


ASTRONOMY DEPT


## GREENWICH CATALOGUE OF STARS

FOR
1910.0

# PART I.-FUNDAMENTAL STARS. PART II.-STARS IN THE ZONE $+24^{\circ} .0$ To $+32^{\circ} .0$. 

FROM OBSERVA'TIONS WITH
THE TRANSIT CIRCLE

Made AT

THE ROYAL OBSERVATORY, GREENWICH,

$$
1906-1914
$$

UNDER THE DIRECTION OF

Sir FRANK WATSON DYSON, M.A., LL.D., F.R.S., astronomer royal.


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## ERRATA.

For the 1910 and 1900 Greenwich Catalogues a complete list of errata is given. To those previous to the 1900 Catalogue only corrections found since the publication of the list printed in that Catalogue are given.

Note.-The figures given are to be substituted for those printed. In some cases to avoid confusion the printed as well as the corrected figures are given.

GREENWICH CATALOGUE FOR 1910.

PART I.

| A 2. | Boss | 103. | Dec. $+62^{\circ}$. |
| :---: | :---: | :---: | :---: |
| A 10. | Lalande | 11501. | Proper motion in Dec. -26 . |
| A 11. | Boss | 1793. | Prcc. $-4 * 520$. |
| A 12. | Boss | $211 \%$ | Magnitude 5.9. |
| A 12. | Boss | 2118. | $5 \cdot 8$. |

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B 4. No. 110. Proper Motion in Dec. - i 70.
B 77. No. 3800 . Epoch 12.7.
B 78. No. 3807 . Secs. of R.A. 43.05. Proper Motion in R.A. $-{ }^{46}$.

B 88. No. 4350. Proper Motion in Dec. +ir8.
B 123. No. 6061. Secs. of Dec. $7^{\prime \prime} \cdot 1$
B 154. No. 7645. Proper Motion in R.A. - 157.
B 199. No. 988 3. " $\quad, \quad+29$.

# COMPLETE LIST OF ERRATA TO GREENWICH SECOND NINE YEAR CATALOGUE, 1900. 

## INTRODUCTION.



## GREENWICH SECOND NINE YEAR CATALOGUE, 1900-continued. INTRODUCTION-continued.

| page. | No. |  |
| :---: | :---: | :---: |
| 38. |  | Helsingfors 1636. Dele. from list. |
| 2. |  | Line 14, for varation read variation. |
| 48. | 476. | Exeess of N.P.D. above pole. $+0^{\mu} \cdot 23$. |
| 49. | 846. | Excess of R.A. above pole. $+^{8} \cdot 53$. |
| 50. | 1055. | Excess of R.A. above pole. $+0^{8.16 .16 .}$ |
| 52. | 1534. | Excess of N.P.D. above pole. +0 ' $\cdot 18$. |
| 53. | 1842. | Excess of R.A. above pole. $+0^{8.033 .}$ |
| 54. | 2045. | Excess of R.A. above pole. - ${ }^{\text {s.474. }}$ |
| 56. | 2627. | Excess of R.A. above pole. $+^{8.041}$. |
| 64. | 4611. | Excess of R.A. above pole. -8.051. |

## PART I.

| page. <br> \{iv\} | $\begin{gathered} N_{G} . \\ 89 . \end{gathered}$ | Secs. of R.A. $4^{8 .}{ }^{8 .} 4_{11}$. Prec. $+2^{8 .} 95^{61}$. Sec. Var. $+^{8.0022 .}$ |  |
| :---: | :---: | :---: | :---: |
| \{v\} | 108. | Sec. Var. +8.01ro. | \{xxiii\} |
| \{v\} | 123. | Secs. of R.A. 55\%.076. Prec. $+3^{\text {B.0294. }}$ | \{xxiv\} |
| \{vi\} | 192. | Pree. $+4^{8.0622 .}$ | \{xxv\} |
| \{vii\} | 205. | Sec. Var. $+^{8.0234 .}$ | $\{\mathrm{xxv} \mathbf{\}}$ |
| \{vii\} | 206. | Sec. Var. + $^{8.0} \cdot 0334$. | $\{\mathrm{xxv}\}$ |
| \{ix\} | 322. | Secs. of N.P.D. $6^{\prime \prime} \cdot 00$. |  |
| \{ix\} | 326. | Sec. Var. $+0^{8.0033 .}$ | $\{\mathrm{xay}\}$ |
| \{x\} | 382. | Prec. $+2^{88}{ }^{\text {F }} 716$ | $\{\mathrm{xxv}\}$ |
| $\{\mathrm{xi}\}$ | 425. | Star's Name, W.B. (2) vi. 316. | \{xxviii\} |
| \{xi\} | 431. | Sec. Var. $+010 \cdot 383$. | \{xxviii\} |
| \{xi\} | 445. | See. Var. $-0^{8.1223 .}$ | \{xxviii\} |
| \{xiv\} | 582 | Prec. +12".533. | \{xxviii\} |
| \{xiv\} | 592. | Sec. Var, $-0^{5.0131 .}$ | \{xxviii\} |
| \{xvi\} | 687. | Prec. $+3^{8.7912}$ | \{xxx $\}$ |
| \{xvi\} | 699. | Sec. Var. ${ }^{\prime \prime} \cdot 203$. | \{xxxi\} |
| \{xvii\} | 720. | Sec. Var. - ${ }^{\text {s.0019 }}$ | \{xxxii\} |
| \{xvii\} | 723. | Sec. Var. $-0^{\text {s.0042 }}$ | \{xxxii\} |
| \{xvii\} | 738. | Sec. Var. -o ${ }^{\text {B.02 }} 98$. | \{xxxiii\} |
| \{xx\} | 854. | Sec. Var, $-0^{\prime \prime} \cdot 24 \mathrm{I}$. |  |

PART II.


No.
500. Proper Motion $+0^{8.004 .}$
506. Proper Motion +8.071.
507. Proper Motion +"•029.
569. Sec. Var. - ${ }^{\text {8. }} 249$.
589. Ast. Cat. No. 1335. B.D. 243. Mag. 8.3.
590. Ast. Cat. No. 135 I. B.D. 245. Mag. $8 \cdot 6$
591. Ast. Cat. No. 1340. B.D. 248. Mag 8.4
636. Proper Motion -8.009, $+^{\text {". }} 0007$
746. Proper Motion - ©.OII
758. Proper Motion $+\mathrm{s} \cdot \mathrm{c}$ \&
761. Proper Motion s.ecc, -".oog.
765. Proper Motion -8.009.
846. Secs. of R.A. $5^{\text {8.37. }}$. Proper Motion $+^{8.013 .}$
847. Proper Motian $+^{8.011 .}$

GREENWICH SECOND NINE YEAR CATALOGUE, 1900-conlinued.
PART II.-coninued.

| PaOe | No. |
| :---: | :---: |
| \{liv\} | 866. Proper Motion - ${ }^{\text {* }}$.035. |
| \{ v \} | 911. Proper Motion $+^{8.025}$. |
| \{lvi\} | 923. Hour of R.A. $23^{\text {b }}$. |
| \{lvi\} | 951. Proper Motion -8.015. |
| \{1vii\} | 962. Proper Motion +8.018. ".000. |
| \{lvii\} | 973. Proper Motion $+^{\prime \prime} .065$. |
| \{lvii\} | 983. Proper Motion - ".002. |
| \{vii\} | 992. Proper Motion $+^{8.007 .}$ |
| \{lviii\} | 1055. Secs. of R.A. $53^{8.25}$. Mean Date in R.A. or-Io. No. of Obs. in R.A. above pole, 2. Proper Motion -8.o18. |
| \{1x\} | 1145. Proper Mlotion +8.005. |
| \{1x\} | 1154. Proper Motion $+^{8.007 .}$ |
| \{lxi\} | 1178. Secs. of N.P.D. $57^{\prime \prime} \cdot 60$. |
| \{lxi\} | 1197. Star's Name, B.D. $+79^{\circ} 108$. |
| \{1xiii\} | 1284. Scc. Var. in N.P.D., insert +. |
| \{1xiii\} | 1285. Sec. Var. in N.P.D., insert -- |
| \{1xiii\} | 1286. Sec. Var. in N.P.D., insert -. |
| \{lxvi\} | 1434. Star's Name, Lalande F. (2) 6. |
| \{lxvi\} | 1444. Ast. Cat. No., 569. Mag. 8.0. |
| \{lxviii\} | 1527. Sec. Var. -0.1223. |
| \{xviii\} | 1534. Secs. of N.P.D. 29"02. |
| $\{\mathbf{x i x}\}$ | 1577. Dele. proper motion in R.A. and N.P.D. |
| \{xix\} | 1581. Dele. proper motion in R.A. and N.P.D. |
| $\{\mathbf{l x x}\}$ | 1604. Prec. - $1^{\text {8. }} 1579$. |
| \{lxxi\} | 1655. Sec. Var. - ${ }^{8.0170 .}$ |
| \{lxxi\} | 1658. Sec. Var. -80.0202. |
| \{lxxiii\} | 1759. Ast. Cat. No., 602. |
| \{lxxiv\} | 1842. Secs. of R.A. $9^{8.806 .}$ |
| \{nxxviii\} | 1998. Star's Name, Oeltz. Arg. (N.) 21795. |
| \{xxxvii\} | 2019. Secs. of R.A. $57^{8.568 .}$ |
| \{1xxviii\} | 2027. Sec. Var. $+\infty 8.0096$. |
| \{lxxix\} | 2044. N.P.D. $12^{\circ} 15^{\prime}$. |
| \{lxxix\} | 2045. Secs. of R.A. ${ }^{668.166 .}$ |
| \{xxxxii\} | 2216. Secs. of N.P.D. $17^{\prime \prime} \cdot 29$. |
| $\{\mathbf{x x x v}\}$ | 2353. Secs. of N.P:D. $52^{\prime \prime} \cdot 61$. |
| \{xc\} | 2604. Ast. Cat. No., 7722. |
| \{xc\} | 2627. Secs. of R.A. $20^{8.209 .}$ |
| \{xciii\} | 2764. Secs. of R.A. $3^{88.759 .}$ Prec. $+2^{8.6167 .}$ |
| $\{\mathrm{xcv}\}$ | 2826. Dele. footnote. |
| \{xevi\} | 2923. Insert footnote. This is the principal star of the pair $\Sigma 1378$, compunents 8.5 and 10.2 . |
| \{xcix\} | 3036. Ast. Cat. No., 6290. |
| \{c\} | 3104. Ast. Cat. No., 8379. |
| \{ciii\} | 322 9. Star's Name, Oeltz. Arg. (N.) 4975. |
| \{civ\} | 3305. Dele. footnote. |
| \{cr\} | 3359. Star's Name, Oeltz. Arg. (N.) 13661. |
| \{cre | 3360. Star's Name, Oeltz. Arg. (N.) 13695. |
| \{cv\} | 336 r. Star's Name, Oeltz. Arg. (N.) 13703. |
| \{cvi\} | 3401. Sec. Var. +o8.0992. |
| \{cviii\} | 3490. Prec. - ${ }^{8} 4202$. |
| \{cxiii\} | 3730. Sces of R.A. $3^{8.784}$. Prec. $+5^{8.6514 .}$ |



Errata.

## GREENWICH SECOND NINE YEAR CATALOGUE, 1900-continued.

## PART II.-continued.

| Page. <br> \{clxxiv\} | No. 6737. |
| :---: | :---: |
| \{clxxvi\} | 6847. Sees. of R.A. 68. 384. |
| \{clexvii\} | 6883 . Sees. of R.A. 208.932. Dele. Proper Motion in R.A. and N.P.D. |
| \{clxxviii\} | 6970. Star's Name, Oeltz. Arg. (N.) 2478. |
| \{clxxix\} | 6983. Proper Motion $+{ }^{*}$-ogo. |
| \{clxxix\} | 7009. Star's Name, Oeltz. Arg. (N.) 3802. |
| \{clxxx\} | 7042. Ast. Cat. No., 1417 . B.D. 348*. Mag. 8.6. |
| \{clxxxiii\} |  No. of Obs. R.A. above pole, 3. |
| \{clxxxiii\} |  No. of Obs. R.A. above pole, 4. |
| \{elxxxiii\} | 7206. Secs. of N.P.D. $26^{\prime \prime} .88$. |
| \{clxxxiv\} | $7250-1$. No. in B.D. $662 \dagger$. |
| \{clxxxviii\} | 7437. Star's Name, B.D. $+67^{\circ} 1076$. |
| \{clxxxix\} | 7485. Star's Name, Oeltz. Arg. (N.) 19951. |
| \{exci\} | 7588. Ast. Cat. No., 8952. |
| \{excii\} | 7661. Star's Name, B.D. $+66^{\circ} 35$. |
| \{excii\} | 7667. Ast. Cat. No., 164. B.D. 4i. Star's Name, B.D. $+66^{\circ} 47$. |
|  | Dele. footnote:-The bracket () in column 2 significs that the number has been taken from Zonc ( $+67^{\circ}$ ). |
| \{exciii\} | 7703. Secs. of R.A. $3^{8.519}$. Mcan Date $01 \cdot 5$. No. of Obs. R.A. above pole, 3 . |

page.
\{excy\} \{excvi\}
\{excvi\} \{cxcix\}
\{ccv\} \{ccix\} \{ecix\} \{ecxv\} \{ecxviii\} \{cexix\} \{cexx\} \{cexxiv\} \{cexxvi\} \{cexxvii\} \{cexxit
\{cexxxi\} \{cexxxii\} \{ecxxxiii\} \{cexxxiii\} \{cexxxviii\} \{ccxxxviii\} \{cexxxix\}

No.
$77^{81}$. Secs. of R.A. $24^{8 \cdot 047 .}$
782 R . Secs. of R.A. ${ }^{1} 9^{\mathrm{g} .592}$. No. of Obs. in R.A., 5.
7845. No. in B.D., 470.
7982. Star's Name, B.D. $+66^{\circ} 732$. Secs. of N.P.D. $12^{\prime \prime} \cdot 02$. No. of Obs.in N.P.D. 3 . Footnote 8301 .
8473. Ast. Cat. No., 438. B.D. 144*. Mag. 7.6.
8483. Secs. of N.P.D. 27".82.
8786. Prec. $+3^{8 .} 3034$.
8945. Star's Namc, B.D. $+65^{\circ} 1156$.
9002. Dele. footnote.
9019. Ast. Cat. No., 6202. B.D. 1322*. Mag. $7 \cdot 5$.
9254. Star's Name, Oeltz. Arg. (N.) 25709.
9324. Secs. of R.A. $47^{8.842}$.
9358. Dele. Proper Motion in R.A. and N.P.D.

957 I. Ast. Cat. No., 3345. B.D. $763^{*}$. Mag. 9.o.
9583. Ast. Cat. No., 3393. B.D. $783^{\text {* }}$. Mag. $8 \cdot 6$.
9649. Sces. of N.P.D. $44^{*} \cdot 95$.
9666. Sces. of N.P.D. $45^{\prime \prime} .88$.
9672. Star's Name, if Draconis . . . a.
9917. Mean Date of Obs. in N.P.D. o2.1.
9918. Mean Date of Obs. in N.P.D. 03.3. 9976-7. Footnote $\Sigma_{2863}$.

## DEDUCED PROPER MOTIONS.

| PaOE. |  |  |  | Page. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $[6]$ | Carrington | 227. | Secs. of N.P.D., for $33^{\prime \prime} \cdot 0$, read $34^{\prime \prime} \cdot 9$ P.M. in N.P.D. $+^{\prime \prime} \cdot 020$. | [14] | Carrington | 954. | Secs. of R.A., for $47^{\text {B. }} 4$, read $4^{63.8}$. P.M. in R.A. ${ }^{8.0000,(" .000) .}$ |
| [9] | " | 480. | Secs. of R.A., for $59^{\mathrm{g} .2}$, read $5^{88.7}$ P.M. in R.A. $+^{8.0175}$ |  |  |  | Secs. of N.P.D., for $11^{\prime \prime} \cdot 0$, read $\mathrm{II}^{\prime \prime} \cdot 3$. P.M. in N.P.D.-".oog. |
|  |  |  | $\left(+^{\prime \prime} .037\right) .$ <br> Secs. of N.P.D., for $22^{\prime \prime} \cdot 8$, read $2 \mathrm{I}^{\prime \prime} \cdot 6$. | [15] | " | 10 | Secs. of R.A., for $2^{8.6}$, read $3^{8.6}$. P.M. in R.A.-8.oogo, (-".017). |
|  |  |  | ' P.M. in N.P.D. ".000. | [18] | " | 1379 | Secs, of N.P.D., for $5 \mathrm{I}^{\prime \prime} \cdot 9$, read $53^{n} \cdot 6$, |
| [9] | " | 503. | Secs. of R.A., for $4^{6 \mathrm{~B}} \cdot 6$, read $45^{\mathrm{B} \cdot 6}$. <br> P.M. in R.A. ${ }^{8.0022 ~(-* .003) . ~}$ | [21 | , |  | P.M. in N.P.D. +".007 P.M. in N.P.D.--".027. |
| [11] | " | 659. | Secs. of N.P.D., for $44^{\prime \prime} \cdot 8$, read $39^{\prime \prime} \cdot 9$ P.M. in N.P.D. +" $^{\circ} \cdot 65$. | [27] | " | 2073. | Epoch of Obs. Ior-r. No. of Obs., 5 . Secs. of R.A., for $54^{\mathrm{B} \cdot 2}$, read $53^{\mathrm{B} \cdot 3}$. |
| [11] | " | 687. | Secs. of R.A., for $49^{\text {B. I }}$, read 48 8. 6 P.M. in R.A.-8.0111 (-".022). | [27] | " | 2075 | P.M. in R.A. - ${ }^{\text {s.017 }} 79$, ( " $^{\circ} .04$ 1) . <br> Sces. of N.P.D., for $64^{\prime \prime} \cdot 3$, read $57^{\prime \prime} \cdot 6$. |
| [12] | " | 783. | Secs. of N.P.D., for $22^{\prime \prime} \cdot 2$, read $24^{\prime \prime} \cdot 6$. P.M. in N.P.D. +" $^{\text {"ol }} 3$. | [29] | " | 3 | P.M. in N.P.D. - ${ }^{* \cdot O}{ }^{\circ} 2$. <br> Secs. of R.A., for $9^{8 \cdot 0}$, read $8^{8.0}$. |
| [12] | " | 798. | Secs. of N.P.D., for $49^{\prime \prime} \cdot 1$, read $50^{\prime \prime} \cdot 4$. P.M. in N.P.D. - ".002. | [30] | " | 2400 | P.M. in R.A. - 8.0985, (-".095). Secs. of R.A., for $0^{8.2}$, read $3^{8.2}$. |
| [13] | " | $82 \mathrm{I} \text {. }$ | Secs. of N.P.D., for $26^{\prime \prime} \cdot 5$, read $27^{\prime \prime} \cdot 5$. P.M. in N.P.D. $+{ }^{\prime \prime} \cdot 067$. | [30] | " | 2406. | P.M. in R.A. - ${ }^{-0} 03^{2} 3$, ( - ".029) . Secs. of R.A., for $5^{8.9}$, read $5^{8.4}$. |
| [14] | " | 9ro. | Secs. of R.A., for $22^{8.4} 4$, read $21^{8.8}$. P.M. in R.A. $+^{8.0180,\left(t^{\prime \prime} \cdot 037\right) .}$ | [30] | , | 2410. | P.M, in R.A. '8.0134, $^{\left(+{ }^{*} .027\right) \text {. }}$ P.M. in R.A. $+^{\text {8.0111, }}\left(+^{\prime \prime} .022\right.$ ). |
| [14] | " | 933. | Sces. of R.A., for $15^{8.9}$, read $15^{8.4}$. <br>  | [33] | " | 2651. | Secs. of N.P.D., for $53^{\prime \prime} \cdot 9$, read $55^{\prime \prime} \cdot g$. P.M. in N.P.D.-"•O35. |

# GREENWICH SECOND NINE YEAR CATALOGUE, 1 goo-continued. DEDUCED PROPER MOTIONS-continued. 



The following errata to the earlier Greenwich Catalogues have been found subsequent to that already published in the Second Nine Year Catalogue for 1900. Most of them bavc bcen detected and kindly communicated by the Director of the American Nautical Almanac, Prof. W. S. Eichelberger, who in his own investigation of the constant of refraction has been making use of the Greenwich observations.

## GREENWICH SECOND TEN YEAR CATALOGUE FOR I8go. INTRODUCTION.




Greenwici Catalogue gf Stars.

## Errata.

GREENWICH SECOND TEN YEAR CATALOGUE, 1890 -continued. INTRODUCTION-continued.


## CATALOGUE

| PAGE. $\{\mathrm{vi}\}$ | No. 1 59. | Secs. of N.P.D. $26 \cdot 37$. |
| :---: | :---: | :---: |
| \{vii\} | 206. | , ", 48.79. |
| \{x\} | 365. | " $\quad$, 9.66. |
| \{xiii\} | 52 I . | , 45.34. |
| \{xiv\} | 58. | $50 \cdot 66$. |
| \{xix\} | 822. | ", 38.20. |
| \{xix\} | 836. | 11.87. |
| \{xxii\} | 951. | $7 \cdot 22$. |
| \{xxii\} | 967. | 19.28 |
| \{xxiv\} | 1063. | " " $\quad 9.43$ |
| \{xxvii\} | 1201. | Secs. of R.A. $1^{18.257 .}$ Secs. of N.P.D. $3^{\prime \prime} \cdot 14$. |
| \{xxviii\} | 129 б. | Secs. of N.P.D. $38^{\prime \prime} \cdot 44$. Mean Date in N.P.D. $94 . \circ 5$. No. of Obs. in N.P.D. above and below pole, 3, 4 . |
| \{xxix\} | 1332. | Secs. of N.P.D. $29^{\prime \prime} \cdot 9^{6}$. No. of Obs. in N.P.D. above pole, 3 . |
| \{xxxiii\} | 1507. | Secs. of R.A. $5^{8 .} 376$. Proper Motion + 8.0019. Secs. of N.P.D. 28".99. Proper Motion $+^{\prime \prime} \cdot 129$. |
| \{xxxviii\} | ${ }^{1792}$. | Secs. of N.P.D. 46.05 . |
| \{xli\} | 1935. | 27.72. |
| \{xli\} | 1948. | " ", 23.73. |
| \{xliv\} | 2059. | No. of Obs. in N.P.D. above and below pole, 6, 24. |
| \{xliv\} | 2071. | No. of Obs. below pole in R.A. and N.P.D., 3. |
| \{xlvii\} | 2240. | Secs. of N.P.D. $5^{\prime \prime \prime} \cdot 7^{6}$ |
| \{xlviii\} | 2299. | , ", $5^{\prime \prime} \cdot 97$. Mean Date in N.P.D. $94 \cdot 08$. No. of Obs. in N.P.D. above pole, 4 . |
| \{xlix\} | 2347. | Secs. of N.P.D. $24 \cdot 10$. |
| \{li\} | 2401. | $36 \cdot 55$ |
| \{lii\} | 2465. | " ", 44.85. |
| $\{\mathrm{liv}\}$ | 2576. | No. of Obs, in R.A. 3, 3. Secs. of N.P.D. $33^{\prime \prime} .84$. Mean Date in N.P.D. 93.70 . No. of Obs. in N.P.D. 3, 3 . |
| \{lvi\} | 2657. | " $\quad 28.25$. |
| \{lvi\} | 2668. | $45 \cdot 91$. |
| \{lvi\} | 2680. | " 27.93. |
| $\{$ lviii\} | 2754. | No. of Obs, in N.P.D. above and below pole, 5,6 . |


| PAGE. <br> $\{1 \mathrm{x}\}$ <br> \{lxi\} | $\begin{gathered} \text { No. } \\ 2865 . \\ 2935 . \end{gathered}$ | Secs. of N.P.D. $18^{\prime \prime} \cdot 97$. <br> No. of Obs. in R.A. above and below pole, 3, 5. Secs. of N.P.D. $43^{\prime \prime} \cdot 16$. Mean Date in N.P.D. $92 \cdot 57$. No. of Obs. in N.P.D. above and below pole, 3,5 . |
| :---: | :---: | :---: |
| \{xi\} | 2950. | Secs. of N.P.D. 30.40 . |
| \{lıv \} | 3136. | ", $\quad$ 51.88. |
| \{lxvi\} | $3^{1} 53$. | " 30.39. |
| \{lxvii\} | 3242. | , 11.76. |
| \{lxviii\} | 3266. | , 23.45. |
| \{lxviii\} | 3269. | $5 \cdot 35$. |
| \{ 1 xx \} | 3384. | 18.42. |
| \{lxxi\} | 3403. | , $44 \cdot 67$. |
| \{1xxii\} | 3477. | $2 \cdot 29$. |
| \{xxiii\} | 3522. | 21.21. |
| \{1xxv\} | 3606. | 29.92 |
| \{lxxvi\} | 3685. | 23.15. |
| \{lxxvi\} | 3689. | " $55 \cdot 03$. |
| \{lxxvi\} | 3693. | , 39.41 . |
| \{lxxvi\}, | 3699. | ", ${ }^{22.09 .}$ |
| \{lxxviii\} | 3796. | " $\quad$, 43.15. |
| \{xxix $\}$ | 3817. | Proper Motion + " ${ }^{\text {-1 }}$ 91. |
| \{1xxx | 3877. | Sees. of N.P.D. $37 \times 77$. |
| \{lxxxii\} | 3972. | " " ${ }^{27} \cdot 08$. |
| \{lxxxii\} | 3990. | , $50 \cdot 87$. |
| \{Ixxxvi\} | 4157. | " 30.22. |
| \{xxxviii\} | 4298. | 12.21 |
| \{xciv\} | 4592. | " 10.01. |
| \{cvii\} | 5201. | ", " 19.08. |
| \{evii\} | 5236. | ", 23.64. |
| \{evii\} | 5248. | ", $\quad$ 23.62. |
| \{eviii\} | 5275. | " 47.14. |
| \{cxiii\} | 5504. | " $35 \cdot 53$. |
| \{exiv\} | 5594. | 50.66 |
| \{exvi\} | 5657. | " ,, 16.97. |
| \{exviii\} | 5766. | " 38.90. |
| \{exix\} | 5831. | " $\quad{ }^{27} 720$. |
| \{cxx\} | 5853. | Secs. of N.P.D. $9^{\prime \prime} \cdot 23$. Mean Date in N.P.D. $93.5^{1}$. No. of Obs. in N.P.D. above and below pole, 86, 33 . |

Errata.
GREENWICH SECOND TEN YEAR CATALOGUE, 1890-continued. CATALOGUE-continued.


GREENWICH TEN YEAR CATALOGUE FOR 1880.
INTRODUCTION.


## GREENWICH TEN YEAR CATALOGUE, 1880 -continued. CATALOGUE.

| PaGE. $\{v\}$ | No. 117 | Secs. of R.A. ${ }^{1} 1 \cdot 129$; Mean Date in R.A. 81.95 ; No. of Obs. below pole, I; Secs. of N.P.D. $22^{\mu} \cdot 25$; Mean Date in N.P.D., $82^{\circ} 09$; No. of Obs. below pole, I. |
| :---: | :---: | :---: |
| \{viiu | 207. | Secs. of N.P.D. 6.59. |
| \{x\} | 302. | " ", 33.88 . |
| \{xi\} | 355. | 17.35. |
| \{xx\} | 705. | No. of Obs. above pole in N.P.D., 5. |
| \{xxiii\} | 813. | Secs. of N.P.D. 8.35. |
| \{xxx\} | 1096. | 6.13. |
| \{xxxii\} | 1164. | $2 \cdot 61$ |
| \{xxxii\} | 1165. | " , 2.01. |
| \{xxxiii\} | 1231. | ", 46.01. |
| \{xxsvi\} | 1326. | No. of Obs. above pole in N.P.D., dele. 5. No. of Obs. below pole in N.P.D., insert 5 . |
| \{xlii\} | 1569. | Secs. of N.P.D. $3^{\prime \prime} \cdot 9^{\circ}$; Mean Date in N.P.D., 82.80 ; No. of Obs.below pole in N.P.D.,5. |
| \{lvi\} | 2136. | Secs. of N.P.D. $55 \cdot 36$. |
| \{lvii\} | 2198. | " 25.98 ; No. of Obs. in N.P.D. above pole, 4 ; No. of Obs. in N.P.D. below pole, 3. |
| \{1viii\} | 2202. | " 15.78 ; No. of Obs. below pole in N.P.D., ${ }^{14}$. |

Page. No.
\{lviii\} 2220. Secs. of N.P.D. $2 \cdot 64$.
\{lviii\} $2222 . \quad, \quad, \quad 50.33$.
\{lx\} 2316. No. of Obs. in R.A. above pole, 2 ; No. of Obs. in R.A. below pole, insert 1 ; N.P.D., $35^{\circ} 50^{\prime} 59^{\prime \prime} .82$; Mean Date in N.P.D., 84•16; No. of Obs.in N.P.D.above pole, 2 ; No. of Obs. in N.P.D. below pole, insert 2.
\{lxviit\} 2622. Secs. of N.P.D. $37^{\prime \prime} \cdot 64$.
\{lxix\} 2678. No. of Obs. in R.A. above pole, 3 ; No. of Obs. in R.A. below pole, insert 2 ; Secs. of N.P.D., $16^{\prime \prime} .82$ : Mean Date in N.P.D., $81 \cdot 92$; No. of Obs.in N.P.D.above pole, 2 ; No. of Obs. in N.P.D. below pole, insert 2 .
\{lxxiii\} 2833. Secs. of N.P.D. 29.37.
\{lxxiii\} 2840. ", 47.50 .
\{lxxviii\} 3017. ,, ,44.64; Mean Date in N.P.D., 86.77; No. of Obs. in N.P.D. above pale, 2.
\{lxxxvi\} 3360. Secs, of N.P.D. $10 \cdot 28$.
\{xcvi\} $3721 . \quad, \quad, 58 \cdot \mathrm{rg} ;$ Mean Date in N.P.D., 81.53; No. of Obs. in N.P.D., above pole, 6; No. of Obs. in N.P.D. below pole, 2.

## GREENWICH NINE YEAR CATALOGUE FOR 1872. INTRODUCTION.

AGE

10. Groombridge 3667. No. of Obs. above and below \begin{tabular}{l}
PagE. <br>
pole, 3, $3 ;$ Excess of N.P.D. <br>

| above pole, $+0^{\prime \prime} \cdot 77$. |
| :--- |

\end{tabular}

366. No. of Obs, above and below pole, 9,5 ; Excess of N.P.D. above pole, $+\mathrm{o}^{\pi} \cdot 54$.

CATALOGUE.

| $\begin{aligned} & \text { PAGE. } \\ & \{x \mathrm{X}\} \end{aligned}$ | No. |  | PAGE. | No. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 244. | Secs. of N.P.D. 17.03. | \{cix\} | 2123. | Secs. | P | 59.10 |
|  |  | Mean Year and Fraction 1871.3. | \{cxi\} | 2181. | " |  | $58 \cdot 66$ |
| \{xli\} | 800. | Secs of N.P.D. . 7.64. |  |  | No. of | s. | N.P.D |
| \{1xxxv\} | 1649. | ", 0.27. | \{exiii\} | 2207. | " | " | 17.32. |
| \{ci\} | 1989. | ", " 48.91 | \{cxv \} | 2253. | " | " | 49.41 . |
| $\{\mathrm{cr}\}$ | 2059. | " $\quad$, 3.83. |  |  |  |  |  |

## NEW REDUCTION OF GROOMBRIDGE'S CATALOGUE, I8ro.

| Page. | No. |  |
| :---: | :--- | :--- |
| 41. | 1557. | Mean Date in N.P.D., $11 \cdot 3$. |
| 45. | 1719. | Secs. of N.P.D., $37^{\prime \prime} \cdot 7$. |
| 51. | 1943. | Mean Date in R.A., $14^{\circ} \mathrm{O}$. |
| 51. | 1947. | Mean Date in R.A. and N.P.D., $144^{\circ} \mathrm{O}$. |
| 55. | 2102. | Prec. in N.P.D., dele. $16^{\prime \prime}$. |
| 56. | 2126. | Prec. in R.A., $-0^{8 .} 57^{8} 3$. |
| 74. | 2849. | Sec. Var. in R.A., insert.- |



LIST OF ERRATA FOUND IN WEISSE'S REDUCTION OF BESSEL'S ZONES TO 1825.

| W.B. and No. | For | Read | W.B. and No. | For | Read | W.B. and No. | For | Read |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ol. $4^{6}$ | $2{ }^{\prime}$ | $0^{\prime}$ | 8n. 1488 | $3^{8 \prime \prime} \cdot 6$ | $48^{\prime \prime} \cdot 6$ | 19 $9^{\text {h }} \cdot 257$ | $39^{\text {s. }} 38$ | $40^{3 \cdot 38}$ |
| 274 | $39^{8.65}$ | $40^{8 \cdot 65}$ | $9^{\text {b }}$. 346 | $28^{\prime \prime} \cdot 2$ | $38^{\prime \prime} \cdot 2$ | 334 | $0^{8.01}$ | $1{ }^{16} 01$ |
| 370 | $44^{6 \cdot 32}$ | $45^{8 \cdot 32}$ | 947 | $32^{\prime \prime} \cdot 3$ | $42^{\prime \prime} \cdot 3$ | 411* | $24^{\prime \prime} \cdot 4$ | $34^{\prime \prime} \cdot 4$ |
| 370 | $46 \cdot{ }^{* \prime}$ | $26^{*} \cdot 3$ | 1267 | $3^{28.86}$ | $33^{8.86}$ | 849 | $43^{8.13}$ | $44^{\text {8. }} 13$ |
| 477 | $46^{\prime}$ | $45^{\prime}$ | 10h. 184 | $43^{\prime}$ | $75^{\prime}$ | 1468 | $54^{8 \cdot} \cdot 4^{6}$ | $5^{68.46}$ |
| $632+$ | $50^{\prime \prime} \cdot 3$ | $40^{\prime \prime} \cdot 3$ | 889 | $43^{\prime \prime} \cdot 1$ | $23^{\prime \prime} \cdot 1$ | 1537 | $49^{\prime \prime} \cdot 6$ | $9^{\prime \prime} \cdot 6$ |
| 1475 | $53^{\prime}$ | $57^{\prime}$ | 1108 | $34^{8 \cdot 28}$ | $35^{8 \cdot 28}$ | 20 ${ }^{\text {h }}$. $155^{2}$ | $19^{8.06}$ | $9^{8.06}$ |
| $2^{\text {h }}$. 21 | 08.86 | ${ }_{18}{ }^{3} 86$ | 1157 | $45^{\prime \prime}$-0 | 15 $5^{\prime \prime}$. | 152 | $40^{\prime \prime} \cdot 9$ | 50 ".9 |
| 128 | $16^{\prime \prime} \cdot 1$ | $10^{\prime \prime} \cdot 1$ | 117. 319 | $47^{8 \cdot 01}$ | $4^{88.01}$ | 187 | $55^{8 \cdot 79}$ | $54^{8.79}$ |
| 140 | $3^{18.79}$ | $3{ }^{18.95}$ | 371 | $21^{8.16}$ | $22^{8.16}$ | 674 | $22^{3 .} 24$ | $23^{3.24}$ |
| 140 | $2110 \cdot 3$ | $19^{\prime \prime} \cdot 2$ | 422 | $5^{8.00}$ | 68.00 | 737 | $40^{8 .} 55$ | $41^{8.55}$ |
| 141 | $3 \mathrm{I}^{8.95}$ | - $32^{8 .} 79$ | $12^{\text {h. }}$. 118 | $21^{\prime \prime} \cdot 3$ | $31^{\prime \prime} \cdot 3=$ | 887 | $27^{8 \cdot 13}$ | 28.13 |
| 141 | $19^{\prime \prime} \cdot 2$ | $21^{\prime \prime} \cdot 3$ | 120 | $21^{8.66}$ | $25^{8.66}$ | 903 | $26^{\prime \prime} \cdot 7$ | $36^{\prime \prime} \cdot 7$ |
| 330 | $25^{\prime} 55^{\prime \prime} .8$ | $26^{\prime} \quad 29^{\prime \prime} \cdot 9$ | 199 | $23^{\prime \prime} \cdot 2$ | $33^{\prime \prime} \cdot 2$ | 1106 | $43^{\prime \prime} \cdot 5$ | $3^{\prime \prime} \cdot 5$ |
| 375 | $3^{68 \cdot 74}$ | $35^{8.74}$ | 976 | $54^{5 \cdot 64}$ | $55^{8.64}$ | 1307 | $32^{8.08}$ | $33^{8.08}$ |
| 502 | $24^{8 \cdot 16}$ | $24^{8 .} 9^{6}$ | $13^{\text {h.. }} 929$ | $25^{\prime \prime} \cdot 3$ | $15^{\prime \prime} \cdot 3$ | 1427 | $7^{8 .} 4^{8}$ | $8{ }^{\mathbf{3} \cdot 48}$ |
| 1151 | $31^{\prime \prime} \cdot 8$ | $11^{\prime \prime} .8$ | $135^{2}$ | $54^{5.8} 4$ | $50^{8.8} 4$ | 1856 | $4^{68 \cdot 39}$ | $4^{68.89}$ |
| $3^{\text {h. }}$. 161 | $5^{18.82}$ | $5^{25.82}$ | $14^{\text {h }}$. 129 | $31^{\prime \prime} \cdot 7$ | $21^{17} \cdot 7$ | 22h. 259 | $34^{\prime \prime} \cdot 3$ | - $44^{\prime \prime} \cdot 3$ |
| 614 | $12{ }^{*} \cdot 5$ | $22^{\prime \prime} \cdot 5$ | 795 | $44^{8 .} 55$ | $43^{8 .} 95$ | 1083 | $42^{\prime}$ | 41' |
| 752 | $45^{\prime \prime} \cdot 1$ | $55^{\prime \prime} \cdot 1$ | $16^{\text {h }}$. 1578 | $4^{88.88}$ | $4^{88.28}$ | 1387 | $34^{\prime \prime} \cdot 5$ | $35^{*} \cdot 5$ |
| $4^{\text {h }}$. 12 | $37^{8 \cdot} 7^{8}$ | $3^{88.78}$ | 1750 | $16^{\prime \prime} \cdot 6$ | $6^{\prime \prime} \cdot 6$ | 23 ${ }^{\text {h. }} 1111$ | $38^{\prime}$ | $37^{\prime}$ |
| $5^{\text {h. }} 1370$ | $36^{\prime}$ | $33^{\prime}$ | 176. 29 | $17^{\text {h.om }}$ | $16^{\text {n. }} 59^{\text {m }}$ | $35^{\circ}$ | $35^{8 \cdot} 9^{6}$ | $34^{8.96}$ |
| 1802 | $38^{\prime \prime} \cdot 9$ | $48^{\prime \prime} \cdot 9$ | 376 | $29^{8 .} 99$ | 288.99 | 461 | $12^{\prime}$ | 11' |
| 1823 | $53^{\mathrm{m}}$ | $52^{\text {m }}$ | 965 | $13^{\prime \prime} .8$ | $23^{n} \cdot 8$ | 860 | $35^{\prime \prime} \cdot 8$ | $55^{\prime \prime} .8$ |
| 1823 | $5^{\prime \prime} \cdot 8^{-}$ | $15^{\prime \prime} .8$ | 1340 | $30^{\prime \prime} \cdot 7$ | $33^{\prime \prime} \cdot 4$ |  |  |  |
| 6h. 1123 | $38^{\prime \prime} \cdot 2$ | . $30^{\prime \prime} \cdot 2$ | 1542 | $5^{6 \times 6} \cdot 6$ | $57^{3 \cdot 63}$ |  |  |  |
| $7^{\text {h. }}$. 37 | $45^{\text {B. }} 65$ | $46^{8.65}$ | 18 ${ }^{\text {h. }}$. 559 | $36^{\prime \prime} \cdot 7$ | $26^{\prime \prime} \cdot 7$ |  | SEL's |  |
| 755 | $49^{\prime \prime} \cdot 3$ | $27^{\prime \prime} \cdot 8$ | 977 | $20^{8 \cdot 73}$ | $19^{8.73}$ |  |  |  |
| 1181 | $37^{\prime \prime} \cdot 1$ | $4 \mathrm{I}^{\prime \prime} \cdot 1$ | 1 $55^{8}$ | $53^{\prime \prime} \cdot 1$ | $33^{\prime \prime} \cdot 1$ | $\dagger$ For $27^{\circ}$ | $\cdots \cdot 2, r$ | $15^{\prime} 16^{\prime \prime}$ |
| 1618 | $9^{\prime \prime} \cdot 2$ | $19^{\prime \prime} \cdot 2$ | 1788 | $9^{8 \cdot} 9^{2}$ | $8 \cdot 92$ | * For $26^{\circ}+4$ | *5, rea | $44^{\prime} 47^{\prime \prime} \cdot 5$ |
| 84. 235 | $10^{\prime \prime} \cdot 3$ | $40^{\prime \prime} \cdot 3$ | 19 ${ }^{\text {h }}$. 159 | $39^{\prime \prime} \cdot 5$ | $33^{\prime \prime} \cdot 5$ |  |  |  |
| 772 | $39^{\prime \prime} \cdot 8$ | $49^{\prime \prime} \cdot 8$ | 230 | $27^{\prime \prime} \cdot 2$ | $17^{\prime \prime} \cdot 2$ |  |  |  |

ADOPTED ERRATA IN LALANDE'S CATALOGUE, I8oo.

| Lalande's No. | For | Read | Lalande's No. | For | Read | Lalande's No. | For | Read |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 290 | $53^{\prime}$ | $5^{8}$ | 1455 | $34^{\prime} 34^{\prime \prime} \cdot 5$ | $44^{\prime} 24^{\prime \prime} \cdot 5$ | 2249 | $16^{\prime}$ | $17^{\prime}$ |
| 919 | Dele. | N.P.D. | 1646 | $45^{\text {6. }} 20$ | $43^{8 .} 70$ |  |  |  |
| 1356 \{ | $3^{22^{\text {B }} 21}$ | $3^{22^{8.06}}$ | 1968 | $59^{\text {B. } 29 ~}$ | $59^{8 .} 53$ | 2687. 2 | ${ }^{168.63}$ | ${ }^{163.60}$ |
| 1356 \} | $58^{\circ} 1^{\prime} 58^{\prime \prime} \cdot 9$ | $59^{\circ} 2^{\prime} 0^{\prime \prime \prime} \cdot 0^{\circ}$ | 6 . | $30^{8.00}$ | $29^{8 .} 9^{1}$ | - | $3^{1} 19 \cdot 5$ | 819.6 |
| 1373 \{ | $5^{8 \cdot 16}$ | $4^{8.68}$ |  | 16'16 $6^{\prime \prime} .8$ | $36^{\prime} 17^{\prime \prime} \cdot 3$ | 28-8 | $17^{8 \cdot} \cdot 6$ | 278.96 |
| 1373 \{ | $5^{8^{\circ} 2^{\prime} 21.9^{\prime \prime}}$ | $59^{\circ} 2^{\prime} 23^{\prime \prime} \cdot 0$ | 2147 |  | $2^{\text {ma }} 0^{81} \cdot 27$ | 3286 | $3^{8.11}$ | $6^{68} 43$ |

ADOPTED ERRATA IN LALANDE'S CATALOGUE, 1800 -continued.


Errata.
ADOPTED ERRATA IN LALANDE'S CATALOGUE, 1800 -continued.

| Lalande's No | For | Read | Lalande's No. | For | Read | Lalande's No. | For | Read |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\left.\begin{array}{l} 23009 \\ 23132 \end{array}\right\}$ | $6 \mathrm{~m} \frac{55^{8.58}}{}$ | $5^{\mathrm{m}} 55^{8 .} 55$ | 28273 \{ | $2 \mathrm{I}^{\text {m }}$ | $20^{\mathrm{m}}$ | 30333 | $54^{\prime} 37^{\prime \prime} \cdot 4$ | $55^{\prime} 27^{\prime \prime} \cdot 0$ |
|  | $10^{\text {m }} 50^{8.79}$ | $\mathrm{If}^{\mathrm{m}} 21^{\text {s. }} 45$ |  | $22^{\text {m }}$ | $2 \mathrm{I}^{\mathrm{m}}$ | 30337 | $38^{\prime \prime} \cdot 9$ | $39^{\prime \prime} \cdot 5$ |
|  | $26^{\prime \prime} \cdot 5$ | $26^{\prime \prime} \cdot 3$ | 308 | $31^{\prime \prime}$ | $35^{\prime \prime} \cdot 9$ |  | $31^{8.80}$ | $3^{318} 74$ |
| 23221 | $33^{8 \cdot 0} 4$ | $33^{\text {8. }} 10$ | 28375 | $44^{\text {s. }} 9$ | $34^{\prime \prime} \cdot 96$ |  | $59^{\circ} 55^{\prime \prime} 27^{\prime \prime} \cdot 0$ | $60^{\circ} 22^{\prime} 53^{\prime \prime} \cdot 0$ |
| 23221 | $46^{\prime}+1^{\prime \prime} \cdot 9$ | $36^{\prime} 41^{\prime \prime} \cdot 8$ |  | 28 m | - $299^{\text {m }}$ |  | $35^{\text {m }}$ | $34^{\text {mi }}$ |
| 23306 | $35^{8.66}$ | $25^{5.66}$ | 28499 | $41^{\prime \prime}$ | $40^{\prime \prime}$ | 30499 | $26^{\prime \prime} \cdot 5$ | ${ }^{2} 7^{\prime \prime} \cdot 2$ |
| 23554 | $25^{\text {m }}$ | $24^{\text {m }}$ |  | $10^{8 .} 97$ | $10^{8.68}$ |  | $40^{m}$ | $39^{\text {m }}$ |
| $24086\{$ | $47^{8 .} 99$ | $4^{88.06}$ |  | $62^{\circ} 37^{\prime} 20^{\prime \prime} \cdot 9$ | $63^{\circ} 37^{\prime} 22^{\prime \prime} .0$ | , | $35^{\prime \prime} \cdot 1$ | $35^{\prime \prime} \cdot 5$ |
|  | $11^{\prime} 15^{\prime \prime} \cdot 7$ | $1^{\prime} 15^{\prime \prime \prime} \cdot 5$ | 28794 | $55^{82^{8} \cdot 40}$ | $52^{8.50}$ | 30648 | $40^{\text {m }}$ | $39^{\text {m }}$ |
| 21208 | 208.70 | $20^{8.6}$ | 28794 \{ | $63^{\circ} 8^{\prime} 52^{\prime \prime} \cdot 7$ | $62^{\circ} 8^{\prime} 51^{\prime \prime} \cdot 6$ | 30648 , | 29.19 | $30^{\prime \prime} \cdot 4$ |
| 24208 | $7^{\prime}$ | $12{ }^{\prime}$ | 28877 |  |  | 30865 | $29^{5 \cdot 93}$ | $59^{8.65}$ |
| 24224 | $\mathrm{m}^{5} 2^{\text {8 }}$ | $49^{\text {m }} 5^{52^{8 .}} 59$ | $29176\{$ | $13^{\text {s.0.05 }}$ | ${ }^{12^{88}} 95$ |  | $55^{\text {m }}$ | $54^{\text {m }}$ |
|  | . 8 | $6^{\prime \prime} \cdot 9$ | 29176 | $60^{\circ}$ I $8^{\prime \prime} 4^{\prime \prime \prime} .8$ | $59^{\circ} 18^{\prime \prime} 47^{\prime \prime} \cdot 8$ | 31085 | $44^{\prime \prime} \cdot 1$ | $44^{\prime \prime} \cdot 4$ |
|  | $50^{\text {m }}$ | $49^{\text {m }}$ | 29184 | $22^{8 .} 75$ | $32^{8 .}$ | 31186 | $41^{8.96}$ | $11^{8.20}$ |
| 26 | $45^{\prime \prime} \cdot 6$ | $45^{\prime \prime} \cdot 8$ | 29222 | $36^{\prime}$ | $37^{\prime}$ |  | $34^{8 \cdot} 7^{2}$ | $34^{8 \cdot 58}$ |
| 24276 | $37^{\prime}$ | $3^{8}$ |  | $29^{8.52}$ | $29^{8 .} \cdot 56$ | ${ }^{31} 323$ 2 | $59^{\circ} 9^{\prime \prime} 3^{\prime \prime} \cdot 9$ | $60^{\circ} 9^{\prime} 5^{\prime \prime} \cdot 2$ |
| ${ }^{2} 4736$ | $9^{\text {m }} 57^{\text {8. }} 15$ | $10^{\mathrm{m}} 27^{8 \cdot 15}$ |  | $57^{\prime} 9^{\prime \prime} \cdot 9$ | $4^{8 \prime} 2 \mathrm{I}^{\prime \prime} \cdot 6$ | 31333 | $20^{8 .} 48$ | 208.88 |
| 24832 | $7^{8.17}$ | ${ }^{17}{ }^{8.17}$ | 29621 | $4^{8} 21^{\prime \prime} \cdot 6$ | $57^{\prime} 9^{\prime \prime} \cdot 9$ | 31584 | $31^{1 \prime \prime} 4$ | $13^{\prime \prime} \cdot 7$ |
| 24956 | $26^{\text {c/ }} 7^{6}$ | 288.42 |  | 8 m | $7^{\text {m }}$ |  | $9^{\text {s. }} 77$ | $9^{8.66}$ |
|  | I | ${ }^{88} 69$ |  | $43^{\prime \prime} \cdot 1$ | $43^{\prime \prime} \cdot 6$ |  | $63^{\circ} 34^{\prime} 4^{\prime \prime} \cdot 4$ | $64^{\circ} 34^{\prime} 5^{\prime \prime} \cdot 5$ |
|  | $62^{\circ}$ 18 $8^{\prime} 34^{\prime \prime} \cdot 1$ | $61^{\circ} 18^{\prime} 33^{\prime \prime} \cdot 1$ |  | $8^{\text {m }}$ | $7{ }^{\text {m }}$ |  | $54^{8.24}$ | $54^{8 \cdot 19}$ |
| 25714 | , | ${ }^{1}$ | 29727 | $42^{\prime \prime} \cdot 7$ | $43^{\prime \prime} \cdot 1$ | 32462 | $17^{\prime} 19^{\prime \prime} \cdot 6$ | $27^{\prime} 19^{\prime \prime} .8$ |
| 25877 | ${ }^{12}$ | $11^{\prime}$ | 29936 | $57^{8 \cdot 73}$ | $26^{8 .} 33$ |  | $18 \mathrm{~s} \cdot 25$ | 188.34 |
| 26011 | ${ }^{1 \mathrm{~m}^{\mathrm{m}} 16^{6.27}}$ | $0^{\mathrm{m}} 45^{\text {8. }}$ | 975 | 18 m | 17 | 32673 | $59^{\circ} 8^{\prime} 37^{\prime \prime} \cdot 0$ | $5^{8 \circ} 53^{\prime} 36^{\prime \prime} .8$ |
|  | 6 m | $5^{r}$ | 975 | 4 | $4 \mathrm{I}^{\prime \prime} \cdot 9$ |  | $45^{\text {² }}$ | $44^{\mathrm{na}}$ |
|  | 25 | $26^{\prime \prime} \cdot 1$ |  | 18 m | $17^{\text {m }}$ | 32776 | $56^{\prime} 59^{\prime \prime} \cdot 7$ | $57^{\prime} 0^{\prime \prime} \cdot 1$ |
| 26184 | $53^{\text {s. }} 23$ | $53^{8.28}$ |  | $43^{\prime \prime} \cdot 4$ | $43^{\prime \prime} \cdot 8$ | 816 | $46^{\mathrm{m}}$ | $45^{\text {m }}$ |
|  | $39^{\prime} 4^{8^{\prime \prime}} \cdot 0$ | $29^{\prime} 47^{\prime \prime} \cdot 8$ |  | 2 | $19^{\text {m }}$ |  | $8^{\prime \prime} \cdot 2$ | $8^{\prime \prime} \cdot 7$ |
|  | 88.29 | $8^{8.35}$ |  | $18^{\prime \prime} \cdot 7$ | $19^{\prime \prime} \cdot 1$ |  | $46^{\text {m }}$ | $45^{\mathrm{n}}$ |
|  | $47^{\prime} 2^{\prime \prime} .8$ | $42^{\prime} 2^{\prime \prime} \cdot 7$ |  | $24^{\text {m }}$ | $23^{\text {m }}$ |  | $53^{\prime \prime} \cdot 5$ | $53^{\prime \prime} \cdot 6$ |
| 26466 | $49^{\prime}$ | $48^{\prime}$ | 139 | $3^{\prime \prime} \cdot 5$ | $3^{*} \cdot 9$ |  | $46^{\mathrm{m}}$ | $45^{\text {m }}$ |
| 26489 \{ | 20 | $19^{\text {n }}$ |  | $24^{\text {m }}$ | $23^{\text {m }}$ |  | $2 \mathrm{I}^{\prime \prime} \cdot 3$ | $21^{* *} .8$ |
|  | $30^{\prime \prime} .8$ | 31 |  | $40^{\prime \prime}$. | $40^{\prime \prime} \cdot 5$ |  | $37^{8 \cdot 60}$ | $37^{8 \cdot 57}$ |
|  | $20^{\text {m }}$ | $19^{\text {m }}$ |  | $25^{\text {m }}$ | $24^{\text {m }}$ | 32839 \{ | $34^{\prime} 7^{\prime \prime} \cdot 5$ | $54^{\prime} 7^{\prime \prime} \cdot 9$ |
| 49 | $30^{\prime \prime} \cdot 8$ | $3 \mathrm{r}^{\prime \prime} \cdot 0$ |  | $57^{\prime \prime}$ | 57 | 32928 | p. 495 | p. 475 . |
| 26939 | $40^{\prime}$ | $38^{\prime}$ |  | $26^{\text {m }}$ | 25 | 33458 | $2^{\mathrm{m}} 3 \mathrm{l}^{\mathrm{s} .81}$ | $3^{\mathrm{m}} 2^{8.20}$ |
| 26949 \{ | 37 | $3^{8 \mathrm{~m}}$ |  | 1".9 | $2^{\prime \prime} \cdot 3$ | 33533 \{ | $4^{\mathrm{m}}$ | $3^{\text {m }}$ |
|  | $36^{\prime \prime} \cdot 7$ | $36^{\prime \prime \prime} \cdot 5$ |  | $26^{\text {m }}$ | $25^{\text {m }}$ | 33533 \{ | $55^{\prime \prime} \cdot 2$ | $55^{\prime \prime} \cdot 7$ |
| 26956 \{ | 38 | $39^{\text {m }}$ |  | $18^{\prime \prime} \cdot 6$ | $19^{\prime \prime} \cdot 0$ | 33534 | $4^{\text {m }}$ | $3^{\text {m }}$ |
|  | $21^{\prime \prime}$ | $2 \mathrm{I}^{\prime \prime} \cdot 5$ | 20 | $26^{\mathrm{m}}$ | $25^{\text {m }}$ | 33534 | $24^{\prime \prime} \cdot 9$ | $25^{\prime \prime} \cdot 4$ |
| $27119\{$ |  |  |  | 45 | $46^{\prime \prime} \cdot 2$ | 33542 | $4^{\mathrm{m}}$ | $3^{\text {m }}$ |
|  | $4^{2} 14^{\prime \prime \prime} \cdot 6$ | $22^{\prime} 14^{\prime \prime} \cdot 3$ | 30233 , | $24^{\text {8. }}+43$ | $24^{8.81}$ | 33542 | $48^{*} \cdot 6$ | $49^{n} \cdot 0$ |
| 27120 | Dele. | N.P.D. | 30233 ? | $62^{\circ} 42^{\prime} 35^{\prime \prime} \cdot 7$ | $61^{\circ} 4 z^{\prime} 30^{\prime \prime} .6$ | 33570 | $5^{\text {m }}$ | $4^{\text {m }}$ |
| 27389 | $3^{88 .} 55$ | $39^{8.60}$ | , | 28 m | $27^{\text {m }}$ | 33570 | $24^{\prime \prime} \cdot 9$ | $25^{\prime \prime} \cdot 4$ |
| 27586 | $59^{\text {m }}$ - ${ }^{\text {s. }} 8$ | $58^{8 \mathrm{~m}} 29^{\text {c. }} 23$ | 263 | $15^{\prime \prime}$ | ${ }^{15} 5^{\prime \prime} \cdot 7$ | 34142 | $3^{18.46}$ | $3^{18.33}$ |
| 27870 | $7^{\text {m }}+$ | 8 m 168.50 | 30303 | $29^{\mathrm{m}} 28^{8 .} 95$ | $30^{\text {m }}{ }^{8} 8.87$ | 34142 2 | $15^{\prime} 55^{\prime \prime} \cdot 7$ | $45^{\prime} 52^{\prime \prime} \cdot 2$ |
|  | 18 m | $19^{\text {m }}$ | 219 $\{$ | $9^{8.20}$ | 88.98 | 34264 | $29^{\prime}$ | $34^{\prime}$ |
| 28241 | 38 | $37^{\prime \prime} \cdot 7$ | 30319 , | $61^{\circ} 5^{\prime} 48^{\prime \prime} \cdot 7$ | $60^{\circ} 5^{\prime} 47^{\prime \prime} \cdot 0$ | 34418 | $30^{\prime}$ | $35^{\prime}$ |
|  | $57^{8.42}$ | $57^{8 .} 33$ | 30328 \{ | ${ }^{25} 5^{8.24}$ | $2^{2} 5^{\text {8. }} 31$ | 34419 | $23^{\prime \prime} \cdot 9$ | $12^{\prime \prime} \cdot 7$ |
|  | $60^{\circ} 17^{\prime} 35^{\prime \prime} \cdot 3$ | $59^{\circ} 17^{\prime} 34^{\prime \prime} 9^{\prime \prime}$ | 30328 2 | $60^{\circ} 22^{\prime} 53^{\prime \prime} \cdot 0$ | $59^{\circ} 54^{\prime} 37^{\prime \prime} \cdot 4$ | $3455^{\circ}$ | $29^{\prime}$ | $34^{\prime}$ |

ADOPTED ERRATA IN LALANDE'S CATALOGUE, 1800 -continued.


## LIST OF OBSERVATIONS IN BESSEL'S ZONES WHICH HAVE NOT BEEN USED.

In R.A. $o^{\text {h }}, 736$; I., 86, 668, $10 f^{1}$; II., 393, 438, 620, 631 , 842, 1444; III., 227, 390, 466, 515, 768; IV., $370,1402,1415$; V., $57,384,452,799,1031$, 1036, 1105, 1644, 1673, 1850, 1951, 1982, 1988; VI., 668, 727, 1036, 1090, 1331 , 1457 ; VII., 544, 602, 826, 1104 ; VIII., 39; X., 463 ; XI., 465 , 912 ; XII., 412,838 ; XIII., 300, 471,588 , 911 , 926, 1124 ; XIV., 597 ; XV., $719,873,1024$; XVI., 81, 85, 203, 1388 ; XVII., 87, 1643; XVIII., 91, 940, 974, 1675 ; XIX., 841, 1199 , 1468, 1562, 1813; XX., 49, 191, 533, 684, 713, 967, 1298, 1412, 1485, 1728, 1734; XXI., 100,

In R.A. XXI., 228, 513, 522, 528, 550, 851, 931, 1538 ; XXII., 703, 861, 1142, 1238, 1372 ; XXIII., $47 \mathrm{I}, 588,599,600,636,823,883,903,922$, 1021.

In Dec. oh $^{\text {h }}$, 1076 ; I., 278, 1174 ; II., 302, 607, 1054, 1133 ; 1207, 1314, 1364, 1461 ; III., 87, 133, 390, 596, 640; IV., 77, 539, 553, irg6; V., 49, 454, 1789; VI., 3,447, 815 ; VII., 1619 ; VIII., 18 r ; XII., 412; XIV., 597; XV., 903; XVI., 755, 922 ; XIX., 1244, 1920 ; XXI., 522, $55^{1}$; XXII., 643. 725.

# LIST OF OBSERVATIONS IN LALANDE'S CATALOGUE, I800, WHICH HAVE NOT BEEN USED. 

In R.A. $57,88,150,55^{6}, 614,741,956,1032,1762,2166$, 2445, 2889, 3219, 3276, 3941, 4513, 4540, 4688, $5141,5147,5216,5223,5307,5415,5994,6472$, $6865,6877,7404,8259,8260,8273,8560,8684$, 9303, $9529,9774,10123,10679,11833,13122$, 13259, 13495, 13679, 13681, 13700, 13958, 14391, 14683, $15004,15031,15169,15412,15613,16237$, $16291,16849,16871,17144,17424,17880,18845$, 20223,20296,20742,21491,21608,21715,22614, 22813,22994, 23011, 23032, 23519, 23567, 23585, 23795, $23871,23966,24025,24110,24216,24290$, 24447, 24866, $25070,25227,25903,26022,26063$, 26099, 26392, 26489, 26491, 26552, 26618, 26852, 26919, 27311, 27735, 28120, 28271, 28429, 28900, 28937, 29155, 29174, 29176, 29637, 30028, 30244, 30260, $30714,30986,31134,31249,31252,31280$, 31317, $3^{1411}, 31503,31848,32034,32295,32367$, 32407, 32832, 32856, 33115, 33127, 33533, 34129, 34132, $34141,34550,35441,35727,35^{12}$ 12,36179, 36474, $36549,36674,36740,37036,37119,37212$, $37474,37503,37730,37853,3^{8122}, 3^{81} 134,38500$, 38537, $38731,39505,39682,39695,39769,40192$, 41 $326,43860,43975,44026,44094,44149,44549$, $+5288,46794,46555,46995$.

In Dec. 22, 741, 1333, 1440, 1544, 2314, 2653, 2881, 3309 , $3338,3432,3882,394 \mathrm{I}, 4353,4369,4446,4570$, 4664, 4960, $5114,5141,5307,5415,6255,6363$, $6434,6466,6474,6840,7250,7315,7342,7631$, 8259, 8260, 8992, 8994, 9078, 9797, 10008, 10060, $10123,11627,11833,12102,12103,12486,12766$, 13122, $13 \times 49,13202,13564,13594,13675,1395^{8}$, $14075,143^{1} 7,14391,14543,14683,14991,15004$, 15031, 15231, 15613, 16305, 16416, 16665, 16875, $17144,17424,17965,18480,18543,18550,19313$, 19367, 19429, 20610, 20973, 21680, 22184,24208 , 24216, 24447, 24939, 24953, 25045, 25070, 25487, 25667, 27097, 28052, 28339, 28648, 28649, 29027, 29521, 29637, 29803, 29832, 29964, 30865, 31155, 31252, $31501,31845,33440,33896,33991,34265$, $35638,35^{8} 36,36120,37132,37435,38224,39$ 194, $39682,39969,39996,40060,4077^{8,41388,41667}$, $43114,43302,43882,44026,45040,45^{177}, 46006$, $46376,46449,46969,46983,47^{291}$.

## INTRODUCTION.

The results contained in the following Catalogue are derived from observations made with the Transit-Circle in the years 1906 to 1914 , and are reduced to the epoch 1910.0.

The Catalogue contains Greenwich clock stars, azimuth stars, stars in the Nautical Almanac, and other Ephemerides, all stars (including the suggested list of fundamental stars) in Newcomb's Fundamental Catalogue visible at Greenwich, and Moon culminators.

## 1. Right Ascensions.

Collimation.-The position of the line of collimation is determined each day by observations on the collimators, the reading of the micrometer of the north collimator for coincidence of its wire with that of the south collimator being usually obtained by observations made through the central cube of the Transit-Circle. A correction of $+^{\mathrm{r}} .011\left(=0^{\prime \prime} .41\right)$, determined from observations made in the years 1897-1905, has been applied in forming the adopted reading of the line of collimation on account of the difference of the readings for coincidence of the collimators according as they are viewed through the central cube or with the instrument raised.

At the beginning of each week these observations are made with the instrument raised, and also through the central cube. The difference between these nearly simultaneous readings for coincidence, as obtained from all the observations of each observer, gives the following corrections to the collimation error derived from observations through the central cube for each of the years 1906-1914.

Excess of Collimation Error for Coincidence of Collimators with the Instrument raised over that through the Central Cube.

|  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year. | W. | J.S. | E. | R.C. | B.E. | H.A. | F.J. | Annual |
| Mean. |  |  |  |  |  |  |  |  |

A correction of $+0^{\prime \prime} \cdot 41$, as mentioned above, has been applied to the observations at the time of reduction. The difference between this correction and the actual mean for the years $1906-1914$, viz. $+0^{\prime \prime} \cdot 27$, may be expressed as a correction in the form ${ }^{8} .009$ ( $1-\tan$ N.P.D.). This apparent correction has not been applied.

Level Error.-Observations of level have been made when practicable, three or more times a day. The following are the mean monthly and annual values of the diurnal change of level for the years 1906-1914, observations within three hours of noon, 6 p.m., and midnight respectively being grouped together; the tables give the excess of the level error at the times named over the level error at about the time of sunset.

> Monthly Means of Diurnal Variation of Level from Observations in 1906-1914.

| Month. | Noon-6 p.m. | Midnight-6 p.m. | No. of Obs. |
| :---: | :---: | :---: | :---: |
| January | +.".06 | ${ }_{+}{ }^{\prime \prime} 12$ | 38 |
| February | +.09 | +.13 | 47 |
| March ... | +.18 | $+.05$ | 47 |
| April. . | $+\cdot 16$ | +.14 | 60 |
| May . | +.23 | +.20 | 53 |
| June . | $+\cdot 35$ | $+20$ | 52 |
| July... | +.38 | +.2I | 45 |
| August | $+\cdot 35$ | +.30 | 52 |
| September | +.34 | +.28 | 72 |
| October . . | +.07 | $+\cdot 26$ | 58 |
| November. | $+.03$ | $+\cdot 25$ | 47 |
| December | -.10 | $+\cdot 18$ | 35 |

Annual Means of Diurnal Variation of Level from Observations in 1906-1914.

| Year. | Noon-6 p.m. | Midnight-6 p.m. | No. of Obs. |
| :---: | :---: | :---: | :---: |
| 1906 | +"34 | +".23 | 42 |
| 1907 | $+\cdot 13$ | +.18 | 72 |
| 1908 | +.14 | $+\cdot 18$ | 70 |
| 1909 | +.15 | +.08 | 67 |
| 1910 | +.15 | +.16 | 68 |
| 1911 | +.29 | $+\cdot 25$ | 71 |
| 1912 | $+\cdot 27$ | +.25 | 52 |
| 1913 | +.14 | $+\cdot 21$ | 82 |
| 1914 | $+17$ | $+\cdot 24$ | 90 |
|  | +.20 | $+\cdot 20$ |  |

Azimuth Error.-The adopted places of the nine azimuth stars-Polaris, Cephei 51, Groombridge 1119, Bradley 1672, Groombridge 2283, $\delta$ Ursæ Minoris, $\lambda$ Ursæ Minoris, Groombridge 3548, and Bradley 3147-were taken from the Greenwich Catalogue 1900. The observations of these stars were kept for place where the azimuth error had been determined by at least six of these stars, either above or below pole on the same evening.

The following is the comparison between the Greenwich observed places of these stars for 1910.0 and the adopted Right Ascensions of Newcomb's and Boss' Catalogue place for 1900:-

| Star's Namc. | Greenwich R.A. 1910. | Correction to Boss. | Correction to Newcomb. |
| :---: | :---: | :---: | :---: |
|  | h m s | 8 | s |
| Polaris | 1. 26. 56.06 | $+.09$ | + $\cdot 2 \mathrm{I}$ |
| Cephei 51 | 6. $58.39 \cdot 56$ | $+.05$ | + 43 |
| Groombridge I I I 9 | 8. 8, 41.06 | -.03 | +.04 |
| Bradley 1672 .... | 12. 14. 26.46 | +.4 ${ }^{\text {I }}$ | + 50 |
| Groombridge 2283 | I5. 5. $58 \cdot 61$ | $+.22$ | . 00 |
| $\delta$ Ursæ Minoris | 18. 1. 18.23 | +.34 | +.44 |
| $\lambda$ Urs\% Minoris... | 19. 10. 58.82 | $+.84$ | + 53 |
| Groombridge 3548 | 21. 17. 38.52 | $+\cdot 12$ | +.14 |
| Bradley 3147.... | 23. $27.47 \cdot 32$ | $+\cdot 16$ | $+1 \cdot 4^{6}$ |

Clock Error.-The Right Ascensions of the clock stars adopted each year in the Introductions to the Greenwich Observations depend on the Standard Mean

Right Ascensions of the Clock Stars for 1900, which are printed in the Introduction to the Greenwich Ten-Year Catalogue 1900, and are based on $12^{\text {b }}$ groups and Newcomb's value of the equinox correction.

The deduced Right Ascensions of Clock Stars in the Catalogue depends on $6^{\mathrm{h}}$ groups, i.e. no observation of a clock star is kept for place unless it forms one of a group of at least six stars extending over a period of observation of at least $6^{\text {h }}$.

For determining the standard Mean Right Ascension for $1910 \cdot 0$, the Right Ascensions of the clock stars have been divided into two groups, depending on $6^{\text {b }}$ and $12^{\mathrm{h}}$ groups. The differences between them have been formed with weights depending on the number of observations in the $12^{\mathrm{h}}$ groups, and are given in the following table as corrections to be applied to the $6^{\mathrm{h}}$ groups.

Assuming that these corrections can be expressed in the form

$$
\mathrm{F}+\mathrm{A} \cos a+\mathrm{B} \sin \alpha+\mathrm{C} \cos 2 \alpha+\mathrm{D} \sin 2 a
$$

the correction to the $6^{h}$ groups has been computed from the formula

$$
-^{\mathrm{s} .} 0018+^{\mathrm{s}} .0012 \cos \alpha-{ }^{8} .0025 \sin a+^{\mathrm{s}} .0023 \cos 2 \alpha \quad+^{\mathrm{s}} .0021 \sin 2 \alpha,
$$

when equal weights have been given to each hourly group. The corrections so formed have been applied to the $6^{\mathrm{h}}$ groups, and the standard Mean Right Ascensions for $1910 \cdot 0$ are formed by recombining the $12^{\mathrm{h}}$ and $6^{\mathrm{h}}$ groups with their relative weights.

These places have been further corrected for magnitude equation to reduce them to the basis of the travelling recording micrometer. The adopted correction ${ }^{\mathrm{s}} .0067(3.0-\mathrm{m})$ has been derived from the observations of clock stars made in 1915 with this micrometer. The observed corrections run as follows:-


These results depend on observations with $12^{\mathrm{h}}$ groups, the numbers of which are suffixed. From a direct comparison of the same places with Boss* the corrections are

$$
\begin{aligned}
\text { +s.013 } 3 & \text { +s.010 }+ \text { s.002 }+ \text { s.001 }
\end{aligned}
$$

Corrections to $6^{\text {h }}$ Groups to Reduce to $12^{\text {h }}$ Groups.

| $\begin{aligned} & \text { Limits } \\ & \text { of } \\ & \text { R A. } \end{aligned}$ | Observed Correc. tion to $6^{\text {b }}$ Group. | No. of Obs. |  | Formula Correction to $6^{\mathrm{h}}$ Group. | Limits of R.A. | Observed Correction to 6h Group. | No. of Obs. |  | Formula <br> Correction to ${ }^{64}$ Group. | $\begin{aligned} & \text { Limits } \\ & \text { of } \\ & \text { N.P.D. } \end{aligned}$ | Observed Correction to $6^{6}$ Group. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $12^{\text {h }}$. | $6^{\text {b }}$. |  |  |  | $12^{\text {b }}$. | $6{ }^{4}$. |  |  |  |
| h h | 5 |  |  | s | $h \mathrm{~h}$ | 5 |  |  | s | $\bigcirc \circ$ | 8 |
| O-I | +.009 | 169 | 318 | +.002 | 12-I3 | . 000 | 82 | 213 | -000 | 50-60 | -.008 |
| 1-2 | +.008 | 127 | 194 | +.001 | $13-14$ | -.001 | 97 | 198 | +.001 | 60-70 | -.001 |
| 2-3 | -.005 | 140 | 167 | . 000 | 14-15 | +.001 | 165 | 216 | +.001 | 70-80 | -.005 |
| 3-4 | - 000 | 127 | 159 | -.002 | $15-16$ | -.007 | 134 | 243 | +.001 | 80-90 | $+.002$ |
| 4-5 | -.007 | 125 | 178 | -.004 | 16-17 | -.002 | 158 | 199 | -000 | 90-100 | +.002 |
| 5-6 | +.006 | 173 | 227 | -.006 | 17-18 | +.005 | 195 | 241 | -.001 | 100-110 | -.006 |
| 6-7 | -.020 | 106 | 191 | -.007 | 18-19 | -.007 | 153 | 282 | -.002 | I IO- | -.008 |
| 7-8 | +.002 | 233 | 260 | -.008 | 19-20 | +-OI2 | 2 I | 350 | -.002 |  |  |
| 8-9 | -.019 | 70 | 123 | -.007 | 20-2I | -.006 | 106 | 270 | -.002 |  |  |
| 9-10 | -.002 | 113 | 186 | -.006 | 2 I-22 | -.005 | 153 | 300 | -.001 |  |  |
| 10-11 | -.007 | 94 | 196 | -.004 | 22-23 | -000 | 125 | 285 | .000 |  |  |
| 11-12 | +.010 | 90 | 239 | -.002 | 23-24 | -.008 | 109 | 251 | $+\cdot 002$ |  |  |
| Total |  | 1567 | 2438 |  |  |  | I 688 | 3048 |  |  |  |

If we assume that the differences between the Greenwich Standard Mean R.A.'s for 1910 and Boss Catalogue for 1900 can be expressed in the form
$\mathrm{A} \cos \alpha+\mathrm{B} \sin \alpha+\mathrm{C} \cos 2 \alpha+\mathrm{D} \sin 2 \alpha$,
then these differences taken as Greenwich-Boss become

$$
+^{\mathrm{s}}: 0023 \cos \alpha-\mathrm{s} .0090 \sin a+^{\mathrm{s}} .0063 \cos 2 \alpha+\cdot \mathrm{s} 0007 \sin 2 \alpha
$$

or correcting the Greenwich Observations for magnitude corrections,

$$
+^{8} \cdot 0030 \cos \alpha-8 \cdot 0095 \sin a+^{8} \cdot 0040 \cos 2 a+^{8} \cdot 0010 \sin 2 \alpha,
$$

This result agrees with the general result of all investigations into the correction required by Boss Catalogue (M.N.R.A.S., lxxv., p. 335), viz.:-

$$
+^{s .008} \cos a-8.007 \sin a+8.006 \cos 2 a-s .001 \sin 2 a
$$

A vi
Catalogue of Fundamental Stars.
Equinox Correction.-The following table shows the results of the ecliptic investigations for the years 1906-1914:-

| Year. | Corrections to |  |  |
| :---: | :---: | :---: | :---: |
|  | Clock Stars. | Obliquity. | O's Latitude. |
| 1906 | $\begin{gathered} s \\ -.058 \end{gathered}$ | -."09 | -."OI |
| 1907 | -. 028 | -. 01 | +.10 |
| 1908 | -.066 | -. 12 | -.01 |
| 1909 | -.044 | 00 | $+.02$ |
| 1910 | -. 036 | $+\cdot 07$ | $+\cdot 16$ |
| 191i | -.036 | +.02 | +.14 |
| 1912 | -.051 | $+.04$ | -.05 |
| 1913 | -.055 | -.01 | $+17$ |
| 1914 | -.027 | $-17$ | $+\cdot 18$ |
| Mean | -.045 | -.03 | $+.08$ |

The mean corrections to the Right Ascension of the Clock Stars, that is to Newcomb's Equinox, is thus - ${ }^{s} .045$, which is considerably larger than the correction deduced in 1900, viz. - ${ }^{s} 014$. The illumination of the field of view was in 1908 altered. The illuminating light is now supplied from a source mounted outside and on the centre of the object-glass instead of being supplied from an internal annular reflector. There is no evidence to point to this as being the cause of the increase. A correction of $+^{s} \cdot 054$ was previously applied to the Greenwich Standard Right Ascensions of the 1890 Catalogue to reduce them to the Equinox of Newcomb's Fundamental Catalogue for 1900, a correction which was substantially the same as that of the Greenwich Observations of the Sun for the years 18971902 ( $+\cdot{ }^{*} 042$ ).

Mean Error of the Tabular Right Ascensions of the Sun's Centre (Mean of Two Limbs) found by different Observers.

| Year. | $\mathrm{W} .$ | J.S. | R.C. | E. | B.E. | F.J. | H.A. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1906 | -. 02 | -. 05 | -. 05 | -00 | . . | . . |  |
| 1907 | -. 01 | -.06 | $+.01$ | -. 04 | . | . | .. |
| 1908 | -. 02 | -. 07 | $-10$ | -.05 | . | . |  |
| 1909 | -. 01 | .. | -. 10 | -. 01 | -. 02 | . |  |
| 1910 | -.06 | . | -. 13 | -.02 | -. 01 | . | . |
| 1911 | -. 06 |  | -. 16 | -. 03 | -. 04 | . |  |
| 1912 | -. 04 | . | -. 12 | -.02 | -. 04 | . | -. 04 |
| 1913 | -. 03 | .. | -. 15 | . | .. | -.09 | -. 04 |
| 1914 | -. 04 |  | -.09 |  |  | -. 14 | -.06 |

Mean Error of the Tabular Declinations of the Sun's Centre (Mean of Two Limbs) found by different Observers.

| Year. | W. | J.S. | R.C. | E. | B.E. | F.J. | H.A. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1906 | -.17 | +.22 | +.55 | -.16 | .. | .. | .. |
| 1907 | -.20 | +.10 | +.51 | -.57 | . | . | . |
| 1908 | -.12 | +.08 | +.39 | -.09 | . | . | .. |
| 1909 | -.13 | . | +.52 | -.22 | +.34 | . | .. |
| 1910 | -.19 | . | +.43 | -.66 | +.17 | . | . |
| 1911 | -.44 | . | +.43 | -.33 | +.13 | . | . |
| 1912 | -.27 | . | +.49 | -.17 | +.14 | . | . |
| 1913 | -.31 | . | -.11 | .. | .. | -.33 | -.16 |
| 1914 | -.25 | .. | +.20 | . | .. | +.09 | +.11 |

## 2. Declinations.

Microscope and Zenith Distance Micrometer Screws.-The error of the mean readings of the six micrometer screws has remained insensible for the range of the screw ( $0^{r}$ to $5^{r}$ ) to which the observations are ordinarily confined. The effect of wear is practically eliminated by the reversal of three of the screws. The error of the Zenith Distance micrometer screw has been checked from time to time by measurements of intervals on the circle, nadir, and collimators.

Nadir Correction.-The apparent corrections for discordance between the zenith point determined from observations of the nadir, and from reflexion observations of stars in the years 1906-1914, are as follows:-

| 1906 | -.40 | 1911 | .- .22 |
| :--- | :--- | :--- | :--- |
| 1907 | -.24 | 1912 | -.12 |
| 1908 | -.33 | 1913 | -.14 |
| 1909 | -.16 | 1914 | -.28 |
| 1910 | -.20 |  |  |

The cause of this discordance is unknown. Since 1906 January 1 a correction of $-0^{\prime \prime} .25$ has been applied to the observation of the nadir in forming the zenith point on days when no reflexion observations of stars were made.

Diurnal Variation of the Nadir.-Observations of the nadir have been made when practicable three or more times a day. The observations have been grouped as in the case of the level, and give the apparent corrections to the nadir about the time of sunset.

Monthly Means of Diurnal Variation of Nadir from Ovservations in 1906-1914.

| Month. | Noon-6 p.m. | Midnight-6 p.m. | No. of Obs. |
| :---: | :---: | :---: | :---: |
| January | +.15 | +.06 | 35 |
| February | +.11 | $-.03$ | 45 |
| March | $+\cdot 24$ | +.24 | 44 |
| April | $+\cdot 12$ | $+\cdot \mathrm{II}$ | 59 |
| May | +.11 | $+\cdot 21$ | 56 |
| June | $+.07$ | $+.02$ | 56 |
| July | $+.07$ | $+\cdot 13$ | 52 |
| August | +.18 | $+.06$ | 61 |
| September | $+\cdot \mathrm{II}$ | $+\cdot 04$ | 69 |
| October . . | $+31$ | $+.03$ | 61 |
| November. | $+19$ | -.09 | $4^{2}$ |
| December | $+12$ | --OI | 35 |
| Mean | +.15 | $+.07$ | . |

Annual Means of Diurnal Variation of Nadir for years 1906-1914.

| Year. | Noon-6 p.m. | Midnight-6 p.m. | No. of Obs. |
| :---: | :---: | :---: | :---: |
|  | 1906 | +.19 | . .01 |
| 1907 | +.17 | +.15 | 40 |
| 1908 | +.11 | +.05 | 67 |
| 1909 | +.18 | +.12 | 82 |
| 1910 | +.19 | +.01 | 69 |
| 1911 | +.17 | +.05 | 72 |
| 1912 | +.19 | +.08 | 69 |
| 1913 | +.13 | +.09 | 58 |
| 1914 | +.15 | +.03 | 73 |
| Mean |  | +.07 | 85 |

$R-D$ Discordance.-The system of reducing the Zenith Distances observed with the Transit-Circle to the mean of reflexion and direct observations for each separate year's observations was followed till the formation of the Catalogue for 1900. It was then found that a large diminution in the value of the flexure-term as determined from the $\mathrm{R}-\mathrm{D}$ investigations for the years 1897-1905 did not appear to be supported by the result of the ordinary direct observations, and a value of $+0^{\prime \prime} .6 \sin$ Z.D. applicable to Z.D. South, corresponding to the mean of the results of the preceeding twenty years' observations, was adopted, and has been in use since.

A discussion of the results of the R and D observations from 1897-1914, by Mr Thackeray (M.N.R.A.S., lxxv., pp. 548-553) has shown-
(1) There is a considerable range in the results given by different observers, pointing to something of the nature of bisection error.
(2) The discordance diverges considerably from the law $a+b \sin$ Z.D.
(3) There are marked systematic differences between the ordinary direct observations and those taken in connection with the observations by reflexion.

Considered as a flexure correction the R and D observations for the years 1906-1914 give the value $+0^{\prime \prime} \cdot 5 \sin$ Z.D. In the previous catalogue the value $+0^{\prime \prime} \cdot 6 \sin$ Z.D. was applied to the observations, and this value has been adopted as the correction applicable to Z.D. South for the present Catalogue.

The observations in the individual years give the following formula for the correction to the direct observations:-

| 1906 | +.09 | $+.47 \sin$ Z.D. | 1911 | +.05 | $+.50 \sin$ Z.D. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1907 | +.05 | +.58 | 1912 | +.03 | +.48 |
| 1908 | +.07 | +.44 | 1913 | +.03 | +.43 |
| 1909 | +.04 | +.60 | 1914 | +.06 | +.37 |
| 1910 | +.03 | +.52 |  |  |  |

Horizontal Flexure.-The values of the horizontal flexure determined from observations on the collimators in the years 1906-1914 are as follows :-

| Year. | Flexure. | No. of Obs. | Year. | Flexure. | No. of Obs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1906 | +"50 | 2 | I9II | +"28 | I |
| 1907 | $+\cdot 07$ | 2 | 1912 | -.15 | 2 |
| 1908 | $-.23$ | I | 1913 | -.16 | 3 |
| 1909 | $-.23$ | 2 | 1914 | -.14 | 2 |
| 1910 | $+.04$ | 2 |  |  |  |

Thermometer.-The thermometer which is used as the exterior thermometer is mounted in the front court in a screen allowing a free circulation of the air. Until 1913 November 10, when it was broken, this thermometer was Negretti and Zambra 70,661 . It was replaced by Hicks 257,551. From comparisons with the standard thermometer an index correction of $-0^{\circ} \cdot 2$ was applied to all the readings

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of Negretti and Zambra 70,661, and from similar comparisons no correction is required to the readings of Hicks 257,551 .

Barometer.-The barometer in use for the whole period 1906-1914 is one made by Horne \& Thornthwaite, marked No. 389, with metallic scale and graduation modified for change of mercury surface in the cistern. From comparisons with the standard barometer it is found to require no corrections to its reading.

Colatitude and Refraction.-Since 1906 January 1, Poulkova refractions have been used. A table of these refractions has been given as an appendix to Greenwich Observations, 1898. The mean value of the colatitude adopted in connection with these refractions is $38^{\circ} 31^{\prime} 21^{\prime \prime} \cdot 80$. Correction for latitude variation derived from Professor Albrecht's provisional discussions of the international series of observations have been applied each year to the Greenwich North Polar Distances, as follows:-

Table of Corrections for Latitude Variation, 1906-1914.
(The signs of these corrections are applicable to colatitude.)

| Fraction of Year. | 1906. | 1907. | 1908. | 1909 | 1910. | 1911. | 1912. | 1913. | 1914. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - 0 | -.13 | -. 0.07 | +.06 | +.21 | +".14 | -. 0.07 | -. 27 | $\stackrel{.1}{13}$ | -.01 |
| - I | -.03 | -.05 | -.03 | $+20$ | +.21 | $+.04$ | -.16 | -.17 | -. 07 |
| - 2 | +.09 | -. 02 | -.12 | +.12 | +.26 | +.12 | -. 04 | -. 18 | -. 17 |
| $\cdot 3$ | +.15 | . 00 | -.18 | -. 02 | +.19 | +.15 | +.10 | -.14 | $-.23$ |
| -4 | +.18 | $+.03$ | -. 20 | -. 15 | +.07 | +.15 | +.16 | --10 | -. 23 |
| - 5 | +.16 | +.05 | -. 17 | -. 25 | -. II | +.09 | $+\cdot 12$ | -. 06 | -. 22 |
| - 6 | +.11 | +.06 | -. 08 | $-.32$ | -. 29 | -. 05 | +.06 | -. 03 | -.21 |
| $\cdot 7$ | $+.04$ | +.09 | $+.02$ | -. 30 | -. 34 | -.16 | $+.02$ | - 00 | -.16 |
| -8 | . 02 | +.II | +.10 | -. 16 | --3I | $-.25$ | -.03 | $+.02$ | -.07 |
| -9 | -. 06 | +.IO | +.19 | - 00 | -. 21 | $-32$ | -.09 | $+.02$ | +.01 |
| $1 \cdot 0$ | -. 08 | +.09 | +.20 | +.16 | -. 04 | -. 30 | -.14 | -00 | +.09 |

The following are the deduced annual corrections to the adopted colatitude $38^{\circ} 31^{\prime} 21^{\prime \prime} \cdot 80$, the mean is $-0^{\prime \prime} \cdot 02$.

| Year. | Correction. | Year. | Correction. |
| :---: | :---: | :---: | :---: |
| 1906 | -.13 | 1911 | $+\because .08$ |
| 1907 | -.09 | 1912 | .00 |
| 1908 | -.14 | 1913 | -.02 |
| 1909 | +.03 | 1914 | +.03 |
| 1910 | +.03 |  |  |

Comparison with other Catalogues.-A comparison has been made of the Greenwich Clock Star Places for the 1890, 1900, and the present Catalogue 1910, with Newcomb's Fundamental Catalogue for 1900, and Boss's Preliminary General Catalogue of 6188 Stars for 1900.

The Greenwich Right Ascensions are the standard mean Right Ascensions used for clock-star lists, and the declinations are those printed in the body of the Catalogues.

The comparison has been made by reducing Newcomb and Boss to the epochs of the Greenwich Catalogues with the annual variations given in these two catalogues. The Right Ascensions of the Greenwich 1890 Catalogue have been increased by $+^{\mathrm{s} .047}$ to reduce them to the equinox of Newcomb's catalogue.

Comparison of Right Ascensions in Order of R.A.
(Unit s.001.)


Right Ascensions in Order of Declination.
(Unit $8 \cdot 001$.)

| Limits of Dec. | No. of Stars. | Greenwich-Newcomb. |  |  |  | Greenwich-Boss. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1890 | 1900. | 1910. | Mean. | 1890 | 1900. | 1910. | Mean |
| $+40^{\circ}$ to $+30^{\circ}$ | 9 | $+6$ | - 2 | $-16$ | - 4 | + 4 | - 5 | - I 3 | - |
| + $30,1+20$ | 37 | $+4$ | - 4 | - 13 | - 4 | +10 | + 4 | - 4 | + |
| +20, +10 | 40 | 0 | -6 | - 3 | - 3 | + 6 | + I | $+7$ | $+$ |
| +10, 0 | 46 | $\bigcirc$ | $+3$ | + 2 | +2 | $+7$ | + 9 | + 7 | $+$ |
| 0,,-10 | 35 | $-2$ | 0 | + 3 | $\bigcirc$ | + 2 | + 4 | $+10$ | + |
| -10,, -20 | 28 | -6 | $-7$ | - I | -5 | - 3 | -7 | - 2 | - |
| -20,, -30 | 15 | + 8 | +18 | +17 | +14 | -8 |  | - 7 | - |
| Mean |  | $\bigcirc$ | - I | - 2 | . | $+4$ | $\bigcirc$ | $+$ |  |

Comparison of Declinations in Order of R.A.

| Limits of R.A. | No. of Stars. | Greenwich-Newcomb. |  |  |  | Greenwich-Boss. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1890. | 1900. | 1910. | Mean. | 1890. | 1900. | 1910. | Mean. |
| h h |  | " | " | " | " | " | " | " | " |
| $0-1$ | 11 | -.13 | +.01 | -. 03 | -.05 | -. 07 | $+\cdot 02$ | -.03 | -.03 |
| 1-2 | 7 | . 01 | -.08 | -.10 | -.06 | -.04 | -. 10 | -. 13 | -.09 |
| 2-3 | 10 | +.06 | -. 01 | +.12 | +.06 | +-01 | $-13$ | +.03 | -. 03 |
| 3-4 | 10 | +.02 | +.06 | +.01 | +.03 | -.01 | $+.04$ | -.01 | +.01 |
| 4-5 | 8 | +.01 | +.08 | +.03 | +.04 | +.01 | +.07 | +.05 | $+.04$ |
| 5-6 | 9 | +.08 | $+.06$ | -.05 | +.03 | +.04 | -. 01 | -. 12 | -.03 |
| 6-7 | 11 | -.11 | - 11 | $-.25$ | -.16 | -10 | -. 08 | -. 18 | -. 12 |
| 7-8 | 8 | -. 05 | -. 02 | -.14 | -. 07 | -.10 | $\cdot 00$ | -. 20 | -.10 |
| 8-9 | 7 | -.15 | +.02 | $-10$ | --.08 | -.16 | . 00 | -. 10 | -.09 |
| 9-10 | 8 | -. 03 | -.11 | -. 22 | -. 12 | -. 02 | -.17 | -. 21 | -.13 |
| 10-11 | 7 | +.02 | $-\cdot 17$ | $-.05$ | -.07 | $+.04$ | -. 15 | -.03 | -. 05 |
| I 1-12 | 8 | -.01 | -.10 | -.14 | -.08 | +.06 | -. 04 | -. 05 | -.01 |
| 12-13 | 10 | +.10 | +.04 | +.11 | +.08 | +.10 | -. 05 | +.03 | $+.03$ |
| $13-14$ | 7 | -.01 | $+.06$ | -. 03 | +.01 | +.06 | +.14 | +.04 | $+\cdot 08$ |
| 14-15 | 8 | +.10 | +.09 | +.21 | +.13 | +.14 | +-11 | +.16 | +.14 |
| 1 5-16 | 9 | +.10 | +.19 | +.18 | +.16 | +.16 | $+.27$ | $+\cdot 27$ | $+\cdot 23$ |
| 16-17 | 8 | -.01 | -. 03 | -. 01 | -. 02 | +.01 | +.14 | +.12 | +.09 |
| 17-18 | 8 | +.09 | +.09 | +.10 | +.09 | $+\cdot 12$ | +.10 | +.14 | +.12 |
| 18-19 | 8 | -.04 | -. 04 | +.03 | -.02 | -. 08 | -.08 | -. 03 | -.06 |
| 19-20 | 12 | +.OI | $+\cdot 03$ | +•13 | $+.06$ | -.03 | -.08 | +.09 | -. 01 |
| 20-21 | 9 | -.01 | -.03 | $-.04$ | -.03 | +.05 | +.07 | +.08 | +.07 |
| 21-22 | 9 | -00 | -.02 | $+\cdot 18$ | +.05 | -. 02 | -.07 | +.12 | $+.01$ |
| 22-23 | 10 | $-.04$ | -.09 | +.01 | -. 04 | -.03 | -.04 | +.04 | -.01 |
| 23-24 | 7 | -. 02 | +.II | +.02 | +.04 | -.09 | -.04 | -.02 | -.05 |

Declinations in Order of Declination.

| Limits of Dec. | No. of Stars. | Greenwich-Newcomb. |  |  |  | Greenwich-Boss. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1890. | 1900. | 1910. | Mean. | 1890. | 1900. | 1910. | Mean. |
| $+40^{\circ}$ to $+30^{\circ}$ | 9 | $\cdots$ | -".13 | ". +.05 | -..07 | +.07 | +. 22 | +"39 | +".23 |
| $+30, \ldots+20$ | 37 | -. 04 | -. 05 | +.12 | +.01 | +.19 | +.19 | $+\cdot 40$ | +.26 |
| +20, $2+10$ | 40 | -.01 | -.01 | +.14 | +.04 | +.22 | $+.22$ | $+\cdot 42$ | +.29 |
| +10, 0 | 46 | -. 08 | $-.28$ | +.01 | -.12 | +.21 | -00 | +.33 | +.18 |
| - , - 10 | 35 | -.05 | -. 17 | +.07 | -.05 | +.24 | +.15 | $+\cdot 40$ | +.26 |
| -10, - 20 | 28 | -. 07 | -.02 | $+.25$ | $+.05$ | $+.20$ | +.25 | +.53 | +.33 |
| $-20,-30$ | 15 | -.06 | +.13 | + 31 | $+\cdot 13$ | $+.04$ | $+\cdot 23$ | +.42 | +.23 |
| Mean |  | -.05 | -•10 | $+\cdot 12$ | --OI | +.19 | $+\cdot 16$ | +.40 | +.25 |

Explanation of the separate Columns of the Printed Catalogue.
The Right Ascensions given in this Catalogue are based on the Greenwich clock-star lists of Standard Right Ascensions referred to the equinox of Professor Newcomb's Catalogue of Fundamental Stars for 1900.

The declinations are based on
Poulkova Refractions,
Value of colatitude $38^{\circ} \cdot 31^{\prime} 21^{\prime \prime} \cdot 80$,
A correction of $+0^{\prime \prime} \cdot 6 \sin$ Z.D. South to the Zenith Distances for flexure, and are corrected for latitude variation.

The Right Ascensions and Declinations are reduced to $1910 \cdot 0$ with the proper motions given in the body of the Catalogue, which are those of Boss's General Catalogue for 1900.

The magnitudes are taken from the Revised Harvard Photometry.
The mean dates require no explanation.
The number of observations gives the aggregate number of observations in the different years above and below pole which are combined with equal weights to form the mean Right Ascensions.

The annual precession and secular variation are derived from Downing's Precession Tables for 1910, in which Newcomb's value of the precession constant is used. The precession in R.A. is given by the formula

$$
3^{\mathrm{s}} \cdot 07252+1^{\mathrm{s}} \cdot 33642 \sin a \tan \delta,
$$

and the secular variation by the formula
where

$$
\begin{aligned}
& \mathrm{A}+\mathrm{B} \cdot \tan \delta+\mathrm{C} \tan ^{2} \delta, \\
& \mathrm{~A}=\quad+0^{\mathrm{s}} \cdot 00186+0^{\mathrm{s}} \cdot 00649 \sin 2 \alpha_{0} \\
& \mathrm{~B}=\quad-0^{\mathrm{s} .00057} \sin \alpha+0^{\mathrm{s} \cdot 02986 \cos \alpha_{\bullet}} \\
& \mathrm{C}=\quad+0^{\mathrm{s}} \cdot 01299 \sin 2 \alpha_{\bullet}
\end{aligned}
$$

It should be noted that the secular variation given by these formulæ, and printed in the Catalogue, is the secular variation which depends on the precession alone. The variation due to the combined effect of proper motion and precession is not included.

The annual proper motions are taken from Boss's General Catalogue for 1900.
To the columns relating to Declinations the same remarks apply generally as in the case of R.A., except that in combining observations above and below the pole the following system of weights are used:-

For stars whose declinations exceed $+75^{\circ}$ the observations above and below pole have equal weights; from $+75^{\circ}$ to $+54^{\circ}$ those below pole have the weight $\frac{2}{3}$ for each observation; from $+54^{\circ}$ to $+49^{\circ}$ those below pole have the weight $\frac{1}{2}$ for each observation; beyond $+49^{\circ}$ the observations below pole are not used in fixing the mean declination 1910.0 .

The precession in Declination is given by the formula

$$
+20^{\prime \prime} \cdot 0461 \cos a
$$

and the secular variation by the formula

$$
\mathbf{A}^{\prime}+\mathbf{B}^{\prime} \tan \delta
$$

where

$$
\begin{aligned}
& \mathrm{A}^{\prime}=-0^{\prime \prime} \cdot 0085 \cos \alpha-0^{\prime \prime} \cdot 4479 \sin \alpha_{0} \\
& \mathrm{~B}^{\prime}=-0^{\prime \prime} \cdot 1948 \sin ^{2} \alpha .
\end{aligned}
$$

Standard Mean Right Ascensions of Clock Stars for $1910 \cdot 0$ based on Twelve-hour Groups Corrected for Magnitude Equation from Observations made with the Travelling Wire Micrometer.

| Star's Name. | Mag. | Mean R.A. $1910 \%$. | Approx. N.P.D. | Star's Name. | Mag. | Mean R.A. $1910 \%$. | Approx. <br> N.P.D. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | h m |  |  |  | h m |  |
| $\boldsymbol{a}$ Andromedæ.. | $2 \cdot 2$ | - 3. 43.950 | 61. 24 | $\bullet$ Aurigæ | $2 \cdot 9$ | 4. 51.7 .814 | 56. 59 |
| $\gamma$ Pegasi | $2 \cdot 9$ | -. 8. 35.999 | 75. 19 | є Leporis. . . . . | $3 \cdot 3$ | 5. I. 39.026 | 112. 29 |
| $\iota$ Ceti . | 3.8 | -. 14. 50.541 | 99. 19 | Rigel | $0 \cdot 3$ | 5. 10. 12.757 | 98. 18 |
| 44 Piscium | $6 \cdot 0$ | -. 20. $47 \cdot 297$ | 88. 34 | $\beta$ Tauri | I. 8 | 5. 20. $36 \cdot 084$ | 6I. 28 |
| 12 Ceti | $6 \cdot 0$ | o. $25 \cdot 26 \cdot 720$ | 94. 27 | $\delta$ Orionis | $2 \cdot 5$ | 5. 27.24 .489 | 90. 22 |
| $\epsilon$ Andromedæ | $4 \cdot 5$ | -. 33. $47 \cdot 773$ | 61. 11 | a Leporis | $2 \cdot 7$ | 5.28. $45 \cdot 618$ | 107. 53 |
| $\beta$ Ceti | $2 \cdot 2$ | -. 39. $4 \cdot 379$ | 108. 29 | ¢ Orionis | I. 8 | 5. $31.38 \cdot 773$ | 91. 16 |
| $\delta$ Piscium | $4 \cdot 6$ | 0. 44.0 .682 | 82. 54 | $\kappa$ Orionis | $2 \cdot 2$ | 5. 43. $29 \cdot 248$ | 99. 42 |
| 20 Ceti ...... | $4: 9$ | O. 48.24 .454 | 91. 38 | a Orion | 1.0* | 5. 50. 17.957 | 82. 37 |
| $\mu$ Andromedæ . | $3 \cdot 9$ | -. $51.45 \cdot 172$ | 51. 59 | I Gemino | $4 \cdot 3$ | 5. 58. $38 \cdot 934$ | 66. 44 |
| $\epsilon$ Piscium | $4 \cdot 5$ | -. 58. $16 \cdot 226$ | 82. 36 | $\nu$ Orionis | $4 \cdot 4$ | 6. 2. $25 \cdot 977$ | 75. 13 |
| $\beta$ Andromedæ | $2 \cdot 4$ | I. $4.41 \cdot 310$ | 54. 51 | $\eta$ Geminorum . . | 3.5* | 6. 9. $26 \cdot 670$ | 67.28 |
| $\zeta^{1}$ Piscium | $5 \cdot 6$ | I. 9. 1.627 | 82. 54 | $\mu$ Geminorum.. | $3 \cdot 2$ | 6. 17. $30 \cdot 929$ | 67.26 |
| $\theta$ Ceti | 3.8 | I. 19. 31.454 | 98. 39 | $\beta$ Canis Majoris | $2 \cdot 0$ | 6. 18. $44 \cdot 169$ | 107. 55 |
| $\eta$ Piscium | $3 \cdot 7$ | 1. 26. 39.906 | 75. 7 | $\nu$ Geminorum | $4 \cdot 1$ | 6. 23. $37 \cdot 159$ | 69. 44 |
| $\nu$ Piscium. | $4 \cdot 7$ | 1. 36. 44.756 | 84. 58 | $\gamma$ Geminorum.. | 1.9 | 6. 32. $30 \cdot 798$ | 73. 31 |
| $\bigcirc$ Pisci | $4 \cdot 5$ | I. $40.38 \cdot 343$ | 81. 18 | $\xi$ Geminorum.. | $3 \cdot 4$ | 6. 40.14 .313 | 77. 0 |
| $\beta$ \ri | $2 \cdot 7$ | I. 49.39 .944 | 69. 38 | $\theta$ Canis Majoris | $4 \cdot 3$ | 6. 50.0 .510 | IOI. 56 |
| a Arietis | $2 \cdot 2$ | 2. 2. $5 \cdot 821$ | 66. 58 | $\epsilon$ Canis Majoris | 1.6 | 6. 55. $5 \cdot 346$ | II8. 51 |
| $\xi^{1}$ Ceti | $4 \cdot 5$ | 2. 8. 13.677 | 81. 35 | $\zeta$ Geminorum | 4** | 6. $58 \cdot 4^{6 \cdot 276}$ | 69. 18 |
| 67 Ceti | $5 \cdot 7$ | 2. 12. 29.634 | 96. 50 | $\gamma$ Canis Majoris | $4^{-1}$ | 6. 59. $41 \cdot 167$ | 105. 30 |
| $\xi^{2}$ Ceti | $4 \cdot 3$ | 2. $23.22 \cdot 298$ | 81. 57 | 5 I Geminorum. | $5 \cdot 3$ | 7. 8. 12.214 | 73. $4^{1}$ |
| $\nu$ Cet | $5 \cdot 0$ | 2. 3 I. $8 \cdot 944$ | 8.4 .48 | $\delta$ Geminorum | $3 \cdot 5$ | 7. 14. 44.933 | 67. 51 |
| $\delta$ C | 40 | 2. $34 \cdot 52 \cdot 080$ | 90. | $\beta$ Canis Minoris | $3 \cdot 1$ | 7. 22. 16.230 | 81. 32 |
| $\gamma^{2}$ Ceti | $3 \cdot 6$ | 2. $38.38 \cdot 156$ | 87. 9 | Castor | $2 \cdot 0$ | 7. 28. 5I. 579 | 57. 55 |
| $\sigma$ Arietis | $5 \cdot 5$ | 2. $46.3 \mathrm{I} \cdot 285$ | 75. 17 | Procyon | 0.5 | 7. 34. $35 \cdot 475$ | 84.33 |
| $\epsilon$ Arie | $4 \cdot 6$ | 2. $54.3 \cdot 753$ | 69. I | Pollux | $1 \cdot 2$ | 7. 39. $48 \cdot 645$ | 61. 45 |
| a Ceti | $2 \cdot 8$ | 2. $57.34 \cdot 399$ | 86. 16 | $\xi$ Argûs | $3 \cdot 5$ | 7. 45. $30 \cdot 520$ | 114. 38 |
| $\delta$ Arictis | $4 \cdot 5$ | 3. 6. $28 \cdot 798$ | 70. 37 | 6 Cancri | $5 \cdot 0$ | 7. 57. $59 \cdot 562$ | 6I. 57 |
| $\tau^{1}$ Arictis | $5 \cdot 2$ | 3. I6. I•684 | 69. 11 | $\rho$ Argus | $2 \cdot 9$ | 8. 3. $4^{2 \cdot 654}$ | III4. 3 |
| - Tauri | $3 \cdot 8$ | 3. 19. 58.073 | 81. 17 | $\beta$ Cancri | 3.8 | 8. II. $38 \cdot 134$ | 80. 32 |
| $f$ Tauri | 43 | 3. $25.54 \cdot 111$ | 77. 22 | $d^{1}$ Cancri | $5 \cdot 9$ | 8. 18. 12.718 | 71. 23 |
| E Eridani | $3 \cdot 8$ | 3. 28. $4 \mathrm{I} \cdot 354$ | 99. 46 | $\eta$ Cancri | $5 \cdot 5$ | 8. $27 \cdot 30 \cdot 335$ | 69. I 5 |
| 11. Tauri | $6 \cdot 2$ | 3. $35 \cdot 23 \cdot 565$ | 64. 58 | $\gamma$ Cancri | $4 \cdot 7$ | 8. 38. $4 \cdot 782$ | 68. I 2 |
| $\delta$ Eridani | 3.7 | 3. $38.56 \cdot 121$ | 100. 4 | $\epsilon$ Hydræ | $3 \cdot 5$ | 8. $4^{2}$. 0.632 | 83. 15 |
| $\eta$ Taur | $3 \cdot 0$ | 3. ${ }^{2} 2 . \quad 7 \cdot 912$ | 66. 10 | a Cancrí | $4 \cdot 3$ | 8. 53. $33 \cdot 96 \mathrm{I}$ | 77. 48 |
| $\gamma^{1}$ Eridan | $3 \cdot 2$ | 3. $53.49 \cdot 776$ | 103. 46 | $\kappa$ Cancri | 5.1 | 9. 2. 52.415 | 78. 58 |
| $\Lambda^{1}$ Tauri | $4 \cdot 5$ | 3. 59. $22 \cdot 299$ | 68. Io | 83 Cancri | $6 \cdot 6$ | 9. 13. 57.584 | 71. 55 |
| $\omega^{1}$ Tauri | $5 \cdot 7$ | 4. 3. $55 \cdot 198$ | 70. 38 | a Hydræ | $2 \cdot 2$ | 9. 23. 9.895 | 98. 16 |
| or Eridan | $4 \cdot 1$ | 4. 7. $28 \cdot 260$ | 97. 4 | $\xi$ leonis | $5 \cdot 1$ | 9. $27.5 \cdot 776$ | 78. I 8 |
| $\gamma$ Tauri | 3.9 | 4. 14. $40 \cdot 174$ | 74. 35 | - Leonis | $3 \cdot 8$ | 9. 36. 20.901 | 79. 42 |
| $\epsilon$ Tauri | $3 \cdot 6$ | 4. 23. $2 \mathrm{I} \cdot 540$ | 7 I . 1 | $\epsilon$ Leonis | $3 \cdot 1$ | 9. $40.44 \cdot 697$ | 65. 49 |
| Aldebaran | - I | 4. 30. $45 \cdot 306$ | 73. 40 | $\mu$ Leonis | $4 \cdot 1$ | 9. $47 \cdot 38 \cdot 866$ | 63. 34 |
| $\tau$ Tauri. | $4 \cdot 3$ | 4. 36. 50.446 | 67. 13 | $\pi$ Leonis | $4 \cdot 9$ | 9. $55 \cdot 27 \cdot 508$ | 81. 31 |
| $\mu$ Eridani. | $4^{2}$ | 4. $4^{1} .0 .05^{8}$ | 93. 25 | Regulus. | I•3 | 10. 3. $34 \cdot 858$ | 77. 36 |

Standard Mean Right Ascensions of Clock Stars for $1910 \cdot 0$ based on Twelve-hour Groups Corrected for Magnitude Equation from Observations made with the Travelling Wire Micrometer-continued.

| Star's Name. | Mag. | Mean R.A. 1910.0 . | $\begin{aligned} & \text { Approx. } \\ & \text { N.P.D. } \end{aligned}$ | Star's Name. | Mag. | Niean R.A. $1910 \%$. | Approx. <br> N.P.D. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | h m s |  |  |  | m |  |
| $\gamma^{1}$ Leonis | $2 \cdot 6$ | 10. 15. 0.793 | 69. 42 | $a$ Serpenti | $2 \cdot 8$ | 15.39. 50.049 | 83. 18 |
| $\mu$ Hydræ | $4 \cdot 1$ | 10. 21. 44.205 | 106. 23 | $\epsilon$ Serpentis | $3 \cdot 8$ | 15.46. 19.718 | 85. 15 |
| $\rho$ Leonis | 3.9 | 10. 28. 4.394 | 80. 14 | $\gamma$ Serpentis | 3.9 | 15.52. 17.705 | 74. 3 |
| 34 Sextanti | $6 \cdot 6$ | 10. 37.58 .665 | 85. 57 | $\beta^{1}$ Scorpii. | $2 \cdot 9$ | 16. 0. 12.098 | 109. 34 |
| $l$ Leonis | $5 \cdot 3$ | 10. $44.3 \mathrm{I} \cdot 663$ | 78. 59 | $\delta$ Ophruchi | 3.0 | 16. 9. $37 \cdot 688$ | 93. 28 |
| $d$ Leonis | 5.1 | 10. 55.54 .786 | 85. 54 | $\gamma$ Herculi | $3 \cdot 8$ | 16. 17. $56 \cdot 961$ | 70. 38 |
| $\chi$ Leonis | 4.7 | II. 0. 22.523 | 82. II | Antares . | I-2 | 16. 23. $53 \cdot 220$ | 116. 14 |
| $\delta$ | $2 \cdot 6$ | II. 9. 19.446 | 68. 59 | $\lambda$ Ophiuchi | 3.9 | 16. 26. 22.390 | 87. 49 |
| $\delta$ Crateri | $3 \cdot 8$ | 11. 14. 50.405 | 104. 17 | $\zeta$ Ophiuchi | $2 \cdot 7$ | 16. 32. 12.082 | 100. 23 |
| $\tau$ Leonis | $5 \cdot 2$ | 11. 23.18 .538 | 86. 39 | $\zeta$ Herculis | 3.0 | 16. $37.53 \cdot 565$ | 58. 14 |
| $v$ Leon | 45 | 11. 32. $20 \cdot 432$ | 90. 20 | $\kappa$ Ophiuchi | 3.4 | 16. $53.24 \cdot 455$ | 80. 29 |
| $\beta$ Leonis. | $2 \cdot 2$ | II. 44.28 .235 | 74. 55 | $\epsilon$ Herculis | 3.9 | 16. $56.50 \cdot 731$ | 58. 56 |
| $\beta$ Virginis | $3 \cdot 8$ | II. 46. 0.427 | 87. 44 | $\eta$ Ophiuchi | $2 \cdot 6$ | 17. 5. 12.913 | 105. 37 |
| $\pi$ Virginis | $4 \cdot 6$ | 11. 56. 15.672 | 82. 53 | $a^{1}$ Herculis | 3.5* | 17. 10. $32 \cdot 599$ | 75. 30 |
| - Virginis | $4 \cdot 2$ | 12. 0. 37.494 | 80. 46 | $\theta$ Ophiuchi | 3.4 | 17. 16. 28.852 | 114. 55 |
| $\epsilon \mathrm{C}$ | $\cdot 2$ | 12. 5. 29.642 | 112. 7 | $\sigma$ Ophiuchi | $4 \cdot 4$ | 17. 22. $2 \cdot 892$ | 85. 47 |
| $\eta$ Virgin | $4 \cdot 0$ | 12. 15. 18.065 | 90. 10 | a Ophiuchi | $2 \cdot 1$ | 17. 30. 45.401 | 77. 23 |
| $\delta^{2}$ Corvi | $3 \cdot 1$ | 12. 25. 12.327 | 106. | $\beta$ Ophiuchi | $2 \cdot 9$ | 17. 39. 1. 579 | 85. 24 |
| $\beta$ Corv | $2 \cdot 8$ | 12. 29. 39.435 | 112. 54 | $\mu$ Herculis | $3 \cdot 5$ | 17.42. $56 \cdot 148$ | 62. 14 |
| $\rho$ Virginis. | $5 \cdot 0$ | 12. 37.19 .754 | 79. 16 | 89 Herculis | $5 \cdot 5$ | 17. 51. 47.314 | 63. 56 |
| 35 Virginis | $6 \cdot 7$ | 12. 43.16 .432 | 85. 56 | 72 Ophiuchi | 3.7 | 18. 3. 4.964 | 80. 27 |
| 31 Com | $5 \cdot 1$ | 12. 47.18 .947 | 6I. 58 | $\mu$ Sagittarii | $4^{\circ} \mathrm{O}$ | 18. 8. 22.838 | III. 5 |
| $\delta$ Virgin | $3 \cdot 7$ | 12. $51.4 \cdot 178$ | 86. 7 | $\eta$ Serpentis | $3 \cdot 4$ | 18. 16. $39 \cdot 167$ | 92. 55 |
| $\epsilon$ Virginis | , | 12. $57.4 \mathrm{I} \cdot 825$ | 78. 33 | $\lambda$ Sagittarii | $2 \cdot 9$ | 18. 22. 24.989 | 115. 28 |
| $\theta$ Virgini | $4 \cdot 4$ | 13. 5. 17.325 | 95. 4 | a Lyræ. | $\bigcirc \cdot \mathrm{I}$ | 18. 33.53 .474 | 51. 18 |
| Spica | $1 \cdot 2$ | 13. 20. 27.010 | 100. $4^{2}$ | 2 Aquilæ | $4 \cdot 7$ | 18. $37.20 \cdot 781$ | 99. 8 |
| $\zeta$ Virginis | $3 \cdot 4$ | 13. 30.6 .351 | 90. 8 | $\beta^{1}$ Lyræ. | 3.7* | 18. 46. 45.409 | 56. 45 |
| $m$ Virgini | $5 \cdot 3$ | 13.36. 53.191 | 98. 15 | $\epsilon$ Aquilæ | $4 \cdot 2$ | 18. 55. $32 \cdot 266$ | 75. 3 |
| $\tau$ Boötis | 4.5 2.8 | 13. 42. 59.129 | 72. 6 | $\zeta$ Aquilæ | 3.0 | 19. I. 16.432 | 76. 16 |
| $\eta$ Boötis | $2 \cdot 8$ | 13. 50.23 .981 | 71. 9 | $\psi$ Sagitta | $4 \cdot 9$ | 19. 10. I-395 | 115. 25 |
| $\tau$ Virginis | 4.3 6.6 | $\begin{array}{llr}\text { 13. } & 57 . & 3.914 \\ \text { 14. } & \text { I } & 31.681\end{array}$ | 88. 1 | $\omega$ Aquilæ | $5 \cdot 1$ | 19. 13. 35.522 | 78. 34 |
| 94 Virgini | $6 \cdot 6$ | 14. 1. 31.681 | 98. 28 | $\delta$ Aquilæ | $3 \cdot 4$ | 19. 20. 57.666 | 87. 4 |
| $\kappa$ Virginis | $4 \cdot 3$ | 14. $8.5 \cdot 556$ | 99. 51 | a Vulpecu | $4 \cdot 6$ | 19. $24.57 \cdot 615$ | 65. 31 |
| Arcturus | $0 \cdot 2$ | 14. Ir. 33.395 | 70. 21 | $\mu$ Aquilæ. | $4 \cdot 7$ | 19. 29. 41.573 | 82. 49 |
| $f$ Böotis | $5 \cdot 4$ | 14. 22. 16.175 | 70. 22 | $h^{2}$ Sagittar | $4 \cdot 7$ | 19.31. 13.927 | 115. 5 |
| $\rho$ Bo | 3.8 | 14. $27.57 \cdot 056$ | 59. 14 | $e^{1}$ Sagittari | $5 \cdot 5$ | 19.35. 34.095 | 106. 30 |
| $\epsilon^{2}$ Boöt | $2 \cdot 7$ | 14. 41. 3.408 | 62. 33 | $\gamma$ Aquilæ | $2 \cdot 8$ | 19.41: 58.861 |  |
| $a \mathrm{~L}$ | $2 \cdot 9$ | 14. 45. $53 \cdot 818$ | 105. 40 | a Aquilæ | 0.9 | 19.46. 23.566 | 81. 22 |
| $\xi^{2}$ Libræ. | $5 \cdot 6$ | 14. 51. $52 \cdot 928$ | 101. 3 | $\beta$ Aquilæ | $3 \cdot 9$ | 19. 50.53 .564 | 83. 49 |
| $\psi$ Boötis | $4 \cdot 7$ | 15. 0. $35 \cdot 300$ | 62. 42 | c Sagittarii | $4 \cdot 6$ | 19. 57.77 .578 | 117. 58 |
| $\boldsymbol{\iota}^{\boldsymbol{1}}$ Libræ | 4.7* | 15. 7. $5 \cdot 289$ | 109. 27 | $\theta$ Aquilæ | $3 \cdot 4$ | 20. 6. $39 \cdot 721$ | 91. 5 |
| $\beta \text { Libr }$ | 2.7 6.6 | 15. 12. 9.719 | 99. 3 | $a^{2}$ Capricor | $3 \cdot 8$ | 20. 13. 3.731 | 102. 49 |
| ${ }^{\circ}{ }^{2}$ Libr | $6 \cdot 6$ | 15. 18. $0 \cdot 450$ | 104. 49 | $\beta$ Capr | $3 \cdot 3$ | 20. 15.57 .380 | 105. 4 |
| $\zeta^{1}$ Libræ a Coron | $5 \cdot 9$ $2 \cdot 3$ | 15. 23. 15. 30. | 106. 24 62.59 |  | $5 \cdot 0$ 4.0 | 20. 23. 20. $28.43 \cdot 710$ 24.786 |  |
| a Coron | $2 \cdot 3$ | 15. 30. $52 \cdot 628$ | 62. 59 | $\epsilon$ Delphi | $4^{\circ}$ | 20. 28. 54.786 | 79. |

The magnitude correction is derived from the formula ${ }^{8.0067}(3.0-\mathrm{M})$.

Standard Mean Right Ascensions of Clock Stars for 1910.0, based on Twelve-hour Groups, Corrected for Magnitude Equation from observations made with the Travelling Wire Micrometer-continued.

| Star's Name. | Mag. | Mean R.A. 1910.0 . | $\begin{aligned} & \text { Approx. } \\ & \text { N.P.D. } \end{aligned}$ | Star's Name. | Mag. | Mean R.A. 1910.0. | Approx. <br> N.P.D. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | h m |  |  |  | n m |  |
| a Delphini | $3 \cdot 9$ | 20. $35 \cdot 27 \cdot 465$ | 74. 24 | $\theta$ Aquarii | 4.3 | 22. 12. 5-134 | 98. 14 |
| ¢ Aquarii | $3 \cdot 8$ | 20. $4^{2}$. $48 \cdot 322$ | 99. 50 | $\gamma$ Aquarii | $4^{\circ} 0$ | 22. 17. 0.500 | 91. 50 |
| $\mu$ Aquarii | $4 \cdot 8$ | 20. $47.48 \cdot 045$ | 99. 19 | $\sigma$ Aquariì | $4 \cdot 9$ | 22. 25. 53.131 | 101. 8 |
| 32 Vulpeculæ | $5 \cdot 2$ | 20. $50.43 \cdot 412$ | 62. 17 | $\eta$ Aquarii | $4 \cdot 1$ | 22. 30. 43.932 | 90. 35 |
| $\theta$ Capricorni | $4^{2}$ | 21. O. 53.371 | 107. 35 | $\zeta$ Pegasi | $3 \cdot 6$ | 22. 36. $58 \cdot 375$ | 79. 38 |
| $\zeta$ Cygni | $3 \cdot 4$ | 21. 9. 6.312 | 60. 9 | $\mu$ Pegasí | $3 \cdot 7$ | 22. 45. 39.474 | 65. 52 |
| a Equulei | $4 \cdot 1$ | 21. 11. 19.525 | 85. 7 | $\lambda$ Aquarii | $3 \cdot 8$ | 22. 47. 55.204 | 98. 4 |
| ¢ Capricorn | $4 \cdot 3$ | 21. 17. 14.226 | 107. 13 | Fomalhaut | 1.3 | 22. 52. $40 \cdot 844$ | 120. 6 |
| $\beta$ Aquarii | $3 \cdot 1$ | 21. 26. 49.317 | 95. 58 | a Pegasi | $2 \cdot 6$ | 23. 0. 16.616 | 75. 17 |
| $\xi$ Aquarii | $4 \cdot 8$ | 21. 32. $57 \cdot 717$ | 98. 15 | $\gamma$ Piscium | $3 \cdot 9$ | 23. 12. 29.974 | 87. 13 |
| $\epsilon$ Pegasi. | $2 \cdot 5$ | 21. 39. 45.940 | 80. 32 | $\kappa$ Piscium | $4 \cdot 9$ | 23. 22. 19.105 | 89. 14 |
| $\delta$ Capricorni | 3.0 | 21. 42.4 .501 | 106. 32 | - Piscium | $4 \cdot 3$ | 23.35.19.231 | 84. 52 |
| 16 Pegasi | $5 \cdot 1$ | 21. 48. $57 \cdot 962$ | 64. 30 | $\delta$ Sculptor | $4 \cdot 6$ | 23. 44. 14.388 | 118. 38 |
| a Aquarii | $3 \cdot 2$ | 22. 1. 9.715 | 90. 45 | $\omega$ Piscium | 40 | 23. $54 \cdot 41 \cdot 328$ | 83. 38 |
| ^Pegasi. | 4.0 | 22. 2. $49 \cdot 197$ | 65. 6 | 2 Ceti | $4 \cdot 6$ | 23. 59. $7 \cdot 820$ | 107. 50 |

The magnitude correction is derived from the formula 8.0067 ( $3 \cdot 0-\mathrm{M}$ ).

## GREENWICH CATALOGUE OF STARS FOR 1910\%

## PART I.

## FUNDAMENTAL STARS

OBSERVED AT THE ROYAL OBSERVATORY, GREENWICH 1906-1914

REDUCED WITH PROPER MOTIONS TO THE EPOCH $1910^{\circ} 0$

| No. in Boss' Oatalogue, 1900. | STAR'S NAME | 薜 | Mean R.A. 1910\%. | Mean Date of Obs. $1900+$ | $\left\|\begin{array}{\|l\|}\text { No. of } \\ \hline \stackrel{\circ}{0} \\ \frac{0}{4} \\ 0 \\ 0 \\ 8 \\ \hline\end{array}\right\|$ | $\begin{array}{c\|} \hline \text { Obs. } \\ \hline \stackrel{\circ}{\circ} \\ M \\ 1 \\ \vdots \\ 0 \\ 0 \\ \hline \end{array}$ | Annual <br> Precession 1910.0 | Secular Variation $19100^{\circ}$ | Annual <br> Proper <br> Motion s.ooor. | Mean Dec. 19ro\%o. | Mean Obs. $1900+$ IgOO | $\square$ |  | $\begin{gathered} \text { Annual } \\ \text { Precession } \\ \text { I910.0. } \end{gathered}$ | Secular Variation 1910.0. | Annnal Motion ".001. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m s |  |  |  | $s$ | 8 |  | - , " |  |  |  | " | " |  |
| 6188 | Piazzi XXIII. 270 | $6 \cdot 3$ | $\bigcirc 26.980$ | 14.41 | 3 |  | $+3.0725$ | +.0014 | + 25 | - 10010.50 |  |  |  | -20.046 | - .009 |  |
| 1 | 33 Piscium ..... | $4 \cdot 7$ | - $43 \cdot 748$ | 10.66 | 5 |  | 3.0720 | -.0014 | - 13 | - 61239.02 | 10.66 | 5 |  | 046 | 010 | + 90 |
| 7 | 4 Ceti | $6 \cdot 3$ | 37.490 | 12.72 | 4 |  | 3.0715 | + 0.0004 | + 18 | - 3258.06 | 12.72 | 4 |  | 044 | 015 | + 4 |
| 9 | 5 Ceti | $6 \cdot 3$ | $335 \cdot 667$. | 12.27 | 7 |  | 3.0714 | +.0006 | + 3 | - $25654 \cdot 15$ | $12 \cdot 27$ | 7 |  | 044 | 016 | - 5 |
| 10 | 21 Andromedæ....a | $\cdot 2$ | $343 \cdot 943$ | 11.17 | 131 |  | $3 \cdot 0844$ | +.0185 | + 106 | +28 $3537 \cdot 04$ | 11.48 | 140 |  | 043 | 16 | - 161 |
| 12 | I 1 Cassiopeiæ . . . . $\beta$ | 2.4 | - $\mathrm{H}^{22 \cdot 147}$ | 09.54 | 1 | 2 | +3.1143 | +.0524 | +677 | +58 39 II.94 | $10 \cdot 38$ |  |  | $+20.042$ | -. 017 | $-\mathrm{I} 81$ |
| 19 | 22 Andromedæ . . . . | $5 \cdot 1$ | $538 \cdot 230$ | $10.56$ | 5 | 1 | 3.1060 | +.0333 | + 4 | +45 $34 \quad 17 \cdot 28$ | 11.23 | 5 |  | 040 | 020 | - I |
| 20 | Piazzi 0. | $6 \cdot 0$ | 542.430 | $09.60$ | 5 |  | 3.0692 | -.0008 | + 19 | - $54455 \cdot 36$ | 10.23 | 7 |  | $0,40$ | 20 | - 20 |
| . | Piazzi 0. | $6 \cdot 8$ | 6 33.194 | $10 \cdot 77$ | 5 |  | 3.0699 | +.0002 | + 8 | - 344918.64 | $10.57$ | 7 |  | 038 | 021 | 13 $+\quad 1$ |
| 27 | 88 Pegasi ....... $\gamma$ | $2 \cdot 9$ | $835 \cdot 996$ | $10 \cdot 74$ | 49 |  | 3.0856 | $+.0102$ | $\bigcirc$ | $+144059.88$ | I I $\cdot 28$ | 47 |  | $\bigcirc 32$ | 026 | - 13 |
| 35 | 35 Piscium. ....... |  | - 1020.640 | 12.07 | 3 |  | +3.0813 | +.0068 | $+66$ | + 8 19 16.45 | 12.07 | 3 |  | $+20.026$ | - .029 | 24 |
|  | 35 Piscium (Comes).. | $7 \cdot 8$ | 1021.155 | 14.74 | 2 |  | 3.0813 | + .0068 | + 66 | + 8 19 6.57 | 14.74 | 2 |  | 026 | 029 | 24 |
| 37 | Bradley 6........... | $6 \cdot 2$ | 116.862 | 12.31 | 2 | I | 3.3410 | +'•1478 | + 68 | +76 $27 \quad 2 \cdot 65$ | I 1.47 | 10 | 10 | 023 | 32 | , |
| 49 | Mayer 5 | 6.4 | 1310.350 | 14.01 | 4 |  | $3 \cdot 0741$ | $+.0032$ | + 49 | + 11118.32 | 13.98 | 6 |  | OI 3 | 034 | + 9 |
| 50 | 25 Andromedæ.... $\sigma$ | $4 \cdot 5$ | $13 \quad 37.311$ | I 3.55 | 3 |  | 3.1308 | +.0253 | - 56 | $+361711 \cdot 41$ | 13.55 | 3 |  | OII | 036 | - 44 |
| 53 | 8 Ceti ........... ${ }^{\text {c }}$ | 3.8 | -14 140.545 | 11.10 | 33 |  | +3.0584 | - 00022 | 12 | - 91921.91 | 11.51 | 2 I |  | $+20.004$ | -. 037 | - 32 |
| 56 | 4 I Piscium .......d | $5 \cdot 6$ | 1557.913 | 14.10 | 3 |  | 3.0851 | + .0068 | 4 | + 74126.62 | $14 \cdot 10$ | 3 |  | 19.997 | 040 | 1 $+\quad 14$ |
| 57 | 27 Andromedæ....p | $5 \cdot 2$ | $16 \quad 22 \cdot 605$ | 13.85 | 2 |  | $3 \cdot 1457$ | $+.0267$ | + 54 | +37 <br> 28 <br> 12.92 | 13.85 | 2 |  | 995 | 041 | - 44 |
| 69 | Mayer 7 . . . . . . . . . . | $6 \cdot 3$ | 1953.749 | $09 \cdot 90$ | 7 |  | $3.0670$ | $+.0016$ | 30 | - 243 0.11 | 09.90 | 7 |  | 970 | 047 | - $\quad 37$ |
| 73 | 44 Piscium | $6 \cdot 0$ | $2047 \cdot 316$ | $10 \cdot 70$ | 29 |  | 3.0755 | + .0037 | - 13 | + 12629.22 | 10.81 | 37 |  | 964 | 049 | - 16 |
| 79 | io Ceti |  | - 220.340 | 10.79 | 1 |  | $+3.0713$ | $+.0028$ |  | - 03252.22 | 10.79 | I |  | $\cdot 954$ | $-.051$ | + 2 |
|  | $\text { W.B. 0. } 3$ | $7 \cdot 0$ | $25 \quad 2 \cdot 700$ | $09 \cdot 74$ | 2 |  | $3.0640$ | +.0016 | + 45 | - 32013.33 | 09.74 | 2 |  | 926 | - 057 | + |
| 90 | 12 Ceti | $6 \cdot 0$ | $25 \quad 26.739$ | 10.36 | 33 |  | 3.0610 | +.0010 | + 5 | - 42715.95 | $10 \cdot 35$ | 37 |  | 923 | 058 | - 7 |
| 91 | Piazzi 0. 91 | $5 \cdot 2$ | 25 52.840 | $07 \cdot 73$ | 1 |  | $3 \cdot 0045$ | -.0096 | - 26 | $\begin{array}{llll}-24 & 17 & 7 \cdot 16\end{array}$ | $07 \cdot 73$ | 1 |  | 918 | 058 |  |
| 102 | 51 Piscium | $5 \cdot 7$ | 27 45.100 | 14.69 | 4 |  | $3 \cdot 0908$ | $+.0067$ | $+\quad 18$ | + 62730.87 | 14.69 | 4 |  | 899 | 063 | + 12 |
| 103 | 15 Cassiopeiæ . . . . к | $4^{-2}$ | - 2752.437 | 10.84 | 4 | 2 | $+3.3832$ | +.0716 | + 16 | + $2 \quad 2666.75$ | 11.03 |  | 8 | $+19.898$ | -.068 | + I |
| 109 | Piazzi 0. $109 . . . . .$. | $5 \cdot 6$ | 2914.070 | 13.85 | 2 |  | $2 \cdot 9741$ | -.0125 | - 23 | $\begin{array}{llll}-30 & 3 & 13.84\end{array}$ | 13.85 | , |  | 883 | 064 | - 28 |
| 116 | ${ }_{13}$ Ceti | $5 \cdot 2$ | $3036 \cdot 896$ | 10.25 | 7 |  | $3 \cdot 0598$ | +.0015 | + 272 | -4 517.74 | 10.26 | 12 |  | 867 | 068 | 18 |
| 117 | 14 Ceti | $5 \cdot 9$ | $3055 \cdot 594$ | 09.75 | 10 |  | $3 \cdot 0694$ | $+.0031$ | + 86 | - 05959.90 | 09.75 | 10 |  | 864 | 069 | - 61 |
| 122 | I7 Cassiopeiæ | $3 \cdot 7$ | $3156 \cdot 985$ | 10.88 | 4 | 2 | $3 \cdot 3226$ | +.0498 | $+\quad 23$ | $+53246.02$ | 10.59 | 4 | 2 | 851 | 076 | - 9 |
| 123 | 29 Andromedæ . . . . $\pi$ | 4.4 | - 324.250 | 08.80 | 2 |  | $+3 \cdot 1946$ | $+.0245$ | + 17 | + $331326 \cdot 94$ | 09. 56 | 3 |  | +19.850 |  |  |
| 127 | Piazzi 0. 130....... | $5 \cdot 7$ | $\begin{array}{llll}32 & 43 \cdot 367\end{array}$ | 14.68 | 2 |  | $2.9828$ | -. 0094 | $+1022$ | $\begin{array}{llll}-25 & 15 & 44.48\end{array}$ | 14.68 | 2 | I | 842 | - 070 | - 9 |
| 126 | Bradley 48. | $6 \cdot 4$ | $\begin{array}{lll}32 & 56 \cdot 263\end{array}$ | $\text { II• } 92$ | 3. | I | 4.4337 | + 3996 | - 526 | +815949.57 | II•19 | 7 | 11 | 839 | 101 | + 91 |
| 130 | 30 Andromedæ . . . $\epsilon$ | $4 \cdot 5$ | 33 47.782 | II.16 | 50 |  | 3.1807 | +.0212 | - 173 | +28 4923.94 | II.85 | 69 |  | 828 | 077 | $-248$ |
| 132 | 31 Andromedæ . . . $\delta$ ¢ | $3 \cdot 5$ | 34 30.673 | $12 \cdot 11$ | 26 |  | 3.1900 | +.0224 | + 107 | $+3022 \quad 7.01$ | 12.27 | 28 |  | 819 | 078 | - 86 |
| 135 | I8 Cassiopeiæ . . . . . a | $2 \cdot 5$ | - 3523.625 | 12.33 |  | 2 | $+3 \cdot 3778$ | $+.0562$ | + 61 | $+56 \quad 2 \quad 37 \cdot 97$ | 12.33 |  | 2 | +19.807 | -.084 | - 31 |
|  | Lalande io82........ | $6 \cdot 5$ | $3632 \cdot 795$ | $14.66$ | 2 |  | $3 \cdot 1056$ | +.0086 | - 84 | + 8514940 | 14.71 | 6 | ) | 792 | 080 | - 82 |
| 147 | 16 Ceti . . ........ $\beta$ | $2 \cdot 2$ | $39 \quad 4.373$ | 1 I $\cdot 83$ | 38 |  | $2 \cdot 9967$ | -.0053 | + 160 | - $18 \quad 2849 \cdot 38$ | 11.85 | 28 |  | 756 | 082 | + 39 |
| 150 | 21 Cassiopeiæ ..... | $5 \cdot 6$ | 39 41•338 | 11.19 |  | 3 | $3 \cdot 9025$ | +.1671 | - 53 | +742946.42 | 12.27 | 13 | 14 | 746 | 106 | - 24 |
| 152 | 22 Cassiopeiæ .... 0 | $4 \cdot 7$ | $3942 \cdot 180$ | 10.09 | 1 | I | $3 \cdot 3265$ | +.0418 | + 22 | +474731.25 | 09.87 | 1 | (I) | 746 | 092 | - 5 |
| 155 | Piazzi 0. 166 | $5 \cdot 3$ | - $4017 \cdot 186$ | $07 \cdot 73$ | I |  | $+2 \cdot 9757$ | -. 0072 | 34 | $\begin{array}{lll}-22 & 30 & 2.64\end{array}$ | $07 \cdot 73$ | 1 |  | +19.737 | -.084 | + 87 |
| 164 | 34 Andromed | $4 \cdot 3$ | $42 \quad 33 \cdot 943$ | 09.40 | 4 |  | 3-1812 | $+.0180$ | - 74 | $+234639 \cdot 87$ | 11.50 | 20 |  | 701 | 094 | 80 |
| 165 | 60 Piscium | $6 \cdot 2$ | $4244 \cdot 307$ | 14.34 | 3 |  | 3.0996 | +.0075 | + 9 | +61459.17 | 14.04 | 7 |  | 698 | 092 | - 10 |
| 170 | 62 Piscium... | $6 \cdot 1$ | 43 37-220 | 14.98 |  |  | $3 \cdot 1027$ | +.0078 | + 71 | + $64830 \cdot 23$ | 14.98 | 1 | , | 684 | 094 | + 8 |
| 168 | 24 Cassiopeiæ . . . . $\eta$ | $3 \cdot 6$ | 43 39.000 | $09 \cdot 48$ | 2 |  | 3.4672 | +.0611 | $+1392$ | +57 20 18.97 | 09.48 | 2 |  | 684 | 104 | - 522 |
| 171 | Mayer 24 | $5 \cdot 8$ | - $4339 \cdot 706$ | 11.84 | 5 |  | $+3.0938$ | +.0068 | $+500$ | + 4 '49 5.17 | 12.26 | 9 | 9 | +19.683 | -.094 | - II 44 |
| 172 | 25 Cassiopeiæ .....v | $5 \cdot 0$ | 4343.750 | 09.72 | 1 |  | $3 \cdot 3797$ | +.0468 | $+\quad 35$ | +50 28 30.18 | 10.40 | 2 | 2 | $682$ | 102 | - 11 |
| 173 | 63 Piscium. . . . . . . $\delta$ | $4 \cdot 6$ | $44 \quad 0.691$ | 11.48 | 34 |  | 3.1043 | +.0080 | $+\quad 55$ | +7543.15 | II.85 | 25 |  | 677 | 095 | - 44 |
| 175 | 35 Andromedæ . . . . v | $4 \cdot 4$ | $4450 \cdot 735$ | 11.33 | 2 |  | $3 \cdot 2951$ | +.0329 | $+\quad 17$ | $+4035 \quad 20 \cdot 83$ | 11.25 | 3 |  | 663 | 102 | - 21 |
| 179 | Bradley 82......... | $5 \cdot 5$ | $4515 \cdot 310$ | $10 \cdot 35$ |  | 1 | $3 \cdot 6043$ | +.0841 | + 47 | +63 $4527 \cdot 78$ | 09.76 | 1 | - 5 | 656 | 112 | - |

[^0]|  | star's name. | 碳 | Mean R.A. igroo. | $\begin{aligned} & \text { Mean } \\ & \text { Date of } \\ & \text { Dabs. } \\ & \text { Igoot } \end{aligned}$ | $\left\|\begin{array}{c}\text { No. of } \\ \hline \stackrel{\circ}{\circ} \\ 0 \\ 0 \\ 0 \\ \vdots \\ \hline\end{array}\right\|$ |  | $\begin{gathered} \text { Annual } \\ \text { Precession } \\ \text { 1910.0. } \end{gathered}$ | $\begin{aligned} & \text { Secular } \\ & \text { Variation } \\ & \text { IgIo-0. } \end{aligned}$ | $\begin{aligned} & \text { Anual } \\ & \text { Proper } \\ & \text { Motion } \\ & \hline \text { H.ooor. } \end{aligned}$ | Mean Dec. y9roo. |  | $\left\|\begin{array}{c\|} \text { No. of } \\ \hline \frac{0}{\circ} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \hline \end{array}\right\|$ |  | $\begin{gathered} \text { Annual } \\ \text { Precession } \\ \text { y9ro.o. } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { Secular } \\ \text { Variation } \\ \text { 19To.o. } \end{gathered}\right.$ | Annual Proper Motion M. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m |  |  |  | $s$ | $s$ |  | - , " |  |  |  |  |  |  |
| 391 | 52 Ceti,$\ldots . . . . . . . \tau$ | $3 \cdot 7$ | I 3953.230 | 11.58 | 6 |  | $+2.9063$ | -000 | -1195 | -16 $24 \begin{array}{lll}39.83\end{array}$ | 10.91 | 4 |  | +18.172 | $\cdot 187$ | + 857 |
| 393 | 110 Piscium. . . . . . 0 | $4 \cdot 5$ | 4038.352 | 10.98 | 41 |  | 3.1595 | + 0112 | + $\mathbf{4}^{6}$ | + 84218.48 | II 24 | 40 |  | 144 | 204 | + 51 |
| 396 | Sculptoris . . . . . . $\epsilon$ ¢ | $5 \cdot 4$ | 4125.975 | II.08 | 1 |  | 7995 | -.0036 | + 116 | $\begin{array}{llll}-25 & 30 & 6.55\end{array}$ | 1 1.08 |  |  | 115 | 83 | - 57 |
| 403 | 4 Arietis | $5 \cdot 7$ | 4317.887 | 14.55 | 3 |  | 3.2450 | + -0158 | + 33 | +16 3027.24 | 14.44 | 4 |  | 18.044 | 214 | - $\quad 25$ |
| 411 | 53 Ceti | $4 \cdot 8$ | $45 \quad 9.910$ | 11.92 | 2 |  | $2 \cdot 9560$ | +.0024 | - 108 |  | 11.92 | 2 |  | 17.972 | 199 | 79 |
| 414 | 54 | $5 \cdot 9$ | $1465 \cdot 298$ | 09.79 | 5 |  | +3.1842 | + -0124 | 47 | +10 35 53.12 | 12 | 9 |  | +17.937 | 5 | 27 |
| 415 | 2 Perse | $5 \cdot 6$ | 4625.498 | 10.58 | 2 | 3 | $3 \cdot 7947$ | -054 | + 25 | +50 2053.87 | 10.98 | 2 | 3 | 923 | 56 | - 29 |
| 416 | 55 Ceti........... $\zeta$ | 3.9 | $47 \quad 1.025$ | 12.85 | 2 |  | $2 \cdot 9580$ | . 0025 | + 25 | -10 $46 \begin{array}{ll}6 \\ 45 & 00\end{array}$ | 12.85 | 2 |  | 900 | 202 | - 32 |
| 419 | 45 Cassiopeiæ . . . . $\epsilon$ | $3 \cdot 4$ | 4754.444 | 11.28 | 2 | 10 | $4 \cdot 2742$ | -1005 |  | +63 $13 \begin{array}{llll} & 38.14\end{array}$ | 11.72 | 2 | 33 | 865 | 290 | - 17 |
| 42 I | 2 Trianguli . . . . . . a | $3 \cdot 6$ | $47 \quad 56 \cdot 838$ | 12.53 | $4^{\circ}$ |  | $3 \cdot 4106$ | . 0251 | + 13 | +29 8127.02 | 12.29 | 43 |  | 863 | 233 | $-232$ |
| 426 | Piazzi I. | $4 \cdot 8$ | I $4853 \cdot 775$ | 09.47 | 2 |  | $+3 \cdot 1018$ | +.0084 | + 15 | + $24436 \cdot 61$ | 09.47 | 2 |  | +17.825 | -215 | + 25 |
| 428 | 6 Arietis | $2 \cdot 7$ | 4939.941 | 10.52 | 43 |  | 3.3010 | .0184 | + 68 | +20 $22 \begin{array}{ll}\text { 1-96 }\end{array}$ | 10.70 | 41 |  | 795 | 229 | - III |
| 436 | 8 Arietis | $5 \cdot 2$ | 5225.938 | 14.76 |  |  | $3 \cdot 2695$ | .0165 | + 21 | +17 $22 \begin{aligned} & 42 \cdot 51\end{aligned}$ | 14.76 |  |  | 682 | 32 | 26 |
| 441 | 9 Arietis | $4 \cdot 8$ | $5254 \cdot 616$ | 09.33 | 5 |  | $3 \cdot 3429$ | . 0204 |  | +23 9 $27 \cdot 18$ | 10.32 | 7 |  | 662 | 238 | 18 |
|  | W.B. (2) | $8 \cdot 5$ | 5256.610 | 07.80 | 1 |  | $3 \cdot 3430$ | . 0204 | 68 | +23 | 07.80 | 1 |  | 661 | 238 | 18 |
| 447 | Mayer | 6.I | I $5436 \cdot 660$ | - 39 |  |  | +3.2071 | +.0132 |  | +115130.83 | 12.39 |  |  | +17.591 | -232 | 35 |
| 4 | 50 Cassiope | $4^{17}$ | $5543 \cdot 534$ | -9.72 | 3 | 4 | 5.0607 | + .1909 | - 83 | +71 $5910 \cdot 97$ | 10.66 | 11 | 22 | 544 | 365 | $\begin{array}{r} \\ +\quad 23 \\ \hline\end{array}$ |
| 453 | 59 Ceti ..........v | $4 \cdot 2$ | 5545.945 | 12.27 | 3 |  | $2 \cdot 8176$ | -.0011 | + 93 | -21 3049.08 | 12.27 | 3 |  | 543 | 206 | - 20 |
| 457 | 53 Cassiopeiæ | $5 \cdot 6$ | $\begin{array}{llll}56 & 19.773\end{array}$ | 10.68 | 2 | 7 | $4 \cdot 4018$ | $+\cdot 1064$ | $\begin{array}{r}14 \\ +\quad 14 \\ \hline\end{array}$ | +63 $5720 \cdot 58$ | 11.48 | 2 | 10 | 519 | 319 |  |
|  | II3 Piscium....... $a^{1}$ | $5 \cdot 2$ | $5723 \cdot 160$ | 10 | 2 |  | $3 \cdot 0991$ | $+.0084$ |  | + 21948.16 | 10.86 | 2 |  | 473 | 29 |  |
| 463 | 113 Piscium ..... $a^{2}$ | $4 \cdot 3$ | I 5723.293 | 12.16 | 4 |  | $+3.0991$ | + :0084 | 28 | + 21945.97 | 11.20 | 5 |  | 473 |  | $6$ |
|  | W.B. I. 973........ | $6 \cdot 3$ | 5744.328 | 12.85 | 6 |  | 3.2246 | :0140 | - 9 | +13 $2034 \cdot 64$ | 12.85 | 6 |  | - 458 | 39 | $6$ |
| 468 | 57 Andromedæ . . . $\gamma^{1}$ | $2 \cdot 3$ | 58 22.127 | 10.82 | 6 |  | $3 \cdot 6646$ | -0394 | $+4^{2}$ | +41 $53 \begin{array}{ll} & 53 \cdot 73\end{array}$ | 10.82 | 6 | (1) | 431 | 271 | 52 |
| 469 | 57 Andromed $\ldots \ldots \gamma^{2}$ | 5.1 | 5822.990 | 11.51 | 2 |  | $3 \cdot 6648$ | -0394 | + ${ }^{1}$ | +41 $53 \begin{array}{llll} & 58 \cdot 41\end{array}$ | 11.51 | 2 |  | 431 | 271 | 55 |
| $47^{2}$ | Piazzi I. 243 | $6 \cdot 4$ | $5846 \cdot 330$ | 14.31 | 2 |  | $3 \cdot 2853$ | -0169 |  | +174915.80 | 14.31 | 2 |  | 414 | 245 | 2 |
| 474 | Piazzi I. ${ }^{2}$ | $4 \cdot 7$ | $2 \bigcirc 27.374$ | -47 | $2^{2}$ |  | $+2.6896$ | - .003 |  | -29 $43 \begin{aligned} & 42 \cdot 17\end{aligned}$ |  | ${ }^{2}$ |  |  |  |  |
| 477 | 13 Arietis | $2 \cdot 2$ | $2 \quad 5 \cdot 815$ | 10.99 | 68 |  |  | +.0204 |  | +23 214.00 | 10.83 | 74 |  | $268$ | 256 | - 146 |
|  | Mayer | $6 \cdot 5$ | 2 4 4 4 | 14.84 | 1 |  | $3.2890$ | .0168 | - 37 | +1736 3.31 | 14.84 | 1 |  | 236 | 252 |  |
| $4^{82}$ | 4 Triang | 3.1 6.4 | $\begin{array}{lll} 4 & 11.010 \\ 4 & 26 \cdot 253 \end{array}$ | 11.53 14.24 | 5 3 |  | 3.5473 3.2810 | -0304 | 123 $+\quad 12$ | + +3433 +16 + | 11.53 | 5 |  | 175 | 274 |  |
|  | Laland | $6 \cdot 4$ | $426 \cdot 253$ |  | 3 |  | $3 \cdot 2810$ | -0162 | + 112 | +16 4888 | 14.24 | 3 |  | 163 | 254 | - 179 |
| 491 | 15 Ariet | 59 | 538.123 | 10.97 | 4 |  | $+3.3133$ | + -0177 | + 62 | +19 434.59 | c9.31 | 15 |  | 17.109 | -259 | 28 |
| 495 | 64 Cati | $5 \cdot 7$ | $635 \cdot 883$ | 08.87 | 8 |  | 3.1729 | -0115 | 92 | + $8856 \cdot 19$ | 08.87 | 8 |  | 065 | 250 | - 108 |
| 498 | 55 Cassiop | $6 \cdot 2$ | 724.220 | 10.87 | 3 |  | $4 \cdot 6641$ | 236 | - 2 | +66 $611 \cdot 38$ | 10.62 | 3 |  | 028 | 366 | + 3 |
| 500 | 6 Pers | $5 \cdot 4$ | 7 8 | 10.96 | 2 | 2 | 3.9338 | .0556 | + 365 | +50 $38 \quad 53.30$ | II. 48 | 2 |  | 17.018 | 310 | - 168 |
| 502 | 19 A | $6 \cdot 0$ | 88.628 | 12.08 | 5 |  | $3 \cdot 2606$ | -.0151 | $+\quad 67$ | +14 5130.46 | 12.08 | 5 |  | $16 \cdot 993$ | 259 | - 22 |
| 505 | 65 Ceti . . . . . . . . . $\xi^{1}$ | 4.5 | $2 \begin{array}{llll}2 & 8 & 13.686\end{array}$ | 11.83 | 35 |  | +3.1776 | + -0117 |  | + $82530 \cdot 10$ | 10.93 | 36 |  | $+16.989$ | -253 | 7 |
| 506 | Fornacis ......... $\mu$ |  | 856.764 | 12.96 | 5 |  | 2.6417 | -.0031 | $+\quad 18$ | $\begin{array}{llll}-31 & 8 & 45 \cdot 98\end{array}$ | 12.96 | , |  | 956 | 213 |  |
| 517 | 9 Trianguli ...... $\gamma$ | $4 \cdot 1$ | 1157.567 | $10 \cdot 35$ | 3 |  | $3 \cdot 5529$ | +.0293 | + 34 | +3325 52.72 | 10.35 | 3 |  | 814 | 289 | 51 |
| 518 | 67 Ceti | $5 \cdot 7$ | 1229.651 | 12.01 | 18 |  | $2 \cdot 9849$ | . 0050 | + 61 | - 650 II -01 | II.61 | 22 |  | 788 | 245 | 108 |
| 521 | 22 Arietis. . . . . . . $\theta$ | $5 \cdot 7$ | $13 \quad 6.967$ | 12.95 | 3 |  | 3.3320 | - 0180 | 10 | +19 297.02 | 10.88 | 6 |  | 759 | 274 | 6 |
| 530 | 65 Ceti ...........o | Var | 21447.948 | 10.60 | 4 |  | $+3.0286$ | +.0064 |  | - 323 9.17 | $10 \cdot 6$ | 9 |  | +16.677 | $\cdot 252$ | 237 |
| 546 | 24 Arietis. . . . . . . . $\xi$ | $5 \cdot 5$ | 1959.456 | 09.43 | 7 |  | . 3.2105 | . 0127 | + | +10 121212.90 | 08.75 | 12 |  | 422 | 275 | 15 |
| 551 | 72 Ceti | $4 \cdot 9$ | $2136 \cdot 065$ | 08.80 | 2 |  | $2 \cdot 8981$ | -0032 | 17 | -12 $\mathbf{4}^{1} 45^{\circ} 22$ | 08.79 | 10 |  | 340 | 252 | 9 |
| 550 | Bradley | $4 \cdot 6$ | $2138 \cdot 028$ | 11.90 | 2 | 4 | $4 \cdot 8965$ | -1327 | - 6 | +66 59 54.77 | 12.07 | 2 | 12 | 338 | 421 |  |
| 560 | 73 Ceti .......... $\xi^{2}$ | $4 \cdot 3$ | $23 \quad 22 \cdot 307$ | 10.59 | 23 |  | $3 \cdot 1833$ | -0116 | + 26 | + 8325.48 | 11.07 | 17 |  | 250 | 279 | 4 |
|  | B.F. 310 | $6 \cdot 3$ | $22446 \cdot 850$ | 07.71 |  |  | $+3 \cdot 1998$ | + 0122 |  | + 9950.90 | 07.71 | 3 |  | +16.177 | 2 | 3 |
| 566 | 26 Arietis | $6 \cdot 1$ | 2535.435 | 13.90 | 2 |  | $3 \cdot 3526$ | . 0180 | + 50 | +192721.88 | 13.90 | 2 |  | 135 | 297 |  |
| 568 | 27 Arietis | $6 \cdot 4$ $4 \cdot 8$ | 2554.704 | 11 | 10 |  | 3.3201 2.8476 | . 0168 | $\begin{array}{r}\text { a } \\ +\quad 25 \\ \hline\end{array}$ | +17 1822.39 |  | 10 |  | 118 | 295 | - 97 |
| 575 576 | 76 Ceti .......... 29 Arietis....... | $4 \cdot 8$ 6.1 | 2749.310 2758.224 | 11.85 13.03 | 2 5 |  | 2.8476 3.2825 | .0025 | - 55 |  | 11.85 13.03 | 5 |  | 019 | 256 | $\begin{array}{r}1 \\ \hline+\quad 37\end{array}$ |
| 576 | 29 Arietis | 6. 1 | 27 58.224 | 13.03 | 5 |  | $3 \cdot 2825$ | .0151 | - II |  | 13.03 | 5 |  | OII | 295 | + 33 |

57 Andromedx. These stars form the pair $\Sigma_{2} 205$.
68 Ceti. The limits of magnitude are 1.7 and 9.6 , period $33^{\text {d.d. }} 6$



Piazzi III. $5^{1}$ This is the principal star of the pair $\Sigma 385$, components 4.7 and 9.0 . 7 Tauri. This star is the close double $\Sigma_{412}$, components 6.6 and 6.7 .
38 Persei. This is the principal star of the pair $\Sigma_{431}$, components 4.2 and 8.5
Piazzi III. ifo. This star is the closo double $0 \Sigma^{5} 65$, components 6.5 and 6.8 .

44 Persei. This is the principal star of the pair $\sum_{464}$, components $2 \cdot 7$ and 9.3
Piazzi III. 178. This is the principal star of the pair $0 \Sigma 67$, components $5 \cdot 0$ and 8.2 . 45 Pcrsei. This is the principal star of the pair $\sum_{471}$, components 3.1 and 8.3 . 35 Tauri. The limits of magnitude are 3.3 and $4 \cdot 2$, period $3^{\text {d. }} 7+$.

| No. in Boss' Catalogue, 1900. | STAR'S NAME. | 碳 | Mean R.A. 19100. | $\begin{aligned} & \text { Mean } \\ & \text { Date of } \\ & \text { Obs. } \\ & \text { 1goo+ } \end{aligned}$ |  |  | Annual Precession $1910^{\circ} 0$. | $\begin{aligned} & \text { secular } \\ & \text { Variation } \\ & \text { Igro.0. } \end{aligned}$ | Annual <br> Proper <br> Motion | Mean Dec. 1910\%. | $\xrightarrow[\text { Date of }]{\text { Mean }}$ Obs. $1900+$ |  |  | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { I910\%o. } \end{aligned}$ | $\begin{gathered} \text { Secular } \\ \text { Variation } \\ \text { 1910.0. } \end{gathered}$ | Annual Motion ".cor. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m |  |  |  | s | s |  | - " |  |  |  | " |  |  |
| 938 | 47 Persei . . . . . . . . $\lambda$ | $4 \cdot 3$ | 35952.415 | $07 \cdot 52$ | 2 | 2 | $1+4.4568$ | $+0.0409$ | - 3 | $+50 \quad 6 \quad 27 \cdot 39$ | 07.88 | 2 | 2 | +10.032 | $\cdot 567$ | 37 |
| 939 | 39 Tauri ........ $\mathrm{A}^{2}$ | $6 \cdot 0$ | 400.435 | II. 85 | 2 |  | 3.5347 | -015 5 | + 125 | +2145 59.61 | 11.85 | 2 |  | 10.022 | 451 | 138 |
| 943 | 41 Tauri. | $5 \cdot 3$ | 14.979 | 12.49 | 7 |  | 3.6730 | - 0179 | + 12 | +27 2129.17 | $2 \cdot 49$ | 7 |  | $9 \cdot 941$ | 69 | 57 |
| 944 | 42 Tauri . . . . . . . $\psi$ | $5 \cdot 3$ | 126.452 | 12.29 | 30 |  | 3.7100 | -0187 | - 62 | +28 $453 \mathrm{I} \cdot 03$ | 12.09 | 32 |  | 914 | 74 | + 3 |
| 948 | Piazzi III. 251 | $5 \cdot 6$ | 154.770 。 | 08.02 |  |  | $2 \cdot 4568$ | -0030 | + 147 | -27 $\begin{array}{r}-23\end{array}$ | 08.02 | I |  | 878 | 316 | $+103$ |
| 947 | $4^{8}$ Persei . . . . . . . . $c$ | $4^{\circ} 0$ | $4 \quad 2 \quad 7 \cdot 363$ | $08 \cdot 75$ | 3 | 3 | +4.3410 | .0361 |  | +47 $28 \quad 22.86$ | 10.09 | 3 | (3) | $+9.862$ | - 555 | - 30 |
|  | $\text { B.D. }+14^{\circ} 657$ | $5 \cdot 9$ | 236.224 | $09 \cdot 12$ | 5 |  | $3 \cdot 3829$ | . 0120 | $+104$ | +14 5521.45 | 09.12 | 5 |  | 825 | 434 | 44 |
| 951 | Piazzi III. 249 | $6 \cdot 1$ | 250.113 | $07 \cdot 91$ | 3 |  | 3.4311 | . 0127 | + 12 | +17 5 59.62 | 07.91 | 3 |  | 808 | 44 I | 17 |
| 952 | 43 Taurí. . . . . . . . $\omega^{\mathbf{1}}$ | $5 \cdot 7$ | $355 \cdot 22 \mathrm{I}$ | $11 \cdot 55$ | 28 |  | $3 \cdot 4834$ | . 0137 | + 75 | +19 2218.89 | 10.80 | 3 I |  | 725 | 448 | 43 |
| 955 | 44 Tauri | $5 \cdot 6$ | 520.825 | 12.72 | 43 |  | $3 \cdot 6506$ | - 0168 | - - 20 | +26 14 48.42 | 12.71 | 42 |  | 6I 5 | 471 | 37 |
| 963 | $38 \text { Eridani . . . . . . . } 0^{1}$ | $4^{\cdot I}$ | 4728.271 | 10.92 | 29 |  | $+2.9263$ | -.0058 | - | $-7418.96$ | 11.03 | 26 |  | $+9.452$ | -. 380 | $+8 \mathrm{I}$ |
|  | Piazzi IV. 6......... | $6 \cdot 2$ | 730.930 | II•77 | 1 |  | 3.5531 | .0146 | - 16 | +22 10 57.57 | II 1.85 | 2 |  | 449 | 46 I | - 19 |
| 9 | Groombridge | $6 \cdot 7$ | 759.880 | $07 \cdot 14$ | 2 | 2 | 17.4812 | 1.7778 | + 150 | +85 19 3.96 | 11.52 | 9 | 22 | 4 II | $2 \cdot 255$ | $+\quad 33$ |
| $967$ | 51 Persei ........ $\mu$ | $4 \cdot 3$ | $8 \quad 17.059$ | 08.25 | 4 | 3 | $4 \cdot 3922$ | .0357 | + 13 | +48 10 $53 \cdot 37$ | 09:57 |  | (3) | 389 | 0.570 | $27$ |
| 978 | 39 Eridani ....... A | $5 \cdot 1$ | 106.680 | $10 \cdot 96$ | 3 |  | $2 \cdot 8532$ | . 0051 | - 8 | -10 $28845 \cdot 37$ | 12.55 | 5 |  | 248 | 373 | - 157 |
| 981 | 49 Tauri . . . . . . . $\mu$ | $4 \cdot 3$ | $41038 \cdot 715$ | 08.00 | 2 |  | $+3.2535$ | +.0094 | + 19 | + 8403.28 | 10.64 | 6 |  | $+9.206$ | - $\cdot 425$ | 20 |
| 980 | 48 Tauri. | $6 \cdot 4$ | 1039.610 | 07.80 | 2 |  | $3 \cdot 3945$ | .0116 | + 84 | + I5 10 34.17 | 07.80 | 2 |  | 204 | 44 | 25 |
| 984 | 40 Eridani . . . . . . $0^{2}$ | $4 \cdot 5$ | 117.757 | 11.97 | 3 |  | $2 \cdot 9099$ | -0055 | -1486 | -74732.55 | 1 | 7 |  | $9 \cdot 168$ | 381 | $-3+33$ |
| 999 | 54 Perseì | $5 \cdot 1$ | 1433.680 | 08.91 | 1 |  | 3.8909 | - 2205 | - 25 | +34 210.74 | $08 \cdot 91$ | 1 |  | $8 \cdot 900$ | 512 | 15 |
| 1000 | 54 Tauri | $3 \cdot 9$ | $1440 \cdot 182$ | $10 \cdot 66$ | 25 |  | $3 \cdot 4027$ | - 1113 | + 8I | +152439.64 | 10.23 | 32 |  | 892 | 448 | 27 |
| 1002 | 52 Tauri ......... $\phi$ | $5 \cdot 1$ | $41448 \cdot 96$ | 13.58 | 6 |  | + 3.6865 | +.0162 | - 14 | $+27810.5$ | 13.5 | 6 |  | $+8.88 \mathrm{I}$ | $-.486$ | 84 |
| 1012 | Lalande 820 | $5 \cdot 3$ | 1643.500 | $12.95$ | 1 |  | $2 \cdot 6142$ | . 0037 | + 31 | -20 51 14.19 | 95 | I |  | 73 I | 347 | 5 |
| 1015 | 59 Tauri ........ | $5 \cdot 7$ | $176 \cdot 164$ | $13.60$ | 6 |  | $3 \cdot 6446$ | -0151 | +19 | +25 253.65 | 13.60 | 6 |  | 701 | 482 | 32 |
|  | 59 Tauri (Comes) . - $\chi$ | $7 \cdot 8$ | $17 \quad 6.836$ | 12.96 | 5 |  | $3 \cdot 6447$ | -0151 | 19 | +252521.83 | 12.96 | 5 |  | 700 | 482 | 32 |
| 1017 | 6i Tauri ....... $\delta^{1}$ | 3.9 | 1744.528 | 10.54 | 5 |  | $3 \cdot 4487$ | - 118 | + 77 | +1719 55.75 | I I. 28 | 6 |  | 650 | 457 | 33 |
| 1019 | 62 Tauri | $6 \cdot 2$ | 41834.052 | II•II | 5 |  | $+3.6125$ | +-0144 | + 13 | $\underline{+24} 5031.65$ | 10.76 | 7 |  | + 8.585 | $-4^{80}$ | - 23 |
| 1022 | 64 Tauri . . . . . . . . $\delta^{2}$ | 4.8 | $1854 \cdot 383$ | 10.64 | 3 |  | 3.4474 | .0117 | + 82 | +17 14 9.93 | 12.16 | 6 |  | 559 | 458 | - 41 |
| $1029$ | 68 Tauri | $4 \cdot 2$ | $20 \quad 16 \cdot 8$ I 3 | $09 \cdot 28$ | 4 |  | 3.4598 | -0117 | + 75 | +174322.02 | 11 | 5 |  | 449 | 461 | - 25 |
| $1032$ | 43 Eridani | $4 \cdot 1$ | 20 39.332 | $\text { I } 2.96$ | I |  | $2 \cdot 2475$ | -0032 | + 45 | $\begin{array}{llll}-34 & 13 & 30 \cdot 36\end{array}$ | 12.96 | 8 |  | 420 | 301 | $+\quad 55$ |
| 1040 | Piazzi IV. 82. . . . . . | $5 \cdot 7$ | 22 40.102 | 11.57 | 6. |  | 3.5501 | - 0128 | + 78 | +212511.50 | I I 41 | 8 |  | 260 | 475 | $-\quad 45$ |
| 1042 | 75 Tauri. | $5 \cdot 3$ | 42317.590 | 10.40 | 2 |  | $+3.4258$ | + .0109 | $+6$ | +16 9 32.6I | 58 | 3 |  | -8.210 | -459 | + 19 |
| 1044 | 74 Tauri ......... $\epsilon$ | 3.6 | 2321.549 | $10 \cdot 96$ | 36 |  | 3.4919 | - 0118 | $+80$ | +185853.30 | II 132 | 4 I |  | 204 | 468 | 38 |
|  | W.B. (2) IV. 436-7.. | $6 \cdot 6$ | $2346 \cdot 212$ | 09•98 | 5 |  | $3.699^{8}$ | -OI 53 |  | +27 1222.53 | $\cdot 98$ | 5 |  | 172 | 496 | 35 |
|  | W.B. (2) IV. $458 . .$. | $6 \cdot 6$ | 2443.574 | 11.79 | 5 |  | $3 \cdot 7207$ | - 0155 | + 119 | +27 $56 \quad 2.86$ | 1 1.79 | 5 |  | 096 | 500 | + 31 |
|  | I Camelopardi(Comes) | $6 \cdot 2$ | 2452.910 | 08.00 | I |  | $4 \cdot 7384$ | .0402 | + 7 | +53 43 2.91 | 08.00 | I |  | 083 | 636 | 5 |
| 1050 | I Camelopa | 5•I | $42453 \cdot 777$ | 07.46 | 2 | 1 | + 4.7384 | +.0402 |  | $+5342 \quad 57 \cdot 58$ | 07.46 | 2 | I | $+8.081$ | -. 636 | 5 |
| 1051 | 80 Tauri | $5 \cdot 7$ | $25 \quad 0.537$ | 07.48 | 2 |  | 3.4104 | - 0106 | + 73 | +15 $26332 \cdot 01$ | 10.24 | 4 |  | $073$ | 459 | 12 |
| 1055 | 81 Tauri | $5 \cdot 5$ | 25 30.790 | $11.45$ | 2 |  | 3.4120 | -0105 | + 73 | + 152948.44 | 12.27 | 4 |  | 8.032 | 459 | 30 |
| 1061 | 57 Persei. . . . . . . . $m$ | 6.1 | $27 \quad 4 \cdot 683$ | $09 \cdot 54$ | 4 |  | $4 \cdot 2 \text { I } 26$ | . 0251 | + 6 | +42 5221.06 | 09.54 | 4 |  | $7 \cdot 906$ | 568 | + 1 |
| 1067 | 86 Tauri. . . . . . . . . $\rho$ | $4 \cdot 8$ | 2844.358 | $10 \cdot 29$ | 6 |  | $3 \cdot 3946$ | - 0100 | + 69 | +1439 21.19 | 10.29 | 6 |  | 774 | 460 | 26 |
| 1068 | Piazzi IV. | $5 \cdot 7$ | 42859.950 | 11.22 | 7 |  | + 3.7493 | +.0154 |  | +28 $4^{6} 25.42$ | 11.22 | 7 |  | $7 \cdot 752$ |  | 22 |
| 1077 | 87 Tauri ............a | I-I | $3045 \cdot 296$ | $10.95$ | 86 |  | 3.4347 | -0104 | + $4^{8}$ | +16 19 44.62 | $10.93$ | 85 |  | 6 II | 467 | I9I |
|  | W.B. (2) IV. $596-7-8$ | $6 \cdot 0$ | 31.3 .765 | 10.50 | 2 |  | 3.6016 | $.0127$ | + 80 | +23 928.89 | 10.50 |  |  | 585 | 489 | $25$ |
| 1079 | 48 Eridani . . . . . . . v | $4 \cdot 1$ | 3149.323 | $11 \cdot 77$ | 4 |  | $2 \cdot 9961$ | -0057 | 0 | - 3328.84 | 13.47 | 10 |  | 524 | 408 | 2 |
| 1085 | W.B. (2) IV. 6 | $5 \cdot 7$ | 32 57-168 | 08.93 | , |  | $3 \cdot 5367$ | - 115 | - 3 | $+203016.00$ | $08 \cdot 93$ | 1 |  | 432 | $4^{82}$ | + 2 |
| 1091 | 53 Eridani | $4^{\circ} \mathrm{O}$ | 43438490 |  | 2 |  | +2.7514 | $+.0042$ | 54 | -14 $12846 \cdot 34$ | 11.54 | 2 |  | + 7-342 | $\cdot 376$ | 161 |
| 1090 | 92 Tauri ....... $\sigma^{2}$ | $4 \cdot 9$ | $34 \quad 7.420$ | 06.99 | 1 |  | 3.4230 | -0099 | + 57 | +1544 $26 \cdot 22$ | $06 \cdot 99$ | 1 |  | 337 | 468 | 20 |
| I 099 | Piazzi IV. i 48. | $5 \cdot 7$ | 3541.635 | 10.40 | 6 |  | 3.7479 | -0143 | + 33 | +28 26 29.21 | $10 \cdot 40$ | 6 |  | 208 | 513 | 42 |
| 1104 | Piazzi IV. I67..... | $5 \cdot 6$ | $36 \quad 22.230$ | 11.02 | I |  | 2.4994 | -0034 | - 49 | $\begin{array}{llll}-24 & 39 & 27.95\end{array}$ | 11.02 | 1 |  | 154 | 343 | + 19 |
| 1100 | Piazzi IV. inz..... | $6 \cdot 0$ | $3642 \cdot 655$ | 10.26 | 1 | I | 8.0013 | -1804 | + 117 | +75 $\mathbf{4}^{6} 44 \cdot 10$ | 12.05 | 13 | 20 | 127 | -1.093 | - I3I |

[^1]| No. in Boss' Catalogue, 1900. | STAR'S NAME. |  | Mean R.A. 1910\%. | Mean Obs. $1900+$ | No. |  | $\begin{aligned} & \text { Anuual } \\ & \text { Precession } \\ & \text { I910.0. } \end{aligned}$ | Vecular 1910.0. | Annual <br> Proper Motion | Mean Der. 1910\%. | Mean Date oI Obs. 1900 | $\left\|\begin{array}{c}\text { No. of } \\ \hline \dot{0} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \vdots\end{array}\right\|$ |  | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & 1910 \% . \end{aligned}$ | Secular Variation 1910.0. | Annual Proper Motion .oor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m |  |  |  | s | $s$ |  | - " |  |  |  | " | " |  |
| 1507 | 62 Orionis . . . . . $\chi^{4}$ | $4 \cdot 7$ | $5 \quad 5834.437$ | $06 \cdot 99$ | 3 |  | $+3.5626$ | +.0018 | + 6 | +20 8 28.00 | $06 \cdot 99$ | 3 |  | +0.124 | 519 | - 13 |
| 1508 | I Geminorum | $4 \cdot 3$ | 6838.950 | 09.86 | 37 |  | $3 \cdot 6+72$ | .0017 | 6 | +2316 8.11 | 09.75 | 42 |  | $+0.118$ | 532 | - 108 |
|  | Lalande 11501 | $6 \cdot 3$ | $6 \quad 37 \cdot 704$ | 12.84 | 5 |  | 3.8292 | .0015 | - 6 | +2931 12.63 | 12.78 | 4 |  | -0.055 | 558 | - 26 |
| 1525 | $67 \text { Orionis . . . . . . . . }$ | $4 \cdot 4$ | $\text { 2. } 25.980$ | $10 \cdot 84$ | 20 |  | 3.4251 | .0015 | + 6 | 194647.66 +144 | 11.07 | 22 |  | 213 | $499$ | - 36 |
|  | Mayer 25I . . . . . . . . . | $6 \cdot 0$ | $46.810$ | $07 \cdot 07$ | I |  | $3 \cdot 6179$ | .0010 | + 21 | $\underline{+22 \quad 12 \quad 18.53}$ | $07 \cdot 07$ | I |  | 360 | $527$ | - 40 |
| 1541 | 5 Geminorum | $5 \cdot 9$ | $\begin{array}{lll}6 & 6 & 1.087\end{array}$ | 12.02 | 4 |  | $+3.6796$ | + $\cdot 0008$ | 5 | +24 26 26.46 | 12.02 | 4 |  | -0.526 | - 536 | - 56 |
| 1548 | 70 Orionis . . . . . . . $\xi$ | 4.4 | $649 \cdot 360$ | 07.05 |  |  | 3.4113 | +.0010 | + 6 | +14 13 $\mathbf{1}^{6} \times 16$ | $07 \cdot 05$ | 1 |  | 596 | 497 | - 34 |
| 1556 | Piazzi V. 335 ..... | $4 \cdot 7$ | $855 \cdot 710$ | 10.64 | 3 | 2 | 6164 | -.0102 | + 22 | +69 $2110 \cdot 20$ | 10.00 | 3 | 14 | 781 | 964 | - 109 |
| 1561 | 7 Geminorum . . . . $\eta$ | var. | 926.679 | $10 \cdot 64$ | 40 |  | 3.6265 | +.0004 | - 45 | +2232 1.01 | 10.86 | 36 |  | 826 | 528 | - 17 |
| I 564 | 71 Orionis . . . . . . . | $5 \cdot 2$ | 933.140 |  |  |  | 3.5372 | +.0006 | - 69 | +19 11 14.79 | $06 \cdot 40$ | 2 |  | 835 | 515 | - 20I |
| 1565 | 44 Aur | 4 | $\begin{array}{llll}6 & 9 & 38 \cdot 588\end{array}$ | 12.08 | 6 |  | + 3.8289 | $\bigcirc$ | 49 | +2931 ${ }^{\text {a }}$ - 52 | 13.12 | 6 |  | -0.843 | - 557 | - 266 |
| 1573 | 8 Geminorum | 6. I | $10+9 \cdot 124$ | 13.39 | 5 |  | 6668 | +.0001 | 12 | +235959.69 | 13.39 | 5 |  | 945 | 533 | - 24 |
| 1577 | 74 Orionis . . . . . . $\kappa^{2}$ | 5.1 | II 23.315 | 09.69 | 2 |  | $3 \cdot 3635$ | +.0007 | + 60 | +12 17 52.53 | 10.82 | 4 |  | 0.995 | 489 | + 193 |
| 1575 | 2 Lyncis | 4.4 | II $40 \cdot 890$ | 08.34 | 1 | 1 | $5 \cdot 2977$ | - .0060 | 7 | + $59 \quad 239.74$ | 08.68 | I | 1 | I. 022 | 771 | + 21 |
| 1 557 | Groombridge 1004 | $6 \cdot 6$ | 1229.502 | 11.28 | 3 | 2 | 26.6248 | - 4777 | + 280 | +86 4526.06 | 10.64 | 7 | 24 | I.091 | 3.875 | - 97 |
| I 598 |  | $5 \cdot 1$ | 61522.680 |  | 2 |  | + 2.8902 | +.0014 | - 5 | -747 5.01 | - 55 | 2 |  | - 1.344 | -0.420 | - ${ }^{2}$ |
|  | $\text { W.B. (2) VI. } 3 \text { I }$ | $6 \cdot 3$ | $15 \quad 27 \cdot 304$ | $12.63$ | 5 |  | 3.8294 | - 0011 | + 25 | +293455.95 | 12.99 | 5 |  | 351 | 556 | - 62 |
| 16 | I Canis Majori | 3 | $1651 \cdot 494$ | 07.11 | 1 |  | $2 \cdot 3023$ | +.0019 | + 6 | -30 1120.94 | $07 \cdot 11$ | 1 |  | 473 | 334 | + 1 |
| $1604$ | I 3 Geminorum ... $\mu$ | $3 \cdot 2$ | 1730.936 | 09.48 | 30 |  | $3 \cdot 6261$ | -.0006 | +. 44 | $\|+223337.79\|$ | $10.47$ | 36 |  | 531 | 526 | - 113 |
| 1606 | $4^{6}$ Aurigæ $\ldots . . . \psi^{1}$ | 5•I | 17 57.900 | 09.53 |  | 2 | .6233 | --0053 | + 13 | $+4920 \quad 5 \cdot 76$ | $09 \cdot 53$ |  | 2 | 570 | 671 | - 5 |
| 1609 | 2 Canis Majoris . . . $\beta$ | 2 | $\begin{array}{llll}6 & 18 & 44 \cdot 166\end{array}$ | 10.86 | 36 |  | + 2.6420 | + | - 5 | -17 $54 \begin{array}{lll}\text { 18.55 }\end{array}$ | 10.75 | 25 |  | - 1.637 |  | $\bigcirc$ |
| 1611 | 8 Monocerotis . . . . | $4 \cdot 5$ | 1859.980 | 07.00 |  |  | 3.1806 | $+.0006$ | - 8 | + 43821.29 | 67 | 3 |  | 660 | 461 | - 3 |
| 1612 | Piazzi VI | $6 \cdot 6$ | 19 IIPI4 |  | 8 |  | 2 | - | 6 | +25 $\begin{aligned} & \text { 2 }\end{aligned}$ | 10.50 | 8 |  | I. 676 | 536 | - 17 |
| $1634$ | Io Monocerotis | 5 | 23 30.880 |  | 1 |  | 2 | + | - 2 | - $442 \quad 19.60$ | 07.10 | I |  | - 2.053 | 429 | + 14 |
| 1635 | 18 G | 4 | 2337.17 | 11 | 31 |  | 34 | - | 6 | +20 16 II•13 | 10.84 | 33 |  | 062 | 516 | - 21 |
| 1657 | 13 Monoce |  | $\begin{array}{llll}6 & 28 & 2.303\end{array}$ | 09.85 | 3 |  | $+3.2448$ | - $\cdot 0003$ | + | + 72358.28 | 09.35 | 7 |  | - 446 | 68 | - 10 |
| 1665 | 8 Lynncis. | 6. 1 | 29 28-013 | 12.01 | 1 | 3 | 5.5198 | $.0192$ | 273 | +61 $3340 \cdot 19$ | II.76 | I | 6 | 570 | 797 | - 281 |
| 1668 | 49 Aurigæ |  | 29 31.999 | 10 | 9 |  | $3 \cdot 7800$ | .0030 | 4 | +28 $535 \cdot 78$ | 12 | 10 |  | 576 | 545 | - 23 |
| 1673 | Piazzi VI. | 5 | 3053.315 | 07.88 |  | I | 10.3336 | - 1290 | 269 | +79 $3950 \cdot 17$ | 10.89 | 4 | 19 | 694 | 1.492 | -616 |
| 1687 | 51 Aurigre | $5 \cdot 7$ | 3225.435 | 09.08 | 2 |  | 4.1620 | . 0063 | 21 | + 3928 15.17 | 09.08 | 2 |  | 826 | 0.600 | - 116 |
| 1690 | ${ }^{2} 4$ Geminorum . . . $\gamma$ | I•9 | $63230 \cdot 793$ | 10 | 50 |  | $+3.4638$ | -.0017 | + 3 I | +162836.45 | 65 | 56 |  | $-2.835$ | - 499 | - 47 |
| 1693 | 53 Auriga | 5 | 32 40.594 | 12. | 5 |  | 3.8076 | .0038 | 12 | +29 3.43 .87 | 2 | 5 |  | 849 | 548 | - 25 |
| 1697 | 54 Aurigæ | 5 | 33 52.659 |  | 7 |  | $3 \cdot 7855$ | -0038 | - 8 | +28 2036.31 | $71$ | 7 |  | $2 \cdot 953$ | 545 | $-\quad 23$ |
| 1704 | 25 Geminorum | $6 \cdot 5$ | $3540 \cdot 650$ |  | 5 |  | $3 \cdot 7828$ | . 0041 | $+6$ | +28 16 49.77 | $12.90$ | 5 |  | 3.108 | 543 | - 15 |
| 1706 | 15 Monocerotis ....s | $4 \cdot 7$ | 36 I•380 | 08.19 | 1 |  | $3 \cdot 3048$ | . 0012 | + | + 95846.54 | 09.39 | 3 |  | 137 | 474 | - 7 |
| 1717 | 27 Geminorum ....E | $3 \cdot 2$ | $638 \quad 23.7111$ | I 1.76 | 50 |  | + 3.693I | - | $\bigcirc$ | +25 13 15.50 | 1.72 | 52 |  | - $3 \cdot 343$ | 529 | 20 |
| 1722 | 28 Geminorum | $5 \cdot 5$ | $\begin{array}{llll}39 & 3 \cdot 264\end{array}$ | 12.00 | 7 |  | 044 | -.0047 | 3 | +29 3 45.74 | 12.00 | 7 |  | 399 |  | - 29 |
| 1725 | 31 Geminorum .... ${ }^{\text {a }}$ | 3.4 | 4014.319 | I I $\cdot 27$ | 22 |  | $3 \cdot 3761$ | - .0019 | - 78 | +125935.99 | I 1.55 | 35 |  | $501$ |  | - 201 |
| 1724 | Aurigæ . . . . . . . $\psi^{5}$ | $5 \cdot 3$ | 40 15.110 | 11.02 | I |  | $4 \cdot 3285$ | -. 0100 | + 7 | +43 $40 \quad 4.84$ | 02 |  |  | $503$ | 620 | + 158 |
| 1732 | 9 Canis Majoris . . a | -1.6 | $41 \quad 10.818$ | 10.54 | 25 |  | 2.6807 | +.0010 | $-367$ | -16 $1635 \quad 3 \mathrm{I} \cdot 35$ | 10.54 | 25 |  | 583 | 383 | -1206 |
| 1740 | 18 Monocerotis | $4 \cdot 7$ | 64310.050 | 10 | 3 |  | + 3.1301 | -.0008 | 4 | $+23040.16$ | 62 | 4 |  | $3 \cdot 753$ | -447 | 25 |
| 1744 | 43 Camelopardi | $5 \cdot 1$ | $44 \quad 0.215$ | 11.33 | 3 | I | 6.4889 | -0499 | + 19 | $+685939 \cdot 20$ | I 11.46 | 1 | 15 | $3 \cdot 825$ | 927 | + 9 |
| 1748 | 58 Aurigæ. | $5 \cdot 0$ | 44 24-140 | II:55 | 2 |  | $4 \cdot 2487$ | -0102 | 16 | +41 $53 \quad 16.80$ | II 1.55 | 2 |  | $3 \cdot 859$ | 606 | - 135 |
| 1759 | 36 Geminorum . . . d | $5 \cdot 2$ | $\begin{array}{ll}46 & 9 \cdot 417\end{array}$ | -09•72 | 3 |  | 3.5980 | .0041 | 7 | +2152 5.47 | 11.17 | 2 |  | $4 \cdot 009$ |  | - 41 |
| 1760 | B.F. 963 | $5 \cdot 8$ | $4632 \cdot 154$ | $07 \cdot 48$ | 2 |  | 3.6473 | 3.0046 | - 29 | $+234231 \cdot 27$ | $09 \cdot 72$ | 3 |  | $4 \cdot 042$ |  | - 16 |
| 1763 | 34 Geminorum . . . $\theta$ | $3 \cdot 6$ | 64651.433 | 09.41 | 3 |  | + 3.9575 | -.0076 | + 5 | $+34 \quad 414.34$ | 09.41 | 3 |  | $-4.069$ |  | $\text { - } 54$ |
| 1758 | Piazzi VI. 201 | $4 \cdot 8$ | $46 \quad 57 \cdot 210$ | 10.08 | 4 | 2 | $8 \cdot 7826$ | $\cdot 1281$ | $+250$ | $+77537 \cdot 50$ | $10.60$ | 8 | 14 | $078$ | I. 252 | $1-\quad 14$ |
|  | Nova Gemin. (1912). | var. | 49 4.017 | 12.21 | 3 |  | $3.8966$ | $\cdot 0073$ |  | $+321513.83$ | $12.21$ | 3 |  | $259$ | 0.553 |  |
| 1778 | 38 Geminorum . . . e | $4 \cdot 7$ | $4934 \cdot 190$ | $07 \cdot 24$ | 1 |  | $3 \cdot 3809$ | $.0028$ | $+50$ | +131734.35 | $07 \cdot 24$ | I |  | $302$ | 480 | - 85 |
| 1780 | 37 Geminorum | $5 \cdot 8$ | $4946 \cdot 657$ | 13.07 | 6 |  | $3 \cdot 6946$ | .0054 | - 30 | +252920.47 | 13.07 | 6 |  | 320 | 524 | + 13 |

[^2]

[^3]

| No. in Hoss' Ostalogue, 1900. | Star's Name. |  | Mean R.A. 19100\%. | MeanDate of Obs. r900+ | No. ol Obs. |  | Anunal Precession $1910 \%$. | $\begin{gathered} \text { Secular } \\ \text { Variation } \\ \text { 19ro.0. } \end{gathered}$ | Annual <br> Proper Motion .0001. | Mean Dec. 1910.0. | Mean Date of $\xrightarrow{\text { Obs. }}$ | No. of Obs. |  | Annual Precession1910.0. | Secular Variation 1910.0. | Annual <br> Proper Motion "OOI. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \hline \dot{\circ} 1 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | h m s |  |  |  | s | s |  | - , " |  |  |  | " | " |  |
| 2540 | 23 Ursæ Majoris . . . $h$ | $3 \cdot 8$ | $92426 \cdot 706$ | 11.32 | 2 | 3 | +4.7520 | -.1026 | + 170 | $+632721 \cdot 76$ | I I 43 | 2 | 4 | -15.603 | - 428 | 5 |
| 2552 | 25 Ursæ Majoris . . . $\theta$ | $3 \cdot 3$ | $2650 \cdot 690$ | 11.16 | I |  | $4^{\text {- } 1357 ~}$ | -.0558 | -1026 | $+52518.01$ | I I-16 | I |  | 734 | 367 | - 548 |
| 2555 | 5 Leonis ......... ${ }^{\text {a }}$ | $5 \cdot 1$ | $27 \quad 5 \cdot 793$ | $10 \cdot 76$ | 22 |  | 3.2437 | - 0099 | - 65 | +114155.57 | I 1.43 | 24 |  | 748 | 286 | - 87 |
| 2566 | Io Leonis Minoris. . | $4 \cdot 6$ | $2842 \cdot 825$ | 12.25 | 2 |  | $3 \cdot 6855$. | -. 0293 | + 11 | +364751•II | 12.25 | 2 |  | 835 | 323 | - 27 |
| 2569 | Lalande 18817. | $3 \cdot 2$ | 293.865 | $10 \cdot 21$ | 2 |  | 2.7632. | +.0029 | 19 | $-20 \quad 43$ | 10.21 | 2 |  | 854 | 240 | - 2 |
| 2572 | 33 Hydra | $5 \cdot 7$ | $930 \quad 3 \cdot 262$ | -04 | 5 |  | +2.9940 | -.0022 | $\bigcirc$ | $-53046 \cdot 67$ | $10 \cdot 34$ | 12 |  | $-15.906$ | $-\quad 259$ | $-\quad 57$ |
| 2580 | 8 Leonis | $5 \cdot 9$ | $32 \quad 4.770$ | 10.55 | 8 |  | $3 \cdot 3158$ | -0128 | 7 | +1650 29.15 | 10.55 | 8 |  | $16.014$ | $284$ | $-\quad 19$ |
| 2582 | 10 Leonis | 5.1 | $32 \quad 27 \cdot 710$ | 10.24 | , |  | 3.1744 | -0077 | 44 | + 71422.79 | 10.18 | 10 |  | 035 | 271 | 7 |
| 2589 | 2 Sextantis | $4 \cdot 8$ | $3345 \cdot 695$ | II.2 I | 2 |  | $3 \cdot 1429$ |  | 110 | + $532 \mathrm{I} \cdot 85$ | I I $\cdot 86$ | 7 |  | 102 | 266 | - 63 |
|  | Piazzi IX. 135 | $6 \cdot 8$ | 3351.817 | II•94 | 3 |  | 3.3730 | 54 | 12 | $+204213.70$ | 11.94 | 3 |  | 107 | 286 | - 32 |
| 2591 | Groombridge | $5 \cdot 7$ | 93433.551 | II•3 1 | 2 | 3 | $+5 \cdot 2083$ | - 1601 | - II 5 | $+693851.66$ | 11.00 | 2 | 13 | -16.143 | -443 | 7 I |
| 2595 | 35 Hydræ ........ | 4.I | 3515.630 | 11.80 | 3 |  | 3.0624 | -.0040 | + 31 | -044 1.63 | 12.39 | 6 |  | 179 | 257 | - 72 |
| 2600 | 38 Hydræ . . . . . . . к | $5 \cdot 0$ | $35 \quad 59 \cdot 487$ | 14.26 | 1 |  | $2 \cdot 8777$ | +.0010 | - 18 | -I3 555 25.1I | 10.94 | 5 |  | 217 | 240 | - 16 |
| 2602 | 14 Leonis .........o | 3.8 | $36 \quad 20 \cdot 910$ | 10.65 | 29 |  | $3.2150$ | -.0092 | - 98 | +10 10878.82 | $11 \cdot 12$ | 29 |  | 236 | 268 | - 39 |
|  | Piazzi 1X. $558 . . .$. | $7 \cdot 6$ | $38 \quad 20 \cdot 326$ | 12.20 | $2 \frac{1}{2}$ |  | $3 \cdot 3637$ | -. 0153 | + 23 | +20 3617.61 | II 1.82 | 3 |  | 337 | 277 | - 35 |
| 2612 | 16 Leonis ....... 4 |  | $\begin{array}{llll}9 & 38 & 49.923\end{array}$ | I I. 54 | 3 |  | +3.2712 | -.OII 5 | - 2 | 26 I-91 | 54 | , |  | $6 \cdot 362$ | - 269 | - $\quad 14$ |
|  | 1V.B. (2) IX. $780 \ldots$ | $6 \cdot 6$ | $\begin{array}{ll}39 & 29.869\end{array}$ | 10 | 14 |  | $3 \cdot 3414$ | -.0145 | + 20 | +19 16 40.17 | 80 | 15 |  | 396 | 273 | - 77 |
| 2615 | Antlige : . . . . . . . $\theta$ | $5 \cdot 0$ | 40 11.440 | 13.31 | 1 |  | $2 \cdot 6764$ | +.0053 | 45 | $\begin{array}{llllll}-27 & 21 & 23.41\end{array}$ | 1 | I |  | 430 | 217 | + 23 |
| 2618 | 17 Leonis . . . . . . . $\epsilon$ | 3.1 | 40 44.701 | II•43 | 60 |  | 3.4152 | -. 0179 | - 30 | +24 11 20.71 | 11.47 | 85 |  | 458 | 277 | - 24 |
| 2620 | 14 Leonis Minoris... | $6 \cdot 8$ | 40 57.260 | II.I5 | I |  | $3 \cdot 8488$ | -.0421 | + 56 | $+453159.26$ | II 1 I 5 |  |  | 469 | 313 | - 143 |
| 2632 | 29 Ursæ Majoris . . v | 3. | $94435 \cdot 931$ | 09.96 | 5 | 2 | $+4.3343$ | -0813 | - 380 | $+592745 \cdot 58$ | $10 \cdot 77$ | 5 | I | -16.648 | - 345 | - 159 |
| 2639 | 23 Leonis . . . . . . . | $6 \cdot 7$ | 46 '9.880 | $10 \cdot 76$ | 3 |  | $3 \cdot 2492$ | -0108 | + 17 | +1329 14.91 | 10.76 | 3 |  | 724 | $259$ | - 27 |
| 2641 | 6 Sextantis | $6 \cdot 0$ | $46 \quad 42 \cdot 025$ | 08.80 | 5 |  | 3.0235 | -0025 | + 9 | - 349 16.15 | 67 | 21. |  | 750 | 235 | 30 |
| 2648 | 24 Leonis . . . . . . . $\mu$ | $4 \cdot 1$ | 4738.877 | 11.07 | 40 |  | 3.4352 | - 0196 | - 163 | $+262552.48$ | I I . 08 | 56 |  | 795 | 266 | 63 |
| 2656 | Piazzi IX. $187 \ldots$ | $6 \cdot 0$ | $5021 \cdot 680$ | 08.27 | , | 2 | $5 \cdot 461 \mathrm{I}$ | -2198 | - 1488 | +73 18 28.81 | II.I 5 | 7 | 25 | 924 | 420 | 47 |
| 2663 | Io Sextantis | $\cdot 9$ | 95139.870 | 0 | 3 |  | +3.1895 | -.0085 | - 61 | + 92135.71 | 67 | 5. |  | $6 \cdot 984$ | - . 240 | + |
| 2665 | 19 Leonis Minoris... | $5 \cdot 2$ | $\begin{array}{lll}52 & 10 \cdot 617\end{array}$ | $08 \cdot 28$ | 2 |  | . 6979 | -.0358 | - 102 | +4129 4.52 | 08.28 | 2 |  | 17.008 | 278 | 37 |
| 2672 | 27 Leonis . . . . . . $\nu$ | $5 \cdot 0$ | $53 \quad 23.030$ | 11 | 5 |  | $3 \cdot 2328$ | -.0105 | - 21 | + I2 52 28.42 | 85 | 7 |  | 064 | 240 | 29 |
| 2680 | 29 Leonis . . . . . . . . $\pi$ | $4 \cdot 9$ | $55 \quad 27 \cdot 523$ | II.46 | 32 |  | $3 \cdot 1755$ | -.008I | - 23 | + $82835 \cdot 01$ | $10 \cdot 55$ | 35 |  | 158 | 232. | - 27 |
| 2688 | Lacaille 41 |  | IO 0 II.497 | 13.55 | 4 |  | 2.7775 | +.0056 | 102 | 235058.63 | 13.55 | 4 |  | 369 | 195 | + 22 |
| 2690 | 40 Hydræ. . . . . . . $v^{2}$ | $4 \cdot 7$ | $10 \quad 0 \quad 44.539$ | 09.74 | 6 |  | +2.9233 | $+$ | 25 | $3740 \cdot 25$ | 8 | 1 I |  | 17•393 | -204 | + 12 |
|  | Mayer 444 . . . . . . . |  | - 48.049 |  | 9 |  | $3 \cdot 2654$ | 22 | - 23 | +16 1143.36 | 12.05 | 10 |  | 395 | 229 | 17 |
| 2694 | 30 Leonis. . . . . . . . $\eta$ |  | $225 \cdot 68 \mathrm{I}$ | 08 | 11 |  | 2756 | -. OI29 |  | +17 12 6.46 | 09.29 | 17 |  | 466 | 227 | 12 |
| 2698 | 32 Leonis. . . . . . . . a | I•3 | $334 \cdot 850$ | II.34 | 86 |  | $3 \cdot 2155$ | -. 0100 | - 169 | + I2 2426.99 | 10.92 | 100 |  | 515 | 22 I | 3 |
| 2706 | 41 Hydræ . . . . . . . $\lambda$ | $3 \cdot 8$ | 612.023 | 10.32 | 4 |  | 2.9385 | +.0015 | - 137 | - I I $5432 \cdot 30$ | $10 \cdot 31$ | 8 |  | 625 | 197 | 93 |
| 2711 | 34 Leonis |  | $10 \quad 6 \quad 47.909$ |  |  |  | $+3.2281$ | 108 | + 33 | $+134759.24$ | $\bullet 41$ | 7 |  | $-17.650$ | -216 | - 47 |
|  | Piazzi X. 23 |  | $1122 \cdot 105$ | II. 44 | 6 |  | $3 \cdot 2729$ | - 0133 |  | +18 II 18.44 | 12.34 | 11 |  | $836$ | 11 | 9 |
| 2726 | 32 Ursae Majoris . . | $5 \cdot 7$ | $1130 \cdot 691$ | 10.34 | 4 | 6 | 4.4129 | - II 34 | - I44 | +65 3328.38 | 11.05 | 4 | 15 | 842 | 286 | 13 |
| 2729 | 33 Ursæ Majoris. . . $\lambda$ | $3 \cdot 5$ | 1140.417 | 09.20 | 4 | 3 | $3 \cdot 647 \mathrm{I}$ | . 0382 | - I49 | +43 2I 50.95 | 10.79 | 4 | (3) | 849 | 235 | 45 |
| 2730 | 36 Leonis ....... $\zeta$ | $3 \cdot 7$ | II $41 \cdot 242$ | 10.53 | 5 |  | $3 \cdot 3417$ | . 0174 | + 16 | +235157.89 | 10.83 | 8 |  | 849 | 214 | 15 |
| 2731 | 37 Leonis | $5 \cdot 7$ | 10 II 51.000 | O | 9 |  | +3.2260 | -. 0109 |  | +14 1038.64 | 10.27 | 11 |  | 17.855 | -206 | 27 |
| 2735 | 22 Sextantis | $5 \cdot 4$ | $\begin{array}{ll}13 & 9.536\end{array}$ | 11.45 | 5 |  | $2 \cdot 9922$ | -0000 | 08 | -7378.86 | II.90 | 15 |  | 907 | 88 | 2 |
| 2740 | Groombridge $1638 \ldots$ |  | $1442 \cdot 120$ | -8.18 | 2 | 2 | $\cdot 9086$ | -.0620 | - 19 | +54 $40 \quad 7 \cdot 38$ | 09.00 | 5 | I | 967 | 245 | 16 |
| 2742 | 41 Leonis . . . . . . . $\boldsymbol{\gamma}^{\mathbf{1}}$ | $2 \cdot 6$ | $15 \quad 0.793$ | 10.50 | 63 |  | $3 \cdot 2911$ | -0147 | + 215 | +20 İ7 49.49 | 10.51 | 70 |  | 979 | 205 | - 153 |
| 2743 | 41 Leonis . . . . . . . $\gamma^{2}$ | 3.8 | 151.123 | 08.57 | 6 |  | 3.291I | -0147 | + 215 | $+201747.05$ | 08.21 | 6 |  | 17.979 | 205 | - 182 |
| 2745 | Bradley $1399 . . . . . .$. | $5 \cdot 6$ | 10 $1642 \cdot 856$ | 09.34 | 9 | 3 | +9.3591 | -I:4841 | -- 893 | +84 $4236 \cdot 75$ | 10.64 | 2 I | 27 | -18.045 | --587 | 41 |
| 2751 | 34 Ursæ Majoris. . . $\mu$ |  | $1658 \cdot 305$ | 09.64 | 4 |  | $3 \cdot 5946$ | -0358 | 73 | +41 5780 | $09 \cdot 64$ | 4 |  | 054 | 220 | 20 |
| 2752 | 42 Leonis . |  | $17 \quad 0.029$ | 09.97 | 11 |  | 3.2327 | - 115 | - 27 | +15 25 46.70 | 10.15 | 12 |  | 055 | 197 | 30 |
| 2754 | Bradley 1429 | $4 \cdot 9$ | $1739 \cdot 195$ | 10.25 | 3 | 3 | 4.3700 | -1155 | - 18 | $\underline{+66}$ I 18.73 | 11.39 | 3 | 13 | 080 | 267 | 23 |
| 2762 | Piazzi X. $22 . . . . . .$. | $5 \cdot 3$ | 2011.400 | $09 \cdot 48$ | 1 | , | $7 \cdot 6750$ | - 8883 | - 450 | +83 I 1.60 | 10.82 | 17 | 12 | 175 | 464 | $\begin{array}{r}+\quad 24 \\ \hline\end{array}$ |

${ }_{23}$ Ursm Majoris. This is the principal star of the pair $\Sigma_{1351}$, components 3.8 and 9.0 .
${ }_{41}$ Leonis. These stars form the pair $\Sigma$ iq24.

| No. in Hoss' Catalogue, 1900. | STAR'S NAME. |  | Ilean R.A. 1910\%. | $\begin{aligned} & \text { Mean } \\ & \text { Date of } \\ & \text { Obs. } \\ & \text { Inoo }+ \end{aligned}$ $1900$ | $\left\|\begin{array}{c}\text { No. of } \\ \hline 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0\end{array}\right\|$ |  | $\begin{aligned} & \text { Aunual } \\ & \text { Precession } \\ & 1910.0 . \end{aligned}$ | Secular Variation $191^{\circ} 0$ | Annual <br> Proper <br> Motion <br> . | Mean Dec. 1910\%. | Yean Obs. $1900+$ | $\left\|\begin{array}{c}\text { No. of } \\ \hline \frac{0}{0} \\ 2 \\ 2 \\ 0 \\ 0 \\ 0\end{array}\right\|$ |  | Annual <br> Precession 1910.0 | Secular Variation 1910.0. | Annual Motion ".001. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m s |  |  |  | s | s |  | - 1 |  |  |  |  | " |  |
| 277.1 | 42 Hydra ........ $\mu$ | 4.1 | 10 2144.208 | $09 \cdot 92$ | 24 |  | -2.9092 | +.0042 | - 89 | -16 $2235 \cdot 31$ | $09 \cdot 83$ | 20 |  | -23I | . 169 | 84 |
| 2776 | 31 Leonis Minoris. . $\beta$ | 4.4 | $22+1.060$ | 10.75 | 3 |  | $3 \cdot 4900$ | - . 0294 | - 99 | +3710 6.24 | 10.75 | 3 |  | 266 | 202 | 110 |
| 2777 | 45 Leonis | $5 \cdot 9$ | $2253 \cdot 888$ | II. 36 | 4 |  | $3 \cdot 1716$ | -.0083 | + 8 | +10 13 16.56 | 1 I $\cdot 36$ | 4 |  | 274 | 2 | 7 |
| 2785 | 36 Urse Majoris | $4 \cdot 8$ | $24 \quad 52 \cdot 454$ | II.70 | 3 | 2 | $3 \cdot 8848$ | - .066I | - 215 | +5626 $32 \cdot 49$ | I I 40 | 3 | I | 344 | 1 | 38 |
| 2788 | 29 Sextantis . | $5 \cdot 2$ | $2454 \cdot 520$ | 11.89 | 3 |  | 3.05 II | -.0018 | - 32 | - 21640.96 | 10.82 | 12 |  | 345 | 172 | 19 |
| 2800 | $4^{6}$ Leonis | $5 \cdot 7$ | 10 2723.617 | 10.17 | 14 |  | +3.2094 | - 0106 | - 27 | +14 35 58.09 | 10.17 | 14 |  | -18.432 | - 176 | + 13 |
| 2799 | Bradley I | $5 \cdot 0$ | 2728.367 | 10.61 | 1 | 3 | $5 \cdot 2064$ | -. 2703 | - 79 | +76 Io $36 \cdot 98$ | 10.64 | 17. | 13 | 434 | 290 | $\text { - } 10$ |
| 2804 | 47 Leonis..... | $3 \cdot 9$ | $28+402$ | 10.69 | 26 |  | $3 \cdot 1624$ | -.0079 | - 5 | + $946 \mathrm{I} 2 \cdot \mathrm{II}$ | 10.21 | 30 |  | 455 | 172 | $6$ |
| 2813 | 37 Ursæ Majoris | $5 \cdot 2$ | 29 22.315 | $10.73$ | 2 | 4 | 3.882 I | -.0692 | + 83 | $+573247 \cdot 81$ | 10.00 | 2 | 4 | $499$ | 210 | $+\quad 31$ |
| 2815 | 44 Hydra | $5 \cdot 3$ | $2943 \cdot 985$ | 12.72 | 2 |  | 2.8518 | + .0075 | - | $-231651.86$ | 12.72 | 2 |  | 511 | 152 | + 8 |
| 2816 | 48 | $5 \cdot 2$ | $10 \quad 30 \quad 6 \cdot 370$ | 12.24 | 5 |  | +3.1390 | - .0065 | 72 | + $7252 \cdot 34$ | II•94 | 7 |  | $8 \cdot 524$ | -167 |  |
| 2817 | 49 Leoni | $5 \cdot 7$ | $30 \quad 18.980$ | 14.12 | 2 |  | 3.1543 | .007t | - 30 | +10 $656 \cdot 10$ | 14.14 | 3 |  | 531 | 168 | 1 |
| 2829 | 37 Leonis Min | $4 \cdot 8$ | 33 39.524 | 11.48 | 8 |  | $3 \cdot 3850$ | . 0240 | $+5$ | +3226 $38 \cdot 74$ | I I 4.48 | 8 |  | 640 | 73 | 3 |
| 2844 | Piazzi X. 126 | $5 \cdot 2$ | 36 38.267 | $10 \cdot 10$ | 3 | 5 | $4 \cdot 3474$ | -1400 | - 14 | $+693250 \cdot 18$ | $09 \cdot 96$ | 3 | 15 | 734 | 218 | $22$ |
| 2846 | 33 Sextantis | $6 \cdot 4$ | 36 49:563 | I $1 \cdot 97$ | 3. |  | 3.0620 | .0019 | 11 | - I 165.63 | I I 197 | 3 |  | 740 | 151 | - 129 |
| 2851 | 34 Sextantis | $6 \cdot 6$ | IO 3758.691 | 10.33 | 25 |  | +3.1057 |  | - 62 | + $\mathbf{4}^{125195}$ | $10 \cdot 82$ | 29 |  | $8 \cdot 776$ | - . 151 | + 21 |
| 2850 | 39 Ursæ Majo | $5 \cdot 8$ | $\begin{array}{lll}38 & 2 \cdot 855\end{array}$ | 10.33 |  | 2 | 3.8116 | . 0682 | + 21 | $+574019.25$ | 10.33 |  | 2 | 778 | 186 | 57 |
| 2854 | 4 L Leonis Minoris | 5.I | $38 \quad 3 \mathrm{I} \cdot 550$ | 12.36 | 1 |  | 3.2763 | - 0164 | - 83 | $+233935.43$ | 10.31 | 3 |  | 793 | 158 | $+\quad 5$ |
| 2866 | 42 Leonis Minoris. | 5.4 6.8 | 40 51.799 | 11.32 | 35 |  | $3 \cdot 3460$ | -0224 | - 20 | +31 923.80 | I I-32 | 35 |  | 863 | 157 | 41 |
|  | Lalande 20748 | $6 \cdot 8$ | 4133.734 | 08.00 | 5 |  | 3.1779 | 94 | + | +13 13 20.92 | 08.00 | 5 |  | 883 | 147 | 49 |
| 2868 | 37 Sextan | $6 \cdot 3$ | 10 41 I 24.580 | $10 \cdot 77$ | 4 |  | $+3.1265$ | - .00 | - 5 | $+65051 \cdot 64$ | O9 | I |  | -18.879 | -145 | - 38 |
| 2870 | 52 Leonis | $5 \cdot 6$ | $4139 \cdot 373$ | 10 | 10 |  | $3 \cdot 1898$ | -.OIOI | - 90 | +14 4012.16 | 10•39 | 1 I |  | 886 | 148 | $79$ |
| 2883 | 53 Leo | 5•3 | 44 31.680 | $10$ | 33 |  | 67 | -.0079 | - 1 | +11 1 18.07 | 10.92 | 48 |  | 969 | 14 I | - 33 |
| 2888 | Hydræ... | 3.3 | 45 II.057 | 09.59 | 3 |  | $2 \cdot 9519$ | +.0053 | + 65 | -15 $43 \begin{array}{lll}20.83\end{array}$ | 09.59 | 3 |  | 18.987 | I 30 | + 193 |
| 2899 | 46 Leonis | $3 \cdot 9$ | $48 \quad 16 \cdot 92 \mathrm{I}$ | 10.17 | 9 |  | $3 \cdot 3574$ | - 02 | + 74 | $+344^{2} 0.82$ | 10.17 | 9 |  | $19 \cdot 073$ | 143 | - 290 |
| 2909 | 54 Leonis | $4 \cdot 5$ | IO 5044.569 | 12.24 | 45 |  | +3.2599 | -. 016 | 55 | +2513 $48 \cdot 10$ | I 2.44 | $4^{8}$ |  | 138 | - -133 | - 17 |
|  | $5+$ Leonis ( | $6 \cdot 3$ | $5045 \cdot 086$ | $10$ | 14 |  | $3 \cdot 2599$ | - 0169 | - 55 | +25 13 45.93 | 10.99 | 14 |  | 138 | 133 | 17 |
| 2915 | 56 Leonis | 6-1 | $5121 \cdot 128$ |  | 5 |  | 3.1186 | -0052 | - 14 | +63957.15 | I 4.27 | , |  | 153 | I 26 | 10 |
| 2918 | Bradley 1 ;08 | $6 \cdot 3$ | $52+6 \cdot 900$ | 08.91 | 8 | 3 | $4 \cdot 9304$ | -3040 | - 248 | +78 I5 $9 \cdot 30$ | 10.20 | 15 | 18 | 190 | 00 | 27 |
| 2920 | 47 Ursæ Majo | $5 \cdot \mathrm{I}$ | $5425 \cdot 878$ | 09.85 | 3 |  | $3 \cdot 3993$ | -0320 | - 280 | $+405439.63$ | 10.92 | , |  | 231 | 132 | + 50 |
| 2925 | 7 Crateris. . . . . . . . a | $4^{2}$ | $1055 \quad 23.305$ |  | 2 |  | +2.9530 | + 00070 | - 326 | -17 $49 \begin{aligned} & \text { - }\end{aligned}$ |  | 2 |  | 9.255 | -112 | + 12 I |
| 2927 | 58 Leonis. . . . . . . . d | $5 \cdot 1$ | $55 \quad 54 \cdot 804$ | 10 | 33 |  | 3.0989 | - .0037 | + 6 | + 463.42 | 10.69 | 5 I |  | 267 | 117 | 21 |
| 2930 | 48 Ursæ Majoris. . . $\beta$ | $2 \cdot 4$ | $5625 \cdot 050$ | 11.50 | 4 | 1 | 3.6332 | -.0619 | + 102 | +565154.11 | I I 4.48 |  | I | 279 | 137 | + 28 |
| 2933 | 50 Ursæ Majoris. . . a | $2 \cdot 0$ | $58 \quad 10.97^{2}$ | I I.07 | 4 | 8 | $3 \cdot 7490$ | $\text { -. } 0806$ | - 168 | $+621413.73$ | $\text { II } \cdot 24$ | 4 | 2 I | $321$ | 138 | 74 |
|  | Piazzi X. 23 I | $6 \cdot 7$ | 59 49.812 | 09.39 | 8 |  | $3 \cdot 1535$ | -.0086 |  | +13 9 8.42 | 09.39 | 8 |  | 359 |  |  |
| 2942 | 63 Leonis . . . . . . . . $\chi$ | $4 \cdot 7$ | II 1222.536 |  | 31 |  | $+3.1197$ | - 0055 |  | + 74921.94 | I 1. 26 | 48 |  | -19.372 | - 109 |  |
| 2950 | 65 Leonis . . . . . . $p^{3}$ | $5 \cdot 7$ | $2 \quad 18 \cdot 794$ | $10.74$ | 5 |  | $3.0867$ | -.0025 | - 25 I | + 22639.18 | 09.25 | 9 |  | 414 | 104 | $-\quad 87$ |
| 2958 | 52 Ursæ Majoris . . . $\psi$ | $3 \cdot 2$ | $436 \cdot 467$ | 09.85 | 10 | 4 | $3 \cdot 3922$ | -.0363 | - 55 | +44 59 13.36 | 10.44 | 10 | (4) | 464 | 1 I I | $-\quad 38$ |
| $2964$ | 11 Crateris. . . . . . . $\beta$ | $4 \cdot 5$ | $-713.830$ | $\text { II• } 54$ | 4 |  | $2 \cdot 9472$ | $+.0100$ |  | $\left[\begin{array}{lll} -22 & 20 & 2.88 \end{array}\right.$ | II•54 | 4 |  | $517$ | 090 | - IOI |
| 2972 | 68 Leonis. . . . . . . $\delta$ | $2 \cdot 6$ | 919.444 | 11.48 | 54 |  | 3.1851 | -.0129 | + 106 | +2I I I.2I | I I $\cdot 24$ | 59 |  | $55^{6}$ | 094 | - I45 |
| 2973 | Piazzi XI. | $5 \cdot 9$ | II 9 2I.29I | 09.46 | II |  | $+3.1166$ | -.0054 | + 26 | $+83312.45$ | 09.46 | 11 |  | 9.559 | - .091 | - 124 |
| 2974 | 70 Leonis. . . . . . . $\theta$ | $3 \cdot 4$ | 931140 | $\text { II } \cdot 64$ | 3 |  | $3 \cdot 1558$ | -.0097 | $43$ | +15 5518.73 | II. 24 | 6 |  | 562 | 092 | 86 |
| 2978 | 73 Leonis. . . . . . . . . $n$ | $5 \cdot 5$ | II $9 \cdot 503$ | $\text { II• } 30$ | 6 |  | 3.1419 | -.0083 | $6$ | +134755.50 | 10.80 | 8 |  | 593 | 089 | 26 |
| 2980 | Piazzi XI. | $6 \cdot 0$ | 1137.757 | $11 \cdot 10$ | 4 | 2 | 3.4057 | -.0432 | $93$ | +49 $58 \quad 3.40$ | 10.96 | 4 | 2 | $601$ | 096 | $-\quad 19$ |
| 2982 | 74 Leonis. . . . . . . $\phi$ |  | $125 \cdot 125$ | 11.71 | 4 |  | 3.0572 | +.0008 | $-75$ | - 3934.34 | 11.72 | 8 |  | 609 | 085 | - 44 |
| 2983 | 75 Leonis. | $5 \cdot 4$ | $\begin{array}{llll}\text { II } & 12 & 39.538\end{array}$ |  | 4 |  | $+3.0845$ | 20 | + 32 | + 23020.09 | 14.29 | 4 |  | -19.620 | -. 084 | 152 |
| 2984 | 53 Ursæ Majoris . . $\}$ |  | 1322.981 | 11.4 | 7 |  | 3.2414 | -.0210 | 333 | +32 229.34 | 41 | 7 |  | 633 | 087 | - 598 |
|  | 53 UrsæMaj. (Comes) $\xi$ |  | 1323.268 | I 1.41 | 6 |  | 3.2414 | -.0210 | - 333 | +32 $2 \quad 6 \cdot 78$ | 11.41 | 7 |  | 633 | 087 | - 598 |
| $2985$ | 54 Ursæ Majoris . . . v |  | 13 37.248 | 10.54 | 5 |  | 3.2509 | -.0225 | $-\quad 18$ | $+33 \quad 35 \quad 7 \cdot 40$ | $10 \cdot 54$ | 5 |  | 637 | 087 | + 15 |
| 2989 | 12 Crateris.. . . . . . $\delta$ | 3.8 | $1450 \cdot 412$ | 10.88 | 33 |  | 3.0058 | +.0066 | - 85 | -14 $1 \begin{array}{llll}17 & 28.64\end{array}$ | 10.22 | 49 |  | 658 | 078 | + 195 |

[^4]

| No. in Boss' Catalogue, 1900. | STAR'S NAME. |  | Mean R.A. igroo. | Mean Date of Obs. $1900+$ | $\left\|\begin{array}{\|c\|}\text { No. of } \\ \hline \dot{I} \\ \text { M } \\ \text { M } \\ 0 \\ 0 \\ 0 \\ \hline\end{array}\right\|$ |  | Annual Precession $1910 \%$. | Secular Variation 1910\%. | Annual <br> Motion <br> ${ }^{2} .000$. | Mean Dec. r980\%. | Mean Date of Obs. $1900+$ | $\left\|\right.$No. of <br> $\stackrel{0}{0}$ <br>  <br>  <br> 0 <br> 0 <br> 4$\|$ | $\begin{array}{c\|} \hline \text { Obs. } \\ \hline \stackrel{\oplus}{\circ} \\ \text { M } \\ \text { 言 } \\ \text { in m } \end{array}$ | Annual Precession $1910 \%$. | Secular Variation 1910\%. | Annual Proper Motion .oor. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m |  |  |  | $s$ | s |  | - ' |  |  |  | " | " |  |
| 3242 | 15 Comæ . . . . . . . . $\gamma$ | $4 \cdot 6$ | $122227 \cdot 261$ | 12.20 | 14 |  | $+3.0007$ | - $\cdot 0124$ | 66 | +28 $46 \quad 7.27$ | $12 \cdot 20$ | 14 |  | 19.950 | 0.051 | 87 |
| 3256 | 7 Corvi . . . . . . . . $\delta^{2}$ | 3.1 | $25 \quad 12 \cdot 328$ | 10.24 | 24 |  | 3.1146 | + .OI20 | 144 | -16 o 51.74 | 10.73 | 33 |  | 925 | 058 | 143 |
| 3260 | 74 Urse Majoris | $5 \cdot 4$ | $2545 \cdot 400$ | 09.97 | 1 | I | $2 \cdot 8241$ | -.0378 | - 87 | +58 $543 \cdot 29$ | 10.05 | , | I | 919 | 55 | 82 |
| 3279 | 8 Canum Venati. . $\beta$ | $4 \cdot 3$ | $2928 \cdot 275$ | 10.79 | 2 |  | 2.9190 | -. 0202 | - 629 | $+415047 \cdot 52$ | 10.79 | 2 |  | 881 | 063 | + 281 |
| 3281 | 5 Draconis. . . . . . к | $3 \cdot 9$ | $2938 \cdot 754$ | 09.35 | 1 | 5 | $2 \cdot 5914$ | -.0530 | 119 | +70 $17 \quad 3.52$ | 10.07 | I | 14 | 879 | 057 | $+6$ |
| 3280 | 9 Corvi. . . . . . . . . $\beta$ | $2 \cdot 8$ | 122939.434 | I 1.48 ${ }^{8}$ | 18 |  | +3.1453 | +.0166 | $\bigcirc$ | -22 5336659 | 10.83 | 27 |  | -19.879 | +.068 | - 61 |
| 3283 | 23 Comæ | $4 \cdot 8$ | 3022.090 | I I. 54 | 4 |  | 2.9971 | -.0084 | - $5^{2}$ | +23 729.15 | 09.98 | 10 |  | 870 | 066 | + 7 |
| 3285 | 24 Comæ | $5 \cdot 2$ | $30 \quad 37 \cdot 028$ | 09.87 | 4 |  | 3.0115 | -.006I | + 3 | +18 $5221 \cdot 39$ | 10.64 | 7 |  | 867 | 067 | + 16 |
| 3290 | 25 Virginis | $5 \cdot 9$ | $\begin{array}{lll}32 & 9.207\end{array}$ | 13.70 | 3 |  | 3.0900 | $+.0064$ | 20 | - 5208833 | 13.70 | 3 |  | 849 | 072 | 27 |
| 3294 | Piazzi XII. | $6 \cdot 0$ | 33 46.97I | 09.43 | 9 |  | 3.0644 | $+.0025$ | 57 | + 22059.82 | $09 \cdot 43$ | 9 |  | 829 | 074 | 27 |
| 3297 | 9 Canum Venaticum. | $6 \cdot 3$ | 123426.444 | 12.87 | 4 |  | $+2.8963$ | -.0191 | - 19 | +4122 11.77 | 7 | 4 |  | 820 | $+.072$ | 31 |
| 3298 | 26 Virginis . . . . . . . $\chi$ | $4 \cdot 8$ | 3436.016 | 13.06 | 7 |  | 0990 | +.0077 | 5 I | - 7300097 | 12.09 | 13 |  | 818 | 76 | 37 |
|  | 29 Virginis . . . . . . $\gamma^{1}$ | $3 \cdot 7$ | $37 \quad 5 \cdot 832$ | 09.06 | 7 |  | .0761 | +.0044 | - 376 | --0 $18 \cdot 38$ | $09 \cdot 47$ | 8 |  | 784 | 081 | 4 |
| 3307 | 29 Virginis . . . . . $\gamma^{2}$ | $3 \cdot 7$ | $37 \quad 6 \cdot 110$ |  | 5 |  | 3.0761 | + .0044 | - 376 | --0 $57 \quad 23.68$ | $07.96$ | 5 |  | 784 | 81 | $+\quad 4$ |
| 3309 | 30 Virginis . . . . . . . $\rho$ | $5 \cdot 6$ | 37 <br> 19.767 | I I-35 | 33 |  | 3.0314 | -.0016 | $+61$ | +104353.62 | 11.17 | 55 |  | 781 | 080 | 101 |
| 3313 | 76 Ursæ Majoris | 5 | 1237 38.192 | I I•O2 | 2 | 3 | $+2.6399$ | - -0377 | - 38 | +63 12 25.44 | 10.02 | 2 | 12 | -19.776 | + $\cdot 070$ | 19 |
| 3318 | Piazzi XII. 168. | $5 \cdot 7$ | 3912.660 | 10.35 | 1 |  | 3.1926 | +.0207 | 30 | -27 49 48.82 | $10 \cdot 35$ | 1 |  | 753 | 088 | 54 |
| 3322 | Groombridge 1922 | $5 \cdot 5$ | $4054 \cdot 176$ | 10.51 | 3 | 2 | 2.8274 | -.0213 | $+\quad 5$ | +45 55 56.51 | $12 \cdot 35$ | 3 |  | 728 | 82 | + 3 |
| 3323 | 32 Virginis . . . . . | $5 \cdot 2$ | 414.237 | 10.69 | 3 |  | 3.0383 | - 0000 | 76 | + 8955.78 | $12 \cdot 17$ | 5 |  | 725 | 087 | + I |
| 3330 | Mayer 537 | $6 \cdot 3$ | 4254.332 | 12.94 | 6 |  | 3.0978 | +.0072 | - I | - $54833 \cdot 40$ | 13.15 | 8 |  | 696 | 093 | 50 |
| 3331 | 35 Virgini | 6.7 | 124316.456 | I I $\cdot 62$ | 18 |  | +3.0547 | +.0022 | 3 | $+4350.55$ | I I • 39 | 38 |  | -19.690 | -092 | 12 |
| 3347 | 31 Comæ | 5•I | $47 \quad 18.963$ | I I $\cdot 38$ | 47 |  | $2 \cdot 9266$ | - 00095 | 12 | +28 I 49.49 | II I I 19 | 7 I |  | 620 | 096 | 26 |
| 3356 | Bradley 173 | $5 \cdot 3$ | $48 \quad 27 \cdot 585$ | 10.04 | , | 2 | $0 \cdot 4475$ | + .1990 | 180 | +83 $54 \quad 7 \cdot 48$ | 10.27 | 9 | 19 | 600 | 22 | + 15 |
| 3353 | 38 Virginis | $6 \cdot 2$ | $48 \quad 34 \cdot 638$ | 10.05 | 10 |  | 3.0876 | +.0061 | - 175 | - 3 3 50.96 | 10.05 | 10 |  | 597 | 103 | 13 |
|  | Lalande 240 | 5 | $48 \quad 59.590$ | II. 27 | I |  | 3.0910 | +.0065 | - 25 | - $344 \quad 2.95$ | I I $\cdot 24$ | 2 |  | 590 | 104 | 70 |
| 3362 | 40 Virginis | 4.9 | $124940 \cdot 318$ | 10.59 | 4 |  | $+3.1183$ | + .0093 |  | -9 ${ }^{9} \quad 30.76$ | $9 \cdot 92$ | 10 |  | $-19.577$ | + •106 | 2 I |
| 3363 | 77 Ursæ Majoris . $\epsilon$ | 1.7 | 504.410 |  | 4 | 1 | $2 \cdot 6358$ | -. 0269 | + 139 | $+562653.66$ | 09.66 | 4 | I | 570 | $092$ |  |
| 3367 | 43 Virginis. . . . . . $\delta$ | $3 \cdot 7$ | $51 \quad 4 \cdot 183$ | I I.07 | 21 |  | 3.0524 | +.0027 | - 317 | + 35310.93 | 10.86 | 32 |  | 550 | 107 | - 64 |
| 3371 | 12 Canum Venati. . . a | $2 \cdot 9$ | $5149 \cdot 203$ | $10 \cdot 73$ | 4 |  | 2.8316 | -. 0150 | - I99 | +3848 15.34 | $10 \cdot 73$ | 4 |  | 536 | 101 | + 43 |
| 3372 | 8 Draconis | $5 \cdot 3$ | 5153.709 | -9.65 | 1 | 2 | 2.4009 | -.0317 | - 5 | +65 $5535 \cdot 62$ | 11.93 | I | 7 | 534 | 087 | 35 |
| 3375 | 44 Virginis . . . . . . . . $k$ | $5 \cdot 9$ | $\begin{array}{llll}12 & 55 & 1.263\end{array}$ | 11.20 | 3 |  | $+3.0910$ | +.0066 |  | - $31935 \cdot 12$ | I $2 \cdot 28$ | 6 |  | -19.471 | + -115 |  |
| 3378 | 46 Virginis . . . . . . . . | $6 \cdot 1$ | $55 \quad 57 \cdot 794$ | 08.67 | 7 |  | 3.0888 | +.0064 | 20 | - 2535.07 | 08.75 | 8 |  | 45 I | 117 | $+46$ |
| 3383 | 47 Virginis . . . . . . . $\epsilon$ | $3 \cdot 0$ | 57 41.826 | I 1.50 | 49 |  | 3.0051 | -.0005 | - 185 | + 112633.82 | 10.95 | O |  | 414 | 18 | + 17 |
| 3388 | 48 Virginis. . . . . . . . | $6 \cdot 5$ | 59 16.103 |  | 6 |  | 3.0915 | +.0067 | 30 | -3 $3045 \cdot 03$ | $09 \cdot 52$ |  |  | 379 | 23 | 40 |
| 3392 | 14 Canum Venaticum | 5•I | 13132.030 | 10.42 | 6 |  | $+2.8123$ | -.OI22 | - 21 | +36 16 $48 \cdot 76$ | 10.42 | 6 |  | 328 | 117 | + 10 |
| 3407 | Groombridge 2006 | 8.0* | $13 \quad 3 \quad 5 \cdot 747$ | 12 | 1 |  | -8.0794 | $+5.5273$ | - 130 | $+88 \quad 7 \quad 58 \cdot 4^{8}$ | 71 | 5 |  | -19.290 | 12 | + 12 |
| 3403 | 49 Virginis . . . . . . . g | $5 \cdot 3$ | 310.810 | 14.27 | 1 |  | $+3.1383$ | +0.0106 | 10 | -10 15 | 27 | 1 |  | 289 | + 133 | 18 |
| 3404 | B.F. 1805 | $5 \cdot 7$ | $350 \cdot 820$ | 12.25 | 1 |  | 3.1274 | +.0098 | 23 | - $830 \cdot 9.08$ | 13.01 | 3 |  | 273 | 134 | 71 |
| 3408 | 50 Virgini | $6 \cdot 2$ | $5 \quad 2.550$ | 13.40 | 1 |  | 3.1375 | +.0105 | 1 | - $95056 \cdot 61$ | 13.33 | 3 |  | 244 | 136 | 23 |
| 3409 | 51 Virginis . . . . . . $\theta$, | 4.4 | $5 \quad 17 \times 333$ | 10.90 | 29 |  | $3 \cdot 1057$ | +.0080 |  | $-5331 \cdot 24$ | $10 \cdot 34$ | 44 |  | 238 | 135 | 42 |
| 3411 | I 5 Canum Venaticum | $6 \cdot 2$ | $13 \quad 5 \quad 33 \cdot 660$ |  | 1 |  | $+2.7671$ | 31 | $12$ | $+39046 \cdot 96$ |  | I |  | -19.231 | +-122 | 4 |
| 3415 | 17 Canum Venaticum | $6 \cdot 0$ | 555.390 | $10 \cdot 36$ | 6 |  | $2 \cdot 7658$ | -. 0130 | - 63 | $+385836 \cdot 88$ | $10 \cdot 36$ | 6 |  | 222 | 2 | + 28 |
| 3424 | 43 Comæ . . . . . . . $\beta$ | $4 \cdot 3$ | $740 \cdot 464$ |  | 61 |  | $2 \cdot 8628$ | -. 0077 | - 604 | +28 20 3.15 | $44$ | 65 |  | 178 | 130 | + 875 |
| 3439 | 19 Canum Venaticum | $5 \cdot 7$ | $\begin{array}{ll}\text { II } & \mathbf{2 9 . 2 7 4}\end{array}$ | 10.82 | 12 |  | $2 \cdot 7118$ | -.0132 | - 104 | +41 1949.57 | $10 \cdot 94$ | 13 |  | 079 | 129 | - $\quad 1$ |
| 3446 | 60 Virginis. . . . . . . $\sigma$ | $5 \cdot 0$ | $13 \quad 3.597$ | 10.59 | 7 |  | 3.0289 | $+.0029$ | - 9 | $+55638.08$ | 10.90 | 27 |  | 036 | 146 | + 9 |
| 3447 | 20 Canum Venaticum | $4 \cdot 7$ | 131330.488 | 09.82 | 4 |  | +2.7056 | -.0129 | 11 | +41 $246 \cdot 19$ | 10.50 | 5 |  | 19.024 | +.132 | + 4 |
| 3448 | 6ı Virginis. . . . . . . | $4 \cdot 8$ | 13 41.682 | 12.31 | 4 |  | $3 \cdot 2082$ | +.0156 | - 754 | -17 48388.43 | 12.31 | 4 |  | 019 | 156 | $-1084$ |
| 3449 | 46 Hydræ . . . . . . . $\gamma$ | $3 \cdot 3$ | $14 \quad 1 \cdot 533$ | 11.6 |  |  | $3 \cdot 2499$ | +.0189 | + 48 | -22 $4^{11} 48 \cdot 35$ | 11 | 3 |  | 009 | 158 | 51 |
| 3452 | Contauri $\times$ Ve. . . . 4 | 2•9 | 1532.015 | 09.32 | 2 |  | $3 \cdot 3895$ | +.0306 | 281 | -36 14 49.92 | 09.32 | , |  | 18.967 | 168 | 94 |
| 3455 | 23 Canum Venaticum | $5 \cdot 7$ | 1617.076 | 10.33 | 5 |  | $2 \cdot 6979$ | -.0123 | - 51 | $+403721 \cdot 58$ | 10.33 | 5 |  | 946 | 137 | 20 |

${ }_{7}$ Canum Venaticum. This is tho principal star of the pair $\beta 608$.
ponents 5.4 and 2.9
48 Virginis. This star is the closo double $\beta 929$, components $7 \%$ and $7 \%$. Magnitude marked * taken from B. D. Catalogue.

| No. in Boss' Catalogue, 1900. | STAR'S NAME. |  | Mean İ.A. $1910 \times 0$. | Mean Date of Obs. $1900+$ | No. of <br> $\stackrel{0}{\circ}$ <br> o <br> 0 <br> 0 <br> 0 <br>  |  | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { Ig10'0. } \end{aligned}$ | - Secular Fariation $1910^{\circ} 0$. | Annual <br> Proper <br> Motion B. 0001 . | Mean Dec. 1910.0. | Mean Date of Obs. Obs. $\qquad$ |  |  | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { Igro.o. } \end{aligned}$ | Secular Variation 1910.0. | Annual <br> Motion <br> ".o01. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m s |  |  |  | 8 | 8 |  | - ' " |  |  |  | $n$ | " |  |
|  | Piazzi XIII. 67. | $6 \cdot 8$ | 1317850.497 | 12.55 | 3 |  | $+3.1172$ | $+.0087$ | - 58 | - $54340 \cdot 66$ | 12.72 | 4 |  | -18.901 | -159 | - 151 |
| $347^{\circ}$ | Groombridge 2007 | 7.4 | $18 \quad 14.580$ | 11.43 | 4 | I | $-2.2841$ | +.8459 | - 1030 | +85 1329.92 | $12 \cdot 16$ | 8 | 3 | 889 | 104 | + 26 |
| 3467 | 65 Virginis. | $5 \cdot 9$ | $18 \quad 38 \cdot 978$ | 08.83 | 10 |  | +3.1075 | + .0082 | 16 | - $4 \begin{array}{llll} & 27 & 13.62\end{array}$ | 09.06 | I I |  | 877 | - 160 | 20 |
| 3471 | 66 Virginis | $5 \cdot 8$ | 19 51.995 | 08.78 | 4 |  | $3 \cdot 1100$ | +.0089 | + 100 | - 4 41 $37 \cdot 72$ | $08 \cdot 78$ | 4 |  | 841 | 163 | 40 |
| 3474 | 79 Ursæ Majoris . . $\zeta^{1}$ | 2.4 | 20 18.193 | 10.13 | , | 1 | $2 \cdot 4076$ | -.0167 | + 148 | $\underline{+552342.38}$ | IO.OI | 2 | I | 828 | 129 | 30 |
| 3475 | 79 Ursæ Majoris . . $\zeta^{2}$ | $4^{\circ}$ | 132019.190 | $07 \cdot 44$ | 1 |  | $+2.4076$ | -.0167 | + 155 | +55 2329.92 | 07.44 | I |  | $-18.828$ | + 1129 | $35$ |
| 3476 | 67 Virginis . . . . . . . a | 1-2 | $20 \quad 26.997$ | II.05 | 72 |  | 3•1593 | $+.0117$ | - 28 | -Io $41 \begin{array}{ll}\text { I } & 30.24\end{array}$ | 10.53 | 89 |  | 824 | 166 | $36$ |
| 3481 | 68 Virginis . . . . . . . i | $5 \cdot 6$ | 2157.907 | I I.98 | 3 |  | $3 \cdot 1740$ | +.0125 | - 92 | -I2 $14 \begin{array}{llll}\text { - } & 21 \cdot 96\end{array}$ | I I. 88 | 7 |  | 778 | 70 | - 22 |
| 3488 | Piazzi XIII. $109 . .$. | 6.1 | 2350.170 | $13 \cdot 14$ | 2 | I | I. 5227 | +.0077 | + 56 | +72 $5130 \cdot 99$ | II.87 | 2 | 10 | 720 | 87 | - 17 |
| 3487 | 70 Virginis. | $5 \cdot 2$ | $24 \quad 1.722$ | 09.58 | 5 |  | $2 \cdot 9507$ | -.0002 | - 167 | +14 I | 11.16 | 15 |  | 714 | 62 | - 586 |
| 3495 | 72 Virginis . . . . . .l | 6•1 | $132543 \cdot 884$ | 10.23 | 5 |  | +3.1239 | +.0093 | 6 | - 6 0 21.38 | 10.23 | 5 |  | -18.660 | + 174 | + II |
| 3498 | 73 Virginis. . . . . . . | $5 \cdot 9$ | 27 II.492 | 08.43 | 5 |  | 3.2363 | +.0164 | - 63 | -18 $15555 \cdot 03$ | $08 \cdot 43$ | 1 |  | 13 | 83 | - 23 |
| 3502 | Lacaille 5 | $5 \cdot 7$ | 27 34.983 | 10.99 | 3 |  | $3 \cdot 3400$ | +.0237 | - 83 | -28 I 3 44.31 | 10.99 | 3 |  | 600 | 90 | 21 |
| 3504 | 76 Virginis | $5 \cdot 4$ | 28 1 3.533 | 11.75 | 3 |  | 3.1583 | +-0114 | - 20 | -942 $5 \cdot 22$ | 11.75 | 3 |  | 579 | 181 | - 44 |
| 3508 | 79 Virginis | 3.4 | $30 \quad 6 \cdot 353$ | 10.61 | 34 |  | 3.0737 | +.0066 | - 191 | - 0889.53 | 10.45 | 34 |  | 517 | 180 | + 34 |
| 3509 | 8i Ursæ Majoris | 5 | $13 \quad 3039 \cdot 745$ | 09.05 | 1 | 1 | $+2.3146$ | - -0137 | 20 | +55 4833.39 | 09.49 | 1 | I | $-18.498$ | -138 | 10 |
| 3511 | Piazzi XIII. 136 | $5 \cdot$ | $3046 \cdot 740$ | 12.25 | 1 |  | 2.6748 | - .0090 | + 70 | +37 3834.29 | $12 \cdot 25$ | I |  | 494 | 158 | - 19 |
| 3510 | 80 Virginis. | $5 \cdot 8$ | $30 \quad 50 \cdot 254$ | -8.15 | II |  | 3.1171 | + .0090 | 13 | - $45616 \cdot 64$ | 08.05 | 1 I |  | 492 | 183 | + 72 |
| 3518 | 25. Canum Venaticum | $4 \cdot 9$ | 3327.770 | $10 \cdot 32$ | 4 |  | $2 \cdot 6767$ | -.0084 | 86 | $+36458 \cdot 32$ | $10 \cdot 32$ | 4 |  | 402 | 63 | + 14 |
| 3527 | Groombridge $2029 .$. | $5 \cdot 7$ | $35 \quad 0.970$ | 09.08 | I | I | 1.4448 | +.0124 | 80 | +71 $4^{2} \quad 0.24$ | 09.48 | 3 | 3 | 348 | 093 | 7 |
| 3534 | 82 Virginis . . . . . . m | $5 \cdot 2$ | $13 \quad 36 \quad 53 \cdot 205$ | 11.26 | 36 |  | +3.1520 | + 0108 |  | - 8 I 4456.83 | 10.78 | 36 |  | -18.281 | -196 | + 36 |
| 3540 | Mayer 5 | $6 \cdot 4$ | 39 I3.167 | 08.29 | 5 |  | 1220 | + .0093 | 32 | - $5 \quad 244.78$ | 08.57 | 4 |  | 197 | 199 | - 26 |
| 3542 | 83 Virgini | $5 \cdot 7$ | $39 \quad 38 \cdot 333$ | I 2.32 | 6 |  | 3.2310 | + OI5I | + 5 | - $1543335 \cdot 39$ | $12 \cdot 32$ | 6 |  | 181 | 06 | - 5 |
| 3548 | 86 Virginis | $5 \cdot 8$ | $41 \quad 8.443$ | 13.77 | 7 |  | $3 \cdot 1936$ | + .0131 | - 16 | -II 158 | 13.94 | , |  | 125 | 206 | 0 |
| 3551 | B. F. 1886 | $6 \cdot 2$ | $42 \quad 27 \cdot 874$ | 11.93 | 5 |  | $3 \cdot 1667$ | +.0115 | 8 | -91531.08 | I 1 -93 | , |  | 076 | 207 | 40 |
| 3558 | 4 Boötis . . . . . . . . $\tau$ | $4 \cdot 5$ | I $342 \begin{array}{lll}\text { 59•138 }\end{array}$ | 10 | 38 |  | +2.8849 | 6 | - 340 | +1754 18.40 | 1 | 52 |  | -18.056 | 90 | + 26 |
| 3563 | 88 Virginis. . . . . . . . $n$ | $6 \cdot 5$ | 4335.435 | 10.40 | 4 |  | 3.1379 | + -0101 | - 30 | - 62318.18 | 11.20 | 5 |  | 033 | 208 | - 28 |
| 3566 | 85 Ursæ Majoris... $\eta$ | I.9 | $43 \quad 59.677$ | 10. 35 | 3 | 3 | $2 \cdot 3802$ | OI | 121 | $+494543 \cdot 96$ | 09.92 | 5 | 3 | 017 | 60 | 2 I |
| 3571 | 89 Virginis | $5 \cdot 1$ | $4458 \cdot 722$ | I I. 79 | 5 |  | $3 \cdot 2610$ | +.0165 | 69 | -17 41 9.II | 11•79 | 5 |  | 17.979 | 218 | 43 |
| 3589 | Io Draconis | $4 \cdot 8$ | $4^{8} \quad 48 \cdot 193$ | 09.56 | 4 | 2 | 1.7524 | -. 0004 | + 4 | $+6510 \quad 3 \cdot 32$ | 09•15 | 4 | 7 | 829 | 124 | 3 |
| 3588 | 7 Boötis | $5 \cdot 7$ | $13 \quad 48 \quad 54.965$ | I 1 | 3 |  | +2.8694 | -.0004 | - 27 | +1822 34.11 | I | 5 |  | $-17 \cdot 825$ | + •199 | 13 |
| 3595 | Bradley 18 | $6 \cdot 2$ | 5014.847 | 10. 32 | 3 |  | 1552 | +.0109 | 10 | - 73657.01 | 10.32 | 3 |  | 771 | 220 | 30 |
| 3596 | \& Boötis . . . . . . . $\eta$ | $2 \cdot 8$ | $50 \quad 23.979$ | 10.58 | 60 |  | $2 \cdot 8611$ | -.0005 | 45 | +185054.83 | 10.00 | 68 |  | 765 | 201 | $-367$ |
| 3600 | 92 Virginis | $5 \cdot 9$ | $5152 \cdot 725$ | I 1-37 | 6 |  | 3.0562 | +.0065 | - 23 | + I 2925.36 | 11.51 | 6 |  | 704 | 217 | + 12 |
| 3604 | 47 Hydræ | $5 \cdot 2$ | $5328 \cdot 005$ | 10.63 | 4 |  | $3 \cdot 3623$ | +.0215 | - 36 | -24 3I 58.12 | 10.63 |  |  | 639 | 240 | - 41 |
|  | W.B. XIII | $7 \cdot 0$ | $\begin{array}{llll}13 & 54 & 16 \cdot 362\end{array}$ | 1 1.29 | 4 |  | $+3.1451$ | + -0103 |  | -629 8.42 | 9 |  |  | -17.606 | $+\cdot 227$ |  |
| 3607 | 48 Hydræ | $5 \cdot 8$ | 54 57.570 | 10.08 | 3 |  | $3 \cdot 3663$ | +.0214 | - 152 | $\begin{array}{llll}-24 & 34 & 16.86\end{array}$ | 10.08 | 3 |  | $577$ | 243 | - III |
| 3609 | Mayer 572 | $6 \cdot 7$ | 5519.905 | I | 4 |  | 3.1599 | +.0111 | 17 | - 743 26.18 | 1 I | 4 |  | 561 | 230 | 59 |
| 3612 | 93 Virginis | $4 \cdot 3$ | $57 \quad 3 \cdot 922$ | $10 \cdot 3$ | 26 |  | 3.0499 | +.0065 | + 13 | + I 5847.21 | $10 \cdot 35$ | 32 |  | 487 | 225 | - 25 |
| 3613 | I 1 Boötis | $6 \cdot 1$ | $57 \quad 5 \cdot 657$ | 12.47 | 37 |  | - 2.7276 | -.003I | - 60 | +27 4915.99 | 12.36 | 4 I |  | 486 | 202 | + 3 |
| 3616 | Piazzi XIII. 286 | $6 \cdot 4$ | 135934.520 | 13.33 | 3 |  | $+3.2452$ | + -0149 | 6 | $-1432 \quad 21.69$ | $13 \cdot 33$ | 3 |  | 7•379 | + $\cdot 243$ | - 29 |
| 3617 | Mayer 573 | $6 \cdot 5$ | $5935 \cdot 438$ | 10.73 | 5 |  | 3-1759 | + -0118 | 27 | - $84931 \cdot 56$ | 10.73 | 5 |  | 378 | 238 | 7 |
|  | Lalande $25^{8}$ | $6 \cdot 4$ | $14 \quad 0 \quad 19.728$ | 14.36 | 4 |  | 3.2634 | +-O157 | - 37 | -15 $\begin{aligned} & 5 \\ & 54\end{aligned} 188.07$ | 14.36 | 4 |  | 346 | 246 | - 12 |
| 3622 | 49 Hydræ. | $3 \cdot 5$ | 114.520 | 13.42 | I |  | 3.405 I | +.0228 | + 31 | $-261454.08$ | 13.42 | 8 |  | $306$ | 258 | - 160 |
| 3624 | 94 Virginis | $6 \cdot 6$ | 1 31.703 | I I $\cdot 44$ | 21 |  | 3.1731 | +.0116 | - 5 | - 82744.63 | 10.68 | 28 |  | 293 | 241 | $+\quad 9$ |
| 3625 | 95 Virginis. | 5 | $14 \quad 157 \cdot 100$ | 09.35 | 3 |  | $+3.1785$ | +.OII8 | 97 | -853 3.0゙4 | 09.97 | 4 |  | -17.274 | $+.242$ | $+\quad 4$ |
| 3626 | I 1 Draconis . . . . . . a | $3 \cdot 6$ | 157.113 | 09.95 | 6 | 5 | 1.6312 | +.0047 | 81 | +64 48 2I.2I | 11.03 | 5 | 12 | 274 | 128 | + 15 |
| 3629 | 96 Virginis. | $6 \cdot 5$ | 412.758 | 11.09 | 5 |  | $3 \cdot 1929$ | + .0124 | 3 | - 95429.94 | 11.09 | 5 |  | 173 | 248 | + 16 |
| 3630 | Piazzi XIII. 316 | $5 \cdot 4$ | 419.920 | 10.42 | 2 |  | $2 \cdot 3996$ | -.0061 | + 4 | +4416 56.03 | 10.42 |  |  | 168 | 188 | - 37 |
| 3632 | Mayer 578 | $5 \cdot 1$ | 5 55.394 | 13.48 | 7 |  | 3.2710 | +.0157 | + I I | -15 51237047 | 13.48 | 7 |  | 096 | 256 | - 22 |

79 Ursæ Majoris. Theso stars form the pair $\Sigma$ if44.
25 Canum Venaticum. This star is the close double $\Sigma_{1768}$, components 5.0 and 8.5 .

| No. in Boss' Catalogue, 1900. | STAR'S NAME. | 勆 | Mean R A. igio.o. | Mean Date of Obs. tgoo | $\left\|\begin{array}{c}\text { No. of } \\ \hline \dot{3} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 2\end{array}\right\|$ |  | Annual <br> Precession 1910.0. | Secular Variatiou 190.0. | Annual <br> Proper <br> B.ootion. <br> .ocor. | Mean Dec. 19\%0\%. | $\begin{gathered} \text { Meac } \\ \text { Date of } \\ \text { Obs. } \\ \text { rgoot } \end{gathered}$ | $\left\|\begin{array}{\|c\|} \hline \text { No.of } \\ \hline 0 . \\ 0 \\ \vdots \\ 0 \\ 8 \\ 8 \end{array}\right\|$ |  | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { Igro\%. } \end{aligned}$ | Secular variation 19 ro\%. | Annual <br> Proper Motion . 01 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m s |  |  |  |  | 8 |  | 0 , |  |  |  | " | " |  |
| 3635 | 12 Boötis . . . . . . d | $4 \cdot 8$ | 14 $6 \quad 17.684$ | I 1.92 | 46 |  | $+2.7385$ | -.0017 |  | +2531 4.15 | 12.00 | $4^{8}$ |  | -17.078 | $+.216$ |  |
| 3642 | 98 Virginis. . . . . . . к | $4 \cdot 3$ | $8 \quad 5 \cdot 563$ | $10: 57$ | 19 |  | +3.1956 | +.0124 | + 5 | -951 918.20 | 10.29 | 22 |  | 16.995 | + 254 | + 130 |
| 3649 | 4 Ursw Minoris .... | $5 \cdot 0$ | 9 II 133 | 08.85 | 2. | 3 | $-0.2782$ | + •1491 | - 89 | $+775813.64$ | 09.14 | 16 | 20 | 945 | -.015 | + 26 |
| 3660 | 99 Virginis . . . . . . . $\downarrow$ | $4 \cdot 2$ | $11 \quad 17.675$ | 10.68 | 4 |  | +3.1432 | $+.0103$ | - 12 | - 53416.78 | II'IO | 6 |  | 846 | +.256 | - 427 |
| 3662 | 16 Boötis . . . . . . . a | $0 \cdot 2$ | 1133.375 | II•IO | 150 |  | $2 \cdot 8134$ | $+.0005$ | -780 | +1939 2.32 | 10.74 | 172 |  | 833 | 230 | $-2003$ |
|  | W.B. XIV. | $6 \cdot 7$ | I4 I2 $35 \cdot 650$ | 08.29 | I |  | $+3.1831$ | + .0118 | 10 | -836 20.51 | 08.29 | 1 |  | $-16.783$ | + 261 | + 20 |
| 3666 | 19 Boötis. . . . . . . . $\lambda$ | $4 \cdot 3$ | $1257 \cdot 897$ | 08.70 | 1 | 2 | $2 \cdot 3005$ | -.0050 | - 179 | +4630 5.38 | 10.47 |  | (2) | 766 | $191$ | + 151 |
| 3667 | 21 Boötis . . . . . . . . $\iota$ | $4 \cdot 8$ | 1258.910 | 10.23 | 1 |  | $2 \cdot 1421$ | -.0043 | - 157 | +51 $4655 \cdot 56$ | 10.23 | I |  | 765 | 178 | + 86 |
| 3669 | Lalande 26I5 | $5 \cdot 7$ | 1339.550 | $13.30$ | 2 |  | $3 \cdot 3159$ | +.0172 | - 40 | -18 177 178.79 | 13.30 | 2 |  | 732 | 273 | 41 |
| 3672 | ı00 Virginis. . . . . . $\lambda$ | $4 \cdot 6$ | 14.14 .287 | 11.26 | 11 |  | $3 \cdot 2425$ | +.0140 | - 15 | -12.57 25.24 | II•II | 21 |  | 705 | 268 | + 23 |
| 3691 | 2 Libræ | $6 \cdot 3$ | $14 \quad 18 \quad 34.960$ | 09.74 | 4 |  | +3.2243 | +.0132 | - 10 | - I1 188 II.37 | I I-36 | 16 |  | -16.492 | + 274 | 64 |
| 3695 | Piazzi XIV. 68 | $5 \cdot 4$ | $1940 \cdot 405$ | II.84 | 2 |  | 3.4195 | +.0214 | - 55 | $\begin{array}{llllllllll}-24 & 23 & 52.26\end{array}$ | II. 84 | 2 |  | 437 | 292 | 31 |
| 3698 | Bradley 186 | $6 \cdot 5$ | $1950.49^{8}$ | 10.34 | 6 |  | 3.2250 | +.0133 | - 47 | - II 1540.45 | 10.34 | 6 |  | 429 | 276 | - 43 |
| 3704 | 23 Boötis . . . . . . $\theta$ | $4^{\cdot 1}$ | $22 \quad 7 \cdot 880$ | 10.14 | 1 | 1 | 2.0688 | -.0025 | - 260 | +52 $15 \quad 59.84$ | 09.54 | 1 | I | 313 | 182 | - 406 |
| 3705 | 22 Boötis . . . . . . . . f | $5 \cdot 4$ | 22 16.191 | 09.79 | 17 |  | $2 \cdot 7952$ | +.0011 | - 52 | +193752.36 | 10.00 | 33 |  | 306 | 244 | + 15 |
| 3710 | 105 Virginis . . . . . . $\phi$ | $5 \cdot 0$ | I4 423333.875 | II $\cdot 85$ | 2 |  | $+3.0975$ | +.0088 | - 89 | - 14929.43 | 09.13 | 4 |  | - 16.240 | + 371 | 10 |
| 3715 | 24 Boötis . . . . . . . . g | $5 \cdot 6$ | $25 \quad 29.843$ | 13.31 | 1 |  | $2 \cdot 1196$ | -. $\cdot 0025$ | - 320 | $+501450.26$ | 13.31 | 1 |  | 140 | 190 | - 54 |
|  | Groombridge 21I6.. | $6 \cdot 5$ | $26 \quad 4.055$ | $09 \cdot 4^{2}$ | 2 |  | +2.3514 | -.0032 | + 114 | +42 $12 \quad 7.08$ | 09.42 | ${ }^{2}$ |  | III | + 211 | - 194 |
| 3718 | 5 Ursæ Minoris | $4 \cdot 4$ | 27 42.218 | 09.98 | 2 | 6 | -0.1708 | $+.1167$ | + $\quad 34$ | +76 5 $46 \cdot 18$ | 10.41 | 15 | 28 |  | - 008 | + 17 |
| 3717 | 25 Boötis | $3 \cdot 8$ | 27 57.061 | I I $\cdot 68$ | 43 |  | +2.5938 | -.0015 | - 78 | $\underline{+304558.38}$ | I I. 69 | 65 |  | 012 | + 234 | + 110 |
| 3722 | 27 Boötis. . . . . . . . $\gamma$ | $3 \cdot 0$ | $\begin{array}{llll}14 & 28 & 27.248\end{array}$ | 10.13 | 4 |  | +2.4265 | -.0027 | $-\quad 95$ | +38 $\mathbf{4}^{2} \quad 5 \cdot 18$ | $10 \cdot 13$ | 4 |  | -I 5.986 | $+220$ | + 144 |
| 3723 | Piazzi XIV. i $26 . .$. | $6 \cdot 2$ | 29 16.110 | 08.65 | 2 | 3 | I. 6334 | + .0060 | - 64 | +60 37 19.13 | 08.95 | 2 | 3 | 943 | $151$ | + 19 |
| 3729 | 28 Boötis. ......... $\sigma$ | $4 \cdot 5$ | $3045 \cdot 694$ | II.46 | 27 |  | $2 \cdot 5982$ | -.0011 | + 149 | + 30889.04 | I I. 66 | 29 |  | 863 | 238 | + 120 |
| 3734 | Mayer 59 | $6 \cdot 2$ | $32 \quad 12 \cdot 386$ | $09 \cdot 54$ | 14 |  | $3 \cdot 2464$ | + .0137 | - 594 | -III $55 \begin{array}{ll}\text { 122.93 }\end{array}$ | 09.54 | 14 |  | 786 | 298 | + 364 |
| 3744 | 33 Boötis | $5 \cdot 4$ | $\begin{array}{llll}35 & 29 \cdot 287\end{array}$ | 07 | 4 |  | $2 \cdot 2399$ | -.0021 | - 69 | $+4447 \quad 33.57$ | $07 \cdot 69$ | 4 |  | 607 | 212 | - 29 |
| 3749 | 29 Boötis. . . . . . . $\pi$ | $4 * 9$ | $\begin{array}{llll}14 & 36 & 29.775\end{array}$ | 10.93 | 4 |  | +2.8178 | +.0025 | + II | +1648 13.70 | $09 \cdot 3$ | 9 |  | 1 5.551 | + $\cdot 266$ | + 2 |
| 3750 | 29 Boötis (Comes) . . $\pi$ | $5 \cdot 8$ | 36 30.260 | 13.47 | , |  | 2.8178 | +.0025 | - 13 | +1648 12.08 | 13.47 | 2 |  | 551 | 266 | + 6 |
| 3752 | 30 Boötis ....... $\zeta$ | $3 \cdot 9$ | $3651 \cdot 033$ | 10.00 | 4 |  | $2 \cdot 8601$ | +.0033 | + $\quad 38$ | +14 650.29 | 0 | 4 |  | 532 | 70 | - 27 |
| 3758 | 107 Virginis . . . . . . $\mu$ | $4 \cdot 0$ | $38 \quad 18 \cdot 937$ | 11.44 | 3 |  | 3.1509 | $+.0104$ | + 71 | - $5161 \cdot 90$ | 11.70 | 4 |  | 450 | 299 | - 322 |
| 3761 | 34 Boötis ........ | $4 * 9$ | 39 28.051 | 13.20 | 16 |  | $2 \cdot 6377$ | +.0002 | 8 | +2654 36.48 | 12.87 | 21 |  | 385 | 253 | 21 |
|  | 36 Boötis . . . . . . . $\epsilon^{1}$ | 5.I | 14413310 | 08 | 3 |  | +2.6238 | + .0002 | - 36 | +27 $27 \quad 13.88$ | 18 | 4 |  | - I 5.297 | +:254 | + 8 |
| 3771 | 36 Boötis . . . . . . . $\epsilon^{2}$ | $2 \cdot 7$ | 413.405 | 11.03 | 84 |  | 2.6238 | + 0002 | - 36 | +27 27 II.71 | 62 | 125 |  | 297 | 254 | + 8 |
| 3769 | Mayer 596 | $6 \cdot 4$ | 41 4.402 | 1 | 2 |  | 3.4005 | +.0186 | - 37 | -20 47 40.43 | I 1.90 | 2 |  | 296 | 327 | - 118 |
| 3772 | 109 Virgini | $3 \cdot 8$ | $4141 \cdot 890$ | $07 \cdot 47$ | 1 |  | 3.0381 | + 0.0074 | - 76 | + 21618.64 | 12.25 | 5 |  | 260 | 294 | - 38 |
| 3773 | Mayer 597 | 6.1 | $42 \quad 6 \cdot 600$ | 13.22 | 1 |  | $3 \cdot 4049$ | +.0187 | - 15 | -20 $56 \quad 49 \cdot 89$ | 13.22 | I |  | 237 | 329 | 6 |
|  | W.B. XIV. $739 . . .$. | 6 | $1443 \quad 0.176$ | 09*48 | 5 |  | $+3.2653$ | $+.0138$ | + 13 | -12 27 41•54 | 09.48 | 5 |  | -15.186 | $+317$ | - 83 |
| 3779 | 7 Libræ . . . . . . . . $\mu$ | $5 \cdot 4$ | $44 \quad 22.950$ | II. 27 | 2 |  | 3.2879 | +-or45 | - 42 | -13 $46 \quad 27.94$ | 11.27 | 2 |  | 107 | 322 | - 25 |
| 3785 | Groombridge $2152 \ldots$ | $6 \cdot 0$ | $45 \quad 34 \cdot 645$ | 12.40 | 2 |  | $2 \cdot 3775$ | -.0010 | $-216$ | +38 10 54.08 | 12.40 | 2 |  | 038 | 236 | + 105 |
| 3784 | 8 Libræ | 5•3 | $4542 \cdot 370$ | 09.41 | 2 |  | 3.3198 | + -0155 | - 71 | - I5 $37 \begin{array}{lll} & 25 \cdot 61\end{array}$ | 09.41 | 2 |  | 031 | 327 | - 78 |
| 3787 | 9 Libræ . . . . . . . . a | $2 \cdot 9$ | $4553 \cdot 817$ | 11-15 | 27 |  | $3 \cdot 3208$ | + -0155 | 74 | -15 40 5.18 | 10.88 | 32 |  | 019 | 327 | - 76 |
|  | 37 Boötis ........ | 4.7 | 144714.110 | 12.39 | 4 |  | +2.7575 | + 0022 | + 92 | +19 28 27.16 | II. 68 | 8 |  | -14.942 | + $\cdot 274$ | 106 |
|  | 37 Boätis (Comes) . . $\xi$ | $6 \cdot 6$ | 47 14.150 | II.41 | 1 |  | 2.7575 | $+.0022$ | + 92 | +192826.59 | 11.41 | 1 |  | 942 | 274 | - 106 |
| 3803 | Piazzi XIV. 217 | $5 \cdot 7$ | $49 \quad 9.270$ | I1.54 | 2 | I | I. 5362 | $+.0089$ | - 169 | +593934.20 | 11.63 | 2 | I | 829 | 157 | + 126 |
| 3804 | 13 Librae... | $5 \cdot 8$ | $49 \quad 29 \cdot 588$ | 09.97 | 12 |  | +3.2563 | +.0132 | - $4^{2}$ | -II 3153.40 | 10.01 | 17 |  | 809 | + 326 | - 22 |
| 3809 | 7 Ursæ Minoris. . . $\beta$, | $2 \cdot 2$ | $50 \quad 57 \cdot 493$ | $09 \cdot 23$ | 11 | 4 | -0.2032 | +.0994 | - 74 | +74 31 24.11 | 10.43 | 25 | 16 |  | - 014 | + 5 |
| 3810 | 15 Libræ......... $\xi^{2}$ | $5 \cdot 6$ | 145152.946 | 11.08 | 21. |  | +3.2503 | +.0130 | I | -II $22 \begin{array}{ll}\text { l } \\ \text { - } & 54\end{array}$ | 10.65 | 33 |  | $-14.668$ | +.329 | 2 |
| 3811 | Piazzi XIV. 221 | $5 \cdot 8$ | $5158 \cdot 257$ | 10.05 | 3 |  | 2.8316 | +.0035 | 13 | +14 $4^{8} 34.73$ | 09.87 | 4 |  | $662$ | 288 | 16 |
| 3823 | 18 Libræ | $6 \cdot 0$ | 54 I.360 | 08.34 | 5 |  | 3.2477 | +.0130 | 72 | -10 $4657 \cdot 32$ | 08.34 | 5 |  | 540 | 332 | - 76 |
| 3827 | Piazzi XIV. 260 ... | 49 | $\begin{array}{lll}56 & 8 \cdot 874\end{array}$ | 10.77 | 4 | 2 | 0.9572 | +.0277 | - 124 | +66 17 $26 \cdot 15$ | II. 23 | 4 | 5 | 411 | 103 | + 32 |
| 3825 | ı9 Libræ . . . . . . . $\delta$ | Var. | $56 \quad 9 \cdot 724$ | 12.06 | 8 |  | $3 \cdot 2058$ | +.0117 | - 46 | - $8 \quad 943.79$ | 12.71 | 13 |  | 410 | 331 | - 11 |

[^5]

[^6]| No. In Boss' Catalogue, 1900. | STAR'S NAME. |  | Mean r.A. z9rooo. | Mean obs. $1900+$ | $\left\|\right.$No. of <br>  <br>  <br> 0 <br> 0 <br> 0 <br> 0 <br> 3$\|$ |  | $\left\lvert\, \begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { 19ro.o. } \end{aligned}\right.$ | $\begin{aligned} & \text { Secular } \\ & \text { Variation } \\ & \text { Igro.0. } \end{aligned}$ | Annual <br> Proper <br> Motion <br> .ooor | Mean Dee. 1910.0. | Mean Obs. $1900+$ | $\left\|\right.$No. of <br> $\stackrel{\circ}{\circ}$ <br>  <br>  <br> 0 <br> $\frac{0}{4}$$\|$ |  | Annual Precession rgroo. | secular Variation 1910.0. | Annual <br> Proper Motion . .01. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m |  |  |  | 8 | 8 |  | - " |  |  |  | " | " |  |
| 4346 | 60 Herculis |  | $17 \quad 1 \begin{array}{lll}12.290\end{array}$ | 11.52 | 6 |  | $+2.7773$ | +.0038 | $+36$ | +125149.67 | I 1-37 | 6 |  | 5.086 | + •394 | 17 |
| 4352 | Mayer 691 | $6 \cdot 1$ | 3 I. 212 | 06.50 | 1 |  | 3.4807 | -0077 |  | -17 2925.03 | 06.50 | I |  | 4.933 | 494 | 22 |
| 4359 | Groombridge 2415 | $6 \cdot 3$ | 450.480 | $10 \cdot 17$ | 1 |  | $1 \cdot 9588$ | -0037 | - 25 | +40 380.54 | 10.17 | 1 |  | 778 | 79 | 28 |
| 4360 | 35 Ophiuchí. . . . . . . $\eta$ | 2.6 | 512.912 | 10.58 | 32 |  | 3.4354 | . 0071 | + 25 | -15 $\mathbf{l}^{66} 50.49$ | 10.68 | 35 |  | 746 | 489 | 86 |
| 4368 | 22 Draconis ...... $\}$ | $3 \cdot 2$ | $831 \cdot 353$ | 10.11 | 4 | 4 | $0 \cdot 1701$ | -0192 | 21 | $+654931.47$ | $10 \cdot 70$ |  | 7 | 465 | 025 | 20 |
| 4371 | 360 phinchi(Comes) A | $5 \cdot 3$ | $17 \quad 9 \quad 48 \cdot 708$ | 13.46 | 2 |  | $+3.7221$ | $+.0089$ | - 365 | $\begin{array}{lllll}-26 & 28 & 15.64\end{array}$ | 13.46 | 2 |  | -4.355 | + 531 | - 1122 |
| $+372$ | 36 Ophiuchi . . . . . A | $5 \cdot 3$ | 948.756 | 14.51 | 1 |  | 3.7221 | . 0089 | - 360 | $\begin{array}{llll}-26 & 28 & 10.82\end{array}$ | 14.51 | 1 |  | 355 | $531$ | -1123 |
| 4373 | 64 Herculis . . . . . a | $3 \cdot 5$ | $1032 \cdot 604$ | 10.76 | 41 |  | $2 \cdot 7351$ | . 0035 | - 8 | +1429 32.58 | 10.41 | 65 |  | 292 | 391 | + $\quad 27$ |
| 43 | 64 Herculis (Comes) a | $5 \cdot 4$ | 1033.110 | 09.35 | I |  | $2 \cdot 7351$ | . 0035 | - ${ }^{4}$ | +1429 30.92 | 09.35 | 1 |  | 292 | 391 | + 31 |
| 4376 | 65 Herculis . . . . . $\delta$ |  | II 20.047 | 12.19 | 20 |  | 2.4649 | . 0030 | - 18 | +24'56 41.41 | 12.19 | 0 |  | 225 | 353 | - 163 |
| $43^{81}$ | 67 Herculis . . . . . . $\pi$ | + | 17 II 54.717 | 10.09 | 3. |  | $+2.0907$ | +.0032 | 21 | $+365436 \cdot 65$ | 10.09 | 3 |  | 175 | - 300 | 2 |
| 4384 | 39 Ophiuchi ....... |  | $1231 \cdot 315$ | 12.03 | 2 |  | 3.6599 | 081 | 48 | $\begin{array}{lllll}-24 & 11 & 22 \cdot 31\end{array}$ | 12.03 | 2 |  | 123 | 4 | 15 |
| 4388 | 68 Herculis . . . . . . u |  | 140013 | 13.35 | 3 |  | 2.2157 | .0031 | 16 | +33 II $48 \cdot 08$ | 13.35 | 3 |  | $3 \cdot 997$ | 18 | 13 |
| 4391 | 69 Heroulis . . . . . . e | $4 \cdot 8$ | 1434.000 | 11.50 | 4 |  | 2.0713 | -0033 | 34 | +3723 7-19 | 11.50 | 4 |  | 948 | 98 | + 53 |
| 4390 | Piazzi XVII. 43 |  | $1438 \cdot 970$ | 8 | 3 |  | $3 \cdot 4895$ | -0066 | - 3 | -17 $73946 \cdot 29$ | II•18 | 3 |  | 941 | 500 |  |
| 4394 | 40 Ophitschi. . . . . . $\xi$ |  | $\begin{array}{llll}17 & 15 & 36.530\end{array}$ | 09*91 | 3 |  | $+3.5763$ | +.0070 | + 171 | -21 110034 | $\cdot 91$ | 3 |  | - 3.859 | - 513 | $-207$ |
| 4399 | 42 Ophiuchi. . . . . . $\theta$ |  | $1628 \cdot 856$ | 10.99 | 33 |  | $3 \cdot 6820$ | -0077 | - I | $-245437 \cdot 00$ | 10.68 | 29 |  | 783 |  | - 31 |
| 4403 | 72 Herculis . . . . . w | 4 | 17 17.471 | 13.09 | 3 |  | 2.2332 | -0029 | $+100$ | +32 $3458.92 \mid$ | 13.09 | 3 |  | 714 | 21 | -1053 |
| 4407 | 43 Ophiuchi |  | $17+1.680$ | 14.06 | 3 |  | 3.7727 | .0081 | + 4 | -28 $3121 \cdot 80$ | 14 | 3 |  | 679 | 542 | 42 |
| 4413 | Mayer 701. |  | 1919.010 | 10.46 | 3 |  | 3.5869 | 66 | 19 | -2I 21129.39 | 10.46 | 3 |  | 540 | 5 I 6 | 36 |
|  | Lalande 316ir ..... |  | $171920 \cdot 850$ | 08.29 | $4$ |  | $+3.5091$ | $+.0062$ | $+\quad 16$ | -I8 $21145 \cdot 19$ |  | 4 |  | - 3.537 | + 505 | - 9 |
|  | 75 Herculis (Comes) $\rho$ |  | $20 \quad 34 \cdot 320$ | $11.07$ | 1. |  | $2.0721$ | $.0031$ | - 32 | +37 13 43.70 | 11.07 | 1 |  | 431 | 299 | - 4 |
| 4419 | 75 Herculis . . . . . . p |  | $20 \quad 34 \cdot 660$ |  | 3 |  | 2.0721 | .0031 | - 32 | +3713 41.23 |  | 3 |  | 431 | 299 | - 4 |
| 4420 | 44 Ophiuchi. . . . . . . b | 3 | $20 \quad 52 \cdot 335$ | $11.89$ | 2 |  | . 6614 | - 0069 | - 5 | -24 $51535 \cdot 63$ | 11.89 | 2 |  | 406 | 28 | - 132 |
| 442 I | 45 Ophiuchi . . . . . .d |  | $2136 \cdot 371$ |  | 3 |  | $3 \cdot 8266$ | -0079 | + 14 | -29 $47 \begin{array}{ll}-2.43\end{array}$ | 07.81 | 3 |  | 343 | 551 | - 156 |
| 4425 | 49 Ophiuchi . . . . . . $\sigma$ |  | $17 \quad 22 \quad 2.902$ |  | 29 |  | +2.9753 | +.0037 | + 2 | + 413 475 |  | 52 |  | 304 | -429 | $+3$ |
| 4430 | 77 Herculis . . . . . . $x$ |  | 2421.073 | I | 3 |  | 1.5888 | -0043 | 0 | +48 $20 \quad 7.00$ |  | 3 |  | 105 | 30 | - 15 |
| 4429 | 34 Scorpii . . . . . . . v |  | $2438 \cdot 480$ | 14.51 | , |  | 4.0758 | 009 | - 2 | -37 13 21.13 | 14.51 | 1 |  | 080 | 88 | - 42 |
| 443 | 5 I Ophiuchi . . . . . . c ${ }^{2}$ |  | $2555 \cdot 440$ | 09.42 | 3 |  | 3.6580 | -0062 | 7 | -23 533 36.97 | 09:18 | 4 |  | $2 \cdot 970$ | 29 | - 38 |
| 4435 | Bradley 3248 |  | $26 \quad 9.033$ | I I. 44 | 4 |  | $3 \cdot 7229$ | -0066 | - 3 | -26 $\begin{array}{llll}-23 & 12\end{array}$ | I I 44 | 4 |  | 950 | 538 | - 31 |
| 4438 | 76 Herculis . . . . . . $\lambda$ |  | $\begin{array}{lll}17 & 27 & 6.045\end{array}$ | 12.15 | 25 |  | $+2.4223$ | +.0028 | + 11 | $+261040 \cdot 84$ | 12.85 | 36 |  | 2.868 | + 351 | + 14 |
| 44 | 23 Draconis. . . . . . . $\beta$ | - | $28 \quad 23.876$ | 09.62 | 9 | 2 | 1.3556 | $.0049$ | - 15 | +52 223.80 | 09.33 | 11 |  | 755 | 197 | + 7 |
| 4449 | 52 Ophiuchi. . . . . . . |  | 2953.660 | 09.50 | 2 |  | $3 \cdot 6074$ | -0054 | $6$ | -2I 590066 | 09.50 | 2 |  | 626 | 523 | - 13 |
| 4458 | 24 Draconis . . . . . $\nu^{1}$ |  | 3024.155 | $10 \cdot 34$ | 2 | 2 | I.1624 | -0057 | + 176 | +551443.74 | 10.77 | 2 |  | 82 | 169 | + 49 |
| 4460 | 25 Draconis . . . . . $\nu^{2}$ |  | $30 \quad 29.540$ | 10.34 | 2 | 2 | I.1632 | . 0057 | + 184 | +5514 1.92 | $10 \cdot 77$ | 2 |  | 574 | 169 | + 51 |
|  | 55 Ophiuchi . . . . . a |  | $173045 \cdot 395$ | 11.09 | 96 |  | $+2.7756$ | +.0030 | + 80 | +123729.72 | 10.68 | 108 |  | $-2.551$ | + $\cdot 403$ | - 235 |
| 4464 | 27 Draconis . . . . . . f |  | $32 \quad 19.315$ | $10.57$ | 2 | 2 | -0.2431 | $.0152$ | $-\quad 24$ | +68 II 32.92 | 10.28 | 3 | 7 | 415 | -034 | + 137 |
| 4462 | 55 Serpentis ...... ${ }^{\text {a }}$ | $3 \cdot 6$ | $32 \quad 25 \cdot 986$ | 12.50 | 5 |  | $+3.4365$ | -0044 | $-\quad 30$ | -I5 20032.91 | $11.97$ | 7 | , | 406 | + 498 | - 71 |
| 4467 | Bradley $2219 . . . .$. | $6 \cdot 7$ | $33 \cdot 20 \cdot 260$ | 09.90 | 2 | I | 3.6050 | -0051 | $19$ | $-215135 \cdot 56$ | $08 \cdot 22$ | 1 |  | 327 | 523 | - 20 |
| 4470 | 26 Draconis . . . . . . . |  | $34 \quad 3 \cdot 517$ | 11-37 | 2 | I | 0.5811 | -0083 | + 345 | +61 $5635 \cdot 36$ | 11.64 | 2 | I | 264 | 085 | - 508 |
| 4475 | 56 Serpentis ......o |  | $17 \quad 36 \quad 21 \cdot 397$ | 09.86 | 6 | 6 | $+3.3752$ | $+.0039$ | - $4^{8}$ | -1249 40.00 | $09 \cdot 85$ | 9 |  | - 2.065 | $\cdot 490$ | - $\quad 36$ |
| 4479 | 85 Herculis . . . . . . . $\downarrow$ |  | 3655.433 | 10.56 | 5 | 2 | +1.6931 | $\cdot 0035$ | $1-8$ | +46 3 13.21 | $11.64$ | 4 | (2) | 015 | + 246 | - 2 |
| 4483 | 28 Draconis . ...... $\omega$ |  | $37 \quad 28.470$ | 13.56 | 2 | - | -0.3563 | - 0139 | $1+\quad 16$ | +684758.52 | $11 \cdot 35$ | 2 | 6 | 1.968 | -.051 | + 327 |
|  | Piazzi XVII. 186 . . | $6 \cdot 4$ | 3737.638 | $12 \cdot 15$ | $4$ |  | $+3.7750$ | $.0050$ | $+\quad 2$ | $-275028.01$ | $12.41$ | 5 | , | 954 | + .549 | - 17 |
|  | Groombridge 2457 . . |  | $3754 \cdot 107$ | $13 \cdot 18$ | 3 |  | $1 \cdot 8096$ | . 0031 | $\left\lvert\, \begin{aligned} & 1 \\ & \hline \end{aligned}\right.$ | $+43 \quad 30 \quad 52.55$ | $13 \cdot 18$ | 3 | , | 930 | $263$ | $+\quad 63$ |
| $44^{81}$ | 58 Ophiuchi. . . . . . . |  | $17 \quad 38 \quad 2 \cdot 167$ | 08.08 | 3 |  | $+3.6003$ | +.0044 | 4 | -2I 38 24.13 | . 08 | 3 |  | - 1.918 | +.523 | - 54 |
| 4487 | 60 Op hiuchi. . . . . . $\beta$ |  | $39 \quad 1.578$ | $10 \cdot 32$ | 69 |  | $2 \cdot 9653$ | , | 28 | + 43615.40 | 10.26 | 89 |  | 831 | 431 | + 152 |
| 4493 | 3 Sagittarii . . . . . . . | Var. | 4153.644 | 10.91 |  |  | $3 \cdot 7748$ | -0044 | 4 | $-27+748 \cdot 78$ | 10.91 | 5 |  | 581 | 549 | - 22 |
| 4497 | 86 Herculis . . . . . . $\mu$ |  | $4256 \cdot 153$ | 10.02 | 76 |  | $2 \cdot 3707$ | -0024 | - 244 | $+274622 \cdot 30$ | $10 \cdot 54$ | 112 |  | 491 | 345 | - 750 |
| 4500 | 62 Ophiuchi. . . . . . $\gamma$ | $3 \cdot 7$ | $43 \quad 22 \cdot 753$ | 11.24 | + |  | $3 \cdot 0087$ | -0027 | - 18 | + 24426.14 | 11.02 | 14 |  | $45^{2}$ | 438 | - 79 |

35 Ophinchi. This star is the close double $\beta$ IIr8. Components 3.0 and 3.5 . 36 Ophiuchi. These stars form the pair South 243 . 64 Herculis. Theso stars form the pair $\Sigma^{2140} 6{ }_{5}$ Herculis. This is the principal star of the pair $\Sigma 3127 . \quad 39$ Ophiuchi. This is tho principal star of the pair Bunham 7928 . 68 Herculis. Limits of magnitude 4.6 and 5.4 . period irregular. Piazzi XVII. 43. This is the principal star of the pair $\beta$ 126, components 6.2 and 8.2 . 75 Her-
 $4^{\circ} 4$ and $5 \cdot 0$. period $7^{d .0}+\quad 86$ Herculis. This is the principal star of the pair $\Sigma 2220$, components $3 \cdot 4$ and 9.5 .

| No. in BossCata logue, r900 | Star's name. | $\begin{aligned} & \text { 总 } \\ & \text { 麌 } \end{aligned}$ | Mean R.A. mgroo. | Mean Date of $1900+$ | No. of Obs. |  | Annual $1910 \%$. | SecularVariation 1910.0 | $\left\{\begin{array}{l}\text { Annual } \\ \text { Proper } \\ \text { Motion } \\ \text { B.ooor. }\end{array}\right.$ | Mean Dec. 19roo. |  | No. of Obs. |  | $\begin{gathered} \text { Annual } \\ \text { Precession } \\ \text { Igto.0. } \end{gathered}$ | $\underset{\substack{\text { Secular } \\ \text { Variation } \\ \text { igit }}}{ }$ | $\begin{aligned} & \text { Anuaz } \\ & \text { Proper } \\ & \text { Motion } \\ & \text { notoror. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \dot{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline 0 \end{aligned}$ |  |  |  |  |
|  |  |  | h m |  |  |  | $s$ | $s$ |  | - , " |  |  |  | " | " |  |
| 4504 | 31 Draconis .... $\psi^{1}$ | 4.9 | $1743 \quad 32.057$ | 11.28 |  |  | - 1.0775 | + -0159 | + 34 | +72 $1135 \cdot 85$ | 12.99 | 8 | 7 | - 1•439 | - 156 | 267 |
| 4508 | 87 Herculis ....... | $5 \cdot 3$ | $4510 \cdot 189$ | $11 \cdot 91$ | 28 |  | +2.4320 | -0024 | - 8 | +25 398.33 | 11.60 | 34 |  | 297 | + 355 | 45 |
| 4514 | 88 Herculis . . . . . . . $z$ | $6 \cdot 4$ | 4742.063 | 07.96 | 3 |  | 1.5685 | .0032 | - 3 | $+4^{8} \quad 25 \quad 5 \cdot 02$ | 08.89 |  | (2) | 075 | 229 | 8 |
| 4517 | 63 Ophiuchi | $6 \cdot 1$ | $4921 \cdot 670$ | 10.91 | 2 |  | $3 \cdot 6913$ | -0032 | 11 | -24 52 11 78 | 10.91 | 2 |  | 0.930 | 538 | 8 |
| 452 I | Mayer 722 | $6 \cdot 4$ | $50 \quad 37 \cdot 317$ | $06 \cdot 48$ | 3 |  | $3 \cdot 5267$ | -0027 | 11 | -1847411.28 | $06 \cdot 48$ | 3 |  | 821 | 4 | 21 |
| 4523 | Lalande 32727 | 8 | $17 \begin{array}{lll}17 & 51 & 085\end{array}$ | 56 | 2 |  | + 3.7841 | + .0030 | 28 | $\begin{array}{llll}-28 & 3 & 4 & 52\end{array}$ | - 56 |  |  | - 0.786 | $\cdot 552$ |  |
| 4528 | 89 Herculis | $5 \cdot 5$ | 5147.331 | 91 | 52 |  | 2.4193 | -0023 | + 1 | +26 3649.92 | 39 | 87 |  | 719 | 353 | - |
| 4531 | 32 Draconis | $3 \cdot 9$ | 5158.292 | 11.10 |  |  | I.0248 | . 0037 | + 119 | +56 53 10.49 | 11 | 4 | I | 702 | 150 | + 75 |
| 4535 | 91 Herculis | $4^{\circ} \mathrm{O}$ | 5310.005 | 11.93 | 2 |  | +2.0563 | . 0025 | - | +3715 42.37 | 11.93 | 2 |  | 598 | $+300$ | $+\quad 4$ $+\quad 1$ |
| 4539 | 35 Draconis | $5 \cdot 0$ | 5328.815 | 12.29 | I |  | - 2.7024 | -014 ${ }^{8}$ | + 138 | +76 $5831 \cdot 37$ | 10.10 | 13 | 5 | 570 | - 394 | + 239 |
| 4536 | 64 Ophiuchi. . . . . . v | $3 \cdot 5$ | $1754 \quad 4.360$ | 42 | 1 |  | 3024 | + . 0022 |  | - $94547 \cdot 61$ | 11.44 | 4 |  | 0.519 | + 481 | - 118 |
| 4538 | 92 Herculis . . . . . ${ }^{\text {g }}$ | $3 \cdot 8$ | 5416.052 | 12.25 | 12 |  | $2 \cdot 3241$ | . 0023 | 66 | +29 $15 \quad 25.35$ | II.81 | 15 |  |  |  | - 27 |
| 4537 | 4 Sagittarii | $4 \cdot 8$ | $54 \quad 17.853$ | $09 \cdot 16$ | 4 |  | 3.6620 | -0024 | + 1 | -23 $4^{8} \quad 30 \cdot 78$ | 09.16 |  |  | 499 | 534 | - 58 |
| 4541 | 33 Draconis....... $\gamma$ | $2 \cdot 4$ | 5430.939 | 08.57 | 16 |  | $\text { I. } 3930$ | .0030 | $9$ | $+\begin{array}{lll} +51 & 29 & 56 \cdot 92 \end{array}$ | 08.68 | 17 | 4 | 480 |  |  |
|  | Mayer 727 ......... | $6 \cdot 5$ | $54 \quad 38.990$ | $07.63$ | 1 |  | $3.5676$ | $.0023$ | - 16 | $\text { -20 } 19 \begin{gathered} 59 \cdot 10 \end{gathered}$ | 07.63 | 1 |  | 468 | 520 | 25 |
| 4548 | 67 Ophiuchi....... | 3.9 | $17 \quad 56 \quad 8.280$ | 62 | 3 |  | + 3.0040 | + -0021 |  | +2567.03 | 10.70 | 9 |  | 0.338 | 438 | 14 |
| 4564 | Sagittarii ....... $\gamma^{1}$ | Var. | $5916 \cdot 260$ | 14.51 | 1 |  | $3 \cdot 8312$ | -0016 | $+7$ | -29 354.06 | 14.51 | I |  | 064 | 59 | 12 |
| 4567 | Piazzi XVII. 342 | $6 \cdot 8$ | \% 5939.320 | 09.27 | 1 |  | $3 \cdot 6788$ | -0017 | 7 | -24 24 | 09.27 | 1 |  | - 030 | 536 | - 16 |
| 4571 |  | 4.5 | $18 \quad 5 \begin{array}{ll}18 & 54.360\end{array}$ | 09.70 | 3 |  | $3 \cdot 0137$ | -0018 | + 169 | + 23112.58 | 09.70 | 3 |  | + 079 | 439 | - 1102 |
| 4571 | 70 Ophiuchi (Comes). | 6 | - 54.500 | 09.72 | I |  | + 3.0137 | + -0018 | $+169$ | + 2319.53 | 09.70 | 3 |  | 079 | + 439 | -1102 |
| 4591 | 23 Ursæ Minoris. . . $\delta$ | $4 \cdot 4$ | $18 \quad 1 \quad 18.230$ | 10.67 | 68 | $4^{2}$ | -19.5157 | -. 0257 | + 200 | +86 $36 \quad 50 \cdot 96$ | 09.86 | 8 | 99 | + 0.114 | .846 | $+\quad 48$ $+\quad 3$ |
| 4577 | Mayer 735 | 4.7 | 222.970 | 12.41 | 1 |  | + 3.7971 | + .0012 | + 13 | $\begin{array}{llll}-28 & 28 & 4 & 50\end{array}$ | 12.41 | 1 |  | 208 | +0.553 | 33 |
| 4581 | 72 Ophiuchi | 3.7 | 34.974 | 10.52 | 41 |  | + 2.8477 | + .0019 | - $4^{2}$ | + 933 I.53 | 11.03 | 34 |  | 270 | + 415 | 82 |
| 4584 | 103 Herculis .......o | 3.8 | $4 \quad 1.884$ | 11.20 | 9 |  | + 2.3394 | +.0021 | $+\quad 2$ | +284458.63 | II 20 | 9 |  |  |  |  |
| 4605 | ${ }^{24}$ Ursæ Mino | $5 \cdot 9$ | $4(4 \cdot 8)$ |  |  |  | $-22.3857$ | $-{ }^{1} 451$ | +680 | +86 $5943 \cdot 60$ | 14.35 | 6 |  |  | 3.264 | 7 |
| 4604 | 13 Sagit | $4^{\circ}$ | $\begin{array}{llll}18 & 8 & 22.846\end{array}$ | II•12 | 26 |  | + 3.5874 | + .0007 | + 3 | -21 458.54 | 10.78 | 38 |  | +0.733 | +0.522 | - 5 |
| 4607 | 14 Sagitt | $5 \cdot 7$ | 851.490 | 08.30 | I |  | $3 \cdot 6049$ | $+.0005$ | - 11 | -21 $44 \begin{array}{ll}\text { 16.53 }\end{array}$ | 08.30 | 1 |  | 775 | 525 | 27 |
| 4613 | 16 Sagitt | $6 \cdot 0$ | 951.610 | 06.51 |  |  | 3.5694 | $+.0004$ |  | -20 $24 \begin{array}{lll}55 & 49\end{array}$ | 06.51 | I |  | 862 | 520 | 10 |
|  | Lalande 33537 | $6 \cdot 0$ | 1141.770 | 14.66 | , |  | 3.8027 | -.0003 | 53 | -28 4059.04 | 14.66 | I |  | 1.023 | 553 | 32 |
| 4620 | Groombridge 25 | $5 \cdot 4$ | 1250.762 | 11.29 | 6 |  | 8657 | +.0019 |  | +42 7 +11.78 | $1 \mathrm{I} \cdot 22$ | 5 |  | 123 | 271 | 7 |
| 4623 | 36 Draconis | $5 \cdot 0$ | $\begin{array}{llll}18 & 13 & 22.727\end{array}$ | 11.13 | 5 | I | + 0.2921 | - 0006 | $+532$ | +64 2159.88 | 10.77 | 5 | 4 | + 1•170 | + .042 |  |
| 4628 | 19 Sagittarii . . . . . $\delta$ | $2 \cdot 8$ | $\begin{array}{llll}15 & 13.965\end{array}$ | 11.57 | 4 |  | 3.8383 | . 0011 | + 28 | $\begin{array}{llll}-29 & 52 & 1.28\end{array}$ | 11.57 | 4 |  | 331 | 558 |  |
| 4630 | Lalande 33732 | ${ }^{6 \cdot}+$ | 1558.985 | 12.44 | 2 |  | $3 \cdot 6929$ | $\text { . } 0006$ |  | -24.57 22.70 | 12.44 | 2 |  | 397 | 536 | - 8 |
| 4632 | Sagittarii | Var. | 165.370 | 10.24 | 3 |  | $3 \cdot 5289$ | -0002 |  | $\begin{array}{lll}-18 & 54 & 2.23\end{array}$ | 10.24 | 3 |  | 406 | 513 |  |
| 4633 | Lalaude 3373 | $6 \cdot 1$ | $16 \quad 18.540$ | 11.84 | 3 |  | 7954 | . 0011 |  | $\begin{array}{llll}-28 & 28 & 17.04\end{array}$ | 11.84 | 3 |  | 425 | 551 | I |
| 4638 | 58 Serpentis ...... $\eta$ | $3 \cdot 4$ | $18 \quad 16 \quad 39 \cdot 173$ | 10.91 | 75 |  | + 3.1406 | + $\cdot 0008$ | 376 | - 25522.20 | 11.40 | 93 |  | + 1.455 | + 456 | 700 |
| 4645 | 20 Sagittarii ...... $\epsilon$ | $2 \cdot 0$ | 1811.933 | 12.99 |  |  | 985 | - . 0022 | 35 | -34 $25 \begin{aligned} & 36.65\end{aligned}$ | 11.35 | 4 |  |  | 579 | 132 |
| 4649 | Bradley 2308 | $5 \cdot 7$ | $18 \quad 23.470$ | 10.95 | 6 |  | 5004 | +.0017 | + 11 | +231419.94 | 11.66 | 7 |  | 607 | 362 | $\begin{array}{r} \\ +\quad 75 \\ \hline\end{array}$ |
| 4651 | Radcliffe 3896 | $5 \cdot 5$ | $1850 \cdot 398$ | 09.77 | 6 |  | $2.6454$ | +.0016 |  | +1746 50.79 | .09.05 | 6 |  | 645 | 384 | + 7 |
| 4656 | 109 Herculis | $3 \cdot 9$ | 19 51.782 | 11.95 | 6 |  | 2.5419 | +.0016 | + 138 | +2143 42•13 | 11.48 | 11 |  | 735 | 368 | - 261 |
| 4655 | ${ }_{21}$ Sagitt | $5 \cdot 0$ | $18 \quad 1959.444$ | 26 | 5 |  | + 3.5727 | - .0008 |  | -20 $35 \quad 25.99$ | 08.26 | 5 |  | 1•746 | + 518 |  |
| 4661 | 2 Lyræ........... $\mu$ | $5 \cdot$ | $21.15 \cdot 920$ | 10.15 | 4 |  | +1.9772 | +.0018 | 18 | +39 $27 \quad 27 \cdot 66$ | 10.15 | 4 |  | 857 | + 286 | 10 |
| 4670 | 43 Draconis ..... $\phi$ | $4 \cdot 2$ | $22 \times 2.937$ | 0.00 | 1 | 2 | - 0.8552 | - 0110 | - $8+$ | +71 1724.34 | 10.76 | 1 | 4 | 926 |  | + 32 |
|  | Lalande 33989 .... | $6 \cdot 2$ | $22 \quad 7.047$ | 12.57 | 3 |  | + 3.7412 | --0017 |  | -26 $41117 \cdot 27$ | 12.57 | , |  | 932 | + $+\quad 542$ $+\quad 537$ | - 46 |
| 4665 | 22 Sagittarii . . . . . . $\lambda$ | $2 \cdot 9$ | 2224.990 | II-2I | 34 |  | + 3.7061 | --0017 | 35 | -25 28 19.51 | 10.85 | 30 |  | 958 | + 537 | - 191 |
| 4671 | 39 Draconis . . . . . . b | $4 \cdot 9$ | $182235 \cdot 690$ | 10.07 |  | 1 | + 0.8810 | . 0005 |  | +58 44 54•10 | 10.07 |  | 1 | $1 \cdot 974$ | + 127 | 55 |
| 4672 |  | 3.7 | $2240 \cdot 880$ | 08.94 | 1 |  | - I•1956 | -0144 | +1169 | +72 4138.39 | 09.24 | 11 | 3 | 98 I | $-\cdot 174$ | 367 |
|  | Lalande 34047 | $6 \cdot 5$ | $23 \quad 20.902$ | $12 \cdot 42$ | 6 |  | +3.7394 | . 0020 |  | -26 3819.00 | 12.42 |  |  | 2.039 | $+\cdot 54 \mathrm{I}$ |  |
| $4674$ | Bradley 2313 | 4.7 | $24 \quad 4.075$ | 07.54 | 1 |  | 3.4193 | . 0007 | $+\quad 2$ | - 143725.93 | $06 \cdot 82$ | 3 |  | 101 | 495 | - 8 |
| 4676 | Mayer 748 | $5 \cdot 8$ | 2454.457 | 10.27 | , |  | $3 \cdot 5244$ | . 0011 | + 33 | -18 $47 \begin{aligned} & \text { II.08 }\end{aligned}$ | 10.27 | 3 |  | 174 | 510 | 101 |

[^7]| No, in Boss' Oatalogue, 1900. | STAR'S NAME. |  | Mean R.A. igroo. | Mean Date of Obs. $1900+$ | $\left\|\begin{array}{\|c\|}\text { No. of } \\ \hline \frac{0}{\circ} \\ \sim \\ 0 \\ 0 \\ 0 \\ \hline 1\end{array}\right\|$ | Obs. | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { 1910.0. } \end{aligned}$ | Secular Variation 1910.0. | Annual <br> Proper <br> Motion B.ooor <br> - | Mean Dec. 1910.0. | Mean Obs. $1900+$ | No. ol <br>  <br>  <br> 0 <br> 0 <br> 0 <br> 4$\|$ |  | Annual Precession 1910.0. | Secular Variation I9 10.0. | Annnal Motion ".001. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m s |  |  |  | 8 | $s$ |  | - " |  |  |  | " | " |  |
| 4930 | Groombridge 2812 | $6 \cdot 7$ | 19 15 57.573 | 13.44 | 4 |  | $2 \cdot 0049$ | + 0.0009 | - 3 | +40 1139.12 | 13.44 | 4 |  | +6.523 | -274 | - 9. |
| 4940 | 60 Draconis. . . . . . $\tau$ | $4 \cdot 6$ | 1717.495 | II.85 | 2 |  | 1.1015 | 5 - .0566 | - 318 | +73 II 19.22 | 11.19 | 2 | 2 | 633 | - 154 | + 110 |
| 4941 | Piazzi XIX. 8 | $5 \cdot 9$ | $1853 \cdot 668$ | 13.09 | 4 |  | + 3.7425 | 5 - -0103 | - 4 | $-28 \quad 2 \begin{array}{lll}-24.94\end{array}$ | 13.09 | 4 |  | 765 | + 5 II | 2 |
| 4944 | 49 Sagittarii | $5 \cdot 6$ | $20 \quad 2.913$ | 13.01 | 3 |  | 3.6352 | - .0088 | - 15 | -24 $\begin{aligned} & 24 \\ & 20.70\end{aligned}$ | 13.01 | 3 |  |  | 495 | 0 |
| 4950 | 3 I Aquilæ | $5 \cdot 2$ | $2040 \cdot 740$ | $08 \cdot 30$ | 3 |  | $2 \cdot 8116$ | - 0.0004 | $+494$ | +11454.86 | 09.25 | 6 |  | 912 | 382 | $+630$ |
| 4952 | 50 Sagittarii | $5 \cdot 6$ | $1920 \quad 57190$ | $09 \cdot 23$ | 3 |  | $+3.5780$ | - . 0082 | + 18 | -2I 5719.78 | $09 \cdot 23$ | 3 |  | $+6.934$ | + $\cdot 487$ | + 1 |
| 4953 | 30 Aquilæ | 3.4 | 2057.671 | 10.89 | 53 |  | $3 \cdot 0082$ | 2-0018 | + 169 | + 2564.88 | 10.45 | 57 |  | 935 | 409 | + 77 |
| 4961 | Bradley 24 | $6 \cdot 2$ | $2142 \cdot 301$ | $12 \cdot 16$ | 30 |  | $2.4951$ | $1+.0008$ | - 137 | +24 4459.56 | 12.17 | 29 |  | 6.996 | 338 | -631 |
| 4965 | 5 Vulpecu | $5 \cdot 6$ | 2217.443 | 13.01 | 3 |  | $2.6191$ | $1+.0005$ | - | +1955 6.80 | 11.20 | 5 |  | $7 \cdot 044$ | 355 | - 39 |
| 4972 | 4 Cygni | $5 \cdot 2$ | 2254.645 | 13.70 | 2 |  | $2 \cdot 1598$ | + 00011 | + | +36 8 12.74 | 12.02 | 3 |  | 094 | 292 | + 6 |
| 4973 | Mayer 808 | $5 \cdot 5$ | $19 \quad 24 \quad 18.280$ | 12.47 | 3 |  | - $3 \cdot 7126$ | - .0106 | + 10 | -27 10 13.59 | 12.47 | 3 |  | -7.209 | - 502 | - $4^{8}$ |
| 4976 | 6 Vulpecu | 4.6 | $2457 \cdot 628$ | 10.92 | 65 |  | 2.5053 | $3+.0009$ | - 93 | +2428 56.05 | 11.75 | 97 |  | 263 | 337 | - II 3. |
| . 4979 | Mayer 810 | $6 \cdot 0$ | 2533.557 | 07.26 | 3 |  | $3 \cdot 5627$ | --.0084 | $+$ | -2I $29 \begin{array}{lll}\text { - } & 59 & 58\end{array}$ | $07 \cdot 26$ | 3 |  | 3 II | 48 I | 15. |
| 4983 | 36 Aquilæ . . . . . . . e | $5 \cdot 2$ | 25 57.450 | $11 \cdot 22$ | 2 |  | 3.1372 | - .0032 | + | - 258836.24 | 10.65 | 5 |  | 343 | 422 |  |
| 4986 | 6 Cygni . . . . . . . . $\beta$ | $3 \cdot 2$ | 275.498 | 12.44 | 33 |  | - 2.4190 | + .0010 | - | +2746 12.51 | $12 \cdot 13$ | 33 |  | 436 | - 324 | 9 |
| 4990 | Groombridge 2900.. | $6 \cdot 0$ | $1927(9.6)$ |  |  |  | 3.5732 | - -1972 | $+\quad 92$ | +79 25 23.82 | 12.01 | 4 |  | 44 | -. 487 | 37 |
| 4988 | 10 Cygni . . . . . . . . . ${ }^{2}$ | $3 \cdot 9$ | 27 26.260 | 07.39 | 2 | I | + 1.5111 | - .0021 | + 21 | +51 3215.73 | $07 \cdot 43$ | 2 | I | 464 | + 201 | + 124 |
| 4992 | 8 Cygni | $4 \cdot 9$ | $28 \quad 25 \cdot 660$ | $10 \cdot 28$ | 5 |  | 2.2291 | $1+.0011$ | + | $+341540 \cdot 23$ | 10.28 | 5 |  | 544 | 298 | - 3 |
| 4995 | 38 Aquilx $: \therefore . . . . . \mu$ | $4 \cdot 7$ | 29 41.587. | 11.99 | $4^{8}$ |  | 7 | -.0014 | + 143 | + 7 II 14.36 | 11.04 | 46 |  | 647 | 390 | - 152 |
| 4997 | 51 Sagittarii . . . . . $h^{1}$ | $5 \cdot 7$ | 3033.853 | 13.00 | 3 |  | 55 | -.0104 | $+10$ | $\left[\begin{array}{lll}-24 & 55 & 0.42\end{array}\right.$ | 13.00 | 3 |  | 717 | 487 | 25 |
| 4999 | 52 Sagittarii . . . . . $h^{2}$ | $4 \cdot 7$ | 193113.940 | II.52 | 19 |  | $+3.6491$ | - .0105 | + 53 | $-25 \quad 4 \quad 58.08$ | 20 | 26 |  | + 7.771 | +.487 | - 25 |
| 5003 | 39 Aquilæ . . . . . . . к | $5 \cdot 0$ | 32.3 .020 | 09.19 | 2 |  | 3.2285 | 45 | $+\quad 2$ | - 7 I 340.93 | $09 \cdot 42$ | 5 |  | 837 | - 430 | 2 |
| 5010 | 4 Sagittr . . . . . . . $\epsilon$ | $5 \cdot 7$ | 33 '12.967 |  | 3 |  |  | $-\quad .0001$ | 10 | +16 15 36.72 | 10.12 | 11 |  | 930 | 60 | 13 |
|  | Groombridge 2891 . . | $6 \cdot 8$ | $3340 \cdot 600$ |  | 2 |  | $1 \cdot 9086$ | $6+\cdot 0004$ | + | $+433015 \cdot 16$ | $11 \cdot 22$ | 2 |  | 967 | 252 | 16 |
| 5014 | 13 Cygni . . . . . . . $\theta$ 日 | $4 \cdot 6$ | 34 I.660 | $08 \cdot 54$ | 1 | I | 1.6114 | - .0016 | - 29 | $+50 \quad 43 \cdot 78$ | 09.32 | I | 1 | $7 \cdot 995$ | 212 | + 247 |
| 5015 | 53 Sagitta | $6 \cdot 2$ | 193425.050 |  | 1 |  | $+3 \cdot 6084$ | 4-0101 | 0 | -23 37 58.58 | 56 | 1 |  | $+8.027$ | + $\cdot 479$ | - 30 |
| 5016 | Bradley 2 | 6. I | $3442 \cdot 620$ | $08 \cdot 41$ | 3. |  | $3 \cdot 6081$ | $\text { - . } 0102$ | + 18 | -23 $\begin{array}{lll}28 & 6.66\end{array}$ | $08 \cdot 41$ | 3 |  | - 050 | 478 | - 3 |
| 5018 | 44 Aquilx $: . . . . . . \sigma$ | $5 \cdot 2$ | 34 45.180 | 11.71 | 2 |  | $3$ |  | - | + 51132.24 | 13.20 | 4 |  | 54 | 392 | 0 |
| 5019 | 54 Sagittarii .....e ${ }^{1}$ | $5 \cdot 5$ | 35 34.113 |  | 30 |  | $3 \cdot 4345$ | $\text { - } \quad .0076$ | + $4^{6}$ | -16 3000.18 | I 1.34 | 26 |  | 119 | 454 |  |
| 5024 | 14 Cygni | $5 \cdot 4$ | $36 \quad 30 \cdot 737$ | 12.06 | 3 |  | $1 \cdot 9506$ | $+.0005$ | + 19 | +42 $3635 \cdot 69$ | 12.06 | 3 |  | $194$ | 256 | + 24 |
| 5027 | 6 Sagitta ........ $\beta$ | $4 \cdot 5$ | $1937 \quad 0.453$ | 4 | 3 |  | + 2.6938 | + .0001 | + 1 | +17 16 1.32 | 38 | 6 |  | 8. 234 | $\cdot 355$ | 38 |
| 5028 | 55 Sagittarii .....e ${ }^{2}$ | $5 \cdot 1$ | 37 22.335 |  | 2 |  |  | -:0075 | $+4^{2}$ | -16 20 $7 \cdot 31$ | 64 | 2 |  | 263 | 452 | 17 |
| 5039 | 10 Vulpeculæ | $5 \cdot 5$ | 3958.412 |  | 32 |  | 2.4933 | + .0009 | $+\quad 4$ | +2533 21.83 | 55 | 39 |  | 469 | 326 | + 13 |
| 5045 | 15 Cygni | $5 \cdot 0$ | 415.900 | 12.18 | 2 |  | $2 \cdot 1571$ | + .0011 | $+57$ | +37 811.09 | . 18 | 位 |  | 553 | 281 | + 34 |
| 5044 | 56 Sagittarii. . . . . . f | $5 \cdot 1$ | $4 \mathrm{I} \quad 6.806$ |  | 3 |  | 3.5118 | -.0093 | - 95 | -19 58840.25 | 08.63 | 3 |  | 560 | 459 | 96 |
| 5047 | 50 Aquilx . . . . . . . $\gamma$ | 2.8 | 194158.860 | 11.03 | 60 |  | + 2.8513 | - .0010 | $+\quad 9$ | +10 10336.27 | $10 \cdot 66$ | 74 |  | $+8.629$ | $+372$ | - 4 |
| 5048 | 18 Cygni ........ $\delta$ | 3.0 | $42 \quad 9.737$ | 10.54 | 3 | 1 |  | $+.0001$ | + 50 | +44 $5438 \cdot 93$ | 0 | 3 | (I) | 643 | 242 | $+37$ |
| 5052 | 7 Sagittæ ....... $\delta$ | $3 \cdot 8$ | 4322.538 | 10.51 | 5 |  | $2 \cdot 6745$ | $+\quad .0002$ | + I | +181842.38 | 10.51 | 5 |  | $739$ | 347 | + 9 |
| . 5058 | 8 Sagittre ....... $\zeta$ | $5 \cdot 0$ | 44 58.960 | 11.I5 | 8 |  | $2.6617$ | $+\quad .0002$ | + 13 | +185456.95 | $12 \cdot 32$ | 12 |  | $865$ | 344 | $+\quad 25$ |
| 5062 | 53 Aquilæ . . . . . . a | $0 \cdot 9$ | $46 \quad 23.554$ | 11.03 | 77 |  | $2 \cdot 8911$ | $1-\quad .0014$ | + 361 | + 83747.95 | 10.46 | 92 |  | 8.976 | 373 | + 380 |
| 5071 | 55 Aquilæ . . . . . . . $\eta$ | var. | $1947 \quad 53 \cdot 344$ | 12.31 | 5 |  | + 3.0564 | -.0032 | $+\quad 5$ | + $04626 \cdot 39$ | $12 \cdot 31$ |  |  | + 9.092 | +.393 | - 9 |
| 5079 | 63 Draconis .....et | $4^{\circ} 0$ | $48 \quad 28 \cdot 913$ | 09.79 | 3 | 4 | $-0.2024$ | $-.0444$ | + 158 | $+70220 \cdot 15$ | 09.69 |  | I6 | 138 | -. 030 | + 31 |
| 5076 | Lalande 37813 .. | $6 \cdot 3$ | $48 \quad 54 \cdot 462$ | 10.45 | 5 |  | + 3.6057 | $-\quad .0119$ | - 94 | $-24 \quad 955 \cdot 12$ | 10.45 | 5 |  | $171$ | + 464 | - $\mathbf{4 I I}^{11}$ |
| 5140 | Groombridge 3402 .. | var. | $4955 \cdot 120$ | 12.37 | 1 | 1 | -56.1401 | $-25.7982$ | +3520 | +8851 9*76 | 10.95 | 16 | 6 | $246$ | $-7 \cdot 266$ | $+\quad 96$ |
| 5091 | 58 Sagittarii ..... $\omega$ | $4 \cdot 8$ | 5019.751 | 12.19 | 7 |  | $1+3.664 I$ | - 0.0134 | + 156 | $\left[\begin{array}{llll}-26 & 32 & 18.85\end{array}\right.$ | $12 \cdot 11$ | 8 |  | $282$ | +0.470 | 1 $+\quad 83$ |
| 5093 | 60 Aquilæ . . . . . . $\beta$ | $3 \cdot 9$ | 195053.572 | 10.98 | 41 |  | + 2.9444 | - .0020 | $+\quad 23$ | +610 53.17 | 09.49 | 30 |  | +9326 | + 376 | 483 |
| 5099 | 61 Aquilæ .:. . . . . $\phi$ | $5 \cdot 3$ | 5158.583 | 12.40 | 3 |  | 2.8392 | - .0010 | + 13 | + 11 II 3.32 | - 48 | 5 |  | 409 | 362 | 8 |
| 5101 | 61 Sagittarii . . . . . g | 5.1 | $5250 \cdot 840$ | 11.68 | 1 |  | $3.404^{2}$ | - .0086 | + 4 | -15 43 51.50 | 11.68 | 1 |  | 476 | 433 |  |
| 5105 | 24 Cygni . . . . . . . . $\psi$ | $4 \cdot 8$ | 5318.210 | 10.61 | 1 |  | 1.5559 | - .0027 | - 44 | +52 $1158 \cdot 70$ | 10.61 | 1 |  | 512 | 196 | $-31$ |
| 5104 | 60 Sagittarii .....A | $5^{\circ}$ | 53 28.318 | II 1.82 | 5 |  | 3.6572 | $\mid-.0136$ | + 18 | $\left\lvert\, \begin{array}{llll}-26 & 26 & 23.91\end{array}\right.$ | 11.88 | 4 |  | 525 | 465 | + 29 |

[^8]55 Aquile. Limits of magnitude 3.5 to 4.7 .
${ }_{63}$ Drsconis. This is the principal star of the pair $\Sigma_{2603}$, components 3.9 and 7.6 . ${ }_{24}$ Cygni. This is the principal star of the pair $\Sigma 2605$, oomponents $5 \cdot 0$ and 7.5 .

| No. in Boss' Oata logue, 1900. | STAR'S NAME. | 号 | Mean R.A. 19ro\%. | Mean Date of Obs. $1900+$ | $\left\|\begin{array}{\|c\|}\text { No. of } \\ \hline 0 \\ \hline 0 \\ 0 \\ 0 \\ 0 \\ 8 \\ 4\end{array}\right\|$ |  | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { 'I9Io.o. } \end{aligned}$ | $\begin{aligned} & \text { Secular } \\ & \text { Variation } \\ & \text { 19I0.o. } \end{aligned}$ | Annual Motion 8.0001 . | Mean Dec. 1910*O. | $\begin{aligned} & \text { Mean } \\ & \text { Date of } \\ & \text { Obs. } \\ & \text { 1goot } \end{aligned}$ | $\left\|\begin{array}{\|c\|} \hline \text { No. ol } \\ \hline 0.0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \hline \end{array}\right\|$ |  | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { Igioo. } \end{aligned}$ | $\begin{aligned} & \text { Secular } \\ & \text { Variation } \\ & \text { igro.o. } \end{aligned}$ | Annual Motion -.001. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m |  |  |  | $s$ | 8 |  | - , " |  |  |  | " |  |  |
| 5118 | 12 Sagittw | $3 \cdot 7$ | I9 $5445 \cdot 313$ | $08 \cdot 96$ | 3 |  | +2.6632 | + 0.0003 | 42 | +191449.94 | 08.18 | 7 |  | $+9.623$ | + 337 | 6 |
| 5128 | 63 Sagittarii | $5 \cdot 8$ | 56 56.185 | 12.08 | 2 |  | 3.3608 | .0081 | + 22 | -13 13312.79 | 12.88 | 3 |  | 790 | 423 | 19 |
| 5129 | 62 Sagittarii ......c | $4 \cdot 6$ | 57 7.591 | 10.62 | 18 |  | 3.6913 | -.0148 | + 27 | -27 5738.03 | $10 \cdot 10$ | 6 |  | 805 | 465 | 10 |
| 5132 | 15 Vulpeculæ | $4 \cdot 7$ | 5723.631 | $11 \cdot 72$ | 25 |  | 2.4660 | +.0012 | + 39 | +27 3015.85 | 11.77 | 24 |  | 825 | 309 | 6 |
| 5135 | Mayer $837 .$. | $6 \cdot 5$ | $58 \quad 24.475$ | 11-71 | 2 |  | $3 \cdot 5621$ | -.012I | - 27 | -2250 55.80 | 11.71 | 2 |  | $9 \cdot 902$ | 447 | 25 |
| 5143 | 63 Aquilæ . . . . . . . $\tau$ | $5 \cdot 7$ | I9 5944.567 | 10.03 | 3 |  | + $2 \cdot 9298$ | - $\cdot 0021$ | + 9 | + 7 I 23.75 | 11.50 | 10 |  | 0.004 | -366 | 21 |
| 5170 | 28 Cygni ........ $b^{2}$ | $4 \cdot 8$ | 2065.060 | 09.68 | 1 |  | $2 \cdot 2272$ | $+.0016$ | , | +36 $3427 \cdot 60$ | 99.68 | 1 |  | 480 | 272 | 9 |
| 5171 | 65 Aquilæ . . . . . . . $\theta$ | $3 \cdot 4$ | $639 \cdot 725$ | $10 \cdot 38$ | 53 |  | $3 \cdot 0941$ | -. 0043 | 21 | - I 520.03 | 09.99 | 59 |  | 24 | 378 | + 3 |
| 5178 | 20 Vulpecul | $5 \cdot 9$ | 814.262 | 12.42 | 22 |  | 2.5150 | +.0012 | 3 | +26 12 34.51 | 12.42 | 2 |  | 40 | 306 | 6 |
| 5179 | 66 Aquilæ | $5 \cdot 6$ | $835 \cdot 140$ | 09. 54 | 1 |  | 3.0978 | -.0044 | 12 | - 1 $1646 \cdot 57$ | 09.54 | 1 |  | 666 | 378 | 24 |
| 5184 | 68 Draconis | $5 \cdot 7$ | $20 \quad 10 \quad 6.570$ | 08.73 | 1 |  | +0.9706 | -.0142 | + 188 | +61 $4^{8} 2 \mathrm{I} \cdot 01$ | 73 | I |  | 0.779 | -115 | 80 |
| 5182 | 67 Aquilæ . . . . . . . p | $5 \cdot 0$ | $10 \quad 6.805$ | 78 | 2 |  | $\cdot 7722$ | -.0004 | + 36 | +1455 22.28 | 12.78 | 2 |  | 779 | 336 | 51 |
| 5186 | 30 Cygni . . . . . . . $0^{1}$ | $5 \cdot 0$ | 1028.247 | $07 \cdot 54$ | 1 | 2 | I.8845 | +.0004 | + 14 | +4632 $35 \cdot 27$ | 09.59 | 1 | (2) | 805 | 227 | 9 |
| 5187 | 31 Cygni . . . . . . . $0^{2}$ | $4 \cdot 0$ | 1047.827 | 09.67 | 2 | I | 1.8887 | +.0003 | + 2 | $+4628 \quad 5 \cdot 05$ | I I 42 | 2 | (I) | 830 | 227 | + 1 |
| 5191 | 33 Cygni | $4 \cdot 3$ | I 118.460 | 11.66 | 1 |  | $+1.3891$ | -.0057 | + 73 | +5617 31.56 | II. 66 | I |  | 867 | +.166 | 82 |
| 5199 | r Cepheí | 4.4 | 20 II (56.3) |  |  |  | - I•9594 | - .1680 | $+38$ | $+7726 \quad 26 \cdot 98$ | 6 | 8 | 8 | -91 3 | - $\cdot 244$ | + 26 |
| 5197 | 5 Capricorni . . . . . . $a^{1}$ | $4 \cdot 6$ | 1239.654 | 10.04 | 7 |  | $+3.3264$ | -.0085 | + 10 | - 12 $47 \begin{array}{llll}12 \cdot 24\end{array}$ | $10 \cdot 17$ | 3 |  | 966 | +.401 | 6 |
| 5198 | 4 Capricorni | $6 \cdot 0$ | $1244 \cdot 264$ | 10.45 | 5 |  | $3 \cdot 5264$ | -.0129 | + 23 | $\begin{array}{llll}-22 & 5 & 18 \cdot 15\end{array}$ | $10 \cdot 45$ | 5 |  | 972 | 6 | 34 |
| 5201 | 24 Vulpeculæ | 5 | 1256.004 | $12 \cdot 27$ | 16 |  | 2.5656 | + .ooli | + 13 | +24 2336.22 | 2 | 17 |  | 986 | 08 | 0 |
| 5202 | 6 Capricorni...... $a^{2}$ | $3 \cdot 8$ | $13 \quad 3.739$ | 14 | 31 |  | 3.3269 | -.0085 | $+40$ | - $1249 \begin{array}{ll}27 & 68\end{array}$ | I1. 23 | 17 |  | 10.996 | 01 | 5 |
| 5206 | 7 Capricorni . . . . . $\sigma$ | $5 \cdot 5$ | $20 \quad 14 \quad 12.080$ | 09.16 | 2 |  | $+3 \cdot 4647$ | - 0116 | + 4 | -19 193358.90 |  | 1 |  | . 079 | 416 | 9 |
| 5216 | 9 Capricorni . . . . . $\beta$ | $3 \cdot 3$ | $15 \cdot 57 \cdot 385$ | 11.51 | 46 |  | $3 \cdot 3708$ | - •0097 | + 24 | -15 51588.23 | 62 | 32 |  | 06 | 03 | 1 |
| 5220 | Groombridge 3140.. | $6 \cdot 1$ | 1659.541 | 12.78 | 2 |  | $2 \cdot 1741$ | +.0018 | - 7 | +39 $7 \begin{array}{lll}7 & 7 \cdot 84\end{array}$ | 12.78 | 2 |  | I | 57 | $20^{\circ}$ |
| 5229 | 37 Cygni | $2 \cdot 3$ | 1859.850 | 10.76 | 3 |  | $2 \cdot 1522$ | +.0020 | + 1 | +39 58 5.31 | 09.80 |  |  | 26 | 25 | 3 |
| 5232 | Lalande 39173 | $6 \cdot 0$ | $1956 \cdot 350$ | 09.54 |  |  | 3.6783 | -.0176 | + 9 | $\begin{array}{lllll}-28 & 57 & 18 \cdot 26\end{array}$ | 09.54 | I |  | 494 | 435 | 5 |
| 5240 | ıo Capricorni . . . . $\pi$ | $5 \cdot 2$ | 202210.250 | 09.74 | 3 |  | +3.4365 | -.0117 | + 7 | -18 $\begin{array}{llll}18 & 30 & 26.40\end{array}$ | $09 \cdot 74$ | 3 |  | 1.653 | +.403 | 13 |
| 5244 | in Capricorni . . . . . p | $5 \cdot 0$ | $2343 \cdot 725$ | II.14 | 39 |  |  | -.0115 | - 10 | -18 $61842 \cdot 27$ | 2 | 6 |  | 764 | 399 | 22 |
|  | Lalande 39350-1 . | $6 \cdot 8$ | 23 46.480 | 08.53 | I |  | 2 | -.0132 |  | $\begin{array}{llll}-21 & 12 & 0.72\end{array}$ | 53 | I |  | 6 | 407 | + $\quad 57$ |
| 5249 | 40 Cygni | $5 \cdot 5$ | 2414.120 | 10.89 | I |  | 2.2240 | $+.0023$ | - 16 | $+38838 \cdot 8 \mathrm{I}$ |  | 1 |  | 799 | 257 | 71 |
| 5248 | Piazzi XX. | $6 \cdot 2$ | 2414.663 | I I 28 | 3 |  | $3 \cdot 5242$ | -.0140 | + 9 | $\begin{array}{llll}-22 & 41 & 25.72\end{array}$ | II. 28 | 3 |  | 800 | 410 | 26 |
| 5252 | Bradley 2630...... | 6 | $202443 \cdot 100$ |  | I |  | $+3.4417$ | -.OII9 | + 15 | -18 $\begin{array}{lll}18 & 53 & 4.58\end{array}$ | . 66 | 1 |  | +11.833 | -400 | - 90 |
| 5253 | 12 Capricorni . . . . o | 6.1 | 2444.415 | -6 | 2 |  | 3.4414 | - .0119 | + II | -18 $\begin{array}{llll}18 & 53 \cdot 10\end{array}$ | $66^{\circ}$ | 2 |  | 835 | 400 | 86 |
| 5254 | 69 Aquilæ | 5•I | $2456 \cdot 860$ | II. 24 | 3 |  | 3.1325 | -. 0053 | $+4^{2}$ | - 3 I1 $7 \cdot 32$ | 10.89 | 15 |  | 850 | 363 | 21 |
| 5255 | 41 Cygni | 4-1 | 2543.060 | 12.22 | 47 |  | 2.4500 | $+.0020$ | + 7 | +30 4 4.26 | 12.27 | 47 |  | 904 | 282 | 4 |
| 5258 | 42 Cygni | $5 \cdot 9$ | 2554.440 | 09.59 | , |  | $2 \cdot 2873$ | +.0024 | + 9 | $+36913.78$ | 09.59 | 1 |  | 11.917 | 263 | - 8 |
| 5265 | 45 Cygni . . . . . . . $\omega^{2}$ | $4 \cdot 9$ | $20 \quad 27 \quad 16.237$ | 09.82 | 3 | 2 | +1.8569 | +.0004 | + 9 | $+4^{8} 38 \quad 55.95$ | 11.78 | 3 | (2) | +12.013 | +.212 | + |
| 5262 | Mayer 866 . . . . . . . . | $6 \cdot 2$ | $2730 \cdot 995$ | 11.74 | 7 |  | 3.5766 | -.0159 | + 7 | $\begin{array}{lllll}-25 & 14 & 52.09\end{array}$ | I I 174 | 7 |  | 030 | 412 | 54 |
| 5270 | 2 Cephei. . . . . . . . . $\theta$ | $4 \cdot 3$ | $28 \quad 4.295$ | -08.15 |  | 2 | 1.0059 | -.0155 | + 66 | +62 4129.19 | $10 \cdot 33$ | 1 | 14 | 069 | 117 | 18 |
| 5272 | 2 Delphini . . . . . . . $\epsilon$ | $4^{\circ}$ | 2854.795 | 11.38 | 50 |  | $+2.8657$ | -.0013 | + 6 | + $105948 \cdot 98$ |  | 54 |  | 128 | +.327 | 26 |
| 5280 | Bradley 26 | 4 | $30 \quad 24 \cdot 223$ | 10.66 | 1 | 5 | -0.2308 | -.0684 | - 2 | +721336.41 | $10 \cdot 14$ | 3 | 12 | 231 | -. 032 | 25 |
| 5278 | Mayer 870 | $6 \cdot 2$ | $20 \quad 30 \quad 26 \cdot 775$ | 06.66 | 2 |  | $+3 \cdot 3928$ | 12 | + 54 | -16 $50 \quad 7 \cdot 91$ | 6 | 2 |  | 12.234 | $+\cdot 387$ | 23 |
| 5282 | 4 Delphini |  | 316.098 |  | 4 |  | - 2.8020 | -.0004 | + 26 | +14 2147.87 | 4 |  |  |  | 318 | + 4 |
|  | Lalande 39714 | $6 \cdot 3$ | $32 \quad 30 \cdot 827$ | II. 59 | 3 |  | +3.5722 | -.0164 | + 63 | $-25 \quad 25^{20.55}$ | 11.59 |  |  | 377 | $+.404$ | + 7 |
| 5290 | 73 Draconis | $5 \cdot 2$ | $3242 \cdot 200$ | II.22 | 2 | I | -0.7535 | - 103I | + 27 | +743846.29 | 12.28 |  | 8 | 390 | -.092 | 12 |
| 5291 | 6 Delphini | $3 \cdot 7$ | $33 \quad 19.719$ | 11. | 7 |  | $+2.8056$ | -.0005 | + 74 | +14 1653.91 | 10.16 | 13 |  | 433 | +.316 | 37 |
| 5301 | 29 Vulpeculæ | $4^{\cdot 8}$ | 2034 30•177 | 14.15 | 3 |  | +2.6741 | +.0010 | + 41 | +20 $53 \quad 5 \cdot 84$ | $13 \cdot 11$ | 5 |  | +12.513 | + 299 | 1 |
| 5304 | 7 Delphini ......... |  | $3445 \cdot 520$ | 10.64 | 2 |  | 2.8929 | -.0016 | + 213 | + 9467.65 | $09.28$ |  |  | $531$ | $324$ | $+\quad 12$ |
|  | Lalande 39816 | $6 \cdot 3$ | $3450 \cdot 545$ | I 1.98 | 2 |  | 3.5390 | -.0156 | + 376 | -24 6 İ.08 | 11.98 | 2 |  | 537 | $397$ | + 461 |
| 5306 | 15 Capricorni | $5 \cdot 3$ | $3455 \cdot 670$ | 07.64 | 2 |  | $3 \cdot 4206$ | -.oI23 | - 20 | $\begin{array}{lllll}-18 & 27 & 20.67\end{array}$ | $07 \cdot 64$ | 2 |  | 542 | 384 | 21 |
| 5307 | Bradley 2667 | $5 \cdot 9$ | 3454.450 | $10 \cdot 35$ | 3 |  | $2 \cdot 7829$ | -.0002 | - I | +1531 18.38 | 12.39 | 4 |  | 540 | 311 | 25 |

[^9]\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline  \& star's name. \& 硠 \& Mean R.A. rgroo. \& \[
\begin{aligned}
\& \text { Mean } \\
\& \text { Date of } \\
\& \text { Oaso. } \\
\& \text { Igoo + }
\end{aligned}
\] \&  \&  \& \[
\begin{aligned}
\& \begin{array}{l}
\text { Annual } \\
\text { Precession } \\
\text { Igroo.o. }
\end{array}
\end{aligned}
\] \& \[
\begin{gathered}
\text { Secular } \\
\text { Variation } \\
\text { rgroo. }
\end{gathered}
\] \& \[
\begin{aligned}
\& \text { Annual } \\
\& \text { Proper } \\
\& \text { Motion } \\
\& \text { B.ooor. }
\end{aligned}
\] \& Mean Dec. r9roo. \& Mean
Date of Obs. r900 + \& \[
\left|\begin{array}{c|}
\hline \text { No. ol } \\
\hline \frac{0}{0} \\
\vdots \\
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\vdots
\end{array}\right|
\] \&  \& \[
\begin{gathered}
\text { Annual } \\
\begin{array}{c}
\text { Precession } \\
\text { 1910.0. }
\end{array}
\end{gathered}
\] \& \(\underset{\substack{\text { Secular } \\ \text { Variation } \\ \text { I9 roo. }}}{ }\) \& \[
\begin{aligned}
\& \text { Anuaal } \\
\& \hline \text { Proper } \\
\& \text { Motion } \\
\& \text { nopor. }
\end{aligned}
\] \\
\hline \& \& \& m \& \& \& \& s \& s \& \& - , " \& \& \& \& \& \& \\
\hline 5310 \& 9 Delphini .......a \& \(3 \cdot 9\) \& \(20 \quad 35 \quad 27 \cdot 472\) \& 10.76 \& 3 I \& \& -2.7821 \& 01 \& \& +153538.86 \& 10.26 \& 35 \& \& +12.579 \& + 310 \& - 8 \\
\hline 5320 \& 50 Cygni . . . . . . . . a \& I•3 \& \(38{ }^{8} \mathrm{I}\). 82 I \& 10.55 \& 10 \& 2 \& 2.0442 \& +.0022 \& - \& +44 5730.07 \& If. 04 \& 10 \& (2) \& 775 \& \& - I \\
\hline 5323 \& 11 Delphini ....... \(\delta\) \& \(4 \cdot 5\) \& 3915.395 \& [1.11 \& 6 \& \& 2.8022 \& -.0003 \& 16 \& +14454.99 \& 09.28 \& 15 \& \& 835 \& 308 \& - 51 \\
\hline 5328 \& 16 Capricorni ..... \(\psi\) \& \(4 \cdot 3\) \& \(4046 \cdot 190\) \& 12.64 \& 4 \& \& 3.5615 \& -.0168 \& 42 \& -25 3540.07 \& 12.99 \& 3 \& \& 937 \& 391 \& - 159 \\
\hline 5329 \& \({ }^{17}\) Capricorni ...... \& \(5 \cdot 9\) \& 4057.030 \& 10.79 \& 5 \& \& 3.4814 \& -.0144 \& \&  \& \(1 \mathrm{I} \cdot 65\) \& 5 \& \& 12.949 \& 8 \& 16 \\
\hline 5334 \& 12 Delphini (Comes) \(\gamma\) \& \(5 \cdot 5\) \& 204228.110 \& II. 58 \& 1 \& \& \(+2.7855\) \& 000 \& - 14 \& +154759.15 \& II.58 \& I \& \& +13.051 \& 03 \& 194 \\
\hline 5335 \& 12 Delphini ...... \(\gamma\) \& \(4 \cdot 5\) \& 4288.990 \& 11.58 \& 1 \& \& \(2 \cdot 7855\) \& -0000 \& 23 \& +154758.78 \& 11.24 \& \& \& 051 \& 303 \& - 204 \\
\hline 5336 \& 53 Cygni........... \(\epsilon\) \& \(2 \cdot 6\) \& \(4234 \cdot 230\) \& 12.14 \& 3 \& \& 2.3979 \& +.0029 \& + 288 \& +33 3757.46 \& 12.14 \& \& \& 057 \& 260 \& + 322 \\
\hline 5337 \& 2 Aquarii. . . . . . . . \(\epsilon\) \& 3.8 \& 4248.329 \& 10.65 \& 32 \& \& 3.2480 \& -. 0084 \& \& - 94932.60 \& 10.17 \& 41 \& \& \(\bigcirc 72\) \& 353 \& - 34 \\
\hline 5338 \& 3 Aquarii \& \(4 \cdot 6\) \& \(42 \quad 59 \cdot 370\) \& 13.60 \& 2 \& \& 3.1675 \& -. 0066 \& \& - 52127.47 \& 13.74 \& 5 \& \& 085 \& 344 \& - 39 \\
\hline 5344 \& Piazzi XX \& \(4 \cdot 6\) \& \(20 \quad 43 \quad 7 \cdot 240\) \& 10.14 \& \& 1 \& +1.4988 \& -.0047 \& - 83 \& +5715 23.02 \& 10.14 \& \& \& +13.093 \& \(+\cdot 160\) \& + 232 \\
\hline 5346 \& 3 Ceph \& \(3 \cdot 6\) \& \(43 \quad 27 \cdot 690\) \& 10.86 \& 1 \& 1 \& 1.2120 \& -.0114 \& + 133 \& +61 2920.67 \& 10.59 \& 1 \& 6 \& 116 \& 128 \& + 820 \\
\hline 5350 \& 54 Cygni . . . . . . . \(\lambda\) \& \(4 \cdot 5\) \& 43 54.147 \& \(10 \cdot 98\) \& 3 \& \& 2.3351 \& +.0031 \& \& +36 9 34.82 \& 10.98 \& \& \& 145 \& 51 \& II \\
\hline 5363 \& 18 Capricorni . . . . \(\omega\) \& \(4 \cdot 2\) \& \(4627 \cdot 185\) \& 14.67 \& 2 \& \& 3.5872 \& -. 0184 \& \& -27 \(15 \begin{array}{llll}5 \& 23 \& 55\end{array}\) \& 14.67 \& \& \& 313 \& \& - 14 \\
\hline 5368 \& Piazzi XX. 3 \& \(6 \cdot 2\) \& 4744.595 \& II.12 \& 2 \& \& 3.5176 \& -.0163 \& +67 \& -24 \(7 \begin{array}{llll} \& 14.49\end{array}\) \& III 12 \& 2 \& \& 397 \& 376 \& - \(\quad 36\) \\
\hline 5371 \& \begin{tabular}{l}
6 Aquarii. ......... \(\mu\) \\
Lalande 403II ....
\end{tabular} \& \(4 \cdot 8\)
\(7 \cdot 1\) \& 2047
48
48
48.059

49 \& .80 \& 30 \& \& 7 \& 2 \& \& | 9 | 19 | 16.99 |
| :--- | :--- | :--- |
| 19 | 27 | 13.93 | \& I I. 26 \& 32 \& \& 13.400 \& $+$ \& 35 <br>

\hline 5377 \& 76 Dracon \& $5 \cdot 7$ \& $\begin{array}{rl}48 & 24.552 \\ 49 & 9.712\end{array}$ \& 10.80
10.22 \& 4 \& 2 \& +3.2327
+3.4227
-4.1430 \& 134 \& + 163 \&  \& 09.47

10.88 \& 26 \& 17 \& $$
\begin{aligned}
& 44^{0} \\
& 489
\end{aligned}
$$ \& $\begin{array}{r}+.364 \\ +\quad .453 \\ \hline\end{array}$ \& $1+26$ <br>

\hline 5374 \& 19 Capricorni \& $5 \cdot 9$ \& 49 42.810 \& 06.59 \& , \& \& +3.398I \& -.0128 \& 38 \& -18 15 52.16 \& 10.62 \& 2 \& \& 24 \& - 360 \& - 19 <br>
\hline 5379 \& 32 Vulpeculæ \& $5 \cdot 2$ \& 5043.428 \& II 92 \& 64 \& \& +2.5564 \& +.0027 \& \& +274253.62 \& 12.10 \& 90 \& \& 589 \& $+.268$ \& - 2 <br>
\hline 5388 \& Bradley 2 \& $5 \cdot 6$ \& $205142 \cdot 113$ \& 91 \& 2 \& 1 \& $2 \cdot 6019$ \& --3198 \& 101 \& +80 1254.93 \& II•Io \& 9 \& 13 \& 13.652 \& 284 \& 30 <br>
\hline 5386 \& 7 Aquarii \& $5 \cdot 7$ \& $\begin{array}{lll}52 & 2.300\end{array}$ \& II•39 \& 3 \& \& +3.2456 \& -. 0087 \& - 10 \& -10. 234.07 \& 11.45 \& 5 \& \& 74 \& + 340 \& - 14 <br>
\hline 5393 \& 58 Cygni. \& $4^{\circ} \mathrm{O}$ \& 53 49-039 \& I2.48 \& 9 \& \& 2.2345 \& +.0038 \& \& +40 49 I2.98 \& 12.48 \& 9 \& \& 87 \& 231 \& - $\quad 24$ <br>
\hline 5398 \& 20 Capricorni \& $6 \cdot 2$ \& 5429.445 \& 14.61 \& 4 \& \& 3.4129 \& $\therefore$-or 36 \& 12 \& $\begin{array}{llll}-19 & 23 & 4.27\end{array}$ \& 14.61 \& 4 \& \& 830 \& 354 \& - 23 <br>
\hline 5402 \& I Piscis Austr \& 47 \& $5546 \cdot 44^{\circ}$ \& 08.60 \& 1 \& \& 3.6881 \& -. 0234 \& + 6 \& $-3^{2} \quad 36 \quad 34 \cdot 32$ \& 08.60 \& 1 \& \& 911 \& 38 I \& <br>
\hline 5403 \& 21 Capricorni \& $6 \cdot 5$ \& $205547 \cdot 980$ \& 10.63 \& 4 \& \& $+3.3829$ \& -:0128 \& 20 \& -17 $52 \begin{array}{lll}55.92\end{array}$ \& 10.31 \& 3 \& \& +13.912 \& -349 \& 10 <br>
\hline 5410 \& 59 Cygni . . . . . . . . .f ${ }^{1}$ \& $4 \cdot 9$ \& $56 \quad 45 \cdot 854$ \& 10.79 \& 8 \& 2 \& 2.0388 \& $+.0032$ \& \& $+4710 \quad 10.09$ \& 11.44 \& 8 \& (2) \& 13.973 \& 7 \& <br>
\hline 5417 \& 22 Capricorni ..... $\eta$ \& $4 \cdot 9$ \& 5917.117 \& 13.68 \& 3 \& \& 3.4215 \& -. 0142 \& 30 \&  \& 14.74 \& 2 \& \& 14.130 \& 348 \& - 43 <br>
\hline 5427 \& ${ }^{23}$ Capricorni ..... $\theta$ \& $4 \cdot 2$ \& $21 \quad 053.379$ \& 10.28 \& 27 \& \& $3 \cdot 3709$ \& --0127 \& $+\quad 57$ \&  \& 10.02 \& 33 \& \& 229 \& 340 \& - 66 <br>
\hline 5431 \& 62 Cygni.......... ${ }^{\text {g }}$ \& $3 \cdot 9$ \& 139.390 \& II•II \& 3 \& I \& $2 \cdot 1801$ \& +.0042 \& \& +43 $34 \quad 6.49$ \& 12.11 \& \& ( 1 \& 277 \& 217 \& - 3 <br>
\hline 5430 \& 24 Capricorni ....A \& $4 \cdot 6$ \& 21.151 .950 \& 14.68 \& 1 \& \& + 3.5169 \& -.0178 \& \& -25 2157.95 \& 14.68 \& 1 \& \& $+14.290$ \& - 354 \& - 51 <br>
\hline 5433 \& 61 Cygni. ...... \& $5 \cdot 6$ \& 251.670 \& 10.42 \& , \& \& $2 \cdot 3354$ \& + 00045 \& +3529 \& +38 1822.50 \& 10.42 \& 3 \& \& 51 \& 232 \& +3245 <br>
\hline 5434 \& 6r Cygni (Comes) \& $6 \cdot 3$ \& 253.297 \& $10 \cdot$ \& 3 \& \& $2 \cdot 3356$ \& +.0045 \& +3509 \& +38 $\mathbf{3}^{8} \mathbf{1 8} \quad 8 \cdot 36$ \& 10.42 \& 3 \& \& 51 \& 232 \& +3079 <br>
\hline 5435 \& 25 Capricorni . . . . $\chi$ \& $5 \cdot 3$ \& 324.490 \& 12.46 \& 4 \& \& 3.4402 \& -.0152 \& \& -21 $33 \begin{array}{llll}\text { 20.33 }\end{array}$ \& 12.46 \& 4 \& \& 384 \& \& - 57 <br>
\hline 5436 \& 63 Cygni . . . . . . . .f ${ }^{2}$ \& $4 \cdot 9$ \& $330 \cdot 064$ \& 08.47 \& 3 \& 3 \& 2.0647 \& $+\cdot .0038$ \& + 11 \& +4717 11.61 \& 10.73 \& \& (3) \& 389 \& \& 8 <br>
\hline 5438 \& 27 Capricor \& $6 \cdot 2$ \& $21+24.412$ \& 13.42 \& 4 \& \& $+3.4266$ \& - .0149 \& + 87 \& -20 55 +.95 \& 13.42 \& 4 \& \& + 14.445 \& $\cdot 340$ \& 126 <br>
\hline 5441 \& ${ }^{1} 3$ Aquarii . . . . . . . $\nu$ \& 4.5 \& $441 \cdot 657$ \& 10.38 \& 6 \& \& 3.2648 \& - .0098 \& + 63 \& -11 $44 \begin{array}{lll}11 & 41\end{array}$ \& 10.83 \& 13 \& \& 462 \& . 324 \& - 13 <br>
\hline 5443 \& 5 Equulei........ $\gamma$ \& $4 \cdot 8$ \& 537.960 \& 12.65 \& 8 \& \& +2.9141 \& -.0012 \& + 36 \& + $9466 \cdot 95$ \& 12.17 \& 13 \& \& 539 \& 286 \& - 161 <br>
\hline 5450 \& 77 Draconis \& $5 \cdot 9$ \& 7 I 9.059 \& 09.52 \& \& \& -1.1428 \& - 1778 \& + 83 \& +77 $454 \mathrm{I} \cdot 52$ \& 11.40 \& 23 \& 37 \& \& + 120 \& $\begin{array}{r} \\ +\quad 33 \\ \hline\end{array}$ <br>
\hline 5448 \& 3 Piscis Australis \& $5 \cdot 6$ \& $757 \cdot 315$ \& 14.74 \& 2 \& \& $+3.5569$ \& -. 0201 \& + 71 \& -27 57512.59 \& 14.74 \& 2 \& \& 658 \& + 348 \& - 138 <br>

\hline 5452 \& $$
64 \text { Cygni. }
$$ \& 3.4 \& $21 \quad 96 \cdot 315$ \& 53 \& 81 \& \& +2.5520 \& +.0039 \& - 2 \& +29 51 26.63 \& 11.77 \& 117 \& \& +14.726 \& + 246 \& 59 <br>

\hline 5453 \& Piazzi XXI. 51 \& $5 \cdot$ \& $930 \cdot 830$ \& $0{ }^{\circ} \mathrm{C} \cdot 1$ \& ${ }^{2}$ \& 1 \& 1.5293 \& -.0041 \& - 5 \& +5936 58.54 \& 10.03 \& $\stackrel{2}{2}$ \& \& 751 \& 145 \& <br>
\hline \& Lalande 41191 \& $6 \cdot 2$ \& 10.4 .563 \& $07 \cdot 11$ \& 3 \& \& $3 \cdot 3608$ \& .0131 \& \& $\begin{array}{lllll}-17 & 43 & 4.48\end{array}$ \& $07 \cdot 11$ \& \& \& 784 \& 325 \& <br>

\hline 5456 \& 28 Capricorni ..... ${ }^{6}$ Cygni \& | 5.4 |
| :--- |
| 3.8 | \& | 10 |
| :--- |
| II |
| II |
| I | \& 12.50 \& 2 \& \& $3 \cdot 4187$ \& -.0151 \& \& | -21 | 1 | 32.06 |
| :--- | :--- | :--- |
| +37 | 39 | 30.78 | \& 12.50

12.86 \& \& \& 810
850 \& 330 \& + 427 <br>
\hline 5460 \& 65 Cygni . . . . . . . . . $\tau$ \& $3 \cdot 8$ \& II 11.890 \& 12.86 \& 3 \& \& $2 \cdot 3797$ \& + 0051 \& + 133 \& +37 3939.78 \& 12.86 \& 3 \& \& 850 \& 22 \& $+427$ <br>
\hline 4561 \& 8 Equulei. ........ $a$ \& $4^{1 / 1}$ \& 21.1119 .533 \& II•56 \& \& \& $+2.9960$ \& -.0028 \& \& \& 11 \& 56 \& \& +14.858 \& \& <br>
\hline 5465 \& 30 Capricorni \& $5 \cdot 4$ \& 1254.583 \& II.41 \& 3 \& \& $3 \cdot 3680$ \& -.0135 \& + 10 \& -18 $21 \begin{array}{ll}14.90\end{array}$ \& II-41 \& 3 \& \& 14.950 \& 321 \& <br>
\hline 5469 \& 67 Cygni ......... $\sigma$ \& $4 \cdot 3$ \& 1352.813 \& 10.44 \& 6 \& \& $2 \cdot 3546$ \& +.0055 \& \& +39 1 1.77 \& 10.44 \& 6 \& \& 15.007 \& 221 \& <br>
\hline 5471 \& 66 Cygni . . . . . . . v \& 4.4 \& 14.12 .998 \& 10. \& , \& \& $2 \cdot 4641$ \& +.0050 \& \& +34 317 \& 10.00 \& 4 \& \& 026 \& 231 \& 21 <br>
\hline 5480 \& 5 Cephei..........a \& $2 \cdot 6$ \& 1625.860 \& $10 \cdot 73$ \& 3 \& \& 1.4129 \& --0073 \& + 217 \& $\begin{array}{lllll}+62 & 12 & 14.52\end{array}$ \& II. 26 \& 3 \& 13 \& 154 \& 128 \& + 49 <br>
\hline
\end{tabular}

12 Delphini. These stars form the pair $\Sigma 2727$.
${ }_{54}$ Cygni. This star is the close double $0 \Sigma_{413}$, components $5 \cdot 0$ and $6 \cdot 3$.
Piazzi XX. 339. This is the principal star of a close double.

61 Cygni. These stars form the pair $\Sigma 2758$.
Piazzi XXI. 51. This star is the close double $\boldsymbol{\Sigma} 2780$; components, $6 \cdot 2$ and 7.2 65 Cygni. This star is a close double, components 3.8 and 7.5 .


[^10]


| No. in Boss' Oatalogue, 1900. | STAR'S NAME. |  | Mean R.A. 1910.0. |  | $\left\lvert\, \begin{aligned} & \text { No. } 0 \\ & \hline \stackrel{0}{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}\right.$ |  | $\begin{aligned} & \text { Annual } \\ & \text { Precession } \\ & \text { rgio.o. } \end{aligned}$ | Secnlar Variation 1910.0. | Annual Proper Motion | Mean Dec. 1910.0. | Mean Obs. $1900+$ | $\left.\begin{array}{\|c\|} \hline \text { No. of } \\ \hline \stackrel{0}{0} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \hline 1 \end{array} \right\rvert\,$ |  | Annual Precession ig 10.0. | Secular Variation 1910.0. | Annual Proper Motion . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | h m |  |  |  | $s$ | s |  | - , " |  |  |  |  | " |  |
|  | Lalande 45965 | $6 \cdot 5$ | $23 \quad 2421 \cdot 370$ | I I 66 | 3 |  | +3.1081 | -.0053 |  | -94540.84 | 11.66 | 3 |  | +19.804 | + .062 |  |
| 6040 | 70 Pegasi ... | 4.7 | $2436 \cdot 180$ | 10.76 | 5 |  | - 3.0278 | +.006I | $+38$ | +12 I5 50.55 | 10.87 | 8 |  | $807$ | 060 | + 27 |
| 6042 | Mayer 997 | $6 \cdot 4$ | $2452 \cdot 910$ | 13.85 | 2 |  | 3.0904 | -.0027 | + 115 | - 5 1 21.74 | 13.85 | 2 |  | 811 | 060 | - 226 |
| 6046 | Piazzi XXIII. | $4 \cdot 9$ | $2552 \cdot 140$ | 13.82 |  | 2 | $2 \cdot 7546$ | $+.0376$ | + 31 | $+58 \quad 3$ " 9.69 | 13.82 |  | 2 | 824 | 051 | + 13 |
| 6048 | Mayer 1000 | $6 \cdot 5$ | $2652 \cdot 605$ | 14.30 | 2 |  | 3.0879 | -. 0024 | + 114 | - 43445.47 | 14.30 | 2 |  | 837 | 057 | - 179 |
| 6051 | 13 Piscium | $6 \cdot 5$ | 2327 20.510 | 14.90 | 1 |  | $+3.0777$ | - $\cdot 0008$ | - I | - 1350.00 | 14.90 | I |  | +19.843 | . 055 | + 23 |
| 6056 | Bradley 314 | $5 \cdot 6$ | 27 47.325 | 10.82 | 81 | 26 | -0.2900 | -. 6295 | + 970 | +86 4839.87 | $10 \cdot 30$ | 163 | 122 | 848 | -.015 | + 18 |
| 6057 | Ioo Aquarii . . . . . . ${ }^{3}$ | $4 \cdot 8$ | 28 34.110 | $06 \cdot 77$ | 1 |  | $+3.1441$ | -. 0120 | - 5 | -21 24 41•16 | $06 \cdot 77$ | 1 |  | 858 | +.053 | + 17 |
| 6059 | 72 Pegasi . . . . . . . | $5 \cdot 2$ | 29 29.123 | 12.31 | 14 |  | $2 \cdot 9666$ | +.0166 | + 40 | +30 4943.00 | 12.44 | 17 |  | 869 | 049 | - 12 |
| 6060 | 14 Piscium | 6.0 | $2931 \cdot 370$ | $14 \cdot 16$ | 2 |  | 3.0779 | -.0007 | + 7 I . | - 14440.06 | 13.99 | 3 |  | 869 | 051 | 9 |
| 6065 | Mayer 1003 | $6 \cdot 5$ | $23 \quad 30 \quad 53.580$ |  | 5 |  | $+3.0962$ | 041 | 6 | - 75745.57 | 10.10 | 6 |  | -885 | +.049 | + 20 |
| 6071 | 16 Andromedæ | $4^{\circ}$ | $33 \quad 9.243$ |  | 4 |  | $2 \cdot 9109$ | +.0278 | + 149 | $+455814.10$ | $10 \cdot 36$ | 4 |  | 909 | 04 I | $-421$ |
| 6073 | 17 Andromedæ. | $4 \cdot 3$ | $3343 \cdot 075$ | 09.09 | 3 | 1 | $2 \cdot 9310$ | +.0254 | + 24. | $\underline{+} 424^{6}$ II. 97 | 08.74 | 3 | (I) | 914 | 040 | - 3 |
| 6077 | 17 Piscium ....... | $4 \cdot 3$ | $35 \quad 19 \cdot 240$ | $10 \cdot 73$ | 58 |  | 3.0596 | +.0032 | + 248 | + 5818.52 | 10.62 | 39 |  | 930 | 040 | - 439 |
| 6078 | 35 Cephei ....... $\gamma$ | $3 \cdot 4$ | $35 \quad 38 \cdot 652$ | 0.56 | 1 | 3 | $2 \cdot 4523$ | +.0783 | - 180 | $+77 \quad 7 \quad 47.99$ | II• 53 | 16 | 19 | 933 | 030 | + 158 |
| 6080 | 19 Andromedæ ...к | $4 \cdot 3$ | $23 \quad 35 \quad 58 \cdot 200$ |  | ${ }^{1}$ |  | $+2.9382$ | +.0266 | + 73 | +43 50 8.28 | 10.84 | 1 |  | +19.936 | +.037 | - 24 |
| 6084 | I 8 Piscium . . . . . . $\lambda$ | $4 \cdot 6$ | 37 27.240 |  | 6 |  | $3 \cdot 0696$ | + .0013 | - 92 | +1175.16 | II. 89 | 10 |  | 949 | 036 | - 144 |
| 6087 | 105 Aquarii . . . . . $\omega^{2}$ | $4 \cdot 6$ | $38 \quad 3 \cdot 408$ | 11.02 | 4 |  | 3.1068 | - .0076 | 60 | $\begin{array}{llll}-15 & 2 & 33 \cdot 30\end{array}$ | II•76 | 5 |  | 954 | 035 | - 60 |
| 6095 | 106 Aquarii. . . . . . ${ }^{\text {1 }}$ | $5 \cdot 3$ | $3932 \cdot 100$ | 11.19 | 3 |  | 3.1130 | -. 0097 | 20 | -18 $4^{6} 334 \cdot 53$ | II•19 | 3 |  | 966 | 032 | $\bigcirc$ |
| 6ror | 20. Andromedæ ... $\psi$ | $5 \cdot 1$ | $4134 \cdot 160$ | 09.28 | 2 |  | $2 \cdot 9616$ | +.0294 | 12 | +45 55 1 $4 \cdot 36$ | 09. 28 | 2 | (2) | 981 | 026 | 18 |
| 6102 | 19 Piscium | $5 \cdot$ | 23 41 47.552 | 10.82 | 5 |  | $+3.0670$ | +.0024 | - 34 | + 25915.17 | 10.58 | 18 |  | 3 | + 027 | 20 |
|  | Lalande 466 | $7 \cdot 5$ | 43 1.701 | 09.79 | 8 |  | -811 | . 0017 | + 32 | - $4574^{2.77}$ | 09.79 | 8 |  | 991 | 025 | - 37 |
| 6107 | 20 Piscium | $5 \cdot 6$ | 43 18.980 | 13.70 | 1 |  | 3.0780 | -. 0008 | + 63 | - $31543 \cdot 20$ | 13.70 | 1 |  | 993 | 024 | + 6 |
| 6108 | Bradley 3 r | $5 \cdot 0$ | 43 35.940 | 10.77 | ${ }^{2}$ | 4 | $2 \cdot 8440$ | + .0616 | $+\quad 19$ | +67 18 24.49 | 11.57 | 2 | 7 | 995 | 021 | + 2 |
| 6109 | Mayer ioir | $6 \cdot 3$ | $4354 \cdot 984$ | 09.08 | 10 |  | 3.0838 | -.0026 | - I | -6 $524^{8.73}$ | 09.08 | 10 |  | 997 | 023 | - 26 |
| 6110 | Sculptoris . . . . . . $\delta$ | $4 \cdot 6$ | 2344 14.397 |  | 22 |  | +3.1226 | -.0157 | + 80 | -28 $3740 \cdot 77$ | 10.53 | 19 |  | +19.999 | -. 023 | - 101 |
| 6113 | 21 Piscium | $5 \cdot 8$ | $4450 \cdot 960$ |  | 1 |  | 3.0716 | +.0013 | 4 | + 03434.69 | 90 | I |  | $20 \cdot 002$ | . 021 | 26 |
| 6127 | 81 Pegasi. . . . . . . . $\phi$ | $5 \cdot 2$ | 4754.470 | 10.98 | - 10 |  | 3.0487 | + .0112 | 11 | +18 3713.76 | I I•IO | 16 |  | 018 | .015 | 44 |
| 6I32 | 24 Piscium. . . . . . . . | $6 \cdot 1$ | $48 \quad 18 \cdot 222$ | 10.73 | 6 |  | 3.0769 | -.0007 | + 47 | - 33918.23 | 10.54 | 5 |  | 020 | -014 | 45 |
| 6133 | 25 Piscium | $6 \cdot 2$ | $4^{48} \quad 28 \cdot 170$ | 08.3I | 2 |  | 3.0706 | + .0020 | + 8 | + 13524.97 | 10.55 | 4 |  | 020 | -014 | 6 |
| 6134 | Piazzi XXIII. 222 | $6 \cdot 2$ | $234^{8} 41 \cdot 730$ | 10.84 | 1 |  | +3.1028 | - •0128 | + 32 | -24 43 47.28 | 10.84 | I |  | -20.022 | $+\cdot \mathrm{Ol} 4$ | - 1 |
| 6135 | 7 Cassiopeiæ . . . . . $\rho$ | 49 | $49 \quad 52 \cdot 860$ | II.03 | 2 | 3 | $2 \cdot 9817$ | +.0446 | - 6 | +565954.79 | I I. 29 | 2 | 3 | 026 | OII | + 5 |
| 6137 | Mayer 1017 | $6 \cdot 0$ | $50 \quad 10 \cdot 228$ | 14.04 | 4 |  | 3.0729 | +.0011 | - 38 | -023 28.41 | 14.04 | 4 |  | $028$ | OII | - 6 |
| 6138 | Groombridge 4163.. | $6 \cdot 7$ | $5026 \cdot 42 \mathrm{I}$ | 09.85 | 1 | 5 | $2 \cdot 8792$ | +.0918 | - 28 | +73 54 34.37 | $10.89$ | I | 20 | 029 | 009 | 7 |
| 6150 | 84 Pegasi. . . . . . . $\psi$ | $4 \cdot 8$ | $5310 \cdot 255$ | 11.76 | 32 |  | 3.0542 | +.0150 | - 31 | +24 $38 \quad 28.48$ | I I. 82 | 34 |  | 037 | 004 | - 37 |
| 6153 | 27 Piscium. . . . . . . . | $5 \cdot 1$ | $23 \quad 54 \quad 3 \cdot 961$ | $09 \cdot 53$ | 1 I |  | +3.0750 | 06 | - 38 | -4 $3 \quad 18.96$ | 09•30 | 15 |  | 20.039 | +.003 | - 67 |
| 6156 | 28 Piscium . . . . . . $\omega$ | $4^{\circ}$ | $5441 \cdot 334$ | $10 \cdot 08$ | 48 |  | 3.0690 | + .0049 | + IOI | +62154.11 | $10 \cdot 26$ | 40 |  |  | +.002 | - 109 |
| 6169 | 30 Piscium | $5 \cdot 2$ | 5712.815 | $12 \cdot 38$ | , |  | 3.0735 | -:0001 | + 8 | - 3 3I 42.28 | 12.38 | 2 |  | 045 | - 002 | II |
| $6171$ | 29 Piscium | $4 \cdot 7$ | $57 \quad 20 \cdot 667$ | 09.55 | , |  | 3.0743 | -.0017 | + 27 | -630 5I.04 | 09.89 | 10 |  | 045 | -003 | 34 |
| 6179 | 2 Ceti | $4 \cdot 6$ | $597 \cdot 831$ | 11.62 | 60 |  | 3.0741 | -.0078 | + 13 | -17 17012.73 | I I 132 | 35 |  | 046 | 007 | 8 |

${ }^{72}$ Pegasi. This star is the close binary $\beta$ 720, components 6.0 and $6 \cdot 0$.

## GREENWICH CATALOGUE OF STARS FOR $1910 \cdot 0$

## PART II.

## CATALOGUE OF STARS IN THE ZONE $+24^{\circ} .0^{\prime}$ тo $+32^{\circ} .0^{\prime}$

OBSERVED AT THE ROYAL OBSERVATORY, GREENWICH 1906-1914

AND REDUCED WITHOUT PROPER MOTIONS TO THE EPOCH $1910^{\circ} 0$

## INTRODUCTION.

## 1. Right Ascensions and Declinations.

The results contained in the following catalogue are derived from observations made with the Transit-Circle in the years 1906 to 1914 . The catalogue was undertaken to provide reference stars for the Oxford Zones of the Astrographic Catalogue. All stars of magnitude $9^{\mathrm{m} .0} 0$ and brighter on the scale of the catalogues of the Astronomische Gesellschaft were observed. About 120 fainter stars principally at $4^{\mathrm{h}}$ and $11^{\mathrm{h}}$ to $13^{\mathrm{h}}$ were added later to provide sufficient reference stars in regions where the number to $9^{\mathrm{m}} .0$ was not enough.

With few exceptions each star was observed five times. The separate observations made in the years 1906 to 1909 are printed in the Greenwich volumes for those years. In 1910 this practice was discontinued. A complete ledger of all the observations has been formed in manuscript, of which a specimen is given for the first four stars, but it has not been considered necessary to print the ledger. It will be noticed that corrections to R.A. for magnitude equation, and to declination for $\mathrm{R}-\mathrm{D}$ discordance are applied in the ledger.

Specimen of Ledger of 1910 Catalogue.

| . Fraction of Year $1900+$ | Month and Day. | $\begin{aligned} & \text { 4. } \\ & \text { b } \\ & 0 \\ & 0 \\ & \hline 0 \end{aligned}$ | $\begin{gathered} \text { R.A. } \\ \text { I910.0. } \end{gathered}$ | Corr. for Magnitude Equation. | Dec. 1910.0. | Fraction of Year $1900+$ | Month and <br> Day. | ¢ d 0. O- | $\begin{aligned} & \text { R.A. } \\ & \text { ig 10.0. } \end{aligned}$ | Corr. for Magnitude Equation. | Dec. 1910.0. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | B.D. $28^{\circ} 1697$ (8m.9) |  |  |  |  | B.D. $23^{\circ} 4^{852}\left(9^{\mathrm{m}} \cdot \mathrm{o}\right)$ |  |  |  |  |  |
|  | Dec. 1 INov. I 5Dec. 5Dec. 99Sept. 17 |  | $\mathrm{o}_{\mathrm{s}}^{\mathrm{h}} \mathrm{om}^{\mathrm{m}}$ | s | $29^{\circ}{ }_{\prime \prime} 3^{\prime}$ |  |  |  | $\mathrm{ol}^{\mathrm{h}} \mathrm{O}_{\mathrm{s}}$ | s | $24^{\circ}{ }_{\prime \prime} \mathrm{I}^{\prime}$ |
| $7 \cdot 9$ |  | JS | 0.86 | --.06 | 17.65 | 10.9 | Nov. 16 | W | $9 \cdot 31$ | - 10 | $2 \cdot 70$ |
| II $\cdot 9$ |  | W | I.OI | -.09 | 17.84 | I 1.8 | Oct. 30 | W | -31 | -.10 | $3 \cdot 34$ |
| II.9 |  | W | I•II | -.09 | 16.61 | II $\cdot 8$ | Nov. 6 | RC | $\cdot 48$ | -.10 | 2.66 |
| II•9 |  | GB | 0.82 | -. 02 | 16.84 | 12.9 | Nov. 9 | W | $\cdot 38$ | - 10 | 2.04 |
| 13.7 |  | W | I. 05 | -.09 | 17.27 | 12.9 | Dec. 16 | HA | -47 | - 10 | $3 \cdot 5 \mathrm{I}$ |
| II 5 |  |  | 0.97 -.07 | -. 07 | 17.24 -.27 | I2.I |  |  | $9 \cdot 39$ $-\quad 10$ | -.10 | 2.85 -.32 |
|  |  |  | 0.90 |  | 16.97 |  |  |  | $9 \cdot 29$ |  | 2.53 |

Specimen of Ledger of 1910 Catalogue-continued.

| Fraction of Year 1900+ | Month and Day. |  | R.A. I910.0. | Corr. for Magnitude Equa. tion. | Dec. 1910.0 . | Frac- <br> tion of Year 1900+ | Month and Day. |  | R.A. $1910^{\circ} 0$. | Corr. for Magnitude Equation. | Dec. $1910^{\circ} 0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | . 2 | 05718 |  |  |  |  | . 25 | $06816^{\text {m }}$ |  |  |
|  |  |  | $\mathrm{o}_{\mathrm{s}}^{\mathrm{h}} \mathrm{o}^{\mathrm{m}}$ |  | $29^{\circ}{ }_{\prime \prime} 35^{\prime}$ |  |  |  | $\mathrm{o}^{\text {h }} \mathrm{o}^{\mathrm{m}}$ | 8 | ${ }^{2} 6^{\circ} 8^{\prime}$ |
|  | Oct. 7 | W | 14.08 | -.06 | $8 \cdot 75$ | $7 \cdot 6$ | Aug. 27 | GC | 17.99 | -. 02 | 53.00 |
| $8 \cdot 7$ | Sept. 14 | SD | - 5 | -. 04 | $8 \cdot 01$ | $8 \cdot 9$ | Nov. 19 | SD | $\cdot 93$ | -. 02 | 54.06 |
| 10.9 | Nov. 25 | S | - 23 | $\div .06$ | 7.57- | $8 \cdot 9$ | Dec. 12 | GC | $\cdot 96$ | -. 02 | $52 \cdot 82$ |
| II.8 | Oct. 17 | RC | 10 | -.06 | $9 \cdot 59$ | 11.9 | Dec. 6 | WD | 18.00 | -. 05 | 54.02 |
| 12.8 | Oct. 8 | HA | -15 | -.06 | $8 \cdot 77$ | 12.8 | Oct. 7 | RC | $17 \cdot 93$ | $-.03$ | 53.82 |
| $10 \cdot 4$ |  |  | 14.14 -.05 | -.05 | 8.54 -.27 | 10.0 |  |  | 17.96 -.03 | -.03 | 53.74 -.30 |
|  |  |  | 14.09 |  | $8 \cdot 27$ |  |  |  | 17.93 |  | 53.44 |

The observations are reduced to the Epoch $1910 \cdot 0$ by the application of Newcomb's Precession, but without proper motion. The details of the reduction as well as the conditions of observation, are similar to those of the fundamental stars in Part I. of this volume. The only feature in the reductions which requires special notice is that of the correction for magnitude equation.

## Correction for Magnitude Equation.

In dealing with the correction for magnitude equation, and with the discussion of the star places on $\mathrm{pp} . \mathrm{Bv}$ and Bvi , it is to be clearly understood that the values of magnitude are those given in the Gesellschaft Catalogues, and not the magnitudes given in the catalogue itself, which were adopted afterwards from later material given by Prof. Pickering in connection with the spectral types.

The determination of the correction for magnitude equation was effected by means of a comparison with the Bonn Catalogue for 1900, published by Prof. Küstner in 1908. The Bonn Catalogue contains stars of all magnitudes between the equator and $51^{\circ}$ North declination observed with special attention to freeing the right ascensions from the effect of magnitude equation. To test the freedom of the right ascensions of Küstner's Catalogue from magnitude equation, a number of the stars were reobserved with the Altazimuth used as a Transit-Circle
after the introduction of a travelling-wire micrometer. Comparison with these observations gave the following results-

| Magnitude. |  | Difference. |
| :---: | :---: | :---: | Number of Stars.

Between the limits of magnitude $5^{\mathrm{m} \cdot 0} \cdot 9^{\mathrm{m} \cdot 0}$, which comprises most of the stars of this catalogue, the results obtained with the travelling micrometer are seen to be in very close agreement with Küstner's Catalogue, and thus a confirmation is obtained of its freedom from magnitude equation.

The Bonn positions were brought up to $1910 \cdot 0$ with the precessions given in the catalogue, proper motions being applied wherever they amounted to ${ }^{\mathrm{s} .01}$ (the mean interval between the Greenwich and Bonn Catalogues is about twelve years). The observations made with the Transit-Circle were compared with these positions, and the magnitude equation determined for each observer. No less than twenty observers participated in the observations, though only seven or eight took a substantial share in them. The observers are :-

| Mr Acton | - HA | Mr Davies | - HD | Mr Percival |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bartle | - GB | , Eddington | - SE | ,, Rotherham |  |
| , Chapman | - SC | Evans | - JE | ," Shepperd |  |
| , Cody | - GC | Evans | - BE | ,, Storey | JS |
| Cullen | - RC | , Green | - G | , White | PW |
| Daniels - | - SD | ", James | - J | ,, Witchell | - W |
| Davies | - WD | Jeffries - | - FJ |  |  |

The four observers W, RC, HA, and WD made observations extending from 1906 to 1914. A separate comparison of their observations with Küstner's Catalogue was made for the two periods 1906-11 and 1912-14.

Though considerable differences are shown in some instances between the results for the two periods it was considered best to adopt in all cases the mean results for each observer for the whole period.

The results are shown in the following table :-

## * Magnitude Equations for the periods 1906-11 and 1912-14

(Unit s.001. Number of observations indicated by subscript figures.)

| Observer. W | Period. 1906-1I | $\begin{aligned} & 5^{\mathrm{m} \cdot 0} \cdot 5^{\circ} 9 \\ & -2715 \end{aligned}$ | $\begin{array}{r} 6^{\mathrm{m} \cdot 0-6^{\mathrm{m}} \cdot 9 .} \\ -1529 \end{array}$ | $\begin{array}{r} 7^{\mathrm{m} \cdot 0} \cdot-7 \cdot \mathrm{~m}^{\mathrm{m}} 9 \\ -35_{64} \end{array}$ | $\begin{gathered} 8^{\mathrm{m} \cdot 0-8^{\mathrm{m}} \cdot 4} \\ -66_{104} \end{gathered}$ | $\begin{aligned} & 8^{\mathrm{m} \cdot 5-8^{\mathrm{m}} \cdot 9} \\ & -7^{2} 215 \end{aligned}$ | $\begin{gathered} 9^{\mathrm{m} \cdot 0-} \\ -95187 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W | 1912-I4 | $-40_{11}$ | $-31_{8}$ | $-66_{31}$ | $-6958$ | $-\mathrm{IO}_{121}$ | - I 34139 |
|  | 1906-14 | -33 | -19 | -45 | -67 | $-82$ | - 112 |
| RC | 1906-1 1 | $-1414$ | $-+318$ | $-1752$ | - 44100 | - 37138 | $-70_{133}$ |
|  | 1912-14 | $-21_{8}$ | $-2815$ | $-5237$ | $-10257$ | $-103111$ | - 127147 |
|  | 1906-14 | $-16$ | $-36$ | -32 | - 65 | - 66 | -100 |
| HA | 1906-11 | $-2529$ | $-3463$ | $-+^{2} 80$ | - 5579 | - 7455 | $-88_{19}$ |
|  | 1912-14 | $-3 \mathrm{O}_{12}$ | $-40_{12}$ | $-5632$ | -6345 | - 73129 | $-104106$ |
|  | 1906-14 | -27 | -35 | $-46$ | - 58 | $-73$ | -102 |
| WD | 1906-11 | $-4{ }^{16}$ | $-50_{24}$ | -4321 | - 4920 | $-26_{36}$ | $-2541$ |
|  | 1912-14 | $-1913$ | $-3616$ | $-7534$ | - 6637 | $-88{ }_{68}$ | - 93i2 |
|  | 1906-14 | -31 | $-44$ | $-63$ | -60 | $-67$ | -68 |

After the magnitude equations had been determined for the different observers it was found that they could be conveniently classified into four groups. These are shown in the following table, where the results are given for fourteen observers ; those for the remaining six, who had made comparatively few observations, are not given.

Magnitude Equation of the Different Observers.
(Unit $5 \cdot 001$. Number of observations indicated by subscript figures.)

| Group | Obs. | $5^{\mathrm{m} \cdot 5 .}$ | $6^{\mathrm{m} .5}$. | $7^{\mathrm{m} \cdot 5}$ | $\mathrm{g}^{\mathrm{m}} .2$. | $8^{\mathrm{m} .7}$. | $9^{\text {m. }} \mathrm{I}$. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (E) | $-3 \mathrm{I}_{20}$ | $-4 \mathrm{I}_{24}$ | $-50_{53}$ | $-41_{62}$ | $-56_{69}$ | $-\epsilon_{321}$ |
|  | P | $-22_{5}$ | $-6{ }_{5} 6$ | $-8729$ | $-7930$ | $-8723$ | $-90{ }_{6}$ |
|  | HD | $-70_{2}$ | $-689$ | $-83_{15}$ | $-8825$ | $-93{ }_{31}$ | - $8 \mathrm{O}_{39}$ |
|  | WD | $-3 \mathrm{I}_{29}$ | $-44_{40}$ | $-63_{55}$ | $-60_{57}$ | $-67104$ | $-68{ }_{113}$ |
|  | Mean | -3I | -47 | -66 | $-61$ | -69 | $-71$ |
| Group II. | JS | $-\mathrm{I}_{12}$ | $-2 \mathrm{O}_{20}$ | $-25_{27}$ | $-1734$ | $-50_{33}$ | $-70_{14}$ |
|  | GC | $+8_{13}$ | $-18_{32}$ | $-1943$ | $-6910$ | $-66_{14}$ | $-80_{1}$ |
|  | PW | $-173$ | $-29_{10}$ | $-3512$ | $-62_{5}$ | $-56_{15}$ | $-569$ |
|  | SD | $-33_{17}$ | $-2718$ | $-32_{32}$ | $-3539$ | $-40_{33}$ | $-8 \mathrm{O}_{16}$ |
|  | Mean | -12 | $-22$ | -26 | -33 | -50 | -70 |
| Group III. | W | $-33_{26}$ | $-1937$ | -4595 | $-67_{162}$ | $-82_{336}$ | $-112328$ |
|  | RC | $-16_{22}$ | $-36_{33}$ | $-3280$ | $-65_{157}$ | $-66_{249}$ | $-100_{280}$ |
|  | HA | $-2741$ | -3575 | $-46_{112}$ | $-58_{124}$ | $-73_{184}$ | $-\mathrm{IO}^{125}$ |
|  | Mean | -25 | $-31$ | $-41$ | $-63$ | $-76$ | $-106$ |
| Group IV. | GB | $+\mathrm{IO}_{14}$ | $-24_{10}$ | $-4722$ | $-11_{35}$ | $-26_{47}$ | - 5727 |
|  | BE | $-6_{18}$ | $-32_{16}$ | $-20_{52}$ | $-18{ }_{73}$ | $-26_{90}$ | - 3253 |
|  | FJ | $-512$ | $-16_{11}$ | $-10_{15}$ | $\mathrm{O}_{25}$ | $-2460$ | - 767 |
|  | Mean | $\bigcirc$ | $-24$ | -25 | - 12 | -25 | - 24 |

* It phould be noted that the magnitudes employed here are those of the A. G. Catalogues, and not those printed in this volume.

In this manner corrections for magnitude equation of all the observers have been determined, and are embodied in the following table :-

| Magnitude. | Group I. $\begin{gathered} \mathrm{E} ; \\ \mathrm{WD} ; \mathrm{P} ; \\ \mathrm{HD} . \end{gathered}$ | Group II. <br> JS; PW; <br> SD; G; <br> GC; C. | Group III. <br> W; S; <br> RC; R; <br> HA; SE. | Group IV. $\begin{aligned} & \mathrm{BE} ; \mathrm{GB} \text {; } \\ & \text { FJ ; J. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| m m | s | s | s | s |
| $5 \cdot 0-5 \cdot 3$ | -. 02 | -. 01 | -. 02 | -. 01 |
| $5 \cdot 4-5 \cdot 8$ | -. 03 | -. 01 | -. 03 | -. 01 |
| $5 \cdot 9-6 \cdot 0$ | -. 04 | -.01 | -. 03 | -. 01 |
| $6 \cdot 1-6 \cdot 3$ | -. 04 | -. 02 | -. 03 | -. 02 |
| $6 \cdot 4-7 \cdot 0$ | -. 05 | -. 02 | -. 03 | -. 02 |
| $7 \cdot 1-7 \cdot 6$ | -.06 | -. 02 | -. 04 | -. 02 |
| $7 \cdot 7-8.0$ | -. 06 | -. 03 | -. 05 | -. 02 |
| $8 \cdot \mathrm{I}-8 \cdot 3$ | -. 07 | -. 03 | -.06 | -. 02 |
| $8 \cdot 4-8.6$ | -. 07 | -. 04 | -. 07 | -. 02 |
| $8 \cdot 7-8.8$ | -. 07 | -. 05 | -.08 | -. 02 |
| $8 \cdot 9$ | -. 07 | -. 06 | -. 09 | -. 02 |
| 9.0 | -. 07 | -.06 | - 10 | -.02 |
| $9 \cdot 1$ | -. 08 | -. 07 | - II | -. 02 |
| $9 \cdot 2$ | -. 08 | -. 07 | -. 12 | -. 02 |
| $9 \cdot 3$ | -.09 | -. 07 | -. 14 | -.02 |
| $9 \cdot 4$ | -. 10 |  | -. 16 |  |
| $9 \cdot 5$ | -. 12 |  | $-18$ |  |

Comparisons with Küstner's Catalogue and with Boss' Preliminary General Catalogue.
After the proper motions had been determined, a comparison was made with Küstner's Catalogue, which is summarised in the following table :-

Küstner-Greenwich.

| Limits of R.A. | Right Ascensions. |  |  |  |  | Declinations. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $-6^{\mathrm{m}} \cdot \mathrm{g}$. | $7^{\mathrm{m} \cdot 0-7^{\mathrm{m}} \cdot 9 .}$ | $8^{\mathrm{m}} \cdot 0-8^{\mathrm{m}} \cdot 9$. | $9^{\mathrm{m} \cdot \mathrm{o}}$. | All. | $-6^{\mathrm{m} \cdot \dot{9}}$. | $7^{\mathrm{m} \cdot 0} 7^{\mathrm{m}} \cdot 9$. | $8^{\mathrm{m} \cdot 0-8 \mathrm{~mm} .9 .}$ | $9^{\text {m.o. }}$ | All. |
| h h |  | $s$ | s | s | s | " | " | " | " | " |
| --3 | -000 | -.004 | --003 | -.003 | --002 | -.08 | - .06 | - •17 | - 38 | - 17 |
| 3-6 | + 6 | + 6 | + 4 | + 21 | + 8 | - 21 | - 46 | - 33 | - 33 | -. 33 |
| 6-9 | + 1 | + 18 | + 14 | + 11 | + II | -. 08 | - .01 | - 20 | - 30 | --16 |
| 9-12 | + 15 | + 3 | + 7 | 11 | + 4 | +-17 | - 14 | - . 10 | +.05 | -. 04 |
| 12-15 | - 10 | - 4 | - 19 | - 15 | - 14 | --36 | - 32 | - 36 | - 32 | -. 34 |
| 15-18 | - 15 | - 5 | - 4 | - 13 | - 7 | --32 | - 36 | - 40 | - 49 | - 39 |
| 18-21 | - 22 | - 11 | - 15 | - 5 | - 15 | - 39 | - 38 | - 47 | - 34 | - 41 |
| 21-0 | - 2 | - 12 | + 8 | + 18 | + 5 | --39 | - $\cdot 27$ | - 41 | - 49 | - 40 |

An analysis of the hourly means gives

$$
\begin{aligned}
& \text { R.A. } \quad-\text { s.001 } \quad+\mathrm{s.010} \sin \alpha \quad+\mathrm{s} .002 \cos \alpha \\
& \text { Dec. } \quad-" .28 \quad+^{\prime \prime} .12 \sin \alpha \quad-" .06 \cos \alpha
\end{aligned}
$$

The means in declination for the 24 hours arranged according to magnitude give

A comparison with Boss' Preliminary General Catalogue is summarised in the following table :-

Boss-Greenwich.

| Limits of R.A. | R.A. | Dec. | No. of Stars. |
| :---: | :---: | :---: | :---: |
| h h | s | " |  |
| 0-3 | $+.022$ | --44 | 43 |
| 3-6 | + 2 | $-48$ | 46 |
| 6-9 | $+10$ | -31 | 66 |
| 9-12 | + 4 | --45 | 28 |
| 12-15 | - 1 | -. 48 | 34 |
| 15-18 | $\bigcirc$ | - 55 | 48 |
| 18-2I | $-12$ | -.62 | 57 |
| 21 - 0 |  | - 55 | 37 |
| Mean | $+\cdot 003$ | - 49 | .. |

Analysis of the hourly means gives the following result for the systematic difference between this catalogue (zone $+24^{\circ}$ to $+32^{\circ}$ ) and Boss' Preliminary General Catalogue.

$$
\begin{array}{llll}
\text { R.A. } & +8.003 & +8.007 \sin \alpha & +8.001 \cos \alpha \\
\text { Dec. } & -" .49 & +^{\prime \prime} .10 \sin \alpha & -" .02 \cos \alpha
\end{array}
$$

These may be compared with the results obtained by comparison of Clock Stars given in the first part of this volume (pp. A v and A xii),

$$
\begin{array}{llll}
\text { R.A. } & -8.002 & +\mathrm{s} .009 \sin \alpha & -\mathrm{s} .003 \cos \alpha \\
\text { Dec. } & -{ }^{\prime \prime} .40 & +^{\prime \prime} .12 \sin \alpha & +^{\prime \prime} .00 \cos \alpha
\end{array}
$$

Here the comparison is not confined to the restricted zone $24^{\circ}-32^{\circ}$.
The periodic difference in R.A. between the Greenwich Catalogue and those of Küstner and Boss agrees with that found for the Clock Stars, and is considered in the Fundamental Catalogue in Part I. The difference in declination may be compared with that found for the catalogues of 1890 and 1900 which give :-

$$
\begin{array}{llll}
\text { Boss-Greenwich } 1890-{ }^{\prime \prime} \cdot 19 & +" \cdot 05 \sin \alpha+{ }^{\prime \prime} \cdot 03 \cos \alpha . \\
\text { Boss-Greenwich } 1900 & -{ }^{\prime \prime} \cdot 16 & +" \cdot 05 \sin \alpha & +" .04 \cos \alpha .
\end{array}
$$

A comparison with Auwers' Fundamental Catalogue gives for the declinations

$$
\text { Auwers-Greenwich 1910 } \quad+^{\prime \prime} \cdot 08 \sin \alpha \quad-" .05 \cos \alpha .
$$

The differences between these comparisons agree with the difference Boss-Auwers $+" \cdot 04 \sin \alpha+{ }^{\prime \prime} \cdot 05 \cos a$ given in Astronomical Journal No. 615.

## Probable Errors.

The probable error of a single observation calculated by discordances from the mean, taking the first star in each ten minutes of right ascension for the whole 24 hours is

$$
\pm^{\mathrm{s} \cdot 040} \text { in R.A. and } \pm 0^{\prime \prime} .43 \text { in Dec. }
$$

As the catalogue places depend on five observations, the probable error of a catalogue place, obtained from the internal accordance of the observations is

$$
\pm^{\text {s.018 in R.A. and }} \pm 0^{\prime \prime} \cdot 19 \text { in Dec. }
$$

The mean discordance from Küstner's catalogue, when allowance is made for the systematic difference is

$$
\pm^{8.030} \text { in R.A. and } \pm^{\prime \prime} \cdot 39 \text { in Dec. }
$$

giving for the probable error of the difference between the two catalogues

$$
\pm^{\mathrm{s} .025} \text { in R.A. and } \pm^{\prime \prime} \cdot 33 \text { in Dec. }
$$

In the introduction to the Bonn catalogue the probable error of a star's place is found to be $\pm^{\text {s. }} 014$ in R.A. and $\pm^{\prime \prime} \cdot 19$ in Dec. Assuming Küstner's catalogue to be entirely free from quasi-systematic error, the probable error of the Greenwich catalogue is found to be

$$
\pm^{\text {8.0205 in R.A. and } \pm^{\prime \prime} \cdot 27 \text { in Dec. } . ~ . ~}
$$

The probable error of a Greenwich place may thus be taken as

$$
\pm^{\text {s.020 in R.A. and }} \pm^{\prime \prime} \cdot 25 \text { in Dec. }
$$

## 2. Determination of Proper Motions.

SYSTEMATIC CORRECTIONS TO CATALOGUES.
Proper motions were determined by comparison with the catalogues of the Astronomische Gesellschaft supplemented by comparisons with the zone observations of Bessel and Lalande. The mean difference of epoch between the Greenwich observations, and those of the catalogues of the Astronomische Gesellschaft is 33 years; between Greenwich and Bessel's zones 85 years; and between Greenwich and Lalande 110 years. The proper motions were obtained separately from each
of these sources, and means taken, double weight being given to the determination from the A.G. catalogues, except in the cases where the difference of epoch was unduly short.

Systematic corrections were applied to the observations to bring them into accord with Boss' Preliminary General Catalogue.

## greenwich catalogue for 1910.

No corrections were applied to the right ascensions, but a correction of $-0^{\prime \prime} \cdot 40$ was applied to the declinations printed in the volume. This correction to the declinations was obtained by comparison of the fundamental stars with the Preliminary General Catalogue.

AStronomische gesellschaft, 1875.
The three catalogues used are-

| Berlin B | - | Dec. $24^{\circ}-25^{\circ}$ |
| :--- | :--- | :--- |
| Cambridge | - | - |
| Dec. $25^{\circ}-30^{\circ}$ |  |  |
| Leiden | - | - |
| Dec. $30^{\circ}-32^{\circ}$ |  |  |

The right ascensions and declinations given in these catalogues were reduced to Boss' system by application of the corrections given on pp. 304 and 327 of the Preliminary General Catalogue. The corrections for magnitude equation for Cambridge, extend only as far as $9^{\mathrm{m}} \cdot 0$, and were continued for the few stars fainter than this limit as follows:-

$$
\begin{array}{llllll}
9^{\mathrm{m} \cdot \mathrm{o}} & -\mathrm{s} \cdot \mathrm{og} & 9^{\mathrm{m} \cdot 2} & -\mathrm{s} \cdot \mathrm{II} & 9^{\mathrm{m} \cdot 4} & -\mathrm{s} \cdot 15 \\
9^{\mathrm{m} \cdot \mathrm{I}} & -\mathrm{s} \cdot 10 & 9^{\mathrm{m} \cdot 3} & -\mathrm{s} \cdot \mathrm{In}_{3} & 9^{\mathrm{m} \cdot 5} & -\mathrm{s} \cdot 17
\end{array}
$$

In the application of these corrections the magnitudes used are those of the A.G. catalogues, and not those printed in this volume.

BESSEL'S ZONE OBSERVATIONS, 1825.
The positions given in Weisse's catalogue were corrected for the systematic errors given by Struve on pp. 28-40 of the introduction. They were then brought up to 1910 , using the precessions (Struve-Peters) given in the catalogues of the Astronomische Gesellschaft. Outstanding differences were examined and many errors were found in the reductions from Bessel's original zones. Proper motions were then derived from the differences Gr---Bessel, which were compared with the proper motions obtained from the differences Gr-A.G.C. The stars were then
arranged in the separate observing zones of Bessel and the mean differences regarded as giving systematic corrections to the separate zones. Zone 301 is given as a specimen, and as showing the general accordance.

Corrections to Bessel's Zone 301.

$$
\text { 1825, August 19. R.A. } 19^{\mathrm{h}} 32^{\mathrm{m}}-20^{\mathrm{h}} 19^{\mathrm{m}} \quad \text { Dec. }+24^{\circ} \text {. }
$$

| Berlin B. Catalogue. |  |  |  |  |  |  |  |  | Cambridge Catalogue. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { No. in } \\ & \text { W.B. } \end{aligned}$ | $\begin{aligned} & \text { Cor. to P.M. } \\ & \text { R.A. Dec. } \end{aligned}$ |  | $\begin{aligned} & \text { No. in } \\ & \text { W.B. } \end{aligned}$ | Cor. to P.M. R.A. Dec. |  | No. in W.B. | Cor. to P.M. R.A. Dec. |  | No. in W.B. | Cor. to P. M. R.A. Dec. |  |
|  | $\begin{gathered} \mathrm{s} \\ (\cdot 000 \mathrm{I}) \end{gathered}$ | (.001) |  | s $(\cdot 0001)$ | " |  | s $(\cdot 0001)$ | ( ${ }_{\text {" }}$ |  | s $(\cdot \mathrm{OOOI})$ | (") |
| XIX 1044 | -42 | +15 | XIX 1377 | -23 | +54 +49 | XIX202I | -42 | +45 | XIX 1044 | -45 | ( +37 +54 |
| 1061 | +28 | $+4^{2}$ | 1458 | $+27$ | +49 | XX 52 | -29 | + 9 | 1061 | +64 | $+54$ |
| 1347 | -16 | + 5 | 1501 | -26 | -25 | 54 | -18 | -12 | 1347 | + 8 | + 5 |
| 1963 | - 9 | -25 | 1693 | -9 | $-24$ | 66 | $+30$ | $+36$ | 1963 | + 3 | +19 |
| VIX 2.001 | $+17$ | +23 | 1724 | +15 | +10 | 307 | -27 | $+30$ | 1987 | -31 | $-24$ |
| XIX 1090 | -47 | +38 | 1757 | - 5 | +22 | 319 | - II | $+22$ | 2001 | $+33$ | +15 |
| 1108 | $-28$ | -18 | 1771 | - 10 | $+39$ | 331 | -24 | +29 | 2029 | $+3$ | $+47$ |
| 1136 | + 1 | -22 | 1793 | - 6 | +10 | 368 | -29 | +17 | . . |  | . . |
| I 296 | - 14 | +15 | 1795 | -16 | +55 | 444 | -43 | + 9 |  | . |  |
| 1320 | +17 | +42 | 1822 | -28 | $+31$ |  | $+5$ | $-17$ |  |  |  |
| 1370 | + 6 | +58 | 1832 | + 6 | +9 |  | -45 | +29 |  |  |  |
| 1 373 | -50 | + 3 | 1839 | $+30$ | $+7$ |  | . . | . . |  | $\ldots$ |  |

The means of these corrections to proper motion are
-s.0012 and $+^{\text {" }} .017$ from Berlin B, and +s .0005 and $+^{\prime \prime} .022$ from Cambridge.
giving corrections to zone 301 of
as shown in the first line of the following table.
The corrections thus found for the separate zones are given in the following table. In the adopted corrections quantities less than s. 04 in R.A. and $0^{\prime \prime} \cdot 6$ in declination were neglected.

Corrections to the Right Ascensions and Declinations of Bessel's Zones as Reduced by Weisse to the epoch, 1825.

| Zone. | Date. | Limits of R.A. | Dec. | Correction given by Struve. |  | Addi |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | R.A. |  | Dec. |  | Number of Stars. |  |  | Adopted. |  |
|  |  |  |  | R.A. | Dec. | B.or L. | C. | L. | C. | B. | L. | c. | R.A. | Dec. |
|  |  | h m h mi | - | s |  |  | s |  |  |  |  |  |  |  |
| 1 | 1825 Aug. 19 | 19 32-20 19 | +24 | -31 |  | +10 | - 4 | -1.4 | - 1.8 | 35 |  | 7 | +.06 | -1.5 |
| 303 | 21 | 19 26-21 5 | +26 | .. | $4 \cdot 2$ | . 08 | . 12 | $+3.4$ | +2.4 | 12 |  | 147 | - I I | +2.6 |
| 304 | 22 | 20 1-20 26 | +24 | $\cdots$ |  | $+\cdot 03$ | +.01 | -1•2 | $-2 \cdot 3$ | 19 |  | 9 | . 00 | -I.7 |
| 5 | 23 | 19 26-2 I 5 | +28. |  |  |  | -. 07 |  | -0.9 |  |  | 142 | -. 07 | -0.9 |
| 6 | 28 | 19 56-21 35 | $+30$ |  |  | -. 03 | -. 03 | + I .8 | +1.7 |  | 93 | 86 | 00 | + 1.8 |
| 307 | 29 | 20 15-20 $4^{2}$ | +24 |  |  | -. 07 | +.02 | $+2 \cdot 6$ | +2.8 | 19 |  | 8 | - 0 | +2.7 |
| 309 | 30 | 20 59-22 32 | +26 |  | +1.6 | -.06 | -.03 | +1.5 | +0.8 | 19 |  | 124 | -00 | + 1 . 0 |
| 310 | 31 | $20 \quad 0-22 \quad 5$ | +32 |  |  | 16 |  | $+2 \cdot 3$ |  |  | 56 |  | - 16 | +2.3 |
| 5 | pt. 27 | $20 \quad 27-2116$ | +24 |  |  | -14 | -. 07 | +0.6 | 0.0 | 26 |  | 9 | -12 | 0.0 |
| 317 | Oct. 2 | 22 30-22 57 | +26 | $\ldots$ |  | $\cdot 26$ | -. 23 | $+3.8$ | $+2.8$ | 3 |  | 22 | -. 23 | +3.0 |
| 321 | 6 | 22 28-0 4 | +26 |  |  | 12 | -. 07 | + $1 \cdot 9$ | +1.9 | 15 |  | 8 I | -.09 | $+\mathrm{I} \cdot 9$ |
| 323 | 9 | 20 59-22 33 | +24 | $\dagger$ |  | . 09 | - 11 | -1.4 | $-2.7$ | 52 |  | 21 | - 10 | $-2 \cdot 0$ |
| 325 | 13 | 22 29-0 33 | +24 | . |  | 13 | $-17$ |  | * | 63 |  | 20 | -. 15 | * |
| 326 | 22 | 20 56-22 31 | +28 |  |  |  | +.08 |  | $-2.4$ |  |  | 110 | . 8 | $-2.4$ |
| 327 | 29 | $2128-2215$ | +30 |  |  | -.06 | -. 05 | +0.2 | -0.7 |  | 35 | 27 | . 06 | - |
| 329 | Nov. 25 | $\begin{array}{llll}22 & 30-23 & 16\end{array}$ | +28 | $\ldots$ |  |  | - 02 | .. | -0.4 |  | . | 47 | . 00 | -0 |
| 331 | 1826 Jan. 9 | - 31-0 52 | +24 | $\ldots$ |  | 11 |  | +1.5 | .. | 11 |  | . . | +'r | + 1.5 |
| 333 | 19 | 1 $32-3$ | +26 | $\cdots$ |  | . 7 | -. 13 | -0.2 | - I•9 | 12 |  | 70 | -. II | - I.3 |
| 339 | Feb. 5 | $656-757$ | +24 | $\ldots$ |  | -10 | -. 29 | +1•3 | +2.5 | 41 |  | 4 | $\cdot 12$ | +1.4 |
| 341 | 15 | $658-836$ | +26 |  |  | . 04 | -. 02 | +1.2 | + $\mathrm{I} \cdot 2$ | 19 |  | 111 | . 00 | +1.2 |
| 344 | 18 | $7{ }_{7}^{7} 56-93$ | +24 | $\dagger$ |  | +.07 | +.08 | $+2 \cdot 2$ | +0.5 | 22 |  | 4 | +.0 | + $\mathrm{I} \cdot 8$ |
| 345 | r. 2 | 8 38-10 34 | +24 |  |  | +.06 | +.05 | + $\mathrm{I} \cdot 9$ | $+3.0$ | 27 |  | 13 | +.06 | +2.5 |
|  | 3 | 8 25-10 4 | +26 | $\cdots$ |  | . 08 | -. 18 | +I•I | $+0.8$ | 13 |  | 81 | -. 15 | +0.9 |
| 348 | 5 | 5 25 5-7 7 | +27 |  |  | -. 03 | -. 12 | $+3 \cdot 2$ | +4.I | 54 | $\cdots$ | 11 | -.06 | $+3.5$ |
| 349 | 5 | $8 \quad 24$-10 3 | +28 |  |  |  | --2I |  | +0.5 |  | $\cdots$ | 86 | -. 21 | - |
|  | 7 | 7 54-9 0 | +30 |  |  | $\cdots$ | .00 | +0.8 | +0.2 |  | 32 | 40 | 0 | - 0 |
| 351 | 13 | $657-8$ 19 | +28 | +69 |  |  | -. 04 |  | +0 |  |  | 80 | - | 0.0 |
| 352 | 2 I | $7 \quad 2-834$ | +28 |  | $+1.0$ |  | -. 08 |  | +0.7 |  |  | 98 | -.08 | $+0.7$ |
| 353 | 21 | $1024-124$ | +24 |  |  | - 15 | - 26 | $+3.0$ | +3.2 | II |  | 5 | -. 19 | $+3.0$ |
| 354 | 22 | $831-105$ | +32 |  |  | -. 06 | .. | $+2.4$ |  | . | 51 |  | -06 | +2.4 |
| 356 | Apr. 20 | $10 \quad 25-12 \quad 2$ | +30 |  |  | +.03 | O1 | +0.6 | -0.5 |  | 34 | 46 | 00 | $0 \cdot 0$ |
| 363 | May 9 | If 59-12 26 | +24 |  |  | +.02 | -. 02 | +0.4 | -0.6 | 5 |  | 2 | 0 | $0 \cdot 0$ |
| 364 | 29 | 13 53-15 34 | +24 |  | $+3 \cdot 8$ | -. 08 | 23 | -0.8 | -0.5 | 26 |  | 6 | - 12 | -0.7 |
|  | 31 | $14 \begin{array}{ll}14-16 & 3\end{array}$ | +26 |  |  | 16 | -. 17 | $+2 \cdot 3$ | +2.4 | 22 |  | 93 | - 17 | +2.4 |
| 366 | ne 2 | $14+27-1635$ | +28 |  |  |  | $-13$ |  | + I .8 |  |  | 114 | -13 | +1.8 |
|  | 3 | 14 29-16 35 | +30 |  |  | +.03 | +.08 | $+2.5$ | +2.8 |  | 69 | 85 | +-06 | +2.6 |
| 368 | 9 | $1532-1652$ | $+32$ |  |  | +.02 | .- | +1.5 |  |  | 28 | . | -00 | +1.5 |
| 369 | 10 | 15 31-17 36 | +2t |  |  | - 15 | - 15 | +0.8 | $+1 \cdot 0$ | 56 | . | 14 | -. 15 | +0.8 |
| 370 | 11 |  | +32 |  |  | 12 |  | +0.4 | $\cdots$ |  | 59 |  | -12 | 0.0 $+\quad .9$ |
| 373 | 1827 Sept ${ }^{24} 4$ | $1631-18$ 0 | +28 |  | + |  | -. 0 |  | + +9 |  |  | 108 | . 10 | 1.9 $+\quad 0.0$ |
| 374 | 1827 Sept. 17 | $22 \quad 0-0 \quad 4$ | +30 |  | $\dagger$ | 16 | $-.04$ | $+0.2$ | -0.5 |  | 94 | 76 | - 10 | 0.0 +0.0 |
| 376 | 22 | $2147-04$ | +32 |  |  | $-17$ |  | $+0.9$ |  |  | 47 | $\cdots$ | -- 17 | +0.9 0.0 |
|  | Oct. ${ }^{2}$ | 22 59-0 35 | +28 |  |  |  | - 10 |  | -0. |  | . |  | --10 | 0.0 +2.5 |
| 388 | 18 | 23 53-135 | +26 |  |  | -. 03 | - 14 | $+4.0$ | +2.3 | 8 | $\cdots$ | 98 | - 13 | +2.5 |
| 389 | 19 | $2352-032$ | +30 |  |  | -.Ir | -. 17 | $+2 \cdot 5$ | + $1 \cdot 7$ | . | 21 | 17 | $-14$ | +2.1 |

$\mathbf{A} \dagger$ or * denotes a special correction depending either on R.A. or declination to be found on page $\mathbf{B}$ xiv.

Corrections to the Right Ascensions and Declinations of Bessel's Zones-contd.

| Zone. | Date. | Limits of R.A. | Dec. | Correction given by Struve. |  | Additional Corrections to Zones. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | R.A. |  | Dec. |  | Number of Stars. |  |  | Adopted. |  |
|  |  |  |  | R.A. | Dec. | B.or L. | C. | or | C. | B. | L. | C. | R.A. | De |
|  |  | hmin hm |  |  |  |  |  |  |  |  |  |  |  |  |
| 390 | 1827 Oct. 20 | 23 53-1 $4^{8}$ | $+30$ |  | -8 | -. 06 | -. 02 | $+0.4$ | -0.5 |  | 76 | 65 | 0 | -0 |
| 395 | 1828 Feb. 7 | $\begin{array}{ll}3 & 29-534\end{array}$ | +24 |  |  | -. 06 | -.06 | +1.4 | + $\mathrm{I} \cdot 9$ | 69 |  | 8 | -. 06 | $+\mathrm{I} 5$ |
| $396$ | - 8 | 2 58-5 4 | +26 |  |  | -. 28 | --19 | $+43$ | $+2.7$ | 8 |  | 103 | 2 | $+3 \cdot 0$ |
| 397 | 12 | $330-53$ | +28 |  |  |  | -. 09 |  | + $\mathrm{I} \cdot 2$ |  |  | 68 | . 09 | +1.2 |
| 398 | 13 | $\begin{array}{llll}3 & 25-5 & 3\end{array}$ | +30 |  |  | -21 | -. 10 | +1.5 | +0.2 |  | 61 | 44 | -16 | +0.8 |
| 399 | 13 | $\begin{array}{ll}6 & 26-8 \\ 3\end{array}$ | +30 |  |  |  | 18 | +1.7 | 2.0 |  | 60 | 72 | - 19 | $+\mathrm{I} \cdot 9$ |
| 400 | 14 | $\begin{array}{llll}3 & 28-5 & 4\end{array}$ | +32 |  |  | -1 |  | $+3.5$ |  |  | 50 |  | -14 | $+3.5$ |
| 401 | 14 | 6 57-8 33 | +32 |  |  | -. 14 |  | $+3 \cdot 1$ |  |  | 47 |  | - 1 | $+3 \cdot 1$ |
| 405 | Mar. I | $457-7+$ | +26 | $\ldots$ | $-3.7$ | -'11 | -1.2 | +0.7 | +0.6 | 23 |  | 126 | -12 | $+0.6$ |
| 40 | 18 | $9 \quad 0-1035$ | $+30$ |  |  | -. 15 | 22 | $-\mathrm{I} \cdot \mathrm{I}$ | - $1 \cdot 1$ |  | 46 | 65 | -. 18 | -I•I |
| 40 | r. 9 |  | +32 |  |  | -. 25 |  | $-3.2$ |  |  | 76 | . | $\cdot 25$ | $-3.2$ |
| 412 | May 8 | $1153-145$ | +24 |  | 3 | - 11 | 3 | +0.1 | +0.6 | 43 |  | 12 | 09 | 0.0 |
| 413 | 20 | $13 \begin{array}{lllll}13 & 25-15 & 34\end{array}$ | +32 |  |  | -. 06 |  | I•I |  | . | 71 |  | .06 | I-1 |
| 423 | ne 19 | 15 55-18 3 | +26 |  | 1.6 | -19 | -11 | $2 \cdot 5$ | $+2.0$ | 19 |  | 120 | - 1 | $2 \cdot 2$ |
| 424 | 21 | $16 \quad 26-18 \quad 32$ | $+30$ |  |  | -. 05 | . 04 | $+3.0$ | +2.8 |  | 65 | 77 | -. 05 | $2 \cdot 9$ |
| 428 | July 17 |  | +27 |  | +1.8 |  |  | +1.3 | +0.2 | 84 |  | 25 |  | $0 \cdot 8$ |
| 432 | Aug. 17 | 17 57-20 1 | +26 |  |  | -.02 | -.09 | $+2 \cdot 9$ | $+2.4$ | 26 |  | 171 | --0 | $+2.5$ |
| 4 | 18 | 17 57-19 31 | +28 |  |  |  | $+$ |  | $+2.9$ |  |  | 105 | +.II | $+2 \cdot 9$ |
| 435 | t. 7 | $18 \quad 25-20 \quad 6$ | +30 |  |  | 1.03 | +.01 | $+3 \cdot 6$ | $+2 \cdot 9$ |  | 85 | 66 | . 0 | $+3 \cdot 3$ |
| $43^{8}$ | t. 22 | 23 52- 1 32 | +32 |  | 4 | -.09 |  | -0.3 |  |  | 38 |  | -.09 | $0 \cdot 0$ |
| 445 | 26 | - 26-2 26 | +24 |  |  | -. 03 | -. 07 | $+3.6$ | $+3.9$ | 80 |  | 24 | -. 05 | $+3.7$ |
| 44 | Dec. 7 | - 29-2 3 | + |  | $+3.9$ | .. | +-01 |  | -0.2 | $\cdots$ |  | 110 | -00 | 0.0 |
| 462 | 1829 Apr. 27 |  | +26 |  |  | . 04 | -.10 | I.2 | -1 | 20 |  | 88 | . 08 | - 1.0 |
| 464 | May 3 | $120-1427$ | +28 |  | $-3.2$ |  | 03 |  | -0.9 |  |  | 146 | . 00 | $-0.9$ |
| 468 | 11 | $12 \quad 0-1349$ | + |  |  | -. 01 | . 00 | $0 \cdot 4$ | -0.6 |  | 47 | 61 | . 00 | $0 \cdot 0$ |
| 471 | 17 | $133^{29-14} 34$ | +30 |  |  | +.09 | +.02 | 0. 2 | 0.2 |  | 25 | 33 | +.06 | $\bigcirc \cdot$ |
| 477 | 22 2 | $16 \begin{array}{lll}16-18 & 4\end{array}$ | +26 |  | $2 \cdot 6$ |  | . 03 |  |  | 33 |  | 105 | . 00 |  |
| 479 | July 11 | $17{ }^{7} 18-1835$ | +32 |  |  | -. 05 |  | $5 \cdot 4$ |  |  | 49 |  | . 05 | $5 \cdot 4$ |
| 484 | Aug. 24 | 18 20-20 0 | $+32$ |  |  | -. 06 |  |  |  |  | 78 | .. | -. 06 |  |
| 488 | Oct. 23 | $2232-031$ | +24 |  | -6.0 | -. 18 | 13 | $0 \cdot 8$ | +1.4 | 74 |  | 22 | - 15 | +I•I |
| 500 | 1831 Apr. 8 | $954-1131$ | +26 |  |  | 05 | -. 02 | $\cdot 7$ | -1-I | 10 |  | 87 | -00 | $1 \cdot 2$ |
|  | 1 | 9 51-11 36 | + 32 |  |  | -. 06 |  | -1 |  |  | 62 |  | . 06 | - |
|  | - 22 | $11127-13 \quad 2$ | +26 | 24 | +3.5 | +.03 | +.06 | $+1.8$ | $+1.0$ | 18 |  | 3 | . 05 | $+1 \cdot 3$ |
| 507 | 1832 Feb . 1 | $458-636$ | + |  |  |  | -. 09 |  |  |  |  | 86 | . 09 |  |
| 513 | . 9 | 4 59-636 | +30 |  | I | -. 05 | +.02 | - 9 | $+2 \cdot$ |  | 7 | 55 | - 0 | $+2.0$ |
| 517 | 14 | $\begin{array}{llll}5 & 0-7 & 5\end{array}$ | +32 |  |  | . 08 |  | +1•0 |  |  | 62 |  | . 08 | I.0 |
| 520 | 19 | 5.29-7 3 | +28 |  |  |  | $\cdot 00$ |  | - |  |  | 97 | . 0 |  |
| 52 I | 21 | 3 59-5 31 | +24 |  |  | 06 | -. 02 | $+1 \cdot 1$ | +o. | 42 |  | 6 | -0 | +1.0 |
| 523 | 2 ? | $455-7 \quad 2$ | +26 |  |  | $+\cdot 21$ | +.05 | $+1 \cdot 1$ | +0.5 | 1 I |  | 121 | . 08 | 0.6 |
| 525 | 29 | $457-7$ I | +32 |  |  | $+\cdot 02$ |  | -0.5 |  |  | 78 |  | . 00 | . 0 |
| 526 | Apr. II | $958-12 \quad 5$ | +28 |  |  |  | --14 |  | -0.1 |  |  | 108 | - 14 | 0.0 |
| 530 | Dec. 15 | $157-336$ | +24 |  |  | -11 | +.16 | $+\mathrm{I} \cdot 5$ | + 1.5 | 70 |  | 11 | -1 | $+1.5$ |
| 532 | 31 | I $30-256$ | +30 |  |  | -.18 | 02 | $0 \cdot 0$ | $0 \cdot \mathrm{I}$ |  | 67 | 41 | -10 | 0.0 |
| 534 | 1833 Jan. 7 | $125-332$ | +32 |  |  | - 11 |  | -0.1 |  |  | 57 |  | - I 1 | $\bigcirc \cdot 0$ |
| 53 | 17 | $136-335$ | +28 |  |  |  | . 00 |  | +0.4 |  |  | 112 | $\cdot 0$ | $\bigcirc$ |
| 536 | 21 | $20-327$ | +30 |  |  | -00 | +.02 | $+{ }^{-1} 1$ | +0.5 |  | 59 | 41 | -00 | +0.8 |

$\mathbf{A} \dagger$ or * denotes a special correction depending either on R.A. or declination to be found on page $\mathbf{B}$ xiv.

## Introduction.

## Special Corrections to Bessel's Zones as reduced by Weisse to 1825 given by Struve ( $p p$. 38-40 of Introduction to Catalogue).

## Zone 323.

The zone extends from R.A. $20^{\mathrm{h}} 59^{\mathrm{m}}$ to $22^{\mathrm{h}} 33^{\mathrm{m}}$. From $21^{\mathrm{h}} 16^{\mathrm{m}}$ to the end a correction of $-1^{\mathrm{s} .38}$ has been applied to the observed R.A.

## Zone 344.

This zone extends from R.A. $7^{\mathrm{h}} 56^{\mathrm{m}}$ to $9^{\mathrm{h}} 3^{\mathrm{m}}$. From $8^{\mathrm{h}} 30^{\mathrm{m}}$ to $9^{\mathrm{h}} 0^{\mathrm{m}}$ a correction of $+0^{\mathrm{s} \cdot 20}\left(\alpha-8^{\mathrm{h}} \cdot 5\right)$ has been applied to the observed R.A.

## Zone 373.

This zone extends from R.A. $16^{h} 3 \mathrm{I}^{\mathrm{m}}$ to $18^{\mathrm{h}} \mathrm{o}^{\mathrm{m}}$. A correction of $+\mathrm{o}^{\prime \prime} \cdot \mathrm{I}+\mathrm{o}^{\prime \prime} \cdot 5$ $\left(\alpha-16^{\mathrm{h}} \cdot 5\right)$ has been applied to the observed declination.

Zone 374.
This zone extends from R.A. $22^{\mathrm{h}} 0^{\mathrm{m}}$ to $0^{\mathrm{h}} 4^{\mathrm{m}}$. A correction of $+\mathrm{o}^{\prime \prime} \cdot 4$ $\left(24^{\mathrm{h}} \cdot 0-a\right)$ has been applied to the observed declination.

## Zone 395.

This zone extends from R.A. $3^{\mathrm{h}} 29^{\mathrm{m}}$ to $5^{\mathrm{h}} 34^{\mathrm{m}}$. A correction of $+\mathrm{o}^{\prime \prime} \cdot 8-\mathrm{r}^{\prime \prime} \cdot 3$ $\left(\alpha-4^{\mathrm{h} \cdot o}\right.$ ) has been applied to the observed declination from $4^{\mathrm{h}} 0^{\mathrm{m}}$ to the end.

$$
\text { Zone } 468 .
$$

This zone extends from R.A. $12^{\mathrm{h}} 0^{\mathrm{m}}$ to $\mathrm{I} 3^{\mathrm{h}} 49^{\mathrm{m}}$. A correction of $+\mathrm{o}^{\prime \prime} \cdot 2+\mathrm{o}^{\prime \prime} \cdot 9$ $\left(\alpha-13^{\mathrm{h}} \cdot 0\right)$ has been applied to the observed declination.

$$
\text { Zone } 47 \mathrm{I} \text {. }
$$

This zone extends from R.A. $13^{\mathrm{h}} 29^{\mathrm{m}}$ to $14^{\mathrm{h}} 34^{\mathrm{m}}$. A correction of $+\mathrm{o}^{\prime \prime} \cdot \mathrm{I}+\mathrm{o}^{\prime \prime} \cdot 5$ ( $\alpha-14^{\mathrm{h}} \cdot 0$ ) has been applied to the observed declination.

## Zone 513.

This zone extends from R.A. $4^{\mathrm{h}} 59^{\mathrm{m}}$ to $6^{\mathrm{h}} 36^{\mathrm{m}}$. A correction of $+0^{\prime \prime} \cdot 3$ between $5^{\mathrm{h}} \cdot 0^{\mathrm{m}}$ and $6^{\mathrm{h}} \cdot 0^{\mathrm{m}}$ has been applied to the observed declination.

Supplementary Corrections to Bessel's Zones.

| Zone 325. |  | Zone 373. |  | Zone 428. |  | Zone 477. |  | Zone 484. |  | Zone 507. |  | Zone 520. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| h m | " | h m | s | h m | s | - | " | h m | " | h m | " | - | " |
| 2230 | -I.3 | 1630 | +.02 | 1715 | $+32$ | 63 - | +2.5 | 1830 | $+2 \cdot 1$ | 50 | $+2.7$ | 610 | $-0.8$ |
| 230 | $-0.3$ | 17 o | -.06 | 1745 | +.20 | 640 | +1.5 | 1930 | +0.6 | 30 | +1.4 | 620 | -1.7 |
| 2330 | $+0.7$ | 1730 | -.13 | 1815 | $+.07$ | 65 - | +0.6 | 200 | -0.1 | 60 | +0.2 | 630 | $-2.7$ |
| 0 | +1.7 | 180 | $-.21$ | 1845 | -.05 | 6530 | +0.1 | . . | .. | 30 | -0.9 | . |  |
| - 30 | $+2 \cdot 7$ | . |  | I9 15 | -.17 | .. | . | . | .- | . | . | . |  |
| . . | . . |  | . . | I9 45 | -. 29 | . . | . | . | . | . | . | . . |  |

From a direct comparison of 383 stars of Boss' catalogue in these 91 zones it appears that an additional correction of $+^{8.02}$ and $+^{\prime \prime} .35$ is required to systematic corrections given above to reduce Bessel's observations to Boss' system. These, however, have not been applied.

Lalande's catalogue, 1800.
Now that Lalande's catalogue is being discussed in times of military stress, it may not be inappropriate to quote Lalande's description in the Histoire Céleste of the time in which the observations were made: "C'est à l'Ecole militaire que la France a dédommagé l'astronomie par un travail suivi avec courage et avec assiduité. . . . On ne verra pas sans intérêt qu'au milieu des convulsions qui agitaient la France, un travail long et pénible s'exécutait dans le silence des nuits, et préparait des résultats faits pour durer plus longtemps que les institutions politiques pour lesquelles on s'agitait si fort et l'on versait tant de sang."-Histoire Céleste, tome i. p. ii-iii.

An inspection of the stars observed each night showed that about thirty per cent. were contained in Boss' Preliminary General Catalogue, and this seemed to give such an excellent basis for obtaining systematic corrections to each night's observations that all Boss stars observed by Lalande were reduced with Boss' elements to 1800, and compared with Lalande places for each night's observations. The mean of the corrections thus obtained was adopted as the systematic correction to that zone or night's observations. (The places in the Lalande catalogne were corrected when necessary for proper motion.) With these corrections Lalande's catalogue places were then reduced to 1910 with the precession Struve-Peters from the A.G. catalogues, compared with the Greenwich catalogue results, and proper motions were found. On comparing these proper motions with proper motions similarly found for the same stars from the A.G. catalogues, it was found that there was a systematic discordance between proper motions given by the two methods. It is possible that the discordance in R.A. arises in part from a magnitude equation in Lalande.

A difficulty arises in dealing with this catalogue as the reference stars are frequently not observed under the same conditions as the zone stars. For instance, an inspection of the pages of the Histoire Céleste will show that the brighter stars are observed over more wires than the fainter stars, and are often observed outside the range of declination of the night's zone.

The reference in Lalande to the night's observations or a zone, as a page in the Histoire Céleste is troublesome, as frequently there are two zones on the same page
also two observations of the same star on two separate nights on the same page, so that it is necessary to refer to the original entries in the Histoire Céleste to identify the two observations before the proper correction can be applied.

The following table gives the corrections to each Lalande zone, or night's observation, as derived from Boss.

Zone Corrections to Lalande Observations 1800, derived from stars in Boss' Catalogue.


These corrections were applied to Lalande's zones, and proper motions were derived from the differences Gr.-Lal. They were compared with the proper
motions derived from differences Gr.-A.G.C. Corrections to reduce the proper motions viz. Gr.-Lal. to systematic agreement with those deduced Gr.-A.G.C. were thus found-

| Zone | $20-1$ | +8.0022 | + ".013 |
| :---: | ---: | :--- | :--- |
| $"$ | $21-2-3$ | +.0006 | +.001 |
| $"$, | $23-4-5$ | +.0020 | +.010 |
| etc. |  |  |  |

The mean corrections for all the zones were found to be - ${ }^{8.0010}$ and $+" .011$.
This mean was taken out, and corrections applied to the Gr.-Lal. proper motions as shown in the following table:-

Corrections Applied to the Preliminary Proper Motions, Greenwich-Lalande.

| Page of Histoire Celeste. | Cor. to Lalande. |  | $\left\lvert\, \begin{gathered} \text { No. } \\ \text { of } \\ \text { Stars. } \end{gathered}\right.$ | Page of Histoirc Celeste. | Cor. to Lalande. |  | $\begin{gathered} \text { No. } \\ \text { of } \\ \text { Stars. } \end{gathered}$ | Page of Histoire C'eleste. | Cor. to Lalande. |  | $-\begin{gathered} \text { No. } \\ \text { of } \\ \text { Stars } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R.A. | Dec. |  |  | R.A. | Dec. |  |  | R.A. | Dec. |  |
|  | I) |  |  |  |  |  |  |  | ${ }^{8}$ |  |  |
|  | (.0001) | (-001) |  |  | (-0001) | (•001) |  |  | (-0001) | (-001) |  |
| 20-I | +32 | + 2 | 19 | 145-6 | + 14 | -8 | 52 | 299 | -22 | -19 | 27 |
| $2 \mathrm{I}-2-3$ | +16 | -10 | 68 | 146 | +13 | +31 | 14 | 303 | - | -13 | 8 |
| 23-4-5 | $+30$ | - I | 29 | 146-7 | +10 | - 3 | 37 | 307 | $-7$ | - 5 | 18 |
| 25-6-7 | $+17$ | + 2 | 141 | 148 | + 6 | $-3$ | 45 | 309-10 | + 4 | -13 | 16 |
| $\left\lvert\, \begin{gathered} 28-9-30 \\ \left(18^{\mathrm{h}}{ }_{52} \mathrm{~m}_{21} \mathrm{~h}_{4}{ }^{\mathrm{m}}\right) \end{gathered}\right.$ | + 4 | $+18$ | 35 | 150-1 | - | -28 | 27 | 310 | + 11 | - 8 | 15 |
| $\begin{gathered} 28-9-30 \\ \left(23^{\mathrm{h}} 30^{\mathrm{m}}-\right) \end{gathered}$ | + 4 | -24 | 34 | 163-4 | - 5 | + 3 | 34 | 312 | - 6 | -23 | 7 |
| 52-3-4 | $+10$ | $\bigcirc$ | 69 | 165-6 | -48 | + 8 | 53 | 314 | +2I | $-7$ | I2 |
| $6 \mathrm{I}-2$ | $+12$ | +12 | 45 | 167-8 | - 8 | - 5 | 46 | 315-6 | -8 |  | 8 |
| 62-3 | * | +14 | 39 | 169-70 | $-12$ | -13 | 40 | 319 | +13 | $-9$ | 19 |
| 63-4 | +13 | + 5 | 65 | 195-6 | + 3 | + 4 | 11 | 334-5 | -14 | $+10$ | 45 |
| $64-5-6$ | - I | -4 | 64 | 198 | -6 | +16 | 16 | 349-50 | -12 | -22 | 11 |
| 66-7-8 | - 15 | +2I | 7 | $\left\|\begin{array}{c} 198-9-200 \\ \left(22^{\mathrm{h}_{16}} 6^{\mathrm{m}} 23^{\mathrm{h}_{33}}{ }_{3}^{\mathrm{m}}\right) \end{array}\right\|$ | -17 | +18 | 23 | 469 | $+30$ | - 6 | 5 |
| 69-70-1 | +14 | - I | 87 | $\left\|\begin{array}{r} 198-200 \\ \left(\mathrm{I}^{\mathrm{h}} 30^{\mathrm{m}} 3^{\mathrm{h}} 22^{\mathrm{m}}\right) \end{array}\right\|$ | $+2$ | + 5 | 35 | 47 I | -24 | $+3$ | 16 |
| 79 | -12 | +II | 34 | $\left\|\begin{array}{c} 20 \mathrm{I} \\ \left(2^{\mathrm{h}} 20^{\mathrm{m}} 3^{\mathrm{h}} 16^{\mathrm{m}}\right) \end{array}\right\|$ | $-32$ | - 10 | 9 | 473 | - 8 | -17 | 22 |
| 101-2 | -16 | -20 | 14 | 201 | $+21$ | $-13$ | 18 | 475 | $-46$ | $+$ | 15 |
| 104 | + I | + 1 | 19 | 20.4 | -13 | + 3 | 17 | 475 | +25 | + 8 | 8 |
| $119-20$ | - 7 | -13 | 28 | 206-7 | + 8 | - 3 | 21 | 564-5 | +21 | +1I | 5 |
| 123-4-5 | -9 | + 6 | 78 | 21 3-4-5 | -19 | - 11 | 24 | 572-3-4 | + 2 | +10 | 73 |
| 130 | $+8$ | $+7$ | 9 | 221 | $+17$ | -II | 16 | 575 | -29 | $+8$ | 7 |
| 132 | + 4 | -16 | 14 | $238-9$ | + 5 | + I | 32 |  |  |  |  |
| 135-6 | -4 | -14 | 29 | 242-3 | -3 | - 12 | 15 |  |  |  |  |
| 138 -9 | - 5 | +15 | 26 | 243-4 | +19 | $-2$ | 21 | * Zone 62-3 | A. Corre | ction +8 | . 0027 |
| $140-1$ | + 2 | $-7$ | 33 | 260 | - 15 | -28 | 23 | $+^{8.0030}$ | --N.P. |  |  |
| 143-4 | +II | +II | 71 | 286 | -7 | -25 | 7 |  |  |  |  |

No corrections were applied for quantities less than ${ }^{8.0005}$ and ".00\%.

As the corrections deduced in this way to Lalande's Zones may be of value in other researches, they are given in the following table, though they were not used in this form in the present investigation.

Corrections to Lalande's Zones, 1800.

| Page of Histoire Celeste. | Date. | Limits of R.A. | Correction. |  | Page of Histoire Celeste. | Date. | Limits of R.A. | Correction. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | R.A. | Dec. |  |  |  | R.A. | Dec. |
|  |  | h m h m | 8 | " |  |  | h m h m | $s$ | " |
| 20-1 | 1793 Aug. 13 | 18 19-22 52 | -. 32 | - $\mathrm{I} \cdot 8$ | $198$ | 1795 Nov. 9 | $1{ }^{1}$ 23-2 55 | +.07 | - I .8 |
| 21-2-3 |  | $18 \quad 21-2222$ | +.03 | $-1 \cdot 4$ | 198-9-200 | 10 | $22 \begin{array}{llll}1 & 16-23 & 33\end{array}$ | + 3 I | - 2.8 |
| 23-4-5 | 20 | 18 12-2 21 | - 27 | - $\mathrm{I} \cdot 2$ | ," | 10 | $130-322$ | +.09 | - $1 \cdot 3$ |
| 25-6-7 | 2 I | $1856-130$ | -.01 | $-2 \cdot 2$ | 201 | 15 | 2 20-3 16 | +.56 | - I•3 |
| 28-9-30 | 24 | $18 \quad 52-2145$ | +.02 | -3.7 | 201 | 21 | 2 I 46-22 13 | - 13 | $-0.6$ |
|  | 24 | 23 30-End | +.02 | +1.0 | 204 | Dec. 23 | 3 44-5 16 | +.09 | $-0.3$ |
| 52-3-4 | 1794 Mar. 14 | 5 54-11 2 | $-12$ | +0.4 | 206-7 | r795 Dec. 30 | 6 29-7 32 | -. 39 | +2.1 |
| 6r-2 | Apr. 21 | $1031-145$ | -.18 | -0.3 | $213-4-5$ | r796 Mar. 7 | 6 40-9 34 | +.22 | +0.7 |
| 62-3 | 22 | $10 \quad 4^{-13} \quad 1$ | * | -2.9 | 21 | 24 | $733-931$ | -I.28 | +1.3 |
| 63-4 | 23 | 10 Io-13 3 | -. 08 | $-2 \cdot 3$ | 238-9 | July 20 | 18 3-21 4 | +.13 | -2.9 |
| 64-5-6 | 25 | 10 14-16 0 | +•10 | - $1 \cdot 0$ | 242-3 | Aug. 23 | 20 20-22 0 | +.09 | $+0.7$ |
| 66-7-8 | 26 | $1044^{-15} 14$ | $+34$ | $-3 \cdot 4$ | 243-4 | Sept. 13 | 20 58-22 33 | -.05 | +0.5 |
| 69-70-1 | 30 | $12 \begin{array}{llll}12 & 2-17 & 18\end{array}$ | -. 02 | - $1 \cdot 2$ | 260 | 1797 Feb. 21 | $5 \quad 1-63$ | +.16 | $+3.2$ |
| 79 | June I I | 15 21-17 1 | +.13 | -I.2 | 286 | Mar. 22 | $8 \quad 0-830$ | +.18 | +1.4 |
| 101-2 | July 21 | $18 \quad 4-1932$ | +.23 | -0.9 | 299 | July 25 | $1656-18$ o | +.29 | 0.0 |
| 104 | Aug. 10 | 18 10-19 4 | +•15 | -4.4 | 303 | Sept. 22 | $2233-0 \quad 1$ | +-16 | -1.7 |
| 11990 | Nov. 18 | 22 18-23 44 | +.08 | -0.6 | 307 | Nov. 13 | 23 34- 1 52 | +•18 | -0.5 |
| 123-4-5 | 29 | 22 45-2 45 | +•10 | $-2.5$ | 309-10 | Dec. 19 | $540-612$ | +.31 | +1.5 |
| $130^{\circ}$ | Dec. 7 | 22 31-22 45 | +.25 | -2.9 | 310 | 30 | $246-325$ | +.05 | $-0.3$ |
| 132 | 7 | $239-429$ | +.23 | $-0.9$ | 312 | 1798 Jan. 23 | $3 \mathrm{l}_{3} 9-4 \mathrm{l} 3$ | +•14 | +2.6 |
| 1 35-6 | 19 | $245-513$ | $+\cdot 18$ | -0.4 | 314 | Feb. I | $344-444$ | -. 24 | +0.9 |
| 139 | 1795 Jan. I | $37-5 \mathrm{r}$ ¢ | +.05 | - $\mathrm{I} \cdot 7$ | 3 I 5 -6 |  | $530-645$ | +.08 | -0.9 |
| $140-1$ | 10 | $440-632$ | -.03 | +0.4 | 319 | 28 | $721-941$ | -.15 | +I•I |
| 1 43-4 | Feb. 16 | $5 \quad 5-824$ | -.12 | $-2 \cdot 1$ | 334-5 | Apr. 23 | $12 \begin{array}{lllll}12 & 57-15 & 34\end{array}$ | +.30 | -1.6 |
| 145-6 |  | 5 1-7 7 \% 58 | $.00$ | +1.0 | 349-50 | Oct. 22 | - $0-157$ | -.05 | +2.5 |
| 146 | Mar. 20 | 8 4-8 31 | $+.05$ | $-4 \cdot 1$ | 469 | 1799 Mar. 22 | $\begin{array}{llllll}15 & 18-17 & 14\end{array}$ | $-.03$ | -1.0 |
| $146-7$ | $3^{30}$ | $887-10 \quad 4$ | $-.0 .4$ | 0.0 | 471 | $\text { May } 28$ | 13 2-13 46 | $+\cdot 47$ | +1.5 |
| 148 | Apr. 1 | $8 \quad 24$-10 15 | -. I I | $-0.5$ | 473 | June 6 | $17.12-18 \quad 20$ | +.22 | -0.6 |
| $150-1$ | 14 | 9 41-10 46 | . 00 | $+5 \cdot 2$ | 475 | 16 | $17^{\circ} 0-18$ I | +.39 | - I.9 |
| 163-4 | May 23 | $13388-16{ }^{1} 1$ | +.29 | $-2.2$ | 475 |  | $17 \quad 0-1730$ | +.29 | - $2 \cdot 2$ |
| 165-6 | 26 | $13 \quad 32-16 \quad 7$ | $+\cdot 55$ | $-2 \cdot 2$ | 564-5 | $1800 \text { May I }$ | I I 58 - 133 |  | $-3.2$ |
| 167-8 | $\text { June } 3$ | $16 \quad 4-18 \quad 7$ | $+13$ | -0.7 | $572-3-4$ | Nov. 13 | $2330-221$ | $+\cdot 18$ | $-2 \cdot 3$ |
| 169-70 | $\text { July } 2$ | $16 \quad 10-1820$ | +•13 | $-0.2$ | $575$ | 1801 Jan. 15 | $335-437$ | + $\cdot 54$ | $-2 \cdot 2$ |
| 195-6 | Oct. 6 | $3 \quad 5-6 \quad 2$ | +.02 | -2.5 |  |  |  |  |  |

* Zone 62-3. Special correction in R.A - 8.12-*.35 (59.0-N.P.D.).


## FURTHER CORRECTIONS TO THE PROPER MOTIONS.

After the corrections to the various catalogues given in the preceding pages had been applied, proper motions were derived by giving a weight of 2 to the deter-

[^11]minations Gr.-A.G.C., and 1 to the determinations Gr.-Bessel, and Gr.-Lalande. The proper motions were then discussed with reference to Solar Motion and Precession in the Monthly Notices of the Royal Astronomical Society, lxxvii. pp. 8-11, and as a result of this discussion some further corrections to the proper motions were derived.

Analysis of the proper motions (omitting nine stars of very large proper motion) gave

| Mag. | Right Ascensions. |  |  | Declinations. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| m m | " | " | " | " | " | " |
| $6 \cdot 0-7 \cdot 8$ | -. 22 | $+\cdot 03 \sin \alpha$ | $+2.40 \cos a$ | $-2.13$ | $-\mathrm{I} .09 \sin \alpha$ | $+\cdot 48 \cos \alpha$ |
| 7.9-8.5 | -.44 | + 33 | +1.49 | -1.41 | -.75 | +65 |
| 8.6-8.9 | -. 57 | $+\cdot 30$ | +1.32 | -1.08 | -.86 | +.49 |
| $9 \cdot 0-$ | -. 86 | + 13 | +ror | -.62 | -. 75 | + 49 |

The absolute term in the right ascensions was considered as arising mainly from uncorrected magnitude equation. It implies corrections of s.006, s.011, s. 015 and ${ }^{\mathrm{s}} .022$ to the differences between the adopted magnitude equations of Greenwich, and the A.G. catalogues. All the proper motions in right ascension were accordingly corrected as follows :-

| Mag. | Correction. | Mag. | Correction. |
| :---: | :---: | :---: | :---: |
| m m | s | m m | s |
| 7.0-7.4 | +.0001 | $8 \cdot 7-8.8$ | +.0005 |
| 7.5-7.9 | +.0002 | 8.9 | +.0006 |
| $8 \cdot 0-8 \cdot 4$ | +.0003 | 9.0 | +.0007 |
| 8.5-8.6 | +.0004 |  |  |

The small value of the constant term in the declinations for the last group of stars suggested the possibility of observational differences between the declinations of the bright and faint stars. Auwers (Tafeln zur Reduction von Sterncatalogen auf das System des Fundamental Catalogs des Berliner Jahrbuchs, 1904) gives the following table of corrections to the declinations of the Berlin B, Cambridge, and Leiden catalogues :-

|  | $6 \mathrm{~m} \cdot 0$ | $6 \mathrm{~m} \cdot 5$ | $7{ }^{\text {m.o }}$ | $7{ }^{\text {m. }} 5$ | 8 m .0 | $8 \mathrm{~m} \cdot 5$ | $9^{\text {m.o }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Berlin B | $+^{\prime \prime} \cdot 29$ | $+^{\prime \prime} \cdot 28$ | $+^{\prime \prime} \cdot 29$ | $+^{\prime \prime} \cdot 29$ | +' ${ }^{\prime \prime} 30$ | $+^{\prime \prime} \cdot 33$ | $+^{\prime \prime} \cdot 37$ |
| Cambridge | + 36 | + 38 | + ${ }^{\prime \prime}$ | + $\cdot 44$ | + 49 | $+\cdot 61$ | + 73 |
| Leiden | + -19 | $+\cdot{ }^{17}$ | $+\cdot 14$ | + $\mathrm{I}^{2}$ | + 09 | $+\cdot 10$ | + $\cdot 10$ |

These corrections indicate a magnitude correction in the Cambridge declinations, and a very small one in the opposite direction in those of Leiden. The existence of magnitude equation in the Cambridge observations is probably to be
accounted for by the use of a pair of horizontal wires $11^{\prime \prime}$ apart, between which the star was placed centrally.

The following corrections were accordingly applied to the Greenwich-Cambridge proper motions in declination :-

| $m$ | $\prime \prime$ | $m$ |
| :---: | ---: | ---: |
| 6.0 | 8.0 | .000 |
| $6.5+.003$ | 8.5 | -.003 |
| $7.0+.002$ | 9.0 | -.007 |
| $7.5+.001$ |  |  |

These corrections have full weight only for those stars whose proper motions depend entirely on Cambridge observations.

PROBABLE ERRORS OF THE PROPER MOTIONS.
The proper motions printed in this volume of stars in Boss' Preliminary General Catalogue are taken from that work. The proper motions of these stars, excepting fundamental stars were, however, computed like those of the other stars in the catalogue by comparisons of Gr.-A.G.C., Gr.-Bessel, and Gr.-Lalande. The mean discordance between the proper motions computed this way, and those given by Boss is-

$$
\pm^{8.00118} 8 \text { in R.A. and } \pm^{\prime \prime} \cdot 0124 \text { in Dec. }
$$

Assuming that Boss made little use of the catalogues employed here, these figures would indicate that the probable errors of the proper motions of the brighter stars in this catalogue are very nearly

$$
\pm^{\text {s.ooro and }} \pm^{\prime \prime} .010 \text {. }
$$

For the fainter stars the probable errors of the proper motions may be given as

$$
\pm^{8.0012} \text { and } \pm^{\prime \prime} \cdot 012 .
$$

These probable errors are derived from the data for the probable errors given in the introductions to the Berlin, Cambridge, and Leiden catalogues, and the probable errors $\pm^{5} \cdot 020$, and $\pm^{"} 0.25$ of this catalogue.

## 3. General Results.

The proper motions determined in this catalogue have been discussed in several papers in the Monthly Notices of the Royal Astronomical Society by Sir
F. W. Dyson, and W. G. Thackeray.* It has not been considered necessary to repeat these discussions here, with the exception of those which have relation to the spectral types of the stars. Thanks to the kindness of Prof. Pickering and Miss Cannon, who have forwarded results of the new Henry Draper Catalogue in advance of its publication, the spectral types for 6500 stars could be included in the catalogue, and these have considerably enhanced its value.

## DISTRIBUTION OF THE STARS.

The zone $24^{\circ}-32^{\circ} \mathrm{N}$. declination cuts the Galaxy at R.A. $5^{\mathrm{n}} 30^{\mathrm{m}}$ and $19^{\mathrm{n}} 30^{\mathrm{m}}$. On the north it reaches the Galactic pole at $12^{\mathrm{b}} \cdot 30^{\mathrm{m}}$, but on the south does not reach a lower Galactic latitude than $-35^{\circ}$. Between $22^{\mathrm{h}}$ and $3^{\mathrm{b}}$ the zone is nearly parallel to the Galaxy, and about $30^{\circ}$ from it.

In the following table is given the total number of stars for each hour of right ascension, and also the number whose spectral type is known. The latter are divided into the number brighter and fainter than $8^{\text {m. }} 60$ on the Harvard Scale, on the assumption that the spectral types are complete to this magnitude. Further, to give information of the constancy of the limiting magnitude, the mean magnitudes are given for each hour (1) for the stars fainter than 8 m. 60 whose spectral types are given in the Draper catalogue and (2) the stars whose spectra are not given.

* References:-

1. The Mean Parallax of Stars of Different Magnitudes. By Sir F. W. Dyson and W. G. Thackeray. Vol. lxxvii. No. I.
2. Greenwich 1910 Catalogue of Stars, Zone $+24^{\circ} 0^{\prime}$ to $+32^{\circ} 0^{\prime}$ : List of Stars the P.M. of which is $20^{\prime \prime}$ or over per Century; and Analysis of Numbers and Percentages of Proper Motions. By W. G. Thackeray. Vol. lxxvii. No. 3.
3. A Statistical Discussion of the Proper Motions of the Stars in the Greenuich Catalogue for 1910. By Sir F. W. Dyson, F.R.S. Vol. lxxvii. No.3.
4. The Systematic Motions of the Stars between Dec. $+24^{\circ}$ and Dec. $+32^{\circ}$. By Sir F. W. Dyson and W. G. Thackeray. Vol. lxxvii. No. 8.
5. The Relative Density of Stars with Proper Motions between certain Limits in Reference to their Galactic Latitudes. By Sir F. W. Dyson and W. G. Thackeray. Vol. Ixxvii. No. 9.
6. The Parallaxes of the B Stars which are between the Limits of $4^{h}$ to $8^{h}$ R.A., and $+24^{\circ}$ to $+32^{\circ}$ Dec. By Sir F. W. Dyson and W. G. Thackeray. Vol. lxxviii. No. 8.
7. Proper Motions of the Stars in Zone $24^{\circ}-32^{\circ}$ N. Declination, in Relation to Spectral Type. By Sir F. W. Dyson and W. G. Thackeray. Vol. Ixxix. No. 3.
8. The Region of the Sky between R.A. $3^{\mathrm{h}}$ and $5^{\mathrm{h}} 30^{\mathrm{m}}$, and N. dec. $20^{\circ}$ to $35^{\circ}$. By Sir F. W. Dyson and P. J. Melotte. Vol. Ixxx. No. i.

Table I.-Distribution of Stars in Order of RA.

| Limits of R.A. | No. of Stars. | Stars in Draper Catalogue. |  | Stars not in Draper Catalogue. | Mean Magnitude. |  | Galactic Latitude. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathrm{o}^{\mathrm{m}}-8^{\mathrm{m}} \cdot 59$. | $8 \mathrm{~m} \cdot 60-$ |  | Col. 4. | Col. 5. |  |
| h h |  |  |  |  | m | m | - |
| $0-1$ | 485 | 136 | 131 | 218 | $8 \cdot 95$ | $9 \cdot 25$ | -35 |
| 1-2 | 424 | 140 | 109 | 175 | $\cdot 90$ | -14 | 33 |
| 2-3 | 406 | 162 | 106 | 138 | $\cdot 91$ | . 04 | 29 |
| 3-4 | 399 | 142 | 120 | I 37 | -94 | $\cdot 22$ | 21 |
| 4-5 | 339 | 122 | 60 | 157 | -81 | -16 | 12 |
| 5-6 | 641 | 240 | 134 | 267 | $\cdot 91$ | -10 | - I |
| 6-7 | 731 | 243 | 165 | 323 | . 89 | - 02 | +10 |
| 7-8 | 530 | 181 | 136 | 21 ? | -88 | $\cdot 30$ | 22 |
| 8-9 | 429 | 140 | 112 | 177 | -87 | -15 | 35 |
| 9-10 | 377 | 125 | 109 | 143 | - 96 | -18 | 48 |
| 10-11 | 364 | 113 | 119 | 132 | $8 \cdot 99$ | - 23 | 61 |
| I 1 -12 | 302 | 102 | 77 | 123 | $9 \cdot 01$ | - 27 | 75 |
| 12-13 | 352 | 125 | 135 | 92 | $9 \cdot 0$ | - 26 | 87 |
| 13-14 | 315 | 107 | 78 | 130 | $8 \cdot 95$ | - 26 | 79 |
| 14-15 | 345 | 109 | 69 | 167 | $8 \cdot 94$ | - 25 | 66 |
| $15-16$ | 358 | 121 | 112 | 125 | 9.05 | -10 | 53 |
| 16-17 | 378 | 125 | 98 | 155 | $8 \cdot 89$ | -15 | 40 |
| 17-18 | 542 | 175 | 87 | 280 | .91 | - 13 | 27 |
| 18-19 | 692 | 233 | 83 | 376 | -83 | . 05 | 15 |
| 19-20 | 976 | 328 | $9+$ | 554 | -79 | -02 | + 3 |
| 20-21 | 852 | 277 | 93 | 482 | . 82 | -00 | -8 |
| $21-22$ | 670 | 220 | 115 | 335 | -84 | . 06 | 18 |
| 22-23 | 575 | It6 | 112 | 297 | -88 | -16 | 26 |
| 23-0 | 511 | 142 | 115 | 254 | $8 \cdot 92$ | $9 \cdot 26$ | $-32$ |

It appears from this table that a somewhat lower limit of magnitude is reached both in this catalogue, and in the Draper Catalogue at a distance from the Galaxy. With a uniform limit of magnitude the number of faint stars at $5^{\mathrm{h}}$ and $6^{\mathrm{h}}$ would be further increased, and still more at $19^{\mathrm{h}}$ and $20^{\mathrm{h}}$.

A remarkable feature is the small number of stars from $4^{\mathrm{h}}$ to $5^{\mathrm{h}}$, and to a less extent from $3^{\mathrm{h}}$ to $4^{\mathrm{h}}$. This is shown in the total number of stars, and also in the stars brighter than $8^{\mathrm{m}} \cdot 60$. An examination of the Franklin-Adams plates shows a very extensive region in which there is a remarkable deficiency of stars relative to the surrounding regions. An outline of this area with an account of the deficiency of stars shown on the Franklin-Adams plates is given in M.N. lxxx. No. 1.

The number of stars in each hour of right ascension for different types of spectrum is shown in Table II.

Table II.—Distribution of Stars of Different Spectral Types for each hour of Right Ascension.


This table shows:-
(1) The great number of B and A stars in the neighbourhood of the MilkyWay, and their paucity near the Galactic poles.
(2) The deficiency of stars from $4^{n}-5^{n}$ of R.A. is shared by all types of spectrum.
(3) The stars F8-G5 show a tendency to greater condensation near the Galactic pole.

Some further features are brought out by an arrangement according to magnitude, and accordingly in Table III. the number of stars brighter and fainter than $8^{\mathrm{m}} .60$ are given for each hour for different spectral classes.

Attention may be drawn to the very small number of A stars fainter than $8^{\mathrm{m} .60}$ in high Galactic latitudes. The large number of bright A stars from $12^{\mathrm{n}}$ to $13^{\mathrm{n}}$ i.e., near the pole of the Galaxy, is due to the cluster in Coma Berenices. If the region is drawn to take in the largest number of these stars it might be taken as bounded by R.A. $12^{\mathrm{h}} 6^{\mathrm{m}} 6^{\mathrm{s}}$ to $12^{\mathrm{h}} 29^{\mathrm{m}} 5^{\mathrm{s}}$ and by declination $24^{\circ} 25^{\prime}$ to $29^{\circ} 30^{\prime}$ for the epoch 1910. This region comprises some 120 stars within the limits of magnitude of the Greenwich catalogue, of which 20 stars brighter than $7 \mathrm{~m} \cdot 5$, and 41 fainter stars have, allowing for probable error, a common centennial proper motion of roughly $-1^{\prime \prime} .50$ in both right ascension and declination. In the preceding and following regions of roughly similar extent about 30 per cent. of the stars have a similar common proper motion, so that one may fairly assume that a considerable proportion of the stars in this region belong to the cluster of Coma Berenices.

Table III.—Distribution of Stars of Different Spectral Types brighter and fainter than $8^{\mathrm{m}} \cdot 60$.

|  | B. |  | A. |  | $\mathrm{F}-\mathrm{F}_{5}$. |  | $\mathrm{F}_{8}-\mathrm{G}_{5}$. |  | $\mathrm{K}_{0}$. |  | $\mathrm{K}_{\varepsilon}-\mathrm{M}$. |  | Gal. lat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \mathrm{m} \quad \mathrm{~m} \\ 0-8 \cdot 59 . \end{gathered}$ | $\stackrel{m}{8 \cdot 60-}^{-}$ | $\left\lvert\, \begin{array}{lr} \text { m } & \text { m } \\ 0-8.59 \end{array}\right.$ | $\begin{aligned} & \mathrm{m} \\ & 8 \cdot 60- \end{aligned}$ | $\underset{0-8 \cdot 59}{m}$ | $\begin{aligned} & \mathrm{m} \\ & 8 \cdot 60- \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{o}-8 \cdot 59 . \end{aligned}$ | $\frac{m}{8 \cdot 60-}$ | $\left\|\begin{array}{cc} \hline m & m \\ 0-8 \cdot 59 \end{array}\right\|$ | m $8 \cdot 60-$ | $\underset{0}{\mathrm{~m}} \mathrm{~m} .59$ | $\begin{aligned} & \mathrm{m} \\ & 8 \cdot 60- \end{aligned}$ |  |
| $\mathrm{O}^{\mathrm{h}} \mathrm{I}^{\text {h }}$ | 4 | $\bigcirc$ | 25 | 21 | 28 | - 20 | 36 | 52 | $=\dot{r}$ | 17 | 19 | 18 | $-35^{\circ}$ |
| 1-2 | 2 | $\bigcirc$ | 28 | 36 | 36 | 11 | 32 | 41 | 35 | 17 | 18 | 12 | 33 |
| 2-3 | 9 | 2 | 36 | 21 | 33 | 24 | 37 | 33 | 32 | 19 | 14 | 5 | 29 |
| 3-4 | 21 | 3 | 56 | 46 | 14 | 12 | 26 | 29 | 23 | 12 | 9 | I I | 21 |
| 4-5 | 16 | 2 | 40 | 16 | 21 | 10 | 19 | 26 | 15 | 3 | 10 | 2 | 12 |
| $5-6$ | 57 | 18 | 66 | 60 | 29 | 20 | 36 | 19 | 3 I 。 | 8 | 20 | 5 | - I |
| 6-7 | 29 | 9 | 81 | 94 | 20 | 22 | 44 | 25 | 36 | - 5 | 29 | 10 | +10 |
| 7-8 | 9 | 3 | 39 | 48 | 29 | 28 | 4 I | 24 | 43 | 13 | 20 | 12 | 22 |
| 8-9 | 1 | I | 39 | 24 | 22 | 22 | 27 | 31 | 33 | 20 | 19 | 13 | 35 |
| 9-10 | 2 | 1 | 18 | 9 | 20 | I I | 32 | 52 | 44 | 29 | 9 | 10 | 48 |
| IO-II | 2 | $\bigcirc$ | 12 | 4 | 21 | 16 | 31 | 56 | 31 | 32 | 12 | 5 | 61 |
| II 1 | 1 | $\bigcirc$ | 17 | I | 27 | 14 | 23 | 41 | 25 | 18 | 11 | 3 | 75 |
| 12-13 | 0 | $\bigcirc$ | 29 | 5 | 21 | 16 | 31 | 82 | 26 | 23 | 18 | 8 | 87 |
| I 3-14 | $\bigcirc$ | 1 | 14 | 5 | 20 | 7 | 30 | 44 | 34 | 12 | 8 | 3 | 79 |
| I 4 -I 5 | 2 | - | 15 | 3 | 23 | 14 | 26 | 28 | 26 | 13 | 16 | 7 | 66 |
| 15-16 | 1 | $\bigcirc$ | 18 | 5 | 16 | 5 | 28 | 53 | 27 | 36 | 25 | 14 | 53 |
| 16-17 | $\bigcirc$ | 0 | 20 | 8 | 29 | 13 | 27 | 37 | 22 | 25 | 26 | 15 | 40 |
| 17-18 | 3 | $\bigcirc$ | 41 | 33 | 27 | 14 | 24 | 27 | 42 | 7 | 37 | 7 | 27 |
| I $8-19$ | 28 | 7 | 70 | 34 | 19 | 5 | 41 | 18 | 46 | 9 | 27 | 6 | 15 |
| $19-20$ | 56 | 2 | . 124 | 68 | 2 I | 12 | 46 | 4 | 43 | 1 | 35 | 7 | + 3 |
| 20-21 | 40 | 2 | 101 | 53 | 21 | 8 | 32 | 6 | 27 | 16 | 58 | 5 | -8 |
| 21-22 | 15 | 1 | 52 | 31 | 26 | 1 I | 42 | 30 | 32 | 17 | 52 | 23 | 18 |
| 22-23 | 7 | - | 5 I | 23 | 21 | 20 | 25 | 31 | 42 | 25 | 34 | 12 | 26 |
| 23-0 | 10 | $\bigcirc$ | 30 | 19 | 27 | 19 | 22 | 37 | 33 | 23 | 23 | 17 | $-32$ |

Table IV.-Cluster of bright Stars in Coma Berenices.

| B.D. - | R.A. 1910. | Dec. 1910. | Proper Motion. |  | Harvard Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | R.A. | Dec. |  |  |
| - | h mi s |  | (8.0001) | (".001) | m |  |
| 282084 | $12 \quad 612$ | +27 77 | -13 | - 10 | $5 \cdot 78$ | A 2 |
| $2 f 2443$ | I 147 | 2427 | -16* | -18* | $5 \cdot 06$ | K o |
| 282100 | 1339 | $27{ }^{18}$ | -25 | + 3 | $7 \cdot 40$ | A 2 |
| 262326 | 1430 | 2630 | -17 | -23 | $6 \cdot 39$ | A 2 |
| 292280 | 1519 | 2858 | - 3 | - 3 | $6 \cdot 53$ | A 2 |
| 252495 | 1655 | 2530 | - 3 | -9 | 7-10 | A 3 |
| 262337 | 1759 | 2621 | - 6* | -14* | $4 \cdot 78$ | F 5 , A 3 |
| 262343 | 1933 | 2621 | + 2 | -16 | $6 \cdot 65$ | A 3 |
| 262344 | 1948 | 2636 | -17* | -23* | $5 \cdot 10$ | A 2 |
| 262345 | 1956 | 265 | +14 | - 11 | $6 \cdot 31$ | A 5 |
| 282115 | 2154 | 2746 | $-17 *$ | -18* | 5.15 | A 5 |
| 272134 | 2229 | 2719 | + I* | -I3* | $5 \cdot 04$ | A 2 |
| 262352 | 238 | 2625 | +10 | - 5 | $6 \cdot 57$ | A 3 |
| 272138 | $24 \quad 9$ | 2643 | -18 | -28 | $6 \cdot 48$ | A 3 |
| 262353 | 2415 | 2624 | -21* | -33* | $6 \cdot 69$ | A 3 |
| 262354 | 2425 | 2625 | -14* | -22* | $5 \cdot 38$ | A $\circ \mathrm{p}$ |
| 242464 | 2457 | 2436 | -18* | - 8* | $5 \cdot 49$ | F5 |
| 252517 | 2631 | $25 \quad 4$ | -8* | - $17{ }^{*}$ | $5 \cdot 39$ | A 3 p |
| 262359 | $27 \quad 5$ | 2622 | -24 | -17 | $8 \cdot 4$ | A 0 |
| 252522 | 293 | 2457 | -12 | -8 | $7 \cdot 15$ | Ma |
| 252523 | $29 \quad 5$ | $24+7$ | -16* | - 7* | $6 \cdot 14$ | A 2 |

* Proper Motions from Boss.

Examination of Table III. shows that the F stars have a uniform distribution, but the F8-G5 stars show a large excess of faint stars about $12^{\text {n }}$, and deficiency about $20^{\mathrm{h}}$.

The K0 stars and still more those of types $\mathrm{K} 2-\mathrm{M}$ show a large number of stars from $17^{\mathrm{h}}-23^{\mathrm{h}}$, and the latter a comparatively small number in high galactic latitudes.

In Table V. the number of stars of different spectral types are divided still further according to magnitude. Attention may be drawn to the large percentage of faint stars in the group F8-G5.

Table V.-Number of Stars for Different Magnitudes for Different Spectral Types.

| Spectral Type. | $\begin{gathered} \mathrm{m} \\ <5.9 \end{gathered}$ | $\frac{\mathrm{m}}{6 \cdot 0-6 \cdot 9}$ | $\stackrel{m}{7 \cdot 0-7 \cdot 9}$ | $\underset{8 \cdot 0-8 \cdot 5 .}{m .}$ | $\underset{8 \cdot 6-8 \cdot 9}{\mathrm{~m}}$ | $\begin{aligned} & \mathrm{m} \\ & 9 \cdot 0 \end{aligned}$ | Sum. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bo-5 | 17 | 17 | 25 | II | I | 4 | 75 |
| B8-9 | 24 | 55 | 80 | 81 | 41 | 7 | 288 |
| Ao | 40 | 58 | I 54 | 223 | 158 | 103 | 736 |
| A2 | 27 | 34 | 87 | 143 | I I I | 80 | 482 |
| $\mathrm{A}_{3}$ | 7 | 21 | 38 | 48 | 42 | 20 | 176 |
| $\mathrm{A}_{5}$ | 6 | 26 | 29 | 42 | 33 | 26 | 162 |
| Fo | 17 | 28 | 62 | 74 | 60 | 26 | 267 |
| F2 | 3 | 16 | 41 | 52 | 37 | 19 | 168 |
| F5 | 15 | 42 | 75 | 142 | 122 | 61 | 457 |
| F8 | 2 | 13 | 5 I | 125 | 118 | 77 | 386 |
| Go | 13 | 17 | 50 | 82 | I 11 | 80 | 353 |
| G5 | I 5 | 37 | 129 | 212 | 221 | 173 | 787 |
| Ko | 61 | I 18 | 264 | 335 | 282 | I 18 | 1178 |
| $\mathrm{K}_{2}$ | 8 | 20 | 103 | 130 | 97 | 33 | 391 |
| K5 | I I | 15 | 60 | 87 | - 46 | 15 | 234 |
| M | 8 | 18 | 43 | 37 | 18 | 19 | I43 |

## Magnitude of Proper Motions.

The numbers of stars with proper motions between certain limits are given for each spectral type in the following table :-

Table VI.-The Numbers of Stars with Proper Motions between Certain Limits for Different Spectral Types.

|  | $0^{\prime \prime}-1^{\prime \prime}$. | $1^{\prime \prime}-2^{\prime \prime}$. | $2^{\prime \prime}-3^{\prime \prime}$. | $3^{\prime \prime}-4^{\prime \prime}$. | $4^{\prime \prime}-5^{\prime \prime}$. | $5^{\prime \prime}-6^{\prime \prime}$. | $6^{\prime \prime}-7^{\prime \prime}$. | 7"-8". | $88^{\prime \prime}-9^{\prime \prime}$. | $9 "-10^{\prime \prime}$. | $10^{\prime \prime}-15^{\prime \prime}$. | $15^{\prime \prime}-20^{\prime \prime}$. | 20"- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bo-5 | 13 | 26 | 16 | 7 | 5 | 3 | . | . | . | . | $\cdots$ | $\cdots$ | . |
| 8-9 | 61 | 73 | 79 | 38 | 22 | 6 | 5 | $\ldots$ | $\ldots$ | . | 1 | 1 | $\cdots$ |
| Ao | 83 | 184 | 193 | 142 | 65 | 41 | 16 | 6 | 3 | 2 | 1 | 1 | 1 |
| 2 | 55 | 119 | 122 | 88 | 55 | 25 | 9 | 5 | 5 | 1 |  | 3 | $\cdots$ |
| 3 | 13 | 32 | 40 | 33 | 24 | 14 | 7 | 7 | I | 2 | 2 | 1 | $\cdots$ |
| 5 | 11 | 32 | 31 | 25 | 25 | 22 | 8 | 3 | 1 | 2 | 5 | . |  |
| Fo | 25 | 38 | 59 | 33 | 30 | 25 | 17 | 10 | 6 | 8 | 7 | 3 | 5 |
| 2 | 11 | 28. | 13 | 28 | 23 | 18 | 14 | 6 | 7 | 2 | 15 | 4 | 2 |
| S | 16 | 46 | 70 | 77 | 51 | $4^{2}$ | 29 | 30 | 15 | 12 | 43 | 12 | 11 |
| 8 | 14 | 37 | 41 | 43 | 55 | 34 | 39 | 25 | 20 | 12 | 44 | 8 | 9 |
| Go | 18 | 28 | 41 | 49 | 21 | 18 | 29 | 21 | 13 | 15 | 37 | 21 | 34 |
| 5 | 37 | 86 | 118 | 98 | 76 | 68 | 35 | 31 | 26 | 20 | 70 | $4^{2}$ | 51 |
| Ko | 96 | 183 | 245 | 179 | 128 | 97 | 58 | 40 | 15 | 23 | 54 | 15 | 41 |
| 2 | 27 | 83 | 92 | 78 | 50 | 26 | 11 | 11 | 4 | I | 7 | 3 | 6 |
| 5 | 24 | 50 | 53 | 37 | 2 I | 18 | 8 | 4 | 4 | 1 | 7 | I | 4 |
| M | 13 | 26 | 31 | 28 | 13 | 17 | 9 | 5 | 1 | 2 | . | 1 | 1 |

This table shows very clearly how the proportion of stars of large proper motion increases to a sharp maximum for types G0 and G5. This is indicated roughly, but in a striking manner, by comparison of the number of proper motions greater than $15^{\prime \prime}$ a century with the number less than $5^{\prime \prime}$ a century.

| Type of Spectrum. | Number of Stars. |  | Proportion. | Typo of Spectrum. | Number of Stars. |  | Proportion. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | p.m. $>15^{\prime \prime}$. | p.m. $<5^{\prime \prime}$. |  |  | p.m. $>15^{\prime \prime}$. | p.m. $<5^{\prime \prime}$. |  |
| Bo-B5 | $\bigcirc$ | 67 |  | F5 | 23 | 260 | I : I I |
| B8-B9 | I | 273 |  | F8 | 17 | 190 | I: II |
| Ao | 2 | 667 |  | Go | 55 | 157 | I : $2 \cdot 8$ |
| A 2 | 3 | 439 |  | G5 | 93 | 415 | I : 4.5 |
| A3 | I | 142 |  | Ko | 56 | 831 | 1: 15 |
| A 5 | $\bigcirc$ | 124 |  | K2 | 9 | 330 | 1 : 37 |
| Fo | 8 | 185 | 1:23 | K5 | 5 | 185 | I : 37 |
| $\mathrm{F}_{2}$ | 6 | 103 | 1: 17 | M | 2 | I I I | I : 56 |

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$2 d$

Among the types B, A, and M, the few stars with large proper motions are bright stars. The following list gives all the stars of these types with proper motion $>10^{\prime \prime}$ a century.

|  |  | m | " |  |  | m | " |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B8 | $\beta$ Tauri | $1 \cdot 78$ | 18 | A2 | 40 Leo. Min. | 5.55 | 12 |
| B9 | 41 Arietis | $3 \cdot 68$ | 13 | $\mathrm{A}_{2}$ | $\delta$ Herculis | $3 \cdot 16$ | 16 |
| Ao | a Andromidæ | $2 \cdot 15$ | 21 | $\mathrm{A}_{2}$ | Lal. 42712 | $6 \cdot 71$ | 20 |
| Ao | $\alpha$ Coronæ | $2 \cdot 3 \mathrm{I}$ | 16 | $\mathrm{A}_{3}$ | P. III. 170 | $5 \cdot 38$ | 11 |
| Ao | $\gamma$ Coronæ | 3.93 | 10 | $\mathrm{A}_{3}$ | P. V. 256 | $5 \cdot 8 \mathrm{I}$ | 18 |
| $\mathrm{A}_{2}$ | B.D. $24^{\circ}, 55^{\circ}$ | $9 \cdot 1$ | 10 | $\mathrm{A}_{3}$ | P. XII. 52 | $6 \cdot 11$ | 14 |
| A2 | $f$ Leonis | $5 \cdot 73$ | 1 I | Ma | $\beta$ Pegasi | $2 \cdot 61$ | 23 |
| Az | $g$ Leonis | $5 \cdot 33$ | 19 | Ma | a Vulpeculæ | $4 \cdot 63$ | 17 |

The proper motion of B.D. $24^{\circ}$, 550 depends on a comparison with Berlin B, with a time interval of thirty-two years. As this is the only faint star of these types with large proper motion, it seems reasonable to suppose that accidental errors have accumulated and increased the true proper motion.

## Systematic Motions.

A determination of the solar motion was made for each type by Airy's method from equations of the form

$$
\begin{aligned}
& \mathrm{X} \sin \alpha-\mathrm{Y} \cos \alpha=\mu_{\alpha} \\
& \mathrm{X} \cos \alpha \sin \delta+\mathrm{Y} \sin \alpha \sin \delta-\mathrm{Z} \cos \delta=\mu_{\delta}
\end{aligned}
$$

where $\mathrm{X}=\mathrm{M} \cos \mathrm{A} \cos \mathrm{D}$
$\mathrm{Y}=\mathrm{M} \sin \mathrm{A} \cos \mathrm{D}$
$\mathrm{Z}=\mathrm{M} \sin \mathrm{D}$
and M, A, D are the parallactic motion, right ascension, and declination of the Solar Apex.

To simplify the arithmetical work, the stars were divided into hourly groups, and the mean position of each group taken to be at the even half-hours, and at declination $28^{\circ}$.

A few stars of very large proper motion in each type were omitted. They are given in the following list :-

List of Stars omitted on Account of Large Proper Motion.

| Approx. |  | Harvard. |  | P.M. |  | B.D. No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R.A. | 1)ec. | Mag. | Spectral Type. | $\mathrm{R}, \mathrm{~A} \text {. }$ (ur | Dec. |  |
| hm | - , |  |  |  |  | - |
| 521 | 2832 | I $\cdot 78$ | B8 | +31 | - 177 | $28 \quad 795$ |
| 658 | 2929 | $5 \cdot 95$ | F8 | +158 | - 823 | 291441 |
| 748 | 3053 | $8 \cdot 2$ | Go | $+725$ | -1848 | 311684 |
| 755 | 2929 | $6 \cdot 94$ | Go | -131 | -1179 | 291664 |
| 138 | 2820 | $4 \cdot 32$ | Go | -797 | + 875 | 282193 |
| 160 | 2529 | 7.06 | Go | $-527$ | + 608 | 253020 |
| 2357 | 2636 | $5 \cdot 85$ | Go | +834 | - 986 | 264734 |
| 1743 | 2746 | $3 \cdot 48$ | G5 | -322 | - 750 | 272888. |
| 1555 | 2759 | $8 \cdot 1$ | Ko | $-756$ | + 304 | $28 \quad 2503$ |
| 200 | 2939 | $5 \cdot 68$ | Ko | +670 | - 528 | 293872 |
| 2340 | 293 | $8 \cdot 9$ | Ko | +923 | + 18 | $28+634$ |
| 116 | 3056 | 8.8 | K5 | $+584$ | $-212$ | 312240 |
| 1319 | $29+2$ | $8 \cdot 86$ | K5 | -446 | + 239 | 292405 |
| 1410 | 3038 | $8 \cdot 45$ | K5 | -394 | + 158 | 302494 |
| 1925 | 2429 | $4 \cdot 63$ | Ma | -127 | - 113 | 243759 |
| 2259 | 2736 | $2 \cdot 61$ | Ma | +190 | + 133 | 274480 |

Table VII.-Systematic Motions for different Spectral TypesEquations and Solutions.


Table VII.-Systematic Motions for Different Spectral TypesEquations and Solutions-continued.

| Spectral Type. | No. of Stars. | Mean Mag. | Equations. | X. | Y. | Z. | A. | D. | M. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fo-F2 | 432 | m $7 \times 95$ | $\begin{aligned} 258 x+4 y-15 z & =-55 \\ 4 x+271 y-3 z & =-507 \\ -15 x-3 y+33 z & =+546 \end{aligned}$ | -. 0.9 | ${ }_{\text {L }} \stackrel{1}{ }$ | $\prime \prime$ +1.62 | 267 | 41 | 2.46 |
| F5 | 457 | $8 \cdot 13$ | $\begin{aligned} 272 x+3 y+z & =+35 \\ 3 x+285 y-14 z & =-637 \\ x-14 y+352 z & =+997 \end{aligned}$ | $+\cdot 14$ | -2.11 | +2.75 | 274 | 52 | $3 \cdot 47$ |
| F8 | 38 I | $8 \cdot 4^{2}$ | $\begin{aligned} 221 x+6 y+2 z & =-64 \\ 6 x+237 y+6 z & =-587 \\ 2 x+6 y+294 z & =+818 \end{aligned}$ | $-25$ | -2.54 | +2.84 | $26+$ | 48 | $3 \cdot 82$ |
| Go | 35 r | $8 \cdot 52$ | $\begin{aligned} 193 x-2 y+16 z & =+18 \\ -2 x+228 y-9 z & =-689 \\ 16 x-\quad 9 y+270 z & =+866 \end{aligned}$ | -.19 | $-2.90$ | $+3 \cdot 10$ | 266 | 47 | $4 \cdot 25$ |
| G5 | 774 | $8 \cdot 35$ | $\begin{aligned} 449 x-12 y+24 z & =+188 \\ -12 x+484 y-5 z & =-1284 \\ 24 x-5 y+596 z & =+1883 \end{aligned}$ | $+\cdot 21$ | $-2.62$ | $+3 \cdot 13$ | 275 | 50 | 4.09 |
| Ko | 1221 | 8.00 | $\begin{aligned} 701 x+31 y+15 z & =-141 \\ 31 x+728 y+24 z & =-1207 \\ 15 x+24 y+906 z & =+1921 \end{aligned}$ | $-.17$ | -1.72 | $+2 \cdot 17$ | 264 | 52 | $2 \cdot 77$ |
| $\mathrm{K} 2-\mathrm{K} 5$ | 621 | $8 \cdot 07$ | $\begin{aligned} 388 x+41 y-29 z & =-2 \\ 41 x+366 y+41 z & =-184 \\ -29 x+41 y+488 z & =+763 \end{aligned}$ | $+\cdot 19$ | - 7 I | + $\mathrm{I} \cdot 60$ | 285 | 66 | 1.76 |
| M | 147 | $7 \cdot 90$ | $\begin{array}{rlr} 95 x+5 y-5 z & =-30 \\ 5 x+85 y+8 z & =-29 \\ -\quad 5 x+8 y+113 z & =+191 \end{array}$ | $-19$ | - 49 | +1.72 | 249 | 74 | 1.80 |
| K2, K 5 , M | 768 | $8 \cdot 03$ | $\begin{aligned} 483 x+46 y-34 z & =-32 \\ 46 x+45 \mathrm{I} y+49 z & =-213 \\ -34 x+49 y+60 \mathrm{I} z & =+954 \end{aligned}$ | +.52 | - 67 | +1.65 | 280 | 68 | 1.78 |

The determinations given above were made after applying a correction of $+^{\prime \prime} \cdot 003$ to Newcomb's value of the precessional quantity $n$ in accordance with recent determinations of this constant. This correction introduces more accordance into the values of A depending on the ratio X: Y. In cases where these quantities are small, as in types $B, A$ and $M$, the correction to the precession makes a considerable change, but a much smaller one for types F8 and G.

The increase in the declination of the Solar Apex is shown in a marked manner
as we proceed from types $B$ and $A$ to $K$ and $M$. For types $B$ and $A$ it is $36^{\circ}$; from F5 to K 0 it is $50^{\circ}$, while for the small groups $\mathrm{K} 2-\mathrm{K} 5$ and M it reaches $66^{\circ}$ and $74^{\circ}$.

This shift of the declination will be explained if the proportion of stars belonging to the two star streams is different for the different types of spectrum. It was shown in the Monthly Notices for June 1917, that the stars, taken as a whole and not divided into their spectral types, showed the phenomena of star-streaming very clearly. It was concluded (p. 590) that the Apices of the two streams were at R.A. $90^{\circ}$, Dec. $-13^{\circ}$, and R.A. $270^{\circ}$, Dec. $-60^{\circ}$; that the relative velocities were as $10: 6$, and that the stars were divided between the streams in the ratio $4: 3$.

Adopting the ratio $10: 6$ of the stream velocities, and the positions of the Apices just given, it follows that corresponding to various positions of the Solar Apex the proportion of stars belonging to the two streams should be as follows :-

|  | A. | F5-Ko. | K.2-K5. | Ma. |
| :--- | :--- | :---: | :---: | :---: |
| Declination of Apex | - | $36^{\circ}$ | $50^{\circ}$ | $66^{\circ}$ |
| Percentage of Stars of Stream I. | 61 | 49 | 38 | $34^{\circ}$ |

The proper motions for stars of types A, F, G and K, were plotted separately for each hour, except from $3^{\mathrm{h}}-9^{\mathrm{h}}$ where the streams are not sufficiently separated. The number of stars moving within $30^{\circ}$ of the directions of the Apices of the two streams were counted for stars with proper motions $>10^{\prime \prime}$ a century, between $5^{\prime \prime}$ and $10^{\prime \prime}$, and those less than $5^{\prime \prime}$ a century. The number of stars moving within $30^{\circ}$ of the direction of the Apex of Stream I. are given in the following table under the heading Stream I., those within $30^{\circ}$ of the Apex of Stream II. under the heading Stream II., and those falling in the remaining $240^{\circ}$ in the third column for each group. The distances from the Apices are also given. At the bottom of the table are given the sums omitting $16^{\mathrm{h}}-20^{\mathrm{h}}$, which is more than $150^{\circ}$ from the Apex and where $\sin s_{1}$ is small. In addition, the corresponding numbers are given when restricted to proper motions $>5^{\prime \prime}$ a century or $>10^{\prime \prime}$ a century.

Table VIII.

| Hour. | Distance from |  | $\operatorname{Sin} s_{1}$. | $\operatorname{Sin} s_{2}$. | Type A. |  |  | Type F. |  |  | Type G. |  |  | Type K. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Apex } \\ \text { I. } \end{gathered}$ | Apex II. |  |  | Stream |  | $-\begin{gathered} \mathrm{Re}- \\ \text { mainder. } \end{gathered}$ | Stream |  | Remainder. | Stream |  | Remainder. | Stream |  | Remainder. |
|  |  |  |  |  | I. | II. |  | I. | II. |  | I. | II. |  | I | II. |  |
| $\mathrm{h} \quad \mathrm{h}$ | - | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| O- I | 98 | 118 | I.00 | - 88 | 20 | 7 | 20 | 25 | 21 | 33 | 33 | 25 | 12 | 31 | 10 | 27 |
| 1-2 | 77 | I25 | $\cdot 97$ | $\cdot 82$ | 17 | 12 | 26 | 32 | 15 | 13 | 34 | 8 | 8 | 19 | 26 | 29 |
| $2-3$ | 65 | 132 | -91 | $\cdot 74$ | 21 | 7 | 29 | 34 | 12 | 20 | 20 | 17 | 25 | 21 | 14 | 3 I |
| 9-10 | 65 | I32 | $\cdot 91$ | $\cdot 74$ | 8 | 6 | 13 | 24 | 9 | 22 | 27 | 15 | 18 | 27 | 33 | 29 |
| 10-II | 77 | I25 | $\cdot 97$ | $\cdot 82$ | I I | 3 | 6 | 28 | 12 | 22 | 23 | 20 | 25 | 19 | 32 | 27 |
| $11-12$ | 98 | 118 | 1.00 | $\cdot 88$ | 5 | 4 | 9 | 25 | 17 | I 5 | 14 | 9 | 24 | 19 | 8 | 27 |
| 12-I3 | 102 | 110 | $\cdot 98$ | $\cdot 94$ | 12 | 6 | 16 | 24 | I 5 | 19 | 29 | 25 | 39 | 26 | 12 | 32 |
| I3-14 | 116 | 104 | $\cdot 90$ | -97 | 5 | 4 | 10 | 14 | 10 | 18 | 24 | 6 | 29 | 20 | 16 | 25 |
| 14-15 | 129 | 98 | $\cdot 77$ | -99 | 5 | I | 12 | 17 | 9 | 22 | 10 | 9 | 24 | 14 | 12 | 34 |
| 15-16 | 142 | 93 | . 62 | I.00 | 7 | 3 | 13 | 15 | 10 | 20 | 18 | 14 | 30 | 20 | 26 | 55 |
| 16-17 | 154 | 90 | $\cdot 43$ | I.00 | 4 | 8 | 16 | 8 | 16 | 40 | 8 | 14 | 21 | 14 | 28 | 27 |
| 17-18 | 163 | 89 | - 29 | 1.00 | 6 | 17 | 5 I | 9 | 13 | 32 | 9 | 9 | 20 | 15 | 27 | 38 |
| 18-19 | 163 | 89 | - 29 | 1.00 | 14 | 17 | 71 | 4 | 14 | 16 | 10 | 11 | 28 | 15 | 22 | 52 |
| 19-20 | 154 | 90 | $\cdot 43$ | 1.00 | 6 I | 29 | 102 | 11 | 9 | 25 | 10 | II | 18 | 26 | 15 | 37 |
| 20-2 1 | 142 | 93 | . 62 | I.00 | 42 | 29 | 83 | 10 | II | 22 | 7 | 9 | 9 | 23 | 29 | 48 |
| 21-22 | 129 | 98 | $\cdot 77$ | -99 | 2 I | 12 | 50 | 26 | 10 | 32 | 20 | 8 | 13 | 30 | 26 | 67 |
| 22-23 | 116 | 104 | -90 | -97 | 22 | 13 | 29 | 18 | 14 | 27 | 10 | 9 | 18 | 27 | 22 | 54 |
| 23-0 | 102 | 110 | $\cdot 98$ | $\cdot 94$ | 15 | 3 | 28 | 26 | I I | 27 | 14 | 13 | 13 | 22 | 20 | 52 |
| Total | . . | . | . 88 | $\cdot 91$ | 211 | IIO |  | 308 |  | 310 |  | 187 |  | 318 | 288 |  |
| $>5^{\prime \prime}$ | . | . | . . | $\cdots$ | 52 | 12 | 33 | 173 | 76 | 92 | 159 | 102 | 126 | II4 | 79 | 103 |
| $>10^{\prime \prime}$ | - . | $\cdots$ | . . | . . | 7 | 2 | 3 | 53 | 30 | 28 | 81 | 49 | 62 | 45 | 26 | 28 |

The percentages obtained from the totals in the above table of stars moving within $30^{\circ}$ of the direction of the Apices of Streams I. and II. are-

| Spectral Type. | All Stars. |  |  | Stars with p.m. $>5^{\prime \prime}$. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stream I. | Stream II. | Remainder. | Stream I. | Stream II. | Remainder. |
| A | - 32 | 17 | 5 I |  | 12 | 34 |
| F | 39 | 22 | 39 | 5 I | 22 |  |
| G . | 37 | 25 | 38 | 41 | 26 | 33 |
| K | 28 | 25 | 47 | 39 | 27 | 34 |

These figures show a continually increasing proportion of stars belonging to Stream II. They have to be interpreted in conjunction with the considerations :-
(1) The velocity of Stream I. is greater than that of Stream II. in the proportion 10:6.
(2) The peculiar motions increase relatively to the Stream motions.
(3) The accidental errors of the determinations cause more spreading where the proper motions are small (e.g. in type A) than where they are large (e.g. types F8-G5).

It is not possible to estimate these effects exactly, but the observed distribution of the directions of the proper motions generally supports the explanation suggested above of the different declinations of the Solar Apex derived from stars of different spectral type.

We may conclude that 60 per cent. of the A stars belong to Stream I., and the proportion diminishes till it is about 50 per cent. for those of type K0, and is 40 per cent. for types K 2 and K 5 , while for M it is only 33 per cent.

Lists are given of -
(1) The stars of proper motion $>20^{\prime \prime}$ a century.
(2) The B stars.
(3) The M stars.

With reference to the proper motions of the $B$ and $M$ stars, it is to be remembered that they are very small, especially those of the fainter stars, so that the accidental errors have greater importance than with the stars of other types.

The publication of this catalogue affords a fitting opportunity to record the great services of Mr Thackeray to the Royal Observatory and to Astronomy in the series of catalogues which have been produced under his direction. They include the Greenwich Catalogues of 1890,1900 , and 1910, as well as the re-reduction of Groombridge's Observations. In the formation of the present catalogue he was for some time single-handed, owing to the war. The value of the catalogue is due to a very large extent to the persistence with which he examined every detail which could improve its accuracy, and the readiness with which he undertook every discussion which promised to be fruitful.

[^12]F. W. DYSON.

List of Stars of proper motion $20^{\prime \prime}$ or more per century．

| Approx． R．A． | Proper Motion． |  | Mag． | Spectral Type． | Approx. | Proper Motion． |  | Mag． | $\begin{gathered} \text { Spectral } \\ \text { Type. } \end{gathered}$ | Approx. | Proper Motion． |  | Mag． | Speetra！ Type． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { R.A.A. } \\ & m .001 . \end{aligned}$ | Dec． $\cdots .001 .$ |  |  |  | $\begin{aligned} & \text { R.A.A. } \\ & \text { R.OOI. } \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & =001 . \end{aligned}$ |  |  |  | $\begin{aligned} & \text { R.A.A. } \\ & \text { R.001. } \end{aligned}$ | Dec． ＂．001． |  |  |
| h m |  |  |  |  | h m |  |  |  |  | h m |  |  |  |  |
|  | $+380$ | － 176 | $6 \cdot 20$ | K o | 42 | $+369$ | $+102$ | $9 \cdot 4$ |  | 102 | ＋ 33 | － 244 | $8 \cdot 11$ | G 5 |
|  | ＋140 | $-161$ | $2 \cdot 15$ | A op |  | ＋217 | $-142$ | $8 \cdot 4$ |  | 6 | －395 | ＋ 62 | $8 \cdot 6$ | G o |
| 4 | ＋197 | $-142$ | $8 \cdot 2$ | Go | 37 | ＋ 77 | －244 | $8 \cdot 0$ | K | 11 | ＋150 | － 299 | 7.54 | Go |
| 6 | ＋217 | ＋ 35 | $8 \cdot 7$ | G 5 | 54 | ＋280 | －138 | $9 \cdot 0$ |  | 14 | －178 | － 101 | $9 \cdot 6$ |  |
|  | ＋303 | －63 | $8 \cdot 8$ |  | 56 | ＋108 | $-263$ | $8 \cdot 5$ | G 5 | 20 | ＋ 24 | － 203 | $8 \cdot 2$ | G 5 |
| 11 | ＋191 | ＋ 47 | $8 \cdot 9$ | K 2 | 54 | ＋20 | － 55 | $9 \cdot 1$ |  | 23 | ＋207 | － 136 | $9 \cdot 2$ |  |
| 13 | ＋137 | －170 | $8 \cdot 56$ | G 5 |  | ＋205 | －104 | $6 \cdot 91$ | F 5 | 30 | ＋ 67 | － 197 | $9 \cdot 6$ |  |
| 30 | ＋394 | $-64$ | 9.4 |  | 5 | －31 | －210 | $8 \cdot 46$ | G 5 | 33 | ＋221 | － 90 | $8 \cdot 7$ | K o |
| 31 | ＋170 | $-423$ | $8 \cdot 6$ | F 8 | 44 | ＋ 99 | －262 | ． $9^{\circ}$ |  | 38 | －226 | － 83 | $8 \cdot 8$ | F 8 |
| 33 | －227 | －248 | 4.52 | G 5 | 54 | ＋174 | －286 | $9 \cdot 4$ |  | 51 | －203 | － 100 | $9 \cdot 6$ |  |
| 34 | －210 | － 75 | 9.4 |  | 6 0 | －151 | －363 | 9－1． |  | 51 | －446 | － 145 | $8 \cdot 6$ | Ko |
| 45 | ＋222 | － 31 | 7－61 | G | 9 | － 64 | －266 | $4 \cdot 45$ | K o | 52 | ＋330 | － 174 | $9 \cdot 2$ | K o |
| 47 | ＋230 | － 46 | $8 \cdot 2$ | G o | 23 | －196 | －432 | $8 \cdot 8$ |  | 11 | －401 | － 82 | $7 \cdot 49$ | G o |
| 53 | ＋215 | －120 | $8 \cdot 6$ | Go | 35 | ＋196 | －280 | $8 \cdot 0$ | K 2 | 6 | ＋588 | － 212 | $9 \cdot 0$ |  |
| 56 | ＋197 | － 73 | $9 \cdot 0$ | G 5 | 45 | － 15 | －208 | $6 \cdot 91$ | F 8 | 6 | ＋588 | － 212 | $8 \cdot 8$ | K 5 |
| 3 | ＋196 | － 47 | $6 \cdot 29$ | F 2 | 49 | ＋250 | －245 | $8 \cdot \mathrm{I}$ | G o | 20 | －301 | － 158 | $8 \cdot 8$ | K |
| 16 | ＋497 | － 95 | $9 \cdot 1$ | G 5 | 57 | ＋159 | －823 | $5 \cdot 95$ | F 8 | 22 | －208 | － 114 | $9 \cdot 26$ | K o |
| 20 | ＋273 | －165 | $7 \cdot 8$ | F 8 |  | －139 | $-323$ | $8 \cdot 31$ | G 5 | 25 | － 93 | － 207 | $6 \cdot 78$ | F o |
| 20 | －328 | －105 | $8 \cdot 9$ | Go |  | －107 | －203 | 7.01 | G o | 25 | －93 | － 207 | $9 \cdot 6$ |  |
| 24 | ＋214 | $\bigcirc$ | $8 \cdot 2$ | G 5 | 8 | － 392 | －112 | $8 \cdot 4$ | K o | 38 | －195 | － 62 | 9.2 |  |
| 26 | ＋197 | －78 | $7 \cdot 27$ | Go | 12 | ＋162 | －139 | 8．1 | G 5 | 39 | － 51 | － 391 | $8 \cdot 8$ |  |
| 28 | ＋254 | － 47 | $8 \cdot 9$ | G 5 | 23 | ＋ 149 | ＋183 | 4－18 | Fo | 12 | ＋166 | － 121 | $8 \cdot 6$ | G 5 |
| 32 | －211 | －238 | 7－10 | K o | 24 | －60 | －211 | $9 \cdot 4$ |  | 8 | －169 | － 129 | $9 \cdot 0$ |  |
| 32 | ＋254 | ＋ 5 | $8 \cdot 26$ | F 8 | 29 | ＋135 | －352 | $8 \cdot 0$ | G。 | 14 | －190 | － 127 | $9 \cdot 6$ |  |
| 33 | ＋421 | －243 | $8 \cdot 7$ | G 5 | 37 | $+63$ | －237 | 4．26 | K o | 14 | － 199 | － 142 | $6 \cdot 30$ | F 5 |
| 34 | $+496$ | $+168$ | $7 \cdot 9$ | G 5 | 39 | $-622$ | － 58 | 1.21 | K o | 16 | －227 | ＋ 159 | $7 \cdot 35$ | Ko |
| 47 | ＋ 17 | －232 | $3 \cdot 58$ | F 5 | 47 | ＋730 | －1848 | $8 \cdot 2$ | Go | 22 | ＋ 40 | － 242 | $8 \cdot 6$ | K 2 |
| 52 | ＋228 | －76 | $9 \cdot 2$ |  | 54 | －131 | －1179 | $6 \cdot 94$ | G o | 34 | ＋153 | － 205 | 9.01 | G 5 |
|  | ＋180 | －308 | $9 \cdot 4$ |  | 5 | － 69 | －． 354 | $5 \cdot 83$ | G 5 | 38 | ＋ 70 | － 202 |  | G 5 |
| 5 | ＋291 | －264 | $8 \cdot 9$ |  | 12 | 289 | －814 | $8 \cdot 5$ |  | 42 | －125 | － 238 | $6 \cdot 72$ | F 5 |
| 10 | $+318$ | －136 | $8 \cdot 2$ | G 5 | 14 | － 12 | － 388 | 5．16 | F 5 | 44 | －263 | － 75 | $8 \cdot 3$ | Go |
| 33 | －473 | －404 | 7.21 | G o | 31 | －207 | ＋ 118 | $9 \cdot 5$ |  | 44 | －329 | － 115 | $6 \cdot 39$ | G 5 |
| 40 | ＋243 | －180 | $8 \cdot 11$ | Ko | 32 | －III | － 186 | $7 \cdot 65$ | G 5 | 46 | －148 | － 211 | $8 \cdot 7$ | G 5 |
| 42 | ＋296 | － 119 | $8 \cdot 2$ | K o | 32 | －229 | － 112 | $9 \cdot 5$ |  | 48 | －226 | － 95 | $7 \cdot 66$ | Go |
| 43 | ＋212 | $-168$ | $7 \cdot 09$ | K o | 39 | －125 | － 339 | $9 \cdot 5$ |  | 133 | －290 | ＋ 120 | $8 \cdot 6$ | G 5 |
| 50 | ＋260 | －165 | $7 \cdot 45$ | G 5 | 47 | $-482$ | － 245 | 6.06 | K o | 3 | －290 | ＋ 120 | $9 \cdot 0$ |  |
| 52 | ＋215 | － 59 | 9.4 |  | 49 | ＋ 74 | － 433 | $6 \cdot 67$ | G o | 4 | ＋195 | － 80 | 8.61 | G 0 |
| 57 | ＋240 | － 168 | $6 \cdot 72$ | G o | 93 | －117 | － 387 | $5 \cdot 96$ | G 5 | 7 | －797 | ＋ 875 | $4 \cdot 32$ | G 0 |
| 33 | －173 | $-836$ | $8 \cdot 0$ | $\mathrm{F}^{2}$ |  | －219 | － 111 |  |  | 12 | ＋ 55 |  | $8 \cdot 4$ | K |
| 31 | ＋254 | －259 | $8 \cdot 1$ | Go | 12 | ＋ 77 | － 507 | $7 \cdot 26$ | K o | 14 | －299． | ＋ 44 | $8 \cdot 2$ | G 5 |
| 37 | ＋190 | －159 | $8 \cdot 7$ | G 5 | 20 | ＋97 | － 190 | $7 \cdot 77$ | G 5 | 19 | －449 | ＋ 239 | 8.86 | K 5 |
| 43 | $+70$ | －230 | $8 \cdot 9$ | G 5 | 27 | －142 | － 234 | 7－13 | Ko | 26 | － 71 | － 191 | $8 \cdot 9$ |  |
| 46 | ＋118 | －354 | $9 \cdot 1$ | G 5 | 47 | ＋128 | － 175 | $8 \cdot 1$ | K | 28 | ＋ 65 | － 217 | 6－18 | G 5 |
| 56 | －94 | －196 | $8 \cdot 3$ | G 5 | 47 | $-218$ | － 63 | 4－10 | K | 42 | －251 | － 90 | $6 \cdot 55$ | F 5 |
| 58 | ＋283 | －122 | $8 \cdot 2$ | K。 | 54 | －345 | － 57 | $8 \cdot 0$ | G 0 | 44 | －484 | － 78 | $7 \cdot 26$ | K 2 |
| 49 | ＋113 | －168 | ${ }^{8 \cdot 26}$ | K o |  | －256 | － 53 | $7 \cdot 91$ | G 5 | 48 | ＋222 | － 414 | $8 \cdot 8$ | K。 |
| 14 | ＋120 | －186 | 8.8 | G 5 |  | － 21 | － 95 | $8 \cdot 8$ | K。 | $14 \quad 4$ | －208 | － 47 | $9 \cdot 2$ | K o |

List of Stars with proper motion $20^{\prime \prime}$ or more per Century-continued.


Greentioh Catalogue of Stars.

List of $B$ Stars-continued.


List of B Stars-continued.

| $\begin{aligned} & \text { Approx. } \\ & \text { R.A. } \end{aligned}$ | Proper Motion. |  | Mag. | Spectral Type | $\begin{gathered} \text { Approx. } \\ \text { R.A. } \end{gathered}$ | Proper Motion. |  | Mag. | $\left\lvert\, \begin{gathered} \text { Spectral } \\ \text { Type. } \end{gathered}\right.$ | $\begin{aligned} & \text { Approx. } \\ & \text { R.A. } \end{aligned}$ | Proper Motion. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { R.A.A. } \\ & \text { m.001. } \end{aligned}$ | Dec. ".001. |  |  |  | $\underset{\text { M.OOI. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.ooi. } \end{aligned}$ |  |  |  | $\substack{\text { R.A. } \\ \text { n. } \\ \\ \hline \\ \hline \\ \hline}$ | $\begin{aligned} & \text { Dec. } \\ & \text { D.oor } \end{aligned}$ |  |  |
| m |  |  |  |  | n m |  |  |  |  | h m |  |  |  |  |
| 743 | - 21 | - 30 | $8 \cdot 7$ | B 9 | 1854 | + 22 | $\bigcirc$ | $7 \cdot 46$ | B 9 | 1938 | - 8 | + 4 | 6.74 | B 8 |
| 45 | + 13 | - 2 | $8 \cdot 0$ | B 9 |  | - 31 | + 4 | 8.2 | B 9 |  | - 15 | + 27 | $6 \cdot 06$ | B 9 |
| 52 | + 10 | - 42 | $8 \cdot 8$ | B 9 | 56 | + 4 | - II | $6 \cdot 70$ | B 8 | 41 | - 17 | + 20 | $7 \cdot 35$ | B 5 |
| 8 - | + 9 | - 19 | $6 \cdot 16$ | B 9 | 57 | 4 | - 7 | 5.50 | ${ }^{\text {B }} 3$ | 42 | - 3 | - 24 | $7 \cdot 28$ | B |
| 43 | - 38 | - 18 | $8 \cdot 7$ | B 9 | 57 | - 13 | + 6 | $6 \cdot 78$ | B 5 | 43 | - | - 5 | $7 \cdot 46$ | B 9 |
| 919 | - 16 | - 6 | 8.81 | B 9 | 59 | + 9 | - 14 | 6.93 | B 8 | 44 |  | + 12 | $7 \cdot 41$ | B 9 |
|  | - 15 | - 25 | $7 \cdot 60$ | B 8 |  | + 28 | - 25 | 7.05 | B 9 | 46 | - I | + 15 | $6 \cdot 29$ | B 8 |
| 29 | + 9 | - 30 | $7 \cdot 8$ | B 9 |  | + 11 | + 2 | $6 \cdot 66$ | B 5 | 47 | + | - 12 | $7 \cdot 8$ | B 5 |
| 1013 | - 22 | - 8 | $6 \cdot 46$ | B 9 | 5 | + 13 | + 11 | $6 \cdot 68$ | B 9 | 47 | + 4 | + 25 | $7 \cdot 34$ | B 9 |
|  | - 26 | - 41 | $5 \cdot 37$ | B 9 | 7 | + 6 | + 21 | 8.0 | B 9 | 51 | - | + 3 | $6 \cdot 36$ | B 9 |
| II 9 | + 11 | - 20 | $7 \cdot 96$ | B 9 | 10 | 10 | + 13 | $7 \cdot 16$ | B 8 | 55 | $+30$ | - 9 | 5.44 | B 8 |
| 139 | + 20 | - 26 | $8 \cdot 8$ | B 9 | 1 I | + |  | 6.69 | B 8 | 56 | + 12 | - 3 | $8 \cdot 8$ | B 9 |
| 1439 | + 8 | - I | $8 \cdot 3$ | B 9 | 12 | + | - 8 | 6.26 | B 9 | 57 | + 12 | - 21 | $8 \cdot 2$ | B 9 |
| 45 | - 11 | - 3 | $6 \cdot 56$ | B 9 | 12 | + 18 | - 15 | $6 \cdot 75$ | B 9 | 57 | - 3 | + 3 | $6 \cdot 71$ | B 8 |
| 1529 | - 26 | - 26 | 4-17 | B 5 | 12 | + 4 | - 3 | 8.4 | B 9 | 57 | + 7 | - | $5 \cdot 75$ | B 8 |
| 1713 |  | + 17 | 7.06 | B 9 | 14 | - 20 | + 8 | $7 \cdot 32$ | B 5 | 58 | + 4 | + 23 | $6 \cdot 60$ | B 8 |
|  | - 6 | - 21 | 7.20 | B 9 | 16 | + 36 | - 4 | 6.64 | B 5 | 59 | + 12 | - 15 | $6 \cdot 79$ | B 9 |
| 42 | - | + 3 | $6 \cdot 25$ | B 9 | 16 | - | - 8 | 6.64 | B 9 | 59 | + | + 3 | $7 \cdot 7$ | B 8 |
| 18 16 | - 10 | - 3 | $6 \cdot 54$ | B 8 | 17 | + | - 2 | $7 \cdot 26$ | B 3 |  | - I | - 12 | $5 \cdot 69$ | B |
| 17 | + 24 | - 19 | $6 \cdot 86$ | B 3 | 17 | + 20 | - 6 | $7 \cdot 26$ | B 3 |  | + 24 | - I2 | 8.0 | B 8 |
| 21 | - 34 | + 21 | $8 \cdot 0$ | B 9 | 19 | - 3 | - 15 | $4 \cdot 92$ | B 5 | 4 | - | + 5 | $8 \cdot 0$ | B 9 |
| 22 | - 47 | + II | $9 \cdot 2$ | B 9 | 20 | + 9 | + 10 | 4.86 | B 3 |  | + | - 14 | $7 \cdot 8$ | B 3 |
| 22 | - 16 | + II | $6 \cdot 83$ | B 3 | 20 | - 4 | + 8 | $6 \cdot 36$ | B 8 |  | + 3 | - 10 | $7 \cdot 6$ | B 5 |
| 22 | + 65 | $-7$ | 8.2 | B 9 | 20 | - 3 | + 9 | $7 \cdot 20$ | B 8 |  | - 9 | + 32 | $8 \cdot 0$ | B 9 |
| 22 | + | + II | $6 \cdot 87$ | B 3 | 21 | + 3 | - I | $8 \cdot 5$ | B 9 |  | + $4^{1}$ | + 15 | $6 \cdot 94$ | B 3 |
| 22 | - | - 7 | $8 \cdot 6$ | B 9 | 21 | I | - 12 | $7 \cdot 28$ | B 8 |  | 1 | - 23 | 7.44 | B 9 |
| 23 | + 4 | - II | $6 \cdot 36$ | B 3 | 22 | + 45 | + 12 | $8 \cdot 0$ | B 9 |  | - 17 | - 4 | $6 \cdot 72$ | B 9 |
| 23 | - 30 | - 7 | $8 \cdot 7$ | B 8 | 25 | - | - 9 | $8 \cdot 0$ | B 8 | 7 | + 37 | + 6 | $9 \cdot 2$ | B 9 |
| 24 | - 7 | + 18 | 6.82 | B 9 | 26 | 3 | - 4 | 8.1 | B 9 | 8 | + 5 | + 5 | 7-10 | B 8 |
| 24 | + 20 | - 25 | 8.6 | B 9 | 27 | + 8 | + 10 | $8 \cdot 5$ | B9 |  | + 5 | + 6 | $7 \cdot 56$ | B 8 |
| 27 | + 25 | + 9 | $7 \cdot 45$ | B 9 | 27 | - 11 | - 8 | $5 \cdot 36$ | B 9 |  | - 4 | - 16 | $5 \cdot 9$ r | B 8 |
| 29 | - 1 | - 7 | $5 \cdot 37$ | B 8 | 27 | - 28 | + 14 | $7 \cdot 7$ | B 8 | 9 | + 7 | $\bigcirc$ | $7 \cdot 9$ | B 9 |
| 29 | + 8 | + I | $6 \cdot 43$ | B 3 | 30 | - 8 | - 4 | 8-1 | B 9 | 9 | + 22 | + II | 8.1 | B 8 |
| 30 | + 33 | - 13 | $7 \cdot 41$ | B 8 | 31 | + $4^{2}$ | - 20 | $8 \cdot 0$ | B 9 | 10 | + 12 | - 9 | $6 \cdot 94$ | $\mathrm{B}_{3}$ |
| 30 | + 23 | + 6 | $8 \cdot 6$ | B 9 | 32 | - I | + 2 | $7 \cdot 6$ | B 2 | 10 | - 14 | - 10 | 8.0 | B 9 |
| 32 | + 4 | + 6 | $8 \cdot \mathrm{I}$ | B9 | 32 | + | - 8 | 8.01 | B 9 | 10 | - 4 | + 4 | $7 \cdot 38$ | B 5 |
| 36 | + 18 | + 27 | $6 \cdot 74$ | B 9 | 32 | + | + 14 | $7 \cdot 46$ | B 5 | 11 | - 3 | - 2 | $4 \cdot 82$ | B 3 |
| 39 | - 9 | - 12 | 7.52 | B 9 | 32 | + 38 | + 9 | $8 \cdot 6$ | B 9 | 14 | - 14 | + 17 | 6.78 | B 3 |
| 39 | - 8 | - 16 | $8 \cdot 0$ | B9 | 32 | + | + 12 | $8 \cdot 6$ | B 9 | 15 | - 25 | + 15 | 8.4 | B 9 |
| 41 | + 36 | + 18 | $7 \cdot 8$ | B 9 | 33 | + 8 | + 9 | 8.46 | B 9 | 16 | - 16 | - 4 | $6 \cdot 64$ | B 8 |
| 4 | - 8 | - 21 | $5 \cdot 78$ | B 3 | 33 | + 25 | - I | $6 \cdot 26$ | B 5 | 16 | $+$ | - 7 | $7 \cdot 40$ | B 8 |
| 46 | - 12 | - 25 | 6.50 | B 9 | 34 | + 12 | - I | $8 \cdot 2$ | B 9 | 18 | - 12 | - 13 | $5 \cdot 41$ | B 8 |
| 46 | + 14 | - 16 | $7 \cdot 46$ | B 8 | 34 | + 26 | + 11 | 7.72 | B 9 | 20 | - 1 | - 7 | $8 \cdot 0$ | B 9 |
| 47 | - 11 | - 20 | $8 \cdot 5$ | B 8 | 35 | - | $-13$ | 7-11 | B 9 | 26 | - 21 | - 4 | $8 \cdot 0$ | B 9 |
| 48 | - 14 | + 4 | $8 \cdot 8$ | B 9 | 36 | - I | +13 | 7.20 | B 8 | 29 | + 18 | - 23 | 7.6 | B |
| 48 | + 23 | + 17 | $8 \cdot 6$ | B 9 | 36 | + 3 | + 13 | $7 \cdot 7$ | B 8 | 31 | + 4 | - | $7 \cdot 41$ | B 5 |
| 48 |  | + 4 | 8.I | B 9 | 36 | - 1 | - 8 | $7 \cdot 6$ | B 9 | 33 | + 15 | - 15 | $5 \cdot 52$ | B 9 |

List of B Stars-continued.

| Approx. R.A. | Proper Motion. |  | Mag. | Spectral Type. | Approx. R.A. | Proper Motion. |  | Mag. | $\begin{gathered} \text { Speetral } \\ \text { Type. } \end{gathered}$ | Approx. | Proper Motion. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R.A. | $\begin{aligned} & \text { Dec. } \\ & 0 . \infty 01 . \end{aligned}$ |  |  |  | $\underset{\text { R.OO1. }}{\text { R.A. }}$ | Dec. ".001. |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { n. } 0.01 . \end{aligned}$ | Dec. ".001. |  |  |
| h m |  |  |  |  | m |  |  |  |  |  |  |  |  |  |
| 2034 | + 16 | - 35 | $7 \cdot 7$ | B 9 | 2114 | + 26 | + | $8 \cdot \mathrm{II}$ | B 5 | 2217 | - | - 2 | 4.88 | B 8 |
| 40 | - 9 | + 3 | $8 \cdot 0$ | B 3 |  | + 16 | - 4 | 7-12 | B 9 | 23 | $+$ | + 4 | 6.71 | B 9 |
| 41 | - 9 | + 5 | 8.0 | B 9 | 21 | + 11 | + 17 | $6 \cdot 88$ | B 8 | 38 | + | - 3 | $7 \cdot 9$ | B 9 |
| 43 | + 20 | - 2 | $7 \cdot 00$ | B 9 | 22 | + 26 | - 15 | $8 \cdot 7$ | B 8 | 39 | - 16 | - 9 | 8.I | B 9 |
| 45 | + 9 | + 13 | $7 \cdot 76$ | B 9 | 31 | + 4 | - 11 | $8 \cdot 4$ | B | 44 | - | $-23$ | $7 \cdot 26$ | B 9 |
| 45 | + 9 | + 13 | $7 \cdot 56$ | B 9 | 41 | - 4 | + 7 | 7-18 | B 9 |  | - 9 | - 17 | $7 \cdot 25$ | B 9 |
| 46 | + 9 | + 8 | $7 \cdot 04$ | B 9 | 41 | + 14 | + 1 | $6 \cdot 56$ | B 8 |  | - | - 27 | $6 \cdot 89$ | B 9 |
| 49 | - 16 | - 8 | 8.0 | B 9 | 43 | + 1 | - 4 | $8 \cdot \mathrm{I}$ | B 8 |  | + 16 | - 6 | $8 \cdot 2$ | B 9 |
| 49 | + 5 | + 9 | $7 \cdot 76$ | B 9 | 48 | $+36$ | - 19 | $8 \cdot 4$ | B 9 |  | - 12 | + 6 | $8 \cdot 4$ | B 9 |
| 50 | + 7 | - 3 | 7.56 | B 9 | 48 | + 1 | + 1 | $5 \cdot 05$ | B 3 | 17 | + 9 | - 21 | $5 \cdot 37$ | B 8 |
| 50 | + 16 | - 11 | $6 \cdot 44$ | B 3 | 56 | + 16 | + 14 | $7 \cdot 7$ | B 9 | 20 | + 15 | + 11 | $7 \cdot 21$ | B 9 |
| 54 | + 18 | + 37 | 7.17 | B 9 | 57 | - 14 | + 6 | $7 \cdot 8$ | B 9 | 31 | - 19 | - 9 | 7.34 | B 9 |
| 57. | + 24 | - 9 | $7 \cdot 8$ | B 8 | 59 | + 25 | + 4 | 7.01 | B 9 | 50 | + 25 | + 12 | $6 \cdot 59$ | B 9 |
| 213 | + 17 | - 5 | $7 \cdot 51$ | B 8 | 59 | $+3$ | - 4 | $7 \cdot 39$ | B 9 | 52 | + 17 | + | $7 \cdot 50$ | B 9 |
|  | + 10 | + 9 | $6 \cdot 77$ | B 9 | $22 \quad 2$ | 16 | + 1 |  | B 9 |  |  | + | $6 \cdot 36$ | B 5 |
|  |  | + 11 |  | B 9 |  |  |  |  | B 8 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| h m |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - 5 | - 30 | + 10 | $8 \cdot 2$ | M a | 16 | 6 |  | $7 \cdot 7$ | Ma |  | - | - 25 | 8.86 | M c |
|  | - 33 | + 1 | $8 \cdot 1$ | M b |  | - 24 | $-52$ | 9-2 | M a |  | - 16 | - 15 | $6 \cdot 31$ | M a |
| 6 | + 18 | + 15 | $8 \cdot 2$ | M a | 42 | + 16 | - 52 | $8 \cdot 7$ | Ma | 55 | + 22 | $-3^{2}$ | 8.51 | M a |
| 16 | + 34 | + 8 | $7 \cdot 86$ | M a |  | - 46 | + 23 | $8 \cdot 7$ | Ma |  | - 29 | - 44 | 7.86 | M a |
| 17 | + 44 | + 45 | var. | M d | 59 | - | + 26 | $8 \cdot 5$ | Ma |  | - | - 37 | var. | M a |
| 22 | + 5 | + 25 | 7-61 | M a | 418 | + 21 | + 13 | $8 \cdot 0$ | M a | 25 | + 22 | $-21$ | $8 \cdot 7$ | M a |
| 47 | + 6 | - 23 | $8 \cdot 2$ | M a | $5 \quad 5$ | - 10 | -18 | $6 \cdot 72$ | Ma | 31 | + 13 | $-4^{2}$ | $5 \cdot 74$ | M a |
| 50 | + 21 | - 22 | $6 \cdot 36$ | M b | 34 | - 5 | - 1 | $6 \cdot 72$ | Ma | 45 | + 5 | $\bigcirc$ | $7 \cdot 28$ | M a |
| 51 | + 36 | - 4 | $8 \cdot 2$ | M a | 45 | + 13 | - 11 | $7 \cdot 7$ | Ma | 10 II | - 13 | $-18$ | $8 \cdot 9$ | M a |
| 52 | + 19 | - 9 | $8 \cdot 1$ | M a |  | - 8 | - 26 | $6 \cdot 32$ | M a | - | + 18 | + 1 | $7 \cdot 88$ | M a |
| 54 | - 27 | - 3 | $8 \cdot 8$ | Ma |  | + 26 | - 39 | $7 \cdot 6$ | M a |  | + | - 15 | 9.0 | M a |
| 16 | - 13 | - 33 | $8 \cdot 5$ | M a | 35 | + $4^{2}$ | - 4 | $8 \cdot 0$ | M a |  | - 34 | - 7 | $7 \cdot 28$ | M a |
|  | - 45 | - 12 | $8 \cdot 7$ | M a | 36 | - 3 | - 46 | 7.8 | M a | 58 | - 12 | + 13 | $9 \cdot 2$ | M a |
| 8 | + 27 | - 31 | $8 \cdot 7$ | Ma | 0 | - 36 | - 49 | $9{ }^{\circ}$ | M a |  | - 31 | - 29 | 8.8 | M a |
| 9 | + 34 | $-56$ | 6.63 | M a | 55 | + 7 | - 7 | $9 \cdot 4$ | M a | 26 | - 90 | + 8 | $7 \cdot 00$ | M a |
| 12 | - 7 | - 9 | $9 \cdot 3$ | M a | 59 | $+46$ | -8 | $6 \cdot 80$ | M a | 5 | -7 | - 29 | $7 \cdot 66$ | M b |
| 17 | + 18 | - 7 | $7 \cdot 7$ | M b |  | + 48 | $-18$ | $9 \cdot 1$ | M a | 1212 | + 32 | + 1 | $\because$ | M a |
| 40 | + 30 | - 41 | $7 \cdot 9$ | M b |  | - II | - 54 | $6 \cdot 90$ | M a |  | - 16 | - | $7 \cdot 45$ | M a |
| 52 | + 17 | $-53$ | $6 \cdot 02$ | M b |  | - 24 | - 26 | 8-21 | M a |  | - 38 | - | $8 \cdot 2$ | M a |
| 52 | -41 | -63 | $7 \cdot 21$ | M b | 10 | - 18 | - 9 | $5 \cdot 87$ | M a | 4 | + 25 | $-17$ | $9 \cdot 6$ | M a |
| 3 | + 5 | + 16 | $7 \cdot 7$ | M a | 4 | - 5 | - 12 |  | M b | $49$ | + 90 | - 16 | $9 \cdot 3$ | M a |
| 10 | + 62 | - 13 | var. | M d | 4 | - 65 | - 37 | $9 \cdot 4$ | M b |  | -67 | $-31$ | $7 \cdot 21$ | M a |
| 12 | + 16 | - 18 | $6 \cdot 85$ | M a | 0 | + 23 | + 12 |  | Ma |  | - 12 | - 13 | $5 \cdot 90$ | M a |
| 33 | + 4 | - 2 | 8.1 | M b | 2 | - 16 | - 15 |  | Ma | 14 | + 9 | - 47 | 8.2 | M a |
| 35 50 | - 3 | $+\quad 18$ $+\quad 19$ | var. | M c | 85 | - | - 17 |  | M a |  | - $4^{2}$ | - 33 | $6 \cdot 56$ | M b |
| 50 | - 4 | - 19 | $7 \cdot 24$ | Ma | 82 |  | - 10 | $9 \cdot 2$ | M b |  | - 20 | - 14 | $8 \cdot 2$ | Ma |

List of M Stars-continued.


## EXPLANATION OF THE SEPARATE COLUMNS OF THE PRINTED CATALOGUE.

Column I gives the reference numbers to the stars in the catalogue.
Column 2 gives the zone and reference number in the Bonn Durchmusterung.
Column 3 gives the reference number in the Astronomische Gesellschaft Catalogue for 1875, the letters B, C, and L referring to the Berlin (Becker), Cambridge and Leiden sections.

Column 4 gives the reference numbers in Weisse's reductions of Bessel's zones for 1825 .
Column 5 gives the reference numbers in Lalande's catalogue for 1800 .
Column 6 gives the observed right ascension corrected for magnitude correction, and reduced to I910.0 without proper motion.

Columns 7, 8, 10, II give the precession and secular variation as described in Part I.
Column 9 gives the observed declination reduced to 1910.0 without proper motion.
Column 12 gives the mean date of observation, in the few cases of two entries the first refers to the R.A. and the second to the declination observations.

Columns 13, 14 give the proper motions in units of s.OOOI and ".OOI, those marked * are taken direct from Boss' Preliminary General Catalogue for 1900.

Column 15 gives the magnitude of the star according to the Harvard system, those with two places of decimals are the latest Harvard values, and the others the B.D. magnitude reduced to the Harvard system by the tables given (Harvard Annals, LXXII, p. 216).

Column 16 gives the spectral type from the Henry Draper Catalogue in course of publication.
N.B.-The number of observations is in all cases 5 , except when stated otherwise in the notes.

## GREENWICH CATALOGUE OF STARS FOR $1910 \cdot 0$

## PART II.

## CATALOGUE OF STARS IN THE ZONE $+24^{\circ} .0^{\prime}$ то $32^{\circ} .0^{\prime}$

OBSERVED AT THE ROYAL OBSERVATORY, GREENWICH

$$
1906-1914
$$

AND REDUCED WITHOUT PROPER MOTLONS TO THE EPOCH $1910^{\circ} 0$

|  |  |  |  |  |  |  |  |  |  |  |  | Annual | I P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. igio.o. | Precession. | See. Var. | Dec. 19100. | Precession. | Sec. Var. | Epoch $1900+$ | $\begin{gathered} \text { R.A. } \\ \text { s.0001. } \end{gathered}$ | Dec. ".001. | Mag. | Spectral Type. |
|  |  |  |  |  | $h^{\text {m }} \mathrm{m}$ | s | $s$ | - " | " | " |  |  |  |  |  |
| 1 | 284697 | C 1443I |  |  | - 0.90 | $+3.0726$ | +.0186 | 29 I3 17•0 | $+20.046$ | -.009 | 11.5 | + 13 | - 29 | $9 \cdot 2$ |  |
| 2 | 234852 | B 9202 | 1246 |  | - $9 \cdot 29$ | 0729 | 153 | $2412 \quad 2.5$ | 046 |  | $12 \cdot 1$ | + 13 | + 23 | $9 \cdot 5$ |  |
| 3 | 295057 | C 14432 | I $247^{-8}$ | 47212-3 | - 14.09 | 0733 | 188 | $2935 \quad 8 \cdot 3$ | 046 | 10 | 10.4 | +49 | - 34 | $8 \cdot 2$ | F 5 |
| 4 | 255068 | C 14434 | 1253 | 47214 | - 17.93 | 0734 | 165 | $26 \quad 8 \quad 53.4$ | 046 |  | $10 \cdot 0$ | + 76 | + 6 | $6 \cdot 52$ | K 2 |
| 5 | 255069 | C I 4435 | 1255 |  | - $21 \cdot 01$ | 0735 | 166 |  | 046 | 10 | 11.0 | 0 | - II | $9 \cdot 0$ |  |
| 6 | $26+744$ | C 14436 | 1256-9 | 47216 | - 023.27 | $+3.0736$ | +.OI72 | $271026 \cdot 8$ | $+20.046$ | -.010 | 10.5 | + 58 | + 12 | $7 \cdot 0$ |  |
| 7 | 295059 | C 14437 | 1 262-3-4 | 47219-21 | - 31.96 | 0743 | 191 | $294943 \cdot 7$ | 046 |  | $9 \cdot 5$ | 30 | - 3 I | $8 \cdot 4$ | Fo |
| 8 | 274673 | C I 4438 |  |  | - $46 \cdot 44$ | 0749 | 178 | $28235 \cdot 0$ | 046 |  | 10.2 | 27 | + 4 | $9 \cdot 2$ |  |
| 9 | 315034 | L 10234 | I 277-8 |  | - 59.89 | 0761 | 205 | $314652 \cdot 1$ | 046 | 11 | 10.6 | - 19 | - 13 | $9 \cdot 4$ |  |
| 10 | 234853 | B 9205 | 1284 | 47245 | 1 I 8.99 | 0759 | 153 | $2446 \cdot 0$ | 046 |  | $9 \cdot 8$ | + II | - 7 | 7-12 | K 5 |
| 11 | 274674 | C I444I |  | 47248 | - 122.85 | $+3.0767$ | +.0177 | $274^{6} 33 \cdot 8$ | $+20 \cdot 046$ | --011 | $8 \cdot 9$ | + 3 | + 13 | $6 \cdot 93$ | K 2 |
| 12 | 244885 | B 9206 | 1289-90 | 47250 | $125 \cdot 15$ | 0763 | 155 | $242457 \cdot 5$ | 046 | II | $9 \cdot 6$ | $+\quad 47$ | - 28 | $7 \cdot 46$ | K o |
| 13 | 284704 | C 3 | 1304 | 47261-2 | I $56 \cdot 28$ | 0786 | 183 | $283130 \cdot 1$ | 045 | 12 | $9 \cdot 6$ | + 288* | - 176* | $6 \cdot 20$ | K o |
| 14 | 274676 | C 4 | 1305 | 47264 | I 57.72 | 0786 | 180 | 28 3 10.I | 045 |  | 10.2 | - 30 | + 17 | $6 \cdot 79$ | K o |
| I 5 | 284705 |  | 1307 |  | 22.55 | 0789 | 181 | $281944 \cdot 6$ | 045 | 13 | 10.8 | + 33 | - 55 | $9 \cdot 0$ |  |
| 16 | 295063 | C 6 | 1308 |  | - 25.76 | +3.0795 | +.0192 | $295226 \cdot 8$ | $+20.045$ | -.O13 | II•I | 19 | + 51 | $9 \cdot 7$ |  |
| 17 | 284707 | C $\quad 8$ |  |  | 210.68 | 0794 | 184 | $2837 \quad 20 \cdot 8$ | 045 | 13 | I I•7 | $+30$ | - 6 | $9 \cdot 4$ |  |
| 18 | 284706 | C $\quad 7$ |  |  | 210.73 | 0794 | 182 | 28 27 | 045 | 13 | 11.3 | + 80 | - 58 | $9 \cdot 4$ |  |
| 19 | 305090 | L $\quad 2$ | 1313-4 | 47270 | 212.29 | 0803 | 198 | $303747 \cdot 2$ | 045 | 13 | II•I | $+38$ | - 15 | $8 \cdot 2$ | K |
| 20 | 284708 | C II |  |  | 224.96 | 0804 | 187 | $29755 \cdot 7$ | 045 | 13 | 11.6 | + 31 | - 26 | $9 \cdot 0$ | A 0 |
| 21 | 305091 | L 4 |  |  | O 225.02 | $+3.0807$ | +.0196 | 3027 34*2 | $+20.045$ | -.O13 | 10.8 | - 10 | - 7 | $9 \cdot 4$ |  |
| 22 | 255073 | C 12 | I 324-6 | 47281 | 243.77 | 0802 | 167 | $25 \quad 57 \quad 9 \cdot 0$ | 045 | 14 | 10.0 | + 105 | $-122$ | $7 \cdot 30$ | K o |
| 23 | 274680 | C 13 |  |  | $246 \cdot 78$ | 0812 | 182 | $281235 \cdot 9$ | 045 | 14 | 10.2 | - 2 | + II | $9 \cdot 2$ |  |
| 24 | $3 \mathrm{I} \quad 1$ | L 9 | 1 332-3-4 |  | 254.64 | 0829 | 205 | $\begin{array}{llllllllllllllllllll}31 & 30 & 29.8\end{array}$ | 044 | 14 | 10.2 | - 59 | - I3 | $8 \cdot 2$ |  |
| 25 | 30 I | I. 12 | 1335-6 | 47287 | $256 \cdot 78$ | 0829 | 204 | 31106.8 | 044 | 14 | 10.6 | - 3 | - 29 | $7 \cdot 01$ | G 5 |
| 26 | 292 | C 15 |  | 47309 | - 322.40 | + 3.0835 | +.0189 | 292011.0 | +20.044 | -.OI 5 | 10.9 | $+6$ | - 45 | $7 \cdot 9$ | F 2 |
| 27 | $30 \quad 2$ | $\mathrm{L} \quad 16$ | 1 356-8 | 47311 | $\begin{array}{lll}3 & 23.44\end{array}$ | 0844 | 200 | $3053 \quad 26 \cdot 8$ | 044 | 15 | II 9 | - 36 | - 24 | $7 \cdot 06$ | A 5 |
| 28 | $30 \quad 3$ | L 17 | I 359-60 | 47312 | $3 \quad 30 \cdot 75$ | -848 | 201 | $305241 \cdot 3$ | 044 | 15 | 12.0 | + 21 | 1 | $7 \cdot 30$ | A 3 |
| 29 | $24 \quad 1$ | B 7 |  |  | $\begin{array}{lll}3 & 32.44\end{array}$ | 0820 | 160 | $2448 \quad 0.4$ | 044 | 15 | I 1.8 | - 32 | - 41 | $8 \cdot 8$ | F 5 |
| 30 | 293 | C 17 |  |  | 333.04 | 0842 | 191 | 292821.7 | $\bigcirc 44$ | 15 | I 2.4 | + I3 | + 39 | $9 \cdot 2$. |  |
| 31 | 283 | C 18 |  |  | - $335 \cdot 33$ | $+3.0842$ | +.0190 | $291354 \times 7$ | +20.044 | --O15 | 12.2 | - 24 | - 24 | $8 \cdot 9$ |  |
| 32 | 284 | C 19 | 1365 | 47319-24 | $343 \cdot 95$ | 0844 | 185 | $283536 \cdot 8$ | 043 | 16 | I1.3 | + 106* | - 161* | 2.15 | A O P |
| 33 | 295 | C 20 |  |  | $3 \quad 49 \cdot 44$ | 0850 | 190 | 292032.5 | 043 | 15 | 12.4 |  |  | $9 \cdot 5$ |  |
| 34 | $24 \quad 2$ | B 9 | 1375 |  | $352 \cdot 80$ | 0828 | 157 | $242453 \cdot 1$ | 043 | 15 | 10.9 | - 24 | - 14 | $9 \cdot 0$ |  |
| 35 | 24 3 | B 12 | $1387-9$ | 47341 | 4 T3.22 | 0839 | 161 | $245738 \cdot 3$ | 043 | 17 | I I. 6 | + 76 | + 51 | $6 \cdot 35$ | G 5 |
| 36 | $27 \quad 2$ | C 22 | 1390 |  | - 414.08 | $+3.0858$ | +.0183 | $2817 \begin{array}{lll}28 & 17\end{array}$ | $+20.043$ | --017 | 11.0 | - 5 | + 16 | $8 \cdot 3$ |  |
| 37 | $27 \quad 3$ | C 24 |  | 47347 | $421 \cdot 65$ | 0859 | 179 | $274448 \cdot 6$ | 042 | 17 | $9 \cdot 7$ | + 44 | - | $6 \cdot 52$ | A 2 |
| 38 | $25 \quad 7$ | C 25 | 9-10 |  | $432 \cdot 76$ | 0852 | 165 | $25 \quad 327.5$ | 042 | 17 | 10.4 | - 46 | - 140 | $9^{\circ} 0$ |  |
| 39 | 3 I | L 26 |  |  | $434 \cdot 89$ | 0892 | 210 | $\begin{array}{lllll}31 & 58 & 39 \cdot 9\end{array}$ | 042 | 18 | 10.4 | $+105$ | - 58 | $9 \cdot 2$ |  |
| 40 | $24 \quad 4$ | B 15 | 11-12 | 47352 | $436 \cdot 28$ | 0849 | 161 | $2447 \quad 5 \cdot 3$ | 042 | 17 | 10.2 | + 145 | - 142 | $8 \cdot 2$ | G o |
| 41 | $25 \quad 9$ | C 26 | 21 |  | - $458 \cdot 00$ | $+3.0867$ | +.0170 | $261054{ }^{\circ}$ | $+20.041$ | --OI8 | $9 \cdot 9$ | + 16 | + 17 | $8 \cdot 8$ |  |
| 42 | 246 | B 20 | 29 | 47384 | $526 \cdot 92$ | 087I | 160 | 24 4I 48.4 | 040 | 19 | $9 \cdot 0$ | - 22 | + 10 | $8 \cdot 2$ | Ma |
| 43 | 264 | C 28 |  |  | $531 \cdot 70$ | 0891 | 177 | 27 I5 51.5 | 040 | 19 | 10.8 | + 15 | 8 | $9 \cdot 9$ |  |
| 44 | 247 | B 21 | 31 |  | 534.4 I | 0877 | 162 | $25 \quad 133.4$ | 040 | 19 | 10.2 | I | - 13 | $8 \cdot 6$ | F |
| 45 | 309 | 1.30 | $33-4-5$ |  | $5 \quad 38 \cdot 27$ | 0922 | 204 | $30 \quad 5656 \cdot 7$ | 040 | 19 | 10.4 | + 2 | - 29 | $9 \cdot 4$ |  |
| 46 | $27 \quad 7$ | C 29 | 42 | 4 | - $547 \cdot 80$ | $+3.0906$ | +-0183 | $\begin{array}{llll}28 & 9 & 8 \cdot 9\end{array}$ | $+20.040$ | -.or9 | $8 \cdot 8$ | - 25 | + 1 | 8.I | Mb |
| 47 | $30 \quad 10$ | C 3I | 46 |  | $5 \quad 56 \cdot 37$ | 0929 | 200 | $302916 \cdot 7$ | 039 | 20 | 10.0 | - 6 | - 29 | $9 \cdot 3$ |  |
| $4^{8}$ | 318 | L 35 | $51-2$ |  | $6 \quad 7 \cdot 73$ | 0946 | 209 | 3 l 44 31.0 | 039 | 20 | $9 \cdot 1$ | + 14 | + 15 | $8 \cdot 2$ | Ma |
| 49 | 24 IO | B 23 | 58 |  | $6 \quad 8 \cdot 86$ | 0887 | 159 | 24197.9 | 039 | 20 | $9 \cdot 8$ | - 91 | - 65 | $9 \cdot 2$ | F 5 |
| 50 | 29 Io | C 32 | 53-4-5 | 22-3 | $6 \quad 9 \cdot 23$ | 0934 | 198 | 30 II 6.4 | 039 | 20 | $9 \cdot 6$ | + 5 | - 25 | $7 \cdot 91$ | A 0 |






| No． | B．D． | A．g．c． | W．B．（2）． | Lalande． | P．A． $1910 \cdot 0$. | Precession． | Sec．Var． | Dec．1910．0． | Precession． | Sec． Var | Epoch $1900+$ | Annual P．M． |  | Mag． | Spectral Type． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { 8.000 }}{\text { R.A. }}$ | Dec． ＊．001． |  |  |
|  | 。 |  |  |  | h m | 5 | s | －＂ | ＂ | ＂ |  |  |  |  |  |
| 251 | 23 80 | B 169 | 706 |  | － $3042 \cdot 42$ | $+3.1521$ | ＋．0174 | 24.1919 .3 | ＋19．866 | －． 069 | 10.2 | ＋ 3 | 11 | $9 \cdot 3$ |  |
| 252 | 29103 | C 336 | 709 |  | $3052 \cdot 10$ | 1767 | 219 | $\begin{array}{llll}30 & 8 & 53.3\end{array}$ | 865 | 71 | 11.8 | ＋ 5 | 17 | $9 \cdot 4$ |  |
| 253 | 2688 | C 338 | 710 | 872 | 3053.40 | 1631 | 193 | $264630 \cdot 0$ | 864 | 71 | ${ }_{11} \cdot 6$ | － 1 | 22 | $9 \cdot 4$ | A 5 |
| 254 | 3178 | L 183 |  |  | 3054.62 | 1837 | 232 | 314414.0 | 864 | 71 | 12.0 | － 20 | － 21 | $9 \cdot 2$ | K 0 |
| 255 | $28 \quad 95$ | C 342 | 717 | 879 | 315.29 | 1716 | 208 | $28 \quad 4433 \cdot 8$ | 862 | 71 | 11.7 | $+75$ | ＋ 26 | $8 \cdot 8$ | F 8 |
| 256 | $28 \quad 96$ | C 343 | 719 | 881 | － 316.22 | ＋3．1711 | ＋．0207 | $2836 \quad 17.9$ | ＋19．862 | －．071 | 10.3 | ＋ 16 | － | $8 \cdot 8$ | G 5 |
| 257 <br> 258 | 29105 | C 344 | 724 | 885－6 | $\begin{array}{lll}31 & 1 \\ 31 & 4.37\end{array}$ | 1753 | 214 | $293026 \cdot 1$ | 860 | 71 | 12.6 | ＋130 | － 423 | 8． 8.6 | F 8 |
| 258 |  |  |  |  | $\begin{array}{lll}31 & 1 & +57\end{array}$ | 1753 | 214 | 293031.6 | 860 | 71 | 12.8 | ＋ 130 | － 423 |  |  |
| 259 260 | 26 26 26 | C 345 |  |  | $\begin{array}{llll}31 & 17.66 \\ 31 & 30.19\end{array}$ | 1657 +660 | 197 |  | 859 | 72 | 11.0 | ＋ 74 | $\begin{array}{r} \\ \hline\end{array}$ | $9 \cdot 3$ 0.2 |  |
|  |  |  |  |  | 313019 |  | 197 | $\begin{array}{llll}27 & 2 & 4\end{array}$ | 85 | 72 | 12.6 |  | 12 | 9.2 |  |
| 261 | 29106 | C 348 | 730 |  | － $3132 \cdot 57$ | $+3 \cdot 1788$ | ＋．0220 | $\begin{array}{llll}30 & 6 & 1.6\end{array}$ | ＋19．856 | －．072 | 12．1 | ＋ 25 | ＋ 19 | $9 \cdot 4$ |  |
| 262 | 26 91 | C 349 | 735 | 900－1 | 3134.28 | 1650 | 194 | $264533 \cdot 5$ | 856 | 72 | $9 \cdot 6$ | － 9 | － 38 | $6 \cdot 26$ | B 8 |
| 263 | 2581 | C 351 | 736 |  | $3136 \cdot 74$ | 1608 | 186 | $253949 \cdot 6$ | 856 | 72 | 11.5 | ＋ 4 | ＋ 22 | $9 \cdot 2$ |  |
| 264 | 3081 | C 350 |  |  | $3136 \cdot 79$ | 1804 | 223 | $3025 \quad 25 \cdot 6$ | 856 | 72 | 12.8 | ＋ 11 | ＋ 13 | $9 \cdot 4$ |  |
| 265 | $29 \quad 107$ | C 352 | 739 | 904－5－6 | 3144.49 | 1763 | 214 | $29204^{8 \cdot 0}$ | 854 | 72 | 11.8 | 6 | ＋ 17 | $8 \cdot 6$ | G 5 |
| 266 | $26 \quad 92$ | C 354 | 746 | 918－9 | － 3158.12 | $+3.1654$ | ＋．0193 | $\begin{array}{llll}26 & 33 & 27\end{array} \cdot 8$ | ＋19．851 | －． 073 | II． 8 | 16 | － 9 | $8 \cdot 2$ | F 2 |
| 267 | 2899 | C 355 | 747 |  | $\begin{array}{ll}32 & 0.17\end{array}$ | 1743 | 209 | $28 \quad 411704$ | 851 | 73 | 12.8 | －7 | ＋ 9 | $9 \cdot 4$ |  |
| 268 | $24 \quad 87$ | 13178 | 750 |  | $\begin{array}{lll}32 & 4.77\end{array}$ | 1582 | 180 | $244027 \cdot 7$ | 850 | 73 | 11.8 | ＋ 14 | － 19 | $8 \cdot 2$ | G 5 |
| 269 | $25 \quad 84$ | C 356 |  |  | $32 \quad 11.92$ | 1625 | 187 | $25417 \cdot 7$ | 849 | 73 | 10.1 | ＋ 54 | ＋ 39 | $9 \cdot 2$ |  |
| 270 | $30 \quad 82$ | L 195 | 754－6 | 927 | 3215.95 | 1851 | 227 | $305928 \cdot 6$ | 848 | 74 | 11．2 | － 8 | ＋ $+\quad 8$ | $8 \cdot 2$ | F。 |
| 271 | $26 \quad 93$ | C 359 | 764 |  | － $3234 \cdot 33$ | $+3 \cdot 1681$ | ＋．0195 | $26{ }^{2} 831 \cdot 2$ | ＋19．844 | －． 074 | 11．2 | 14 | 4 | $8 \cdot 9$ | F 5 |
| 272 | 2587 | C 361 | 777 | 953 | $33 \quad 0.04$ | 1645 | 186 | $253736 \cdot 0$ | 839 | 75 | 10.3 | ＋ 27 | － 36 | 8.6 | A 0 |
| 273 | 2588 | C 364 |  |  | 331122 | 1644 | 187 | $25 \quad 368 \cdot 8$ | 838 | 75 | 11.8 | 21 | － 14 | $9 \cdot 4$ |  |
| 274 | $25 \quad 89$ | C 365 | 779 |  | 331.96 | 1654 | 189 | $25 \quad 50 \quad 7 \cdot 2$ | 838 | 75 | 12.2 | 50 | － 22 | $8 \cdot 8$ |  |
| 275 | $25 \quad 90$ | C 366 | 773 |  | 335.93 | 1636 | 185 | 252014.5 | 837 | 75 | $\mathrm{II}^{1} 3$ | 41 | － 40 | $8 \cdot 3$ |  |
| 276 | 3186 | L 199 |  | 956 | － 3310.03 | $+3.1916$ | ＋．0234 | $\begin{array}{lll}31 & 43 & 9.7\end{array}$ | ＋19．837 | ． 075 | 12.7 | ＋ 95 | － 59 | $8 \cdot 8$ | F 5 |
| 277 | $24 \quad 88$ | $\begin{array}{ll}\text { B } & 187 \\ \text { C }\end{array}$ | 783－4 |  | $\begin{array}{llll}33 & 15.88\end{array}$ | 1613 | 181 | $244045 \cdot 1$ | 835 | 76 | 12.0 |  | － 18 | $8 \cdot 6$ | F 8 |
| 278 | 2591 | C 367 | 790 |  | $33 \quad 35 \cdot 76$ | 1675 | 190 |  | 831 | 76 | 12.0 | ＋ 47 | ＋ 2 | $9 \cdot 2$ |  |
| 279 | $27 \quad 95$ | C 368 |  |  | $33 \quad 39.43$ | 1763 | 205 | $275738 \cdot 0$ | 830 | 76 | 12.5 | － 17 | ＋ 8 | $9 \cdot 4$ |  |
| 280 | $26 \quad 94$ | C 369 |  |  | $3344 \cdot 91$ | 1727 | 198 | $27 \quad 3 \quad 28.6$ | 829 | 76 | 12.2 | 29 | 115 | $8 \cdot 7$ |  |
| 281 | 28103 | C 370 | 796－7 | 976 | － $3347 \cdot 76$ | $+3.1807$ | $+.0212$ | $28+923 \cdot 5$ | ＋19．828 | －． 077 | 11－2，11．9 | －173＊ | － $248^{*}$ | 4.52 | G； |
| 282 | $28 \quad 102$ | C 371 | 792－5 |  | 3348.51 | 1798 | 210 | $28 \quad 37 \quad 52.9$ | 828 | 76 | 12.8 | ＋ 7 | ＋ 21 | $9 \cdot 4$ |  |
| 283 | 3188 | L 202 <br> C  | 798－9 |  | $3350 \cdot 64$ | 1926 | 232 | $\begin{array}{llllllllllll}31 & 24 & 4 \cdot 1\end{array}$ | 828 | 78 | 12.0 | ＋ 10 | － 50 | $8 \cdot 6$ | G 3 |
| 284 | $30 \quad 89$ | C 372 | 805 | 980 | $34 \begin{array}{ll} \\ 3 & \text {－14 }\end{array}$ | 1890 | 226 | 303133.0 | 826 | 77 | 13.0 | $-163$ | － 75 | $9 \cdot 4$ |  |
| 285 | $26 \quad 95$ | C 374 |  |  | $\begin{array}{lll}34 & 8 \cdot 73\end{array}$ | 1745 | 199 |  | 824 | 77 | 12.7 | 33 | 31 | 9.0 |  |
| 286 | $25 \quad 92$ | C 375 | 812 | 983 | － 34 11．52 | $+3 \cdot 1687$ | ＋．0190 | 2549 46．2 | $+19.823$ | －． 077 | 10.6 | ＋ 14 | 17 | $7 \cdot 26$ | K 。 |
| 287 | $24 \quad 90$ | B 190 | 813－4－5 | 984 | $\begin{array}{ll}34 & 12.84\end{array}$ | 1645 | 183 | $245037 \cdot 5$ | 823 | 78 | 11.7 | － 7 | － 23 | $8 \cdot 6$ | F 5 |
| 288 | $27 \quad 98$ | C 376 |  |  | $3+13.07$ | 1777 | 204 | $\begin{array}{lllllll}27 & 5 & 3 & 38.0\end{array}$ | 823 | 77 | 11.7 | － 30 | ＋ $\mathbf{4 2}^{2}$ | $9 \cdot 2$ |  |
| 289 | $30 \quad 91$ | C 378 | 819－20 | 992－6 | 3430.69 | 1900 | 224 | $\begin{array}{llll}30 & 22 & 6.8\end{array}$ | 819 | 78 | 1221， $22 \cdot 3$ | ＋107＊ | －86＊ | 3.49 | K 2 |
| 290 | 24 91 | B 191 | 821 |  | $3435 \cdot 80$ | 1672 | 186 | $25 \quad 1412.4$ | 818 | 78 | 12.6 | 21 | － 23 | $9 \cdot 11$ | F 5 |
| 291 | $26 \quad 96$ | C 381 |  |  | － $3436 \cdot 50$ | $+3 \cdot 1749$ | ＋－0198 | $265941 \cdot 9$ | $+19.818$ | －．078 | 12.4 | ＋ 19 | － | $8 \cdot 8$ |  |
| 292 | $25 \quad 93$ | C 382 | 832 |  | $3442 \cdot 23$ | 1719 | 193 | $261438 \cdot 5$ | 817 | 78 | 11.7 | － 16 | － 45 | $8 \cdot 9$ | G 5 |
| 293 | 2388 | B 195 | 830 |  | 3453.87 | 1630 | 177 | $\begin{array}{llll}24 & 3 & 47 \cdot 7\end{array}$ | 814 | 79 | 11.2 | ＋ 12 | ＋ | $8 \cdot 8$ |  |
| 294 | 28106 | C 385 | 835－6 | 1021 | $\begin{array}{lll}35 & 9 \cdot 30\end{array}$ | 1851 | 212 | $28 \quad 5235.9$ | 811 | 79 | 11.8 | ＋ 1 | ＋ 6 | $9 \cdot 4$ | K。 |
| 295 | $25 \quad 96$ | C 386 | 844 | 1032 | $3531 \cdot 71$ | 1739 | 193 | $261021 \cdot 2$ | 806 | 80 | 10.0 | ＋ 112 | － 7 | $8 \cdot 0$ | F 8 |
| 296 | $30 \quad 93$ | L 211 | 845 |  | － 3535.37 | $+3.1981$ | ＋．0233 | $\begin{array}{llll}31 & 17 & 3.9\end{array}$ | ＋19．805 | －．081 | 11．2 | ＋ 65 | － 23 | 9.4 |  |
| 297 | $30 \quad 94$ | $\mathrm{L}_{\mathrm{L}} 212$ | 856 |  | $3543 \cdot 69$ | 1976 | 231 | $\begin{array}{llll}31 & 414.9\end{array}$ | 803 | 82 | 11.4 | ＋${ }^{2}$ | ＋ 12 | $9 \cdot 2$ |  |
| 298 | $23 \quad 93$ | B 202 | 858 | 1046 | 3544.11 | 1654 | 179 | $\begin{array}{lllll}24 & 6 & 37.6\end{array}$ | 803 | 81 | 9.6 | 10 | ＋ 22 | 8.2 | G 5 |
| 299 | 29119 | $\begin{array}{ll}\text { C } & 387 \\ \text { C } & 389\end{array}$ | 860－2－3 |  | $3551 \cdot 70$ 3558.44 | 1904 | 218 | $2930+5 \cdot 0$ | 801 | 81 | 11.2 | 39 | － 16 | $8 \cdot 8$ | Go |
| 300 | 28107 | C 389 |  |  | $3558 \cdot 44$ | 1853 | 210 | $28 \quad 21 \quad 52.0$ | 800 | 81 | 11.8 | 36 | － 6 | 9.2 |  |


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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910*O. | Preeession. | Sec. Var. | Dee. 191c.o. | Precession. | Sec. Var. | Epoch $1900+$ | $\underset{\text { 8.000 }}{\text { R.A. }}$ | $\begin{gathered} \text { Dee. } \\ \text { ".oor. } \end{gathered}$ | Mag. | Speetral Type. |
|  | $\bigcirc$ |  |  |  | h m s * | s | $s$ | - , | " | " |  |  |  |  |  |
| 301 | $28 \quad 108$ | C 390 | 865 | 1053 | - $3558 \cdot 94$ | $+3.189 \mathrm{r}$ | +.0215 | $29834^{\circ} \mathrm{I}$ | +19.799 | -.08 I | $10 \cdot 6$ | + 40 | + 14 | $8 \cdot 9$ | Ko |
| 302 | $30 \quad 96$ | $\begin{array}{ll}\text { L } & \text { I } 3\end{array}$ | 867-8 | 1054-5 | $36 \quad 3.04$ | 1964 | 227 | $\begin{array}{llll}30 & 3717.5\end{array}$ | 799 | 8 I | $9 \cdot 8$ | + 116 | + 22 | $8 \cdot 2$ | F 5 |
| 303 | $27 \quad 102$ | C 392 | 876 |  | $36 \quad 34 \cdot 63$ | 1866 | 208 | 281459.9 | 791 | 82 | $11 \cdot 3$ | - 47 | - 26 | $9 \cdot 4$ |  |
| 304 | $27 \quad 103$ | C 393 | 878-9 | 1079-80 | $36 \quad 37 \cdot 95$ | 1835 | 204 | $27 \quad 3256 \cdot 6$ | 79 I | 82 | $9 \cdot 4$ | + 1 | - 13 | $8 \cdot 4$ | A 5 |
| 305 | $25 \quad 97$ | C 394 | 88I-2 |  | 36 39-18 | 1736 | 188 | $\begin{array}{ll}25 & 2416 \cdot 7\end{array}$ | 790 | 82 | 10.4 | - 19 | - 29 | $9 \cdot 2$ |  |
| 306 | $23 \quad 94$ | B 208 | 885-7-8 | 1087 | - 3649.43 | $+3 \cdot 1683$ | +.0179 | $2+\quad 8 \quad 8 \cdot 4$ | +19.788 | -.082 | $8 \cdot 7$ | + 77 * | - $24^{*}$ | $5 \cdot 98$ | A 51 |
| 307 | 26103 | C 396 |  | 1090 | $3657 \cdot 84$ | 1804 | 198 | 26 41 34.2 | 786 | 83 | $10 \cdot 7$ | + $+^{2}$ | - 34 | $8 \cdot 2$ | A 2 |
| 308 | 25102 | C 399 | 897 |  | 37 I. 62 | 1786 | 195 | $26 \quad 16 \quad 9 \cdot 2$ | 785 | 83 | II $\cdot 2$ | + 27 | + 31 | $8 \cdot 6$ | F 5 |
| 309 | 31102 | L 219 |  |  | - 37 20-45 | 2059 | 237 | 3 I $36502 \cdot 3$ | 781 | 85 | 11.9 | - 3 | - 78 | $9 \cdot 0$ | F 8 |
| 310 | 29121 | C 401 |  |  | 37 20.64 | $198+$ | 224 | $\begin{array}{lllllllllll}30 & 8 & 27\end{array}$ | 780 | $8+$ | 12.0 | + 3 | $+30$ | $9 \cdot+$ |  |
| 311 | 28110 | $\mathrm{C}^{\text {C }} 404$ | 906 |  | - 3728.32 | $+3 \cdot 1922$ | $+.021+$ | $284951 \cdot 3$ | +19.779 | -.084 | 12.4 | - 3 | + 7 | $9 \cdot 5$ |  |
| 312 | $27 \quad 107$ | C 406 | 908 | 1108 | 37 31-19 | 1857 | 203 | 2727 58.1 | 778 | 84 | $12 \cdot+$ | - 19 | - 12 | $8 \cdot 8$ |  |
| 313 | 25104 | C 407 | 909-10 |  | 3731.40 | 1760 | 189 | $25 \quad 25 \quad 2 \cdot 0$ | 778 | 84 | 13.0 | + 54 | - 34 | $9 \cdot 2$ |  |
| 314 | $2+99$ | B 212 |  |  | 37 34-31 | 1716 | 182 | $242636 \cdot 1$ | 777 | 84 | 12.8 | 11 | II | $9 \cdot 2$ |  |
| 315 | 26108 | C 410 |  | $1113-4$ | 37 41-28 | 1847 | 201 | 27859.0 | 776 | 84 | 10.6 | $+35$ | - 5 | $7 \cdot 41$ | Fo |
| 316 | 26109 | C 411 |  |  | - $3744 \cdot 94$ | $+3.1812$ | +.0195 | 262233.4 | +19.775 | -.085 | $12 \cdot 4$ | - 12 | - 5 | $9 \cdot 3$ |  |
| 317 | 31104 | L. 223 |  | 1116 | 37 48.14 | 2061 | 235 | 312014.4 | 774 | 86 | 12.5 | $+\quad 37$ | + 1 | $9 \cdot 2$ |  |
| 318 | 29125 | C 412 | 923-4 | I 12001 | $3758 \cdot 90$ | 1978 | 220 | $293636 \cdot 4$ | 771 | 86 | $9 \cdot 8$ | - 24 | - 49 | $7 \cdot 9$ | G 5 |
| 319 | 27109 | C 415 | 932 |  | 3818.28 | 1904 | 208 | $27 \quad 5837 \cdot 3$ | 768 | 86 | $10 \cdot 7$ | 20 | $+36$ | $9 \cdot 4$ |  |
| 320 | 29127 | C 417 | 934 | I $130-1$ | $38 \quad 27 \cdot 91$ | 1999 | 222 | $29+3 \quad 4.6$ | 764 | 86 | 10.4 | - 19 | - 20 | $9 \cdot 0$ | K 2 |
| 321 | 26112 | C 418 | 94 I |  | - $3831 \cdot 32$ | $+3.1849$ | +.0199 | $264137 \cdot 6$ | +19.764 | -.086 | 10.0 | + 4 | $+\quad 4$ | $8 \cdot 7$ | A 5 |
| 322 | 31106 | L 227 | 943 |  | $3846 \cdot 85$ | 2104 | 237 | $\begin{array}{lllll}31 & 29 & 8 \cdot 2\end{array}$ | 760 | 88 | $1 \mathrm{I} \cdot 0$ | - 21 | - 13 | $9 \cdot 4$ |  |
| 323 | $2+104$ | B 216 | 948-9 | 1145 | 3854.24 | 1749 | 183 | $242350 \cdot 6$ | 758 | 87 | $9 \cdot 5$ | - 3 | - 13 | $8 \cdot 1$ | G 5 |
| 324 |  | C +20a |  |  | $3854 \cdot 32$ | 1875 | 201 | $26 \quad 5937 \cdot 5$ | 758 | 87 | 12.8 |  |  | $9 \cdot 4$ |  |
| 325 | 27 113 | C +21 | 9+5-7 |  | $3855 \cdot 00$ | 1940 | 210 | $28 \quad 1710 \cdot 5$ | 758 | 87 | $10 \cdot 3$ | - 3 | - 12 | $9 \cdot 0$ | F 8 |
| 326 | 30105 | C $+^{22}$ |  |  | - 3918.75 | $+3.2064$ | +.0229 | $30 \quad 2+28 \cdot 6$ | $+19.752$ | -. 088 | 12.0 | - I | - 27 | $9 \cdot 3$ |  |
| 327 | 28 II4 | C +23 | 959 |  | 39 20.53 | 1976 | 215 | $28+3 \quad 30 \cdot 8$ | 75 I | 89 | 12.0 | - | - 2 | $9 \cdot 2$ |  |
| 328 | 30107 | L 232 | 962 |  | 39 27-16 | 2094 | 232 | $305328 \cdot 1$ | 750 | 88 | 11.3 | + 25 | - 25 | $9 \cdot 2$ | G 5 |
| 329 | 25110 | C 426 | 970 |  | 39 49-13 | 1866 | 197 | $\begin{array}{lllll}26 & 1643 \cdot 2\end{array}$ | 744 | 89 | $10 \cdot 1$ | 97 | - 57 | $8 \cdot 7$ | F 8 |
| 330 | $2+107$ | C 427 | 971 |  | $3951 \cdot 72$ | 1810 | 188 | $25 \quad 8 \quad 14.7$ | 744 | 89 | 11.8 | 12 | + 2 | 9.4 |  |
| 331 |  | C +29 |  |  | - 3957.40 | $+3.2070$ | $+.0226$ | $\begin{array}{llll}30 & 7 & 8.2\end{array}$ | $+18.74^{2}$ | -.090 | $11 \cdot 5$ | - 35 | - 5 | $9 \cdot 2$ |  |
| 332 | 27116 | C +33 |  |  | $40 \quad 27 \cdot 30$ | 1978 | 210 | $28 \quad 5 \quad 40 \cdot 2$ | 735 | 91 | 11.4 | + 14 | - 13 | $8 \cdot 8$ |  |
| 333 | 27 117 | C $43+$ | 982 | 1192 | $40 \quad 29 \cdot 90$ | 1947 | 205 | $\begin{array}{llllll}27 & 28 & 17 \cdot 8\end{array}$ | 734 | 90 | 10.8 | + 10 | 1 | $8 \cdot 6$ | G 5 |
| 334 |  | C 435 |  |  | $4030 \cdot 4^{6}$ | 1980 | 210 | $\begin{array}{llll}28 & 681.7\end{array}$ | 734 | 91 | $12 \cdot 1$ | 61 | $+20$ | $9 \cdot 4$ |  |
| 335 | 30110 | L 238 | 986 | 1194 | $40 \quad 36 \cdot 79$ | 2151 | 235 | $311036 \cdot 3$ | 732 | 91 | 11.0 | + 19 | - 20 | $8 \cdot 8$ | K 2 |
| 336 | 28119 | C 437 | 984 |  | $04040 \cdot 43$ | $+3 \cdot 2045$ | +.0220 | 29 I +8.6 | +19.731 | -.091 | 10.5 | 35 | - 34 | $8 \cdot 6$ | Fo |
| 337 | 29132 | C 438 | 987 | 1203 | $4047 \cdot 52$ | 2083 | 225 | $295040 \cdot 1$ | 729 | 91 | $10 \cdot 7$ | + 2 | - 19 | 8.8 | A 2 |
| 338 | 28 121 | C 439 | 988 | 1202 | $40+7.81$ | 2021 | 216 | $284152 \cdot 6$ | 729 | 91 | $10 \cdot 3$ | + 29 | - 7 | $8 \cdot 8$ | A 3 |
| 339 | 28122 | C $+{ }^{\text {I }}$ |  |  | $40 \quad 50.54$ | 2038 | 218 | 29 O 2.1 | 728 | 92 | $10 \cdot 2$ | 22 | + 20 | $8 \cdot 8$ | A 2 |
| 340 | 25 III | C $+4^{2}$ | 991 |  | 4051.01 | 1848 | 190 | $2521 \quad 7 \cdot 8$ | 728 | 90 | II. 2 | ? | - 37 | $9 \cdot 5$ |  |
| 341 | 25 II2 | C 444 | 996 | I 211 - 2 | - 4058.89 | $+3 \cdot 1868$ | +.0193 | $2540 \quad 5 \mathrm{I} \cdot 6$ | +19.726 | -.091 | 10.1 | 13 | - 14 | $7 \cdot 86$ | K 2 |
| $34^{2}$ | 31111 | $\begin{array}{ll}\mathrm{L} & 241\end{array}$ |  |  | $4125 \cdot 56$ | 2218 | 241 | 315133.2 | 719 | 93 | $10 \cdot 3$ | 10 | + 10 | $9 \cdot 4$ |  |
| $3+3$ | 30112 | 1. $24^{2}$ | 1006 |  | $4125 \cdot 94$ | 2182 | 236 | 3 I 1+4.9 | 719 | 93 | 11.0 | 31 | - 27 | $9 \cdot 4$ |  |
| 344 | 30113 | C +50 | 1007 | 1229-30 | $+134.17$ | $2 \mathrm{I}+2$ | 230 | $\begin{array}{llll}30 & 27 & 8.6\end{array}$ | 717 | 93 | $9^{\circ} 0$ | 21 | - 69 | $7 \cdot 36$ | G 5 |
| 345 | 28124 | C +5I | 1010 | 1232 | $4134 \cdot 81$ | 2052 | 217 | $28+927 \cdot 5$ | 717 | 93 | $10 \cdot 2$ | 9 | - 26 | $9 \cdot 4$ |  |
| 346 | 30114 | C +52 | 1011 | 1234-5 | $\bigcirc 4^{1} 37.04$ | +3.2I 44 | +.0230 | $\begin{array}{lllll}30 & 27 & 37.4\end{array}$ | $+19.716$ | -.093 | $9 \cdot 2$ | - 28 | - 28 | $7 \cdot 61$ | G 5 |
| 347 | 25115 | C +55 | 1018-9 |  | $42 \quad 13.71$ | 1898 | 193 | $\begin{array}{llll}25 & 35 & 9.8\end{array}$ | 707 | 94 | II.I | + 129 | - 90 | $9 \cdot 2$ |  |
| 348 | 27121 | C +57 |  |  | $42 \begin{array}{ll}42 & 16.59\end{array}$ | $20+2$ | 213 | $28142 \cdot 7$ | 706 | 94 | 10.2 |  |  | $8 \cdot 9$ | K o |
| 349 | 26 I24 | $\mathrm{C}+60$ |  |  | $\begin{array}{lll}42 & 39 \cdot 63\end{array}$ | 1967 | 200 | 2639 11•3 | 700 | 95 | $1 \mathrm{I} \cdot 4$ | 14 | $+\quad 4$ | $9 \cdot+$ |  |
| 350 | $28 \quad 128$ | C 461 | 1030 |  | $4^{2} 43 \cdot 26$ | 2099 | 219 | 29 1 50.7 | 699 | 96 | $12 \cdot 1$ | + 39 | + 10 | $9 \cdot+$ |  |


| No. | . 13.1 . | A.G.C. | W.B. (z). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0 | Precession. | Sec.Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B. }-000 \mathrm{I} .}{\text { R. }}$ | $\begin{aligned} & \text { Dee. } \\ & \text { m. } \mathrm{OOOI} . \end{aligned}$ |  |  |
|  | - |  |  |  | 11 m | s | s | - , | " | " |  |  |  |  |  |
| 351 | $25 \quad 117$ | C 463 |  |  | - $4^{2} 44 \cdot 18$ | $+3.1959$ | +.0194 | $254346 \cdot 4$ | +19.699 | -094 | 10.7 | $+$ | - $5^{8}$ | $8 \cdot 9$ |  |
| 352 | $28 \quad 129$ | C 464 |  | 1268 | $44^{2} 48 \cdot 52$ | 2061 | 213 | 28 I8 1.2 | - 697 | 95 | 11.7 | 26 | + 10 | $9 \cdot 2$ | F 5 |
| 353 | 27123 | C 465 |  |  | $4250 \cdot 49$ | 2011 | 206 | 27 21 $53 \cdot 8$ | 697 | 96 | 12.4 | 6 | + 12 | $9 \cdot 4$ |  |
| 354 | 28130 | C 466 |  |  | $4251 \cdot 69$ | 2074 | 215 | $28 \quad 2952 \cdot 5$ | 696 | 95 | II. 8 | - 39 | + 59 | 9.4 |  |
| 355 | 24115 | B 240 | 1035 |  | 4253.04 | 1887 | 189 | $\begin{array}{llll}25 & 2 & 35\end{array}$ | 696 | 95 | 11.4 | + 26 | + 8 $+\quad$ | 8.6 | A o |
| 356 | 25118 | C 467 | 1031 | 1275 | - $4^{2} 56 \cdot 15$ | +3.1928 | +.0195 | $25480 \cdot 0$ | +19.695 | -095 | 10.3 | + ${ }^{1} 1$ | 6 | 7.06 | K o |
| 357 | 26126 | C 468 |  |  | $4256 \cdot 60$ | 1972 | 200 | $2636 \quad 21.4$ | + 695 | 96 | 10.7 | + 23 | + 11 | $7 \cdot 8$ | G 5 |
| 358 | 30117 | L 252 | 1042 |  | $\begin{array}{lll}43 & 18 \cdot 58\end{array}$ | 2217 | 234 | 30431119 | 689 | 97 | 10.2 | - 40 | + 30 | $8 \cdot 9$ |  |
| 359 | 24118 | C 470 |  |  | 4318.73 | 1899 | 191 | $\begin{array}{llll}25 & 3 & 30 \cdot 8\end{array}$ | 689 | 96 | 10.6 | - 24 | - 68 | $9 \cdot 2$ | G 5 |
| 360 | 29137 | C 472 | 1045 | 1286 | $43 \quad 23 \cdot 17$ | 2187 | 230 | $\begin{array}{lllllllllll}30 & 10 & 29.9\end{array}$ | 688 | 97 | 10.6 | + | 25 | $8 \cdot 9$ |  |
| 361 | 27124 | C 473 | 1048 | 1290 | - 4326.84 | +3.2077 | $+.0214$ | $\begin{array}{llll}28 & 14 & 2.2\end{array}$ | +19.687 | -. 097 | 10.8 | 10 | + 40 | $9 \cdot 3$ |  |
| 362 | 24119 | B 246 | 1061 |  | $44 \quad 7 \cdot 71$ | 1884 | 186 | $242247 \cdot 9$ | 675 | 97 | 11.3 | 12 | 4 | $9 \cdot 3$ |  |
| 363 | 27126 | C ${ }^{\text {C }} 776$ | 1068 |  | 4417.51 | 2087 | 212 | $\begin{array}{lllll}27 & 56 & 23.2\end{array}$ | 673 | 99 | 11.8 | 6 | - 22 | $9 \cdot 2$ |  |
| 364 | $27 \quad 127$ | C 477 | 1069 | 1315 | $4+19.78$ | 2104 | 214 | 28 13 $44^{\circ}$ <br>    | 672 | 99 | I1.2 | - | $\bigcirc$ | 7.30 | K |
| 365 | $25 \quad 123$ | C 479 | 1072 |  | $44 \quad 25.80$ | 1973 | 196 | 2551588.4 | 671 | 98 | 11.4 | 44 | - 23 | $9 \cdot 2$ | F 5 |
| 366 | 24121 | C 483 | 1076 |  | - 4449.21 | +3.1950 | +.0192 | $\begin{array}{lllll}25 & 15 & 18.8\end{array}$ | $+19.665$ | -. 099 | ${ }_{11} \cdot 8$ | $\bigcirc$ | 30 | $9 \cdot 4$ |  |
| 367 | 29139 | C 484 | 1077 |  | 4453.73 | 2224 | 229 | $295645 \cdot 8$ | 663 | 100 | 10.7 | - 7 | - 30 | $9 \cdot 2$ | G 5 |
| 368 | 30 521 | L 261 | 1080 |  | 4458.82 | 2294 | 237 | $\begin{array}{lll}31 & 247.6\end{array}$ | 661 | 100 | I 1.8 | + 71 | 21 | $9 \cdot 4$ |  |
| 369 | 31122 | L 262 | 1082 |  | 4459.40 | 2336 | 244 |  | 66 I | 100 | 11.2 | + 8 | - | 8.4 |  |
| 370 | 29141 | C 486 | 1081 | 1332-3 | $45 \quad 0.10$ | 2228 | 229 | $2957 \quad 38 \cdot 2$ | 660 | 100 | 9.5 | + 171 | - 3 I | $7 \cdot 61$ | G 5 |
| 371 | 261311 | C 487 | 1084 | 1338-9-42 | $\begin{array}{ll}-4.5 & 2.82\end{array}$ | $+3.2068$ | +.0207 |  | +19.660 | -. 100 | 10.7 | + 69* | - $7^{*}$ | $6 \cdot 29$ | F |
| 372 | \% 1 |  |  |  | $45 \quad 3.22$ | 2068 | 207 |  | 660 | 100 | $10 \cdot 7$ | + 69* | - $7^{*}$ | $6 \cdot 29$ |  |
| 373 | 26132 | C ${ }^{\text {c }} 88$ |  |  | 45 5.15 | 2023 | 201 | $\begin{array}{lllllllllllll}26 & 25 & 57\end{array}$ | 659 | 100 | 52.2 | + 116 | + 4 | $9 \cdot 4$ | G 5 |
| 374 | 24122 | C 492 |  |  | $45 \quad 14.66$ | 1947 | 191 | $24 \quad 5987$ | 657 | 100 | 52.2 | + 3 | $\bigcirc$ | $9 \cdot 4$ |  |
| 375 | 27132 | C 493 | 1095 | 1357 | 4525.07 | 2117 | 212 | $275246 \cdot 2$ | 654 | 101 | $9 \cdot 8$ | 14 | I 1 | $7 \cdot 8$ | K o |
| 376 | 31125 | L 267 |  | 1356 | $\bigcirc 4526.41$ | $+3.2342$ | +.0242 | 315411.7 | +19.653 | - 102 | 10.5 | + 7 | + 7 | $9 \cdot 3$ |  |
| 377 | $\begin{array}{ll}24 & 123 \\ 28 & \end{array}$ | C 498 | 1109 | 1370 | 45 50.12 | 1968 | 192 |  | 646 | 101 | 10.6 | - 34 | - 18 | $7 \cdot 41$ | G 5 |
| 378 | 28132 | C 496 |  |  | 45 50.29 | 2182 | 219 | 284545 | 646 | 101 | 12.8 | + 34 | + | $9 \cdot 4$ |  |
| 379 | 28134 | C 495 | 1108 |  | 45 50.38 | 2206 | 222 | 298831.6 | 646 | 102 | 12.0 | + 8 | - 39 | $9 \cdot 2$ | F 8 |
| 380 | 28133 | C 497 |  |  | $4550 \cdot{ }^{2}$ | 2210 | 223 |  | 646 | 102 | 12.8 | 20 | - 35 | $9 \cdot 5$ |  |
| 381 | 31127 | L 272 | 1104 | $1372-3$ |  | $+3.2361$ | +.0245 | $313340 \cdot 8$ | +19.644 | - 103 | 12.8 | 5 | - 54 | $9 \cdot 3$ |  |
| 382 | 28137 | C 502 | 1117 |  | $46 \quad 12 \cdot 76$ | 2207 | 222 | $\begin{array}{llll}28 & 58 & 2 \cdot 5\end{array}$ | 640 | 102 | 12.4 | - 17 | + 10 | $9 \cdot 3$ |  |
| 383 | $25 \quad 124$ | C 505 | 1124 -5 |  | $\begin{array}{lll}46 & 19.83\end{array}$ | 2033 | 198 | $255921 \cdot 5$ | 638 | 102 | 12.0 | + 53 | 28 | $9 \cdot 4$ | F 8 |
| 384 | 26137 | C 507 |  |  | $46 \quad 29 \cdot 68$ | 2025 | 205 | $\begin{array}{llll}26 & 52 & 5 \cdot 5\end{array}$ | 635 | 103 | 11.0 |  | 21 | $9 \cdot 3$ 8.2 | G 5 |
| 385 | 31130 | L 280 | 1135-6 | 1411 | $46 \quad 58.43$ | 2392 | 244 | . ${ }^{11} 3042.4$ | 627 | 105 | $9 \cdot 2$ | 8 | 33 | $8 \cdot 2$ | A 2 |
| 386 | 31131 | L 28I |  | 1415 | $\bigcirc{ }^{\circ} 47$ 1•73 | $+3.2419$ | +-0247 | $315239 \cdot 6$ | +19.625 | -. 105 | 9.6 | + | - 23 | $8 \cdot 2$ | Ma |
| 387 | 26138 | C 510 | $1139-40$ | 1418-9 | $47 \quad 3.91$ | 2131 | 208 | 271723.2 | 625 | 104 | 10.2 | + 39 | + 16 | $8 \cdot 4$ | G 5 |
| 388 | 31132 | L 283 | 1141 |  | 4788.51 | 2392 | 243 | $312436 \cdot 0$ | 623 | 105 | 11.5 | + 13 | 19 $+\quad 19$ | $9 \cdot 2$ |  |
| 389 | $30 \quad 124$ | L 284 |  |  | $47 \quad 8.78$ | 2351 | 236 | $30 \quad 47 \quad 0 \cdot 0$ | 623 | 105 | 11.8 | 31 | + 9 | $9 \cdot 4$ |  |
| 390 | 24124 | B 264 | 1143 |  | $47 \quad 10 \cdot 55$ | 1962 | 187 | $\begin{array}{llll}24 & 22 & 6 \cdot 7\end{array}$ | 623 | 105 | 11.4 | 4 | - I | $9 \cdot 3$ |  |
| 391 | 24127 | C 516 |  |  | - 4724.98 | $+3.2021$ | +-0194 | $\begin{array}{llll}25 & 16 & 3 \cdot 9\end{array}$ | +19.618 | --105 | 11.8 | - 16 | - 63 | $9 \cdot 4$ |  |
| 392 | 28139 | C 519 |  |  | 4729.09 | 2256 | 224 | 29.619 .1 | 617 | 105 | 12.4 | $+\quad 3$ | - 28 | $9 \cdot 4$ |  |
| 393 | 24128 | C 52 I | $114^{8-9-50}$ | 1431 | 4733.59 | 2026 | 194 |  | 616 | 105 | 9.9 | + 63 | - | $7 \cdot 74$ | K |
| 394 | 25131 | C 522 |  |  | $4740 \cdot 56$ | 2076 | 201 | $\begin{array}{lllllll}26 & 4 & 54\end{array}$ | ${ }_{614}^{61}$ | 105 | 10.6 | + 51 | + 13 | $8 \cdot 2$ | K O |
| 395 | 30126 | L 289 |  |  | $4745 \cdot 43$ | 2354 | 235 | $30 \quad 30 \quad 30 \cdot 9$ | 612 | 106 | 12.8 | 4 | - 33 | $9 \cdot 4$ |  |
| 396 | 30125 | L 288 | 1154 | 1436 | - $4746 \cdot 18$ | $+3.2385$ | +.0239 | $30 \quad 58 \quad 16 \cdot 8$ | +19.612 | - 106 | 10.7 | + 178 | - 46 | $8 \cdot 2$ | G 0 |
| 397 | 30127 | L 290 | 1159 | 1440 | $4749 \cdot 22$ | 2382 | 238 | $305420 \cdot 4$ | 611 | 106 | 11.4 | - 9 | - 31 | $8 \cdot 30$ | Go |
| 398 | 29145 | C 524 |  | $14^{15}$-2 | 4749.90 | 2331 | 232 | $\begin{array}{llll}30 & 6 & 58 \cdot 3\end{array}$ | 611 | 106 | 11.5 | + 19 | - 11 | $8 \cdot 4$ | K 2 |
| 399 | $2814{ }^{1}$ | C 526 | $1162-4$ |  | $\begin{array}{ll}48 & 3.04 \\ 48 & 5.67\end{array}$ | 2241 2329 | 220 | $\begin{array}{llll}28 & 35 & 12.0 \\ 29 & 51 & 37.6\end{array}$ | 607 603 | 106 | 12.0 | $+\quad 4$ $+\quad 20$ | $+\quad 8$ $-\quad 19$ | 9.2 7.71 |  |
| 400 | 29147 | C 527 | 1167 | 1455-6 | $48 \quad 15 \cdot 67$ | 2329 | 230 | $295137 \cdot 6$ | 603 | 107 | 115 5 | 20 | - 19 | $7 \cdot 71$ | K |


| No. | B.D. | A.G.c. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Se. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s. } 000 \mathrm{I} . \end{aligned}$ | $\begin{gathered} \text { Dec. } \\ \text { n.OOI. } \end{gathered}$ |  |  |
|  | - |  |  |  | h m |  |  |  | " | " |  |  |  |  |  |
| 401 | 26145 | C 530 | 1177 |  | - $4^{8}$ 41-51 | $+3.2143$ | +.0205 | $264232 \cdot 5$ | +19.595 | --107 | 12.0 | + 21 | - 24 | $9 \cdot 3$ |  |
| 402 | 28143 | C 531 | 1178 | 1479 | $4^{8} \quad 44 \cdot 68$ | 2263 | 220 | $28 \quad 35 \quad 30 \cdot 3$ | 594 | 107 | 12.0 | - 14 | + 3 | $7 \cdot 8$ | A 2 |
| 403 | 28144 | C 533 | 1179 |  | $4^{8}+5 \cdot{ }^{2}$ | 2289 | 225 | $29 \times 6 \cdot 1$ | 594 | 108 | 12.6 | - 4 | - 57 | $6 \cdot 72$ | G 5 |
| 404 | $27 \quad 142$ | C 534 |  |  | $4845 \cdot 50$ | 2208 | 213 | $2743 \quad 34 \cdot 2$ | 593 | 107 | 12.4 | - 5 | + $\quad 1$ | $9 \cdot 4$ | G |
| 405 | 27143 | C 535 | 1181 |  | 48 $46 \cdot 26$ | 2189 | 211 | $27 \quad 25 \quad 19.3$ | 593 | 107 | 12.8 | + 23 | - $\quad 10$ | $9 \cdot 0$ |  |
| 406 | ${ }^{2} 4129$ | B 269 | 1185-6 |  | - $4^{8} 4^{8 \cdot 24}$ | $+3.2009$ | +.0189 | ${ }^{2} 42641 \cdot 4$ | +19.593 | --107 | 12.6 | + | - 53 | $8 \cdot 2$ | Fo |
| 407 | 24130 | B 270 |  |  | 4851.80 | 2038 | 192 | $245434 \cdot 7$ | 592 | 108 | 13.1 | + 54 | - 58 | $9 \cdot 3$ |  |
| 408 | 27144 | C 537 |  | $1486-8$ | $48 \quad 58 \cdot 42$ | 2236 | 216 |  | 590 | 107 | 10.7 | 1 $+\quad 32$ | - 7 | $7 \cdot 9$ | G 5 |
| 409 | 24132 | B 271 |  |  | $48 \quad 59 \cdot 58$ | 2025 | 191 | $243740 \cdot 8$ | 590 | 108 | 13.0 | + 35 | - 8 | $9 \cdot 3$ |  |
| 410 | $24 \quad 133$ | B 272 | 1192 | 1494 | $49 \quad 10.57$ | 2052 | 193 | $24 \quad 59 \quad 58 \cdot 3$ | 586 | 109 | $9 \cdot 4$ | + 72 | - 23 | $7 \cdot 41$ | K o |
| 411 | 24134 | B 275 |  |  | - 4923.44 | $+3.2042$ | +.0191 | $2444 \quad 7 \cdot 0$ | +19.583 | --109 | 10.0 | - 19 | - 58 | $9 \cdot 2$ |  |
| 412 | 31137 | L 300 |  |  | 4925.73 | 2475 | 245 | $312741 \cdot 7$ | 582 | 110 | $10 \cdot 4$ | - 18 | - 15 | $9 \cdot 2$ |  |
| 413 | 24135 | B 277 | 1196 | 1502 | 49 27.37 | 2054 | 192 | $24 \quad 5422 \cdot 3$ | 581 | 109 | 9.4 | 10 | - $4^{2}$ | 8.2 | A o |
| 414 | 24136 | C 539 |  | 1510 | $4934 \cdot 52$ | 2077 | 195 | $\begin{array}{llllll}25 & 13 & 38.9\end{array}$ | 579 | 109 | $9 \cdot 8$ | $\bigcirc$ | - 36 | 8.61 | F o |
| 415 | 28149 | C 541 |  |  | $4956 \cdot 70$ | 2294 | 220 | $28 \quad 30 \quad 2.6$ | 572 | 109 | $9 \cdot 8$ | 25 | + 7 | 8.8 |  |
| 416 | 28150 | C 542 |  |  | - $4958 \cdot 15$ | +3.2291 | $+.0220$ | $282641 \cdot 6$ | +19.572 | --109 | 11.2 | + 19 | + 17 | $9 \cdot 5$ |  |
| 417 | 27146 | C 543 | 1209 |  | $5016 \cdot 12$ | -2250 | 214 | 274054.0 | 566 | 111 | $11 \cdot 7$ | + 22 | $+\quad 17$ | $9 \cdot 0$ | F 8 |
| 418 | 26148 | C 544 | 1215 |  | $5020 \cdot 77$ | 2219 | 209 | $27 \quad 915.0$ | 564 | 111 | $12 \cdot 1$ | + 61 | + 58 | $9 \cdot 4$ | G 5 |
| 419 | 231126 | B 285 | 1218-9 | 1540 | 5025.46 | 2028 | 187 | $\begin{array}{llll}24 & 4 & 10.4\end{array}$ | 563 | 0 | $9 \cdot 1$ | 15 | - 22 | $6 \cdot 36$ | Mb |
| 420 | 29150 | C 545 | 1221 | 1539-41 | $5030 \cdot 00$ | 2423 | 235 | 301025.8 | 561 | 112 | 10.0 | + 17 | 5 | $7 \cdot 86$ | A 2 |
| 421 | 27148 | C 546 | 1223 | 1544-5 | - $5033 \cdot 42$ | $+3.2284$ | +.0217 | $28+22.7$ | +19.560 | --111 | $9 \cdot 9$ | + 34 | - 32 | $7 \cdot 28$ | A 5 |
| 422 | 25135 | C 547 |  |  | $5041 \cdot 85$ | 2150 | 200 | $25 \quad 5456 \cdot 7$ | 558 | 111 | $9 \cdot 0$ | + 5 | + 21 | 8.8 | G 5 |
| 423 | 26149 | C 550 | 1235 |  | 513.15 | 2219 | 208 | 265020.9 | 551 | 112 | 11.5 | $\bigcirc$ | + 20 | $9 \cdot 2$ |  |
| 424 | 31141 | L 310 |  |  | $51 \quad 3.79$ | 2524 | 245 | 312048.6 | 550 | 113 | - 6 | - 10 | - 25 | $9 \cdot 3$ |  |
| 425 | 31143 | L 311 |  | 1558 | $51 \quad 7 \cdot 38$ | 2562 | 249 | $\begin{array}{lllll}31 & 51 & 16.9\end{array}$ | 550 | 113 | $9 \cdot 7$ | + 77 | - 16 | $8 \cdot 0$ | Go |
| 426 | 26151 | C 551 | 1238 | 1561 | - 517.83 | $+3.2214$ | $+\cdot 0207$ | 264317.9 | +19.549 | --112 | 6. |  | + 6* | $5 \cdot 94$ | A 2 |
| 427 | $28 \quad 153$ | C 552 |  |  | 5112.54 | 2387 | 228 | $2917 \quad 33.3$ | 548 | 114 | 12.4 |  | - 9 | 8.8 | K |
| 428 | 29153 | C 554 | 1244 |  | 5120.90 | 2456 | 236 | $301441 \cdot 1$ | 545 | 113 | 12.4 | + 7 | - 36 | $9 \cdot 4$ |  |
| 429 | $28 \quad 154$ | C 555 | 1246 |  | 5124.01 | 2350 | 223 | 284023.9 |  | 113 | 12.8 | + 9 |  | 8.9 | K o |
| 430 | 29154 | C 556 |  |  | 5125.02 | 2404 | 226 | $\begin{array}{llll}29 & 27 & 4.4\end{array}$ | 544 | 114 | 13.2 | $+\quad 77$ | - 31 | $9 \cdot 3$ |  |
| 431 | 23129 | B 288 | 1247 |  | - 5127.50 | $+3.2057$ | +.0189 | $24 \quad 644 \cdot 7$ | +19.543 | $-112$ | 13.4 | + 25 | + 14 | 9.4 | K 5 |
| 432 | 29155 | C 557 | 1248 |  | 5134.46 | 2432 | 231 | $294642 \cdot 1$ | 54 I | 114 | 13.2 | - 10 | - | $9 \cdot 2$ |  |
| 433 | 27152 | C 558 |  |  | $5143 \cdot 60$ | 2288 | 215 | $27 \quad 35 \quad 34 \cdot 7$ | $53^{8}$ | 113 | 12.8 | - 50 | - 35 | $9 \cdot 4$ | Go |
| 434 | 28155 | C 559 | 1256 | 1585 | 5148.85 | 2339 | 219 | $\begin{array}{llllll}28 & 18 & 41 \cdot 1\end{array}$ | 536 | 113 | 12.0 | $+4$ | + 4 | 8.6 | G 5 |
| 435 | $25 \quad 136$ | C 560 | 1259 |  | $5153 \cdot 62$ | 2179 | 201 | $25 \quad 5110.3$ | 534 | 114 | $10 \cdot 8$ | + 27 | - 4 | $8 \cdot 2$ | Ma |
| 436 | $28 \quad 156$ | C 562 | 1258 |  | - 5154.97 | $+3.2363$ | +.0222 | $28 \quad 37 \quad 23.8$ | +19.534 | --115 | 12.6 | + 8 | $+4^{\circ}$ | $9 \cdot 4$ | G 5 |
| 437. | 26154 | C 563 |  |  | $5156 \cdot 60$ | 2263 | 210 | $\begin{array}{lllll}27 & 6 & 31 \cdot 4\end{array}$ | 533 | 114 | 12.0 | + 39 | - 2 | $9 \cdot 3$ |  |
| 438 | 31144 | L <br> C | 1262-3 | 1597-8-9 | 525.06 | 2564 | 245 | 312434.1 | 531 | 115 | 11.0 | + 15 | - 9 | $8 \cdot 1$ | Ma |
| 439 | $\begin{array}{ll}24 & 148 \\ 26\end{array}$ | C 566 |  |  | $52 \quad 20 \cdot 81$ | 2152 | 197 | ${ }_{2}^{25} 14451 \cdot 5$ | 525 | 115 | 12.0 | + 52 | - 7 | $9 \cdot 3$ |  |
| $44^{\circ}$ | 26155 | C 567 | 1266 | 1611 | $52 \quad 23.98$ | 2236 | 206 | $26 \quad 3045 \cdot 8$ | 524 | 115 | $11 \cdot 3$ | + 16 | - 17 | 8.0 | A 3 |
| 44 I | 24149 | B 293 | 1268-70 | 1616 | - 5227.08 | $+3.2126$ | +.0193 | 244819.5 | +19.523 | --115 | 12.4 | + 116 | + 18 | 8.8 | F 8 |
| 442 | 24151 | B 294 |  |  | $5235 \cdot 14$ | 2109 | 191 | $24 \quad 28 \quad 31 \cdot 3$ | 521 | 115 | 12.2 | - 38 | - 40 | $9 \cdot 4$ | Go |
| 443 | $\begin{array}{lll}23 & 132 \\ 28 & 3\end{array}$ | B 296 | 1281 |  | $5254 \cdot 23$ | 2100 | 190 | ${ }_{24}^{24} 113179$ | 514 | 116 | $10 \cdot 9$ | $+4^{8}$ | - 45 | $9 \cdot 5$ | $\mathrm{K}_{2}$ |
| 444 | 28157 | C 569 C | 1282 | 1630 | $5257 \cdot 67$ | 2388 | 222 | 283021.0 | 513 | 116 | ${ }^{12} 3$, r1'9 | $+\quad 9^{*}$ | - 12* | $5 \cdot 64$ | K。 |
| 445 | 28159 | C 571 | 1284 | 1633 | $\begin{array}{lll}53 & 0.70\end{array}$ | 2426 | 226 | $29 \quad 2 \begin{array}{lllll} & 11\end{array}$ | 512 | 117 | $11^{\circ}$ | $+\quad 39$ | - 75 | $8 \cdot 6$ | K o |
| 446 | $28 \quad 160$ | C 573 |  |  | $\bigcirc 533.28$ | +3.2400 | +.0223 | ${ }^{28} 38{ }^{8} 45 \cdot 8$ | +19.511 | --117 | 12.4 | - ${ }^{2}$ | + ${ }^{2}$ | 9.2 |  |
| 447 | $\begin{array}{lll}29 & 158 \\ 27 & 154\end{array}$ | $\begin{array}{ll}\text { C } & 574 \\ \text { C } & 576\end{array}$ |  | 1635 | $\begin{array}{ll}53 & 6.82 \\ 53 & 1.15\end{array}$ | 2485 | 233 | $294949 \cdot 3$ | 510 | 117 | 11.5 | + 165 | - 120 | 8.6 | Go |
| 448 | 27154 | C 576 | 1295 |  | $5315 \cdot 13$ | 2327 | 214 | $27 \quad 2954 \cdot 7$ | 507 | 117 | 12.3 | + 3 | - 78 | $9 \cdot 3$ | G 5 |
| 449 | $\begin{array}{lll}31 & 148\end{array}$ | L $\quad 329$ | 1296-7 |  | $\begin{array}{lll}53 & 17 \cdot 79\end{array}$ | 2615 | 247 |  | 506 | 118 | $1 \mathrm{I} \cdot 8$ | + 2 | -10 | 9.0 |  |
| 450 | 30142 | L 331 |  |  | 53 $\mathbf{3 1} 79$ | 2555 | 240 | $303637 \cdot 5$ | 502 | 119 | 11.4 | - 20 | - 10 | $8 \cdot 8$ | G 5 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec. Var. | Epoch $1900+$ | $\underset{\text { B.OOO }}{\text { R. }}$ | $\begin{aligned} & \text { Dec. } \\ & =.001 . \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m s | 8 | s | - , " |  | " |  |  |  |  |  |
| 451 | 27155 | C 580 | 1300 |  | - 5332.51 | $+3.2346$ | +.0215 | 273988.4 | +19.501 | -117 | 11.6 | + 31 | + 16 | $9 \cdot 4$ | F 8 |
| 452 | 23134 | B 300 | $1303-4$ | 1647 | 53 37.28 | 2107 | 188 | $24 \quad 2 \quad 11 \cdot 3$ | 500 | 117 | II. 6 | 62 | - 32 | $8 \cdot 2$ | F 8 |
| 453 | 26161 | C 582 |  | 1646 | $53 \quad 37 \cdot 36$ | 2256 | 205 | $\begin{array}{lllllllllll} & 17 & 59 * 7\end{array}$ | 500 | 118 | 11.6 | - 16 | + 6 | $7 \cdot 47$ | K 2 |
| 454 | 24153 | B $\quad 303$ C |  |  | $5347 \cdot 56$ | 2170 | 196 | $245546 \cdot 7$ | 496 | 117 | II.3 | + 5 | + 25 | 8.9 | K 5 |
| 455 | 26162 | C 583 |  |  | 53 47•57 | 2266 | 205 | $262220 \cdot 1$ | 496 | I 18 | 11.4 | + 16 | - 18 | $9 \cdot 2$ |  |
| 456 | $28 \quad 162$ | C 585 |  |  | - 5356.22 | +3.2439 | +.0225 | $28 \quad 48 \quad 26 \cdot 5$ | +19.494 | - 119 | I 1.6 | - 75 | $-105$ | $9 \cdot 2$ | G 5 |
| 457 | 26163 | C 586 | 1316 | 1665-6-7 | $54 \quad 10.98$ | 2332 | 213 | $27 \quad 10 \quad 15 \cdot 2$ | 488 | 119 | 10.1 | + $+\quad 19$ | + 7 | 7•16 | Ko |
| 458 | 31150 | L 3334 | 1315 | 1663 | 54 II•39 | 2679 | 253 | 3158 II. 6 | 488 | 120 | 10.8 | + 1 | - 16 | $7 \cdot 28$ | A 2 |
| 459 | 27157 | C 587 | 1318 |  | $5417 \cdot 60$ | 2347 | 214 | 272018.0 | 486 | 119 | 11.6 | + 19 | - 88 | $9 \cdot 3$ |  |
| 460 | 24155 | B 307 | I 325 |  | $5430 \cdot 46$ | 2167 | 193 | 2436443 | 482 | 119 | I I 2 | + 6 | - 13 | $8 \cdot 9$ | K 2 |
| 461 | 24156 | B 308 | 1331 |  | - $545 \mathrm{I} \cdot 56$ | $+3.2173$ | +.0193 | $\begin{array}{llll}24 & 33 & 15 \cdot 2\end{array}$ | +19.474 | - 120 | 10.0 | - 20 | - 3 | $8 \cdot 8$ | M a |
| 462 | $\begin{array}{ll}31 & 157\end{array}$ | L $\quad 339$ | 1330 |  | $5452 \cdot 50$ | 2669 | 248 | 3 I 3 I $47 \cdot 3$ | 474 | 122 | I I 3 | - 46 | + 4 | $9 \cdot 4$ |  |
| 463 | 31158 | L 340 | 1 333-4 | 1696-7 | 55 3.14 | 2663 | 246 | $\begin{array}{llll}31 & 22 & 8 \cdot 3\end{array}$ | 47 I | 122 | $9 \cdot 5$ | - 12 | - 36 | $7 \cdot 9$ | G 5 |
| 464 | 27159 | C 59I | I 336 |  | $55 \quad 3 \cdot 27$ | 2429 | 221 | 28 II 34.9 | 471 | 121 | I 1.4 | - 24 | + 11 | $9 \cdot 3$ |  |
| 465 | 31159 | L 343 | 1339 |  | 55 20-16 | 2711 | 250 | $3 \mathrm{I} 5034 \cdot 2$ | 465 | 123 | $9 \cdot 0$ | + 1 | - 3 | $8 \cdot 8$ | F 8 |
| 466 | 24158 | C 596 | I $3+3$ |  | - $5532 \cdot 82$ | +3.2219 | $+\cdot 0197$ | $24 \quad 58 \quad 9 \cdot 7$ | +19.460 | -121 | $9 \cdot 6$ | - 25 | - I | $9 \cdot 3$ | K |
| 467 | 25147 | C 595 | I 342 |  | 5533.09 | 2285 | 205 | $25 \quad 5618 \cdot 0$ | 460 | 121 | $9 \cdot 9$ | + 21 | - 9 | $8 \cdot 8$ | Ko |
| 468 | 25148 | C 598 |  |  | $56 \quad 0 \cdot 23$ | 2279 | 202 | $2540 \quad 28 \cdot 7$ | 451 | 122 | 10.9 | + 71 | + 7 | $9 \cdot 2$ | F 8 |
| 469 | 28166 | C 600 | 1353 | 1732 | 56 | 2486 | 224 | $28 \quad 30 \quad 53 \cdot 0$ | 448 | 123 | $9 \cdot 6$ | + 149 | - 73 | $9 \cdot 0$ | G 5 |
| 470 | 25150 | C 604 | 1356 |  | 56 19.08 | 2310 | 205 | $255917 \cdot 6$ | 444 | 123 | $9 \cdot 1$ | $+\quad 24$ | - 5 | $8 \cdot 4$ | K 5 |
| 471 | 29165 | C 605 | 1360 |  | - $5624 \cdot 63$ | $+3.2569$ | $+.0232$ | $293123 \cdot 6$ | +19.442 | -124 | 10.8 | 31 | - 38 | $9 \cdot 4$ |  |
| 472 | 29166 | C 606 | 1362 |  | $56 \quad 28 \cdot 88$ | 2619 | 237 | $30 \quad 9 \quad 14.3$ | $44^{\circ}$ | 124 | 10.5 | - 39 | - 23 | 9•1 1 | F |
| 473 | 31164 | L 350 | 1366 | $1747-8$ | $5634 \cdot 41$ | 2712 | 247 | $\begin{array}{lllllllll}31 & 19 & 42 \cdot 6\end{array}$ | 438 | 125 | $9 \cdot 8$ | - 13 | + 15 | $8 \cdot 8$ | K 2 |
| 474 | $27 \quad 162$ | C 609 | I 368 | 1750 | $564 \mathrm{I} \cdot 61$ | 2453 | 219 | $27 \quad 50 \quad 3.9$ | 436 | 124 | 10.4 | - 6 | - 66 | $8 \cdot 8$ | G 5 |
| 475 | $30 \quad 147$ | L 351 |  | 1751 | $5644 \cdot 31$ | 2661 | 242 | $303546 \cdot 8$ | 435 | 125 | 10.4 | - 15 | - 10 | $8 \cdot 2$ | K 0 |
| 476 | 24163 | B 313 | 1371 | 1762 | - 5651.68 | $+3.224^{2}$ | +-0197 | 244829.5 | +19.432 | -1 124 | 9.6 | $+102$ | - 5 | $6 \cdot 76$ | G 5 |
| 477 | $\begin{array}{ll}31 & 167\end{array}$ | L 352 | 1377 |  | $57 \quad 17 \cdot 35$ | 2763 | 251 |  | 423 | 126 | 10.6 | +19 | - 10 | $9 \cdot 3$ | A 2 |
| 478 | 29168 | C 6iI | 1378 |  | $57 \quad 18 \cdot 64$ | 2610 | 235 | $294044 \cdot 6$ | 422 | 126 | $9 \cdot 6$ | - 21 | - 24 | $8 \cdot 6$ | G 5 |
| 479 | 23141 | B 315 | 1381 |  | 57 2I•13 | 2207 | 192 | $24 \quad 10 \quad 12.4$ | 422 | 125 | 10.8 |  | $1-\quad 10$ |  |  |
| 480 | $26 \quad 169$ | C 612 | $1389-90$ | I791-2-4 | $5742 \cdot 21$ | 2441 | 215 | $271549 \cdot 8$ | 414 | 126 | I I $\cdot 2$ | + 56 | + 10 | 6.67 | $\mathrm{F}_{5}$ |
| 481 | $24 \quad 167$ | B 317 | 1394 |  | - $5752 \cdot 92$ | +3.2238 | +.0194 | 242251.7 | +19.410 | -.126 | II.O | - 28 | - 6 | $9 \cdot 4$ | G 5 |
| 482 | 31168 | L 358 | 1393 | โ 796-7-8 | $5753 \cdot 12$ | 2757 | 248 | $\begin{array}{llll}31 & 19 & 16.6\end{array}$ | 410 | 128 | I 1.6 | + 188* | - 3I* | $5 \cdot 46$ | B 9 |
| 483 | $\begin{array}{lll}25 & 156\end{array}$ | C 613 | 1399 | 1801-2 | $5758 \cdot 24$ | 2343 | 205 | 254854.0 | 408 | 126 | 10.6 | + $\quad 28$ | $+\quad 13$ | 6.87 | F 2 |
| 484 | 29170 | C 614 | 工 397-8 |  | 5758.98 | 2618 | 233 | $2930 \quad 8.8$ | 408 | 128 | 10.6 | - 33 | + 3 | $8 \cdot 0$ | K |
| 485 | 30149 | L 360 |  | 1800 | $58 \quad 0.01$ | 2744 | 247 | $3 \mathrm{I} \quad 6 \quad 2.0$ | 408 | 128 | I I 6 | 8 | 2 | $9 \cdot 4$ | F 5 |
| 486 | 26170 | C 617 |  |  | - 58 19.30 | $+3.2{ }^{2} 23$ | +.0212 | $26 \quad 4712 \cdot 9$ | $+19.401$ | -. 128 | $10 \cdot 2$ | - 20 | - 22 | $8 \cdot 9$ | K |
| 487 | $25 \quad 158$ | C 622 | 1409 | 1827-8 | $5842 \cdot 21$ | 2364 | 205 | $254942 \cdot 7$ | - 392 | 128 | 10.4 | + 2 | - 2 | $8 \cdot 2$ | Fo |
| 488 | 28 171 | C 623 |  | '1829 | $5846 \cdot 25$ | 2605 | 230 | 29140 | 391 | 129 | 10.8 | + 18 |  | $8 \cdot 8$ | K 2 |
| 489 | 30153 | $\mathrm{L}^{\text {L }} 366$ | 1410 |  | $5847 \cdot 98$ | 2738 | 244 | $30 \quad 4 \mathrm{I} 45 \cdot 4$ | 390 | 129 | II 10 | + 26 | 16 | $9 \cdot 2$ |  |
| 490 | $27 \quad 165$ | C 624 |  |  | $58 \quad 48 \cdot 29$ | 2516 | 220 | $275038 \cdot 3$ | 390 | 128 | II ${ }^{\circ}$ | + II | - 2 | $9 \cdot 4$ | A 0 |
| 491 | $27 \quad 166$ | C 625 | 1415 |  | - $5855 \cdot 30$ | $+3.2486$ | $+.0217$ | $272354 \cdot 6$ | +19387 | -129 | $10 \cdot 3$ | - 19 | + 26 | 9.0 | K |
| 492 | $30 \quad 154$ | L 369 |  |  | $59 \quad \mathbf{1} \cdot 07$ | 2731 | 243 | 303178 | 385 | 130 | 12.6 | + 2 | - 40 | $9 \cdot 3$ |  |
| 493 | 30156 | $\mathrm{L} \quad 370$ | 1419 | 1843 | $59 \quad 9.88$ | 2776 | 246 | 31.1511 .8 | 382 | 130 | 10.4 | + 22 | $-\quad 38$ | $8 \cdot 0$ | K |
| 494 | 25160 | C 627 |  |  | 5910.46 | 2394 | 208 | 26414.1 | 382 | 129 | II.O | - 29 | - 15 | $8 \cdot 9$ | Go |
| 495 | 25161 | C 628 | 142 I | I 845 | 5914.72 | 2399 | 208 | $26 \quad 6 \quad 16 \cdot 3$ | 380 | 130 | II. 6 | - 35 | + 3 | $8 \cdot 8$ | G 0 |
| 496 | $24 \quad 169$ | B 326 | 1422 |  | - 5915.36 |  | +.0197 | $2445 \quad 9.4$ | +19.380 | -.129 | 10.8 |  | + 19 | $8 \cdot 9$ | Go |
| 497 | 28 I74 | C 63I |  | $1854$ | 5932.27 | 2642 | $232$ | $291043 \cdot 7$ | $373$ | 131 | 10*2 | $+69$ | -115 | $6 \cdot 08$ | F 5 |
| 498 | $28 \quad 175$ | C 632 |  | 1857 | 5939.54 | $265 \text { I }$ | 232 | $29 \quad 1435 \cdot 4$ | 371 | $\text { I } 31$ | 12.5 | $+\quad 42$ | + 33 | 8.8 |  |
| 499 | 26174 | C 634 |  |  | $5952 \cdot 88$ | 2504 | 216 | $271532 \cdot 0$ | 366 | 131 | 13.0 |  |  | $9 \cdot 9$ |  |
| 500 | $27 \quad 169$ | C 635 |  |  | $5956 \cdot 04$ | 2565 | 222 | 28 I $57 \cdot 2$ | 364 | 131 | $10 \cdot 1$ | + 7 | + 4 | $8 \cdot 7$ | G 5 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sce. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Typc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { s.000. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { " } \cdot 001 . \end{aligned}$ |  |  |
|  | - |  |  |  | 1 m | s | s | - , " | " | " |  |  |  |  |  |
| 501 | ${ }^{2} 4173$ | B 328 | $144^{\circ}$ |  | $1 \begin{array}{llll}1 & 0 & 3.77\end{array}$ | $+3.2301$ | +.0195 | $242830 \cdot 6$ | +19.361 | --130 | $9 \cdot 6$ | + 28 | - 35 | 8.8 | K o |
| 502 | 23142 | B 329 | 1452 |  | - 31.78 | 2278 | 192 | $24 \quad 0 \quad 5 \cdot 4$ | 351 | 132 | $9 \cdot 8$ | + 38 | + 13 | $9 \cdot 3$ | G 5 |
| 503 | 31 179 | $\begin{array}{ll}\text { L } & 382\end{array}$ | 1460 |  | $1{ }^{\text {I }}$-15 | 2905 | 255 | 314629.4 | 338 | 134 | 10.5 | + 29 | - 26 | $9 \cdot 3$ |  |
| 504 | 31180 | $\mathrm{L}_{\mathrm{L}} \quad 384$ | 1464 | 1899-1900 | 113.91 | 2904 | 254 | $31420 \cdot 1$ | 335 | 135 | 9.4 | $+t^{*}$ | - 19* | $6 \cdot 64$ | K o |
| 505 | 29175 | C 642 |  |  | 116.71 | 2718 | 235 | $292630 \cdot 4$ | 334 | 135 | $10 \cdot 4$ | + 12 | - $5^{1}$ | $9 \cdot 1$ |  |
| 506 | 31181 | L 385 | 1467 |  | $\begin{array}{llll}1 & 1 & 18.19\end{array}$ | $+3.2878$ | +.0252 | 312148.9 | +19.333 | --135 | $10 \cdot 7$ | + | - 33 | $9 \cdot 3$ |  |
| 507 | $\begin{array}{lll}27 & 172\end{array}$ | C 643 |  |  | 118.28 | 2605 | 223 | $28 \quad 1.22 \cdot 3$ | +333 | 134 | 11.3 | + 11 | $\begin{array}{r} \\ +\quad 27 \\ \hline\end{array}$ | 9.1 | K o |
| 508 | $25 \quad 165$ | C 644 | 1470 |  | 119.73 | 2469 | 209 | $\begin{array}{llllllllll}26 & 15 & 4 & 9\end{array}$ | 332 | 134 | 10.4 | 15 | - 29 | $8 \cdot 5$ | K o |
| 509 | $30 \quad 163$ | L 386 | 1468 |  | 119.91 | 2836 | 247 | $30 \quad 5050.8$ | 332 | 135 | 12.0 | - 2 | + 19 | $9 \cdot 3$ |  |
| 510 | $30 \quad 164$ | L 390 |  | 1907 | 130.26 | 2824 | 245 | $\begin{array}{lllll}30 & 38 & 14.7\end{array}$ | 328 | $13^{6}$ | 10.5 | 11 | + II | $8 \cdot 8$ |  |
| 511 | 24178 | B 337 | ${ }^{1} 475$ |  | $1 \quad 33.32$ | $+3.2335$ | +.0196 | 242522.2 | +19.327 | -.134 | 11.4 | - 9 | - 50 | $9 \cdot 3$ |  |
| 512 | $\begin{array}{lll}27 & 174 \\ 28\end{array}$ | C 646 | $1+76$ |  | $1{ }^{1} 40.29$ | 2605 | 222 | $27 \quad 53121 \cdot 5$ | 325 | 134 | 12.5 | + 8 | - | $9 \cdot 3$ | F 8 |
| 513 | 28179 | C 647 |  | 1914 | 143.02 | 2713 | 233 | 29 12 $2156 \cdot 3$ | 324 | 135 | $9 \cdot 3$ | + 37 | - 21 | 8.I | G 5 |
| 514 | 26181 | C 648 |  |  | 20.63 | 2509 | 212 | $26 \quad 32 \quad 21 \cdot 3$ | 317 | 135 | 12.8 | - 12 | - 18 | 9.2 | F 8 |
| 515 | 29176 | C 649 |  |  | 26.98 | 2770 | 238 | $294511 \cdot 0$ | 314 | 136 | 12.9 | - 1 | 23 | $9 \cdot 2$ |  |
| 516 | 24180 | B 339 | 1492 |  | 12214.02 | $+3.2348$ | +.0195 | $242136 \cdot 8$ | +19.311 | -. 135 | 12.2 | 5 | - 14 | $9 \cdot 2$ | K o |
| 517 | 27175 | C 651 | ${ }^{1} 491$ |  | 214.61 | 2636 | 224 | $\begin{array}{llll}28 & 3 & 15.8\end{array}$ | 311 | 136 | $1 \cdot 0$ | 16 | + 5 | $8 \cdot 5$ | K |
| 518 | 28182 | C 650 |  |  | 214.76 | 2674 | 227 |  | 311 | 136 | 12.8 | + 7 | $-\quad+$ | 9.1 | A 5 |
| 519 | $24 \quad 182$ | B 340 | 1500 |  | $237 \cdot 02$ | 2368 | 196 | $2+2934.6$ | 302 | 136 | - | + 28 | - | 8.8 | F 8 |
| 520 | 26185 | C 653 | 1499 |  | $237 \cdot 11$ | 2547 | 214 | $26{ }^{8} 8 \quad 16 \cdot 5$ | 302 | 136 | 10.3 | 17 | - 27 | $9 \cdot 3$ |  |
| 521 | 318185 | L 399 | 1505 | 1967-8-9 | $1 \begin{array}{lll}1 & 3.26\end{array}$ | $+3.2952$ | . 0253 | $31 \begin{array}{lll}1815 & 5.6\end{array}$ | +19.293 | --139 | $10 \cdot 4$ | + 153 * | - $47 *$ | $6 \cdot 29$ | F 2 |
| 522 | $28 \quad 187$ | C 661 | 1510 | 1978-9 | 320.42 | 2696 | 227 | 282322.3 | 285 | 139 | 10.5 | - 40 | - 72 | $6 \cdot 78$ | Fo |
| 523 | 31186 | L 402 | 1517 |  | 321.41 | 2952 | 253 | 312448.0 | 285 | 140 | $1 \cdot 2$ | + 6 | + 12 | $9 \cdot 3$ |  |
| 524 | 29179 | C 662 | 1511 | 1977 | $322 \cdot 31$ | 2827 | 241 | 295659.9 | 285 | 139 | 10.6 | + | - 26 | $8 \cdot 7$ | K o |
| 525 | $25^{5170}$ | C 663 | 1518-21 |  | $329 \cdot 15$ | 2463 | 204 | 252539.5 | 282 | 137 | 11.2 | - | 12 | $9 \cdot 2$ |  |
| 526 | $30 \quad 172$ | L 405 |  | 1995 | $347 \cdot 38$ | $+3.2949$ | +.0251 | $\begin{array}{llll}31 & 12 & 37.2\end{array}$ | +19.275 | -. 141 | $9 \cdot 6$ | 10 | 20 | $8 \cdot 7$ | K 2 |
| 527 | 29 181 | C 665 | 1527 | 1997-8 | $352 \cdot 00$ | 2841 | 240 | 2955 41•3 | 273 | 139 | 9.5 | + 12 | 9 | $7 \cdot{ }^{6}$ | A 5 |
| 528 | 28190 | C 666 | 1528 |  | $356 \cdot 52$ | 2740 | 230 | $28+1{ }^{2} \times 1.2$ | 271 | 140 | 11.2 | + 21 | 40 | $9 \cdot 3$ |  |
| 529 | 27180 | C 669 |  |  | 415.43 | 2670 | 222 | $274436 \cdot 0$ | 263 | 140 | 11.2 | 17 | 11 | $9 \cdot 3$ | F 2 |
| 530 | 29183 | C 670 | 1534 | $2015-7$ | + 21.65 | 2841 | 239 | $294444^{6}$ | 261 | 141 | $9 \cdot$ | 5 | - 15 | $8 \cdot 3$ | K 2 |
| 531 | 29184 | C 671 | 1535 | 2018-9 | 427.11 | $+3.2864$ | +.024I | $\begin{array}{llll}29 & 58 & 1.8\end{array}$ | +19.259 | -.141 | $9 \cdot 5$ | + 34 | + 23 | $8 \cdot 6$ | K 5 |
| 532 | 23149 | B 352 | 4 |  | $4+8.51$ | 2389 | 194 | $24 \quad 2 \quad 18.9$ | 250 | 139 | 10.0 | + 20 | - 20 | $9 \cdot 3$ |  |
| 533 | 30177 | ${ }^{\text {L }} 415$ |  |  | $5 \quad 5 \cdot 08$ | 2930 | 246 | $302933 \cdot 1$ | 243. | 142 | 12.0 | + 24 | - 37 | $8 \cdot 6$ | G 5 |
| 534 | 27181 | C 672 | 8 |  | $5 \quad 5 \cdot 15$ | 2735 | 227 | 28, 1321.0 | 243 | 141 | 12.0 | + 21 | + 33 | $8 \cdot 3$ | F 8 |
| 535 | $27 \quad 182$ | C 673 | 13 |  | $512 \cdot 64$ | 2683 | 2 I | $27 \quad 33 \quad 51.7$ | 240 | $14^{2}$ | 12.0 | 51 | 8 | 9.1 |  |
| 536 | 29185 |  | , 16-18 | 2065 | 524.53 | $+3.2844$ | +.0237 | 292325.5 | +19.235 | -. 143 | 12.4 | - 33 | - 16 |  |  |
| 537 | 24186 | C 675 | 20 | 2066 | $526 \cdot 30$ | 2479 2728 | 202 | 24.5852 .4 | 234 | 142 | 11.4 | + 11 | - 112 | 6.06 | K 5 |
| 538 | $\begin{array}{llll}27 & 183 \\ 29 & 187\end{array}$ | C 676 |  |  | $528 \cdot 94$ | 2728 | 225 | $27 \quad 5953 \cdot 6$ | 233 | 142 | 1199 | - 6 | + 5 | $9 \cdot 3$ | G 5 |
| 539 | 29187 | C 678 |  |  | $546 \cdot 25$ | 2851 | 236 | $29 \begin{array}{lllllll}29 & 18.8\end{array}$ | 226 | 144 | 12.0 | + 15 | - 2 | $9 \cdot 3$ |  |
| 540 | 27185 | C 679 | 23-4 | 2075 | $548 \cdot 26$ | 2686 | 220 | $27 \quad 23 \quad 20 \cdot 5$ | 226 | 143 | 11.3 | + 15 | + 4 | $8 \cdot 1$ | Fo |
| 541 | 24187 | C 681 | 26 |  | 549.94 | $+3.2510$ | +.0204 | 251441.4 | +19.225 | -. 143 | 11.8 | + 31 | - 17 | 9.16 | K 2 |
| 542 | 30180 | L 419 |  |  | 552.45 | 2988 | 249 | 305151.6 | 224 | 144 | 12.4 | 6 | + 10 | $9 \cdot 3$ |  |
| 543 | 23154 | B 358 |  |  | 553.40 | 2416 | 195 | $2{ }^{2} 4^{2} 54 \cdot 1$ | 223 | 142 | 11.6 |  | + $\quad 2$ | $8 \cdot 7$ | G 5 |
| 544 | 30 181 | L ${ }^{\text {L }}$ | 31 | 2086 | $\begin{array}{lll}6 & 8.75\end{array}$ | 3006 | 250 | $305646 \cdot 6$ | 217 | 145 | 13.5 | - $177^{*}$ | - 14* | $5 \cdot 04$ | A 5 |
| 545 | 30182 | C 683 | 35 |  | 612.57 | 2965 | 247 | 302819.1 | 215 | 145 | 10.2 | 10 | - 33 | $8 \cdot 5$ | Ma |
| 546 | $25 \quad 185$ | C 685 | 38-9 |  | $\begin{array}{lll}1 & 6 & 2+10\end{array}$ | $+3.2536$ | +.0205 | $25 \quad 224{ }^{1 / 2}$ | +19.211 | -. 144 | 10.4 | 29 | - 39 | $9 \cdot 16$ | G 5 |
| 547 | $\begin{array}{lll}26 & 195 \\ 29\end{array}$ | C 686 | 44 |  | 6 <br> 6 <br> 6 | 2646 | 215 | $\begin{array}{lllllllll}26 & 39 & 4 \cdot 3\end{array}$ | 207 | 145 | 11.1 | $-\quad 21$ <br> $+\quad 50$ | + 5 | $9 \cdot 1$ | A 0 |
| 548 | 29190 | C 688 | 46 | 2112-3-4-7 | $641 \cdot 99$ | 2905 | 239 | $293643 \cdot 6$ | 203 | 146 | 12.7 | + $55^{*}$ | - $3^{8 *}$ | $4 \cdot 70$ | K o |
| 549 | 27189 | C 691 | 59 |  | $\begin{array}{ll}7 & 9 \cdot 28\end{array}$ | 2758 | 224 | 27 $4^{6} 14^{\circ}$ <br> 0  | 192 | 146 | 10.4 | + 29 | - 8 | $8 \cdot 7$ | F 8 |
| 550 | 28197 | C 692 | 60 |  | $720 \cdot 42$ | 2820 | 231 | $28 \quad 25 \quad 57 \cdot 4$ | 187 | 146 | 10.6 | - 34 | - 12 | $8 \cdot 7$ | Ma |


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. | Epoch $1900+$ | Annual P.M. |  | Mag. | SpectralType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s.0001. } \end{aligned}$ | Dec. <br> ".001. |  |  |
|  | - |  |  |  | h m | s | s | , |  | " |  |  |  |  |  |
| 551 | 23157 | B 366 | 64 |  | $\begin{array}{llll}1 & 7 & 29.39\end{array}$ | $+3 \cdot 2455$ | +.0196 | $24 \quad 315 \%$ | +19.183 | $-\cdot 145$ | II•I | - 9 | 7 | $9 \cdot 3$ |  |
| 552 | 31196 | L 430 | 61 | 2134 | $731 \cdot 12$ | 3125 | 258 | 31.440 .6 | 182 | 150 | 11.2 | + 14 | - 8 | $8 \cdot 3$ | B 9 |
| 553 | 27190 | C $69+$ |  |  | 738.91 | 2756 | 223 | $\begin{array}{llll}27 & 35 & 1 \cdot 7\end{array}$ | 179 | 147 | $11 \cdot 2$ | - $\quad 29$ | + 35 | ${ }^{9} 3$ |  |
| 554 | $31196 a$ | L 433 |  | 2142 | $752 \cdot 22$ | 3124 | 258 | $313546 \cdot 2$ | 174 | 150 | $10 \cdot 1$ | + 18 | - 18 | $8 \cdot 3$ |  |
| 555 | 31197 | L $43+$ |  | 2144 | 753.71 | 3125 | 258 |  | 173 | 150 | 10.3 | + 19 | - 22 | $6 \cdot 57$ | A 0 |
| 556 | 25188 | C 697 |  |  | 1756.20 | $+3.2589$ | +.0207 | $253126 \cdot 2$ | +19.172 | $-147$ | 11.8 | + 25 | - 35 | $9 \cdot 1$ |  |
| 557 | 29195 | C 698 | 70 | 47-8-9-50 | $8 \quad 1.81$ | $294+$ | 240 | $2935 \quad 14.9$ | 169 | - 149 |  | - 1 | - 32 | $6 \cdot 40$ | Ko |
| 558 | $\begin{array}{ll}31 & 198\end{array}$ | $\begin{array}{ll}\mathrm{L} & 437 \\ \mathrm{C} & 6\end{array}$ |  |  | 8 $7 \cdot 04$ <br> 8  | 3149 | 259 | $\begin{array}{lllll}31 & 46 & 43.9\end{array}$ | 167 | 150 | 12.1 | - 19 | - 30 | $9 \cdot 3$ |  |
| 559 | $28 \quad 202$ | C 699 |  | 2156 | 8 II. 88 | 2917 | 237 | 291322.7 | 165 | 150 | 12.0 | + 5 | - 4 | 8.9 | Go |
| 560 | $24 \quad 189$ | C 701 | 81 |  | $8 \quad 27.53$ | 2556 | 203 | $24592 \cdot 6$ | 158 | $14^{8}$ | 12.2 | - 9 | + 8 | $8 \cdot 1$ | A 2 |
| 561 | 26197 | C 700 | 80 |  | 11 8 | $+3.2740$ | +.0219 | $27 \quad 7 \quad 52 \cdot 0$ | +19.158 | --149 | 12.2 | - 115 | - 86 | 8.8 | K |
| 562 | 28204 | C 702 | 86 | 2167 | $835 \cdot{ }^{2}$ | 2932 | 237 | $291536 \cdot 0$ | 155 | 150 | 12.8 | - 11 | - 34 | $6 \cdot 85$ | K |
| 563 | 29198 | C 703 |  | 2166 | $836 \cdot 13$ | 3002 | 244 | $\begin{array}{llll}30 & 1 & 19.5\end{array}$ | 155 | 151 | 12.7 | + 11 | - 6 | $8 \cdot 7$ | $A_{2}$ |
| 564 | 31200 | L 443 | 85 |  | 838.42 | 3181 | 261 | 3155 | 154 | 150 | 13.2 | - | + | $9 \cdot 1$ | G 5 |
| 565 | 25192 | C 704 | 87 | 2175 | $839 \cdot 08$ | 2646 | 211 | $25 \begin{array}{llll}58 & 31.5\end{array}$ | 153 | 148 | 13.6 | + 24 | - 23 | $7 \cdot 92$ | Ko |
| 566 | 24190 | B 372 | 89 |  | 1839.61 | $+3.2525$ | + 0200 | 2431447 | +19.153 | $-148$ | 13.3 | - | - 13 | $8 \cdot 3$ | $\mathrm{K}_{2}$ |
| 567 | 30186 | L 444 |  |  | 848.86 | 3075 | 250 | 304345.8 | 149 | 151 | 12.6 | + 43 | - 64 | $8 \cdot 7$ | Go |
| 568 | 25194 | C 706 |  | 2180 | 850.71 | 2634 | 209 | 254554.3 | 148 | 149 | 13.4 | - 5 | - $4^{6}$ | 7.91 | K 2 |
| 569 | 23158 | B 373 |  | 2181 | 851.53 | 2495 | 200 | $24 \quad 6 \quad 25.5$ | 148 | 148 | 13.0 | $+16 *$ | - $\mathbf{4 I}^{*}$ | $4 \cdot 64$ | K |
| 570 | 26199 | C 707 |  |  | $852 \cdot 79$ | 2711 | 216 | $2639 \quad 2{ }^{2} \cdot 6$ | 147 | 150 | 12.0 | $+20$ | - 31 | $8 \cdot 7$ | Ma |
| 571 | $28 \quad 205$ | C 708 | 92 | 2182 | $\begin{array}{lll}1 & 9 & 2.57\end{array}$ | $+3.2932$ | +.0236 |  | +19.143 | $-\cdot 151$ | 13.2 |  | - 18 |  |  |
| 572 | 27196 | C 712 |  |  | 97.93 | 2841 | 228 | $\begin{array}{lllll}28 & 3 & 14.8\end{array}$ | 141 | 150 | 13.5 | + 26 | - 56 | $6 \cdot 63$ | Ma |
| 573 | 25197 | C 714 | 97 |  | 9 12.58 | 2608 | 207 | 252186 | 139 | 150 | 13.4 | + 49 | - 64 | 8.46 | G 5 |
| 574 | 29199 | C 715 | 95-6 |  | 914.23 | 2974 | 240 | 29293666 | 138 | 152 | 13.6 | + 7 | - 6 | $9 \cdot 1$ | A 2 |
| 575 | 29200 | C 717 | 100 | 2191 | 922.33 | 303 I | 244 |  | 135 | 152 | II. 5 | $+16$ | - 12 | $7 \cdot 36$ | A 0 |
| 576 | 26202 | C 718 |  |  | $1 \mathrm{l} 934 \cdot 28$ | $+3.2754$ | +.0218 | $26 \quad 55 \quad 31 \cdot 9$ | +19.130 | --151 | 12.3 | 26 | - 6 | $9 \cdot 3$ |  |
| 577 | 25198 | C 720 | 110-1 |  | $940 \cdot 96$ | 2630 | 208 | $\begin{array}{lllllllllll}25 & 27 & 47\end{array}$ | 127 | 151 | 11.4 | 11 | - 33 | $9 \cdot 7$ |  |
| 578 | 27199 | C 719 | 107 |  | 9 +1.08 | 2817 | 223 | $27 \begin{array}{lllllllll} & 35 & 56\end{array}$ | 127 | 151 | 12.4 | - 1 | - 11 | $9 \cdot 1$ |  |
| 579 | 31207 | $\begin{array}{ll}\mathrm{L} & 452 \\ \mathrm{C} & \\ \end{array}$ | 109 |  | $9+1 \cdot 79$ | 3182 | 258 | $\begin{array}{lllllllll}31 & 32 & 37 \cdot 9\end{array}$ | 126 | 152 | 12.4 | + 13 | - 7 | $9 \cdot 3$ | Fo |
| 580 | 25200 | C 72 I | 116 | 2207 | 953.03 | 2679 | 212 | $\begin{array}{llllllllllllll}58 & 12 \cdot 6\end{array}$ | 121 | 151 | $10 \cdot 9$ | + 25 | - 5 | $8 \cdot 7$ | Ko |
| 581 | 29203 | C 722 |  |  | 1103.80 | $+3.3025$ | $+.02{ }^{2}$ | $29+541 \cdot 5$ | +19.116 | --153 | $10 \cdot 3$ | - 15 | + 21 | $9 \cdot 3$ |  |
| 582 | $30 \quad 189$ | L 457 |  |  | $10 \quad 5.87$ | 3116 | 250 | $304257 \cdot 3$ | 116 | 154 | 11.8 | + 15 | + 18 | $9 \cdot 2$ | $A=$ |
| 583 | 25201 | $\mathrm{C}^{\text {C }} 723$ |  |  | $10 \quad 12.89$ | 2700 | 213 | $\begin{array}{llll}26 & 6 & 25 \cdot 7\end{array}$ | 113 | 151 | 11.8 | - 26 | + 21 | 9.3 | Go |
| 584 |  | C 725 | 123 |  | 1024.75 | 3071 | 245 |  | 107 | 154 | 10.7 | $-4^{6}$ | -148 | $9 \cdot 2$ |  |
| 585 | 26206 | C 726 |  |  | 1025.08 | 2759 | 217 | $264^{2} 35 \cdot 0$ | 107 | 153 | 11.0 | $+\quad 32$ | $+.6$ | $9 \cdot 1$ | G 5 |
| 586 | 30190 | L 460 | 125 |  | 11032.86 | +3.3163 | +.0254 | $31 \begin{array}{lll}31 & 2 & 520\end{array}$ | +19.104 | --154 | 10.4 | + 13 | - 4 | $9^{9.1}$ |  |
| 587 | $25 \quad 205$ | C 729 | 14-2 | 2249-51 | 1110.27 | 2655 | 207 | $\begin{array}{lllllllllll}25 & 17 & 38 \cdot 5\end{array}$ | 087 | 155 | $9 \cdot 2$ | - 21 | - 36 | var. | $\stackrel{\mathrm{Na}}{8}$ |
| 588 | 27202 | C 730 | 143 |  | $\begin{array}{llll}11 & 1 & 13.32 \\ 11 & 5.50\end{array}$ | 2907 | 229 | $\begin{array}{llll}28 & 6 & 1\end{array}+4$ | 086 | 156 | 10.0 | + 5 | - 46 | 9•1 | F 8 |
| 589 | 27205 | C 736 |  |  | $1154 \cdot 50$ | 2861 | 223 |  | 067 | 156 | 10.0 | - 76 | - 25 | 9-1 |  |
| 590 | 30195 | L 468 | 160-1 | 2281-2 | 12 1.10 | 3234 | 257 | 3116410 | 064 | 158 | 9.5 | - 18 | - 8 | $8 \cdot 3$ | A 2 |
| 591 | 29209 | C 737 | 167-8 |  | $\begin{array}{lll}1 & 12 & 6.09\end{array}$ | +3.3066 | $+.024^{2}$ | $\begin{array}{llll}29 & 31 & 2 \cdot 8 \\ 27 & 30\end{array}$ | +19.062 | --157 | 8.9 | + 16 | + 7 | 7.9 | F 2 |
| 592 | 27206 | C 738 | 169-70 | 2285-6 | $\begin{array}{lll}12 & 6 \cdot 57\end{array}$ | 2879 | 224 | $273036 \cdot 7$ | 062 | 156 | $9 \cdot 8$ | + 21 | - 14 | $8 \cdot 1$ | A 2 |
| 593 | 30196 | L 471 | 175-6 | 2292-3 | 1224.11 | 3247 | 257 | $\begin{array}{llllllllll}31 & 16 & 11.8\end{array}$ | 054 | 158 | $8 \cdot 8$ | - $5+$ | + 11 | 6.86 | K o |
| 594 | $25 \quad 210$ | C 739 |  |  | $1227 \cdot 20$ | 2735 | 212 | $254915 \cdot 3$ | 053 | 157 | 10.2 | - 5 | - 9 | $9 \cdot 3$ | Ma |
| 595 | $28 \quad 213$ | C 741 |  |  | 1259.34 | 3046 | 238 | $\begin{array}{llll}29 & 1 & 8.5\end{array}$ | 038 | 159 | 10 | 11 | - 25 | $9 \cdot 1$ |  |
| 596 | 27207 | C 742 | 187-8 | 2313-4 | 11259.58 | $+3.2901$ | +.0225 | $27 \quad 28 \quad 27 \cdot 1$ | $+19.038$ | --158 | 10.3 | - 6 | + 3 | $8 \cdot 7$ |  |
| 597 | 25211 | C 743 |  | 2322 | 1313.13 | 2770 | 213 | $\begin{array}{llllllllll}25 & 58 & 39 \cdot 2\end{array}$ | ${ }^{0} 3^{2}$ | 159 | $9 \cdot 4$ | + 10 | -7 | $7 \cdot 8$ | A 3 |
| 598 | 26217 | C 745 | 198 |  | 1321.60 | 2815 | 216 | $262546 \cdot 3$ | 028 | 159 | 10.4 | + 21 | + 10 | $8 \cdot 5$ | K |
| 599 | $25^{2} 212$ | C 747 |  |  | 13 13 13 24.90 | 2743 3068 | 210 | $\begin{array}{rrrr}25 & 37 & 17 \cdot 1 \\ 20 & 6 & 31 \cdot 2\end{array}$ | 026 026 | 159 160 | 10.3 10.0 | - 13 | + | $8 \cdot 6$ | K |
| 600 | 28214 | C 746 |  |  | $13{ }^{25 \cdot 24}$ | 3068 | 239 | $29634 * 2$ | 026 | 160 |  | 17 |  | $9 \cdot 3$ | K 2 |



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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec. Var. | Epoch r900t | $\underset{\text { B. } \mathrm{P} . \mathrm{A} .}{\mathrm{I} .}$ | $\begin{aligned} & \text { Dec. } \\ & \text { D.oor. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m | s | s | - , | " | " |  |  |  |  |  |
| 701 | 28249 | C 849 | 504 | 2747-8 | I 26 16.31 | + 3.3443 | +.0243 | $\begin{array}{llll}28 & 57 & 4 \cdot 8\end{array}$ | $+18.643$ | -187 | 12.0 | + 150 | - 78 | $7 \cdot 27$ |  |
| 702 | 29256 | C 851 | 511 | 2758 | $2642 \cdot 71$ | 3594 | 253 | $30 \quad 944.2$ | 628 | 190 | $10 \cdot 3$ | + 36 | - 36 | $8 \cdot 41$ | K o |
| 703 | 26252 | C 853 | 513 |  | $2645 \cdot 18$ | 3261 | 229 | 27 10 59.6 | 627 | 188 | II.I | + 120 | - 8 | 9.1 |  |
| 704 | 28250 | C 856 |  |  | 2733.43 | 3509 | 245 | 29122.4 | 601 | 190 | 11.8 | + 19 | - 20 | $9 \cdot 3$ |  |
| 705 |  | C 857 |  |  | $27 \quad 34 \cdot 59$ | 3509 | 245 | $291122 \cdot 3$ | 600 | 191 | 12.4 |  |  | $9 \cdot 4$ |  |
| 706 | 26254 | C 859 |  |  | I 2752.05 | $+3.3231$ | +.022 | $26374 \mathrm{I} \cdot 6$ | +18.591 | --190 | 10.6 | + 14 | - 23 | $8 \cdot 7$ |  |
| 707 | $25 \quad 263$ | C 860 | 540 |  | - 2755.73 | 3181 | 220 | $\begin{array}{llll}26 & 9 & 3.9\end{array}$ | 589 58 | 190 | 11.5 | - 3 | - 7 | 8.8 |  |
| 708 | 26256 | C 862 |  |  | $28 \quad 5.88$ | 3211 | 222 | $262246 \cdot 7$ | 583 | 190 | 12.8 | - 50 | - | $9 \cdot 1$ |  |
| 709 | 27244 | C 863 |  |  | $28 \quad 7 \cdot 11$ | 3332 | 231 | $272841 \cdot 9$ | 582 | 191 | 12.0 | + 9 | + 18 | $9 \cdot 1$ | G 5 |
| 710 | 28252 | C 864 |  |  | $\begin{array}{llll}28 & 13.78\end{array}$ | 3498 | 243 | $\begin{array}{llll}28 & 55 & 9 \cdot 6\end{array}$ | 579 | 192 | 12.6 | + 50 | - 41 | $9 \cdot 3$ |  |
| 711 | 29258 | C 865 | 550 |  | I 28813.89 | $+3.3556$ | +.0248 | $292532 \cdot 6$ | $+18.579$ | --193 | 10.4 |  | - 13 | $8 \cdot 7$ | Fo |
| 712 | 26257 | C 866 | 551 |  | 2814.56 | 3210 | 222 | $26 \quad 2019 \cdot 1$ | 578 | 191 | 12.6 | - 69 | - 11 | 9-1 |  |
| 713 | 28253 | C 867 |  | 2802-4 | $28 \quad 16.53$ | 3486 | 242 | $\begin{array}{ll}28 & 48 \\ 185\end{array}$ | 577 | 192 | 12.4 | + 194 | - 47 | $8 \cdot 9$ | G 5 |
| 714 | 30240 | $\begin{array}{ll}\text { L } & 564\end{array}$ | 553 |  | $\begin{array}{ll}28 & 19.19\end{array}$ | 3683 | 256 | 3029 11•7 | 576 | 194 | 13.2 | - 10 | - 22 | $9 \cdot 2$ | A 5 |
| 715 | 29260 | C 868 | 557 | 2812 | $2833 \cdot{ }^{2}$ | 3624 | 252 | 295539.7 | 568 | 194 | $9 \cdot 7$ | 5 | - 33 | $8 \cdot 1$ | A 3 |
| 716 | $\begin{array}{ll}24 & 231\end{array}$ | B 473 |  |  | I 2857.28 | $+3.3057$ | +.0210 | $\begin{array}{llll}24 & 45 & 25.3\end{array}$ | +18.555 | --192 | 10.8 | 21 | - 23 | 8.86 | A 2 |
| 717 | $\begin{array}{ll}26 & 259\end{array}$ | C 874 |  |  | $29 \quad 5.09$ | 3288 | 226 | 26501503 | 551 | 193 | 9.6 | - 9 | + 3 | $9 \cdot 1$ | $\mathrm{A}^{2}$ |
| 718 | $28 \quad 257$ | C 876 | 584 | 2846 | $2945 \cdot 81$ | 3527 | 242 | $\begin{array}{llll}28 & 46 & 42 \cdot 3\end{array}$ | 528 | 195 | 10.0 | 24 | - 27 | $8 \cdot 7$ | Ko |
| 719 | $28 \quad 259$ | C 878 | 592 | 2857 | 2959.33 | 3518 | 241 | $\begin{array}{llll}28 & 38 & 25.9\end{array}$ | 521 | 196 | $9 \cdot 3$ | 32 | - | $8 \cdot 3$ | K O |
| 720 | $27 \quad 247$ | C 883 |  |  | $30 \quad 12.73$ | 3449 | 236 | $27 \quad 5859.5$ | 513 | 196 | 12.2 | 40 | + 49 | $9 \cdot 3$ |  |
| 721 | $30 \cdot 245$ | C 884 | 599 |  | 13021.22 | +3.3726 | $+.0256$ | $\begin{array}{llll}30 & 18 & 53.5\end{array}$ | +18.508 | --197 | 11.3 | - 11 | - 25 | 8.36 | K 5 |
| 722 | 30246 | L 579 |  | 2869 | 3023.84 | 3790 | 261 | $304939 \cdot 5$ | 507 | 198 | 11.5 | + 27 | + 8 | $8 \cdot 6$ | A 5 |
| 723 |  |  |  |  | 3024.00 | 3790 | 261 | 304939.4 | 507 | 198 | 12.8 | + 27 | + | $9 \cdot 4$ |  |
| 724 | $25 \quad 265$ | C 885 | 603 | 288 I | 3026.26 | 3256 | 222 |  | 506 | 194 | 10.9 | + 17 | - 59 | $7 \cdot 71$ | F 8 |
| 725 | $31278$ | L 581 |  |  | $3034 \cdot 86$ | 3854 | 265 | $\begin{array}{llllllllllll}31 & 17 & 59.9\end{array}$ | 501 | 198 | $12 \cdot 3$ | 10 | - 19 | $8 \cdot 7$ | F 5 |
| 726. |  |  |  |  | I 3035.49 | $+3.3852$ | $+\cdot 0265$ | $\begin{array}{llll}31 & 17 & 17.5\end{array}$ | +18.501 | -198 | 11.2 |  |  |  |  |
| 727 | $28 \quad 261$ | C 886 | 608 | 2878 | $3035 \cdot 41$ | 3531 | 24 I | $\begin{array}{lllllllllllll}28 & 36\end{array}$ | 501 | 197 | 12.8 | - 20 | - 24 | $9 \cdot 3$ |  |
| 728 | $27 \quad 248$ | C 887 |  | 2889-91 | $3036 \cdot 16$ | 3439 | 234 | $274832 \cdot 9$ | 500 | 196 | 11.3 | + | + 1 | $7 \cdot 0$ | G 5 |
| 729 | 31277 | L. 582 |  |  | 3037.27 | 3918 | 270 |  | 499 | 198 | 12.8 | - 26 | - 35 | $9 \cdot 3$ |  |
| 730 | $26 \quad 264$ | C 888 |  |  | 3057.50 | 3278 | 222 | $\begin{array}{lllllllllllllll}26 & 18 & 3.5\end{array}$ | 488 | 195 | II. 8 | + 3 | 6 | 8.8 |  |
| 731 | $26 \quad 265$ | C 890 | 628 | 2918 | 13120.14 | $+3.3342$ | +.0226 | $\begin{array}{lllll}26 & 46 & 26 \cdot 4\end{array}$ | +18.475 | --197 | $1 \mathrm{I} \cdot 2$ |  | - 4 | $8 \cdot 1$ | A 3 |
| 732 | 31280 | L 590 |  | 2915 | 3124.25 | 3931 | 269 |  | 473 | 199 | 12.0 | + 37 | - 5 | $9 \cdot 3$ |  |
| 733 | 24237 | C 891 |  |  | 3124.98 | 3143 | 213 | $245840 \cdot 3$ | 472 | 196 | 12.6 | - 35 | $+\quad 5$ | $9 \cdot 3$ | F 8 |
| 734 | $28 \quad 267$ | C 893 | 632 | 2922 | 3134.84 | 3604 | 245 | $28 \quad 5833.9$ | 467 | 198 | $10 \cdot 3$ | + 7 | - 58 | $8 \cdot 2$ | K o |
| 735 | $25 \quad 267$ | C 894 |  |  | $3135 \cdot 47$ | 3216 | 217 | $253556 \cdot 1$ | 467 | 196 | 12.4 | $+35$ | 14 | $9 \cdot 3$ |  |
| 736 | 23213 | B 485 |  |  | I 3149.41 | $+3.3056$ | $+\cdot 0207$ | $24 \begin{array}{llll}24 & 5 & 31.8\end{array}$ | + 18.459 | --196 | 13.0 | - 15 | + 24 | $9 \cdot 3$ |  |
| 737 | 29269 | C 895 |  |  | $3156 \cdot 59$ | 3653 | 248 | $\begin{array}{lllll}29 & 17 & 38.9\end{array}$ |  | 199 | 13.8 | - 63 | - 13 | 10.6 |  |
| 738 | $26 \quad 268$ | C 896 |  |  | $\begin{array}{llll}32 & 5 \cdot 4\end{array}$ | 3386 | 228 | $265882 \cdot 9$ | 450 | 198 | 12.6 | - 7 | + 8 | $9 \cdot 1$ |  |
| 739 | 29270 | C 898 | 645 |  | 3213.95 | 3774 | 256 | $\begin{array}{lllllllllll}30 & 13 & 8.9\end{array}$ | 444 | 201 | 12.8 | 13 | - 12 | $9 \cdot 3$ |  |
| 740 | $28 \quad 270$ | C 900 |  |  | $32 \quad 19.98$ | 3656 | 247 | 29 I3 24.5 | 44 I | 201 | 12.3 | 7 | - 8 | $9 \cdot 7$ |  |
| $74^{1}$ | 24239 | B 490 |  | 2950 | 1 3227.38 | +3.3139 | $+.0212$ | $244^{2} 51514$ | +18.437 | --198 | 8.9 | - 154 | $-238$ | 7.10 |  |
| 742 | 23216 | B 491 | 655 |  | $3236 \cdot 27$ | 3078 | 207 | $24 \quad 10 \quad 16 \cdot 7$ | 432 | 197 | $10 \cdot 2$ | - 6 | 22 | $8 \cdot 3$ | K 0 |
| 743 | $25 \quad 269$ | C 903 | 668-9 |  | $3254 \cdot 79$ | 3233 | 216 | $25 \quad 2645 \cdot 4$ | 42 I | 199 | 10.5 | + 15 | - 11 | 8.71 | K 0 |
| 744 | 30252 | C 904 | 667 | 2962 | $3257 \cdot 51$ | 3810 | 257 |  | 419 | 202 | 10.5 | + 197 | $+\quad 5$ | $8 \cdot 26$ | F 8 |
| 745 | 30254 | L 606 | 675 |  | 3313.06 | 3892 | 263 | $3055 \quad 27 \cdot 0$ | 410 | 204 | 11.9 | + 51 | - 54 | $9 \cdot 3$ |  |
| 746 | $28 \quad 271$ | C 906 |  | 2975 | 13317.29 | $+3.3672$ | +. 0246 | $\begin{array}{llll}29 & 6 & 54 \cdot 9\end{array}$ | $+18.408$ | $-203$ | II.O | +321 | - 243 | $8 \cdot 7$ | G 5 |
| 747 | $26 \quad 273$ | C 907 |  |  | 33 20.21 | 3365 | 225 | $263039 \cdot 6$ | 407 | 201 | 11.7 | - 15 | - | $9 \cdot 2$ |  |
| 748 | $\begin{array}{lll}28 & 273\end{array}$ | C 908 | 680 | 2984 | $33 \quad 24 \cdot 77$ | 3588 | 240 | $282317{ }^{\circ} \mathrm{O}$ | 404 | 202 | 12.0 | - 38 | $+$ | $8 \cdot 7$ |  |
| 749 | $30 \quad 257$ | L 609 | 689 | 2995 | $33.45 \cdot 28$ | 3943 | 267 | 31 It 31.0 | 392 | 202 | 10.4 | - 16 | + 5 | $7 \cdot 9$ | K o |
| 750 | $25 \quad 271$ | C 909 | 691 |  | $33 \cdot 47 \cdot 90$ | 3318 | 22 I | $25 \quad 59 \quad 25 \cdot 3$ | 390 | 201 | 11.8 | + $\quad 27$ | + 4 | $8 \cdot 9$ |  |



Grefnwich Catalogue of Stars.



|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.I). | A.f.C. | W. R. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoeh $1900+$ | $\begin{gathered} \text { R.A. } \\ \text { S.0001. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ":०ol } \end{aligned}$ | Mag. | Spectral <br> Tyре. |
|  |  |  |  |  | 11 mm s | 5 | $s$ | - |  | " |  |  |  |  |  |
| 951 | $30 \quad 328$ | $\begin{array}{ll}\text { L } & 78 \mathrm{I} \\ \mathrm{C}\end{array}$ | 1353 |  | 15941.41 | +3.4690 | +.0267 | $304423 \cdot 1$ | +17.374 | -. 260 | 11.3 | 23 | 37 | $8 \cdot 5$ |  |
| 952 | 28351 | C 1128 |  | 3823-4 | 206.26 | $+382$ | 249 | $28+024^{\circ} 2$ | 356 | 258 | $9 \cdot 7$ | + 24 | I | $7 \cdot 9$ | G 5 |
| 953 | 24300 | B 626 | 1 375-6 |  | $0+1 \cdot 33$ | 3816 | 217 | $244^{2} \quad 53 \cdot 6$ | 330 | 256 | $8 \cdot 5$ | - 11 | - II | $8 \cdot 0$ | G 5 |
| 954 | 27329 | C 113I |  |  | - $45 \cdot 32$ | $4^{2} 49$ | 239 | $27 \quad 4017 \cdot 5$ | 327 | 258 | $10 \cdot 3$ | 22 | 16 | $9 \cdot 4$ |  |
| 955 | 30333 | L 784 |  | 3843 | I $3 \cdot 62$ | 4703 | 265 | $30 \quad 33 \quad 53 \cdot 3$ | 314 | 261 | $10 \cdot 1$ | + 16 | - 47 | $8 \cdot 6$ | $G 5$ |
| 936 |  | B 628 | I 386 |  | 2 I 9.76 | $+3.3822$ | +.0217 | $244^{0} 45^{\prime 2}$ | +17.309 | -. 258 | II. 6 |  |  |  |  |
| 957 | $2+302$ | B 628,9 |  |  | I 9.67 | 3822 | 217 | $244044 \cdot 3$ | 309 | 258 | 11.9 | - 15 | - 33 | 8-I | A 0 |
| 958 |  | B 629 | 1387 |  | I $9 \cdot 76$ | 3822 | 217 | $2440+3 \cdot 6$ | 309 | 258 | II•9 | - 15 | - 33 |  |  |
| 959 | 29358 | C II 33 | I 391 |  | I 18.52 | 4619 | 260 | $295913 \cdot 1$ | 302 | 263 | $12 \cdot 3$ | + 4 | 13 $+\quad 1$ | $9 \cdot 4$ |  |
| 960 | 26354 | C II 34 |  |  | I 23.96 | 4078 | 230 | $26 \quad 2429 \cdot 2$ | 299 | 258 | 1 I. 8 | - 49 | $+56$ | $8 \cdot 7$ | A 0 |
| 961 | $27 \quad 330$ | C II 35 | 1398 |  | $2 \quad 1 \quad 26.93$ | $+3.4227$ | +.0238 | $\begin{array}{llll}27 & 24 & 16 \cdot 9\end{array}$ | +17.297 | $-259$ | 11.8 | - 37 | + 6 | $9 \cdot 1$ | K 0 |
| 962 | $25 \quad 348$ | C 1136 |  | 3859 | 136.22 | 3936 | 222 | $\begin{array}{llll}25 & 24 & 5 \cdot 7\end{array}$ | 290 | 257 | II•9 | - 6 | - 26 | $7 \cdot 36$ | A 3 |
| 963 | 28359 | CII 37 | $1402-3$ | 3857 | I 38.05 | 4450 | 250 | $2850 \quad 25 \cdot 5$ | 288 | 262 | 12.7 | 8 | + 7 | $6 \cdot 53$ | A 2 |
| 964 | 25349 | C II 38 | 1404 | 3863 | I $42 \cdot 96$ | 3921 | 221 | $\begin{array}{lllll}25 & 16 & 32 \cdot 8\end{array}$ | 285 | 257 | 13.0 | + 33 | 1 | $6 \cdot 0$ | B 8 |
| 965 | 25350 | C II39 |  |  | I $48 \cdot 28$ | 4013 | 225 | $\begin{array}{llllll}25 & 53 & 37 \cdot 4\end{array}$ | 281 | 258 | $12 \cdot 5$ | + $7^{6}$ | + 21 | $7 \cdot 38$ | G 5 |
| 966 | 26357 | CIIfI | 1414 |  | $2 \quad 212.31$ | +3.4158 | +.0233 | $264^{8} \quad 33 \cdot 2$ | +17.263 | -. 260 | $10 \cdot 5$ | + 28 | + 9 | $6 \cdot 82$ | A 2 |
| 967 | 29 361 | CII42 | $1417-8-9$ | 3882 | 2 25.19 | 4545 | 254 | $291847 \cdot 4$ | 254 | 264 | II.O | + 17 | - 16 | $7 \cdot 9$ | A 3 |
| 968 | 28 361 | C II 43 | $1422-3-4$ | 3887 | $23 \mathrm{I} \cdot 24$ | 453 I | 253 | $291218 \cdot 0$ | 249 | 263 | $2 \cdot 2$ | - 5 | + 2 | $8 \cdot 3$ |  |
| 969 | $28 \quad 363$ | C II 44 |  |  | $237 \cdot 20$ | 4412 | 248 | $\begin{array}{llll}28 & 25 & 14.8\end{array}$ | 245 | 264 | II. 5 | + 31 | - 22 | $9 \cdot 4$ |  |
| 970 | 28364 | C II 45 | $1+3 \mathrm{I}-2$ | 3895 | $24^{8 \cdot 15}$ | +529 | 253 | 29834.3 | 237 | 263 | 10.5 | + 6 | + 33 | $8 \cdot 2$ | Ko |
| 971 | 24305 | B 637 | 1445 |  | $2315 \cdot 52$ | +3.3828 | +.0214 | ${ }^{2}+23 \quad 28.9$ | +17.219 | -.261 | $9 \cdot 2$ | + 4 | + 16 | $7 \cdot 7$ | Ma |
| 972 | 27335 | C II 46 |  |  | 312.27 | 4347 | 242 | $27 \quad 53 \quad 27 \cdot 1$ | 219 | 263 | II•I | + 136 | - 308 | $9 \cdot 4$ |  |
| 973 | 24308 | B 640 | 1456 |  | $347 \cdot 28$ | 3842 | 214 | $2+2359 \cdot 7$ | 193 | 261 | $9 \cdot 3$ | + 29 | - 18 | $9 \cdot 2$ | F 8 |
| 974 | 27336 | C II 49 | I 459-60 |  | $356 \cdot 24$ | 4293 | 238 | $272+45 \cdot 1$ | 186 | 264 | $10 \cdot 3$ | 20 | - 40 | $9 \cdot 4$ |  |
| 975 | 24312 | B 642 | 1467 |  | $45 \cdot 70$ | 392 I | 218 | $245338 \cdot 6$ | 178 | 263 | II.3 | 14 | + 25 | $9 \cdot 1$ | Ko |
| 976 | 27337 | C II 50 | 1 $465-6$ | 3939-40 | 2488.07 | $+3.4383$ | +.0243 | $\begin{array}{llll}27 & 58 & 4 \cdot 2\end{array}$ | +17.177 | -. 265 | $10 \cdot 2$ | - 7 | + 23 | 8.I | A 0 |
| 977 | 25354 | C II5 |  |  | 410.06 | 4015 | 223 | 25 31 $8 \cdot 3$ | 175 | 262 | . 2 | + 60 | 24 | $8 \cdot 7$ | F 2 |
| 978 | 24313 | B 644 | I $4755^{-6}$ |  | $416 \cdot 99$ | 3855 | 214 | $242+37 \cdot 9$ | 170 | 263 | 11.5 | II | - 13 | 8.1 | G 5 |
| 979 | 25355 | C II 52 | 1474 | 3944 | $417 \cdot 79$ | 4017 | 223 | $25 \quad 30 \quad 52 \cdot 6$ | 169 | 264 | 10.5 | + 58* | - 37* | $5 \cdot 07$ | Fo |
| 980 | 31370 | L, 80I | 1471 |  | 423.75 | 5020 | 278 | $315325 \cdot 0$ | 165 | 270 | II I I | 4 | 8 | $7 \cdot 8$ | K 2 |
| 981 | 26362 | C II 54 |  |  | $2427 \cdot 35$ | $+3.4235$ | $+\cdot 0235$ | $265633 \cdot 5$ | +17.163 | $-.265$ | 13.1 | + 15 | - 3 | $9 \cdot 4$ | Ko |
| 982 | 25357 | C II 55 | 148 |  | $442 \cdot 86$ | 4108 | $227$ | $26 \quad 3 \quad 32 \cdot 7$ | 150 | 265 | I I. 8 | + 35 | + 13 | $8 \cdot 9$ | F 8 |
| 983 | 25358 | C II 56 |  |  | $445 \cdot 78$ | 4068 | 225 | $25+646 \cdot 8$ | 148 | 264 | 12.0 | + 32 | + 39 | $9 \cdot 1$ | A 2 |
| 984 | 29365 | C II 57 |  |  | 451.86 | 4719 | 260 | $2958 \quad 3 \cdot 3$ | 144 | 270 | $12 \cdot 2$ | $+\quad 25$ $+\quad 1$ | - I | $9 \cdot 4$ |  |
| 985 | 31373 | I」 807 |  |  | 456.09 | 4941 | 273 | $\begin{array}{llll}31 & 19 & 0.3\end{array}$ | 141 | 272 | 12.9 | - 17 | 41 | $9 \cdot 4$ |  |
| 986 | 29366 | C II 58 | $5-6-7$ | 3962 | $2 \quad 5 \quad 9.79$ | $+3 \cdot 4634$ | +.0255 | $292316 \cdot 2$ | +17.130 | -.269 | x1.9, 12.7 | + 222 |  | $8 \cdot 9$ |  |
| 987 | 29368 | C ir 6 I |  | 3977 | 533.49 | 4688 | 257 | $293913 \cdot 8$ | 113 | 271 | 10.3 | - 19 | - $\quad 1$ | $8 \cdot 5$ | F 5 |
| 988 | 24318 | B 648 |  |  | $543 \cdot 4^{2}$ | 3916 | ${ }^{2} 216$ | 2436 I. 1 | 105 | 266 | $12 \cdot 3$ | + 17 | - 6 | $8 \cdot 38$ | K 2 |
| 989 | 28367 | C 1162 | 2 I |  | 553.70 | $44^{81}$ | 246 | $281742 \cdot 0$ | 097 | 271 | 12.4 | + 6 | - 15 | $9 \cdot 4$ |  |
| 990 | 29369 | CII63 | 20-2-3-4 | 3990 | $5 \quad 54 \cdot 68$ | 4671 | 256 | 29291.4 | 096 | 271 | II 1.6 | + 6 | + 6 | $8 \cdot 2$ | A 0 |
| 991 | 29,370 | C 1164 | 25 | 3991-2 | $\begin{array}{llll}2 & 5 & 55 \cdot 37\end{array}$ | $+3.4704$ | +.0258 | $294130 \cdot 5$ | +17.096 | $-27^{2}$ | $10 \cdot 1$ | + 8 | - 7 | $8 \cdot 2$ | Fo |
| 992 | 25362 | C is 66 | $32-3-4$ | 4003-4 | $6 \quad 4 \cdot 66$ | 4059 | 223 | $253046 \cdot 6$ | 088 | 267 | $10 \cdot 7$ |  | - II* | $6 \cdot 18$ | K 2 |
| 993 | $30 \quad 347$ | L 81I |  | 3997 | $6 \quad 9 \cdot 15$ | 4942 | 270 | 31.69 .8 | 085 | 275 | II•I | + 18 | + 14 | $6 \cdot 20$ | A 0 |
| 994 | 25363 | C 1168 | 40 | 4010-1 | $6 \quad 18.41$ | 4090 | 224 | 254054.9 | 078 | 267 | 10.5 | - 77 | 22 | $8 \cdot 5$ | F 5 |
| 995 | 23295 | B 65 I | $4^{1-2}$ |  | $6 \quad 18 \cdot 58$ | 3856 | 212 | $2464 \cdot 1$ | 078 | 267 | 11.0 | 12 | - 50 | $8 \cdot 7$ | G 5 |
| 996 | 27341 | C 117 ${ }^{\text {c }}$ | 53-4 |  | $2 \quad 6 \quad 42.09$ | +3.4440 | +.0242 | $275351 \cdot 5$ | +17.060 | $-271$ | 11.8 | - 4 | + 2 | 9.4 |  |
| 997 | $24319$ | C1172 | $68$ |  | $7 \quad 5 \cdot 78$ | $4007$ | $219$ | $25 \quad 0 \quad 12 \cdot 2$ | . 042 | - 269 | II.7 | + ${ }^{2}$ | - 20 | $9 \cdot 4$ | Ko |
| 998 | 29371 |  | $62-3$ | 4033-4 | $7 \quad 8 \cdot 72$ | $+770$ | $259$ | $295253.9$ | $039$ | 274 | 9.5 | - $4^{8 *}$ | - 62* | $\} 5 \cdot 20$ | G O |
| 999 | 29371 | C1173 | $64$ |  | $7 \quad 9 \cdot 06$ | $4770$ | $259$ | $29 \quad 52 \quad 55 \cdot 2$ | $039$ | 274 | 7.5 | - $4^{8 *}$ | - 62* | $\int_{8.1} 5$ | K |
| 1000 | $28 \quad 369$ | C 1174 | 69 | 4036 | $\begin{array}{lll}7 & 10.57\end{array}$ | 4593 | 250 | $28+6+8 \cdot 3$ | - 038 | 274 | $9 \cdot 6$ | - 18 | - 4 | 8.I | K 2 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | 1 P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sce. Var. | Dec. 191000 | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & 1900+ \end{aligned}$ | $\underset{\text { B.ooor. }}{\text { R. }}$ | Dec. ".001. | Nag. | Spectral |
|  | - |  |  |  | h m s | s | s | - , | " | " |  |  |  |  |  |
| 1001 | 31382 | 1.814 | 65 | 4032 | $2 \begin{array}{llll} \\ & 7 & 12.74\end{array}$ | $+3 \cdot 5079$ | $+\cdot 0277$ | $31+3{ }^{1} \times 6$ | $+17.036$ | --277 | $10 \cdot 4$ | + 28 | 7 | 8.10 | $\mathrm{K}_{2}$ |
| 1002 | 29374 | C 1178 |  | 4058 | 755.07 | 4834 | 261 | $30 \quad 813.0$ | 17.004 | 275 | $9 \cdot 1$ | 14 | + | $7 \cdot 76$ | G 5 |
| 1003 | 24322 | C1181 | 102 |  | $815 \cdot 17$ | 4027 | 219 | 2457 37-1 | $16 \cdot 988$ | 272 | 10.6 | - 82 | 121 | 8.63 | Go |
| 1004 | 31386 | L. 821 | 100 | 4078 | 8 20.18 | 5075 | 274 | $\begin{array}{llllllllllll}31 & 29 & 54\end{array}$ | 984 | 278 | 10.1 | + $4^{6}$ | - $4^{2}$ | $8 \cdot 1$ | F; |
| 1005 | 27344 | C 1182 | 103 |  | 823.72 | 4426 | 239 | 27 31 $24 \cdot 2$ | 981 | 275 | $11 \cdot 5$ | - 17 | - 30 | $9 \cdot 4$ |  |
| 06 | 24325 | B 666 |  | +094 | $2833 \cdot 85$ | $+3.4067$ | $+.0220$ | $251035 \cdot 6$ | +16.974 | --271 | 10.9 | + 12 | - 75 | 7.08 | F $;$ |
| 1007 | 25368 | C 1186 | 123 | +102 | 853.10 | 4232 | 234 |  | 959 | 273 | 10.6 | + 29 | + $\quad 29$ | $7 \cdot 30$ | G 5 |
| 100 | 27346 | C 1187 | 125 |  | 859.52 | 4513 | 243 |  | 953 | 276 | 12.6 | 39 | - 80 | 9.4 |  |
| 1009 | 30354 | C 1188 | 128-9 | 4103 | $95 \cdot 23$ | $+895$ | 263 | $\begin{array}{lllll}30 & 18 & 18.8\end{array}$ | 950 | 278 | 12.1 | 21 | - 19 | $7 \cdot 31$ | Fo |
| 1010 | 31388 | L 828 |  |  | 914.95 | 5085 | 273 | 312353.5 | $9+2$ | 280 | 12.9 | - 2 | - 33 | $9 \cdot 4$ |  |
| 1011 | 27348 | O 1191 | 137 |  | $2 \quad 9 \quad 20.39$ | $+3+450$ | +.0239 | $27314 \mathrm{I} \cdot 0$ | $+16.938$ | --277 | 12.6 | - 30 | + 5 | $9 \cdot 4$ |  |
| 1012 | 28374 | C 1192 | 138 | 4114 | 924.74 | - 4572 | 246 | $\begin{array}{llllllllll}28 & 16 & 24.3\end{array}$ | 934 | 278 | 12.0 | + 123 | - 68 | $6 \cdot 57$ | G 5 |
| $\mid 1013$ | $29376\{$ | C 1194 | 139-40 | 4115-6 | 927.30 | +851 | 260 | $\begin{array}{lllll}29 & 58 & 29.8\end{array}$ | 932 | 279 | 11.8 | + 18 | + $+^{1}$ |  |  |
| $1014$ | ${ }^{29} 3702$ | C 1195 | 141-2 |  | 927.83 | 4851 | 260 | $29 \begin{array}{lllll} & 58 & 32.7\end{array}$ | 932 | 279 | 11.7 | + 18 | + 41 | 7.21 | B 8 |
| 1015 | 27350 | C 1198 |  |  | $10 \mathrm{II}+{ }^{2}$ | 4491 | 240 | 2738 57.3 | 897 | 278 | 11.7 | + 12 |  | $9 \cdot 2$ |  |
| 1016 | 26373 | C 1200 | 154 |  | 21015.00 | $+3.4381$ | +.0235 | $\begin{array}{lllll}26 & 56 & 29.2\end{array}$ | $1+16.895$ | -. 278 | 10.1 | + 237 | - 136 | $8 \cdot 2$ | ${ }^{\text {a }} 5$ |
| 1017 | 28376 | C 1202 | 155 | 4140 | $1017 \cdot 11$ | 4615 | 247 | $28 \quad 2348.9$ | 893 | 279 | 11.5 | - 23 | + 7 | $8 \cdot 7$ | Ko |
| 1018 | 28377 | ${ }^{\text {C } 1203}$ | 158 |  | 1025.34 | 4730 | 253 | $29+54^{\circ} \mathrm{O}$ | 887 | 282 | 1.7 | - 12 | - 55 | $8 \cdot 8$ |  |
| 1019 | 25372 | ${ }^{\text {C } 1204}$ |  |  | 10 30.03 | 4275 | 229 | $\begin{array}{llllllllll}26 & 13 & 420\end{array}$ | 883 | 276 | 11.5 | + 18 | - ${ }^{1}$ | 8.6 | F 5 |
| 1020 | 24329 | B 681 | $164-5$ | 4158 | 10 $36 \cdot 18$ | 4030 | 217 | $2+3735 \cdot 1$ | 878 | 275 | $11 \cdot 1$ | 61* | 87* | 5.64 | F 5 |
| 1021 | 25373 | C 1205 |  | $4154-5$ | 21036.66 | $+3.4144$ | $+.0222$ | $25.2156 \cdot 5$ | +16.878 | -. 275 | $1 \cdot 1$ | + 136* | - 60* | 5.84 | $\mathrm{F}_{2}$ |
| 1022 | $\begin{array}{ll}30 & 358\end{array}$ | L 836 |  |  | 1052.35 | 5018 | 267 | $30+3 \quad 31 \cdot 3$ | 866 | 283 | $\cdot 2$ | 11 | + 31 | 9.2 |  |
| 1023 | 24330 | B 686 | 176-7 |  | 10 59.75 | 4041 | 217 | ${ }^{2}+38819.4$ | 860 | 276 | 14.3 | + +5 | 13 | var. | Md |
| 1024 <br> 1025 | 29380 | C 1207 |  |  | 110.28 | 4816 | 256 | 293012.4 | 860 | 283 | 12.7 | + 40 |  | 9.4 |  |
| 1025 | 26375 | C 1208 | 178 |  | 112.75 | $+348$ | 232 | $2636 \quad 32 \cdot 3$ | 857 | 278 | 10.7 | + 5 | + 30 | $8 \cdot 8$ | A 2 |
| 1026 | 30360 | L. 838 | 174-5 | $4^{16} 4$ | 2115.58 | $+3.5008$ | +.0266 | $\begin{array}{lllll}30 & 37 & 32.5\end{array}$ | +16.855 | -.284 | 10.8 | 74 | 11 | 7.86 | F 0 |
| 1027 | 29382 | C 1209 | 182 | $+169$ | 1112.53 | 4803 | 255 | $\begin{array}{ll}29 & 23113.7\end{array}$ | 849 | 283 | II.0 | + 63 | 4 | $8 \cdot 7$ | G 5 |
| 1028 | 29384 | C 1210 | 191 |  | $\begin{array}{ll}11 & 25.89\end{array}$ | $+803$ | 255 | $292116 \cdot 2$ | 839 | 283 | 13.2 | - 41 | - 32 | 9.4 |  |
| 1029 | 29385 | C 1211 | 195 |  | $\begin{array}{ll}11 & 31.87\end{array}$ | 4836 | 256 | $2932 \quad 0 \cdot 6$ | 834 | 284 | 13.5 | - | + 7 | $9 \cdot 4$ |  |
| 1030 | 28379 | C 1212 |  |  | 1132.92 | 4773 | 252 | 29 9 11.3 | 833 | 283 | 13.5 | $-\quad+$ | + 11 | $9 \cdot 4$ |  |
| 1031 | $30 \quad 362$ | $\begin{array}{lll}\text { L } & 843\end{array}$ | 196-7 | 4183 | 21141.12 | +3.5019 | $+\cdot 0265$ | $303522 \cdot 5$ | $+16.827$ | -. 285 | 11.3 | 11 | + 19 | $8 \cdot 7$ |  |
| 1032 | $27 \quad 354$ | C 1216 | 203 |  | 1157.38 | 4607 | 244 | $28+517$ | 814 | 283 | 13.5 | 32 | + 18 | $9 \cdot 4$ |  |
| 1033 | $28 \quad 381$ | C 1217 |  |  | 1157.97 | 4637 | 245 |  | 814 | 283 | 12.8 | + 19 | + 20 | $9 \cdot 1$ |  |
| 1034 | 30363 | L $8+5$ | 209 |  | $12 \quad 7 \cdot 32$ | 5105 | 269 | $31 \begin{array}{llll}1 & 1 & 3 & 0\end{array}$ | 806 | 287 | 11.9 | + 12 | - 5 | $8 \cdot 7$ |  |
| 1035 | $28 \quad 382$ |  | 212 | 4207 | 1211.25 | 4653 | 246 | $281936 \cdot 3$ | 803 | 283 | $11 \cdot 3$ | + 67 | $-641$ | $6 \cdot 61$ | F 5 |
| 1036 |  | C1219 | 213 | 4208 | 211211.79 | $+3.4654$ | $+\cdot 0246$ | $281948 \cdot 5$ | $+16.802$ | -. 283 | $11 \cdot 7$ | + 67 | $-64$ | $6 \cdot 6$ | F 5 |
| 1037 | 30364 | L. 847 | 210 |  | 1212.78 | 5149 | 271 | 31159.0 | 802 | 287 | 12.5 | + 9 | - 22 | $9 \cdot 1$ |  |
| 1038. | $28 \quad 383$ | C 1220 |  |  | 1223.68 | 4725 | 249 | 28 to 17.1 | 793 | 284 | 12.5 | - 51 | - 38 | 9.4 |  |
| 1039 | 25377 | C 1221 | 225 |  | 1227.64 | 4200 | 223 | $\begin{array}{lllll}25 & 27 & 10.2\end{array}$ | 790 | 279 | 12.5 | + 30 | 54 | $9 \cdot 8$ |  |
| $10+0$ | 30367 | L 849 |  |  | 124120 | 5092 | 268 | $30 \quad 5033.8$ | 779 | 287 | 12.9 | 24 | 57 | $9 \cdot 4$ |  |
| $10+1$ | $28 \quad 385$ | C 1222 | 231. | 4223 | 21243.75 | +3.4711 | +.0249 | 283529.0 | +16.777 | $-284$ | $9 \cdot 7$ | + 12 | 18 | $6 \cdot 85$ | Ma |
| 1042 | 29387 | C 1223 | 234 | 4231-2-3 | 1252.07 | 485 | 256 |  | 771 | 286 | 9.8 | + 6 | - 32 | $7 \cdot 35$ | A 3 |
| 1043 | 27359 | C 1225 |  |  | 1313.16 | +551 | 239 | $27 \quad 32 \quad 5 \cdot 4$ | 754 | 285 | 10.2 | 16 | + $+\quad 31$ | $9 \cdot 4$ |  |
| $10+4$ | 31395 | L 853 |  |  | 1317.88 | 5261 | 276 | $31{ }^{12} 43 \cdot 2$ | 750 | 289 | 10.2 | 5 | - 18 | $8 \cdot 7$ |  |
| 1045 | 27360 | C 1229 | 243 | 4262 | $1343 \cdot 82$ | 4677 | $2+5$ | $\begin{array}{lllllllllllll}28 & 13 & 39.5\end{array}$ | 729 | 286 | $9 \cdot 1$ |  | 2* | $5 \cdot 28$ | A 2 |
| 1046 | $\begin{array}{lll}26 & 383 \\ 298\end{array}$ | C 1230 | 244 | 4264 | $\begin{array}{llll}2 & 13 & 44.29\end{array}$ | $+3.474$ | +.0235 | $\begin{array}{lllll}26 & 58 & 59.6\end{array}$ | +16.729 | $-284$ | 10.4 | 22 | - 27 | $8 \cdot 7$ | F 8 |
| 1047 | 29 28 28 3888 | C 1232 C 1235 |  | 4266 | $\begin{array}{lll}13 & 55.91 \\ 14 & 12.97\end{array}$ | +919 | 257 | $\begin{array}{lllll}29 & 37 & 53.5 \\ 28 & 3+ \\ 1.8\end{array}$ | 719 | 288 | 10.9 | - 39 | - 35 | $8 \cdot 7$ | A 3 |
| 1048 | 28388 | C 1235 |  |  | 1412.97 | 4719 | 247 | $\begin{array}{lllll}28 & 2+ & 1.8 \\ 31 & \end{array}$ | 706 | 287 | 10.9 | - 8 | + 6 | $9 \cdot 8$ |  |
| 1049 | 31 399 | L 860 |  |  | 1415.97 | 5279 | 275 | $\begin{array}{llllllllllll}31 & 38\end{array}$ | 703 | 292 | 11.7 | + 33 | + 4 | 9.4 |  |
| 1050 | $2+335$ | C 1237 | $264-5$ | 4288 | $1426 \cdot 27$ | 4190 | 220 | $\begin{array}{llllll}25 & 5 & 54\end{array}$ | 695 | 283 | 10.9 | + 22 | - 27 | $7 \cdot 86$ | A o |


|  |  |  |  |  |  |  |  |  |  |  |  | Annu | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Preesssion. | Sec. Var. | Dec. 1910.0. | Precession. | $\begin{aligned} & \text { See. } \\ & \text { Var. } \end{aligned}$ | $\begin{aligned} & \text { Epoeh } \\ & \text { igoo } \end{aligned}$ | $\underset{\text { R.000 }}{\substack{\text { R.A. }}}$ | $\begin{aligned} & \text { Dec. } \\ & \text { n.○○ } \end{aligned}$ | Mag. | $\begin{array}{\|l} \text { Spectral } \\ \text { Type. } \end{array}$ |
|  |  |  |  |  | h m s | s | s. | - " |  | " |  |  |  |  |  |
| 1051 | 30372 | 1. 862 | 263 | 4287 | $2 \mathrm{I}+3+{ }^{\text {+ }}$ 6 | $+3.5161$ | +.0269 | $30 \quad 55 \quad 33 \cdot 1$ | +16.689 | -291 | 10.1 | + ${ }^{\text {a }}$ |  | $7 \cdot 29$ |  |
| 1052 | 30373 | C 1239 |  |  | $143+76$ | 5065 |  | $30 \quad 22 \quad 29.1$ | 688 | 290 | $11 \cdot 7$ | + 35 | - 24 | $8 \cdot 71$ | F 5 |
| 1053 | 31403 | 1. 864 | 266 | 4292 | It +3.70 | 5339 | 278 | 315419.0 | 681 | 293 | II•I | - | + 5 | $8 \cdot 1$ |  |
| 1054 | 30374 | C 1240 |  |  | $1+{ }^{1}+6 \cdot 50$ | 5076 | 264 | $302+26 \cdot 9$ | 678 | 290 | $11 \cdot 1$ |  |  | $9 \cdot 2$ |  |
| 1055 | 29,392 | C $12{ }_{4}{ }^{2}$ | 270-1 | 4295-6 | $14+8 \cdot 47$ | 4968 | 258 | 29. $4^{6} \quad 31 \cdot 5$ | 677 | 290 | $10 \cdot 3$ | 12 | 45 | $6 \cdot 60$ | K o |
| 1056 | $25 \quad 381$ | C 1243 |  |  | $21451 \times 33$ | $+3.363$ | +.0228 | $\begin{array}{llll}26 & 7 & 28.7\end{array}$ | +16.675 | $-285$ | 11.4 | + | + | 9.4 |  |
| 1057 | 29393 | ${ }_{\text {C }} 1244$ | 274-5 |  | $1455 \cdot 23$ | + 4906 | 255 |  | 672 | 290 | 10.4 | 19 | 29 | $8 \cdot 5$ | F 5 |
| 1058 | 27363 | C $12{ }^{+8}$ |  | 4320 | 1533.57 | 4706 | $2+3$ | $28 \quad 6 \quad 39 \cdot 5$ | 640 | 290 | $9 \cdot 5$ | 2 | 31 | $7 \cdot 9$ | G o |
| 1059 | 28393 | C 1249 |  | 4322 | 1536.02 | - $474^{2}$ | 245 | 281924.4 | 638 | 290 | $9 \cdot 7$ | - 20 | 22 | $7 \cdot 30$ | Fo |
| 1060 1 | 26389 | C 1250 | 293 | 4326 | 1544.66 | 4518 | 235 | $26 \quad 56 \quad 51 \cdot 7$ | 631 | 289 | 10.8 | + 31 | 12 | $8 \cdot 3$ | K o |
| 1061 | 30379 | C 1251 | 291-2 | 4324 | 21547.57 | $+3 \cdot 5080$ | +.0262 | $301546 \cdot 0$ | $+16.629$ | - 292 | $10 \cdot 3$ | 10 | + 2 | 8.21 | G 5 |
| 1062 | 29396 | C 1252 | 294-5 |  | $1550 \cdot 20$ | 4952 | 256 | 29 35 17.0 | 627 | 291 | $10 \cdot+$ | + 31 | - 58 | 8.8 | Go |
| 1063 | 26390 | C 1255 | 301 | 4333 | 1559.30 | 4530 | 235 | $26 \quad 5921 \cdot 7$ | 620 | 289 | $\mathrm{II}_{1} 1$ | 35 | 55 | 8.6 | Go |
| 1064 | 30380 | C 1257 | 302 | 4334 | $16 \quad 6.28$ | 5114 | 261 | 302433.9 | 614 | 293 | 12.5 | 14 | 21 | $9 \cdot 2$ |  |
| 1065 | 27366 | C 1258 | 303 |  | $16 \quad 7 \cdot 19$ | $46+5$ | $2^{4}{ }^{\circ}$ | $273932 \cdot 8$ | 613 | 290 | 13.2 | + 18 | 21 | 8.8 | A 2 |
| 5066 | 31406 | L. 876 | 305 |  | 21618.76 | $+3.5333$ | $+\cdot 0276$ | $\begin{array}{llll}31 & 36 & 29.8\end{array}$ | $+16.603$ | -. 296 | 13.3 | - 21 | 23 | $9 \cdot 2$ |  |
| 1067 | 26391 | C 1259 |  |  | 1619.00 | 4470 | 231 | $26 \quad 34 \quad 12 \cdot 2$ | 603 | 289 | 12.3 | - 44 | - 12 | $8 \cdot 7$ | G |
| 1068 | 25384 | C 1261 |  |  | $1627 \cdot 17$ | 4329 | 224 | $254047 \cdot 1$ | 597 | 288 | 13.1 | + $+\quad 17$ | - 14 | $9 \cdot 2$ |  |
| 1069 | 25385 | ${ }_{C}^{C} 1262$ |  |  | 1629.00 | 4398 | 228 | $\begin{array}{llll}26 & 6 & 18.5\end{array}$ | 595 | 288 | 13.3 | + 68 | - 38 | $9 \cdot 2$ |  |
| 1070 | 26392 | C 1264 |  | 4352-3-4 | 1655.20 | 4587 | 237 | 27 II $37 \cdot 5$ | 574 | 291 | 10.5 | - 65 | + | 8.I |  |
| 1071 | 29399 | $\mathrm{C}^{\text {C }} 1263$ | 317-8 | 4349 | $21656 \cdot 70$ | $+3.5052$ | +.0259 | $295510 \cdot 7$ | $+16.572$ | -. 295 | 10.0 | 23 | 10 | $8 \cdot 7$ | G |
| 1072 | 29400 | C 1265 | 319 |  | $1656 \cdot 95$ | $50+6$ | 259 | 295255.2 | 572 | 295 | 11.7 | - 40 | - | $8 \cdot 9$ |  |
| 1073 | 25387 | C 1270 | 329 |  | 176.04 | 4355 | 225 | $254449^{\circ}$ | 565 | 289 | 11.5 | 14 | + | $9 \cdot 1$ |  |
| 1074 | 25388 | ${ }^{\text {C } 1271}$ | 327 |  | $\begin{array}{ll}17 & 6.26\end{array}$ | 4373 | 226 | $255136 \cdot 3$ | 565 | 289 | 11.7 | - | $-78$ | $8 \cdot 9$ | G 5 |
| 1075 | 25389 | C 1272 | 330 |  | $17 \quad 6.88$ | 4369 | 226 | $25 \quad 50 \quad 9 \cdot 1$ | 564 | 289 | 13.1 | 34 | + | $9 \cdot 4$ |  |
| 1076 | 29 for | C 1269 | 323-4 | 4357 | $\begin{array}{llll}2 & 17 & 7.48\end{array}$ | $+3.5056$ | +.0259 | $\begin{array}{lllll}29 & 54 & 49 \cdot 5\end{array}$ | +16.564 | -. 295 | II•I | - ${ }^{2}$ | $\begin{array}{r}17 \\ +\quad 88 \\ \hline\end{array}$ | 7.76 | K \% |
| 1077 | 30384 | L 879 | 325-6 |  | 1713.41 | 5273 | 270 | $\begin{array}{lll}31 & 7 & 38.8\end{array}$ | 559 | 297 | 9 | + 48 | - 88 | 8.6 | F 8 |
| 1078 | 27368 | C 1273 |  |  | $1724 \cdot 34$ | 4663 | 240 | 273424.0 | 550 | 293 | $3 \cdot 2$ | - 9 | + | $9 \cdot 1$ |  |
| 1079 | 26395 | C 1274 | 334 | 4368-9 | ${ }^{1} 726.69$ | 4607 | 237 | 271351.0 | 548 | 292 | 12.1 | + 5 | $\bigcirc$ | 8.8 | K o |
| 1080 | 24339 | B 720 |  |  | $17+7.80$ | 4216 | 218 | $\begin{array}{llllll}24 & 47 & 10 \cdot 8\end{array}$ | 530 | 289 | 10.6 | 0 | + 11 | 9.1 | F 5 |
| 1081 | 24340 | B 721 | 345 |  | 21753.27 | $+3.4535$ | +.021 + | $2415 \quad 56 \cdot 8$ | +16.526 | -. 289 | 10.7 | + 34 | - ${ }^{2} 4$ | 9.I | G. 5 |
| 1082 | 26397 | C 1276 | 348 | 4385 | $18 \quad 1.06$ | $4+62$ | 228 | $\begin{array}{lllll}26 & 16 & 23.5\end{array}$ | 520 | 292 | 12.1 | - 31 | + + | $8 \cdot 1$ | F 8 |
| 1083 | 24341 | C 1278 |  |  | $\begin{array}{lll}18 & 3.78\end{array}$ | 4281 | 219 | $\begin{array}{lll}25 & 9 & 4 \cdot 3\end{array}$ | 517 | 290 | 13.1 |  |  | 10.7 |  |
| 1084 | 27369 | C 1279 | 352 |  | $\begin{array}{lll}18 & 5.85\end{array}$ | 4707 | 240 | $2743 \quad 56 \cdot 3$ | 516 | 294 | 13.2 | + 17 | 15 | $8 \cdot 5$ | K |
| 1085 | 28402 | C1281 | 353 |  | $18 \quad 6 \cdot 77$ | 4807 | 245 | $\begin{array}{llllllllllll}28 & 18 & 56 \cdot 6\end{array}$ | 515 | 295 | 13.1 | + 16 | 39 | $8 \cdot 9$ |  |
| 1086 | 29402 | C 1280 | 350-1 | 4384 | $\begin{array}{lll}218 & 7.23\end{array}$ | +3.5056 | +.0258 | $2945 \quad 24 \cdot 5$ | +16.515 | --297 | 12.7 | 15 | - 52 | $8 \cdot 7$ | F 5 |
| 1087 | 25392 | C 1283 |  |  | $\begin{array}{ll}18 & 9.96\end{array}$ | 4328 | 222 | $25 \quad 2543 \cdot 4$ | 512 | 290 | 13.3 | - 38 | - | $9 \cdot 4$ |  |
| 1088 | 29403 | C 1282 | 354 |  | 1811.33 | 5051 | 257 | 2943 3.2 | 511 | 296 | 12.9 | - 9 | - | $9 \cdot 2$ |  |
| 1089 | 26398 | C 1284 |  |  | 18 $15 \cdot 4$ <br> 18  | +529 | 231 |  | 508 | 293 | 12.7 | 4 | $+$ | $8 \cdot 7$ | F 5 |
| 1090 | 28403 | C 1286 | 361 |  | $18 \quad 26 \cdot 70$ | $480+$ | 245 | $2815 \quad 8 \cdot 0$ | 499 | 296 | 12.2 | 9 | + | $9 \cdot 1$ |  |
| 1091 | $30 \quad 387$ | C 1288 | 365 |  | 21849.15 | $+3 \cdot 5166$ | $+\cdot 0262$ | $\begin{array}{llll}30 & 16 & 22.2\end{array}$ | $+16.480$ | -. 298 | $9 \cdot 9$ | 4 | - 23 | 9.2 |  |
| 1092 | 28409 | C 1292 | 372 | 4415 | 1925.85 | +931 | 250 | $28 \quad 5013.0$ | 449 | 298 | $9 \cdot 9$ | + 31 | + 14 | $7 \cdot 10$ | K 0 |
| 1093 | 27373 | $\mathrm{C}_{\mathrm{C}} \mathrm{L} 293$ | 373 | 4417-9 | 1927.14 | 4660 | 236 | $\begin{array}{llll}27 & 15 & 6.4\end{array}$ | 448 | 296 | 10.1 | + 12 | + 4 | $8 \cdot 1$ | K o |
| 1094 | 29406 | ${ }^{\text {C } 1295}$ | 374-5 |  | $19.33 \cdot 73$ | 5182 | 262 | $\begin{array}{lllll}30 & 14 & 37.5\end{array}$ | $44^{2}$ | 300 | 10.0 | - 36 | - 163 | $8 \cdot 16$ | G 5 |
| 1095 | 28410 | C 1296 | 381 |  | $1940 \cdot 80$ | 4864 | 246 | $\begin{array}{llll}28 & 24 & 56.8\end{array}$ | 437 | 298 | $9 \cdot 7$ | + 12 | - 13 | $8 \cdot 7$ | F 2 |
| 1096 | 30391 | 1895 | $386-7$ |  | 21950.68 | $+3.5316$ | +.026 | 305321.3 | +16.428 | -301 | 10.7 | + 20 | - 9 | 9•1 | K 。 |
| 1097 | 24344 | C 1297 | 393 | 4437 | 1952.32 | 4309 | 219 | $25+46 \cdot 3$ | 427 | 294 | 10.5 | + 3 | + 7 | 8.01 | G 0 |
| 1098 | 25394 | C 1298 |  |  | $1953 \cdot 28$ | 4427 | $22+$ | $254742 \cdot 4$ | 427 | 295 | 11.7 | + 75 | - $4^{2}$ | 9.1 |  |
| 1099 | 25395 | C 1299 |  |  | 1953.81 | 4465 | 226 | $\begin{array}{llll}26 & 1 & 27 \%\end{array}$ | 426 | 295 | 12.3 | - 21 | + 24 | 9.4 | A 5 |
| I 100 | 27374 | Cizor | 398 | 4440-1 | $205 \cdot 59$ | +680 | 236 | $\begin{array}{llll}27 & 16 & 37 \cdot 8\end{array}$ | 416 | 297 | 11.5 | 16 | - 10 | $8 \cdot 2$ | K o |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | I P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. $1910^{\circ} \mathrm{O}$. | Precession. | Sec. Var. | Epoch <br> $1900+$ | $\begin{aligned} & \text { R.A. } \\ & \text { s.ooor. } \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.oot. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m s |  | s |  | " | " |  |  |  |  |  |
| IIOI | 27376 | C 1302 |  |  | 220930 | $+3.4734$ | +.0239 | $27 \quad 35 \quad 12.6$ | +16.413 | - 298 | 12.8 | 16 | + 12 | $8 \cdot 8$ | G 5 |
| 1102 | 27375 | $\mathrm{C}_{1} 1303$ | 401 | 4444 | $20 \quad 9.67$ | 4691 | 237 | 271949.0 | 412 | 297 | 12.8 | 7 | - 6 | $9 \cdot 4$ |  |
| 1103 | 31419 | L 899 | 397 |  | $20 \quad 12 \cdot 17$ | 5465 | 275 | $3 \mathrm{I} 4 \mathrm{I} 47 \cdot 4$ | 411 | 304 | 12.2 | - 106 | - 26 | $8 \cdot 6$ |  |
| 1104 | 29410 | C 1304 | 402-3 | 4446 | $20 \quad 14.62$ | 5064 | 255 | $29 \quad 28 \quad 28 \cdot 3$ | 408 | 301 | II•I | 1 | 44 | $7 \cdot 9$ | K 2 |
| 1105 | 24346 | B 732 |  |  | 2019.12 | 4215 | 215 | 2426 II.4 | 405 | 294 | $11 \cdot 9$ | - 45 | - 23 | $8 \cdot 7$ | G 5 |
| 1106 | 24347 | B 734 | 408 | 4456 | 22042.69 | $+3.4275$ | -0217 | 244512.4 | $+16 \cdot 385$ | -. 294 | $10 \cdot 9$ | - 27 | + 7 | $6 \cdot 94$ | $\text { A } 3$ |
| $1107$ | 30393 | L 903 |  |  | $2046 \cdot 65$ | 5263 | 264 | $30 \quad 30 \quad 7 \cdot 3$ | 381 | $304$ | $10 \cdot 5$ | - 4 | - 67 | $7.81$ | K o |
| I I 08 | 3 I 42 I | L 904 | 406-7 |  | $2049 \cdot 32$ | 5442 | 273 | $3128 \cdot 24 \cdot 1$ | $380$ | $304$ | 11.5 | + 35 | - I | $8 \cdot 3$ |  |
| 1109 | 29412 | C 1307 | 412-3 | $44^{62}$ | $20 \quad 55.40$ | 5091 | 256 | 293124.9 | 375 | 302 | 11.8 | - 22 | - 11 | $8.9$ | $A_{5}$ |
| IIIO | 27378 | C 1309 | 427 |  | $21 \quad 27 \cdot 62$ | 4776 | 239 | $27 \quad 38 \quad 37 \cdot 4$ | 347 | 301 | II.9 | 15 | + 6 | $8 \cdot 7$ | K o |
| IIII | 30395 | C 1310 | 429-30 |  | $22133 \cdot 85$ | $+3 \cdot 5259$ | +.0263 | 302136.4 | +16.342 | 304 | 12.0 | - II | - 7 | $8 \cdot 91$ | K o |
| II I 2 | 26407 | C I3II |  |  | 2137.61 | +621 | 232 | $264244 * 4$ | 338 | 299 | 12.0 | + 48 | - 18 | $9 \cdot 4$ | $\mathrm{F}^{2}$ |
| III3 | 30.396 | L 910 | 434 | 4513 | $214 \mathrm{I} \cdot 02$ | 5358 | 268 | $30 \quad 53 \quad 2 \cdot 3$ | 336 | 306 | $9 \cdot 6$ | $+\quad 56$ | - 28 | 8.1 | F 5 |
| III4 | 25398 | C I312 |  | 4493-4 | $2147 \cdot 15$ | 4445 | 224 | $\begin{array}{lllll}25 & 38 & 13.4\end{array}$ | 331 | 298 | $9 \cdot \mathrm{I}$ | - 19 | - 24 | 7-11 | F 5 |
| II 15 | 23323 | B 737 | 438 |  | 2149.86 | 4179 | 210 | $24 \bigcirc 48 \cdot 8$ | 328 | 296 | II.3 | + 23 | - 4 | $9 \cdot 1$ | A 2 |
| $1{ }^{1} 16$ | 26409 | C 1314 | 439 | 4496 | 22154.99 | $+3.4611$ | 0231 | 263634.5 | +16.324 | - 300 | $9 \cdot 6$ | 22 | - 6I | $6 \cdot 18$ | K 5 |
| III 7 | 31427 , | L 913 |  | 4498-9 | $22 \quad 7 \cdot 59$ | 5466 | 274 | $312351 \cdot 9$ | 313 | 307 | 10.7 | - $24^{*}$ | - 34* | $5 \cdot 80$ | Ko |
| 1118 | 26410 | C 1316 | 450 |  | $2215 \cdot 96$ | 4616 | 231 | $26 \quad 35 \quad 27 \cdot 5$ | 306 | 301 | I2.8 | + 20 | 10 | $9 \cdot 4$ |  |
| 11 | 24351 | C 1317 | 453-4 |  | $22 \quad 16.76$ | 4391 | 221 |  | 305 | 299 | $12 \cdot 8$ | 5 | - 12 | $8 \cdot 76$ | K |
| II 20 | 26411 | C I320 |  |  | $22 \quad 26.09$ | 4676 | 234 | $26 \quad 55 \quad 18 \cdot 5$ | 298 | 302 | 12.5 | - | - 17 | $9 \cdot 4$ |  |
| 1121 | 31428 | L 915 |  |  | 22240.49 | +3.5493 | +.0274 | $\begin{array}{llll}11 & 27 & 43 \cdot 5\end{array}$ | $+16.286$ | -. 307 | 12.1 | - 6 | + 15 | $9 \cdot 4$ |  |
| 11122 | 29417 | C I 323 | $465-6-7$ | 4524-5-6 | 22 53.11 | 5098 | 254 | $2916 \quad 5 \cdot 2$ | 275 | 305 | 10.7 | - 14* | - $87^{*}$ | $5 \cdot 38$ |  |
| II 123 | 29418 | C I 324 |  | 4527 | 2254.45 | 5135 | - 256 | $2928 \quad 12 \cdot 2$ | 274 | 306 | 9.9 | - 2 | - 6 | $7 \cdot 8$ | GO |
| I 124 | 27384 |  |  |  | 22 57.33 | 4848 | 241 | $2750.32 \cdot 9$ | 271 | 304 | -14.9 |  |  | $8 \cdot 7$ |  |
| II 25 | 31431 | L 919 | 470 |  | $23 \quad 4 \cdot 80$ | 5566 | 276 | $3 \mathrm{I} 46 \quad 57 \cdot 4$ | 265 | 309 | 11.7 | + 19 | $-26$ | $9 \cdot 4$ |  |
| 11 | 31432 | L 920 | 47 I |  | $223 \quad 5 \cdot 65$ | $+3.5564$ | 0276 | $3146 \quad 6 \cdot 0$ | $+16 \cdot 264$ | -. 309 | $11 \cdot 7$ | + 12 | - 27 | $8 \cdot 9$ |  |
| $1127$ | 23326 | B 742 | 4 | 4536 | 238.60 | 4242 | 212 | $\begin{array}{llll}24 & 13 & 43.4\end{array}$ | 261 | 298 | 12.0 | 18 | - II | $8 \cdot 58$ | G 5 |
| I 128 | 29419 | C 1327 | 479-80-1 | 4537 | 2319.01 | 5121 | 253 | $29 \quad 20 \quad 0.2$ | 253 | $307$ | 11.9 | - 19 | + 21 | $8 \cdot 8$ | Fo |
| $11129$ | 29421 | C I 330 | 483-4-5 | 4540-2 | 23 28.10 | 5116 | 253 | $\begin{array}{llllll}29 & 17 & 4.7\end{array}$ | 245 | 307 | 10.9 | + 57 | $+5$ | $8 \cdot 2$ | Go |
| 1130 | 29423 | C 1332 |  | 4546-7-8 | 23 31.40 | 5161 | 255 | $293138 \cdot 6$ | 242 | 307 | $9 \cdot 4$ | - 55* | $+70 *$ | $5 \cdot 90$ | G 0 |
| 1131 | 26.416 | C 1334 | 490 | 4555 | 223 39.19 | $+3.4695$ | 0233 | 265129.5 | $+16.236$ | -.304 | 11.5 | 4 | 40 | $8 \cdot 8$ | A 2 |
| 1132 | 27385 | C I 335 |  |  | 23 4I.49 | 4776 | 237 | $27 \quad 1915.6$ | 234 | 304 | 13.0 | 2 | 11 | $9 \cdot 4$ |  |
| 1133 | 28421 | C I 337 |  |  | $2357 \cdot 56$ | 5019 | 247 | $283957 \cdot 2$ | 219 | 307 | I 1.9 | 20 | 12 | $9 \cdot 4$ |  |
| II 34 | 30399 | L 923 | 494-5 |  | $24.2 \cdot 31$ | 5346 | 263 | $\begin{array}{llllllllll}30 & 27\end{array}$ | 216 | 310 | $9 \cdot 9$ | + II | 11 | $7 \cdot 76$ | $\mathrm{K} \circ$ |
| I 135 | 26418 | C 1338 |  | 4570 | $24 \quad 6.83$ | 4651 | 230 | $2632 \quad 25 \cdot 9$ | 2 I 2 | 304 | 13.0 | + 19 | + 81 | $9 \cdot 4$ | K |
| II 36 | 27388 | C 1339 | 502 |  | $22420 \cdot 62$ | $+3.4847$ | +.0239 | $\begin{array}{llll}27 & 38 & 25 \cdot 3\end{array}$ | $+16.200$ | $-\cdot 307$ | I $2 \cdot 1$ | $2$ | - 63 | $9 \cdot 4$ |  |
| $1137$ | 31438 | L 926 |  |  | $2425 \cdot 89$ | 5578 | - 275 | $\begin{array}{llllllllllllllll} & 1 & 38 & 33 \cdot 6\end{array}$ | 195 | 312 | I I $\cdot 1$ | - 3 | - 7 | $9 \cdot 2$ |  |
| 1138 | 26420 | $\mathrm{C}_{1342}$ |  |  | $25 \quad 9 \cdot 72$ | 4774 | 235 | $27 \quad 6 \quad 32.4$ | $157$ | $307$ | $9 \cdot 7$ | + 26 | - 22 | $9 \cdot 2$ | Go |
| I I 39 | 24358 | C 1343 | 525 | 4608 | $25 \quad 2 \mathrm{I} \cdot 51$ | 439 I | $217$ | $24 \quad 50 \quad 12 \cdot 5$ | $147$ | $304$ | $8 \cdot 7$ | $+\quad 52 *$ | $-83^{*}$ | $5 \cdot 86$ | $\text { F } 5$ |
| II 40 | 27391 | C 1344 | 523 |  | $25 \quad 23 \cdot 36$ | $4^{8} 31$ | $238$ | $\begin{array}{llll}27 & 24 & 0.7\end{array}$ | $146$ | $308$ | $8 \cdot 8$ | $-7$ | $-\quad 23$ | $8 \cdot 7$ | G 5 |
| 1141 | 30403 | C 1346 | 534 |  | $22546 \cdot 67$ | $+3.5356$ | +.0261 | $\begin{array}{llll}30 & 15 & 10.9\end{array}$ | +16.125 | $-312$ | $9 \cdot 7$ | - 5 | - 16 | $9 \cdot 4$ |  |
| 1142 | 30404 | L 938 | 547 |  | $26 \quad 13.93$ | $5529$ | $269$ | $31.650 \cdot 6$ | 102 | 315 | $9 \cdot 4$ | $+62$ | 19 $+\quad 19$ | $8 \cdot 3$ | F 5 |
| I 143 | 26424 | C 1349 | 555-6 | 4641-3 | 2617.80 | 4812 | $235$ | $\begin{array}{llll}27 & 10 & 13.8\end{array}$ | 099 | 310 | 9.5 | - 5 | + 9 | $7 \cdot 20$ | F 2 |
| I I 44 | 31443 | L 942 | 561 |  | 26 38.29 | 5640 | 274 | $\begin{array}{lllllllllllll}31 & 37\end{array}$ | 081 | 316 | 10.0 | - 66 | - 90 | 8.8 |  |
| II 45 | 31444 | L 944 | 564 | 4653 | $26 ; 3.43$ | 5660 | 275 | $3 \mathrm{I} 42 \quad 2 \cdot 2$ | 068 | 317 | $9 \cdot 7$ | 20 | $-\quad 15$ | $7 \cdot 68$ | G 0 |
| II 46 | 27393 | C 1350 | 568 |  | 22658.26 | $+3.4939$ | +.0239 | $274742 \cdot 7$ | +16.064 | -.312 | $10 \cdot 3$ | 24 | - 69 | $8 \cdot 8$ |  |
| $1147$ | 27394 | C 1351 | 570 | 4664-5 | $27 \quad 0.66$ | 5007 | $243$ | 28 10 8.3 | 061 | 313 | II.I | 9 | - 5 | $8 \cdot 0$ | A 0 |
| $114^{8}$ | 25417 | C 1354 |  |  | $27 \quad 14.07$ | $4605$ | $224$ | $\begin{array}{llrr}25 & 51 & 3 \cdot 4\end{array}$ | 050 | 309 | II.4 | - I9 | $\bigcirc$ | $9 \cdot 4$ |  |
| $1149$ | 28431 | C I 353 |  | 4672 | $27 \quad 15 \cdot 32$ | $5148$ | $249$ | $285450 \cdot 4$ | $049$ | 314 | II•I |  | + 7 | $8 \cdot 2$ |  |
| I 150 | 24364 | C 1355 | 585 |  | $27 \quad 19.20$ | 4473 | 218 | $2543 \mathrm{I} \cdot \mathrm{I}$ | 045 | 309 | 10.7 | + 52 | - 18 | 8.91 | F 5 |


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910\%. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.000I. }}{\text { R.A. }}$ | Dec. |  |  |
|  | - |  |  |  | h m | 8 | s | - " | " | " |  |  |  |  |  |
| $1{ }^{1} 51$ | 29434 | C 1356 | 593-4 | 4688-90 | 22749.29 | $+3.5283$ | +.0254 | $2934 \quad 6.6$ | +16.019 | --315 | $9 \cdot 7$ | - ${ }^{2}$ | - 29 | $7 \cdot 8$ | K o |
| 1152 | 25420 | C 1357 |  |  | $27 \quad 52 \cdot 68$ | 4626 | 224 | $25 \quad 53 \quad 22 \cdot 7$ | 16.016 | 311 | 10.3 | - 6 | - 14 | 9.1 |  |
| II 53 | 30409 | L. 954 | 598-9 | 4702 | $28 \quad 12.54$ | 5566 | 267 | $31046 \cdot 7$ | 15.998 | 319 | $9 \cdot 9$ | - 29 | - 38 | $7 \cdot 37$ | K 2 |
| 1154 | 26425 | C 1358 |  | 4714 | $28 \quad 26 \cdot 81$ | 4829 | 233 |  | 986 | 313 | 10.3 | + 29 | - 5 | 8.6 | A 3 |
| II 55 | 30410 | L. 956 |  | 4713 | 2833.08 | 5608 | 269 |  | 980 | 319 | 9.9 | - $4^{0}$ | - 58 | $7 \cdot 96$ | $\mathrm{G}_{5}$ |
| II 56 | 30411 | L 957 | 607-8 |  | $22838 \cdot 14$ | $+3.5577$ | +.0267 | 31038.1 | +15.976 | --319 | 10.0 | - 26 | 4 | $7 \cdot 7$ | K o |
| 1157 | $26+27$ | $\mathrm{C}_{1} 1361$ |  | 4730 | $28 \quad 56.27$ | 4827 | 232 | $26 \quad 5345 \cdot 6$ | 960 | 314 | 10.7 | + 1 | 4 | 9.2 |  |
| I158. | 31453 | L 962 |  |  | $29 \quad 5 \cdot 57$ | 5777 | 277 | 315755.5 | 951 | 322 | 11.3 | 19 | 9 | $9 \cdot 4$ |  |
| II 59 | $28+35$ | $\mathrm{C}_{1} \mathrm{I} 362$ | 620 |  | 2913.51 | 5076 | 244 | $\begin{array}{lllllllllll} & 28 & 14 & 4.6\end{array}$ | 944 | 318 | 10.5 | 12 | 8 | $8 \cdot 6$ | K 0 |
| 1160 | 24368 | B 777 | 629 | 4744 | 2922.66 | 4440 | 215 | 243714.9 | 936 | 313 | 10.7 | 10 | 23 | $8 \cdot 7$ | K 5 |
| 1161 | 24369 | B 779 | 635 | 4748 | $22927 \cdot 62$ | + 3.4421 | +.0214 | $242955 \cdot 6$ | +15.933 | -.313 | 10.7 | + 63 | 4 | $8 \cdot 26$ | Fo |
| 1162 | 27401 | ${ }_{\text {C }} 1364$ | 631 |  | $2928 \cdot 12$ | 5037 | 241 | $275941 \cdot 5$ | 932 | 317 | 11.0 | - 18 | $-3$ | $8 \cdot 8$ |  |
| 11163 | 30414 | $\mathrm{Cl}^{\mathrm{C}} 1367$ | 645-6 |  | $30 \quad 2.00$ | 5478 | 260 | $\begin{array}{llllllllllll}30 & 17 & 14.5\end{array}$ | 902 | 322 | 9.6 | - 17 | - 3 | 8.51 | K o |
| 11164 | 30415 | L 972 |  |  | $30 \quad 12.69$ | 5615 | 266 | $\begin{array}{lllll}30 & 58 & 42 \cdot 5\end{array}$ | 892 | 324 | 11.5 | - 10 | + $\quad 2$ | $9 \cdot 2$ | A 2 |
| 1165 | 25423 | C 1369 |  |  | 3018.53 | 4708 | 225 | $26 \quad 247.1$ | 887 | 316 | 12.5 | 14 | - 48. | $8 \cdot 9$ |  |
| 11 | 28437 | C 1370 | 655 | 4767 | 23024.71 | $+3.5214$ | +.0249 | 2849443 | +15.881 | --319 | I1.5 | + | 10 | 8.0 | A 3 |
| 1167 | 30417 | L 976 | 659-60 |  | $3033 \cdot 21$ | 5580 | 264 | $304455 \cdot 9$ | 874 | 323 | 11.1 | + | - 63 | $7 \cdot 9$ | Go |
| 11568 | 29438 | $\mathrm{C}_{1} 1371$ |  |  | 3043.54 | 5344 | 252 | 292854.4 | 864 | 321 | $11 \cdot 1$ |  | + 18 $+\quad 1$ | 8.0 | K o |
| 11569 | 28438 | ${ }_{\text {C }} 1372$ | 663 | 4776 | 3045.86 | 5256 | 248 | 29 o 40.3 | 863 | 320 | 11.5 | 11 | + 23 | $7 \cdot 10$ | B 8 |
| 1170 | 26432 | C 1373 |  | 4785 | $3055 \cdot 18$ | 4851 | 231 | $2646 \quad 26 \cdot 0$ | 855 | 318 | 10.9 | + 14 | - 13 | $7 \cdot 9$ | G 5 |
| 11171 | 27405 | C 1374 |  |  | $\begin{array}{llll}2 & 31 & 0.36\end{array}$ | +3.5107 | $+.0242$ | $\begin{array}{llll}28 & 10 & 16.3\end{array}$ | +15.850 | --321 | 12.9 | - 15 | - 5 | 8.5 |  |
| 1172 | 26433 | $\mathrm{C}_{1} 1376$ | ${ }_{670}^{670}$ | 4794 | $\begin{array}{ll}31 & 2.77 \\ 31\end{array}$ | - 4909 | 234 | $\begin{array}{lllll}27 & 4 & 48 \cdot 8\end{array}$ | 848 | 318 | 13.0 | $+\quad 2$ | + 3 | 8.1 |  |
| 1153 | 30418 | L 980 | 674-5-6 | 4798 | 3120.85 | 5693 | 270 | $311256 \cdot 1$ | 831 | 326 | $10 \cdot 9$ | - 30 | - 13 | $6 \cdot 16$ | K |
| 11744 | 29442 | C 1389 | $682$ |  | 3133.82 | 5422 | 255 | $2946 \quad 51 \cdot 9$ | 820 | 324 | 11.0 | + 21 | + 7 | $9 \cdot 1$ | Ko |
| 1175 | 24375 | B 787 | 692 | 4815 | 3146.01 | 4428 | 211 | $24 \quad 15 \quad 24.4$ | 809 | 316 | 10.2 | + 111* | 9* | $7 \cdot 37$ | F 5 |
| 1176 | 24376 | B 788 | 693 | 4818 | 23148.82 | $+3.4429$ | +.0211 | $24 \begin{array}{lllll}24 & 21.9\end{array}$ | +15.806 | $-316$ | 10.9 | + 102* | - 10 * | $6 \cdot 57$ | F 5 |
| 1177 | 29444 | $\mathrm{Cr}_{1} 138 \mathrm{I}$ | 689 | 4812 | 3150.14 | 5474 | 257 | 30 1-1 0.1 | 805 | 324 | 10.5 | - 8 | + 8 | $7 \times 1{ }^{1}$ | A 0 |
| Ir 78 | $26+37$ | $\mathrm{C}_{1} 1382$ | 696 | 4825 | $\begin{array}{lll}32 & 1.25\end{array}$ | 4867 | 231 | $\begin{array}{lllllllllll}26 & 43 & 16 \cdot 3\end{array}$ | 796 | 320 | 12.3 | + 22 | - 63 | $8 \cdot 9$ | K o |
| 1179 | 29445 | $\mathrm{C}^{\mathrm{C}} 1383$ |  |  | 3215.86 | 5361 | 252 | 292148.1 | 782 | 325 | 13.3 | + 4 | - 31 | $9 \cdot 4$ | Go |
| 1180 | 27408 | C 1384 |  |  | 3221.91 | 5040 | 238 | 273731.0 | 777 | 323 | 13.5 | + 35 | + 21 | $9 \cdot 4$ |  |
| 1181 | 25426 | C 1385 |  |  | 23229.57 | $+3.4764$ | $+.0226$ | $\begin{array}{llll}26 & 5 & 1 \cdot 2\end{array}$ | $+15.770$ | -. 320 | 12.7 | + 48 | - 42 | 9.1 |  |
| I 1 | 27410 | C 1386 |  |  | $3231 \cdot 16$ | 5102 | 241 | $\begin{array}{llllllll}27 & 56 & 42 \cdot 9\end{array}$ | 769 | 323 | 12.1 | + 22 | - 24 | $8 \cdot 7$ | F 5 |
| 11883 | 27411 | $\mathrm{C}_{1} 1388$ |  |  | $3244 \cdot 67$ | 5055 | 239 | $27 \quad 39$ 27.1 | 756 | 323 | 12.0 | - 33 | + + | 8.8 | F |
| 1184 | 25428 | C 1389 | 711 |  | $32 \quad 45 \cdot 79$ | 4722 | 224 | $\begin{array}{lllllllllll}25 & 4^{8} \quad 57.7\end{array}$ | 755 | 320 | 11.9 | + | + 30 | 8.8 |  |
| 1185 | 28446 | C 1391 |  |  | $33 \quad 3 \cdot 96$ | 5180 | 243 | $28 \quad 1734.2$ | 739 | 325 | 12.7 | 17 |  | 8.9 |  |
| 1186 | 30421 | L 990 | 718-9-20 | 4855 | $\begin{array}{llll}2 & 33 & 9.82\end{array}$ | +3.5591 | $+\cdot 0261$ | $\begin{array}{llllllll}30 & 26 & 12.3\end{array}$ | +15.733 | --329 | 9.99 | - 367 | - 404 | $7 \cdot 21$ | G o |
| 1187 | 26438 | C 1392 | 723 | 4861 | 3314.38 | 4969 | 234 | $\begin{array}{llll}27 & 7 & 32.8\end{array}$ | 730 | 323 | 12.0 | $+\quad 3$ | - 2 | $8 \cdot \mathrm{I}$ | Mb |
| 1188 | 25430 | C 1393 | 727 |  | 3322.32 | 4742 | 224 | $25 \begin{array}{lll}51 & 2 \cdot 2\end{array}$ | 723 | 322 | 12.3 | + 29 | - 4 | 9.1 |  |
| 11889 | 29448 | C 1394 | 726 | 4868 | $\begin{array}{lll}33 & 27.69\end{array}$ | 5544 | 258 | $\begin{array}{lll}30 & 9 & 8.4\end{array}$ | 717 | 328 | 11.9 | + 14 | - 52 | 8.61 | K o |
| 1150 | 2543 I | C 1395 |  |  | 3329.50 | 4798 | 226 | $26 \quad 8 \quad 46 \cdot 3$ | 715 | 322 | II•I |  |  | $9 \cdot 2$ |  |
| 1191 | 27412 | C 1397 |  |  | 233 37.61 | $+3.5052$ | +.0237 | 273143.6 | +15.707 | --325 | $10 \cdot 1$ | + 18 | + 4 | $8 \cdot 7$ | G 5 |
| 1192 | 25432 | C 1399 | 741 | 4898 | 34 7.51 | 4693 | 220 | $25 \quad 29 \quad 0.7$ | 681 | 322 | $10 \cdot 3$ | + 6 | 9 | $8 \cdot 9$ | Fo. |
| 1193 | 23350 | B 799 | 748 |  | 3422.03 | 4450 | 210 | $\begin{array}{llll}24 & 4 & 29.9\end{array}$ | 668 | 319 | $11 \cdot 3$ | + 20 | + 16 | $9 \cdot 1$ | F 5 |
| 1194 | 30426 | L 1003 | $751-2$ |  | 3439.72 | 5726 | 265 | $\begin{array}{llll}30 & 55 & 4.2\end{array}$ | 652 | 332 | $11 \cdot 3$ | + 22 | 10 | $9 \cdot 4$ | A 2 |
| 1195 | 27415 | C 1403 | 759 |  | $3455 \cdot 62$ | 5209 | $24^{2}$ | $28 \quad 1210 \cdot 5$ | 637 | 329 | 13.1 | + 77 | - 99 | $9 \cdot 5$ |  |
| 1196 | 29453 | C 1404 |  | 4914 | 23458.41 | $+3.5439$ | $+.0251$ | $292434 \cdot 3$ | +15.635 | --330 | 10.5 | + | 8 | $7 \cdot 45$ | B 9 |
| 1197 | 29452 |  |  |  | 3458.44 | 5551 | 256 | 29598.2 | 635 | 331 | 13.3 |  |  | $9 \cdot 8$ |  |
| 1198 | 31463 | L 1006 | 760 | 4912 | $\begin{array}{lll}35 & 1.46\end{array}$ | 5939 | 276 | $\begin{array}{lll}31 & 56 & 0.7\end{array}$ | 633 | 335 | $12 \cdot 3$ | + 36 | 12 | $7 \cdot 50$ | A 2 |
| I 199 | 29454 | C 1405 |  |  | $35 \quad 5 \cdot 24$ | 5435 | 250 | $2922 \quad 12 \cdot 0$ | 62.9 | 330 | 14.7 |  |  | 9.8 |  |
| 1200 | 26443 | C 1406 | 771 | 4921-2 | $35 \quad 25 \cdot 24$ | 4937 | 230 | $264029 \cdot 8$ | 611 | 327 | 10.5 | + 53 | - 34* | $5 \cdot 38$ | A 2 |

1153. Burnham 1310. 1175, 1176. Burnbam 1332.

1156, 1163, 1184, 1185 . Number of observations 6. 1183. Number of observations 7.

1162, 1197. Number of observations 4. 1200. $\Sigma 289$.

|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
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| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910\%. | Preceseion. | $\begin{aligned} & \text { Sec. } \\ & \text { Var. } \end{aligned}$ | Epoch 1900+ | $\underset{8 \bullet 000 \mathrm{I} .}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \cdots \cdot \infty 01 . \end{aligned}$ | Mag. | Spectral Type. |
|  | 。 |  |  |  | 1 m | s | s | - , " | " | " |  |  |  |  |  |
| 1201 | 25436 | C 1407 |  | 4924 | 23527.03 | $+3.4858$ | +.0226 | ${ }^{26} 1149.0$ | +15.609 | -.326 | -1 | + 24 | + 14 | $8 \cdot 1$ | F 5 |
| 12 | 30427 | L 1009 | 766-7 |  | $35 \quad 27.99$ | 5771 | 269 | $\begin{array}{llll}31 & 1 & 59.8\end{array}$ | 608 | 335 | 12.1 | + | - 19 | $8 \cdot 3$ | Ko |
| 1203 | 30428 | L 1010 | 773-4 |  | $3537 \cdot 58$ | 5731 | 263 | $304850 \cdot 0$ | 599 | 334 | 11.1 | - | + 18 | Var. | Mc |
| 1204 | 26444 | C 1409 | 789 |  | $3552 \cdot 52$ | 4910 | 228 | 26 28 <br> 12.6  | 585 | 327 | $12 \cdot 1$ | - 39 | - 19 | 9.4 |  |
| 1205 | 27419 | C 1410 | 788 |  | $3554 \cdot 36$ | 5086 | 236 | $\begin{array}{llll}27 & 25 & 19.6\end{array}$ | 584 | 329 | 11.5 | + 14 | + 10 | $9 \cdot 1$ |  |
| 1206 | 23354 | B 805 |  |  | 23556.62 | $+3.4504$ | +.0210 | $\begin{array}{llll}24 & 12 & 11 & 1\end{array} 7$ | +15.581 | - 322 | 12.3 | 39 | - 15 | $9^{9 \cdot 2}$ | F 5 |
| 1207 | 24381 | C 1412 | 792 |  | 3557.56 | 4687 | 218 | 2513 44-1 | 581 | 325 | $11 \cdot 3$ | - 3 | - 9 | 8.04 | A 0 |
| 1208 | 27420 | ${ }_{\text {C }} \mathrm{C} 1414$ |  |  | $\begin{array}{ll}36 & 16 \cdot 18\end{array}$ | 5140 | 237 | 273939.3 | 564 | 331 | 11.0 | 43 | + 18 | $9 \cdot 1$ |  |
| 1209 | 26447 | C 1415 | 803 | 4957-8 | $3625 \cdot 50$ | 4938 | 228 |  | 555 | 328 | 10.7 | - 33 | + 6 | $8 \cdot 1$ | A 0 |
| 1210 | 30433 | L ior2 | 806-7 | 4960 | 3637.57 | 5706 | 261 | $\begin{array}{llll}30 & 33 & 8.0\end{array}$ | 544 | 334 | 9.5 | + 77 | - 28 | 7.21 | K |
| 1211 | 25437 | $\mathrm{C}_{1} 1416$ |  |  | 23649.06 | $+3.4749$ | +.0220 | $25 \quad 28 \quad 23.2$ | +15.534 | $-326$ | 10.9 | - 21 | - 21 | $8 \cdot 7$ | F 5 |
| 1212 | 23357 | B 809 | 815 |  | 3654.48 | 4512 | 210 | $\begin{array}{llll}24 & 8 & 2.5\end{array}$ | 529 | 325 | $11 \cdot 3$ | + 7 | - 8 | $8 \cdot 9$ |  |
| 1213 | 25438 | C 1418 |  |  | 3713.30 | 4876 | 225 | $\begin{array}{lll}26 & 7 & 9.8\end{array}$ | 512 | 328 | $10 \cdot 1$ | + $\quad 27$ | - 46 | $8 \cdot 9$ | Fo |
| 1214 | 26451 | C1419 | 836 | 5003 | 37 49-13 | 4982 | 229 | 263716.4 | 478 | 330 | $9 \cdot 3$ | + 22 | - 27 | $7 \cdot 7$ | A 0 |
| 1215 | 31469 | L 1020 | 840-1-2 |  | $\begin{array}{ll}38 & 2 \cdot 24\end{array}$ | 5917 | 268 | $312440 \cdot 2$ | 466 | 340 | $12 \cdot 1$ | + 31 | - 10 | $8 \cdot 9$ |  |
| 1216 | 27424 | ${ }^{\text {C }} 1420$ | 845-7 | 5009-11-2-3 | ${ }_{2}^{2} 38810.00$ | $+3.5121$ | $+.0233$ | - $27 \begin{array}{lll}27 & 19 & 29.1\end{array}$ | +15.459 | $-333$ | 12.5 | $+3^{*}$ | - $13{ }^{*}$ | $4 \cdot 58$ | B 3 |
| 1217 | 26452 | ${ }^{\text {C } 1421}$ |  |  | $\begin{array}{llll}38 & 13.52\end{array}$ | 4977 | 227 | 263241.0 | 455 | 331 | 11.9 | - 14 | + $+\quad 86$ | 9.1 |  |
| 1218 | 27425 | C 1422 | 8 |  | 38831.24 | 5212 | 237 | $274546 \cdot 5$ | 439 | 335 | $12 \cdot 3$ | 16 | + 46 | $9 \cdot 2$ |  |
| 1219 | 31471 | L 1021 | 853 | 5015 | $\begin{array}{llll}38 & 31 \cdot 40\end{array}$ | 6026 | 273 | $\begin{array}{lllllllllllll}31 & 52 & 18.0\end{array}$ | 439 | 341 | $12 \cdot 1$ | - 16 | - 20 | $9 \cdot 2$ |  |
| 1220 | 31472 | L 1022 | 855 | 5017 | $38 \quad 35 \cdot 77$ | 6051 | 274 | 3159 2I•I | 435 | 341 | 10.5 | + | - 25 | $7 \cdot 70$ | K O |
| 1221 | 25441 | C 1423 |  | 5029 | $23837 \cdot 62 ~$ | +3.4749 | $+.0217$ | $2515 \quad 22.2$ | +15433 | --331 | II 3 | $\bigcirc$ | $\bigcirc$ | $6 \cdot 37$ | A 2 |
| 1222 | 26454 | C 1424 | 861 |  | 3847.02 | 5013 | 229 | $\begin{array}{llllllllllll} \\ 26 & 40 & 16.8\end{array}$ | 424 | 332 | $\mathrm{II}^{5} 5$ | - 37 | - 23 | 8.9 |  |
| 1223 | 30436 | L 1026 | 867 |  | $\begin{array}{lll}39 & 2.87\end{array}$ | 5792 | 261 | $303930 \cdot 8$ | 409 | 340 | 13.5 | + 49 | - 37 | 9.4 |  |
| 1224 | 31474 | L 1029 |  |  | $39 \quad 8.19$ | 5995 | 270 | $\begin{array}{lllllllllllllllll}31 & 38 & 29.2\end{array}$ | 405 | 343 | 13.3 | - 81 | - 40 | $9 \cdot 4$ |  |
| 1225 | 27428 | C 1425 |  | 5037 | 3911.98 | 5204 | 236 | $2738{ }^{2} \quad 4$ I | 401 | 335 | 12.6 | + 25 | - 35 | $7 \cdot 9$ | A 2 |
| 1226 | 28455 | C 1426 |  |  | 23915.98 | $+3.5484$ | +.0248 | $\begin{array}{llll}29 & 4 & 52.6\end{array}$ | +15.397 | --338 | 13.3 | - 20 | - 9 |  | Fo |
| 1227 |  | - 1426 |  |  | 3916.07 | 5484 | 248 | $29 \quad 45000$ | 397 | 338 |  | - 20 | 9 |  | Fo |
| 1228 | 30438 | ${ }^{1} 1030$ | 869-70 |  | 3923.44 | 5893 | 265 | $\begin{array}{llll}31 & 6 & 36 \cdot 9\end{array}$ | 391 | 343 | 12.0 | + $\quad 2$ | - 25 | $8 \cdot 9$ | A 2 |
| 1229 | 28456 | C 1428 | 888 |  | 39 49.53 | 5380 | 241 | $\begin{array}{llllllllllll}28 & 28 & 37 \cdot 4\end{array}$ | 365 | 339 | 10.7 | + II | + 3 | $8 \cdot 5$ | K o |
| 1230 | $294^{61}$ | C 1429 | 896 | 5066 | $40 \quad 13 \cdot 10$ | 5678 | 255 | $2956{ }^{2} 4^{1}$ I | 344 | 342 | 11.9 | - 12 | - 0 | $8 \cdot 8$ | G 5 |
| 1231 | 26455 | C 1430 | 899 | 5072 | 24015.14 | $+3.5056$ | $+.0229$ | $\begin{array}{llll}26 & 43 & 29.3\end{array}$ | +15.342 | --336 | 11.9 | $+\quad 30$ $+\quad 67$ | - 12 | 8.8 | F 5 |
| 1232 | $23 \quad 368$ | B 823 |  |  | $40 \quad 15.94$ | 4571 | 209 | $24 \quad 5 \quad 28.2$ | 341 | 331 | 11-3,12.7 | + 67 | + 16 | $9 \cdot 4$ | G |
| 1233 | ${ }^{2}+391$ | B 824 | 904 |  | $4034 \cdot 24$ | 4654 | 211 | 243048.0 | 324 | 332 | 10.5 | - 16 | - 27 | $9 \cdot 2$ | Fo |
| 1234 | 31477 | ${ }_{\text {L } 1038}$ |  | 5087 | $4055 \cdot 01$ | 6039 | 270 | $\begin{array}{lll}31 & 37 & 0.7\end{array}$ | 304 | 347 | 9.9 | - 28 | - 28 | $8 \cdot 6$ | K 0 |
| I235 | 25449 | C 1436 | 911 | 5094 | $4059 \cdot 52$ | 4802 | 217 | $\begin{array}{llllll}25 & 16 & 29 \cdot 1\end{array}$ | 300 | 335 | $9 \cdot 8$ | + 180 | - 180 | $8 \cdot 11$ | K |
| Y 236 | 26458 | C 1437 C 1438 | 913 | 5103 | 2415.93 | $+3.5066$ | +.0228 | $\begin{array}{lllll}26 & 40 & 32 \cdot 5\end{array}$ | +15.294 | --337 | 10.9 | $+$ | - $4^{6}$ | 8.7 | Fo |
| 1237 | 27435 | ${ }^{\text {C } 1438}$ |  |  | $41 \quad 7 \cdot 77$ | 5257 | 237 | 274044.8 | 292 | 339 | 12.2 |  | - 5 | $9 \cdot 4$ |  |
| 1238 | 29465 | ${ }^{\text {C } 1440}$ | 914-6 |  | 4112.69 | 5590 | 250 | $\begin{array}{llllll}29 & 22 & 10.8\end{array}$ | 288 | 343 | 3 | 24 | - 66 | $8 \cdot 9$ |  |
| 1239 | 28460 | C 1441 | 923 |  | 4123.72 | 5546 | 248 | $\begin{array}{lllll}29 & 7 & 38 \cdot 3\end{array}$ | 277 | 342 | 12.9 | 11 | - 38 | $9 \cdot 4$ |  |
| 1240 | 28461 | C 1444 | 928 |  | 4135.01 | 5516 | 243 | $\begin{array}{llll}28 & 57 & 2 \cdot 8\end{array}$ | 267 | 342 | 12.5 | - 8 | 19 | $9 \cdot 2$ |  |
| 1241 | 29.468 | C 1445 | 931 | 5114 | 24138.45 | $+3.5664$ | +.0253 | 2941 10.2 | +15.264 | --343 | 12.3 | + | - 8 | $9 \cdot 1$ |  |
| 1242 | 30.444 | L 1042 | 929 |  | 4139.00 | 5935 | 264 | $\begin{array}{lllllllllllll}31 & 1 & 60\end{array}$ | 263 | 347 | 10.7 | 12 | - 6 | 8.0 | B 8 |
| 1243 | 27438 | C 1446 |  |  | 4153.88 | 5255 | 236 |  | 249 | 341 | 12.5 | 22 | + 27 | $9 \cdot 4$ |  |
| 1244 | $26{ }^{261}$ | C 1447 | 937 | 5123 | $4156 \cdot 44$ | 5025 | 225 | $26214 \mathrm{I} \cdot 3$ | 247 | 338 | II•I | $\bigcirc$ | - 22 | $8 \cdot 2$ | K |
| 1245 | 29471 | C 1451 | 942-3 | 5133 | $4217 \cdot 11$ | 5603 | 248 | $2918 \quad 7 \cdot 0$ | 227 | 345 | 12.8 | 18 | 22 | $7 \cdot 19$ | B 9 |
| 1246 | 30.445 | L 1045 | 944 |  | 24221.13 | $+3.5883$ | +.0261 | $304036 \cdot 9$ | +15.223 | --347 | 11.9 |  | - 20 | 8.06 | Go |
| 1247 | 28462 | C 1452 | 950 | $5141-2-3$ | $4232 \cdot 80$ | 5525 | 245 | $28 \quad 5225.6$ | 212 | 344 | 12.2 | + 115* | - 125* | $4 \cdot 62$ | K |
| I248 | 24393 | B 834 | 955 |  | $4233 \cdot 92$ | 4659 | 209 | $\begin{array}{lllllllllll}24 & 19 & 13.6\end{array}$ | 2 II | 336 | 12.7 | + 44 | - 1 | $9 \cdot 2$ | G 5 |
| 1249 | 30446 | L 1047 | 949 |  | $4233 \cdot 97$ | 5876 | 259 | $3037 \quad 5 \cdot 1$ | 211 | 347 | 12.0 | 4 | $1+\quad 22$ | $8 \cdot 6$ | F 5 |
| 1250 | 28463 | C 1453 |  | 5147 | $4240 \cdot 07$ | $54^{87}$ | 243 | $28 \quad 40 \quad 8 \cdot 2$ | 205 | 344 | II•9 | + | + 6 | $8 \cdot 7$ | B 8 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. $1910 \%$. | Precession. | $\begin{aligned} & \text { Sec. } \\ & \text { Var } \end{aligned}$ | Epoch rgoot | $\xrightarrow[8.0001 .]{\text { R.A }}$ | $\begin{aligned} & \text { Dec. } \\ & 0.001 . \end{aligned}$ | Mag. | Spectral Type. |
|  |  |  |  |  | h m s | 8 | ${ }^{8}$ | - , " | " | " |  |  |  |  |  |
| 1251 | 26465 | C 1454 | 963 | 5158 | 24250.41 | $+3.5108$ | +.0228 | 264143.9 | +15.196 | - 341 | 12.5,11.8 | 221 | -119 | 8.2 | K o |
| 1252 | 30447 | L 1048 | 959-60 |  | $4250 \cdot 97$ | 5925 | 261 | $3049 \quad 7 \cdot 2$ | 195 | 348 | $12 \cdot 1$ | $+\quad 83$ $+\quad 17$ | + $\quad 20$ | 8.5 | F 8 |
| 1253 | 29473 | C 1455 | 964 |  | 4255.66 | 5753 | 254 | $29 \begin{array}{ll} \\ 58 & 7 \cdot 9\end{array}$ | 190 | 347 | 12.9 | + 17 | - 28 | 8.5 | G 5 |
| 1254 | 27441 | C 1456 |  |  | $43 \quad 2 \cdot 14$ | 5368 | 240 | 28 I 8.0 | 184 | 345 | 12.9 | - 24 | + 40 | 9.4 |  |
| 1255 | 30448 | L 1049 | 970-1 |  | $\begin{array}{ll}43 & 17.87\end{array}$ | 5922 | 261 | 3044 39.1 | 169 | 349 | 11.4 | + 164 | - 168 | $7 \cdot 09$ | K。 |
| 1256 | 24394 | C 1457 | 972 |  | 24319.50 | $+3.4785$ | +.0213 | $245516 \cdot 0$ | +15.167 | --338 | $13^{\circ} 0$ | + 15 | - 22 | $8 \cdot 7$ | K 2 |
| 1257 | 26467 | C 1458 | 973 |  | $43^{\circ} \mathbf{2 1} \cdot 61$ | 5034 | 224 | 261433.4 | 165 | 341 | 13.3 | + 32 | - 74 | 9.1 |  |
| 1258 | $25+52$ | C 1459 |  | 5177 | $43 \quad 26 \cdot 74$ | 4949 | 220 | 25479.7 | 160 | 340 | 12.5 | - 12 | - 21 | 8.8 |  |
| 1259 | $2+396$ | B 838 | 979 |  | 43 31.72 | 4769 | 213 | $244847 \cdot 4$ | 156 | 338 | II. 5 | + 51* | - 6* | $5 \cdot 87$ | A 0 |
| 1260 | $2+395$ | B 839 | 980 |  | 43 31-73 | 4749 | 212 | $244^{2} \quad 7 \cdot 0$ | 156 | 337 | $13 \cdot 3$ | + 16 | - $4^{6}$ | $8 \cdot 3$ | G 5 |
| 1261 | 28464 | C 1461 | 978 |  | 24336.57 | $+3.5566$ | +.0245 | $\begin{array}{lll}28 & 57 & 9.5\end{array}$ | +15.151 | -. 346 | 13.7 |  | + 6 | 9.4 |  |
| 1262 | 31483 | L 1053 |  | 5180 | $4345 \cdot 69$ | 6142 | 270 | $\begin{array}{ll}31 & 44 \\ \text { 18.1 }\end{array}$ | 142 | 351 | 12.2 | + 29 | - 33 | 8.8 | A 2 |
| 1263 | 30449 | L 1058 |  |  | 4416.82 | 5930 | 260 | 303934.7 | 113 | 351 | 13.2 | + 1 | + 2 | $8 \cdot 7$ | F 2 |
| 1264 | 26468 | C 1466 |  |  | $44 \quad 24.57$ | 5083 | 224 | $\begin{array}{llllll}26 & 22 & 51 \cdot 4\end{array}$ | 105 | 343 | 12.2 | -, 26 | + 90 | $9 \cdot 4$ | A 0 |
| 1265 | 29480 | C 1467 |  |  | $44 \quad 28.63$ | 5723 | 251 | 2937 29.1 | 101 | 349 | 13.4 |  |  | $9 \cdot 8$ |  |
| 1266 | 26470 | C 1468 | 1007 | 5208 | $24433 \cdot 66$ | $+3.5180$ | $+.0228$ | $\begin{array}{llll}26 & 52 & 6 \cdot 9\end{array}$ | +15.096 | - 344 | 12.7 | + 25 | - 11 | $9 \cdot 4$ |  |
| 1267 | 29 481 | C 1469 | 1004-5 | 5205 | $4436 \cdot 49$ | 5834 | 255 |  | 094 | 350 | 10.5 | + 28 | - 38 | $6 \cdot 74$ | Fo |
| 1268 | 26471 | C 1470 | 1009 | 5216-7-8 | $4440 \cdot 99$ | 5186 | 228 | $26 \quad 5324 \cdot 1$ | 090 | 344 | 12.4 | + 50* | - $113{ }^{*}$ | $3 \cdot 68$ | B 8 |
| 1269 | ${ }^{2}+400$ | C 1471 | 1018-9 | 5228 | 44 59-12 | 4826 | 214 | $245740 \cdot 0$ | 072 | 341 | $10 \cdot 9$ | $+33$ | - 28 | 8.2 | Fo |
| 1270 | 31490 | L 1065 | 1014 | 5223 | $4459 \cdot 39$ | 6146 | 269 | $\begin{array}{llll}31 & 36 & 4.7\end{array}$ | 072 | 354 | 12.5 |  | - 52 | $6 \cdot 64$ | A 0 |
| 1271 | 31491 | L 1066 |  |  | $245 \quad 3.30$ | $+3 \cdot 6188$ | +.0270 |  | +15.069 | -. 355 | 12.6 | 1 | - 45 | 9.4 |  |
| 1272 | 31493 | L 1068 | 1025 |  | $45 \quad 32.24$ | 6245 | 272 | 315932.5 | 040 | 355 | 10.5 | + 7 | - | $8 \cdot 1$ | K 5 |
| 1273 | 29484 | C 1473 | 1029-30 | 5240 | $4540 \cdot 08$ | 5812 | 252 | $295456 \cdot 6$ | 033 | 352 | 10.5 | + 84 | - 53 | $7 \cdot 56$ | G 5 |
| 1274 | 29485 | C 1474 | 1031-2 | 5241 | $4542 \cdot 88$ | 5859 | 255 | $\begin{array}{llll}30 & 8 & 17.9\end{array}$ | 15.030 | 352 | 10.1 | + 4 | 10 | $7 \cdot 96$ | K 0 |
| 1275 | 26474 | C1476 |  |  | $4^{6} \quad 20 \cdot 21$ | 5098 | 223 | 26 I4 34.2 | 14.994 | 346 | 11.4 |  |  | $8 \cdot 5$ | B 8 |
| 1276 | 26475 | C 1478 |  | 5265 | $24632 \cdot 68$ | $+3.5230$ | +.0227 | $26 \quad 5412 \cdot 4$ | +14.982 | - 348 | 11.7 | + 7 | + 15 | 8.1 | A 0 |
| 1277. | 29488 | C 1479 | 1044-5 | 5260-66 | 464 1.00 | 5818 | 251 | 294923.9 | 974 | 354 | 11.7 | + 35 |  | 8.5 | Fo |
| 1278 | 29489 | C 1480 | 1047 | 5270-2 | 4644.02 | 5888 | 253 | $\begin{array}{lllll}30 & 9 & 14.6\end{array}$ | 971 | 354 | 12.5 | + 15 | - 21 | $8 \cdot 26$ | A 0 |
| 1279 | 29491 | C 1481 |  |  | $4651 \cdot 63$ | 5740 | $24^{8}$ | $29254 \cdot 1$ | 963 | 353 | 12.5 | + 22 | 20 | $9 \cdot 1$ |  |
| 1280 | 26476 | C 1482 | 1056 | 5277 | $4652 \cdot 10$ | 5201 | 226 | $264255^{2}$ | 963 | 348 | 13.1 | + 29 | - | $8 \cdot 7$ | A 5 |
| 1281 | 28470 | C1483 | 1055 |  | 24653.89 | $+3.5505$ | +.0238 | $\begin{array}{llll}28 & 15 & 22.8\end{array}$ | +14.961 | -. 352 | 13.5 | + 33 | - 62 | $9 \cdot 1$ |  |
| 1282 | 28471 | C 1484 | 1057 |  | $4656 \cdot 05$ | 5585 | 242 | $\begin{array}{llll}28 & 39 & 4.5\end{array}$ | 959 | 352 | 12.5 | + 101 | - 44 | 8.9 | K o |
| 1283 | 24405 | C 1486 | 1062 |  | $4657 \cdot 90$ | 4842 | 212 | 244944.5 | 957 | 345 | 12.9 | 3 | 2 I | $9 \cdot 2$ | Go |
| 1284 | 29492 | $\mathrm{C}_{1} 1485$ | 1058-9 | 5278-9 | $4659 \cdot 61$ | 5824 | 250 | $294843^{\circ}$ | 955 | 354 | 11.5 | 6 | 12 $+\quad 12$ | $8 \cdot 3$ | A 0 |
| 1285 | 29493 | C1488 | 1066 | 5292-3 | 47 30.39 | 5829 | 250 | $294632 \cdot 0$ | 926 | 355 | 11.9 | 11 | - 39 | 8.9 | K 2 |
| 1286 | 27448 | C 1489 |  |  | 247 32-11 | $+3.5411$ | +:0234 | $2742 \begin{array}{llll} & 27 & 3\end{array}$ | +14.924 | - 351 | II•I | + 14 | - 13 | $8 \cdot 6$ | K |
| 1287 | 28473 | C 1490 | 1070 | 5301 | 47 41.43 | 5693 | 250 | $29 \quad 5 \quad 32 \cdot 5$ | 916 | 353 | 11.9 | + 13 | + 6 | $8 \cdot 5$ | A 0 |
| 1288 | 26478 | C 1492 | 1072 |  | $4743 \cdot 42$ | 5307 | 230 | $27 \quad 941.8$ | 914 | 350 | 12.9 | + 30 | $\bigcirc$ | $9 \cdot 4$ | F 5 |
| 1289 | 25456 | C 1493 | 1076 |  | 4752.05 | 4997 | 217 | $25 \quad 3250 \cdot 1$ | 905 | 348 | 12.8 | + 15 | - 38 | $9 \cdot 1$ | Fo |
| 1290 | 31 497 | L 1076 | 1074 | 5307 | $47 \quad 57 \cdot 99$ | 6156 | 264 | $\begin{array}{lllll}31 & 16 & 36 \cdot 3\end{array}$ | 899 | 360 | 12.0 | 18 | 11 | $6 \cdot 53$ | F 5 |
| 1291 | 29494 | C 1494 |  |  | 24758.35 | $+3.5781$ | $+.0247$ | $292913 \cdot 6$ | + 14.899 | -. 355 | 13.1 | 12 | + 3 | 9.2 | G 5 |
| 1292 | 30457 | L 1077 |  |  | $\begin{array}{ll}48 & 4 \cdot 16\end{array}$ | 6142 | 264 | 311144.3 | 893 | 360 | 14.3 | - 3 | - 11 | $9 \cdot 4$ |  |
| 1293 | 30458 | L 1080 | 1079 |  | $\begin{array}{llll}48 & 12.97\end{array}$ | - 6028 | 257 | $\begin{array}{lllll}30 & 38 & 4 \mathrm{I} \cdot 8\end{array}$ | 884 | 359 | 14.1 | - 9 | + 22 | $9 \cdot 4$ |  |
| 1294 | 28474 | C 1496 | 1083 | 5314 | $48 \quad 22 \cdot 67$ | 5600 | 238 | 2833 12.I | 875 | 355 | 12.9 | + $\quad 38$ | + 10 | 8.9 | K 2 |
| 1295 | 31499 | L 1082 | 1084-5-6 | 5317-8 | $48 \quad 29 \cdot 60$ | 6183 | 264 | $\begin{array}{llll}31 & 19 & 45.5\end{array}$ | 868 | 360 | $12 \cdot 1$ |  | 10 | $8 \cdot 2$ | A 2 |
| I 296 | 31498 | L 1083 |  |  | ${ }_{2}^{2} 4^{8} 30 \cdot 27$ | $+3.6314$ | +.0270 | $315633 \cdot 7$ | +14.868 | - 361 | 13.9 | - 18 | -. 63 | $9 \cdot 4$ |  |
| 1297 | 23378 | B 850 | 1092 |  | $48 \quad 37 \cdot 03$ | 4751 | 207 | 241021.2 | 861 | 346 | 13.5 | + 26 | + ${ }^{\circ} 5$ | $9 \cdot 5$ | Fo |
| 1298 | 29495 | C 1497 |  |  | $48 \quad 38 \cdot 74$ | 5850 | 250 | 294428.5 | 859 | 356 | 12.6 | + 30 | - 50 | $9 \cdot 4$ | Go |
| 1299 | 31500 | L 1084 | 1089 | 5325 | $4840 \cdot 67$ | 6326 | 270 | 315811.0 | 857 | 361 | 11.6 | + 26 | - 57 | 8.5 | A 3 |
| 1300 | 26480 | C 1498 | 1094 | 5332 | $4^{8} \quad 41 \times 74$ | 5175 | 223 | 262251.0 | 856 | 351 | 10.7 | $\bigcirc$ | + 4 | 7.85 | Fo |


| No. | B.D. | A.g.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec.Var. | $\begin{aligned} & \text { Epoch } \\ & \text { Ig00+ } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { s. } .000 \mathrm{~A} .}{\text { R. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.001. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | $s$ | 8 | - , " | " | " |  |  |  |  |  |
| 1301 | $26+81$ | C 1499 |  | 5334 | $24^{8} 54.33$ | $+3.5221$ | +.0225 | 263538.8 | +14.844 | --351 | 13.1 | + 97 | - 24 | 8.8 |  |
| 1302 | 24408 | B 852 |  |  | $4916 \cdot 19$ | 4781 | 208 | $\begin{array}{lllllll}24 & 15 & 57 \cdot 4\end{array}$ | 823 | 347 | 10.8 | 10 | - 23 | $9 \cdot 1$ | G o |
| 1303 | $304^{63}$ | L 1090 | 1120-1 |  | 49 59.24 | 6166 | 260 |  | 780 | 364 | $10 \cdot 1$ | - 49 | - 39 | 9.4 |  |
| 1304 | 26482 | ${ }_{C} 11503$ | 1127 | 5361 | $50 \quad 1.34$ | 5242 | 224 | $\begin{array}{llllllllllll}26 & 34 & 33.9\end{array}$ | 778 | 354 | II•4 | + 58 | + 4 | 8.I | G 5 |
| 1305 | 25459 | C 1505 |  |  | $50 \quad$ I.81 | 5167 | 221 | 26 II $39 \cdot 6$ | 778 | 353 | 12.3 |  | $-13$ | $9 \cdot 1$ |  |
| 1306 | 27455 | ${ }_{C} 1504$ | 1128-9 | 5362 | $250 \quad 2 \cdot 46$ | $+3.5397$ | +.0230 | 272127.0 | +14.778 | -355 | 10.7 | - 6 | - 18 | $6 \cdot 72$ | B 9 |
| 1307 |  | ${ }_{\text {C }} 1506$ |  |  | $50 \quad 3 \cdot 21$ | 5106 | 218 | $25 \quad 52 \quad 52 \cdot 2$ | - 777 | 353 | 13.5 |  |  | $9 \cdot 4$ |  |
| ${ }_{1} 1308$ | 27456 | C 1507 |  | 5363 | $50 \quad 5 \cdot 15$ | 5483 | 233 | $274649 \cdot 6$ | 775 | 356 | $12 \cdot 1$ | + 4 | 22 | $8 \cdot 5$ | A 2 |
| ${ }_{1} 1309$ | 24410 | B 856 | 1135 |  | $50 \quad 5.97$ | 4817 | 207 | $2422 \quad 19^{\circ}$ | 774 | 350 | 12.2 | $\begin{array}{r} \\ +\quad 16 \\ \hline\end{array}$ | - 36 | $8 \cdot 9$ |  |
| 1310 | 29500 | C 1509 |  |  | $50 \quad 13.70$ | 5965 | 252 | $\begin{array}{lllll}30 & 6 & 10.2\end{array}$ | 766 | 357 | 12.6 | $+4^{8}$ | + 12 | 8.71 | F 8 |
| 1311 | 25460 | C 1510 |  |  | 25015.09 | $+3.5096$ | +.0218 | $2548 \quad 18.9$ | +14.765 | -. 353 | 12.9 | 6 | + 6 | 9.4 |  |
| 1312 | 30464 | L 1095 | 1133 | 5365-6 | 5015.41 | 6088 | 257 | $304043 \cdot 0$ | 765 | 362 | II•1 | - | - 19 | 7.24 | Ma |
| 1313 | 26484 | C1512 | 1137 | 5376 | $5019 \cdot 27$ | 5236 | 224 | $26.3046 \cdot 9$ | 761 | 354 | 11.8 | + 194 | - 165 | $7 \cdot 45$ | G 5 |
| 1314 | 30465 | L1097 | 1103-38-9 | 5375 | $50 \quad 26 \cdot 80$ | 6208 | 261 | $\begin{array}{lllll}31 & 12 & 56 \cdot 7\end{array}$ | 753 | 364 | 12.3 | $\begin{array}{r} \\ +\quad 25 \\ \hline\end{array}$ | - 58 | 8.0 | F 5 |
| 1315 | 26485 | C 1514 |  |  | $50 \quad 30 \cdot 70$ | 5255 | 224 | $2635121 \cdot 4$ | 749 | 354 | 13.5 | + 39 | + 21 | $9 \cdot 4$ |  |
| 1316 | 27457 | C 1515 |  | 5378 | 25032.55 | $+3.5517$ | 0234 | $27 \quad 5335 \cdot 5$ | +14.747 | -. 357 | 12.5 | 24 | 10 | $8 \cdot 1$ | A 2 |
| 1317 | 24412 | B 859 | 1145 |  | $5035 \cdot 39$ | 4823 | 207 | 242119.7 | - 745 | 351 | 12.4 | - 4 | - 21 | 9.2 |  |
| 1318 | 25465 | C 1516 | 1148 | 5388 | 5048.03 | 5092 | 217 | $25.43 \quad 38 \cdot 1$ | 732 | 354 | 12.2 | + | - 26 | $8 \cdot 3$ | G 5 |
| 1319 | 31505 | ${ }_{4} 1098$ | 1146 |  | $50 \quad 50 \cdot 49$ | 6311 | 265 |  | 730 | 365 | 12.3 | - 19 | - 16 | $9 \cdot 4$ |  |
| I 320 | 28477 | C 1517 | 1149 |  | $50 \quad 53.33$ | 5709 | 242 | $\begin{array}{llll}28 & 48 & 2 \cdot 1\end{array}$ | 727 | 360 | 11.8 | + 22 | + 6 | $6 \cdot 52$ | K o |
| 1321 | 31507 | L 1100 | 1151 | 5388 | 2515.74 | $+3.6306$ | +.0264 |  | +14.714 | $-365$ | 13.0 | + 26 | 4 | $8 \cdot 7$ | Fo |
| 1322 | 30466 | LIIOI | 1153 | 5393-4 | $51 \quad 6.23$ | 6075 | 256 | 303118 |  | 363 | 13.1 | + 61 | - 3 | 8.I | K。 |
| 1323 | 29501 | C 1518 | 1160 |  | $5135 \cdot 26$ | 6000 | 252 | $\begin{array}{llll}30 & 6 & 26 \cdot 3\end{array}$ | 686 | 362 | 13.9 | + 23 | + 17 | $9 \cdot 5$ |  |
| 1324 | 31509 | $\mathrm{LI}_{1105}$ | 1162 | 5415 -6-7 | $5149 \cdot 28$ | 6322 | 264 |  | 672 | 367 | 9.9,10.9 | + 8* | - $37^{*}$ | 5•18 |  |
| 1325 | 25467 | C 1520 | 1168 |  | $51 \quad 59.14$ | 5208 | 220 |  | 662 | 356 | 9.4 | - 13 | - 2 | 8.8 | Go |
| 1326 | 29502 | C 1521 | 1171-2 | 5425 | $2 \begin{array}{lll}2 & 5210.76\end{array}$ | +3.5854 | +.0245 | 292054.2 | +14.650 | $-363$ | 11.5 | + 17 | - 39 | $8 \cdot 9$ | G 5 |
| $\left\lvert\, \begin{aligned} & 1327 \\ & 1328\end{aligned}\right.$ | 29503 | C 1523 | 1178 -9-80 | 5430 | 5221.75 | 5849 | 245 | $2918 \quad 2.7$ | 639 | 364 | $2 \cdot 2$ | +164 | - 59 | $9 \cdot 4$ |  |
| 1328 | 30469 | L 1109 | 1184 | 5435 | $5234 \cdot 42$ | 6250 | 260 | $\begin{array}{lllll}31 & 9 & 19.9\end{array}$ | 627 | 367 | 10.2 | + 31 | + 1 | $7 \cdot 9$ | K o |
|  | 31511 | LIIIo | 1187 |  | $5241 \cdot 95$ | 6362 | 265 | $313922 \cdot 0$ | 619 | 369 | 11.7 | - 21 | + 3 | 9.1 |  |
| 1330 | 26489 | C 1527 |  |  | $52 ; 1 \cdot 58$ | 5382 | 226 | $26 \quad 58$ Ir 13 | 609 | 359 | 12.5 | + 15 | + 49 | 9.5 | A 2 |
| 1331 | 31513 | L 1112 |  |  | 25254.45 | $+3.6405$ | $+.0267$ | 314927.8 | +14.607 | -. 370 | 12.1 |  | - 23 | $9 \cdot 4$ |  |
| ${ }^{1} 332$ | 26491 | C 1528 |  |  | $5256 \cdot 19$ | 5385 | 226 | $\begin{array}{lllll}26 & 58 & 37.5\end{array}$ | 605 | 359 | 10.3 | 10 | - 37 | 9.2 | Go |
| 1333 | 30471 | LII14 | 1193 |  | 53 4.00 | 6228 | 257 | $305947 \cdot 2$ | 597 | 368 | 13.0 | + 1 | - 12 | $9 \cdot 4$ |  |
| I 334 | 26493 | C 1530 |  |  | 5334.04 | 5285 | 222 | $262440 \cdot 1$ | 567 | 359 | 10.3 | 21 | + 141 | 8.5 | K |
| 1335 | 31517 | LIII9 | 1207 |  | $53 ; 6 \cdot 15$ | 6443 | 266 | $315217 \cdot 0$ | 545 | 372 | 13.3 | + 9 | - 23 | $9 \cdot 4$ |  |
| 1336 | 28479 | C 1532 |  |  | 25358.33 | $+3 \cdot 5737$ | +.0234 | $\begin{array}{llll}28 & 35 & 19.8\end{array}$ | +14.543 | -. 366 | 13.7 | 12 | - 31 | 10.2 |  |
| 1337 | $24+18$ | ${ }^{\text {C } 1533}$ | 1220 |  | 53 59.30 | 5035 | 212 | $25 \quad 6 \quad 24 \cdot 3$ | 542 | 357 | 13.0 | - 4 | + 1 | $8 \cdot 96$ | A 0 |
| 1338 | 26494 | C 1534 | 1222 | $54^{82}$ | $54 \quad 3 \cdot 81$ | 5405 | 225 | $265730 \cdot 0$ | 537 | 362 | 11.7 | 31 | - 36 | $8 \cdot 8$ | F 8 |
| 1339 | 30474 | C 1537 | 1228-9 | 5489 | $54 \quad 28.69$ | 6101 | 251 | $\begin{array}{llll}30 & 14 & 53.4\end{array}$ | 513 | 370 | 11.5 | + <br> $+\quad 23$ | - 20 | 8.26 | G 5 |
| 1340 | 26495 | C1538 | 1231 | 5498 | $5431 \cdot 36$ | 5412 | 225 | $26 \quad 5636 \cdot 6$ | 510 | 362 | 11.1 | + 10 $+\quad 10$ | - 5 | 8.8 | F 5 |
| 1341 | 26496 | C 1539 | 1235 |  | $25438 \cdot 91$ | $+3.5331$ | +.0222 | $263150 \cdot 8$ | +14.502 | -.362 | 11.4 | + 27 | + | 8.6 | K 2 |
| 1342 | 30477 | $\mathrm{L}_{\mathrm{B}} 1128$ | 1239-40 | 5501-2 | $5449 \cdot 73$ | 6223 | 256 | $3046 \quad 5 \cdot 1$ | 491 | 371 | 11.3 | + 35 | - 33 | $7 \cdot 40$ | F 5 |
| 1343 | 2+ +19 | B 871 | 1246 | 5512 | 5455.05 | 5011 | 209 | $\begin{array}{llllll}24 & 53 & 16.6\end{array}$ | 486 | 359 | 11.8 | - 17 | - 16 | $8 \cdot 9$ | $\mathrm{A}^{2}$ |
| $13+4$ | 29508 | C 1541 | 1243-4 | 5508-9 | $\begin{array}{lll}55 & 0.98\end{array}$ | 6107 | 251 | $\begin{array}{lllllllll}30 & 12 & 43.2\end{array}$ | 480 | 370 | 11.7 | - 12 | - 32 | 8.61 | K o |
| I 345 | $244^{21}$ | B 873 | 1259 |  | $55 \quad 30 \cdot 17$ | 4952 | 207 | $243150 \cdot 1$ | 450 | 358 | 11.5 | + 2 | $+\quad 5$ | 9.5 |  |
| 1346 | 31523 | LII35 |  |  | 25537.99 | $+3.6463$ | $+.0264$ | $\begin{array}{llll}31 & 45 & 42 \cdot 6\end{array}$ | +14.442 | - 375 | 11.1 | + 25 | $\begin{array}{r}-14 \\ \hline\end{array}$ | 9.4 |  |
| 1347 | 31524 | L 11136 |  |  | $5546 \cdot 82$ | 6431 | 263 | 313555.1 | 433 | 376 | 10.3 | - 31 | $\begin{array}{r} \\ +\quad 18 \\ \hline\end{array}$ | 8.8 |  |
| 1348 | $24+23$ | B 876 | 1271 | 5551 | $56 \quad 12 \cdot 22$ | 5013 | 208 | $244^{6} \quad 15 \cdot 2$ | 408 | 361 | 11.9 | 19 | - 27 | $8 \cdot 3$ | F 2 |
| 1349 | 31527 | L 1138 |  |  | $\begin{array}{llll}56 & 17.44\end{array}$ | 6472 | 264 |  | 402 | 376 | 12.9 | 6 | - 5 | $9 \cdot 4$ |  |
| 1350 | 28482 | C 1547 |  |  | $\begin{array}{llll}56 & 18.83\end{array}$ | 5847 | 239 | $28 \quad 5116.5$ | 401 | 369 | 13.7 | - 12 | + 16 | 10.0 |  |

[^13]| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | See. Var. | Epoch <br> $1900+$ | Annual P.M. |  | Mag. | Spectral Typo: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s.0001. } \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ".001. } \end{aligned}$ |  |  |
|  |  |  |  |  | $h$ in |  | 8 |  |  |  |  |  |  |  |  |
| 1351 | $2+{ }^{2}+25$ | B 880 | 1278 |  | $256 \quad 22 \cdot 92$ | $+3.5025$ | +.0209 | $244^{8} 4779$ | +14397 | -. 362 | 12.5 |  | - 15 | 9.4 |  |
| $11352$ | 31528 | L II 40 | $1280-1$ |  | $5635 \cdot 56$ | 6408 | 261 | $3 \mathrm{I} 2432 \cdot 2$ | 383 | 376 | 12.1 | + 2 | - 6 | $9 \cdot 4$ |  |
| 1353 | $25+77$ | C I550 | 1285 | 5559 | $5635 \cdot 75$ | 5287 | 218 | $26 \quad 624 \cdot 6$ | 383 | 364 | 10.1 | - $9^{*}$ | - ${ }^{*}$ | $5 \cdot 91$ | A 2 |
| 1354 | 30479 | L 1141 |  |  | $5643 \cdot 03$ | 6240 | 252 | $\begin{array}{lllll}30 & 37 & 53.2\end{array}$ | 376 | 374 | $12 \cdot 0$ | - 5 | - 7 | $9 \cdot \mathrm{I}$ |  |
| 1355 | 29512 | C I551 | 1288 |  | $56+6 \cdot 65$ | 6131 | 248 | $30 \cdot 7.4 \mathrm{I} \cdot 0$ | 372 | 373 | $12 \cdot 5$ | + 12 | $3$ | $9 \cdot 4$ |  |
| 1356 | 26503 | C 1553 | I 294 | 5572 | $257 \quad 5 \cdot 56$ | $+3.5328$ | . 0218 | 26 I 5 3I•9 | +14353 | - 366 | $9 \cdot 3$ | + 179* | - 168* | $6 \cdot 72$ | Go |
| 1357 | 27468 | C 1558 | 1314 | 5599 | 587.49 | 5691 | 23 I | $2755 \quad 2 \cdot 1$ | 291 | 371 | $10 \cdot 1$ | + 32 | - 8 | $6 \cdot 34$ | A 5 |
| 1358 | 27469 | C I 559 | $1317-8$ | 5605-7 | $58 \quad 9 \cdot 53$ | 5546 | 226 | $\begin{array}{lllll}27 & 13 & 1.5\end{array}$ | 288 | 370 | $9 \cdot 5$ | - 24 | - $4+$ | $8 \cdot 1$ | K o |
| 1359 | 29517 | C I 560 | 1316-9 | 5603-4 | $58 \quad 15 \cdot 28$ | 6174 | 249 | $30 \quad 931 \cdot 3$ | 283 | 376 | 10.7 | + 5 | - 26 | $8 \cdot 56$ | Ko |
| 1360 | 27471 | C I562 | 1327 | 5620 | $5836 \cdot 8+$ | 5752 | 232 | $28 \quad 9 \quad 25 \cdot 3$ | 260 | 373 | $10 \cdot 3$ | - 12 | - 20 | $8 \cdot 6$ | B 9 |
| 1361 | 31531 | L II 52 | 1329 | 5623 | $25849 \cdot 16$ | $+3.6507$ | 0262 | $\begin{array}{llll}31 & 35 & 37.4\end{array}$ | +14.248 | - 381 | $9 \cdot 9$ | - | - 19 | $8 \cdot \mathrm{I}$ | A 0 |
| 1362 | 30482 | L. 1154 | 1331 | 5634-5 | 597.99 | 6372 | 256 | $3057 \quad 32.8$ | 228 | 379 | 10.8 | + 21 | - 19 | $8 \cdot 9$ | A 0 |
| 1363 | 30484 | LII 56 | 1345 | 5645-6 | $59 \quad 27 \cdot 54$ | 6320 | 253 | $3041 \begin{array}{llll}3 & 18.3\end{array}$ | 208 | 379 | $10 \cdot 5$ | - 5 | + 3 | $8 \cdot 7$ | K o |
| 1364 | $28 \quad 487$ | C I563 | 1346 | 5656 | $5930 \cdot 69$ | 5971 | 239 | $29 \quad 5 \quad 11.8$ | 205 | 376 | II.I |  |  | $9 \cdot 4$ |  |
| 1365 | 29518 | C 1564 |  |  | 59 4I•6I | 6140 | 245 | $295041 \cdot 9$ | 194 | 378 | I1.9 | + 45 | - 38 | $9 \cdot 4$ | G 5 |
|  |  |  | , |  | $25943 \cdot 67$ | $+3.5652$ | +.0226 |  | +14.19I | - 374 | 6.8 |  |  |  |  |
| 1367 | 27474 | C 1565 | $1350\{$ |  | $5943 \cdot 79$ | 5652 | 226 | $273345 \cdot 5$ | 191 | 374 | 3.6 | - | - 38 | $8 \cdot 7$ | F 5 |
| 13681 |  |  |  |  | $5943 \cdot 76$ | 5652 | 226 | $273344 \cdot 7$ | 191 | 374 | . 9 | - I | - 38 |  |  |
| 1369 | 31534 | L II $5^{8}$ | 1351 |  | $5952 \cdot 81$ | 6568 | 262 | $314448 \cdot 6$ | 182 | 382 | 12.1 | $+\quad 29$ | - 53 | $8 \cdot 15$ | G 0 |
| 1370 | $28+88$ | C 1567 | $1352-3-4$ | 5662 | $5954 \cdot 31$ | 6003 | 240 | 29 II 31.6 | 181 | 377 | 10.8 | + 73 | - 65 | $8 \cdot 0$ | F 5 |
| 11371 | 30486 | L I 159 |  | 5667-8 | 309.52 | $+3.6288$ | +.0249 | $\begin{array}{llll}30 & 28 & 1.4\end{array}$ | +14.164 | -.38I | 13.3 | - $2^{2}$ | + 2 | $8 \cdot 6$ | K 0 |
| 1372 | $24+3$ I | B 895 | 1369 | $5678-9$ | - 9.75 | 5116 | 208 | $245420 \cdot 3$ | 164 | 369 | II 5.5 | +3 * | - $14^{*}$ | 6. 11 | B 8 |
| 1373 | 25484 | C 1569 | $1370$ |  | - I2.75 | 5241 | 213 | 25 31 ${ }^{20} 0$ | 16 I | 369 | 13.3 | $+\quad 17$ $+\quad 37$ | - 29 | $8 \cdot 6$ | A. 5 |
| 1374 | 27477 | C 1568 | I 368 |  | - I 3.28 | 5653 | 227 | 27 31 13.0 | 161 | 372 | $13.7$ | - 37 | $+3$ | $8 \cdot 7$ | A 0 |
| 1375 | 25485 | C 1571 |  |  | - 14.48 | 5313 | 215 | $255215 \cdot 2$ | 160 | 370 | 13.9 | + 3 | - 22 | $9 \cdot 4$ |  |
| 1376 | 31536 | LII 60 | 1364 | 5670 | $3015 \cdot 11$ | $+3.6563$ | .0261 | $3 \mathrm{I} 40 ; 6 \cdot 0$ | +14.159 | $-383$ | 11.9 | + 57 | - 37 | $8 \cdot 0$ | G 5 |
| 1377 | 29519 | C 1570 | I 366-7 | 5675-6 | - 17.31 | 6227 | 248 | $3010 \quad 38.8$ | 157 | 380 | $13 \cdot 9$ | + 24 | - 15 | $8 \cdot 5 \mathrm{I}$ | Ko |
| 1378 | $27 \quad 478$ | C 1572 | 1 374-5 |  | - 26.10 | 5620 | 225 | $27 \quad 20 \quad 18.5$ | 148 | 372 | $12 \cdot 5$ | + 51 | - 57 | $8 \cdot 6$ | Go |
| 1379 | 24432 | B 900 | 1382 |  | $040 \cdot 33$ | 5125 | 208 | $24 \quad 54 \quad 17.2$ | 133 | 369 | $12 \cdot 1$ | - 4 | + 7 | $9 \cdot 5$ | A 2 |
| 1380 | 24433 | C-1573 |  | 5697 | - $48 \cdot 17$ | 5163 | 209 | $25 \quad 4 \quad 57 \cdot 4$ | 125 | 369 | 11.7 | - $4^{2}$ | - 43 | 8.71 | F 8 |
| 1381 | 25487 | C I574 |  |  | $3 \quad 544.34$ | $+3.5289$ | +.0213 | $254128 \cdot 9$ | +14.119 | - 371 | I•9 | $+44$ | + 3 | $9 \cdot 2$ |  |
| 1382 | 3 I 539 | L i 169 |  |  | $1 \mathrm{I} \cdot 90$ | 6635 | 263 | $3 \mathrm{I} 54 \mathrm{l}^{28 \cdot 5}$ | 1 I İ | 385 | 12.5 | + 27 | - 49 | $9 \cdot 4$ |  |
| 1383 | 31540 | L I 1172 |  |  | 1 II. 56 | 6582 | 260 | $313926 \cdot 3$ | 100 | 384 | $12 \cdot 1$ | - 17 | $+4$ | $9 \cdot 2$ | A 2 |
| 1384 | 29522 | C 1575 | 1 392-3 | 5707-9 | I 24.33 | 6254 | 248 | $30 \quad 1049 \cdot 5$ | 088 | 382 | 9. I | + 40 | - 62 | 7-11 | A 5 |
| 1385 | 26509 |  |  |  | I 44.40 | 5496 | 219 | $263657 \cdot 5$ | 067 | 374 | 13.6 |  |  | 10.7 |  |
| 1386 | 31542 | LII 179 | 1406 |  | 3 I 51.24 | $+3.6550$ | +.0258 | $\begin{array}{llll}31 & 26 & 48 \cdot 4\end{array}$ | +14.060 | -. 386 | II•I | - 37 | - 2 | 9.4 |  |
| 1387 | 28493 | C 1576 | 1408 | 5720 | I 52.36 | 5957 | 235 | $\begin{array}{lllll}28 & 4^{6} & 35 \cdot 6\end{array}$ | $059$ | 380 | 9.1 | - 14 | $+\quad 2$ | $7 \cdot 60$ | B 9 |
| 1388 | 24437 | C 1578 | $1420-1$ |  | $232 \cdot 65$ | 5223 | 209 | $\begin{array}{lllll}25 & 12 & 29.8\end{array}$ | 14.016 | 374 | $10 \cdot 8$ | - 21 | - 99 | 8.1 1 | F 8 |
| 1389 | $24+38$ | B 9II | 1433 |  | $24^{2} 8.73$ | 5030 | 203 | $\begin{array}{lllll}24 & 13 & 47 \cdot 7\end{array}$ | 13.999 | 371 | - | - 6 | - 10 | 9.I |  |
| 1390 | 25495 | C I581 |  | 5761 | $3 \quad 7 \cdot 57$ | 5398 | 214 | 26 - 22.2 | 980 | 376 | 10.76 | - 128 | - 836 | $8 \cdot 0$ | F 2 |
| ${ }^{1} 391$ | 25496 | C 1582 |  |  | $\begin{array}{llll}3 & 3 & 8.41\end{array}$ | $+3.5319$ | +.0212 | $25 \quad 37 \quad 28 \cdot 9$ | +13.980 | -•374 | 11.3 | - 22 | + II | $8 \cdot 7$ | F 5 |
| ${ }^{1} 392$ | 3 I 546 | L 1188 |  |  | 317.71 | 6683 | $260$ | $3 \mathrm{I} 5 \mathrm{I} 5 \mathrm{I} \cdot 4$ | 969 | 389 | $11 \cdot 7$ | - 35 | - 12 | $9 \cdot 2$ |  |
| I 393 | 25497 | C 1584 | 1442-3-4 |  | 322.54 | 5247 | $208$ | 251451.4 | $964$ | 374 | $10 \cdot 2$ | - 4 | - 59 | $8 \cdot 36$ | G 5 |
| I 394 | 29528 | C 1583 |  |  | $325 \cdot 52$ | $6232$ | $243$ | $295155 \cdot 4$ | $961$ | 385 | $12 \cdot 2$ |  | 18 | 10.7 |  |
| I 395 | 26511 | C 1585 |  |  | 331.44 | 5621 | $22 \text { I }$ | $2725 \cdot 5$ | $956$ | 377 | 13.9 | $+46$ | $+$ | $10 \cdot 7$ |  |
| 1396 | 24441 | C 1586 | 1450 | 5777 | $\begin{array}{llll}3 & 3 & 33.37\end{array}$ | $+3.5205$ | $+\cdot 0207$ | 25 I 33.5 | +13.953 | --374 | 10.9 | - 27 | $-103$ | $8 \cdot 7$ | F 2 |
| 1 397 | 30493 | L 1192 |  |  | +4.08 | 6505 | 253 | $31 \bigcirc 33 \cdot 2$ | 92 I | 389 | 12.7 | 1 | + 21 | $9 \cdot 4$ |  |
| 1 398 | 24443 | B 918 |  |  | 4 8.8I | 5140 | $205$ | $243910 \cdot 1$ | 916 | 374 | 12.9 | + 5 | - 10 | $9 \cdot 8$ |  |
| $1399$ | 28499 | C 1587 |  | 5789-90 | $411 \cdot 61$ | $6000$ | $234$ | $28 \quad 44 \quad 2 \cdot 0$ | $913$ | 384 | $10 \cdot 7$ | + $22^{*}$ | - $25^{*}$ | $5 \cdot 60$ | B 9 |
| 1400 | 29529 | C 1588 | 1462 | 5792 | $4 \quad 16.47$ | 6261 | $243$ | $29 \quad 54 \quad 23 \cdot 7$ | 908 | 387 | 12.7 | + 37 | - 39 | $9 \cdot 4$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | 1 P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | See. Var. | Dec. 1910.0 | Precession. | Sec. Var. | Epoch $1900+$ | $\underset{\text { B.000 }}{\text { R.A. }}$ | $\begin{gathered} \text { Dee. } \\ \text { "ool. } \end{gathered}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m s | s | 8 | - ' | " | *" |  |  |  |  |  |
| 1401 | 30494 | LII94 |  |  | $\begin{array}{llll}3 & 4 & 19.42\end{array}$ | +3.6522 | +.0253 | 31319.1 | +13.905 | $-389$ | I 1-9 | $+4^{2}$ | $+9$ | $9^{-1}$ | A 5 |
| 1402 | 25500 | C 1589 | 1468 |  | $425 \cdot 18$ | 5412 | 213 | $\begin{array}{llll}25 & 57 & 7 \cdot 1\end{array}$ | 899 | 378 | 11.0 | 11 | + 13 | $9 \cdot 1$ |  |
| 1403 | 27480 | C 1592 | 1474 | 5808-9 | $446 \cdot 06$ | 574 I | 224 | $27 \quad 2842 \cdot 5$ | 877 | 380 | 10.4 | + 1 | - 26 | $6 \cdot 38$ | A 0 |
| 1404 | 29531. | C 1593 | I 475-6 | 5804-6 | $449 \cdot 77$ | 6144 | 239 | $2919 \quad 25 \cdot 4$ | 873 | 387 | $12 \cdot 7$ | + 5 | - 3 | $9 \cdot 1$ | A 3 |
| 1405 | 24448 | B 920 | 1481 | 5820 | $45 \mathrm{I} \cdot 48$ | 5086 | 201 | $241916 \cdot 1$ | 872 | 376 | 12.5 | 6 | + 8 | $8 \cdot 9$ | K o |
| 1406 | 24449 | C 1594 | 1482 | 5822 | $3 \quad 453.43$ | +3.5212 | +.0206 | $24 \quad 56 \quad 22 \cdot 5$ | + 13.869 | --377 | II•3 | - 18 | - 24 | $8 \cdot 9$ | G o |
| 1407 | 26516 | C I 595 | 7-8 | 5831 | $5 \quad 6 \cdot 14$ | 5551 | 216 | 2633 9.0 | 856 | 380 | II.9 | $+3$ | + 91 | $6 \cdot 12$ | K o |
| 1408 | 31553 | L 1197 | 1461 |  | $5 \quad 20 \cdot 24$ | 6740 | 260 | $\begin{array}{llll}31 & 53 & 7 \cdot 5\end{array}$ | 84 I | 393 | $12 \cdot 3$ | + 31 | - 49 | $7 \cdot 38$ | K O |
| 1409 | 24450 | B 927 | 35 |  | $547 \cdot 95$ | 5086 | 201 | $241415 \cdot 1$ | 811 | 376 | $12 \cdot 7$ | 6 | - 32 | $9 \cdot 2$ |  |
| 1410 | 31556 | L 120 I |  |  | $5 \quad 56 \cdot 77$ | 6682 | 256 | $\begin{array}{lllll} & 1 & 34 & 34 \cdot 8\end{array}$ | 802 | 394 | 13.1 | 7 | - 47 | $9 \cdot 4$ |  |
| 1411 | 31557 | L 1202 |  |  | $\begin{array}{lll}3 & 6 & 0.75\end{array}$ | $+3.6776$ | $+.0260$ | $\begin{array}{llll}31 & 58 & 19.5\end{array}$ | +13.798 | -. 395 | I 3.1 | $\pm 5$ | - 23 | $9 \cdot 1$ |  |
| 1412 | 26519 | C 1597 | 39 | 5863 | $6 \quad 9 \cdot 62$ | 5563 | 216 | $26 \quad 30 \quad 20 \cdot 5$ | 788 | 382 | 13.3 | 0 | + 10 | $8 \cdot 6$ | K 2 |
| 1413 | 31559 | $\mathrm{L}_{\mathrm{C}} 1203$ |  |  | $\begin{array}{lll}6 & 11.94\end{array}$ | 6737 | 258 |  | 786 | 395 | 12.5 | 19 | + 15 | $8 \cdot 6$ |  |
| $1{ }^{1} 124$ | 29534 | C 1598 | 48 | 5872-3 | $630 \cdot 46$ | 6220 | 239 | $292932 \cdot 0$ | 767 | 390 | $12 \cdot 1$ | - 1 | - 26 | 8. 1 | A 2 |
| I4I5 | 30502 | L I 205 |  |  | $640 \cdot 24$ | 6583 | 252 | $\begin{array}{llll}31 & 4 & 48 \cdot 9\end{array}$ | 756 | 394 | 13.5 | - . 2 | + 10 | $9 \cdot 4$ | A |
| 1416 | 29535 | C 1599 | 52 | 5882-3 | $3648 \cdot 53$ | $+3.6224$ | +.0239 | 292854.5 | +13.747 | $-390$ | 13.1 | + 13 | - 92 | $9 \cdot 4$ | G 5 |
| 1417 | 26523 | C 1600 | 55-57 | 5889-90 | $652 \cdot 29$ | 5664 | 220 | $2655 \quad 5 \cdot 3$ | 744 | 384 | 12.3 | + 6 * | - 17* | $5 \cdot 65$ | A $0 \%$ |
| I418 | 26525 | C i601 | 62 |  | $75 \cdot 40$ | 5720 | 220 | $\begin{array}{llll}27 & 9 & 19.6\end{array}$ | 730 | 383 | 14.5 | $+36$ | - 38 | 10.0 |  |
| 1419 | 30503 | L 1210 |  | 5903 | $727 \cdot 21$ | 6473 | 245 | $30 \quad 30 \quad 55.9$ | 706 | 394 | 10.6 | + 25 | $+\quad 22$ | $8 \cdot 9$ |  |
| 1420 | 31565 | L 1212 | 76 |  | $739 \cdot 14$ | 6810 | 259 | $315638 \cdot 1$ | 694 | 399 | II•I | + 8 | - 15 | $8 \cdot 5$ | F 8 |
| 11421 | 30505 | L 1213 | 77 | 5912-28 | $3740 \cdot 68$ | $+3.6528$ | +.0248 | $304354 \cdot 6$ | +13.692 | -•394 | $11 \cdot 3$ | 4 | - $3^{6}$ | 7•30 | K 2 |
| 1422 | 2445 I | C 1602 | 87-8-9 | 5892 | 749.95 | 5316 | 207 | 25 10 $39 \cdot 7$ | 682 | 381 | $10 \cdot 7$ | - 1 | - 2 | $8 \cdot 61$ | A 2 |
| 1423 | 25510 | C 1603 | 94-5 | 5929 | 8 I.46 | 5504 | 212 | $26 \quad 3 \quad 16 \cdot 9$ | 670 | 384 | 12.9 | + 29 | - 14 | $8 \cdot 5$ | A 2 |
| 1424 | $285^{5} 6^{\circ}$ | C 1604 |  |  | $8 \quad 7 \cdot 29$ | 6047 | 230 | $28 \quad 30 \quad 10 \cdot 3$ | 664 | 391 | 13.3 | $+9$ | 17 | $10 \cdot 7$ |  |
| 1425 | 31567 | L 1216 |  |  | $8 \quad 8 \cdot 31$ | 6684 | 253 | 312121.0 | 663 | 397 | 11.9 | + 19 | - 77 | $9 \cdot 2$ |  |
| 1426 | $28 \quad 507$ | C 1605 | 98 |  | 38810.99 | $+3.6124$ | +.0235 | $28 \quad 5344 \cdot 6$ | +13.660 | -391 | 12.3 | 3 | + 12 | $8 \cdot 7$ | A 2 |
| 1427 | 30507 | L. 1217 |  |  | $8 \quad 22 \cdot 12$ | 6548 | 248 | 304449.9 | 648 | 396 | 13.5 | - 20 | + 12 | $9 \cdot 2$ |  |
| 1428 | 27485 |  |  |  | $\begin{array}{lll}9 & 5 \cdot 78\end{array}$ | 5846 | 223 | $27 \quad 3249.4$ | 601 | 387 | 13.7 |  |  | 10.7 |  |
| 1429 | $28 \quad 508$ | C 1606 | 114 |  | $9 \begin{array}{lll}9 & 11.96\end{array}$ | 6019 | 228 | 28191936 | 594 | 393 | 12.9 | + 17 | + 23 | $9 \cdot 4$ |  |
| 1430 | 30511 | L 1222 | 123 | 5965-6 | $927 \cdot 35$ | 6500 | 245 | $302550 \cdot 6$ | 578 | 397 | 10.8 | - 2 | - 10 | $8 \cdot 7$ |  |
| 1431 | 24454 | B 949 |  |  | $\begin{array}{lll}3 & 9 & 32 \cdot 22\end{array}$ | $+3.5226$ | $+.0201$ | $243536 \cdot 4$ | +13.573 | $-384$ | II•7 | - 35 | - 23 | $8 \cdot 9$ | G 5 |
| 1432 | $28 \quad 509$ | C 1607 | 133-4 | 5976 | $945 \cdot 05$ | 6117 | 231 | 284254.0 | 1559 | 394 | 11.2 | $\bigcirc$ | - 4 | $8 \cdot 6$ | K 2 |
| 1433 | 30512 | C 1608 | 136 | 5977-8 | $951 \cdot 42$ | 6461 | 243 | 3013 20.1 | 553 | 397 | 10.2 | 30* | - $5^{*}$ | $5 \cdot 53$ | A 0 |
| 1434 | $25 \quad 515$ | C 1609 | 138 |  | $955 \cdot 12$ | 5561 | 212 | $26 \quad 9 \quad 2 \cdot 1$ | 548 | 387 | 11.3 | - 1 | - 4 | $8 \cdot \mathrm{I}$ | A 0 |
| 1435 | 26530 | C.611 | 146 | 5988 | $10 \quad 12.53$ | 5657 | 215 | 2634 I4.I | 529 | 389 | 10.9 | + 28 | + 2 | $8 \cdot 2$ | A 5 |
| 1436 | 24457 | B 955 |  | 5994 | 31022.51 | $+3.5162$ | +.0197 | $\begin{array}{llll}24 & 12 & 37.3\end{array}$ | +13.518 | $-384$ | 11.0 | 5 | - 19 | $8 \cdot 6$ | A 0 |
| 1437 | 31575 | L 1233 | 156 |  | $1044 \cdot 86$ | 6803 | 253 |  | 494 | 402 | 12.3 | 21 | - 21 | $9 \cdot 4$ |  |
| 1438 | 23425 | B 958 | 161 |  | $1050 \cdot 34$ | 5133 | 196 | 24 I 56.9 | 489 | 385 | 12.5 | 38 | - 45 | $8 \cdot 8$ |  |
| 1439 | 24459 | C 1612 |  |  | $1054 \cdot 24$ | 5349 | 205 | $25 \quad 345 \cdot 6$ | 485 | 387 | 12.9 | 16 | + 23. | $9 \cdot 2$ |  |
| 1440 | $244^{60}$ | C 1614 |  |  | 110.63 | 5358 | 204 | $25 \quad 544 \cdot 5$ | 478 | 387 | 13.5 | 22 | + 20 | $9 \cdot 4$ |  |
| 1441 | 31576 | L 1235 | 160 |  | 3 II 2.28 | $+3.6874$ | +.0255 | 315153.7 | $+13.476$ | -.404 | 12.1 |  | - 100 | $6 \cdot 05$ | K o |
| 1442 | 25517 | C 1616 | 166 | $6013$ | $\begin{array}{lll}11 & 11.69\end{array}$ | 5527 | 209 | $255236 \cdot 3$ | 465 | 390 | 13.2 | $1+\quad 20$ | $+\quad 5$ | $8 \cdot 5$ | A 2 |
| I 443 | $244^{61}$ | C 1618 | 168 | 6016 | $\begin{array}{lll}11 & 16.62\end{array}$ | 5378 | 204 | - $25 \quad 9 \quad 55 \cdot \mathrm{I}$ | $460$ | 388 | 13.3 | + 46 | - 27 | $8 \cdot 9$ |  |
| 1444 | 28511 | C162I |  | 6025 | II 37.90 | $6093$ | 227 | $\begin{array}{lllll}28 & 25 & 39.6\end{array}$ | 437 | 397 | II-9 | - 6 | - 12 | $8 \cdot 3$ | A 0 |
| 1445 | $274^{88}$ | C 1622 | 176 |  | 11 3 $38 \cdot 22$ | 6032 | 224 | $28 \quad 9 \quad 13 \cdot 6$ | 437 | 397 | 11.9 | $+\quad 66$ | - $4^{8}$ | $8 \cdot 8$ | F 8 |
| 1446 | $25 \quad 521$ | C 1623 | 175 | $6030$ | 3 II $41 \cdot 83$ | $+3.5405$ | $+\cdot 0204$ | 25 15 22.0 | $+13.433$ | $-389$ | 11.5 | + 23 | - 12 | $8 \cdot 26$ | F 5 |
| 1447 | 30518 | L 1238 |  | 6029 | $1152 \cdot 72$ | 6577 | 243 | 30317.0 | 421 | 401 | $12 \cdot 7$ | 10 | - 5 | $9 \cdot 2$ |  |
| 1448 | 26534 | C 1624 | $185$ |  | $129.50$ | 5694 | 214 | $26335 \mathrm{I} \cdot 1$ | 403 | 392 | $11 \cdot 9$ | + 13 | + 2 | $8 \cdot 8$ | K o |
| $1449$ | 30520 | L 1240 | $183$ | 6040-1 | $129 \cdot 90$ | 6648 | 245 | $3047 \quad 53 \cdot 0$ | 403 | 404 | 10.6 | - 91 | - 59 | $6 \cdot 53$ | Go |
| 1450 | $28 \quad 513$ | C I628 | 193-4 |  | 1226.45 | 6266 | 232 | 2976.6 | 385 | 399 | 12.9 | + 33 | - 90 | $9 \cdot 2$ | G 5 |


| No． | B．D． | A．G．C． | W．B．（2）． | Lalande． | R．A．1910．0． | Precession． | Sec．Var． | Dec． $1910^{\circ} \mathrm{O}$ ． | Precession． | Soc． | $\begin{aligned} & \text { Epoch } \\ & \text { Igoot } \end{aligned}$ | Annual P．M． |  | Mag． | $\begin{array}{\|l\|l} \text { Spectral } \\ \text { Typo. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.0.A. } \\ \text { B.000. } \end{gathered}$ | Doc. |  |  |
|  | － |  |  |  | $\mathrm{nf} \mathrm{m}^{\text {mis }}$ |  |  |  |  |  |  |  |  |  |  |
| 1451 | 30522 | $\mathrm{L}_{1243}$ |  | $6052-3$ | $\begin{array}{ll}3 & 12414.48\end{array}$ | ＋3．6591 | ＋0242 | 302956.9 | ＋ 13.369 | 403 | 12.9 |  | 6 | 9.4 | A 2 |
| 1452 | 26535 | C 1629 |  | 6062 | 1242.09 | 5818 | 218 | 27 5 11 1 | 368 | 392 | 13.0 | － | － 23 | 9.1 |  |
| T453 | $2+464$ 30524 | B <br> L <br> L <br> 1245 |  | 6071 $6063-4$ | 1245.85. | 5275 | 199 | 243258.0 | 363 | 389 | 11.5 | － | － $4^{8}$ | $7_{8.3}^{7}$ | Fo |
| ［1454 | 300  <br> 24  <br> 29 54 | （ $\begin{aligned} & \text { L } 1245 \\ & C 1632\end{aligned}$ | 02 |  | 12 12 12 12 52.88 | 6644 6480 | 248 238 | $\begin{array}{cc}30 & 42 \\ 30 & 2+9 \\ 30 & 10.9\end{array}$ | 356 356 | 404 | 12.1 11.9 | － 10 | － 89 | 8.3 9.4 | B 9 O |
| T 456 | 25528 | C 1633 |  |  | 31256.46 | $+3.5606$ | ＋．0208 | $26 \quad 5 \quad 18.8$ | ＋13．353 | ． 393 | 13.9 |  | － 15 | 9.8 |  |
| 1457 | 26537 | ${ }_{C}^{C} 1634$ | 205 |  | 1257.49 | 5713 | 213 | $263457 \cdot 2$ | 352 | 394 | $12 \cdot 8$ | ＋ 86 | － 72 | 9.1 8.9 |  |
| 1458 | 28514 | C 1635 |  | 6076 | 130.88 | 6113 | 227 | $\begin{array}{lllll}28 & 23 & 3 \cdot 9\end{array}$ | 348 | 400 | 12.5 | ［ 13 | \％ | 8.9 | A 2 |
| $1 \begin{aligned} & 1459 \\ & 1460\end{aligned}$ | 31579 2749 | （ | 204 210 |  | $\begin{array}{ll}13 & 2.70 \\ 13 & 11.77\end{array}$ | 6891 5876 | 254 218 | $\begin{array}{lllll}31 & 43 & 34.8 \\ 27 & 18 & 20.0\end{array}$ | 345 | 498 | 12.5 13.8 | －$\quad 26$ | － 47 | 8.5 9.8 |  |
| 1461 | 26539 | C 1641 | 217 | 6097 | 31337.80 | ＋3．5679 | ＋．0211 | 262158.9 | ＋13．307 | ． 395 | 10.5 |  |  | 8.7 |  |
| ${ }^{1462}$ | 27492 | C 1644 | 227 | 6108 | 1413.91 | 5877 | 217 | 271256.0 |  | 396 | 10 |  |  | 7.8 | A 0 |
| ＋1463 | 31580 | L 1254 | 230 |  | 14 32．66 | 6919 | 251 | $314142 \cdot 6$ | 247 | 409 | 11.6 |  | ${ }^{10}$ | 9.2 |  |
| ＋ $\begin{aligned} & 1+64 \\ & 1+465\end{aligned}$ | 26540 30525 | Cr 1646 L 1257 | 234 233 | 6113 | $1433 \cdot 05$ 1437.05 | 5780 6697 | 213 | $264+46 \cdot 8$ <br> 3045 | 47 | 397 | 3 |  | －${ }^{78 *}$ | 5.94 | Q 5 |
| 1466 | 27493 | C 1648 | 240 |  | 31446.66 | $+3.6062$ | ＋．0222 | 2759 51．4 | ＋13．232 | 398 |  |  |  |  | F 8 |
| ＋+67 | 28516 | C 1649 | 243 | 6119－20－ | 1453.37 | ＋ 6229 | 227 | 2843 21－9 | ＋225 | 403 | 10.9 |  | ${ }^{27}{ }^{*}$ | $4 \cdot 72$ | K 5 |
| ז468 | 29545 | C 1650 |  |  | 1457.88 | 6487 | 236 | 295014.3 | 219 | 406 | 11.9 | 12 | － 82 | $9 \cdot 4$ |  |
| 1469 | 30526 | $\mathrm{L}^{\text {L } 1260}$ |  | 6122 | 150.61 | 6650 | 241 | 3031 32－2． | 216 | 407 | 12.3 |  | ＋ 11 | 9.1 |  |
| ${ }^{1470}$ | 25536 | C 1651 | 248 |  | $15 \quad 5.28$ | 5484 | 202 | 252020.5 | 12 | 395 | 11.8 | ＋ | －93＊ | $6 \cdot 41$ | K |
| ${ }^{1} 771$ | 24471 | B 985 |  | 6130 | 3158.91 | ＋3．5247 | ＋．0195 | 241343 | ＋13．207 | －392 | $12 \cdot 3$ | － | － 11 | 8.0 | K。 |
| T 772 | 28517 | ${ }^{\text {C } 1652}$ |  |  | 1513.08 | 6186 | 225 | $2830 \quad 9 \cdot 6$ | 203 | 403 | 12.5 | － 43 | － 67 | 8.9 | Go |
| 1473 | 26542 | $\mathrm{C}_{\mathrm{C}} 1653$ | 252 | 6131 | 1515.61 | 5762 | 211 | $2636 \quad 6.8$ | 200 | 398 | 12.9 | － 25 | ＋ 13 | 8.0 | G 5 |
| ${ }^{1}+74$ | 27494 | C 1654 | 253 |  | 1519.93 | 6099 | 223 | $28 \quad 6 \quad 35 \cdot 5$ | 195 | ＋04 | 13.0 |  | ＋ | 9.4 | F 5 |
| ${ }^{1}+75$ | 30530 | L 1264 |  | $6^{144-5}$ | 1548.37 | 6648 | $2{ }^{2}$ | $302633 \cdot 1$ | 165 | 408 | $11 \cdot 9$ |  |  | 8.5 | A 2 |
| 1476 | 29549 | C 1656 | 265 | 6148 | 31549.91 | ＋3．6533 | ＋．0236 | $295712 \cdot 6$ | ＋13．162 | 407 | 12．1 |  | － 34 | 8.6 | K 。 |
| ${ }^{1}+777$ | 26543 | C 1658 | 270 |  | 162.55 | 5858 | 214 | 26584.3 | 148 | 400 | 13.2 | ＋ 24 | － 33 | 9.1 | F 8 |
| 1478 |  | $\mathrm{L}_{1} 1268$ |  |  | 1618.66 | 6873 | 247 | 311959.9 | 130 | 411 | ${ }^{12} 2 \cdot 1$ |  | －${ }^{4}$ | 7.9 | F5 |
| ｜ | 27500 30532 | C 1662 $\mathrm{~L} \times 271$ | $\stackrel{285-6}{ }$ | $6176-7-8$ 6173 | 1647.49 1645.87 | 5943 6824 | 216 |  | 100 | 400 | 12.3 | $+$ | －12＊ | 5．64 | K |
| 1480 | 30532 | L 1271 | 279 | 6173 | $1645 \cdot 87$ | 6824 | 45 | $31 \quad 528.2$ | 101 | 411 | 9 | ＋ | ＋ 17 | $7 \cdot 55$ | K。 |
| $1+81$ | 31587 | L 1272 | 28. |  | 31649.83 | ＋3．6874 | ＋．0247 | 31 17 11 7 | ＋13．096 | 412 | ${ }^{12.0}$ | － | 25 | 8.9 |  |
| ［1482 | 31588 | ${ }_{\text {L }} 1273$ |  |  | 1656.76 | 7038 | 252 | $\begin{array}{llll}31 & 55 & 4.4 \\ 2 & 53\end{array}$ |  | 415 | 11.3 |  |  | 7.7 8.7 | Ma |
| $\left\lvert\, \begin{aligned} & 1483 \\ & 1484\end{aligned}\right.$ | 24476 | B 998 C 1666 Cr |  | 6198 | 17177.08 | 5355 | 196 | $24339^{\circ} \mathrm{O}$ |  | 396 | 11.1 10.9 | $\begin{array}{r}+\quad 21 \\ \hline+\quad 28 \\ \hline\end{array}$ |  |  |  |
| $\left\{\begin{array}{l} 1484 \\ 1485 \end{array}\right\}$ | 29552 | C 1666 C 1667 | 293 295 |  | 1722.51 1723.30 | 6460 6460 | 231 231 | $292949 \cdot 3$ 29294791 | 060 060 | 408 | 10.9 10.9 | $+\quad 28$ $+\quad 28$ + | － | $7 \cdot 8$ | A 2 |
| 1486 | 27501 | C 168 | 299 |  | 31733.94 | $+3.5976$ | ＋．0215 |  |  |  | 11.1 |  |  | 8.7 | A |
| ${ }^{4} 487$ | 26547 | ${ }^{\text {C }} 1669$ |  | 6206 | 1735.33 |  | 208 | 26 <br> 19 <br> 19 <br> +9 | 047 | 401 | 11－2 | ＋ 26 |  | 8.7 |  |
| I488 | 26548 | C 1670 |  | 6210 | $174{ }^{1.88}$ | 5804 | 210 | $263+48 \cdot 3$ | 039 | 402 | 11.0 | － 13 |  | $7 \cdot 28$ | A 2 |
| 1489 | 31592 | L 1258 | 301 |  | 17 52．2I | 6987 | 9 | 3139177.7 | 028 | 415 | 11.8 | $+$ | －${ }_{-42}^{2}$ | ${ }^{9.4}$ |  |
| ${ }^{1490}$ | 30535 | L 1279 |  | 6208－9 | 1752.08 | 6747 | ${ }^{2} 4^{\circ}$ | 303949.2 | 028 | ${ }^{12}$ | 10.6 |  | 42 | $7 \cdot 46$ |  |
| ${ }^{1491}$ | 29555 | C 1672 | 305 | $6215-6$ | 31759.45 | ＋．3．6620 | ＋．0236 | 3076.8 | ＋13．020 | 411 | 11.6 |  | － 21 | $8 .+1$ | A |
| ${ }^{1492}$ | 26550 | $\mathrm{C}^{\text {C } 1673}$ | 309－10 | 6222 | 188.34 | 5924 | 214 | $27+53.8$ | 13.010 | 402 | 12.6 |  | －$\quad 33$ | 8.5 |  |
| ז 1493 |  | C 1674 B 1004 |  |  | 18 18 18 188.63 58.15 |  | 232 195 |  |  | 411 | $111 \cdot 6$ | － 42 | $\begin{array}{r}1 \\ \hline\end{array}$ | 9.7 9.4 |  |
| ＋1494 | 24 24 2488 488 | B 1004 B 1005 | 328 330 | 6245 | 18 $1888 \cdot 15$ 189 | ${ }_{5353}$ | 195 195 | $\begin{array}{lllllllllll}24 & 28 & 43 \cdot 8 \\ 24 & 24 & 21 \cdot 3\end{array}$ | 954 953 | 399 399 | 22， $11 \cdot$ | $+\quad 35$ <br> $+\quad 10$ | ＋${ }^{4}$ | ${ }_{5}^{9.66}$ | K 。 |
| 1496 | 30538 | L 1290 | 327 |  | $\begin{array}{lll}3 & 19 & 6 \cdot 26\end{array}$ | ＋3．6878 | ＋．0243 | $31 \quad 520.3$ | ＋12．946 | 417 | 13.1 |  | 16 | 8.7 | A 2 |
| 1497 | 27505 | ${ }^{\text {C }} 1677$ | 332 |  | 19 10．72 | 6066 | 218 | 2737 23．0 | $94^{\circ}$ | 404 | 29 | ＋ | ＋ 25 |  |  |
| ${ }^{1498}$ | 28526 | C 1679 | 334 | $6254-5$ | 19 21：75 | 6233 | 222 | $28 \quad 20 \quad 7 \cdot 6$ | 928 | 411 | 11.0 |  | － 55 | 6.99 | A 0 |
| 1499 | 28529 | C 1680 | 344 | 6258－60 | 1934.41 | 6255 | 22 | 282355.3 | 914 | 411 | 11.7 |  | ＋ 8 | 9.4 |  |
| 1500 | 24484 | C 1.682 | 351 |  | $1941^{1 / 24}$ | 5520 | 199 | $25 \quad 7 \quad 15 \cdot 1$ | 907 | 401 | 11.5 | 15 | 23 | 9.5 |  |



| No. | B. D. | A.G.C. | W.B. (z). | Lalande. | R.A. $1910 \times 0$. | Precession. | Sec. Var. | Dec. 19100. | Procossion. | Scc. Var. | $\begin{aligned} & \text { Epeoh } \\ & \text { igoot } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{8.0001 .}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.०ot. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | s | s | - , " | " | " |  |  |  |  |  |
| 1551 | 27526 | C 1744 | 564 | 6578 | 32958.75 | $+3.6255$ | +.0208 | $27 \quad 32 \quad 58 \cdot 5$ | +12.204 | 422 | 11.2 | + 18 | $4^{6}$ | 8.7 | A 3 |
| 1552 | 31619 | LI 1355 | 559-60 | 6572-3-4 | $30 \quad 1.70$ | 7193 | 236 | $\begin{array}{lllllllllllll}31 & 22 & 48 \cdot 9\end{array}$ | 201 | 435 | 10.6 | + 43 | - 20 | $6 \cdot 83$ | Fo |
| 1553 | 27529 | C 1747 | 574 | 6594-6632 | $3037 \cdot 79$ | 6208 | 206 | $\begin{array}{llllllllll}27 & 17 & 38 \cdot 9\end{array}$ | 159 | 422 | 12.0 | + 45 | + 5 | 8.1 | K o |
| 1554 | 29579 | C 1746 | 572-3 | 6591-2 | $3039 \cdot 35$ | 6782 | 222 | $2941 \quad 5 \cdot 2$ | 158 | 431 | $11 \cdot 1$ | + 3 | - 22 | $7 \cdot 76$ | A 0 |
| 1555 | 26579 | C 1749 |  |  | $3042 \cdot 10$ | 6150 | 204 | $27 \quad 2{ }^{2} 42 \cdot \mathrm{I}$ | 155 | 421 | 12.2 | 24 | 41 | $9 \cdot 2$ |  |
| 1556 | $28 \quad 547$ | C 1750 | 578 |  | 33050.05 | $+3 \cdot 6537$ | 0216 | $28 \quad 39$ 50.4 | +12.145 | 429 | 12.0 | + 12 | - 59 | 8.2 | F 8 |
| 1557 | 31621 | LI 1358 | 577 | 6596 | $3056 \cdot 48$ | 7302 | 238 | 314345.9 | 138 | 437 | 12.7 | + 28 | - 50 | 8.8 | F 5 |
| 1558 | 24512 | C 1751 |  |  | $3057 \cdot 37$ | 5707 | 192 | $\begin{array}{llll}25 & 6 & 2 \cdot 2\end{array}$ | 137 | 420 | 12.9 | + 16 | - 32 | $9 \cdot 21$ | Fo |
| 1559 | 30556 | L 1359 |  | 6607-2 1 | 311 1-17 | 7061 | 230 | $30 \quad 4635 \cdot 5$ | 133 | 435 | 12.5 | - 36 | - 20 | 8.5 | F 0 |
| ${ }^{1} 560$ | $28 \quad 548$ | C 1753 | 586 |  | $31 \quad 9 \cdot 17$ | 6607 | 218 | $285534 \cdot 0$ | 123 | 430 | 11.3 | + 37 | + | $6 \cdot 63$ | A 5 |
| ${ }_{1} 561$ | 30557 | $\mathrm{L}_{1} 362$ | 596-7 | 6618-9 | 33132.49 | $+3.7085$ | +.0230 | $304941 \cdot 2$ | +12.097 | -437 | $9 * 9$ | - 14 | - $4^{2}$ | $8 \cdot 0$ | G 5 |
| 1562 | 25580 | C 1758 | 607 | 6638 | 3145.94 | 5858 | 194 | 25422.6 | 080 | 421 | 10.2 | + 188 | - 259 | $8 \cdot 1$ | Go |
| 1563 | 30558 | ${ }_{\text {L }} 1365$ | 608-9 | $6636-7$ | 3154.13 | 7091 | 230 | $30 \quad 49 \quad 23.2$ | 071 | 437 | 10.5 | - 113 | + 30 | $7 \cdot 01$ | F 5 |
| ${ }_{1564}$ | 24520 | B 1073 | 615 |  | 3158.03 | 5546 | 185 | $24 \quad 18 \quad 38.4$ | 066 | 418 | II•1 | - 10 | + 15 | $8 \cdot 6$ | A 2 |
| I565 | 31625 | L 1366 | 610 |  | 3158.91 | 7220 | 234 |  | 065 | 438 | $10 \cdot 6$ | 13 | + 8 | $9 \cdot 2$ |  |
| 1566 | $27 \quad 534$ | $\mathrm{C}^{\mathrm{C}} 1760$ | 614 |  | $\begin{array}{llll}3 & 32 & 3.87\end{array}$ | $+3 \cdot 6436$ | $+.0210$ | $28 \quad 843 \cdot 3$ | +12.059 | -431 | 10.8 | - 8 | 12 | $9 \cdot 1$ |  |
| 1567. | 27537 | C i761 | 635 |  | $\begin{array}{lll}33 & 3 & 55\end{array}$ | 6437 | 209 | $28 \quad 4 \quad 21 \cdot 7$ | $11 \cdot 989$ | 433 | $10 \cdot 8$ | - | - | $9 \cdot 1$ |  |
| 1568 | 24523 | B 1079 | 640 | 6667 | 3315.03 | 5566 | 185 |  | 977 | 421 | 9.5 | - 12 | - 15 | $8 \cdot 5$ | Fo |
| 1569 | 24524 | C 1763 |  |  | $3317 \cdot 79$ | 5759 | 190 | $\begin{array}{llll}25 & 9 & 25 \cdot 9\end{array}$ | 973 | 423 | 11.3 | + 22 | - 4 | $9 \cdot 41$ | Go |
| 1570 | 27540 | C 1765 |  |  | 3342.84 | 6351 | 206 | $273947 \cdot 6$ | 944 | 428 | 12.3 | 0 | + 4 | $8 \cdot 9$ | A 0 |
| 1571 | $2+526$ | C 1766 | 648 |  | $33345 \cdot 33$ | +3.5699 | +.0188 | 245148.6 | +11.94 ${ }^{1}$ | 424 | 11.6 | + 8 | + 10 | $8 \cdot 9$ | A 3 |
| 1572 | 24527 | B 1083 | 649-50 | 6677 | $3345 \cdot 46$ | 5597 | 184 | $\begin{array}{llll}24 & 24 & 37 \cdot 2\end{array}$ | 941 | 422. | 8.9 | + 23 | - 63 | $7 \cdot 06$ | A 0 |
| 1573 | 26589 | C 1770 |  |  | $34 \quad 2 \cdot 56$ | 6095 | 198 |  | 920 | 428 | 12.9 | + | - 4 | 9.4 |  |
| 1574 | 28556 | ${ }_{C}^{C} 1769$ | 651-2 | 6684 | 34 4.12 | 6720 | 216 | $29 \quad 933 \cdot 5$ | 919 | 435 | 12.3 | - 2 | - 13 |  |  |
| I 575 | 25584 | C 1772 |  |  | $34+95$ | 5928 | 193 | $25 ; 04.5$ | 918 | 427 | 13.1 | - | 22 | $8 \cdot 95$ | Go |
| 1576 | 26590 | $\mathrm{C}_{1} 1771$ | 653 | 6688 | $\begin{array}{llll}3 & 34 & 5 \cdot 87\end{array}$ | $+3.6184$ | 0201 | $265546 \cdot 4$ | +11.917 | 429 | $2 \cdot 6$ | + 47 | - 36 | $8 \cdot 7$ |  |
| 1577 | 27542 | C 1773 |  |  | $3411 \cdot 70$ | 6313 | 204 | $\begin{array}{llll}27 & 28 & 0.9\end{array}$ | 910 | 428 | 12.9 | + 19 | - 13 | $8 \cdot 8$ | A |
| 1578 | 26591 | C 1774 |  | 6689 | 3415.85 | 6114 | 198 | 263711.9 | 905 | 429 | 13.3 | + 17 | - 6 | 9.4 |  |
| 1579 | 31629 | L 1375 |  |  | 3418.53 | 7350 | 235 |  | 902 | 443 | 13.3 | - 5 | - 21 | $9 \cdot 1$ |  |
| 1580 | $24 \quad 528$ | C 1777 | 671 |  | 3428.77 | 5720 | 187 | $245413 \cdot 1$ | 890 | 425 | 13.3 | + 15 | - 1 | 9.2 | A 2 |
| 1581 | 26595 | C 1780 | 677 | 6701-2 | $33443 \cdot 26$ | $+3.6134$ | +.0199 | 26 40 13.6 | +11.873 | 429 | 13.7 | + 115 | - 96 | 9-1 |  |
| 1582 | 26596 | $\mathrm{C}_{1782}$ | 680 | $6710-1$ | 3448.02 | 6117 | 198 | 263545.0 | 868 | 429 | $11 \cdot 9$ | + 5 | + 14 | $8 \cdot 5$ |  |
| 1583 | 29589 | C 1781 | 679 | 6699-700 | 3448.91 | 6759 | 216 |  | 866 | 437 | 14.1 | + 4 | - 22 | $9 \cdot 4$ |  |
| 1584 | 26597 | ${ }^{\text {C } 1784}$ | 682 | 6712 | $3450 \cdot 93$ | 6109 | 198 | 263325.4 | 864 | 429 | 12.8 | + 10 | - 14 | $9 \cdot 1$ |  |
| 1585 | 29590 | C 1783 |  | 6704 | $3451 \cdot 42$ | 6861 | 219 | $293952 \cdot 5$ | 864 | $43^{8}$ | 13.9 | + 29 | 12 | $9 \cdot 2$ |  |
| 1586 | $28 \quad 560$ | C 1785 |  |  | 33459.55 | +3.6539 | +.0209 | $28 \quad 2045 \cdot 5$ | +11.853 | -436 | 13.0 |  | 24 | $8 \cdot 5$ |  |
| 1587 | $28 \quad 562$ | C 1787 | 687 $686-8$ |  | $\begin{array}{ll}35 & 8.37\end{array}$ | 6575 | 210 | $28 \quad 2853.0$ | 844 | 436 | 12.4 | a $+\quad 38$ $+\quad 38$ | - 40 | 6.86 | A 0 |
| 1588 | 28 61 |  | 686-8 |  | $\begin{array}{lll}35 & 8.65\end{array}$ | 6575 | 10 | $\cdots 28 \quad 28 \quad 59.4$ | 843 | 436 | 12.7 | $\begin{array}{r} \\ +\quad 38 \\ \hline\end{array}$ | - 40 |  |  |
| 1589 | 28561 | C 1786 |  | 6717 | $\begin{array}{llll}35 & 8.73\end{array}$ | 6742 | 16 | $\begin{array}{lllllllllllll}29 & 9 & 49.5\end{array}$ | 843 | 436 | 13.7 | 28 | - 19 | 9.4 |  |
| 1590 | 31630 | L I 380 | 684-5 |  | $3512 \cdot 13$ | 7344 | 232 |  | 839 | 444 | 12.9 | + 6 | 109 | $8 \cdot 6$ | K o |
| 1591 | 24529 | C 1788 | 700-2 | 6732 | $\begin{array}{llll}3 & 35 & 23.57\end{array}$ | $+3.5766$ | +.0188 | $\begin{array}{llll}25 & 2 & 20.5\end{array}$ | +11.825 | - 426 | 12•1,12•5 | + 11 | - 15* | 6:15 | A 0 |
| 1592 | 31632 | L I 381 |  |  | $35 \quad 23.74$ | 7424 | 235 | $314942 \cdot 4$ | 825 | 445 | 13.1 | + 7 | $-{ }^{42}$ | $8 \cdot 6$ |  |
| 1593 | 25589 | C 1789 |  |  | $35 \quad 30 \cdot 68$ | 5897 | 191 | $253558 \cdot 7$ | 817 | 428 | 12.9 | - 27 | + 4 | $9 \cdot 4$ | K 2 |
| 1594 | 24530 | C 1790 | 703 |  | 3535.05 | 5800 | 188 | 25 10 28.8 | 812 | 427 | 13.4 | + 4 | - 12 | 9.01 | 1 A O |
| 1595 | 29592 | C 1791 | 704 | 6736-7-8 | $3546 \cdot 37$ | 6767 | 215 | $2913 \quad 2 \cdot 2$ | 799 | 438 | 12.6 | 19 | - 67 | 8.8 | G 5 |
| 1596 | $28 \quad 563$ | C 1792 |  |  | 33547.54 | $+3.6530$ | $+.0207$ | $\begin{array}{llll}28 & 14 & 46.9\end{array}$ | +11.797 | 437 | 13.3 | - 32 | + 126 |  |  |
| 1597 | $28 \quad 564$ | C 1793 | 705-6 | 6739 | $3548 \cdot 28$ | 6571 | 208 | $\begin{array}{llll}28 & 24 & 48 \cdot 2\end{array}$ | 796 | 437 | 10-1 | - 12 | + 23 | $6 \cdot 89$ | $9 \quad \mathrm{~B} 9$ |
| ${ }^{1} 598$ | 24532 | B 1094 |  |  | 3551.07 | 5673 | 185 | ${ }^{2} 436610 \cdot 8$ | 793 | 426 | 12.5 | + 5 | - 10 | $9 \cdot 1$ | G o |
| 1599 | 24533 | B 1096 | 709 | 6743 | 3555.96 | 5701 | 185 | $\begin{array}{llll}24 & 43 & 4 \cdot 3\end{array}$ | 787 | 426 | II•3 | +13 | + 6 | $8 \cdot 3$ | $\mathrm{K}_{2}$ |
| 1600 | 24534 | C 1796 | 713 | 6758 | 3618.62 | 5791 | 188 | $25+52 \cdot 7$ | 760 | 428 | 8 II•5 | + 11 | + | $8 \cdot 06$ | 6 K 2 |

[^14]| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Preeession. | See. Var. | Dee. 19100. | Precession. | See. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { igoot } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s.000I. } \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ".oor. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | s | $s$ | - , " |  | " |  |  |  |  |  |
| 1601 | 31637 | L 1387 | 720 |  | $\begin{array}{llll}3 & 36 & 38.81\end{array}$ | $+3.7335$ | +.0231 | 312319.2 | +11.737 | - 446 | 10.6 | + 21 | $-4^{6}$ | $8 \cdot 7$ |  |
| 16 | 27550 | C 1797 | 726 |  | $3640 \cdot 87$ | 6491 | 206 | $\begin{array}{llll}28 & 1 & 7 \cdot 2\end{array}$ | 734 | 439 | $10 \cdot 2$ | $+$ | $+\quad 3$ | $8 \cdot 2$ | K |
| 1603 | 28567 | C 1798 | 725 | 6769-70 | $\begin{array}{ll}36 & 42 \cdot 48\end{array}$ | 6765 | 213 | $\begin{array}{lllll}29 & 8 & 11.4\end{array}$ | 732 | 439 | $12 \cdot 5$ | + $4^{2}$ | - 26 | $8 \cdot 9$ |  |
| 1604 | 26601 | C 1801 | 733 | 6779 | $\begin{array}{lll}37 & 3 \cdot 77\end{array}$ | 6083 | 194 | $26178 \cdot 0$ | 707 | +33 | 12.3 | + 59 | - $4^{2}$ | $7 \cdot 8$ | K O |
| 1605 | 28569 | C 1803 |  |  | $3715 \cdot 78$ | $6 ; 85$ | 208 | $28 \quad 2140 \cdot 7$ | 693 | $44^{\circ}$ | 13.3 | + 29 | + 24 | $9 \cdot 4$ |  |
| 16 | 31 639 | L 1394 | 737 |  | $\begin{array}{llll}3 & 3721.94\end{array}$ | +3.7344 | +.0230 | 3121515 | +11.686 | -447 | 12.8 | + 33 | + 35 | 9.1 | K 2 |
| 1607 | 29597 | C 1805 | 739 | 6790 | $3728 \cdot 47$ | 6973 | 218 | $295425^{\circ} \mathrm{O}$ | 679 | +43 | $11 \cdot 6$, | + $14^{6}$ | - 159 | $8 \cdot 7$ | G 5 |
| 1608 | $2+536$ | B IIO+ |  |  | $3733 \cdot 76$ | 5610 | 181 | $241226 \cdot 1$ | 673 | 428 | 12.4 | + 15 | - 45 | 9.5 | F 8 |
| 1609 | 25593 | ${ }_{\text {C }} 1806$ | 752-3-4 | 6806-7 | 3743.02 | 5885 | 188 | $\begin{array}{lllll}25 & 23 & 42 \cdot 9\end{array}$ | 661 | 43 I | $10 \cdot 3$ | - $4^{6}$ | - 3 | 7.11 | F; |
| 1610 | 26604 | C 1810 |  |  | $38 \quad 8.02$ | 6097 | 193 | $\begin{array}{llll}26 & 16 & 9 \cdot 3\end{array}$ | 631 | 434 | 13.4 | - I | + 9 | 9.4 |  |
| 1611 | 25598 | $\mathrm{C}_{1811}$ |  |  | 3 38 <br> 1 $+59$ | $+3.5998$ | +.0190 | $255025 \cdot 7$ | +11.618 | - 434 | 12.6 | 40 | 6 | 8.6 | K o |
| I6 | 25597 | C 1812 | 761 | 6826-7 | $381+83$ | 5915 | 188 | $25 \quad 2976$ | 618 | +32 | 12.8 | + 21 | + | $8 \cdot 5$ | F 8 |
| 1613 | $2+537$ | B 1106 | 767 |  | $38 \quad 20.48$ | 5757 | 184 | $244746 \cdot 8$ | 617 | 430 | 13.1 | + 14 | - 78 | $7 \cdot 46$ | ${ }^{1} 2$ |
| ${ }_{161}{ }^{16}$ | 25599 | C 1813 |  | 6833 | $3820 \cdot 80$ | 6060 | 192 | $26 \quad 545 \cdot 3$ | 616 | 434 | 14.1 | - 23 | 6 | $7 \cdot 53$ | K o |
| 1615 | 23495 | B 1107 | 768-70 |  | $38 \quad 22.03$ | 5595 | 180 | $24-5 \quad 24 \cdot 6$ | 615 | $4^{28}$ | 13.8 | + | - 37 | $8 \cdot 5$ | 15 |
| 1616 | 29602 | ${ }_{\text {C }} 1814$ | 762 |  | 338 <br> 3 | $+3.6832$ | $+.0213$ | $\begin{array}{llll}29 & 16 & 40 \cdot 2\end{array}$ | $+11.612$ | - 443 | 13.5 | - $\quad 2$ | + 17 | 9.4 |  |
| 1617 | 29603 | C 1815 | 763-4 | 6828 | 3825.31 | 6863 | 214 | 2923 52•1 | 611 | 443 | 14.1 | - | - II | $8 \cdot 7$ | B 9 |
| 1618 | 24539 | C 1817 |  |  | $38 \quad 27 \cdot{ }^{8}$ | 5798 | 185 | ${ }^{2}+59464$ | 609 | 43 I | 13.0 | + 27 | - 9 | $9 \cdot 4$ |  |
| 1619 | 25600 | C 1818 | 778 | 6840-1 | $38 \quad 28.77$ | 5909 | 188 | $25 \quad 2631 \cdot 9$ | 609 | 432 | 12.1 | + 44 | - 122 | $8 \cdot 5$ | G o |
| 1620 | 31641 | L. 1399 |  |  | 3830.04 | 749 s | 232 | 315011.9 | 605 | 450 | 14.4 | - 15 | - |  |  |
| 1621 | 31641 |  |  |  | $33830 \cdot 70$ | +3.7491 | $+.0232$ | 31503.5 | +11.605 | -450 | 14.9 | - 15 | 8 |  |  |
| 16 | 26607 | C 1819 | 783 |  | $3837 \cdot 51$ | 6311 | 199 | $27 \quad 7 \quad 59 \cdot 5$ | 596 | 434 | 13.0 | 10 | + 35 | $8 \cdot 3$ | K ; |
| 1623 | 25601 | C 1820 | 784 |  | $\begin{array}{lll}38 & 37 \cdot 69\end{array}$ | 5948 | 189 | $25 \quad 35 \quad 52 \cdot 8$ | 596 | $+33$ | 12.5 | - 24 | - 36 | $8 \cdot \mathrm{I}$ | K |
| 1624 | ${ }^{2} 4540$ | B 1112 |  | 6853 | $\begin{array}{llll}38 & 38 \cdot 68\end{array}$ | 5641 | 180 | $24 \quad 16 \quad 22.9$ | 595 | 429 | 13.8 | + 18 | - 47 | $8 \cdot 1$ | A 2 |
| 1625 | 27555 | C 1821 | 790 |  | 3854.49 | 6;08 | 204 | $\begin{array}{lllllllllllll}27 & 5 & 23.9\end{array}$ | 577 | 437 | 12.7 | $+52$ | - 52 | $8 \cdot 7$ |  |
| 1626 | 31643 | Li 1401 |  |  | $33855 \cdot 63$ | $+3.7510$ | +.0232 | $3152+3 \cdot 8$ | +11.574 | - 452 | 12.2 | + 8 | - 27 | $8 \cdot 3$ |  |
| 16 | 24543 | B 1114 |  |  | $38 \quad 58.04$ | 5719 | 183 | $2435 \quad 26 \cdot 4$ | 572 | 431 | 12.5 | + 13 | $\bigcirc$ | $9 \cdot 2$ | K 2 |
| 16 | 23504 | B 1116 | 796-7 |  | $39+39$ | 5611 | 179 | $24 \quad 6+2 \cdot 2$ | 565 | 429 | 13.9 | + 20 | - 46 | 8.9 | A; |
| 1629 | 29606 | C 1822 |  | 6860 | $\begin{array}{lll}39 & 7 \cdot 60\end{array}$ | 6912 | $2 \mathrm{I}+$ | $\begin{array}{llll}29 & 32 \quad 19.4\end{array}$ | 560 | 445 | 13.9 | - 27 | - 36 | $8 \cdot 3$ | A 0 |
| 1630 | 27556 | C 1823 | 793-4 | 6862 | 39 8.74 | 6437 | 202 | $273655 \cdot 1$ | 559 | 436 | 13.9 | 34 | - 64 | $6 \cdot 71$ | Fo |
| 1631 | 27558 | ${ }_{C}^{C 1824}$ | 798-9 | 6865 | 33915.10 | $+3 \cdot 6445$ | $+\cdot 0201$ |  | +II.552 | --439 | 13.7 | + 86 | 121 | ${ }^{7} \cdot 02$ | Go |
| 1632 | 29607 | C 1825 |  | 6864 | 3917.45 | 6994 | 216 | $\begin{array}{lll}29 & 51 & 8.5\end{array}$ | 549 | 446 | 14.5 | + 12 | - 13 | 8.1 | A 0 |
| 1633 | 23505 | B 1119 | 806-7 | 6875 | 3927.09 | 5592 | 178 | 24025.5 | 537 | 429 | 13.2 | + 14* | - $55 *$ | $5 \cdot 43$ | B 5 |
| 1634 | 27559 | C 1826 |  |  | $3927 \cdot 64$ | 6358 | 198 | $27 \quad 15 \quad 54.6$ | 536 | 439 | 14.7 | $+$ | - 10 | $8 \cdot 9$ |  |
| 1635 | 30-68 | LI 403 |  |  | $3930 \cdot 37$ | $7^{2} 44$ | 223 | $304^{8} \quad 4^{1 \cdot 3}$ | 534 | 450 | 13.2 | 29 | - | $9 \cdot 4$ |  |
| 1636 | 29609 | C 1827 | 805 |  | $33933 \cdot \mathbf{2 2}$ | $+3.6871$ | +.0211 | $\begin{array}{llll}29 & 20 & 39.2 \\ 29 & 30\end{array}$ | +11.530 | -. 445 | 13.5 | 10 $+\quad 12 *$ | 5 | 9.4 |  |
| 1637 | ${ }^{2} 454{ }^{6}$ | B 1128 |  | 6883 | $3947 \cdot 40$ | 5724 | 181 | 243326.7 | 513 | 431 | 13.8 | $+12^{*}$ | - 55 | $5 \cdot 63$ | B 8 |
| 1638 | 26608 | C 1828 |  |  | $3948 \cdot 22$ | 6206 | 194 |  | 512 | 437 | 11.9 |  |  | $8 \cdot 7$ | A 5 |
| 1639 | 24547 | B 1129 | 814 |  | $3950 \cdot 88$ | 5639 | 179 | 24.1175 | 509 | 431 | 14.9 | + 8* | - $4^{8 *}$ | $4 \cdot 37$ | B 5 |
| 1640 | 28575 | C 1829 |  | 6882 | $3956 \cdot 76$ | 6640 | 206 | $28 \quad 2314.9$ | 502 | 444 | 11.9 | 30 | - 36 | 8.0 | A 2 |
| 1641 | $24 \quad 548$ | B 1132 |  |  | 33958.29 | $+3.5746$ | +.0182 | $24 \quad 38 \quad 25.9$ | +II.500 | $-432$ | 14.1 | + $4^{1}$ | - 43 | $9 \cdot 2$ | F 5 |
| 1642 | 27561 | C 1830 | 815-6 |  | 40 2.28 | 6527 | 203 | 27 55 15 $5^{\prime}$ <br> 25    | 496 | +41 | 13.2 |  | + 27 | 8.0 | A 0 |
| $16+3$ | 25607 | C 1831 |  | 6897 | $40 \quad 8.85$ | 5909 | 186 | $2519+5 \cdot 5$ | 487 | 434 | 12.9 | - 6 | - 43 | $8 \cdot 66$ | F o |
| $16+4$ | 31646 | L 1406 |  |  | 40.9 .50 | 7498 | 230 | 31444.2 | +86 | +53 | 14.4 | $+30$ | + 21 | $9 \cdot 4$ |  |
| 1645 | 24550 | В 1136 |  |  | 4012.93 | 5644 | 179 | $24 \quad 1055 \cdot 8$ | $4^{82}$ | 432 | $1{ }^{4} 2$ | + 62 | - 56 | $9 \cdot 1$ | A 2 |
| 1646 | 23512 | B 1138 | 824-5 |  | $34^{0} 16.41$ | $+3.5616$ | +.0178 | $\begin{array}{llll}24 & 3 & 16.9\end{array}$ | +11.479 | - +31 | 11.5 | + 33 | - 41 | 8.2 | B 9 |
| 1647 | 23513 | B 1140 |  |  | 4020.06 | 5606 | 178 | $24 \quad 0 \quad 28.6$ | 474 | 431 | 14.3 |  | - 29 | $9 \cdot 4$ |  |
| 1648 | 28579 | C 1835 | 826 |  | $4025 \cdot 58$ | 6670 | 206 | $\begin{array}{llll}28 & 28 & 19.4\end{array}$ | 467 | 445 | 13.9 | + 2 | - 26 | $9 \cdot 1$ |  |
| $16+9$ | 23516 | B 1142 | 829-30 | 6911 | 4028.07 | 5626 | 179 |  | 464 | 431 | 11.7 | 2I* | - $45^{*}$ | 4.02 | B 5 |
| 1650 | 24553 | B 1145 | 835 |  | $4032 \cdot 65$ | 5670 | 178 | $24 \quad 16 \quad 26.4$ | 458 | 432 | 13.2 | + 12* | - 4 I $^{*}$ | $5 \cdot 85$ | B 8 |


| No. | B. D . | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dee. 1910.0. | Precession. | $\begin{aligned} & \text { Sec. } \\ & \text { Var. } \end{aligned}$ | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. | $\begin{aligned} & \text { Dec. } \\ & \text { N.ooi. } \end{aligned}$ |  |  |
|  |  |  |  |  | h m s | 8 | s | - " |  |  |  |  |  |  |  |
| 1651 | 25611 | C 1836 | 832 |  | $34034 \cdot 31$ | +3.6025 | +-0189 | $254743 \cdot 0$ | +11.457 | -437 | 12.5 | 9 | - 19 | $8 \cdot 6$ | K 5 |
| 1652 | 24554 | C 1838 |  | 6915 | $4035 \cdot 43$ | 5866 | 185 | $25 \quad 7 \quad 6 \cdot 1$ | 456 | 434 | 12.7 | - 5 | - 30 | $8 \cdot 06$ | A 0 |
| 1653 | 25612 |  | 836 |  | $4036 \cdot 50$ | 6001 | 188 | 25 41 $27 \cdot 8$ | 454 | 436 | 13.9 | - 7 | - | $8 \cdot 7$ | K 0 |
| 1654 | 28580 | C 1837 | 831 |  | 4038.39 | 6700 | 207 | $28 \quad 3441 \cdot 9$ | 453 | 445 | 12.9 | + 21 | $+\quad 29$ | $5 \cdot 6$ | K o |
| I655 | 24556 | B 1147 | 838 |  | $4040 \cdot 99$ | 5666 | 178 | $2414 \quad 52 \cdot 2$ | 449 | 432 | 12.5 | - 7 | - 22 | $6 \cdot 46$ | B 9 |
| 1656 | 31647 | L 1407 |  |  | $34^{\circ}+4 \cdot 64$ | $+3.7575$ | +.0232 |  | + I1.444 | 454 | 12.5 | + 20 | 35 | $9 \cdot 4$ |  |
| I657 | 29616 | ${ }^{\text {C }} 1840$ | 840 | 6919-20 | 4052.90 | 6908 | 211 | 2923 31.8 | 435 | 447 | 12.8 | - 2 | 38 | $8 \cdot 5$ | B 9 |
| 1658 | 27562 | ${ }^{\text {C } 1841}$ |  |  | $4054 \cdot 61$ | 6438 | 198 | $272942 \cdot 0$ | 432 | 441 | 11.7 |  |  | $9 \cdot 4$ | B 9 |
| 1659 | 25615 | $\mathrm{C}_{18} \mathrm{l}^{2}$ | 850 |  | $4110 \cdot 11$ | 5980 | 186 | $25 \quad 33 \quad 52 \cdot 3$ | $4^{1} 4$ | 437 | 10.6 | 44 | - 67 | $8 \cdot 7$ | A 0 |
| 1660 | $28 \quad 582$ | C 1843 | 852 |  | 4126.84 | 6670 | 205 | $\begin{array}{lllllllllll}28 & 24 & 3\end{array}$ | 394 | 446 | 12. | + 44 | - 31 | $8 \cdot 7$ | A 0 |
| 1661 | 25616 | C 1844 | 855 | 6940 | $34^{11} 32 \cdot 69$ | $+3.5937$ | +.0185 | 252122.9 | +11.387 | 436 | 12.4 | 18 | - 52 | 9.2 | M a |
| 1662 | 24562 | B 1160 | 857 |  | $4137 \cdot{ }^{2}$ | 5679 | 178 | $24.1430 \cdot 3$ | 382 | 434 | $9 \cdot 3$ | 26 | - 26 | 6.68 | B 9 |
| 1663 | 24563 | B 1161 |  |  | 4140.93 | 5749 | 180 | 243229.5 | 377 | 434 | 12.7 | + 15 | - 38 | 8.6 | A 2 |
| 1664 | 29618 | C 1845 |  |  | $4141 \cdot 18$ | 7044 | 214 | $2952 \quad 12.8$ | 377 | 450 | 13.5 |  |  | $9 \cdot 2$ |  |
| r665 | 29620 | C 1846 | 858 | 6943 | 4151.94 | 6978 | 212 | 293549.0 | 364 | 449 | $1 \mathrm{I} \cdot 3$ | 20 | - 8 | $8 \cdot 5$ | B 8 |
| 1666 | 24566 | B 1170 |  |  | $342 \begin{array}{lll}3 & 1.91\end{array}$ | +3.5701 | $+\cdot 0178$ | $2418 \quad 38.6$ | +11.352 | 434 | 12.5 | + 33 | 32 | $7 \cdot 29$ | A O |
| 1667 | 24567 | B 1172 |  |  | $\begin{array}{ll}42 & 4.33\end{array}$ | 5717 | 178 | $242247 \cdot 4$ | 349 | 434 | 14.1 | 20 | - 16 | 8.42 | A 0 |
| 1668 | 28585 | C 1847 | 862 |  | $42 \quad 6.93$ | 6861 | 209 | 29654.0 | 346 | 447 | 13.9 | $+\quad 37$ | - 29 | $9 \cdot 2$ |  |
| 1669 | 23540 | B 1176 | 866 |  | $42 \quad 7 \cdot 92$ | 5633 | 176 | $\begin{array}{lllll}24 & 0 & 38.8\end{array}$ | 345 | 433 | 14.1 | $+\quad 19$ | - $\mathbf{4}^{1}$ | $6 \cdot 81$ | B 9 |
| 1670 | 31650 | L1416 | 861 | 6953 | $\begin{array}{lll}42 & 9.85\end{array}$ | 7589 | 230 | $\begin{array}{llll}31 & 55 & 4.4\end{array}$ | $34^{2}$ | 457 | 12.4 | - 28 | - 36 | $6 \cdot 23$ | Go |
| 1671 | $24 \quad 568$ | ${ }^{\text {C } 1848}$ |  |  | $34^{2} 22.90$ | $+3 \cdot 5892$ | +-0183 | $\begin{array}{lll}25 & 6 & 31.0\end{array}$ | +11.327 | 436 | 12.3 | + 5 | - 66 | $8 \cdot 26$ | A 2 |
| 1672 | 28586 | C 1849 | 871 |  | 4229.50 | 6669 | 203 | 28 19 12.2 | 318 | 446 | 12.5 | + 6 | - 17 | $9 \cdot 2$ | B 9 |
| 1673 | 31651 | ${ }_{L} \mathrm{~L} 419$ |  |  | $4240 \cdot 72$ | 7462 | 228 |  | 305 | 456 | 12.4 | 23 | - 35 | $8 \cdot 9$ |  |
| 1674 | 24571 | B 1181 |  |  | $4243 \cdot 73$ | 5805 | 180 | $\begin{array}{llllllllll}24 & 42 & 41.8\end{array}$ | 301 | 436 | 10.7 | 25 | - 7 | $6 \cdot 77$ | K 5 |
| I 675 | 27567 | C1851 | 875-7 |  | $4244 \cdot{ }^{1}$ | 6444 | 196 | $27 \quad 23 \quad 23.4$ | 301 | 443 | 13.4 | 12 | - 52 | $8 \cdot 7$ | Ma |
| ${ }^{1} 676$ | 29621 | C 1850 | 874 | 6975 | $34244 \cdot 50$ | $+3.7013$ | $+.0212$ | $\begin{array}{lllll}29 & 40 & 12.7\end{array}$ | +11.300 | 450 | 13.1 | - $\quad 24$ | - 47 | 9.4 |  |
| 1677 | $\begin{array}{lll}31 & 652\end{array}$ | L 1420 | 873 |  | 4244.95 | 7539 | 229 | $31 \begin{array}{lll}31 & 41 & 9.8\end{array}$ | 300 | 456 | 11.7 | - 4 | - 44 | $8 \cdot 1$ 8.7 | A 3 |
| 1678 | 23549 | B 1183 |  |  | 4251.88 | 5651 | 176 | $\begin{array}{lllll}24 & 2 & 31 \cdot 7\end{array}$ | 292 | 435 | 12.1 | $\begin{array}{r}14 \\ +\quad 14 \\ \hline\end{array}$ | - 50 | $8 \cdot 7$ | A 3 |
| 1679 | 26617 | C. 1853 | 881 |  | $4252 \cdot 77$ | 6186 | 190 | 261843.0 | 290 | 440 | 11.3 | + $\quad 27$ | + 13 | $8 \cdot 1$ | K ${ }^{2}$ |
| 1680 | 30576 | L 1422 |  |  | $42 \quad 59.83$ | 7201 | 216 | 302249.4 | 282 | 453 | 12.7 | 5 | 32 | $8 \cdot 9$ |  |
| 1681 | 23553 | B 1187 |  | 6993 | $\begin{array}{lll}3 & 43 & 8.22\end{array}$ | $+3.5661$ | $+\cdot 0176$ | 24 4 II•I | $+11.272$ | 435 | 12.3 | + 12 | - 55 | $6 \cdot 56$ | A 0 |
| 1682 | 25619 | C 1854 |  |  | 4312.00 | +6120 | 188 | $\begin{array}{lll}26 & 1 & 0.8\end{array}$ | 268 | 441 | 13.3 | - 34 | + 23 | 8.7 | M a |
| 1683 | 25620 | C 1855 |  |  | 43 17.11 | 6004 | 185 | 253127.4 | 262 | 439 | 13.4 | - 4 | + 32 | $8 \cdot 7$ | B 9 |
| 1684 | 31654 | L 1423 |  |  | $43 \quad 23.95$ | 7528 | 227 | $313552 \cdot 0$ | 253 | 457 | 13.1 | 11 | + 31 | $9 \cdot 2$ |  |
| 1685 | 27569 | C 1856 | 889 |  | 4326.48 | 6554 | 199 | $\begin{array}{lllllllll}27 & 47 & 18.9\end{array}$ | 251 | 445 | 13.0 | + II | 17 | $9 \cdot 1$ | Go |
| 1686 | 31655 | L 1424 | 888 |  | $34327 \cdot 57$ | $+3.7634$ | +.0228 | 315919.3 | +11.248 | -459 | 12.5 | 9 | - 7 | $8 \cdot 2$ | B 9 |
| 1687 | 28592 | C 1857 |  |  | 43 33.16 | 6654 | 200 | $28119^{\circ} \mathrm{O}$ | 242 | 448 | 13.5 |  |  | $9 \cdot 1$ | A 0 |
| 1688 | 30577 | L 1426 | 892 |  | $4335 \cdot 72$ | 7333 | 219 | $30 \quad 5033.4$ | 239 | 456 | 12.9 |  |  | 8.9 |  |
| 1689 | 28593 | C 1858 |  |  | 43 53.88 | 6705 | 201 | 28 21 $56 \cdot 9$ | 217 | 449 | 12.4 | + 53 | $-230$ | $8 \cdot 9$ | G 5 |
| 1690 | 23560 | B 1201 |  |  | $4354 \cdot 75$ | 5685 | 176 | $\begin{array}{llll}24 & 7 & 18.5\end{array}$ | 216 | 436 | 10.6 | + 9 | 49 | 8.1 | A 0 |
| 1691 | 23 561 | B 1202 | 903 |  | 343 59.72 | $+3.5683$ | $+.0176$ | $24 \quad 6 \quad 24.4$ | +11.210 | 436 | 9.8 | $\bigcirc$ | 47 | 6.63 | B 9 |
| 1692 | 29629 | C 1859 | 904 |  | 4412.42 | 7016 | 210 | 293420.5 | 195 | 453 | 13.5 | - 6 | 11 | $9 \cdot 1$ |  |
| 1693 | 27571 | C 1860 |  |  | $44 \quad 12 \cdot 79$ | 6507 | 196 | 273231.4 | 194 | 447 | 13.8 | - 9 | 22 | $9 \cdot 4$ |  |
| 1694 | 23567 | B 1210 | 914 |  | $4434 \cdot 58$ | 5685 | 175 | $24 \quad 432.8$ | 167 | 437 | 10.8 | + 11 | 4 | $7 \cdot 34$ | A 0 |
| 1695 | 25623 | C 1865 |  |  | $4435 \cdot 39$ | 6083 | 184 | $254612 \cdot 7$ | 167 | $44^{2}$ | 13.0 | + 23 | - 25 | $9 \cdot 1$ | K 2 |
| 1696 | 29632 | C 1864 | $9^{11-2}$ | 7030 | $34436 \cdot 38$ | $+3.6971$ | +.0207 | 292214.8 | + I1.166 | -.452 | 10.1 | 15 | - 12 | $7 \cdot 9$ | A 0 |
| 1697 | 31658 | L 1436 |  |  | 44 49.29 | 7472 | 223 | $311649^{\circ}$ | 150 | 459 | 11.8 | 6 | - 41 | $8 \cdot 5$ | A 0 |
| 1698 | 24577 | B 1215 |  |  | 4453.09 | 5762 | 176 | $2423 \quad 36 \cdot 6$ | 145 | 438 | 11.9 | + 2 | 108* | $9 \cdot 4$ | Fo |
| 1699 | 25624 | C 1867 | 920 | 7050 | $4454 \cdot 14$ | 5978 | 182 | $\begin{array}{lllllllllllll}25 & 18 & 30.2\end{array}$ | 144 | 441 | 12.1 | + 29* | $-108^{*}$ | $5 \cdot 38$ | A 3 |
| 1700 | 29633 | C 1868 | 919 | 7044 | 4458.07 | 7004 | 208 | $29 \quad 28 \quad 17 \cdot 8$ | 139 | 453 | 11.7 | + 17 | + 7 | $8 \cdot 7$ | $\mathrm{A}_{2}$ |

[^15]|  |  |  |  |  |  |  |  |  |  |  |  | Annua | I.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precossion. |  | Dec. 19100 | Precession | Sec. Var. | Epoch 1900+ | $\underset{\text { R.000 I. }}{\text { R. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.OOI. } \end{aligned}$ | Mag. | Spectral Type. |
|  | $\bigcirc$ |  |  |  | h m s | $s$ | 5 | - | " | " |  |  |  |  |  |
| 1701 | 24578 | B1218 | 926 |  | $3 \quad 45 \quad 5 \cdot 69$ | $+3.5726$ | +.0175 | 2413 21.8 | +11.130 | - 438 | 11.4 | + 29 | - 23 | $7 \cdot 26$ | A 2 |
| 1702 | 30579 | L. 1438 |  |  | $45 \quad 16.64$ | 7254 | 215 | $\begin{array}{llll}30 & 25 & 7 \cdot 5\end{array}$ | II6 | 457 | II. 8 | - 39 | - 33 | $9 \cdot 4$ |  |
| 1703 | 31659 | L 1439 |  |  | 4519.04 | 7647 | 225 | $315351 \cdot 9$ | 114 | 462 | 12.5 | - 10 | - 29 | $8 \cdot 8$ | A 2 |
| 1704 | 26624 | C 1869 | 931 |  | 4519.56 | 6345 | 191 | $26 \quad 48 \quad 15 \cdot 1$ | 113 | 445 | $12 \cdot 3$ | 1 $+\quad 38$ | - 69 | $9 \cdot 4$ |  |
| 1705 | 29635 | C 1870 | 929-30 | 7057-8 | $45 \quad 24 \cdot 85$ | 6990 | 208 | $2923 \quad 4.9$ | 107 | 453 | I 1. 3 | - 18 | - 94 | $8 \cdot 2$ | F 8 |
| 1706 | 25627 | C 1874 | 943 | 7085 | 34553.46 | +3.6179 | +.0186 | 26459.0 | +11.073 | --444 | $10 \cdot 7$ | + 28 | + 25 | $8 \cdot 6$ | F 8 |
| 1707 | 24583 | C 1877 | 946 |  | $46 \quad 1.56$ | 5896 | 178 | $245330 \cdot 4$ | 062 | 442 | 12.0 | + 3 | - 4 | $6 \cdot 86$ | A 2 |
| 1708 | 24584 | B 1226 |  |  | $46 \quad 4.64$ | 5746 | 174 | 241453.7 | 059 | 440 | 12.5 | + 7 | - 47 | $9 \cdot 2$ | A 5 |
| 1709 | 25630 | C 1878 | 951 |  | $4620 \cdot 56$ | 6066 | 183 | $25 \quad 35 \quad 0.9$ | $039$ | 443 | 12.8 | - 75 | - II2 | $9 \cdot 4$ | G 5 |
| 1710 | $30 \quad 582$ | L 1450 | 948 | 7093-4 | $4627 \cdot 01$ | 7403 | 217 | $3053 \quad 56 \cdot 3$ | 031 | 461 | 11.4 | 12 | - 57 | $6 \cdot 22$ | A 3 |
| 1711 | $27 \quad 582$ | C1881 | 968 |  | $34^{6} \mathbf{2 9 . 7 2}$ | +3.6595 | +-0194 | $274439 \cdot 6$ | +11.028 | -. 450 | 13.7 | - 12 | - 30 | $9^{-1}$ |  |
| 1712 | 31660 | L I 451 |  |  | 4629.75 | 7631 | 224 | $314452 \cdot 6$ | 028 | 463 | 13.6 | + 92 | - 354 | 9. I | G 5 |
| 1713 | 27583 | C 1882 | 953 |  | 4631.63 | 6587 | 194 | $2742 \quad 26 \cdot 5$ | 025 | 450 | 13.5 | $+\quad 29$ | - 3 | 9. I |  |
| ${ }^{171} 4$ | 25631 | C 1883 | 954 | 7104 | 4631.65 | 6104 | 183 | $254346 \cdot 6$ | 025 | 445 | 13.1 | $+\quad 28$ $+\quad 1$ | - 34 | $8 \cdot 1$ | A o |
| 1715 | 29636 | C I884 | 95 |  | $4635 \cdot 22$ | 7001 | 205 | 292043.0 | 022 | 455 | I $2 \cdot 6$ | - 41 | - 145 | $8 \cdot 3$ | $G_{5}$ |
| 1716 | 24586 | C 1885 | 957 |  | $34636 \cdot 70$ | $+3 \cdot 5948$ | +.0178 | $\begin{array}{lll}25 & 4 & 15 \cdot 8\end{array}$ | +11.019 | -. 443 | 12.4 | + 20 | + 35 | 8.06 | K。 |
| 1717 | 31661 | LI 455 |  |  | $4638 \cdot 18$ | 7621 | 223 | $\begin{array}{llll}31 & 42 & 3 \cdot 3\end{array}$ | 018 | 463 | 13.7 | $+\quad 40$ | - 146 | $9 \cdot 1$ | F 8 |
| 1718 | 25632 | C 1887 |  | 7108 | $4644 \cdot 19$ | 6163 | 184 | $255741 \cdot 6$ | 011 | 445 | II.7 | - 40 | - 22 | $8 \cdot 2$ | A 2 |
| 1719 | 24587 | B1232 | 959 |  | $4648 \cdot 34$ | 5909 | 177 | 245349.5 | 006 | 442 | 10.2 | - 78 | - 156 | $6 \cdot 78$ | Go |
| 1720 | 27585 | C 1890 | 962 |  | $46 \quad 56 \cdot 92$ | 6633 | 193 | $275150 \cdot 2$ | $10 \cdot 995$ | 451 | $12 \cdot 3$ | + 21 | - 5 | 8.8 | K |
| 11721 | 26632 | C 1891 |  |  | $34710 \cdot 75$ | +3.6293 | $+.0187$ | $\begin{array}{llll}26 & 28 & 17 \cdot 9\end{array}$ | $+10.978$ | -. 447 | 13.5 | + 15 | + 13 | $8 \cdot 7$ |  |
| 1722 | 27586 | C 1893 |  |  | 4728.05 | 6490 | 191 | $\begin{array}{llll}27 & 15 & 19.2\end{array}$ | - 957 | 450 | 12.9 | 13 $+\quad 13$ | + 14 | 8.8 |  |
| 1723 | 24589 | B 1233 |  |  | $+730 \cdot 39$ | 5813 | $175$ | $2426 \quad 2.9$ | 955 | $44^{2}$ | 13.0 | 1 $+\quad 38$ | - 56 | $9 \cdot 23$ | F 8 |
| 1724 | 26633 | C 1894 |  |  | $4731 \cdot 30$ | 6284 | 186 | $262446 \cdot 8$ | 953 | 447 | 11.5 | + 87 | - 96 | $7 \cdot 98$ | G 0 |
| 1725 | 31664 | J. 1462 |  |  | $4735 \cdot 28$ | 7510 | 219 |  | 948 | 463 | $14^{\circ} 0$ | - 24 | - 17 | $9 \cdot 1$ |  |
| 1726 | 24590 | C 1896 |  |  | $34737 \cdot 15$ | $+3.5975$ | +.0178 | $\begin{array}{lll}25 & 7 & 20 \cdot 4\end{array}$ | $+10.946$ | - 444 | 13.8 | - 23 | - 8 | 9.01 | A 2 |
| 1727 | 25637 | C 1898 | 976-7 |  | $4742 \cdot 62$ | 6011 | 178 | $\begin{array}{llll}25 & 16 & 2.4\end{array}$ | $939$ | 444 | 12.8 | + 13 | - 17 | $8 \cdot 61$ | A 0 |
| 1728 | 27587 | C1899 | 978 |  | $4748 \cdot 96$ | 6622 | 193 | $2745 \quad 52 \cdot 2$ | 931 | 452 | I $2 \cdot 5$ | + 2 | - 22 | $8 \cdot 7$ | A 3 |
| 1729 | 30586 | LI 1466 | 979 |  | 47 58.71 | 7328 | 212 | $30 \quad 30 \quad 22.9$ | 919 | 461 | $13 \cdot 3$ | - 11 | - 44 | $9 \cdot 2$ |  |
| 1730 | 25639 | C Igoi |  |  | $4^{8} \quad 4 \cdot 20$ | 6112 | 181 | $2540 \quad 6 \cdot 4$ | 913 | 446 | I 2.9 | + 8 | - 29 | $8 \cdot 5$ | G 5 |
| 1731 | 27589 | C 1902 | 981 |  | $\begin{array}{lll}3 & 48 & 6 \cdot 37\end{array}$ | $+3.6656$ | +.0194 | 2752 II•I | +10.911 | - $\cdot 453$ | I I. 6 | - 75 | 8 | $7 \cdot 9$ | G 5 |
| 1732 | 25640 | C 1903 | 984 | 7145 | $48 \quad 6 \cdot 74$ | 6064 | 180 | $252746 \cdot 8$ | 909 | 445 | 13.7 | + 11 | - 5 | $8 \cdot 6$ | A 2 |
| 1733 | 25641 | C 1904 | 985-6 | 7158 | $48 \quad 9 \cdot 11$ | 6053 | 179 | $25 \quad 2458 \cdot 6$ | 907 | 445 | 13.6 | + 31 | - 30 | $7 \cdot 16$ | A 0 |
| 1734 | 26636 | C 1906 |  |  | $48 \quad 22.41$ | 6351 | 187 | $263743 \cdot 8$ | 891 | 450 | 11.9 | + 12 | + 12 | $7 \cdot 54$ | G 5 |
| 1735 | 31666 | L. 1468 | 987 | 7146-7-8-9 | $\begin{array}{ll}48 & 28 \cdot 25\end{array}$ | 7633 | 220 | $31 \quad 37 \quad 1 \cdot 2$ | 884 | 465 | 11.7 | $+10 *$ | - 17* | $2 \cdot 91$ | B I |
| 1736 | 30589 | LI 1471 |  |  | $34^{8} 43 \cdot 22$ | +3.7402 | +.0213 | 3043 57.0 | $+10.865$ | - 463 | I I 4 | $+9$ | - 25 | $9 \cdot 4$ |  |
| 1737 | 25642 | C rgio | 1003-4 |  | 4915.22 | 6071 | 179 | $25 \quad 25 \quad 13.9$ | 826 | 447 | 10.7 | $\bigcirc$ | - 11 | $8 \cdot 8$ | K o |
| 1738 | 27597 | C 1911 | 1005 |  | 49 28.75 | 6690 | 193 | $2755 \quad 29 \cdot 7$ | 809 | 455 | 10.8 | + 19 | - 8 | 8.1 | G 5 |
| 1739 | 26640 | C 1912 | 1012 |  | $4938 \cdot 42$ | 6412 | 186 | $264759 \cdot 4$ | 798 | 452 | 10.7 | - I | - 24 | $8 \cdot 7$ | Ko |
| 1740 | 24595 | B 1246 | 1016 | 7196 | $49+3 \cdot 44$ | 5939 | 175 | 245028.6 | 792 | 447 | $10 \cdot 7$ | - 5 | - 16 | $8 \cdot 9$ | A 2 |
| 1741 | 30591 | L 1474 | 1010 | 7185-6 | $34945 \cdot 23$ | $+3.7434$ | +.0213 | $\begin{array}{lllll}30 & 46 & 53 \cdot 3\end{array}$ | $+10.789$ | -. 465 | $9 \cdot 9$ | - 31 | - 21 | var. | B 01 |
| 1742 | 31669 | $\mathrm{L}_{1} 1477$ |  |  | 5014.18 | 7743 | 220 | $3153 \quad 30 \cdot 3$ | -753 | 469 | 10.5 | $+\quad 2$ | - 15 | 9.1 | A 0 |
| 1743 | 27600 | C 1916 | 1022 |  | 5017.33 | 6701 | 192 | $275445 \cdot 7$ | 750 | 457 | $10 \cdot 3$ | - 15 | + 3 | $8 \cdot 7$ | A 0 |
| 1744 | 31670 | L 1478 |  |  | 5017.98 | 7747 | 220 | $31541 \cdot 0$ | 749 | 469 | 10.7 | + 14 | - 4 | 9.1 | A 0 |
| 1745 | 26643 | C 1922 |  |  | $5050 \cdot 91$ | 6515 | 187 | $\begin{array}{lll}27 & 8 & 3.6\end{array}$ | 697 | 455 | $10 \cdot 0$ | $-\quad 22$ | - 69 | $9 \cdot 4$ |  |
| 1746 | 26645 | C 1923 |  |  | 3512.77 | +3.6357 | +.0183 | $26 \quad 28 \quad 56 \cdot 4$ | +10.694 | -. 453 | 10.4 | + 56 | - 21 | $9 \cdot 2$ | A 5 |
| 1747 | 26648 | C 1929 | 1046 |  | 5130.28 | 6306 | 181 | $261448 \cdot 6$ | 660 | 453 | $9 \cdot 6$ | + 3 | - 19 | $8 \cdot 5$ | F 5 |
| 1748 | 24598 | C 1930 | 1051 | 7250-1-4 | $5146 \cdot 98$ | 6012 | 174 | $\begin{array}{llll}25 & \text { I } & 18.4\end{array}$ | 639 | 450 | 10.4 | + 3 | + 20 | $7 \cdot 71$ | G 5 |
| 1749 | 29649 | C 1931 | 1050 |  | $5152 \cdot 32$ | 7199 | 203 | $294446 \cdot 6$ | 633 | 465 | 11.2 | - 30 | - 69 | $9 \cdot 5$ |  |
| 1750 | 24599 | B 1266 | 1060 |  | 523.28 | 5820 | 169 | $2412 \quad 6.2$ | 619 | $44^{8}$ | $10 \cdot 1$ | - 2 | - 4 | $6 \cdot 38$ | Ko |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \times 0$. | Precession. | Sec. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec Var. | Epoch$1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { B.000 } . \end{aligned}$ | Dec. ".oor. |  |  |
|  |  |  |  |  | h m s | s | s | - " |  | * |  |  |  |  |  |
| 1751 | 26650 | C 1932 |  |  | $352 \quad 4 \cdot 12$ | $+3.6379$ | +.0183 | $263036 \cdot 6$ | $+10.618$ | --455 | 12.5 |  | + | $9 \cdot 4$ |  |
| 1752 | 26654 | C 1935 | 1075 |  | $5251 \cdot 19$ | 6384 | 182 |  |  | 455 | 11.5 | + 24 | + 11 | 9.4 |  |
| 1753 | 30595 | L 1490 | $1071-2$ |  | $5256 \cdot 23$ | 7593 | 212 | $\begin{array}{lllll}31 & 9 & 0.8\end{array}$ | 553 | 470 | 11.7 | + 9 | - 3 | 9.4 | A 0 |
| 1754 | 31677 | L 1494 |  |  | 5325.29 | 7767 | 216 | $314516 \cdot 1$ | 518 | 473 | 11.4 | 5 | - 9 | $9 \cdot 1$ |  |
| 1755 | 26655 | C 1939 |  | 12-3-4-5 | 53 36.11 | 6510 | 184 | $\begin{array}{lllll}26 & 56 & 25.8\end{array}$ | 504 | 458 | 10.8 | 9 | + 6 | $7 \cdot 38$ | A 0 |
| 1756 | 24602 | C 1941 | 1093 | 7329 | $353+9.08$ | $1+3.6026$ | +.0172 | ${ }^{2} 45733 \cdot 0$ | +10.488 | 453 | 11.9 | + 12 | $\bigcirc$ | $8 \cdot 47$ | K 2 |
| 1757 | 24601 | B 1278 |  |  | 5349.29 | 5913 | 169 | $24 \quad 2922.4$ | 488 | 451 | 12.3 | - | - 10 | $9 \cdot 1$ | A 0 |
| 1758 | 24603 | B 1280 |  |  | 5353.44 | 5991 | 171 | $24+8 \quad 38 \cdot 7$ | 483 | 452 | I2.9 | + 56 | - 45 | $9 \cdot 15$ | F 8 |
| 1759 | 30599 | L I 496 | 1097-8 | 7328 | $54 \quad 3.77$ | 7601 | 212 | $\begin{array}{llll}31 & 6 & 13.6\end{array}$ | 469 | +73 | 12.4 | - 10 | - 23 | $8 \cdot 8$ | K o |
| 1760 | 30600 | L. 1497 | 1100-1 |  | $54 \quad 9.08$ | $760+$ | 212 | $31 \quad 635.0$ | 463 | +73 | 12.6 | + | - 5 | $9 \cdot 1$ |  |
| 1761 | 31680 | L. 1498 |  |  | $35412 \cdot 13$ | +3.7796 | $+.0215$ | $\begin{array}{llll}31 & 4829.0\end{array}$ | +10.459 | $+75$ | 13.4 | 7 | - 19 | 9.4 |  |
| 1762 | 28606 | C 1942 | 1104 |  | $5412 \cdot 47$ | 6928 | 193 | $28 \quad 32 \quad 59.4$ | +59 | $+64$ | 13.5 | 24 | + 11 | $9 \cdot 2$ |  |
| ${ }^{17} 763$ | ${ }^{2}+60+$ | B 1281 |  |  | 5413.51 | 5945 | 170 | $2+36 \quad 6 \cdot 7$ | +57 | +53 | 13.7 | 7 | + 9 | 9.4 |  |
| 1764 | 30603 | C 19+3 |  |  | $5420 \cdot 22$ | 7356 | 204 | 301029.6 | +49 | +69 | .13.9 | - 10 | + 36 | $9 \cdot 2$ |  |
| ${ }_{1765}$ | $2+605$ | B 1282 | 1110 | 7350-1 | $5430 \cdot 46$ | 5911 | 168 | ${ }^{2}+2626 \cdot 3$ | +37 | $+52$ | 13.9 | + $7^{8}$ | - $4^{8}$ | $8 \cdot 7$ | G 0 |
| 1766 | 29659 | C $194+$ | 1107 | 7340-2 | $3 \quad 54 \quad 3.3 .36$ | $+3.7170$ | +.0198 | 292719.9 | +10.433 | -- +67 | 11.5 | - 1 | + | 8. I | B 9 |
| 1767 | 29660 | C 1945 |  | $73+1$ | $5433 \cdot 69$ | 7137 | 197 | $\begin{array}{llllllllllll}29 & 19 & 39.8\end{array}$ | +32 | 467 | 13.7 | 26 | - 71 | $8 \cdot 9$ | F 5 |
| 1768 | 27611 | C 1946 | 1108-9 |  | $5434 \cdot 72$ | 6615 | 185 | $\begin{array}{lllllllllll}27 & 17 & 59\end{array}$ | +30 | $+60$ | 12.4 | + 10 | - 19 | $8 \cdot 5$ | K 5 |
| 1769 | 28609 | C 1952 | 1131 |  | 55 53.01 | 6878 | 189 | $28 \mathrm{I}+59 \cdot 8$ | 333 | 465 | $9 \cdot 0$ | + 43 | - 3 | $6 \cdot 99$ | A 0 |
| 1770 | 27616 | C 1954 | 1133.4 | 7394 | $55 \quad 54 \cdot 34$ | 6652 | $18+$ | $272142 \cdot 9$ | 332 | 462 | 10.0 | 12 | 9 | $8 \cdot 7$ | K o |
| 1771 | 31687 | L 1512 |  |  | $356+56$ | $+3.7875$ | 021 + | $315746 \cdot 8$ | +10.318 | -478 | 10.8 | 11 | - 10 | 9.1 | A 0 |
| 1772 | 26665 | C 1956 |  |  | $56 \quad 25 \cdot 52$ | 6357 | 177 | $266925 \cdot 3$ | 292 | $+59$ | 11.9 | 3 | + | $9 \cdot 1$ |  |
| 1773 | 30607 | L 1515 |  | 7404 | $56 \quad 27 \cdot 99$ | 7512 | 204 | $\begin{array}{lllll}30 & 37 & 3.2\end{array}$ | 290 | +74 | 12.5 | - 7 | - 40 | $9 \cdot 4$ |  |
| 1774 | 25662 | C 1957 |  | 7411 | $\begin{array}{llll}56 & 28.53\end{array}$ | 6238 | $17+$ | 254019.5 | 288 | 458 | 12.1 | + 3 | + 11 | $8 \cdot 9$ |  |
| 1775 | 27618 | C 1958 | 1150 | 7417 | $56+2 \cdot 98$ | 6795 | 186 | $27 \quad 52 \quad 30 \cdot 3$ | 271 | 465 | $9 \cdot 6$ | + 6 | - 11 | $7 \cdot 4^{8}$ | G 5 |
| 1776 | 30609 | L 1516 |  | 7412 | $35645 \cdot 4+$ | +3.76+5 | 0210 | $\begin{array}{llll}31 & 5 & 2.6\end{array}$ | +10.268 | $\cdot 776$ | $2 \cdot 0$ | 73 | - 196 | $8 \cdot 3$ | G 5 |
| 1777 | 31692 | L 1518 | 1148 | 7415 | 5648.49 | 7688 | 210 | $3114 \begin{array}{lll}1+3\end{array}$ | $26+$ | 476 | 10.8 | + | - 18 | $8 \cdot 2$ | A 0 |
| 1778 | 25663 | C 1960 | 1154 | 7427-8 | $5650 \cdot 90$ | 6242 | 172 | $25 \mathrm{t}^{0} \mathrm{t}^{2}$ | 261 | 458 | 13.0 | + | + 22 | 9.4 |  |
| 1779 | 25664 | C 1962 | 1161 | 7435-6 | $\begin{array}{llll}57 & 14.78\end{array}$ | 6249 | 173 | 25 40 17.4 | 231 | 459 | $10 \cdot 6$ | + 13 | - 5 | $8 \cdot 2$ | A 0 |
| ${ }_{1780}$ | 28610 | C 1963 | 1162 |  | 5725.99 | 6892 | 188 | $28 \quad 1222 \cdot 1$ | 217. | $+67$ | $12 \cdot 1$ | + | + 11 | $8 \cdot 5$ | Go |
| 1781 | 24613 | C 1965 | 1172 1168 |  | $3 \begin{array}{lll}3 & 5755.52\end{array}$ | +3.6117 | +.0169 |  | +10.179 | -*457 | $9 \cdot 7$ | 17 | + 2 | 8.69 | A 2 |
| 1788 | 30611 | L 1524 | 1168 |  | $\begin{array}{lll}57 & 55.77 \\ 58 \\ 5\end{array}$ | $7+97$ | 200 | 30 27 $56 \cdot 1$ <br> 28 21 7 | 179 | 475 | 11.6 10.5 | 17 | + 14 | 9.4 |  |
| 1783 | 28613 | C 1966 |  | 7455 7460 | $\begin{array}{lll}58 \\ 58 \\ 58 & 5 \cdot 50\end{array}$ | 6956 6024 | 188 |  | 167 | 468 | 10.5 12.6 | + 9 | - $\quad 2$ | $7 \cdot 9$ 8.7 | A 3 |
| 1784 | $2+614$ 28 2814 | B 1304 C 1067 | 1177 | 7460 | $\begin{array}{lll}58 & 12.47 \\ 58 & 14.47\end{array}$ | 6024 7099 | 166 | $\begin{array}{llll}24 & 41 & 53 \cdot 9 \\ 28 & 57 & 8.4\end{array}$ | 159 157 | 457 470 | 12.6 12.5 | $+\quad 9$ $+\quad 216$ | - 52 | 8.7 8.2 | F F 8 |
| 1785 | 28614 | C 1967 |  |  | $58 \quad 14.47$ | 7099 | 191 | $\begin{array}{llllllllllllllllll}28 & 57 & 8 \cdot 4\end{array}$ | 157 | 470 | 12.5 | $+216$ | - 122 | $8 \cdot 2$ |  |
| 1786 | 27623 | C 1969 | 1178 | 7462 | 3 <br> 3 <br> 58 <br> 58 <br> $22 \cdot 15$ | +3.6822 | +.0184 | $275^{2}+{ }^{1 \cdot 2}$ | +10.146 | - +68 | 12.3 | + 31 | - 40 | var. | A 0 |
| 1787 | 23606 | B 1305 | 1183 |  | $\begin{array}{lll}58 & 2 \\ 5 \\ -8 & 72\end{array}$ | $589+$ | 163 | ${ }^{2}+9$ 14.3 | 143 | $+55$ | 12.4 | - 8 | - 15 | $9 \cdot 8$ |  |
| 1788 | 27624 | C 1971 | 1180 |  | $58 \quad 26 \cdot 49$ | 6716 | 182 | 2727 391 | 141 | 466 | 13.5 | 13 | - 35 | $8 \cdot 5$ | A 5 |
| I789 | 26669 | C 1972 | 1182 |  | $5828 \cdot 13$ | 6411 | 175 |  | 139 | 463 | 12.7 | 10 | - 24 | 9.1 | G |
| 1790 | 29665 | C 1973 | 1186 |  | $5844 \cdot 82$ | 7256 | 194 | $2930+5 \cdot 5$ | 118 | 473 | 13.1 | $+1$ | + | $9 \cdot+$ |  |
| 1791 | 2; 667 | C 1974 |  | $7+78$ | $3584^{6 \cdot 01}$ | $+3.6142$ | +-0168 | $\begin{array}{llll}25 & 9 & 9 \cdot 5\end{array}$ | +10.116 | 458 | 13.0 | 13 | - $4^{8}$ | $8 \cdot 9$ |  |
| ${ }^{1} 792$ | 30614 | L 1529 |  |  | $58 \quad 59.58$ | 7562 | 201 | $\begin{array}{llll}30 & 38 & 13.7\end{array}$ | 099 | 478 | 12.3 | 43 | 10 | $9 \cdot 2$ | A |
| I 793 | $2{ }^{2} 616$ | C 1976 |  |  | $\begin{array}{llll}59 & 13.99\end{array}$ | 6131 | 168 | $25+4 \cdot 9$ | 081 | 459 | 12.9 |  | - 3 | $9 \cdot+$ |  |
| 1794 | 2; 670 | C 1977 | 1196 | $7+95$ | 5918.67 | $63+8$ | 173 | 255714.9 | 076 | 462 | 12.3 | $\bigcirc$ | + 26 | $8 \cdot 5$ | M a |
| ${ }^{1} 795$ | 25671 | C 1978 | 1200 | 7500 | 5929.04 | 6162 | 168 | 25 II $34^{\circ} 0$ | 062 | 460 | 12.8 | 20 | 39 | $8 \cdot 6$ |  |
| 1796 | 27628 | C 1979 | 1202 | 7511 | $359+1.01$ | $+3.6710$ | +.0179 | 2721582.9 | +10.047 | $-{ }^{-}+68$ | 11.3 | + 4 | - 24 | $7 \cdot 9$ | A 2 |
| 1797 | 31700 | L $153+$ | 1203-4 | ${ }_{7512-3-+}^{7523}$ | $5952 \cdot 86$ <br> 59 <br> 96.02 | $77+6$ 678 | 205 | $\begin{array}{llll}31 & 15 & 8.0 \\ 17 & 38 & 8.2\end{array}$ | 032 | 482 +69 | 11.5 12.3 | 11 | - 15 | $7 \cdot 43$ | K 5 |
| 1798 | 27629 | ${ }^{\text {C } 1980}$ | $121+$ | 7523 | +59 $56 \cdot 92$ | $678+$ | 181 | $\begin{array}{lll}27 & 38 & 8 \cdot 2\end{array}$ | 027 | +69 | 12.3 | 11 | - 52 | $7 \cdot 9$ | $\mathrm{A}_{2}$ |
| 1799 | 27630 | ${ }_{C} \mathrm{C}_{19881^{\circ}}$ |  |  | $406 \cdot 17$ | 6919 | $18+$ | $\begin{array}{lll}28 & 9 & 2 \cdot 3\end{array}$ | 016 | 470 | 13.4 |  |  | $9 \cdot 0$ |  |
| 1800 | $2+617$ | C 1983 |  |  | - 8.36 | 6125 | 167 | $25 \quad 027 \cdot 7$ | 013 | +60 | 13.1 | - 34 | - 37 | $9 \cdot 4$ |  |


| No. | B.1). | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | See. Var. | Dec. 191000 | Precession. | Sce. Var. | $\begin{aligned} & \text { Epoch } \\ & 1900+ \end{aligned}$ | Annual P.M. |  | Mag. | Speetral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { s.ooor. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec, } \\ & \text { N.OOI. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | s | s | - ' | " | " |  |  |  |  |  |
| 1801 | 25673 | C 1982 |  |  | 4 O 8.55 | $+3.6333$ | +.0171 | $25 \quad 5036 \cdot 4$ | +10.012 | $-463$ | $14^{11}$ | + 19 | $\bigcirc$ | $9 \cdot 1$ |  |
| 1802 | 25674 | C 1986 |  |  | - 31.64 | 6264 | 169 | $2532+0 \cdot 9$ | 9.983 | 463 | $12 \cdot 8$ |  |  | 9.4 |  |
| 1803 | 26675 | C 1987 | 1222 |  | - 33.35 | 6455 | 173 | 261828.4 | 981 | 465 | 13.0 | 35 | 31 | $8 \cdot 6$ | A |
| 1804 | 25675 | C 1988 |  | 7547-8 | - $36 \cdot 75$ | 6371 | 171 | $\begin{array}{llll}25 & 58 & 6 \cdot 9\end{array}$ | 976 | 464 | 11.4 | 51 | + 5 | $7 \cdot 49$ | F 8 |
| 1805 | 24620 | B 1325 | 1225 |  | - 39.97 | 6005 | 163 | $242918 \cdot 0$ | 973 | 459 | 13.2 | - II | 32 | 94 |  |
| 1806 | 28617 | C 1989 |  |  | + 049.99 | $+3.6934$ | +.0183 | $\begin{array}{llll}28 & 9 & 49.3\end{array}$ | + 9.960 | -471 | 12.7 |  | + 16 | 9.4 |  |
| 1807 | 27632 | C 1990 | 1232-3 |  | 1 2.19 | 6709 | 178 | $27 \quad 16$ 53.1 | 945 | 469 | $13 \cdot 1$ | - 14 | - 51 | $9 \cdot 5$ |  |
| 1808 | 27633 | C 1991 | 1234-6 | 7566-7 | 14.97 | 6730 | 179 | 272129.0 | 941 | 469 | 12.5 | $+12^{*}$ | - $57{ }^{*}$ | $5 \cdot 27$ | A 01 |
| 1809 | 28618 | C 1992 |  |  | 110.63 | 7077 | 186 | $2841 \begin{array}{ll}21 \cdot 5\end{array}$ | 933 | 473 | 13.4 | + 15 | + 18 | $9 \cdot 0$ |  |
| 1810 | 27634 | C 1994 | 1239-40 | 7575 | 112.53 | 6711 | 178 | $27 \quad 1645 \cdot 3$ | 931 | 470 | 12.0 | - 25 | + 2 | 8.6 | K |
| 1811 | 29672 | C 1993 | 1237 | 7571-2 | +114.28 | $+3 \cdot 7436$ | +.0195 | 30.158 .7 | + 9.929 | $\cdot 479$ | 10.8 | - 3 | 23 | 8.01 | K 2 |
| 1812 | 25677 | C 1995 |  | 7580 | 114.45 | 6257 | 171 | $252845 \cdot 6$ | 929 | 464 | 11.9 | - 7 | + 36 | 8.2 | A 0 |
| 1813 | 28619 | C 1995a |  | 7583 | $126 \cdot+3$ | 7100 | 187 | $2845 \hat{1} 1 \cdot 0$ | 914 | 474 | 12.3 | $62^{*}$ | + $3^{*}$ | $5 \cdot 29$ | Fo |
| 1814 | 27635 | C 1996 | 1252-3 |  | 139.31 | 6715 | 177 | $\begin{array}{llll}27 & 16 & 8.8\end{array}$ | 910 | 470 | 10.2 | 51 | - 75 | 8.8 | G 5 |
| 1815 | 31705 | L 1546 |  |  | 147.91 | 7869 | 204 | 313359.2 | 886 | 484 | $10 \cdot 3$ | + 6 | + 29 | 9.0 | A 0 |
| 1816 | 30618 | L 1554 | 1264 |  | $\begin{array}{llll}4 & 2 & 7 \cdot 12\end{array}$ | $+3.7595$ | +.0197 | $3033+0 \cdot 6$ | + 9.862 | - 482 | 12.5 | $+{ }^{0}$ | - 60 | $9 \cdot 4$ |  |
| 1817 | 26682 | C 1997 |  |  | 243.68 | 6603 | 174 | $\begin{array}{llllllllll}26 & 46 & 7 \cdot 8\end{array}$ | 817 | $+69$ | 11.9 | + 14 | - 15 | 9-1 |  |
| 1818 | 31708 | L 1560 | 1274 | 7631 | $246 \cdot 37$ | 7808 | 202 | $\begin{array}{lllllll}117 & 3+1\end{array}$ | 813 | +85 | 10.2 |  | 22 | $8 \cdot 0$ | A 0 |
| 1819 | 25678 | C 1999 | 1291 | 7647-50 | 311.41 | 6324 | 167 | $\begin{array}{llllllllllllll}25 & 38 & 18.5\end{array}$ | 781 | 466 | $9 \cdot 6$ | - 14 | - 10 | $7 \cdot 40$ | Ko |
| 1820 | $28 \quad 624$ | C 2000 | 1286 |  | 318.45 | 7181 | 186 | $\begin{array}{llllll}28 & 57 & 10.9\end{array}$ | 772 | 477 | $12 \cdot 3$ | + 76 |  | $8 \cdot 6$ | Go |
| 1821 | 30621 | L 1565 | 1287 |  | $\begin{array}{llll}4 & 3 & 23 \cdot 67\end{array}$ | +3.7649 | +.0197 | $30+40+6 \cdot+$ | + 9.764 | $-+83$ | 11.0 | 1 | 37 | 8.4 | Ko |
| 1822 | 28627 | ${ }^{\text {C } 2001}$ | 1293 |  | 334.20 | 7040 | 181 | $\begin{array}{llll}28 & 24 & 22 \cdot 3\end{array}$ | 752 | 477 | 12.7 | $+\quad 14$ | $\begin{array}{r}\text { - } \\ -\quad 89 \\ \hline\end{array}$ | 9.0 | Go |
| 1823 | 26684 | C 2003 | 1299 |  | $337 \cdot 12$ | 6643 | 173 |  | 748 | 471 | $12 \cdot 3$ | - 10 | + 66 | 8.6 | Go |
| 1824 | 30623 | LI 1567 |  |  | $3 \begin{array}{ll}3 & 37 \cdot 66\end{array}$ | 7614 | 195 |  | 747 | 484 | 13.2 | + | - 1 | 8.6 | K o |
| 1825 | 30624 | C 2002 | 1294 | 7656 | 338.82 | 7578 | 194 |  | 745 | 483 | 11.5 | - 3 | - 10 | $8 \cdot 6$ |  |
| 1826 | 31713 | L 1569 |  |  | - 345.57 | $+3.7840$ | +.0200 | $312037 \cdot 2$ | +9.736 | 487 | 13.4 | $+\quad 29$ | - 22 | $9 \cdot 4$ |  |
| 1827 | $3171+$ | L 1572 | 1301 | 7665-70 | $3 \quad 56.79$ | 7863 | 201 | $312+46 \cdot 4$ | 722 | 48 | $10 \cdot 4$ | + 38 | + <br> + | $6 \cdot 94$ | F 5 |
| 1828 | 30626 | C 2005 | 1322 | 7692-4 | $+39.05$ | 7597 | 193 | $3024+4 \cdot 8$ | 669 | $4{ }^{8}$ | 12.3 | + 10 | - 29 | $8 \cdot 7$ |  |
| 1829 | 31715 | L 1580 |  |  | $4+8 \cdot 26$ | 7960 | 201 | 314221.0 | 657 | 489 | 11.7 | 9 | - 34 | $9 \cdot 4$ |  |
| 1830 | ${ }^{2}+629$ | C 2007 | 2 |  | 59.21 | 6222 | 163 | $\begin{array}{llll}25 & 7 & 39.4\end{array}$ | 630 | 468 | II 3 | $\bigcirc$ | 4 | 8.8 |  |
| 1831 | 26686 | C 2008 | 5 | 7717-8-9 | $+520.81$ | $+3 \cdot 6507$ | $+.0168$ | $26144^{8 \cdot 3}$ | $+9.615$ | - 471 | 12.7 | - 20* |  | .5.55 | Fo |
| 1832 | 31716 | L 1584 | 4 |  | 535.31 | 7877 | 198 | 312153.8 | 597 | 490 | 12.3 | + 10 | - 14 | 9.4 |  |
| 1833 | 26687 | C 2009 | 7 | 7728 | $543 \cdot 83$ | 6517 | 167 | $261555 \cdot 5$ | 586 | 471 | 11.4 | + 32 | - 74 | $8 \cdot 7$ | Go |
| 1834 | 31718 | L 1586 | 12 | 7730-2 | 559.58 | 7872 | 197 |  | 565 | 489 | 10.8 | - 20 | - 20 | $7 \cdot 6$ | A 0 |
| 1835 | 29676 | C 2010 | 14 | 7736 | $559 \cdot 83$ | 7397 | 186 | $293557 \cdot 1$ | 565 | 483 | 10.2 | + 80 | - 137 | $8 \cdot 0$ | K o |
| 1836 | 26689 | C 2011 |  |  | 466.66 | $+3.6635$ | +.0170 | $264^{2} 22 \cdot 1$ | + 9.556 | --474 | 12.3 | + +5 | + 55 | 9.1 | F 5 |
| 1837 | 25681 | C 2012 |  |  | $620 \cdot 64$ | 6395 | 165 | $2545 \quad 1 \cdot 4$ | 538 | 471 | 11.8 |  | + 20 | $8 \cdot 5$ | Go |
| 1838 | 24632 | B 1346 |  | 7761 | $626 \cdot+1$ | 6008 | 157 | ${ }^{2} 411554 \cdot 3$ | 532 | 461 | 12.5 | + 39 | - +9 | $9 \cdot 0$ |  |
| 1839 | $2+631$ | B 1347 |  | 7759 | 6 27-12 | 6109 | 159 | ${ }^{2}+36 \quad 16 \cdot 6$ | 531 | +62 | 13.0 | + 14 | - 12 | 9.0 |  |
| 1840 | 31719 | L 1588 | 26 | 7751 | $630 \cdot 00$ | 8060 | 201 |  | 527 | +92 | II.9 | + 15 | - 29 | 8.4 | A 。 |
| 1841 | 30630 | C 2014 |  |  | $4 \quad 633.52$ | $+3.7565$ | +.0189 | 3011 | + 9.522 | 487 | 13.2 | , |  | 9.4 |  |
| 1842 | 24633 | B 1348 | 32 | 7767 | $636 \cdot 36$ | $604+$ | 157 | 2420 11.3 | 519 | 467 | 12.6 | + 27 | - 33 | 8.6 |  |
| $18+3$ | 28630 | C 2015 | 33 |  | $6+7 \cdot 08$ | 7035 | 178 | $\begin{array}{llllllllllllllllllllll}28 & 12 & 10.5\end{array}$ | 505 | ${ }^{80}$ | 12.7 | + 37 | + 10 | 9.4 |  |
| 1844 | 25682 | C 2016 | 39 |  | $7 \quad 0.20$ | 6419 | 164 | $25+8.50 \cdot 2$ | 488 | 472 | 11.5 | + 15 | + 11 | 8.6 |  |
| 1845 | 31721 | L 1593 | 35 |  | $17 \quad 2 \cdot 72$ | 7958 | 196 | $\begin{array}{llllllllllll}31 & 33\end{array}$ | 484 | $49^{2}$ | 12.5 | 6 | - 1 | $8 \cdot 4$ | B9 |
| 1846 | 28631 | C 2018 |  |  | $\begin{array}{llll}4 & 7 & 22 \cdot 27\end{array}$ | +3.7193 | +.0180 | $\begin{array}{llll}28 & 45 & 49 \cdot 6\end{array}$ | + 9.460 | $-482$ | 12.1 | + 33 | + 3 | $9^{\circ} \mathrm{O}$ |  |
| 1847 | 28632 | C 2019 | 63 | 7808-9 | 748.55 | 7234 | 180 | $\begin{array}{lllll}28 & 53 & 3+9\end{array}$ | 425 | 484 | 10.0 | 13 $+\quad 13$ | - 21 | $8 \cdot 5$ |  |
| 1848 | ${ }^{2}+635$ | B 1359 | 77 |  | 817.06 | 6112 | 156 | $243120 \cdot 8$ | 389 | 468 | 11.0 | + 27 | - 8 | $9 \cdot 4$ |  |
| 1849 | 31727 | L 1604 | 81 |  | 849.31 | 8018 | 197 | 31 40 <br> 68  | 348 | 495 | 10.4 | - 11 | - 20 | 8.6 |  |
| 1850 | 31728 | L 1605 | 82 |  | $850 \cdot 55$ | 8001 | 196 | $\begin{array}{lllllllllll}31 & 36 & \end{array}$ | 347 | 495 | $1{ }^{1} 7$ | 6 | - $\quad 35$ | $8 \cdot 6$ | A |


| No. | B D. | A.g.C. | W.B. (2). | Lalande. | R.A. 191000. | Preeession. | See. Var. | Dec. 1910.0. | Precession. | $\begin{aligned} & \text { Se. } \\ & \text { Var. } \end{aligned}$ | Epoeh$1900+$ | Annual P.M. |  | Mag. | Speetral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { 8. }}{\text { R. A. } \mathrm{A} .}$ | $\begin{aligned} & \text { Deo. } \\ & \cdot 00 \mathrm{I} \end{aligned}$ |  |  |
|  |  |  |  |  | h m s | $s$ | $s$ |  | " | " |  |  |  |  |  |
| 1901 | 31767 | L 1661 | 266 |  | $41639 \cdot 15$ | $+3.8199$ | +.0187 | $315137 \cdot 3$ | + 8.736 | --505 | 12.6 | + | - III | 9.0 |  |
| $1902$ | 30659 | C 2057 |  |  | 1639.67 | 7729 | 177 | 301244.7 | 735 | 499 | 12.6 | + 72 | - 31 | $9 \cdot 11$ | G 5 |
| 1903 | 29702 | C 2058 | 269 |  | $1642 \cdot 15$ | 7565 | 174 | $2937 \quad 26 \cdot 2$ | 733 | 497 | 13.6 | - 20 | - 19 | $9 \cdot 8$ |  |
| 1904 | ) 25707 | C 2059 | 279 |  | $176 \cdot 17$ | 6448 | 152 | $25 \quad 25 \quad 3.5$ | 700 | 482 | 13.6 | + 19* | - $32^{*}$ | $5 \cdot 38$ | B 9 |
| 1905 | 12 | C 2060 | 280 |  | $17 \quad 6.74$ | 6448 | 152 | 252520.6 | 700 | 482 | 13.0 |  | - | $9 \cdot 0$ |  |
| 1906 | 28648 | C 2061 | 284 | 8141 | 41719.42 | +3.7180 | +.0164 | 281113.3 | $+8.684$ | -492 | $0 \cdot 7$ |  | + 17 | $8 \cdot 4$ | A 3 |
| 1907 | 31769 | L 1665 |  |  | $1725 \cdot 48$ | 8248 | 186 | $31 \quad 59 \quad 2 \cdot 6$ | 676 | 507 | 11.0 | + 57 | - 79 | $9 \cdot 0$ |  |
| 1908 | 28649 | C 2062 | 293 |  | 1730.81 | 7354 | 169 | 2849 2.I | 668 | 494 | 10.4 | - 12 | - 26 | $9 \cdot 0$ |  |
| 1909 | 26716 | C 2063 |  |  | 1735.04 | 6871 | 159 | $\begin{array}{llll}27 & 1 & 8.8\end{array}$ | 663 | 489 | $10 \cdot 0$ | + 22 | - 7 | 8.2 |  |
| 1910 | 24654 | B 1406 | 305-6 | 8183 | $18 \quad 3.91$ | 6146 | 145 | 24 11 $46 \cdot 7$ | 625 | 476 | $9 \cdot 3$ | + 69 | - 56 | $7 \cdot 23$ | F 5 |
| 1911 | 27658 | C 2065 | 302 | 8173 | 4188.68 | $+3.7135$ | +.0163 | $2758.46 \cdot 4$ | + 8.618 | --493 | $9 \cdot 4$ | 24 | - 106 | $8 \cdot 0$ | G o |
| 1912 | 28652 | C 2066 |  |  | 1813.13 | 7284 | 166 | $283132 \cdot 4$ | 613 | 494 | 11.2 | + 1 | + 27 | $9 \cdot 0$ |  |
| 1913 | 31772 | L 1670 | 304 |  | 1819.98 | 8164 | 183 | $313845^{\circ}$ | 604 | 507 | 11.8 | + 10 | - 3 | $9 \cdot 4$ |  |
| 1914 | 23683 | B 1416 | 315-6 | 8202 | 1832.03 | 6124 | 143 | $24 \quad 541 \cdot 2$ | 588 | 480 | 10.9 | + 16 | + 2 | $8 \cdot 6$ |  |
| 1915 | 23684 | B1417 | 318-9 | 8206-7 | 1834.03 | 6125 | 144 | $24 \quad 5 \quad 31 \cdot 6$ | 585 | 480 | II.I | $+13^{*}$ | - $23^{*}$ | $6 \cdot 16$ | B 8 |
| 1916 | 29706 | C 2068 | 320 | 8201 | $418 \quad 47 \cdot 38$ | $+3.7677$ | $+.0172$ | $295458 \cdot 7$ | + 8.568 | -. 500 | 12.4 | 31 | - 6 | $9 \cdot 0$ | A 2 |
| 1917 | 28653 | C 2069 |  | 8211 | 1848.48 | 7371 | 167 | $284841 \cdot 9$ | 566 | 495 | 11.0 | + 16 | + 13 | 8.0 | M a |
| 1918 | 30660 | C 2070 |  |  | 1850.78 | 7765 | 174 | $301334 \cdot 1$ | 563 | 502 | 12.3 | - 4 | - 23 | $9 \cdot 4$ |  |
| 1919 | ${ }^{2} 4655$ | C 2071 | 338 |  | 1914.64 | 6353 | 148 | $24 \begin{array}{llllllll} & 57 & 15 \cdot 7\end{array}$ | 531 | 479 | 12.1 | + 27 | - 18 | $9 \cdot 8$ |  |
| 1920 | 29709 | C 2073 | 340 | 8244 | 1933.58 | 7597 | 169 | 293521.8 | 506 | 501 | 9.6 | + 9 | - 44 | 8.8 | F |
| 1921 | 25710 | C 2074 | 346 |  | 41941.20 | $+3 \cdot 6509$ | +-0149 | $253234 \cdot 1$ | + 8.497 | --487 | $9 \cdot 6$ | + 35 | + 20 | 7.71 | F 5 |
| 1922 | 31773 | L 1681 | 345 |  | 1951.12 | - 8277 | 183 | $\begin{array}{llll}31 & 57 & 4.8\end{array}$ | 484 | 510 | 10.3 | - 3 | + 24 | $8 \cdot 4$ | G 5 |
| 1923 | 29712 | C 2076 | 350-1 | 8259-60 | $1959 \cdot 69$ | 7527 | 167 | $\begin{array}{lllll}29 & 19 & 15.3\end{array}$ | 472 | 499 | $9 \cdot 6$ | - 7 | + 11 | 8.0 | K o |
| 1924 | 29711 | C 2077 | 354 | 8263 | $20 \quad 2 \cdot 61$ | 7635 | 169 | $294^{2} \quad 5 \cdot 3$ | 468 | 501 | 12.0 | - 15 | + 8 | $8 \cdot 8$ |  |
| 1925 | 31776 | L 1683 |  | 8270-3 | 2022.34 | 8077 | 178 |  | 443 | 507 | 9.0 | + 64* | - 120* | $5 \cdot 33$ | K o |
| 1926 | 31777 | $\mathrm{L}_{1} 1684$ | 360 |  | 42032.49 | $+3.8230$ | . 0182 | 314515.8 | + 8.430 | -.509 | 8.8 | - 1 | 35 | 8.4 | A 0 |
| 1927 | 27659 | C 2078 |  |  | $2044 \cdot 4^{6}$ | 7078 | 158 | $\begin{array}{llll}27 & 38 & 27 \cdot 1\end{array}$ | 414 | 495 | 13.1 | - 19 | - 38 | $10 \cdot 7$ |  |
| 1928 | 31778 | L 1685 | 370 |  | 2054.94 | 8263 | 181 | 315053.5 | 399 | 510 | 9.7 | $+33$ | - 65 | 9.4 |  |
| 1929 | 26720 | C 2079 |  |  | 2147.91 | 6741 | 151 | $\begin{array}{llll}26 & 19 & 47\end{array}$ | 329 | 491 | 12.6 | + 43 | - 28 | $10 \cdot 7$ |  |
| 1930 | 28656 | C 2080 |  |  | 2153.01 | 7433 | 163 | $\begin{array}{llll}28 & 53 & 19.7\end{array}$ | 322 | 501 | 10.4 | - | - 33 | $9 \cdot 4$ |  |
| 1931 | 24658 | C 2082 | 402-3 | 8338 | $422 \quad 6 \cdot 15$ | $+3.636 \mathrm{r}$ | +.0143 | $245^{1} 34.4$ | + 8.305 | $-486$ | 11.5 |  | - 14 | $9 \cdot 0$ | A |
| 1932 | 29715 | $\mathrm{C}^{\text {C } 2081}$ | 395 |  | $\begin{array}{lll}22 & 7 \cdot 31\end{array}$ | 7758 | 168 | $30 \quad 2 \begin{array}{llll} \\ 3 & 1\end{array}$ | 304 | 504 | 11.7 | $+\quad 31$ $+\quad 26$ | - 17 | $9 \cdot 4$ |  |
| 1933 | 25714 | C 2083 |  |  | $\begin{array}{ll}22 & 18.18\end{array}$ | 6454 | 146 |  | 289 | 487 | 13.6 | + 26 | + 3 | $10 \cdot 0$ |  |
| 1934 | 24659 | B 1436 |  |  | $22.24 \cdot 15$ | 6205 | 140 | $24 \quad 1426 \cdot 7$ | 281 | 484 | 12.6 | + 269 | + 102 | $9 \cdot 4$ |  |
| 1935 | 25715 |  |  |  | 2230.05 | 6536 | 147 | $25314 \cdot 1$ | 273 | 489 | 13.6 |  |  | $9 \cdot 8$ |  |
| 1936 | 27660 | C 2084 | 411 | 8352 | 42243.55 | $+3 \cdot 7086$ | +.0156 | $27344^{8 \cdot 5}$ | + 8.255 | --496 | $9 \cdot 3$ | 21 | 13 $+\quad 13$ | 7.76 | A 0 |
| 1937 | 30665 | C 2085 | 42 I | 8364-5 | $23 \quad 10.84$ | 7808 | 168 | $30 \quad 944.4$ | 218 | 506 | $9 \cdot 2$ | + 7 | - 28 | $6 \cdot 26$ | F 5 |
| 1938 | 30665 | C 2086 | 422 | $8366-7$ | 2311.49 | 7810 | 168 | $\begin{array}{lllll}30 & 9 & 55.9\end{array}$ | 218 | 506 | $9 \cdot 6$ | + 7 | - 28 | $8 \cdot 6$ |  |
| 1939 | 27661 | C 2088 | $436-7$ | 8396 | 23 46.19 | 6998 | 153 | 271222.5 | 172 | 496 | 10.0 | + 15 | - 34 | 6.61 | A 0 |
| 1940 | 25717 | C 2089 |  |  | 23 48.00 | 6547 | 145 | $25 \quad 30 \quad 9.4$ | 169 | 490 | 14.2 | + 65 | - 8 | 10.2 |  |
| 194 r | 26722 | C 2090 |  |  | 42358.32 | $+3 \cdot 6805$ | +.0149 | $2628 \quad 28 \cdot 2$ | + 8.156 | - 493 | 9.8 | + 62 | - 38 | $9 \cdot 4$ |  |
| 1942 | 26724 | C 2091 | $44^{8-9}$ | 8408 | 24.9 .68 | 6969 | 151 | $27 \quad 4$ <br> $18 \cdot 3$ | 140 | 495 | 9.6 | + 12 | 45 | $8 \cdot 8$ |  |
| 1943 | 28658 | C 2093 |  |  | 2426.05 | 7455 | 160 | $285041 \cdot 7$ | 119 | 502 | 10.6 | 20 | - 40 | $8 \cdot 6$ | Fo |
| 1944 | 30668 | C 2092 | 451 |  | 2426.09 | 7876 | 167 | $\begin{array}{llllllllllllllll}30 & 20 & 18.6\end{array}$ | 119 | 508 | 11.4 | - 67 | - 109 | 9.4 |  |
| 1945 | 27662 | C 2094 | 458 | 8418 | $2443 \cdot 57$ | 7207 | 155 | $\begin{array}{llll}27 & 56 & 2 \cdot 9\end{array}$ | 096 | 500 | II.8 | + 84 | + 29 | $6 \cdot 64$ | G 5 |
| 1946 | 31 784 | L 1701 | 454 |  |  | +3.8186 | +.0173 | 312339.6 | + 8.093 | -.513 | $9 \cdot 6$ | - 8 | - 33 | $8 \cdot 7$ | A 3 |
| 1947 | 28659 |  |  |  | $25 \quad 30 \cdot 66$ | $754{ }^{2}$ |  | $\begin{array}{llll}29 & 6 & 22.8\end{array}$ | 032 | 505 | 12.6 |  |  | $9 \cdot 8$ |  |
| 1948 | 30674 | ${ }_{\text {L }} 11707$ | 478-9 |  | $25 \quad 39 \cdot 36$ | 8109 | 170 |  | 021 | 513 | 11.8 | + 10 | 55 | $9 \cdot 1$ |  |
| 1949 | 24662 29 29 | C 2098 | 487 485 |  | 25 2548.74 | 6396 | 139 | $\begin{array}{llll}24 & 50 & 14.8 \\ 20 & 5 & 4.8\end{array}$ | .008 $+\quad .099$ | 490 508 | 8.8 | 28 | - 47 | $8 \cdot 2$ | G 5 |
|  | 29716 |  | 485 | 8459-60 | $2555 \cdot 85$ | 7724 |  | $2944 \quad 2 \cdot 3$ | + 7.999 | 508 | 9.4 |  |  | $8 \cdot 4$ | F2 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annue | l P.M. |  |  |
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| No. |  | A.G | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | $\begin{aligned} & \text { Sec., } \\ & \text { Var. } \end{aligned}$ | Epoch $1900+$ | $\begin{gathered} \text { R.A. } \end{gathered}$ | $\begin{aligned} & \text { Deo. } \\ & \text { Dooi. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m s | $s$ | s | - . |  | " |  |  |  |  |  |
| 1951 | 25719 | C 2100 |  |  | $\begin{array}{llll}4 & 26 & 19.37\end{array}$ | $+3 \cdot 6625$ | +.0143 | 254134.4 | $+7 \cdot 968$ | - 493 | 11.6 | $+$ | - 13 | $9 \cdot 4$ |  |
| 1952 | 31 <br> 887 | L 1708 | 494 |  | 2627.56 | 8192 | 170 | $\begin{array}{llll}31 & 20 & 3.9\end{array}$ | 956 | 513 | 11.2 | $-1$ | - 10 | $9 \cdot 4$ |  |
| 1953 | 28660 | C 2102 | 501 |  | 26 32.96 | 7476 | 157 | $2849 \quad 22 \cdot 2$ | 949 | 504 | $11 \cdot 3$ | + | + 16 | $9 \cdot \mathrm{I}$ |  |
| 1954 | 24663 | C 2104 | 511-2-3 | 8506-7-8 | 2653.24 | 6448 | 139 | 2459 37.I | 922 | 491 | 9•6, 10.3 | + 8 | - 31 | $7 \cdot 31$ | A 2 |
| 1955 | 31790 | L 1712 | 509-10 | 8501-2 | 2656.64 | 8164 | 168 | 3112471 | 917 | 513 | 9.0 | 9 | - 30 | 8.2 | A 0 |
| 1956 | 28662 | C 2106 |  |  | $427 \quad 4.95$ | $+3.7291$ | +.0153 | $28 \quad 7 \quad 53.3$ | $+7.906$ | -503 | 13.2 | + | - 26 | $9 \cdot 8$ |  |
| 1957 | 31 3191 | L 1715 |  |  | $27 \quad 7 \cdot 66$ | 8279 | 171 | 3115 38 | 902 | 516 | 10.4 | 17 | 6 | 8.6 | B 9 |
| 1958 | 24664 | $\mathrm{C}^{\mathrm{C}} 2107$ |  |  | $27 \quad 11.36$ | 6435 | 139 | $245551 \cdot 9$ | 898 | 492 | 13.2 | 3 | 1 $+\quad 41$ | $10 \cdot 0$ |  |
| 1959 | 28663 | $\mathrm{C}^{2} 2109$ | 523 |  | 2749.99 | 7469 | 155 | 284424.3 | 846 | 506 | 10.6 | - 2 | - 107 | $9 \cdot 4$ |  |
| 1960 | 31794 | L 1718 | 522 |  | 2753.91 | 8253 | 168 | $\begin{array}{llll}31 & 28 & 11.9\end{array}$ | 841 | 516 | 8.8 | 22 | - 7 | 8.4 | A 0 |
| 1961 | 29720 | C 2110 | 525 |  | $428 \quad 1 \cdot 70^{\circ}$ | $+3.7835$ | +.0161 | $30 \quad 126.2$ | + $7 \cdot 830$ | - 511 | 14.2 | + 13 | - 21 | $10 \cdot 0$ |  |
| 1962 | 23705 | B 1456 | 530-1 | $8546-7$ | $28 \quad 2 \cdot 13$ | 6226 | 133 | $24 \quad 523.0$ | -830 | 489 | 10.0 | + 16 | - 9 | 8.0 | Fo |
| 1963 | 31795 | L 1723 | 527 |  | 2811.61 | 8401 | 170 | 315712.4 | 817 | 517 | $10 \cdot 6$ | + 33 | - 63 | $8 \cdot 6$ | G |
| 1964 | 30685 | L 1725 |  | 8539-40 | $28 \quad 16.92$ | 8124 | 166 |  | 810 | 515 | 10.0 | - 45 | - 48 | 8.4 | K 2 |
| 1965 | 24665 | B 1459 | 539-40 |  | $28 \quad 24 \cdot 60$ | 6287 | 134 | $24 \quad 18 \quad 50 \cdot 7$ | 799 | 490 | 10.2 | 19 | - 59 | 9.0 | F 8 |
| 1966 | 24666 |  |  |  | $42849 \cdot 81$ | $+3.6416$ | +.0136 | 244726.8 | $+7 \cdot 765$ | -493 | 14.2 |  |  | 9.5 |  |
| 1967 | 28666 | C2111 | 545 | 8568-9-70-1 | 2859.94 | 7493 | 154 | $28 \quad 46 \quad 25 \cdot 4$ | 752 | 507 | 11.2 | + $4^{*}$ | - 22* | $5 \cdot 70$ | B 9 |
| 1968 | 30686 | $\mathrm{L}_{\mathrm{C}} 1727$ | 548 |  | $29 \quad 6.09$ | 7969 | 161 | $\begin{array}{llll}30 & 26 & 32 \cdot 7\end{array}$ | 744 | 514 | 12.4 | $+37$ | - 24 | 9.1 | Fo |
| 1969 | 27665 | C 2112 | 552-3 |  | 29 $7 \cdot 89$ | 7100 | 147 | $27 \quad 2046 \cdot 4$ | 741 | 502. | 12.2 | + 5 | - 16 | $9 \cdot 4$ |  |
| 1970 | 27667 | C2113 |  |  | 2917.89 | 7248 | 148 | 275243.0 | 728 | 505 | 12.7 | + 81 | 50 | 9.4 |  |
| 1971 | 23710 | B 1463 | 560 |  | 42923.41 | $+3.6231$ | +.0131 | $24 \quad 3 \quad 27 \cdot 3$ | + $7 \cdot 721$ | -491 | $10 \cdot 9$ | + 27 | - 17 | 9.0 | A |
| 1972 | 29721 | C 2114 | 557 |  | 2932.06 | 7754 | 156 | 294016.2 | - 709 | 512 | 12.0 | - 35 | - 153 | $9 \cdot 1$ |  |
| 1973 | 28669 | C 2115 |  |  | $3035 \cdot 20$ | 7560 | 153 | $28 \quad 5635 \cdot 4$ | 624 | 510 | 13.7 | + 23 | - 96 | $10 \cdot 7$ |  |
| 1974 | 30691 | L 1734 | 581 |  | 3044.42 | 8073 | 161 | $3043 \quad 28.4$ | 612 | 517 | $10 \cdot 0$ | + | - 32 | $9{ }^{\circ}$ |  |
| 1975 | 26729 | C 2117 |  |  | $31 \quad 10.73$ | 7049 | 142 | $27 \quad 4 \quad 20 \cdot 2$ | 576 | 504 | 12.4 | - 33 | 20 | 9.0 |  |
| 1976 | 26730 | C 2118 | 600 |  | 43112.95 | $+3.7017$ | +.0143 | 2657 8.0 | $+7.573$ | - 503 | 11.8 | + 162 | - 142 | $8 \cdot 4$ |  |
| 1977 | 29724 |  |  |  | 3123.03 | 7755 | 154 | 293550.5 | 559 | 512 | 13.6 |  |  | 9.5 |  |
| 1978 | 28672 | C212I |  |  | 3129.21 | 7574 | 152 | $28 \quad 5716 \cdot 0$ | 551 | 508 | 11.3 | + 18 | - 21 | $9 \cdot 1$ |  |
| 1979 | 30695 | ${ }_{C}^{C} 2122$ | 602 | 8652 | $3132 \cdot 10$ | 7937 | 156 | $301312 \cdot 1$ | 547 | 516 | 10.6 | + 5 | - 127 | $7 \cdot 91$ | F 5 |
| 1980 | 27673 | C2123 | 606 |  | 3133.45 | 7237 | 145 | $274435 \cdot 3$ | 546 | 506 | 9.7 | 22 | + 4 | $7 \cdot 38$ | A o |
| 1981 | 25720 | C 2124 | 620 | 8666 | 43154.00 | $+3.6646$ | +.0135 | $253245 \cdot 6$ | + 7.517 | - 499 | 9.5 | + 21 | - 12 | $7 \cdot 61$ | K 2 |
| 1982 | 30697 | L 1738 | 615 |  | $32 \begin{array}{ll}32 & 41\end{array}$ | 8196 | 161 | $\begin{array}{llll}31 & 5 & 7 \cdot 8\end{array}$ | 507 | 520 | 11.6 | - 7 | - 16 | $9 \cdot 0$ |  |
| 1983 | 30698 | C 2125 | 619 | 8662 | 32 3.15 | 7945 | 156 |  | 505 | 516 | 11.6 | + 14 | - 5 | $8 \cdot 56$ | B 9 |
| 1984 | 30699 | C 2126 | 622 | 8668 | $\begin{array}{llll}32 & 11.74\end{array}$ | 7981 | 157 | $302043 \cdot 6$ | 493 | 516 | 11.5 | - 21 | + 15 | 8.5 |  |
| 1985 | 31802 | L 1741 |  |  | $3215 \cdot 33$ | 8422 | 165 | 315016.4 | 489 | 523 | $14^{1.1}$ | + 5 | + 4 | 9.8 |  |
| 1986 | 31803 | L 1742 | 627 |  | 43228.80 | $+3.8420$ | $+\cdot 0165$ | $31495 \cdot 0$ | $+7.470$ | - 522 | 10.1 | + 9 | - 21 | 7.08 | B 3 |
| 1987 | 24672 | B 1475 | $637-8$ |  | $32 \cdot 42 \cdot 16$ | 6346 | 129 | $\begin{array}{ll}24 & 22 \\ 23 & 23.9\end{array}$ | 453 | 495 | 11.1 | + 9 | - 24 | $9 \cdot 1$ | A 3 |
| 1988 | 29725 | C 2127 | 610-34 | 8684 | $3246 \cdot 43$ | 7661 | 151 | 291225.2 | 447 | 513 | 11.0 | - 7 | - 7 | $8 \cdot 5$ | A 2 |
| 1989 | 28674 | C2128 | 612 | 8686 | $32 \begin{array}{ll} \\ 50 \cdot 92\end{array}$ | 7473 | 147 | $28 \quad 3216.8$ | 440 | 511 | 10.5 | - 31 | - 10 | $8 \cdot 4$ | F 8 |
| 1990 | 26731 |  |  |  | $3255 \cdot 78$ | 6984 | 139 | $2645 \quad 38 \cdot 7$ | 435 | 504 | $9 \cdot 6$ | + 24 | - 60 |  |  |
| 1991 | 26731 | C2129 | 642 | 8693-4 | 43255.83 | +3.6984 | +.0139 | $264540 \cdot 8$ | + 7 7435 | -504 | 13.0 | + 24 | - 60 | $6 \cdot 49$ | F o |
| 1992 | 26731 |  |  |  | 3255.91 | - 6984 | 139 | $264542 \cdot 8$ | + 435 | 504 | $9 \cdot 9$ | $\begin{array}{r} \\ +\quad 24 \\ \hline\end{array}$ | - 60 |  |  |
| 1993. | 27677 | C 2130 | 623 |  | 33 21-12 | 7327 | 145 | 275938.4 | 400 | 509 | 12.9 | + 2 | + | $9 \cdot 8$ |  |
| 1994 | 24673 | B 1478 | 657 |  | $3327 \cdot 63$ | 6408 | 130 | 2434 52-I | 390 | 496 | 11.2 | - 8 | - 31 | $9 \cdot 4$ |  |
| 1995 | 31805 | L 1744 |  |  | $33 \quad 28 \cdot 34$ | 8357 | 161 | $313347 \cdot 5$ | 390 | 523 | $9 \cdot 2$ | + 19 | - 23 | $7 \cdot 8$ | Fo |
| 1996 | 24674 | $\mathrm{C}_{213}$ | 666-7-8 | 8726-7-8 | $43353 \cdot 69$ | $+3.8533$ | +.0131 | $25 \quad 2 \quad 25 \cdot 3$ | $+7 \cdot 355$ | -499 | 9.0 | + 7 | + | $6 \cdot 27$ | A 3 |
| 1997 | 27679 | $\mathrm{C}^{\text {c }} 2132$ |  |  | 33 56.01 | 7292 | 142 | $27 \quad 5037 \cdot 8$ | 352 | 509 | 11.4 | - 19 | - 2 | $9 \cdot 0$ |  |
| 1998 | 28677 | C 2134 | 644 | 8723-4 | $\begin{array}{lll}34 & 0.62\end{array}$ | 7506 | 146 | $28 \quad 36 \quad 20 \cdot 9$ | 346 | 512 | 10.8 | + 23 | + 27 | $8 \cdot 1$ | A 2 |
| 1999 | $\begin{array}{ll}31 & 807\end{array}$ | L 1746 |  |  | $34 \quad 7.04$ | 8450 | 162 | $315047 \cdot 8$ | 337 | 525 | 10.2 | $+\quad 7$ | - 36 | $9 \cdot 4$ |  |
| 2000 | 29728 | C 2135 | 680 | 8742-3 | $344^{1} 00$ | 7854 | 151 | 294748.8 | 291 | 517 | 9.0 | + 27 | - 20 | $6 \cdot 92$ | Fo |


| No. | B.D. | A.G.C. | W.B. (2). | Lalando. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 191000. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Tуре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. }}{\text { R.A. }}$ | $\underset{\sim}{\text { Dec. }} \underset{\sim}{\text { Dit. }}$ |  |  |
|  | - |  |  |  | h m s | s | s | 8 |  | " |  |  |  |  |  |
| 2001 | 24675 |  |  |  | $43452 \cdot 07$ | +3.6499 | +.0129 | $24 \quad 523664$ | $+7 \cdot 276$ | -499 | 11.8 |  |  | 9.5 |  |
| 2002 | 27682 | C 2136 |  |  | 350.35 | 7248 | 14 I | $273834 \cdot 5$ | 265 | 510 | 13.6 | - | + 11 | $10 \cdot 2$ |  |
| 2003 | 30704 | ${ }_{\text {C }} 2137$ | 687 | 8755 | $35 \quad 4 \cdot 40$ | 7951 | 152 | $\begin{array}{llll}30 & 7 & 2.3\end{array}$ | 260 | 519 | 9.2 | + 33 | - 60 | 8.06 | F 5 |
| 2004 | 29729 | $\mathrm{C}^{\text {C } 2138}$ | 695 |  | $\begin{array}{llll}35 & 21.98\end{array}$ | 7792 | 149 | $29 \begin{array}{lllll} & 33 & 13 \cdot 6\end{array}$ | 236 | 516 | 10.6 | + 27 | - 74 | $9 \cdot 1$ |  |
| 2005 | 27683 | C 2139 |  |  | $35 \quad 26 \cdot 78$ | 7261 | 141 | $27 \quad 40 \quad 10.9$ | 229 | 510 | 13.4 | + 34 | - $4^{\circ}$ | 10.0 |  |
| 200 | 25723 | $\mathrm{C}^{\text {c }} 2142$ | 699 |  | $43536 \cdot 59$ | $+3.6757$ | +.0132 | $2549 \quad 6 \cdot 0$ | $+7.215$ | --503 | $8 \cdot 7$ | - 7 | - 31 | $8 \cdot 4$ | B 9 |
| $2007$ | 28679 | C 2140 |  |  | 3538.93 | 7658 | 146 | $29433 \cdot 1$ | 212 | - 515 | 12.3 | - 22 | - 8 | $9 \cdot 4$ |  |
| 2008 | 29730 | $\mathrm{C}_{2141}$ |  |  | 3539.42 | 7674 | 147 | 29749.0 | 212 | 516 | $12 \cdot 1$ | - 43 | - 1 | 9.4 |  |
| 2009 | 28680 | C 2143 | 681 | 8770-1-2 | 3541.64 | 7479 | 143 | 282629.2 | 208 | 513 | 10.4 | $+33^{*}$ | - $4^{*}$ | $5 \cdot 68$ | A 0 |
| 2010 | 28682 | C 2145 | 689 | 8790-1 | $3^{6} \quad 9 \cdot 12$ | 7497 | 143 | $28 \quad 29 \quad 12.8$ | 172 | 513 | 11.8 | + 16 | - | $8 \cdot 8$ | F 8 |
| 2011 | 24678 | B 1493 | 718 |  | 43619.09 | $+3.6407$ | +.0126 |  | + 7.158 | --498 | 14.1 | + 10 | - 6 | $9 \cdot 8$ |  |
| 2012 | 26735 | $\mathrm{C}_{21} \mathrm{C}_{4} 6$ | 717 |  | 3621.32 | 7033 | 135 | $26 \quad 48 \quad 27 \cdot 8$ | 155 | 507 | 13.2 | + 6 | - 13 | $8 \cdot 7$ |  |
| 2013 | 28683 | C 2147 |  |  | $3635 \cdot 29$ | 7485 | 142 | 282540.8 | 136 | 514 | 10.8 | + 4 | $+\quad 15$ | $9 \cdot 0$ | G |
| 2014 | 25725 | C 2149 | $74^{2}$ |  | $3732 \cdot 95$ | 6846 | 129 | $26 \quad 422.8$ | 057 | 505 | $8 \cdot 4$ | - 18 | + 17 | $8 \cdot 6$ | K 5 |
| 2015 | 26737 |  |  |  | $3753 \cdot 23$ | 7063 | 133 | 265126.4 | 030 | 508 | 11.7 |  |  | $9 \cdot 5$ |  |
| 2016 | 27688 | C 2150 | 759 | 8840 | 43759.33 | $+3.7248$ | +.0136 | 273128.0 | + 7.022 | $-.512$ | $8 \cdot 3$ | + 58 | - 244 | $8 \cdot 0$ | K o |
| 2017 | 30709 | C2151 |  |  | $3830 \cdot 37$ | -8096 | 148 | $3028 \quad 10.0$ | 6.979 | 523 | 13.5 | - 19 | - 43 | $9 \cdot 5$ |  |
| 2018 | 30710 | C 2152 |  |  | $\begin{array}{llll}38 & 36 \cdot 58\end{array}$ | 8061 | 148 | $30 \quad 20 \quad 54.7$ | 970 | 522 | 13.8 | + 46 | - 20 | $10 \cdot 0$ |  |
| 2019 | 25727 | C2153 | 781 |  | 3854.34 | 6667 | 126 | $25{ }_{2} 21 \quad 39 \cdot 5$ | 947 | 504 | 13.4 | - 55 | - 38 | $9 \cdot 5$ |  |
| 2020 | 28685 | C 2154 |  |  | $39 \quad 6.87$ | 7607 | 140 | $284520 \cdot 9$ | 929 | 517 | 14.5 | - 13 | - II3 | $9 \cdot 8$ |  |
| 2021 | 28686 |  |  |  | 43914.59 | $+3.7684$ | $+\cdot 0140$ | $\begin{array}{llll}29 & 1 & 18.4\end{array}$ | +6.918 | $-.518$ | 13.6 |  |  | $9 \cdot 5$ |  |
| 2022 | 30713 | C 2156 | 794 |  | 39 46•13 | 8007 | 144 | $30657 \cdot 7$ | 875 | 523 | $8 \cdot 8$ | - 2 | - 15 | 8.6 |  |
| 2023 | 24683 | B1512 | 802 |  | $39 \quad 50 \cdot 34$ | 6379 | 121 | $2441439 \cdot 1$ | 870 | 502 | $8 \cdot 6$ | - 13 | - 13 | $9 \cdot 0$ |  |
| 2024 | 28687 | C 2157 | 806 |  | $\begin{array}{lll}40 & 11.57\end{array}$ | 7545 | 137 | $28 \quad 2947 \cdot 5$ | 840 | 517 | 9 ${ }^{\circ}$ | 8 $+\quad 8$ |  | $7 \cdot 02$ | G 5 |
| 2025 | 27 691 | C 2158 |  |  | 4024.57 | 7174 | 132 | $27 \quad 954.2$ | 822 | 512 | 10.8 | - 36 | + 11 | $9 \cdot 4$ |  |
| 2026 | 28689 | C 2159 |  |  | $44033 \cdot 2 \mathrm{I}$ | $+3.7609$ | +.0138 | $284232 \cdot 0$ | + 6.81 I | - 519 | $10 \cdot 3$ | + | + 22 | $8 \cdot 7$ | Go |
| 2027 | 25731 | C 2160 | 822 | 8917 | 4040.06 | 6822 | 126 | $25 \quad 5220 \cdot 1$ | 801 | 508 | $9 \cdot 0$ | $+$ | - 39 | $7 \cdot 48$ | A 0 |
| 2028 | 30718 | $\mathrm{C}^{2} 2161$ |  |  | $4053 \cdot 80$ | 8056 | 143 | 301427.0 | 782 | 525 | 13.5 | - 4 | - | 10.0 |  |
| 2029 | 27694 | $\mathrm{C}_{2164}$ | 826 |  | $4056 \cdot 38{ }^{\prime}$ | 7338 | 133 | 274414.1 | 779 | 515 | 11.0 | - 6 | - 4 | $8 \cdot 4$ | A 2 |
| 2030 | 28692 | C 2165 | 827 |  | $4058 \cdot 70$ | 7627 | 137 | $2845 \mathrm{I} 3 \cdot 1$ | 775 | 519 | 11.8 | + | + 18 | $9 \cdot 4$ |  |
| 2031 | 30719 | L 1771 |  |  | $4 \begin{array}{lll}41 & 1.87\end{array}$ | $+3.8206$ | +.0146 | $304436 \cdot 6$ | +6.771 | --527 | 14.0 | + 15 | + | $9 \cdot 5$ |  |
| 2032 | 30720 | L $177{ }^{2}$ |  |  | 415.46 | 8113 | 144 | $302530 \cdot 8$ | 767 | 526 | 13.6 | - 18 | - 13 | $9 \cdot 4$ |  |
| 2033 | 27695 | C 2167 |  |  | $4117 \cdot 50$ | 7434 | 133 | $\begin{array}{llll}28 & 3 & 44.9\end{array}$ | 749 | 516 | 13.3 | + | - 16 | $9 \cdot 4$ |  |
| 2034 | 31815 | L 1774 |  |  | +1 21.22 | 8415 | 149 | 31 2533.5 | 745 | 530 | 12.9 | + $\quad 2$ | 35 | $9 \cdot 4$ |  |
| 2035 | 29738 | C 2169 | $847^{-8}$ |  | 4141.60 | 7754 | 138 | 29 10 17.7 | 716 | 522 | 10.0 | 36 | 15 | $9 \cdot 0$ | A 0 |
| 2036 | 24686 |  |  |  | 44159.87 | $+3.6385$ | +.0118 | $24 \begin{array}{lllll} & 11 & 354\end{array}$ | +6.692 | -. 504 | 13.4 |  |  | $9 \cdot 8$ |  |
| 2037 | 25734 | C 2173 |  |  | $4235 \cdot 24$ | 6779 | 123 | $253849 \cdot 7$ | 643 | 509 | $9 \cdot 4$ | - 46 | - 7 | $8 \cdot 5$ | G 0 |
| 2038 | 28695 | C 2172 | $864-5$ | 8965-6 | 4238.63 | 7737 | 136 | $29438 \cdot 2$ | 638 | 522 | $9 \cdot 5$ | + 11 | - 60 | 7.01 | F 5 |
| 2039 | 29741 | C 2175 | 866 |  | $4^{2} 41.07$ | 7893 | 138 | $293649 \cdot 6$ | 635 | 524 | $9 \cdot 0$ | - 13 | - 24 | $7 \cdot 36$ | B 9 |
| 2040 | 26750 | C 2176 | 874 | 8974 | $4^{2} 46.05^{.}$ | 7098 | 127 | $26 \quad 48 \quad 24.4$ | 628 | 511 | $9 \cdot 0$ | 7 | + 16 | $7 \cdot 8$ | K 0 |
| 2041 | 24689 | B 1528 | 886 | 8991-4 | $+436 \cdot 48$ | $+3.649^{8}$ | +.0118 | $\begin{array}{llll}24 & 35 & 4 \cdot 5\end{array}$ | +6.601 | --507 | 10.4 | + 23 | - 25 | $8 \cdot 0$ | F 2 |
| 2042 | 30721 | L 1777 | 884 |  | 4315.25 | 8252 | 143 | $\begin{array}{llllllllllll}30 & 4^{8} & 32 \cdot 2\end{array}$ | 588 | 525 | $10 \cdot 4$ | $+\quad 7$ $+\quad$ | - 10 | $8 \cdot 6$ | Fo |
| 2043 | 28696 | C 2178 | 888 |  | $43 \quad 17 \cdot 47$ | $7^{613}$ | 133 |  | 586 | 521 | $10 \cdot 9$ | $+\quad 37$ | + 26 | $8 \cdot 7$ |  |
| 2044 | 24691 | B 1530 | 895 |  | $4324 \cdot 42$ | 6422 | 117 | 241723.0 | 576 | 504 | 12.4 | $+\quad 4$ | - 19 |  |  |
| 2045 | 31816 | L 1779 | 889 | 8992 | $43 \quad 26 \cdot 56$ | 8396 | 146 | 311654.5 | 572 | 531 | $8 \cdot 9$ | + 17* | - 113 ${ }^{*}$ | $5 \cdot 76$ | K o |
| 20.46 | 26752 | C 2180 | 896 | 9003 | 443 31.06 | $+3.7118$ | +.0125 | 265115.5 | + 6.566 | --514 | 10.6 | 7 | - 63 | $7 \cdot 6$ | Go |
| 2047 | 29742 | C 2181 |  | 9001 | $4334 \cdot 77$ | 7845 | 136 | $292450 \cdot 2$ | 561 | 525 | 10.4 | + 11 | - 54 | 7.21 | A $\circ p$ |
| 2048 | 28698 | C 2182 | 898 | 9004 | 43 37•73 | 7495 | 131 | 28 II 34.7 | 557 | 520 | $10 \cdot 1$ | - 14 | + | $7 \cdot 49$ | Ko |
| 2049 | 29743 | C 2183 |  |  | +3 44.26 | 7939 | 137 | $2943 \quad 52 \cdot 3$ | 548 | 526 | 11.6 | + 24 | + 4 | $9 \cdot 4$ |  |
| 2050 | 28700 | C 2185 | 915 |  | 4420.41 | 7671 | 132 | $28 \quad 47 \quad 10 \cdot 5$ | 499 | 522 | 11.2 | + 3 | + 20 | $8 \cdot 8$ | F 8 |


| No. | B.I). | A.G.c. | W.B. (2). | Lalande. | R.A. 19100. | Proccssion. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch$1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.A. }}{\substack{\text { R. } \\ \hline}}$ | Dec. |  |  |
|  | - |  |  |  | h m | 8 | 8 | - " |  | " |  |  |  |  |  |
| 2051 | 28701 | C 2186 | 916 |  | 44423.63 | $+3.7647$ | +.0132 | 284155.2 | $+6.493$ | -. 522 | 9.2 |  | 21 | $8 \cdot 0$ | A 5 |
| 2052 | 27700 | C 2187 |  |  | $4444 \cdot 88$ | 7437 | 129 | 275659.8 | 464 | 520 | 10.0 | - $\quad 36$ | - .4 | $9 \cdot 0$ |  |
| 2053 | 27699 | C 2188 |  | 9030 | 44 45.21 | 7475 | 129 | $\begin{array}{llll}28 & 4 & 59.4\end{array}$ | 464 | 520 | 8.6 | - 14 | - 66 | 8.5 |  |
| 2054 | 31817 | $\mathrm{L}_{\mathrm{C}} 1782$ | 925 |  | $45 \quad 1 \cdot 38$ | 8454 | 144 | $312441 \cdot 0$ | 442 | 533 | 9.4 | $+\quad 5$ $+\quad 1$ | - 24 | 7.8 | K o |
| 2055 | 28704 | C 2190 |  | 9040 | $45 \quad 13.90$ | 7501 | 129 | $\begin{array}{llll}28 & 9 & 34.8\end{array}$ | 424 | 521 | 8.8 | + | - 17 | $7 \cdot 72$ | B 3 |
| 2056 | 30727 | L 1786 | 937 | 9042 | $44527 \cdot 20$ | $+3.8295$ | +.0140 | $305220 \cdot 0$ | +6.406 | -. 532 | 9.9 | + 15 | - 64 | $8 \cdot 8$ | A |
| 2057 | 24695 | B 1537 | 950-1 |  | $4546 \cdot 77$ | 6402 | 114 |  | 379 | 507 | 10.8 | - 2 | - 32 | $8 \cdot 7$ | F 5 |
| 2058 | 28707 | C 2192 | 946 | 9060 | $45 \quad 52.63$ | 7569 | 129 | $\begin{array}{llll}28 & 22 & 25.7\end{array}$ | 370 | 523 | 9.6 | + 11 | + 29 $+\quad 1$ | $8 \cdot 39$ | N |
| 2059 | 28706 | ${ }_{C}^{C} 2193$ |  |  | $4553 \cdot 89$ | 7599 | 129 |  |  | 523 | 11.5 | + 93 | - 51 | $8 \cdot 6$ |  |
| 2060 | 25742 | C 2194 | 958 |  | $\begin{array}{lll}46 & 4.87\end{array}$ | 6860 | 118 | 2549 41•7 | 354 | 512 | 12.5 | + 10 | + 20 | $9 \cdot 4$ |  |
| 2061 | 26756 | C 2195 |  |  | 44612.69 | $+3 \cdot 7079$ | +.0121 | $263710 \cdot 1$ | +6.343 | -515 | 12.0 | + | + 11 | 9.1 |  |
| 2062 | 30732 | $\mathrm{L}_{1} 790$ | 960 | 9072 | $4625 \cdot 00$ | + 8350 | 139 | 31 0 | + 326 | 532 | 9.2 | - 11 | - 101 | 6.82 | $G_{5}$ |
| 2063 | 26757 | C 2196 |  |  | $4630 \cdot 69$ | 7122 | 122 | 264554.8 | - 318 | 517 | 11.2 | + 20 | - 27 | 8.6 |  |
| 2064 | 31821 | L 1791 | 963 | 9078 | 4639.89 | 8600 | 143 | 31505.8 | 305 | 536 | $9 \cdot 4$ | - 16 | - 15 | $7 \cdot{ }^{2}$ | A 3 |
| 2065 | 26758 | C 2200 |  |  | $4657 \cdot 79$ | 7157 | 121 | $265235 \cdot 8$ | 281 | 518 | 11.3 | - 46 | - 18 | $8 \cdot 6$ |  |
| 2066 | 27701 | C 2201 | 978 | 9096 | $447 \quad 9.70$ | $+3.7404$ | +.0125 | 274451.6 | +6.264 | . 521 | I1. 1 | + $4^{8}$ | - 12 | $5 \cdot 91$ | F 2 |
| 2067 | 30735 | L 1793 |  |  | 4715.15 | +8258 | 136 | $304048 \cdot 3$ | 257 | 533 | 12.2 | - 9 | + 2 | 9.4 |  |
| 2068 | 27702 | $\mathrm{C}_{2} 2202$ | 984 |  | 4717.26 | 7240 | 123 | $27 \quad 971$ 1.3 | 254 | 519 | 11.4 | + $+\quad 17$ | - 37 | $8 \cdot 8$ |  |
| 2069 | 27704 | ${ }_{C} \mathrm{C} 2203$ | 985 | 9103 | 4722.81 | 7465 | 126 | $275730 \cdot 2$ | 246 | 522 | 9.8 | + 21 | - 66 | $8 \cdot 2$ | F. 5 |
| 2070 | 26759 | C 2204 | 986 |  | $47 \quad 23 \cdot 86$ | 7092 | 121 | $263743 \cdot 1$ | 244 | 517 | 10.0 | + 7 | - 27 | $7 \cdot 84$ | K 2 |
| 2071 | 29750 | C 2205 |  |  | $44740 \cdot 18$ | $+3.7889$ | +.0130 | 292512.7 | $+6 \cdot 221$ | - 528 | 11.5 | + 6 | - 14 | $9 \cdot 4$ |  |
| 2072 | 24702 | C 2206 | 994 |  | $474^{8 \cdot 72}$ | 6584 | 113 | $244513 \cdot 1$ | 210 | 510 | 10.8 | 8 | - 35 | 8.8 | F 8 |
| 2073 | 23756 | B 1547 | 995-6 |  | $4753 \cdot 93$ | 6391 | 111 | $\begin{array}{llll}24 & 1 & 42 \cdot 6\end{array}$ | 203 | 508 | 10.3 | 6 | - 1 | $7 \cdot 7$ | F 8 |
| 2074 | 25746 | C 2208 | 1002-3 | 9132 | $48 \quad 5 \cdot 37$ | 6711 | 115 | $\begin{array}{llll}25 & 13 & 4.4\end{array}$ | 188 | 512 | $8 \cdot 6$ | 5 | - 23 | $7 \cdot 21$ | A 0 |
| 2075 | 29754 | C 2209 | 1004 | 9129 | $48 \quad 15 \cdot 66$ | 7829 | 128 | 291148.8 | 172 | 527 | $9 \cdot 6$ | 26 | - 12 | $9 \cdot 0$ |  |
| 2076 | 28713 | C 2212 | 1014 | 9153 | $44846 \cdot 56$ | +3.7681 | +.0126 | $283955 \cdot 3$ | +6.129 | -:526 | $9 \cdot 0$ | + 44 | - 42 | 8.8 | F 5 |
| 2077 | 26762 | C 2215 |  |  | $\begin{array}{lll}49 & 0.38\end{array}$ | 7102 | 120 | $263648 \cdot 5$ | 111 | 518 | 10.3 | - 15 | + 28 | 8.8 |  |
| 2078 | 25750 | C 2216 |  |  | $49 \quad 10 \cdot 70$ | 6820 | 118 | $253457 \cdot 3$ | 096 | 514 | 12.5 | - 13 | - 5 | 9.5 |  |
| 2079 | 29755 | C 2219 |  |  | 4938.49 | 7893 | 126 | 29 21 $53 \cdot 6$ | 059 | 529 | $9 \cdot 8$ | - 3 | - 10 | $9 \cdot 0$ |  |
| 2080 | $28 \quad 714$ | C 2221 |  |  | $4945 \cdot 53$ | 7696 | 125 | 28415 | 047 | 526 | $9 \cdot 3$ | + 18 | - 25 | 94 |  |
| 2081 | 25753 | C 2222 | 1032 |  | $44945 \cdot 60$ | $+3.6702$ | +-0112 | $25 \quad 7 \quad 55.9$ | $+6.047$ | -. 513 | $9 \cdot 1$ | t | 12 | 8.61 | A 0 |
| 2082 | 26764 | C 2223 | 1041 | 9193 | 4959.21 | 7235 825 | 118 |  | 029 | 521 | $9 \cdot 1$ | 35 | 32 | $7 \cdot 46$ | K o |
| 2083 | 30741 | $\mathrm{LI}_{1800}$ | 1034 | 9188 | $50 \quad 1.42$ | 8205 | 130 |  | 027 | 534 |  | - 6 | 11 | $7 \cdot 46$ | A 0 |
| 2084 | 30742 | C 2224 | 1037 | 9190 | $50 \quad 4 \cdot 35$ | 8142 | 129 | 30 II 38.6 | 022 | 533 | 10.4 | - 0 | - 26 | $7 \cdot 56$ | A 0 |
| 2085 | 30743 | L 1802 | 1045 |  | $50 \quad 14.98$ | 8213 | 130 | $3025 \quad 24.9$ | 007 | 534 | 11.2 | + 21 | - 38 | 9.0 |  |
| 2086 | 27708 | C 2225 | 1047 | 9203 | 45018.43 |  | +.0120 | $274^{11} 36 \cdot 2$ | $+6.003$ |  |  |  |  | $8 \cdot 7$ | F 8 |
| 2087 | 25755 | C 2227 |  |  | 5043.89 | $6728$ | 111 | 25 II 57.7 | $5 \cdot 967$ | 514 | 11.8 | + 2 | - 34 | $9 \cdot 0$ |  |
| 2088 | 29760 | ${ }^{\text {C }} 2226$ |  |  | 5046.06 | 8047 | 127 | 29517.5 | 964 | 532 | 12.2 | + 19 | - 23. | 9.4 |  |
| 2089 | 24709 | B 1574 | 1064-7 | 9223 | $5046 \cdot 53$ | 6526 | 109 | $24 \quad 2657 \cdot 3$ | 963 | 511 | 12.8.13.4 |  | - 31* | $6 \cdot 28$ | Fo |
| 2090 | 24708 | B 1575 | 1068 |  | 5048.00 | 6596 | 110 | $24 \quad 42 \quad 32 \cdot 5$ | 961 | 513 | 12.8 | + 12 | 11 | 9.8 |  |
| 2091 | 28716 | C 2228 |  |  | 4512.09 | $+3.7547$ | +.0121 | $\begin{array}{llll}28 & 7 & 32.8\end{array}$ | + $5 \cdot 942$ | - 525 | 12.9 | + 17 | - 8 | $9 \cdot 4$ |  |
| 2092 | 30744 | L 1807 |  |  | $51 \quad 17.27$ | 8382 | 131 | $30 \quad 57 \quad 5 \cdot 7$ | 921 | 537 | 13.1 | + 30 | - 18 | $9 \cdot 4$ |  |
| 2093 | 28721 | C 2229 | 1074 |  | 5124.76 | 7550 | 121 | $28 \quad 714.2$ | 910 | 526 | 13.0 | - 21 | - $7^{8}$ | $9 \cdot 0$ | G 5 |
| 2094 | 24711 | B 1578 | 1082-3 |  | 5136.95 | 6576 | 108 | $243639 \cdot 6$ | 893 | 513 | 11.3 | 16 | + $\quad 2$ | 8.8 | G 5 |
| 2095 | 27712 | C 2232 | 1090-1 | 9250 | $\begin{array}{lll}52 & 3.73\end{array}$ | 7305 | 117 | $\begin{array}{lllll}27 & 14 & 19.3\end{array}$ | 855 | 523 | 11.0 | + 90 | - 134 | 8.7 | F 5 |
| 2096 | 29771 | C 2233 | 1098 | 9254 | $4{ }_{4} 5217 \cdot 81$ | $+3.8103$ | +.0125 | 2959 II•2 | + 5.836 | -. 534 | $9 \cdot 0$ | + 18 | - 18 | $7 \cdot 86$ | A 0 |
| 2097 | 29770 | C 2234 |  |  | $5220 \cdot 10$ | 7940 | 123 | $29 \begin{array}{llll}26 & 26 & 8\end{array}$ | + 833 | 531 | 10.7 | + 16 | 0 | $9 \cdot 0$ | A 2 |
| 2098 | 30746 | L 1816 | 1099 |  | 5223.54 | 8256 | 127 | $302955 \cdot 3$ | 827 | 536 | $9 \cdot 3$ | 0 | + 15 | $8 \cdot 1$ | A 3 |
| 2099 | 25761 | C 2237 |  |  | $\begin{array}{lll}52 & 32 \cdot 17\end{array}$ | 6820 | 109 | 252857.0 | 816 | 516 | 12.6 | + + | + 3 | $9 \cdot 4$ |  |
| 2100 | 29773 | C 2238 |  | 9259 | $5236 \cdot 83$ | 8023 | 124 | $294230 \cdot 0$ | 809 | 533 |  | - 19 | - 10 | 8.4 | A 2 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec.Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Sprectral Tyре |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. A. }}{\text { R. }}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m |  | $s$ | - , " |  | " |  |  |  |  |  |
| 2151 | 30774 | C 2276 | 1257 |  | + $584^{8 \cdot 32}$ | +3.8251 | +.0116 | $301642 \cdot 4$ | $+5 \cdot 290$ | - 540 | 12.6 | $+10$ | - |  |  |
| 2152 | 30775 | L 1847 | 1258 |  | $5849 \cdot 68$ | 8244 | 116 | $\begin{array}{lllllllllllllllllllll}30 & 15 & 14.8\end{array}$ | - 287 | 540 | 12.0 | + 23 | + 20 | $9 \cdot 06$ |  |
| 2153 | 27723 | C 2278 |  | 9484 | 59 0.21 | 7457 | 108 | $27 \quad 3416.2$ | 273 | 529 | 11.8 | + | 6 | $6 \cdot 48$ | A 2 |
| 2154 | 28741 | C 2279 |  |  | 59 4.16 | 7762 | 111 | $28 \quad 37 \quad 16 \cdot 7$ | 267 | 534 | 11.8 |  |  | $9 \cdot 1$ | F 5 |
|  | 30778 |  |  |  | $59 \quad 7 \cdot 13$ | 8404 | 118 | $30 \quad 46 \quad 28 \cdot 4$ | 263 | 542 | 14.9 |  |  | 9.5 |  |
| 2156 | 30.778 | L 1849 |  |  | 449 <br> 8.07 | $+3.8404$ | +-0118 | $30 \quad 46 \quad 24.3$ | + $5 \cdot 262$ | - 542 | 13.8 | + 16 | - 26 | 9.4 |  |
| 2157 | 29801 | C 2280 |  |  | 5913.58 | 8018 | 113 | 292912.7 | 253 | 538 | 13.7 |  |  | $9 \cdot 4$ |  |
| 2158 | 29802 | ${ }^{\text {C } 2281}$ |  | 9490 | 5914.66 | 8126 | 115 | $\begin{array}{llll}29 & 51 & 1.8\end{array}$ | 252 | 539 | 11.4 | - $4^{8}$ | + 39 | $7 \cdot 91$ | K o |
| 2159 | 26781 | C 2283 |  |  | 5914.94 | 7228 | 105 | $2645 \quad 28.2$ | 252 | 526 | 13.6 | + 11 | + 31 | $9{ }^{\circ}$ |  |
| 2160 | 26780 | C 2284 | 1270 | 9493 | 5914.99 | 7182 | 105 | $263546 \cdot 3$ | 252 | 525 | II.8 | + 16 | - 24 | $7 \cdot 42$ | A 2 |
| 2161 | 27726 | C 2286 |  |  | $45938 \cdot 11$ | $+3.7452$ | +.0107 | 27 32  <br> 26 18 8.7 <br> 18   | + 5.219 | --530 | 12.8 |  |  | 9.4 |  |
| $2162$ | 26782 26783 | C 2287 | ${ }_{\text {c }}^{1284}$ |  | 59 $593 \cdot 11$ 0 | 7103 | 103 | $\begin{array}{lll}26 & 18 & 1.8 \\ 26 & 18 & 2.8\end{array}$ | 212 | 524 | 12.8 | II | $+\quad 29$ $+\quad 1$ | $9 \cdot 4$ |  |
| 2163 2164 | 26783 30781 | C 2288 | 1298-300 | 9531 | $5 \begin{array}{lll}5 & 0 & 19.01 \\ & 0 & 22.03\end{array}$ | 7109 | 102 | $\begin{array}{lllll}26 & 18 & 25 \cdot 8\end{array}$ | 162 | 524 | . 4 |  | + | $6 \cdot 56$ | B 5 |
| 2165 | 24745 | В 1635 | 1306-7 |  | (1) | 8233 655 | 114 95 | 30   <br> 34 10 189.9 <br> 4 $89 \cdot 1$  | 156 | 541 | 12.6 11.8 | + $\begin{array}{r}48 \\ +\quad 5\end{array}$ | 7 $-\quad 18$ $-\quad 18$ | 9.4 9.8 |  |
| 2166 | 29806 | C 2290 |  | 9529 | $5 \quad 5029.68$ | $+3.8075$ | +.0112 | $293835 \cdot 7$ | $+5 \cdot 14^{6}$ | --540 | $9 \cdot 3$ | + 21 | 52 | 8.0 | F 2 |
| 2167 | 26785 | C 2292 | $1315-6$ |  | - 59.13 | 7133 | IoI | $262230 \cdot 0$ | 105 | , 526 | $9 \cdot 8$ | + 22 |  | $8 \cdot 7$ |  |
| 2168 | 29809 | C 2294 |  |  | I 16.23 | 8173 | 112 | $295651 \cdot 0$ | 081 | 541 | 11.2 | - 8 | - 52 | 8.66 | A 2 |
| 2169 | 24750 | B 1638 | 1334 |  | 1 26.73 | 6555 | 95 | $24168 \cdot 1$ | 066 | 518 | 10.7 | + 18 | - 8 | 9.0 | A 0 |
| 2170 | 26787 | C 2298 | 1328 | 9566 | 1 29.20 | 7278 | 103 | $26 \quad 5232 \cdot 0$ | 063 | 528 | 9.6 | - | + 10 | $8 \cdot 4$ | A $p$ |
| 2171 | 30786 | L 1863 |  |  | $5 \quad 1 \begin{array}{lll}50.48\end{array}$ | $+3.8394$ | +-0114 | $3040 \quad 6 \cdot 1$ | $+5.047$ | -. 544 | 10.8 | + 13 | + 17 | $9 \cdot 4$ |  |
| 2172 | 30785 | L 1862 | 1332 |  | I $40 \cdot 61$ | 8496 | 115 | $30 \quad 5959.7$ | 046 | 545 | 12.6 | - 19 | + 33 | 9.1 |  |
| 2173 | 30788 | L 1866 |  |  | 1 43.27 | 8380 | 113 | $\begin{array}{llllllllllllllll}30 & 37 & \end{array}$ | 043 | 543 | 12.0 | + 18 | - 7 | $9 \cdot 4$ |  |
| 2174 | 30790 | L 1868 |  |  | I 50.22 | 8347 | 112 | $303017 \cdot 1$ | 033 | 544 | 12.6 | - | - 17 | $9 \cdot 4$ | A |
| 2175 | 29813 | C 2300 |  |  | $27 \cdot 96$ | 8213 | 110 | $\begin{array}{lllll}30 & 3 & 22.8\end{array}$ | 008 | 542 | 13.4 | - 11 | $+4$ | $9 \cdot 1$ |  |
| 2176 | 24753 | B 1640 | 1349 |  | $\begin{array}{llll}5 & 2 & 9.94\end{array}$ | $+3 \cdot 6679$ | +-0094 | $24 \begin{array}{lll}42 & 24.3\end{array}$ | + 5.005 | --520 | 12.9 | + 20 | + 19 | 9.4 | F 5 |
| 2177 | 26789 | C 2302 | 1 358-9 | 9595 | 221.95 | 7097 | 99 | 26 I2 39.1 | 4.988 | 526 | 10.8 | - 61 | - 60 | $8 \cdot 0$ | G 5 |
| 2178 | 28750 | C 2303 | 1360 | 9596 | 229.29 | 7683 | 105 | $\begin{array}{lllllllllllllllllllllll}28 & 15 & 30.9\end{array}$ | 978 | 534 | 12.0 | + 25 | - 39 | $8 \cdot 4$ | F 2 |
| 2179 | 30794 | L1870 | 1351-2-3 |  | 231.70 | 8519 | 114 |  | 974 | 546 | 11.2 | + 13 | - 45 | $8 \cdot 6$ | A 3 |
| 2180 | 24755 | B 1645 | 1370 | 9612 | $237 \cdot 47$ | 6530 | 94 | $24 \quad 8 \quad 49 \cdot 2$ | 966 | 518 | 11.0 | $+\quad 2^{*}$ | - 15* | $5 \cdot 50$ | B 3 |
| 2181 | 30796 | L 1871 | 1364 |  | $5 \quad 242 \cdot 51$ | $+3.8301$ | +.0110 | 301950.9 | + 4.958 | - 543 | 11.0 | - 8 | - 17 | $9^{\circ} 0$ | A 0 |
| 2182 | 28751 | C 2305 | ${ }^{1} 373-4$ | 9618 | $256 \cdot 03$ | 7657 | 103 | $28 \quad 9 \quad 22 \cdot 1$ | 940 | 534 | 9.4 | + 9 | + 7 | $7 \cdot 00$ | A 2 |
| 2183 | 31865 | L 1878 | 1386 |  | $332 \cdot 13$ | 8693 | 114 | 31 $3441 \cdot 2$ | 889 | 549 | 10.7 | - 7 | - | $8 \cdot 6$ |  |
| 2184 | 29820 | C 2308 | 1394 |  | $335 \cdot 8$ I | 8053 | 106 | $292854 \cdot 6$ | 884 | 541 | II. 5 | + 58 | - 143 | $9 \cdot 1$ | G 5 |
| 2185 | 27 731 | C 2301 | 1403-4-5 |  | $342 \cdot 32$ | 7383 | 100 | 27 11 2.5 | 875 | 530 | 12.6 | - 11 | - 28 | $9 \cdot 4$ | K 2 |
| 2186 | 29821 | C 2309 |  |  | $\begin{array}{llll}5 & 3 & 42.95\end{array}$ | $+3.8158$ | +.0108 | $294950 \cdot 4$ | $+4.874$ | - 542 | 12.0 |  |  | $8 \cdot 6$ | A 3 |
| 2187 | 28753 | $\mathrm{C}_{231 \mathrm{II}}$ | 1402 |  | 345.54 | 7911 | 105 | 29044 | 869 | 539 | 12.2 | - 10 | - 22 | 8.8 | A 0 |
| 2188 | 29822 | C 2312 | 1414 |  | 359.76 | 8116 | 107 | 29 4I I-I | 850 | 54 I | 9.7 | + 18 | + 5 | 6.61 | F 8 |
| 2189 | 28754 | $\mathrm{C}_{2} 2313$ | 1415-6 |  | $4 \quad 0.42$ | 7921 | 105 | 29 I 44-I | 850 | 538 | 12.8 | - 30 | - II | 8.8 | G 5 |
| 2190 | 27732 | C 2315 | 1421 | 9653 | $45 \cdot 90$ | 7596 | 101 | $\begin{array}{lll}27 & 55 & 0.8\end{array}$ | 84 I | $53+$ | I2.I | 34 | - 57 | $5 \cdot 97$ | A 3 |
| 2191 | 27732 | C 2316 |  |  | $\begin{array}{llll}5 & 4 & 6 \cdot 36\end{array}$ | $+3 \cdot 7597$ | +.0101 | 2755 11.8 | + 4.841 | -. 534 | 11.3 | 34 | - 57 | $8 \cdot 6$ |  |
| 2192 | 25786 | C 2317 |  |  | 4 9.61 | 6953 | 95 | $\begin{array}{llll}25 & 39 & 2.8\end{array}$ | 835 | 525 | 13.6 | - 17 | - 17 | $9 \cdot 4$ |  |
| 2193 | 31867 | L 1885 | 1422 | 9651 | 415.70 | 8773 | 115 | $\begin{array}{llll}31 & 49 & 1.3\end{array}$ | 827 | 550 | 11.0 | + 15 | - 57 | $7 \cdot 8$ | A 5 |
| 2194 | 27733 | C 232 I | 1428 |  | 421.77 | 7487 | 10 | 273151.0 | 818 | 532 | 13.8 | + 151 | - 55 | 9.1 |  |
| 2195 | 27734 | C 2322 | 1433 | 9661 | 425.02 | 7462 | 99 | $27 \quad 26 \quad 39.2$ | 814 | 532 | 12.3 | + 154 | - 104 | $6 \cdot 91$ | F 5 |
| 2196 | 26794 | C 2323 |  |  | $\begin{array}{llll}5 & 4 & 26.84\end{array}$ | +3.7227 | +.0098 | $26 \begin{array}{llll}26 & 371.4\end{array}$ | + 4.8 II | -. 528 | 13.4 | $\begin{array}{r} \\ +\quad 37 \\ \hline\end{array}$ | - 19 |  |  |
| 2197 | 30803 | L 1886 |  |  | $428 \cdot 52$ | 8356 | 108 | $302750 \cdot 6$ | 809 | 545 | 10.8 | ar $+\quad 21$ $+\quad 28$ | - 112 | $7 \cdot 66$ | F 8 |
| 2198 | 26795 | C 2324 | 1436 |  | 428.85. | 7233 | 98 | $26 \quad 38 \quad 25 \cdot 7$ | 809 | 528 | 12.0 | + 28 | - 37 | $9 \cdot 4$ |  |
| 2199 | 30804 | L 1888 |  |  | $448 \cdot 68$ | 8426 | 109 | $304^{1}+1$ | 780 | 546 | 10.0 | - 14 | 14 $+\quad 1$ | $6 \cdot 91$ | K o |
| 2200 | 24770 | C 2326 |  |  | $455 \cdot 52$ | 6697 | 91 | $244^{2} 1774$ | 770 | 522 | 12.8 |  |  | $9 \cdot 4$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | I P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalando. | R.A. 1910.0 | Precession. | Sec. Var. | Dee. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | $\xrightarrow[\text { R.0001. }]{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ".-ooi. } \end{aligned}$ | Mag. | Spectral Type. |
|  | $\bigcirc$ |  |  |  | h m s | s | s | - , " | " | " |  |  |  |  |  |
| 2201 | 28755 | C 2328 | 1456-9 |  | $5 \begin{array}{lll}5 & 5 & 3.93\end{array}$ | $+3.7807$ | $+.0102$ | $28 \quad 36 \quad 53 \cdot 7$ | $+4.759$ | $-.536$ | 11.4 |  |  | $8 \cdot 4$ | A 0 |
| $\left\|\begin{array}{l} 2202 \\ 2,202 \end{array}\right\|$ | \}31 871 | L 1891 | 1 453-5 | 9682 | 510.13 | 8814 | 114 |  | 750 | 552 | 12.7 | - 90 | 1 | 37.9 | G 5 |
| 2203 | $j 3187$ | C 1891 | 1453-5 | 9682 | $\begin{array}{lll}5 & 10.42\end{array}$ | 8814 | 114 | 315534.9 | 750 | 552 | $7 \cdot 1$ | - 90 | - 1 | $\int$ | G |
| 2204 | 24772 | C 2330 | $1-2-3-4$ |  | 513.26 | 6789 | 91 | $\begin{array}{llll}25 & 2 & 0.2\end{array}$ | 746 | 523 | 11.8 | - 23 | - 210 | $8 \cdot 46$ | G 5 |
| 2205 | 31872 | L. 1892 |  |  | $5 \quad 13.99$ | 8800 | 113 | 315234.9 | 745 | 552 | 13.5 | 15 | - 26 | $9 \cdot 1$ |  |
| 2206 | 24773 | C 2333 |  |  | $5 \quad 5 \quad 19.02$ | $+3.6714$ | +.0090 | $244529 \cdot 6$ | + 4.738 | -. 522 | I $2 \cdot 9$ | $-\quad 26$ | - 35 | $9 \cdot 0$ |  |
| 2207 | 30808 | C 2331 |  |  | $520 \cdot 20$ | 8279 | 107 | 3011123.4 | 736 | 545 | 12.4 | - 54 | + 30 | $8 \cdot 66$ | K o |
| 2208 | 24774 | ${ }_{\text {B } 1664}$ |  |  | $5 \quad 22 \cdot 86$ | 6586 | 90 | $2417 \quad 29 \cdot 3$ | 732 | 520 | I 3.8 | + 5 | - 24 | $9 \cdot 0$ |  |
| 2209 | 29829 | C 2332 | 1 4 $68-9$ |  | $5 \quad 22 \cdot 94$ | 8124 | 105 | $294022 \cdot 3$ | 732 | 542 | 12.2 | + 18 | - 45 | $8 \cdot 5$ | F 5 |
| 2210 | 29830 | C 2335 | 8-9 |  | $5 \quad 34 \cdot 75$ | 8110 | 104 | $29378 \cdot 0$ | 715 | 542 | 12.6 | + 3 | - 20 | 7.01 | A 0 |
| 2211 | 28757 | C 2337 | 10-11 | 9704 | $\begin{array}{llll}5 & 5 & 39 \cdot 28\end{array}$ | $+3.7890$ | $+\cdot 0102$ | $28 \quad 5250 \cdot 2$ | $+4.709$ | $-.538$ | 10.9 | - 17 | - 8 | 8.1 | A O |
| 2212 | 30812 | L I 894 |  |  | $54 \mathrm{I} \cdot 26$ | 8436 | 107 | 304138.3 | 707 | 547 | 12.0 | - 13 | + 27 | $6 \cdot 76$ | K 0 |
| 2213 | 24776 | B 1669 |  |  | $549 \cdot 73$ | 6591 | 89 | $241757 \cdot 6$ | 694 | 521 | 12.4 | + 29 | - 37 | $9 \cdot 4$ |  |
| 2214 | 31875 | L 1895 | 14 |  | 552.62 | 8699 | 110 |  | 690 | 551 | 13.2 | - 36 | - 21 |  |  |
| 2215 | 29833 | C 2338 | 22 |  | 554.41 | 8164 | 104 | $294735 \cdot 6$ | 688 | 543 | 11.7 | - 8 | $-\quad 18$ | $6 \cdot 72$ | Ma |
| 2216 | 24779 | B 1673 | 73 |  | $5 \quad 6 \quad 12.54$ | $+3.6692$ | +.0089 | 2439 28.1 | + 4.66I | $-.523$ | 12.4 | $+33$ | - 37 | $9 \cdot 1$ |  |
| 2217 | 29834 | C 2341 |  |  | $616 \cdot 40$ | 8050 | 102 | $2924 \quad 7 \cdot 5$ | 657 | 541 | 11.8 | + 25 | + 10 | $9 \cdot 4$ |  |
| 2218 | 30818 | C 2342 | 43-4 |  | $641 \cdot 76$ | 8266 | 104 | $30 \quad 6 \quad 33 \cdot 0$ | 620 | 544 | 9.2 | - 18 | - 38 | $8 \cdot 56$ | F 8 |
| 2219 | 24782 | B 1674 | 53 |  | $642 \cdot 26$ | 6562 | 88 | 241012.4 | 620 | 52 I | $9 \cdot 9$ | 4 | - 6 | $8 \cdot 0$ | Fo |
| 2220 | 30819 | C 2343 | 45 |  | $6.45 \cdot 25$ | 8282 | 104 | $30 \quad 945.4$ | 616 | 545 | 12.4 | 4 | - 17 | $9 \cdot 5$ |  |
| 2221 | 26796 | C 2344 | 54 |  | $5647 \cdot 10$ | $+3.7167$ | +.0094 | $26 \quad 2056 \cdot 6$ | + 4.613 | $-.529$ | $9 \cdot 4$ | - 40 | - 120 | $6 \cdot 84$ | G 5 |
| 2222 | 30820 | L 1903 | 49 |  | 650.76 | 8334 | 105 | 301942.5 | 607 | 546 | 13.4 | + 2 | - 6 | $9 \cdot 4$ | A 5 |
| 2223 | 28759 | C 2345 | 55 |  | $654 \cdot 25$ | 7888 | 100 | $28 \quad 50 \quad 24 \cdot 3$ | 603 | 539 | 12.4 | - | - 4 | $8 \cdot 8$ | A o |
| 2224 | 27737 | C 2347 | 57 |  | $656 \cdot 25$ | 7495 | 95 | $27 \quad 2943 \cdot 2$ | 600 | 534 | 13.2 | - I5 | + 18 | 9.0 | K o |
| 2225 | 30822 | L 1904 |  |  | $7 \quad 2 \cdot 13$ | 8511 | 106 | $30 \quad 54 \quad 6 \cdot 3$ | 592 | 549 | 14.3 | - 7 | - 52 | $9 \cdot 4$ | F 5 |
| 2226 | 26797 | C $2344^{8}$ | 64-6-7 |  | $\begin{array}{llll}5 & 7 & 3 & 30\end{array}$ | $+3.7112$ | +.0092 | $26 \quad 9 \quad 1.4$ | + 4.590 | -. 529 | 13.0 | - 16 | - 51 | $8 \cdot 4$ | F 8 |
| 2227 | 29835 | C 2349 |  |  | 78.45 | 8004 | 101 | $\begin{array}{llllllll}29 & 13 & 37\end{array}$ | 583 | 541 | 13.5 | + 53 | - 9 | $9 \cdot 4$ | A 2 |
| 2228 | 3 I 883 | L 1912 | 70 |  | $725 \cdot 80$ | 8850 | 109 | $3 \mathrm{I} 58837 \cdot 5$ | 558 | 554 | 11.4 | - 8 | - 5 | $8 \cdot 5$ |  |
| 2229 | 29837 | C 2352 |  |  | 733.02 | 8202 | 102 | $295228 \cdot 4$ | 548 | 544 | 12.4 | - 15 | - 17 | $9 \cdot 1$ | B 9 |
| 2230 | 24787 | B 1676 | 93-4 |  | 733.76 | 6599 | 87 | $2417 \quad 22 \cdot 5$ | 546 | 522 | 11.6 | - 17 | - 22 | $7 \cdot 8$ | F 5 |
| 2231 | 30825 | L I914 | 80 |  | $5 \quad 7 \quad 38.08$ | $+3.8503$ | $+.0106$ | $305132 \cdot 7$ | $+4.54 \mathrm{I}$ | -. 548 | 12.6 | + 28 | + 10 | $8 \cdot 7$ | K |
| 2232 | 31886 | L I915 | 85-6 |  | $743 \cdot 56$ | 8657 | 106 | $312116 \cdot 4$ | 532 | 552 | 12.0 | 4 | - 26 | $8 \cdot 6$ | A 3 |
| 2233 | 29838 | C 2353 |  |  | 8 1.09 | 8047 | 100 | 292049.4 | 509 | 542 | 13.6 | - 5 | - 5 | $9 \cdot 1$ |  |
| 2234 | 31888 | L 1917 | $98-9$ |  | $8 \quad 7 \cdot 78$ | 8695 | 105 | $312756 \cdot 2$ | 498 | 551 | 13.1 | + 5 | $-\quad 12$ | $8 \cdot 8$ | K 2 |
| 2235 | 25800 | C 2355 |  |  | $8 \quad 7 \cdot 97$ | 6843 | 89 | $25 \quad 948 \cdot 5$ | 498 | 526 | 13.9 | 10 | - 32 | 8.8 |  |
| 2236 | 24788 | C 2356 |  |  | $\begin{array}{lll}5 & 8 & 8.20\end{array}$ | $+3.6807$ | +.0088 | $25 \quad 1 \quad 57 \cdot 2$ | + 4.498 | -. 525 | $14^{\circ} 1$ | + 5 | - 21 | $9 \cdot 4$ |  |
| 2237 | 28761 | C 2358 | 107 |  | 817.08 | 7685 |  | $28 \quad 7 \quad 3 \cdot 2$ | 485 | 537 | 14.2 | + 34 | + 5 | $9 \cdot 0$ | G 5 |
| 2238 | 24791 | C 2359 | 114 |  | $8 \quad 22.53$ | 6740 | 88 | $2447 \quad 8 \cdot 9$ | 477 | 524 | I $2 \cdot 8$ | - 5 | - 17 | $9^{\circ} 0$ |  |
| 2239 | 31891 | L 1921 |  |  | $8 \quad 24.39$ | 8823 | 108 | $31520 \cdot 1$ | 475 | 554 | $14^{\circ} 1$ | - 19 | - 6 | $9 \cdot 4$ | F |
| 2240 | 30827 | L 1923 | III | 9768-9 | $8 \quad 29.02$ | 8336 | 102 |  | 468 | 547 | 10.2 | - 26 | + 6 | $7 \cdot 21$ | Fo |
| 2241 | 31894 | L 1925 | I 15 |  | $5 \quad 8 \quad 42 \cdot 88$ | $+3.8741$ | +.0107 | $\begin{array}{llll}31 & 35 & 49\end{array}$ | + 4.448 | -. 553 | II.8 | + 4 | - 2 | $8 \cdot 6$ | A 0 |
| 2242 | 29842 | C 2361 |  |  | 8 $848 \cdot 42$ | 8252 | IOI | $30 \quad 0 \quad 37 \cdot 3$ | - 44 I | 546 | 12.2 | $-7$ |  | $8 \cdot 6$ |  |
| 2243 | 31895 | L. 1927 | 120-1-2-3 |  | $851 \cdot 26$ | 8648 | 105 | $\begin{array}{llllll}31 & 17 & 54.2\end{array}$ | 437 | 553 | II•3 | $1-6$ | - 46 | $6 \cdot 78$ | K |
| 2244 | 30829 | L 1928 | 124 | $9774-7$ | $852 \cdot 16$ | $8423$ | 102 | $\begin{array}{llll}30 & 34 & 3 \cdot 7\end{array}$ | 435 | $549$ | 12.2 | + 9 | 10 | $7 \cdot 9$ | A 0 |
| 2245 | 25804 | C 2363 | I $30-1-2$ | $9786$ | $857 \cdot 45$ | 7029 | 89 | $25484^{8 \cdot 1}$ | 428 | 528 | 12.2 | $+\quad 10$ | - 22 | $7 \cdot 8$ | A 2 |
| 2246 | 29843 | C 2362 |  |  | $\begin{array}{lll}5 & 9 & 0.35\end{array}$ | +3.8011 | +.0098 | $2912 \quad 19 \cdot 1$ | + 4.424 | -. 542 | 13.6 | $+2 I$ | - 26 | $9 \cdot 4$ |  |
| 2247 | 30832 | L 1929 | I 33 |  | 910.54 | 8542 | 103 | $305648 \cdot 9$ | 410 | 550 | 13.0 | $\text { - } 12$ | - 19 | $8 \cdot 0$ | A O |
| 2248 | 31898 | L I 1930 | 1 34-5-6 |  | 912.93 | 8757 | 104 | 313759 I | 406 | 553 | 12.0 | $+\quad 4$ | $+\quad 7$ | $8 \cdot 2$ | B 8 |
| 2249 | 30835 | L I 932 | 144 |  | 922.56 | 8394 | 101 | $\begin{array}{lll} 30 & 27 & 38 \cdot 2 \end{array}$ | 390 | 548 | 13.0 |  | $+\quad 16$ | $9 \cdot 0$ | A 0 |
| 2250 | 29845 | C 2364 |  |  | $924 \cdot 92$ | 7991 | 97 | 29734.4 | 389 | 542 | 13.0 | + 10 | - $4^{8}$ | $9 \cdot 1$ |  |


| No. | B.D. | A.g.c. | W.13. (2). | Lalande. | R.A. 19100. | Precession. | See. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. } .0001 .}{ }$ | $\begin{gathered} \text { Dec. } \\ n \cdot-001 . \end{gathered}$ |  |  |
|  | - |  |  |  | h m s | 8 | s | - ' $\quad$ |  | " |  |  |  |  |  |
| 2251 | 30836 | ${ }^{\text {C }} 2366$ |  |  | $5 \quad 9 \quad 36 \cdot 56$ | $+3.8327$ | +.0100 | $3014{ }^{3} 16.9$ | + 4.372 | $-\cdot 548$ | 13.5 | + 34 | - 31 | $9 \cdot 8$ |  |
| 2252 | 31901 | L 1936 |  |  | - 939.94 | 8781 | 103 | 3114153.1 | 367 | 553 | 12.5 | + 39 | - 32 | 8.8 | A |
| 2253 | ${ }^{2}+797$ | C 2367 |  |  | 944.45 | 6769 | 86 | ${ }^{2}+5139 \cdot 3$ | 362 | 525 | 14.3 | - 9 | - 20 | $9 \cdot 4$ |  |
| 2254 | 24798 | B 1687 |  |  | $949 \cdot 37$ | 6646 | 85 | $242452 \cdot 7$ | 354 | 524 | 12.8 | + 30 | - 22 | 9.0 |  |
| 2255 | 25806 | C 2368 |  |  | 951.89 | 6933 | 86 | 252649.4 | 350 | 528 | 13.6 | + 13 | - 9 | $9 \cdot 1$ |  |
| 2256 | 29847 | C 2369 |  |  | $\begin{array}{lll}5 & 10 & 3.73\end{array}$ | $+3 \cdot 8067$ | +-0096 | $292157 \cdot 4$ | + 4.333 | -. 544 | 13.0 | + 41 | - 45 | 9.0 | G 5 |
| 2257 | 30838 | L 1939 |  | 9797-9 | $10 \quad 7.88$ | 8379 | 99 | $3023+3 \cdot 2$ | 327 | 548 | 11.6 | + 22 | - 26 | 8.0 | A 2 |
| 2258 | 31905 | ${ }^{\text {L } 1940}$ | 165-6 |  | 1017.69 | 8789 | 103 | 3114242.2 | 313 | 554 | $10 \cdot 1$ | + 3 | - 4 | 8.4 | B 9 |
| 2259 | 26799 | C 2372 |  |  | 1020.51 | 7384 | 90 | $\begin{array}{llllllllllll}27 & 12.6\end{array}$ | 309 | 534 | 12.4 | + 7 | - 114 | $9 \cdot 4$ |  |
| 2260 | 24803 | C 2373 |  |  | 1021.05 | 6739 | 84 | $24+417 \cdot 6$ | 309 | 525 | 13.2 | + 16 | - 4 | 9.0 |  |
| 2261 | 25807 | C 2374 | 178 | 9809 | 51026.60 | $+3.705 \mathrm{I}$ | +.0087 | 255122.3 | + 4.300 | -. 529 | 11.8 | - 15 | - 19 | $7 \cdot 90$ | A 0 |
| 2262 | 25808 | C 2375 | 179 |  | 10 26.71 | 6883 | 85 | $\begin{array}{lllll}25 & 15 & 26.5\end{array}$ | 300 | 527 | 12.6 | + 14 | + 19 | $8 \cdot 5$ |  |
| 2263 | 29849 | C 2376 |  |  | 1032.60 | 8037 | 95 | $\begin{array}{lllll}29 & 15 & 20.8\end{array}$ | 292 | 543 | 13.2 | + $4^{1}$ | - 61 | $9 \cdot 0$ | F 8 |
| 2264 | 28766 | C 2377 |  |  | $1033 \cdot 61$ | 7726. | 94 | $\begin{array}{llllllll}28 & 12 & 10.2\end{array}$ | 290 | 540 | 13.2 | + 2 | - 19 | $9 \cdot 0$ | G 5 |
| 2265 | 28767 | C 2378 |  |  | IO $34 \cdot 89$ | 7968 | 94 | $\begin{array}{llll}29 & 1 & 22.4\end{array}$ | 289 | 542 | 13.8 | + | - $4^{8}$ | $9 \cdot 4$ | A |
| 2266 | 27743 | C 2380 |  |  | $51045 \cdot 59$ | +3.7595 | +.0091 | $27+5 \quad 5 \cdot 2$ | + 4.273 | --537 | 13.6 | - 5 | + 7 | $9 \cdot 4$ | Go |
| 2267 | 26800 | C 2382 | 191-5 |  | $1048 \cdot 57$ | 7380 | 90 | $\begin{array}{llll}27 & 0 & 29.7\end{array}$ | 269 | 535 | 11.6 | + 44 | - 19 | $8 \cdot 8$ |  |
| 2268 | . 28769 | ${ }^{\text {C }} 2384$ |  |  | 1052.94 | 7695 | 91 | $\begin{array}{lllll}28 & 5 & 23.0\end{array}$ | 263 | 540 | 10.5 | - 7 | - 8 | $8 \cdot 4$ | K o |
| 2269 | 28770 | C 2385 |  |  | Io 59.54 | 7851 8350 | 93 | $\begin{array}{llll}28 & 37 & 4.2\end{array}$ | 253 | 542 | 14.1 | +13 | $+\quad 24$ $+\quad 32$ | 9.4 |  |
| 2270 | 30844 | L 1949 |  |  | 11 1-18 | 8350 | 981 | $30 \quad 16 \quad 45 \cdot 3$ | 252 | 549 | $14^{2}$ | + | - 32 | 9.4 | A |
| 2271 | 31910 | L 1951 |  | 9819 | 5111157 | $+3.8711$ | +.0100 | $3126 \quad 27 \cdot 2$ | + 4.236 | - 553 | $\mathrm{ri}_{1.2}$ | + 12 | - 19 | $8 \cdot 2$ | A 5 |
| 2272 | 23885 | B 1692 | 202 |  | 1111.67 | 6546 | 82 | $\begin{array}{llll}24 & 1 & 2.4\end{array}$ | 236 | 523 | 13.0 | - 38 | - 39 | $9 \cdot 1$ |  |
| 2273 | 27744 | C 2388 |  |  | 1114.01 | 7559 | 90 | $\begin{array}{llll}27 & 37 & 4.6\end{array}$ | ${ }_{2} 33$ | 537 | 13.8 | + 54 | + | $9 \cdot 0$ |  |
| 2274 | 31911 | L 1953 | 206 |  | 1120.89 | 8887 | 101 | $315945 \cdot 7$ | 223 | 555 | 14.1 | - 12 | - 25 | $9 \cdot 0$ | A |
| 2275 | ${ }^{2} 4807$ | C 2389 |  |  | 1127.04 | 6823 | 84 | $\begin{array}{llll}25 & 1 & 10.3\end{array}$ | 215 | 527 | 13.4 | + 16 | - 76 | 9.0 |  |
| 2276 | 28772 | C 2390 | 207 | 9827 | 51133.93 | +3.7910 | +.0092 | 28 48 <br> $82 \cdot 1$  | $+4.205$ | --542 | 10.6 | + 30 | - 17 | $6 \cdot 89$ | Fo |
| 2277 | 27745 | C 2391 |  |  | $1134 \cdot 13$ | 7465 | 89 | . $27 \begin{array}{lll}17 & 3.4\end{array}$ | 205 | 536 | 13.4 | - 47 | - 69 | $9 \cdot 4$ |  |
| 2278 | 31914 | L 1958 | 208 | 9824 | II $4{ }^{1 \cdot 36}$ | 8804 | 100 | 3143 31.8 | 195 | 555 | 9.6 | - 4 | - 9 | $8 \cdot 0$ | K 5 |
| 2279 | 27746 | C 2392 |  |  | II $4^{2.05}$ | 7576 | 89 | 273959.0 | 193 | 538 | 11.5 | - | + 30 | $8 \cdot 7$ | F 5 |
| 2280 | $25^{812}$ | C 2393 | 222 |  | $1150 \cdot 42$ | 7095 | 85 | $2559 \quad 5 \cdot 0$ | 182 | 531 | 12.3 | - 44 | + 39 | $8 \cdot 8$ |  |
| 2281 | 30849 | L 1968 |  |  | $5 \begin{array}{llll}5 & 12 & 32.51\end{array}$ | $+3 \cdot 8533$ | +.0097 | 305014.9 | +4.121 | -. $55^{2}$ | $10 \cdot 7$ | - | - 20 | $9 \cdot 0$ |  |
| 2282 | 28773 | C 2396 | 246 | 9855-6 | 1234.38 | 7881 8777 | 91 | $\begin{array}{llll}28 & 41 & 3 \cdot 3\end{array}$ | 119 | 542 | $10 \cdot 3$ | - 47 | - 19 | $7 \cdot 25$ | A 3 |
| 2283 | 31915 | L 1970 | 238 |  | $1236 \cdot 35$ | 8777 | 99 | $\begin{array}{lllll}31 & 37 & 8.9\end{array}$ | 116 | 555 | I1-3 | - 10 | + 26 | $8 \cdot 7$ |  |
| 2284 | 30851 | L 1973 |  |  | $12+3 \cdot 00$ | 8363 | 95 | $\begin{array}{lllllllll}30 & 16 & 53\end{array}$ | 106 | 550 | 12.0 | - | - 27 | $8 \cdot 8$ | K o |
| 2285 | 29858 | C 2399 |  |  | 1249.66 | 8211 | 93 | $294654 \cdot 5$ | 096 | 547 | 12.2 | + 9 | -. 25 | $9 \cdot 1$ |  |
| 2286 | 28774 | C 2400 |  | 9866 | 51259.44 | +3.7919 | +.0090 | $\begin{array}{llll}28 & 48 & 10 \cdot 7\end{array}$ | $+4.084$ | $-542$ | 12.0 | + 16 | - 15 | 8.8 | A |
| 2287 | 27750 | C 2401 | 264 | 9872 | $\begin{array}{ll}13 & 2.87\end{array}$ | 7681 | 88 | $275942 \cdot 5$ | 078 | 540 | $9 \cdot 9$ | - 15 |  | 8.4 | A 2 |
| 2288 | 29860 | C 2402 | 263 |  | $13 \quad 5 \cdot 15$ | 8166 | 92 | $293734 \cdot 1$ | 075 | 547 | 11.0 | + 6 | - 31 | $8 \cdot 8$ | A 0 |
| 2289 | 30854 | L 1985 | 273 |  | 1333.93 | 8563 | 95 | 3054 41.3 | 034 | 552 | 11.2 | + 15 | $+\quad 9$ $+\quad 37$ | $9 \cdot 0$ | A O |
| 2290 | 28776 | C 2406 | 280 |  | 1352.25 | 7888 | 88 | $28{ }^{\circ} 0477$ | 008 | 543 | I 1.8 | $+43$ | - 37 | $9 \cdot 1$ | B 9 |
| 2291 | ${ }_{2} 4^{816}$ | B 1702 | 285 |  | $\begin{array}{lllll}5 & 13 & 57.54\end{array}$ | $+3.6708$ | +.0079 |  | + 3.999 | $-526$ | 12.3 | + 1 | - 25 | 9.4 |  |
| 2292 |  | ${ }^{\text {B } 1704}$ |  |  | $\begin{array}{lll}14 & 10.67 \\ 14 & 11.60\end{array}$ | 6858 | 8 8 | $\begin{array}{llll}25 & 5 & 41 \cdot 1\end{array}$ | 981 | 528 | 14.6 | a $+\quad 50$ +18 | - 57 | $9 \cdot 8$ |  |
| 2293 | $\int^{25} 816$ | C 2410 |  |  | 1411.60 | 6858 | 8 81 | $\begin{array}{llll}25 & 5 & 27.4\end{array}$ | 979 | 528 | 13.3 | + 18 | - 42 | $9 \cdot 4$ |  |
| 2294 | 26805 | C 2409 | 296 |  | 1412.05 | 7160 | 82 86 | $\begin{array}{llll}26 & 9 & 56 \cdot 4\end{array}$ | 979 | 533 | 12.4 | 17 | - 8 | $9 \cdot 0$ |  |
| 2295 | 28777 | C 2408 |  | 9911 | 1413.97 | 7718 | 86 | $28 \quad 5 \quad 45 \cdot 6$ | 977 | $54^{\circ}$ | 13.0 |  | 21 | $9 \cdot 4$ | G |
| 2296 | 30860 | L 1991 | 287 |  | $5 \begin{array}{llll}5 & 14 & 14.68\end{array}$ | $+3.8415$ | $+\cdot 0092$ | $\begin{array}{llll}30 & 25 & 2.2\end{array}$ | + 3.975 | -551 | 13.7 | - 4 | + 10 | $9 \cdot 4$ | A 5 |
| 2297 | 26806 | C 24 II |  |  | 1416.08 | 7397 | 84 | $2659 \quad 27 \cdot 2$ | 974 | 536 | $14^{2}$ | + 8 | - 63 | $9 \cdot 1$ |  |
| 2298 | 31921 | L 1993 |  |  | If 28.56 | 8719 | 97 |  | 955 | 555 | 14.1 | + 20 | $-4^{2}$ | $9 \cdot 4$ |  |
| 2299 | 24818 | C 2412 | 304 |  | $1439 \cdot 22$ | 6814 | 79 | 245525.9 | 941 | 528 | 10.6 | + 2 | + 5 | $8 \cdot 96$ | A |
| 2300 | 31922 | L 1995 |  |  | $1443 \cdot 39$ | 8773 | 96 | $\begin{array}{llll}31 & 33 & 29.3\end{array}$ | 935 | 556 | 13.5 | - 1 | - 21 | $9 \cdot 4$ |  |


| No. | B. ${ }_{\text {d }}{ }_{1}$ | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \%$. | Precession. | Sec. Var. | Dec. $19 \mathrm{IO}^{\circ} \mathrm{O}$ | Precession. | Sec.Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spcetral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.ooor. }}{\text { R.A. }}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m s | 8 | - | - , " | " | " |  |  |  |  |  |
| 2301 | 25818 | ${ }^{\text {C }} 2413$ | 307-8 |  | $51446 \cdot 00$ | $+3 \cdot 6858$ | +.0080 | $25 \quad 4 \quad 46 \cdot 0$ | + 3.931 | $-.528$ | 10.4 |  | - 5 | $8 \cdot 36$ | A 2 |
| 2302 | 27755 | C 2414 |  |  | 1455.28 | 7687 | 85 | $\begin{array}{llllllllll}27 & 58 & 33.6\end{array}$ | 918 | 541 | 12.6 | + 16 | + $+\quad 6$ | $9 \cdot 4$ |  |
| 2303 | 28779 | C 2415 | 317 | 9933 | $15 \quad 2.98$ | 7932 | 87 | $\begin{array}{llll}28 & 48 & 6.5\end{array}$ | 907 | 544 | 10.6 | - 16 | + 53 | 8.5 | G 5 |
| 2304 | 30862 | L 1999 | 309-10 |  | $\begin{array}{lll}15 & 4.39\end{array}$ | 8584 | 93 |  | 905 | 553 | 12.0 | 4 | $\bigcirc$ | $9 \cdot 0$ |  |
| 2305 | 23899 | B1713 | 325 |  | $15 \quad 5 \cdot 65$ | 6566 | 77 | 24 I 7 7.1 | 902 | 525 | 13.0 | - | - 67 | $8 \cdot 5$ | F 5 |
| 2306 | 25820 | ${ }_{\text {C }} 2418$ | 332-86 |  | 51519.24 | +3.7019 | $+\cdot 0080$ | $2538836 \cdot 1$ | + 3.884 | -.532 | 10.8 | - 15 | $\bigcirc$ | $8 \cdot 6$ |  |
| 2307 | 27758 | C 2417 |  | 9944-5 | 1520.13 | 7657 | 85 | 27520.4 | 882 | 540 | 12.0 | - 19* | - 30* | $6 \cdot 30$ | B 9 |
| 2308 | 27759 | C 2419 |  |  | $15 \quad 22.24$ | 7709 | 84 | $\begin{array}{llll}28 & 2 & 30 \cdot 8\end{array}$ | 879 | 541 | $\mathrm{II}^{\text {- }}$ | - 11 | + ${ }^{\text {I }}$ | $9 \cdot 4$ |  |
| 2309 | 29869 | C 2420 | 331 | 9947 | 1529.09 | 8138 | 88 | $\begin{array}{lllllllllll}29 & 28 & 45 \cdot 8\end{array}$ | 869 | 547 | II•3 | + $\mathbf{2}^{*}$ | $+\mathrm{I}^{*}$ | $5 \cdot 72$ | A 0 |
| 2310 | 27762 | C 2421 |  |  | $16 \quad 0.59$ | 7508 | 83 | $27 \quad 2032 \cdot 8$ | 825 | 538 | 11.0 | + 9 | + 14 | 9.4 |  |
| 2311 | 31939 | L 2012 | 350 | 9966 | 51620.53 | $+3.8699$ | $+\cdot 0092$ |  | +3.795 | -. 556 | $9 \cdot 3$ | $+$ | 25 | 8.02 | F 5 |
| 2312 | 26809 | C 2423 |  |  | 1627.24 | 7403 | 81 | $26585 \cdot 8$ | 786 | 537 | 11.5 | - 14 | $+\quad 36$ | $9 \cdot 0$ |  |
| 2313 | 29874 | C 2424 |  |  | $1647 \cdot 44$ | 8055 | 85 | - 29 10 34.2 | 758 | 546 | 12.6 | + 45 | - 38 | 8.8 |  |
| 2314 | 27765 | C 2425 |  |  | 1655.02 | 7710 | 82 | $28-53.6$ | 746 | 541 | ${ }_{11} .8$ | + $\quad 37$ | 10 | 9.0 |  |
| 2315 | 28782 | C 2426 |  |  | $17 \quad 0.27$ | 7816 | 84 | $\begin{array}{lllllllllll}28 & 22 & 26 \cdot 6\end{array}$ | 739 | 543 | 13.6 | + 8 | 21 | 8.7 | A |
| 2316 | 28783 | C 2427 |  | 9998 | $\begin{array}{llll}5 & 17 & 7 \cdot 65\end{array}$ | +3.7903 | $+\cdot 0083$ | 283941.6 | + 3.728 | --544 | 12.0 |  | - 68 | $8 \cdot 7$ | F 8 |
| 2317 | 31947 | L 2015 | 367 |  | 1715.85 | 8639 | 91 | $\begin{array}{llllllllll}31 & 42.6\end{array}$ | 716 | 555 | 13.8 | + 39 | - 8 | 9.4 |  |
| 2318 | 29876 | C 2428 | 374 | 10001 | 1715.99 | 8198 | 86 | $293835 \cdot 1$ | 716 | 548 | 10.4 | - 3 | - 29 | $7 \cdot 76$ | B 9 |
| 2319 | 24824 | C 2431 | 384 |  | $17 \quad 16.37$ | 6853 | 75 | $25 \bigcirc 58 \cdot 5$ | 716 | 530 | 13.9 | + 23 | - 31 | $9 \cdot 5$ |  |
| 2320 | 31948 | L 2016 | 370-1 |  | 1717.56 | 8639 | 91 | $\begin{array}{lllllllllllllllll}31 & 4 & 19.7\end{array}$ | 713 | 555 | 12.6 | + 12 | + | $8 \cdot 6$ | A 0 |
| 2321 | 28785 | C 2429 |  | 10007-8 | 51717.82 | +3.8006 | + $\cdot 008$ | 29.17 .0 | + 3.713 | -. 545 | 11.8 | - 14 | + 21 | $8 \cdot 0$ | K 。 |
| 23 | 31949 | L 2017 |  |  | 1719.33 | 8830 | 92 | 314047.4 | 712 | 557 | 13.6 | - 17 | - 14 | 8.8 |  |
| 2323 | 28787 | C 2432 | 382 | 10013-4 | 1720.65 | 7821 | 83 | $\begin{array}{lllllllllllllll}28 & 22 & 59\end{array}$ | 709 | 543 | 9.7 | - 27 | - 27 | $7 \cdot 36$ | A 3 |
| 2324 | 28788 | C 2435 | 391 | 10026-7 | $1740 \cdot 82$ | 7963 | 83 | $28 \quad 51 \quad 6 \cdot 2$ | 681 | 544 | 10.0 | + 19* | - 30* | $6 \cdot 39$ | B 9 |
| 2325 | 29878 | C 2436 | 394 | 10031 | 1749.95 | 8184 | 84 | $2935 \quad \mathrm{I} \cdot 2$ | 667 | 548 | 9.4 | - 13 | - | $8 \cdot 6$ | K 2 |
| 2326 | 30871 | C 2437 |  |  | $518 \quad 5 \cdot 59$ | +3.8359 | +.0086 | $\begin{array}{llll}30 & 9 & 8.5\end{array}$ | + 3.645 | -. 552 | 10.8 | + 7 | - 15 | 9.1 |  |
| 2327 | 29880 | C 2438 | 405 |  | 1816.80 | 8203 | 84 | 293823.4 | 629 | 549 | II. 1 | + 27 | - 20 | $9 \cdot 4$ |  |
| 2328 | 24826 | C 2439 | $4^{11-2-4}$ | 10056 | $18 \quad 29.43$ | 6820 | 74 | $245235 \cdot 6$ | 612 | 530 | 9.5 | - 15 | - 45 | $8 \cdot 2$ | A 2 |
| 2329 | 30873 | C 2440 | $4^{13}$ |  | $1842 \cdot 83$ | 8349 | 85 | $3063 \mathrm{I} \cdot \mathrm{I}$ | 591 | 551 | 11.8 | + 1 | + 22 | 9.11 | F 5 |
| 2330 | 30876 | L 2026 |  |  | 1848.3 I | 8471 | 86 | 303014.7 | 584 | 551 | $10 \cdot 1$ | - 27 | - 33 | $8 \cdot 6$ | K 2 |
| 2331 | 31954 | L 2027 | 419 | 10057-8 | $518 \quad 50 \cdot 22$ | $+3.8670$ | +.0086 | 318827.1 | + 3.58 I | -. 556 | $9 \cdot 9$ | 35 | - 45 | 6.37 | K 0 |
| 2332 | 31955 | L 2028 | 420 | 10059-60 | $1850 \cdot 45$ | 8645 | 86 | $\begin{array}{llll}31 & 3 & 35.9\end{array}$ | 581 | 556 | $9 \cdot 3$ | - 9* | - 9* | $5 \cdot 93$ | B 9 |
| 2333 | 28792 | C 2443 |  |  | 1916.77 | 7988 | 8 I | $285428 \cdot 0$ | 543 | 547 | 12.4 | + 23 | - 64 | $9 \cdot 4$ |  |
| 2334 | 23911 | B 1727 | 444 |  | 1918.36 | 6588 | 72 | $\begin{array}{llll}24 & 1 & 28.7\end{array}$ | 54. | 527 | 12.8 | - 2 | - 29 | $9 \cdot 1$ |  |
| 2335 | 30882 | C 2445 | 443 |  | $1933 \cdot 21$ | 8347 | 84 | $\begin{array}{lll}30 & 5 & 6.8\end{array}$ | 520 | 552 | 12.2 | + 5 | - 4 | $8 \cdot 76$ | B 8 |
| 2336 | 29886 | C 2446 |  |  | $\begin{array}{llll}5 & 1933.87\end{array}$ | $+3.8179$ | +.0082 | 293159.3 | $+3.518$ | -. 549 | 12.6 | + 12 | - 55 | 8.5 |  |
| 2337 | 29888 | C 2447 | 449 |  | 1941.89 | 8057 | 80 | 29739.6 | 507 | 547 | 13.0 | + 26 | + 9 | $8 \cdot 5$ | K 5 |
| 2338 | 30885 | L 2041 | 451 |  | $1949 \cdot 16$ | 8513 | 84 | $3037 \quad 5 \cdot 0$ | 497 | 555 | 13.4 | 12 | + 5 | 9.4 | Ao |
| 2339 | 30887 | L 2042 | 452 |  | 19 51.09 | 8510 | 84 | $\begin{array}{llllll}30 & 36 & 23.2\end{array}$ | 494 | 554 | 13.6 | - 2 | + 4 | 9.4 | A |
| 2340 | 30886 | L 2043 |  |  | 1954.01 | 8594 | 85 |  | 490 | 556 | 12.5 | $+22$ | 15 | $8 \cdot 8$ |  |
| 2341 | 27769 | C 2448 |  |  |  | + $3 \cdot 7688$ | +.0078 |  |  |  |  | - 14 | - | 9.1 | A |
| 2342 | 30888 | L 2045 |  |  | 1959.85 | 8406 | 83 | $\begin{array}{llll}30 & 16 & 1.8\end{array}$ | 481 | 552 | 13.8 | + 2 | - 4 | $8 \cdot 6$ | A 0 |
| 2343 | 31960 | L 2044 | 454-5 |  | $20 \quad 0 \cdot 33$ | 8941 | 87 | 3158824.0 | 481 | 561 | 13.4 | + 46 | - 51 | $9 \cdot 4$ |  |
| 2344 | 30891 | C 2450 |  |  | $2026 \cdot 14$ | 8377 | 82 | $\begin{array}{llll}30 & 9 & 54.2\end{array}$ | 444 | 552 | 13.8 | - 1 | - 6 | $9 \cdot 4$ |  |
| 2345 | 25828 | C 2452 | 471-3 |  | 20 28.11 | 7055 | 72 | 2540 47•1 | 44 I | 534 | 11.4 | 19 | - 8 | $8 \cdot 0$ | F 5 |
| 2346 | 29893 | C 2451 |  |  | 52029.58 | $+3.8298$ | $+\cdot 0081$ | 295425.6 | + 3.438 | - 551 | 12.8 | + 7 | - $6^{3}$ | 8.06 | B 9 |
| 2347 | 30892 | L 2052 |  |  | 2032.65 | 8406 | 82 | 3015  <br> 8 26.8 | 434 | 552 | 12.0 | + 28 | - 60 | $8 \cdot 6$ | F 5 |
| 2348 | 28795 | C 2453 | 474 | $10114^{-23}$ | $2036 \cdot 08$ | 7884 | 78 |  | 429 | 546 | $11^{\circ} \cdot 1.11^{2}$ | + $24^{*}$ | - 177* | 1.78 | B 8 |
| 2349 | 28796 | C 2454 |  |  | -20 43.33 | 7803 | 78 | 28 15 <br> 1514  | 419 | 544 | $14^{\circ} 2$ | - 37 | + 7 | $9 \cdot 4$ |  |
| 2350 | 23914 | B 1739 | 488 |  | $2047 \cdot 55$ | 6592 | 69 | $24 \bigcirc 53 \cdot 6$ | 412 | 527 | 13.5 |  | - 51 | 9.1 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Var. Sec. | Doc. 1910.0. | Precession. | Soc. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { Igoot } \end{aligned}$ | Annual P.M. |  | Mag. | $\begin{array}{\|c\|c\|} \text { Spectral } \\ \text { Type. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.OOOI. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Doc. } \\ & { }_{n} \cdot \mathrm{OOI} \text {. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | s | 8 | - , " |  |  |  |  |  |  |  |
| 2351 | 26817 | C 2456 |  |  | $\begin{array}{lll}5 & 21 & 0.55\end{array}$ | +3.7413 | +.0074 | 265514.0 | + 3.393 | -540 | $14^{\circ} \mathrm{O}$ | - 34 | - 3 | $9^{9 \cdot 1}$ |  |
| 2352 | 30894 | L 2059 |  |  | $21 \quad 1 \cdot 19$ | 8448 | 81 |  | 393 | 553 | $14^{\circ} \mathrm{O}$ | - 2 | + 14 | $8 \cdot 6$ | K 2 |
| 2353 | 31966 | L 2060 |  |  | $21 \quad 3.27$ | 8666 | 83 |  | 391 | 558 | 14.3 | + 36 | - 6 | $9 \cdot 1$ |  |
| 2354 | 25830 | ${ }^{\text {C }} 2459$ | 498 |  | $2110 \cdot 11$ | 6925 | 70 | $\begin{array}{llllll}25 & 12 & 19.2\end{array}$ | 380 | 532 | 14.4 | + 27 | - 27 | $8 \cdot 6$ |  |
| 2355 | 28798 | C 2458 |  |  | $2111 \cdot 13$ | 7876 | 77 | $28 \quad 2949.5$ | 379 | 545 | 14.3 | + 22 | - 15 | $9 \cdot 1$ |  |
| 2356 | 24831 | C 2460 | 500-1 |  | 52111.83 | $+3.6849$ | +.0070 | $24 \begin{array}{lll}26 & 0.2\end{array}$ | $+3.378$ | -53I | 13.0 | 0 | + 10 | $8 \cdot 31$ | A 5 |
| 2357 | 25831 | C 2461 | 504-5 |  | 2115.12 | 7057 | 71 | 254024.7 |  | 534 | 13.3 | - 20 | 17 $+\quad 17$ | 8.6 |  |
| 2358 | 31968 | L 2064 |  |  | 2119.27 | 8358 | 85 | 314117.8 | 368 | 560 | 14.2 | + 15 | - 16 | $9 \cdot 4$ |  |
| 2359 | 27771 | C 2464 | 507 | 10156 | 2122.49 | 7593 | 75 | $27 \begin{array}{lllll} & 31 & 57.9\end{array}$ | 363 | 542 | 13.4 | + 10 | - 21 | $7 \cdot 8$ | F 8 |
| 2360 | 30898 | C 2462 |  | 10143 | 2122.67 | 8372 | 80 | 30751.0 | 362 | 553 | 12.9 |  | 19* | $5 \cdot 72$ | B 9 |
| 2361 | 29897 | C 2466 |  | 10149 | 52125.32 | $+3.8284$ | +.0080 | $295036 \cdot 6$ | + 3.359 | -551 | 12.8 | + | - 20 | $8 \cdot 0$ | K 5 |
| 2362 | 26819 | C 2467 | 513 |  | 2131.55 | 7296 | 72 | 263023.4 | 349 | 538 | 13.8 | + 18 | - 5 | $9 \cdot 0$ |  |
| 2363 | 30900 | L 2068 |  |  | 2133.86 | 8569 | 81 | $3045 \quad 58 \cdot 2$ | 346 | 556 | 14.0 | - | - 6 | $9 \cdot 4$ |  |
| 2364 | 31973 | L 2071 |  |  | 2139.79 | 8744 | 84 | $\begin{array}{llllllllllll}31 & 19 & 21 \cdot 2\end{array}$ | 337 | 558 | 12.0 | + 6 | + 6 | $8 \cdot 4$ | B 8 |
| 2365 | 24833 | B 1744 |  |  | $2140 \cdot 19$ | 6629 | 68 | $\begin{array}{llll}24 & 8 & 5.8\end{array}$ | 337 | 528 | 12.6 | $+\quad 19$ | - 31 | $8 \cdot 7$ |  |
| 2366 | 30902 | L 2073 |  |  | 52144.55 | $+3 \cdot 8584$ | +.008I | 304839.0 | $+3.373$ | - 556 | 12.6 | + 13 | - 33 | $8 \cdot 7$ | K o |
| 2367 | 31 974 | L 2079 |  |  | 2154.94 | 8951 | 84 | 315817.5 | 316 | 561 | 12.6 | 1 $+\quad 27$ | - 15 | $9 \cdot 0$ | A 2 |
| 2368 | 24835 | B 1746 |  |  | 22 2.12 | 6776 | 68 | $243925 \cdot 4$ | 306 | 531 | 12.4 | + 32 | + 8 | 8.8 |  |
| 2369 | 26821 | C 2468 | 528-9 |  | 2210.96 | 7172 | 70 | $26 \quad 344 \cdot$ I | 293 | 536 | 12.0 | + 14 | - 10 | 9-1 |  |
| 2370 | 30906 | L 2086 | 530 | 10174 | $22 \quad 24.35$ | 8513 | 79 | 3034803 | 274 | 555 | $9 \cdot 2$ | + 2 | + | $8 \cdot 4$ | K o |
| 2371 | 31982 | L 2097 |  |  | 52335.41 | $+3.8766$ | +.0080 | 312115.7 | + 3.172 | -. 560 | 10.2 | - 21 | - 46 | $8 \cdot 7$ |  |
| 2372 | 24840 | B 1758 |  |  | $23 \quad 37 \cdot 93$ | 6640 | 65 | 24.831 .0 | 168 | 529 | II. 2 | - ${ }^{\circ}$ | - 19 | $9 \cdot 4$ |  |
| 2373 | 25839 | B 1760 | 582-3-6 | 10232 | 2343.93 | 6901 | 67 |  | 159 | 533 | $9 \cdot 9$ | + 15 | * ${ }^{\text {- }}$ 3* | $6 \cdot 6$ |  |
| 2374 | 25839 | B 176r | 584-7-8 | 10231-3 | $2344 \cdot 12$ | 6901 | 67 | $\begin{array}{llllllllll}25 & 4 & 41 \cdot 9\end{array}$ | 159 | 533 | 10.3 | + 15 | - ${ }^{\text {- }}$ | $5 \cdot 44$ | A 0 |
| 2375 | 28808 | C 2471 |  |  | $2347 \cdot 38$ | 7994 | 73 | $28 \quad 50 \quad 37 \cdot 7$ | 155 | 548 | II.6 | + 13 | - 12 | $9 \cdot 4$ |  |
| 2376 | 27778 | ${ }_{\text {C }} 2473$ | 589 |  | 52351.77 | $+3.7675$ | +0072 | 274616.7 | + 3.147 | - 542 | I1.8 | + 8 | - 9 | $8 \cdot 8$ | F 0 |
| 2377 | 29909 | C 2474 | 590-1 | 10235-6 | 2357.46 | + 8076 | 74 | 29655.5 | 140 | 549 | 8.0 | + ${ }^{8} 8$ | - 64 | $6 \cdot 24$ | F 5 |
| 2378 | 30912 | L2107 |  |  | 2359.45 | 8508 | 77 | $303134 \cdot 3$ |  | 556 | 9.4 | - 4 | - 46 | $8 \cdot 6$ | K o |
| 2379 | 26826 | C 2476 | 602 | 10247 | $24 \quad 6 \cdot 79$ | 7412 | 70 |  | 126 | 540 | 10.0 | - 3 | - 11 | $8 \cdot 4$ | A o |
| 2380 | 26827 | C 2477 |  |  | $24 \quad 7.95$ | 7461 | 70 | $\begin{array}{llll}27 & 2 & 2 & 9.7\end{array}$ | 124 | 541 | 13.4 | 17 | $+9$ | $9 \cdot 4$ |  |
| 2381 | 29910 | C 2478 |  |  | 52418.07 | $+3.8273$ | +-0074 | 2945 25.0 | + 3.110 | - 552 | 12.2 | 4 | - 3 | 8.8 |  |
| 2382 | 30913 | L 2110 |  |  | 2421.47 | 8466 | 75 | 3022550 | 106 | 555 | 12.4 | - 9 | + 6 | $8 \cdot 8$ | A 0 |
| 2383 | 29911 | C 2479 | 604 | 10255 | $2422 \cdot 01$ | 8188 | 73 | $292840 \cdot 9$ | 104 | 551 | 10.4 | + 18 | - 31 | $7 \cdot 16$ | G 5 |
| 2384 | 31989 | L 2112 |  |  | $2430 \cdot 89$ | 8891 | 80 | $314355 \cdot 6$ | 101 | 562 | 11.4 | + 5 | - 29 | $7 \cdot 7$ | A 0 |
| 2385 | 31991 | L 2114 | 607-8 |  | 24 39.8I | 8727 | 78 | $311242 \cdot 5$ | 078 | 560 | 2 | + 16 | - 3 | $7 \cdot 8$ | A 0 |
| 2386 | 31992 | L 2115 |  |  | $52446 \cdot 35$ | $+3.8799$ | +-0078 | $3126 \quad 27 \cdot 8$ | + 3.070 | -. 560 | II.3 | + 2 | $\bigcirc$ | 7.76 | K 5 |
| 2387 | 25842 | C 2482 | 616 |  | 2452.49 | 7156 | 67 | $255743 \cdot 6$ |  | 536 | 12.8 | + 19 | - 18 | 8.8 |  |
| 2388 | 25843 | C2483 | 619-20 | 10281 | $2454 \cdot 60$ | 6958 | 66 | $251546{ }^{6} 3$ | 057 | 533 | 11.3 | $+$ | - 17 | $8 \cdot 1$ | A 3 |
| 2389 | 31 993 | L 2116 | 613 |  | 2459.13 | 8749 | 77 | 311643.4 | 051 | 559 | 13.2 | - 9 | - 46 | $9 \cdot 1$ |  |
| 2390 | 30917 | L 2117 | 614 |  | $25 \quad 0.08$ | 8651 | 76 | $30 \quad 58 \quad 5 \cdot 0$ | 049 | 559 | 11.4 | + $4^{1}$ | - 41 | $8 \cdot 7$ | F 8 |
| 2391 | 26829 | C 2485 | 630 |  | $52526 \cdot 85$ | +3.7317 | +.0067 | $263056 \cdot 1$ | +3.011 | -539 | 12.2 | + 14 |  | 8.6 | F 5 |
| 2392 | 27783 | C 2487 | 636 | 10304 | 2543.27 | 7663 | 68 | $27 \quad 42 \quad 5 \cdot 9$ |  |  | 10.8 | - 6 | - $4^{8}$ | $7 \cdot 50$ | F 8 |
| 2393 | 31 998 | L2121 | 631 |  | 2544.02 | 8804 | 76 | 312631.2 | 986 | 560 | 11.6 | 26 | - 19 | $8 \cdot 4$ | K o |
| 2394 | 30922 | L 2123 |  |  | $2556 \cdot 98$ | 8681 | 75 | $31 \begin{array}{llll}11 & 2 & 47 \cdot 3\end{array}$ |  | 559 | 11.8 | + 8 | - 12 | $9 \cdot 4$ |  |
| 2395 | 29921 | C 2489 |  | 10312 | $26 \quad 4.56$ | 8164 | 71 | 292212.4 | 956 | 551 | 11.4 | 15 | - 55 | $8 \cdot 6$ | G 5 |
| 2396 | 30923 | L 2124 | 647 |  | $526 \quad 6.03$ | +3.8623 | +.0074 | 305135.0 | +2.954 | -. 558 | 11.8 | + 25 | - 3 | 9•1 |  |
| 2397 | 28813 | C 2490 | $651-2$ | 10317 | 2612.31 | 8036 | 70 | $28 \quad 56 \quad 47 \cdot 8$ | - 946 | 550 | II. 8 | 6 | - 5 | 8.7 | Fo |
| 2398 | 26834 | C 2492 | 660 |  | $26 \quad 19.97$ | 7350 | 65 | 2637 5.1 | 934 | 540 | 12.0 | - 3 | - 16 | $7 \cdot 7$ | K 2 |
| 2399 | 24846 | C 2495 |  |  | $26 \quad 28.08$ | 6869 | 63 | $24 \begin{array}{llll} & 55 & 33 \cdot 8\end{array}$ |  | 532 | 12.1 |  | - 66 | 9.1 |  |
| 2400 | 29923 | C 2494 |  | 10329 | 26 31-16 | 8093 | 70 | 29746.1 | 918 | 551 | 11.7 | - 31 | - 57 | $7 \cdot 8$ | F 5 |

[^16]| No. | B.D | A.G.C | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Doc. 1910.0. | Precession. | Sec. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { B.0001. } \end{aligned}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m | 8 |  | - , " |  | " |  |  |  |  |  |
| 2401 | 24847 | C 2496 | 668 |  | 52638.75 | +3.6869 | +.0063 | $245523 \cdot 1$ | + 2.907 | -. 533 | 12.1 | 16 | - 28 | $9 \cdot 0$ |  |
| 2402 | $29 \quad 924$ | C 2497 |  |  | 2650.04 | 8158 |  | $292020 \cdot 6$ | 891 | 552 | 11.8 | - 11 | - 156 | $8 \cdot 7$ |  |
| 2403 | 26835 | C 2498 |  | 10345-8 | $2650 \cdot 36$ | 7439 | 66 | $265457 \cdot 6$ | 89 I | 541 | 11.0 | - 19 | - 11 | $7 \cdot 11$ | B 5 |
| 2404 | $31 \begin{array}{ll}31 & 1001\end{array}$ | L 2130 | 666-7 | 10340 | $2654 \cdot 85$ | 8979 | 75 |  | 884 | 563 | 11.8 | + 10 | + 3 | $7 \cdot 6$ |  |
| 2405 | $\begin{array}{ll}26 & 838\end{array}$ | C 2499 | 677 |  | $\begin{array}{ll}27 & 0.87\end{array}$ | 7243 | 63 | $2614 \begin{array}{lll} \\ 26 & 2 \cdot 1\end{array}$ | 875 | 538 | 12.5 | 11 | 9 | 8.8 |  |
| 2406 | $26 \quad 839$ | C 2500 | 680 |  | $527 \quad 5 \cdot 15$ | $+3.7384$ | +.0064 | 2643 24.I' | $+2.869$ | --540 | 13.1 | - 9 | + 14 | 9.4 |  |
| 2407 | $31 \quad 1003$ | L 2133 | 675 | 10349 | $27 \quad 9.08$ | - 8929 | 73 | $\begin{array}{llll}31 & 48 & 25.9\end{array}$ | 863 | 563 | . 2 | + | - 19 | $7 \cdot 26$ | A 2 |
| 2408 | $26 \quad 841$ | C 2501 | 683-4 | 10360-1 | 2710.07 | 7373 | 64 | $264055 \cdot 4$ | 862 | 540 | 11.7 | + 36 | - | 8.2 | B 2 |
| 2409 | $28 \quad 818$ | C 2502 |  |  | 2715.07 | 7839 | 67 | $281620 \cdot 1$ | 855 | 548 | $12 \cdot 1$ | + | - 57 | 8.6 | F 2 |
| 2410 | $25 \quad 852$ | C 2503 |  | 10371 | $27 \quad 23 \cdot 17$ | 7128 | 64 | $254945 \cdot 5$ | 843 | 537 | 13.2 | - 10 | - 12 | $8 \cdot 0$ | K o |
| 2411 | $24 \quad 850$ | B 1784 | 704 |  | 52733.94 | $+3 \cdot 6699$ | 0060 | $24 \quad 18 \quad 7 \cdot 2$ | + 2.827 | --531 | 13.2 | 77 | - 82 | $8 \cdot 5$ | F 8 |
| 2412 | $27 \quad 789$ | C 2504 |  |  | $2741 \cdot 76$ | 7714 | 66 | $275031 \cdot 3$ | 816 | 545 | 13.4 | 39 | - 6 | $9 \cdot 4$ |  |
| 2413 | 25'857 | C 2506 |  |  | $27 \quad 57.54$ | 7011 | 62 | 252433.0 | 793 | 536 | 13.0 | 49 | - 13 | $9 \cdot 4$ |  |
| 2414 | 24854 | B 1787 |  | 10390 | 2759.49 | 6775 | 61 | 243358.4 | 791 | 532 | 11.3 |  | - $4^{2}$ | $6 \cdot 92$ | B 8 |
| 2415 | 26846 | C 2508 | 715 |  | $28 \quad 2.90$ | 7315 | 63 | $\begin{array}{llll}26 & 28 & 18 \cdot 2\end{array}$ | 786 | 540 | 13.6 | - 17 | - 4 | $9 \cdot 1$ |  |
| 2416 | 26847 | C 2509 |  |  | 52812.41 | $+3.7304$ | +.0063 | $26 \quad 25 \quad 51.7$ | + 2.773 | --540 | 13.9 | - 7 | - 13 | $9 \cdot 4$ |  |
| 2417 | $27 \quad 791$ | C 2511 | 724 | 10393 | - 2816.62 | 7499 | 63 | $27 \quad 6 \quad 4.2$ | 765 | 542 | 12.8 | + 7 | - 3 | $8 \cdot 0$ | K o |
| 2418 | 311007 | L 2144 | 716 |  | 2818.84 | 8714 | 71 | $31 \quad 646 \cdot 8$ | 763 | 561 | 13.8 | + | + 6 | $9 \cdot 4$ |  |
| 2419 | $28 \quad 821$ | ${ }^{\text {C } 2512}$ |  |  | $28 \quad 20 \cdot 23$ | 7980 | 66 | 2843 41-I | 761 | 550 | 13.8 | 12 | - | $9 \cdot 1$ |  |
| 2420 | 26. 850 | C2515 | 728 | 10401-2 | $28 \quad 35.64$ | 7418 | 63 | 2649 II•I | 752 | 541 | $1 \mathrm{I} \cdot 3$ | 11 | 10 | $7 \cdot 7$ | A 3 |
| 2421 | $27 \quad 794$ | C 2517 | 733-4 | 10410-1 | 52843.56 | +3.7550 | $+\cdot 0064$ | $27 \quad 168.6$ | + $2 \cdot 726$ | --543 | - | - 40 | - I | $7 \cdot 8$ | Fo |
| 2422 | $30 \quad 938$ | L 2145 |  |  | $2845 \cdot 39$ | 8541 | 68 | 303317.3 | 725 | 557 | - 7 | + 1 | - 29 | 8.8 | A |
| 2423 | $27 \quad 799$ | C 2521 |  |  | 2858.53 | 7717 | 64 | $27506 \cdot 1$ | 705 | 546 | 12.2 | - 30 | - 19 | 8.2 | K 2 |
| 2424 | $27 \quad 798$ | C 2522 |  |  | 2858.95 | 7763 | 64 | 275923.5 | 705 | 545 | 10.9 | + 7 | + 20 | $8 \cdot 0$ | B 8 |
| 2425 | 311013 | L 2148 | 737 |  | $29 \quad 2.66$ | 8863 | 71 | 313429.9 | 699 | 562 | 13.5 | + 17 | 3 | $9 \cdot 4$ | F。 |
| 2426 | $30 \quad 941$ | L 2150 | 739 |  | $529 \quad 5 \cdot 75$ | $+3 \cdot 8661$ | -0069 | 3056 2.1 | + 2.695 | -. 560 | 13.7 | + 4 | - 14 | $9 \cdot 4$ |  |
| 2427 | $29 \quad 935$ | C 2523 | 747 |  | 2912.06 | 8141 | 66 | $291451 \cdot 2$ | 686 | 552 | 14.0 | + 4 | - 16 | 9.1 |  |
| 2428 | $25 \quad 863$ | C 2524 | 752 |  | 2916.58 | 7134 | 61 | 254924.6 | 679 | 537 | 13.7 | 21 | - 1 | 8.5 |  |
| 2429 | $30 \quad 942$ | L 2155 |  | 10423 | 2918.55 | 8642 | 68 | $30 \quad 52 \quad 90$ | 676 | 559 | 12.7 | - | - 43 | 8.0 | F 5 |
| 2430 | $26 \quad 856$ | C 2526 | 753 | 10430-2 | 29 21.10 | 7449 | 62 | $2654 \quad 50 \cdot 3$ | 673 | 543 | 13.6 | $+32$ | - 91 | 8.0 | F 8 |
| 2431 | $26 \quad 858$ | C 2527 | 760 |  | 5 52927.68 | +3.7328 | +-0061 | $26 \quad 2951 \cdot 1$ | + 2.663 | -54I | 13.3 | + 3 | - 16 | $9 \cdot 0$ | A 5 |
| 2432 | 24868 | B 1797 | $766-7$ | 10443 | $2933 \cdot 14$ | 6687 | 57 | 241350.2 | 656 | 531 | $12 \cdot 1$ | + 11 | - 27 | $7 \cdot 8$ | K。 |
| 2433 | $30 \quad 944$ | L 2158 | 757 | 10433 | 29 36.13 | 8542 | 66 | $303240 \cdot 6$ | 651 | 558 | 12.2 | - 18 | - 29 | 8.2 | A 3 |
| 2434 | 27802 | C 2530 |  | 10440 | $2936 \cdot 87$ | 7607 | 62 | 2727 17.3. | 650 | 545 | 13.4 | + | - 9 | $9 \cdot 0$ |  |
| 2435 | $25 \quad 866$ | C 2533 | 770 |  | $2942 \cdot 94$ | 7120 | 60 | 2546 10.1. | 641 | 537 | 12.2 | + | + 12 | $7 \cdot 7$ | A 0 |
| 2436 | $24 \quad 869$ | C 2534 |  |  | $52951 \cdot 45$ | +3.6893 | +.0058 | $245747 \cdot 1$ | + 2.630 | --534 | 12.0 | - 8 | - 12 | $8 \cdot 7$ |  |
| 2437 | 25868 | C 2535 | 781 |  | $\begin{array}{ll}30 & 0.32\end{array}$ | 7134 | 60 | $\begin{array}{llllll}25 & 48 \\ 42 \cdot 8\end{array}$ | 617 | 538 | 13.4 | + | - 19 | $9 \cdot 0$ |  |
| 2438 | 24870 | B 1803 |  |  | $30 \quad 2 \cdot 60^{\circ}$ | 6756 | 57 | $2428 \quad 23 \cdot 1$ | 612 | 533 | 13.4 | + 17 | - 38 | $9 \cdot 0$ |  |
| 2439 | $25 \quad 872$ | C 2536 |  |  | $30 \quad 9.89$ | 6965 | 59 | $251257 \cdot 6$ | 602 | 536 | 13.8 | + 45 | - 13 | $9 \cdot 4$ |  |
| 2440 | 27806 | C 2537 | 790 | 10457 | 3016.51 | 7654 | 62 | $27 \begin{array}{llllllll} & 36 & 16 \cdot 4\end{array}$ | 592 | 545 | 12.5 | 23 | - 19 | $6 \cdot 47$ | K o |
| 2441 | $24 \quad 873$ | B 1810 | 804 |  | 53026.88 | $+3.6818$ | +.0058 | $244126 \cdot 2$ | + 2.578 |  | 12.2 | 10 |  | $8 \cdot 4$ | F 5 |
| 2442 | $25 \quad 875$ | C 2539 | 799 |  | $30 \quad 24 \cdot 50$ | 7177 | 60 | $25 \quad 57 \quad 29 \cdot 5$ | 580 | 539 | 12.8 | 66 | - 39 | 9.4 |  |
| 2443 | 26864 | C 2540 | 801 |  | 3027.21 | 7249 | 59 | $\begin{array}{llllllll}26 & 12 & 36 \cdot 9\end{array}$ | 578 | 540 | 13.4 | + 5 | - 3 | $8 \cdot 5$ | B 8 |
| 2444 | 311020 | L 2172 | 796 | 10458 | 3033.90 | 8990 | 69 | $3 \mathrm{I} 5649^{\circ} \mathrm{O}$ | 567 | 565 | 12.6 | + 5 | - 27 | $7 \cdot 7$ | F 5 |
| 2445 | $24 \quad 875$ | B 1813 | 808 |  | $3036 \cdot 94$ | 6743 | 56 | $\begin{array}{lllllllllll}24 & 25 & 12.8\end{array}$ | 565 | 533 | 12.6 | - I | 28 | $9 \cdot 0$ |  |
| 2446 | $30 \quad 949$ | L 2174 |  | 10463 | 53038.95 | $+3.8543$ | $+\cdot 0064$ | 303159.2 | + $2 \cdot 560$ | --558 | 12.7 | 29 |  | $8 \cdot 2$ | G 5 |
| 2447 | $26 \quad 866$ | C 2542 | 811 |  | $3043 \cdot 40$ | 7276 | 59 | $\begin{array}{llll}26 & 18 & 0.7\end{array}$ | 554 | 540 | 12.6 | $\bigcirc$ | + 26 | $9 \cdot 4$ |  |
| 2448 | 251878 | C 2545 |  |  | 3055.00 | 7057 | 57 | $253150 \cdot 0$ | 537 | 537 | 12.8 | 40 | + 25 | $8 \cdot 6$ |  |
| 2449 | $25 \quad 879$ | C 2544 | 816 | 10489 | $\begin{array}{lll}30 & 55.49\end{array}$ | 7157 | 58 | $255^{2} 255^{\circ}$ | 537 | 539 | 12.6 | 16 | + 2 | $6 \cdot 32$ 8.3 | F 5 |
| 2450 | $24 \quad 882$ | B 1817 | 822-3-4 |  | $3057 \cdot 38$ | 6714 | 55 | $24 \quad 18 \quad 40 \cdot 4$ | 534 | 532 | 11 | - | - 15 | $8 \cdot 2$ | K 2 |

2422, 2428, 2431. Number of observations 6.

| No. | B.D. | A.G.C. | W.B. (2) | Lalande. | R.A. $1910^{\circ} \mathrm{O}$. | Precession. | Sec. Var. | Dec. 191000 | Precession. | See. Var. | $\begin{gathered} \text { Epoch } \\ 1900+ \end{gathered}$ | Annual P.M. |  | Mag. | Spectral Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. | $\begin{aligned} & \text { Dec. } \\ & n \cdot 00 \text { I. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | 8 | 5 | - " |  | " |  |  |  |  |  |
| 2451 | 27 811 | C 2546 | 817 | 10488 | 53110.05 | +3.7731 | +.0061 | 275117.3 | $+2.530$ | - 547 | 12.9 | + 27 | + 7 | $8 \cdot 6$ | B 8 |
| 2452 | 25881 | C 2547 |  |  | $31 \quad 5 \cdot 15$ | 6935 | 56 | $25 \quad 5 \quad 50 \cdot 9$ | 523 | 535 | 13.6 | + 14 | - 7 | 9.1 |  |
| 2453 | 29841 | C 2548 | 827 |  | 3114.59 | 8153 | 62 | $2915 \begin{array}{ll}27 & 27.4\end{array}$ | 508 | 553 | 13.4 | + 4 | - 45 | 8.8 | A 3 |
| 2454 | $26 \quad 870$ | C 2551 | $84^{2-3}$ | 10510-25 | $3131 \cdot 56$ | 7444 | 59 | 26528.6 | 484 | 543 | 11.0 | + 10* | - $30 *$ | 5.70 | B 8 |
| $2+55$ | 311025 | L 2181 | 837-8 | 10504 | $31 \quad 32 \cdot 27$ | 8781 | 68 | $\begin{array}{llllll}11 & 16 & 36 \cdot 8\end{array}$ | 484 | 562 | 9.6 |  | - 53 | $7 \cdot 8$ | F 5 |
| $2+56$ | $24 \quad 889$ | B 1827 |  |  | 53139.03 | $+3.6680$ | +.0054 | 24 10 4777 | +2.473 | -. 532 | 13.3 | - 6 | - 28 | $9 \cdot 4$ |  |
| 2457 |  | L 2183 | 840 |  | 3141.59 | 8924 | 66 | 314323.7 | 469 | 564 | 12.4 | + 15 | - 27 | $9 \cdot 1$ |  |
| $2+58$ | 27818 | C 2554 | 857 | 10526 | $32 \quad 2.70$ | 7547 | 59 |  | 439 | 545 | 13.3 | + 38 | + 10 | $9 \cdot 0$ |  |
| 2459 | $26 \quad 876$ | C 2555 | 862 | 10528 | $\begin{array}{lll}32 & 4.40\end{array}$ | 7241 | 57 | $26 \quad 9 \quad 46 \cdot 6$ | 437 | 540 | 11.4 | + 29 | + 30 | $8 \cdot 4$ | A 2 |
| 2460 | 25888 | C 2557 |  |  | 3217.53 | 7183 | 57 | $\begin{array}{lllll}25 & 57 & 26 \cdot 9\end{array}$ | 417 | 539 | 12.9 | - 10 | + $1+$ | $9 \cdot 4$ |  |
| ${ }^{2}+6$ I | $25 \quad 890$ | C 2558 |  |  | 53221.85 | $+3.7069$ | +.0056 | 25 3 319.7 | + 2.411 | --537 | 12.9 , | - 4 | - 9 | $9 \cdot 4$ |  |
| $2{ }^{2} 62$ | 24894 | B 1838 |  |  | 3225.11 | 6678 | 54 | 2410 1.2. | 407 | 532 | 11.8 | + 19 | + | $9 \cdot 0$ |  |
| $2{ }^{2} 63$ | $24 \quad 895$ | B 1840 |  |  | $32 \quad 36 \cdot 92$ | 6705 | 53 | 241538.9 | 391 | 532 | 12.4 | + 19 | - 19 | $9 \cdot 0$ |  |
| 2464 | $26 \quad 879$ | C 2559 | 887-8 |  | $\begin{array}{lll}32 & 39.89\end{array}$ | 7446 | 57 | 265151.6 | 385 | 543 | 12.7 | - 15 | - $\quad 27$ | $9 \cdot 1$ | Go |
| 2465 | $30 \quad 962$ | L 2192 |  |  | 3244.01 | 8668 | 63 | 305418.4 | 379 | 560 | 12.7 | + 11 | - 6 | $8 \cdot 8$ |  |
| $2+66$ |  | L |  |  | 53250.28 | $+3.8523$ | +.0062 | $302621 \cdot 9$ | + 2.369 | -. 558 | 13.1 | - 10 | - 9 | 8.0 |  |
| 2467 | ${ }^{30} 9$ | $L$ | 891 | 556 -7 | 3251.20 | 8523 | 62 | 302623.2 | 369 | 558 | 10.9 | - 10* | - $9^{*}$ | $5 \cdot 49$ | A 2 |
| 2468 | 3086 | C 2560 |  |  | 3258.69 | 8440 | 62 | 301018.3 | 358 | 557 | 12.3 | + 8 | + | $9 \cdot 1$ |  |
| 2469 | 311035 | L 2198 |  |  | $33 \quad 7 \cdot 76$ | 8803 | 63 | $\begin{array}{llllll}31 & 19 & 34.9\end{array}$ | 345 | 565 | 12.3 | + 1 | + | $9 \cdot 0$ |  |
| $2+70$ | $\begin{array}{ll}28 & 836\end{array}$ | C 2565 | 905 | 10570 | $33 \quad 16.68 ~$ | 7904 | 59 | $\begin{array}{llll}28 & 24 & 29.3\end{array}$ | 332 | 550 | 11.6 | + 6 | - 12 | $8 \cdot 2$ | B |
| ${ }^{2}+71$ | 26883 | C 2566 | 909-10 |  | $\begin{array}{llll}5 & 33 & 18.92\end{array}$ | +3.7275 | +.0055 | $\begin{array}{lllll}26 & 15 & 49.9\end{array}$ | + 2.329 | --541 | 13.0 | + 21 | + 15 | $9 \cdot 1$ |  |
| 2472 | 26884 | C 2567 | 912 |  | $33 \quad 20 \cdot 78$ | 7362 | 56 | $263358 \cdot 6$ | 326 | 542 | 11.4 | + 9 | + | 6.47 | K o |
| 2473 | 27823 | C 2569 |  |  | 3327.02 | 7768 | 58 | 275657.7 | 317 | 548 | 13.0 | - 43 | - 27 | 9.4 |  |
| 2474 | 30966 | C 2568 |  |  | $33 \quad 29.23$ | 8420 | 62 | $30 \quad 5 \quad 57 \cdot 2$ | 314 | 556 | 11.7 | - 4 | + 12 | $7 \cdot 76$ | A 0 |
| 2475 | $29 \quad 947$ | C 2570 | 918 | 10582 | 33 34.91 | 8133 | 59 | $29 \quad 9 \quad 50 \cdot 7$ | 306 | 553 | 12.3 | + 28 | + | 6.00 | B 5 |
| 2476 | $30 \quad 968$ | L 2203 | 917 | 10578 | $53336 \cdot 70$ | $+3.8651$ | +.006 1 | $3050,22 \cdot 9$ | +2.303 | -. 560 | 10:9 | + | + 13 | $7 \cdot 52$ |  |
| 2477 | $29 \quad 949$ | C 2571 |  |  | 3344.72 | 8323 | 60 | $294^{6}$ 58.1 | 291 | 556 | 11.0 | - 15 | - 20 | 8.4 | G 5 |
| 2478 | 25 901 | C 2572 |  |  | $33 \quad 58.69$ | 6991 | 53 | 251544.3 | 271 | 536 | 12.0 | + 10 | - 10 | 8.8 |  |
| 2479 | 311040 | L 2206 | 934-5-6 | 10592 | $\begin{array}{ll}34 & 1.42\end{array}$ | 8759 | 62 | 311028.3 | 266 | 564 | 11.4 | + 28 | - 27 | $8 \cdot 1$ |  |
| 2480 | $27 \quad 828$ | C 2573 | 928-44 |  | $34 \quad 4 \cdot 73$ | 7705 | 55 | 2743 51.0 | 262 | 548 | $12 \cdot 2$ | $\bigcirc$ | + 15 | $9 \cdot 0$ |  |
| 2481 | $25 \quad 902$ | C 2575 | 951 | 10605 | 534 9.51 | $+3.7158$ | +.0054 | $255049 \cdot 8$ | + 2.255 | -. 539 | 12.8 | + 23* | - 31* | 5.00 | B 3 |
| 2482 | $30 \quad 970$ | C 2574 | 943 |  | 3410.81 | 8403 | 60 |  |  | 556 | 11.5 | - | - 9 | $8 \cdot 16$ | F 5 |
| 2483 | 311043 | L 2209 |  |  | 34 $\mathbf{1 2} \cdot 57$ | 8974 | 63 | 315058.4 | 250 | 567 | 11.2 | - 2 | - 9 | $8 \cdot 0$ | B 9 |
| 2484 | $24 \quad 909$ | B 1852 | 957 | 10613 | $3421 \cdot 15$ | 6686 |  | 241028.2 | 239 | 533 | $12 .+$ | 6 | + 14 | 7.04 | $\mathrm{F}_{2}$ |
| $24^{85}$ | 311044 | L 2212 | 949-50 | 10615-6 | $3422 \cdot 20$ | 8806 | 62 | 311914.9 | 237 | 564 | 13.1 |  | - 1 | $9 \cdot 1$ |  |
| 2486 | $25 \quad 907$ | C 2579 | 969 |  | 53443.42 | +3.6929 | +.005 1 | $\begin{array}{llll}25 & 2 & 5.3\end{array}$ | + 2.207 | --536 | 11.5 | + 14 | + 10 | 8.86 | A |
| 2487 | $24 \quad 911$ | C 2580 |  |  | $3443 \cdot 52$ | 6895 | 52 | $\begin{array}{llll}24 & 55 & 0.3\end{array}$ |  | 536 | 12.4 | 13 | - 23 | $9 \cdot 16$ | F |
| 2488 | 311048 | L 2216 | 962-3 |  | $3446 \cdot 45$ | 8804 | 62 |  | 203 | 564 | 11.7 | - 4 | - 1 | $5 \cdot 96$ | B 8 |
| 2489 | $24 \quad 913$ | B 1862 | 973-4 | 10631 | $3447 \cdot 04$ | 6775 | 51 | $\begin{array}{llll}24 & 29 & 21.2\end{array}$ | 201 | 534 | 12.2 | + 16 | - 33 | $7 \cdot 14$ | K |
| 2490 | 311049 | L 2218 | 965 |  | $3450 \cdot 96$ | 8988 | 62 | $\begin{array}{llllllllll}31 & 52 & 19.8\end{array}$ | 195 | 567 | 12.0 | 4 | - I | $6 \cdot 72$ | M a |
| 2491 | $28 \quad 846$ | C 2581 | 971 | 10624 | $53452 \cdot 97$ | $+3.8066$ | $+\cdot 0056$ | $\begin{array}{lllll}28 & 55 & 42 \cdot 1\end{array}$ | +2.193 | --553 | 11.1 | - 11 | - | $7 \cdot 16$ | K o |
| 2492 | $27 \quad 832$ | C 2582 |  |  | 3453.72 | 7609 | 54 | $\begin{array}{lllllllllll}27 & 23 & 39.7\end{array}$ | 191 | . 547 | 12.8 | - 14 | $+3$ | $8 \cdot 5$ | A |
| ${ }^{2}+93$ | 311050 | L 2219 |  |  | $3454 \cdot 53$ | 8972 | 61 | $314959 \cdot 2$ | 190 | 566 | 13.3 | + 17 | - 11 | 9.1 |  |
| 2494 | $25 \quad 909$ | ${ }^{\text {C } 2583}$ |  |  | 3455.90 | 7189 | 52 | $255646 \cdot 9$ | 188 | 540 | 13.3 | + $+\quad 9$ | + 2 | $9 \cdot 4$ |  |
| 2495 | $27 \quad 833$ | C 2584 | 980-1 | 10633 | $\begin{array}{lll}35 & 0.74\end{array}$ | 7711 | 55 | $27 \quad 4415 \cdot 4$ | 181 | 548 | 12.5 | + 15 | 26 | 8.2 | F 5 |
| 2496 | 26899 | C 2586 | 992 |  | $\begin{array}{lll}5 & 35 & 8.79\end{array}$ | $+3.7480$ | +.0053 | $2657 \quad 6.5$ | + 2.169 | - 545 | 13.8 | + 24 | - 86 | $9 \cdot 1$ |  |
| 2497 | $29 \quad 952$ | C 2585 |  |  | $\begin{array}{llll}35 & 10.09\end{array}$ | 8102 | 55 | $29 \quad 230 \cdot 6$ | 168 | 554 | 14.1 | + 12 | - 65 | $9 \cdot 0$ |  |
| 2498 | 25910 | C 2587 | 997 | 10647 | $\begin{array}{llll}35 & 13.73\end{array}$ | 6982 | 52 | $\begin{array}{lllll}25 & 13 & 1 \cdot 1\end{array}$ | 162 | 537 | 13.3 | + 21 | - 14 | 8.6 | K |
| 2499 | $26 \quad 901$ | C 2591 |  |  | $\begin{array}{lll}35 & 28.94\end{array}$ | 7229 | 52 | $\begin{array}{llll}26 & 4 & 55 \cdot 3\end{array}$ | 140 | 540 | 13.0 | - 1 | - 36 | 9.4 |  |
| 2500 | 311056 | L 2226 | 1000-1 | 10644 | $3530 \cdot 97$ | 8753 | 58 |  1 | 137 | 564 | 11.7 | - 1 | - 25 | 8.1 | A 0 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{8.0001 .}{\text { R.A. }}$ | Dec. |  |  |
|  | 。 |  |  |  | h m | s | 8 | - " |  | " |  |  |  |  |  |
|  | $29 \quad 975$ | C 2645 | 1134 |  | $53832 \cdot 10$ | $+3.8400$ | $+.0051$ | $295842 \cdot 7$ | + 1.875 | - 558 | 10.8 | 9 | + | 8.II | B 9 |
| 2552 | $24 \quad 936$ | B 1908 |  |  | $3834 \cdot 79$ | 6820 | 46 | $243637 \cdot 8$ | 870 860 | 535 | 13.5 | - 4 | - $\quad 24$ | $9 \cdot 1$ |  |
| 2553 | 2784 | C 2649 | 1143 | 10782 | 3841.61 | 7708 | 49 | 274128.4 | 860 | 549 | 12.0 | - 36 | - | $7 \cdot 8$ | A 0 |
| 2554 | 30993 | L 2254 | 1137 |  | $3843 \cdot 28$ | 8547 | 52 | 302652.6 | 857 | 560 | 12.2 | - 82 | 12 | $7 \cdot 51$ | G 5 |
| 2555 | $27 \quad 850$ | C 2650 | 1156 |  | - 38 49.51 | 7561 | 47 | 27 II 23.2 | 849 | 547 | $14^{\circ}$ | + 14 | 29 | $9 \cdot 4$ |  |
| 2556 | $26 \quad 931$ | C 2651 | 1157 |  | 538 50.13 | $+3.7465$ | +-0048 | 265141.0 | + 1.849 | -544 | 13.3 | 9 | 4 | $9 \cdot 1$ |  |
| 2557 | 311072 | L 2255 | $1147-9$ | 10780 | -38 52.36 | 8804 | 52 | $311587 \cdot 9$ | 846 | 565 | 11.8 | + | - $\quad 5$ | $8 \cdot 2$ | G 0 |
| 2558 | 28866 | C 2652 |  |  | $38 \quad 53.97$ | 7963 | 51 | $\begin{array}{lllllllllll} & 38 & 32 & 38 \cdot 2\end{array}$ | 843 | 552 | 13.8 | + 20 | + 33 | $9 \cdot 4$ |  |
| 2559 | 28868 | C 2653 |  | 10787 | $38 \quad 54.73$ | 8095 | 49 | $28 \quad 58 \quad 37 \cdot 0$ | 842 | 554 | 11.6 | + | - 13 | $8 \cdot 1$ | B 5 |
| 2560 | $30 \quad 994$ | L 2259 | 1154 |  | 3856.60 | 8590 | 52 | $\begin{array}{llll}30 & 35 & 4.5\end{array}$ | 839 | 560 | 12.0 | + 18 | 14 | $7 \cdot 9$ | G 5 |
| 2561 | $24 \quad 940$ | C 2657 | 11 65-6 | 10802 | $539 \quad 5 \cdot 57$ | +3.6896 | $+\cdot 0045$ | $24 \quad 5236.7$ | + 1.826 | -. 537 | 12.7 | - 7 | + 47 | 7.96 | G 5 |
|  | $\begin{array}{lll}25 & 952 \\ 25 & 953\end{array}$ | C 2656 |  |  | $\begin{array}{ll}39 & 6.07 \\ 30 & 16.10\end{array}$ | 7058 | 45 | $252655 \cdot \mathrm{I}$ |  | 539 | 13.9 | + 23 | $\begin{array}{r} \\ +\quad 18 \\ \hline-\quad 6\end{array}$ | 9.4 8.1 8.1 |  |
| 2563 2564 | $\begin{array}{lll}25 & 953 \\ 28 & 871\end{array}$ | C 2659 | 1169 |  | $3916 \cdot 10$ 3918.21 | 7136 7848 7 | 46 | $\begin{array}{cccc}25 & 43 & 8 \cdot 5 \\ 28 & 9 & 20 \cdot 1\end{array}$ | 810 808 | 540 551 | 12.5 | $+\quad 5$ $+\quad 19$ $+\quad 1$ | 6 $+\quad 10$ | $8 \cdot 1$ <br> $8 \cdot \mathrm{I}$ | A 0 |
| 2565 | $26 \quad 937$ | C 2660 | 1169 |  | $\begin{array}{ll}39 & 18 \cdot 21 \\ 39 & 19.63\end{array}$ | 7848 7304 | 46 | $\begin{array}{llllll}26 & 18 & 18.2\end{array}$ | 805 | 541 | 11.8 | - 14 | $+\quad 18$ | $7 \cdot 22$ | B 9 |
| 2566 | 311077 | L 2264 | 1168 |  | 53925.73 | $+3.8806$ | $+.0051$ | 31.558 .6 | + 1.796 | --565 | 13.5 | 4 | + 3 | $9 \cdot 4$ |  |
| 2567 | 28873 | C 2661 | 1178 |  | 3928.70 | 7866 | 48 | $28 \quad 1251 \cdot 2$ | 792 | 551 | 12.3 | - | $+\quad 13$ $+\quad 1$ | $8 \cdot 5$ | A 5 |
| 2568 | $24 \quad 942$ | C 2663 | 1192 |  | $3938 \cdot 92$ | 6832 | 44 | $243846 \cdot 1$ | 778 | 536 | 13.0 | - 14 | - 31 | $8 \cdot 0$ | A 2 |
| 2569 | 311079 | L 2266 | 1179 |  | 3938.98 | 8779 | 50 | 311024.6 | 778 | 565 | 12.5 | + 7 | - 12 | 9.0 |  |
| 2570 | 311080 | L 2267 | 1180-1 | 10805 | 3939.99 | 8814 | 50 | 311714.2 | 776 | 565 | 10.3 | + 8 | 23 | $6 \cdot 73$ | K o |
| 2571 | 24943 | B 1921 |  |  | $53942 \cdot 75$ | $+3.6758$ | +-0043 | $242255 \cdot 5$ | + 1.772 | - 535 | 13.2 | + 13 | + | $8 \cdot 64$ | N |
| 2572 | $29 \quad 983$ | C 2665 |  | 10814 | 3947.91 | 8184 | 48 | 291538.7 | 765 | 554 | 11.8 | - 13 | - $\quad 37$ | $7 \cdot 40$ | F 2 |
| 2573 | 30997 | C 2666 |  | 10813 | $3950 \cdot 25$ | 845 I | 51 | $\begin{array}{lllll}30 & 7 & 48 \cdot 3\end{array}$ | 762 | 559 | 12.6 | + | 10 | $8 \cdot 24$ | B 5 |
| 2574 | $\begin{array}{lll}28 & 878\end{array}$ | C 2667 |  |  | $3954 \cdot 52$ | 8001 | 48 | $28 \quad 39 \quad 25 \cdot 3$ | 754 | 553 | 13.4 | + 45 | + 23 $+\quad 1$ | $8 \cdot 8$ | B 9 |
| 2575 | $30 \quad 999$ | L 2269 | 1193 |  | 39 56.79 | 8642 | 51 | $3044 \quad 22 \cdot 2$ | 751 | 561 | 12.8 | + 16 | - 33 | $9 \cdot 4$ |  |
| 2576 | $26 \quad 942$ | C 2669 | 1202 |  | $53957 \cdot 35$ | $+3.7443$ | +.0046 | $264635 \cdot 2$ | + 1.751 | . 544 | 14.0 | - 8 | - 19 | $9 \cdot 5$ |  |
| 2577 | 24947 | B 1924 |  |  | $3958 \cdot 62$ | 6865 | 44 |  | 749 | 536 | 13.3 | + 10 | - 5 | $9 \cdot 1$ |  |
| 2578 | $25 \quad 958$ | C 2670 |  |  | 3958.77 | 7130 | 45 | 254138.7 | 749 | 540 | 12.5 | + 10 | + 14 | $8 \cdot 6$ | F 5 |
| 2579 | $25 \quad 961$ | C 2672 | 1207 | 10829-30 | $40 \quad 0 \cdot 16$ | 6956 | 44 | $\begin{array}{llllllllll}25 & 4 & 47\end{array}$ | 747 | 537 | 10.5 | + 14 | - 32 | $7 \cdot 81$ | K o |
| 2580 | $27 \quad 857$ | C 2671 | 1204 |  | $40 \quad 1 \cdot 49$ | 7750 | 47 | $\begin{array}{llll}27 & 49 & 6.8\end{array}$ | 746 | 549 | 13.8 | + 13 | + | $9 \cdot 1$ |  |
| 2581 | $29 \quad 985$ | C 2673 |  |  | 54012.81 | $+3.8134$ | +.0048 | $29 \quad 533.4$ | + 1.728 | - 554 | 14.2 | + 14 | - 34 | 9-1 |  |
| 2582 | $26 \quad 944$ | C 2675 |  |  | $40 \quad 16.83$ | 7240 | 45 | $26 \quad 426.5$ |  | 541 | 13.6 | - 15 | + $+\quad 7$ | 9-1 |  |
| 2583 | $25 \quad 963$ |  |  |  | $40 \quad 20 \cdot 19$ | 7185 | 45 |  | 718 | 541 | 10.9, $6 \cdot 9$ | $+\quad 21$ $+\quad 1$ + | $+\quad 7$ $+\quad 7$ | $7 \cdot 7$ | B 9 |
| 2584 | $25 \quad 963$ | C 2676 |  | 10838 | $40 \quad 20 \cdot 55$ | 7184 | 45 |  | 717 | 541 | 10.4 | + 21 | $+\quad 7$ <br> -6 | -0 | B |
| 2585 | $3^{1} \quad 1084$ | L 2271 | 1211 |  | 4022.42 | 8838 | 50 |  | 715 | 565 | 13.4 | 12 |  | $9 \cdot 0$ |  |
| 2586 | $24 \quad 950$ | B 1933 |  | 10841 | $54026 \cdot 10$ | +3.6706 | +.0043 | 24111816 | + 1.709 | - 534 | 10.6 | + | 19 | 8.0 | A 3 |
| 2587 | $25 \quad 966$ | C 2678 | 1229 |  | 4038.04 | 7011 | 43 | 25 1611.6 | 692 | 538 | 13.5 | 9 | - 19 | 9.0 |  |
| 2588 | 28883 | C 2677 | '1226-7 |  | 40 39.19 | 7936 | 46 | $\begin{array}{llllll}28 & 26 & 15.8\end{array}$ | 691 | 552 | 12.5 | 9 | - 15 | $9 \cdot 4$ |  |
| 2589 | $25 \quad 967$ | C 2679 |  | 10850 | 40 42-12 | 7124 | 44 | $25 \quad 3957.6$ | 686 | 540 | 9.9 | 2 | + 40 | $8 \cdot 5$ | G 5 |
| 2590 | $26 \quad 948$ | C 2680 | 1232 |  | 4044.02 | 7230 | 44 | $\begin{array}{llll}26 & 2 & 7.5\end{array}$ | 683 | 541 | 13.5 | 9 | 3 | $9 \cdot \mathrm{I}$ |  |
| 2591 | $25 \quad 970$ | C 2682 | 1236 |  | $54049 \cdot 65$ | +3.7079 | +.0043 | 253029.1 | +1.676 | -. 538 | 12.2 | 9 | 2 | 8.8 |  |
| 2592 | $25 \quad 972$ | C 2684 | 1244-5 |  | $4059 \cdot 36$ | 7003 | 43 | 251424.2 | 661 | 538 | 13.6 | + 3 | - 21 | 8.8 |  |
| 2593 | $29 \quad 992$ | C 2686 |  |  | 4111.51 | 8347 | 47 | $294647 \cdot 1$ | 643 | 557 | 13.6 | - 25 | + 7 | 9.4 |  |
| 2594 | $28 \quad 886$ | C 2687 |  |  | 4123.36 | 7866 | 45 | 28 11 41.1 | 627 | 551 | 12.7 | 14 | 10 | 8.8 |  |
| 2595 | 311091 | L 2279 |  | 10864 | 4123.66 | 8929 | 49 | $313736 \cdot 8$ | 625 | 566 | 9.6 | 1 | - 63 | $7 \cdot 37$ | A o |
| 2596 | 29 994 | C 2688 | 1251 | 10867 | $54125 \cdot 58$ | $+3.8230$ | +.0046 | $292347 \cdot 9$ | $+1.622$ | -. 556 | $9 \cdot 8$ | + 2 | + | $8 \cdot 0$ | B 9 |
| 2597 | $28 \quad 887$ | C 2689 | 1256-7 | 10872 | $4132 \cdot 25$ | 7985 | 46 | $2835 \quad 24.3$ | 614 | 552 | 11.0 | + 2 | - 9 | $8 \cdot 1$ | B 9 |
| 2598 | $25 \quad 975$ | C 2690 | 1263 | 10878 | $4^{1} 32.58$ | 7168 | 42 | $254845 \cdot 7$ | 612 | 540 | 10.5 | + 12 | - 5 | $8 \cdot 6$ | ${ }^{1} 5$ |
| 2599 | $29 \quad 997$ | C 2692 | 1262 | 10875 | 4139.99 | 8301 | 46 | $293736 \cdot 8$ | 602 | 557 | $9 \cdot 5$ | - 18 | - 111 | $7 \cdot 21$ | F 8 |
| 2600 | $25 \quad 977$ | C 2693 | 1266 | 10882 | $4143 \cdot 25$ | 7201 | 42 | 255538.5 | 598 | 541 | 12.3 | + 16 | + | $9 \cdot 4$ |  |

2583 . Number of observations 2 and $t$.
2587. Number of observations 6.

| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession | Sec. Var. | Dec. $1910^{\circ} \mathrm{O}$ | Precession. | Sec.Var. | $\begin{aligned} & \text { Epoch } \\ & 1900+ \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { 8.000 } \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { n.00 } . \end{aligned}$ |  |  |
|  | - |  |  |  | h m s | 8 | s | - " ${ }^{\text {, }}$ |  | " |  |  |  |  |  |
| 2601 | $24 \quad 956$ | B 1951 |  |  | 54143.75 | +3.6829 | $+.0042$ | $243656 \cdot 6$ | +1.596 | -. 535 | 12.7 |  | + 8 | $9 \cdot 0$ | A 3 |
| $2602$ | $25 \quad 978$ | C 2696 | 1277-8 | 10894 | $\begin{array}{lll}42 & 0.66\end{array}$ | 7090 | 42 | $\begin{array}{llll}25 & 32 & 8.4\end{array}$ | 571 | 540 | $10 \cdot 1$ | + 1 | $\begin{array}{r} \\ +\quad 13 \\ \hline 18\end{array}$ | $6 \cdot 58$ | K o |
| $2603$ | $26 \quad 955$ | C 2694 |  |  | $\begin{array}{lll}42 & 0.77\end{array}$ | 7481 | 43 | 265325.0 | 571 | 546 | 12.6 | + 14 | - 18 | $8 \cdot 7$ |  |
| $2604$ | $\begin{array}{ll}27 & 866 \\ 28 & 803\end{array}$ | C 2697 |  | 10893 | $42 \quad 5 \cdot 85$ | 7691 | 44 | $\begin{array}{llllll}27 & 36 & 10 \cdot 9\end{array}$ | 564 | 549 | 10.9 | - 4 | + 6 | $8 \cdot 0$ |  |
| 2605 | $28 \quad 893$ | C 2699 | 1280-1 |  | $\begin{array}{llll}42 & 10.78\end{array}$ | 8037 | 45 | $2845 \quad 25 \cdot 5$ | 557 | 553 | 13.0 | 7 | + 18 | $8 \cdot 7$ | B 8 |
|  | $24 \quad 961$ | B 1959 | 1290 |  | 54217.24 | +3.6671 | +.0040 | $24 \quad 2 \quad 57 \cdot 2$ | + 1.548 | --53+ | 13.3 | + 17 | 5 | $9 \cdot 4$ | A |
| 2607 | 301014 | L 2291 |  |  | $42 \quad 20.55$ | 8605 | 46 | 303555.9 | 542 | 561 | 13.2 | + 12 | - 14 | 8.6 | N |
| 26 | 301015 | L 2292 | 1285 | 10 | 4224.08 | 8575 | 46 | $30 \quad 3012.3$ | 538 | 561 | $10 \cdot 1$ | + 12 | - 53 | $7 \cdot 16$ | K 5 |
| 2609 | $24 \quad 963$ | B 1961 |  | 10911 | $42 \cdot 24 \cdot 1$ | 6841 | 4 I | 243916.5 | 538 | 537 | 11.8 | $+\quad 2^{*}$ | - 28* | $7 \cdot 16$ | K 2 |
| 2610 | $24 \quad 965$ | B 1963 |  | 10912 | $4^{2} 26 \cdot 11$ | 6834 | 41 | $243745^{\circ} \mathrm{O}$ | 535 | 537 | II.I | + 6 | - 22 | $8 \cdot 0$ |  |
| 2611 | 311100 | L 2294 |  | 10907 | 54236.83 | $+3.8788$ | +.0047 | 311041.7 | + 1.520 | -. 565 | 12.6 | + 25 | - 13 | $8 \cdot 8$ |  |
| 12 | $\begin{array}{lll}30 & 1017\end{array}$ | C 2704. |  |  | 4241.80 | 8433 | 45 | $30 \quad 236 \cdot 6$ | 513 | 558 | 13.3 | - $4^{6}$ | - 4 | 9.4 |  |
| 2613 | $26 \quad 959$ | C 2705 | 1297 |  | $4^{2} 4^{2 \cdot 27}$ | 7507 | $4^{2}$ | $26 \quad 58 \quad 22 \cdot 1$ | ${ }^{512}$ | 546 | 13.2 | - 7 | - 17 | $9 \cdot 1$ |  |
| 2614 | $28 \quad 902$ | C 2706 | 1308 |  | $43 \quad 0.07$ | 7899 | 43 | $\begin{array}{llllllllllll}28 & 17 & 37 \cdot 3\end{array}$ |  | 552 | 12.3 | + 10 | - 24 | $8 \cdot 5$ | B 8 |
| 2615 | $24 \quad 967$ | B 1970 |  |  | $\begin{array}{lll}43 & 2 \cdot 18\end{array}$ | 6737 | 39 | ${ }^{2}+1643.0$ |  | 535 | 12.7 |  | - 5 | 8.8 |  |
| 2616 | $24 \quad 968$ | B 1972 |  | 10945 | $\begin{array}{lll}5 & 43 & 3.79\end{array}$ | $+3.6802$ | +.0040 | $24304^{6 \cdot 4}$ | + 1.480 | - 536 | 12.8 | + 21 | - 4 | 8.6 | A 0 |
| 2617 | $26 \quad 963$ | C 2707 | 1316 |  | $434 \cdot 56$ | 7236 | 40 | $26 \quad 2 \begin{array}{lllll} & 26\end{array}$ | 478 | 542 | 13.2 | + 3 | - 19 | 9.4 | A o |
| 2618 | 311104 | L 2298 |  |  | $43 \quad 7 \cdot 43$ | 8893 | 45 | $\begin{array}{llll}31 & 30 & 7 \cdot 6\end{array}$ | 475 | 567 | 13.9 | + 16 | - 2 | $8 \cdot 8$ |  |
|  | 291004 | C 2708 |  | 10935 | $43 \quad 10.05$ | 8333 | 43 | $2943 \quad 7 \cdot 8$ | 471 | 558 | 11.9 | - 7 | - 44 | $8 \cdot 2$ | F 2 |
| 2620 | 291005 | C 2709 | $1313-4$ |  | $43 \quad 10 \cdot 17$ | 8145 | 42 | $29 \quad 6 \quad 20.7$ | 471 | 555 | 13.0 | + | + 6 | $8 \cdot 2$ | A 2 |
| 2621 | $27 \quad 874$ | C 2710 |  | 10917 | $\begin{array}{llll}5 & 43 & 10 \cdot 28\end{array}$ | $+3.7614$ | +.0041 | $27 \quad 20 \quad 0.2$ | +1.471 | --548 |  | - 2 | + 4 | $8 \cdot 1$ | B 8 |
| 26 | $30 \quad 1020$ | L 2300 | 1312 |  | 43 11.21 | 8633 | 45 | $30 \quad 4051.8$ | 470 | 561 | 12.9 | - 6 | + 11 | 8.6 | Fo |
| 26 | 301021 | C 2712 |  |  | $43 \quad 27 \cdot 15$ | $8+42$ | 44 | $\begin{array}{llll}30 & 4 & 10 \cdot 8\end{array}$ | 446 | 558 | 12.3 | - ${ }^{8}$ | - 9 | $8 \cdot 8$ |  |
| 26 | $24 \quad 970$ | B 1979 |  | 19066 | $43 \quad 29.54$ | 6810 | 39 |  | 443 | 536 | 9.5 | $+3^{*}$ | - 36* | 5.02 | K o |
| 2625 | 291009 | C 2713 | 1325 | 10958 | +3 $32 \cdot 12$ | 8327 | 43 | $294150 \cdot 3$ | 439 | 558 | II.I | - 6 | - 16 | $7 \cdot 76$ | A 5 |
|  | 25 991 | C 2714 | 1329 | 10965 | 54332.69 | +3.7117 | +.0039 | 253714.6 | + 1.438 | - 541 | 10.7 | - 1 | - 17 | $7 \cdot 6$ | K o |
| 2627 | $2+973$ | B 1982 | 1340 |  | $4349 \cdot 85$ | 6714 | 38 | $\begin{array}{lllllllll}24 & 11 & 35.9\end{array}$ |  | 535 | 10.7 | + 13 | - 12 | 8.0 | K o |
| 2628 | $27 \quad 880$ | C 2717 | ${ }^{1341-2}$ | 10975 | $43 \quad 58.94$ | 7671 | 41 | 273123.0 | 400 | 548 | 10.8 | - 3 | - 30 | $7 \cdot 29$ | K |
| 2629 | 311111 | L 2306 | 1337 | 10972 | $44 \quad 4 \cdot 51$ | 8977 | $4+$ |  | 391 | 568 | 12.4 | $+31$ | - 14 | $6 \cdot 72$ | A 3 |
| 2630 | 311111 |  | 1338 |  | $44 \quad 4 \cdot 81$ | 8977 | 44 | $314530 \cdot 0$ | 391 | 568 | 132,117 | + 31 | - 14 | $8 \cdot 0$ |  |
| 2631 | $27 \quad 881$ | C 2718 | 1346 |  | $\begin{array}{lll}5 & 44 & 7.14\end{array}$ | $+3.7548$ | +.0040 |  | + 1.388 | --546 | 13.0 | + 74 | - 262 | 9.0 |  |
| 2632 | $30 \quad 1023$ | C 2719 |  |  | $44 \quad 10.47$ | 8532 | 42 |  | 384 | 561 | 12.8 | - 11 | - 14 | $9 \cdot 4$ |  |
| 2633 | $30 \quad 1024$ | L 2309 |  |  | $44 \quad 12.93$ | 8589 | 42 | 303155.9 | 380 | 562 | 13.3 | + 31 | - 39 | 8.8 | B 5 |
| $263+$ | $26 \quad 971$ | C 2721 | 1361-2-3 |  | $4435 \cdot 97$ | 7501 | 39 | $26 \quad 56$ I $2 \cdot 0$ |  | 546 | 12.0 | - $5^{8}$ | - 106 | $9 \cdot 1$ |  |
| 2635 | 311115 | L 2314 | 1358 | 10988 | 4439.99 | 8749 | 43 | 3121703 | 340 | 564 | $10 \cdot 3$ | $+\quad 19$ | - 19 | 8.0 | B 5 |
| 2636 | 291012 | C 2722 | 1365 |  | $5444^{8 \cdot 42}$ | +3.8341 | +.0041 | 2944 1-5 | + 1.329 | - 558 | 12.4 | $\bigcirc$ | 44 | $9 \cdot 0$ |  |
| 2637 | $27 \quad 886$ | C 2724 | 1371 -2 | 11008 | $\begin{array}{lll}45 & 0.75\end{array}$ | 7661 | 38 | $272855 \cdot 7$ |  | 548 | 10.5 | - 14 | - 54 | $7 \cdot 14$ | F 5 |
| 2638 | 301027 | L 2317 | 1369 |  | $45 \quad 5 \cdot 62$ | 8643 | 41 | $304150 \cdot 8$ | 2 | 562 | 13.6 | + 22 | + 4 | $9 \cdot 4$ | B 5 |
| 2639 | $24 \quad 980$ | B 1998 |  |  | $45 \quad 5.75$ | 6693 | 36 | $\begin{array}{llll}24 & 6 & 38.9\end{array}$ | 301 | 534 | 13.8 | + 16 | - 3 | $9 \cdot 0$ | A 5 |
| 2640 | $27 \quad 887$ | C 2725 | 1373-4 | 11012 | $45 \quad 8.62$ | 7715 | 39 | $273936 \cdot 4$ | 298 | 549 | 12.3 | + 10 | - 11 | $7 \cdot 7$ | Ma |
| $26+1$ | 311119 | L 2318 | 1370 |  | $545 \quad 10.83$ | +3.8927 | +.0042 | $313537 \cdot 4$ | +1.295 | -. 567 | 13.0 |  | + 6 | $8 \cdot 4$ | K 5 |
| 2642 | $26 \quad 975$ | ${ }_{\text {C }} 2727$ | 1378 | 11022 | $\begin{array}{llll}45 & 12.46\end{array}$ | 7238 | 37 |  | 294 | 542 | $12 \cdot 1$ | + 13 | - 57 | $7 \cdot 8$ | A 3 |
| 4 | 27888 | C 2728 |  | 11021 | $45 \quad 17 \cdot 80$ | 7799 | 39 | $27 \quad 56 \quad 30 \cdot 2$ | 285 | 550 | 13.5 | - ${ }^{*}$ | -* | $5 \cdot 65$ | K 0 |
| $264+$ | $24 \quad 984$ | C 2730 |  |  | $45 \quad 29 \cdot 15$ | 6922 | 37 | $2455 \quad 10.2$ | 269 | 538 | 13.6 | 10 | - 27 | $9 \cdot 4$ |  |
| 2645 | 251005 | C 2731 | 1388-9-90 | 11036 | $45 \quad 29 \cdot 45$ | 7002 | 37 |  | 269 | 539 | 12.4 | + 4 | - 43 | $9 \cdot 1$ | F 5 |
| $26+6$ | 311123 | L 2321 |  |  | $54535 \cdot 42$ | +3.8842 | +-0040 |  | $+1.260$ |  |  | $\bigcirc$ | + 27 | $9 \cdot 4$ | A 2 |
| 2647 | $30 \quad 1030$ | L 2323 |  |  | $45 \quad 42 \cdot 17$ | 8610 | 40 | 303531.2 | 250 | 562 | 13.6 | + 10 | + 15 | $9 \cdot 4$ |  |
| 2648 | 301032 | L 2324 |  |  | $4544 \cdot 35$ | 8588 | 40 | 303116.6 | 247 | 562 | 12.7 | + 22 | + 6 | 9.0 | A |
| 26.49 | $30 \quad 1033$ | L 2327 | ${ }^{1} 395-6$ | 11040 | $4554 \cdot 88$ | 8719 | 39 | $3055 \quad 58 \cdot 9$ | 231 | 564 | $9 \cdot 9$ | - 11 | - 13 | $7 \cdot 36$ | A 0 |
| 2650 | $30 \quad 1034$ | L 2328 | 1398 | 11043 | 45 56.70 | 8653 | 39 | 3043 36.0 | 228 | 563 | 12.0 | + 9 | - 36 | $8 \cdot 2$ | F 5 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Soc. Var. | Dec. 1910.0. | Precession. | Sec.Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & 8.0001 . \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { D.ooi. } \end{aligned}$ |  |  |
|  | $\bigcirc$ |  |  |  | $\mathrm{h} \quad \mathrm{m}$ s |  | s | - , " |  | " |  |  |  |  |  |
|  | $\begin{array}{ll}28 & 917 \\ 28 & 918\end{array}$ | C 2733 |  |  | $\begin{array}{llll}5 & 45 & 51\end{array} 39$ | +3.7887 | $+.0037$ | $\begin{array}{llll}28 & 13 & 59.9\end{array}$ | +1.237 | $-552$ | 13.0 | $+\quad 19$ $+\quad 33$ |  | $9 \cdot 4$ |  |
|  | 28 <br> 28 <br> 27 <br> 8918 | C 2734 |  |  | $4552 \cdot 23$ | 7838 | 37 | $284 \begin{array}{llll}28 & 4\end{array}$ | 235 | 551 | 13.0 | - $\quad 33$ | + 14 | $8 \cdot 1$ | A o |
| 2654 |  | ${ }^{\text {C }} 2735$ | 1409-10 |  | $\begin{array}{ll}46 & 0.19\end{array}$ | 7763 | 38 | $27+94.0$ | 224 | 550 | 12.6 | + 8 | - 16 | 8.4 |  |
| 2655 | $)^{28} 919$ | C 2736 | 1411 |  | $\begin{array}{ll}46 & 6 \cdot 59 \\ 46 & 7 \cdot 25\end{array}$ | 7945 | 37 37 | $\begin{array}{llll}28 & 25 & 33 \cdot 3 \\ 28 & 25 & 41 \cdot 4\end{array}$ | 214 214 | 553 553 | $\begin{array}{r} 13.9 \\ 13.9 \end{array}$ | - 6 | $\begin{aligned} & \circ \\ & 0 \end{aligned}$ | 8.1 | A 2 |
|  |  |  |  |  |  |  |  | 28.25414 |  |  |  |  |  |  |  |
| 56 | $24 \quad 989$ | B 2010 | 1417-8 |  | $\begin{array}{llll}5 & 46 & 7 \cdot 37\end{array}$ | $+3.6855$ | $+\cdot 0036$ | $244051 \cdot 4$ | +1.214 | - 537 | 13.4 | 8 | 16 | 8.8 |  |
| 2657 | $28 \quad 920$ | C 2738 | 1416 |  | 4613.23 | 7889 | 37 | $\begin{array}{llll}28 & 14 & 16.9\end{array}$ | 205 | 552 | 12.8 | + | 11 | 8.8 |  |
| 2658 | 291020 | C 2739 | 1420 |  | 46 22.80 | 8228 | 38 | $292116 \cdot 0$ | 190 | 556 | 13.5 | + 29 | - 22 | $9 \cdot 4$ | A |
| 2659 | 29102 I | C 2741 |  |  | $4625 \cdot 13$ | 8394 | 38 | $2953 \quad 35 \cdot 9$ | 187 | 559 | 12.8 | - 5 | - 18 | $8 \cdot 91$ | B 9 |
| 2660 | $29 \cdot 1022$ | C 2742 | 1425 | 11055 | $4631 \cdot 27$ | 8272 | 38 | $292942 \cdot 6$ | 179 | 557 | 9.9 | - 20 | - 20 | $8 \cdot 2$ | K 2 |
| 61 | $28 \quad 924$ | C 2744 | 1430 |  | $54639 \cdot 21$ | $+3 \cdot 8002$ | $+.0037$ | $2836 \quad 37 \cdot 2$ | +1.167 | -53 | 12.7 | + | 17 | 9.0 | A 2 |
| 26 | 311127 | L 2336 | 1429 |  | $4645 \cdot 18$ | 8878 | 38 | $312549 \cdot 1$ | 158 | 567 | 11.6 | + | - 12 | 8.8 | B 9 |
| 6 | $26 \quad 981$ | C 2745 |  |  | $4647 \cdot 95$ | 7376 | 35 | $26 \quad 2941 \cdot 6$ | 154 | 545 | 12.8 | + 11 | - 23 | $9 \cdot 4$ |  |
| 2564 | $24 \quad 995$ | B 2016 |  |  | 4659.78 | 6696 | 33 | ${ }^{2} 463030 \cdot 6$ | 136 | 534 | 12.6 |  | 6 | $8 \cdot 7$ |  |
| 2665 | 291027 | C 2747 |  |  | $47 \quad 0.86$ | 8350 | 37 | 2944 50.1 | 135 | 558 | 14.0 | + 14 | - 75 | 8.6 | G 0 |
| 2666 | 291027 | C 2748 |  |  | $\begin{array}{lll}5 & 47 & 1.96\end{array}$ | $+3.835 \mathrm{I}$ | +.0037 | 2944 59•2 | + 1.134 | - 558 | 14.2 | + 14 | - 75 | $8 \cdot 6$ | Go |
| 2667 | 251014 | C 2750 | 1 442-4 | 11081 | $47 \quad 4 \cdot 36$ | 7023 | 34 | $\begin{array}{llll}25 & 16 & 8.4\end{array}$ | 131 | 539 | 14.1 | - 1 | - 49 | $9 \cdot 0$ | A 0 |
| 2668 | 251013 | C 2749 | 1439 |  | $47 \quad 4 \cdot 70$ | 7208 | 34 | $255447 \cdot 5$ | 129 | 542 | 14.2 | - | - 6 | 9.1 |  |
| 2669 | 291028 | C 2751 | 1441 | 11076 | 4713.48 | 8149 | 37 | $29 \quad 5 \quad 26.9$ | 118 | 555 | 11.0 | 4 | - 28 | 8.4 | G 5 |
| 2670 | $27 \quad 895$ | C 2752 |  |  | $4715 \cdot 21$ | 7813 | 36 | $27 \quad 58 \quad 38 \cdot 0$ | 115 | 551 | 12.9 | - 6 | - 20 | $9 \cdot 4$ |  |
| 2671 | $28 \quad 927$ | C 2753 | 1447 |  | $\begin{array}{llll}5 & 47 & 16.98\end{array}$ | +3.7952 | +.0035 | $28 \quad 26 \quad 22 \cdot 3$ | + 1.112 | - 553 | 13.0 | + 6 | + 4 | 9.0 | B 5 |
| ${ }^{2672}$ | $26 \quad 985$ | C 2755 |  |  | $47 \quad 29.79$ | 7356 | 34 | $26 \quad 25 \quad 27 \cdot 8$ | 093 | 545 | 11.2 | + 20 | + 5 | $8 \cdot 1$ | B 3 |
| 2673 | $26 \quad 987$ | C 2757 |  |  | $47 \quad 30 \cdot 89$ | 7242 | 34 | 26 I 477.6 | 091 | 542 | 12.4 | + 5 | - 24 | 9.1 |  |
| 2674 | 301041 | L 2342 | 1452 |  | 47 33.06 | 8564 | 37 | $30 \quad 25 \quad 52.5$ | - 089 | 561 | 11.1 | + 15 | - 130 | 8.0 | F 8 |
| 2675 | $28 \quad 930$ | C 2759 |  |  | $47 \quad 37 \cdot 77$ | 7897 | 35 | $\begin{array}{lllllllllll}28 & 15 & 17.5\end{array}$ | 081 | 552 | 10.9 | - 22 | + $+\quad 7$ | 8.2 | K 5 |
| 2676 | $27 \quad 899$ | C 2760 | 1461 | 11090 | $54740 \cdot 20$ | $+3.7699$ | +.0035 | 273530.6 | + 1.078 | - 549 | 12.2 |  | - 18* | 4.54 | A 0 |
| 2677 | $25 \quad 1019$ | C 2762 | $1+71$ | 11094 | $4756 \cdot 59$ | 7154 | 33 | $25 \begin{array}{llll}25 & 4 & 19.8\end{array}$ | 054 | 541 | [1.3 | + 22 | + 13 | $8 \cdot 6$ |  |
| 2678 | 251020 | C 2763 | 1473 | 11095 | $47 \quad 57 \cdot 49$ | 6963 | 33 | $25 \quad 3 \quad 12.0$ | 054 | 538 | 10.8 | - 2 | - 20 | $7 \cdot 66$ | G 5 |
| 2679 | $27 \quad 900$ | C 2764 | 1472 |  | $48 \quad 1 \cdot 33$ | 7675 | 35 | $273033 \cdot 6$ | 048 | 549 | 12.6 | - 15 | - 63 | 9.4 |  |
| 2680 | 241007 | B 2031 | 1476 | 11099 | $\begin{array}{ll}48 & 2.93\end{array}$ | 6742 | 33 |  | 045 | 535 | 11.8 | - 5 | - 20 | 7.8 | B 8 |
| 2681 | 251021 | C 2766 | 1474 | 11096 | $54^{88} 4.02$ | $+3.7112$ | $+.0033$ | 253424.4 | + 1.043 | - 540 | 12.0 | 15 | + 23 | $8 \cdot 2$ | A 0 |
| 2682 | $26 \quad 990$ | C 2770 |  |  | $48 \quad 10 \cdot 40$ | 7351 | 33 | $262410 \cdot 5$ | 035 | 544 | 13.1 | + 29 | - 20 | $9 \cdot 1$ |  |
| 2683 | $28 \quad 933$ | C 2768 | 1469 |  | $\begin{array}{llll}48 & 10.38\end{array}$ | 8104 | 35 | $\begin{array}{ll}28 & 56 \quad 1.3 .7\end{array}$ | 035 | 555 | 12.7 | - 3 | - 7 | $9 \cdot 0$ | B 9 |
| 2684 | $26 \quad 992$ | C 2771 | 1485-6 | 11108 | $\begin{array}{llll}48 & 23.50\end{array}$ | 7351 | 32 | $\begin{array}{llllllllllllllll}26 & 24 & 12 \cdot 7\end{array}$ | 014 | 544 | 12.6 | 5 | + 3 | 8.4 | B 8 |
| 2685 | $30 \quad 1045$ | L 2348 | 1482 | 11102 | $\begin{array}{llll}48 & 28 \cdot 58\end{array}$ | 8579 | 35 | $\begin{array}{llll}30 & 28 \quad 30 \cdot 3\end{array}$ | 007 | -562 | 11. | 23 | 5 | $7 \cdot 46$ | B 5 |
| 2686 | 251024 | C 2772 | 1490 | 11111-2 | $\begin{array}{lllll}5 & 48 & 29.39\end{array}$ | $+3.7098$ | $+\cdot 0032$ | $253127 \cdot 8$ | + 1.007 | --540 | 13.4 | 20 | + 20 | $8 \cdot 7$ | A 2 |
| 2687 | 301046 | L 2349 |  |  | 48 31.99 | 8627 | 35 | $3037+3.9$ | 003 | 563 | 13.4 |  |  | 9.4 |  |
| 2688 | 241010 | B 2037 | 1492 |  | $48 \quad 33 \cdot 75$ | 6688 | 32 | $24 \quad 420 \cdot 9$ | 000 | 534 | 12.4 | 12 | - 11 | 8.8 |  |
| 2689 | $26 \quad 995$ | C 2774 | 1496 |  | $4842 \cdot 27$ | 7415 | 33 | $26 \quad 37 \quad 16 \cdot 3$ | 0.988 | 545 | 13.6 | - 55 | - 16 | 9.0 |  |
| 2690 | 311136 | L 2352 |  |  | $48 \quad 46 \cdot 53$ | 8792 | 35 | $\begin{array}{llll}31 & 8 & 50.7\end{array}$ | 981 | 566 | 12.9 | 10 | 15 | 9.4 |  |
| 2691 | 311137 | L. 2353 |  |  | $\begin{array}{lllll}5 & 48 & 47 \cdot 89\end{array}$ | $+3.8813$ | +.0035 | 31 12 29.8 <br> 28   | + 0.979 | --566 | 13.8 | + 28 | + 10 | $9 \cdot 4$ |  |
| 2692 | $28 \quad 938$ | C 2775. |  |  | $48 \quad 57 \cdot 30$ | 8022 | 33 | 283950.7 | 966 | 554 | 12.6 | 8 | + 6 | $9 \cdot 0$ |  |
| 2693 | 301050 | L 2355 | 1501 |  | $49 \quad 6 \cdot 54$ | 8532 | 34 |  | 952 | 561 | 13.1 | - 2 | - 24 | 9.1 |  |
| 2694 | 311139 | L 2356 | 1499-500 | 111122 | $49 \quad 8 \cdot 50$ | 8966 | 35 |  | 949 | 568 | 10.5 | 20 | - 180 | - 5.81 | A 3 |
| 2695 | 30105 I | L 2357 | 1504 |  | $49 \quad 15 \cdot 35$ | 8679 | 34 | $30 \quad 47 \quad 14.4$ | 940 | 564 | 12.3 | $\bigcirc$ | 23 | 9.4 |  |
| 2696 | $28 \quad 940$ | C 2776 | 1505 |  | $54916 \cdot 29$ | $+3.7934$ | $+\cdot 0033$ | $28 \quad 2217.5$ | + 0.939 | --553 | 12.4 | $+30$ | + 28 | 8.6 | B 9 |
| 2697 | $27 \quad 906$ | C 2779 | 1513 | 11132 | $4925 \cdot 16$ | ${ }_{7} 7623$ | 32 | $\begin{array}{lllll}27 & 19 & 28.9\end{array}$ | 925 | 548 | 11.5 | 14 | + <br> + | 8.0 | F 5 |
| 2698 | 291037 | C 2781 |  | 11134 | $4936 \cdot 45$ | 8417 | 33 | $2956 \quad 52 \cdot 2$ | 909 | 559 | 11.5 | 11 | - 26 | $7 \cdot 16$ | $E \circ$ |
| 2699 | 291039 | C 2784 | 1521 |  | 4945.45 | 8174 | 32 | $\begin{array}{lllll}29 & 9 & 90 \cdot 2\end{array}$ | 896 | 556 | 11.0 | + 33 | - 5 | $7 \cdot 85$ |  |
| 2700 | 301055 | L 2359 | 1520 |  | $494^{8.66}$ | 8651 | 33 | 304143.9 | 890 | 563 | 11.6 | + 4 | + 5 | $8 \cdot 4$ | B 8 |

[^17]| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Soc. Var. | Dec. 19 ro -0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & 3.000 \text { I. } \end{aligned}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m - s | 8 | 8 | , | " | " |  |  |  |  |  |
| 2751 | 291069 | C 2844 |  |  | $5 \quad 5427 \cdot 24$ | +3.8257 | +.0025 | $292450 \cdot 8$ | +0.485 | -559 | 12.4 | - 19 | - 18 | $9 \cdot 4$ |  |
| 2752 | $27 \quad 943$ | C 2845 | 1675 | 11287 | $\begin{array}{r}5427.54 \\ \hline\end{array}$ | 7611 | $\begin{array}{r}24 \\ \hline\end{array}$ | $\begin{array}{llll}27 & 16 & 5 \cdot 3\end{array}$ | + 484 | 548 | 11.8 | 1 | - 74 | $6 \cdot 83$ | K o |
| 2753 | 311158 | L 2391 | 1670 | 11280 | 5428.07 | 9052 | 25 | $31 \begin{array}{llll}36 & 7 & 0\end{array}$ | 484 | 570 | 11.5 | + | - 21 | $7 \cdot 24$ | K o |
| 2754 | 311159 | L 2392 |  |  | $5430 \cdot 48$ | 8890 | 24 | 312554.7 | 481 | 567 | 12.4 | + 136 | - 286 | 9.4 |  |
| 2755 | 251067 | C 2846 | 1681 |  | 5439.95 | 7010 | 23 | 251134.5 | 466 | 540 | 12.2 | + 16 | + 2 | 8.8 |  |
| 2756 | 241052 | C 2847 |  |  | 554 40.92 | +3.6939 | +.0024 | $245637 \cdot 3$ | $+0.465$ | -539 | 12.9 | + 15 | - 38 | $8 \cdot 6$ |  |
| 2757 | 251069 | C 2850 | 1685 |  | $5447 \cdot 40$ | 7217 | 24 | $25 \quad 55 \quad 2 \cdot 3$ | 456 | 543 | 11.8 | - 7 | $\bigcirc$ | 8.6 | Fo |
| 2758 | $28 \quad 969$ | C 2851 | 1684 | 11302 | 5453.58 | 8131 | 24 | 29083.5 | 446 | 557 | 11.5 | + 10 | - 34 | $7 \cdot 32$ | Fo |
| 2759 | 291072 | C 2852 |  |  | $54 \quad 57.74$ | 8213 | 24 | $\begin{array}{llll}29 & 16 & 4 \cdot 8\end{array}$ | 440 | 559 | 12.8 | + 4 | - 21 | $9 \cdot 4$ |  |
| 2760 | 311162 | L 2394 | 1683 |  | $\begin{array}{ll}55 & 1.22\end{array}$ | 9060 | 24 | $3157 \quad 27.6$ | 436 | 570 | 11.4 | - | - 20 | $7 \cdot 7$ | A 3 |
| 2761 | 241055 | C 2854 | 1694 |  | $5 \begin{array}{lll}55 & 2 \cdot 13\end{array}$ | +3.6891 | +.0023 | 244622.4 | + 0.434 | --538 | 13.3 | - 34 | 11 | 8.6 |  |
| 2762 | $26 \quad 1031$ | C 2855 |  |  | 559.08 | 7445 | 23 | $264156 \cdot 4$ | 424 | 546 | 13.4 | - 7 | $\bigcirc$ | $8 \cdot 8$ |  |
| 2763 | $27 \quad 945$ | C 2856 | 1705-6 | 11326 | $55 \quad 21.05$ | 7701 | 22 | $27347 \cdot 0$ | 407 | 550 | 11.2 | - 17 | - 20 | 6.08 | B 8 |
| 2764 | 311164 | L 2396 | $1697-8$ |  | 55 21.25 | 8763 | 22 | 31151.0 | 407 | 565 | 13.4 | - 1 | - 4 | 6.01 | A 0 |
| 2765 | 301081 | L 2397 | 1700 |  | $55 \quad 22.86$ | 8701 | 23 | $30 \quad 50 \quad 5 \cdot 3$ | 404 | 564 | 12.9 | + 20 | - 77 | $9 \cdot 1$ |  |
| 2766 | 311165 | L 2398 |  |  | $55524 \cdot 38$ | $+3.8925$ | $+.0023$ | $\begin{array}{llll}31 & 32 & 15.1\end{array}$ | + 0.402 | -.568 | 10.7 | - | - 39 | $7 \cdot 8$ | G 5 |
| 2767 | 251073 | C 2857 | 1711 |  | $55 \quad 28.90$ | 7209 | 23 | $25 \begin{array}{lll}25 & 16.6\end{array}$ | 395 | 543 | 13.6 | + 19 | + 20 | 9.4 |  |
| 2768 | 301084 | L 2401 |  |  | $55 \quad 29 \cdot 84$ | 8600 | 23 | $303055 \cdot 1$ | 394 | 562 | 13.5 | + 11 | - 37 | $9 \cdot 4$ |  |
| 2769 | 291074 | C 2859 |  |  | $5535 \cdot 34$ | 8266 | 23 | $2926 \quad 24 \cdot 8$ | 386 | 559 | 11.9 | - 17 | - 24 | $8 \cdot 5$ | A 0 |
| 2770 | $28 \quad 974$ | C 2860 | 1710 |  | $5535 \cdot 37$ | 8072 | 23 | $28 \quad 48$ 9-I | 386 | 555 | 13.2 | - 17 | - 46 | $9 \cdot 0$ |  |
| 2771 | 251075 | C 2862 |  |  | $55536 \cdot 79$ | $+3.7065$ | . 0023 | $25 \quad 23$ 0.3 | +0.383 | --541 | 14.0 | + 8 | + 20 | $9 \cdot 4$ |  |
| 2772 | 291075 | C 2861 | 1713 |  | $5540 \cdot 39$ | 8308 | 23 | $2934 \quad 29 \cdot 2$ | - 379 | 559 | 11.8 | - 10 | - 15 | 8.4 | A 2 |
| 2773 | $\begin{array}{lll}26 & 1034 \\ 28 & \end{array}$ | C 2884 | 1716 |  | $5544 \cdot 72$ | 7456 | 22 | 264415.5 | 372 | 546 | 12.8 | + 16 | - 23 | 9-1 |  |
| 2774 | $28 \quad 979$ | C 2865 | 1719 | 11344 | 55 57.20 | 7892 | 21 | 2812 26.I | 354 | 553 | 13.6 | - 3 | - 7 | $9 \cdot 4$ | A 0 |
| 2775 | 311168 | L 2404 | 1717 |  | $\begin{array}{lll}56 & 0.57\end{array}$ | 8857 | 22 | $\begin{array}{lllllllllllll}31 & 19 & 30.9\end{array}$ | 348 | 567 | $1 \mathrm{I} \cdot 6$ | + 8 | - 23 | 8.0 | G 5 |
| 2776 | $25 \quad 1079$ | C 2867 | 1730-1 |  | 556 1.00 | $+3 \cdot 7094$ | $+\cdot 0022$ | $\begin{array}{lll}25 & 29 & 9.8\end{array}$ | + 0.348 | -541 | 12.0 | $\bigcirc$ | - 38 | 9-1 | Go |
| 2777 | $27 \quad 955$ | C 2874 | 1746 |  | 5625.00 | 7594 | 21 | 271219.0 | 313 | 548 | 13.4 | - 6 | - 21 | $9 \cdot 1$ |  |
| 2778 | $28 \quad 982$ | C 2875 |  |  | 5629.44 | 7872 | 21 | $28825 \cdot 1$ | 308 | 553 | 12.8 | + $\quad 35$ | - 7 | $9 \cdot 4$ |  |
| 2779 | 261039 | C 2880 |  |  | $5651 \cdot 19$ | 7367 | 20 | 262551.2 | 276 | 545 | $10 \cdot 3$ | + 5 | - 2 | $8 \cdot 7$ | F 2 |
| 2780 | 241071 | C 2884 |  |  | 5653.88 | 6892 | 20 | $244^{6} \quad 26 \cdot 5$ | 271 | 538 | 11.6 | + 8 | 7 | $8 \cdot 8$ | A. |
| 2781 | $28 \quad 989$ | C 2882 |  | 11380 | 55654.07 | $+3.7892$ | +.0020 | 28 I2 22.8 | + 0.271 | --553 | 12.4 | $+34$ | - 27 | $9 \cdot 5$ |  |
| 2782 | 301091 | L 2415 |  |  | $574 \cdot 38$ | 8549 | 20 | $30 \quad 20 \quad 52.2$ | 257 | 562 | 13.4 | + 8 | - 7 | $9 \cdot 4$ |  |
| 2783 | 28 991 | C 2886 |  | $11394-5$ | $\begin{array}{llll}57 & 16.99\end{array}$ | 8034 | 21 | $2840 \quad 38 \cdot 6$ | 238 | 555 | - | - | + 3 | $7 \cdot 9$ | B 3 |
| 2784 | 251089 | C 2890 | 1773 | 11400 | $57 \quad 17.49$ | 7210 | 20 |  |  | 543 |  |  | - 76 | $8 \cdot 0$ | F 8 |
| 2785 | 311174 | L 2416 | 1769 |  | 57 <br> 7739 | 8771 | 20 | $\begin{array}{llllll}31 & 3 & 10.3\end{array}$ | 238 | 565 | 12.8 | - 10 | + 1 | 9.0 | B |
| 2786 | $25 \quad 1088$ | C 2891 | 1775 |  | $5 \begin{array}{llll}5718.25\end{array}$ | +3.7149 | +.0020 | 254033.2 | +0.236 | $-.542$ | 11.6 | + 23 | + 16 | 8.8 |  |
| 2787 | 291083 | C 2887 |  |  | $57 \quad 19.01$ | 8373 |  | 294653.4 | 235 | 560 | 12.0 | + 10 | - 20 | 9.4 |  |
| 2788 | 311175 | L 2417 |  |  | 57 32-10 | 8879 | 19 | 312326.6 | 216 | 567 | 10.5 | - 36 | + 19 | 7-12 | F 8 |
| 2789 | 241075 | B 2137 |  |  | $5743 \cdot 41$ | 6736 | 19 |  | 200 | 536 | 12.2 | + 18 | - 53 | $9 \cdot 1$ |  |
| 2790 | $27 \quad 963$ | C 2894 | 1784-5 |  | 5746.97 | 7725 | 19 | $27 \quad 38 \quad 40 \cdot 9$ | 194 | 550 | ${ }_{1}^{10.1}$ | + 24 | - 52 | 8.8 | F 2 |
| 2791 | 241076 | C 2896 | 1790 |  | 55748.01 | $+3.6956$ | +.0019 | 245951.0 | + 0.192 | --539 | 12.8 | + 12 | + 3 | $9 \cdot 4$ |  |
| 2792 | 261044 | C 2897 | 1791 |  | 57 50.16 | 7280 | 19 | $26741 \cdot 0$ | 190 | 544 | 13.0 | + 30 | + 5 | 9-1 |  |
| 2793 | 261045 | C 2898 |  |  | 5751.51 | 7324 | 19 |  | 187 | 544 | 13.3 | + 9 | - 6 | $9 \cdot 1$ | A 2 |
| 2794 | 261046 | C 2900 | 1795 | 11418 -20 | $5757 \cdot 31$ | 7397 | 19 | 263151.8 | 179 | 545 | 12.7 | - | + 4 | 6.97 | B 8 |
| 2795 | 291089 | C 2901 | 1823 |  | 58 1.40 | 8249 | 18 | 292248.0 | 174 | 558 | 13.9 | $+\quad 47$ | - 49 | 8.7 | G 5 |
| 2796 | 311179 | L 2422 | 1789 |  | $\begin{array}{llllll}5 & 58 & 3.81\end{array}$ | $+3.8860$ | +.0018 | 311949.5 | +0.169 | $-.567$ | $14^{\circ} 0$ |  | - 15 | 9.4 |  |
| 2797 | 261049 | C 2903 |  |  | 58 8.31 | 7507 | 19 | $26 \quad 5426 \cdot 4$ | 163 | 547 | 12.0 | - 26 | - 1 | $9 \cdot 1$ |  |
| 2798 | 261050 | C 2904 |  |  | $58 \quad 8.96$ | 7458 | 19 | 26.4426 .8 | 162 | 546 | $14^{\circ}$ | - 4 | - 10 | $8 \cdot 7$ |  |
| 2799 | 311181 | L 2424 | 1796 | 11415 | $5810 \cdot 97$. | 8957 | 18 | $31 \begin{array}{lll}188 & 4 \cdot 1\end{array}$ | 159 | 568 | $14^{\circ} 0$ | + 25 | + 2 | 8.8 | A 0 |
| 2800 | 26 1051 | C 2906 | 1802 |  | $58 \quad 16 \cdot 15$ | 7346 | 18 | 26 21 <br> 18.6  | 152 | 544 | $14^{\circ}$ | + 8 | + 12 | 8.8 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910\%. | Precession. | Sec. Var. | $\begin{gathered} \text { Epoch } \\ 1900+ \end{gathered}$ | Annual P.M. |  | Mag. | $\begin{array}{\|c} \text { Spectral } \\ \text { Type. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B. }}{\text { R.A.A. }}$ | Dec. ".oor. |  |  |
|  | - |  |  |  | h m s | s | 8 | - , " | - " | * |  |  |  |  |  |
| 2801 | 28994 | C 2905 |  | 11429-30 | $5 \quad 58 \quad 18.23$ | +3.8026 | +.0018 | $28 \quad 38 \quad 56 \cdot 5$ | +0.149 | -. 555 | 13.0 | + 39 | - 15 | 8.8 | B 9 |
| 2802 | 251097 | C 2908 |  |  | $\begin{array}{ll}58 & 19.70\end{array}$ | 6979 |  | $25 \quad 447 \cdot 4$ |  | 539 | 14.7 | - 25 | + 2 | 9.4 |  |
| 2803 | $27 \quad 966$ | C 2907 | 1804-5 |  | 58821.57 | 7704 | 18 | 273427.0 | 143 | 550 | 12.6 | + 33 | 0 | 7.8 | A O |
| 2804 | 241079 | C 2910 |  |  | $\begin{array}{llll}58 & 28.63\end{array}$ | 688 I | 18 |  | 133 | 538 | 13.9 |  |  | 9.0 |  |
| 2805 | 291094 | C 2909 |  |  | $58 \quad 30 \cdot 95$ | 8293 | 17 | 293121.5 | 130 | 558 | 14.3 | + 39 | 22 | 8.8 | A 0 |
| 6 | 241080 | C 2912 |  |  | 55834.41 | +3.6952 | +-0018 |  | +0.125 | - 539 | 14.1 | + 41 | - 30 | 9.1 |  |
| 2807 | 251099 | C 2913 | 1816 |  | $5834 \cdot 67$ | 6984 | 18 | $25 \quad 5 \quad 49 \cdot 7$ | 124 | 539 | 14.2 | - 3 | - 16 | 8.81 | K o |
| 2808 | $28 \quad 997$ | C 2911 | 1812-3 | 11434 | $58 \quad 34 \cdot 90$ | 7922 | 17 | $\begin{array}{lllllll}28 & 18 & 14.9\end{array}$ | 124 | 553 | 13.0 | $+\quad 16$ | + 1 | 8.4 | K 2 |
| 2809 | 251100 | C 2915 | 1817 | 11441 | $58 \quad 38 \cdot 24$ | 7084 | 18 | $25 \quad 2653.0$ | 120 | 541 | 13.0 | + 6 | - 45 | 7.01 | K o |
| 2810 | $28 \quad 998$ | C 2914 |  | 11436 | $5840 \cdot 26$ | 8129 | 17 | $28 \quad 5916.6$ | 117 | 556 | 13.9 | + 26 | - 6 | $8 \cdot 6$ | B 9 |
| 28 II | 301098 | L ${ }^{2} \downarrow^{28}$ |  |  | $55847 \cdot 50$ | $+3.8515$ | +.0017 |  | +0.105 | -.56I | 13.0 | - 11 | - 5 | $8 \cdot 2$ | A |
| 2812 | 311187 | L 2427 |  |  | 5848.24 | 8772 | 17 | 317311.5 | 105 | 565 | 13.5 | + 23 | - 13 | $8 \cdot 8$ |  |
| 2813 | 251105 | C 2916 | 1833 |  | $\begin{array}{lll}59 & 9 \cdot 17\end{array}$ | 7009 | 17 | 25 II 2.6 | 074 | 540 | 11.6 | + 27 $+\quad 1$ | - 67 | 8.6 | F 8 |
| $281+$ | 291097 | C 2918 | 1830 |  | 5915.53 | 8229 | 16 | $29 \begin{array}{llll}29 & 56 \cdot 7\end{array}$ | 064 | 557 | $12 \cdot 1$ | + 5 | - 7 | 9.4 |  |
| 2815 | 281001 | C 2919 |  |  | 5916.04 | 8063 | 16 | $\begin{array}{llllll}28 & 46 & 18.5\end{array}$ | 064 | 555 | 12.3 | + | $+33$ | $9 \cdot 1$ |  |
| 6 | $27 \quad 968$ | C 2920 | 1834 | 11460 | 55917.83 | +3.7541 | +.0017 | $\begin{array}{llll}27 & 1 & 22.8\end{array}$ | + 0.061 | - 547 | 13.0 | + 6 | - 22 | $8 \cdot 8$ | A 0 |
| 2817 | 301102 | C 2921 |  |  | 5922.65 | 8524 | 16 | $3015 \begin{array}{llll}30 & 15\end{array}$ | 054 | 561 | 12.4 | - 10 | - 67 | $8 \cdot 7$ |  |
| 2818 | 261056 | C 2922 | 1843 |  | 5925.06 | 7266 | 17 | $26444{ }^{\circ} \mathrm{O}$ | 051 | 543 | 13.3 | + 6 | - 14 | $8 \cdot 7$ | A 2 |
| 2819. | 251108 | C 2925 | 1850 | $11469-70$ | $5930 \cdot 89$ | 7187 | 17 | $25 \begin{array}{llll}25 & 21.9\end{array}$ | 042 | 542 | 13.0 | + 7 | - 9 | $8 \cdot 0$ | A 5 |
| 2820 | 251109 | C 2927 |  |  | $5933 \cdot 52$ | 7231 | 17 | $25 \quad 57 \quad 23 \cdot 8$ | 038 | 543 | 11.9 | + 32 | - 37 | $8 \cdot 4$ |  |
| 2821 | 291100 | C 2926 | 1849 |  | $55936 \cdot 18$ | +3.8149 | +.0016 | $29 \quad 3113.5$ | + 0.035 | -. 556 | 11.3 | - 28 | - 8 | $9 \cdot 4$ |  |
| 2822 | 241086 | B 2159 | 1851 |  | 5938.34 | 6773 | 16 | $2421,0.0$ | + 032 | 536 | 11.8 | + 16 | - 18 | 8.8 | B 9 |
| 2823 | 3111192 | L 2434 |  |  | $\begin{array}{lll}6 & 0 & 1.44\end{array}$ | 8964 | 15 |  | 002 | 568 | 13.5 | + 11 | + <br> $+\quad 15$ | 9.0 | A 3 |
| 2824 | 311193 | L 2437 | 1856 | 11476 | - 6.66 | 9062 | 15 |  | 010 | 570 | 12.5 | - 7 | - 31 | $7 \cdot 9$ | G 5 |
| 2825 | 291106 | C2931 |  |  | - 14.17 | 8246 | 14 | $2922 \quad 7 \cdot 5$ | 020 | $55^{8}$ | 13.5 | + 24 | - 13 | $9 \cdot \mathrm{I}$ |  |
| 2826 | 261067 | C 2935 |  |  | $6 \quad 0 \quad 19.57$ | +3.7410 | +.0015 | $26 \quad 3414.6$ | - 0.029 | - 545 | 14.20 | -113 | - 363 | $9 \cdot \mathrm{I}$ |  |
| 28271 | 281008 | C 2936 | 1869 | 11490 | - 23.53 | 8115 | 15 | $28{ }^{26} 31$ 1-6 | 035 | 556 | 11.5 | + 19 | - 9 | $7 \cdot 45$ | B o |
| 2828 | 301108 | C 2937 |  |  | - 26.21 | 8463 | 14 | $\begin{array}{llll}30 & 4 & 12.9\end{array}$ | 038 | 561 | 13.6 | + 1 | - 22 | $9 \cdot 4$ |  |
| 2829 | 291109 | C 2938 |  |  | - 30.03 | 8220 | 14 | $2917 \quad 1.5$ | 044 | 557 | 13.4 | + 8 | - 13 | 8.6 | A 0 |
| 2830 | 301110 | L ${ }^{2} 44^{2}$ | 1873 |  | - 31.59 | 8687 | 14 | $\begin{array}{llll}30 & 47 & 8.8\end{array}$ | 047 | 564 | 13.4 | + 19 | - 3 | $8 \cdot 5$ | B 8 |
| 2831 | 311195 | L 2441 , |  | 1 I 491 | $6 \bigcirc 31.94$ | $+3.8889$ | +.0014 | 312516.2 | - 0.047 | $-567$ | 11.9 | + 3 | - 17 | 8.0 | G 5 |
| 2832 | 291111 | C 2940 | 1880-1 | 11498 | - $33 \cdot 32$ | 8165 | 14 | $29 \quad 6 \quad 20 \cdot 1$ | 048 | 556 | 12.8 | + 22 | - 77 | $7 \cdot 58$ | K 2 |
| 2833 | $27 \quad 975$ | C 2942 |  | 11504 | - $35 \cdot 36$ | 78141 | 15 | $27 \quad 5632 \cdot 4$ | 051 | 552 | 12.6 | + 20 | - 10 | 8.4 | A 0 |
| 2834 | 261070 | C 2944 | 1891 |  | - $35 \cdot 28$ | 7252 | 15 | $\begin{array}{lllll}26 & 1 & 46 \cdot 9\end{array}$ | 051 | 543 | 13.1 | + 17 | + 3 | 9.4 |  |
| 2835 | 29 1112 | C 2943 |  | II 501 | - $37 \cdot 68$ | 8292 | 15 | $293112 \cdot 7$ | 055 | 558 | 12.8 | 6 | - 26 | $6 \cdot 32$ | Ma |
| 2836 | 311196 | L ${ }^{2}+44$ | 1883 | 11500 | $6 \quad 045 \cdot 32$ | +3.9068 | +.0014 | $\begin{array}{llll}31 & 58 & 33 \cdot 1\end{array}$ | -0.066 | -. 570 | 13.4 | + 33 | - 32 | $8 \cdot 7$ |  |
| 2837 | $26 \quad 1074$ | C 2946 |  | 11515-6 | - $47 \times 43$ | 7398 | 15 | $26 \quad 32 \quad 2 \cdot 2$ | 069 | 545 | 12.8 | + 5 | + 4 | $7 \cdot 6$ | K 0 |
| 2838 | $27 \quad 979$ | C 2947 | 1897 | 11517 | - $50 \cdot 93$ | 7553 | 15 | $\begin{array}{llllllllllllll}27 & 3 & 49.3\end{array}$ | 074 | 547 | 13.2 | + 5 | - 3 | $8 \cdot 6$ | B 8 |
| 2839 | 241092 | C 2953 | 1906 |  | $1 \mathrm{II} \cdot 21$ | 6889 | 14 | $244535 \cdot 6$ | 104 | $53^{8}$ | 13.9 | + 19 | - 7 | $8 \cdot 7$ | A 0 |
| 2840 | 241095 | B 2172 |  |  | 124.41 | 6765 | 14 | 241918.6 | 123 | 536 | 13.5 | + 13 | + 6 | $8 \cdot 6$ |  |
| 2841 | $26 \quad 1079$ | C 2955 |  | 11532 | $6 \quad 125.79$ | +3.7441 | +.0014 | $264049 \cdot 5$ | -0.125 | -. 546 | 13.8 |  | + 8 | 7.50 | K 0 |
| 2842 | 241096 | B 2174 |  |  | 125.77 | 6831 | 14 | $\begin{array}{llllll}24 & 3 & 33 & 18.4\end{array}$ | 125 | 537 | 14.0 | + 7 | - 9 | 9.0 |  |
| 2843 | $26 \quad 1082$ | C 2957 |  | 11544 | 143.08 | 7444 | 13 |  | 150 | 546 | 12.7 | + 11 | - 23 | 7.01 8.8 | B 9 |
| 2844 | 251121 | C 2958 | 1926 |  | ${ }^{1} 50 \cdot 10$ | 7108 | 13 |  | 160 | 541 | 13.6 | - 10 | - 24 | $8 \cdot 8$ |  |
| 2845 | 281015 | C 2959 |  |  | I $57 \cdot 84$ | 7976 | 12 | $\begin{array}{lllllllllllllllll}28 & 28 & 58.7\end{array}$ | 172 | 554 | 12.7 | $+5$ | + | 9.4 |  |
| 2846 | $27 \quad 991$ | C 2960 | 1930 | 11549 | $6 \quad 1 \begin{array}{lll}69.74\end{array}$ | $+3.7792$ | +.0012 | $\begin{array}{llll}27 & 52 & 13.7\end{array}$ | -0.175 | - 550 | 13.3 | + 22 | - ${ }^{2}$ | $8 \cdot 6$ | B 9 |
| 2847 | 281016 | C 2962 |  |  | 22.56 | 7868 | 12 | $28 \quad 7 \quad 29.5$ | 179 | 553 | 13.6 | + 17 | - 27 | $9 \cdot 1$ |  |
| 2848 | 261086 | C 2964 | 1938 |  | $25 \cdot 72$ | 7371 | 13 | $\begin{array}{llll}26 & 26 & 34.4\end{array}$ | 184 | 545 | 13.5 | - 105 | $-3^{8}$ | 8.6 |  |
| 2849 | 281018 | C 2965 | 1933 |  | $2110 \cdot 36$ | 8124 | 12 | $\begin{array}{llllll}28 & 58 & 17.7\end{array}$ | 190 | 556 | 14.4 | - 14 | - 24 | $9 \cdot 1$ |  |
| 2850 | 281018 | C 2966 |  |  | 211.37 | 8124 | 12 | $\begin{array}{lllll}28 & 58 & 21.8\end{array}$ | 191 | 556 | 14.4 | 14 | - 24 | 9-1 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910\%. | Procession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch s900+ | Annual P.M. |  | Mag. | $\left\|\begin{array}{c} \text { Spectral } \\ \text { Type. } \end{array}\right\|$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.O.A. }}{\text { R. }}$ | $\underset{\sim}{\text { Dec. }}$ |  |  |
|  |  |  |  |  | h m s | 8 | 8 | - " | " | " |  |  |  |  |  |
|  | $27 \quad 994$ | C 2967 |  | 11568 | $\begin{array}{llll}6 & 2 & 19.90\end{array}$ | $+3.7664$ | +.0012 | 272631.4 | -0.204 | - 548 | 13.6 | + 32 | - 72 | $8 \cdot 2$ | Go |
| 2852 | 261088 | C 2970 | 1951 | 11573 | 221.21 | 7362 | 12 | 262441.9 | 206 | 545 | 12.3 | + 5 | + $\quad 5$ | $7 \cdot 8$ | A |
| 2853 | 291119 | C 2968 | 1942 |  | 221.78 | 8154 | 11 | $29 \quad 4 \begin{array}{ll}119\end{array}$ | 207 | 555 | 13.8 | - | - 31 | 8.8 |  |
| 2854 2855 | 25 25 25 11125 | C 2972 C 2973 | 1960 |  | 225.54 | 7090 | 13 | $\begin{array}{lllll}25 & 28 & 5 \cdot 1\end{array}$ | 213 | 541 | 13.0 | - 22 | + 4 | 8.0 | B 9 |
| 2855 | 251124 | C 2973 | 1958 | - | 226.49 | 7224 | 12 | $255610 \cdot 1$ | 213 |  | 13.7 | + 31 | - 18 | $8 \cdot 0$ | F 5 |
| 2856 | 301121 | L 2452 |  | 11560 | $\begin{array}{llll}6 & 2 & 30.44\end{array}$ | $+3.8522$ | +-0010 | $301547 \cdot 0$ | - 0.219 | --562 | 13.4 | + 13 | - 43 | $8 \cdot 4$ | G 5 |
| 2857 | 301120 | L 2453 | 1949 |  | ${ }_{2} 31.17$ | 8625 | 10 |  | 220 | 563 | 13.8 | + 20 | - 27 | $8 \cdot 7$ |  |
| 2858 <br> 285 <br> 8 | 311203 | L 2455 | 1950-3 | 11570 | 234.89 | 8823 | 10 | 311255.7 | 226 | 566 | 12.7 | + 66 | + 3 | $8 \cdot 0$ | F 8 |
| 2859 | 261090 | C 2974 | 1964 |  | 236.93 | 7392 | 12 | 263055.0 | 229 |  | 14.0 | - 8 | - 56 | 9.4 |  |
| 2860 | 241109 | C 2976 |  |  | 237.92 | 6934 | 12 | $24 \quad 55 \quad 12.7$ | 230 | 539 | 13.5 | + 20 | + 6 | 8.66 | A 0 |
| 2861 | 281021 | C 2975 | 1944 |  | $6 \quad 240 \cdot 53$ | +3.8129 | +.0011 | $28 \quad 5920 \cdot 8$ | -0.235 | --556 | 13.9 |  | + | $9 \cdot 0$ |  |
| 2862 | 301122 | L 2456 | 1961 | 11580-1 | $242 \cdot 81$ | 8624 | 10 | $\begin{array}{llllllllll}30 & 35 & 10.5\end{array}$ | 238 |  | 12.3 | - 3 | - 39 | 8.0 | G 5 |
| 2863 | 29 1121 | C 2979 | 1972 |  | 251.21 | $814^{2}$ | 10 | $29 \begin{array}{llll} & 1 & 53.0\end{array}$ | 249 | 555 | 14.1 | + 31 | - 13 | $9 \cdot 0$ |  |
| 2864 | 2511128 | C 2980 | 1980 |  | $253 \cdot 15$ | 7237 | 12 | $25 \quad 5845 \cdot 8$ | 252 | 543 | 12.8 | - 9 | + 4 | $8 \cdot 2$ | K o |
| 2865 | 261094 | C 2981 | 1982 |  | 254.10 | 7390 | 11 | 263026.4 | 256 |  | 13.3 | + 31 | - 5 | 9.0 |  |
| 2866 | 291123 | C 2982 |  |  | $\begin{array}{llll}6 & 3 & 2.98\end{array}$ | +3.8397 | +-0010 | 29 51 $36 \cdot 3$ | - 0.267 | --559 | 13.3 | + 16 | - 5 | 8.61 | F 2 |
| 2867 | 251130 | C 2983 |  |  | $\begin{array}{llll}3 & 5.26\end{array}$ | 7147 | 11 | 254013.0 | 270 | 542 | 13.7 | - 3 | + 17 | $8 \cdot 7$ | B 9 |
| 2868 | 251131 | C 2985 |  | 11611 | 313.53 | 7145 | 11 | $253935 \cdot 3$ | 283 | 542 | 14.1 | + 19 | - 39 | $7 \cdot 6$ | Ma |
| 2869 | 311207 | L 2460 | 1985-6. | 11603 | 317.06 | 8843 | 9 | $\begin{array}{llllllllll}31 & 16 & 43.8\end{array}$ | 287 | 566 | 12.8 | + | - 13 | $7 \cdot 46$ | A 2 |
| 2870 | 301126 | L 2461 | 1996 |  | 320.96 | 8606 | 9 | $303147 \cdot 6$ | 293 | 563 | 13.1 | + 13 | 18 $+\quad 1$ | 8.6 |  |
| 2871 | 281024 | C 2986 |  |  | $6 \quad 321.04$ | +3.8060 | +-0010 | $\begin{array}{llll}28 & 45 & 46 \cdot 7\end{array}$ | - 0.293 | --555 | 13.3 |  | - 16 | 9.0 |  |
| 2872 | 311208 | L 2462 | 1988-9 |  | 322.98 | 8994 | 9 | 314453.8 | 296 | 569 | 13.8 | + | - 5 | $8 \cdot 8$ | F 5 |
| 2873 | 261099 | C 2989 | 1998-9 |  | 324.59 | 7376 | 11 | $\begin{array}{llllllllll}26 & 27 & 41 \cdot 3\end{array}$ | 299 | 546 | 14.0 | + 15 | - 8 | $9 \cdot 4$ |  |
| 2874 | 241123 | B 2209 | 2002 |  | 325.50 | 6779 | 11 | $24 \quad 22 \quad 24 \cdot 2$ | 300 | . 536 | 12.8 | - 2 | - 23 | 8.6 | B 8 |
| 2875 | 301127 | C 2988 |  |  | 327.09 | 8453 | 9 | $30 \quad 2 \quad 36 \cdot 3$ | 302 | 561 | 13.6 | $+43$ | - 24 | 9.0 |  |
| 2876 | 251133 | C 2991 |  | 11617 | $\begin{array}{llll}6 & 3 & 28.39\end{array}$ | $+3.7106$ | +.0011 | 2531357 | -0.303 | -. 541 | 12.3 | 21 | - 4 | $8 \cdot 1$ | A 0 |
| 2877 | 291126 | C 2993 | 2006 |  | 3 41-16 | 8169 | 9 | $29 \quad 720 \cdot 0$ | 322 | 555 | 12.8 | + 28 | - $\quad 37$ | 8.5 |  |
| 2878 | 241126 | B 2213 | 2003 |  | 344.75 | 6798 | 10 | $24 \quad 2631.5$ | 328 | 537 | 13.1 | + 37 | - 22 | $8 \cdot 2$ | Go |
| 2879 | 271006 | C 2994 | 2012 | 11627 | 3.48 .21 | 7595 | 10 | $\begin{array}{llllll}27 & 12 & 30 \cdot 3\end{array}$ | 332 | 547 | 13.3 | + 14 | - | $8 \cdot 0$ | K o |
| 2880 | 241128 | B 2214 |  |  | 348.56 | 6841 | 10 | 243541.4 | 334 | 537 | 12.8 | 9 | - 23 | 8.6 | A 0 |
| 2881 | 281026 | C 2995 | 2011 |  | $6{ }_{6} \quad 3 \quad 50.42$ | +3.8035 | +.0010 | $28 \quad 40$ 50.2 | -0.335 | --555 | $14^{11}$ | $\bigcirc$ | - 4 | $7 \cdot 8$ |  |
| 2882 | 281027 | C 2996 |  |  | 357.04 | 7942 | 9 | $\begin{array}{llll}28 & 22 & 32 \cdot 7\end{array}$ | 346 | 554 | 13.8 | + 24 | + 18 | 9.0 |  |
| 2883 | 291128 | C 2997 | 2017 | 11632 | 359.56 | 8210 | 9 |  | 350 | 557 | 12.1 | 20 | - 54 | 7.8 | F 5 |
| 2884 | 281028 | C 3001 |  | 11636 | 43.52 | 7954 | 9 |  | 356 | 553 | 12.7 | + 45 | + $\quad 27$ | 8.4 | F 5 |
| 2885 | 281029 | C 3002 |  |  | 412.35 | 8017 | 9 | $28 \quad 37 \quad 17 \cdot 3$ | 367 | 554 | 13.8 |  |  | 10.2 |  |
| 2886 | 241135 | B 2217 |  |  | $\begin{array}{llll}6 & 4 & 18.78\end{array}$ | +3.6739 | +.0011 | 241351.5 | -0.378 | --536 | 13.5 | + 15 | - 7 | $8 \cdot 5$ | A 2 |
| 2887 | 291131 | C 3003 | 2026 |  | 420.91 | 8243 | 8 | 292146.6 | 381 | 558 | 13.2 | - 13 | - 11 | $8 \cdot 6$ |  |
| 2888 | $24^{11138}$ | B 2219 |  |  | 425.11 | 6852 | 10 | $24 \begin{array}{llll} & 38 & 5 \cdot 7\end{array}$ | 386 | 538 | 14.2 | 23 | + 15 | $9 \cdot 4$ | A |
| 2889 | 301132 | C 3004 |  |  | 425.25 | 8453 | 7 |  | 386 | 560 | 13.8 | - | - 22 | 9.21 | A |
| 2890 | 301133 | L 2475 |  | 11643-4 | 426.67 | 8617 | 7 | $\begin{array}{llll}30 & 34 & 0.5\end{array}$ | 389 | 563 | 14.0 | + $\quad 27$ | 60 | $7 \cdot 8$ | G 5 |
| 2891 | 301134 | L 2476 |  | 11646-7 | $6 \quad 429.61$ | $+3.8578$ | $+\cdot 0007$ | $\begin{array}{llll}30 & 26 & 33.7\end{array}$ | -0.394 | $-.562$ | 1.3 .6 | + 25 | - $4^{1}$ | $8 \cdot 0$ | G 5 |
| 2892 2893 | 261110 | C 3005 | 2041 |  | 434.79 | 7370 | 9 | $\begin{array}{lllll}26 & 26 & 38.5\end{array}$ | 401 | 545 | 13.4 | + 24 | - 21 | 8.8 |  |
| 2893 289 | 26 1111 | C 3006 | 2044-5 |  | 438.91 | 7392 | 9 | $\begin{array}{llll}26 & 31 & 2.9\end{array}$ | 407 | 545 | 13.7 | + 26 | - 21 | 8.7 |  |
| 2894 | 301136 | L 2480 |  | 11657 | 439.31 | 8539 | 6 | $\begin{array}{llllllll}30 & 19 & 10\end{array}$ | 407 | 562 | 13.6 | + 22 | - 9 | $8 \cdot 2$ |  |
| 2895 | 28 1031 | C 3009 |  | 11669 | 445 -01 | 8017 | 8 | $28 \quad 37 \quad 32 \cdot 0$ | 416 | 554 | 13.9 | + 29 | 5 | $9 \cdot 4$ |  |
| 2896 | 29 I133 | C 3012 | 2048 |  | $6 \quad 449.08$ | $+3.8264$ | +.0008 | $\begin{array}{llll}29 & 25 & 59.2\end{array}$ | $-0.42 \mathrm{I}$ | -. 559 | 13.4 | + 28 | - 14 | $8 \cdot 6$ | A 0 |
| 2897 | 301138 | L 2486 | 2043-6 |  | 450.50 | 8745 | 6 | $30 \quad 58 \quad 26.8$ | 424 | 565 | 12.4 | + 10 | - 15 | $8 \cdot 1$ | F 8 |
| 2898 | 311221 | L 2487 |  |  | $452 \cdot 26$ | 8863 | 6 | $312044 \cdot 3$ | 426 | 567 | 13.3 | + 6 | - 2 | $9 \cdot 0$ |  |
| 2899 | 26 1116 | C 3014 | 2055-6 |  | 5 $5 \cdot 59$ | 7377 | 8 | $262757 \cdot 7$ | 439 | 545 | 12.5 | 16 | - 10 | 8.8 | A 2 |
| 2900 | 261117 | C 3015 | 1 | 11684 | 517.82 | 7251 | 8 | $\begin{array}{lll}26 & 1 & 57.8\end{array}$ | 464 | 543 | 11.5 | 7 | - | $7 \cdot 93$ | N |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | I P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19x0.0. | Precossion. | Sec. Var. | Dec. 19100. | Precession. | Sec. Var. | Epoch $1900+$ | $\underset{\text { R.000I. }}{\text { R, }}$ | $\begin{gathered} \text { Dec. } \\ \text { roor } \end{gathered}$ | Mag. | Spectral Type. |
|  | $\bigcirc$ |  |  |  | h m s | s | s | - , | " | " |  |  |  |  |  |
| 2901 | 291136 | C 3016 |  |  | $\begin{array}{lllll}6 & 5 & 27 \cdot 19\end{array}$ | +3.8414 | $+\cdot 0007$ | 295510.9 | -0.477 | -. 560 | 12.8 | - 3 | + 20 | $9 \cdot 4$ |  |
| 2902 | 30 II4I | L 2491 | 2 | 11680-1 | 531.60 | 8655 | 5 | $30413 \mathrm{I} \cdot 6$ | 484 | 563 | 12.0 | - 11 | - 14 | $8 \cdot 0$ | A |
| 2903 | 281036 | C 3018 | 4-5 | 11689 | $\begin{array}{lll}5 & 31.99\end{array}$ | 8108 | 8 | 2855 34.1 | 484 | 556 | $10 \cdot 6$ | - 5 | + 8 | $7 \cdot 63$ | B 8 |
| 2904 | 24 II48 | C 3019 |  |  | $532 \cdot 56$ | 6927 | 8 | $2454 \quad 2.6$ | 485 | 539 | $12 \cdot 3$ | + 8 | - 5 | $8 \cdot 2 \mathrm{I}$ | B 9 |
| 2905 | 30 II 42 | L 2492 | 3 | 11683-5 | 533.04 | 8661 |  | $30 \quad 4233.4$ | 485 | 563 | 12.0 | 11 | - 30 | $8 \cdot 4$ |  |
| 2906 | 25 I 147 | C 3020 |  | 11693 | 6534.35 | $+3.7228$ | +.0008 | $25 \quad 5713.8$ | -0.487 | --543 | 13.0 | $+2$ | - 4 | $9 \cdot 4$ | F |
| 2907 | 25 II51 | C 3022 |  |  | $551 \cdot 33$ | 7118 | 7 |  | 512 | 541 | 12.5 | + | - 31 | $9 \cdot 4$ | G 5 |
| 2908 | 311223 | L 2494 | 1 2-3 |  | - 553.03 | 8813 | 4 |  | 515 | 566 | 11.0 | + 10 | 0 | $7 \cdot 9$ | A 2 |
| 2909 | $27 \quad 1012$ | C 3023 |  |  | $554 \cdot 26$ | 7559 | 7 | $\begin{array}{llll}27 & 5 & 29.9\end{array}$ | 516 | 547 | 13.3 | + 3 | + 6 | 9. I | A |
| 2910 | 281038 | C 3025 | 16 | 11699 | 558.08 | 8066 | 5 | $28 \quad 47 \quad 16 \cdot 9$ | 522 | 555 | 13.0 | + 2 | - 22 | $8 \cdot 4$ | A 2 |
| 2911 | 26 II 20 | C 3027 | 18 |  | $\begin{array}{lll}6 & 6 & 0.46\end{array}$ | $+3.7380$ | +.0006 | $26 \quad 2844.4$ | -0.525 | -. 545 | 13.7 | +. 39 | - 55 | 9.0 |  |
| 2912 | 24 I151 | B 2230 | 22 |  | $6 \quad 1.07$ | 6796 | -8 | $24 \quad 26 \quad 26 \cdot 4$ | 526 | 536 | 12.0 | + $5^{*}$ | - $56 *$ | $5 \cdot 92$ | K |
| 2913 | 251153 | C 3028 |  |  | $6 \quad 1 \cdot 86$ | 6963 | 7 | 25 I $46 \cdot 2$ | 528 | 538 | 14.0 | + 20 | - 23 | $7 \cdot 76$ | G 5 |
| 2914 | 29 II 38 | C 3026 |  |  | $\begin{array}{ll}6 & 2 \cdot 84\end{array}$ | 8345 | 5 | $294^{2} \quad 0.2$ | 529 | 560 | 14.2 | - 13 | $+6$ | 8.21 | B 9 |
| 2915 | 261122 | C 3029 |  |  | $6 \quad 4.08$ | 7446 |  | $264^{2} 17.4$ | 531 | 546 | 14.3 | + 20 | + 10 | $8 \cdot 4$ | A 0 |
| 2916 | 261123 | C 3030 | 24 |  | $\begin{array}{lll}6 & 6 & 7.05\end{array}$ | $+3.7370$ | $+\cdot 0006$ | $\begin{array}{llll}26 & 2650 \cdot 7\end{array}$ | -0.535 | --545 | 14.0 | + 4 | + 22 | $9 \cdot 8$ |  |
| 2917 | $27 \quad 1013$ | C 3031 |  |  | $6 \quad 8 \cdot 70$ | - 7577 | 7 | $27 \quad 9$ II.4 | 538 | 548 | $13 \cdot 6$ | - 10 | - 21 | 8.2 | A 0 |
| 2918 | 261125 | C 3033 | 28 | 11714 | $\begin{array}{ll}6 & 9 \cdot 47\end{array}$ | 7242 | 6 | $26 \quad 0 \quad 18.6$ | 538 | 543 | 14.0 | - 3 | - 2 | 8.8 |  |
| 2919 | 26 II 26 | C 3034 | 29 |  | $610 \cdot 62$. | 7371 | 6 | $26 \quad 27 \quad 5 \cdot 1$ | 541 | 545 | 14.0 | 10 | $-2$ | 9.0 |  |
| 2920 | 291139 | C 3035 |  |  | 616.45 | 842 I | 5 | 295653.8 | 548 | 560 | 14.0 |  |  | 10.0 |  |
| 2921 | 241153 | B 2235 |  |  | $6 \quad 620 \cdot 63$ | $+3 \cdot 6879$ | +.0007 | $244357 \cdot 4$ | - 0.555 | -. 537 | 12.6 | + II | - 19 | $8 \cdot 7$ |  |
| 2922 | 29 II 40 | C 3036 |  |  | $620 \cdot 88$ | 8287 | 5 | 293044.9 | 555 | 558 | 11.8 | + 10 | - 18 | $7 \cdot 41$ | G 5 |
| 2923 | 26 II 27 | C 3037 | 37 |  | $626 \cdot 46$ | 7382 |  | $26 \quad 29$ I $2 \cdot 6$ | 563 | 545 | 13.2 | + 10 | - 12 | $8 \cdot 6$ | A 0 |
| 2924 | 311226 | L 2499 |  | - | $626 \cdot 46$ | 8894 | 3 | 3 I $26+3 \cdot 5$ | 563 | 566 | 14.2 | 13 | - 24 | $9^{\circ} 0$ | A 0 |
| 2925 | 311227 | L 2500 |  |  | $635 \cdot 53$ | 8890 | 3 | $\begin{array}{llll}\text { I } & 26 & \text { I-3 }\end{array}$ | 577 | 566 | 13.3 | + 15 | - 2 | $9 \cdot 4$ | A 0 |
| 2926 | 241156 | B 2239 |  |  | $\begin{array}{llll}6 & 6 & 37 \cdot 38\end{array}$ | $+3 \cdot 6878$ | +.0007 | $244348 \cdot 8$ | - 0.579 | -.537 | 13.4 | + 35 | - 20 | $9 \cdot 2$ |  |
| 2927 | 30 I149 | L 2501 |  |  | $6+2 \cdot 02$ | 8542 | 3 | $\begin{array}{llll}30 & 20 & 13.7\end{array}$ | 586 | 562 | 13.4 | + 21 | + 17 | 9.0 |  |
| 2928 | 30 I150 | L 2503 |  |  | $6+3 \cdot 37$ | 8609 | 3 | $30 \quad 3250 \cdot 1$ | 587 | 563 | 13.0 | - 11 | - 15 | $8 \cdot 4$ |  |
| 2929 | 29 II44 | C 3040 |  |  | $646 \cdot 91$ | 8413 | 4 | $295514 \cdot 7$ | 593 | 560 | 14.0 | + 67 | - 155 | $9 \cdot 4$ |  |
| 2930 | 301151 | L 2505 | $4^{6-7}$ | $11726-7$ | $647 \cdot 76$ | 8688 | 3 | $30 \quad 48 \quad 3 \cdot 0$ | 595 | 564 | 10.7 | + 3 | - 25 | $7 \cdot 7$ | A 3 |
| 2931 | 241159 | C 3041 | 59 |  | $\begin{array}{llll}6 & 6 & 58.67\end{array}$ | +3.6939 | +.0006 | $245653 \cdot 2$ | -0.596 | $-.538$ | $12 \cdot 0$ | + 16 | - 15 | $9 \cdot 0$ |  |
| 2932 | 311229 | L. 2506 | 56 |  | $7 \quad 6 \cdot 52$ | 8794 | 2 |  | 622 | 565 | 14.1 | + 16 | - 7 | $9 \cdot 4$ |  |
| 2933 | 29 1145 | C 3042 |  |  | $7 \quad 7 \cdot 41$ | 8255 | 4 | $292434 \cdot 7$ | 622 | 558 | 14.2 | + 15 | - 14 | $9 \cdot 1$ | A 2 |
| 2934 | 251159 | C 3044 |  |  | $7 \quad 8.21$ | 7158 | 5 | $254255 \cdot 8$ | 624 | 541 | 13.7 | 10 | - 10 | $8 \cdot 6$ | A 2 |
| 2935 | 291146 | C 3043 |  |  | 711.62 | 8358 | 3 | $294446 \cdot 3$ | 630 | 559 | 12.5 | 12 | - 92 | $8 \cdot 8$ |  |
| 2936 | 24 1161 | B 2242 |  |  | $\begin{array}{llll}6 & 7 & 18.42\end{array}$ | $+3.6798$ | $\pm \cdot 0007$ | $24 \quad 26 \quad 55 \cdot 7$ | -0.638 | -. 536 | 12.8 | + 7 | - 32 | 9.0 |  |
| 2937 | 271019 | C 3047 | 70 | 11757 | 721.60 | 7665 | 5 | $\begin{array}{llll}27 & 27 & 17.8\end{array}$ | 644 | 549 | 12.8 | + 22 | - 39 | $8 \cdot 6$ | F 2 |
| 2938 | 291147 | C 3048 | 77-8-81 |  | 733.27 | 8146 | 3 | $29 \quad 3 \quad 26 \cdot 8$ | 660 | 556 | II.3 | + 20 | 0 | $8 \cdot 2$ | A 5 |
| 2939 | 311231 | L 2509 | 79-80 |  | $739 \cdot 54$ | 8889 | 1 | $\begin{array}{llll}31 & 26 & 7 \cdot 3\end{array}$ | 665 | 566 | 12.5 | - 72 | - 37 | $9 \cdot 4$ | G 5 |
| 2940 | 251163 | C 3050 | 92-3 |  | $748 \cdot 52$ | 7060 | $4$ | $\begin{array}{llll}25 & 22 & 33 \cdot 6\end{array}$ | 684 | 540 | II $\cdot 7$ | - 5 | + 6 | $8 \cdot 5$ | A 0 |
| $294{ }^{1}$ | 271024 | C 305 I | 945 |  | $6 \quad 753.63$ | $+3.7587$ | $+\cdot 0003$ | 27 Il $1133 \cdot 2$ | - 0.691 | - 548 | 13.4 | + 13 | + 17 | $9 \cdot 4$ |  |
| 2942 | 251164 | C 3053 |  |  | $753 \cdot 64$ | 7154 |  | $254220 \cdot 9$ | 691 | 541 | 13.3 | - 5 | + 41 | $9 \cdot 1$ | A |
| 2943 | 261139 | C 3052 |  |  | $754 \cdot 31$ | 7378 | 4 | $262846 \cdot 8$ | 691 | 545 | 13.3 | + 34 | - 19 | $9 \cdot 4$ |  |
| 2944 | 241165 | B 2250 | 102 |  | $8 \quad 8.83$ | 6868 |  | $244156 \cdot 4$ | 713 | 537 | 11.3 | + 18 | - II | $9 \cdot 0$ |  |
| 2945 | 281051 | C 3056 |  |  | $835 \cdot 4 \mathrm{I}$ | 8046 | I | $284350 \cdot 0$ | 751 | 554 | $12 \cdot 1$ | - 17 | - 3 | $9 \cdot 4$ |  |
| 2946 | 241168 | B 2253 | 113 | 11796 | $\begin{array}{llll}6 & 8 & 38 \cdot 85\end{array}$ | $+3 \cdot 6674$ | +.0004 | $24 \quad 0 \quad 42 \cdot 8$ | - 0.756 | -. 534 | 11.1 | - 12 | - 21 | $8 \cdot 0$ | Fo |
| 2947 | 30 II 59 | L 2513 |  |  | $841 \cdot 27$ | 18689 | 0 | $30 \quad 48 \quad 3 \mathrm{I} \cdot 2$ | 759 | 563 | 11.8 | + 3 | - 52 | $9 \cdot 0$ |  |
| 2948 | $28 \quad 1052$ | C 3057 |  |  | $842 \cdot 46$ | 7842 | 1 | $\begin{array}{llll}28 & 3 & 14.4\end{array}$ | 761 | 551 | 12.4 | + 24 | - 34 | $8 \cdot 8$ | F |
| 2949 | 271028 | C 3058 | 122 | 11801 | $856 \cdot 24$ | 7718 | + 2 | $27 \quad 38 \quad 24.4$ | 781 | - 550 | 12.2 | - 7 | - 7 | $8 \cdot 2$ | K 2 |
| 2950 | $31 \quad 1239$ | L 2517 |  | 11792 | 858.43 | 8972 | - 2 | $314153 \cdot 1$ | 784 | 568 | 13.0 | + 11 | - 18 | $8 \cdot 7$ | A |


| No. | B.D. | A.G.c. | W.B. (2). | Lalando. | R.A. $1910 \%$. | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec. Var. | Epocb $1900+$ | Annual P.M. |  | Mag. | $\begin{gathered} \text { Spectral } \\ \text { Type. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.O.A. }}{\text { R. }}$ | Dec. $0.001 .$ |  |  |
|  | 。 |  |  |  | h m | $s$ | 8 | - , " |  | " |  |  |  |  |  |
| 2951 | 301161 | L 2518 | 116-7-8 |  | $\begin{array}{lll}6 & 9 & 0.35\end{array}$ | +3.8741 | -.0001 | $305834 \cdot \mathrm{I}$ | -0.787 | $-564$ | 13.4 | + 19 | - 21 | $8 \cdot 7$ | A 0 |
| 2952 | 271030 | ${ }^{\text {C }} 3060$ |  |  | 912.76 | 7644 |  | 272323.0 | 806 | 549 | 12.9 | - 25 | + 38 | $9 \cdot 4$ |  |
| 2953 | 251174 | C 3061 | 1 $39-41$ | 11825 | 914.88 | 7030 |  | $\begin{array}{llllll}25 & 16 & 27.9\end{array}$ | 809 | 539 | $12 \cdot 3$ | - 19 | + | 8.2 | K 2 |
| 2954 | 271032 | ${ }^{\text {C }} 3062$ |  |  | 919.87 | 7800 |  | $\begin{array}{llll}27 & 55 & 6 \cdot 2\end{array}$ | 816 | 551 | $14^{2} 2$ | + 4 | + 28 | 9.0 |  |
| 2955 | 281053 | C 3063 | 138 |  | 923.33 | 8115 |  | $28 \quad 57$ 45•I | 819 | 555 | 14.0 | $+32$ | - 27 | $9 \cdot 0$ |  |
| 2956 | 311244 | L. 2521 | 136 | 11816 | $\begin{array}{llll}6 & 9 & 25.34\end{array}$ | $+3.8908$ | .0002 | $\begin{array}{llll}31 & 29 & 59 & 3\end{array}$ | $-0.823$ | $-567$ | 13.8 | + 25 | - 47 | 8.0 | G 5 |
| 2957 | 291153 | C 3064 |  |  | 925.55 | 8221 |  | $\begin{array}{llllllllll}29 & 18 & 25.9\end{array}$ | 825 | 556 | 13.5 | + $4^{8}$ | - 30 | 8.4 | A 0 |
| 2958 | 241174 | B 2263 |  |  | $932 \cdot 84$ | 6833 | + | $243456 \cdot 9$ | 835 | 536 | 12.2 | + 16 | - 16 | $8 \cdot 6$ | K 5 |
| 2959 | 291154 | C 3064 a | 147 | 11831-2-3 | 938.58 | 8289 |  | $293153 \cdot 7$ | 843 | 557 | 12•1,13•1 | - $49^{*}$ | - 266* | 4.45 | Ko |
| 2960 | 261148 | C 3067 |  |  | 939.04 | 7438 |  | $264^{11} 32 \cdot 2$ | 844 | 545 | 14.2 | + 22 | 25 | $9 \cdot 4$ | A 5 |
| 2961 | 291155 | C 3066 |  |  | $6 \quad 941 \cdot 17$ | $+3.8205$ | -.0001 | $\begin{array}{llll}29 & 15 & 29.9\end{array}$ | $-0.847$ | --556 | 12.9 |  |  | $8 \cdot 6$ | B 9 |
| 2962 | 291158 | C 3068 | 152-3 |  | $947 \cdot 07$ | 8125 |  | $28 \quad 59.51 \cdot 9$ | 855 | 555 | 13.3 | + 24 | - 41 | 8.8 |  |
| 2963 | 251180 | C 3070 | 1 59-60 | 11854 | 951.22 | 7054 | + 2 | 252141.4 | 861 | 540 | 11.1 | - 14 | $+14$ | $7 \cdot 71$ | K 5 |
| 2964 | 311246 | L 2524 |  | 11838 | 952.89 | 9024 |  | $315152 \cdot 3$ | 864 | 568 | ${ }_{11} 1.8$ | + 1 | - 8 | 8.6 | A 0 |
| 2965 | $30 \quad 1167$ | L 2526 |  |  | $10 \quad 1.87$ | 8688 | 4 | $304^{8} 46 \cdot 1$ | 877 | 563 | 13.5 | + 18 | - 16 | 8.6 | B 9 |
| 2966 | 301168 | L 2530 |  |  | 6 10 9.84 | $+3.8603$ | -.0005 | 303233.2 | - 0.889 | --562 | 13.4 | + II | + 13 | 8.8 | A |
| 2967 | 27 1036 | C 3073 | 166-7 | 11840 | Io 14.63 | 7791 | I | 275327.0 | 896 | 550 | 13.4 | + 21 | - 3I | 8.0 | K 2 |
| 2968 | 261150 | C 3075 |  |  | $10 \quad 16 \cdot 45$ | 7366 |  | $262645 \cdot 2$ | 898 | 543 | $13 \cdot 9$ |  |  | 8.6 | A 2 |
| 2969 | 311249 | L 2533 | 164 |  | 1020.06 | 8869 | - 3 | $312257 \cdot 1$ | 904 | 565 | 14.0 | + 18 | - 17 | 9.0 |  |
| 2970 | 2411776 | B 2268 | ${ }^{1} 77$ |  | $1020 \cdot 32$ | 6694 |  |    <br> 2 5 $27 \cdot 1$ | 904 | 533 | 12.8 | + 14 | - 25 | $9 \cdot 4$ |  |
| 2971 | 281058 | C 3077 | 171-2 |  | $6 \quad 10 \quad 22.21$ | +3.7893 | -.0002 | $\begin{array}{lllllllll}28 & 13 & 50 \cdot 4\end{array}$ | - 0.906 | -.552 | 13.2 | + 4 | + 5 | $7 \cdot 8$ | A 0 |
| 2972 | 241178 | B 2269 |  |  | 1023.61 | 6713 | + | $24 \quad 9 \quad 22.7$ | 909 | 534 | 14.2 | + 15 | - 27 | $9 \cdot 4$ |  |
| 2973 | 28 1059 | C 3079 |  |  | 10 $32 \cdot 71$ | 7892 | - | $\begin{array}{llllllllllll}28 & 1 & 44.8\end{array}$ | 922 | 552 | 13.0 |  |  | $9 \cdot 4$ |  |
| 2974 | 301172 | C 3078 |  | I1875-6 | 1034.33 | 8474 | 4 | $30 \quad 757 \cdot 1$ | 924 | 560 | 12.4 | + 12 | - 25 | $6 \cdot 87$ | B 9 |
| 2975 | 28 1060 | C 3081 | 181 |  | 10 $37 \cdot 68$ | 7912 |  | $28 \quad 17 \quad 53.6$ | 930 | 552 | 12.8 | + | + 13 | $9 \cdot 0$ |  |
| 2976 | 28 1062 | C. 3082 | 180 | 11880 | 6 10 39.44 | $+3.8089$ | -0002 | $28 \quad 5254 \cdot 5$ | -0.93I | --555 | 12.5 | +' | - 37 | $7 \cdot 31$ | A 2 p |
| 2977 | 291161 | C 3083 |  |  | 1042.75 | 8348 | - 3 | $294335 \cdot 2$ | 937 | 558 | 13.3 | - II | - $\quad 27$ | 9.0 |  |
| 2978 | 261151 | C 3085 | 185 |  | 1043.62 | 7451 | 1 | $26+4$ 30•1 | 939 | 545 | $13 \cdot 1$ | + 7 | - 26 | 8.8 |  |
| 2979 | 311251 | L 2536 | 178-9 | 11877 | 1044.41 | 8931 | 5 | $313447 \cdot 2$ | 939 | 566 | II•9 | + II | - 88 | 7.8 | K |
| 2980 | 241182 | B 2278 | 192 |  | -10 49.10 | 6668 | I | $23 \quad 5959.6$ | 945 | 533 | 13.4 | - 12* | - $24^{*}$ | $6 \cdot 11$ | G 5 |
| 2981 | 311252 | L 2537 |  |  | $61045 \cdot 63$ | $+3.8804$ | . 0004 | 311110.9 | -0.94I | -. 564 | 13.3 | + | - 5 | 9.0 |  |
| 2982 | 311254 | L. 2540 | 183 |  | 1055.26 | 8871 | - 4 | 3123 36.2 | 955 | 565 | 12.8 | + 25 | - 32 | $9 \cdot 4$ |  |
| 2983 | 301177 | C 3089 |  | 11894-5 | 118805 | 8443 |  | $\begin{array}{lll}30 & 2 & 2.6\end{array}$ | 973 | 559 | 10.5 | - 5 | - 31 | $8 \cdot 11$ | A 2 |
| 2984 | 261156 | ${ }^{\text {C }} 3091$ |  |  | II 14.76 | 7387 |  | $263127 \cdot 3$ | 984 | 544 | 11.8 | + 13 | 11 | $8 \cdot 2$ | K o |
| 2985 | 29 1163 | C 3092 | 202 |  | 1120.64 | 8299 | 4 | $293427 \cdot 1$ | 992 | 557 | 11.9 | 21 | - 33 | $8 \cdot 6$ |  |
| 2986 | 251191 | C 3093 | 205-8 | 11946 | 6 III 21.40 | $+3.7099$ | -.0001 | 253133.5 | $-0.992$ | --539 | 12.3 | + 11 | + 25 | $8 \cdot 5$ | G o |
| 2987 | 271041 | C 3094 |  |  | 1124.79 | 7787 | ${ }^{2}$ | $27 \quad 52 \quad 56 \cdot 2$ | 998 | 550 | 13.2 | - 54 | - $4^{2}$ | $9 \cdot 4$ |  |
| 2988 | 301178 | L 2543 |  |  | 1128.88 | 8741 | 6 | 305921.8 | 1.003 | 564 | 12.5 | 5 | - 24 | 9.0 |  |
| 2989 | 271045 | C 3097 | 218 |  | $1146 \cdot 56$ | 7556 | 3 | $27 \quad 614.2$ | 030 | 546 | 10.5 | 11 | + | $9 \cdot 4$ | A 2 |
| 2990 | 291165 | C 3098 |  |  | $\begin{array}{lll}12 & 1.87\end{array}$ | 8200 | 5 | $\begin{array}{lll}29 & 15 & 9.4\end{array}$ | 052 | 555 | II. 6 | 27 | - 14 | $7 \cdot 7$ | A 0 |
| 2991 | 26 1164 | C 3102 |  |  | $\begin{array}{llll}6 & 12 & 10.26\end{array}$ | +3.7350 | 0002 | $\begin{array}{llll}26 & 24 \quad 6.4\end{array}$ | - 1.064 | --543 | 11.9 | + 13 | + 26 | 8.8 |  |
| 2992 | $27 \quad 1049$ | C 3104 | 233 |  | 1215.78 | 7592 |  | 271349.2 | 072 | 547 | 12.3 | + 41 | + 2 | $9 \cdot 4$ | A 5 |
| 2993 | 281071 | C 3105 | 235 | 11933 | $12 \begin{array}{ll}19.43\end{array}$ | 7833 | 4 | $28 \quad 225.0$ | 077 | 550 | 12.4 | + 21 | 18 | $7 \cdot 42$ | A 0 |
| 2994 | 26 1169 | C 3107 | 240 | 11951 | I2 30.19 | 7369 | 2 | $26 \quad 28 \quad 6 \cdot 9$ | 093 | 543 | 11.6 | 31 | - 17 | 8.0 | K 2 |
| 2995 | 301185 | L 2550 |  |  | $1236 \cdot 80$ | 8519 | 5 | $3017 \quad 15 \cdot 0$ | 103 | 560 | 12.3 | + 2 | - 34 | 8.8 | F |
| 996 | 311263 | L 2551 | 239 |  | $6 \quad 1241.47$ | $+3.8789$ | -.0007 | $\begin{array}{llll}31 & 8 & 48.4\end{array}$ | I•110 | $-\cdot 564$ | 12.6 | - 10 | $+3$ | 8.7 | A 0 |
| 2997 | 271054 | C 3109 | 245-6 | 11952 | $1242 \cdot 42$ | 7596 | 4 | 2714450 | 110 | 547 | 12.5 | $+\quad 9^{*}$ | - $76 *$ | $6 \cdot 72$ | K o |
| 2998 | 291170 | O 3110 |  |  | 1252.39 | 8372 | 7 | $2949 \quad 1 \cdot 8$ | 125 | 558 | 10.4 | + 1 | - $4^{8}$ | 6.86 | A 0 |
| 2999 | 251205 | C 3112 | 253 |  | 1256.35 | 7208 | 3 | $25 \quad 5453.9$ | 131 | 541 | 13.7 | - 12 | + 6 | $9 \cdot 4$ |  |
| 3000 | 281073 | C 3113 | 259 | 11967 | $13 \quad 6.67$ | 7846 | 5 | $28 \quad 525.6$ | 147 | 550 | 11.1 | - 11 | + 5 | 8.0 | K o |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 191c*o. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { I900+ } \end{aligned}$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Dec. } \\ & \text { D.001. } \end{aligned}$ |  |  |
|  | ${ }^{\circ}$ |  |  |  | ${ }^{\mathrm{h}} \mathrm{nt}$ | s | s | , | " | " |  |  |  |  |  |
| 3001 | 251207 | ${ }_{\text {C }} 3114$ |  | 11975 | $\begin{array}{llll}6 & 13 & 10.33\end{array}$ | $+3.7056$ | -.0003 | $\begin{array}{lll}25 & 23 & 0.7\end{array}$ | - 1.151 | -. 539 | 10.3 | + 14 | - 14 | 8.0 | B 8 |
|  | 251208 | C 3115 |  | 11976-8 | 1312.50 | 7108 |  | 2534 1.0 | 155 | 539 | 10.7 | - 13 | - 28 | 8.4 |  |
| 3003 | 311264 | L 2557 | 258 |  | 1313.13 | 8868 |  |  | 155 | 565 | 12.3 | - 5 | + 3 | $9 \cdot 0$ |  |
| 3004 | 291172 | C 3116 |  | 11937 | 1328.36 | 8415 |  | $29574 \mathrm{I} \cdot 6$ | 177 | 559 | 12.5 | + 16 | - 9 | 9.0 |  |
| 3005 | 291173 | C 31.17 | 266 |  | 1329.01 | 8250 |  | $2925 \quad 24.6$ | 179 | 556 | 12.5 | + 10 | - 18 | 9.0 |  |
| 3006 | 261177 | C 3122 | 274 |  | $6 \begin{array}{llll}6 & 13 & 38.40\end{array}$ | $+3.7237$ | -. 0005 | 26 I 6.6 | - 1.192 | -. 541 | 13.0 | + | + 14 | $9 \cdot 0$ | F 5 |
| 3007 | 271060 | C 3121 |  | 11991 | 1339.32 | 7529 |  | 27 1 19.1 | 193 | 546 | $1{ }^{1} \cdot 1$ | + 5 | - 3 | $8 \cdot 5$ | B 9 |
| 3008 | 261178 | C 3123 |  |  | 1339.58 | 7506 |  | $26 \quad 5647 \cdot 7$ | 195 | 546 | 12.6 | - 51 | - 13 | $9 \cdot 4$ |  |
| 3009 | 251213 | C 3125 | 280 | 11996 | 1351.47 | 7151 |  | 25 54314.9 | 211 | 540 | 12.1 | + 5 | + 23 | 8.8 | G 5 |
| 3010 | 261179 | C 3126 |  |  | 143.51 | 7312 |  | $26 \quad 1655 \cdot 7$ | 230 | 542 | 14.0 | + 4 | + 20 | $9 \cdot 1$ |  |
| 3011 | 261181 | C 3128 |  |  | $\begin{array}{lll}6 & 14 & 9.53\end{array}$ | +3.7438 | -.0006 | $264259 \cdot 9$ | - 1.238 | -. 543 | 13.8 | + | - 18 | $9 \cdot 1$ | A 0 |
| 3012 | 281078 | C 3130 | 287-8 | 11973 | $14 \quad 17.34$ | 7956 |  | 2827 54.1 | 249 | 552 | 11.5 | + 18 | - 31 | $7 \cdot 16$ | A 3 |
| 3013 | 251215 | C 3131 |  |  | 1419.05 | 6959 |  | $\begin{array}{llll}25 & 3 & 7 \cdot 4\end{array}$ | 251 | 537 | 11.7 | + 24 | - 62 | $7 \cdot 46$ | K 2 |
| 3014 | $27 \quad 1066$ | C 3132 |  | 12013 | 1425.74 | 7645 |  | $\begin{array}{lllll}27 & 25 & 22.8\end{array}$ | 262 | 547 | 12.2 | - 13 | + 16 | 8.4 | A 0 |
| 3015 | $30 \quad 1196$ | L 2563 | 291 |  | 1427.76 | 8553 | 9 | $\begin{array}{lllllllllllllllll}30 & 24 & 30 \cdot 7\end{array}$ | 265 | 561 | 12.5 | 12 | - 67 | $7 \cdot 86$ | Fo |
| 3016 | 3x 1269 | L 2562 | 290 |  | 61428.52 | $+3.8807$ | -0010 | 31 12 47 | - I. 266 | $-.564$ | 13.0 | - 23 | - 28 | $9 \cdot 1$ |  |
| 3017 | 291180 | C 3133 |  |  | $14 \quad 29.94$ | 8283 | 10 | $2932 \begin{aligned} & 24.3\end{aligned}$ | 267 | 556 | 13.0 | + 8 | - | $9 \cdot 0$ | A |
| 3018 | 241206 | B 2313 |  |  | 1434.01 | 6832 |  | $\begin{array}{llll}24 & 36 & 16.4\end{array}$ | 273. | 535 | 10.8 | - 41 | - 19 | 8.0 | Go |
| 3019 | 271068 | C 3135 |  |  | 1437.52 | 7716 |  | 273943.4 | 279 | 548 | 12.8 | - 18 | + 20 | $8 \cdot 8$ | A 。 |
| 3020 | 291181 | C 3136 |  |  | 1441.75 | 8333 |  | $29426 \cdot 0$ | 285 | 556 | 13.2 | + 43 | - 37 | $9 \cdot 1$ |  |
| 3021 | 281080 | C 3137 |  |  | $61440 \cdot 81$ | $+3.7867$ | 008 | $28 \quad 656.0$ | - 1.283 | - 550 | 13.0 | + 10 | - 11 | 8.7 | K o |
| 3022 | $27 \quad 1069$ | C 3138 |  | 12028 | 1446.22 | 7615 | 8 | 2719 16.1 | 291 | 546 | 13.1 | 17 $+\quad 1$ | - 15 | $9 \cdot 4$ | A 0 |
| 3023 | 271070 | $\mathrm{C}^{\text {3 }} 339$ |  |  | 1446.63 | 7716 | 8 | $\begin{array}{llll}27 & 39 & 54.4\end{array}$ | 292 | 548 | 12.8 | - 3 | - 26 | $8 \cdot 6$ | K o |
| 3024 | 28 1081 | C 3140 | 297 |  | 1449.74 | 8035 | 9 | 2843 36.8 | 297 | 553 | 12.4 | + 2 | - 2 | $8 \cdot 9$ |  |
| 3025 | 261185 | C $314^{2}$ |  |  | 1454.45 | 7406 |  | ${ }^{26} 3635 \cdot 5$ | 302 | 543 | 11.5 | + 19 | + 10 | $8 \cdot 4$ | A 0 |
| 3026 | 251222 | C 3144 |  |  | 61459.02 | $+3 \cdot 7008$ | -.0007 | $\begin{array}{llll}25 & 13 & 34.8\end{array}$ | - 1.310 | -. 538 | 12.3 | + 20 | - $4^{8}$ | $9 \cdot 4$ |  |
| 3027 | 311271 | L 2564 | 300 |  | $15 \quad 0.88$ | 8955 | 12 | 314048.4 | 313 | 566 | 12.3 | + 2 | - 49 | $7 \cdot 7$ | F 5 |
| 3028 | 251223 | C 3146 | 308 | 12041-2 | $15 \quad 1.05$ | 7128 | 8 | $253883 \cdot 1$ | 313 | 540 | 12.9 | + 21 | - 81 | $7 \cdot 9$ | K 5 |
| 3029 | 251225 | C 3149 | 309 | 12043-4 | $15 \quad 3.33$ | 7008 |  | $\begin{array}{llllll}25 & 13 & 40 \cdot 8\end{array}$ | 315 | 538 | 11.1 | - | - 29 | 7-16 | B 9 |
| 3030 | 291187 | C 3145 |  |  | 154.02 | 8304 | 10 | $293640 \cdot 3$ | 317 | 556 | 13.8 | + 13 | + 2 | 9-1 | A 2 |
| 3031 | 29 1188 | C 3148 | 307 |  | $615 \quad 6.11$ | $+3.8118$ | --0009 | $\begin{array}{llll}29 & 0 & 17.0\end{array}$ | - 1.320 | -. 554 | 14.0 | + 26 |  |  |  |
| 3032 | 311272 | L 2565 | 306 |  | $\begin{array}{ll}15 & 9.92\end{array}$ | 8855 | -12 | $\begin{array}{llll}31 & 22 & 7 \cdot 1\end{array}$ | 326 | 565 | 13.8 | + 25 | - 28 | $9^{\circ}$ | A 0 |
| 3033 | 261187 | C 3150 |  |  | $15 \quad 12.96$ | 7384 |  | $\begin{array}{llll}26 & 32 & 9 \cdot 6\end{array}$ | 330 | 543 | 13.3 | - 23 | - 11 | $9 \cdot 1$ | F 5 |
| 3034 | 251226 | C 3152 | 317 |  | 1518.51 | 7155 | 7 | $254433 \cdot 8$ | 339 | 5401 | 13.2 | + 13 | - 16 | 8.8 | G 5 |
| 3035 | 29 1189 | C 3151 | 314 |  | $15 \quad 20.17$ | 8242 | 10 | $292440 \cdot 4$ | 340 | 555 | 11.3 | 16 | + 4 | 6.91 | Fo |
| 3036 | 291190 | C 3153 | 316 |  | $6 \quad 15 \quad 27.29$ | +3.8294 | -.0011 | $293455 \cdot 8$ | 1-351 | -. 556 | 2.8 | + 25 | - 63 | $6 \cdot 27$ | A ○ |
| 3037 | 241212 | B 2320 | 323 |  | 1529.39 | 6669 |  | $24 \quad 1 \begin{array}{lllll} & 40 \cdot 5\end{array}$ | 353 | 533 | 12.5 | + 43 | + 10 | 8.6 | Go |
| 3038 | 29 I192 | C 3155 |  |  | 1534.91 | 8205 |  | 29 <br> 17854 | 362 | 554 | 14.2 | - 75 | + 24 | $9 \cdot 4$ |  |
| 3039 | 26 I191 | C 3156 |  |  | $1535 \cdot 37$ | 7364 |  | $\begin{array}{llll}26 & 28 & 12.4\end{array}$ | 362 | 543 | 13.3 | + 35 | - 6 | $9 \cdot 4$ | A |
| 3040 | 31 1274 | L 2568 |  |  | $1542 \cdot 25$ | 8799 | 12 | $3 \mathrm{I} 1 \mathrm{I} 5 \mathrm{I} \cdot 6$ | 372 | 564 | 13.5 | - 6 | 9 | $9 \cdot 1$ | A 5 |
| 3041 | 301209 | L 2569 |  |  | 61552.50 | $+3 \cdot 8558$ | -.0012 | $\begin{array}{llll}30 & 25 & 53 \cdot 1\end{array}$ | - 1-388 | -.561 | 11.5 | + | - 46 | $8 \cdot \mathrm{I}$ | G 5 |
| 3042 | 241218 | B 2323 | 336 |  | 1553.87 | 6815 | 7 | $\begin{array}{llll}24 & 33 & 4.6\end{array}$ | 390 | 535 | 12.7 | + | - 35 | 8.8 |  |
| 3043 | 311275 | L 2571 |  |  | 1559.40 | 8753 | 13 | $\begin{array}{llll}31 & 3 & 22.8\end{array}$ | 397 | 563 | 13.1 | + 21 | - 31 | 9.0 | K |
| 3044 | 251232 | C 3160 | 341 |  | $16 \quad 6 \cdot 41$ | 6955 | 7 |  | 407 | 537 | 12.6 | - | - 8 | 8.61 | G 5 |
| 3045 | 201211 | C 3162 | 340 |  | $16 \quad 18.14$ | 8423 | 12 | $30-22.8$ | 425 | 559 | 10.5 | + 2 | - 5 | 7.06 | A 0 |
| 3046 | 31 1278 | L 2577 |  | 12080 | $\begin{array}{llll}6 & 16 & 39.88\end{array}$ | $+3.8730$ | -.0014 | $\begin{array}{llll}30 & 59 & 19.7\end{array}$ | - 1.455 | $-.563$ | 10.5 | - ${ }^{2}$ | - 37 | $7 \cdot 8$ | Fo |
| 3047 | 301213 | L 2578 |  |  | $1644 \cdot 63$ | 8592 | 12 | $\begin{array}{llll}30 & 33 & 1.5\end{array}$ | 464 | 561 | 13.3 | 16 | - 30 | 9.0 |  |
| 3048 | 251236 | C 3170 | 364 |  | 1645.05 | 7119 | 09 | ${ }_{25} 53743 \cdot 1$ | 464 | 540 | 12.8 | + 18 | - 14 | 8.6 | B 9 |
| $3049$ | 281094 | ${ }_{\text {C }} 3167$ |  |  | $1645 \cdot 29$ | 8100 | 12 |  | 464 | 554 | II. 1 | $+$ | 1 | $7 \cdot 7$ |  |
| 3050 | $25 \quad 1237$ | C 3171 | 368 |  | $1645 \cdot 36$ | 6976 | 8 | $25 \quad 7 \quad 33 \cdot 4$ | 464 | 538 | 12.7 | + 3 | - 19 | $9 \cdot 8$ | K 。 |


| No. | B.D. | A.G.C. | W.B. (z). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 191000 | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { igoot } \end{aligned}$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { B.000 I. } \end{aligned}$ | Dec. $\cdots \cdot 00 \mathrm{I}$ |  |  |
|  | - |  |  |  | hm | s | s | , |  | " |  |  |  |  |  |
| 3051 | 281095 | C 3168 | 362 |  | $61646 \cdot 48$ | $+3 \cdot 786 \mathrm{I}$ | -.0012 | $28 \quad 9 \quad 58.9$ | - 1.468 | - 550 | 13.7 | + 36 | $+30$ | 9.0 | A 0 |
| 3052 | 261200 | ${ }^{\text {C }} 3172$ |  | 12102 | 1648.74 | 7455 | 10 | $264729 \cdot 6$ | 470 | 544 | 13.8 | + 28 | 34 | $9 \cdot 4$ |  |
| 3053 | 261201 | C 3173 | 367 | 12103 | $1649 \cdot 15$ | $7+32$ | 10 | $264^{2}{ }^{2} 4 \cdot 5$ | 470 | 544 | 13.5 | - ${ }^{-11}$ | - 29 | $8 \cdot 4$ | A 0 |
| 3054 | 291200 | C 3174 | 370 |  | $17 \quad 2.75$ | 8412 | 14 | $29 \quad 58 \quad 30 \cdot 3$ | 490 | 558 | 13.3 | + 3 | - 19 | $8 \cdot 7$ |  |
| 3055 | 281097 | C 3176 | 375 | 12111 | $17 \quad 7 \cdot 56$ | 7820 | 12 | $\begin{array}{lll}28 & 1 & 49 \cdot 9\end{array}$ | 497 | 549 | 12.5 | - 18 | + 6 | $7 \cdot 71$ | K 2 |
| 3056 | 271088 | C 3177 |  |  | $6 \begin{array}{llll}6 & 17 & 9.92\end{array}$ | $+3.7668$ | -.0008 | 273112.4 | - 1.500 | --547 | 13.6 | - 75 | + 26 | $9 \cdot 4$ |  |
| 3057 | 28 1099 | C 3178 | 379 |  | ${ }^{1} 1718.15$ | 8011 | 13 | $283956 \cdot 5$ | 512 | 552 | 12.6 | - 13 | - 27 | $7 \cdot 7$ | A 0 |
| 3058 | $27 \quad 1089$ | C. 3179 |  | 12119 | 1721.41 | 7659 | 11 | $27 \quad 2918.9$ | 516 | 547 | 13.6 | + 13 | - 6 | $8 \cdot 5$ | A 3 |
| 3059 | 261204 | C 3181 | 384 |  | $17 \quad 24.46$ | 7237 | 10 | $\begin{array}{llll}26 & 2 & 33 \cdot 3\end{array}$ | 520 | 541 | 13.5 | - 43 | - 15 | $8 \cdot 1$ | A 3 |
| 3060 | 271090 | C 3180 |  | 12125 | $17 \quad 26 \cdot 25$ | 7743 | 12 | $\begin{array}{llll}27 & 46 & 32 \cdot 9\end{array}$ | 523 | 548 | 13.7 | - 5 | + 1 | $7 \cdot 8$ | A 0 |
| 3061 | 27 1091 | C 3182 |  | 12127 | 61731.44 | $+3.7583$ | 0012 | $27 \quad 142.6$ | $-1.531$ | $-546$ | 12.6 | + 11 | - 17 | $8 \cdot 2$ | B 9 |
| 3062 | 281100 | C 3183 |  |  | $1735 \cdot 55$ | 7997 | 14 | $\begin{array}{lllll}28 & 37 & 19.0\end{array}$ | 538 | 552 | 13.6 | + 27 | - 17 | $8 \cdot 4$ | A 0 |
| 3063 | 241237 | B 2338 |  |  | $1737 \cdot 92$ | 6820 | 9 | $\begin{array}{llllllllllll} \\ & 34 & 53.5\end{array}$ | 541 | 535 | 13.4 | + 11 | - 17 | 8.6 |  |
| 3064 | 301216 | C 3185 |  |  | ${ }^{1} 738.93$ | 8435 | 15 | $\begin{array}{lllllllll}30 & 3 & 14.7\end{array}$ | 542 | 559 | 13.6 | - 19 | - 4 | $9 \cdot 0$ |  |
| 3065 | 28 I101 | C 3186 | 387 |  | $174^{0.62}$ | 8050 | 14 | $28 \quad 48 \quad 2 \cdot 9$ | 545 | 553 | 12.1 | + 14 | - $\quad 27$ | 8.4 | B 8 |
| 30 | 241239 | B 2340 | 393 |  | $61745 \cdot 90$ | $+3.6706$ | -0008 | 241027.5 | - 1.552 | --534 | 14.2 | + | - 23 | 9.4 |  |
| 3067 | 29 I208 | $\mathrm{C}^{1} 189$ |  |  | 1750.51 | 8122 | ${ }^{1}+$ | $29 \quad 2 \begin{array}{ll} & 1\end{array}+3$ | 560 | 554 | 13.8 | - 9 | - 65 | $9 \cdot 1$ | A 2 |
| 3068 | $27 \quad 1092$ | C 3192 |  | 12145 | 1752.21 | 7562 | 12 | $27 \quad 948.0$ | 561 | 546 | 12.7 | - 33 | + 7 | 7.8 | A 0 |
| 3069 | 291209 | ${ }^{C} 3191$ |  |  | 1753.23 | 8349 | 15 | $\begin{array}{llllllllll}29 & 46 & 49 \cdot 8\end{array}$ | 563 | 557 | 14.3 | - 45 | + 4 | 9.4 |  |
| 3070 | $31 \quad 1283$ | L. 2584 |  |  | 1758.09 | 8991 | 18 | $31{ }^{1} 8858.2$ | 570 | 566 | 13.2 | + 7 | - 64 | $8 \cdot 6$ | F |
| 3071 | 241241 | B 2343 | 398 |  | 61758.48 | +3.6680 | . 0009 |  | - 1.570 | -.533 | $14^{2} 2$ |  | - $\quad 2$ | $9 \cdot 5$ | A 2 |
| 3072 | 261205 | C 3193 | 396 |  | 1759.31 | 7462 | 12 | 264931.9 | 571 | 544 | 13.2 | + 18 | + 26 | 8.8 | $\mathrm{F}_{2}$ |
| 3073 | 29 I210 | ${ }_{\text {C }} 3194$ |  |  | $18 \quad 9 \cdot 18$ | 8116 | 14 | $\begin{array}{llllll}29 & 1 & 15 \cdot 1\end{array}$ | 586 | 553 | 13.0 | + 9 | + 2 | $9 \cdot 1$ | Go |
| 3074 | 261206 | C 3195 | 407 | 12157 | 1814.05 | 7263 | 12 | $\begin{array}{llll}26 & 8 & 32 \cdot 3\end{array}$ | 593 | 544 | 12.1 | + 26 | + 7 | $8 \cdot 7$ | B 8 |
| 3075 | $25 \quad 1249$ | C 3196 | 411 | 12162 | $18 \quad 19 \cdot 17$ | 7021 | 10 | $\begin{array}{llllllllll}25 & 17 & 48.6\end{array}$ | 600 | 537 | 11.7 | - 30 | - 35 | 8.8 | A 5 |
| 3076 | 301218 | L 2587 | 409 |  | $61826 \cdot 18$ | $+3 \cdot 8573$ | . 0016 | 303013.4 | - 1.611 | --561 | $10 \cdot 5$ | + 18 | - 6 | 8.2 |  |
| 3077 | 251251 | ${ }_{C} 15197$ | 415 | 12167-8 | $\begin{array}{ll}18 & 30 \cdot 35\end{array}$ | 7068 | 10 | $\begin{array}{llllll}25 & 27 & 48.8\end{array}$ | 616 | 538 | 11.7 | + 23 | - 6 | 8.5 | B |
| 3078 | 241251 | C 3201 |  | 12189 | $\begin{array}{ll}19 & 0.78\end{array}$ | 6881 | 11 | 24 48 <br> 29  <br> 10  | 661 | 535 | 12.8 | - 3 | - 25 | $8 \cdot 86$ | A |
| 3079 | 311287 | L 2590 | $4^{22}$ |  | 19 1.40 | 9008 | 19 | $315241 \cdot 1$ | 661 | 566 | 14.1 |  | - 23 | $9 \cdot 4$ |  |
| 3080 | 301219 | C 3200 |  |  | $19 \quad 2 \cdot 27$ | $844^{1}$ | 18 | $\begin{array}{lllll}30 & 5 & 15.4\end{array}$ | 663 | 559 | 12.3 | - 8 | - 9 | $8 \cdot 7$ |  |
| 3081 | 291213 | C 3202 | 426 | 12177 | $619.7 \cdot 80$ | $+3.8338$ | -.0017 | $29+519.9$ | $-\mathrm{I} .672$ | --556 | $10 \cdot 3$ | + | - 26 | 6.52 | B 9 |
| 3082 | 251255 | C 3204 | +37-8 | 12197-9 | 19 II.12 | 6962 | 11 | $25 \quad 547 \cdot 9$ | 676 | 536 | 10.5 | + 6* | - 17* | $6 \cdot 56$ | Ko |
| 3083 | 301220 | L 2593 |  |  | 1911.08 | 8611 | 17 | $303756 \cdot 1$ | 676 | 560 | 12.7 | + 13 | + 6 | $8 \cdot 8$ |  |
| 3084 | 28 1109 | C 3205 | +39-40 | 12196 | 1918.99 | 7830 | 15 | $28+50 \cdot 6$ | 688 | 548 | 11.8 | - 2 | - 16 | $7 \cdot 7$ | A 0 |
| 3085 | 281110 | C 3208 | 441 |  | 1923.40 | 7991 | 16 | 28 37 | 693 | 551 | 12.9 | 6 | + 7 | 8.6 | A 0 |
| 3086 | 241255 | B 2358 | 447 | 12190 | 61930.05 | $+3.6751$ | .001 1 |  | - 1.704 | - 533 | 10.7 | + 14 | - 19 | 8.0 | F 8 |
| 3087 | 261215 | C 3215 | 450 |  | 19 41•23 | 7248 | 14 | $\begin{array}{lll}26 & 6 & 8.8\end{array}$ | 720 | 543 | 12.9 | + 13 | + 18 | $9 \cdot 4$ |  |
| 3088 | 291217 | C 3212 |  |  | $1942 \cdot 44$ | 8295 | 18 | $2937 \begin{array}{llll} & 17.2\end{array}$ | 721 | 555 | 12.0 | + 18 | - 63 | $9 \cdot 1$ |  |
| 3089 | 311292 | L 2597 | 449 |  | 1954.26 | 9032 | - 21 |    <br> 1 57 43.8 | 738 | 566 | 11.9 | + 5 | - 27 | 9.1 |  |
| 3090 | $30 \quad 1224$ | L 2600 |  |  | 2012.85 | 8520 | 20 | $\begin{array}{llll}30 & 21 & 5 \cdot 3\end{array}$ | 766 | 559 | II•I | + 10 | + 15 | $8 \cdot 6$ |  |
| 3091 | 271102 | C 3217 | $47^{\circ}$ |  | $\begin{array}{llll}6 & 20 & 31 \cdot 37\end{array}$ | $+3.7526$ | .0016 | $27+0.6$ | - 1.791 | --544 | 11.5 | + 16 | + 15 | $9 \cdot 1$ |  |
| 3092 | 251271 | C 3220 |  |  | $20 \quad 32 \cdot 54$ | 7111 | 14 | $25 \quad 37$ 4.5.3 | 795 | 539 | 12.9 |  |  | $9 \cdot 1$ |  |
| 3093 | $25 \quad 1272$ | C 3221 | 475 | 12237 | $2033 \cdot 18$ | 7091 | 14 | 253344.5 | 795 | 538 | $10 \cdot 7$ | - 16 | - 33 | 8.6 | A 2 |
| 3094 | 29122 I | C 3219 | 469 |  | $2035 \cdot 65$ | 8311 | 19 | 2940 55.2 | 799 | 556 | 11.2 | - 1 | - 19 | $8 \cdot 8$ | A 0 |
| 3095 | $25 \quad 1273$ | C 3223 |  |  | $2039 \cdot 12$ | 7117 | $1+$ | $\begin{array}{llll}25 & 39 & 5 \cdot 5\end{array}$ | $80+$ | 539 | 12.9 | 19 | + $\quad 25$ | $9 \cdot 1$ |  |
| 3096 | 251274 | C 3224 | 478 | $122{ }^{\circ}$ | $620+0.77$ | $+3.7106$ | -.0014 | $253650 \cdot 6$ | - 1.807 | -. 539 | 10.7 |  | - $4^{2}$ | $8 \cdot 6$ |  |
| 3097 | $24 \quad 1263$ | C 3225 |  |  | $20+5 \cdot 62$ | 6865 | 13 | $244^{6} \quad 2.5$ | 814 | 535 | 13.0 | + 4 | - 28 | $9 \cdot 1$ | Fo |
| 3098 | 261222 | C 3226 |  |  | $20+77.80$ | 7271 876 | 14 | 2611124.1 | 817 | 541 | 13.6 | - 27 | + 24 | 9.1 |  |
| 3099 | 311296 | L 2605 | 483 |  | 2111.09 | 8756 | 23 | $31.6+3 \cdot 1$ | 850 | 562 | 12.5 | + | - 21 | $9 \cdot 0$ |  |
| 3100 | 241264 | C 3228 |  |  | 2118.46 | 6875 | 14 | ${ }^{2}+4^{8} \quad 23 \%$ | 860 | 534 | 13.5 | - 9 | - 25 | $9 \cdot 5$ | A |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 191000 | Precession. | Sec. Var. | Epoch 19007 | Annual P.M. |  | Mag. | Spectral Type. |
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|  |  |  |  |  |  |  |  |  |  |  |  | R A. 8.0001 . | Dec. $0.001 .$ |  |  |
|  | - |  |  |  | h m | s | 8 | , |  | " |  |  |  |  |  |
| 3151 | 251304 | C 3292 | 63 I |  | 62522.29 | $+3.7056$ | -.0020 | 2529 II.7 | --2.214 | -. 536 | 13.8 | + 15 | $+$ | $9 \cdot 4$ |  |
| 3152 | 311318 | L 2656 |  |  | 2537.93 | 8913 | 31 | $\begin{array}{ll}31 & 39 \\ 14.4\end{array}$ | 237 | 563 | 11.3 | + 19 | - 22 | 8.8 |  |
| 3153 | 311319 | L 2660 |  |  | 2555.33 | 8796 | 32 |  | 262 | 561 | 12.5 | + 24 | - 29 | 9.0 |  |
| 3154 | 311320 | L 2661 |  |  | 2555.81 | 8885 | 32 | $313422 \cdot 3$ | 264 | 563 | 12.9 | + 39 | - 41 | $9 \cdot 4$ |  |
| 3155 | 291253 | C 3294 |  |  | $26 \quad 1.29$ | 8180 | 28 | 291848.9 | 271 | 551 | 13.5 | + 1 | 23 | $9 \cdot 4$ |  |
| 3156 | 281142 | C 3295 | 648-9 | 12436 | $\begin{array}{lll}6 & 26 & \text { I. } 54\end{array}$ | +3.7918 | -.0027 | $\begin{array}{llll}28 & 26 & 43 \cdot 6\end{array}$ | $-2.271$ | -. 549 | 9.5 | - 8 | - 10 | 8.0 | A 0 |
| 3157 | 301253 | L 2663 | 650 |  | $26 \quad 7.56$ | 8560 | 29 | $303233 \cdot 6$ | 281 | 558 | 12.7 | + 4 | - 32 | $9 \cdot 0$ |  |
| 3158 | 291255 | C 3296 |  |  | $26 \quad 10.61$ | 8213 | 28 | $2925 \quad 24.5$ | 285 | 552 | $14^{\circ} \mathrm{O}$ | + 1 | - 15 | $9 \cdot 1$ |  |
| 3159 | 251309 | C 3298 |  |  | 26 11.69 | 6909 | 21 | $24 \quad 5833 \cdot 4$ | 287 | 533 | 14.1 | + 5 | - $\quad 25$ | $9 \cdot 4$ |  |
| 3160 | 251308 | C 3297 |  |  | 26 11.75. | 6929 | 21 | 25.243 .2 | 287 | 533 | 13.5 | + 21 | - 28 | $9 \cdot 4$ |  |
| 3161 | 261259 | C 3299 |  |  | 62623.31 | $+3.7464$ | -. 0025 | $265452 \cdot 5$ | - 2.303 | $-.542$ | 13.5 | - 13 | + | 9.4 |  |
| 3162 | 291258 | C 3300 |  |  | 2638.46 | 8218 | 29 | $292641 \cdot 1$ | 324 | 551 | 10.0 | + 14 | - 27 | 8.8 | A |
| 3163 | 261261 | C 3302 | 668-9 |  | 2639.92 | 7271 | 23 | $261457 \cdot 1$ | 327 | 539 | 9.9 | + 7 | - 29 | 8.2 | A 2 |
| 3164 | 311325 | L 2673 |  |  | $2644 \cdot 65$ | 8824 | 33 | $\begin{array}{ll}31 & 23 \\ 22.6\end{array}$ | 334 | 561 | $\mathrm{II}^{1} 3$ | + 31 | - 1 | $9 \cdot 4$ |  |
| 3165 | 281152 | C 3304 |  |  | $27 \quad 14.57$ | 7900 | 29 | $\begin{array}{llll}28 & 23 & 57.7\end{array}$ | 378 | 548 | II•I | 9 | - | $9 \cdot 1$ |  |
| 3166 | 251314 | C 3308 |  |  | 62717.31 | $+3.7172$ | -.0024 | $255447 \cdot 4$ | $-2.38 \mathrm{I}$ | - 537 | 10.0 | 14 | + 27 | 8.0 | K 2 |
| 3167 | 301256 | L 2678 |  | 12474 | 2718.18 | 8507 | 32 | $\begin{array}{lllllllllll}30 & 23 & 28 \cdot 5\end{array}$ | 382 | 558 | 10.5 | 20 | 28 | $8 \cdot 0$ | A 2 |
| 3168 | 291263 | C 3307 | 684 |  | $27 \quad 19.64$ | 8224 | 30 | 292820.9 | 385 | 551 | 10.9 | . 50 | - 10 | $8 \cdot 2$ | K |
| 3169 | 271141 | ${ }_{\text {C }}$ C 3309 | 688 | 12486 | $27 \quad 22.43$ | 7748 | 27 | $275330 \cdot 0$ | 388 | 546 | $9 \cdot 6$ | $\bigcirc$ | 11 | $7 \cdot 72$ | K 5 |
| 3170 | 281154 | C3311 | 692 | 12483 | 2724.83 | 7824 | 29 | $\begin{array}{llllllllllllll}28 & 8 & 58.4\end{array}$ | 392 | 547 | 10.3 | 37 | - 39 | $7 \cdot 6$ | A 2 |
| 3171 | 251317 | C 3315 | 702 |  | 62737.03 | +3.7010 | 0024 | $25 \quad 2048.4$ | $-2.410$ | -. 534 | 11.5 | 28 | - 16 | 8.4 | A 0 |
| 3172 | 251318 | C 3317 | 704 |  | 27 38.07 | 7011 | 23 | $25 \quad 218.5$ | 411 | 534 | 11.5 | + 1 | - 19 | $9 \cdot 0$ | A. |
| 3173 | 281156 | C 3314 | 700 | 12496 | $27 \quad 39.06$ | 7824 | 29 | $\begin{array}{llll}28 & 9 & 8.3\end{array}$ | 413 | 547 | 11.7 | + 7 | + 20 | 8.5 | A 5 |
| 3174 | 271144 | ${ }_{\text {C }}$ |  |  | $2739 \cdot 45$ | 7585 | 27 | $\begin{array}{llll}27 & 20 & 33 \cdot 1\end{array}$ | 413 | 543 | $12 \cdot 1$ | - 16 | + 15 | 9.0 |  |
| 3175 | 291264 | C 3318 |  | 12532 | $2746 \cdot 76$ | 8304 | 31 | $294422 \cdot 0$ | 424 | 553 | 10.9 | + 22 | - 15 | 8.2 |  |
| 3176 | 241303 | B 2443 |  |  | 62748.57 | $+3 \cdot 6661$ | -. 0023 | $\begin{array}{lll}24 & 6 & 29.7\end{array}$ | $-2.427$ | --529 | 12.4 | + 14 | - 34 | 9.0 | F |
| 3177 | 261267 | C 3319 |  |  | $27 \quad 49 \cdot 23$ | 7392 | 26 | $\begin{array}{llllll}26 & 40 & 55 \cdot 1\end{array}$ | 427 | 540 | 12.5 | - 6 | - 8 | $8 \cdot 7$ |  |
| 3178 | 281160 | C 3320 | 710 | 12510 | 28 I.4I | 7792 | 29 | $\begin{array}{llll}28 & 2 & 50 \cdot 8\end{array}$ | 444 | 546 | 12.0 | + 9 | - 16 | 7.8 | K 2 |
| 3179 | 2881163 | C 3322 |  |  | 28 <br> 8 <br> 12.80 | 8057 | 30 | $\begin{array}{lllll}28 & 55 & 59.3\end{array}$ |  | 550 | 13.4 | + 19 | + 13 | $8 \cdot 7$ |  |
| 3180 | 311333 | L 2690 |  |  | $28 \quad 17.71$ | 8769 | 35 |  | 469 | 560 | 13.8 | 29 | - 5 | $9 \cdot 4$ |  |
| 3181 | 311334 | L 2691 |  |  | 6 i8 19.81 | $+3.8714$ | -.0035 | $\begin{array}{llll}31 & 3 & 46 \cdot 5\end{array}$ | $-2.472$ | --559 | 14.0 | + 12 | - 25 | 9.1 |  |
| 3182 | 271148 | C 3326 | 720 | 12522 | $28 \quad 20 \cdot 42$ | 7515 | 28 | $27 \quad 6 \quad 47 \cdot 2$ | 472 | 541 | ${ }^{1} 1.5$ | + 15 | - 21 | 8.0 | K o |
| 3183 | 261272 | C 3329 | 723 |  | $28 \quad 26 \cdot 70$ | 7439 | 28 | $\begin{array}{llll}26 & 51 & 5 \cdot 7\end{array}$ | 482 | 541 | 13.5 |  | - $4^{6}$ | 9.1 |  |
| 3184 | 271150 | C $333{ }^{\circ}$ |  |  | $28 \quad 28.92$ | 7762 | 29 | $\begin{array}{lllll}27 & 57 & 8.4\end{array}$ | 485 | 546 | 13.5 | + 7 | + 23 | 9.4 |  |
| 3185 | 31 1337 | L 2693 | 721 |  | 28 31.02 | 8719 | 35 | 3 I 44 59-1 | 488 | 559 | 13.2 | 13 | - 104 | $9 \cdot 4$ |  |
| 3186 | 311338 | L 2696 | 726-7 | 12527 | 62843.74 | $+3.8699$ | -. 0035 | $31126 \cdot 2$ | $-2.507$ | --559 | 11.7 |  | - 25 | 8.5 | A 0 |
| 3187 | 291272 | C 3334 | 730 | 12563 | $28 \quad 49 \cdot 58$ | 8224 | 33 | $\begin{array}{llll}29 & 29 & 1 \cdot 1\end{array}$ | 515 | 552 | 12.9 | + 1 | - 10 | 9.1 |  |
| 3188 | 281166 | C 3335 |  |  | 2854.02 | 8045 | 31 | $28 \quad 548.7$ | 521 | 550 | 13.2 | + 76 | - 131 | $9 \cdot 4$ |  |
| 3189 | 291274 | C 3337 | 738 |  | $2858 \cdot 52$ | 8207 | 33 | 292623.6 | 528 | 552 | 12.9 | + 20 | - 8 | 9.0 |  |
| 3190 | 301265 | L 2698 |  |  | $29 \quad 2.96$ | 848 I | 33 | $3019 \quad 50.2$ | 534 | 555 | 13.4 | + 41 | + 12 | $9 \cdot 4$ |  |
| 3191 | 271153 | C 3338 |  |  | $\begin{array}{lll}6 & 29 & 8.38\end{array}$ | $+3.7513$ | -. 0029 | $\begin{array}{llll}27 & 6 & 57.3\end{array}$ | $2 \cdot 541$ | --540 | 14.1 | + | + 15 | $9 \cdot 1$ | A O |
| 3192 | 311342 | $\mathrm{L}_{2} 2701$ | 740-1 | 12538 | 2912.53 | 8850 |  | 3113018.0 |  | 561 | 10.6 | - | - II | 7-11 | K o |
| 3193 | 251326 | C 3340 | 760 | 12554 | 2929.35 | 6903 | 26 |  | 572 | 532 | 10.7 | - 15 | - 23 | $7 \cdot 96$ | K 2 |
| 3194 | 311345 | L 2704 | 749-50 |  | $\begin{array}{ll}29 & 29.51 \\ 29 & 31.60\end{array}$ | 8837 |  | $\begin{array}{llll}31 & 28 & 3.5 \\ 24 & 42\end{array}$ |  | 560 | 12.6 12.8 | - 32 | - 87 $-\quad 11$ | 8.7 8.7 |  |
| 3195 | ${ }^{2}+1317$ | C 3342 |  | 12557 | 29 31.60 | 6822 |  | $\begin{array}{lllll}24 & 42 & 19.3\end{array}$ | 576 | 531 | 12.8 | - | 11 | $8 \cdot 7$ |  |
| 3196 | $28 \quad 1168$ | C 3339 | 756-7 | 12553 | 62931.99 | $+3.7800$ | -.0030 | $\begin{array}{lllll}28 & 5 & 35 \cdot 8\end{array}$ | - $2 \cdot 576$ | -5 545 | rory, $\mathrm{xr} \times \mathrm{I}$ | - | -- 23 * | 5.05 | A 0 |
| 3197 | 311346 | L 2705 |  |  | 2933.95 | 8974 | 39 |  | 579 | 562 | 12.5 | + 15 | - 24 | $8 \cdot 7$ |  |
| 3198 | $28 \quad 1170$ | C 3341 | 758 |  | 2934.43 | 7925 | 32 | $28 \quad 3048.3$ | 579 | 547 | 11.4 | + | - 3 | 8.5 | A 2 |
| 3199 | 241318 | B 2465 | 765 |  | $2935 \cdot 64$ | 6641 | 24 | $\begin{array}{llllll}24 & 3 & 12.0\end{array}$ | 582 | 528 | 12.7 | - 6 | - $\quad 38$ | 9.1 |  |
| 3200 | 271157 | C 3343 | 764 |  | 2943.39 | 7660 | 31 | $273720 \cdot 3$ | 591 | 543 | 12.7 | - | + 10 | 9.4 |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Soc. Var. | Deef $1910 \cdot 0$. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoeh } \\ & \text { 1900+ } \end{aligned}$ | $\begin{aligned} & \text { R.A. } \\ & \text { B.000 } . \end{aligned}$ | Dec. ".oor. | Mag. | Speetral туре. |
|  | - |  |  |  | h m | 8 | 8 | - , " | * | " |  |  |  |  |  |
| 3201 | 301270 | L 2709 | 762 |  | $62947 \cdot 94$ | $+3.8527$ | -.0036 | $\begin{array}{llllllllll}30 & 29 & 13.8\end{array}$ | - 2.599 | - 555 | 10.9 | + 23 | 8 | 8.8 | A |
| 3202 | 281173 | C 3344 | 771 | 12573 | 2959.66 | 7870 | 33 | $28 \quad 20 \quad 9.5$ | 617 | 547 | 11.5 | - 1 | 1 I | 8.0 | B 9 |
| 3203 | 271159 | C 3346 |  |  | $30 \quad 3 \cdot 19$ | 7697 | 32 | 274517.4 | 621 | 544 | 12.8 | - 16 | - 24 | $9 \cdot 1$ |  |
| 3204 | 311351 | L 2713 | $772-3$ | 12572 | $30 \quad 9.84$ | 8860 | 39 | $\begin{array}{lllll}31 & 33 & 6.4\end{array}$ | 631 | . 561 | $9 \cdot 9$ | + | - 47 | 7.22 | K 2 |
| 3205 | 271162 | C 3348 |  |  | $30 \quad 14.67$ | 7695 | 32 | $\begin{array}{lll}27 & 45 & 1.8\end{array}$ | 638 | 544 | 13.1 |  | - | $9^{\cdot 8}$ |  |
| 3206 | 311352 | L 2714 |  |  | 63015.50 | $+3 \cdot 8961$ | -.0040 | $31 \begin{array}{llll}31 & 52 & 5\end{array}$ | - 2.640 | -. 562 | 12.2 | + 15 | - 41 | $9 \cdot 1$ |  |
| 3.207 | $30 \quad 1273$ | L 2715 |  |  | 3016.52 | 8590 | 37 | $304147 \cdot 2$ | 641 | 556 | 13.1 | - 10 | - 14 | $9 \cdot 4$ |  |
| 3208 | $26 \quad 1286$ | C 3350 | 791 |  | 3029.40 | 7413 | 31 | $\begin{array}{llllllllll}26 & 47 & 20.4\end{array}$ | 658 | 539 | 12.7 | +. 22 | - 108 | $9 \cdot 4$ | F 8 |
| 3209 | 291282 | C 3351 | 790 |  | $30 \quad 36.09$ | 8311 | 37 | $2948 \cdot 5 \cdot 4$ | 669 | 552 | 11.7 | + 32 | - 46 | 8.61 | A |
| 32 IO | 301275 | L 2718 | 787 | 12619 | $3036 \cdot 55$ | . 8427 | 36 | 301044.0 | 670 | 554 | 11.3 | + 9 | - 9 | $8 \cdot 5$ | F 5 |
| 3211 | 261292 | C 3353 | 796 |  | $63040 \cdot 94$ | $+3.7285$ | -.0030 | 26210.2 | $-2.676$ | -. 538 | 13.0 | - 7 | - 20 | 9.4 |  |
| 3212 | 311354 | L 2721 | 793-4 | 12594 | $3044 \cdot 48$ | 820 | 40 | 312556.9 | 680 | 560 | 10.0 | + 5 | + 14 | $7 \cdot 8$ | A 2 |
| 3213 | 271164 | C 3355 | 799 |  | $3048 \cdot 16$ | 7576 | 32 | $272115 \cdot 1$ | 686 | 542 | $9 \cdot 7$ | + | - 81 | $6 \cdot 89$ | Go |
| 3214 | 241321 | B 2472 | 809 |  | $3 \mathrm{I} \quad 5 \cdot 24$ | 6760 | 27 | 243012.6 | 711 | 529 | 13.3 | - 5 | - 39 | 9.4 | A 2 |
| 325 | $31 \quad 1356$ | L 2723 |  |  | 317.85 | 8679 | 39 | $305936 \cdot 3$ | 715 | 557 | 12.7 | 10 | - 6 | 8.1 | A 3 |
| 3216 | 301276 | L 2724 |  |  | $\begin{array}{lll}6 & 31 & 8.35\end{array}$ | $+3.8598$ | 0038 | 3044 II. 8 | $-2.715$ | - 556 | 14.1 | - 19 | + | $9 \cdot 4$ |  |
| 3217 | 241322 | B 2474 |  |  | $31 \quad 10.28$ | 6689 | 26 | 241458.1 | 718 | 528 | 13.9 | + 22 | - 10 | $9 \cdot$ | A 0 |
| 3218 | 27 I169 | C 3361 | 815 |  | 3121.02 | 7706 | 34 | $274^{28} 14.2$ | 734 | 543 | 13.2 | - 2 | - 2 | 8.7 | F 2 |
| 3219 | 31.1358 | L 2727 | 813-4 |  | - 3130.99 | 8929 | 42 | $\begin{array}{llll}31 & 47 & 9.3\end{array}$ | 748 | 561 | I1.2 | - | - 31 | $7 \cdot 8$ | Ko |
| 3220 | 29 1284 | C 3364 |  |  | $3135 \cdot 65$ | 8350 | 38 | $295640 \%$ | 755 | 553 | 13.1 | 12 | + 5 | 9.4 |  |
| 32 | 241326 | B 2478 | 826 |  | 63137.02 | +3.6750 | 028 | $\begin{array}{llll}24 & 28 & 26.9\end{array}$ | $-2.757$ | --529 | 12.3 | + 17 | - 40 | $9 \cdot 0$ | F ${ }^{\text {; }}$ |
| 322 | 28 1184 | C 3367 |  |  | 3141.80 | 7778 | 35 | $28 \quad 3 \quad 5 \cdot 0$ | 764 | 544 | 13.6 | - 21 | + 15 | $9 \cdot 1$ | G 5 |
| 3223 | 29 I286 | C 3365 | 823-4 |  | $3142 \cdot 23$ | 8064 | 36 | 29 - 24.I | 764 | 549 | 14.0 | $+10$ | - 16 | $9 \cdot 4$ |  |
| 3224 | 301278 | C 3369 |  |  | 3148.49 | 8362 | 38 | 29597 7-1 | 773 | 553 | 13.1 | + 17 | - 3 | $9 \cdot 1$ |  |
| 3225 | 251342 | C 3370 |  |  | 3148.86 | 6979 | 30 | $\begin{array}{lllllllllll}5 & 17 & 35 \cdot 2\end{array}$ | 774 | 534 | 13.4 | $+34$ | - 13 | $9 \cdot 4$ |  |
| 3226 | $24 \quad 1328$ | C 3372 | 838-40 | 12646-7 | $63156 \cdot 21$ | $+3.6803$ | 0028 | 2439 59.1 | - 2.784 | --530 |  | 1 | - 19 | 6.44 | A 2 |
| 3227 | 291289 | C 3371 |  |  | 3158.89 | 8225 | 38 | $\begin{array}{ll}29 & 32 \\ 3 & 33 \cdot 6\end{array}$ | 788 | 551 | 11.6 | 15 | + 23 | 9.0 |  |
| 3228 | 311353 | L 2735 | 844-5 | 12648 | $\begin{array}{lll}32 & 17.07\end{array}$ | 8665 | 40 |  | 814 | 556 | II. 5 | 12 | + 10 | 7.23 | A 2 |
| 3229 | 301281 | L 2737 |  |  | $32 \quad 29.92$ | 8581 | 41 | $3042 \quad 7 \cdot 1$ | 833 | 556 | 11.7 | + 24 | - 30 | $9 \cdot 0$ |  |
| 3230 | 241331 | C 3379 | 859-60 | 12666 | $32 \quad 30 \cdot 73$ | 6869 | 30 | $24544^{1} \cdot 7$ | 835 | 531 | 12.3 | + 16 | - 22 | 8.91 | A 2 |
| 3231 | 291292 | C 3377 | 851-2 |  | $63231 \cdot 22$ | $+3.8310$ | -. 0040 | 294943.9 | $-2.835$ | $-.552$ | 14.1 | + 8 | - 10 | $9 \cdot 4$ |  |
| 3232 | 311364 | L 2739 |  | 12657 | 3233.85 | -8767 | 43 | $\begin{array}{lllllllllllll}31 & 17 & 42 \cdot 1\end{array}$ | 839 | 558 | 12.1 | - 6 | - 24 | 8. 1 | Go |
| 3233 | 311365 | L 2741 |  |  | $3239 \cdot 13$ | 8803 | 43 | $\begin{array}{llllllllllll}31 & 24.2\end{array}$ | 846 | 559 | 13.3 | + 8 | - 25 | 9.0 |  |
| 3234 | 291293 | C 3381 | 856-7-8 | 12661-2 | $3240 \cdot 58$ | 8076 | 38 | $\begin{array}{lllllllllll}29 & 3 & 43\end{array}$ | 849 | 548 | 12.7 | - 12* | - $25^{*}$ | $5 \cdot 54$ | A 0 |
| 3235 | 301284 | L 2742 |  |  | $3246 \cdot 25$ | 8627 | 40 | 305118.1 | 856 | 555 | 13.1 | + | + 11 | 9.4 |  |
| 3236 | 241332 | B 2494 | 872 | 12677 | $63248 \cdot 14$ | $+3.6761$ | . 0029 | 243143.9 | - 2.859 | --529 | 12.5 | 15 | - 51 | $6 \cdot 70$ |  |
| 3237 | 251353 | C 3382 | 869 |  | 3248.48 | 7126 | 32 | 254920.0 | 859 | 535 | 12.9 | + 17 | - 3 | $8 \cdot 7$ | F 5 |
| 3238 | 311366 | L 2743 |  |  | $3248 \cdot 48$ | 8848 | 43 |  | 859 | 560 | 12.5 | + 2 | + 31 | 8.8 | F 8 |
| 3239 | 281190 | C 3383 | $870-1$ |  | $3256 \cdot 90$ | 7981 | 39 | $\begin{array}{llll}28 & 45 & 2.7\end{array}$ | 872 | 547 | 12.8 | + 21 | + 8 | $9 \cdot 4$ |  |
| 3240 | 27 1181 | C 3384 | 875 |  | 3258.55 | 7459 | 34 | 2659 1-3 | 875 | 540 | 11.8 | + 4 | - 10 | 8.0 | A 0 |
| 3241 | 261300 | C 3385 |  |  | $\begin{array}{lll}6 & 33 & 3.97\end{array}$ | +3.7341 | -.0034 | $\begin{array}{lllll}26 & 34 & 42 \cdot 1\end{array}$ | $-2.882$ | - 537 | 14.0 | + 5 | + 7 | 8.8 | A 0 |
| 3242 | 261302 | C 3386 |  |  | $\begin{array}{llll}33 & 7 \cdot 18\end{array}$ | 7285 | 34 | $\begin{array}{llll}26 & 23 & 1.9\end{array}$ | 887 | 537 | $13 \cdot 1$ | 0 | - 7 | 9.1 |  |
| 3243 | 271182 | C 3387 | 881-2 | 12687 | 33 14.39 | 7722 | 37 | 2753 1-1 | 897 | 543 | 12.4 | + 6 | - 31 | 7.20 | A 2 |
| 3244 | 311369 | L 2749 |  | 12678 | $\begin{array}{llll}33 & 15.75\end{array}$ | 8938 | 45 | $315041 \cdot 4$ | 900 | 560 | 11.8 | 18 | $+\quad 19$ | 7.31 | A 0 |
| 3245 | 291297 | C 3390 | 886-7 |  | $\begin{array}{lll}33 & 24.47\end{array}$ | 8304 | 41 | $2949 \quad 12 \cdot 4$ | 911 | 551 | 11.9 | 9 | + 13 | 8.16 | B 9 |
| 3246 | $31 \begin{array}{ll}1370\end{array}$ | L 2750 | 883-4 | 12686 | 63325.35 | $+3.8882$ | -. 0044 | $\begin{array}{llll}31 & 40 & 16.7\end{array}$ | -2.913 | --559 | 12.1 | - 2 | - 25 | 8.4 |  |
| 3247 | 251357 | C 3391 | 890 |  | $\begin{array}{llll}33 & 26.61\end{array}$ | 7071 | 32 |  | 915 | 533 | 13.7 | + 27 | - 21 | $9 \cdot 5$ |  |
| $324^{8}$ | 241338 | B 2497 | 892 | 12700 | 3328.06 | 6783 | 30 | $243656 \cdot 1$ | 917 | 529 | 12.6 | - 4 | + 2 | $9 \cdot$ | A |
| 3249 | 301290 | L 2754 |  | 12701 | $3347 \cdot 75$ | 8476 | 42 |  | 946 | 554 | 11.7 | + 7 | - 16 | 8.0 | A 0 |
| 3250 | 251361 | C 3395 | 903-4 |  | 3351 11 | 7062 | 33 | 253653.3 | 950 | 533 | 12.9 | - 13 | + 37 | 8.6 | G 5 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{C}$ | Precession. | Soc. Var. | Deo. $1910 \cdot 0$. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
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|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. }-000 \text { I. }}{\text { R. }}$ | Dec. Nooi. |  |  |
|  | 。 |  |  |  | h m | 8 | 8 | - , " |  | " |  |  |  |  |  |
| 3251 | 281196 | C 3394 | 897-8 | 12709 | $6 \quad 33 \quad 52 \cdot 65$ | $+3.7855$ | -.0038 | $28 \quad 2036 \cdot 3$ | $2 \cdot 953$ | -. 545 | 10.7 | - 8* | - 23 * | $5 \cdot 84$ | B 8 |
| 3252 | $25 \quad 1362$ | C 3398 |  |  | $3353 \cdot 38$ | 6931 | 32 | $\begin{array}{lllll}25 & 9 & 6.8\end{array}$ | 953 | 531 | 11.4 | + | - 22 | $8 \cdot 6$ |  |
| 3253 | 261306 | C 3397 |  |  | $3353 \cdot 90$ | 7233 | 34 | $261247 \cdot 6$ | 954 | 536 | 11.4 | + 22 | + 14 | 9.4 |  |
| 3254 | 281198 | C 3396 | 89.9 |  | $3354 \cdot 37$ | 7885 | 40 |  | 954 | 545 | 11.0 | - 30 | - 5 | 8.8 |  |
| 3255 | $25 \quad 1363$ | C 3399 |  |  | $3357 \cdot 00$ | 6928 | 32 | $\begin{array}{llll}25 & 8 & 28.9\end{array}$ | 959 | 531 | 11.6 | + 12 | - 38 | 8.8 | A o |
| 3256 | $24 \begin{array}{ll}1343\end{array}$ | C 3402 | 909 | 12715-6 | $\begin{array}{lll}6 & 34 & 0.29\end{array}$ | $+3.6798$ | -.0031 | $244^{0} 40 \cdot 6$ | $-2.963$ | - 529 | 10.3 | + | + 81 | 6.48 | F 5 |
| 3257 | 251364 | C 3401 | 908 |  | $34 \quad 0.64$ | 7056 | 33 | $253544 \cdot 8$ | 964 | 533 | $13 \cdot 1$ | - 13 | + 8 | 8.8 |  |
| 3258 | 251365 | C 3403 |  |  | $34 \quad 0.94$ | 6910 | 32 | $\begin{array}{lllll}25 & 4 & 36 \cdot 3\end{array}$ | 964 | 530 | 13.8 | + 7 | + 7 | 9.4 |  |
| 3259 | 291299 | C 3400 |  |  | $\begin{array}{lll}34 & 3 \cdot 87\end{array}$ | 8174 | 41 | ${ }_{29} 92424 \cdot 1$ | 969 | 549 | 13.1 | - 16 | + 12 | $9 \cdot 4$ |  |
| $3260$ | 291300 | C 3404 |  |  | $34 \quad 18.19$ | 8246 | 42 | 293847.6 | 989 | 550 | 14.3 | 14 | - 14 | $9 \cdot 4$ |  |
| 3261 | 261308 | C 3405 |  |  | $6 \quad 3421.67$ | +3.7307 | 0036 | 2628 40.1 | $2 \cdot 995$ | 537 | 14.0 | - 4 | + 12 | 9.4 |  |
| 3262 | $2+13+5$ | B 2508 |  |  | 3425.54 | 6637 | 31 | $\begin{array}{llll}24 & 6 & 15.7\end{array}$ | 3.001 | 526 | 14.0 | 21 | - 35 | $9 \cdot 1$ |  |
| 3263 | 291302 | C 3406 |  |  | $3427 \cdot 26$ | 8042 | 41 | $28 \quad 58 \quad 37 \cdot 6$ | 002 | 547 | 13.1 | - 17 | + 8 | $9 \cdot 1$ |  |
| 3264 | $30 \quad 1297$ | C 3407 | 918-9 | 12722 | 3428.89 | 8431 | 43 | 301596 | 005 | 553 | 10.6 | + 7 | - 27 | $8 \cdot 2$ | A 2 |
| 3265 | $25 \quad 1372$ | C 3410 |  |  | 3429.02 | 6956 | 33 | $251446 \cdot 2$ | 005 | 531 | 12.6 | + 18 | - 53 | 8.6 |  |
| 3266 | 251371 | C 3411 | - |  | 63431.25 | $+3 \cdot 7002$ | . 0034 | $\begin{array}{llllll}25 & 24 & 40 \cdot 3\end{array}$ | 3.008 | - 532 | 13.6 | + 7 | 16 | 8.8 |  |
| 3267 | 261309 | C 3413 | 934 |  | $3440 \cdot 60$ | 7263 | 36 | $26 \quad 1947 \cdot 5$ | 022 | 536 | 14.0 | $+$ | - 12 | 9.4 |  |
| 3268 | 281202 | C 3415 |  |  | $3444 \cdot 62$ | 7893 | 40 | $28 \quad 29$ 5.1 | 028 | 545 | 13.3 | + 30 | - 18 | $9 \cdot 4$ |  |
| 3269 | 281203 | C 3416 | 931 |  | $3445 \cdot 63$ | 7975 | 40 | $2845 \quad 33.2$ | 029 | 546 | 11.6 | - 18 | - 19 | $8 \cdot 8$ |  |
| 3270 | 311381 | L 2761 | 932 |  | $3452 \cdot 27$ | 8725 | 46 | $311156 \cdot 1$ | 038 | 557 | $9 \cdot 7$ | 6 | + 3 | $7 \cdot 7$ | K o |
| 3271 | 251378 | C 3419 |  |  | $63454 \cdot 80$ | $+3.6929$ | .0033 | $\begin{array}{lllll}25 & 9 & 34.3\end{array}$ | $-3.042$ | -.531 | 12.4 | + 11 | - 13 | 9.0 |  |
| 3272 | 301300 | L 2763 | 937 | 12745 | $35 \quad 6.86$ | 8441 | 44 | $\begin{array}{llllllllllll}30 & 17 & 39 \cdot 8\end{array}$ | 060 | 552 | 11.7 | + 4 |  | 8.0 | B 9 |
| 3273 | 311383 | L 2764 | 942 |  | $\begin{array}{llll}35 & 14.87\end{array}$ | 8797 | 48 | 3126 6.1 | 071 | 557 | 11.5 | - 27 | - 19 | 8.0 | G 5 |
| 3274 | 241349 | C 3420 |  |  | $35 \quad 16.22$ | 6820 | 34 | 244631.6 | 072 | 529 | 12.5 | - 25 | - 1 | $9 \cdot 4$ |  |
| 3275 | $\begin{array}{llll}26 & 1317\end{array}$ | C 3422 | 955 |  | $\begin{array}{lll}35 & 26 \cdot 14\end{array}$ | 7386 | 38 | $\begin{array}{llll}26 & 46 & 1.8\end{array}$ | 087 | 539 | 12.3 | 4 | + 9 | $8 \cdot 2$ | K 2 |
| 3276 | 251382 | C 3423 |  | 12766 | $\begin{array}{llll}6 & 35 \quad 27.02\end{array}$ | $+3.6997$ | 0035 | $25 \quad 2426.4$ | - 3.088 | - 531 | 12.6 | 31 |  | 8.0 | Ma |
| 3277 | 291307 | C 3424 | 956-7 |  | 35 34-12 | 8286 | 45 | 294753.0 | 098 | 550 | 11.9 | + 9 | - 30 | 7.36 | K o |
| 3278 | 241353 | C 3428 | 970 |  | $3540 \cdot 57$ | 6809 | 34 | $2444{ }^{2} 4^{\circ}$ | 109 | 529 | 12.5 | - 7 | - 18 | $9 \cdot 0$ | A |
| 3279 | 291309 | C 3426 | 960 |  | $3540 \cdot 62$ | 8058 | 43 | $29 \quad 2 \quad 52 \cdot 9$ | 109 | 546 | 11.7 | + 20 | - 8 | 8.4 | A 0 |
| 3280 | $28 \quad 1207$ | C 3427 | 961-2 | 12770 | $3540 \cdot 63$ | 7828 | 41 | 281649.7 | 109 | 543 | 12.9 | 6* | - 15* | 6.54 | K |
| 3281 | 241354 | B 2525 |  |  | $63543 \cdot 08$ | +3.6649 | -.0033 | 24 10 $5 \cdot 7$ | - 3.111 | - 527 | 12.5 | + 14 | + 6 | $8 \cdot 6$ |  |
| 3282 | 241357 | B 2526 |  |  | $3544 \cdot 98$ | 6616 | 33 | $24 \quad 2 \begin{array}{llll} & 53\end{array}$ | 114 | 526 | 12.0 | + 143 | - 280 | $8 \cdot 0$ | K 2 |
| 3283 | 301303 | L 2773 | 976-8 |  | $\begin{array}{ll}36 & 0.39\end{array}$ | 8584 | 47 | $30 \quad 46 \quad 7 \cdot 4$ | 136 | 554 | 11.7 | + 4 | - 1 | 8.0 | F 5 |
| 3284 | 271193 | C 3432 |  | 12785 | $\begin{array}{lll}36 & 1.03\end{array}$ | 7590 | 40 | $\begin{array}{llllll}27 & 28 & 48.2\end{array}$ | 137 | 540 | 12.0 | + $\quad 5$ | + 4 | $8 \cdot 5$ |  |
| 3285 | $27 \quad 1194$ | C 3433 | 983 | 12789 | $\begin{array}{lll}36 & 5 \cdot 49\end{array}$ | 7498 | 39 | $27 \quad 9 \quad 58.2$ | 143 | 539 | 11.5 | 8 |  | 7.68 | K o |
| 3286 | 271195 | C 3434 |  |  | $\begin{array}{lll}6 & 36 & 7 \cdot 46\end{array}$ | $+3.7602$ | -. 0040 | 273121.6 | $-3.146$ | - 540 | 11.8 | + 27 | $+25$ | 8.6 | A 。 |
| 3287 | 261322 | C 3435 |  |  | $36 \quad 17 \cdot 80$ | 7274 | 38 |  | 162 | 536 | 11.9 | - 39 | - | $9 \cdot 4$ |  |
| 3288 | 311388 | L 2774 | 984 |  | $\begin{array}{llll} & 36 & 19.38\end{array}$ | 8825 | 50 | 313225.0 | 163 | 558 | 12.1 | - 8 | - $4^{2}$ | $8 \cdot 1$ | N |
| 3289 | 271197 | C 3436 |  |  | $36 \quad 24.72$ | 7519 | 40 | 271429.8 | 170 | 539 | 11.5 | + 40 | + 31 | 9.4 |  |
| 3290 | 28 1211 | C 3438 | 991-2-3 |  | 3631.51 | 7997 | 44 | 285131.0 | 182 | 545 | 13.1 | 14 | 81 | $9 \cdot 4$ |  |
| 3291 | 251392 | C 3440 | 1006-7 | 12816 | 63638.86 | $+3.7033$ | -.0037 | $253317 \cdot 0$ | - 3.192 | -.532 | 11.3 |  | - 46 | $7 \cdot 8$ | Ma |
| 3292 | 291317 | C 3439 |  |  | 3639.47 | 8252 | 45 | $2942 \quad 18.2$ | 192 | 549 | 13.0 | + 45 | - 26 | 9.4 |  |
| 3293 | 311389 | L 2776 |  |  | $3643 \cdot 14$ | 8936 | 51 | $315347 \cdot 6$ | 198 | 559 | 12.3 | + 5 | - 34 | $8 \cdot 2$ | B 9 |
| 3294 | 251393 | C 3442 | 1013-4 | 12820 | $3645 \cdot 05$ | 7003 | 37 | $25 \begin{array}{lllllll}26 & 58.4\end{array}$ | 201 | 532 | 12.5 | - 7 | - 9 | 9.0 | Go |
| 3295 | 291319 | C 3441 | 1005 | 12809 | $3647 \cdot 31$ | 8194 | 45 | 293143 | 204 | 548 | 11.5 | $+5^{2}$ | - 36 | 8.7 |  |
| 3296 | 291320 | C 3443 | 1009-10 | 12812 | $63649 \cdot 42$ | $+3.8177$ | . 0045 | $292742 \cdot 3$ | $3 \cdot 206$ | - 548 | 10.9 | + 26 | - 9 | $7 \cdot 46$ | B 9 |
| 3297 | 241365 | C 3445 |  |  | 3654.03 | 6829 | 36 | $244952 \cdot 6$ | 214 | 528 | 13.5 | - 4 | - 17 | $9 \cdot 4$ |  |
| 3298 | 271199 | C 3444 |  |  | 3656.02 | 7598 | 42 | 273119.0 | 217 | 539 | 13.3 | + 16 | + 5 | 9-1 |  |
| 3299 | 301305 | L. 2782 |  |  | $\begin{array}{lll}37 & 5 \cdot 13\end{array}$ | 8485 | 48 | $3028 \quad 8.0$ | 229 | 552 |  | + 16 | - 39 | $8 \cdot 2$ |  |
| 3300 | $30 \quad 1306$ | C 3447 |  |  | $37 \quad 9.72$ | 8362 | 47 | $30 \quad 4 \quad 27 \cdot 4$ | 237 | 550 | 11.9 | - 1 | - 27 | $8 \cdot 7$ |  |

[^18]3283. Burnham 3554.
3291. Burnham 3550.


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Туре. |
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|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.ooor. }}{\text { R.A. }}$ | Dec. <br> ".ool. |  |  |
|  | - |  |  |  | $\mathrm{ha}^{\mathrm{m}}$ | 8 | s | - , |  | " |  |  |  |  |  |
| 3351 | 241394 | B 2586 |  |  | 64119.43 | $+3.6646$ | -.0040 | 241443.4 | - 3.594 | -. 524 | 12.3 | + 17 | - 44 | 8.6 |  |
| 3352 | 241397 | B 2589 |  |  | 4129.75 | 6655 | $4{ }^{2}$ | $241645 \cdot 6$ | 610 | 524 | 12.5 | - 2 | - 63 | $8 \cdot 6$ |  |
| 3353 | 261350 | C 3487 |  | 12990 | $4131 \cdot 46$ | 7249 | 45 | $\begin{array}{lllllllllllllllllll} & 23 & 37.6\end{array}$ | 612 | 533 | 12.4 | + 3 | - 14 | 8.7 | $\mathrm{K}_{2}$ |
| 3354 | 261351 | C 3488 | 1173-4 | I2993 | $4135 \cdot 10$ | 7324 | 46 | $26 \quad 39 \quad 27 \cdot 8$ | 617 | 534 | 12.8 | - 7 | $\begin{array}{r} \\ +\quad 18 \\ \hline\end{array}$ | $8 \cdot 6$ | Fo |
| 3355 | 241399 | B 2591 |  |  | $4^{11} 37 \cdot 67$ | 6676 | 42 | 242132.4 | 622 | 524 | 12.5 | - 7 | - 18 | $9 \cdot 4$ |  |
| 3356 | 271226 | C 3489 |  |  | 64139.02 | $+3.7487$ | -.0048 | 271321.9 | - 3.623 | --536 | 12 | - 20 | - 56 | 8.2 | K o |
| 3357 | 241401 | C 3490 |  |  | 4143.93 | 6835 | 43 | $\begin{array}{lll}24 & 56 & 0.3\end{array}$ | 630 | 527 | 13.1 | - 7 | + 10 | $9 \cdot 1$ |  |
| 3358 | 301331 | L. 2818 |  | 12989 | 4144.33 | 8534 | 56 | 3043 I.0 | 630 | 551 | 10.3 | - 13 | $\square 28$ | 8.2 |  |
| 3359 | 281234 | C 3492 |  |  | 4152.44 | 7799 | 51 | $\begin{array}{llllllllll}28 & 17 & 33.2\end{array}$ | 642 | 540 | 12.2 | + 14 | - 19 | 9.0 | K 2 |
| 3360 | 261355 | C 3493 | 1187 | 13004 | $4152 \cdot 87$ | 7199 | 46 |  | 643 | 532 | 11.9 | + 14 | - 34 | 8.6 | A 0 |
| 3361 | 311413 | L2819 | 1179-80 | 12995 | $64156 \cdot 12$ | $+3 \cdot 8873$ | -.0060 | $\begin{array}{llll}31 & 48 & 4.3\end{array}$ | - 3.647 | --555 | 10.7 | + 24 | - 22 | $7 \cdot 99$ | F 8 |
| 3362 | 301332 | C 3494 | 1185 | 13000 | 4159.73 | 8377 | 56 | $301246 \cdot 9$ | 653 | 549 | 11.3 | - 9 | + | 8.01 | G 5 |
| 3363 | 251433 | C 3496 |  |  | $42 \quad 4 \cdot 70$ | 7077 | 45 | 2548 1.6 | 660 | 530 | 12.5 | $\bigcirc$ | - 24 | 9.0 |  |
| 3364 | 311414 | L 2821 |  | 13003 | $42 \quad 8.68$ | 8665 | 58 |  | 666 | 552 | 10.9 | - |  | 7.8 | A 2 |
| 3365 | 241404 | B 2599 | 1204 |  | 4228.99 | 6642 | 42 | $24 \quad 1459.2$ | 695 | 524 | 10.5 | 17 | - 12 | 8.7 | A 0 |
| 3366 | 311415 | L 2827 |  |  | $642 \begin{array}{lll} \\ 42.01\end{array}$ | $+3.8725$ | -. 0060 | $\begin{array}{llll}31 & 20 & 41 \cdot 8\end{array}$ | - 3.699 | $-.553$ | $1 \mathrm{I} \cdot 6$ | + 6 | - 20 | 8.6 |  |
| 3367 3368 | $\} 261358$ | [C3503 |  |  | $4232 \cdot 96$ | 7361 7861 | 47 | $\begin{array}{llll}26 & 48 & 6 \cdot 3\end{array}$ | 700 | 534 | 11.2 | + 26 | - 30 | 9.0 |  |
|  |  | C 3504 |  |  | $4234 \cdot 70$ | 7361 | 47 |  | 703 | 534 | $10 \cdot 9$ | + 26 | - 30 | $9 \cdot 0$ |  |
| [ $\begin{aligned} & 3369 \\ & 3370\end{aligned}$ | $\begin{array}{ll}29 & 1351 \\ 31 & 1416\end{array}$ | C 3502 L 2829 | 1201 1206 | 13 | $\begin{array}{ll}42 & 34 \cdot 84 \\ 42 & 51 \cdot 26\end{array}$ | 8090 8730 | 53 60 | $\begin{array}{ccc}29 & 16 & 52 \cdot 7 \\ 31 & 22 & 1 \cdot 3\end{array}$ | 703 726 | 544 553 | 10.1 10.8 | $+\quad 4$ $+\quad 37$ + | $-\quad 55$ $-\quad 38$ | 8.2 8.6 | K <br> F 2 |
| 3371 | 241406 | B 2604 | 1215 |  | 64259.04 | $+3 \cdot 6698$ | -. 0044 | 242748.9 | $-3.738$ | $-5^{2} 4$ | 10.5 | + 16 | - 150 | 8.0 | F 8 |
| 3372 | 301336 | C 3507 | 1218 |  | 43 21.32 | 8373 | 58 | $\begin{array}{lllllllllll}30 & 13 & 43.6\end{array}$ | 769 | 548 | 10.4 | + 19 | - 13 | 8.8 |  |
| 3373 | 281244 | C 3508 |  |  | 4322.42 | 7928 | 54 | 284524.5 | 771 | 541 | 12.2 | - 12 | - 23 | 9.4 |  |
| 3374 | 271236 | C 3510 | 1224 |  | 43 32.92 | 7496 | 52 | 271732.4 | 786 | 535 | 10.4 | - 23 | - 26 | 6.58 | A 2 |
| 3375 | $28 \quad 1246$ | C 3512 | 1226 |  | $43 \quad 36 \cdot 65$ | 7699 | 53 | 275923.4 | 792 | 538 | 11.8 | 23 | + 18 | 9.0 |  |
| 3376 | 281247 | C 3513 |  |  | 64338.40 | $+3.7893$ | -.005 | 283836.6 | $-3.795$ | --541 | 11.2 | + 28 | - 39 | 8.2 | G 5 |
| 3377 | 281248 | C 3515 | 1239 |  | $44 \quad 1.03$ | - 7824 | 55 | $28 \quad 25$ 11.8 | 826 | 540 | 10.7 | + 9 | - 28 | $8 \cdot 4$ | K 5 |
| 3378 | 281250 | C 3517 | 1245 |  | $44 \quad 6.59$ | 7975 | 55 | $28 \quad 5542 \cdot 4$ | 835 | 542 | $\cdot \mathrm{I}$ | - 38 | - 21 | $8 \cdot 7$ |  |
| 3379 | 311418 | L. 2836 | 1240 | 13063 | $44 \quad 9 \cdot 67$ | 8808 | 64 |  | 839 | 554 | 10.7 | $+16$ | - 22 | 8.05 | G 5 |
| 3380 | $25 \quad 1446$ | C 3518 | 1248-9 | 13074 | $44 \quad 10.19$ | 7006 | 47 | 25 25 | 839 | 529 | 11.1 | + 14 | - 24 | $7 \cdot 19$ | K ${ }_{2}$ |
| 3381 | 241414 | C 3520 |  |  | $644 \begin{array}{lll}6 & 15.11\end{array}$ | $+3.6796$ | -.0046 | $24 \quad 5017.6$ | - 3.846 | $-525$ | 12.3 | - ${ }^{1}$ | - 22 | 9.5 |  |
| 3382 | 291361 | C 3519 |  | 13071 | 4416.60 | 8191 | 57 | 293978 | -849 | 545 | 12.1 | + 11 | - 29 | $8 \cdot 7$ | B 9 |
| 3383 | $27 \quad 1240$ | C 3521 | 1252 |  | $4425 \cdot 79$ | 7437 | 51 | $\begin{array}{llll}27 & 6 & 22.8\end{array}$ | 862 | 534 | 11.3 | $+\quad 3$ | - 2 | $8 \cdot 2$ | A 0 |
| 3384 | 241417 | B 2619 | 1238 |  | $4446 \cdot 44$ | 6634 | 45 | $241541 \cdot 1$ | 891 | 522 | $10 \cdot 7$ | - 12 | - 66 | 8.4 | F 5 |
| 3385 | 311420 | L 2839 | 1255 |  | 44 47.10 | 8893 | 65 | $315526 \cdot 1$ | 892 | 555 | 11.9 | + | - 24 | 8.8 | A 0 |
| 3386 | 311421 | L 2840 |  | 13085 | $64449 \cdot 11$ | $+3.8759$ | -.0063 | $\begin{array}{llll}31 & 30 & 2.5\end{array}$ | $-3.895$ | --553 | 10.4 | + 10 | - 20 | 8.4 |  |
| 3387 | $25 \quad 1458$ | C 3533 |  |  | $45 \quad 12.88$ | 6843 | $4^{8}$ | $\begin{array}{llll}25 & 1 & 28.7\end{array}$ | 929 | 525 | 11.5 | - 18 | + 44 | 8.76 | K o |
| 3388 | 261370 | C 3532 | 1276-7 | 13112 | $45 \quad 13.17$ | 723 I | 49 | $26 \quad 2414.5$ | 930 | 531 | 11.3 | - 9 | - 9 | 8.0 | K o |
| 3389 | 251459 | C 3534 | 1279 |  | 4513.58 | 6939 | 49 | 252213.0 | 931 | 527 | 11.8 | + 2 | - 14 | 8.8 |  |
| 3390 | 261371 | C 3535 |  | 13122 | $45 \quad 26 \cdot 51$ | 7115 | 50 | $26 \quad 00.8$ | 949 | 529 | 12.1 | + 9 | - 39 | 8.8 | F 8 |
| 3391 | 251460 | C 3536 | 1282-3 | 13125 | $64526 \cdot 80$ | +3.7079 | -.0050 | $25 \begin{array}{llll}52 & 11.9\end{array}$ | - 3.949 | $-529$ | 10.0 | 11 | - 208 | 6.91 | F 8 |
| 3392 | 301345 | C 3537 |  | 13118 | $45 \quad 32 \cdot 54$ | 8276 | 61 | 2957 33•1 | 958 | 546 | 11 | 17 $+\quad 17$ | - 14 | $8 \cdot 16$ | K o |
| 3393 | 291374 | C 3538 | 1285 |  | $45 \quad 37 \cdot 12$ | 8062 | 59 | $\begin{array}{llll}29 & 15 & 6.1\end{array}$ | 964 | 54.2 | 10.7 | + 13 | - 5 | 8.2 | A 2 |
| 3394 | 271248 | C 3541 |  |  | 4546.06 | 7657 | 56 |  | 977 | 537 | 11.5 | - 3 | - 10 | 9.4 |  |
| 3395 | 261373 | C 3542 | 1295 |  | $45 \quad 57 \cdot 29$ | 7332 | 52 | $\begin{array}{ll}26 & 46 \quad 10 \cdot 2\end{array}$ | 992 | 532 | 12.5 | + 10 | 26 | $9 \cdot 4$ |  |
| 3396 | 251465 | C 3544 | 1304 |  | 64612.85 | $+3.6874$ | -. 0049 | $\begin{array}{lllll}25 & 9 & 18.8\end{array}$ | $-4.014$ | --525 | 12.5 | - 26 | - 33 | 9.1 |  |
| 3397 | 241427 | C 3545 |  |  | $46 \quad 12 \cdot 38$ | 6757 | 48 |  | 014 | 523 | 11.5 | - 13 | - 15 | 9.0 | A 3 |
| 3398 | 261375 | C 3547 |  | 13148-9 | $4618 \cdot 27$ | 7255 | 52 | $2630 \quad 29.5$ | 22 | 530 | 10.5 |  | - 44 | $8 \cdot 1$ | A 3 |
| 3399 | 251469 | C 3550 | 1309-10 | 13162 | 4625.09 | 7045 | 51 | $\begin{array}{llll}25 & 46 & 10.4\end{array}$ | 032 | 527 | 11.5 | $+$ | + 38 | $6 \cdot 62$ | A 2 |
| 3400 | 281260 | C 3549 |  |  | $4625 \cdot 37$ | 7898 | 59 | 28438.0 | 032 | 540 | 12.7 | + | - 16 | $9 \cdot 4$ |  |


| No. | B.D. | A.G.C. | W.13. (2) | Lalando. | R.A. $1910^{\circ} \mathrm{O}$. | Precession. | Sec. Var. | Dec. $1910 \cdot 0$. | Precession. | Soc. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.A. } \\ \text { s.ooo } . \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N. } \mathrm{oci} \text {. } \end{aligned}$ |  |  |
|  | - ${ }^{\circ}$ |  |  |  | h mis ${ }^{\text {b }}$ | ${ }^{8}$ | ${ }^{8}$ | - ' " |  | " |  |  |  |  |  |
| 3401 | 27 27 26 1250 | C 3551 |  |  | $\begin{array}{llll}6 & 46 & 27 \cdot 61\end{array}$ | $+3.7577$ | -.0056 | $27 \begin{array}{lll}27 & 3769\end{array}$ | - 4.037 | - 535 | 13.3 | + 28 | 28 | $9 \cdot 4$ |  |
| 3402 | 26 1376 <br> 20  | C 3552 |  |  | $4629 \cdot 80$ | 7202 814 |  |  | 039 | 530 | 12.7 | - 2 | - 23 | 9.0 |  |
| 3403 3404 | $\begin{array}{lll}29 & 13882 \\ 30 & 1352\end{array}$ | C 3556 |  | 13176 | 4658.23 | 8144 838 |  | 293314.4 | 080 | 543 | 9.7 | $\bigcirc$ | - 100 | 7.66 | F |
| 3404 | 301352 | L 2856 |  |  | $47 \quad 9 \cdot 65$ | 8389 |  | 3021148 | 096 | 545 | 11.9 | + 11 | - 19 | 9.0 |  |
| 3405 | 25.1476 | C 3560 |  |  | $47 \quad 9.74$ | 7045 |  | 254788 | -096 | 526 | 11.7 | + 35 | + 3 | $8 \cdot 7$ |  |
| 3406 | 251478 | ${ }^{\text {C }} 3561$ | $1331-3$ |  | $\begin{array}{llll}6 & 47 & 13.67\end{array}$ | +3.6847 | -. 0050 | $\begin{array}{llll}55 & 4 & 41 \cdot 9\end{array}$ | -4.102 | $-522$ | 12.6 | - 11 | - 69 | 8.91 | G 5 |
| 3407 | 31.1428 | L 2857 | 1323 |  | 47 16.15 | 8763 | 69 | $313416 \cdot 9$ | 105 | 551 | 12.5 | - 38 | - 14 | $9 \cdot 0$ |  |
| 3408 | 251479 | C 3562 | 1335 | 13194 | 4720.93 | 7069 |  | $\begin{array}{llllllllll}25 & 52 & 24\end{array}$ | 112 | 526 | 10.5 | - 30 | + 10 | $7 \cdot 64$ | Fo |
| 3409 | $28 \quad 1266$ | C 3563 | 1334 |  | 47 24.89 | 7921 | 61 | 2849 II•I | 118 | 539 | 12.3 | + $\quad 37$ | $+\quad 9$ | 8.5 |  |
| 3410 | $28 \quad 1267$ | C 3564 | 1336 |  | 47 33.10 | 7938 | 61 | $28 \quad 5240 \cdot 4$ | 129 | 540 | 12.1 | + | - 53 | 8.7 |  |
| 3411 | 251482 | C 3566 | 1344 | 13204 | 64733.88 | +3.6941 | 0052 | $\begin{array}{llll}25 & 25 \quad 18.3\end{array}$ | - 4.131 | --525 | II•7 | - 15 | - 26 | $7 \cdot 36$ | A 2 |
| 3412 | 281268 | C 3565 |  |  | 4736.81 | 7773 | 60 | $28 \quad 19 \quad 20 \cdot 3$ | ${ }^{13} 5^{\circ}$ | 537 | 13.1 | + 7 | + | $9 \cdot \mathrm{I}$ |  |
| 3413 | 291389 | C 3567 | 1341 |  | $4740 \cdot 98$ | 8176 |  | $294030 \cdot 2$ | 141 | 542 | 12.9 | $+3$ | - 9 | 8.8 |  |
| 3414 | 301354 | L 2859 | 1337 | 13202 | $4741 \cdot 73$ | 8458 | 66 | $\begin{array}{llll}30 & 36 & 4 \cdot 9\end{array}$ | 142 | 547 | 11.5 | + 14 | - 26 | 8.4 | A 0 |
| 345 | 291391 | C 3568 | 1347 | 13210 | 4754.72 | 8160 | 63 | $293742 \cdot 5$ | 161 | 542 | II.I | + 13 | - 34 | $8 \cdot 0$ | K o |
| 3416 | 311433 | L 2861 |  | 13213 | $\begin{array}{lll}6 & 48 & 9 \cdot 48\end{array}$ | $+3.8651$ | 0069 | $\begin{array}{lllll}31 & 13 & 58.3\end{array}$ | - 4.179 | - 550 | 12.5 | 17 | - 35 | 7.8 | G 5 |
| 3417 | 28127 I | C 3571 |  |  | $48 \quad 16.08$ | 7820 | 61 | $282954 \cdot 1$ | 191 | 537 | 11.9 | 18 | - 17 | 8.0 | F 5 |
| 3418 | 241437 | C 3573 |  |  | $48 \quad 20 \cdot 88$ | 6784 | 51 |  | 198 | 522 | 13.1 | - 19 | - 5 | $9 \cdot 4$ |  |
| 3419 | 241440 | B 2653 |  |  | $48 \quad 25 \cdot 05$ | 6685 | 49 | $2431 \quad 1.0$ | 203 | 521 | 12.9 | + 13 | + 5 | $9 \cdot 4$ | A O |
| 3420 | $24^{1} 442$ | B 2654 | 1364 |  | $4^{8} \quad 25 \cdot 98$ | 6553 | 48 | $\begin{array}{lllllllll}24 & 2 & 15.3\end{array}$ | 205 | 519 | 13.3 | - 14 | - $4^{8}$ | 8.8 | F 8 |
| 3421 | 311434 | L2865 | 1357 | 13225 | $6 \begin{array}{lll}68 & 26 \cdot 13\end{array}$ | +3.8769 | -0070 | $\begin{array}{llll}31 & 36 & 55\end{array}$ | -4.205 | - 551 | 12.7 | 4 $+\quad 4$ | - 32 | 8.6 | G 5 |
| 3422 | 271256 | C 3574 | 1362 |  | $4^{8} \quad 29 \cdot 92$ | 7503 | 58 | $\begin{array}{lll}27 & 25 & 1.2\end{array}$ | 210 | 532 | 13.3 | + 57 | - 39 | $9{ }^{-1}$ |  |
| 3423 | 291394 | C 3575 |  |  | $48 \quad 43 \cdot 44$ | 8027 |  | $\begin{array}{llll}29 & 12 & 8.7\end{array}$ | 229 | 540 | 12.5 | - 52 | + | 8.8 |  |
| 3424 | 291395 | C 3577 | 1370 |  | $48 \quad 48 \cdot 2 \mathrm{I}$ | 7984 | 63 | $\begin{array}{llllll}29 & 3 & 39.8\end{array}$ | 236 | 539 | 12.5 | + 26 | - 27 | $9 \cdot 1$ |  |
| 3425 | $27 \quad 1258$ | C 3578 | 1371 |  | $48 \quad 49 \cdot 54$ | 7545 | 60 | 273414.0 | 239 | 532 | 11.9 | + 12 | - 30 | 8.6 | A 0 |
| 3426 | 26 1 387 <br> 10   | C 3579 | - 1376 | 13259 | 64853.91 | $\begin{array}{r}+3.7278 \\ \hline 824\end{array}$ | -.0056 | $\begin{array}{llll}26 & 38 & 34 \cdot 3\end{array}$ | -4.245 | -530 | 10.9 11.8 | - 8 | - 12 | 7.58 | ${ }^{\text {A }}$ - |
| 3427 | 301357 | C 3580 | 1377 | 13258 | $49 \quad 3.04$ | 8247 | 66 | 295625.0 | 258 | 543 | 11.8 | + 13 | - 2 | 7.91 | B 8 |
| 3428 | 311438 | L2870 |  | 13257 | $49 \quad 8 \cdot 13$ | 8730 | 71 | 313037.4 | 265 | 549 | 13.0 | + 10 | - 9 | $9 \cdot 0$ | G 5 |
| 3429 | 24145 I | B 2660 |  | $13279-80$ | 4913.55 | 6637 | 51 | 242137.9 | 273 | 519 | 11.7 | - 35 | - 137 | $6 \cdot 84$ | F 8 |
| 3430 | $26 \quad 1388$ | C 3584 | 1385 |  | $49 \quad 20.09$ | 7156 | 56 |  | 283 | 527 | 12.0 |  | - 15 | 9.0 |  |
| 3431 | 311441 | L2871 | 1383 |  | 64928.74 | $+3.8582$ | -.0069 |  | - 4.295 | --547 | 12.3 | - | - 5 | 8.6 | G 5 |
| 3432 | 251492 | C 3585 |  |  | $4930 \cdot 72$ | 6992 | 55 | $\begin{array}{llllllllll}58 & 51-3\end{array}$ | 29.8 | 525 | 13.3 | + 34 | - 39 | $9 \cdot 4$ |  |
| 3433 | 311442 | L 2872 |  | 13274 | $4930 \cdot 86$ | 8839 | 73 | 315154.1 | 298 | 551 | 12.9 | - 7 | + 2 | $8 \cdot 7$ | Go |
| 3434 | 261390 | C 3587 | 1392 |  | 4931.53 | 7185 | 57 | $261947 \cdot 7$ | 299 | 527 | 13.5 | + 4 | - 24 | $8 \cdot 6$ |  |
| 3435 | 271264 | C. 3588 | 1393 | 13291 | $4936 \cdot 38$ | 7510 | 60 | 272759.6 | 305 | 532 | 13.1 | + 14 | - 16 | 8.8 | Fo |
| 3436 | 311443 | L 2873 |  |  | $64936 \cdot 81$ | +3.8646 | 0071 | $\begin{array}{llll}31 & 15 & 3.9\end{array}$ | - $4 \cdot 306$ | $-\cdot 548$ | 12.9 | 3 | - 33 | $8 \cdot 7$ |  |
| 3437 |  |  |  |  | 49 42.16 | 8346 | 68 | $\begin{array}{llll}30 & 16 & 55 \cdot 2\end{array}$ | 313 | 544 | 12.5 | + 194 | - 245 |  |  |
| 3438 | 301359 | L 2875 | 1391 | 13 | $494^{4 \cdot 13}$ | 8346 | 68 | $\begin{array}{llll}30 & 16 & 55 \cdot 2\end{array}$ | 313 | 544 | 10.5 | +194 | - 245 | 8.1 | G. 0 |
| 3439 |  |  |  |  | $\begin{array}{ll}49 & 42 \cdot 21 \\ 49 & 43.68\end{array}$ | 8346 | 68 58 | $\begin{array}{llll}30 & 16 & 53.6\end{array}$ | 313 | 544 | 10.1 | $\begin{array}{r} \\ +\quad 194 \\ \hline\end{array}$ | - 245 |  |  |
| 3440 | 261392 | C 3590 |  |  | $4943 \cdot 68$ | 7274 | 58 | $263849 \cdot 7$ | 316 | 529 | 12.5 |  | - II | $9 \cdot 4$ | A 2 |
| 3441 | 251496 | C 3591 | 1404 | 13299 | $64946 \cdot 64$ | $+3.6946$ | 0054 | $\begin{array}{llll}25 & 29 & 20.5\end{array}$ | $4 \cdot 320$ | -. 524 | 13.1 | $30^{*}$ | $+13^{*}$ | $5 \cdot 77$ | Go |
| 3442 | 291400 | C 3592 |  |  | 4954.73 | 8056 | 67 | $291932 \cdot 0$ | 332 | 539 | 12.8 | - 2 | - 18 | $9 \cdot 0$ |  |
| $34+3$ | 311446 | L 2876 |  |  | $4956 \cdot 72$ | 8797 | 74 | 314432.8 . | 335 | 550 | 12.1 | 32 | - 27 | 9.0 |  |
| 3444 | 241457 | B 2669 |  | $13313-4$ | $\begin{array}{lll}50 & 8.28\end{array}$ | 6567 | 51 | $24 \quad 721.4$ | 350 | 518 | 14.1 |  | - $4^{2}$ | $7 \cdot 67$ | B 3 |
| 3445 | 301361 | L 2878 | 1407 |  | $50 \quad 10 \cdot 75$ | 8504 | 70 | $30 \quad 48 \quad 26 \cdot 9$ | 354 | 546 | 14.3 | - II | - 3 I | $8 \cdot 7$ | Fo |
| 3446 | 271269 | C 3596 | 1410 | 13309 | 65011.16 | $+3.7477$ | . 0061 | $272153.2{ }^{\circ}$ | $4 \cdot 354$ | --531 | 13.9 | - I | - 11 | 8.2 | A 2 |
| 3447 | 291402 | C 3595 |  |  | 5011.44 | 8007 | 66 | 29 IO 26.4 | 354 | 539 | 14.5 | + 4 | - 2 | $9 \cdot 1$ |  |
| 3448 | $2{ }^{2} 1458$ | B 2671 |  |  | $5012 \cdot 33$ | 6711 | 53 | $243855 \cdot 5$ | 356 | 521 | 13.1 | + | - 25 | 9.4 |  |
| 3449 | 271270 | C 3598 | 1416 | 13315 | 5019.06 | 7486 | 61 |  | 366 | 532 | II.1 | + 2 | - 6 | 6.97 | B 9 |
| 3450 | $30 \quad 1363$ | L 2881 |  |  | $50 \quad 20 \cdot 85$ | 8451 | 70 | $3038 \quad 27.5$ | 369 | 546 | 14.2 | $+30$ | + 23 | 9.4 | A 5 |


| No. | B.D | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Doc. 1910.0. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & 8.000 \mathrm{I} . \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { "- } 1 . \end{aligned}$ |  |  |
|  | 。 |  |  |  | h m s | 8 | 8 | - , " | * | " |  |  |  |  |  |
| 3451 | 301364 | L 2882 |  |  | 65022.07 | $+3.8462$ | -. 0070 | $304039 \cdot 1$ | -4.370 | -. 546 | 14.3 | + 21 | 3 | 9. 1 |  |
| 3452 | 291403 | C 3599 | 1417 |  | 5024.93 | 8146 |  | $2938 \quad 29.5$ | 374 | 541 | 12.9 | + | - 32 | $8 \cdot 6$ | K 2 |
|  | 251499 | C 3602 |  |  | 5036.04 | 6999 |  | $254135 \cdot 1$ | 390 | 525 | 13.1 | + 13 | - 24 | $9 \cdot 0$ |  |
| 3454 | 291405 | ${ }^{\text {C }} 3601$ |  |  | $5037 \cdot 19$ | 8046 | 68 | $2918{ }^{2}+2 \cdot 5$ | 392 | 539 | 13.8 | - 6 | - 12 | 9.4 |  |
| 3455 | 261396 | C 3605 | 1424 |  | $5042 \cdot 26$ | 7106 | 57 | $26 \quad 434 \cdot 2$ | 399 | 526 | 13.2 | + | - $4^{2}$ | 9.4 |  |
| 3456 | 271273 | C 3606 | 1423 |  | $65043 \cdot 5 \mathrm{I}$ | $+3.7365$ | -0060 | 2659 19.0 | $-4.401$ | -.530 | 12.5 | - 31 | - 50 | $9 \cdot 5$ |  |
| 3457 | 251502 | C 3607 | 1431 | 13334 | $5047 \cdot 59$ | 6839 | 55 | $25 \quad 7 \quad 2.4 .2$ | 407 | 522 | 10.5 | - 19 | + 44 | $7 \cdot 61$ | A 3 |
| 3458 | 241461 | B 2677 |  |  | $5050 \cdot 33$ | 6691 | 54 | 243528.6 | 410 | 519 | 13.4 | + 1 | - 54 | 9.4 |  |
| 3459 | 291407 | C 3608 |  |  | 5053.04 | 7975 | 67 |  | 414 | 538 | 13.5 | + ${ }^{8} 8$ | - 4 | $8 \cdot 8$ |  |
| 3460 | 241463 | B 2678 | 1435 |  | $5053 \cdot 80$ | 6606 | 53 | $\begin{array}{lllll}24 & 16 & 56.9\end{array}$ | 416 | 518 | 12.7 | + 8 | - 34 | 9.4 |  |
| 3461 | 311449 | L 2887 | 1425 | 13328 | $65056 \cdot 30$ | +3.8714 | -0074 | $\begin{array}{llll}31 & 30 & 8.2\end{array}$ | $-4.418$ | --548 | $\cdot 1$ |  | - 23 | 8.4 | G o |
| 3462 | 261398 | C 361I |  |  | $51 \quad 3 \cdot 82$ | 7068 | 58 | 255659.9 | 430 | 525 | 14.4 | - 7 | - 45 | 9.4 |  |
| 3463 | 251505 | C 3612 |  |  | $\begin{array}{lll}51 & 12.37\end{array}$ | 6981 | 57 | 253834.2 | 441 | 524 | $12 \cdot 3$ | + 14 | - 25 | $8 \cdot 6$ |  |
| 3464 | 301368 | L 2890 | 1440 | 13338 | $51 \quad 15 \cdot 96$ | 8293 | 70 | $308849 \cdot 1$ | 447 | 543 | 12.5 | - $\quad 5$ | - 22 | 8.4 | K o |
| 3465 | 241467 | B 2681 | 1447 |  | 5118.15 | 6640 | 53 | $242452 .+$ | 450 | 519 | 12.3 | + 15 | - 30 | 8.8 | K o |
| 3466 | 251507 | C 3613 | 1449-50 |  | 65122.75 | $+3 \cdot 6783$ | 0055 | 24564.5 | 4.457 | -.521 | 13.5 | +. 27 | + 6 | 8.81 | A 2 |
| 3467 | $27 \quad 1276$ | C 3614 | I 448 |  | 5127.54 | 7625 | 64 | $275421 \cdot 8$ | 464 | 533 | 12.7 | + 3 | - 10 | $9 \cdot 0$ | A |
| 3468 | 241470 | ${ }^{\text {C }} 3615$ | 1452 | 13363-5 | 5129.53 | 6734 | 55 | $\begin{array}{lllllll}24 & 45 & 39.9\end{array}$ | 467 | 520 | 11.3 | - 8 | - 36 | $6 \cdot 96$ | G 5 |
| 3469. | 251509 | C 3616 | ${ }^{1} 453-4$ | 13364 | $5130 \cdot 25$ | 6821 | 56 | $25+32 \cdot 2$ | 467 | 521 | 12.0 | 22 | + 6 | $7 \cdot 59$ | A0 |
| 3470 | $30 \quad 1369$ | L 2892 | 1446 |  | $5132 \cdot 73$ | 8467 | 72 | $\begin{array}{llll}30 & 43 & 14.9\end{array}$ | 471 | 545 | 13.2 | 10 | - 8 | 8.1 | K o |
| 3471 | 251510 | C 3617 |  |  | 6 51 $37 \cdot 82$ | $+3.6995$ | -. 0057 | $25 \quad 42 \quad 6 \cdot 4$ | $-4.478$ | -. 524 | 12.7 | $-4^{8}$ | - | 9.0 |  |
| 3472 | 251511 | C 3620 |  |  | $5139 \cdot 26$ | 6869 | 56 | $\begin{array}{llll}25 & 15 & 3.8\end{array}$ | 480 | 522 | 13.7 | - 2 | - 17 | $9 \cdot 4$ |  |
| 3473 | 301371 | L 2893 |  |  | $5141 \cdot 16$ | 8395 | 71 | $\begin{array}{llll}30 & 29 & 20 \cdot 3\end{array}$ | 482 | 544 | 13.1 | + 5 | - 13 | $9 \cdot 1$ |  |
| 3474 | 301373 | L. 2894 |  |  | 5148.31 | 8515 | 73 |  | 492 | 546 | 12.5 | + 9 | - 5 | $8 \cdot 6$ | K 5 |
| 3475 | $3{ }^{1} 1453$ | L 2895 | 1457 | 13361 | $51+9.45$ | 8654 | 74 | $\begin{array}{llll}31 & 20 & 0.5\end{array}$ | 494 | 548 | 11.9 | + 18 | - 43 | $8 \cdot 6$ | K 2 |
| 3476. | 301375 | L 2897 | 1461 |  | $6 \quad 51582.07$ | $+3.8433$ | -.0072 | $\begin{array}{lllllllll}30 & 37 & 15 \cdot 2\end{array}$ | - +498 | -.545 | 13.2 | + 9 | - 76 | 9.4 |  |
| 3477 | 271280 | C 3622 |  |  | $\begin{array}{ll}52 & 12.62\end{array}$ | 7357 | 62 | $26 \quad 5936.4$ | 528 | 529 | 13.0 | - 9 | - | 9.4 | F 8 |
| 3478 | 261404 | C 3623 |  |  | 5218.06 | 7269 | 61 |  | 535 | 528 | 11.7 | + 16 | - 24 | 9.0 | K 2 |
| 3479 | 241477 | C 3624 | ${ }^{1} 476$ |  | 5220.00 | 6774 | 56 | $\begin{array}{llll}24 & 55 & 19.5\end{array}$ | 538 | 521 | 12.9 | - 21 | - 25 | 9.01 | $\mathrm{F}^{2}$ |
| 3480 | 311457 | L 2901 |  | 13383 | 5221.57 | 8717 | 77 | $\begin{array}{lll}31 & 33 & 1.5\end{array}$ | 54 I | $54^{8}$ | $12 \cdot 1$ | 62 | - $4^{2}$ | 8.6 | Go |
| 3481 | 271281 | C 3626 |  |  | $6 \quad 5.226 .38$ | +3.7397 | -0062 | $\begin{array}{lllll}27 & 7 & 55.9\end{array}$ | - 4.546 | -.530 | 11.7 | - 8 | - | 8.4 | G 5 |
| 3482 | 271282 | C 3627 |  |  | $5233 \cdot 10$ | 7574 | 65 | $2745 \quad 26 \cdot 3$ | 556 | 531 | 11.5 | - 12 | + | $8 \cdot 4$ |  |
| 3483 | 251517 | C 3628 | $1483-4-5$ |  | 5237.71 | 6819 | 57 | $\geq \begin{gathered}-5115\end{gathered}$ | 563 | 522 | 11.8 | - 15 | - 31 | $8 \cdot 46$ | K 0 |
| 3484 | 291415 | C 3629 |  |  | $5242 \cdot 78$ | 7928 | 69 | $\begin{array}{llll}28 & 58 & 0.2\end{array}$ | 570 | 537 | 12.9 | + 46 | - 101 | $9 \cdot 0$ |  |
| 3485 | 291416 | C 3630 |  |  | 5252.64 | 8089 | 71 | $2930{ }^{4 \cdot 1}$ | 585 | 538 | 12.8 | + 29 | - 40 | $9 \cdot 1$ |  |
| 3486 | 241481 | C 3631 | 1494 |  | $6 \quad 5253.88$ | $+3 \cdot 6748$ | -.0057 | $245036 \cdot 2$ | - 4.586 | -.519 | II•I | - 13 | - 39 | 8.8 |  |
| 3487 | 251519 | C 3632 | 1498-9-500 |  | $5257 \cdot 21$ | 6803 | 57 | $25 \quad 231 \cdot 1$ | 592 | 521 | 9.9 | - 55 | - 6I | 8-11 | F 5 |
| 3488 | $28 \quad 1286$ | C 3633 | 1495 |  | $53 \quad 501$ | 7858 | 70 | 28442088 | 602 | 535 | 14.1 | + 32 | - 65 | 9.8 |  |
| 3489 | 291417 | C 3634 |  |  | $53 \quad 6.95$ | 8080 | 71 | $\begin{array}{llllll}29 & 29 & 15.7\end{array}$ | 605 | 538 | 14.0 | + 49 | - 16 | $9 \cdot 4$ |  |
| 3490 | $28 \quad 1287$ | C 3635 | 1502-3 |  | $53 \quad 13.90$ | 7870 | 70 | $28 \quad 4658 \cdot 3$ | 614 | 535 | 12.2 | 20 | 136 | $8 \cdot 6$ | K 2 |
| 3491 | 261405 | C 3636 |  |  | $65314 \cdot 62$ | $+3.7124$ | -.0062 | 261200 | $-4.616$ | $-525$ | $9 \cdot 8$ | $\rightarrow 120 *$ | + 86* | 6.10 | F 5 |
| 3492 | 251520 | C 3638 | 1508 |  | 5320.10 | 6912 | 59 | $25 \quad 26+5 \cdot 3$ | 623 | 522 | 11.9 | + 5 | - $\quad 1$ | 8.6 |  |
| 3493 | 271286 | C 3637 |  |  | 5321.81 | 7471 | 65 | $\begin{array}{llll}27 & 25 & 4.9\end{array}$ | 626 | 530 | 13.3 | + 38 | + 20 | $9 \cdot 5$ |  |
| 3494 | 261407 | C 3639 |  |  | 5322.32 | 7149 | 62 |  | 626 | 525 | 13.7 | + 14 | - 15 | $9 \cdot 4$ |  |
| 3495 | 291421 | C 3640 | 1509 |  | $53 \quad 30 \cdot 77$ | 8050 | 72 | $29^{\circ} 23+3.9$ | 639 | 538 | 13.0 | + 31 | + 4 | 9.I | F |
| 3496 | 251522 | C 3642 |  |  | $653 \quad 32.53$ | $+3.6777$ | -. 0058 | ${ }^{2}+5748 \cdot 0$ | $-4.641$ | - 520 | 13.3 | + | 5 | 9.0 |  |
| 3497 | 291422 | C 3641 |  |  | $\begin{array}{llll}53 & 36 \cdot 99\end{array}$ | 8161 | 73 | 294688.7 | 647 | 539 | 13.4 | + 17 | - 10 | $9 \cdot 0$ |  |
| 3498 | 261409 | C 3643 |  |  | $53 \quad 38.90$ | 7213 | 63 | $26{ }^{26} 3126 \cdot 7$ | 650 | 526 | 14.4 | + 24 | - 12 | 9.4 |  |
| 3499 | 261410 | C 3644 |  |  | $5340 \cdot 75$ | 7075 | 61 | $\begin{array}{llll}26 & 2 & 2.9\end{array}$ | 653 | 524 | 13.4 | - 2 | + II | $8 \cdot 7$ |  |
| 3500 | 251523 | C 3645 | 1518 |  | 5341.69 | 6773 | 58 | $24 \quad 57 \quad 0.9$ | 654 | 520 | 12.8 | 3 | - 19 | 8.8 |  |


| No. | B.D. | A.G.c. | W.B (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { \&.ooot. }}{\text { R.A. }}$ | Dec. $1.001 .$ |  |  |
|  | - |  |  |  | h m s | s | s | - , " | " | " |  |  |  |  |  |
| 3501 | $25 \quad 1524$ | C 3646 | 1521-3 |  | 653 49.61 | +3.6884 | -.0059 | 252122.0 | - 4.666 | --521 | 13.4 |  | 36 | 8.2 | G |
| 3502 | 251525 | C 3647 | 1524 |  | 5351.03 | 6885 | 59 | $252130 \cdot 8$ | 667 | 521 | 13.0 | - 27 | 36 | 8.8 | G |
| 3503 | 26 I411 | C 3649 |  |  | 53 54.61 | 7074 | 62 | $\begin{array}{lllll}26 & 2 & 13.7\end{array}$ | 672 | 524 | I2.1 | - 11* | - 14* | $6 \cdot 29$ | B 9 |
| 3504 | 261412 | C 3650 |  |  | 53 56.44 | 7110 | 61 | $\begin{array}{llllllllllll}26 & 10 & 2 \cdot 9\end{array}$ | 674 | 525 | 13.3 | 8 | - 22 | 9.0 |  |
| 3505 | 291425 | C 3654 | 1532 |  | $5423 \cdot 58$ | 8193 | 75 | $295345 \cdot 8$ | 714 | 540 | $9 \cdot 9$ | 5 | 18 | $7 \cdot 36$ | K o |
| 3506 | $30 \quad 1387$ | L 2914 |  |  | 65425.39 | $+3 \cdot 8349$ | -.0076 | 302438.6 | $-4.715$ | --541 | II•I | + 2 | 35 | 7.76 | G 5 |
| 3507 | 271292 | C 3657 | 1544-5 |  | $5439 \cdot 00$ | 7343 | 65 | 27 0 10.1 | 735 | 527 | 11.8 | + 15 | + II | $7 \cdot 8$ | K o |
| 3508 | 271294 | ${ }_{\text {C }} 3664$ | 1557 |  | $55 \quad 7.86$ | 7451 |  | $27 \begin{array}{lllllllll} & 23 & 36 \cdot 9\end{array}$ | 776 | 529 | 13.3 | $+\quad 53$ | - 12 | 9.4 |  |
| 3509 | 301389 | L 2921 |  |  | - $5511 \cdot 13$ | 8278 | 78 | 30 Il $50 \cdot 9$ | 780 | 539 | ${ }^{12 \cdot 9}$ | + 6 | - 29 | $9 \cdot 4$ |  |
| 3510 | 271295 | C 3665 | 1560 |  | $55 \quad 12 \cdot 16$ | 7477 | 67 | $27 \quad 29 \quad 7 \cdot 1$ | 782. | 528 | 13.3 | + 5 | 7 | 9.4 | M a |
| 3511 | 281290 | C 3666 |  |  | 65513.82 | $+3.7605$ | -.0069 | 275548.7 | $-4.784$ | -.530 | 11.6 | + 13 | - 31 | 8.8 |  |
| 3512 | 301391 | L 2923 |  |  | 5514.12 | 8301 | 78 | 301626.0 | 784 | 539 | 13.5 | + 16 | a $+\quad 5$ | $9 \cdot 4$ |  |
| 3513 | 301393 | C 3667 | 1558 | 13484 | 5516.62 | 8241 | 77 | 30439.5 | 789 | 538 | 13.0 | + 45 | - II | $8 \cdot 51$ | G 5 |
| 3514 | 271296 | C 3668 | 1563 | 13495 | 55 21.59 | 7418 | 67 | $27 \quad 16 \quad 58.1$ | $79^{6}$ | 527 | $12 \cdot 3$ | + 13 | - 9 | 7-19 | K 2 |
| 3515 | 24.1491 | B 2721 |  | 13504 | 55 23.16 | 6668 | 59 | 2436 24-1 | 797 | 516 | 12.9 | + 20 | 11 | 8.4 | A 2 |
| 3516 | 291429 | C 3669 | 1562 | 13490 | 65525.45 | +3.8175 | -.0076 | 295143.7 | $-4.800$ | -. 538 | 13.8 | 4 | 7 | 7.86 | G 5 |
| 3517 | 291430 | C 3670 |  |  | $55 \quad 30 \cdot 77$ | 8018 | 75 | $292036 \cdot 2$ | 809 | 536 | 13.3 | + 1 | + | $7 \cdot 70$ | G 5 |
| 3518 | 271300 | C 3674 |  |  | 55 39.46 | 7475 | 68 | $272924 \cdot 1$ | 820 | 528 | 13.5 | + 29 | 17 | $9 \cdot 4$ |  |
| 3519 | 261424 | C 3677 | 1576 |  | 5539.73 | 7139 | 65 |  | 821 | 523 | 13.8 | + 10 | 11 | $9 \cdot 1$ | A 2 |
| 3520 | 29 143I | C 3676 |  |  | $5542 \cdot 62$ | 8045 | 75 | $\begin{array}{llllll}29 & 26 \quad 8.9\end{array}$ | 826 | 537 | 13.6 | + 9 | - 4 | $9 \cdot 1$ |  |
| 3521 | 271301 | C 3679 | 1578 | 13514 | 65547.55 | +3.7479 | -.0068 | $27 \quad 30 \quad 25.2$ | $-4.833$ | -. 528 | 12.5 | + 19 | - | $8 \cdot 2$ |  |
| 3522 | 291432 | ${ }_{\text {C }} 3678$ |  |  | $5547 \cdot 65$ | 8023 | 75 | 292158.6 | 833 | 536 | 14.4 | - 17 | + 10 | $9 \cdot 4$ |  |
| 3523 | 261426 | ${ }_{\text {C }} 3682$ | 1581-2 | 13519 | 55 51.37 | 7152 | 65 | $26 \quad 2143.9$ | 837 | 524 | 12.8 | - 2 | + | $8 \cdot 7$ |  |
| 3524 | 291433 | C 3681 |  |  | $5554 \cdot 42$ | 8068 | 75 | $2931 \quad 4 \cdot 1$ | 841 | 537 | 14.4 | + 12 | - 50 | $9 \cdot 1$ | A 0 |
| 3525 | 241495 | B 2725 | 1592 |  | $\begin{array}{lll}56 & 0.49\end{array}$ | 6600 | 60 | $24 \quad 22 \quad 26 \cdot 5$ | 850 | 515 | 13.9 | - | 71 | $9 \cdot 4$ |  |
| 3526 | 261427 | C 3683 | 1587 | 13526 | $\begin{array}{lll}6 & 56 & \text { 1.18 } \\ \\ 56\end{array}$ | $+3.7247$ | -.0066 | $26423 \cdot 4$ | $-4.851$ | --525 | 14.1 | 13 | 16 | $8 \cdot 5$ | B 9 |
| 3527 | 251540 | C 3685 |  |  | $\begin{array}{lll}56 & 9.66\end{array}$ | 6963 | 63 | 254141.3 | 864 | 521 | 12.6 | 7 | + 4 | $8 \cdot 4$ | A 0 |
| 3528 | 29 1434 | C 3684 | 1591 | 13529 | $\begin{array}{lll}56 & 12.94 \\ 56 & 1.92\end{array}$ | 8148 8301 |  | 29 30 30 | 868 | 538 | 13.6 | - 5 | - 23 | 8.71 | A 2 |
| 3529 3530 | 30 1 <br> 30 1498 | L 2931 |  |  | $\begin{array}{lll}56 & 18.32 \\ 56 & \text { 21.14 }\end{array}$ | 8391 8316 | 80 80 | $\begin{array}{llll}30 & 35 & 45 \cdot 9 \\ 30 & 21 & 13.2\end{array}$ | 869 879 | 54 I | 14.3 14.0 | - 4 | - $\quad 2$ | 9.0 |  |
|  |  |  |  |  |  |  |  | 302113 | 879 | 540 | $1+0$ | + 24 | - 1 | $9 \cdot 4$ |  |
| 3531 | 261431 | C 3687 |  |  | $65626 \cdot 56$ | $+3.7250$ | -.0067 | $2643 \quad 23 \cdot 5$ | - 4.888 | -. 525 | 14.2 | + 23 | - 37 | $9 \cdot 1$ |  |
| 3532 | 241498 | B 2727 | 1601 | 13540 | 5629.51 | 6624 | 6 I | $2428 \quad 28.6$ | 892 | 515 | 13.8 | + $+\quad 3$ | - 33 | 8.0 | A 0 |
| 3533 | 311471 | L 2934 |  |  | 56 31-01 | 8626 | 82 | $\begin{array}{llll}31 & 22 & 7.4\end{array}$ | 893 | 544 | 13.6 | - 21 | $\square$ | $8 \cdot 0$ | Go |
| 3534 | 251542 | C 3689 |  |  | $5635 \cdot 29$ | 6921 | 64 | 253314.3 | 899 | 519 | 12.5 |  | + 6 | $6 \cdot 94$ | A 2 |
| 3535 | 301404 | C 3691 | 1602 |  | $5643 \cdot 35$ | 8210 | 78 | $30 \times 48.8$ | 910 | 538 | 12.6 | 7 | - 57 | 8.56 | K 2 |
| 3536 | $25 \quad 1545$ | C 3692 | 1609-10 | 13554 | $65648 \cdot 81$ | $+3.6903$ | -.0063 | $\begin{array}{ll}25 & 29 \\ 40 \cdot 1\end{array}$ | -4.919 | -.519 | 13.3 | - 7 | - 58 | $7 \cdot 41$ | A 3 |
| 3537 | 261435 | C 3693 | 1611 |  | $5650 \cdot 46$ | 7037 | 66 | 255831.0 | 920 | 521 | 12.9 | + 16 | + 5 | $8 \cdot 0$ | G 5 |
| 3538 | 311473 | L 2936 | 1605 | 13541 | 5651.58 | 8654 | 84 | $\begin{array}{llll}31 & 2889\end{array}$ | 923 | 545 | $13 \cdot 1$ | + 7 | - 25 | $7 \cdot 8$ | K 5 |
| 3539 | 241502 | B 2735 | 1614 | 13559 | $5655 \cdot 87$ | 6586 | 61 | $242039 \cdot 9$ | 929 | 515 | 13.9 | - $3^{*}$ | - 14* | $5 \cdot 21$ | Ko |
| 3540 | 315474 | L 2937 |  | 13543 | $5658 \cdot 24$ | 8718 | 85 | 314033.5 | 932 | 545 | 11.3 | + 2 | - 14 | $8 \cdot 0$ | K o |
| 3541 | 311475 | L 2938 | 1613 |  | 65711.54 | $+3.8525$ | -0082 | $31341 \cdot 1$ | $-4.950$ | $-\cdot 54.2$ | 13.3 | + 22 | 30 | $9 \cdot 0$ |  |
| 3542 | 241507 | B 2737 | 1634 |  | $57 \quad 27 \cdot 53$ | 6506 | 61 |  | 974 | 513 | 13.7 | + 9 | - 34 | $9 \cdot 0$ |  |
| 3543 | 251551 | C 3697 | 1642-3 | 13586 | 57 43-15 | 6892 | 65 | $25 \quad 2835.0$ | 995 | 519 | 11.7 | 4 | - 23 | 8.4 | A 2 |
| 3544 | 261440 | C 3696 | 1641 | 13564 | $5744 \cdot 30$ | 7271 | 68 | $264944 \cdot 7$ | 997 | 524 | 13.3 | - 7 | - 22 | $9 \cdot 1$ |  |
| 3545 | 241510 | B $274^{\circ}$ |  |  | 57 46.31 | 6667 | 63 | 243944.2 | 999 | 516 | 14.3 | + 28 | - $4^{1}$ | 9.1 |  |
| 3546 |  | C 3695 |  | 13576 | $6 \quad 5747 \cdot 34$ |  |  | $292917 \cdot 7$ | - $5 \cdot 001$ | --535 | 12.88 | + 121* | - 823* | $5 \cdot 95$ | F 8 |
| 3547 | 251553 | C 3701 | 1647-8 | 13594 | 5756.58 | 6888 | 65 | $\begin{array}{llll}25 & 28 & 9.8\end{array}$ | 015 | 518 | 12.7 | + 22 | - $4^{2}$ | $8 \cdot 4$ |  |
| 3548 | 301406 | L 2947 | 1644 | 13584 | 57 57.11 | 8382 | 83 | $\begin{array}{llll}30 & 37 & 2 \cdot 3\end{array}$ | 015 | 540 | 12.6 | - 23 | - 26 | 8.6 | A 3 |
| 3549 | 301407 | L 2948 | 1645 |  | $5757 \cdot 61$ | 8228 | 80 | $30 \quad 6 \quad 25 \cdot 1$ | 016 | 537 | 13.3 | + 8 | $\bigcirc$ | 9.0 |  |
| 3550 | 241511 | C 3705 |  |  | 5758.03 | 6684 | 63 | $2443{ }^{2 \cdot 1}$ | 016 | 515 | 13.3 | 40 | - 64 | 9.1 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sea. Var. | $\begin{aligned} & \text { Epoch } \\ & 1900+ \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\sim \cdot 0001}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { D.OOI. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m |  | s | - , " |  | " |  |  |  |  |  |
| 3551 | 291442 | C 3700 |  |  | 65759.60 | $+3 \cdot 8142$ | -. 0079 | $294923 \cdot 0$ | - 5.019 | $-.536$ | $14^{2}$ | + 14 | - 15 | 9.4 |  |
| 3552 | 271307 | C 3706 | 1649 | 13593 | 58 | 7356 | 70 | $\begin{array}{lllllll}27 & 8 & 12.4\end{array}$ | 020 | 525 | 13.8 | + 4 | + 12 | $8 \cdot 0$ | Go |
| 3553 | 251556 | C 3708 |  | 13597 | $\begin{array}{ll}58 & 1.36\end{array}$ | 6820 | 65 |  | 020 | 517 | 14.3 | + 14 | - 33 | $8 \cdot 2$ | K o |
| 3554 | 301409 | L 2950 |  |  | 58 4.31 | 8259 | 81 | $\begin{array}{lllllllllll}30 & 12 & 52 \cdot 9\end{array}$ | 025 | 538 | 14.4 | + 28 | - 16 | $9 \cdot 4$ |  |
| 3555 | 291444 | C 3711 |  |  | $58 \quad 10.45$ | 7885 | 77 | $285756 \cdot 1$ | 033 | 533 | 14.7 |  |  | $9 \cdot 4$ |  |
| 3556 | 271308 | C 3713 | 1656 | 13600 | $6 \quad 5813.43$ | $+3.7307$ | -.0070 | $\begin{array}{llll}26 & 58 & 6.8\end{array}$ | - 5.037 | $-\cdot 524$ | 14.2 | - | - 10 | $8 \cdot 2$ | K o |
| 3557 | 241513 | B 2747 |  | 13603 | 5813.46 | 6623 | 64 | 243041.4 | 037 | 514 | 14.6 | + 21 | - 16 | $8 \cdot 7$ |  |
| 3558 | 251557 | C 3714 | 1662-3 |  | $58 \quad 22.88$ | 6908 | 67 | $25 \quad 33 \quad 9 \cdot 1$ | 052 | 518 | 13.1 | + | - 38 | 8.6 |  |
| 3559 | 251558 | C 3715 |  |  | $58 \quad 23.83$ | 6944 | 67 | $254050 \cdot 5$ | 053 | 519 | 13.0 | - 11 | + 50 | $8 \cdot 6$ |  |
| 3560 | 24 1515 | B 2750 |  | 13617 | $58 \quad 3 \mathrm{I} \cdot 31$ | 658 I | 64 | 242149.0 | 063 | 513 | 12.4 | + 13 | - 31 | $8 \cdot 4$ |  |
| 3561 | 261446 | C 3718 |  |  | $6584 \mathrm{~L} \cdot 51$ | $+3.7166$ | -.0069 | $26 \quad 28$ 57.2 | $-5.078$ | $-.522$ | 12.0 | + | - 78 | 8.6 |  |
| 3562 | 261447 | C 3719 |  |  | $5845 \cdot 34$ | 7114 | 69 | $261755 \cdot 5$ | 083 | 521 | 12.7 |  |  | 9.4 |  |
| 3563 | 301412 | L 2955 |  |  | $\begin{array}{ll}59 & 4.97\end{array}$ | 8312 | 84 | $\begin{array}{llllllllllllllll}30 & 25 & 7.8\end{array}$ | 111 | 538 | 13.3 | 15 | + | $9 \cdot 1$ |  |
| 3564 | $2+1519$ | B 2754 |  |  | 5914.33 | 6631 | 64 | $243358 \cdot 1$ | 124 | 513 | 13.7 | + 17 | - 28 | $9 \cdot 4$ |  |
| 3565 | 301413 | L 2958 | 168 r | $13631-2$ | 5914.66 | 8335 | 84 | $30 \quad 2948.3$ | 125 | 538 | 12.7 | - | 11 | $7 \cdot 24$ | G 5 |
| 3566 | 281305 | C 3723 |  | 13639 | 65915.35 | $+3.7668$ | -. 0078 | 2815 <br> 12.5 | - 5.125 | --528 | 13.9 | + 57 | - 72 | $8 \cdot 8$ |  |
| 3567 | $28 \quad 1306$ | C 3725 | 1686 |  | 5925.43 | 7573 | 75 | $275541 \cdot 5$ | 139 | 527 | $14^{\circ} 2$ |  | - 32 | 9.4 |  |
| 3568 | 291451 | C 3726 | 1685 |  | 5928.88 | 8140 | 82 | 295126.3 | 143 | 535 | 14.0 | - 1 | - 11 | $8 \cdot 6$ | A 0 |
| 3569 | 311484 | L 2961 | $1692-3$ |  | 59 41.16 | 8637 | 88 | 31 $2941 \cdot 2$ | 162 | 542 | 13.9 | + 38 | - 9 | 8.7 | A 3 |
| 3570 | 291454 | C 3728 | 1698 | 13655 | 59 50.71 | 8075 | 82 | $2939 \quad 6 \cdot 2$ | 176 | 533 | 13.2 | + 12 | - 17 | $8 \cdot 4$ | B 9 |
| 3571 | 241521 | C 3730 |  |  | $65956 \cdot 33$ | $+3.6708$ | -.0069 | 245150.5 | -- $5 \cdot 183$ | $-.514$ | 13.7 |  |  | 9.8 |  |
| 3572 | 311487 | L 2962 | 1701-3 | 13656 | 5959.93 | 8645 | 89 | 313144.7 | 188 | 542 | 12.9 | +. 34 | - 8 | 6.80 | Ma |
| 3573 | 281307 | ${ }_{\text {C }}$ 3731 |  |  | 7 - 7 ¢ 40 | 7590 | 76 | 28 ○ 24.4 | 197 | 527 | $13 \cdot 7$ | - 19 | + 28 | 9.4 |  |
| 3574 | 261451 | C 3732 | 1722 |  | - 11.48 | 7097 | 71 | $\begin{array}{lllllllllllllllll}26 & 16 & 36 \cdot 9\end{array}$ | 204 | 520 | 13.1 | + 8 | - 50 | $9 \cdot 1$ |  |
| 3575 | 241523 | B 276r |  |  | - 12.05 | 6593 | 66 | $24 \quad 27 \quad 1 \cdot 4$ | 205 | 513 | $14^{\circ} 2$ | + 18 | - 28 | 9.1 |  |
| 3576 | 3131 1489 <br> 88  | L 2965 |  |  | $\begin{array}{llll}7 & 0 & 25.87\end{array}$ | $+3.8552$ | .0089 | $\begin{array}{llll}31 & 14 & 34.9\end{array}$ | $-5.225$ | --541 | 14.0 | 17 $+\quad 17$ | - 17 | $9 \cdot 4$ |  |
| 3577 | 281309 | C 3733 |  | 13679 | - 28.50 | 7623 | 78 | $\begin{array}{lllll}28 & 7 & 59.9\end{array}$ | 229 | 528 | 13.7 12.7 | $+\quad 36$ $+\quad 9$ | - 18 | $9 \cdot 1$ <br> 8.4 <br> 8.8 | Ma |
| 3578 | 261453 | C 3735 | 1731 |  | - 3 I . 68 | 7007 | 71 | $25 \begin{array}{lllll}25 & 30 \cdot 4\end{array}$ | 233 | 518 | 12.7 | - 9 | - 22 | 8.4 |  |
| 3579 | 281310 | C 3734 | 1727 | 13681 | - 32.01 | 7680 | 78 | $\begin{array}{lllllllllll}28 & 19 & 42 \cdot 8\end{array}$ | 233 | 528 | 12.7 | - 16 | - 2 | 7.8 8.6 | A 2 |
| 3580 | 251570 | C 3736 |  |  | - $34 \cdot 11$ | 6917 | 70 |  | 236 | 517 | 13.1 | + 25 | - 19 | 8.6 |  |
| 358 r | $\begin{array}{lll}25 & 1571 \\ 28 & 1312\end{array}$ | C 3737 C 3788 c | 1735 1749 | 13675 13700 |  | + +36739 7682 | -.0068 |  |  | -.515 | 10.7 | + 19 | 21 | $7 \cdot 16$ $8 \cdot 7$ | K 2 |
|  | 28 28 28 1312 | C 3738 | 1749 | 13700 $\times 3724-5$ | 16.08 | 7682 7666 6 | 79 88 68 | $\begin{array}{llll}28 \\ 28 & 21 & 10 \cdot 7 \\ 28 & 18 & 58.2\end{array}$ | 281 338 | 527 | 11.5 | 19 <br> $+\quad 9$ <br> $+\quad 17$ | $\bigcirc$ | $8 \cdot 7$ 6.23 | B 9 |
| 84 | 241530 | B 2773 |  | , | I 46.56 | 6471 | 66 | $\begin{array}{llllll} \\ 28 & 18 & 28 & 24.0\end{array}$ | 338 | 527 51 | 12.7 | 12 | $1 \begin{aligned} & 1 \\ & -\quad 43\end{aligned}$ | 0.4 |  |
| 3585 | 24153 I | B 2774 |  |  | 1 48.27 | 6543 | 67 | $\begin{array}{lllllllllll}24 & 18 & 29.4\end{array}$ | 340 | 512 | 11.3 | - 8 | - 54 | $6 \cdot 90$ | Ма |
| 3586 | 31 1494 | L 2976 |  | 13723 | 7 I $54 \cdot 35$ | $+3.8570$ | -.0092 | $312050 \cdot 8$ | - 5.349 | -. 540 | 11.3 | + 13 | - 31 | 8.8 |  |
| 3587 | $28 \quad 1316$ | C 3747 |  |  | I 55.47 | 7743 | 81 | $28 \quad 3510 \cdot 2$ | 350 | 528 | 13.2 | 88 | - 43 | 9.5 |  |
| 3588 | 241532 | C 3748 | ${ }^{1} 778$ |  | 159.35 | 6677 | 69 | $244^{28} 16 \cdot 2$ | 356 | 512 | 13.7 | 3 | - 9 | 9.5 |  |
| 3589 | 251579 | C 3749 | 1788 |  | 213.21 | 6891 |  |  | 375 | 515 | 13.1 | + 1 | 10 | $9 \cdot 1$ |  |
| 3590 | 241534 | B 2790 | 1801 |  | 221.27 | 6611 | 68 | $2434 \quad 16 \cdot 7$ | 387 | 511 | 13.1 | + 21 | + 12 | $9 \cdot 0$ |  |
| 3591 | 301423 | C 3753 |  | 13742 | $\begin{array}{llll}7 & 2 & 22.34\end{array}$ | $+3.8151$ | -.0087 | $295856 \cdot 4$ | $-5.388$ | --533 | 12.51 | 107 | - 323 | $8 \cdot 31$ |  |
| 3592 | 311495 | L 2984 | 1795 | 13746 | 235.72 | 8601 | 94 | 312811.7 | 408 | 540 | 12.9 | 5 | - 5 | $8 \cdot 8$ | A 0 |
| 3593 | 281319 | C 3754 | 1811-2 | 13757 | $240 \cdot 80$ | 7668 | 81 | $28 \quad 2057 \cdot 8$ | 415 | 526 | 12.5 | 1 | - 43 | 9.4 | F 5 |
| 3594 | 311496 | L 2985 |  |  | 246.33 | 8643 | 94 | 313631.3 | 422 | 540 | 12.9 | 45 | - 24 | 9.4 |  |
| 3595 | $25 \quad 1584$ | C 3756 | 1824-5 |  | $3 \quad 1 \cdot 01$ | 6759 | 71 | $25 \quad 7$ 59.1 | 443 | 514 | 12.8 | 0 | - 15 | $8 \cdot 8$ |  |
| 3596 | 251585 | C 3758 | 1827-8 |  | $\begin{array}{llll}7 & 3 & 2.71\end{array}$ | $+3.6758$ | -.007 | $\begin{array}{llll}25 & 7 & 53.0\end{array}$ | $-5.446$ | -.514 | 12.1 | - 20 | - 15 | $9 \cdot 5$ |  |
| 3597 | 261463 | C 3760 | 1831-2 |  | 314.38 | 7213 | 76 | 264622.0 | 461 | 519 | $12 \cdot 1$ | + 13 | - 51 | 9.1 |  |
| 3598 | 261464 | C 3761 |  |  | 319.30 | 7251 | 77 | 265439.9 | 468 | 520 | 12.3 | - | - 15 | $9 \cdot 0$ | A 2 |
| 3599 | $30 \quad 1430$ | L 2992 | 1833 |  | 325.89 | 8307 | 90 | 303154.7 | 478 | 535 | $10 \cdot 1$ | + 13 | - 95 | $7 \cdot 8$ | F 8 |
| 3600 | 291466 | C 3762 |  |  | 326.29 | 7879 | 85 | $29 \quad 548 \cdot 4$ | 478 | 528 | 11.3 | + | - 4 | $8 \cdot 7$ | A 0 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
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| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | $\xrightarrow[\text { R. } . \text { A. }]{\text { R. }}$ | Dec. ".001. | Mag. | Spectral Type. |
|  | - |  |  |  | h m | s | s | - , " | " | " |  |  |  |  |  |
| 3601 | 301431 | L 2994 | 1839 | 13783 | $\begin{array}{llll}7 & 3 & 35 \cdot 16\end{array}$ | $+3.8233$ | -.0089 | $30 \quad 1729.7$ | - $5 \cdot 490$ | -. 534 | 10.6 | + 22 | - 51 | $7 \cdot 41$ | K o |
| 602 | 281320 | C 3767 | 1845 | 13789 | 338.10 | 7615 | 83 | $281146 \cdot 2$ | 495 | 525 | 10.3 | + 21 | 45 | 8.4 | A 0 |
| 3603 | 251590 | C 3769 | 1853-4 |  | 3 48.14 | 6828 | 73 | 252421.6 | 509 | 514 | 11.7 | 5 | 12 | $8 \cdot 6$ | A 3 |
| 3604 | 251594 | C 3774 | 1869 | 13792 | $4 \quad 3.97$ | 6956 | 75 | $255237 \cdot 4$ | 531 | 516 | 11.7 | - 80 | - 203 | 7.01 | Go |
| 3605 | $26 \quad 1470$ | C 3775 | 1868 | 13809 | $4 \quad 5 \cdot 53$ | 7176 | 77 | $2640 \quad 6 \cdot 4$ | 534 | 519 | $12 \cdot 1$ | $+31$ | - 69 | $7 \cdot 7$ | K o |
| 3606 | 251595 | C 3776 | 1874 | 13797 | $7 \quad 4$ 12.01 | $+3.6956$ | -0075 | $255247 \cdot 6$ | $-5.542$ | -516 | 12.6 | + 14 | - 15 | $7 \cdot 7$ | Fo |
| 3607 | 251596 | C 3777 |  | 137.98 | 416.09 | 6930 | 74 | $254722 \cdot 2$ | 548 | 515 | 12.7 | + 4 | - 66 | 8.6 |  |
| 3608 | 301435 | C 3778 |  |  | 422.88 | 8181 | 91 | $\begin{array}{llll}30 & 9 & 8.9\end{array}$ | 558 | 533 | 13.6 | - 40 | - 29 | 9.0 |  |
| 3609 | 271323 | C 3780 | 1881-2 |  | 429.86 | 7326 | 80 | $27 \quad 1236.4$ | 567 | 52 I | 12.5 | 1 $+\quad 9$ | - 9 | $9 \cdot 0$ | A 0 |
| 3610 | 281326 | C 3779 |  |  | 430.96 | 7705 | 85 | 283158.5 | 569 | 526 | 13.5 | - 14 | + 5 | 9.5 |  |
| 36 II | 261471 | C 3781 |  |  | $7 \quad 4 \quad 31.73$ | +3.7084 | 0077 | $\begin{array}{llll}26 & 21 & 6.4\end{array}$ | - 5.570 | -.518 | 12.9 | + 6 | + 7 | $8 \cdot 6$ | A 0 |
| 3612 | 301436 | L 3000 | 1884 | 13862 | 439.96 | 8287 | 92 | 303018.5 | 58 I | 533 | 11.7 | + 23 | - $\quad 24$ | $8 \cdot 1$ | A 2 |
| 3613 | $24 \quad 546$ | B 2814 | 1909-10 | I 3856 | $\begin{array}{ll}5 & 1.88\end{array}$ | 6506 | 71 | 241525.0 | 612 | 508 | 11.1 | - $5^{2}$ | - 145 | $7 \cdot 8$ | F 5 |
| 3614 | 301437 | C 3782 |  |  | $\begin{array}{lll}5 & 9 \cdot 27\end{array}$ | 8131 | 91 | $30 \quad 000$ | 622 | 531 | 12.7 | + 12 | + 12 | 9.1 |  |
| 3615 | $25 \quad 1597$ | C 3783 | 1919 |  | $5 \quad 10.29$ | 6759 | 75 | $251130 \cdot 3$ | 623 | 512 | 12.7 | 26 | - 36 | $9 \cdot 4$ | K |
| 3616 | 301439 | L 3009 | 1921 | 13886 | 524.74 | $+3.8246$ | 0093 | $302336 \cdot 0$ | $-5.644$ | -. 533 | 10.4 | - 19* | - $47^{*}$ | 4.48 | K o |
| 3617 | 291470 | C 3785 | 2 |  | $526 \cdot 27$ | 8084 | 9 I | 29510.7 |  | 530 | 12.7 | + 4 | - 36 | 8.81 | A 3 |
| 3618 | 251598 | C 3787 | 12-3 | 13869 | 532.47 | 6833 | 75 | $25 \quad 2822.8$ | 654 | 513 | If.I | + 7 | - 6 | 8.6 | A 0 |
| 3619 | 301442 | L 3015 |  | 13895 | 544.66 | 8311 | 95 | 303712.3 | 672 | 534 | 10.9 | - 12 | - 10 | $7 \cdot 8$ | F 2 |
| 3620 | 241549 | C 3788 | 28-9 | 13879 | 545.77 | $66_{51}$ | 74 | 24.48 41-5 | 674 | 510 | II.9 | 18 | - 26 | 8.21 | Ma |
| 3621 | 301444 | L 3016 | 18 |  | 547.99 | $+3.8340$ | 0095 | 304254.8 | $-5.677$ | - 534 | 12.4 | + 5 | - 15 | 8.9 |  |
| 3622 | 271327 | C 3789 | 23-4-5-6 |  | $548 \cdot 18$ | 7257 | 81 | $27 \times 19 \cdot 2$ | 677 | 519 | $12 \cdot 1,9^{+1}$ | - 13* | - 49* | $5 \cdot 60$ | A 2 |
| 3623 | 311505 | L 3017 | 20 | 13867 | $550 \cdot 89$ | 8587 | 99 |  | 681 | 537 | 12.3 | - 3 | - $\quad 27$ | $8 \cdot 2$ | A 2 |
| 3624 | 26 I48I | C 3792 | 33-4-5 |  | $556 \cdot 24$ | 7129 | 79 | $\begin{array}{llllll}26 & 33 & 16 \cdot 1\end{array}$ | 688 | 517 | 11.7 | - 2 | - 9 | 6.75 | K O |
| 3625 | 281332 | C 3794 |  |  | $6 \quad 12.29$ | 7725 | 88 | $28 \quad 3915.7$ | 710 | 525 | 13.3 | 22 | - 25 | $9 \cdot 4$ |  |
| 3626 | 261482 | ${ }^{\text {C }} 3796$ | 46. |  | $\begin{array}{llll}7 & 6 & 12.65\end{array}$ | +3.7188 | -.0080 | $\begin{array}{llll}26 & 46 & 25.5\end{array}$ | -5.711 | -. 517 | 13.3 | + | - 10 | $9 \cdot 1$ |  |
| 3627 | 311506 | L 3019 | 37-116 | 13882 | $6^{6} 14.99$ | 8618 | 100 | $\begin{array}{lll}31 & 38 \\ 26 \cdot 0\end{array}$ | 714 | 537 | $12 \cdot 1$ | 5 | - 15 | $8 \cdot 8$ | K 2 |
| 3628 | $25 \quad 1603$ | C 3798 |  |  | $6 \quad 22 \cdot 52$ | 6774 | 76 | $\begin{array}{lllll}25 & 16 & 55 \cdot 1\end{array}$ | 725 | 511 | 13.8 | - 43 | + 3 | 9.4 |  |
| 3629 | 281333 | C 3800 |  |  | $632 \cdot 62$ | 7788 | 90 | $28 \quad 5252 \cdot 3$ | 739 | 526 | 13.1 | - 82 | - 20 | $9 \cdot 8$ |  |
| 3630 | 301446 | L 3022 | 51 |  | $633 \cdot 11$ | 8285 | 96 | $303326 \cdot 4$ | 739 | 532 | $12 \cdot 1$ | + 19 | - 15 | $8 \cdot 8$ | K 5 |
| 3631 | 281336 | C 3804 |  | 13905 | $7 \quad 646 \cdot 56$ | $+3.7635$ | -.0087 | 28 21 <br> 1.8  | - 5.758 | - 522 | 12.5 | $+\quad 19$ | - 50 | $9 \cdot 4$ | K 2 |
| 3632 | 241554 | C 3806 |  |  | $646 \cdot 94$ | 6641 | 74 | $244^{8} \quad 12 \cdot 7$ | 759 | 509 | 13.5 | + 12 | - 19 | $9 \cdot 0$ |  |
| 3633 | $26 \quad 1485$ | C 3805 |  |  | $647 \cdot 32$ | 6961 | 78 | 255824.8 | 759 | 513 | 12.5 |  |  | 8.8 | A 5 |
| 3634 | 271334 | C 3807 | 62 |  | $6 \quad 5 \mathrm{I} \cdot 75$ | 7466 | 86 | $\begin{array}{llllll}27 & 46 & 24 \cdot 0\end{array}$ | 766 | 521 | 14.1 | + 20 | - 15 | 9.4 |  |
| 3635 | 261487 | C 3808 | 69 |  | $657 \cdot 01$ | 7166 | 81 | $264^{2} 54 \cdot 7$ | 773 | 517 | 12. | 15 | - 59 | $7 \cdot 8$ | K o |
| 3636 | 241556 | B 2829 | 74-7 | 13918 | $\begin{array}{llll}7 & 6 & 58.28\end{array}$ | $+3.6512$ |  | $\begin{array}{lll}24 & 20 & 0.3\end{array}$ |  | --507 | 12.3 |  |  |  |  |
| 3637 | 24.558 | B 2830 | 75-6 | 13920 | 658.37 | 6498 | 73 | $241646 \cdot 8$ | 775 | 507 | 12.2 | - 14* | - $52^{*}$ | $5 \cdot 76$ | F 5 |
| 3638 | 281337 | C 3810 | 65 | 13914 | $7 \quad 0.80$ | 7717 | 90 | $\begin{array}{llll}28 & 39 & 0.2\end{array}$ | 778 | 524 | 13.1 | - | - 13 | $8 \cdot 8$ | K |
| 3639 | 251606 | C 3812 |  |  | $\begin{array}{ll}7 & 2.30\end{array}$ | 6878 | $78^{\circ}$ | $254049 \cdot 9$ | 780 | 513 | 13.7 |  |  | $9 \cdot 4$ |  |
| 3640 | $25 \quad 1608$ | C 3814 | 83 |  | 710.03 | 688 I | 78 | $254146 \cdot 9$ | 791 | 512 | 12.8 | 35 | - 59 | $8 \cdot 5$ |  |
| 3641 | 271337 | C 3815 | $8 \mathrm{I}-2$ |  | $7 \quad 7 \quad 13.09$ | $+3.7350$ | -.0085 | ${ }^{2} 72241^{1 \cdot 0}$ | - $5 \cdot 795$ | --519 | 12.9 |  | - 90 | $6 \cdot 44$ | F 5 |
| 3642 | 291479 | C 3816 |  |  | 716.59 | 7948 | 93 | $\begin{array}{llll}29 & 26 & 57.9\end{array}$ | 801 | 527 | 12.7 |  | + 20 | 8.8 |  |
| 3643 | 251609 | C 3818 | 86 | 13924 | $717 \cdot 32$ | 6936 | 79 | 255358.4 | 801 | 513 | 13.2 |  | - 18* | $6 \cdot 89$ | A 0 |
| 3644 | $24 \quad 1564$ | B 2833 | 97-8 |  | 724.60 | 6486 | 74 | $241458 \cdot 0$ | 812 | 506 | 13.9 | + 32 | - 50 | 9.0 |  |
| 3645 | 241562 | C 3819 |  |  | $725 \cdot 99$ | 6649 |  | 245114.3 | 813 | 508 | $14^{\circ} \mathrm{O}$ | 13 | 12 | 9.4 |  |
| 3646 | 281340 | C 3821 | 92 | 13931 | $\begin{array}{llll}7 & 7 & 29.48\end{array}$ | $+3.7506$ | $-.0087$ | $\begin{array}{llll}27 & 56 & 2.6\end{array}$ | $-5.818$ | -.521 | 13.1 | + 26 | 26 | 8.2 | F 2 |
| 3647 | 241567 | C 3822 | 107 |  | 741.98 | 6635 | 76 | $244^{88} 31 \cdot 0$ | 836 | 508 | 13.4 | 52 | 10 | 8.56 | F 5 |
| 3648 | 31 1513 | L 3028 | 113 |  | 8 8.06 | 8411 | 100 | $\begin{array}{lllll}31 & 1 & 39 \cdot 8\end{array}$ | 872 | 533 | 13.1 | - 7 | - 40 | $9 \cdot 4$ | A 0 |
| 3649 | 281341 | C 3825 | 117 -9 |  | 88.58 | 7554 | 89 | $28 \quad 711.5$ | 873 | 521 | 13.4 | - 14 | - 39 | $9 \cdot 4$ | K |
| 3650 | 281342 | C 3826 | 120-1-2 | 13953-4 | 811.25 | 7705 | 9 I | $28 \quad 38 \quad 49 \cdot 5$ | 876 | 523 | 12.6 | - 12 | - $\quad 30$ | $7 \cdot 7$ | A 0 |

3612. Burnbam 3856. 3641. $\Sigma$ 1037.
3613. Burnham 3862 3650. Burnham 3890.

|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{O}$. | Precession. | Soc. Var. | Dec. 1910\%. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | $\begin{aligned} & \text { R.A. } \\ & -\cdot 000 \text { I. } \end{aligned}$ | $\begin{aligned} & \text { Doc. } \\ & \text { N. } 00 \text { I. } \end{aligned}$ | Mag. | Spectral Type. |
|  |  |  |  |  | h m s | s | 8 | - , " |  | " |  |  |  |  |  |
| 3651 | 281343 | C 3828 | 128-9-30 | 1 3958-60 | $\begin{array}{lllll}7 & 8 & 19 \cdot 13\end{array}$ | $+3.7722$ | -0092 | $284^{2} 41 \cdot 0$ | - 5.887 | --523 | 13.7 | + 16 |  | 9.0 |  |
| $3652$ | 261492 | C 3830 |  |  | 824.31 | 7128 | 82 | $26 \quad 37 \quad 23.7$ | -894 | 515 | 13.4 | - 19 | - 15 | $9 \cdot 4$ |  |
| $3653$ | $\begin{array}{llll}25 & 1613 \\ 24 & 1575\end{array}$ | C 383 I | 135-6 | 1 3972 | 825.56 | 6726 | 77 | 25 10 0.0 | 897 | 510 | 12.7 | - 290 | - 112 | 8.4 |  |
| 3654 365 | $\begin{array}{lll}24 & 1575 \\ 24 & 1576\end{array}$ | B 2841 C 3835 | 151 | 13986 | 845.06 | 6456 | 75 | $24 \quad 1023.4$ | 924 | 506 | 12.9 | 5 | - 27 | $8 \cdot 6$ | A 0 |
| 3655 | $24^{1576}$ | C 3835 |  | I 3990 | 8 57.10 | 6641 | 77 | $24 \quad 5156.4$ | 940 | 507 | 11.5 |  | - 16* | $6 \cdot 66$ | B 9 |
| 3656 | 261494 | C 3833 |  |  | $\begin{array}{llll}7 & 8 & 57 & 39\end{array}$ | $+3 \cdot 6973$ | -.0081 | $\begin{array}{lll}26 & 4 & 49.8\end{array}$ | - 5.940 | $-512$ | 12.3 | - 15 | - 17 | $9 \cdot 1$ |  |
| 3657 | 311516 | L 3035 |  | I 3979 | 857.43. | 8569 | 104 | 313422.0 | 940 | 534 | 11.5 | + 9 | - $3^{8}$ | $8 \cdot 6$ | F 5 |
| 3658 | 281346 | C 3834 | 1 54-5 | 13987 | 90.47 | 7683 | 91 | $28 \quad 3549 \cdot 6$ | 945 | 522 | 12.5 | - $3^{1}$ | - $4^{8}$ | $8 \cdot 6$ | K o |
| 3659 | $\begin{array}{llll}30 & 1461\end{array}$ | L 3037 |  |  | 94.80 | 8137 | 99 | $\begin{array}{llll}30 & 8 & 54.6\end{array}$ | 951 | 529 | 12.9 | - 14 | + 16 | $9 \cdot 4$ |  |
| 3660 | $2{ }^{2} \quad 1578$ | B 2843 | 162 | 14001 | $9 \quad 5 \cdot 67$ | 6450 | 75 | $24 \quad 9 \quad 47 \cdot 4$ | 952 | 505 | 11.5 | 13 | - 49 | 8.0 |  |
| 3661 | 311517 | L 3036 |  | 13984 | $\begin{array}{llll}7 \quad 9 & 6.22\end{array}$ | $+3.8588$ | -0105 | 313883.9 | - 5.953 | -. 535 | 12.3 | 27 | - 21 | $8 \cdot 6$ | A o |
| 3662 | 251618 | C 3840 | 164-5 | 14003 | 911.78 | 6686 | 78 | $25 \quad 230.4$ | 961 | 508 | II.9 | $+37^{*}$ | - 92* | 6.02 | K o |
| 3663 | 261495 | C 3838 | 161 |  | 912.15 | 7171 | 85 | $\begin{array}{lllllllll}26 & 48 & 13.8\end{array}$ | 96I | -515 | 13.2 | + 18 | - 19 | 9.0 | G o |
| 3664 | 271342 | C 3839 |  |  | 912.84 | 7250 | 86 | $\begin{array}{llllllllll}27 & 5 & 12.8\end{array}$ | 962 | 516 | 13.9 | - 2 | - 18 | $9 \cdot 1$ |  |
| 3665 | 301464 | C 384I | 163 |  | 920.55 | 8092 | 98 | $\begin{array}{lllll}30 & 0 & 18.1\end{array}$ | 974 | 528 | 13.2 | - 15 | - II | $8 \cdot 8$ |  |
| 3666 | 301463 | L 3042 |  |  | $\begin{array}{lllll}7 & 9 & 21.36\end{array}$ | $+3.8245$ | -. 0100 | 30318.3 | - 5.974 | $-530$ | 13.7 | + 23 | I5 | $9{ }^{\circ} \mathrm{O}$ |  |
| 3667 | 261497 | C 3843 |  |  | $931 \cdot 06$ | +6990 | 82 | $\begin{array}{llll}26 & 9 & 37 \cdot 7\end{array}$ | 988 | 512 | 13.3 | + 10 | - 10 | $8 \cdot 6$ | A |
| 3668 | 261498 | C 3844 |  |  | $935 \cdot 89$ | 6955 | 82 | $\begin{array}{llll}26 & 2 & 9.9\end{array}$ | 995 | 512 | 12.7 | - 19 | $+$ | 8.2 | F 8 |
| 3669 | 251622 | C 3848 | 178 |  | 947.09 | 6795 | 80 | $252730 \cdot 2$ | $6 \cdot 010$ | 509 | 12.7 | + 21 | - 19 | $9 \cdot 4$ |  |
| 3670 | 291487 | C 3849 |  |  | Io 1.23 | 7806 | 95 | $29 \quad 3 \quad 26 \cdot 3$ | 029 | 522 | 12.1 | - 2 | 10 | 10.2 |  |
| 3671 | 241583 | B 2853 |  | 14030 | 7 Io 2.36 | $+3.6403$ | -.0076 | $\begin{array}{llll}24 & 0 & 47.8\end{array}$ | -6.031 | --503 | 11.7 | + 13 | - 48 | 7.7 | G 5 |
| 3672 | 271346 | C 3850 | 188 |  | $10 \quad 10.33$ | 7394 | 90 | $273737 \cdot 0$ | 042 | 518 | 12.8 | + 9 | - 39 | $8 \cdot 7$ |  |
| 3673 | 311521 | L 3046 | 187-9 | 14027 | 1017.87 | 8381 | 104 | $\begin{array}{lll}31 & 0 & 16.4\end{array}$ | 053 | 531 | $12 \cdot 1$ | + 23 | - $\quad 37$ | $8 \cdot 6$ | $\mathrm{A}^{2}$ |
| 3674 | 281350 | C 3853 | 199-200 | 14033 | 1020.05 | 7514 | 91 | $\begin{array}{lllll}28 & 3 & 17.3\end{array}$ | 056 | 519 | 12.7 | - 14* | - $9^{*}$ | $5 \cdot 87$ | Ma |
| 3675 | 291489 | C 3852 | 198 | 14031 | 10 $21 \cdot 19$ | 7907 | 97 | $29 \quad 2445 \cdot 5$ | 057 | 524 | 12.8 | + 21 | - 44 | $8 \cdot 0$ | B 8 |
| 3676 | 241585 | B 2858 |  |  | 7 10 31.01 | $+3.6542$ | -. 0078 | $24 \quad 3245 \cdot 8$ | -6.071 | --505 | 13.1 | 21 | - 62 | 9.0 |  |
| 3677 | 241586 | C 3855 |  |  | 10 36.75 | 6617 | 80 | 244937.5 | 079 | 506 | 13.3 | + 7 | + 24 | 8.6 |  |
| 3678 | 301466 | L. 3048 | 213 | 14039 | 10 38.82 | 8335 | 103 | $30 \quad 5148.4$ | 082 | 529 | 12.9 | + 5 | - 27 | 8.8 | F 8 |
| 3679 | 301467 | L 3049 |  |  | 10 $44 \cdot 95$ | 8251 | 102 |  | 090 | 528 | 13.3 | + $\quad 27$ | + 3 | $9 \cdot 4$ |  |
| 3680 | 29 1491 | C 3857 | 222 |  | 10 51.24 | 7898 | 98 | 292400 | 099 | 523 | 12.6 | 8 | - 35 | $9 \cdot 4$ | F 2 |
| 3681 | 301468 | C 3858 |  |  | 7 10 51.92 | $+3.8092$ | -0101 | $\begin{array}{llll}30 & 3 & 22.2\end{array}$ | -6.100 | --526 | 12.1 | 10 | - 39 | 9.06 | G |
| 3682 | $25 \quad 1625$ | C 3859 |  |  | 1110.94 | 6674 | 81 | $\begin{array}{llll}25 & 3 & 0.3\end{array}$ | 113 | 506 | 13.1 | + II | - $\quad 24$ | $9 \cdot 1$ |  |
| 3683 | 241590 | B 2867 | 237 | 14072 | 11 9.18 | 6402 | 77 | $\begin{array}{llll}24 & 2 & 36.5\end{array}$ | 124 | 502 | II• 5 | 11 | - 84 | 8.4 | F 8 |
| 3684 | 241592 | C 3861 | 244 | 14075 | 1119.71 | 6575. | 80 | $244^{1}$ 45.1 | 139 | 505 | 9.6 | - 6 | - 17 | 7.01 | A 0 |
| 3685 | 261508 | C 3865 | 245-6-7 | 14080 | 1128.94 | 7165 | 87 | 265178 | 151 | 514 | 11.6 | + 66 | - 145 | $6 \cdot 51$ | G 5 |
| 3686 | 311525 | L 3058 | 241 |  | 71130.26 | $+3.8515$ | -. 0108 | $\begin{array}{llll}31 & 29 & 5 \cdot 9\end{array}$ | $-6 \cdot 153$ | -.531 | 12.1 | 9 | - II | $9 \cdot 4$ | A 2 |
| 3687 | 261510 | C 3866 | 251 | 14086-7 | II 42.51 | 7071 | 87 | 263126.2 | 171 | 511 | 11.6 | - 21 | - 11 | 7.40 | K o |
| 3688 | 311527 | L 3062 | 249 | 14078 | 1143.35 | 8627 | 109 |  | 171 | 533 | 10.7 | + 5 | - 22 | $6 \cdot 68$ | B 8 |
| 3689 | 301473 | L 3064 | 255 |  | 122.80 | 8223 | 104 | $\begin{array}{lllllllllllllll}30 & 32 & 26.4\end{array}$ | 199 | 527 | 12.6 | 35 | - 10 | $8 \cdot 8$ | K 5 |
| 3690 | 301474 | L 3066 | 258 |  | 128.98 | 8254 | 104 | $\begin{array}{lllll}30 & 38 & 46 \cdot 7\end{array}$ | 207 | 528 | 13.0 | + | - 52 | 8.8 | F 8 |
| 3601 | 241598 | B 2875 | 267 |  | $7 \begin{array}{llll}7 & 12 & 15.66\end{array}$ | $+3.6424$ | 0079 | $\begin{array}{llll}24 & 9 & 28.3\end{array}$ | $-6.217$ | -. 503 | 13.1 | + 8 | - 33 | $8 \cdot 6$ |  |
| 3692 | 241599 | C 3872 |  |  | 1218.19 | 6566 | 81 | $244^{1} \quad 21 \cdot 2$ | 220 | 505 | 12.9 | + 7 | - 3 | $8 \cdot 4$ | A 0 |
| 3693 | 311529 | L 3068 |  | 14098-100 | 1218.98 | 8394 | 108 | $\begin{array}{llll}31 & 7 & 4.9\end{array}$ | 221 | 529 | 12.1 | + $\quad 1$ | - 20 | $5 \cdot 98$ | B 9 |
| 3694 | 281356 | C 3870 |  |  | 1219.02 | 7667 | 96 | $\begin{array}{lllll}28 & 39 & 4 \cdot 6\end{array}$ | 221 | 520 | 13.7 | - 36 | - 50 | $8 \cdot 7$ | F 5 |
| 3695 | 261512 | C 3873 | 268 | 14110-1 | 1221.51 | 7057 | 87 | $26 \quad 2940 \cdot 9$ | 225 | 511 | 11.8 | + | - 5 | 7.6 | Kc |
| 3696 | 291497 | C 3871 |  |  | $\begin{array}{llll}712 & 21.75\end{array}$ | $+3.7918$ | - 0100 |  | -6.225 | -. 523 | 13.7 | + 3 | 3 | 9.4 |  |
| 3697 | 271354 | C 3874 | 270-1 |  | 1224.17 | 7282 | 91 |  | 228 | 514 | 12.7 | $+\quad 15$ | - 36 | 7.75 | K o |
| 3698 | 241600 | B 2879 | 280 | 14119 | $1236 \cdot 35$ | 6443 | 80 | $24 \begin{array}{lllllllll}24 & 21.9\end{array}$ | 244 | 503 | 11.8 |  | - 32 | $8 \cdot 6$ | F 5 |
| 3699 | 271355 | C 3876 |  |  | $1237 \cdot 28$ | 7394 | 93 | $2742 \quad 24 \cdot 5$ | 246 | 515 | 13.5 | - 30 | - 9 | $9 \cdot 4$ |  |
| 3700 | 281357 | C 3877 |  |  | $1240 \cdot 46$ | 7699 | 97 | $284638 \cdot 3$ | 250 | 519 | 13.1 | - 3 | - 12 | $8 \cdot 7$ | A 2 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 191000 | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.000I. }}{\underset{\text { R.A. }}{ } .}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.ooI. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | s | s | - , " | " | " |  |  |  |  |  |
| 3701 | 31 1531 | L 3070 | 274 | 14144 | 7124155 | $+3.8350$ | --0107 | $\begin{array}{llll}30 & 59 & 12.8\end{array}$ | 6.251 | --528 | 13.4 | $\bigcirc$ | + | 8.6 | A 0 |
| 3702 | 261516 | C 3879 |  |  | 1245.57 | 7127 | 89 | 264533.2 | 258 | 512 | 13.3 | - 2 | 21 | $9 \cdot 1$ |  |
| 3703 | $27^{1356}$ | C 3880 | 281-3 |  | 1252.41 | 7311 | 93 | $27 \quad 25 \quad 9.8$ | 267 | 514 | 12.0 | 12 | - 139 | $8 \cdot 1$ | G 5 |
| 3704 | 291501 | C 3881 |  |  | $132 \cdot 30$ | 7814 | 100 | 29 II 8.1 | 281 | 521 | 13.1 |  |  | $9 \cdot 4$ |  |
| 3705 | $25 \quad 1634$ | C 3885 | 296 |  | 135.03 | 6865 | 85 | $\begin{array}{llll}25 & 49 & 9.8\end{array}$ | 285 | 507 | 14.3 | + 8 | + 8 | $9 \cdot 4$ |  |
| 3706 | 28 1361 | C 3883 |  |  | $\begin{array}{llll}7 & 13 & 5 \cdot 34\end{array}$ | +3.7517 | -.0096 | $\begin{array}{llll}28 & 9 & 17.9\end{array}$ | - $6 \cdot 285$ | -517 | 14.1 | + 63 | - 13 | $9 \cdot 5$ |  |
| 3707 | 291502 | C 3886 | 293 |  | $1 \begin{array}{ll}13 & 8.33\end{array}$ | 7779 | 99 | $\begin{array}{lllll}29 & 4 & 9.8\end{array}$ | 289 | 520 | 13.8 | - 6 | - 31 | $9 \cdot 4$ |  |
| 3708 | 291503 | C 3887 |  |  | 1311.36 | 7835 | 100 | 291551.8 | 293 | 521 | 13.6 | + 32 | - 38 | 9.0 | F 2 |
| 3709 | 251636 | C 3889 | 298 |  | 1312.47 | 6853 | 85 | $2545 \quad 28.9$ | 294 | 507 | 12.5 | + | - 6 | 8.7 | $\mathrm{A}_{2}$ |
| 3710 | 291505 | C 3890 | 300 |  | 1322.33 | 7857 | 100 | 292051.9 | 308 | 52 I | 11.7 | + 18 | - 31 | $8 \cdot 0$ | K |
| 3711 | 261517 | C 3891 |  |  | 71322.89 | $+3.6941$ | -.0087 | $\begin{array}{llll}26 & 6 & 20 \cdot 6\end{array}$ | -6.309 | -. 508 | 11.I |  |  | 8.0 | Fo |
| 3712 | 241611 | B 2886 | 307 | 14147 | 1323.84 | 6447 | 81 | 241655.2 | 311 | 502 | 12.6 | $\bigcirc$ | 41 | 8.4 | A O |
| 3713 | 271360 | C 3893 |  | 14153 | 1339.93 | 7232 | 93 | $27 \quad 954.4$ | 333 | 512 | 11.7 | 5 | - $4^{6}$ | 8.6 | Fo |
| 3714 | $27 \quad 1362$ | C 3897 | 318 | 14167 | 1356.62 | 7180 | 91 | $26 \quad 5915 \%$ | 357 | 512 | 10.7 |  | + 1 | 6.88 | K o |
| 3715 | 311534 | L 3076 | 302 | 14176 | $14 \quad 29.19$ | 8496 | 113 | $\begin{array}{llll}31 & 32 & 0.3\end{array}$ | 401 | 530 | 10.1 | 4 | - 12 | $8 \cdot 2$ | Mb |
| 3716 | 311537 | L 3077 |  |  | $71440 \cdot 91$ | +3.8327 | 0110 | 305858.9 | - 6.416 | --.527 | 11.1 | 6 | - 20 | $9 \cdot 4$ |  |
| 3717 | 281367 | ${ }^{\text {C }} 3901$ | 332-3 | 14185 | $1445 \cdot 38$ | 7538 | 98 | $\begin{array}{lllllllllll}28 & 17 & 19.2\end{array}$ | 423 | 515 | 10.9 | + 13 | - 7 | $7 \cdot 6$ | A 2 |
| 3718 | 311541 | L 3080 |  |  | 1458.97 | 8526 | 114 | $\begin{array}{llll}31 & 39 & 3.5\end{array}$ | 442 | 529 | 12.3 | - 51 | - $\quad 37$ | 9.4 |  |
| 3719 | 311540 | ${ }_{\text {L }} \mathbf{3 0 8 1}$ | 315 |  | 1459.33 | 8519 | 114 | $\begin{array}{llllllllllllllll}31 & 37 & 39\end{array}$ | $44^{2}$ | 529 | 11.9 | + 30 | - 69 | $8 \cdot 8$ |  |
| 3720 | 291511 | C 3902 | 343 | 14196 | 158.07 | 8001 | 106 | 29545.6 | 455 | 522 | 11.5 | + 25 | - 22 | 7-11 | A 2 |
| 3721 | 251641 | C 3903 |  |  | $\begin{array}{llll}7 & 15 & 8.14\end{array}$ | $+3.6665$ | -.0085 |  | $6 \cdot 455$ | $-504$ | 13.4 | 4 | - 99 | 9.4 |  |
| 3722 | 311542 | L 3082 | 320 | 14193 | $15 \quad 8.75$ | 8594 | 115 | 315248.2 | 456 | 530 | 13.7 | - 13 | - 30 | $9 \cdot 0$ |  |
| 3723 | 261525 | C 3906 | 356-7 | 14213 | 1520.89 | 7112 | 91 | 2647 31.2 | 473 | 509 | 13.2 | + 21 | - 28 | 8.4 | K 2 |
| 3724 | 271367 | C 3905 | 354-5 |  | $15 \quad 21.49$ | 7318 | 96 | $273153 \cdot 1$ | 473 | 512 | 13.8 | + 7 | - $\quad 56$ | $9 \cdot 4$ | Fo |
| 3725 | 311544 | L 3086 | 328 |  | $15 \quad 28.22$ | 8560 | 115 | $\begin{array}{lllll}31 & 4^{6} 54 \cdot 9\end{array}$ | 482 | 530 | 13.8 | 6 | - 12 | 9.0 | F2 |
| 3726 | 251644 | C 3908 |  |  | $\begin{array}{llll}7 & 15 & 32.08\end{array}$ | $+3.6848$ | -.0089 | $\begin{array}{llll}25 & 50 & 12.9\end{array}$ | -6.488 | -. 506 | 13.3 | - 5 | $\bigcirc$ | 8.6 | A 2 |
| 3727 | $24 \quad 1627$ | C 3909 |  |  | 1537.83 | 6567 | 86 | $244756 \cdot 4$ | 496 | 501 | 13.2 | - 1 | - | $9{ }^{\circ}$ |  |
| 3728 | $25 \quad 1645$ | C 3910 |  |  | 1538.48 | 6677 | 87 | $\begin{array}{lllll}25 & 12 & 39.4\end{array}$ | 496 | 504 | 13.1 | + 29 | - 1 | $9 \cdot 4$ | A 0 |
| 3729 | 261528 | C 3911 | 370 | 14232 | $1542 \cdot 30$ | 7073 | 92 | $263946 \cdot 8$ | 502 | 509 | $2 \cdot 2$ | + 24 | + 7 | 8.0 | A O |
| 3730 | 291514 | C 3913 |  |  | 1548.62 | 7773 | 104 | 29840.5 | 511 | 518 | 12.5 | + 26 | - 5 | 8.4 | Ko |
| 3731 | $27 \quad 1369$ | C 3916 | 375-6 |  | 71554.09 | $+3.7230$ | -.0096 | $27{ }^{14} 14^{*} 7$ | -6.518 | --510 | 12.3 | - 44 | + 7 | $8 \cdot 2$ | F 5 |
| 3732 | 311549 | ${ }^{\text {L }} 3089$ |  |  | 15 55.97 | 8331 | 112 | $\begin{array}{llll}31 & 2 & 32.9\end{array}$ | 521 | 526 | 12.3 | + 10 | + 5 | 9.0 | A 0 |
| 3733 | 261531 | C 3918 | 378 | 14.242 | $16 \quad 0.43$ | 6978 | 91 | $261942 \cdot 1$ | 526 | 508 | $13 \cdot 1$ | + | - 28 | $7 \cdot 9$ | Go |
| 3734 | 291515 | C 3917 |  |  | $16 \quad 2 \cdot 32$ | 7968 | 106 | . 2949 18•1 | 529 | 520 | 13.0 | + 53 | 12 | $9 \cdot 4$ |  |
| 3735 | $25 \quad 1649$ | C 3919 |  |  | $16 \quad 2 \cdot 80$ | 6725 | 88 | $\begin{array}{llll}25 & 24 & 4.3\end{array}$ | 530 | 504 | 13.2 | + | - 27 | $8 \cdot 6$ | F |
| 3736 | 311551 | L 3091 |  |  | $\begin{array}{lll}7 & 16 & 3.94\end{array}$ | $+3.8393$ | -.0112 | 311513.0 | -6.532 | --527 | 12.8 | 26 | - 29 | $8 \cdot 5$ | K o |
| 3737 | $26 \quad 1532$ | C 3920 | 379 | 14244 | 168.03 | 6895 | 89 | $26 \quad 154{ }^{\circ} \mathrm{O}$ | 537 | 506 | 13.4 | - | - 31 | $8 \cdot 2$ | K 2 |
| 3738 | 261535 | C 3922 | 384 |  | 1613.21 | 6918 | 90 | $\begin{array}{llll}26 & 6 & 56 \cdot 3\end{array}$ | 544 | 506 | 14.1 | - 13 | + 1 | $9 \cdot 0$ | A 0 |
| 3739 | 251651 | C 3924 |  |  | 1617.91 | 6637 | 88 | $\begin{array}{llll}25 & 5 & 1.6\end{array}$ | 550 | 502 | 13.7 | $+3$ | - 36 | $9 \cdot 4$ |  |
| 3740 | $30 \quad 1488$ | C 3923 |  |  | $16 \quad 22.15$ | 8019 | 108 | $\begin{array}{llll}30 & 0 & 27.7\end{array}$ | 557 | 52 I | 11.9 | + 21 | $+5$ | $8 \cdot 11$ | F 5 |
| 3741 | 251652 | C 3926 |  |  | 71622.20 | $+3.6768$ | -.0089 | $\begin{array}{llll}25 & 34 & 10 \cdot 2\end{array}$ | - $6 \cdot 557$ | --504 | 13.9 | + 33 | - 13 | $9 \cdot 4$ |  |
| 3742 | 301489 | L 3096 | 387 |  | $16 \quad 27 \cdot 36$ | 8148 | 110 | $\begin{array}{lll}30 & 27 & 0.6\end{array}$ | 564 | 523 | 12.9 | + | - 12 | $8 \cdot 1$ | K o |
| 3743 | 311553 | L 3099 | 388 |  | $1633 \cdot 13$ | 8323 | 113 | 317819.5 | 572 | 525 | 12.4 | - 8 | - 23 | $8 \cdot 0$ | F 5 |
| 3744 | 291516 | C 3927 |  |  | $1634 \cdot 85$ | 7932 | 107 | $\begin{array}{lll}29 & 43 & 5 \cdot 2 \\ 20 & 59 & 51.2\end{array}$ | 575 | 519 | 12.5 | + 5 | + 6 | $8 \cdot 5$ | F 5 |
| 3745 | 301490 | C 3928 | 393 | 14297 | $1652 \cdot 2 \mathrm{I}$ | 8010 | 109 | $295951 \cdot 2$ | 598 | 520 | 11.6 | 16 | 106 | $7 \cdot 96$ | K 2 |
| 3746 | 25.1654 | C 3929 | 400 |  | $\begin{array}{lll}7 & 17 & 0.97\end{array}$ | $+3.6635$ | -.0089 | $\begin{array}{llll}25 & 5 & 57 \cdot 2\end{array}$ | -6.610 | --501 | 12.9 | - 11 | - 75 | 9.4 |  |
| 3747 | 281373 | C 3930 |  |  | $17 \begin{array}{ll}17 & 10.35\end{array}$ | 7526 | 101 | $\begin{array}{llll}28 & 19 & 50 \cdot 3\end{array}$ | 623 | 513 | 13.0 | + 40 | - 18 | $9 \cdot 8$ |  |
| 3748 | 291520 | C 3931 |  |  | $1726 \cdot 37$ | 7852 | 107 | 2928 39.1 | 645 | 518 | 12.9 | + 15 | - 55 | $9 \cdot 4$ |  |
| 3749 | 281375 | C 3935 | 418-9-20 |  | 1745.30 | 7677 | 105 | 28 53. $2 \cdot 6$ | 671 | 515 | 11.7 | + 4 | - 47 | $9 \cdot 0$ | K o |
| 3750 | $25 \quad 1657$ | C 3937 |  |  | 1749.70 | 6752 | 91 | $253340 \cdot 8$ | 678 | 502 | 12.3 |  | - 14 | $9 \cdot 1$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
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| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec. Var. | Epoch $1900+$ | $\underset{\text { R.O.A. }}{\text { R. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ":oai. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m | s |  | - , " |  | " |  |  |  |  |  |
| 3751 | 271371 | C 3936 | 422 |  | $71750 \cdot 12$ | $+3.71{ }^{6} 6$ | -. 0097 | $27 \quad 0 \quad 6 \cdot 9$ | $-6.678$ | 508 | 12.9 | - 9 | $+$ | $9 \cdot 4$ | A |
| 3752 | 251659 | C 3939 |  |  | 1753.93 | 6786 | 93 | $254120 \cdot 9$ | 683 | 503 | 12.1 | 4 | $\bigcirc$ | $9 \cdot 0$ | B 9 |
| 3753 | 251660 | C 3940 |  | 14310 | $1759 \cdot 36$ | 6659 | 89 |  | 691 | 501 | 11.9 | - 51* | - 23 * | 5.08 | G 5 |
| 3754 | 261542 | C 3941 | 432 |  | 1811.51 | 6991 | 94 | $26 \quad 27 \quad 18.7$ | 708 | 506 | 12.9 | - 32 | + 6 | $9 \cdot 0$ |  |
| 3755 | 281376 | C 3942 | 429-30-1 |  | $18 \quad 14.89$ | 7623 | 105 | $284^{2} 48 \cdot 0$ | 712 | 514 | 13.5 | 24 | - | $9^{1 / 1}$ |  |
| 3756 | 311560 | L 3113 | 426 |  | 71817.75 | $+3 \cdot 8476$ | 119 | $313655 \cdot 1$ | -6.716 | -526 | 14.3 | 11 | 22 | $9^{\circ} 0$ |  |
| 3757 | 281377 | C 3943 | 436-8 | 14317 | $1820 \cdot 38$ | 7411 | 102 | $27 \quad 58 \quad 9 \cdot 9$ | 719 | 511 | 11.7 | 5 | 22 | $7 \cdot 9$ | K 2 |
| 3758 | 281378 | C 3944 | 449-50 | ${ }^{1} 4327$ | $18 \quad 39 \cdot 32$ | 7418 | 102 | 28 - 20.6 | 745 | 512 | 11.4 | 8 | - 9 | $9^{\circ} \mathrm{O}$ | K |
| 3759 | 311563 | L 3117 | 452 |  | 1854.03 | 8293 | 117 | $\begin{array}{lllllllllll}31 & 1 & 53.9\end{array}$ | 766 | 523 | 11.2 | 10 | - 26 | 8.8 |  |
| 3760 | $27 \quad 1374$ | C 3949 |  | ${ }^{1} 4335$ | 1857.55 | 7360 | 102 | $274845 \cdot 3$ | 771 | 510 | 9.9 | 10* | + $15^{*}$ | $5 \cdot 71$ | Fo |
| 3761 | 271376 | C 3950 |  |  | $7 \quad 196.68$ | $+3.7280$ | .0101 | 273150.0 | $-6.783$ | -510 | 12.3 | 31 | 15 | 8.8 | A o |
| 3762 | 28138 I | C 3951 | 463-4 | 14349 | $19 \quad 9.79$ | 7428 | 103 | $28 \quad 3 \quad 33 \cdot 6$ | 788 | 510 | 12.5 | + <br> + | 7 | 9.4 |  |
| 3763 | 261547 | ${ }^{\text {C }} 3952$ |  |  | $1915 \cdot 35$ | 7077 | 97 | 26481814 | 795 | 506 | 12.5 | + 3 | 4 | $9^{\circ} 0$ |  |
| 3764 | 241648 | C 3953 |  |  | $20+31$ | 6546 | 91 |  | 862 | 497 | 13.2 | 20 | - 9 | $9 \cdot 46$ | A |
| 3765 | 281385 | C 3954 | 482-3 | 14378-9 | $20 \quad 8.27$ | 7395 | 104 | $27 \quad 58 \quad 39 \cdot 3$ | 867 | 509 | 1222,12:8 | 86* | $90^{*}$ | $3 \cdot 89$ | K 。 |
| 3766 | $25 \quad 1669$ | C 3956 | 486 |  | $7 \quad 20 \quad 12 \cdot 19$ | $+3.662+$ | -.0092 | 251047 | -6.873 | -499 | 12.9 | + 15 | + | 8.7 | A 5 |
| 3767 | 261552 | C 3955 |  |  | 2013.39 | 7068 | 98 | $264^{8} \quad 2 \mathrm{I} \cdot 6$ | 874 | 505 | 13.7 | + 7 | - 7 | $8 \cdot 8$ |  |
| 3768 | 301500 | C 3957 | 488 |  | $2032 \cdot 83$ | 7952 | 114 | 2956 37.1 | 901 | 516 | 12.7 | + 5 | 8 | $9 \cdot 4$ |  |
| 3769 | 301501 | L 3132 |  |  | $2038 \cdot 16$ | 8011 | 115 | $\begin{array}{llll}30 & 8 & 52 \cdot 1\end{array}$ | 908 | 517 | 13.5 | 14 | 28 | $9^{\circ} \mathrm{O}$ |  |
| 3770 | 301502 | L 3133 |  |  | 20 40:57 | 8163 | 117 | $30 \quad 3955.4$ | 912 | 519 | 13.9 | 30 | - 34 | $8 \cdot 7$ | A 3 |
| 3771 | 261554 | C 3960 | 496 |  | $72046 \cdot 80$ | $+3.6878$ | . 0099 | $\begin{array}{llll}26 & 8 & 1.0\end{array}$ | -6.921 | . 502 | 13.0 | + 17 | + 12 | 8.6 | Ia |
| 3772 | 311574 | L 3134 |  | 14391 | 2053.77 | 8500 | 124 |  | 930 | 524 | 12.7 | - 4 | - 10 | $7 \cdot 15$ | G 5 |
| 3773 | $27 \quad 1383$ | C 3962 | 504 |  | $21 \quad 2.86$ | 7202 | 102 | 271925.0 | 942 | 506 | 13.3 | + 26 | + 9 | $9 \cdot 4$ |  |
| 3774 | $32 \quad 1550$ | L 3136 |  | 14404 | $21 \quad 10.77$ | 8537 | 125 | 315550.6 | 953 | 524 | $13 \cdot 1$ | + 3 | - 1 | 9.0 | K o |
| 3775 | 27 I 385 | C 3963 | 507 | 14412 | 2119.01 | 7298 | 104 | $27404^{1 \cdot 1}$ | 964 | 508 | 13.3 | + 18 | 8 | $9^{\circ}$ |  |
| 3776 | $24 \quad 1658$ | B 2943 |  |  | $\begin{array}{llll}721 & 19.95\end{array}$ | +3.6449 | . 0091 | $243252 \cdot 2$ | -6.966 | --496 | 14.3 | 23 | + 21 | $9 \cdot 1$ |  |
| 3777 | 281391 | ${ }^{\text {C }} 3967$ |  |  | 2128.04 | $74+6$ | 107 | $28 \quad 12 \quad 36 \cdot 2$ | 977 | 510 | 14.5 |  |  | $9 \cdot 4$ |  |
| 3778 | 291532 | C 3968 | 511 |  | 2129.99 | 7804 | 113 | $\begin{array}{ll}29 & 28 \quad 6.5\end{array}$ | 979 | 513 | 13.9 | + 27 | + 10 | $9 \cdot 0$ | A 2 |
| 3779 | $2+1659$ | B 2944 | 510 |  | $2131 \cdot 81$ | 6331 | 90 | $\begin{array}{lllll}24 & 6 & 28.8\end{array}$ | 982 | 494 | $14^{\circ} 2$ | 3 | 12 | 8.4 | A 2 |
| 3780 | $27 \quad 1387$ | C. 3970 | 525-6 | 1442 I | $2142 \cdot 18$ | 7239 | 103 | $272846 \cdot 0$ | 996 | 506 | 12.2 | 31 | 13 | $8 \cdot 2$ | A |
| 3781 | 301505 | C 3969 |  |  | 72142.97 | $+3.797 \mathrm{I}$ | 0116 |  | -6.997 | -.515 | 14.2 | + 27 | - 15 | $9 \cdot 1$ |  |
| 3782 | 291533 | C 3971 | 528 |  | 2153.01 | 7807. | 113 | $29 \quad 2941 \cdot 6$ | 7.011 | 513 | 12.5 | + 12 | - 44 | $9 \cdot 0$ | F 8 |
| 3783 | 261561 | C 3973 |  |  | $\begin{array}{lll}22 & 4 \cdot 88\end{array}$ | 6823 | 98 | $\begin{array}{lllllllll} & 5 & 58 & 410\end{array}$ | 027 | 500 | $14^{\circ} \mathrm{O}$ | - 1 | + 17 | $9 \cdot 4$ |  |
| 3784 | 271389 | C 3974 | 539-40 | 14431 | 2214.58 | 7232 | 104 | $27 \quad 2836.8$ | 041 | 506 | 11.5 | - $4^{6}$ | - 106 | $8 \cdot 1$ | K o |
| 3785 | 311581 | L 3138 |  |  | 2217.53 | 8451 | 125 |  | 045 | 521 | 13.7 | 19 | 25 | $9 \cdot 1$ |  |
| 3786 | 301508 | L 3140 |  |  | 722 22.09, | $+3.8097$ | -.0119 | $30 \quad 30 \quad 30 \cdot 1$ | -7.049 | - 517 | 12.9 | 8 | - 148 | 8.8 | G 5 |
| 3787 | 261564 | C 3976 | 544 | 14444 | $\begin{array}{lll}22 & 28.98\end{array}$ | 6937 | 101 | $26 \quad 2434 \cdot 9$ | 060 | 502 | 11.6 | + | + + | $7 \cdot 15$ | A 2 |
| 3788 | 291535 | C 3977 | 543 | 14438 | $\begin{array}{llll}22 & 32 \cdot 27\end{array}$ | 7832 | 115 | $2936 \quad 27 \cdot 6$ | 064 | 512 | 12.6 | + 12 | - 43 | $7 \cdot 41$ | A 5 |
| 3789 | $24 \quad 1663$ | B 2954 | 549 |  | $\begin{array}{lll}22 & 33.37\end{array}$ | 6337 | 91 | 24103.4 | 066 | 493 | 13.2 | 13 | - 17 | $8 \cdot 6$ | A o |
| 3790 | $25 \quad 1677$ | C 3978 |  |  | $2234 \cdot 00$ | 6613 | 95 | $\begin{array}{lllllllllll}25 & 12 & 38.8\end{array}$ | 067 | 496 | 13.1 | 11 | - 47 | $8 \cdot 2$ | Fo |
| 3791 | 271394 | C 3979 | 559-60 |  | $\begin{array}{llll}7 & 23 & 1.44\end{array}$ | $+3.7093$ | -.0103 | $27 \quad 0 \quad 9.6$ | - 7-103 | -.503 | 13.3 | + | - 4 | 9.1 | K |
| 3792 | 271395 | C 3980 | 561-2 | 14464 | 23.4 .56 | 7295 | 107 | $27 \quad 448.6$ | 109 | 506 | 12.3 | + 10 | + 20 | $6 \cdot 62$ | K o |
| 3793 | 241665 | C 3981 |  | 14481 | 2312.40 | 6507 | 95 | $2450 \quad 2 \cdot 0$ | 119 | 495 | 12.5 | + 14 | - 91 | $7 \cdot 41$ | F 8 |
| 3794 | 241667 | B 2962 |  |  | 2316.06 | 6408 | 93 | 242751.0 | 124 | 493 | 12.9 | + 1 | - 5 | 9.4 | K |
| 3795 | 321562 | L 3150 | 564 | 14463 | $23 \quad 19 \cdot 46$ | 8519 | 129 | 315751.0 | 128 | 522 | 11.6 | $+117^{*}$ | + 183* | 4-18 | Fo |
| 3796 | $26 \quad 1566$ | C 3983 | 573-4 |  | $7 \quad 2320.91$ | $+3.7035$ | -.0103 | $\begin{array}{lllll}26 & 4^{8} & 12 \cdot 1\end{array}$ | -7.131 | $-\cdot 502$ | 14.1 | + 73 | - 87 | $9 \cdot 1$ | G 5 |
| 3797 | 311589 | L. 3151 |  |  | $23 \quad 24.28$ | 8476 | 127 | 314934.4 | 135 | 521 | 13.8 | - 24 | + 16 | $9 \cdot 4$ |  |
| 3798 | 251683 | C 3984 |  |  | 2325.27 | 6669 | 97 | 2527 11.1 | ${ }^{1} 36$ | 497 | 12.8 | + 49 | - 36 | $8 \cdot 5$ | G 5 |
| 3799 | 311591 | L 3154 |  |  | 23.28 .42 | 8287 | 124 |  | 140. | 518 | 13.7 | + 8* | - 107 | $9 \cdot 0$ | G |
| 3800 | $28 \quad 1396$ | C 3985 | 584 | 144946 | 23 44•11 | 7447 | 110 | $\begin{array}{llllll}28 & 18 & 15\end{array}$ | 162 | 507 | 127 | - $24^{*}$ | - 59* | $5 \cdot 04$ | A 2 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100 . | Precession. | Sec. Var. | Dec. 1910\%. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { 8.0001. }}{\text { R.A. }}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m s | 8 | 5 | - , " | " | " |  |  |  |  |  |
| 3801 | 241673 | B 2970 |  |  | $72355 \cdot 55$ | $+3.6441$ | -.0095 | $243636 \cdot 4$ | - $7 \cdot 178$ | -493 | 13.6 |  | - 10 | 8.6 |  |
| $3802$ | 271397 | C 3986 |  |  | 2358.52 | 7113 7885 | 105 | $276649 \cdot 5$ | 183 | 502 | II•3 | - 9 * | - 6 | $8 \cdot 4$ | $\mathrm{K}_{2}$ |
| 3803 | 281400 | C 3988 | 591-3 | 14513-4 | 2412.95 | 7385 | 110 | $\begin{array}{llll}28 & 6 & 8.8\end{array}$ | 202 | 506 | II. 5 | $-2{ }^{\text {* }}$ | - $4^{*}$ | $5 \cdot 09$ | K o |
| 3804 | 311597 | L 3159 |  |  | 24 40.10 | 8349 | 127 | 312726.5 | 238 | 518 | 12.3 | 22 | - 23 | $9 \cdot 4$ |  |
| 3805 | 311598 | L 3160 | 602 |  | $2440 \cdot 78$ | 8312 | 127 | $311957 \cdot 3$ | 240 | 517 | 12.3 | 4 | - 18 | $8 \cdot 0$ | G $5^{\circ}$ |
| 3806 | 291540 | C 3992 | 607 |  | 724 43.12 | +3.7741 | -.0117 | 292243.6 | $-7.242$ | -. 510 | 11.5 | $+$ | - 19 | $8 \cdot 0$ | G 5 |
| 3807 | 291539 | C 3991 |  |  | $2443 \cdot 15$ | 7796 | 118 | $293420 \cdot 3$ | 242 | 510 | 11.7 | - 4 | - 211 | $9 \cdot 4$ |  |
| 3808 | 311599 | L 3161 |  |  | 2444.63 | 8426 | 128 | 314258.6 | 245 | 519 | 13.0 | - 23 | - 23 | $8 \cdot 8$ | A o |
| $3809$ | 251689 | C 3994 | 615 |  | 2454.40 | 6703 | 100 | $\begin{array}{llll}25 & 38 \\ 9.0\end{array}$ | 257 | 497 | 12.1 | - 18 | - 2 | $8 \cdot 4$ | K 2 |
| 3810 | 311601 | L 3163 |  |  | $24 \quad 58 \cdot 97$ | 8432 | 130 | $314447 \cdot 5$ | 264 | 519 | 12.7 | 10 | 9 | 9.4 |  |
| 3811 | 261573 | C 3996 | 619 |  | $72459 \cdot 72$ | $+3.6790$ | -.0101 | $255751 \cdot 0$ | $-7.265$ | -497 | 12.7 | + 23 | 22 | $8 \cdot 8$ |  |
| 3812 | 281405 | C 3997 | 616-8 | 14543-4 | $25 \quad 3.95$ | 7374 | 113 | $28 \quad 5 \quad 50 \cdot 7$ | 27 I | 505 | 13.8 | + $4^{2}$ | - 20 | 8.0 | F 5 |
| 3813 | 301519 | L. 3165 | 620 |  | $25 \quad 12.22$ | 8136 | 125 | 304544.0 | 282 | 515 | 14.1 | 4 | 20 | $8 \cdot 5$ | A 0 |
| 3814 | 291541 | C 3999 | 626 |  | $25 \quad 18.46$ | 7726 | 118 | $29 \quad 20 \quad 59 \cdot 5$ | 290 | 509 | 13.1 | 12 $+\quad 12$ | - 27 | 9.4 |  |
| 3815 | 301520 | L 3166 | 624 |  | $25 \quad 18.95$ | 8132 | 125 | 3045 I 3.2 | 291 | 515 | 10.9 | - 66 | - 114 | 8.6 | F 5 |
| 3816 | 291543 | $\mathrm{C}_{4001}$ | 629 |  | 72525.21 | +3.7616 | -.0116 | $\begin{array}{llll}28 & 58 & 8.5\end{array}$ | -7.299 | -. 508 | II•7 | - 13 | - 17 | 8.6 | F 5 |
| 7 | 251690 | C 4003 |  |  | $25 \quad 27 \cdot 26$ | 6644 | 100 | $25 \quad 2545 \cdot 9$ | 302 | 495 | 14.4 | + 3 | - 18 | $9 \cdot 0$ |  |
| 3818 | 251691 | C 4005 |  |  | $25 \quad 29.83$ | 6622 | 99 | 252116.8 | 306 | 493 | 13.1 | - 2 | + 8 | $8 \cdot 7$ |  |
| 3819 | 281408 | C 4006 | 634-6 |  | 2533.23 | 7395 | 112 | 28 11 25.3 | 310 | 505 | 13.4 | - 13 | - 14 | $9 \cdot 5$ |  |
| 3820 | 291544 | C 4007 | 637 |  | 2538.50 | 7737 | 118 | $29 \quad 2419.5$ | 318 | 509 | 11.7 | + 12 | - 44 | $8 \cdot 2$ | G 5 |
| 3821 | 271403 | $\mathrm{C}_{4} 8009$ | 647-8 | 14571 | $725 \quad 50 \cdot 27$ | +3.7286 | -. 0111 | $\begin{array}{lllll}27 & 48 & 42 \cdot 0\end{array}$ | $-7.333$ | - 502 | $9 \cdot 6$ | + | - 9 | $8 \cdot 1$ | F 8 |
| 2 | 241681 | B 2987 | 654 |  | $2554 \cdot 08$ | 6279 | 95 | $\begin{array}{llllllllll}24 & 3 & 55.2\end{array}$ | 339 | 489 | 11.0 | + 31 | $+\quad 15$ | $9{ }^{\circ} \mathrm{O}$ |  |
| 3823 | 291546 | ${ }^{\text {C }} 4010$ | 653 |  | $26 \quad 3.24$ | 7625 | 117 | $\begin{array}{llll}29 & 1 & 1 & 36 \cdot 8\end{array}$ | 351 | 507 | 13.1 | + 9 | - 37 | 8.8 | G 5 |
| 3824 | 261579 | ${ }^{\text {C }} 4012$ |  |  | $26 \quad 6 \cdot 57$ | 6964 | 107 | $\begin{array}{llll}26 & 39 & 5 \cdot 8\end{array}$ | 356 | 498 | 13.6 | + 9 | - 9 | $9 \cdot 4$ |  |
| 3825 | 261580 | C 4015 | 656 |  | 2610.88 | 6782 | 103 | 255847.0 | 362 | 496 | 13.5 |  | + 15 | 8.6 | K o |
| 3826 | 241683 | B 2989 | 661 | 14585 | $\begin{array}{llll}7 & 2612.87\end{array}$ | $+3.6308$ | -.0096 | 241122.8 | $-7.364$ | -490 | 12.7 | - 2 | 11 | $8 \cdot 0$ | K o |
| 3827 | 311603 | L 3169 |  |  | ${ }_{26} 2618.84$ | 8228 | 128 | $\begin{array}{lllllllll}31 & 711.0\end{array}$ | 373 | 515 | 14.3 | + 14 | - 17 | $9 \cdot 0$ |  |
| 38 | 241685 | ${ }_{\text {C }} 4016$ |  | 14589 | $26 \quad 20 \cdot 97$ | 6447 | 98 | $2443 \quad 30 \cdot 9$ | 375 | 491 | 14.3 | $+34$ | - 13 | $9 \cdot 4$ |  |
| 3829 | 241686 | ${ }^{\text {C }} 4017$ |  | 14596 | $26 \quad 27 \cdot 04$ | 6438 | 98 | $24.4137 \cdot 3$ | 383 | 49 I | 11.7 | - 2 | - | 8.2 | R 8 |
| 3830 | 311606 | L 3171 |  | 14584 | 2631.91 | 8276 | 129 |  | 390 | 515 | II.9 | + 7 | - 31 | $8 \cdot 4$ | K o |
| 3831 | 271405 | C 4018 | 664-5 |  | $72632 \cdot 62$ | $+3.7138$ | -.0109 | $\begin{array}{lllll}27 & 18 & 18.5\end{array}$ | $-7.392$ | - 500 | 13.9 | 5 | 12 | 9-I | F 5 |
| 3832 | 241687 | B 2996 | 672 |  | $2635 \cdot 86$ | 6295 | 96 | $\begin{array}{llll}24 & 9 & 7 \cdot 8\end{array}$ | 396 | 489 | 11.3 | + 5 | + 23 | 8.2 | K 2 |
| 3833 | 271406 | C 4019 | 668-9 | 14597 | $2639 \cdot 31$ | 7141 | 109 | $\begin{array}{llll}27 & 19 & 3 \cdot 2\end{array}$ | 400 | 500 | 12.1 | - 28 | - 93 | 8.0 | K。 |
| 3834 | 311608 | L 3174 |  |  | $27 \quad 7 \cdot 45$ | 8323 | 131 | $\begin{array}{llll}31 & 28 & 31 \cdot 7\end{array}$ | 438 | 516 | 12.7 | + 2 | - 24 | 8.6 | F 5 |
| 3835 | $26 \ngtr 584$ | C 4023 |  |  | $27 \quad 9.04$ | 6876 | 106 | $26 \quad 2158 \cdot 2$ | $44^{\circ}$ | 496 | 12.9 | + 7 | + 4 | $9 \cdot 0$ |  |
| 3836 | $26 \quad 1585$ | C 4025 |  |  | 72711.24 | $+3.6790$ | -2104 | 268248.6 | 7-443 | - 494 | 13.1 | + 43 | + 20 | 19.4 |  |
| 3837 | $27 \quad 1409$ | C 4024 |  | 14624 | $27 \quad 12.53$ | 7279 | 112 | $27 \quad 5034 \cdot 1$ | $44^{6}$ | 501 | 12.7 | + 3 | - 2 | $8 \cdot 6$ | A 2 |
| 3838 | 261587 | C 4030 | 695-7-8 |  | $27 \quad 25.71$ | 6960 | 109 |  | 463 | 497 | 13.1 | + 11 | - 14 | 8.8 | G 5 |
| 3839 3840 | 271411 | C 4031 |  | 14639 | $2734 \cdot 17$ | 7215 | 113 | $2737 \quad 35 \cdot 8$ | 474 | 500 | 13.4 | - 17 | - | 9.0 | A 0 |
| 3840 | 261588 | C 4033 | 706 |  | 27 41.43 | 6854 | 107 |  | 484 | 494 | IT•I | 8 | + | $7 \cdot 8$ | A 2 |
| 3841 | $26 \quad 1589$ | C 4034 | 708-9-10 |  | 72745.08 | +3.6947 | -. 0108 | $\begin{array}{llll}26 & 39 & 10.5\end{array}$ | -7.489 | - 496 | 12.0 |  | + 11 | $8 \cdot 4$ |  |
| 3842 | 311611 | L 3180 |  |  | 2747.55 | 8437 | 134 | $\begin{array}{llll}31 & 53 & 19.2\end{array}$ | 493 | 517 | $13 \cdot 1$ | + 5 | - 56 | 8.8 |  |
| 3843 | 301525 | $\mathrm{L}_{\mathrm{C}} 3181$ |  | 14643 | 2749.39 | 8120 | 129 | $3049415 \cdot 5$ | 495 | 512 | 11.9 | - 13 | + 1 | $7 \cdot 46$ | K o |
| 3844 | 261590 | C 4035 |  |  | $2749 \cdot 65$ | 6750 | 105 | $\begin{array}{lllll}25 & 55 & 21.7\end{array}$ | 496 | 494 | $14^{\circ} \mathrm{O}$ | + 26 | - 4 | 8.8 |  |
| 3845 | 311612 | L 3182 |  |  | 27 51.27 | 8188 | 130 | $\begin{array}{llll}31 & 3 & 8.7\end{array}$ | 497 | 513 | 13.1 | + 3 | + 9 | $7 \cdot 8$ |  |
| 3846 | 261591 | C 4036 | 721 |  | $728 \quad 6.05$ | $+3.6820$ | --0107 | 26 II 43.3 | - 7.517 | - 495 | 13.3 | + 8 | - 9 | $9 \cdot 4$ |  |
| 3847 | 251704 | C 4037 | 723 |  | $\begin{array}{lll}28 & 13.09\end{array}$ | 6658 | 103 | $253540 \cdot 4$ | 527 | 492 | 12.3 | - 19 | + $\quad 1$ | 8.8 |  |
| 3848 | 301527 | L 3184 | 722-4 |  | $\begin{array}{ll}28 & 25 \cdot 12\end{array}$ | 8041 | 129 | $303434 \cdot 6$ | 543 | 511 | 12.9 | 2 | + 5 | $9 \cdot 4$ | A 3 |
| 3849 | 251706 | ${ }^{\text {C }} 4040$ | 733 |  | $28 \quad 35 \cdot 59$ | 6516 | 102 | $25 \quad 427 \cdot 6$ | 558 | 489 | 13.3 | - 25 | - 8 | $9 \cdot 4$ |  |
| 3850 | 311615 | L/3186 | 729 |  | $2837 \cdot 71$ | 8288 | 133 | 312537.0 | 561 | 514 | 11.3 | - 44 | - 15 | 8.6 |  |


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| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Seo. Var. | Doc. 1910.0. | Precession. | $\begin{aligned} & \text { Sec. } \\ & \text { Var. } \end{aligned}$ | $\begin{aligned} & \text { Epooh } \\ & \text { Igoot } \end{aligned}$ | R.A. -.0001. | $\begin{array}{\|c} \text { Dec. } \\ . \end{array}$ | Mag. | Spectral <br> Typo. |
|  | - |  |  |  | h m | 8 | 8 | - , " |  | " |  |  |  |  |  |
| 3851 | $24 \quad 1698$ | B 3010 |  |  | $7 \quad 28 \quad 38 \cdot 56$ | $+3.6310$ | -. 0099 | $24 \quad 17 \quad 12.2$ | -7.562 | -487 | 13.4 | 6 | 20 | 9.4 |  |
| 3852 | 281415 | C 4041 | 738 |  | $2851 \cdot 48$ | 7472 | 118 | $283621 \cdot 7$ | 578 | 502 | 11•9 | $+$ | + | $7 \cdot 7$ | B 9 |
| 3853 | 281416 | C. 4042 |  | 14688 | $2854 \cdot 15$ | 7549 | 119 | $28 \quad 5254 \cdot 6$ | 582 | 504 | 12.4 | + 17 | - 20 | 6.74 | G 5 |
| 3854 | 291553 | C 4044 |  |  | 2856.59 | 7561 | 120 | $285541 \cdot 1$ | 586 | 504 | 12.1 | - 4 | - | $8 \cdot 8$ |  |
| 3855 | $31 \begin{array}{llll}31 & 1618\end{array}$ | L 3191 |  |  | $28 \quad 57 \cdot 36$ | 8249 | 133 | $3118 \quad 37 \cdot 1$ | 587 | 513 | 13.7 | - 1 | - 17 | 9.4 |  |
| 3856 | 281417 | C 4046 | 745 |  | $\begin{array}{lll}729 & 3.54\end{array}$ | $+3 \cdot 7496$ | -. 0118 | 284155 | $-7.596$ | -503 | 12.7 | + 10 | - 40 | $7 \cdot 7$ | K 2 |
| 3857 | 241703 | B 3016 | 748 |  | $29 \quad 6.39$ | 6246 | 98 | $24 \quad 322 \cdot 1$ | 599 | 486 | 12.9 | - 21 | + 3 | $9 \cdot 8$ | F 2 |
| 3858 | 251708 | C 4048 | 752 |  | 2911.44 | 6497 | 103 | $25 \quad 122.3$ | 605 | 489 | 13.6 | + 22 | - 9 | $9 \cdot 4$ |  |
| 3859 | 281418 | C 4049 | 750 | 14705 | 29 19.21 | 7426 | 118 | $28 \quad 2737 \cdot 5$ | 616 | 502 | 12.1 | + 29 | - 24 | $7 \cdot 8$ | A o |
| 3860 | $26 \quad 1597$ | C 4050 |  |  | 2919.58 | 6949 | 110 | $264335 \cdot 4$ | 617 | 495 | $14^{\circ} \mathrm{O}$ | + 26 | - 49 | 9.4 |  |
| 3861 | $25 \quad 1709$ | $\mathrm{C}_{4} 41$ | 755 | 14707 | 729 21.22 | $+3.6531$ | -. 0104 | $25 \quad 932 \cdot 0$ | $-7.619$ | 490 | 13.4 | + 99 | - 352 | $8 \cdot 0$ | G o |
| 3862 | 311620 | L. 3193 | 751 |  | 2925.69 | 8198 | 133 | $31 \quad 926.0$ | 626 | 512 | 12.7 | - 25* | - I * | $5 \cdot 34$ | K o |
| 3863 | $24 \quad 1705$ | B 3019 |  |  | 29 32.61 | 6346 | 101 | $24 \quad 2743 \cdot 8$ | 635 | 486 | $11 \cdot 9$ | - 12 | - 15 | $7 \cdot 91$ | Ma |
| 3864 | 241706 | B 3020 | 762 |  | $2935 \cdot 61$ | 6259 | 100 | $\begin{array}{llll}24 & 7 & 39.3\end{array}$ | 639 | 485 | 13.3 | - 2 | + ${ }^{11}$ | 8.0 | F 5 |
| 3865 | 301530 | L 3194 | 759 |  | $2943 \cdot 61$ | 7982 | 130 | $\begin{array}{llll}30 & 26 \quad 0.2\end{array}$ | 650 | 509 | 12.9 | + 7 | - 31 | $8 \cdot 6$ | G o |
| 3866 | 281419 | ${ }_{\text {C }} 4053$ | 763-4 | 14714 | 72946.82 | $+3.7522$ | . 0120 | $284928 \cdot 7$ | $7 \cdot 654$ | . 502 | 11.5 | - 5 | + 12 | 7.02 | A 3 |
| 3867 | 251711 | ${ }^{\text {C }} 4054$ |  |  | $2947 \cdot 06$ | 6686 | 106 | $254544 \cdot 6$ | 654 | 491 | ${ }^{13} 31$ | - 4 | $1+\quad 35$ | $8 \cdot 6$ |  |
| 3868 | 261601 | C 4055 | 767 | 14719 | 2949.00 | 6964 | III | $264757 \cdot 2$ | 657 | 494 | 13.5 | + 13 | - 11 | $8 \cdot 5$ | K o |
| 3869 | 261603 | C +056 | 772 |  | $2957 \cdot 67$ | 6957 | 111 | $26 \quad 4710.9$ | 669 | 494 | 12.3 | + $\quad 27$ | - 19 | 9.4 |  |
| 3870 | 311623 | L. 3196 |  | 14725 | 3011.03 | 8114 | 133 | $30 \quad 54 \quad 23 \cdot 3$ | 686 | 510 | 12.8 | + 17 | - 24 | $8 \cdot 7$ | G 5 |
| 3871 | 311624 | L 3197 | 773 |  | 73012.41 | $+3.8336$ | -0137 | $\begin{array}{llll}31 & 39 & 34.5\end{array}$ | $-7.688$ | - 513 | 11.6 | + 18 | + 20 | $8 \cdot 2$ |  |
| 3872 | 271424 | ${ }^{\text {C }} 4059$ | $780-1$ | 14744 | $30 \quad 22 \cdot 70$ | 7037 | 113 | $27 \quad 547 \cdot 6$ | 702 | 495 | 10.8 | - 20* | - 116* | $4 \cdot 22$ | K 5 |
| 3873 | 251713 | C 4060 | 790 |  | 3027.00 | 6505 | 104 | $\begin{array}{llll}25 & 6 & 18.4\end{array}$ | 708 | 488 | 12.9 | 5 | - 3 | $8 \cdot 2$ | K o |
| 3874 | 241712 | B 3026 | 794 |  | 3027.25 | 6271 | 10 | $24 \begin{array}{lllllll}24 & 12 & 23.6\end{array}$ | 708 | 486 | $12 \cdot 1$ | + 3 | - 12 | $9 \cdot 0$ |  |
| 3875 | 281420 | C 4061 | 784 |  | $3030 \cdot 65$ | 7515 | 121 | $284944 \cdot 3$ | 713 | 502 | $14^{11}$ | I | - $\quad 38$ | $9 \cdot 4$ | G |
| 3876 | 261605 | C 4062 |  |  | 73038.92 | $+3.6853$ | -. 0110 | 262525.6 | $7 \cdot 724$ | 493 | $14^{-2}$ | + | - 27 | $9 \cdot 1$ |  |
| 3877 | 311627 | L 3200 | 785-6 |  | 303975 | 8390 | 138 | 315150.4 | 725 | 513 | 11.9 | + 10 | - 16 | 8.6 |  |
| 3878 | 311628 | L 3201 |  |  | $3043 \cdot 33$ | 8224 | I 35 | $\begin{array}{llllll}31 & 18 & 32 \cdot 2\end{array}$ | 729 | 511 | 13.4 | - 30 | - 33 | 9•1 |  |
| 3879 | 261607 | C 4063 |  |  | 3051.70 | 6758 | 108 | $26434 \cdot 5$ | 741 | 491 | 13.5 | + 16 | - | 9-1 |  |
| 3880 | 271426 | C 4066 | 802-4 |  | $3057 \cdot 10$ | 7018 | 114 | $27 \quad 2 \begin{array}{ll} & 57\end{array}$ | 748 | 494 | 12.9 | + 9 | - 31 | $9 \cdot 4$ |  |
| 3881 | 301533 | C 4065 |  |  | $73059 \cdot 10$ | $+3.7835$ | -.0129 | 295851.8 | $-7.751$ | -505 | 11.5 | + 2 | - 39 | $8 \cdot 21$ | $\mathrm{F}^{2}$ |
| 3882 | 301535 | L 3205 |  |  | 3124.44 | 7897 | 130 | $30 \quad 12 \cdot 56 \cdot 5$ | 784 | 506 | 13.9 | + 11 | - 39 | $8 \cdot 6$ | Fo |
| 3883 | 251716 | C 4069 |  |  | 3127.69 | 6524 | 106 | $2513 \quad 4{ }^{\circ} \mathrm{O}$ | 790 | 488 | 11.5 | - 15 | - 57 | $8 \cdot 6$ |  |
| 3884 | 261610 | ${ }^{\text {C }} 4070$ | 819 |  | $\begin{array}{lll}31 & 29.65\end{array}$ | 6719 | 110 | $255^{56} 13.0$ | 792 | 490 | 13.8 | + 33 | - 58 | $9 \cdot 4$ |  |
| 3885 | $27 \quad 1428$ | C4071 |  |  | 3132.23 | 7206 | 118 | $2745 \quad 37 \cdot 9$ | 795 | 496 | 13.6 | + 1 | - 17 | 9.4 |  |
| 3886 | 261611 | C 4072 | 826 |  | $73136 \cdot 36$ | +3.6744 | -.0109 | $\begin{array}{llll}26 & 3 & 17.2\end{array}$ | $-7.801$ | - 490 | 14.2 | + 6 | - 16 | $9 \cdot 4$ |  |
| 3887 | 241718 | B 3030 | 827 |  | $3136 \cdot 61$ | 6229 | 101 | $24 \quad 5 \quad 23.6$ | 802 | 483 | 12.3 | + | - 6 | $8 \cdot 4$ | K o |
| 3888 | 291562 | C 4074 | 824 |  | $3142 \cdot 65$ | 7661 | 127 | 292411.7 | 810 | 502 | 12.7 | 9 | - 7 | 9.0 | A 0 |
| 3889 | 311633 | L 3206 | 823 | 14781 | $3146 \cdot 46$ | 8360 | 140 | $314855 \cdot 6$ | 814 | 511 | 10.8 | 16 | - 33 | $7 \cdot 60$ | B 9 |
| 3890 | $28 \quad 1426$ | C 4078 | 841 -2 |  | $32 \begin{array}{ll}12 \cdot 19\end{array}$ | 7247 | 119 | $27 \quad 56 \quad 27 \cdot 9$ | 849 | 497 | $9 \cdot 9$ | 1 | - 11 | $8 \cdot 2$ | A 0 |
| 3891 | 241725 | B 3040 |  |  | 73231.50 | $+3.6207$ | . 0101 | $\begin{array}{llll}24 & 2 & 19.3\end{array}$ | $-7.875$ | -482 | 10.7 | - 23 | - 34 | $8 \cdot 2$ | G 5 |
| 3892 | 311634 | L 3212 | 852 |  | $3237 \cdot 14$ | 8081 | 135 | $30 \quad 53 \quad 57 \cdot 2$ | 882 | 507 | $10 \cdot 3$ | + 11 | 6 | 8.4 | G 5 |
| 3893 | 311635 | L 3214 | 853 | 14815 | $3240 \cdot 41$ | 8264 | 139 | 3151588 | 886 | 509 | 11.4 | - 4 | - 74 | $8 \cdot 1$ | K o |
| 3894 | 241727 | B 3041 | 864-5 | . 14838 | $3247 \cdot 65$ | 6339 | 104 | $24334^{6 \cdot 0}$ | 897 | 484 | $9 \cdot 8$ | + 6 | + | $6 \cdot 32$ | F 0 |
| 3895 | $28 \quad 1427$ | C 4080 | 857 |  | $3251 \cdot 18$ | 7400 | 124 | 283115.0 | 901 | 498 | 12.1 | + 12 | 22 | $9 \cdot 4$ | F 5 |
| 3896 | 251725 | C 4086 | 870 |  | 73254.23 | $+3 \cdot 6423$ | - 0106 | $2453 \quad 28.3$ |  |  | 12.8 | - 8 | - 18 | 9.5 |  |
| 3897 | 281428 | C +084 | 863 |  | 3255.87 | 7396 | 123 | $28 \quad 3047 \cdot 2$ | 908 | 498 | 12.3 | + 9 | - 33 | $8 \cdot 8$ |  |
| 38988 | 271430 | C 4085 | 866 |  | 3255.95 | 6979 | 115 | $265925 \cdot 6$ | 908 | 493 | 12.3 | 27 | + 10 | 8.8 | K o |
| 3899 | 251727 | C 4087 | 871 |  | 3258.03 | 6524 | 107 | $251646 \cdot 1$ | 910 | 486 | 12.7 | 8 | - 7 | 9.1 |  |
| 3900 | 291568 | C 4092 |  |  | 33 37.91 | 7519 | 127 | $\begin{array}{lllll}28 & 58 & 59.8\end{array}$ | 964 | 499 | 13.5 | 31 | - 75 | 9.4 |  |


| No | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | SpectralType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. } .000 \mathrm{I} .}{ }$ | $\begin{aligned} & \text { Dec. } \\ & \text { D. } 0001 . \end{aligned}$ |  |  |
|  | 。 |  |  |  | h m s | 8 | s | - , | " | " |  |  |  |  |  |
| 3901 | 241729 | B 3050 | 891 | 14870 | 733 39.21 | $+3.6319$ | -. 0105 | 243168 | $-7.965$ | -.482 | $11 \cdot 1$ | - 14 | + | $9 \cdot 4$ |  |
| 3902 | 241730 | B 3051 | 897 | 14876 | $3345 \cdot 79$ | 6294 | 105 | 24 25 <br> 188  | 975 | 482 | $8 \cdot 6$ | - 6 | - 20 | $6 \cdot 04$ | A 0 |
| 3903 | 271438 | C 4094 | 896 |  | 3350.75 | 7061 | 119 | 27 19 54.8 | 981 | 491 | 12.5 | + 35 | + 3 | 9.1 |  |
| 3904 | 291570 | C 4095 | 895 |  | 3353.78 | 7736 | 131 | $294555 \cdot 6$ | 985 | 505 | $13 \cdot 1$ | - 28 | - $4^{6}$ | 9.4 |  |
| 3905 | 281432 | C 4096 | 898 |  | $33 \quad 55 \cdot 08$ | 7255 | 122 | $\begin{array}{llll}28 & 2 & 42.6\end{array}$ | 987 | 494 | 12.9 | 24 | - 10 | $9 \cdot 4$ |  |
| 3906 | 301541 | L 3222 |  |  | 73418.50 | $+3 \cdot 7827$ | -.0134 | $\begin{array}{llll}30 & 618.0\end{array}$ | -8.019 | - 501 | 12.3 | + 3 | $\bigcirc$ | 8.8 |  |
| 3907 | 271440 | C 4100 |  | 14890 | 34 21.20 | 6946 | 117 | $265545 \cdot 2$ | 021 | 490 | 12.8 | + 44 | - 105 | 8.6 | G 5 |
| 3908 | 301542 | L 3223 |  |  | $3432 \cdot 23$ | 7835 | . 135 | 30843.4 | 036 | 502 | 13.1 |  |  | 9.1 |  |
| 3909 | 271443 | $\mathrm{C}_{4103}$ | 914 |  | $3436 \cdot 55$ | 7103 | 120 | $273121 \cdot 1$ | 043 | 492 | 11.7 | + 39 | - 15 | $8 \cdot 6$ | K O |
| 3910 | 301543 | L 3224 |  |  | $3440 \cdot 21$ | 7887 | 136 | $\begin{array}{llllllllll}30 & 19 & 56.5\end{array}$ | 047 | 502 | 13.5 | + 14 | + 3 | $9 \cdot 4$ |  |
| 3911 | 291575 | ${ }_{\text {C }} 4104$ | 917-9 |  | $73445 \cdot 47$ | +3.7517 | -.0127 | $\begin{array}{llll}29 & 1 & 51 \cdot 9\end{array}$ | $-8.053$ | - 498 | 12.8 | - 7 | 79 | $9 \cdot 1$ |  |
| 3912 | 261624 | C 4105 | 922 |  | 34 49.15 | - 6842 | 115 | 2633 33-1 | 059 | 489 | 13.9 | + 6 | - 16 | $9 \cdot 4$ |  |
| 3913 | 281435 | ${ }^{\text {C }} 4106$ | 924 |  | 3456.40 | 7211 | 123 | 2756 I•I | 068 | 493 | 13.5 | 12 | - 22 | 9.0 |  |
| 3914 | 291578 | ${ }^{\text {C } 4109}$ | 928-30 |  | 354.20 | 7516 | 128 | 29220.0 | 079 | 498 | 13.3 | + 27 | - 17 | $9 \cdot \circ$ | F 5 |
| 3915 | 281438 | $\mathrm{C}_{4} 112$ |  |  | 3514.90 | 7268 | 125 | $\begin{array}{llll}28 & 9 & 12.5\end{array}$ | 093 | 494 | $12 \cdot 1$ | - 2 | + 15 | 8.8 | A 0 |
| 3916 |  | ${ }_{\text {c }}$ 41I3 |  |  | 73523.95 | $+3.7398$ | -.0127 | $\begin{array}{llll}28 & 37 & 59 & 3\end{array}$ | -8.105 | --495 | 14.2 |  |  | $9 \cdot 4$ |  |
| 3917 | 281440 | ${ }^{\text {C }} 41114$ |  |  | $35 \quad 24 \cdot 01$ | -7388 | 127 | $28 \quad 3547 \cdot 2$ | 105 | 495 | 13.7 | - $3^{8}$ | + | $9 \cdot 4$ |  |
| 3918 | 271446 | C 4116 | 944 |  | 3525.59 | 7185 | 122 | 275129.9 | 108 | 492 | 13.3 | + $\quad 39$ | - 3 | 9-1 |  |
| 3919 | 251738 | C4117 | 953 |  | $35 \quad 35 \cdot 55$ | 6468 | 111 | 25 10 27.8 | 121 | 482 | 9.4 | - 19 | - 66 | 8.0 | F 8 |
| 3920 | 301546 | L 3230 | 949 |  | 35 37-17 | 7998 | 140 | 3045 51.0 | 123 | 502 | 11.5 | + 4 | - 28 | $9 \cdot 0$ |  |
| 3921 | 271449 | C 4118 | 952 |  | $73539 \cdot 98$ | $+3.7155$ | -.0123 | 274533.5 | -8.127 | -491 | 12.4 | + 14 | - 15 | $9 \cdot 4$ |  |
| 3922 | 261625 | $\mathrm{C}_{4119}$ |  |  | $3547 \cdot 59$ | 6708 | 115 | $26 \quad 5 \quad 53 \cdot 1$ | 137 | 486 | II•I | - 14 | - 24 | $8 \cdot 6$ | K 2 |
| 3923 | 241740 | B 3074 |  |  | $3634 \cdot 83$ | 6221 | 107 | $241540 \cdot 6$ | 200 | 478 | $9 \cdot 0$ | + 7 | - 27 | $8 \cdot 2$ | A 3 |
| 3924. | 301549 | L 3235 | 983 | 14932 | 36 39.10 | 7873 | 138 | 302243.7 | 205 | 500 | $8 \cdot 1$ | - 9 | + 1 | $7 \cdot 11$ | K 2 |
| 3925 | 311644 | L 3237 |  |  | $3643 \cdot 68$ | 8173 | 144 | 312517.3 | 212 | 504 | 11.8 | + 14 | - 45 | $9 \cdot 1$ | G |
| 3926 | 311645 | L 3238 |  |  | $73648 \cdot 30$ | $+3.8180$ | -.0145 | $312656 \cdot 0$ | - 8.217 | -. 504 | 10.7 | 14 | - 20 | $9 \cdot 4$ |  |
| 3927 | 301550 | L 3239 |  |  | $3648 \cdot 36$ | 7985 | 142 | $304634 \cdot 1$ | 217 | 501 | 12.5 | - 3 | + 21 | 9.0 |  |
| 3928 | 301551 | L 3242 |  |  | $3653 \cdot 17$ | 7967 | 141 | $3043 \quad 15.2$ | 224 | 501 | 12.8 | - 25 | + 5 | 9-1 |  |
| 3929 | 271454 | ${ }_{C}{ }_{\text {C }} 4125$ |  |  | $3655 \cdot 46$ | 6990 | 121 | 271224.2 | 227 | 489 | 11.7 | 8 | - 7 | 8.8 | A 5 |
| 3930 | 291587 | C 4126 | 995-7-8 |  | $37 \quad 3.36$ | 7491 | 131 | $29 \quad 244.9$ | 237 | 495 | $9 \cdot 9$ | 9 | - 25 | $8 \cdot \mathrm{I}$ | K 5 |
| 3931 | 301553 | $\mathrm{C}_{4} 4127$ |  |  | $7 \quad 3716.07$ | $+3.7770$ | -.0137 | $30 \quad 2 \quad 49 \cdot 0$ | -8.255 | - 499 | 12.3 | 24 | - 24 | 9.21 | F 5 |
| 3932 | 261630 | C 4128 | 1005 |  | $37 \quad 19.02$ | 6715 | 117 | 26 II $26 \cdot 8$ | 259 | 485 | 12.9 | - 23 | - 114 | $9 \cdot 4$ |  |
| 3933 | 241746 | B 3078 |  |  | $3723 \cdot 12$ | 6234 | . 108 | $242036 \cdot 2$ | 264 | 477 | 11.5 | + 28 | - 15 | $9 \cdot 4$ |  |
| 3934 | 311649 | L 3245 | 1004 |  | $\begin{array}{llll}37 & 24.45\end{array}$ | 8173 | 146 | $\begin{array}{llll}31 & 27 & 22.2\end{array}$ | 265 | 503 | II.9 | + 11 | - II | 8.8 | F 5 |
| 3935 | 291589 | $\mathrm{C}_{4} 130$ |  |  | $\begin{array}{lll}37 & 30 \cdot 38\end{array}$ | 7469 | 132 | $28 \quad 5914.6$ | 273 | 494 | 12.5 |  |  | $9 \cdot 4$ |  |
| 3936 | 291590 | ${ }_{\text {C }} 4132$ | 1015 | 14962 | $73741 \cdot 33$ | $+3.7498$ | -.0132 | 29. $6 \quad 6 \quad 7 \cdot 2$ | - 8.288 | --494 | 10.4 | + 53 * | - 237* | $4 \cdot 26$ | K o |
| 3937 | 301557 | L 3249 |  |  | $3742 \cdot 33$ | 7895 | 141 | $\begin{array}{llll}30 & 30 & 29.2\end{array}$ | 289 | 499 | $9 \cdot 7$ | + 7 | - 5 | $8 \cdot 8$ | G 5 |
| 3938 | 281453 | $\mathrm{C}_{4} 134$ |  |  | $3746 \cdot 32$ | 7345 | 129 | $283^{2} 259{ }^{\circ}+$ | 294 | 492 | 11.5 | + 14 | + 1 | 9.0 |  |
| 3939 | 26163 I | C 4136 |  |  | $37 \quad 57 \cdot 78$ | 6871 | 120 | $\begin{array}{llll}26 & 48 & 30 \cdot 3\end{array}$ | 310 | 486 | 11.3 | - 4 | + 10 | 8.6 |  |
| 3940 | 241750 | B 3086 | 1026 |  | $\begin{array}{llll}38 & 4 \cdot 61\end{array}$ | 6147 | 107 | $\begin{array}{llll}24 & 2 & 2.9\end{array}$ | 320 | 475 | 12.7 | - 9 | - | $9 \cdot 0$ | A |
| 3941 | 291593 | ${ }^{\text {C }} 414{ }^{\circ}$ | 1028 |  | $\begin{array}{llll}7 & 38 & 20.89\end{array}$ | $+3.7634$ | -.0136 | 293712.8 | $-8.341$ | --495 | 12.4 | + | - 25 | 9.0 |  |
| 3942 | 241755 | B 3090 |  | 14990 | $\begin{array}{llll}38 & 32 \cdot 33\end{array}$ | 6251 | 110 | $\begin{array}{llllll}24 & 27 & 30 \cdot 2\end{array}$ | 355 | 477 | 9.2 | - $24^{*}$ | - 26* | $6 \cdot 84$ | A 5 |
| 3943 | 241756 | C 4142 |  |  | $38 \quad 3479$ | 6304 | 111 | 2440 10.1 | 359 | 478 | 14.0 |  |  | 9.4 |  |
| 3944 | 271460 | ${ }^{\text {C }} 4141$ |  |  | $38 \quad 36 \cdot 96$ | 7009 | 124 | $272126 \cdot 0$ | 362 | $4^{87}$ | -13.1 | 36 | - 90 | $9 \cdot 1$ |  |
| 3945 | 261633 | C 4143 | 1041 | 14991 | $38 \quad 37 \cdot 62$ | 6649 | 117 | $255957 \cdot 0$ | 363 | $4^{82}$ | 10.3 | $15 *$ | - ${ }^{\text {- }}$ * | $5 \cdot 40$ | K 5 |
| 3946 | 311660 | L 3253 | 1042 |  | $73855 \cdot 70$ | +3.8114 | -.0147 | 311945.9 | $-8.387$ | - 500 | $8 \cdot 9$ | * | - 20 |  |  |
| 3947 | 241759 | B 3095 | 1049 | 15000-1-4 | $\begin{array}{lll}39 & 0.94\end{array}$ | 6285 | 112 | $243652 \cdot 3$ | 394 | 477 | 12.9 | 16* | - ${ }^{\text {a }}$ * | $3 \cdot 68$ | G 5 |
| 3948 | 271464 | C 4147 | 1046 |  | $39 \quad 1 \cdot 73$ | 7095 | 126 | $274146 \cdot 1$ | 395 | 487 | 11.0 | 32 | - | $8 \cdot 5$ | Ko |
| 3949 | 241763 | B 3100 | 1062 | 15021 | $3930 \cdot 19$ | 6260 | 112 | , 243212.5 | 432 | 475 | 10.1 | + 16 | - 10 | $8 \cdot 7$ | Go |
| 3950 | 281463 | C 4150 | 1071-2 | 15028-30-1-2 | $3948 \cdot 56$ | 7234 | 130 | 281439.4 | 457 | 488 | 11.67 | -471* | - ${ }^{\text {- }}$ * | 1-2I | K o |


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Preeession. | Sec. Var. | Dec. 1910\%. | Precession. | $\begin{aligned} & \text { Sec. } \\ & \text { Var. } \end{aligned}$ | $\begin{aligned} & \text { Epoeh } \\ & 1900+ \end{aligned}$ | Annual P.M. |  | Mag. | Speetral Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.0001. }}{\text { R.A. }}$ | Dec. ".00 1. |  |  |
|  | $\bigcirc$ |  |  |  | h m | s | 8 | $\bigcirc$, | " | " |  |  |  |  |  |
| 3951 | $28 \quad 1464$ | C 4151 |  |  | $\begin{array}{llll}7 & 40 & 0.67\end{array}$ | $+3.7373$ | -.0133 | $284540 \cdot 3$ | -8.473 | 490 | 12.8 | + 18 | - 15 | $9 \cdot 4$ |  |
| $3952$ | 261638 | C 4152 | 1076 |  | $\begin{array}{lll}40 & 2.37\end{array}$ | 6686 | 121 | $26 \quad 12 \quad 22 \cdot 2$ | 475 | 481 | $10 \cdot 7$ | 9 | - $\quad 27$ | 8.2 | K o |
| 3953 | 31 1662 <br> 25  | L 3259 |  |  | $40 \quad 3.97$ | 8231 | 151 | $314730 \cdot 1$ | 477 | 501 | 13.5 | 12 | - 24 | 9.4 | A 0 |
| 3954 | 251751 | C 4153 |  |  | $404 \cdot 80$ | 6360 | 114 | 2457 II 6 | 478 | 477 | 14.0 | + 4 | - 83 | 9.0 |  |
| 3955 | 291597 | C 4154 | 1077-8 |  | $40 \quad 9.49$ | 7428 | 135 | $\begin{array}{llll}28 & 58 & 4.6\end{array}$ | 484 | 491 | 12.9 | + 1 | + 2 | $9 \cdot 4$ |  |
| 6 | 261640 | C 4155 |  |  | $74020 \cdot 59$ | $+3 \cdot 6834$ | -. 0124 | 264657.0 | - $8 \cdot 500$ | -483 | 14.0 | - 3 | - 16 | $9 \cdot 0$ |  |
| 3957 | 271470 | C 4156 | 1089 |  | 4021.67 | +6877 | 125 | $26 \quad 56$ 37.9. | 501 | 484 | 11.2 | - 6 | - | $8 \cdot 0$ | B 8 |
| 3958 | 241766 | ${ }_{\text {B }} 3113$ | 1104 |  | 4113.11 | 6117 | 110 | ${ }_{2}+\quad 3 \quad 74.4$ | 568 | 47 I | 9.8 | - | - 15 | $8 \cdot 7$ |  |
| 3959 | 261645 | ${ }^{\text {C } 4160}$ | 1100 |  | 4115.03 | 6677 | 122 | $261340 \cdot 8$ | 571 | 479 | 10.7 | +. 47 | + 17 | $9 \cdot 8$ |  |
| 3960 | $26 \quad 1647$ | C4161 | 1109 |  | 4129.01 | 6679 | 123 | 261444.2 | 589 | 479 | 10.4 | - 26 | - 23 | $8 \cdot 8$ | G |
| 3961 | 291606 | $\mathrm{C}_{4} 162$ | IIII |  | 74141.95 | $+3.7641$ | -.0141 | 294844.6 | -8.606 | --492 | I1.7 | $+$ | + 4 | $9 \cdot 31$ | F 2 |
| 3962 | 251759 | $\mathrm{C}_{4} 163$ |  |  | $4142 \cdot 70$ | - 6376 | 112 |  | 607 | 475 | 12.3 | + 20 | - 12 | $9 \cdot 4$ |  |
| 3963 | 321621 | L 3269. |  |  | $4144 \cdot 36$ | 8255 | 155 | $315742 \cdot 0$ | 609 | 500 | 11.9 | + 20 | - 5 | $9 \cdot 0$ |  |
| 3964 | 301566 | L $32700^{\circ}$ | 1112 |  | $4145 \cdot 85$ | 7783 | 145 | $\begin{array}{llllll}30 & 19 & 6.8\end{array}$ | 611 | 493 | $9 \cdot 4$ | + 12 | - 7 | 8.1 | G 5 |
| 3965 | $25 \quad 1762$ | C 4166 |  |  | $\begin{array}{lll} \\ 42 & \text { 1.73 }\end{array}$ | 6349 | 116 | 245952.5 | 633 | 474 | 12.4 | + 39 | - 25 | $9 \cdot 4$ |  |
| 3966 | $25 \quad 1763$ | ${ }_{\text {C }}^{4}+169$ |  |  | $\begin{array}{lll}7 & 42 & 6.54\end{array}$ | $+3.6526$ | -. 0115 | 254125.9 | -8.639 | --477 | 11.7 | 34 | - 39 | $9 \cdot 0$ | A 0 |
| 3967 | 291613 | $\mathrm{C}_{4172}$ |  |  | 4221.20 | 7510 | 140 | 292257.3 | 658 | 490 | II. 3 | - 19 | - 21 | $8 \cdot 7$ |  |
| 3968 | 291614 | C 4173 | 1131-2 | 15109-10 | 4222.68 | 7375 | 137 | $285321 \cdot 5$ | 660 | 488 |  | - 18 | - | $7 \cdot 65$ | G 5 |
| 3969 | 251764 | $\mathrm{C}^{\text {C }} 1175$ |  |  | $\begin{array}{ll}42 & 31.72\end{array}$ | 6431 | 115 | ${ }_{25} 52025 \cdot 2$ | 672 | 474 | 11.5 | + 4 | + 7 | 9.4 |  |
| 3970 | $26 \quad 1652$ | C 4177 |  |  | $4247 \cdot 18$ | 6649 | 124 | 26 II $34 \cdot 8$ | 692 | $47^{8}$ | 11.9 | 20 | 20 | $9 \cdot 4$ |  |
| 3971 | 29.1615 | $\mathrm{C}_{4} 178$ | 1141-2 | 15126-7 | 74252.75 | $+3.7395$ | -.0139 | 285914.2 | -8.700 | $-487$ | $8 \cdot 5$ | + 16 |  | $6 \cdot 93$ | G 5 |
| 3972 | 3 I 1668 | L. 3276 | 1146 | 15129 | $43 \quad 3.08$ | 7995 | 152 | $31883 \cdot 2$ | 713 | 495 | 12.3 | - 8 | - 22 | 8.6 | Fo |
| 3973 | 291616 | C 4179 |  |  | $4310 \cdot 52$ | 7434 | 140 | $29833 \cdot 6$ | 723 | 488 | 13.7 | + 52 | + 2 | $8 \cdot 7$ |  |
| 3974 | 241775 | B 3126 |  |  | $43 \quad 16.30$ | 6159 | 113 | $24.18 \quad 29.1$ | 730 | 470 | 14.2 | - 21 | - 50 | 8.83 | F 8 |
| 3975 | 281474 | C 4183 | $1155-6-7$ | 15144-5 | $43 \quad 25 \cdot 27$ | 7336 | 138 | 284754.5 | 742 | 486 | 12.7 | + 16 | - 9 | 8.0 | Fo |
| 3976 | 281476 | C 4185 | 1 1 66-8-9 | 15157 | $74340 \cdot 44$ | +3.7307 | -.0138 | 2842 <br> 180 | $-8.761$ | -485 | I1.7 | 11 | - ${ }^{2}$ | $8 \cdot 2$ | Fo |
| 3977 | 311672 | $\mathrm{L}_{\mathrm{C}} 328 \mathrm{I}$ |  |  | 4343.28 | 7930 | 152 15 | $30 \quad 56 \quad 35 \cdot 7$ | 765 | 493 | 12.3 | - 16 | - 30 | 8.7 | B 9 |
| 3978 | 241777 | $\mathrm{C}_{4} 4189$ |  | $15169-72$ | 4353.84 | 6254 | 116 | $24 \begin{array}{lll}24 & 50 \cdot 5\end{array}$ | 780 | 47 I | 10.2 | - 100 | - 20 | 7.06 | F 5 |
| 3979 | 271485 | ${ }_{\text {C }} 4188$ | 1172 |  | $43 \quad 54.63$ | 6840 | 129 |  | 781 | 479 | 12.1 | + $\quad 36$ | - 53 | 8.7 8.6 |  |
| 3980 | $25 \quad 1768$ | C4191 |  |  | $44 \quad 3 \cdot 67$ | 6407 | 119 |  | 793 | 473 | 12.7 | 4 | - 10 | $8 \cdot 6$ | K |
| 398 I | 261655 | $\mathrm{C}_{4} 1192$ | 1176 |  | $\begin{array}{lll}744 & 7.28\end{array}$ | $+3.6724$ | -. 0127 | $26 \quad 3242 \cdot 5$ | $8 \cdot 797$ | $-47^{8}$ | 13.1 | 4 | - 63 | 9.4 |  |
| 3982 | 241779 | B 3135 | 1180 | 15183-7 | $44 \quad 10 \cdot 79$ | 6196 | 115 | 2429 4I•3 | 802 | 470 | 12.4 | - 5 | - | 8.09 | K o |
| 3983 | 281480 | C 4193 |  |  | $44 \quad 12 \cdot 64$ | 7264 | 138 | $283434 \cdot 1$ | 805 | 485 | 11.8 | + 20 | - 31 |  |  |
| 3984 | 261656 | C 4194 | 1183 |  | 4418.08 | 6707 | 126 | $26 \quad 29 \quad 23 \cdot 1$ | 811 | 477 | 12.3 | - 3 | - 7 | $6 \cdot 82$ | G 5 |
| 3985 | 301574 | L 3283 |  |  | 44 1877 | 7700 | 147 | $30 \quad 941 \cdot 4$ | 811 | 490 | 12.6 | + 16 | + 11 | 8.4 | K 2 |
| 3986 | 281482 | $\mathrm{C}_{4197}$ | 1181-4 | 15184-6 | $744{ }^{22.61}{ }^{\circ}$ | $+3.7221$ | -.0137 |  | $-8.818$ | - 484 | 11.3 | 9 | - 15 | 6.65 | $\mathrm{A}_{2}$ |
| 3987 | 271490 | C 4198 | 1185-7 |  | 4422.73 | 6996 | 132 | $2735 \quad 21 \cdot 6$ | 818 | 481 | 11.7 | - 3 | - 13 | $7 \cdot 7$ | Go |
| 3988 | 261658 | C 4199 |  |  | 4429.43 | 6776 | 128 | $26 \quad 4549 \cdot 9$ | 826 | 477 | 12.7 | + $+\quad 19$ | - 31 | $9 \cdot 4$ |  |
| 3989 | 29 I622 | ${ }^{\text {C }} 4202$ | 1191 | 15193-4 | $4442 \cdot 22$ | 7362 | 141 | $28 \quad 57 \quad 3 \mathrm{I} \cdot 2$ | 843 | 485 | $9 \cdot 7$ | + 34 | - 40 | $7 \cdot 9$ | G 5 |
| 3990 | 291623 | C 4203 | 1192 |  | 4447.71 | 7605 | 145 | $295047 \cdot 7$ | 850 | 488 | 13.1 | + $5^{2}$ | + 3 | $9 \cdot 8$ |  |
| 3991 | $24 \quad 5783$ | $\mathrm{C}_{4} 4204$ | 1197 |  | $74453 \cdot 89$ | $+3.6253$ | -. 0118 | $24 \quad 45 \quad 22 \cdot 8$ | $-8.858$ | - 470 | $1 \mathrm{I} \cdot 9$ | - 13 | + 122 | 8.8 |  |
| 3992 | 301576 | L 3288 |  |  | $4455 \cdot 64$ | 7892 | 152 | $30 \quad 5222.5$ | 861 | $49^{2}$ | 12.9 | + 7 | - 32 | 9.4 |  |
| 3993 | 301579 | C 4205 |  |  | $45 \quad 1 \cdot 95$ | 7616 | 145 | $295344 \cdot 5$ | 869 | 489 | 14.0 | II | + $\quad 2$ | 9.4 |  |
| 3994 | 241785 | B 3139 | 1206 | 15218-38 | $45 \quad 14.85$ | 6156 | 116 | $24 \begin{array}{lllllll}23 & 18.8\end{array}$ | 886 | 468 | 11.2 | 16 | - 8 | $7 \cdot \mathrm{Or}$ | Fo |
| 3995 | 311676 | L 3293 | 1200 | 15204 | $45 \quad 17 \cdot 40$ | 8164 | 159 | 315032.4 | 889 | 494 | 13.7 | 14 | $-4^{2}$ | $6 \cdot 85$ | A 5 |
| 3996 | $24 \quad 1786$ | B 3141 | 1209 | 15221 | $745 \quad 20.78$ | $+3.6060$ | -.0114 | ${ }^{24} 4043.4$ | -8.894 | $-467$ | 12.4 | - 7 | - 31 | 8.43 | F 2 |
| 3927 | 30 I581 | L. 3294 |  |  | $45 \quad 21.99$ | 7777 | 150 | $30 \quad 29 \quad 24 \cdot 1$ | 895 | 489 | 12.5 | + 2 | - $\quad 3$ | 7.6 | ${ }_{4} 5$ |
| 3998 | 31 1677 | L 3295 | 1204 | 15206 | $\begin{array}{llll}45 & 23.42\end{array}$ | 8163 | 159 | $3 \mathrm{I} \quad 5041.8$ | 896 | 494 | 13.0 | - 13 | - 57 | $8 \cdot 1$ | A 5 |
| 3999 | $\begin{array}{llll}25 & 1773 \\ 28 & 7488\end{array}$ | C 4206 | 1210 |  | 45 <br> 45 <br> $30 \cdot 73$ <br> 0.94 | 6394 7105 | 122 | $\begin{array}{llll}25 & 20 & 18.4\end{array}$ | 907 | 471 | 13.5 | - 11 | + 9 | 8.2 8.8 | F 5 |
| 4000 | 28 I488 | C 4207 |  |  | $45 \quad 39 \cdot 94$ | 7105 | 136 | $\begin{array}{llll}28 & 3 & 35.4\end{array}$ | 918 | 48 I | 12.9 | - 8 | - 7 | $8 \cdot 8$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | I P.M. |  |  |
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| No. | B.D | A.G.C. | W.B. (2). | Lalande. | R.A. igroo. | Precession. | Sec. Var. | Doc. 1910.0. | Precession. | Sec. Var. | Epoch <br> 1900+ | $\underset{\mathrm{a} .000 \mathrm{I}}{\text { R.A. }}$ | Dec. $0.001 .$ | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
|  | - |  |  |  | h m | s | s | - , " |  | " |  |  |  |  |  |
| 4001 | 261661 | C 4208 | 1216-8 | 15231 | $74543 \cdot 44$ | $+3.6714$ | -.0129 | $263512 \cdot 1$ | -8.923 | $-476$ | 12.9 | + 40 | - 21 | 8.8 | K 2 |
| 4002 | 291624 | C 4209 |  | 15229 | $4549 \cdot 97$ | 7466 | 145 | $292347 \cdot 9$ | 93 I | 485 | $11 \cdot 3$ | - 6 | - 10 | $6 \cdot 90$ | G 5 |
| 4003 | 301583 | L 3300 | 1214 |  | 45 50.28 | 7846 | 152 | $3045 \quad 32 \cdot 9$ | 931 | 489 | 12.4 | + 10 | - | $8 \cdot 0$ | B 9 |
| 4004 | 291628 | C 4212 |  |  | $46 \quad 17.08$ | 7463 | 145 | 292435.4 | 967 | 485 | 11.5 | + 26 | - 20 | $8 \cdot 2$ | G 5 |
| 4005 | 251778 | C. 4214 | 1232 |  | $46 \quad 21.57$ | 6311 | 12 I | $\begin{array}{llll}25 & 3 & 4.9\end{array}$ | 973 | 469 | 10.7 | 7 | - 28 | 8.0 | G 5 |
| 4006 | 251779 | C 4215 | 1233 |  | $74622 \cdot 30$ | $+3.6320$ | 0121 | $\begin{array}{llll}25 & 5 & 22.4\end{array}$ | - 8.973 | - $\cdot 469$ | 12.1 | + 91 | - 101 | $9 \cdot 4$ |  |
| 4007 | $30 \quad 1589$ | L 3306 | 1240 |  | 4652.76 | 7663 | 151 | $30 \quad 953.8$ | 9.013 | 486 | 9.5 | + 16 | - 26 | 8.1 | A 0 |
| 4008 | 301590 | C 4220 | 1250 |  | $47 \quad 7 \cdot 45$ | 7601 | 149 | $2957 \quad 25.8$ | 032 | 486 | 12.7 | - 9 | - 23 | 9.16 | K |
| 4009 | 271497 | C 422 I |  |  | 47 8.12 | 6946 | 135 | $\begin{array}{llllll}27 & 32 & 14.9\end{array}$ | 033 | 477 | 12.5 | + 58 | - 47 | 9.1 |  |
| 4010 | 301591 | L 3310 |  |  | $47 \quad 13 \cdot 10$ | 7721 | 152 | 302354.7 | 041 | 487 | 13.2 | - Io | - 19 | 9.0 |  |
| 4011 | 261665 | ${ }^{\text {C }} 4222$ | 1258 |  | $\begin{array}{llll}7 & 47 & 18.47\end{array}$ | $+3.6583$ | -.0127 | $\begin{array}{llll}26 & 9 & 41.8\end{array}$ | - 9.046 | $-472$ | 13.2 | + 43 | - 147 | 9.0 | K o |
| 4012 | 281494 | C 4223 | 1259 |  | $47 \quad 22.76$ | 7059 | 137 | $27 \quad 58 \quad 42 \cdot 8$ | 053 | 479 | 13.3 | + 33 | + | $9 \cdot 4$ |  |
| 4013 | 281496 | C 4226 | 1264 | 15301 | 47 43•19 | 7100 | 139 | $\begin{array}{lllllllll}28 & 8 & 53\end{array}$ | 079 | 478 | 10.6 | + 7 | - 20 | 8.5 | F |
| 4014 | 281497 | C 4227 | I265-6 | 15305 | 47 47.41 | 7136 | 140 | $\begin{array}{llll}28 & 17 & 5 \cdot 7\end{array}$ | 084 | 479 | 8.7 | - 17 | + 13 | $6 \cdot 74$ | A 0 |
| 4015 | 311684 | L 3313 | 1263 | 15290 | $4748 \cdot 14$ | 7850 | 156 | $\begin{array}{llll}30 & 53 & 0.6\end{array}$ | 085 | 488 | 9.95 | + 566 | -1848 | 8-2 | G o |
| 4016 | $25 \quad 1783$ | C 4228 |  |  | $74754 \cdot 13$ | +3.6455 | -. 0126 | $254127 \cdot 8$ | - 9.093 | $-470$ | 12 | - 108 | + 11 | $9 \cdot 4$ | Fo |
| 4017 | 271499 | C 4229 | 1273-4 | 15316-7 | 4759.44 | 6792 | 133 | $265958 \cdot 0$ | 100 | 474 | II. 5 | - 22* | - 37* | $4 \cdot 99$ | A 2 |
| 4018 | 261668 | C 4230 | 1277 | 15325 | - $4^{81} 14.48$ | 6737 | 132 | $26 \quad 4888$ | 119 | 473 | 9.7 | + 63 | - 177 | $8 \cdot 0$ | F 8 |
| 4019 | 291641 | C 4232 | 1284 |  | $48 \quad 27.75$ | 7440 | 147 | $292647 \cdot 9$ | 137 | 482 | 9.5 | + 27 | - 77 | $8 \cdot 4$ | K o |
| 4020 | 311688 | L 3318 |  |  | $48 \quad 28.69$ | 7883 | 158 | $3 \mathrm{I} \quad 24^{6 \cdot 0}$ | 138 | 488 | 11.5 | 15 | - 10 | $9 \cdot 4$ |  |
| 4021 | 311689 | L 3320 |  |  | $7 \begin{array}{lll}78 & 43 \cdot 15\end{array}$ | $+3.7938$ | -.0159 | 311443.0 | - 9.157 | --488 | 12.7 | - 30 | - 37 | 9.4 |  |
| 4022 | 311690 | L 3322 |  |  | $4853 \cdot 80$ | 7930 | 159 |  | 171 | 488 | 11.7 | - 9 | + 9 | $8 \cdot 7$ | Fo |
| 4023 | 291644 | C 4237 | 1299 |  | $4854 \cdot 81$ | 7376 | 146 | $\begin{array}{llllllllllll}29 & 14 & 13.3\end{array}$ | 172 | 480 | 12.3 | - | - 27 | 8.6 |  |
| 4024 | 261673 | C 4238 | 1303 |  | $4859 \cdot 40$ | 6623 | 131 | $\begin{array}{lllll}26 & 24 & 7 \cdot 6\end{array}$ | 177 | 471 | 10.5 | + 15 | - 21 | 8.6 | K 2 |
| 4025 | 301601 | L 3326 |  | 15347 | $497 \cdot 01$ | 7743 | 156 | $303436 \cdot 6$ | 188 | 486 | 11.5 | - 5 | - | $7 \cdot 80$ | G 5 |
| 4026 | 251788 | C 4241 |  |  | $74910 \cdot 31$ | $+3.6377$ | -. 0126 | $25 \quad 2655 \cdot 4$ | $-9.192$ | $-467$ | $13 \cdot 1$ | - 14 | - 17 | 9.0 |  |
| 4027 | 311693 | L 3329 |  |  | $4917 \cdot 06$ | 7864 | 158 | 31518.39 | - 201 | 486 | 13.3 | - 13 | - | $9 \cdot 1$ |  |
| 4028 | 311694 | L 3330 |  |  | 4918.00 | 7885 | 159 | $\begin{array}{llll}31 & 5 & 39.7\end{array}$ | 202 | 486 | 14.3 | + 30 | + 3 | $9 \cdot 1$ |  |
| 4029 | 241800 | B 3169 | 1322 | 15372 | $49 \quad 29.43$ | 6110 | 121 | $\begin{array}{lllll}24 & 24 & 18.4\end{array}$ | 216 | 463 | 12.9 | $+\quad 5$ | - 35 | $8 \cdot 4$ | A 5 |
| 4030 | 281500 | C 4243 | 1319-20 | 15368 | $4934 \cdot 42$ | 7200 | 144 | $28 \quad 37 \quad 17 \cdot 7$ | 223 | 478 | 10.9 | - $5^{2}$ | - 90 | $7 \cdot 23$ | F 5 |
| 4031 | 271501 | C 4244 | 1323 |  | $74937 \cdot 52$ | $+3.6855$ | -.0136 | $27 \quad 1856.8$ | - 9.228 | -.472 | 11.9 | + 33 | + | $9 \cdot 0$ | G 5 |
| 4032 | 291645 | C 4246 |  |  | $4950 \cdot 94$ | 7406 | 149 | $292347 \cdot 4$ | 245 | 480 | - | + 45 | - 92 | $8 \cdot 4$ | Go |
| 4033 | 301608 | L 3331 |  |  | 4952.25 | 7796 | 158 |  | 246 | 484 | 13.1 | - 11 | - 32 | $8 \cdot 6$ | G 5 |
| 4034 | 281501 | C 4247 | 1327 |  | 4958.16 | 7231 | 145 | $2845 \quad 29^{\circ} \mathrm{O}$ | 254 | 477 | 13.3 | + 29 | - 1 | 8.8 |  |
| 4035 | 301609 | L 3334 |  | 15048 | $\begin{array}{lll}50 & 2.89\end{array}$ | 7594 | 154 | $\begin{array}{llllllllllllllll}30 & 5 & 30 \cdot 4\end{array}$ | 260 | 482 | 13.3 | + 4 | + 16 | 8.6 | A 5 |
| 4036 | 301610 | L 3335 |  |  | 750 | $+3.7733$ | -.0157 |  | - 9.260 | $-.484$ | 12.9 | - 89 | - 74 | $8 \cdot 5$ | G o |
| 4037 | 241802 | B 3173 |  | 15401 | $50 \quad 6 \cdot 55$ | 6151 | 123 | $24 \quad 36 \quad 0.6$ | 265 | 463 | 13.6 | - 4 | - 17 | $8 \cdot 2$ | A 2 |
| 4038 | 241804 | B 3176 |  | 15412 | $5026 \cdot 63$ | 6113 | 2 | $242757 \cdot 0$ | 291 | 462 | 13.5 | - 32 | - 15 | $8 \cdot 7$ | F |
| 4039. | 281502 | C 4250 | 1336-40 | 15407 | $50 \quad 26 \cdot 76$ | 7003 | 141 | 275551.4 | 291 | 474 | 11.9 | + 8 | - 39 | $8 \cdot 6$ | A 0 |
| 4040 | 251794 | C 4252 | 1346 |  | $50 \quad 35 \cdot 98$ | 622 I | 124 | 2454 II•9 | 303 | 464 | $9 \cdot 5$ | - 4 | + 10 | $7 \cdot 66$ | K o |
| 4041 | 301612 | L 3338 |  | 15410 | $75037 \cdot 90$ | $+3.7584$ | -.0155 | $30 \quad 5 \quad 24^{\circ} \mathrm{O}$ | - 9.305 | -.482 | $8 \cdot 7$ | - 3 | + | $6 \cdot 86$ | K o |
| 4042 | 321648 | L 3339 | 1342 | 15409 | $5042 \cdot 23$ | 8101 | 166 | $31 \begin{array}{lll}156 & 2.5\end{array}$ | 311 | 489 | $9 \cdot 9$ | + 6 | - 24 | $7 \cdot 54$ | Fo |
| 4043 | 291651 | C 4254 | 1344 |  | 5043.75 | 733 I | 148 | $\begin{array}{lll}29 & 10 & 9 \cdot 8\end{array}$ | 313 | 478 | II•I | - 6 | + 12 | 8.7 | F 5 |
| 4044 | 291653 | C 4259 |  |  | 5110.22 | 7433 | 151 | 293418.0 | 347 | 478 | 11.1 | - 17 | - 12 | $9 \cdot 4$ | $\mathrm{F}_{2}$ |
| 4045 | 261684 | C 4261 |  | 15437 | 5119.00 | 6578 | 133 | $26 \quad 2040 \cdot 5$ | 358 | 468 | $9 \cdot 6$ | $+31$ | - | 8.2 | K o |
| 4046 | 291654 | $\mathrm{C}_{4} 260$ | 1357 |  | 75121.90 | $+3.7486$ | -.0153 | $294632 \cdot 8$ | -9.362 | --479 | 11.3 | + 22 | + 10 | 8.66 | G 5 |
| 4047 | 311700 | L 3342 |  |  | $\begin{array}{ll}51 & 26 \cdot 89\end{array}$ | 7929 | 163 | 31   <br> 1 22 27.7 | 369 | 486 | 11.7 | + 2 | - 7 | 8.8 | A 5 |
| 4048 | 241811 | ${ }_{\text {C }} 4264$ | 1383-4 |  | 528.23 | 6164 | 125 |  | 421 | 461 | 11.5 | + 4 | + 8 | 8.91 | A o |
| 4049 | 271513 | ${ }_{\text {C }} 4263$ | 1373-4 | $15461$ | $\begin{array}{lr}52 & 9.90 \\ 52 & 6.92\end{array}$ | 6926 | 141 | 27 | 424 | 471 | 9.8 |  | - 67 | 7.7 8.8 | K o |
| 4050 | 301620 | L 3347 | 1376 | 15460 | $52 \quad 16.92$ | 7729 | 160 | $304226 \cdot 6$ | 433 | 481 | II.5 | + 8 | - $4^{2}$ | 8.8 | B 9 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Procession. | Sec.Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A.A. } \\ & \text { P.0001. } \end{aligned}$ | $\begin{aligned} & \text { Doc. } \\ & \sim \cdot 001 . \end{aligned}$ |  |  |
|  | - |  |  |  | h m s | s | 8 | - , " |  | " |  |  |  |  |  |
| 40512 | 291656 | ${ }_{C} 4265$ | 1379 |  | $7 \quad 5217.43$ | $+3.7467$ | -.0153 | 294529.9 | $-9.433$ | -478 | 8.9 |  | 16 | $8 \cdot 36$ | K o |
| 40522 | 281511 | ${ }^{\text {C }} 4267$ |  |  | $5231 \cdot 16$ | 7104 | 147 | $2882535 \cdot 2$ | 451 | 473 | 11.5 | - 15 | - 36 | $9 \cdot 0$ |  |
| 40533 | 311703 | L 3350 |  |  | $5240 \cdot 62$ | 7871 | 164 | 311425.5 | 464 | 483 | 13.3 | + 2 | - $3^{6}$ | $9 \cdot 4$ |  |
| 40542 | 291658 | C 4268 | 1390 |  | 5247.06 | 7380 | 154 | $2928 \quad 0.9$ | 471 | 476 | 13.1 | + 27 | - 14 | $9 \cdot 4$ | A 0 |
| 40553 | 301622 | L 3351 |  |  | $52 \quad 47 \cdot 68$ | 7704 | 160 | $30 \quad 38 \quad 55 \cdot 2$ | 472 | 481 | 12.5 | + | - 12 | $9 \cdot 1$ |  |
| +056 3 | 301623 | L 3352 |  |  | $75252 \cdot 11$ | +3.7580 | -. 0158 |  | 9.478 | -478 | 10.9 | + 20 | - 22 | $8 \cdot 7$ |  |
| 40572 | 261689 | C 4270 | 1401 |  | 53 11.41 | 6532 | 135 | $\begin{array}{lll}26 & 16 & 1.9\end{array}$ | 502 | 466 | 11-3 | - 35 | - 48 | $9 \cdot 0$ | F 8 |
| 4058 | 311705 | L. 3356 | 1404 | 15507 | $53 \quad 30 \cdot 59$ | 7780 | 163 | 3057 49-1 | 528 | 479 | 11.8 | + 5 | - 30 | $8 \cdot 4$ | F 5 |
| 40592 | 281513 | ${ }^{\text {C }} 4275$ | 1412 | I 5518 | 53 40.05 | 7171 | 149 | $\begin{array}{lllllllllll}28 & 44 & 26 \cdot 9\end{array}$ | 540 | 472 | 11.5 | + | - 90 | 8.8 | G 5 |
| 40603 | 301626 | L 3358 | 1408 |  | 53 40.68 | 7702 | 162 | $3041 \begin{array}{llll} & 37 \cdot 3\end{array}$ | 541 | 479 | $10 \cdot 3$ | - 9 | - 14 | $8 \cdot 4$ | G 5 |
| 40612 | 241816 | B 3198 |  |  | 753 41.48 | $+3 \cdot 6096$ | -. 0125 | $2433 \quad 31.4$ | $-9.541$ | . 459 | 13.3 | + 15 | + 4 | 9.4 |  |
| 40623 | 311706 | L 3359 |  |  | $5344 \cdot 63$ | 7996 | 168 | 314448.5 | 546 | 483 | 11.4 | - 4 | - 21 | $8 \cdot 6$ | A 0 |
| 40632 | 281515 | ${ }_{\text {C }} 4277$ | 1416 | 15523 | $53 \quad 47 \cdot 27$ | 6970 | 145 | $27 \quad 5914.2$ | 549 | 470 | 13.1 | + 16 | - 45 | $9 \cdot 1$ |  |
| 40642 | 291663 | C 4279 | 1418 |  | $53 \quad 51.85$ | 7293 | 153 | 291229.5 | 555 | 474 | 12.7 | $+43$ | - 26 | 9•1 |  |
| 40652 | 251805 | C 4280 |  |  | $\begin{array}{ll}54 & 1.66\end{array}$ | 6241 | 130 | $25 \quad 937 \cdot 1$ | 568 | 460 | 11.7 | + 15 | + 6 | $8 \cdot 6$ | A 3 |
| 4066 | 301628 | L 3362 |  |  | $7 \quad 54 \quad 11 \cdot 93$ | +3.7596 | -. 0161 | 302029.0 | -9.580 | -476 | 13.3 | - 3 | - 14 | 9.4 |  |
| 4067 | 311710 | ${ }_{\text {L }} 3363$ | 1423 | 15536 | 5423.07 | 8011 | 170 |  | 595 | 482 | $9 \cdot 8$ | + 17 | - 86 | $8 \cdot 6$ | K 2 |
| 4068 | 241820 | B 3205 | 1431 |  | 5428.84 | 6027 | 125 | $24 \quad 1914.6$ | 602 | 457 | 12.1 | + 35 | - 66 | 9.0 |  |
| 4069 | 251806 | C 4282 |  |  | 54 33.10 | 6261 | 131 | $\begin{array}{llll}25 & 16 & 0.2 \\ 20 & 29 & 18.2\end{array}$ | 607 | 459 | 12.7 | + 25 | - $\quad 25$ | $9^{9}{ }^{\circ} \cdot$ |  |
| 4070 | 291664 | C 4285 | 1434 | 15565 | $54 \quad 57 \cdot 77$ | 7351 | 156 | $29 \quad 29 \quad 18.2$ | 639 | 473 | $7 \cdot 98$ | - 100 | -1179 | $6 \cdot 94$ | Go |
| 4071 | 251810 | C 4286 | 1439 |  | 7550.44 | $+3.6259$ | -. 0131 | 251651.8 | $-9.642$ | -459 | 9.4 | + | - 46 | $8 \cdot 0$ | A 0 |
| 4072 | 251811 | C 4287 | 1444 |  | 558.06 | 6313 | 132 | 252945.5 | 652 | 459 | 10.5 | - 16 | - 63 | $9 \cdot 1$ |  |
| 4073 | 261696 | C 4288 |  |  | $55 \quad 18.26$ | 6403 | 132 | 255222.9 | 665 | 460 | 11.0 | + | - 14 | 8.8 | Fo |
| 4074 | 261697 | C 4289 |  |  | 55 <br> $55 \cdot 17$ | 6400 | 132 | $\begin{array}{lllllll}25 & 51 & 52 \cdot 3\end{array}$ | 674 | 460 | 11.5 | + ${ }^{3}$ | - 17* | 9.4 |  |
| 4075 | 251812 | C 4290 | 1453 | 15581 | $55 \quad 29 \cdot 24$ | 6342 | 133 | 253883.3 | 679 | 460 | 11.7 |  | 1* | 5.88 | K o |
| 4076 | 291667 | C 4293 | 1456 | 15588 | $7 \quad 55 \quad 50 \cdot 97$ | +3.7434 | -.0159 | 295044.9 | $-9.707$ | -. 474 | 10.9 | - | - 15 | 8.86 | A 0 |
| 4077 | 311715 | L 3370 |  |  | $\begin{array}{ll}56 & 2 \cdot 17\end{array}$ | 7865 | 169 | 312518.5 | 721 | 479 | 13.3 | + 10 | - 16 | 9.4 |  |
| 4078 | 241826 | B 3217 | 1465 | 15608 | $\begin{array}{ll}56 & 7 \cdot 16\end{array}$ | 5967 | 126 | 24 9 4 | 727 | 454 | 10.9 | 5 | - 25 | $7 \cdot 41$ | Ko |
| 4079 | 251816 | C 4296 | ${ }^{1} 473$ | 15611 -3 | $\begin{array}{llll}56 & 18 \cdot 17\end{array}$ | 6255 | 133 | $\begin{array}{llll}25 & 20 & 16.6\end{array}$ | 742 | 458 | 11.5 | - $9^{*}$ | + 12* | $6 \cdot 20$ | A 0 |
| 4080 | 291668 | C 4295 | 1466-7-8 | 15607 | $56 \quad 18.43$ | 7168 | 152 | 285258.8 | 742 | 470 | 11.0 | - 14 | - 27 | $8 \cdot 2$ |  |
| 408 I | 271523 | ${ }_{C} 4299$ |  |  | $75639 \cdot 32$ | $+3.6707$ | -.0143 | $\begin{array}{llll}27 & 8 & 21.2\end{array}$ | $-9.768$ | $-.463$ | 12.7 | + | - 10 | $9 \cdot 0$ |  |
| 4082 | 251819 | ${ }^{\text {C }} 4301$ | 1479 |  | $56 \quad 39 \cdot 93$ | 6223 | 132 | 2513 34.1 | 769 | 457 | 13.5 | + 15 | - 5 | $8 \cdot 6$ |  |
| 4083 | 251818 | ${ }^{\text {C }} 4302$ |  |  | $5640 \cdot 30$ | 6308 | 134 | $\begin{array}{lllll}25 & 34 & 10 \cdot 7\end{array}$ | 769 | 458 | 13.3 | - 21 | + 13 | $8 \cdot 6$ |  |
| 4084 | 281527 | C 4300 | 1476 |  | $5641 \cdot 19$ | 7043 | 151 | $\begin{array}{llll}28 & 26 & 2 \cdot 5\end{array}$ | 771 | 467 | 12.6 | - 6 | - 5 | 8.6 | A O |
| 4085 | 241829 | B 3220 | 1481 |  | 5641.75 | 5949 | 126 | $24 \quad 6 \quad 58 \cdot 1$ | 772 | 453 | 13.1 | + 8 | + 11 | $9 \cdot 0$ |  |
| 4086 | 271524 | ${ }^{\text {C }} 4303$ |  | 15628 |  | +3.6642 | -.0141 |  |  |  | $2 \cdot 6$ | + 20 | - 48 | $8 \cdot 2$ | K o |
| 4087 | 251821 | ${ }_{\text {C }} 4305$ | 1486 |  | 5653.94 | 6194 | 132 | $\begin{array}{lllll}25 & 7 & 26 \cdot 8\end{array}$ | 787 | 456 | 12.9 | + $4^{6}$ | - 5 | $9 \cdot 1$ |  |
| 4088 | 301631 | C 4307 |  |  | $\begin{array}{ll}57 & 7 \cdot 12\end{array}$ | 7431 | 16 | $295434 \cdot \mathrm{I}$ | 804 | 472 | 14.1 | - 19 | 22 | $9 \cdot 4$ |  |
| 4089 | 251825 | C 4309 | 1498 | 15658 | 5718.24 | 6173 | 131 | $25 \quad 3 \quad 40 \cdot 7$ | 818 | 456 | 12.1 | + 5 | - 34 | $8 \cdot 6$ | K 0 |
| 4090 | 251826 | C 4311 | 1503 | - 15664 | $57 \quad 30 \cdot 24$ | 6214 | 133 | $\begin{array}{llllllllllll}25 & 14 & 77\end{array}$ | 833 | 456 | 12.3 | + 23 | - 13 | $8 \cdot 6$ | K 5 |
| 4091 | 271528 | ${ }_{\text {C }}{ }_{4}{ }^{12}$ |  |  | $75732 \cdot 60$ | +3.6839 | -.0147 | 27423.9 | $-9.837$ | -. 463 | 13.7 | + 7 | + 10 | $9 \cdot 1$ |  |
| 4092 | $2 \begin{aligned} & 28 \\ & 1 \\ & 1529\end{aligned}$ | C 4313 | 1504-5 | 15665 | $5740 \cdot 44$ | 6962 | 150 | $28 \quad 1057 \cdot 7$ | 846 | 466 | 11.4 | - 32 | + 8 | 8.2 | F 5 |
| 4093 | $3{ }^{24} 18835$ | C 4316 |  |  | $57 \quad 44 \cdot 29$ | 6113 | I31 | $24 \quad 5029.3$ | 851 | 455 | 13.4 |  | - 20 | 8.81 | 1 Fo |
| 4094 | 4261707 | ${ }_{C} 4319$ |  | 15673 | $5750 \cdot 41$ | 6532 | 141 | 26311010 | 858 | 458 | 12.4 | - 5 | - 40 | 6.96 | $6{ }^{\text {A } 2}$ |
| 4095 | 5291675 | C 4321 | 1513 |  | 57 58.51 | 7174 | 4155 | 29 - 21.4 | 870 | 467 | 13.2 | - | - $\quad 32$ | $8 \cdot 8$ | K |
| 4096 | 68 1532 | C 4322 | 1514-5 | $15676-7$ | $75759 \cdot 57$ | $+3.6922$ | $2-.0150$ | $\begin{array}{llll}28 & 2 & 50 \cdot 3\end{array}$ | $-9.871$ | $-\cdot 464$ | 10.5 | - 15 | *- $5^{2}$ | $5 \cdot 04$ | 4 K |
| 4097 | $7 \begin{aligned} & 311719\end{aligned}$ | L 3375 | 1483 |  | $\begin{array}{lll}58 & 3 \cdot 17\end{array}$ | 7787 | 171 | $\begin{array}{llll}31 & 16 & 3.7\end{array}$ | 875 | 475 | 14.3 | + 33 | - 8 | 9.4 |  |
| 4098 | 27 1529 <br> 28 1534 | C 4324 |  |  | $\begin{array}{lll}58 & 11.34 \\ 58 & 20.62\end{array}$ | 6797 | 7 147 | $\begin{array}{lllllllll}27 & 3440.4 \\ 28 & 4\end{array}$ | 885 | 462 | 10.9 | - 20 | + 12 | $8 \cdot 7$ |  |
| 4099 4100 | 9281534 | C 4326 | 1520-1 |  | 58 <br> 58 <br> 58 <br> 8 | 6916 | $6 \quad 150$ |  | 898 | 464 | 11.5 | + 30 | - 39 | $9 \cdot 0$ |  |
| 4100 | -24 1838 | C 4329 | 1530 |  | $58 \quad 32 \cdot 97$ | 6104 |  | $245051 \cdot 8$ | 913 | 454 | 43.5 | + 29 | $1-52$ | $8 \cdot 7$ |  |

4058. Number of observations 6. 4075. Number of observations 32. 4079. Number of observations 8. 4094. Burnham 4399. 4096. Number of observations 44.

| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 19\%0.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s. } 0001 . \end{aligned}$ | Dec. ".001. |  |  |
|  | ${ }^{\circ}$. |  |  |  | $\mathrm{hr} \mathrm{m}^{8}$ | 8 | s | - , " | " | " |  |  |  |  |  |
| 4101 | 281537 | C 4327 |  |  | $7 \quad 5833.77$ | +3.7050 | -.0154 | $283421 \cdot 4$ | $-9.914$ | -465 | 14.3 | - 2 | $+$ | $9 \cdot 4$ |  |
| 4102 | 241840 | C 4332 | 1 539-40 | 15707 | 5844.86 | 6080 | 132 | $244541 \cdot 6$ | 928 | 453 | 10.2 | 16 | - 17 | $8 \cdot 16$ | Ma |
| 4103 | 29 1682 | C 4331 | 1 536-7 |  | $5847 \cdot 88$ | 7268 | 159 | 292421.6 | 932 | 468 | 12.1 | $+\quad 16$ | - 4 | 9.0 | $\mathrm{A}^{2}$ |
| 4104 | 281541 | C 4333 | ${ }^{1} 544$ | 15713 | 5912.91 | 6853 | 150 | $27 \begin{array}{lllll} & 51 & 19.0\end{array}$ | 964 | 462 | 11.9 | + 33 | - 38 | $8 \cdot 8$ | K |
| 4105 | $24 \quad 1843$ | B 3243 | I 548 | 15722 | $59 \quad 19 \cdot 24$ | 6029 | 131 | $24 \quad 35 \quad 2 \cdot 2$ | 971 | $45^{2}$ | 12.7 | - 33 | + $+\quad 46$ | 8.06 | G 5 |
| 4106 | 271532 | C 4334 |  |  | $759 \quad 27 \cdot 77$ | $+3.6616$ | -. 0145 | $26564 \mathrm{I} \cdot 0$ | $-9.983$ | -. 459 | 13.1 | 49 | - 6 | 9.4 |  |
| 4107 | 28 1543 | C 4335 | 1549-50-1 |  | $5932 \cdot 71$ | 7072 | 156 | $284^{2} 42 \cdot 6$ | 989 | 464 | 13.7 | + | - $4^{2}$ | 9.0 |  |
| 4108 | 261711 | C 4336 | 1554 |  | - 59 32.88 | 6386 | 140 | $\begin{array}{lllll}26 & 2 & 15\end{array}$ | 989 | 455 | 13.0 | - 30 | - 33 | $9 \cdot 1$ | K o |
| 4109 | 251839 | C 4338 |  |  | 5934.24 | 6209 | 136 | ${ }_{2}^{25}$ 19 43.8 | 991 | 453 | 13.7 | + 32 | + 18 | $9 \cdot 1$ |  |
| 4110 | $28 \quad 1544$ | C 4337 |  |  | 5935.90 | 704 I | 156 | 283549.4 | 993 | 464 | 13.5 | $+\quad 29$ | - 8 | 9.0 | K 5 |
| 4 III | 301639 | L 3384 |  |  | 75954.49 | +3.7510 | -. 0168 | $\begin{array}{llll}30 & 22 & 25 \cdot 3\end{array}$ | -10.016 | $-469$ | 13.3 | + 20 | + 1 | 9.4 |  |
| 4112 | 311726 | L 3385 |  |  | $5956 \cdot 30$ | 7838 | 175 | $313417 \cdot 7$ | 018 | 473 | 11.3 | + 20 | - 18 | $8 \cdot 1$ | K o |
| 4113 | 241847 | B 325 I |  | 15749 | $8 \quad 4.23$ | 5986 | 131 | $24.26 \quad 51.5$ | 028 | 450 | 13.7 | + 20 | - 82 | $8 \cdot 6$ | G 5 |
|  | $\}_{271536}$ | C 4343 | $1567-8$ | 15.746 | $\circ 6.20$ -6.23 | 6822 6822 | 150 | $\begin{array}{rrrr}27 & 47 & 13.5 \\ 27 & 47 & 9.0\end{array}$ | 031 031 | 460 460 | $10 \cdot 2$ | + 7 | $\begin{array}{r}19 \\ \hline-\quad 19 \\ \hline\end{array}$ | $\} 6 \cdot 16$ | B9 |
| 6 | 261713 | C 4344 | 1570 |  | 8 ○ 6.45 | $+3 \cdot 6461$ | -.0143 |  | -10.031 | -.456 | 13.0 | + II | - 11 | $8 \cdot 2$ | K o |
| 4117 | $24 \quad 1848$ | C 4346 |  |  | - 15.44 | 6056 | 133 | $244442 \cdot 3$ | 042 | 450 | 13.7 | + 51 | - 109 | $9 \cdot 4$ |  |
| 4118 | 241852 | B 3254 | 1576 |  | - 29.67 | 5942 | 130 |  | 061 | 449 | 13.7 | - 10 | - 52 | 8.5 | F 5 |
| 4119 | 261716 | C 4349 |  |  | - 3 1. 56 | 6512 | 143 | 2635 54. I | 063 | 456 | 14.1 | + 11 | + 10 | $9 \cdot 4$ |  |
| $4^{120}$ | $25 \quad 1844$ | C 435 I | 1577-8 | 15764 | -41-18 | 6298 | 139 | $2545 \quad 2 \cdot 6$ | 075 | 453 | 13.5 | 14 | + 12 | $8 \cdot 9$ | K 5 |
| 4121 | 311728 | L 3390 |  |  | $8 \bigcirc 43.22$ | $+3.7690$ | -. 0173 | $3 \mathrm{I}^{\prime} \quad 5 \quad 14.2$ | -10.077 | -470 | $13 \cdot 1$ | + 26 | - 3 | $8 \cdot 7$ |  |
| 4122 | 261717 | C 4352 |  |  | - $45 \cdot 57$ | 6482 | 143 | $26 \quad 29 \quad 24.2$ | 081 | 455 | 13.9 | - 53 | - 36 | $9 \cdot 4$ |  |
| 4 I 23 | 281551 | ${ }_{\text {C }} 4353$ | 1581 |  | - 48.93 | 6905 | 153 | $\begin{array}{llll}28 & 9 & 6 \cdot 3\end{array}$ | 085 | 461 | 13.5 | - 13 | $\bigcirc$ | $9 \cdot 4$ |  |
| 4124 | 261718 | C 4356 |  |  | 13.68 | 6389 | 144 | $\begin{array}{llll}26 & 8 & 9 \cdot 9\end{array}$ | 103 | 453 | I1.7 |  | + 15 | $8 \cdot 7$ | Go |
| 4125 | $25 \quad 1846$ | C 4357 |  |  | 14.12 | 6167 | 136 | $251441 \cdot 9$ | 104 | 45 I | 14.2 | 29 | - 13 | $9 \cdot 4$ |  |
| $4{ }^{126}$ | 241858 | B 3260 |  |  | 8 1 114.10 | $+3.5960$ | -.0132 | 242421.8 | $10 \cdot 116$ | . 448 | . 2 | 26 | - 36 | 8.7 | F 5 |
| 4127 | 291688 | C 4364 |  | 15801 | 1 42.03 | 7073 | 159 | 285153 | 152 | 461 | 11.3 | + 10 | - 6 | $8 \cdot 6$ | Ko |
| 4128 | 311734 | L. 3398 |  | 15807 | 157.11 | 7630 | 174 | $305640 \cdot 7$ | 170 | 468 | 11.5 | + 115 | - 86 | $8 \cdot 5$ | G 5 |
| 4129 | 311735 | L. 3399 |  | 15808 | 1. 59.73 | 7868 | 180 | $314842 \cdot 6$ | 174 | 471 | 10.3 | - 8 | - 64 | 7.8 | F 8 |
| 4130 | $28 \quad 1556$ | C 4366 | 1616 |  | 22.83 | 6870 | 154 | $\begin{array}{lllll}28 & 5 & 18.4\end{array}$ | 178 | 458 | 12.7 | $+$ | + 14 | $8 \cdot 7$ | A |
| 4131 | 301645 | L 3400 | 1618-9 | 15817-8 | $8 \quad 2 \quad 14.26$ | +3.7558 | -. 0172 | $3041157 \cdot 6$ | -10.192 | -. 466 | 12.6 | 10 | - 130 | $8 \cdot 7$ | Go |
| 4132 | 271541 | C 4367 | 1622-3 |  | $214: 70$ | 6658 | 150 | $27 \quad 16 \quad 23.7$ | 193 | 456 | II. | + 6 | + 11 | $7 \cdot 8$ | A 0 |
| 4133 | 301646 | L 3402 | 1626 |  | 227.21 | 7575 | 173 | $3046 \quad 37 \cdot 9$ | 208 | 466 | 13.5 | - 5 | 10 | $9 \cdot 2$ | Mb |
| $4{ }^{1} 34$ | 281558 | C 4371 |  |  | 227.43 | 6807 | 153 | $27 \quad 5214.5$ | 208 | 458 | $14^{\circ}$ |  |  |  |  |
| 4135 | 241863 | B 3267 | $1637-8$ | 15839 | $228 \cdot 48$ | 5913 | 132 | ${ }^{24} 1644 \cdot 8$ | 209 | 446 | 11.9 | 7 | - 56 | 8.5 | Ko |
| 4136 | $25 \quad 1853$ | C 4373 |  |  | $8 \quad 241.96$ | +3.6079 | 0137 | 245834.2 | -10.227 | 448 | 13.4 | 0 | 8 | 8.9 |  |
| 4137 | 291691 | ${ }_{\text {C }}+4372$ | 1642 | I 5844 | $244 \cdot 66$ | 7058 | 160 | 285130.9 | 230 | 460 | 13.7 | + 5 | - 29 | $9 \cdot 1$ | A 3 |
| 4138 | 241868 | C 4374 | 1647 |  | 252.85 | 6013 | 133 | $244254 \cdot 6$ | 241 | 446 | 13.9 | - 62 | 21 | $9 \cdot 5$ |  |
| 4139 | 251854 | C 4376 | 1646 |  | 254.36 | 6282 | 141 | $254852 \cdot 3$ | 242 | 449 | 11.7 | - I | - 11 | $8 \cdot 2$ | F 5 |
| 4140 | 291693 | C 4375 |  |  | $257 \cdot 34$ | 7160 | 163 | 29 I5 $32 \cdot 8$ | 246 | 461 | 13.5 | + 7 | + 13 | $9 \cdot 2$ |  |
| $4^{141}$ | 271544 | C 4377 | 1655-6 | 15864 | $\begin{array}{llll}8 & 3 & 19.39\end{array}$ | $+3.6761$ | --0154 | 274434.4 | -10.273 | --456 | $1 \mathrm{I} \cdot 8$ |  | - 34* | $6 \cdot 79$ |  |
| 4142 | 301650 | L 3406 | 1660 | 15867 | $3 \mathrm{3} 2 \cdot 33$ | 7567 | 175 | $30 \quad 49 \quad 0 \cdot 5$ | 290 | 465 | $1 \mathrm{I} \cdot 7$ | + 12 | - $\quad 72$ | $8 \cdot 7$ | F 5 |
| 4143 | 271546 | C 4380 | 1664 |  | 334.66 | 6642 | 152 | $\begin{array}{lllll}27 & 17 & 29.9\end{array}$ | 293 | 454 | 12.2 | - 4 | - 7 | $8 \cdot 7$ |  |
| $4144$ |  |  |  |  | $346 \cdot 59$ | 7506 | 174 | $\begin{array}{lllll}30 & 36 & 20 \cdot 2\end{array}$ | 308 | 464 | 14.5 | + 13 | $+3$ | $9 \cdot 0$ |  |
| 4145 | $)^{301651}$ | L 3408 |  | 15876 | 3 47.17 | 7506 | 174 | $303635 \cdot 6$ | 308 | 464 | 12.5 | + 13 | + 3 | $8 \cdot 5$ | Go |
| 4146 | 251860 | C 4386 | 1679 | 15890 | 8400.75 | $+3 \cdot 6088$ | -.0138 | $\begin{array}{llll}25 & 5 & 22.9\end{array}$ | $-10.325$ | -446 | 13.3 | - 3 | - 28 | $8 \cdot \mathrm{I}$ | G 5 |
| 4147 | 291696 | C 4384 | 1675-6 | 15884 | $4 \quad 1.43$ | 7168 | 164 | 292123.6 | 326 | 460 | 13.4 | - 2 | - 14 | $6 \cdot 56$ | Go |
| 4148 | 281562 | ${ }_{\text {C }} 4385$ |  | 15886 | $4 \quad 2 \cdot 39$ | 6934 | 159 | $28 \quad 2737 \cdot 6$ | 327 | 457 | 13.5 | + 28 | - $4^{0}$ | 8.9 | K |
| 4149 | 251864 | C 4389 | 1682 | 15898 | $416 \cdot 59$ | 6264 | 142 | 254923.2 | 345 | 449 | 11.9 | + 31 | - 40 | 8.1 | K 2 |
| 4150 | 291698 | C 4390 | 1683-5 | 15896 | $4{ }^{24 \cdot 13}$ | 7170 | 165 | $29 \quad 23 \quad 23.8$ | 354 | 459 | $12 \cdot 1$ | - 18 | - 37 | 7.51 | K 5 |


| No. | B.D. | A.G.C. | W.B. (z). | Lalande. | R.A. 19roo. | Precession. | Sec. Var. | Dec. 1910.0. | Precossion: | See. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { Igoo+ } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. | Dec. ".00I. |  |  |
|  | ${ }^{\circ}$ |  |  |  | h m 8 | ${ }^{\text {a }}$ | 8 | - , " | " | " |  |  |  |  |  |
| 4151 | 311745 | L 3412 |  |  | $8 \quad 436 \cdot 21$ | $+3.7686$ | -. 0179 |  | -10.369 | -. 465 | 12.7 | + 38 | - 37 | $9 \cdot 5$ |  |
| 4152 | 271554 | C 4392 | 1696-7 | 15915 | 444.85 | 6639 | 152 | $\begin{array}{lllll}27 & 21 & 12.8 \\ 26 & 6 & 35.8\end{array}$ | 381 | 452 | 11.4 | + 13 | - 16 | $7 \cdot 9$ | K o |
| 4153 | 261728 | C 4393 |  | ${ }^{15917}$ | $446 \cdot 82$ | 6328 | 145 | $\begin{array}{llll}26 & 6 & 35.8\end{array}$ | 383 | 448 | $11 \cdot 9$ | - 8* | - $38^{*}$ | $6 \cdot 70$ | K o |
| 4154 | 261730 | C 4394 |  |  | 451.95 | 6339 | 145 | $\begin{array}{lllll}26 & 9 & 3 & 30 \cdot 4\end{array}$ | 389 | 448 | 12.8 | - 6 | - 8 | $8 \cdot 9$ | A |
| 4155 | 291701 | C 4396 |  |  | $456 \cdot 29$ | 7250 | 168 | 2943 35.2 | 394 | 459 | 13.5 | - 2 | 17 | $9 \cdot 5$ |  |
| $+156$ | 25 '1865 | C 4397 | 1698 | 15925 | $\begin{array}{llll}8 & 5 & 2.04\end{array}$ | $+3.6243$ | -.0143 | 254651.0 | -10.402 | - 447 | 12.31 | $-51^{*}$ | - 354* | $5 \cdot 83$ | G 5 |
| 4157 | 311753 | L 3419 | 8 | 15944 | 5 52.26 | 7730 | 181 | 313418.1 | 464 | 464 | 10.4 | + 7 | - 10 | 8.1 | K 0 |
| 4158 | 311754 | L 3420 |  | 15945 | 554.62 | 7757 | 182 | 314028.6 | 468 | 465 | 10.4 | - 2 | + 15 | 8.5 |  |
| 4159 | 251871 | ${ }_{\text {C }} 4408$ | 34 |  | 625.41 | 6099 | 139 | $\begin{array}{lllll}25 & 16 & 26 \cdot 5\end{array}$ | 505 | 444 | 12.5 | - 9 | - 25 | $9 \cdot 5$ | G 5 |
| 4160 | 311757 | L. 3423 |  | 15966 | $636 \cdot 76$ | 7591 | 179 | $31 \quad 653.5$ | 519 | 461 | 12.7 | + 27 | - 28 | 8.I | K 0 |
| 4161 | 251872 | C 44 II | 38 |  | $8 \quad 639.70$ | $+3.6138$ | -. 0140 | $252656 \cdot 2$ | -10.524 | -.444 | 12.9 | 21 | 47 | 8.9 | Fo |
| ${ }^{1162}$ | 291709 | C 4412 | 39 |  | $647 \cdot 69$ | 7035 | 165 | 29 1 366.3 | 534 | 455 | 13.1 | 94 | 17 | $8 \cdot 7$ | F 8 |
| ${ }^{1163}$ | 311759 | L. 3426 |  |  | 648.50 | 7657 | 181 |  | 535 | 463 | 13.7 | - 24 | - 1 | 9.5 |  |
| 4164 | 311760 | L 3427 | 37 |  | $649 \cdot 60$ | 7698 | 182 |  | 536 | 462 | 13.7 | + 17 | - 36 | $9 \cdot 1$ |  |
| 4165 | 301659 | L $3+28$ |  |  | 653.91 | 7456 | 178 | $3037 \quad 57 \cdot 7$ | 541 | 459 | 13.8 | + 20 | - 44 | $9 \cdot 1$ |  |
| 4166 | 301660 | L 3429 | 41 |  | $8 \quad 7 \quad 2.01$ | +3.7480 | -. 0178 | $304345 \cdot 2$ | -10.551 | --459 | 12.7 | 10 | - 34 | $8 \cdot 9$ | G |
| $4^{157}$ | 291712 | C 4414 | 43 |  | $\begin{array}{lll}7 & 3.42\end{array}$ | 7046 | 166 | $\begin{array}{llll}29 & 5 & 2 \mathrm{I} \cdot 2\end{array}$ | 552 | 454 | 11.6 | + 3 | - 18 | $7 \cdot 9$ | A 0 |
| $4{ }^{168}$ | 291713 | C $4+16$ |  |  | 7 10.08 | 7233 | 171 | $\begin{array}{lllll}29 & 48 & 39.5\end{array}$ | 561 | 456 | 12.9 | - | 3 | $8 \cdot 51$ | A 2 |
| $4{ }^{169} 9$ | 261742 | C 4417 |  | 15996-7 | 712.62 | 6386 | 149 | $26 \quad 2936 \cdot 8$ | 565 | 444 | 13.3 | + |  | 8.7 | Fo |
| 4170 | 301661 | L 3432 | 48-9 | 15991-3 | $720 \cdot 18$ | 7470 | 178 | $304246 \cdot 2$ | 573 | 459 | I $1 \cdot 1$ | + 20 | 10 | $8 \cdot 6$ | A 5 |
| 4171 | 301664 | $\mathrm{C}_{4+19}$ | 55-6 | 16006 | $8 \quad 734 \cdot 32$ | +3.7257 | . 0173 | 295537.4 | -10.591 | $-\cdot 456$ | 10.9 | + 1* | - $23 *$ | $5 \cdot 59$ | A op |
| $4{ }^{1172}$ | 251875 | C 442 I | 60 |  | 739.73 | 6156 | 141 | $\begin{array}{lllll}25 & 35 & 7 \cdot 1\end{array}$ | 597 | 443 | 13.5 | - 21 | - 40 | $9 \cdot 5$ |  |
| 4173 | 301666 | L 3439 | 62 |  | 755.75 | 7396 | 178 |  | 618 | 457 | 12.8 | + 24 | - 36 | $9 \cdot 2$ |  |
| ${ }^{1174}$ | 281569 | C 4422 | 66-7 |  | $759 \cdot 82$ | 6895 | 164 | $28 \quad 3344 \cdot 6$ | 623 | 452 | 12.1 | - 24 | + i | 8.5 | F 2 |
| 4175 | 251878 | C 4425 | 79 | 16033 | 813.29 | 6001 | 141 | $24 \quad 584 \mathrm{I} \cdot 8$ | 639 | $44^{\circ}$ | 12.3 | - 25 | - 12 | 9.01 | A 3 |
| 4176 | 261746 | C 4424 |  |  | $\begin{array}{llll}8 & 8 & 14.21\end{array}$ | +3.6239 | -.0147 | $\begin{array}{llll}25 & 57 & 23.3\end{array}$ | -10.640 | --443 | 12.3 | + 26 | , | 9.5 |  |
| 4177 | 281570 | C 4427 | $81-2$ | 16035 | 823.44 | 6757 | 159 | $\begin{array}{llll}28 & 3 & 0.8\end{array}$ | 651 | 449 | 11.6 | + 7 | - 26 | 7.63 | F 2 |
| ${ }^{1} 178$ | $27 \quad 1563$ | C 4428 | 87-8 |  | 833.46 | 6591 | 156 | $\begin{array}{llll}27 & 24 & 3.4\end{array}$ | 664 | 447 | $12 \cdot 1$ | + 14 | - I | 8.5 | A 0 |
| 4179 | $\begin{array}{llll}28 & 1571 \\ 27 & 1566\end{array}$ | C 4429 |  |  | $\begin{array}{ll}9 & 8.48\end{array}$ | 6748 | 160 | $\begin{array}{llll}28 & 3 & 39.7\end{array}$ | 707 | 448 | 12.7 | + 20 | 20 | $9 \cdot 5$ |  |
| 4180 | $27 \quad 1566$ | C 4430 | 101 | 16067 | 911.33 | 6482 | 154 | $\begin{array}{llllllllllll}27 & 0 & 13.8\end{array}$ | 710 | 445 | 11.2 | + 24 | 50 | $7 \cdot 7$. | G 5 |
| 4181 | 311766 | L 3447 | 98 |  | $8 \quad 913.95$ | +3.7665 | -.0186 | $\begin{array}{llll}31 & 34 & 3.7\end{array}$ | -10.714 | --459 | 13.1 | - 30 | - 21 | $9 \cdot 1$ |  |
| 4182 | 271567 | ${ }^{\text {C }} 4431$ | 73-102 | 16070 | 914.72 | 6589 | 156 | $\begin{array}{llll}27 & 26 & 10 \cdot 1\end{array}$ | 715 | 446 | 12.1 | - 14 | + 26 | 8.1 |  |
| +183 | 251880 | C 4432 |  |  | $9^{20 \cdot 17}$ | 5992 | 142 | $\begin{array}{llll}25 & 0 & 29.4\end{array}$ | 721 | 439 | 12.5 | - 12 | - 25 | 8.86 | Mc |
| 4184 | 271568 | C 4433 | 106-7 | 16075 | $924 \cdot 13$ | 6571 | 156 | $\begin{array}{lllllll}27 & 22 & 31.3\end{array}$ | 726 | 446 | 12.3 | + 12 | - 31 | $8 \cdot 6$ | K o |
| 4185 | 311768 | L 3451 |  |  | $935 \cdot 70$ | 7489 | 182 | $\begin{array}{llll}30 & 56 & 2 \mathrm{I} \cdot 7\end{array}$ | 741 | 456 | 13.9 | + 9 | $+6$ | 9.5 |  |
| 4186 | 301675 | L 3452 | 111 | 16082 | $8 \quad 937 \cdot 71$ | +3.7445 | -.0181 | $304641 \cdot 3$ | -10.744 | -455 | 13.5 | + 10 | 42 | $8 \cdot 9$ |  |
| 4187 | 241887 | C 4434 | 114 |  | 944.43 | 5892 | 141 | $243643 \cdot 3$ | 75 I | 437 | 13.7 | + 31 | - 35 | 9-1 |  |
| 4188 | 311770 | L. 3453 |  |  | $946 \cdot 96$ | 7680 | 187 | $\begin{array}{lllll}31 & 39 & 39.5\end{array}$ | 755 | 459 | 13.4 | + 10 | - 57 | 9-1 |  |
| +189 | 241889 | B 3306 | 117 |  | 947.91 | 5751 | 137 | $\begin{array}{llll}24 & 1 & 16.5\end{array}$ | 756 | 435 | 13.5 | - 8 | - 14 | 8.5 | A 2 |
| 4190 | 281573 | C 4436 |  |  | 948.63 | 6724 | 161 | $28 \quad 40 \cdot 7$ | 757 | 447 | 14.1 | +. 15 | 16 | $9 \cdot 5$ |  |
| $4^{19} 9$ | 271571 | C 4438 | 121-2 |  | 8 10 0.34 | +3.6566 | -. 0157 | $\begin{array}{lllll}27 & 23 & 45 \cdot 0\end{array}$ | $-10.771$ | --445 | 13.3 | + 30 | + 3 | $9 \cdot 1$ | A 2 |
| $+^{1} 92$ | 301676 | L 3460 |  |  | 1014.04 | 7272 | 179 | $\begin{array}{llll}30 & 9 & 57 \cdot 5\end{array}$ | 788 | 452 | $13 \cdot 1$ | + 22 | - 59 | $8 \cdot 7$ |  |
| 4193 | 301677 | C 4441 | 126 |  | I0 24.79 | 7204 | 175 | $29 \quad 55 \quad 10 \cdot 2$ | 801 | 452 | 12.1 | + 5 | - 5 | $8 \cdot 7$ |  |
| 4194 | 281575 | C 4445 | 140 | 16070 | 1049.01 | 6876 | 167 | 284037.0 | 831 | 449 | $12 \cdot 1$ | + 23 | 21 | $8 \cdot 7$ | G 5 |
| 4195 | 251888 | C 4446 | 144 |  | $1054 \cdot 50$ | 5961 | 144 |  | 838 | 436 | 11.8 | 18 | 23 | 9.11 | Fo |
| 4196 | 291727 | C 4448 |  |  | 811120.20 |  | -.0174 | $\begin{array}{llll}29 & 38 & 22.8 \\ 30 & 36 & 8.7\end{array}$ | -10.869 | --450 | 12.3 | 18 | $\begin{array}{r}31 \\ -\quad 56 \\ \hline\end{array}$ | 9.5 |  |
| +197 | 301680 | L 3466 | 151 | 16134-6-7 | 11525.94 | 7368 | 182 | $\begin{array}{llllllllllllllllll}30 & 36 & 48.7\end{array}$ | 876 | 453 | $9 \cdot 7$ | 18 | - 56 | 8.2 | A 3 |
| 4198 | 251891 | C 4452 | 168 |  | 1154.13 | 5942 | 145 | $\begin{array}{lllll}24 & 57 & 20 \cdot 8\end{array}$ | 911 | 435 | 12.5 | - 13 | - 18 | $9 \cdot 16$ | Fo |
| 4199 | 271575 | C 4451 | 166-7 | 16158-9 | 1154.66 | 6518 | 159 | $\begin{array}{lllllllll}27 & 19 & 38.5\end{array}$ | 911 | $44^{2}$ | $10 \cdot 0$ | + 26 | + 10 | $7 \cdot+3$ | K 2 |
| 4200 | $31 \quad 1777$ | L 3468 |  |  | $12 \mathrm{I} \cdot 75$ | 7445 | 184 | $305647 \cdot 7$ | 920 | 453 | 14.1 | - 19 | - 31 | $9 \cdot 5$ |  |


| No． | B．D． | A．G．c． | W．B．（2）． | Lalande． | R．A． 191000 | Precession． | Sec．Var． | Dec．1910．0． | Precession． | Sec． Var． | Epoch $1900+$ | Annual P．M． |  | Mag． | Spectral туре． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s. } 0001 . \end{aligned}$ | $\begin{gathered} \text { Dec. } \\ \text { ".oor. } \end{gathered}$ |  |  |
|  | － |  |  |  | h m | 8 | 8 | －，＂ | ＂ | ＊ |  |  |  |  |  |
| 4201 | 271576 | C 4453 | 169 | 16163－4 | 8123.81 | $+3.6601$ | －－0161 | $274049 \cdot 7$ | －10．922 | －－443 | 13.1 | － 6 | － 9 | $7 \cdot 8$ | K。 |
| 4202 | 251892 | C 4454 | 174 |  | 1213.05 | 5976 | 146 | $25 \quad 6 \quad 56 \cdot 5$ | 934 | 434 | 12.6 | ＋ 26 | － 35 | $7 \cdot 41$ | K |
| 4203 | 281579 | C 4456 |  |  | 1219.57 | 6875 | 169 | $28 \quad 46 \quad 33 \cdot 3$ | 942 | 445 | 12.4 | ＋ 49 | － 5 | $9 \cdot 5$ |  |
| 4204 | 251893 | C 4458 | 180 |  | 1222.06 | 6118 | 149 | $254314 \cdot 6$ | 945 | 436 | $12 \cdot 7$ | ＋ 1 | － 1 | $8 \cdot 3$ | K 。 |
| 4205 | 301685 | L 3469 |  | － | 1223.01 | 7190 | 177 | $30 \times 14.6$ | 946 | 449 | $13 \cdot 1$ | ＋ 12 | － 25 | $9 \cdot 1$ |  |
| 4206 | 311778 | L 3470 |  |  | 81226.07 | $+3.7600$ | －． 0188 | 313328.2 | －10．950 | －－454 | 14.3 |  | － 38. | 9．5． |  |
| 4207 | 31 1779 | L 3471 |  |  | 1227.06 | 7480 | 185 | $\begin{array}{llll}31 & 6 & 41 \cdot 2\end{array}$ | 951 | 452 | 11.7 | ＋ 11 | － 32 | 8．1 | F 2 |
| 4208 | 271578 | C 4459 |  |  | 1228.92 | 6446 | 158 | $27 \quad 422.5$ | 953 | 440 | 13.4 | － 32 | － 20 | $9 \cdot 1$ |  |
| 4209 | $31 \quad 1781$ | L 3472 | 18 I－2 |  | $1236 \cdot 63$ | 7421 | 184 | 30540.6 | 963 | 452 | 12.53 | 224 | －814 | $8 \cdot 5$ |  |
| 4210 | $26 \quad 1760$ | C 4461 | 188－9 | 16186 | $1240 \cdot 25$ | 6352 | 155 | 264214.5 | 967 | 439 | $9 \cdot 9$ | － 30 | － 21 | $7 \cdot 04$ | A 3 |
| 42 II | 291730 | C 4460 | 186 | 16223 | $81242 \cdot 27$ | $+3.7017$ | －．0173 | 292132.2 | －10．970 | －－447 | 12.7 | － 12 | － 34 | 8.1 | A 3 |
| 4212 | 251896 | C 4463 | 195 |  | 1252.35 | 6103 | 150 | 254115.9 | 982 | 435 | 13.5 | ＋ | － 7 | $9 \cdot 2$ | A 2 |
| 42 I 3 | 281581 | C 4465 |  |  | $1257 \cdot 44$ | 6692 | 164 | $28 \quad 547.5$ | 988 | 442 | 12.8 | － 7 | － 29 | $8 \cdot 7$ |  |
| 4214 | 291731 | ${ }^{\text {C }} 4464$ |  |  | 1258.32 | 6932 | 171 | $29 \quad 24 \mathrm{I} \cdot 6$ | 989 | 445 | 13.3 | ＋ 16 | － 27 | 9.1 |  |
| 4215 | 301689 | L 3478 |  |  | $13 \quad 0.47$ | 7332 | 183 | $3035 \quad 30 \cdot 5$ | $99^{2}$ | 450 | 13.6 | ＋ 7 | － 30 | 9.5 |  |
| 6 | 281582 | C 4468 |  |  | $\begin{array}{llll}8 & 13 & 18.60\end{array}$ | $+3.6684$ | －．0165 | $\begin{array}{ll}28 & 510 \cdot 0\end{array}$ | －11．014 | －．442 | 12.2 | ＋ 14 | － | $8 \cdot 8$ |  |
| 4217 | 271582 | C 4469 | 203 | 16207 | 1319.05 | 6575 | 162 | 2738 55•I | 014 | 441 | 13.1 | － 5 | － 7 | $8 \cdot 9$ |  |
| 4218 | 261762 | C 4471 | 208－9 | $16215-8$ | 1328.59 | 6318 | 156 | 263659.6 | 026 | 438 | 11.9 | －$\quad 29$ | － 31 | 7.04 | Fo |
| 4219 | 271585 | C 4472 |  |  | 1345.97 | 6493 | 161 | $272042 \cdot 6$ | 047 | 439 | 11.7 | ＋ 16 | － 39 | 9．1 |  |
| 4220 | 241903 | B 3332 | 218 | 16237－8 | 13 47．71 | 5796 | 143 | $2427 \quad 21.2$ | 049 | 432 | 11.5 | ＋ | － 31 | 7－11 | G 5 |
| 21 | 281583 | ${ }_{\text {C }} 4473$ |  |  | 81353.50 | $+3.6780$ | 0168 | $\begin{array}{llll}28 & 30 & 31.3\end{array}$ | －11．056 | －－442 | － 4 | 33 | ＋ 14 | 8.5 |  |
| 4222 | 251897 | C 4474 |  |  | $1357 \cdot 25$ | 5938 | 147 | $25 \quad 3 \begin{array}{ll}25 & 5\end{array}$ | 061 | 432 | 13.7 | － 16 | － 36 | $9 \cdot 5$ |  |
| 4223 | 311784 | L 3480 |  | 16229－31 | 1358.12 | 7421 | 187 | 305953.7 | 062 | 450 | $12 \cdot 3$ | ＋ | ＋ 23 | 8.5 | K 2 |
| 4224 | 271586 | ${ }^{\text {C }} 4475$ | 222 | 16248 | 145.07 | 6383 | 159 | 265519.8 | 070 | 438 | 12.7 | － 14 | ＋ 21 | $8 \cdot 3$ | F 5 |
| 4225 | $25 \quad 1898$ | C 4477 |  | 16253 | $14 \quad 9.09$ | 5980 | 148 | $\begin{array}{llllll}25 & 15 & 25.7\end{array}$ | 075 | 433 | 13.1 | 11 | － 31 | $8 \cdot 5$ | A 0 |
| 4226 | $25 \quad 1899$ | C 4479 |  | 16267 | 81428.11 | $+3.5923$ | －． 0147 | $\begin{array}{llll}25 & 2 & 14.9\end{array}$ | －11．098 | －431 | 12.6 | ＋ 21 | － | $8 \cdot 5$ | K 5 |
| 4227 | $28 \quad 1584$ | C 4480 |  |  | 1433.51 | 6830 | 170 | $28 \quad 45 \quad 10 \cdot 3$ | － 105 | 443 | 12.9 | ＋ 22 | － 7 | 9－2 |  |
| 4228 | 271588 | C 4481 |  | 16268 | 1433.55 | 643 I | 161 | $\begin{array}{llll}27 & 9 & 1.5\end{array}$ | 105 | 437 | 12.5 | －． | ＋ 7 | 8.2 | K 。 |
| 4229 | 271589 | C 4482 | 231－2 | 16270－1－2 | $1436 \cdot 00$ | 6519 | 163 | $273034 \cdot 2$ | 108 | 438 | 11.32 | －－ | －388＊ | $5 \cdot 16$ | F 5 |
| 4230 | 26 1764 | C 4483 | 235 |  | 1438.54 | 6308 | 158 | 2639 I4．I | 11 | 436 | 13.0 | ＋ 41 | ＋ 10 | $9 \cdot 1$ |  |
| 4231 | 241907 | B 3339 | 238 | 16280 | 81440.14 | ＋3．5699 | －． 0142 | $24 \quad 533 \cdot 0$ | －II－113 | －． 428 | 11.4 | ＋ | － 30 | $8 \cdot 3$ | A 0 |
| 4232 | 251901 | C 4485 | 241 |  | 1453.25 | 6094 | 152 | $254650 \cdot 6$ | 129 | 432 | 9.9 | － 1 | － 28 | $8 \cdot 3$ | F 5 |
| 4233 | 2419091 | B 3344 | 251 | 16288－90－I | $15 \mathrm{II} \cdot 20$ | 5741 | 142 | 241822.7 | 150 | 428 | $10 \cdot 4$ | － 11 | ＊－31＊ | 5.87 | A 0 |
| 4234 | 271592 | C 4487 | 249 |  | $15 \quad 16.43$ | 6444 | 161 | $\begin{array}{lllll}27 & 15 & 9.2\end{array}$ | 157 | 437 | 11.5 | 25 | － 9 | $9 \cdot 2$ |  |
| 4235 | $25 \quad 1903$ | C 4488 | 252 |  | $15 \quad 17 \cdot 21$ | 6049 | 152 | $\begin{array}{lllllllllll}25 & 37\end{array}$ | 158 | 432 | 11.5 | 11 | 12 | $7 \cdot 35$ | K 2 |
| 4236 | 271594 | C 4490 | 258 | 16303－5 | 81536.78 |  | －．0165 | $27 \quad 38 \quad 16 \cdot 2$ | －11．181 |  | $1 \mathrm{I} \cdot 6$ | － 26 | － 8 | 8.7 | A 3 |
| 4237 | 281588 | C 4489 |  |  | 1537.09 | 6746 | 170 | 2822 21．1 | 182 | 439 | 12.6 | ＋ 6 | － 21 | $9 \cdot 5$ |  |
| 4238 | 26－1766 | ${ }^{\text {C }} 4491$ | 262 |  | $1547 \cdot 48$ | 6279 | 158 | $\begin{array}{llllllllllllllllll}26 & 36 & 39\end{array}$ | 194 | 435 | 11.0 | ＋ 35 | － 13 | 8.8 | F 5 |
| 4239 | 25 1905 <br> 25 1906 | C 4492 |  |  | $1550 \cdot 35$ $1554 \cdot 12$ | 5901 | 148 | $\begin{array}{rrrr}25 & 1 & 49 \cdot 8 \\ 25 & 10 & 10 \cdot 3\end{array}$ | 198 | 429 | 13.6 |  |  | 9.5 |  |
| 4240 | $25 \quad 1906$ | C 4493 | 265 |  | $1554 \cdot 12$ | 5933 | 149 | $25 \quad 10 \quad 10 \cdot 3$ | 202 | 429 | $13 \cdot 3$ | 36 | － $4^{8}$ | $9 \cdot 5$ |  |
| 4241 | $27 \quad 1596$ | C 4495 |  | 16315 | $\begin{array}{lll}8 & 16 & 1.87\end{array}$ | $+3.6480$ | －． 0163 | $272659 \cdot 6$ | －11．212 | $-\cdot 436$ | $10 \cdot 7$ | ＋ 28 | － 13 | $8 \cdot 5$ |  |
| 4242 | 291739 | C 4494 |  | 16311 | $16 \quad 2.68$ | 6892 | 175 | $29 \quad 6 \quad 10 \cdot 1$ | 213 | 441 | $11 \cdot 3$ | － 20 | ＋ 15 | $8 \cdot 5$ | G 5 |
| 4243 | 3271597 | C 4496 | 285 | 16323－4 | $1622 \cdot 52$ | 6541 | 165 | $27 \quad 43 \quad 27 \cdot 2$ | 237 | 437 | 12 | － 3 | － 24 | $8 \cdot 9$ | F |
| 4244 | 24 1913 | B 3351 |  |  | $1636 \cdot 99$ | 5721 | 145 |  | 254 | 426 | 11.0 | －$\quad 41$ | －$\quad 39$ | 8.7 8.6 | $\mathrm{F}_{2}$ |
| 4245 | 26 1768 | C 4497 | 292 | 16336 | $1647 \times 93$ | 6166 | 156 | $261238 \cdot 1$ | 267 | 432 | $0 \cdot 2$ | 3 | － 29 | 8.6 | G 5 |
| 4246 | 27 151598 | C 4498 | 296 |  |  | $+3.6335$ | －．0161 |  | －11．283 | －－434 | 13.3 | － 6 | － 129 | $9 \cdot 1$ |  |
| 4247 | 261770 | C 4500 | 312 | 16360 | $17 \quad 19.20$ | 6114 | 155 | 26 I 3 I． 6 | 305 | 430 | 11.8 | ＋ 6 | － 20 | $8 \cdot 3$ | K o |
| 4248 | 271599 | C 4499 | $310-1$ | 16321 | 1720.07 | 6546 | 167 | $274843 \cdot 1$ | 306 | 435 | 12.8 | ＋ 15 | ＋ 2 | $7 \cdot 7$ | G 5 |
| 4249 | 321724 | L 3499 | 306 | 16347－9 | 1720.15 | 7587 | 196 |  | 306 | 448 | 12.3 | ＋ 3 | － 14 | $7 \cdot 7$ | G 5 |
| 4250 | 301700 | L 3501 |  |  | 1725.40 | 7178 | ． 185 | 301913.4 | 313 | 443 | 14.1 | ＋ 3 | － $4^{6}$ | $9 \cdot 5$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Doc. } \\ & \text { and. } \end{aligned}$ |  |  |
|  | $\bigcirc$ |  |  |  | h m s | 8 | 8 | - " | " | " |  |  |  |  |  |
| 4251 | 301701 | L 3502 |  |  | $\begin{array}{llll}8 & 17 & 26.77\end{array}$ | +3.7308 | -.0189 | $304933 \cdot 9$ | -11.314 | -.445 | $12 \cdot 3$ | - 4 | $+35$ | 9-1 |  |
| 4252 | 27 1601 | C 4502 |  | 16367-8 | $1735 \cdot 76$ | 6436 | 165 | $27 \quad 2255 \cdot 8$ | 325 | 433 | 12.3 |  | 11 | $8 \cdot 6$ | K 2 |
| 4253 | 271602 | C 4503 |  |  | $1737 \cdot 24$ | 6364 | 163 | $27 \quad 5 \quad 4 \cdot 1$ | 327 | 432 | 14.1 | - 2 | 16 | $9 \cdot 5$ |  |
| 4254 | $30 \quad 1702$ | I. 3505 | 318 | 16333-71 | 17 54.37 | 7206 | 187 | 302756.2 | 347 | 442 | I I. 2 | - 5 | - 21 | $8 \cdot 2$ | A 2 |
| 4255 | $31 \quad 1803$ | L 3509 | 326 |  | 18 I 3.59 | 7324 | 191 | $30 \quad 5649.8$ | 370 | 443 | 12.9 | + 31 | - 26 | $9 \cdot 1$ |  |
| 4256 | $27 \quad 1604$ | C 4506 | 330 | 16386-7 | $8 \quad 1813.85$ | $+3.6456$ | -.0165 | $273021 \cdot 9$ | - II.371 | -.432 | 14•I | - 3 | - 2 | $8 \cdot 9$ | F 5 |
| 4257 | 311804 | L 3510 |  |  | 1818.03 | 7495 | 195 | $\begin{array}{llll}31 & 36 & 3 \cdot 0\end{array}$ | 376 | 445 | 12.5 |  |  | $8 \cdot 5$ |  |
| 4258 | 251912 | C 4509 |  |  | $18 \quad 24.48$ | 5880 | 151 | $\begin{array}{llll}25 & 6 & 33.4\end{array}$ | 383 | 425 | 14.3 | + II | - 9 | $9 \cdot \mathrm{I}$ |  |
| 4259 | 271605 | C 4508 | 336 |  | $18 \quad 24.85$ | 6324 | 162 | $2658 \quad 30 \cdot 9$ | 384 | 431 | 13.6 | - 5 | - 26 | 9.I |  |
| 4260 | 311806 | L 3511 | 335 | 16392 | $18 \quad 29 \cdot 38$ | 7488 | 195 |  | 389 | 445 | -0 | - 30 | - 40 | $7 \cdot 4^{8}$ | K o |
| 4261 | 301704 | L 3512 | 339 |  | $\begin{array}{llll}8 & 18 & 32.52\end{array}$ | $+3.7076$ | -.0184 | $30 \quad 040 \cdot 5$ | - 11.393 | - 440 | II.8 | - 31 | - 38 | $8 \cdot 6$ | A 5 |
| 4262 | 311807 | L 35 I 3 |  |  | $1837 \cdot 34$ | 7338 | 191 | 31151.2 | 399 | 443 | 12.7 | + 6 | + 35 | $8 \cdot 6$ |  |
| 4263 | 291747 | C 4511 |  |  | 1846.87 | 6826 | 177 | $29230 \cdot 0$ | 410 | 436 | $12 \cdot 9$ | - 2 | - 45 | $8 \cdot 8$ | G 0 |
| 4264 | 261778 | C 4512 | 348-9-50 | 16415-7-8 | $1856 \cdot 22$ | 6262 | 162 | $2645 \quad 23.2$ | 422 | 428 | 11.5,12.0 | - 15* | - 15* | $8 \cdot 5$ | A 2 |
| 4265 | 271606 | C 4513 |  | 16416 | 18 57.37 | 6383 | 165 | $27 \quad 15 \quad 24.7$ | 423 | 43 I | 11.4 | - 4 | + 2 | $8 \cdot 8$ | A 2 |
| 4266 | 25 I916 | C 4516 |  |  | $8 \quad 1920.91$ | $+3.5837$ | -.0151 | $2459 \quad 10 \cdot 2$ | - II*45 | -.424 | 12.0 | + 7 | - 17 | 9-1 |  |
| 4267 | 28 1598 | C 4518 | 360-I |  | 1932.57 | 6714 | 175 | $28 \quad 38 \quad 54 \cdot 2$ | 465 | 434 | 12.5 | + 12 | - 24 | $9 \cdot 6$ |  |
| 4268 | 24.1920 | B 3369 | 364 | 16447 | $1935 \cdot 17$ | 5659 | 146 | $\begin{array}{llll}24 & 14 & 9 \cdot 3\end{array}$ | 468 | 42 I | 10.0 | - 46 | + 9 | $7 \cdot 27$ | Fo |
| 4269 | 28 I 599 | C 4520 |  |  | 1936.48 | 6513 | 170 | $275025 \cdot 1$ | 470 | 432 | II 5 | - 2 | + 3 | $8 \cdot 5$ |  |
| 4270 | 301706 | C 452 I | 363 |  | $1947 \cdot 01$ | 7035 | 185 | $295638 \cdot 7$ | 482 | 438 | II 15 | - 8 | - 21 | $8 \cdot 59$ | K o |
| 4271 | 311809 | L 3520 |  |  | 8 I9 49.82 | $+3.7479$ | -.0197 | 313934.5 | - I I.486 | -.443 | 12.5 | + 12 | - 13 | 9•1 |  |
| 4272 | 3 I | L 3521 |  |  | 1953.41 | 7394 | 195 | 312034.5 | 490 | 442 | 12.5 | - 47 | - 30 | $9^{-1}$ |  |
| 4273 | 24.1921 | C 4522 | 372 |  | 1957.01 | 5748 | 149 | $243832 \cdot 5$ | 494 | 422 | 10.2 | + 19 | - 1 | $8 \cdot 41$ | K o |
| 4274 | $31 \begin{array}{ll}31 & 1810\end{array}$ | L 3522 |  |  | $20 \quad 10.85$ | 7392 | 195 | $3 \mathrm{I} 2120 \cdot 0$ | 5 II | 441 | $10 \cdot 5$ | $+56$ | - 67 | 8.8 |  |
| 4275 | 261780 | C 4523 |  |  | 2012.29 | 6203 | 161 | 2635 5I•8 | 513 | 428 | $13 \cdot 0$ | + 11 | - 7 | 9•1 |  |
| 4276 | 311811 | L 3524 |  | 16470 | 82028.60 | +3.7334 | -. 0193 | 317820.8 | - I1.532 | - 440 | 12.3 | + 29 | - 76 | $8 \cdot 6$ |  |
| 4277 | $31 \quad 1812$ | L 3525 | 383 | 16471 | 20 29.90 | 7405 | 197 | $312545 \cdot 7$ | 534 | 441 | 13.0 | - 12 | - 15 | $8 \cdot 7$ |  |
| 4278 | 291753 | C 4525 | 387-8 | 16478 | $2036 \cdot 15$ | 6763 | 178 | $28 \quad 55 \quad 22 \cdot 3$ | 54 I | 433 | I I. 6 | + 6 | - 37 | $7 \cdot 8$ | K 0 |
| 4279 | 281600 | C 4526 | 390-1 | 16479 | $2037 \cdot 55$ | 6706 | 176 | $284146 \cdot 6$ | 543 | 433 | 11.7 | $+\quad 4$ | - 2 | 8.1 | K 0 |
| 4280 | 261782 | C 4527 | 395 |  | $2049 \cdot 86$ | 6242 | 164 | $2648 \quad 20 \cdot 2$ | 557 | 427 | 10.8 | 8 | + 8 | $8 \cdot 7$ | K o |
| 4281 | 28 1602 | C 4529 | 398 | 16491-2 | $8 \quad 2059.42$ | $+3.6575$ | -.0173 | 28 III $25 \cdot 9$ | -11.569 | -*431 | $9 \cdot 7$ | - 23 * | - 131* | $5 \cdot 83$ | K ${ }^{2}$ |
| 4282 | 28 1603 | C 4531 | 405 | 16504 | 2112.24 | 6612 | 174 | $282127 \cdot 8$ | 584 | 431 | 9.8 | + 6 | + 3 | $8 \cdot 5$ | K o |
| 4283 | 251920 | C 4533 | 410-2 | $16517-9$ | 2118.80 | 5770 | 151 | $244950 \cdot 0$ | 592 | 420 | $10 \cdot 6$ | - 29* | - 85* | 7-10 | A 3 |
| 4284 | $25 \quad 1920$ | C 4534 | 411-3 | 16518 | 2119.00 | 5770 | 151 | 244954.7 | 592 | 420 | II. 5 | - 29* | - $85^{*}$ | $7 \cdot 64$ | G |
| 4285 | $\} 271612$ | C 4532 |  | 16511-3 | $2120 \cdot 52$ | 6335 | 167 | 271344.4 | 594 | 428 | II.O | - 5 * | - $8^{*}$ | $6 \cdot 32$ | A 2 |
| 4286 |  |  |  | $16512-4$ | 82120.75 | $+3.6335$ | -.0167 | $\begin{array}{lllll}27 & 13 & 48 \cdot 9\end{array}$ | - II.594 | $-.428$ | 9.9 | - 5* | - $9^{*}$ | $6 \cdot 30$ |  |
| 4287 | 301709 | C 4535 | 415 |  | 2133.29 | 6982 | 185 | $295213 \cdot 0$ | 609 | 435 | 10.5 | - 112 | - 56 | 8.61 | F 5 |
| 4288 | 241925 | B 3387 |  |  | 2 I 44.87 | 5578 | 146 | $\begin{array}{llll}24 & 1 & 23.7\end{array}$ | 623 | 417 | $10 \cdot 3$ | - 23 | - 6 | $8 \cdot 6$ | G 5 |
| 4289 | 261786 | C 4536 |  |  | $2151 \cdot 63$ | 6039 | I 59 | $26 \quad 1 \quad 15 \cdot 7$ | 631 | 424 | 10.5 | - 8 | - 24 | $9 \cdot 5$ |  |
| 4290 | 3 I 1814 | L 3534 |  | 16532-3 | 22 1.66 | 7222 | 194 | $30 \quad 5046 \cdot 3$ | 643 | 437 | $9 \cdot 8$ | $+38$ | - 27 | $8 \cdot 0$ | F 2 |
| 4291 | 27 1613 | C 4539 |  |  | $\begin{array}{lll}8 \quad 22 & 5.28\end{array}$ | $+3.6301$ | -.0167 | $27 \quad 8 \quad 33 \cdot 0$ | - 11.647 | -.425 | 11.5 | + 24 | - 2 | $8 \cdot 9$ |  |
| 4292 | 281606 | C 4541 | $431-2$ |  | 22 II.49 | 6472 | 172 | 27 51 29.0 | 654 | 428 | II•9 | + 2 | + 8 | $8 \cdot 7$ | $\mathrm{F}^{2}$ |
| 4293 | 291755 | C 4542 | 439 |  | $22 \quad 20.89$ | 6845 | 182 | $2923 \quad 8 \cdot 0$ | 666 | 432 | 11.4 | - . 17 | - 41 | 9•1 | G |
| 4294 | $32 \begin{array}{lll}32 & 1738\end{array}$ | L 3540 |  |  | $2243 \cdot 24$ | 7487 | 202 | $3 \mathrm{I} 5515 \cdot \mathrm{I}$ | 692 | 439 | 14.9 | - 58 | -91 | $8 \cdot 7$ |  |
| 4295 | $28 \quad 1608$ | C 4545 |  |  | 2258.23 | 66 II | 177 | $28 \quad 29$ I. 2 | 710 | 428 | $10 \cdot 8$ | - | + 19 | 9.1 |  |
| 4296 | $25 \quad 1927$ | C 4546 | 458 |  | $\begin{array}{llll}8 & 23 & 9.27\end{array}$ | $+3.5743$ | -.0152 | $245022 \cdot 7$ | - I 1.723 | -.418 | $8 \cdot 8$ | - 8 | - 41 | 8.2I | A 2 |
| 4297 | 241931 | C 4547 | 46 I | 16597-8-9 | $\begin{array}{lll}23 & 16.75\end{array}$ | 5651 | 150 | $242638 \cdot 9$ | 732 | 416 | $10 \cdot 9$ | - 20* | - 71* | $6 \cdot 06$ | A 5 |
| 4298 | 291758 | ${ }^{\text {C }} 4548$ | 466 |  | 23 42.15 | 6694 | 180 | $285247 \cdot 0$ | 762 | 428 | 10.6 | + 11 | - 29 | $9 \cdot 5$ |  |
| 4299 | 311818 | L 3545 |  |  | $2342 \cdot 65$ | 7250 | 197 | $\begin{array}{llllllll}31 & 5 & 20.9\end{array}$ | 762 | 435 | 10.6 | + 2 | 0 | 9.1 | Fo |
| 4300 | 291759 | C 4549 | 467 | 16568 | 2344.94 | 6914 | 186 | $29 \quad 46 \quad 7 \cdot 3$ | 765 | 43 I | $9 \cdot 8$ | - 2 | - 15 | $8 \cdot 33$ | A 0 |


| No． | B．D． | A．G．C． | W．B．（2）． | Lalande． | R．A． 19100. | Precession． | Seo．Var． | Dec．1910．0． | Precession | Sec． Var． | $\begin{aligned} & \text { Epoch } \\ & \text { Igoo+ } \end{aligned}$ | Annual P．M． |  | Mag． | Spectral Type． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | RA． 8．0001． | Dec． ＂．001． |  |  |
|  | － |  |  |  | h m | s | s | －，＂ | ＂ | ＂ |  |  |  |  |  |
| 4301 | 311819 | L 3549 |  |  | $82415 \cdot 50$ | $+3.7390$ | －． 0202 | $314032 \cdot 2$ | －11．801 | －．435 | 10.5 | ＋ | － 23 | $8 \cdot 3$ | F 5 |
| ＋302 | 241934 | ${ }^{\text {C }} 4554$ | 479－80 | 16631－4－6 | $24 \quad 19.68$ | 5680 | 152 | $243843 \cdot 0$ | 806 | 415 | 10.2 | － 31 | － 22 | $7 \cdot 1$ | K 0 |
| 4303 | 261789 | ${ }_{\text {C }}$ C 4555 | 481－2－3 | 16637－8． | 2425.39 | 6107 | 163 | $26 \quad 2935 \cdot 6$ | 813 | 42 I | 9.4 | － 22 | － 20 | $6 \cdot 67$ | A 0 |
| 4304 | $25 \quad 1934$ | C 4557 | 489 |  | $2439 \cdot 08$ | 5765 | 155 | 25 2 21.6 | 829 | 416 | 11.1 | ＋ 4 | － 17 | $9 \cdot 5$ |  |
| 4305 | $28 \quad 1613$ | C 4556 |  |  | 2441.75 | 6553 | 178 | $28 \quad 2256 \cdot 8$ | 832 | 425 | 10.3 | － 2 | － 28 | $8 \cdot 9$ | F 5 |
| 4306 | 291764 | C 4558 | 495 |  | $8 \quad 25 \quad 3.70$ | $+3.6764$ | －． 0184 | $\begin{array}{llll}29 & 16 & 2.2\end{array}$ | －II 8.88 | $-427$ | 11.7 | － 7 | － 12 | $9 \cdot 6$ |  |
| 4307 | 261792 | C 4559 |  | 16665 | $2532 \cdot 31$ | 6048 | 163 | $26 \quad 1929.5$ | 89 I | $4^{18}$ | $9 \cdot 3$ | $\bigcirc$ | $\bigcirc$ | $8 \cdot 7$ | K 5 |
| 4308 | 261793 | C 4560 | 513 | 16669－70 | $2546 \cdot 67$ | 6077 | 164 | $26 \quad 27$ 56．7 | 908 | 418 | 10.0 | 12 | － 48 | $8 \cdot 5$ | F 5 |
| 4309 | 261794 | ${ }^{\text {C }} 4561$ | 516 |  | 25 52．86 | 5977 | 161 | $\begin{array}{lllll}26 & 2 & 36 \cdot 9\end{array}$ | 915 | 417 | 9.0 | － 2 | － 45 | $7 \cdot 44$ |  |
| 4310 | 241938 | C 4562 |  |  | $2555.55^{\circ}$ | 5670 | 154 | $244^{2} 49 \cdot 7$ | 919 | 413 | 10.8 | 35 | － 46 | $9 \cdot 1$ |  |
| 4311 | 311826 | L 3555 | 514 |  | $\begin{array}{lll}8 & 26 & 1 \cdot 57\end{array}$ | $+3.7162$ | －．0199 |  | －11．926 | － 430 | 11.8 | ＋ | － 27 | $8 \cdot 7$ |  |
| 4312 | 301718 | L 3556 | 517 |  | $26 \quad 3 \cdot 40$ | 7034 | 195 | $\begin{array}{lllllllllllll}30 & 26 & 28.7\end{array}$ | 928 | 428 | 13.0 | ＋ 27 | － 8 | $9 \cdot 2$ |  |
| 4313 | 251937 | C 4563 |  |  | $26 \quad 7 \cdot 64$ | 5797 | 158 |  | 933 | 415 | 13.5 | ＋ 5 | － 9 | $9 \cdot 1$ | K 5 |
| 4314 | 241940 | C 4564 | 525 | 16685－7 | 26 II． 32 | 5592 | 153 | $24 \quad 23 \quad 6 \cdot 7$ | 937 | 412 | $9 \cdot 7$ | －62＊ | － $63^{*}$ | $5 \cdot 73$ | Fo |
| 4.315 | 301719 | L 3559 | 522 |  | 26 20．18 | 6924 | 191 | $30 \quad 54.2$ | 947 | 427 | 11.4 | ＋ | － 15 | $8 \cdot 2$ | F 2 |
| 4316 | 291772 | C 4568 |  | 16750 | $82646 \cdot 86$ | $+3.6818$ | －．0189 | $293726 \cdot 8$ | － 11.979 | － 425 | 12.0 | －． 18 | － 40 | 7.06 | G 5 |
| 4317 | 291770 | C 4569 |  | 16754 | $2647 \cdot 40$ | 6855 | 189 | $2946 \quad 17 \cdot 6$ | 979 | 425 | 11.4 | － 46 | － 35 | $8 \cdot 7$ |  |
| 4318 | 241942 | B 341 I | 546 | 16731－2 | $2656 \cdot 06$ | 5593 | 153 | 242628.8 | 989 | 410 | II．0 | 3 | － 14 | $8 \cdot 9$ | A 0 |
| 4319 | $24 \quad 1943$ | B 3413 |  | 16762 | $27 \quad 5 \cdot 38$ | 5503 | 150 | $\begin{array}{llll}24 & 3 & 8.7\end{array}$ | 12.000 | 409 | 12.1 | － 1 | － 69 | $8 \cdot 9$ | Go |
| 4320 | 261796 | C 4570 |  |  | $27 \quad 6 \cdot 76$ | 6005 | 164 |  | 003 | $4{ }^{16}$ | 13.5 | ＋ 6 | － $4^{8}$ | $9 \cdot 2$ |  |
| 4321 | 251942 | C 4571 | 554 |  | $\begin{array}{lll}8 & 27 & 9.47\end{array}$ | $+3.5800$ | －． 0159 | 252221.3 | －12．005 | $-412$ | 13.1 | － 18 | － 63 | $8 \cdot 7$ | K o |
| 4322 | 261798 | C 4572 |  |  | 2715.63 | 5916 | 162 | $25 \quad 5251 \cdot 4$ | OI2 | 414 | 14.2 | － 13 | － 18 | $9 \cdot 2$ |  |
| 4323 | 271623 | ${ }_{\text {C }}$ C 4573 |  |  | ${ }_{27} 18 \cdot 18$ | 6367 | 176 | 274843.8 | 015 | 419 | 13.9 | ＋ 21 | ＋ | $9 \cdot 5$ |  |
| 4324 | 251944 | C 4574 |  |  | 27 29．10 | 5852 | 161 | $25 \quad 37 \quad 17 \cdot 6$ | 028 | 413 | 13.9 | － 32 | ＋ | $9 \cdot 2$ |  |
| 4325 | 311833 | L 3569 | 562 |  | $2735 \cdot 87$ | 7356 | 206 | $314853 \cdot 6$ | 036 | 430 | 14.3 | 20 | － 15 | $8 \cdot 7$ | K 2 |
| 4326 | 261801 | C 4577 | 569 |  | $82740 \cdot 72$ | $+3.6073$ | －． 0167 | $\begin{array}{lllll}26 & 35 & 27 \cdot 9\end{array}$ | －12．042 | －415 | 13.7 | $+4^{2}$ | $+10$ | $9 \cdot 5$ |  |
| 4327 | 241946 | B 3419 | 571 | 16739－63 | $2741 \cdot 00$ | 5570 | 153 | $\begin{array}{llllllllllll}24 & 23 & 29.5\end{array}$ | 042 | 410 | 10.9 | － $47^{*}$ | －65＊ | $6 \cdot 41$ | K o |
| 4328 | 291778 | C 4578 | 575 |  | $28 \quad 8.46$ | 6764 | 188 | 293049.7 | 074 | 422 | 10.5 | － 34 | ＋ 1 | $8 \cdot 7$ | K o |
| 4329 | $27 \quad 1627$ | C 4579 | 577 | 16771－2 | $\begin{array}{llll}28 & 11.97\end{array}$ | 6313 | 175 | $\begin{array}{lllll}27 & 39 & 7 \cdot 4\end{array}$ | 078 | 418 | 10.9 | －II | － 15 | 8.7 | G 5 |
| 4330 | 301726 | L $357{ }^{\circ}$ |  |  | $28 \quad 20 \cdot 38$ | 7040 | 197 | $30 \quad 38 \quad 22 \cdot 2$ | 088 | 425 | 12.2 |  | － 70 | 9.5 |  |
| 4331 | 311835 | L 3572 | 579 |  | $8 \quad 2826.38$ | ＋ $3 \cdot 7177$ | －． 0202 | $31 \begin{array}{lll}31 & 11 & 19.3\end{array}$ | －12．094 | －427 | 11.5 | ＋． 22 | － 23 | $9 \cdot 1$ |  |
| 4332 | 251950 | C 4582 | 591 | 16790 | $2845 \cdot 12$ | 5813 | 161 | $25 \quad 32 \quad 29 \cdot 0$ | 116 | 411 | 10.4 | 32 | － 19 | $8 \cdot 1$ | A 3 |
| 4333 | 271629 | ${ }^{\text {C }} 458 \mathrm{I}$ | 590 | 16785－6 | $2845 \cdot 36$ | 6321 | 176 | $274329 \cdot 6$ | 117 | 417 | 10.8 | $+33$ | － 102 | $8 \cdot 7$ | K 。 |
| 4334 | 251951 | $\mathrm{C}_{4} 454$ | 594－5 |  | 2849.92 | 5666 | 157 | $24 \quad 54 \quad 4 \cdot 6$ | 122 | 410 | 12.0 | － 5 | － 29 | 8．81 | A 0 |
| 4335 | 261803 | C 4585 |  |  | $28 \quad 56 \cdot 25$ | 5873 | 163 | $2549 \quad 6 \cdot 5$ | 129 | 412 | 10.6 | 5 | － 16 | 8.6 |  |
|  |  | B 3424 | 618 598 | 16796 | $828 \quad 59.85$ | $+3.5525$ | －． 0154 | $\begin{array}{llll}24 & 17 & 4.6\end{array}$ | －12．134 | －－407 | 11.2 | ＋ 17 | － 10 | $8 \cdot 7$ | K 2 ． |
| $4337$ | $\begin{array}{lll}28 & 1623 \\ 28 & 1624\end{array}$ | C 4586 | 598 $599-600$ |  | $\begin{array}{rrr}29 & 8.68 \\ 29 & 10.44\end{array}$ | 6505 658 | 182 | $\begin{array}{rrrr}28 & 31 & 43.4 \\ 28 & 45 & 7.8\end{array}$ | 144 | 419 | 12.4 | ＋ 4 | a <br> $+\quad 7$ | 8.2 8.7 | A |
| $\|4338\|$ | 281624 | C 4588 | 599－600 |  | 2910.44 | 6558 | 183 | $\begin{array}{llll}28 & 45 & 7 \cdot 8\end{array}$ | 146 | 419 | 11.3 | － 1 | － 32 | $8 \cdot 7$ | G 5 |
| 4339 | 291780 | C 4589 |  |  | $2915 \cdot 16$. | 6613 | 185 | $28 \quad 58$ 59．I | 151 | 419 | $12 \cdot 2$ | ＋ 19 | － 30 | $9 \cdot 2$ |  |
| 4340 | 241951 | B 3427 | 632 | 16806 | $29^{26.47}$ | 5526 | 154 | 24 19 11．2 | 164 | 407 | 13.1 | － 5 | － 27 | $9 \cdot 1$ |  |
| 4341 | $27 \quad 1631$ | C 4592 |  | 16811 | 82941.21 | ＋3．6101 | －．0169 | 265148.8 | $-12.18 \mathrm{I}$ | － $4^{13}$ | 12.4 |  | ＋ 45 | $9 \cdot 5$ | G |
| 4342 | 261806 | C 4595 |  | 16825 | $\begin{array}{lll}30 & 3.89\end{array}$ | 5932 | 166 | $26.940 \cdot 6$ | 208 | 409 | 10.2 | ＋ 17 | － 15 | $8 \cdot 7$ |  |
| 4343 | 241952 | C 4596 | 621－2 |  | $\begin{array}{lll}30 & 8.89\end{array}$ | 5582 | 157 | $2437 \quad 27.1$ | 214 | 406 | $12 \cdot 1$ | － 4 | － 99 | $9 \cdot 5$ |  |
| 4344 | 311844 | L 3579 |  |  | $30 \quad 26 \cdot 34$ | 7075 | 202 | $305720 \cdot 3$ | 234 | 423 | $10 \cdot 2$ | $+\quad 5$ | － 3 | 9．1． |  |
| 4345 | 301731 | L 3580 | 629 |  | $30 \quad 29.79$ | 6917 | 197 | 30 I9 44．2 | 238 | 420 | $10 \cdot 0$ | ＋ 51 | －$\quad 27$ | $8 \cdot 7$ | F 8 |
| 4364 | 241955 | B 344 r ． | 644 | 16847－9 | 83043.47 | $+3.5515$ | －． 0155 | 242143.2 | －12．253 | －404 | $9 \cdot 4$ |  | － 6 | $6 \cdot 84$ | A 0 |
| 4347 | 291785 | C 4598 | 648 | 16846 | $3053 \cdot 87$ | 6589 | 186 | 29 I 900 | 266 | 416 | 8.8 | ＋ 15 | － 25 | $8 \cdot 1$ | K 。 |
| 4348 | 291786 | C 4599 |  |  | 3150.47 | 6641 | 88 |  | 279 | 417 | 10.7 | － 24 | － 17 | $8 \cdot 9$ | K 。 |
| 4349 | 261809 | C 4601 | 658－9 | 16871－4－5－6 | 3120.06 | 5930 | 168 | $261458 \cdot 1$ | 296 | 407 | 10.4 | － 30 | － 14 | $7 \cdot 9$ | A 0 |
| 4350 | 241956 | C 4603 | 668 |  | 3129.52 | 5596 | 159 | $2447 \quad 2.0$ | 307 | 404 | 11．2 | $-152$ | ＋\＄8 | $9 \cdot 5$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epach $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { 9.000 } . \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { Deoor } \end{aligned}$ |  |  |
|  |  |  |  |  | h m | 8 | 8 | - , | " | " |  |  |  |  |  |
| 4351 | $30 \quad 1734$ | L 3583 | ${ }_{660}$ |  | 83130.90 | $+3.6839$ | -.0196 | $30 \quad 5 \quad 51 \cdot 9$ | -12.308 | $-418$ | 11.6 |  | - 141 |  |  |
| $4352$ | $\begin{array}{llll}28 & 1627 \\ 25 & 1258\end{array}$ | C 4604 | 672-3-4 |  | 3145.07 | 6495 | 185 | 2841580 | 324 | 415 | 9.8 | - 18 | - 29 | $8 \cdot 5$ | Fo |
| 4353 | $25 \quad 1958$ | ${ }_{\text {C }}+606$ | 679 |  | 3147.84 | 5730 | 162 | $\begin{array}{llllllllll}25 & 24 & 19.3\end{array}$ | 328 | 406 | 12.0 | + 1 | - 47 | $9 \cdot 5$ |  |
| 4354 | 251959 | C 4607 | 683 |  | 3150.74 | 5768 | 164 | 25 34 43.2 | 331 | 406 | 11.7 | $+\quad 19$ $+\quad 1$ | - 26 | $9 \cdot 1$ |  |
| $4355$ | 281628 | C 4609 | 678-80-1 | 16893-4 | 3154.53 | 6470 | 184 | $28 \quad 3631 \cdot 7$ | 335 | 415 | 10.2 | + 41 | - 56 | $6 \cdot 72$ | G 5 |
| 4356 | $27 \quad 1640$ | C 46 II |  |  | 83213.60 | $+3 \cdot 6072$ | --0173 | $\begin{array}{llll}26 & 56 & 5 \cdot 8\end{array}$ | -12.357 | --409 | 11.7 | + 13 | - 19 | 8.8 | F 5 |
| 4357 | 281629 | $\mathrm{C}_{4} 4610$ | 690-1-2 |  | 3213.76 | 6483 | 185 | 28 41 $15 \cdot 4$ | 357 | 413 | II.I | - 3 | + 31 | $9 \cdot 5$ |  |
| 4358 | 261815 | $\mathrm{C}_{4} 612$ |  | 16919-20-1-2 | 3223.49 | 5980 | 170 | $\begin{array}{llll}26 & 33 & 6 \cdot 3\end{array}$ | 368 | 407 | 10.3 | - | - 18 | $7 \cdot 9$ | K o |
| $\left\lvert\, \begin{aligned} & 4359 \\ & 4360 \end{aligned}\right.$ | 301738 | L 3592 |  |  | 3239.95 | 6873 | 199 | $\begin{array}{lll}30 & 20 & 1.4\end{array}$ | 387 | 418 | 10.6 | + 8 | - 38 | $8 \cdot 5$ | $\mathrm{A}_{\mathrm{A}}{ }^{2}$ |
| 4360 | 261816 | C 4618 | 716 | 16933-4-5 | $3246 \cdot 68$ | 5931 | 170 | $\begin{array}{llll}26 & 22 & 4 \cdot 7\end{array}$ | 395 | 407 | $9 \cdot 3$ | - 83 | - 186 | $7 \cdot 65$ |  |
| 4361 | 301739 | C 4619 |  |  | 83252.15 | $+3.6775$ | --0196 | $\begin{array}{llll}29 & 57 & 0.5\end{array}$ | -12.401 | $-416$ | 11.2 | - 176 | [ 112 | 9.5 |  |
| 4362 | 31 1849 | L 3599 |  | 16944 | $33 \quad 5 \cdot 68$ | 7036 | 204 | $\begin{array}{llll}31 & 1 & 39.9\end{array}$ | 417 | $4{ }^{18}$ | II•I | - | - 8 | $7 \cdot 65$ | $\mathrm{K}^{\mathbf{K}}$ |
| 4363 | 311848 | L 3600 | 720 |  | $\begin{array}{lll}33 & 6.13\end{array}$ | 7148 | 208 |  | 417 | 419 | 11 | 11 | - 53 | $8 \cdot 7$ |  |
| 4364 4365 | 31 1850 <br> 24 1968 | L 3601 | 736 |  | $\begin{array}{rrr}33 & 9 \cdot 86 \\ 33 & 27 \cdot 95\end{array}$ | 7210 5391 | 5 | $\begin{array}{ccc}31 & 43 & 40 \cdot 6 \\ 24 & 0 & 19.0\end{array}$ | 422 442 | 420 399 | 12.1 10.0 | 17 $-\quad 15$ $-\quad 29$ | [-50 | $9 \cdot 5$ $6 \cdot 84$ | F 8 |
| 4366 | 241969 | C 4626 |  | 16977 | $83343 \cdot 48$ | +3.5555 | -.0159 | $244^{6} \quad 0.2$ | - 12.460 | ;400 | 10.5 | - 2 | - 16 | 8.61 | K 。 |
| 4367 | 311852 | L 3605 |  |  | $3345 \cdot 39$ | + 6969 | 202 | $\begin{array}{llllllllllll}30 & 4^{8} & 1.6\end{array}$ | 462 | 417 | 11.1 | + 17 | - 37 | $9 \cdot 5$ |  |
| 4368 | 251965 | C +628 | $7+4$ |  | 33 47-37 | 5653 | 162 | 251240.0 | 464 | 402 | 11.8 | + 25 | - 17 | $9 \cdot 2$ |  |
| 4369. | $25 \quad 1966$ | C 4629 | 7+5-6 |  | 3350.60 | 5667 | 163 | $\begin{array}{llllll}25 & 16449\end{array}$ | 468 | 402 | 9.2 | + 28 | - 15. | $8 \cdot 8$ |  |
| 4370 | $30 \quad 1743$ | C 4630 | 748 |  | $34 \quad 0.73$ | 6730 | 196 | $295145 \cdot 8$ | 480 | $4^{14}$ | 12.1 | + 3 | - 4 | $9 \cdot 2$ |  |
| +371 | 311854 | L 3609 |  |  | $83+9.84$ | $+3.7015$ | -.0205 | 31211.1 | -12.490 | $-416$ | 12.9 | + 69 | - 81 | $9 \cdot 5$ |  |
| 4372 | 251969 | $\mathrm{C}^{\text {c }} 4631$ | 771 | 16957 | 3+ 17.66 | 5583 | 161 |  | 499 | 400 | 11.0 | - 6 | + 11 | 8.81 | G 5 |
| 4373 | 291797 | C 4632 | 769-70 |  | $342 \mathrm{I} \cdot 95$ | 6472 | 188 |  | 504 | 4 II | 12.2 | + 56 | - 10 | $8 \cdot 8$ | Go |
| 4374 | 311857 | L 3612 | 772 |  | $3435 \cdot 50$ | 7085 | 209 | 312028.2 | 519 | 416 | 9.6 | - 8 | + 30 | $8 \cdot 1$ | K |
| 4375 | $29 \quad 1798$ | C 4634 | 775 |  | $3436 \cdot 83$ | 6654 | 194 | 2936 3.1 | 521 | 413 | 11.6 | + 12 | - 10 | $8 \cdot 6$ | G 5 |
| 4376 | 261822 | C 4637 | 791-2 |  | $83+59 \cdot 32$ | +3.5928 | -0172 | 26 31 41-3 | -12.546 | 403 | 11.4 | - 28 | - 7 | 8.9 | $\mathrm{F}_{2}$ |
| 4377 | $\begin{array}{lll}26 & 1823 \\ 26 & 1826\end{array}$ | C 4638 |  |  | $\begin{array}{lrr}35 & 0.51 \\ 35\end{array}$ | 5898 | 171 | $\begin{array}{lllll}26 & 23 & 52.5\end{array}$ | 548 | 403 | 12.0 | + | - 7 | $8 \cdot 9$ | F 5 |
| 4378 | 261826 | C 4642 | 797 |  | $35 \quad 12.06$ | 5826 | 169 | $\begin{array}{llllll}26 & 5 & 36 \cdot 3\end{array}$ | 561 | 402 | 12.2 | + | + 2 | $9 \cdot 1$ | F 8 |
| 4379 | 291803 | C 4644 | 796 |  | $\begin{array}{lllll}35 & 15.86\end{array}$ | 6471 | 189 |  | 565 | 409 | 10.6 | + | - 10 | $8 \cdot 7$ | K o |
| 4380 | $29180+$ | C +645 | 799 |  | $3525 \cdot 60$ | 6619 | 194 | $293132 \cdot 8$ | 576 | 410 | $12 \cdot 1$ | + 27 | - 3 | $8 \cdot 8$ | K 2 |
| $4381$ | 271651 | C 4649 | 809-10 |  | 83538.24 | $+3.6121$ |  |  | -12.591 | -404 | 10.8 | + 7 | - 3 | 8.5 | K 2 |
| 4382 | 291806 | ${ }^{\text {C }} 4651$ | 817 |  | $3556 \cdot 59$ | 6530 | 192 | 29 If 59.6 | 611 | 409 | 11.8 | + 36 | - 13 | $9 \cdot 5$ |  |
| 4383 | 291807 | C 4652 | 819 |  | 3558.46 | 6523 | 191 | 29 10 23.3 | 614 | 408 | 11.6 | + 32 | + 20 | 9.5 |  |
| ${ }^{+384}$ | 301751 | L 3621 |  |  | 36 96.10 | 6794 | 1 | $\begin{array}{lllllllllllllll}30 & 18 & 54.8\end{array}$ |  | 411 | 10.4 | - 30 | - 29 | $8 \cdot 9$ | K o |
| 4385 | 291810 | C 4654 | 834 | 17117 | $36 \quad 30 \cdot 97$ | 6522 | 191 | 291240.5 | 650 | 408 | 13.3 | - 18 | - 43 | $9 \cdot 5$ |  |
| 4386 | 311863 | L 3623 |  |  | 83631.70 | $+3.7082$ | -.0211 | 313057.0 | -12.651 |  |  | - 1 | - 51 | $9 \cdot 5$ |  |
| 4387 | 311864 | L 3624 | 833 |  | 3632.88 | 7011 | 209 | $\begin{array}{lllll}11 & 14 & 10\end{array}$ | 653 | 413 | 13.3 | - | - 19 | $9 \cdot 5$ | F 5 |
| 4388 | 291811 | C 4655 | 838 | 17088 | $3640 \cdot 33$ | 6464 | 191 | $\begin{array}{lll}28 & 59 & 0.4\end{array}$ | 661 | 407 | 12.5 | + 6 | - 16 | $8 \cdot 9$ | A 2 |
| 4389 | $24 \quad 1976$ | B 3508 | 844 | ${ }^{17} 7094-5$ | $3640 \cdot 48$ | 5364 | 157 | $\begin{array}{llll}24 & 7 & 10 \cdot 6\end{array}$ | 661 | 394 |  | - 14 | 14 $+\quad 14$ | 8.1 | K 。 |
| 4390 | $2+1975$ | C 4658 | 843 | 17093 | $364 \mathrm{I} \cdot 28$ | 5486 | 161 | $244041 \cdot 9$ | 662 | 396 |  | $+3$ | - 53 | $8 \cdot 8$ |  |
| 439 I | $26 \quad 1830$ | C 4659 |  |  | $83644 \cdot 47$ | +3.5874 | -.0173 | $\begin{array}{lll}26 & 26 & 0 \cdot 8\end{array}$ | -12.666 | -400 | 13.7 |  | - 13 | 10.1 |  |
| 4392 | 251973 | C 4660 |  |  | $3646 \cdot 64$ | 5628 | 165 | $2520 \quad 2 \cdot 0$ | 668 | 398 | 13.6 | - 21 | - 35 | $9 \cdot 2$ |  |
| 4393 | 291815 | C 4661 | 846 |  | $3656 \cdot 18$ | 6646 | 197 | $2946 \quad 6 \cdot 9$ | 679 | 408 | 13.1 | + 5 | - 8 | $9 \cdot 5$ |  |
| 4394 | $25 \quad 1974$ | C 4663 | 860 |  | $\begin{array}{ll}37 & 5.29\end{array}$ | 5630 | 165 | $252147 \cdot 6$ | 689 | 397 | 12.4 | $+\quad 19$ | - 8 | $8 \cdot 9$ |  |
| 4395 | 311866 | L 3630 |  |  | $37 \quad 12 \cdot 23$ | 7095 | 213 | $313758 \cdot 7$ | 697 | 413 | 12.6 | + 27 | - 50 | $8 \cdot 9$ |  |
| 4396 | $29 \quad 1817$ | $\mathrm{C}_{4} 66_{4}$ | 863 |  | 83714.64 | $+3.6625$ | -. 0197 | 294237.0 | -12.700 | --408 |  | - 50 | - $4^{2}$ | 9.16 | F 5 |
| 4397 | $\begin{array}{lll}31 & 1867 \\ 26 & 183\end{array}$ | L 3633 |  |  | 3718.35 | 7027 | 210 | $\begin{array}{lll} 3122 & 9 \cdot 1 \end{array}$ | 704 | 412 |  | - 12 | - 13 | 9.5 |  |
| 4398 | $\begin{array}{lll}26 & 1832 \\ 31 & 1868\end{array}$ | $\text { C } 4665$ | $865$ |  | $\begin{array}{ll}37 & 20 \cdot 95\end{array}$ | 5851 | 173 | $26 \quad 22 \quad 42 \cdot 6$ | 707 | 399 | 11.5 | - 10 | - 36 | $8 \cdot 7$ |  |
| 4399 4400 | 311868 | L 3636 | $876$ |  | $\begin{array}{ll}38 & 2.04 \\ 38 & 9.66\end{array}$ | 7078 | $214$ |  | 753 | 411 |  | - 11 | + 9 | $8 \cdot 6$ | K 5 |
| 4400 | 291818 | C 4668 | 883 |  | 38. 9.66 |  | 197 | $293451 \cdot 7$ | 762 | 406 |  | + $\quad 2$ | - 32 | $9 \cdot 6$ |  |
| 4366. Number of observations 6. |  |  |  |  | 4396, 4397. Number of observations 4. |  |  |  |  | 4398. Burnham 4731. |  |  |  |  |  |


| No． | B．D． | A．G．C． | W．B．（2）． | Lalande． | R．A． 1910.0. | Precession． | Sec．Var． | Dec．1910．0． | Precession． | Sec.Var. | Epoch 1900＋ | Annual P．M． |  | Mag． | Spectral Type． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. 8.0001. | Dec. |  |  |
|  | － |  |  |  | h m | 8 | $s$ | －，＂ | ＂ | ＂ |  |  |  |  |  |
| 4401 | 241982 | B 3518 |  |  | $8 \quad 38 \quad 9.74$ | $+3.5382$ | －．0159 | 24194.1 | －12．762 | $-.392$ | 12.8 |  | $-\quad 4^{8}$ | 9.1 |  |
| $\left.\right\|_{4402} ^{T+}$ | 251977 | $\mathrm{C}_{4669}$ | 896 |  | $\begin{array}{llll}38 & 26.71\end{array}$ | 5553 | 165 | $25 \quad 725.0$ | 781 | 393 | 13.1 | 19 $+\quad 19$ | －$\quad 34$ | $9 \cdot 2$ |  |
| 4403 | 271658 | C 4670 | 893－4 | 17159－60 | 38 31．15 | 6094 | 182 | $27 \quad 3255.7$ | 786 | 399 | $9 \cdot 0$ | ＋ 5 | － 33 | 8.04 | K 2 |
| 4404 | 281640 | C 4671 | 907－8 |  | $\begin{array}{ll}39 & 0.86\end{array}$ | 6368 | 192 | $\begin{array}{llll}28 & 4644.8\end{array}$ | 819 | 402 | 12.0 | －II | － 7 | \} $8 \cdot 5$ | Go |
| 4405 | 281640 | C 4672 |  |  | $39 \quad 2 \cdot 42$ | 6368 | 192 | $284655 \cdot 6$ | 821 | 402 | 13.3 | II | 7 |  |  |
| 4406 | 251981 | C 4674 | 911 |  | $8396 \cdot 17$ | $+3.5543$ | －．0165 | $\begin{array}{llll}25 & 7 & 49.3\end{array}$ | －12．825 | －－393 | $1 \cdot 76$ | － $9^{2}$ | － 339 | 9.5 |  |
| 4407 | 311873 | L 3643 |  |  | 39 II．02 | 6945 | 211 | $31 \begin{array}{llllllll}31 & 12\end{array}$ | 831 | － 408 | 12.2 | ＋ 25 | － 35 | $9 \cdot 2$ |  |
| 4408 | 311874 | L 3644 |  |  | $39 \quad 22 \cdot 32$ | 7002 | 213 | $\begin{array}{lllllllllll}31 & 27 & 12.6\end{array}$ | 843 | 408 | 12.7 | － 37 | ＋$\quad 2$ | $9 \cdot 5$ |  |
| 4409 | 291819 | C 4676 |  |  | 3939.02 | 6394 | 192 | $28 \quad 5636 \cdot 9$ | 862 | 402 | 11.9 | － 16 | － 20 | 9－1 |  |
| 4410 | $30 \quad 1760$ | C 4677 | 916 |  | $3940 \cdot 51$ | 6642 | 201 | $295954 \cdot \mathrm{I}$ | 864 | 405 | $9 \cdot 9$ | ＋ 44 | 97 | $8 \cdot 7$ | G 5 |
| 4411 | $31 \quad 1876$ | L 3647 | 921 | 17194－5 | $83950 \cdot 29$ | $+3.6886$ | 0209 | 311827.8 | － 12.874 | －406 | 9.2 | ＋${ }^{*}$ | －20＊ | $6 \cdot 14$ | K o |
| 4412 | 291820 | C 4678 | 929 |  | 40 5．13 | 6538 | 198 | 293541.4 | 891 | 403 | 10.6 | － 2 | － 15 | $8 \cdot 7$ | G 5 |
| 4413 | $28 \quad 1642$ | C 4679 | 931 | 17204 | $40 \quad 5 \cdot 73$ | 6344 | 192 | $28{ }^{26} 1777$ | 892 | 400 | 9.8 | 75 | ＋ $1+$ | $7 \cdot 24$ | F 2 |
| 4414 | 251982 | $\mathrm{C}_{4} 680$ |  |  | 4025.39 | 5515 | 166 | $\begin{array}{llll}25 & 6 & 29.8\end{array}$ | 914 | 390 | 12.2 | － 21 | － 31 | 9.2 |  |
| $4415$ | 291821 | ${ }^{\text {C } 4681}$ |  |  | $40 \quad 29.65$ | 6468 | 197 | 292014.3 | 918 | 401 | 12.4 | ＋ 19 | ＋ 78 | $9 \cdot 5$ |  |
| 4416 | 281644 | $\mathrm{C}_{4682}$ | 943 | 17221. | $84034 \cdot 23$ | $+3.6322$ | －．0192 | $\begin{array}{llll}28 & 43 & 4 \cdot 7\end{array}$ | －12．924 | －－399 | 10.6 | ＋ | － 24 | $8 \cdot 3$ | G 0 |
| 4417 | 251983 | C 4683 | 950－1 | 17232 | $4043 \cdot 86$ | 5635 | 170 | $254053 \cdot 3$ | 934 | 391 | 12.0 | － | － 11 | $7 \cdot 9$ | A 2 |
| 4418 | 251984 | C 4685 | 953－4 |  | 4048.74 | 5625 | 170 | $253845 \cdot 2$ | $94^{\circ}$ | 391 | 13.3 | － 65 | － 49 | $9 \cdot 9$ |  |
| 4419 | 281645 | －C 4684 | 952 | 17233 | $4049 \cdot 84$ | 6135 | 187 | $2755 \quad 29.3$ | 941 | 396 | 10.6 | － 14 | －61 | $7 \cdot 39$ | K o |
| 4420 | 271663 | C 4686 |  |  | $4053 \cdot 18$ | 5928 | 180 | $27 \quad 050.7$ | 945 | 395 | ${ }_{11} 6$ | ＋ 22 | － 85 | $8 \cdot 3$ | F 8 |
| $44^{21}$ | 291823 | ${ }^{\text {C }} 4687$ | 958 | 17243 | 84113.35 | $+3.6396$ | －．0196 | 29 541．8 | －12．967 | － 399 |  | － $15^{*}$ | －50＊ | $6 \cdot 6 \mathrm{x}$ | A 5 |
| 4422 | 291824 | C 4688 | 959 | 17246 | 4115.21 | 6394 | 196 | $29 \quad 5 \quad 22.9$ | 969 | 399 | 12．1 | －15＊ | －50＊ | $4 \cdot 20$ | G 5 |
| 4423 | 261840 | ${ }_{4} 4689$ |  | 17253 | 4128.83 | 5648 | 172 | $\begin{array}{llll}25 & 48 & 8.6\end{array}$ | 984 | 391 | 9.8 | － 12 | －II | 8.7 |  |
| 4424 | 281647 | C 4690 | 968 | 17256 | 4142.02 | 6247 | 190 | $\begin{array}{llllll}28 & 29 & 33.9\end{array}$ | 999 | 396 | $9 \cdot 6$ | $+$ | － 40 | $6 \cdot 65$ | Go |
| 4425 | $27 \quad 1667$ | C 4691 | 972 |  | $4^{11} 42 \cdot 29$ | 5925 | 181 | $27 \quad 4 \quad 23 \cdot 3$ | 999 | 393 | 10.2 | $+$ | － 5 | $8 \cdot 7$ | A 2 |
| 26 | 291825 | C 4692 |  |  | $84148 \cdot 71$ | $+3.6465$ | －．0198 | 292631.5 | －13．006 | － 399 | II． 2 | － 8 | ＋ 13 | $8 \cdot 6$ | F 8 |
| 4427 | 241990 | B 3542 |  | 17278 | 4224.25 | 5318 | 161 | $\begin{array}{lllll}24 & 211 & 14 \cdot 2\end{array}$ | 046 | 386 | 12.8 | 13 | － 36 | $8 \cdot 7$ |  |
| 4428 | 2881648 | ${ }_{C}^{C} 4693$ | 983 | 17274 | 4229.25 | 6190 | 189 |  | 051 | 395 | 10.6 | 12 | － 20 | $8 \cdot 6$ | Go |
| $44^{29}$ | 261843 | C 4694 |  |  | $4230 \cdot 82$ | 5643 | 172 | $25 \quad 52002$ | 053 | 388 | 13.0 | 6 | － 4 | 9.5 |  |
| 4430 | 291826 | C 4695 | 988 |  | $4237 \cdot 44$ | 6362 | 197 | $29435 \cdot 0$ | 060 | 396 | 11．6 | ＋ 1 | － 23 | $9 \cdot 1$ |  |
| 3 x | 311884 | L 3656 | 1001－2 | 17303 | 84316.75 | $+3.6757$ | ． 0210 | 304843.6 | －13．104 | － 400 | $9 \cdot 1$ | 12. | － 49 | $8 \cdot 7$ | K o |
| 4432 | 241992 | R 3549 | 1008 | 17310 | 4318.05 | 5325 | 163 | 242739.6 | 105 | 384 | 9.4 | 28 | 18 | $8 \cdot 7$ | B 9 |
| 4433 | 281650 | C 4701 |  |  | 43 54．13 | 6243 | 194 | 284024.0 | 145 | 393 | $9 \cdot 9$ | ＋ | － 21 | $9 \cdot 5$ | A 2 |
| 4434 | 271672 | $\mathrm{C}_{4703}$ | 1024 | 17338 | 4415.82 | 5888 | 182 | $27 \quad 756 \cdot 1$ | 169 | 389 | $9 \cdot 4$ | ＋ 10 | － 29 | 8.7 | A 3 |
| 4435 | 311886 | L 3661 | 1022 |  | $44 \quad 16 \cdot 61$ | 6910 | 217 | $\begin{array}{lllllllllll}31 & 32 & 43.9\end{array}$ | 170 | 400 | 10.0 | － | － 45 | $9 \cdot 5$ |  |
| 4436 | 291828 | $\mathrm{C}_{4702}$ | 1023 | 17332 | 84417.79 | $+3.6491$ | －0202 | $294^{6} 59 \times 9$ | －13．171 | － 395 | $8 \cdot 8$ | $+$ | － 43 | $7 \cdot 46$ | K 。 |
| 4437 | 261848 | C 4704 | $1036-7$ |  | $4448 \cdot 56$ | 5780 | 180 | 264121.3 | 205 | 387 | 9.2 | ＋ | － 31 | $8 \cdot 6$ | K 。 |
| 4438 | 251997 | C 4705 |  |  | $4456 \cdot 56$ | 5393 | 167 | $24 \quad 5457 \cdot 6$ | 214 | 383 | 10.2 | 9 | － 36 | $9 \cdot 1$ |  |
| 4439 | 281653 | ${ }_{\text {C }} 4706$ |  |  | $45 \quad 10.98$ | 6166 | 193 | $28 \quad 2710.4$ | 229 | 390 | $10 \cdot 1$ | － 8 | － 24 | $9 \cdot 5$ |  |
| 4440 | 271674 | C 4707 | 1051 | 17386 | $45 \quad 24 \cdot 45$ | 5872 | 183 | $27 \quad 946 \cdot 2$ | 244 | 387 | $9 \cdot 2$ | 49 | － $4^{1}$ | $7 \cdot 39$ | Fo |
| 4441 | $26 \quad 1852$ | ${ }_{\text {C }} 4709$ |  |  | 84553.41 | $+3.5747$ | －．0180 | $\begin{array}{llll}26 & 38 & 5 \cdot 3\end{array}$ | －13．276 | － 385 | 10.8 | 16 | － | 9.5 | K o |
| 4442 | 301779 | $\mathrm{C}_{4710}$ |  |  | 4559.98 | 647 I | 205 | $295127 \cdot 7$ | 283 | 392 | 10.4 | 42 | － 14 | $8 \cdot 56$ | A 2 |
| 4443 | 252000 | $\mathrm{C}_{4713}$ | 1068 |  | $46 \quad 20 \cdot 28$ | 5508 | 172 | $25 \quad 3419.3$ | 305 | 382 | 12.1 | 37 | － 96 | $9 \cdot 1$ |  |
| 4444 | 281657 | ${ }_{\text {C }} 4712$ |  |  | $46 \quad 21 \cdot 33$ | 6120 | 193 | 28 21 31．7 | 306 | 388 | $12 \cdot 0$ | 21 | － 10 | $9 \cdot 5$ |  |
| 4445 | $26 \quad 1854$ | C 4714 |  | 17425 | $4638 \cdot 32$ | 5609 | 176 | $26 \quad 3 \quad 55 \cdot 4$ | 325 | 383 | 11.7 | 41 | － 13 | $8 \cdot 7$ |  |
| 4446 | 261855 | ${ }^{\text {C }} 4715$ |  | 17426 | $84640 \cdot 71$ | $+3.5606$ | －．0176 | 26． 325.4 | －13．327 | $-383$ | 11．2 |  | 26 | $7 \cdot 51$ |  |
| 4447 | 301781 | L 3677 | 1074 | 17422－3－4 | 4641.88 | ＋6533 | 208 | 3011290 | 328 | $39^{2}$ | $1 \mathrm{I} \cdot 0$ | － 19 | － 21 | $6 \cdot 98$ | K。 |
| 4448 | 29 1831 | C 4716 | 1077 |  | $4643 \cdot 63$ | 6365 | 202 | $\begin{array}{lllll}29 & 28 & 19.5\end{array}$ | 330 | 390 | 11.4 | ＋ 36 | － 26 | 8.06 | ${ }^{\text {A }} 3$ |
| 4449 | 291832 | $\mathrm{C}_{4} 4717$ |  |  | $4651 \cdot 36$ | 6299 | 200 | 29 III $40 \cdot 3$ | 339 | 389 | 12.7 | $+$ | － 24 | $8 \cdot 1$ | $\mathrm{K}_{2}$ |
| 4450 | 241999 | C 4718 | 1085－7 |  | $4652 \cdot 40$ | 5302 | 167 | 243848.5 | 340 | 378 | 12.2 | － | － 34 | $8 \cdot 46$ | A 2 |


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 191000. | Precession. | Sec. Var. | Deč. 1910.0 | Precession. | Sec. Var. | $\left\lvert\, \begin{aligned} & \text { Epoch } \\ & \text { 1900 }+ \end{aligned}\right.$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { 3.000I. } \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.OOI. } \end{aligned}$ |  |  |
|  | - |  |  |  | h | s | s | - , " |  | " |  |  |  |  |  |
| 4451 | 252003 | C 4719 | 1086 | 17437 | 84653.97 | +3.5482 | -.0172 | $25 \quad 2949 \cdot 6$ | -13.342 | -. 379 | 12.5 | + 28 | 8 | $8 \cdot 5$ | F 5 |
| +452 | 242000 | B 3570 | 1091 |  | $4657 \cdot 12$ | 5179 | 162 | 24356.0 | 345 | 377 | 12.5 | - 2 | - 33 | 9.5 |  |
| 4453 | 242001 | B 3571 |  |  | $4657 \cdot 69$ | 5230 | 164 | $2418 \quad 36.5$ | 346 | 378 | 12.2 | - 17 | - 19 | $9 \cdot 6$ |  |
| 4454 | 281659 | C 4720 | - |  | $47 \quad 4.05$ | 6159 | 196 | 283551.0 | 353 | 388 | $10 \cdot 1$ | - $12^{*}$ | - 15* | 6.31 | Ma |
| 4455 | 242002 | B 3572 |  |  | $47 \quad 5 \cdot 94$ | 5225 | 164 | $241751 \cdot 3$ | 355 | 378 | 13.3 | + 16 | - 25 | $9 \cdot 2$ |  |
| +456 | 271679 | ${ }_{\text {C }} 4721$ | 1095 |  | 847 II.93 | $+3.5879$ | -. 0186 | $27 \begin{array}{lll}21 & 15.7\end{array}$ | -13.361 | -384 | 13.2 |  |  |  |  |
| 4457 | 281660 | C 4722 |  |  | 4714.27 | 6173 | 196 | $284030 \cdot 0$ | 364 | 387 | 11-5,118 | - 365* | - 245* | 6.06 | K o |
| 4458 | 301784 | L 3682 |  | 1745 1-2-3 | 47 32.25 | 6539 | 209 | $\begin{array}{llll}30 & 18 & 4.7\end{array}$ | 383 | 391 | 10.5 | - | - 79 | $7 \cdot 56$ | K 2 |
| 4459 | 311901 | L 3681 | 1096 |  | $47 \quad 32 \cdot 59$ | 6803 | 219 | $\begin{array}{lllll}31 & 25 & 9 \cdot 1\end{array}$ | 384 | 393 | 13.1 | + 16 | + 10 | $9 \cdot 2$ | GO |
| 4460 | 291837 | C 4724 | 1099 |  | 4741.80 | 6245 | 200 | $\begin{array}{llllllllll}29 & 2 & 18.4\end{array}$ | 394 | 388 | II $\cdot 2$ | + 8 | - 30 | $8 \cdot 7$ |  |
| 4461 | 311902 | L 3683 | 1100 |  | 84748.20 | $+3 \cdot 6777$ | -. 0218 | $312021 \cdot 2$ | -13.400 | . 393 | 12.5 | + 16 | + | $9 \cdot 2$ | G 5 |
| 4462 | 271682 | C 4727 | III8 |  | $48 \quad 28.05$ | 5831 | 186 |  | 444 | 381 | $9 \cdot 6$ | - 1 | - 29 | $8 \cdot 7$ | K o |
| $4+63$ | 242006 | B 3577 |  | 17505 | $48 \quad 39 \cdot 50$ | 5225 | 165 | $242556 \cdot 7$ | 456 | 375 | 10.4 | $+\quad 16$ $+\quad 37$ | - 147 | $9 \cdot 5$ |  |
| 4464 | 301788 | L 3687 |  |  | $48 \quad 40 \cdot 53$ | 6613 | 214 | $304344 \cdot 1$ | 457 | 390 | 12.0 | + 37 | - 43 | $9 \cdot 1$ |  |
| 4465 | $27 \quad 1683$ | C 4729 |  |  | $4^{8} 43 \cdot 55$ | 5787 | 185 | $27 \quad 4 \begin{array}{ll}20.4\end{array}$ | 461 | 381 | 12.0 | 13 | - 1 | $9 \cdot 5$ |  |
| 4466 | $30 \quad 1789$ | L 3689 | 1120 | 17502 | $84844 \cdot 91$ | $+3.6550$ | . 0212 | 302755.6 | -13.462 | --389 | 11.5 | - 13 | - 21 | 8.8 | F 5 |
| 4467 | 311907 | L 3688 |  | 17499-501 | $\begin{array}{lll}48 & 45 \cdot 31 \\ 48 & 45 \cdot 44\end{array}$ | 6656 6656 | 215 215 | $\begin{array}{lllll}30 & 55 & 15.8 \\ 30 & 55 & 5\end{array}$ | 462 | 390 | 12.2 12.2 12.7 | $\left.\begin{aligned} & +30^{*} \\ & +\quad 30^{*} \end{aligned} \right\rvert\,$ | $33^{*}$ | $5 \cdot 60$ | K |
| $4+68$ | 301790 | L 3690 |  |  | 48 48 48 $48 \cdot 44$ 49 | 6656 6472 | 215 | $\begin{array}{rrrr}30 & 55 & 14.3 \\ 30 & 8 & 9.5\end{array}$ | 462 467 | 390 | 12.2 13.7 | $+\quad 30 *$ $+\quad 22$ + |  |  |  |
| 4469 | $30179^{2}$ | L 3691 | 1125 | 17508 | $4855 \cdot 12$ | 6568 | 213 |  | 473 | 389 | 8.6 | $\begin{array}{r} \\ +\quad 8 \\ \hline\end{array}$ | $\begin{array}{r} \\ \hline\end{array}$ | $8 \cdot 3$ | G 5 |
| 4470 | 271685 | C 4730 | 1129 | 17512 | $48 \quad 59.73$ | 5823 | 187 | $27 \quad 15$ 55.1 | $47^{8}$ | 381 | 9.4 | 9 | - 46 | $7 \cdot 16$ | K 5 |
| 447 I | $25 \quad 2009$ | ${ }_{\text {C }} 4733$ |  |  | $84934 \cdot 76$ | +3.5407 | -0173 | ${ }_{25} 22248.1$ | $-13.516$ | - 375 | . 2 | - | - 18 | 9.5 |  |
| 4472 | 261865 | C 4732 | ${ }^{114} 47-8$ |  | 4935.49 | 5657 | 181 | $26 \quad 33 \quad 5 \cdot 7$ | 517 | 378 | 9.20 | + 55 | - 433 | 6.67 | G 0 |
| 4473 | 281665 | C 4734 |  |  | 4959.00 | 6066 | 196 | $\begin{array}{llllll}28 & 27 & 28.3\end{array}$ | 542 | 381 | 11.1 | 16 | - 50 | $9 \cdot 5$ |  |
| 4474 | 261866 | C 4737 | 1160-1 |  | $50 \quad 7.09$ | 5690 | 183 | $\begin{array}{lllllllllllll}26 & 45 & 12 \cdot 2\end{array}$ | 550 | 378 | 0.7 | 28 | - 26 | $7 \cdot 14$ | A 0 |
| 4475 | $26 \quad 1867$ | C 4738 |  |  | 50 11.17 | 5623 | 181 | $\begin{array}{lllll}26 & 26 & 50 \cdot 8\end{array}$ | 555 | 377 | 12.9 | 19 | + 12 | $9 \cdot 5$ |  |
| 4476 | 281666 | ${ }^{\text {C }} 4739$ | 1167 | 17563-4 | $8 \quad 50 \quad 16.37$ | $+3.6018$ | --0194 | 281618.1 | -13.560 | --381 | $8 \cdot 8$ |  |  | $5 \cdot 25$ | G 5 |
| 4477 | 252011 | ${ }^{\text {C }} 474{ }^{\circ}$ |  |  | $50 \quad 33 \cdot 19$ | 5396 | 173 | $\begin{array}{llllll}25 & 24 & 41 \cdot 7\end{array}$ | 578 | 373 | 11.6 | + 38 | + 19 | $9 \cdot 6$ |  |
| 4478 | 291844 | C 4741 |  |  | 5049.86 | 623 I | 203 | $291639^{\circ}$ | 596 | 383 | 11.2 | + | - 31 | $9 \cdot 1$ |  |
| +479 | 261869 | C $474{ }^{2}$ | 1175-6 |  | $5050 \cdot 44$ | 5665 | 183 | $264220 \cdot 0$ | 597 | 376 | $9 \cdot 8$ | - 34 | - 25 | 8.2 | F 2 |
| 4480 | 252013 | C 4744 | 1183-4 | 17584 | $5056 \cdot 15$ | 5259 | 170 | $244737 \cdot 5$ | 603 | 372 | $9 \cdot 3$ | + 76 | 73 | $6 \cdot 72$ | F 2 |
| 4481 | 291845 | C 4743 | 1155 |  | 85058.52 | +.3.6168 | . 0201 | $29 \quad 52.4$ | -13.606 | $-382$ | 9.7 | 10 | 114 | 8.6 | G 5 |
| 4482 | 252014 | C 4745 |  |  | 518.01 | 5454 | 176 | $254433 \cdot 1$ | 616 | 373 | 12.2 |  |  |  |  |
| 4483 | 242015 | B 3598 | 1188 |  | 51.9 .54 | 5152 | 165 | $241736 \cdot 2$ | 617 | 370 | 10.8 | - $4^{8}$ | - 45 | 8.8 |  |
| 4484 | 311910 | L 3697 |  |  | 5111.06 | 6611 | 218 |  | 619 | 385 | 13.1 | 42 | + 26 | 9.5 |  |
| 4485 | 252015 | C 4747 |  | 17608 | 5129.03 | 5366 | 176 | 252111.0 | 638 | 371 | 11.4 | 36 | - 45 | $9 \cdot 2$ | Go |
| 4486 | 291847 | ${ }^{\text {C }} 4748$ |  |  | $85141 \cdot \mathrm{II}$ | $+3.6276$ | . 0205 | $293342 \cdot 2$ | -13.651 | -382 | 10.8 | 17 | - 5 | $9 \cdot 1$ | Fo |
| 4487 | 311912 | L 3701 | 1197 |  | $5144 \cdot 54$ | 6679 | 221 | $\begin{array}{lllllllllllll}31 & 19 & 22.8\end{array}$ | 655 | 387 | 11.0 | + 24 | + | 8.8 |  |
| 4488 | 321812 | L 3703 |  |  | 5148.55 | 6822 | 226 |  | 659 | 388 | 14.9 | + 17 | + 8 | $9 \cdot 5$ |  |
| 4489 | 321814 | L 3704 |  |  | 5214.60 | 6794 | 226 | 31.5157 .2 | 687 | 386 | $9 \cdot 2$ |  |  | $8 \cdot 7$ |  |
| 4490 | 301795 | L 3706 | 1210 | 17628-9 | $5230 \cdot 80$ | 6488 | 215 | $303448 \cdot 3$ | 704 | 382 | 9.4 | $+53^{*}$ | + 12 * | $6 \cdot 20$ | F 5 |
| 4491 | 252016 | B 3607 | 1217 |  | $8 \quad 5232.01$ | $+3.5240$ | -. 0170 | 245032.0 | -13.705 | - 369 | 12.5 | + 30 | 80 | $9 \cdot 9$ |  |
| 4492 | 271695 | ${ }^{\text {C }} 475{ }^{2}$ | 1219 |  | 5242.77 | 5656 | 185 | 265018.1 | 717 | 374 | 12.9 | + 16 | - 58 | 9-1 |  |
| 4493 | 271696 | C +753 | 1222-4 | 17644 | 52 47.19 | 5670 | 185 | $265441 \cdot 3$ | 721 | 374 | 12.6 | 5 | - 28 | $9 \cdot 2$ | A o |
| 4494 | 242019 | ${ }^{\text {B }} 3613$ | $1226-7$ |  | 52 50.92 | 5153 | 168 | $242646 \cdot 3$ | 726 | 367 | 10.4 | 21 | + 11 | $8 \cdot 7$ |  |
| 4495 | $27 \quad 1698$ | C 4754 | 1233-4 | 17653 | $\begin{array}{lll}53 & 2 \cdot 92\end{array}$ | 5649 | 185 | $26 \quad 50 \quad 12 \cdot 6$ | 738 | 373 | 12.6 | 11 | 8 | $8 \cdot 3$ | G 5 |
| 4496 | 242021 | C 4755 |  |  | 85316.49 |  | -.0169 | 243338.8 | -13.753 | $-367$ | 12.2 | 29 | - 59 | 9.5 |  |
| 4497 | $\begin{array}{lll}31 & 1913 \\ 25\end{array}$ | L 3711 |  | 1765 | 53 20.88 | 6523 | 218 | $3048 \quad 55^{\circ} \mathrm{O}$ | 757 | 380 | 12.7 | - 23 | - 1 | 9.2 |  |
| 4498 | 252017 | C 4756 |  | 17664 | $5321 \cdot 31$ | 5409 | 177 | $254344 * 7$ | 758 | 369 | 13.0 | + 4 | - 14 | $8 \cdot 7$ | A 5 |
| 4499 | 271699 | C 4757 B 3616 |  |  | 53 <br> 53 <br> 53 <br> $20 \cdot 12$ | 5801 | 191 |  | 763 | 374 | 11.9 | - 9 | - 19 | $9 \cdot 5$ | F 5 |
| 4500 | 242022 | B 3616 | 1245-6 | 17674 | 53 30.12 | 5114 | 167 | $\begin{array}{lllll}24 & 18 & 52 \cdot 9\end{array}$ | 767 | 366 | 11.7 | - 12 | - 24 | $7 \cdot 56$ | $\mathrm{A}^{2}$ |


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Scc. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{array}{\|l} \text { Spectral } \\ \text { Type. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.A. } \\ \text { 8.000 I. } \end{gathered}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m 8 | s | s | - , " |  | " |  |  |  |  |  |
| 4501 | 252018 | C 4758 |  | 17673 | $853 \quad 32 \cdot 30$ | $+3.5411$ | -.0177 | 254523.7 | -13.769 | $-368$ | 11.9 | 33 | - 147 | $7 \cdot 23$ | G 5 |
| 4502 | 311915 | L 3714 |  | 17667 | 53 36.14 | 6541 | 218 | 3055 5.0 | 773 | 381 | 13.5 | - 37 | - 43 | $9 \cdot 5$ |  |
| 4503 | 252019 | C 4759 |  |  | 53 36.26 | 5405 | 177 | $\begin{array}{llll}25 & 44 & \text { 1.2 }\end{array}$ | 774 | 368 | 14.4 | 94 | - 21 | 9.5 |  |
| 4504 | 261873 | ${ }_{\text {C }} \mathbf{4 7 6 0}$ | 1247 | 17676 | $5337 \cdot 83$ | 5518 | 181 | $\begin{array}{lllll}26 & 16 & 26.6\end{array}$ | 775 | 370 | 12.2 | 14 |  | $7 \cdot 8$ | G o |
| 4505 | 252020 | C 4763 |  |  | 5348.03 | 5349 | 175 | $25 \quad 28 \quad 56 \cdot 9$ | 786 | 368 | 12.3 | 36 | - $4^{6}$ | $9 \cdot 2$ |  |
| 4506 | 261875 | ${ }^{\text {C }} 4765$ |  |  | 854 21.68 | $+3 \cdot 5422$ | -.0178 | 2553 4.3 | - 13.822 | -. 368 | 11.5 | + 13 | - 22 | $9 \cdot 6$ |  |
| 4507 | 291849 | C 4764 | 1262 | 17699 | 54 23.19 | 6170 | 205. | 292147.7 | 823 | 376 | 9.9 | - 6 | - 17 | 8.1 | K 2 |
| 4508 | 261876 | C 4766 |  | 17708 | 5423.51 | 5453 | 179 | $\begin{array}{lllll}26 & 2 & 18.6\end{array}$ | 824 | 368 | 12.5 | + 26 | - 40 | $9 \cdot 5$ | A 5 |
| 4509 | 252022 | ${ }_{\text {C }} 4768$ | 1267 |  | 5428.34 | 5231 | 172 | $2458 \quad 22 \cdot 3$ | 829 | 366 | 12.0 | + | + 3 | $9 \cdot 5$ | K 0 |
| 4510 | 321823 | L 3725 | 1266 | 17706 | $5435 \cdot 77$ | 6726 | 227 | 314919.6 | 836 | 382 | 10.4 | 11 | - 5 | $8 \cdot 2$ | A 2 |
| 4511 | 261877 | ${ }_{\text {C }} 4769$ | 1271 | 17691. | 85438.45 | +3.5605 | -.0185 | $\begin{array}{llll}26 & 47 & 3 & 3\end{array}$ | -13.839 | - 370 | 11.9 | - 36 | + II | 6.63 | A 2 |
| 4512 | 242023 | C $477{ }^{\circ}$ |  |  | $5451 \cdot 83$ | 5173 | 171 | 244328.5 | 853 | 364 | 12.2 | + | - $4^{2}$ | $9 \cdot 2$ |  |
| 4513 | 29 1851 | ${ }^{\text {C } 4771}$ | 1276 | 17721 | $5456 \cdot 78$ | 6082 | 203 | 29 1 10.2 | 859 | 374 | $9 \cdot 3$ | + 25 | - II | $8 \cdot 1$ | K 5 |
| 4514 | 261879 | C 4774 |  |  | $5458 \cdot 78$ | 5562 | 184 | $263647 \cdot 9$ | 861 | 368 | 12.4 | - 26 | - 41 | $10 \cdot 1$ |  |
| 4515 | 252024 | C 4776 |  | 17734 | 55 9.69 | 5192 | 172 | $245051 \cdot 9$ | 872 | 364 | 10.8 | + 16 | - 32 | 8.51 | Ma |
| 4516 | 301805 | L 3730 |  | 17736 | 85525.49 | $+3.6396$ | -.0216 | 302834.8 | -13.889 | --377 | 10.3 | + 16 | - 18 | $8 \cdot 7$ |  |
| 4517 | 242026 | B 3627 |  |  | 55 34.32 | 5040 | 167 | $\begin{array}{llll}24 & 8 & 7.5\end{array}$ | 898 | 362 | 11.1 | + 37 | $-152$ | 8.8 | K o |
| 4518 | 291853 | C 4780 |  |  | $5534 \cdot 32$ | 6193 | 209 | 293510.7 | 898 | 375 | 11.5 | + 6 | - 19 | 9.5 | A 5 |
| +519 | 271703 261882 | C 4781 | 1290 |  | $5538 \cdot 26$ | 5777 | 193 |  | 902 | 370 | 11.7 | - 9 | - 24 | $8 \cdot 8$ | A O |
| 4520 | 261882 | C 4783 |  | 17752 | $5545 \cdot 09$ | 5469 | 182 | $261430 \cdot 3$ | 909 | 366 | 11.2 | - 2 | - 14 | $8 \cdot 9$ | K o |
| 4521 | 252027 | ${ }_{\text {C }} 4784$ |  |  | 85552.37 | $+3.5303$ | -.0176 | $\begin{array}{llll}25 & 27 & 8.2\end{array}$ | -13.917 | $-365$ | 11.7 | + | - 7 | $9 \cdot 1$ |  |
| 4522 | $\begin{array}{lll}31 & 1919 \\ 26 & 1883\end{array}$ | L 3732 |  |  | $\begin{array}{lll}56 & 7 \cdot 97\end{array}$ | 6544 | 222 | $\begin{array}{llll}31 & 12 & 6.9\end{array}$ | 933 | 377 | 12.9 | + 33 | - 70 | 9.2 |  |
| 4523 | 261883 | C 4786 |  |  | $\begin{array}{llll}56 & 18 \cdot 98\end{array}$ | 5567 | 186 | $\begin{array}{llll}26 & 45 & 41 \cdot 9\end{array}$ | 945 | 367 | 13.2 | 16 | - 13 | 9.5 |  |
| 4524 4525 | $\begin{array}{ll}28 & 1673 \\ 26 & 1884\end{array}$ | C 4787 | 1303 | 17768 | $\begin{array}{llll}56 & 22 \cdot 74 \\ 56 & 2.8\end{array}$ | 5889 | 198 | ${ }_{28} 16$ 51.1 | 949 | 370 | 13.0 | - 8 | - 27 | $9 \cdot 5$ |  |
| 4525 | 261884 | C 4788 |  |  | 5622.89 | 5561 | 186 | $264436 \cdot 2$ | 949 | 367 | 11.4 | + 30 | - 21 | $8 \cdot 3$ | Fo |
| 4526 | $\begin{array}{lll}28 & 1674 \\ 26 & 1885\end{array}$ | $\mathrm{C}_{\mathrm{C}}+789$ | 1305 | $17613-17770$ | $8 \begin{array}{lll}86 & 27 \cdot 12\end{array}$ | +3.5882 | -.0198 | $\begin{array}{llll}28 & 15 & 27.5\end{array}$ | -13.953 | - 370 | 9.8 |  | - 88* | $5 \cdot 95$ |  |
| 4527 | $\begin{array}{ll}26 & 1885 \\ 25\end{array}$ | ${ }^{\text {C }} 4790$ |  |  | $56 \quad 37 \cdot 29$ | 5518 | 184 | $2633 \quad 27 \cdot 1$ | 964 | 366 | 12.5 | + $\quad 28$ | - 6 | $8 \cdot 9$ | F 8 |
| 4528 | 252028 | C 4791 |  |  | $5643 \cdot 28$ | 5358 | 179 | 2547 56.0 | 970 | 364 | 10.5 | - 19 | - 8 | $9 \cdot 2$ |  |
| 4529 | 29 1857 <br> 26  | ${ }_{\text {C }}$ |  |  | $\begin{array}{ll}57 & 0.31\end{array}$ | 6135 | 209 | $\begin{array}{lllll}29 & 28 & 18.6\end{array}$ | 988 | 37 I | 13.3 | + 1 | - 19 | $9 \cdot 1$ | K 2 |
| 4530 | 261886 | C 4793 |  |  | $\begin{array}{lll}57 & 4 \cdot 36\end{array}$ | 5442 | 183 | $26 \quad 14 \quad 27.5$ | $99^{2}$ | 364 | 13.2 | 12 | - 13 | $9 \cdot 5$ |  |
| 4531 | 311923 | L 3735 | 1317 | 17783 | $85713 \cdot 15$ | $+3.6636$ | -. 0228 | 3143111.2 | -14.002 | -. 376 | 10.7 | + 10 | - 47 | $8 \cdot 1$ | K 5 |
| 4532 | $\begin{array}{llll}26 & 1889 \\ 29 & 185\end{array}$ | ${ }_{\text {C }}$ |  | 17793 | $57 \quad 14.99$ | 5433 | 183 | $\begin{array}{lllll}26 & 12 & 37.0\end{array}$ | 003 | 364 | 10.4 | - 16 | - 38 | 7.28 | K o |
| 4533 | 291858 | C 4795 | 1321 |  | $\begin{array}{llll}57 & 17 \cdot 18\end{array}$ | 6185 | 11 | $294347 \cdot 4$ | 006 | 371 | 10.6 | - 6 | - 28 | 8.61 | A 0 |
| 4534 | 252029 | C 4798 | 1325-6-7 | ${ }_{17811}$ | 5728.71 | 5141 | 172 | $\begin{array}{lllll}24 & 48 & 27 \cdot 3\end{array}$ | 018 | 360 | 11.8 | -* | - $5^{*}$ | $5 \cdot 45$ | A 0 |
| 4535 | 301808 | L 3737 | 1328-9 | 17809-10 | $5740 \cdot 95$ | 6338 | 217 | $\begin{array}{lllllllllll}30 & 27 & 27\end{array}$ | 031 | 372 | $9 \cdot 7$ | + 12 | - 5 | $7 \cdot 89$ | A 2 |
| 4536 | 271708 | C 4799 | 1338 |  | $85754 \cdot 56$ | $+3.5703$ | -.0193 | $\begin{array}{llll}27 & 34 & 1 \cdot 9\end{array}$ | -14.045 | - 365 | $8 \cdot 9$ |  | - 43 | $8 \cdot 7$ | K 2 |
| 4537 | $\begin{array}{lll}29 & 1859 \\ 26 \\ 189\end{array}$ | C 4800 |  |  | 5758.04 <br> 58 <br> 8 | 6171 5335 | 211 180 | $\begin{array}{llll}29 & 44 & 8 \cdot 6\end{array}$ | 048 | 370 | 9.6 | + 36 | - 125 | $8 \cdot 9$ |  |
| 4538 | $26 \quad 1891$ | $\mathrm{C}_{4801}$ | 1341 |  | $\begin{array}{ll}58 & 1.61\end{array}$ | 5335 | 180 | $\begin{array}{lllll}25 & 48 & 46 \cdot 9\end{array}$ | 052 | 361 | 11.4 | - 12 | + 2 | $8 \cdot 9$ | K o |
| 4539 | $26 \quad 1892$ | C 4803 | 1350 | 17836 | $\begin{array}{llll}58 & 17 \cdot 28\end{array}$ | 5415 | 183 | $\begin{array}{llllll}26 & 13 & 39.9\end{array}$ | 068 | 362 | $9 \cdot 7$ | - 8 | - 14 | $8 \cdot 6$ | K 2 |
| 4540 |  | C 4804 |  |  | $58 \quad 32 \cdot 67$ | 6133 | 211 | $293743 \cdot 4$ | 084 | 369 | 12.2 |  |  | $9 \cdot 5$ |  |
| $454{ }^{\text {I }}$ | $25 \quad 2033$ | C 4806 |  |  | $8 \quad 5843.09$ | +3.5237 | -. 0177 | $\begin{array}{llll}25 & 23 & 52.6\end{array}$ | -14.095 | $-359$ | 11.6 |  | + 1 | $9 \cdot 1$ |  |
| 4542 | $28 \quad 1683$ | ${ }^{\text {C }} 4807$ | 1360 | 17851-2 | $5848 \cdot 20$ | 5830 | 198 | $\begin{array}{lllllllllllll}28 & 15 & 17.5\end{array}$ | 100 | 366 | 9.0 |  | - 8* | $6 \cdot 34$ | A 0 |
| 4543 | 291860 | C 4809 | 1363 |  | 5858.41 | 6123 | 211 | $293730 \cdot 9$ | 111 | 368 | 10.2 | 22 | - 44 | 7.86 | Ma |
| 4544 | 29 1861 | C 4810 |  |  | $\begin{array}{lll}59 & 0.85\end{array}$ | 5998 | 207 | $29332 \cdot 2$ | 114 | 366 | 11.4 | + 29 | - 12 | 9.5 |  |
| 4545 | 252034 | C 4812 | 1370 |  | $\begin{array}{ll}59 & 8.14\end{array}$ | 5296 | 180 | $.254345 \cdot 0$ | 121 | 359 | 10.7 | + 24 | - $\mathbf{4}^{1}$ | $8 \cdot 9$ | G 5 |
| 4546 | 281684 | $\mathrm{C}_{48 \mathrm{II}}$ |  |  |  |  | --0204 | $\begin{array}{lll}28 & 47 & 9.4\end{array}$ | -14.122 | $-367$ | 11.0 | 7 | - 5 | 9.1 |  |
| 4547 | $25 \quad 2036$ | $\mathrm{C}_{4813}$ |  | 17879 | 59 36.01 | 5132 | 175 | $245749 \cdot 6$ | 150 | 357 | $8 \cdot 6$ | 10 | - $4^{6}$ | $8 \cdot 3$ | K。 |
| 4548 | 261895 | C 4814 | 1384-5 | 17880 | $\begin{array}{r}59 \\ \hline 96.58 \\ \hline\end{array}$ | 5443 | 186 |  | 161 | 359 | $9 \cdot 2$ | 12 | - 36 | 7.9 | K 2 |
| 4549 | 29 <br> 1865 <br> 30 <br> 1813 | C 4815 C 4816 |  |  | $\begin{array}{llll}9 & 0 & 15.78 \\ & 0 & 17.12\end{array}$ | 5973 | 207 | $\begin{array}{lllll}29 & 4 & 28 \cdot 1 \\ 29 & 57 & \end{array}$ | 191 | 364 | 10.0 | 53 | - 2 | $8 \cdot 7$ | F 5 |
| 4550 | $30 \quad 1813$ | C 4816 |  |  | $017 \cdot 12$ | 6165 | 214 | $295740 \cdot 9$ | 192 | 366 | 11.6 | 30 | - 99 | $9 \cdot 2$ |  |
| 4508, $4509,4512-4514,4518-4520,4527$. Number of observations 4. 4526. Burnham 489r. 4527. This is the principal star of the pair $\Sigma 1301$. 4534. Number of observations 24. <br> 4543. Number of obscrvations 6 . <br> 4549. Burnham 49 rg. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec. Var. | Epoch$1900+1$ | Annual P.M. |  | Mag. | Spectra Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. R.A. A. }}{\text { R. }}$ | Dec. ".00 I. |  |  |
|  | - |  |  |  | h m s | 8 | 8 | , "* |  | " |  |  |  |  |  |
| $4551$ | 252040 | $\mathrm{C}_{\mathrm{C}} 4818$ | 1396 |  | $\begin{array}{lllll}9 & 0 & 18.88\end{array}$ | $+3.5202$ | -. 0178 | $25 \quad 2256 \cdot 5$ | -14.194 | --356 | 12.2 |  |  | $9 \cdot 5$ |  |
| $4552$ | 271711 | C 4819 |  |  | - 21.98 | 5650 | 194 | 273359.9 | 197 | 361 | 12.6 | - | - 74 | $9 \cdot 5$ |  |
| 4553 | 271712 | C 4820 |  |  | - 26.67 | 5676 | 195 | 274158.8 | 202 | 361 | 13.0 | - 18 | - 3 | 9.5 |  |
| 4554 | $\begin{array}{lll}24 & 2038 \\ 26 & 1809\end{array}$ | B 3645 | 1417 | 17919-20 | - 51.72 | 4936 | 169 | $\begin{array}{llll}24 & 6 & 4.9 \\ 26 & & \\ & 9 & 28.3\end{array}$ | 228 | 352 | 10.2 | $+\quad 85$ $+\quad 26$ | - 24 | 8.7 8.5 | Go |
| 4555 | $26 \quad 1899$ | C 4823 | 1420 | 17916 | - 54.27 | $54^{16}$ | 186 | $26 \quad 29 \quad 28 \cdot 3$ | 231 | 357 | 11.1 | + 26 | - 39 | $8 \cdot 5$ |  |
| 4556 | 311930 | L 3754 | 1411 |  | 9 - 58.80 | $+3.6440$ | -. 0227 | $31 \begin{array}{lll}31 & 24.2\end{array}$ | -14.235 | $-368$ | 12.8 | + 20 | 9 | 8.5 | A 5 |
| 4557 | 242040 | C 4825 | 1426-7 |  | 128.55 | 5053 | 173 | $244459 \cdot 8$ | 266 | 353 | 12.0 | + 7 | - 20 | 8.8 |  |
| 4558 | 311931 | L 3758 |  |  | 130.48 | 6536 | 231 |  | 268 | 368 | 11.6 | + 21 | - 22 | $9 \cdot 2$ |  |
| 4559 | 311933 | L 3759 |  |  | 114.43 | 6361 | 224 | $\begin{array}{llll}31 & 0 & 14.5\end{array}$ | 282 | 366 | 12.2 | + 9 | - 36 | $8 \cdot 7$ | K |
| 4560 | 281691 | C 4826 | ${ }^{1} 443$ | 17944 | 22.05 | 5806 | 202 | $28 \quad 28 \quad 55 \cdot 8$ | 300 | 360 | 12.8 | + 3 | - 6 | $8 \cdot 7$ | Fo |
| 4561 | $\begin{array}{ll}31 & 1934 \\ 30 & 1816\end{array}$ | L 3760 | 1444 | 17946 | $\begin{array}{lll}9 & 2 & 10.47\end{array}$ | $+3.6475$ | -.0229 | $\begin{array}{llll}31 & 33 & 47 \cdot 3\end{array}$ | -14.308 | $-367$ | 9.8 | + 11 | - $\quad 37$ | 7.06 | K 2 |
| 4562 | 301816 | C 4828 |  |  | 213.53 | 6119 | 215 | $295747 \cdot 3$ | 312 | 362 | 13.1 | + 11 | - 30 | $9 \cdot 11$ |  |
| 4563 | 281694 | C 4829 | 1454 | 17950 | 218.50 | 5776 | 202 | $28 \quad 225 \cdot 3$ | 317 | 359 | 12.8 | - 8 | - 24 | $8 \cdot 3$ | K o |
| 4564 | 271714 | C 4830 |  |  | 219.11 | 5483 | 191 | $265739 \cdot 7$ | 317 | 355 | 12.9 | - 9 | - 1 | $9 \cdot 2$ |  |
| 4565 | 252050 | C 4831 |  |  | 228.99 | 5120 | 177 | ${ }^{2} 51029.5$ | 327 | 352 | 13.1 | - 19 | - 3 | $8 \cdot 9$ |  |
| 4566 | 301817 | $\mathrm{C}_{4} 832$ | 1463 | 17958-60 | 9236.03 | $+3.6122$ | -.0216 | 30 - 59.8 | -14.335 | -. 360 | 11.8 | - 20* | - $9^{*}$ | 5.38 | G 5 |
| 4567 | 261901 | C 4833 | 1469 | 17987 | 236.62 | 5279 | 183 | $25 \quad 59$ 20.1 | 336 | 353 | 11.9 | - 32 | - 2 | $6 \cdot 80$ | Fo |
| 4568 | 311936 | L 3765 |  |  | 239.39 | 6434 | 228 | $31 \begin{array}{llllllll}31 & 26 & 18.3\end{array}$ | 338 | 365 | 13.2 | - 32 | - 14 | 9.5 |  |
| 4569 | 281696 | C 4834 | 1471 | 17965 | 243.11 | 5673 | 198 | $27 \quad 5522.4$ | 342 | 357 | 12.1 | - 54 | - 61 | $7 \cdot 9$ | G 5 |
| 4570 | 301818 | L 3766 | 1470 | 17963 | $247 \cdot 81$ | 6242 | 221 | 303511.6 | 347 | 362 | 13.5 | + 25 | - $4^{6}$ | $8 \cdot 5$ | K o |
| 4571 | 301819 | L 3767 | 1474 | 17975 | $\begin{array}{llll}9 & 2 & 58.37\end{array}$ | $+3.6258$ | -.0221 | 304047.7 | $-14.357$ | --362 | 13.3 | 10 | - 16 | $8 \cdot 3$ | K |
| 4572 | 281697 | C 4835 | 1480 | 17981 | 34.08 | 5660 | 198 | $27 \quad 5348.4$ | 363 | 357 | 12.6 | 12 | + 71 | $8 \cdot 5$ |  |
| 4573 | 281698 | C 4836 | 1481 | 17985 | $\begin{array}{ll}3 & 7 \cdot 35\end{array}$ | 5661 | 198 | 275416.0 | 366 | 357 | 12.2 | - 12 | + 71 | $8 \cdot 5$ |  |
| 4574 | $\begin{array}{llll}31 & 1937\end{array}$ | L 3769 |  | 17980 | 38.28 | 6322 | 223 | 305919.4 | 367 | 363 | 11.5 | - $4^{8}$ | - 17 | 8.5 |  |
| 4575 | 271715 | C4838 | 1488 |  | 329.78 | 5466 | 192 | $27 \quad 069$ | 389 | 353 | 11.43 | - 87* | $-387^{*}$ | $5 \cdot 96$ | G 5 |
| 4576 | 311939 | L 3772 |  |  | $\begin{array}{llll}9 & 3 & 41.44\end{array}$ | +3.6284 | . 0222 | 305237.4 | -14.401 | - 362 | 11.0 | ${ }^{6}$ | - 22 | 9.5 |  |
| 4577 | 261902 | C 4841 | 1502 | 18012 | $4 \quad 5 \cdot 36$ | 5291 | 185 | 261158.8 | 425 | 351 | 11.0 | 18 | + 9 | $8 \cdot 7$ | K O |
| 4578 | 311940 | L 3775 |  |  | $4 \quad 9.72$ | 6266 | 223 | $\begin{array}{llll}30 & 51 & 4.4\end{array}$ | - 430 | 361 | 10.4 |  |  | 9.5 |  |
| 4579 | 311941 | L 3776 | 1498 | 18009-10 | 412.46 | 6315 | 225 | $31444^{\circ}$ | 432 | 360 | $9 \cdot 2$ | + | - 62 | $7 \cdot 71$ | A 5 |
| 4580 | 301822 | C 4842 | 1517-8. | 18032 | $44^{1 \cdot 80}$ | 6051 | 215 | 295526.0 | 462 | 358 | 9.8 | + 4 | - | $8 \cdot 31$ | K 5 |
| 4581 | 301823 | L 3780 |  |  | $\begin{array}{llll}9 & 5 & 5 \cdot 38\end{array}$ | $+3 \cdot 6216$ | . 0223 | 3043 38.8 | $-14.486$ | --358 | 11.5 |  |  | $9 \cdot 2$ |  |
| 4582 | 261903 | C 4848 | 10 |  | $5 \quad 7 \cdot 21$ | 5386 | 191 | $264629 \cdot 0$ | 488 | 351 | $11.0{ }^{\circ}$ | + 3 | - 15 | $9 \cdot 1$ | F 8 |
| 4583 | 291874 | C 4849 | 4-5-6 | 18046 | $5 \quad 10.09$ | 5936 | 213 | 292614.5 | 491 | 356 | 10.0 | - 24 | - 37 | 8.1 | F 8 |
| 4584 | 31 1946 | L 3781 | 3 | 18044-5 | $5 \quad 12.67$ | 6345 | 228 | $\begin{array}{llllllll}31 & 19 & 49\end{array}$ | 493 | 359 | 10.4 | 5 | - 37 | var. | Ma |
| 4585 | 291876 | C 4852 |  |  | $520 \cdot 95$ | 5809 | 207 | 285123.5 | 502 | 355 | 11.6. | $\bigcirc$ | 8 | $9 \cdot 5$ |  |
| 4586 | 261905 | C 4853 | 14 |  | $9 \quad 525.00$ | $+3.5326$ | -.0188 | 263032.9 | $-14.506$ | --350 |  | - 2 | 20 | $9 \cdot 5$ | A 0 |
| 4587 | 281707 | C 4855 |  |  | 535.87 | 5675 | 201 | $\begin{array}{llllllll}28 & 14 & 30.9\end{array}$ | 517 | 353 | 12.8 | - 5 | - 31 | $9 \cdot 5$ |  |
| 4588 | 252056 | ${ }^{\text {C }} 4856$ | 36 | 18085 | $\begin{array}{ll}6 & 6 \cdot 13\end{array}$ | 5168 | 183 | $254716 \cdot 0$ | 547 | 347 | 9.5 | + 13 | - 15 | 8.7 | K |
| 4589 | 252057 | C 4858 | $4{ }^{1}$ | 18092 | $6 \quad 20 \cdot 16$ | 5163 | 183 | 254721.7 | 561 | 347 | 10.8 | $+$ | + 10 | $9 \cdot 5$ |  |
| 4590 | 291879 | C 4859 | 49 | 18064 | 635.44 | 5861 | 211 | 291424.0 | 576 | 352 | 8.5 | + | - 14 | 8.1 | K o |
| 4591 | 252059 | C 4860 |  |  | $9 \quad 638.73$ | $+3.5088$ | --0181 | $25 \quad 2617.0$ | -14.580 | -. 345 | 12.0 | $-162$ | - 111 | $9 \cdot 5$ |  |
| 4592 | 261909 | C 4862 | 63 | 18104 | 648.89 | 5278 | 188 | 262510.6 | 590 | 347 | 11.0 | 61 | - 5 | 9.1 | F 8 |
| 4593 | 301829 | L 3789 | 61-2 | 18102-3 | $656 \cdot 25$ | 6157 | 224 | 30408.5 | 597 | 355 | 9.3 | 11 | - 14 | $8 \cdot 5$ | F 5 |
| 4594 | 281710 | $\mathrm{C}_{4} 4863$ |  |  | 7.5 .04 | 5644 | 202 | $\begin{array}{lllllllll}28 & 15 & 13.9\end{array}$ | 606 | 351 | 11.8 | 34 | - 31 | 9.5 | F 8 |
| 4595 | 271722 | C 4864 |  |  | $7 \quad 5 \cdot 53$ | 5438 | 195 | $271451 \cdot 0$ | 607 | 348 | 11.8 | - 10 | + 11 | 9.5 |  |
| 4596 | 261911 | C 4867 |  | 18148 | ${ }_{9} 8^{8} 10 \cdot 80$ | +3.5129 | -.0184 | $254839 \cdot 2$ | $-14.671$ | - 343 | 10.5 | + 19 | - 19 | 8.6 | $\mathrm{K}_{2}$ |
| 4597 | 271727 | C 4868 |  |  | 819.25 | 5326 | 192 | $26 \quad 4910 \cdot 7$ | 680 | 345 | 10.0 | - 16 | + 5 | $9 \cdot 1$ | G 5 |
| 4598 | 242054 | C 4869 | 86-7-8 |  | 819.74 | 4904 | 176 | $243951 \cdot 3$ | 680 | 340 | $9 \cdot 1$ | - 26 | - 8 | $7 \cdot 81$ | K |
| 4599 | 261912 | C 4870 |  | 18154 | 822.09 | 5124 | 184 | 254816.6 | 683 | 343 | 11.6 | 2 | - 36 | $9 \cdot 2$ | F 5 |
| 4600 | 252062 | C 4871 | 91 | 18158 | 827.10 | 5088 | 182 | $253734{ }^{\circ}$ | 688 | 342 | $9 \cdot 2$ | 29 | - 23 | $8 \cdot 2$ | A 5 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | 1 P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \%$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | $1900+$ | R.A. 8.0001. | $\begin{aligned} & \text { Dec. } \\ & \text { noor. } \end{aligned}$ | Mag. | Type. |
|  | - |  |  |  | h m $\mathrm{s}^{\circ}$ | s | 8 | - " |  |  |  |  |  |  |  |
| 4601 | 311952 | L 3794 |  |  | $\begin{array}{llll}9 & 8 & 38.02\end{array}$ | $+3.6284$ | -.0230 |  | -14.698 | -.354 | 12.6 |  | 10 | $9 \cdot 5$ |  |
| 4602 | 242055 | C 4872 |  |  | 839.01 | 4890 | 175 | $24 \begin{array}{llllllllll} & 31 & 24.8\end{array}$ | 699 | 340 | 13.4 | + 38 | - I | $9 \cdot 5$ |  |
| 4603 | 311953 | L 3796 |  |  | $844 \cdot 83$ | 6206 | 227 | 31.644 .0 | 705 | 353 | 13.6 | - II | - 31 | $9 \cdot 2$ |  |
| 4604 | $25 \quad 2063$ | $\mathrm{C}_{4875}$ | 99 | 18174 | 854.2 I | 5086 | 183 | $25 \quad 3950 \cdot 2$ | 714 | 341 | 9.2 | + 4 | + 11 | $8 \cdot 5$ | K o |
| 4605 | $28 \quad 1717$ | C 4876 |  |  | 859.84 | 5667 | 206 | $28 \quad 34 \quad 52.8$ | 720 | 348 | 12.2 | - 4 | - 5 | $9 \cdot 5$ |  |
| 4606 | 301834 | L 3799 | 97 | 18169-70 | $\begin{array}{llll}9 & 9 & 0.17\end{array}$ | $+3.6030$ | . 0222 | $\begin{array}{llll}30 & 19 & 0.6\end{array}$ | -14.920 | --351 | 11.2 | $\bigcirc$ | 14 | $8 \cdot 1$ | G 5 |
| 4607 | $25 \quad 2065$ | C 4878 |  | 18184 | 913.39 | 5025 | 181 | $\begin{array}{llllllllll}25 & 23 & 6 \cdot 7\end{array}$ | 733 | 340 | $10 \cdot 6$ | - 10 | $-\quad 92$ | 7.02 | K |
| 4608 | 281718 | C 4879 |  | 18183 | 916.64 | 5574 | 202 | $28 \quad 9 \begin{array}{ll}22.5\end{array}$ | 737 | 346 | $10 \cdot 6$ | + 15 | - 14 | 8.6 | K o |
| 4609 | 261917 | $\mathrm{C}_{4} 4880$ |  |  | 922.39 | 5130 | 188 | $\begin{array}{llllllllll}25 & 56 & 23.0\end{array}$ | 742 | 341 | 11.6 | - 18 | - $\quad 3$ | $9 \cdot 5$ |  |
| 4610 | 242059 | C 4882 |  |  | $931 \cdot 10$ | 4878 | 176 | $\begin{array}{llll}24 & 39 & 6 \cdot 3\end{array}$ | 751 | 338 | $10 \cdot 2$ | + 14 | - 18 | 9.01 | K |
| 4611 | 311955 | L 3804 |  | 18202 | $9 \quad 940.99$ | $+3.6216$ | -. 0228 | $\begin{array}{llll}31 & 16 & 9.7\end{array}$ | -14.761 | -351 | 9.6 | - 57 | + 92 | 8.6 |  |
| 4612 | 242063 | B 3696 |  |  | 1010.66 | 4768 | 172 | $\begin{array}{llll}24 & 8 & 37.6\end{array}$ | 790 | 335 | 11.0 |  | - 34 | $8 \cdot 7$ | G 5 |
| 4613 | $28 \quad 1722$ | C 4883 | 131 | 18213-4 | 1013.11 | 5579 | 204 |  | 792 | 345 | 10.7 | + 53 | - 22 | $7 \cdot 9$ | F 8 |
| 4614 | 281723 | C 4884 | 136 | 18224-5 | 10 33.71 | 5565 | 204 | $\begin{array}{llllllllll}28 & 15 & 34.4\end{array}$ | 813 | 345 | 10.6 | - 25 | - 29 | 8.5 | F 2 |
| 4615 | 252069 | C 4886 |  |  | 1038.34 | 4903 | 177 | $245352 \cdot 1$ | 817 | 337 | 10.8 | 27 | - 3I | $9 \cdot 2$ |  |
| 4616 | 281725 | $\mathrm{C}_{4885}$ |  |  | 9 10 38.38 | $+3.5635$ | -. 0207 | $28 \quad 3644 \cdot 6$ | -14.817 | --346 | 12.4 | + 28 | - 20 | $9 \cdot 5$ |  |
| 4617 | 271734 | C 4888 | 142 | 18232 | 1052.56 | 5275 | 193 | $265029 \cdot 8$ | 831 | 340 | 8.5 | - 22 | + 40 | $8 \cdot 2$ | F 8 |
| 4618 | $30 \quad 1838$ | L 3810 |  |  | 110.81 | 6000 | 223 | 302459.5 | 839 | 347 | $9 \cdot 7$ | + 46 | - 129 | $9 \cdot 2$ |  |
| 4619 | 252073 | C 4890 | 160 | 18259 | II 31.85 | 4907 | 179 | $25 \quad 0 \quad 49 \cdot 2$ | 870 | 335 | $9 \cdot 3$ | - 15 | + 5 | 8.7 | K o |
| 4620 | $30 \quad 1839$ | L 3812 | 155 |  | 1137.49 | 6055 | 226 | $\begin{array}{lll}30 & 45 & 1.3\end{array}$ | 875 | 346 | $8 \cdot 6$ | + 5 | + 4 | $7 \cdot 8$ | A 0 |
| 4621 | 281727 | C 4891 |  |  | 91156.97 | $+3.5539$ | -. 0205 | $\begin{array}{llll}28 & 17 & 18.0\end{array}$ | -14.894 | --341 | 10.8 | - 24 | - 16 | $9 \cdot 1$ |  |
| 4622 | 31 1961 | L 3814 | 166 | 18270-i | 12 I 99 | 6242 | 234 | 314039.5 | 899 | 347 | 1 I . | + 7 | - 17 | 7.9 | K o |
| 4623 | 242068 | B 3710 | 172 | 18277 | $\begin{array}{ll}12 & 7 \cdot 80\end{array}$ | 4710 | 172 |  | 905 | 332 | 11.0 | - 38 | - 76 |  | F 5 |
| 4624 | 242068 | B 3711 | 173 |  | 128.00 | 4710 | 172 | 24 I $56 \cdot 0$ | 905 | 332 | 11.4 | - 38 | - 76 |  | F |
| 4625 | 271737 | C 4892 | 171 |  | 1212.26 | 5243 | 194 | $264930 \cdot 4$ | 909 | 338 | 11.0 | + $+\quad 17$ |  | $8 \cdot 7$ | K 5 |
| 4626 | 281729 | $\mathrm{C}_{4} 4893$ | ${ }^{1} 74$ | 18278 | 91217.70 | $+3.5433$ | . 0201 | $\begin{array}{llllll}27 & 47 & 55\end{array}$ | $-14.914$ | - $\begin{array}{r}\text { ' } \\ \hline-339 \\ \hline\end{array}$ | 10.0 |  | - 30 | $6 \cdot 53$ | F 5 |
| 4627 | $28 \quad 1730$ | C 4895 | 175 |  | $12 \begin{array}{ll}123.76\end{array}$ | 5442 | 201 | 275131.7 | 92 I | 339 | 11.9 | + 56 | - 44 | $9 \cdot 2$ |  |
| 4628 | $29 \quad 1883$ | ${ }_{\text {C }} 4896$ | 176 | 18286 | 1232.99 | 5659 | 211 | 28 57 1.6 | 929 | 341 | 10.17 | + 59 | - 507 | $7 \cdot 26$ | K o |
| 4629 | 261922 | C 4897 | $179-80$ | 18293 | $1235 \cdot 33$ | 5150 | 190 |  | 932 | 336 | 13.4 | + 10 | - 48 | $9 \cdot 2$ | G 5 |
| 4630 | 281732 | C 4899 | 184 | 18294 | $1243 \cdot 22$ | 5569 | 207 | $2831 \begin{array}{lll} \\ & 32.5\end{array}$ | 939 | 341 | 10.8 | + 20 | - | $8 \cdot 9$ | F5 |
| 4631 | 301842 | C 4900 |  |  | 91248.14 | $+3.5856$ | . 0219 | $295630 \cdot 4$ | -14.944 | $-343$ | 11.6 9 | - 6 | 18 $+\quad 18$ | 9.5 |  |
| 4632 | 301845 | L. 3817 |  |  | 1313.29 | 5882 | 221 | $30 \quad 7$ 14-1 | 968 | 342 | 9.8 | 79 | - 65 | $8 \cdot 5$ |  |
| 4633 | 301847 | L 3819 |  | 18296 | 1328.02 | 5893 | 222 | $\begin{array}{llll}30 & 12 & 0.1\end{array}$ | 983 | 341 | 11.5 | 92 | - 67 | 8.5 | G 5 |
| 46.4 | 281735 | C 4904 | 201 |  | $1335 \cdot 74$ | 5573 | 209 | $28839 \quad 5 \cdot 3$ | 990 | 339 | 11.3 |  | - 29 | $9 \cdot 2$ |  |
| 4635 | 261927 | C 4906 | 212-3 | 18336-7 | 1359.76 | 5166 | 193 | 263753.7 | 15.013 | 333 | 11.4 | - 5 | - 29 | 6.63 | K。 |
| 4636 | 291887 | C 4907 | 211 |  | $914 \quad 3.73$ | +3.5773 | -. 0218 | 294143.6 | -15.017 | --339 | 12.2 | + 6 | - 36 | $9 \cdot 7$ |  |
| 4637 | 252080 | C 4908 | 216 |  | $14 \quad 7 \cdot 58$ | 4811 | 179 | $244656 \cdot 9$ | 021 | 330 | 13.2 | + 18 | - 67 | $8 \cdot 8$ |  |
| 4638 | $25 \quad 2081$ | C 4909 | 219 | 18344 | $14 \quad 16.45$ | 4955 | 186 | $253346 \cdot 2$ | 029 | 330 | 11.9 | - 10 | - 4 | $8 \cdot 1$ | F 5 |
| 4639 | 281737 | ${ }^{\text {C }} 4910$ |  |  | 1420.72 | 5556 | 209 | 283928.0 | 034 | 338 | $14^{2} 2$ | + 20 | - 32 | $9 \cdot 1$ |  |
| 4640 | 242070 | C 4912 |  |  | $1424 \cdot 71$ | 4778 | 178 | $24 \quad 38 \quad 12.5$ | 038 | 329 | 12.4 | 26 | - $\quad 27$ | 9.21 | A |
| 4641 | 281738 | $\mathrm{C}_{4911}$ |  |  | 91426.32 | $+3.5384$ | -.0202 | $27 \begin{array}{lll} & 48 & 8.2\end{array}$ | -15.039 | -.335 | 12.5 | + 9 | - 15 | $8 \cdot 9$ |  |
| 4642 | 311970 | L 3825 |  |  | $1434{ }^{\circ} 1$ | 6102 | 232 |  | 046 | 342 | 13.2 | + 9 | + 21 | $9 \cdot 5$ |  |
| 4643 | $25 \quad 2083$ | ${ }^{\text {C }} 4914$ | 225-6 | 18355 | $1436 \cdot 60$ | 4804 | 179 | 244753.8 | 049 | 329 | 11.0 | + 30 | - 96 | $7 \cdot 81$ | G 5 |
| 4644 | 281739 | ${ }_{\text {C }}^{\text {C }} 4913$ | 224 229 | 18352 18358 | 1438.74 | 5552 | 209 | $\begin{array}{lllllllllll}28 & 40 & 21.5 \\ 27 & 32 & 43.7\end{array}$ | 051 | 337 | 11.7 | + 28 | + 7 | 8.0 8.7 | K ${ }^{2}$ |
| 4645 | 271742 | C 4916 | 229 | 18358 | $1446 \cdot 85$ | 5326 | 200 | $27 \quad 3243 \cdot 7$ | 059 | 334 | 12.2 | 7 | - II | $8 \cdot 7$ | Fo |
| 4646 | 281740 | ${ }_{\text {C }} 4915$ |  |  | $91447 \cdot 36$ | $+3.5540$ | -. 0209 | $283746 \cdot 6$ | -15.059 | $-337$ | 12.0 |  |  | 9.5 |  |
| 4647 | 271743 | ${ }^{\text {C }} 4917$ |  |  | $1459 \cdot 89$ | 5275 | 199 | $\begin{array}{lllll}27 & 18 & 29.4\end{array}$ | 071 | 333 | 10.7 | - ${ }^{11}$ | 17 $+\quad 17$ | 9-I |  |
| 4648 | 261931 | C 4918 | 237 |  | 156.68 | 5038 | 189 | $\begin{array}{llllllllllll}26 & 56 \cdot 2\end{array}$ | 078 | 330 | 11.4 | + 20 | - 32 | 8.7 | K |
| 4649 | 291888 | C 4919 | 254 |  | 15 51.44 | 5571 | 212 | $28 \quad 5444 \cdot 4$ | 121 | 334 | 11.7 | + 24 | - 10 | 9.7 | A 3 |
| 4650 | 25 2084 | C 492 I | 259 | 18390 | 1556.73 | 4917 | 187 | $253255 \cdot 1$ | 126 | 328 | 10.2 | + $4^{1}$ * | - 150* | $7 \cdot 26$ | Go |

[^19]4614. This is the principal star of $\Sigma 1327$. Number of observations 8. 4628. This is the close double $\Sigma 3121$. 4632. This is the close double Burnham 5016.

| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Procession. | Sec. Var. | Dec. 19100. | Precession. | Soc. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. A. A. }}{\text { R. }}$ | $\begin{aligned} & \text { Dec. } \\ & N \cdot 001 . \end{aligned}$ |  |  |
|  | $\bigcirc$ |  |  |  | h m | s | s | - , " |  | " |  |  |  |  |  |
| 4651 | 261932 | C 4922 |  | 18395 | $916 \quad 0.33$ | $+3 \cdot 5077$ | -.0191 | 262345.4 | -15.129 | --329 | 11.6 | - $4^{6}$ | - 22 | $8 \cdot 1$ | F 5 |
| 4652 | 252085 | ${ }_{\text {C }} 4923$ | 262 | 18399 | 1613.43 | 4948 | 186 | $25 \quad 4428.7$ | 142 | 327 | 12.4 | + | - 2 | $8 \cdot 8$ | Ko |
| 4653 | 291890 | C 4924 | 264 | 18402 | $16 \quad 24 \cdot 14$ | 5552 | 212 | $28 \quad 5256 \cdot 8$ | 152 | 333 | 12.2 | + 20 | 4 | 7.9 | F 2 |
| 4654 | 271745 | ${ }^{\text {C }} 4925$ | 267 |  | 1627.02 | 5226 | 198 | $27 \quad 1344 \cdot 5$ | 155 | 329 | 12.6 | + 12 | - 5 | $8 \cdot 8$ |  |
| 4655 | 29 1891 | C 4927 |  |  | 1630.50 | 5629 | 215 | 29 16 $51 \cdot 7$ | 158 | 334 | 12.4 | + 32 | - 34 | 8.5 |  |
| 4656 | 261936 | ${ }^{\text {C }} 4930$ | 287 289 | 18438-9 | 91726.69 | +3.4997 | -.0189 | 26 8 $34 \cdot 5$ <br> 80   | -15.212 | -. 325 | 10.0 | 27 | - 36 | 8.2 | G 5 |
| 4657 | 301855 | L 3840 | 289-90 |  | 1738.21 | 5864 | 226 | 303453.2 | 222 | 334 | 10.4 | + 1 | - 16 | $8 \cdot 9$ |  |
| 4658 | 252087 | C 4931 |  |  | 1754.39 | 4802 | 182 | 25855.8 | 238 | 324 | 12.2 | + 7 | - 35 | $9 \cdot 5$ |  |
| 4659 | 311974 | L 3844 |  |  | $18 \quad 19.06$ | 6021 | 235 | ${ }^{31} 2551.8$ | 261 | 334 | 12.5 | - 100 | - 55 | $9 \cdot 5$ |  |
| 4660 | 252088 | C 4933 | 305 | 18465 | $18 \quad 19.47$ | 4870 | 187 | $25 \quad 34 \quad 5 \cdot 2$ | 262 | 323 | 11.4 | - $9^{2}$ * | - $3^{*}$ | $6 \cdot 46$ | G 5 |
| 4661 | 242077 | C 4934 |  |  | 91822.53 | $+3.4710$ | -.or80 | $244213 \cdot 1$ | $-15.254$ | -. 321 | 12.2 | 6 | - 14 | 8.86 | K。 |
| 4662 | 281745 | C +935 | 308 |  | 1837.04 | 5381 | 207 | $28 \quad 176 \cdot 1$ | 278 | 328 | II-7 | + 18 | - 46 | 8.1 | F 5 |
| 4663 | 261938 | C 4936 | 319 | 718469 | 1853.78 | 4996 | 191 | $\begin{array}{lllll}26 & 18 & 19.7\end{array}$ | 294 | 323 | 10.6 | $+\quad 9^{*}$ | - 50* | $6 \cdot 82$ | K o |
| 4664 | $\begin{array}{lll}28 & 1746 \\ 32 & 1872\end{array}$ | C 4937 |  | 18479-80 | 1858.50 | 5414 | 209 | $\begin{array}{llll}28 & 30 & 8.8\end{array}$ | 298 | 328 | II.2 | 8 | - 27 | $9 \cdot 1$ |  |
| 4665 | $\begin{array}{llll}32 & 1872\end{array}$ | L. 3849 |  |  | $19 \quad 1.30$ | 6108 | 240 | $315630 \cdot 6$ | 301 | 334 | 14.6 | 23 | - 28 | $9 \cdot 5$ |  |
| 4666 | 252089 | C 4938 | 322 |  | $\begin{array}{llll}9 & 19 & 2.75\end{array}$ | $+3.4721$ | -.0181 | ${ }^{2} 45032 \cdot 1$ | -15.302 | $\cdot 321$ | 12.2 | 3 | + 9 | $8 \cdot 16$ | F 8 |
| 4667 | 31 1977 | L 3850 |  |  | 197.55 | 5934 | 232 | $\begin{array}{llll}31 & 6 & 59.7\end{array}$ | 307 | 342 | 12.7 | - 2 | + 18 | $9 \cdot 5$ |  |
| 4668 | 30 1861 | L 385 1 |  |  | 1916.37 | 5807 | 225 | $30 \quad 3034.9$ | 315 | 330 | 13.0 | 21 | + $\quad 36$ | 9.5 |  |
| 4669 | 261939 | C 4940 | 330-2 | 1849I-2 | 1924.97 | 5034 | 194 | $26 \quad 3412.6$ | 323 | 322 | 12.2 | - 23* | - $53^{*}$ | $4 \cdot 61$ | Ko |
| 4670 | 271750 | C $494{ }^{1}$ |  |  | 1928.73 | 5127 | 198 | $\begin{array}{llllllllll}27 & 4 & 13.3\end{array}$ | 327 | 323 | 12.7 | - 2 | - 18 | $8 \cdot 5$ | A 2 |
| 4671 | 301862 | L 3854 | 335 |  | 9 19 <br> 19 39 | $+3.5799$ | --0226 | 303116.4 | -15.337 | --330 | 13.0 | - 4 | - 7 | 9.1 |  |
| 4672 | 291896 | C 4942 |  |  | $1946 \cdot 10$ | 5619 | 219 | $2938.27 \cdot 2$ | 343 | 328 | 13.4 | + 4 | + 3 | $9 \cdot 5$ |  |
| 4673 | 252091 | C 4944 |  | 18513 | $1946 \cdot 89$ | 4848 | 186 | $253645 \cdot 2$ | 344 | 322 | 11.7 | + 24 | - | $8 \cdot 1$ | A 2 |
| 4674 | 301864 | C 4943 | 340 | 18504 | 1947.93 | 5677 | 221 | $29 \begin{array}{llll} & 56 & 3\end{array}$ | 345 | 328 | 11.5 | - 12 | - 6 | 8.81 | B 9 |
| 4675 | 261940 | C 4946 | 346-7 |  | 1953.32 | 5039 | 194 | 2639 3.1 | 350 | 321 | 12.2 | + 47 | - 36 | $9 \cdot 1$ |  |
| 4676 | 252093 | C 4947 |  |  | $9^{\prime} 20$ I. 84 | +3.4752 | -. 0183 | $\begin{array}{llll}25 & 719.3\end{array}$ | -15.358 | $-319$ | 14.3 | - 19 | - 3 I | $8 \cdot 5$ | F 8 |
| 4677 | 311978 | L 3860 | $351-2$ | 18522 | $\begin{array}{llll}20 & 7 \cdot 18\end{array}$ | 5860 | 230 | $\begin{array}{llll}30 & 53 & 8.5\end{array}$ | 363 | 329 | 12.7 | + <br> + | - 190 | 7.77 | G 5 |
| 4678 | 291899 | C 4949 |  |  | $20 \quad 10 \cdot 90$ | 5530 | 216 | 29 I4 31.0 | 366 | 326 | 13.5 | + $4^{8}$ | - 38 | 8.9 | F 8 |
| 4679 | 261941 | C 4953 | 360-1 | 1854I | 2033.76 | 5013 | 194 | 263533.9 | 388 | 321 | 12.5 | - 23 | - 4 | $8 \cdot 8$ | K 2 |
| 4680 | 311979 | L 3863 | 357 |  | $2035 \cdot 65$ | 6015 | 238 | 3142159 | 389 | 330 | 12.9 | $+30$ | - 12 | 9.1 |  |
| 4681 | 301866 | C 4954 |  |  | $92040 \cdot 26$ | $+3.5624$ | -. 0220 | $294650 \cdot 6$ | -15.394 | -. 327 | 12.1 | 7 | - 23 | $9 \cdot 5$ |  |
| 4682 | 291900 | C 4955 | 365 | 18543 | 2044.42 | 5476 | 214 | $29 \quad 227 \cdot 1$ | 398 | 325 | $9 \cdot 7$ | 57 | - 77 | $8 \cdot 1$ | F 8 |
| 4683 | 311982 | L 3866 |  |  | $2054 \cdot 69$ | 5972 | 236 | 313211.0 | 407 | 329 | 12.5 | - 12 | - 21 | 9-1 |  |
| 4684 | 261942 | C 4957 | 375 | 18550 | 2057.51 | 4887 | 186 | $255755 \cdot 6$ | 410 | 319 | 11.7 | + 6 | - $5^{1}$ | $8 \cdot 7$ | F 8 |
| 4685 | 311984 | L 3867 | 376 | 18552 | 2110.75 | 5972 | 236 | 313422.9 | 422 | 328 | 11.8 | + 36 | - 45 | $8 \cdot 6$ | G 5 |
| 4686 | 261944 | ${ }_{C} 4958$ | $38^{\prime 6}$ | 18563 | 92128.70 | $+3.5020$ | -.0195 | $264438 \cdot 3$ | -15.439 | -. 320 | 10.9 | + 19 | - 175 | 8.6 | G 5 |
| 4687. | 281754 | C 4959 | 387 |  | 2131.07 | 5264 | 205 | $\begin{array}{llll}28 & 2 & 20 \cdot 4\end{array}$ | 44 I | 322 | 11.2 | - 31 | - 14. | $8 \cdot 7$ |  |
| 4688 | 301868 | L 3870 |  |  | $2135 \cdot 72$ | 5780 | 228 | 304115 | 445 | 326 | 10.7 | - 14 | - 37 | 8.7 |  |
| 4689 | 291903 | C 4960 | 397 |  | $22 \quad 3 \cdot 45$ | $555^{8}$ | 220 | 293729.0 | 47 I | 323 | 10.6 | $+4$ | - 22 | 8.86 | K o |
| 4690 | $30 \quad 1869$ | L 3874 |  |  | $2230 \cdot 41$ | 5650 | 223 | $\begin{array}{llll}30 & 9 & 9.9\end{array}$ | 496 | 322 | 12.6 | - I | 23 | $9 \cdot 2$ |  |
| 4691 | 321884 | ${ }_{\text {L }} 3873$ | 402 |  | 92231.40 | +3.5993 | -. 0240 | 31585128.7 | -15.497 | $-.327$ | 14.3 | II | - 78 | $8 \cdot 7$ |  |
| 4692 | 261948 | ${ }_{\text {C }} 4965$ |  |  | 22 51.98 | 4911 | 193 | $\begin{array}{lll}26 & 19 & 9.7\end{array}$ | 516 | 316 | 13.0 | + 11 | $\bigcirc$ | $9 \cdot 5$ | K o |
| 4693 | 281761 | C 4964 | 412 |  | 2253.45 | 5334 | 211 | $28.3450 \cdot 4$ | 517 | 320 | 11.5 | + 24 | + 12 | $8 \cdot 9$ |  |
| 4694 | 321886 | L 3876 | 413 |  | $2259 \cdot 31$ | 5964 | 240 | $314646 \cdot 2$ | 523 | 326 | 13.6 | + 11 | - 9 | $9 \cdot 2$ | G o |
| 4695 | 271756 | C 4967 |  |  | $23 \quad 3.05$ | 5091 | 200 | 27 I8 51.0 | 526 | 317 | 12.7 | - 9 | - 11 | $9 \cdot 2$ |  |
| 4696 | 242089 | B 3766 |  |  | 92333.59 | $+3.4513$ | -.0174 | 2411519 | -15.554 | $-310$ | 11.9 | - $4^{0}$ | $+$ | 9.2 | G 5 |
| 4697 | 261951 | C 4968 | 426 |  | 2341.65 | 4944 | 195 | $26 \quad 36 \quad 20 \cdot 9$ | 562 | 315 | 12.4 | - 21 | + 1 | $8 \cdot 3$ | K |
| 4698 | 281763 | C 4969 |  |  | $2347 \cdot 95$ | 5195 | 206 | $27 \begin{array}{ll}27 & 1.6\end{array}$ | 568 | 316 | 13.0 | + 18 | - 51 | $8 \cdot 8$ |  |
| 4699 | 281764 | C 4970 |  |  | $2350 \cdot 62$ | 5262 | 209 | 28 19 35.0 | 570 | 317 | 11.9 | + 5 | + 4 | $9 \cdot 1$ |  |
| 4700 | 281765 | C 4973 | $44^{2}$ |  | $24 \quad 19.75$ | 5149 | 204 | $27 \quad 47 \quad 14.3$ | 597 | 315 | 11.6 | - 10 | - 7 | $8 \cdot 1$ | A 0 |

[^20]| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dcc. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R. R.A. } \\ & \text { B. } \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N. } \end{aligned}$ |  |  |
|  | $\bigcirc$ |  |  |  | $\mathrm{hr} \mathrm{m}^{\mathrm{m}}$ | 8 | s | - , " | " | " |  |  |  |  |  |
| 4701 | 311990 | L 3882 |  |  | $92436 \cdot 94$ | $+3.5881$ | -. 0238 | $313547 \cdot 6$ | -15.613 | -321 | 13.0 | 10 | 4 | $9 \cdot 1$ |  |
| 4702 | 291905 | C 4974 |  |  | $2440 \cdot 44$ | 5411 | 217 | 291246.5 | 616 | 317 | 12.7 | + 8 | - 32 | $9 \cdot 5$ |  |
| 4703 | 301872 | L 3884 |  |  | 24 45•18 | 5646 | 227 | 302559.2 | 620 | 320 | 14.3 |  | + 28 | $9 \cdot 5$ | A |
| 4704 | 291906 | C 4975 | 427 | 18665 | $2445 \cdot 70$ | 5389 | 216 | 29641.0 | 621 | 317 | 10.0 | - 8 | - 23 | $8 \cdot 0$ | K o |
| 4705 | 311992 | L 3885 | 449 | 18642 | 2449.74 | 5900 | 239 | 3143 18.1 | 624 | 321 | 11.9 | 12 | - 25 | $7 \cdot 60$ |  |
| 4706 | 252105 | C 4977 | 453 |  | 92454.89 | $+3.4641$ | -.0182 | $\begin{array}{llll}25 & 4 & 29.5\end{array}$ | -15.629 | $-309$ | 10.6 | 14 | - 6 | 8.5 | K o |
| 4707 | 301873 | C 4978 |  |  | 25 9.11 | 5544 | 223 | $29 \begin{array}{lll}29 & 7.8\end{array}$ | 642 | 318 | 13.2 | 31 | - 16 | 8.8 | $\text { F } 8$ |
| 4708 | 252106 | C 4980 |  |  | 2510.20 | 4712 | 185 | $253024 \cdot 3$ | 643 | 309 | 12.8 | $\bigcirc$ | + 4 | $9 \cdot 5$ |  |
| 4709 | 291907 | C 4979 |  |  | ${ }_{25}^{5} \quad 11.98$ | 5454 | 219 | $293031 \cdot 9$ | 644 | 316 | 13.2 | + 64 | + ${ }^{2}$ | $9 \cdot 1$ |  |
| 4710 | 252108 | C 4982 |  |  | $2542 \cdot 97$ | 4658 | 183 | $\begin{array}{llll}25 & 16 & 6 \cdot 5\end{array}$ | 673 | 308 | 11.2 | + 26 | - 68 | $9 \cdot 5$ |  |
| 4711 | 291908 | C 4984 | 452 |  | $925 \quad 50.33$ | $+3.547^{2}$ | -.022 1 | 29414.3 | -15.679 | -.315 | 12.2 | + 13 | - 4 | 9.09 | G 5 |
| 4712 | 311995 | L 3891 |  |  | 2553.90 | 5834 | 237 | $\begin{array}{lllll}31 & 3226.4\end{array}$ | 683 | 318 | 11.3 | - 47 | - 22 | $9 \cdot 5$ |  |
| 4713 | 252109 | ${ }^{\text {C }} 4985$ | 475 | 18679 | 25 54.77 | 4685 | 186 | $25 \quad 2635 \cdot 5$ | 683 | 308 | 11.5 | + 16 | - 21 | $8 \cdot 7$ | Ma |
| 4714 | 281768 | C 4987 | 477 | 18692 | $\begin{array}{lll}26 & 2.47\end{array}$ | 5108 | 205 | $27 \begin{array}{lll}27 & 47 & 0.9\end{array}$ | 690 | 312 | 12.3 | - 14 | - 28 | $6 \cdot 59$ | A 0 |
| 4715 | 311996 | L 3893 |  |  | $26 \quad 7 \cdot 51$ | 5803 | 237 | $\begin{array}{llll}31 & 25 & 3.7\end{array}$ | 695 | 318 | 14.4 | + 45 | - 29 | 9.5 |  |
| 4716 | 252110 | C 4988 |  |  | $92616 \cdot 00$ | $+3.4690$ | -.0187 | $25 \begin{array}{llll}25 & 31 & 4\end{array}$ | -15.703 | -309 | 14.2 |  | + 13 |  |  |
| +7178 | 252111 | ${ }_{\text {C }} 4989$ | 486-7 |  | ${ }^{26} 19.70$ | - 4564 | 182 | $244838 \cdot 6$ | 706 | 307 | 13.5 | - 30 | - 27 | $8 \cdot 76$ | K 2 |
| 4718 | 261957 | ${ }^{\text {C }} 4990$ |  |  | $26 \quad 25 \cdot 59$ | 4807 | 193 | 26 II 18.0 | 711 | 308 | 14.6 | - 5 | - 14 | $9 \cdot 2$ |  |
| 4719 | 271768 | ${ }^{\text {C }} 4991$ |  |  | 2628.55 | 4980 | 200 | $\begin{array}{llll}27 & 9 & 6.6\end{array}$ | 714 | 310 | 13.8 | - 34 | - 65 | $8 \cdot 6$ | Go |
| 4720 | 252112 | C 4992 |  |  | $2632 \cdot 11$ | 4629 | 185 |  | 717 | 308 | 14.0 |  | - 78 | 9.1 |  |
| 4721 | 252113 | C 4993 | $49^{1}$ | 18699 | $92640 \cdot 45$ | $+3.4653$ | . 0186 | $252136 \cdot 0$ | -15.725 | --307 | 12.5 |  | $\begin{array}{r}2 \\ +\quad 1 \\ \hline\end{array}$ | 8.7 | Ko |
| 4722 | 311999 | L 3897 |  |  | $2648 \cdot 30$ | - 5671 | 231 | $30 \quad 5045 \cdot 5$ | 732 733 | 316 | 14.0 |  | - 18 | 9.1 | G |
| 4723 | 271770 | C 4994 | 494 |  | $26 \cdot 49 \cdot 92$ | 4986 | 201 | $27 \quad 13 \quad 31 \cdot 2$ | 733 | 309 | 11.5 | + 2 | - 36 | $8 \cdot \mathrm{I}$ | G 5 |
| 4724 | 242099 | B 3785 |  |  | $2655 \cdot 58$ | 4441 | 177 | 24 10 51.5 | 738 | 304 | 13.7 |  | + 5 | $9 \cdot 2$ |  |
| 4725 | 301875 | C 4997 | 498 |  | 27 11.47 | 5493 | 224 | $2959 \quad 2 \cdot 0$ | 753 | 317 | $14^{\circ} \mathrm{O}$ | 2 | + 7 | $9 \cdot 2$ | F |
| 4726 | 271775 | C 5001 | 504 | 18721 | $92730 \cdot 55$ | $+3.5000$ | -.0202 | 272332.6 | $-15.77^{\circ}$ | -. 308 | 11.3 | - 107 | - 234 | $7 \cdot 13$ | K o |
| 4727 | 312000 | L 3903 | 507 | 18723-4 | 27 41-82 | 5671 | 232 | $30 \quad 58 \quad 5 \cdot 6$ | 780 | 315 | 11.6 | + 6 | - 54 | 7.9 | K o |
| 4728 | $27 \quad 1776$ | C 5004 |  |  | $2745 \cdot 26$ | 5032 | 204 | $273545 \cdot 6$ | 783 | 308 | 10.6 | - 18 |  | $8 \cdot 5$ | Fo |
| 4729 | 291913 | C 5005 | 515-25 | 18742 | $\begin{array}{llll}28 & 2.27\end{array}$ | 5241 | 214 | $2846 \begin{array}{ll}2 \cdot 11\end{array}$ | $79^{8}$ | 310 | 10.5 | - 6 | - $\quad 38$ | $6 \cdot 35$ | A 2 |
| 4730 | 291914 | C 5007 |  |  | $28 \quad 12.62$ | 5333 | 218 | $291646 \cdot 8$ | 808 | 310 | 11.0 | 26 | - 15 | $9 \cdot 1$ | G 5 |
| 4731 | 261965 | C 5009 |  |  | $928 \quad 32 \cdot 45$ | $+3.4855$ | -.0197 | $2643 \quad 29 \cdot 1$ | -15.826 | $-305$ | 10.8 | - | + 11 | $9 \cdot 2$ |  |
| 4732 | 271779 | C 5011 | 537 |  | $2845 \cdot 41$ | 5036 | 205 | $27 \quad 45 \quad 6.9$ | 837 | 307 | 11.5 | 10 | + 33 | $8 \cdot 1$ | F 5 |
| 4733 | 271780 | C 5012 |  |  | $2847 \cdot 40$ | 4936 | 201 |  | 839 | 306 | 11.0 | + 5 | - 46 | $8 \cdot 5$ | Ko |
| 4734 | 252118 | C 5013 |  |  | $2847 \cdot 41$ | 4592 | 185 | $\begin{array}{llllll}25 & 16 & 22.8\end{array}$ | 839 | 303 | 12.2 | + 14 | - 7 | $9 \cdot 2$ | G 5 |
| 4735 | 312001 | L 3907 |  |  | $29 \quad 6.09$ | 5698 | 236 | $31 \begin{array}{llll}318 & 28.1\end{array}$ | 856 | 312 | $14^{\circ} \mathrm{O}$ | - 25 | + 8 | 9.5 |  |
| 4736 | 312002 | L 3908 |  |  | 9 29221.86 | +3.5623 | -. 0233 | $305742 \cdot 0$ | - 15.870 | -311 | 11.4 |  |  | $8 \cdot 7$ |  |
| 4737 | 312003 | ${ }^{\circ} \mathrm{L} 3910$ |  | 18789-90 | 29 31-53 | 5709 | 237 | $\begin{array}{lllllllllll}31 & 25 & 39.9\end{array}$ | 878 | 311 | 10.8 | + 6 | - 27 | 8.5 | $\mathrm{A}_{5}$ |
| 4738 | 301877 | L 3911 |  |  | $2940 \cdot 50$ | 5547 | 229 | $303645 \cdot 8$ | 886 | 309 | 12 | + | - 26 | 9.5 |  |
| 4739 | 252121 | C 5016 |  |  | 2951.85 | 4574 | 185 | $\begin{array}{lllllll}25 & 18 & 18.9\end{array}$ | 896 | 300 | 12.4 | + 3 | - 29 | $9 \cdot 5$ |  |
| 4740 | 281771 | C 5015 |  | 18805-6 | $2953 \cdot 60$ | 5114 | 210 | $\begin{array}{llll}28 & 20 & 4 \cdot 8\end{array}$ | 898 | 305 | 11.4 | - 15 | - 27 | $8 \cdot 3$ | K o |
| 4741 | 281772 | C 5017 | 558-9 |  | $92955 \cdot 36$ | +3.5188 | -. 0214 |  | -15.899 | --306 | 12.0 | + 30 | + 21 | $8 \cdot 3$ |  |
| 4742 | 261974 | C 5018 | 562-3 | 18807-8 | $2956 \cdot 52$ | 4799 | 196 | $\begin{array}{lllllllllllll} & 36 & 39\end{array}$ | 900 | 302 | 9.8 | + 7 | - 30 | $7 \cdot 8$ | B 9 |
| 4743 | 312007 | ${ }_{\text {L }} 3912$ | 566 | 18811 | 308.98 | 5703 | 239 | $\begin{array}{llll}31 & 29 & 2.6\end{array}$ | 912 | 310 | 10.2 | - $5^{2}$ | - $4^{0}$ | $7 \cdot 96$ | F 5 |
| 4744 | 271781 | C 5019 | 572 |  | 3018.44 | 4956 | 204 | $27 \begin{array}{llll}27 & 31 & 4\end{array}$ | 920 | 303 | 10.8 | + $\quad 24$ | - 29 | $9 \cdot 1$ |  |
| 4745 | 261977 | C 5020 |  |  | 3018.62 | 4819 | 198 | $26.45 \quad 19.0$ | 920 | 302 | 10.6 | 17 | - 31 | $9 \cdot 5$ |  |
| 4746 | 301879 | ${ }^{\text {C }} 5021$ |  |  | $93030 \cdot 56$ | $+3.5378$ | -. 0224 | $2985020 \cdot 4$ | -15.931 | --307 | 9.4 | - 19 | $+\quad 16$ | 8.81 | $\mathrm{G}_{5}$ |
| 4747 | 281774 | C 5024 | 585 |  | 3115.96 | 5155 | 214 | $2884434 \cdot 3$ | 971 | 303 | 11.0 | - 8 | - 13 | 9.5 | G |
| 4748 | 281776 | C 5027 |  |  | 3121.07 | 5084 | 211 | $\begin{array}{llll}28 & 22 & 3 \cdot 9\end{array}$ | 975 | 302 | 10.4 | + 26 | - 30 | $9 \cdot 5$ |  |
| 4749 | 312011 | L 3919 | 587 | 18845-6 | 3122.60 | 5684 | 239 |  | 977 | 308 | 9.6 | + 10* | - $42 *$ | $5 \cdot 74$ | Ma |
| 4750 | $30 \quad 1883$ | C 5028 |  |  | 3127.44 | 5362 | 224 | 2953 7-1 | 981 | 305 | 10.6 | - 59 | - 49 | 9.2 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \times 0$. | Precession. | Sec. Var. | Dec. 191000 | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R. R.A. } \\ \text { R.000I. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { M.OOI. } \end{aligned}$ |  |  |
|  |  |  |  |  | h m | s | s |  |  | " |  |  |  |  |  |
| 4751 | 281780 | C 5030 | 573 | 18855-6 | $93134 \cdot 51$ | +3.5041 | -. 0208 | $28 \quad 9 \quad 43 \cdot 0$ | - 15.987 | - 302 | $9 \cdot 2$ | - 15 | - | $7 \cdot 07$ | K |
| 4752 | 281779 | ${ }_{\text {C }}$ 5031 | 596 |  | 3136.32 | 5080 | 211 | $28 \quad 2241.8$ | 989 | 302 | 10.4 | - 109 | - 110 | $9 \cdot 2$ |  |
| 4753 | 281781 | C 5032 | 599 |  | 3138.76 | 5103 | 211 | $28 \quad 3040 \cdot 2$ | 991 | 303 | 11.2 | - 3 | - 32 | $9 \cdot 5$ |  |
| 4754 | 312012 | L 3921 | 602 |  | 3153.24 | 5686 | $24^{\circ}$ | 313911.7 | 16.003 | 306 | 10.8 | - 24 | + 8 | $9 \cdot 2$ | F |
| 4755 | 312014 | L 3925 |  | 18867-8 | $\begin{array}{llll}32 & 7 \cdot 18\end{array}$ | 5624 | 237 | 312141.6 |  | 306 | 9.8 | + 12 | - 29 | 8.1 | G 5 |
| 4756 | 252126 | C 5038 | 618 |  | 93225.89 | $+3.4432$ | -.0182 | $\begin{array}{lll}24 & 48 & 5 \cdot 4\end{array}$ | -16.032 | --294 | 10.4 | - 41 | - 12 | 9.01 | G o |
| 4757 | 252127 | C 5039 | 626 | 18888 | 3241.02 | 4473 | 185 | $25 \quad 430 \cdot 5$ | 045 | 294 | 9.2 | - $77^{*}$ | - $27^{*}$ | $6 \cdot 60$ | F 8 |
| 4758 | 242110 | B 3803 | 628 |  | 3247.79 | 4368 | 180 | 242818.8 | 051 | 293 | 10.4 | - 10 | + 10 | 8.5 | F 5 |
| 4759 | 252128 | C 5040 |  |  | $\begin{array}{lll}33 & 1.88\end{array}$ | 4551 | 188 | 253433.4 | 064 | 294 | 12.2 | - 26 | - 14 | $9 \cdot 2$ |  |
| 4760 | $26 \quad 1985$ | C 504 I | 637 | 18902 | 33 11.21 | 4581 | 189 | $2546 \quad 17 \cdot 9$ | 072 | 293 | 11.7 | - 7 | + 3 | 8.I | G 5 |
| 4761 | 281785 | C 5042 | 636 | 18898 | 93313.06 | $+3.5045$ | . 211 | $\begin{array}{llll}28 & 24 & 39.7\end{array}$ | -16.073 | --298 | 10.9 | - | 7 | $7 \cdot 9$ | G o |
| 4762 | 312018 | L 3929 | 634 | 18896-7 | 3316.85 | 5553 | 235 |  |  | 302 | 12.6 | - 12 | - 37 | $8 \cdot 7$ | Fo |
| 4763 | 271790 | C 5044 |  |  | 3320.92 | 4782 | 200 | 26570.0 | 080 | 296 | 12.6 | + 7 | + 7 | 8.8 |  |
| 4764 | 301885 | L 3930 |  |  | $\begin{array}{ll}33 & 27 \cdot 17\end{array}$ | 5379 | 227 | - $3016 \quad 2 \cdot 7$ | 085 | 302 | 12.6 | - 23 | + 8 | 8.8 | $F_{2}$ |
| 4765 | $30 \quad 1887$ | L 3931 | 642 | 18908-9 | 3311.03 | 5432 | 229 | 3033 31-1 | 089 | 302 | 10.4 | - 8 | - 14 | 8.02 | Go |
| 4766 | 301886 | L 3932 |  |  | $93332 \cdot 17$ | $+3.5455$ | 0230 | 3041000 | -16.090 | --302 | 13.2 | - II | + | $8 \cdot 9$ |  |
| 4767 | 291924 | C 5045 |  |  | 3333.02 | 5209 | 220 | 292138.8 | 091 | 299 | 13.2 | - 1 | - 19 | $9 \cdot 5$ |  |
| 4768 | 301888 | L 3933 | 646 |  | 33 41.25 | 5450 | 230 | 304053.8 | 098 | 302 | 11.2 | + 15 | + 2 | $8 \cdot 9$ |  |
| 4769 | 252130 | ${ }_{\text {C }} 5047$ |  |  | $3346 \cdot 76$ | 4395 | 182 | $2445 \quad 22 \cdot 7$ | 103 | 291 | 10.8 | + 3 | - 14 | $9 \cdot 2$ |  |
| 4770 | 261987 | C 5048 |  |  | 3348.33 | 4666 | 194 | $262041 \cdot 4$ | 104 | 295 | 10.0 | - 13 | - 24 | 8.9 |  |
| 4771 | 261989 | C 5050 | 658 | 18927 | $934 \quad 2 \cdot 46$ | $+3.4563$ | -.0190 |  | $-16.116$ | --292 | $8 \cdot 4$ | - | + $\quad 29$ | 7-19 | Fo |
| $4772$ | 291926 | C 5051 | 674 |  | 3449.05 | 5124 | 218 | 29438.6 | 157 | 296 | 9.4 | - | - 28 | $9 \cdot 5$ | K |
| 4773 | 301893 | L 3935 |  |  | $\begin{array}{lll}35 & 0.03\end{array}$ | 5361 | 228 | $\begin{array}{llllllll}30 & 23 & 53\end{array}$ | 166 | 299 | 10.8 | - 38 | + 6 | $9 \cdot 5$ |  |
| 4774 | 281793 | C 5053 |  |  | $\begin{array}{lll}35 & 5 \cdot 17\end{array}$ | 5039 | 214 |  | 170 <br> 178 | 296 | 11.4 | - 57 | - 50 | $9 \cdot 5$ | G |
| 4775 | 252134 | C 5054 | 679 |  | 3514.40 | 4477 | 188 | $25 \quad 2546 \cdot 5$ | 178 | 291 | 11.2 | 10 | - 5 | 8.1 | Go |
| 4776 | 261990 | C 5055 | 685 | 18970 | 93523.39 | $+3.4641$ | . 0195 | $262446 \cdot 2$ | -16.186 | -.291 | $0 \cdot 2$ | - 26 | - 68 | $7 \cdot 9$ | K o |
| 4777 | 312020 | L 3939 |  |  | $3532 \cdot 77$ | 5486 | 236 | $\begin{array}{lll}31 & 9 & 0.6\end{array}$ | 194 | 298 | 12.6 | - 8 | + 16 $+\quad 10$ | $9 \cdot 5$ | G |
| 4778 | 242115 | B 3817 |  |  | 3533.68 | 4316 | 180 | $243045 \cdot 7$ | 195 | 288 | 12.4 | + II | - 39 | $9 \cdot 2$ | K o |
| 4779 | 281795 | C 5056 | 689 |  | 3542.06 | 4947 | 211 | $\begin{array}{lllllll}28 & 12 & 58.9\end{array}$ | 202 | 294 | 12.6 | - | - 31 | $9 \cdot 5$ |  |
| 4780 | 271794 | C 5057 |  |  | $3549 \cdot 73$ | 4738 | 200 | $\begin{array}{llll}27 & 2 & 22.8\end{array}$ | 209 | 291 | 10.7 | $\bigcirc$ | 21 | $8 \cdot 9$ |  |
| $47^{81}$ | 271795 | C 5058 |  |  | $93557 \cdot 51$ | $+3.4817$ | . 0204 | 27.3043 .2 | $-16.215$ | -. 292 | 11.8 | - 21 | - 1 | 8.9 | G 5 |
| 4782 | 312026 | L 3943 | 696 | 18987-8 | $36 \quad 15.87$ | 5566 | 242 | $\begin{array}{lllllllllllll}31 & 41 & 13.9\end{array}$ | 231 | 297 | 13.4 | + 11 | - 33 | 6.08 | K 5 |
| 4783 | 281797 | C 5059 |  | 18990 | $36 \quad 22 \cdot 57$ | 4956 | 211 | $28 \quad 2155.4$ | 237 | 291 | 11.0 | + 18 | - 16 | $8 \cdot 7$ | G0 |
| 4784 | 261991 | C 5062 | 708 | 18999-9000 | 3627.97 | 4600 | 195 | 261922.6 | 241 | 290 | 11.6 | - 9* | - $47^{*}$ | $6 \cdot 43$ | K |
| 4785 | 291933 | C 5061 | 702 |  | 3628.60 | 5117 | 219 | $291649 \cdot 1$ | 242 | 293 | 10.6 | + 19 | - 26 | 8.31 | G 5 |
| 4786 | 291936 | C 5064 | 719 | 19006 | 93652.43 | $+3.5075$ | -.0218 | $\begin{array}{llll}29 & 6 & 8.5\end{array}$ | -16.262 | -. 292 | 10.4 | - 39 | - 32 | 8.6 | Fo |
| 4787 | 312031 | L 3949 | 725 |  | $37 \quad 6 \cdot 35$ | 5543 | 242 | $314126 \cdot 3$ | 274 | 296 | 13.3 | 5 | - 27 | 9.1 |  |
| 4788 | 261993 | C 5065 | 732 | 19026 | 37 11.26 | 4529 | 192 | 26 - $2 \cdot 0$ | 278 | 287 | 10.0 | 26 | - 5 | $7 \cdot 8$ | K |
| 4789 | 301898 | L 3952 | 739 | 19031-2 | $37 \quad 27 \cdot 86$ | 5315 | 231 | 303119.5 | 292 | 293 | 9.6 | 32 | - 3 | $6 \cdot 68$ | A 5 |
| 4790 | 242121 | C 5067 |  | 19040 | $3742 \cdot 70$ | 4188 | 178 | ${ }^{2} 4046.8$ | 305 | 283 | 13.0 | - | + 13 | 8.7 | G 5 |
| 4791 | 321923 |  |  |  |  |  |  |  | -16.319 |  |  |  |  |  |  |
| 4792 | $27 \quad 1800$ | C 5068 | 750 | 19046 | $38 \quad 2 \cdot 36$ | - 4783 | 206 | $27 \quad 3631 \cdot 9$ | 322 | 288 | 12.6 | + 14 | - 16 | 8.7 | Ko |
| 4793 | 242122 | C 5069 |  |  | $\begin{array}{lll}38 & 8.60\end{array}$ | 4286 | 183 | $24408 \cdot 7$ | 327 | 283 | 13.4 | + 30 | - 18 | $9 \cdot 2$ |  |
| 4794 | 242123 | B 3829 |  | 19057 | $\begin{array}{llll}38 & 13.34\end{array}$ | 4207 | 179 | $241140 \cdot 7$ | 331 | 281 | 10.4 | - 18 | - 29 | 8.9 | K 2 |
| 4795 | 252141 | C 5070 | 754 | 19058 | $38 \quad 14.50$ | 4341 | 184 | $\begin{array}{llll}25 & 1 & 2.8\end{array}$ | 332 | 285 | $9 \cdot 2$ | 4. | - 69 | $8 \cdot 8$ | F 8 |
| 4796 | 252142 | C 5071 | 756 | 19060 | 93816.29 | $+3.4338$ | -.0185 | $245956 \cdot 6$ | -16.333 | $-283$ | $9 \cdot 4$ | - 27 | - 44 | 9.1 |  |
| 4797 | 301901 | L 3958 | 752-3 | 19051-2-3 | 38 38 16.85 | 5268 | 230 |  | 334 | 291 |  | - 21 * | - 109* | $5 \cdot 73$ | A 2 |
| 4798 | 281800 | C 5072 |  |  | $38 \quad 39 \cdot 50$ | 4856 | 210 | $28 \quad 731.0$ | 353 | 287 | 10.4 | + 21 | - 37 | $9 \cdot 5$ |  |
| 4799 | 291938 |  |  |  | 38 <br> 8 <br> $51 \cdot 17$ | 5116 | 222 | 293750.4 | 363. | 289 | 13.2 |  |  | $10 \cdot 0$ |  |
| 4800 | 252144 | C 5074 |  |  | $3855 \cdot 70$ | 4441 | 190 | 254243.8 | 367 | 283 | 10.7 | - 57 | - 52 | $9 \cdot 1$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession | Sec. Var. | Dec. 19100. | Precession. | Sec. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{array}{\|c} \text { Spectral } \\ \text { Type. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. $8.0001 \text {. }$ | $\begin{aligned} & \text { Dec. } \\ & \text { neor. } \end{aligned}$ |  |  |
|  | ${ }^{\circ}$ |  |  |  | h m | s | 8 | - , " | " | " |  |  |  |  |  |
| 4801 | 261996 | C 5076 |  |  | 9391.71 | +3.4447 | -.0190 | $25463 \cdot 0$ | -16.372 | $-283$ | 12.6 | + 24 | - 103 | $9 \cdot 5$ | G 0 |
| 4802 | 291939 | C 5075 | 771 |  | $\begin{array}{lll}39 & \text { I } 87\end{array}$ | 5037 | 219 | $291246 \cdot 7$ | 372 | 288 | 12.6 | - 19 | - | $8 \cdot 7$ | K o |
| 4803 | 252146 | C 5077 |  |  | 3913.66 | 4424 | 189 | 253914.8 | 382 | 282 | 13.3 | - 35 | - $\quad 30$ | $9 \cdot 5$ |  |
| 4804 | 291942 | C 5079 | 778 | 19091 | 3938.87 | 5005 | 218 | $29720 \cdot 0$ | 403 | 287 | 10.9 | - I | - 27 | $7 \cdot 68$ | A 5 |
| 4805 | 281802 | C 5081 |  | 19102-3 | 3958.05 | 4828 | 210 | $28 \quad 9 \begin{array}{ll}21 \cdot 5\end{array}$ | 419 | 284 | 11.0 | - 26 | - 50 | $7 \cdot 40$ | Fo |
| 4806 | 271806 | C 5083 | 794 | 19121 | $94042 \cdot 91$ | $+3 \cdot 4691$ | -.0205 | $272740 \cdot 6$ | -16.457 | -. 282 | $9 \cdot 9$ | + 36 | - 22 | $7 \cdot 9$ | K o |
| 4807 | 242129 | B 3836 | 797 | 19123-4-6-7-9 | $4044 \cdot 70$ | 4152 | 179 | 24 II $20 \cdot 7$ | 458 | 277 | 11.4 | - 30* | - 24* | 3.12 | G op |
| $4808$ | $\begin{array}{ll}31 & 2040 \\ 28 \\ 180\end{array}$ | L 3962 | 795 |  | $40 \quad 52 \cdot 74$ | 5287 | 234 | $305346 \cdot 1$ | 465 | 287 | 10.8 | - 63 | - 37 | 9.5 |  |
| $\mid 4809$ | 281804 | C 5084 |  |  | 4 I I. 63 | 4805 | 21 | 28 10 52.2 | 472 | 282 | 10.6 | 40 | + $+\quad 4$ | $9 \cdot 1$ | F 8 |
| 4810 | $24^{2131}$ | B 3842 |  |  | $4^{11} 18 \cdot 17$ | 4168 | 180 | 242134.5 | 486 | 276 | 10.6 | 11 | - 25 | $9 \cdot 5$ |  |
| 48 II | 312044 | L 3966 | 808 |  | $\begin{array}{llll}9 & 41 & 29.67\end{array}$ | $+3.5387$ | -. 0240 | $\begin{array}{lll}31 & 32 & 51.3\end{array}$ | -16.495 | $-285$ | 10.8 | + 54 | - 67 | $9 \cdot 1$ | K o |
| 4812 | 271808 | C 5086 | 815 | 19147 | 4133.72 | 4649 | 204 | $27 \quad 2023.6$ | 499 | 280 | 11.4 | + 2 | - 15 | $8 \cdot 7$ | A 2 |
| 4813 | 271809 | C 5087 | 817 | 19165 | $41{ }^{1} 4^{2 \cdot 78}$ | 4685 | 206 | 273429.0 | 506 | 28 r | 10.4 | + 6 | - 24 | $8 \cdot 6$ | Go |
| 4814 | 242133 | B 3844 | 827 | 19172-3 | 42 16.II | 4100 | 177 | $\begin{array}{lllll}24 & 3 & 50.9\end{array}$ | 534 | 273 | 10.0 | - I | - 29 | $6 \cdot 72$ | K |
| 4815 | 301911 | L 3971 | 828 | 19171 | $4^{2} 26 \cdot 15$ | 5085 | 226 | 30. $030 \cdot 9$ | 542 | 283 | II.2 | 10 | 3 | $8 \cdot 1$ | K 。 |
| 4816 | 271811 | C 5090 | 837 |  | $94^{2} 46 \cdot 67$ | $+3.4651$ | -.0205 | 273149.9 | -16.559 | -279 | 10.4 |  | $-4^{2}$ | 9.5 |  |
| 4817 | 312047 | L 3973 | 834 |  | $4248 \cdot 17$ | 5374 | 242 |  | 560 | 283 | $9 \cdot 6$ | + 16 | + 9 | $9 \cdot 1$ |  |
| 4818 | $\begin{array}{lll}29 & 1948 \\ 25 & 215\end{array}$ | C 5092 | 841 852 | 19179 | $43 \quad 7 \cdot 11$ | 488 I | 218 |  | 576 | 279 | 8.4 | + 14 | - 13 | $7 \cdot 7$ | A 0 |
| 4819 | 252155 | C 5095 | 852 | 19216 | $43 \quad 35 \cdot 49$ | 4213 | 185 | $245754 \cdot 5$ | 599 | 273 | $9 \cdot 0$ | - 24 | - 4 | $8 \cdot 1$ | A 0 |
| 4820 | 312051 | L 3977 |  |  | $4342 \cdot 73$ | 5188 | $23+$ | 3047 57.1 | 605 | 281 | 10.6 | 11 | + 1 | 8.8 |  |
| 482 I | 301917 | C 5096 | 853 |  | $94345 \cdot 19$ | +3.5029 | 0225 | $295356 \cdot 7$ | -16.607 | -. 285 | . 4 | - 8 | $\bigcirc$ | 8.91 | K o |
| 4822 | 301918 | L 3979 |  |  | $4350 \cdot 40$ | 5092 | 229 | $\begin{array}{lllllllllll}30 & 16 & 25.5\end{array}$ | 611 | 281 | - | 15 | - 16 | $9 \cdot 5$ |  |
| 4823 | 291950 |  |  |  | $4355 \cdot 80$ | 4984 | 224 | 294015.8 | 616 | 278 | .2 |  |  | $9 \cdot 7$ |  |
| 4824 | 252157 | C 5098 | 865 | 19224 |  | 4186 | 184 | 245145.2 | 623 | 272 | 10.8 | - 15 | - 12 | $8 \cdot 56$ |  |
| 4825 | 252158 | C5100 |  |  | 4413.08 | 4305 | 190 | 253743.4 | 629 | 272 | 12.9 | 7 | + 2 | $9 \cdot 2$ | K o |
| 4826 | 252159 | $\mathrm{C}_{5101}$ | 870-1 | 19236 | 94423.01 | $+3.4173$ | --0183 | 244911.4 | $-16.638$ | - 271 | $9 \cdot 2$ | 21 | - 30 | $8 \cdot 56$ | K 。 |
| 4827 | 252160 | C5103 |  |  | 4429.47 | 4218 | 186 | $25 \quad 715.8$ | 643 | 271 | 12.8 | - 10 | + 15 | 9.5 |  |
| $4828$ | $\begin{array}{lll}31 & 2053 \\ 26 & 2009\end{array}$ | L 398 I | 869 | 19230 | 4429.62 | 5289 | 240 | $\begin{array}{lllll}31 & 29 & 50.1\end{array}$ | 643 | 279 | $9 \cdot 2$ | + $\quad 38$ | - $\quad 38$ | $6 \cdot 87$ | A 5 |
| $\left\|\begin{array}{l} 4829 \\ 4830 \end{array}\right\|$ | 262009 | C 5104 |  |  | $4430 \cdot 79$ | 436 x | 193 | -26-1 17.5 | 644 | 272 | 12.3 |  |  | $9 \cdot 5$ |  |
| 4830 | 262013 | C 5107 |  |  | 4450.00 | 4323 | 192 | $254943 \cdot 2$ | 660 | 271 | $9 \cdot 2$ | + 19 | - 21 | $8 \cdot 9$ | K 2 |
| 4831 | 271814 | C 5108 |  | 19253 | $94457 \cdot 43$ | $+3.4551$ | -.0203 | 271524.5 | -16.666 | $-272$ | 10.6 | 0 | - 33 | $8 \cdot 9$ | K |
| 4832 | $\begin{array}{llll}25 & 2163 \\ 26 & 2014\end{array}$ | ${ }_{\text {C }} 5109$ | 886 | 19258 | $\begin{array}{llll}45 & 3 & 74\end{array}$ | 4183 | 185 | $245850 \cdot 4$ | 671 | 270 | 9.4 | 25 | + 33 | $6 \cdot 95$ | F 5 |
| 4833. | $\begin{array}{lll}26 & 2014 \\ 26 & 2015\end{array}$ | ${ }_{\text {C }} 5110$ |  |  | $4510 \cdot 31$ | 4403 | 196 | $262248 \cdot 4$ | 676 | 271 | 12.6 | - 27 | 10 | $9 \cdot 1$ |  |
| 4834 | 262015 | C 5111 |  |  | $45 \quad 20 \cdot 10$ | $44^{13}$ | 197 | $26 \quad 2742 \cdot 5$ | 684 | 270 | 14.2 | + 20 | + 19 | 9.5 |  |
| 4835 | 321941 | L 3983 | 892 | 19263 | $45 \quad 28.00$ | 5317 | 243 | 314847 - | 690 | 278 | $1{ }^{1}$ | 4 | - | $7 \cdot 28$ | Ma |
| 4836 | 24.2139 | B 3856 |  |  | 94530.63 | $+3.4031$ | -.0178 | $24 \quad 433 \cdot \mathrm{I}$ | -16.692 | -. 269 | 12.5 | - 1 | - 16 | 9.5 | K o |
| 4837 | $24^{21}{ }^{2}{ }^{2}$ | B 3858 |  |  | $45 \quad 52 \cdot 74$ | 4055 | 179 | $241650 \cdot 6$ | 710 | 268 | 10.4 | 22 | - 25 | 8.8 | G 5 |
| 4838 | 301922 | L 3984 | 902 |  | 46 I. 45 | 5090 | 232 | 303717.2 | 717 | 276 | 11.9 |  | - 20 | $9 \cdot 1$ | G 5 |
| 4839 | $\begin{array}{lll}29 & 1954 \\ 25 & 2164\end{array}$ | ${ }_{\text {C }}$ C 5112 |  |  | $\begin{array}{ll}46 & 1.73\end{array}$ | 4876 | 222 | $\begin{array}{lllllllllll}29 & 22 & 19.8\end{array}$ | 717 | 273 | 13.4 | 18 | + 22 | $9 \cdot 5$ | F 8 |
| 4840 | 252164 | C 5113 |  |  | $46 \quad 7 \cdot 81$ | 4245 | 189 | $253152 \cdot 1$ | 722 | 269 | 12.9 | - 15 | - 28 | $9 \cdot 5$ |  |
| 4841 | 25.2165 | C 5114 |  |  | 94614.35 | +3.4219 | -.0188 | $\begin{array}{llll}25 & 22 & 47 \cdot 9\end{array}$ | $-16.728$ | -. 267 | 11.7 | + 2 | - 10 | $9 \cdot 1$ | K |
| 4842 | 281814 | C 5115 |  |  | $46 \quad 19.40$ | 4638 | 209 | $275941 \cdot 7$ | 732 | 271 | 11.2 | + 17 | - | $8 \cdot 7$ | K o |
| 4843 | $\begin{array}{ccc}32 & 1943 \\ 25 & 2166\end{array}$ | L 3985 | 907 | 19285 | $46 \quad 23 \cdot 50$ | 5297 | 244 | 31515129.4 | 735 | 276 | 14.3 | + 1 | - 32 | $8 \cdot 5$ |  |
| 4844 | 252166 | C 5116 |  |  | $46 \quad 23 \cdot 81$ | 4195 | 187 | $\begin{array}{llll}25 & 15 & 2 \cdot 5\end{array}$ | 735 | 267 | 13.5 | 20 | - 57 | 9.5 |  |
| 4845 | 252168 | C 5117 |  |  | $4631 \times 59$ | 4173 | 186 | $25 \quad 7 \quad 55 \cdot 0$ | 741 | 267 | 11.0 | 41 | + 81 | 9.5 |  |
| 4846 | 262017 | C 5118 | 913 |  | $94634 \cdot 63$ | +3.4426 | -.0199 | $\begin{array}{llll}26 & 44 & 5 \cdot 7\end{array}$ | -16.744 | -. 269 | 12.4 | - 30 | - 2 | 8.8 | Go |
| 4847 | 301923 | L 3987 |  |  | $4634 \cdot 65$ | 5059 | 231 |  | 744 | 274 | 13.7 | - 47 | - 25 | $9 \cdot 5$ |  |
| 4848 | 301924 | L 3988 | 909-10 |  | $4635 \cdot 12$ | 5097 | 233 | 3045 3.1 | 744 | 274 | 12.6 | - 19 | + 43 | 8.6 | F 5 |
| 4849 | $25 \quad 2169$ | ${ }_{C} 5119$ | 923 | 19303 | $4646 \cdot 61$ | 4119 | 183 | 2449 18.0 | 754 | 267 | 10.0 | + 11* | - 193* | $5 \cdot 33$ | A 2 |
| 4850 | 291956 | C5120 |  |  | $4653 \cdot 21$ | 4906 | 225 | 294118.0 | 759 | 271 | 11.4 | + 30 | - 68 | 9.01 | F 8 |


| No. | B.D. | A.G.C. | W.B. (2) | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Procession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. $8.0001 .$ | $\begin{aligned} & \text { Dec. } \\ & \text { n.०ol } \end{aligned}$ |  |  |
|  |  |  |  |  | h m | s | s | - , | " | " |  |  |  |  |  |
| 4851 | 271818 | C 512 I | 928 |  | 94658.42 | $+3.4512$ | -. 0204 | $\begin{array}{lllllll}27 & 19 & 42 \cdot 9\end{array}$ | $-16.763$ | --269 | $1 \mathrm{I} \cdot 2$ | + .3 | 10 | 9.1 |  |
| 4852 | 312059 | ${ }^{\text {L }} 3991$ | $930-1$ |  | $47 \quad 5 \cdot 60$ | 5092 | 234 | $\begin{array}{llll}30 & 4^{8} & 32 \cdot 8\end{array}$ | 769 | 274 | 12.9 | - 97 | - 29 | 8.6 | G 0 |
| 4853 | 252170 | ${ }^{\text {C }} 5122$ | 934 |  | $47 \quad 7 \cdot 84$ | 4222 | 189 | $253151 \cdot 2$ | 770 | 267 | $11 \cdot 3$ | - 36 | - 21 | $7 \cdot 8$ | K 2 |
| 4854 | 291958 | ${ }^{C} 5123$ |  |  | $4710 \cdot 32$ | 4780 | 218 | $28859 \quad 24 \cdot 1$ | 772 | 271 | 13.0 | - 38 | - $\quad 24$ | $9 \cdot 2$ |  |
| 4855 | 271819 | C5124 | 935 |  | $47^{\circ} 15 \cdot 68$ | 4518 | 204 | $272430 \cdot 0$ | 777 | 268 | 12.8 | + 96 | $-175$ | 8.I | K o |
| 4856 | 281815 | C 5126 |  | 19313-4 | 94717.71 | $+3 \cdot 4645$ | 0211 | 28 II 48.9 | $-16 \cdot 778$ | --270 | 10.6 | - 3 | - 22 | $7 \cdot 70$ | K |
| 4857 | 291959 | ${ }^{\text {C }} 5128$ |  |  | 4730.02 | 4845 | 223 | $292537 \cdot 4$ | 788 | 270 | 12.3 | + 9 | - 54 | 9.5 | G 0 |
| 4858 | 29 1961 | C 5129 |  |  | $4735 \cdot 83$ | 4870 | 224 | $293532 \cdot 0$ | 793 | 270 | 13.2 | - 18 | - 21 | 9.5 |  |
| 4859 | 262019 | C 5130 |  | 19322-3 | 4738.86 | 4352 | 196 | $26.25 \quad 52 \cdot 4$ | 795 | 266 | II 1 | - 163* | - 63* | 4.10 | K |
| 4860 | 301925 | L 4001 | 947 |  | $48 \quad 3.70$ | 5045 | 233 | $30^{\circ} 4^{2} \quad 2 \cdot 9$ | 815 | 271 | $12 \cdot 9$ | + 23 | - 17 | 9.5 |  |
| 486 I | 291963 | ${ }_{\text {C }} 5131$ | 954 |  | 94826.68 | $+3.4851$ | 0224 | 2937 9 8 | -16.833 | --269 | 13.2 | 35 | - $4^{6}$ | 9.26 | G 0 |
| 4862 | $26 \quad 2021$ | ${ }_{\text {C }} 5132$ | 958 | 19349 | $48 \quad 29.05$ | ${ }^{2} 278$ | 194 |  | 835 | 265 | 10.9 | + $3^{8}$ | - $25^{\circ}$ | 7.04 | K 2 |
| 4863 | 262022 | ${ }_{\text {C }} 5133$ |  |  | 48 $34 \cdot 87$ | 4342 | 197 | $26 \quad 3058 \cdot 7$ | 840 | 265 | II. 8 | 21 | $+30$ | $8 \cdot 8$ | F 8 |
| 4864 | 262023 | C 5134 | 963 |  | $48 \quad 43 \cdot 76$ | 4370 | 198 | $264258 \cdot 9$ | 847 | 265 | 13.0 | 22 | - | $9 \cdot 2$ |  |
| 4865 | 281816 | C 5136 | 966 | 19354 | $48 \quad 48 \cdot 87$ | 4593 | 210 | $28 \quad 7$ II.6 | 851 | 266 | $9 \cdot 7$ | 21 | - 13 | $7 \cdot 57$ | A 0 |
| 4866 | 291964 | C 5135 | 964 |  | $94849 \cdot 82$ | $+3.4843$ | -. 0224 | $2938 \quad 16.8$ | $-16.851$ | --269 | 10.8 | + 28 | + | 9.08 | F 5 |
| 4867 | 271821 | C 5137 | 967 |  | 4851.05 | 4527 | 207 | $27 \quad 4256 \cdot 2$ | 852 | 265 | 11.6 | 13 | - 18 | 9.1 | K 0 |
| 4868 | 291966 | C 5138 |  |  | $4^{8} 54 \cdot 11$ | 4719 | 217 | $\begin{array}{llll}28 & 54 & 9.4\end{array}$ | 855 | 267 | 12.6 | - 34 | 21 | $9 \cdot 5$ |  |
| 4869 | 312066 | L 4007 | 975 | 19366-7 | 49 9 | 5084 | 237 | 31.3049 .8 | 867 | 270 | 10.8 |  | - $\quad 27$ | $8 \cdot 1$ | F 5 |
| 4870 | 291969 | C5140 | 983 |  | $4925 \cdot 41$ | 4740 | 219 | $29 \quad 646 \cdot 7$ | 880 | 266 | $10 \cdot 2$ | - 53 | - | $8 \cdot 1$ | F 5 |
| 4871 | 312067 | Li 4008 | 982 | 19372 | 94929.58 | $+3.5128$ | $-.0240$ | $312547 \cdot 7$ | $-16.883$ | -. 269 | II.2 | 8 | - 14 |  |  |
| 4872 | 281818 | C 5141 | 987 |  | 4933.99 | 4518 | 207 | $274640 \cdot 7$ | 886 | 264 | , 11.5 | + 17 | + 9 | $8 \cdot 9$ | K o |
| 4873 | 291970 | C 5142 |  |  | 49 42.56 | 4787 | 222 | $292649 \cdot 6$ | 893 | 266 | 11.4 | - $4^{2}$ | + 2 | $9 \cdot 2$ |  |
| 4874 | 321952 | $\mathrm{L}_{4} 4009$ |  |  | 49 53.12 | 5185 | 244 | 3 I $4922 \cdot 5$ | 901 | 269 | 9.8 | + 12 | + | $8 \cdot 7$ |  |
| 4875 | 252178 | C 5143 | 991 | 19386 | 49 59.82 | 4083 | 185 | $\begin{array}{llll}25 & 3 & 57 \cdot 3\end{array}$ | 907 | 260 | $9 \cdot 0$ | + 19 | -143 | 7.16 | F 8 |
| 4876 | 312072 | L 40, ${ }^{0}$ | 1002 |  | 95028.62 | $+3.5131$ | -. 0242 | 313659.0 | -16.929 | -. 268 | 10.2 | + 13 | 22 | 8.8 | K 5 |
| 4877 | 252180 | C 5144 |  |  | $5035 \cdot 31$ | 4158 | 190 | $2538 \quad 31 \cdot 6$ | 934 | 260 | 10.9 | - 50 | - 2 | 8.8 | F 8 |
| 4878 | 271824 | C 5145 | 1006 |  | $5042 \cdot 71$ | 4409 | 203 | $27 \quad 1640 \cdot 4$ | 940 | 261 | 10.8 | + 27 | - 24 | $8 \cdot 1$ | K |
| 4879 | 301933 | $\mathrm{L}_{4} \mathrm{COL}_{3}$ | 1013 | 19406 | 5055.71 | 4880 | 229 | $301256 \cdot 2$ | 950 | 263 | 11.2 | + 5 | + 6 | $8 \cdot 1$ | F 8 |
| 4880 | 262026 | C 5147 | 1015-6 | 19410 | 5058.04 | 4270 | 197 | $26 \quad 2534 \cdot 6$ | 952 | 259 | 10.2 | + | + | 8.1 | K |
| 4881 | 252182 | ${ }_{C} 5148$ |  |  | $9 \begin{array}{llll}91 & 13.89\end{array}$ | $+3.4057$ | 0186 | $25 \quad 454 \cdot 7$ | -16.964 | -. 257 | 12.0 | 12 | - 17 | 8.8 |  |
| 4882 | 252183 | C 5149 |  |  | 5116.00 | 4067 | 186 | $25 \quad 9 \quad 6 \cdot 6$ | 966 | 257 | 12.0 | + 2 | - 39 | $8 \cdot 8$ |  |
| 4883 | $25 \quad 2184$ | C 5150 | 1027 | 19429 | 5138.68 | 4109 | 189 | $25 \quad 28 \quad 55 \cdot 3$ | 983 | 257 | 11.4 | - 1 | - 35 | $8 \cdot 7$ | G 0 |
| 4884 | 281822 | ${ }^{\text {C }} 5151$ | 1029-30 | 19431 | 5145.09 | 4581 | 213 | $283131 \cdot 1$ | 988 | 262 | $10 \cdot 4$ | + 20 | - 60 | $8 \cdot 1$ | F 8 |
| 4885 | 291973 | C5152 |  |  | $5145 \cdot 67$ | 4737 | 222 | 292931.9 | 989 | 262 | 11.3 | + 32 | - | $9 \cdot 2$ |  |
| 4886 | 252185 | ${ }_{C} 5154$ | 1032 | 19435 | 95146.73 | $+3.4094$ | -.0188 | $25 \quad 2419.0$ | -16.990 | --257 | 11.6 | + 7 | - 33 | 8.6 | K o |
| 4887 | 291974 | C 5153 |  |  | $5146 \cdot 80$ | 4636 | 217 | $\begin{array}{lllll}28 & 52 & 19.8\end{array}$ | 990 | 262 | 12.4 | + 12 | - 26 | 9.5 |  |
| 4888 | $28 \quad 1823$ | C 5155 |  |  | $\begin{array}{lll}52 & 0.13\end{array}$ | 4491 | 209 | 28 - 13.9 | 17.000 | 259 | 12.6 | 30 | - | $8 \cdot 9$ | K |
| 4889 | 242156 | B 3877 | 1041-2 |  | $\begin{array}{lll}52 & 2.37\end{array}$ | 3944 | 181 | $24 \quad 2644 \cdot 9$ | 002 | 255 | 9.4 | - 3 | - 23 | $8 \cdot 7$ | Q 5 |
| 4890 | 291975 | C5156 | 1038 |  | $\begin{array}{lll}52 & 3.89\end{array}$ | 4647 | 218 | $28 \quad 59$ 2I.0 | 003 | 260 | 10.8 | 12 | + 8 | $7 \cdot 42$ | Ko |
| 4891 | 291976 | C 5157 |  |  | 95212.30 | $+3.4731$ | -.0223 | $293157 \cdot 8$ | -17.009 | -. 260 | 13.0 | $\bigcirc$ | + 18 | $9 \cdot 5$ |  |
| 4892 | 252186 | C 5159 |  | 19457 | 5215.04 | 4055 | 187 | $\begin{array}{lllll}25 & 13 & 28 \cdot 3\end{array}$ | 012 | 255 | 11.8 | 77 | - 62 | 8.1 | K |
| 4893 4894 | $\begin{array}{lll}29 & 1977 \\ 27 & 1829\end{array}$ | C 5158 | 1044 |  | $\begin{array}{lll}52 & 15.92 \\ 52 & 28.38\end{array}$ | 4741 | 223 | $\begin{array}{llll}29 & 36 & 2 \cdot 3\end{array}$ | 012 | 260 | 11.6 | 12 | - 3 | 8.21 | G 5 |
| $4 \begin{aligned} & 4894 \\ & 4895\end{aligned}$ | $\begin{array}{ll}27 & 1829 \\ 30 & 1936\end{array}$ |  |  |  | $\begin{array}{lll}52 & 28 \cdot 38 \\ 52 & 34.82\end{array}$ | 4385 | 204 | $\begin{array}{llll}27 & 24 & 13.2\end{array}$ | 022 | 257 | 13.8 |  |  | $9 \cdot 7$ |  |
| 4895 | 301936 | C 5161 |  |  | $5234 \cdot 82$ | 4786 | 227 | 29558.6 | 027 | 260 | 12.0 | - 1 | - 13 | $9 \cdot 5$ |  |
| 4896 | 262029 | ${ }_{\text {C }} 5162$ |  |  | 95237.02 | +3.4179 | --0194 | $26 \quad 5 \quad 59.2$ | -17.028 | -. 256 |  |  | $\bigcirc$ | $10 \cdot 0$ |  |
| 4897 | $25 \quad 2189$ | C 5163 |  | 19474 | $5242 \cdot 24$ | 4018 | 185 | $\begin{array}{lllllllllllllll}25 & 2 & 42 \cdot 5\end{array}$ | 032 | 255 | 11.0 | + 25 | - 71 | $8 \cdot 5$ | K |
| 4898 | 242157 | B 3886 |  |  | $5252 \cdot 50$ | 3890 | 179 | $24 \quad 1242 \cdot 3$ | 040 | 252 | 11-6,10.8 | - 14 | - IO1 | $9 \cdot 5$ | G 5 |
| 4899 | 312075 | L 4022 | 1062 | 1948 I | $53 \quad 4 \cdot 91$ | 4939 | 236 | $305647 \cdot 5$ | 050 | 261 | $9 \cdot 5$ | - | - 14 | $8 \cdot 1$ | Ko |
| 4900 | 301938 | L 4023 |  |  | $53 \quad 6.49$ | 4842 | 230 | $3021 \quad 20 \cdot 2$ | 051 | 261 | 12.4 | + | - 24 | $8 \cdot 7$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | SpectralType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { 8.0001. } \end{aligned}$ | Dec. ". 001. |  |  |
|  | 。 |  |  |  | h m | s | s | - , " |  | " |  |  |  |  |  |
| 4901 | 291979 | C 5165 | - 1065 |  | 95310.48 | $+3.4620$ | -. 0218 | $29 \quad 0 \quad 42.2$ | -17.054 | -. 257 | 11.7 | + 41 | - 19 | 8.8 |  |
| 4902 | 291980 | C 5167 | 1070 |  | 5316.02 | 4603 | 218 | $28 \quad 55 \quad 10.5$ | 058 | 257 | 12.5 | + 32 | - 20 | $9 \cdot 1$ | K 2 |
| 4903 | $28 \quad 1824$ | C 5169 | 1071 | 19488-9 | $\begin{array}{llll}53 & 17.30\end{array}$ | 4487 | 211 | 28 II 20.9 | 059 | 256 | 11 | - 92 | - 32 | $6 \cdot 42$ | Fo |
| 4904 | $30 \quad 1940$ | ${ }_{\text {C }} 5168$ |  |  | $53 \quad 17.54$ | 4771 | 227 | $295751 \cdot 6$ | 060 | 259 | 12.4 | + 4 | - 29 | $8 \cdot 2$ | K |
| 4905 | 252190 | C 5171 |  |  | $53 \quad 50 \cdot 71$ | 3959 | 184 | $244946 \cdot 0$ | 085 | 251 | 9.8 | 22 | - 39 | 9.01 | A 2 |
| 6 | 312078 | L 4030 | 1082 | 19510 | $95354 \cdot \mathrm{II}$ | $+3.4900$ | -.0236 | 3051 IT.2 | $-17.087$ | --259 | $9 \cdot 0$ | 16 | - 73 | $8 \cdot \mathrm{I}$ | K o |
| 4907 | 301943 | L 4031 |  |  | $54 \quad 2.59$ | 4868 | 233 | 3041815 | 094 | 258 | 12.4 | - $\quad 36$ | - 60 | 9-1 |  |
| 4908 | 301944 | L 4033 |  |  | $54 \quad 3.54$ | 4805 | 230 | $301838 \cdot 1$ | 095 | 258 | 13.0 | 15 | - 31 | 9.1 |  |
| 4909 | 301945 | L 4035 |  |  | $\begin{array}{lll}54 & 7 \cdot 76\end{array}$ | 4824 | 231 | $\begin{array}{llllllllll}30 & 26 & 19.8\end{array}$ | 098 | 258 | 13.0 | - 6 | - 24 | $9 \cdot 2$ |  |
| 4910 | 281826 | C 5173 | 1088 |  | $54 \quad 9.06$ | 4427 | 209 | $27 \quad 57 \quad 19.9$ | 099 | 255 | 10.7 | - 26I | - $\quad 57$ | 8.0 | G o |
| 4911 | 262030 | C 5174 |  |  | $95415 \cdot 70$ | $+3.4113$ | -.0191 | $255530 \cdot 0$ | -17.104 | -. 252 | 13.9 | + 33 |  | 8.9 | K o |
| 4912 | 301946 | C 5175 |  | 19516 | 54.24 .99 | 4757 | 228 | $30 \quad 437.0$ | III | 258 | $10 \cdot 0$ | - $77 *$ | - 50* | $5 \cdot 86$ | K o |
| 4913 | 29 1983 | C 5176 | 1093 |  | $54 \quad 29 \cdot 14$ | 4645 | 221 | $29 \begin{array}{lllllllll}29 & 29.8\end{array}$ | 114 | 256 | 12.6 | + 2 | - 27 | $9 \cdot 1$ | A 2 |
| 4914 | 32 1961 | L 4037 | 1092 | 19518 | 54 32.12 | 5055 | 244 | $\begin{array}{llll}31 & 54 \\ 8.0\end{array}$ | 116 | 259 | 14.3 | $+$ | - 30 | 8.5 |  |
| 4915 | 26203 I | C 5177 | 1094 |  | $5432 \cdot 30$ | 4208 | 197 | $\begin{array}{lll}26 & 36 & 2 \cdot 8\end{array}$ | 116 | 253 | 12.4 | - 5 |  | $8 \cdot 5$ | K o |
| 4916 | 30. 1947 | C 5178 |  |  | 95438.03 | $+3.4698$ | -. 0224 | $294455 \cdot 6$ | -17.121 | -. 255 | 12.6 | - 55 | - 28 | 9.01 | G 5 |
| 4917 | 252191 | C 5179 | 1099 | 19529 | $5458 \cdot 37$ | 3956 | 184 | $24595 \cdot 1$ | 136 | 249 | 9.2 | - 188 | - 53 | $7 \cdot 91$ | G 5 |
| 4918 | 28 1827 | C 5180 | $1104-5$ |  | $55 \quad 30 \cdot 64$ | 4492 | 214 | $\begin{array}{lllll}28 & 36 & 32 \cdot 2\end{array}$ | 161 | 253 | $9 \cdot 2$ | - 17 | - 141 | $7 \cdot 9$ | G o |
| 4919 | 301950 | L 4040 |  |  | $5540 \cdot 81$ | 481 I | 233 | $\begin{array}{lllll}30 & 38 & 15.7\end{array}$ | 168 | 255 | $9 \cdot 2$ | - 139 | - 57 | $9 \cdot 2$ |  |
| 4920 | 312082 | L 4043 |  |  | $56 \quad 2 \cdot 24$ | 4903 | 238 | 3 I 1559.1 | 184 | 254 | 10.0 | - 17 | + | 8.8 |  |
| $49^{21}$ | 291986 | C 5182 |  |  | $\begin{array}{llll}9 & 56 & 8.07\end{array}$ | $+3.457 \mathrm{I}$ | 0220 | $\begin{array}{lll}29 & 13 & 0.7\end{array}$ | -17.189 | $-.252$ | $9 \cdot 6$ | + 24 | + 3 | 6.99 | K 2 |
| 4922 | 312083 | L 4044 | 1122 | 19554 | $56 \quad 12.55$ | 4857 | 236 | $\begin{array}{llll}31 & 1 & 6.9\end{array}$ | 192 | 253 | 0.1 | - 53 | + 72 | $7 \cdot 8$ | A 2 |
| 4923 | 291987 | C 5183 | 1128 |  | 56 24.56 | 4529 | 218 | $28 \quad 5956 \cdot 3$ | 201 | 251 | 10.4 |  | + 27 $+\quad 1$ | 8.8 | G 0 |
| 4924 | 291988 | C 5184 | 1130 |  | $56 \quad 29 \cdot 60$ | 4519 | 218 | $28 \quad 57 \quad 15 \cdot 3$ | 205 | 251 | $10 \cdot 0$ | + | + 28 | $8 \cdot 7$ | F 8 |
| 4925 | 242166 | C 5185 |  |  | $5635 \cdot 24$ | 3817 | 178 | 241655.8 | 209 | 246 | $9 \cdot$ | + | 9 | $9 \cdot 7$ |  |
| 4926 | 242167 | B 3909 | 1140-1 | 19566 | $95649 \cdot 35$ | $+3.3831$ | -.0180 | $242452 \cdot 6$ | -17.220 | -. 246 | 8.8 | 12 | 11 | 8.1 | K |
| 4927 | $25 \quad 2195$ | ${ }_{\text {C }} 5189$ |  |  | 5716.06 | 4011 | 190 | 2543 31.9 | 240 | 246 | 9.2 | + 13 | + 15 | 9.1 | K o |
| 4928 | $27 \quad 1839$ | C 5190 |  |  | $5746 \cdot 08$ | 4203 | 201 | $27 \quad 614.3$ | 262 | 246 | $14^{\circ} \mathrm{O}$ | + 33 | - 29 | 10.4 |  |
| 4929 | 26 2037 | C 5192 | ${ }_{11}^{1174}$ |  | $58 \quad 26.44$ | 4050 | 194 | 26 II 0.7 | 292 | 244 | 12.0 | - 4 | - 20 | 10.0 |  |
| 4930 | $28 \quad 1833$ | C 5193 | 1177-80 |  | $58 \quad 35 \cdot 62$ | 4417 | 214 | $28 \quad 40 \quad 2 \cdot 5$ | 298 | 247 | 8.8 | - 17 | $+\quad 18$ | $9 \cdot 5$ |  |
| 4931 | $32 \begin{array}{lll}32 & 1972\end{array}$ | $\mathrm{L}_{4} 4053$ | 1182-3 | 19615 | $95843 \cdot 65$ | +3.4927 | -. 0244 | 3155150 | -17.304 | -. 251 | $8 \cdot 2$ | - 15 | 12 | $8 \cdot 5$ | K |
| 4932 | $28 \quad 1834$ | C 5194 |  |  | $58 \quad 57 \cdot 52$ | 4289 | 208 | 2753 4.1 | 315 | 245 | $14^{-2}$ | + 12 | - $\quad 27$ | 10.9 |  |
| 4933 | $25 \quad 2197$ | C 5196 |  |  | $59 \quad 9 \cdot 80$ | 3955 | 189 | $253937 \cdot 5$ | 324 | 242 | $9 \cdot 2$ | + 17 | - 15 | 9.1 |  |
| 4934 | $25 \quad 2198$ | C 5199 | 1193 |  | 5924.91 | 3950 | 189 | 2540 1.8 | 335 | 240 | 8.8 | - 39 | - 29 | 8.5 | K 2 |
| 4935 | $28 \quad 1835$ | C 5198 | 1192 |  | $5925 \cdot 37$ | 4336 | 21 | $\begin{array}{llll}28 & 17 & 0.4\end{array}$ | 335 | 244 | $8 \cdot 9$ | + 12 | + 9 | $7 \cdot 90$ | A 5 |
| 4936 | 301956 | L 4057 | 1199 | 19655 | 9. 5954.92 | $+3.4614$ | -. 0228 | $3011110 \cdot 3$ | $-17.357$ | $-247$ | 8.8 | + 3 | + | $8 \cdot{ }^{1}$ | F 5 |
| 4937 | $25 \quad 2199$ | ${ }_{\text {C }} 5201$ | 1213 |  | 10.019 .74 | 3855 | 185 | $\begin{array}{llllllllll}25 & 9 & 24 \cdot 7\end{array}$ | 375 | 238 | 10.5 | + 7 | - 74 | 8.7 |  |
| 4938 | 271844 | C 5202 | 1217 |  | - 21.56 | 4110 | 199 | $26 \quad 55 \quad 37 \cdot 5$ | 376 | 241 | 11.0 | - 160 | - 95 | 8.8 | K o |
| 4939 | 252200 | C 5203 | 1222-5 |  | - 22.72 | 3869 | 186 | $2 \begin{array}{lllllllll}2 & 15 & 34.6\end{array}$ | 377 | 238 | 11.6 | 22 | 12 | 8.6 |  |
| 4940 | 312095 | L 4060 | 1211 |  | - 26.54 | 4809 | $24^{\circ}$ | $\begin{array}{llllllllllllll}31 & 31 & 28.2\end{array}$ | 380 | 246 | 9.6 | - 25 | 20 | $7 \cdot 86$ | A 3 |
| 494 I | 291990 | ${ }_{\text {C }} 5204$ | 1226 |  | $10 \quad 030.42$ | $+3.4439$ | . 0219 | 29 9 39.2 | $-17.382$ | -. 243 | 10.9 | - 29 | - 39 | $8 \cdot 7$ | K |
| 4942 | 291991 | C 5205 | 1228 |  | - 33.34 | 4425 | 218 | $29431 \cdot 2$ | 385 | 241 | 2 | - 12 | - 23 | $9 \cdot 6$ | G 5 |
| 4943 | 262042 | ${ }^{\text {C }} 5207$ |  |  | - 52.60 | 4006 | 195 | $\begin{array}{llllll}26 & 18 & 15.9\end{array}$ | 399 | 240 | 12.2 | + 27 | - 38 | $9 \cdot 2$ |  |
| 4944 | $\begin{array}{lll}31 & 2097 \\ 24 & 2177\end{array}$ | L 4064 | $1234-5$ 1240 | 19691 | - 59.50 | 4816 | 242 | 3140 | 404 | 245 | 10.8 | - 1 | 39 | $8 \cdot 4$ | G 5 |
| 4945 | $2+2177$ | B 3928 | 1240 | 19698 | $15 \cdot 12$ | 3713 | ${ }^{178}$ | $\begin{array}{llllllllll}24 & 16 & 21 \cdot 3\end{array}$ | 408 | 237 | 10.2 | 8 | 22 | $8 \cdot 3$ | K 2 |
| 4946 | 312098 | L 4065 |  |  | 10 1 5.54 | $+3.4735$ | -. 0237 | $311042 \cdot 3$ | -17.408 | -. 244 | 12.2 |  |  | $8 \cdot 7$ | K |
| 4947 | 301959 | L 4067 |  |  | 113.58 | 4598 | 229 | $\begin{array}{llllllllllll}30 & 19 & 52.7\end{array}$ | 414 | 243 | 11.6 | - 23 | $-\quad 38$ | 8.8 | F 5 |
| 4948 | 281838 | C 5209 |  |  | I 23.03 | 4271 | 211 | 28 I2 11.5 | 421 | 240 | 11.4 | -. 26 | + 5 | 9.6 |  |
| 4949 | 291998 | C5211 |  |  | 1 47.62 | 4433 | 220 | 2921.33 .9 | 438 | 240 | 11.7 | - 32 | - 59 | $9 \cdot 3$ |  |
| 4950 | 291999 | C 5213 |  |  | I 50.60 | 4367 | 217 | $28 \quad 55 \quad 56 \cdot 9$ | 440 | 239 | 12.0 | + $+\quad 40$ | - 13 | 9.6 | F 2 |


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| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Soc. Var. | Dec. 1910.0. | Precession. | Sec. <br> Var | Epoch $1900+$ | $\begin{aligned} & \text { R.A. } . \\ & 8: 0001 . \end{aligned}$ | $\begin{gathered} \text { Dec. } \\ \sim=001 . \end{gathered}$ | Mag. | Spectral Tуре. |
|  |  |  |  |  | $n \mathrm{~m}$ s | 8 | 8 |  |  | " |  |  |  |  |  |
| 49 | 301961 | C 5214 | 1255 |  | $\begin{array}{llll}10 & 1 & 58.95\end{array}$ | $+3.4518$ | 0226 | 2929 57 <br> 19  | -17.446 | $-240$ | $10 \cdot 7$ | - | - 19 | $7 \cdot 36$ | F 5 |
| 2 | 301962 | C 5215 | 1257 |  | $2 \quad 1.32$ | 4508 | 225 | $295355 \cdot 5$ | 448 | 240 | 13.0 | - 80 | - 150 | $8 \cdot 9$ |  |
| 4954 | $\begin{array}{lll}29 & 2000 \\ 24 & 2180\end{array}$ | C 5216 |  |  | $2 \quad 5 \cdot 51$ | 4473 | 223 | $29.4034^{\circ} \mathrm{O}$ | 451 | 240 | $11 \cdot 4,11 \cdot 8$ | + 25 | - 244 | $8 \cdot 11$ | G 5 |
| 4954 | 242180 | B 3933 | 1263 |  | $2 \quad 7 \cdot 78$ | 3658 | 176 | $24 \quad 241 \cdot 2$ | 453 | 235 | $13 \cdot 1$ | - 32 | + 3 | 9.0 | K |
| 4955 | 271847 | C 5217 | 1264 |  | 215.08 | 4120 | 202 | $27 \quad 2014.2$ | 458 | 237 | 13.4 | + 7 | - 5 | $8 \cdot 6$ |  |
| 4956 | $27 \quad 184^{8}$ | C 5218 | 1266 |  | Io 22 I .80 | $+3.4101$ | . 0201 |  | -17.463 | $-.237$ | II.4 | - 25 | - 15 | 7.98 | F 8 |
| 4957 | 28 1841 | C 5219 | 1267 |  | 225.89 | 4285 | 213 | 282921.0 | 466 | 238 | 13.4 | + 19 | - 30 | $8 \cdot 8$ | F 5 |
| 4958 | 301963 | 1. 4076 |  |  | 239.65 | 4554 | 229 | 30196.6 | 476 | 240 | 12.7 | - 40 | - 20 | $9 \cdot 6$ |  |
| 4959 | 271850 | C 5220 |  |  | $245 \cdot 59$ | 4074 | 200 | $\begin{array}{llll}27 & 6 & 29.4\end{array}$ | 480 | 236 | 12.2 | + 20 | - 13 | $9 \cdot 3$ |  |
| 4960 | 271851 | C 5221 |  |  | $249 \cdot 38$ | 4046 | 199 | $2655 \quad 32 \cdot 2$ | 482 | 236 | 12.0 | + 6 | - 51 | $9 \cdot 2$ |  |
| 4961 | 271852 | C 5223 | 1287-8 |  | 10 $\begin{array}{lll}3 & 3 \cdot 65\end{array}$ | $+3.4085$ | -. 0202 | 271416.0 | -17.493 | -. 235 | 10.1 | - | - 2 | $8 \cdot 2$ | K o |
| 4962 | $30 \quad 1966$ | L 4080 |  |  | 319.49 | 4575 | 231 | $\begin{array}{llll}30 & 35 & 9.8\end{array}$ | 504 | 238 | 12.4 | + 32 | - 49 | $9 \cdot 6$ |  |
| 4963 | 312100 | L 4081 |  |  | 322.69 | 4643 | 235 | $\begin{array}{lllllllllll}31 & 2 & 13.3\end{array}$ | 506 | 238 | 12.2 | - 52 | - 123 | $8 \cdot 7$ | F 8 |
| 4964 | 312099 | L 4082 |  |  | 323.12 | 4697 | 239 | $\begin{array}{llll}31 & 23 & 4.4\end{array}$ | 506 | 238 | 12.2 | 3 | - 25 | $9 \cdot 3$ |  |
| 496\% | 252203 | C 5225 | I 293-5 |  | 325.43 | 3725 | 182 | $244457 \cdot 4$ | 508 | 232 | 9.6 | 30 | - 10 | $7 \cdot 66$ | Fo |
| 4966 | 252204 | C 5226 | 1297 |  | 10 3 34.77 | $+3.3741$ | -.0183 | 245327.0 | -17.515 | -.232 | II $\cdot 3$ | + 27 | - 34 | $8 \cdot 76$ | G 0 |
| 4967 | $32 \quad 1984$ | $\mathrm{L}_{4} 4085$ | $1301-2$ |  | $345 \cdot 82$ | 4748 | 242 |  | 523 | 239 | $11 \cdot 3$ | + 9 | - 16 | $9 \cdot 2$ | K 2 |
| 4968 | $30 \quad 1968$ | L 4087 |  |  | $349 \cdot 80$ | 4580 | 232 | $30 \quad 43 \quad 5 \cdot 8$ | 525 | 238 | 13.3 | + 49 | - 67 | $9 \cdot 6$ |  |
| 4969 | 262051 | C 5227 |  |  | $4 \quad 0.59$ | 3879 | 192 | $255735 \cdot 6$ | 533 | 232 | 10.8 | + 11 | - 55 | $8 \cdot 8$ | K o |
| 4970 | 252206 | C 5229 | 1313 |  | $418 \cdot 11$ | 3737 | 184 | $24 \quad 59 \quad 17.9$ | 545 | 230 | 11.4 | - 99 | - 105 | 8.8 | G 5 |
| 4971 | 281844 | C 5228 | 1310 |  | 10 418.85 | $+3.4223$ | 0212 | $\begin{array}{llll}28 & 25 \quad 26.9\end{array}$ | -17.546 | -. 233 | ${ }_{11} .6$ | - 13 | - 20 | $8 \cdot 9$ |  |
| 4972 | $27 \quad 1853$ | C 5230 | $1314-5$ |  | 424.48 | 4086 | 204 | $272945 \cdot 7$ | 550 | 232 | 10.4 | + 12 | - 20 | $8 \cdot 0$ | Fo |
| 4973 | 292006 | C 5233 |  |  | 513.90 | 4258 | 216 | $28 \quad 5012.5$ | 585 | 233 | 10.6 | - 13 | - 18 | $9 \cdot 2$ |  |
| 4974 | 281847 | ${ }_{C}{ }^{\text {c }} 5234$ | I 2-3-4 |  | 517.98 | 4226 | 214 | $\begin{array}{lllll}28 & 38 & 4 \cdot 6\end{array}$ | 587 | 232 | $9 \cdot 4$ | 1 <br> $+\quad 31$ | - 29 | $8 \cdot 7$ | K o |
| 4975 | 252209 | C 5235 | 21 |  | 531.04 | 3709 | 184 | $245935 \cdot 4$ | 597 | 228 | 10.4 | + 68 | - 19 | $9 \cdot 6$ |  |
| 4976 | 252210 | C 5236 | 22 |  | $10 \quad 531.60$ | $+3.3697$ | -.0183 | 24 54-21.1 | -17.597 | -. 228 | 12.6 | - | - 23 | 10.0 |  |
| 4977 | 242189 | B 3949 | 25 | 19794 | 534.85 | 3617 | 178 | $\begin{array}{lllllll}24 & 19 & 28.7\end{array}$ | 599 | 228 | $9 \cdot 3$ | 3 | - 25 | $7 \cdot 91$ | G 5 |
| 4978 | 312104 | L 4098 | 33 |  | $6 \quad 5 \cdot 89$ | 4630 | 239 | 313011.4 | 621 | 234 | 12.0 | 12 | - 15 | $9 \cdot 6$ |  |
| 4979 | 312105 | $\mathrm{L}_{4} 101$ | 40 |  | $618 \cdot 22$ | 4584 | 236 |  | 629 | 232 | 10.3 | - II | - 43 | $9 \cdot 2$ | K 。 |
| 4980 | 281850 | C 5241 | 47 | 19813 | $628 \cdot 70$ | 4143 | 211 | $\begin{array}{llllll}28 & 17 & 13.9\end{array}$ | 637 | 229 | 10.6 | + 12 | - 44 | $8 \cdot 2$ | K 5 |
| 498 I | 301974 | L 4103 | 52-3 |  | 10 $6 \quad 36 \cdot 28$ | $+3.4477$ | -.0231 | 303533.8 | -17.642 | -.231 | $9 \cdot 2$ | + 41 | - 43 | 8.34 | K o |
| 4982 | 242192 | C 5243 | 57 | 19819 | 639.96 | 3624 | 179 | $243341 \cdot 2$ | 644 | 226 | 11.2 | - 28 | - 28 | 8.81 | A 5 |
| 4983 | 301975 | C 5244 | 56 |  | $642 \cdot 81$ | 4373 | 224 | $29 \begin{array}{lll}25 & 7 \cdot 8\end{array}$ | 646 | 231 | $10 \cdot 6$ | + 13 | + 27 | 8.4 | A 0 |
| 4984 | 242193 | B 3953 | 60 | 19821 | $649 \cdot 11$ | 3572 | 177 | 24 II 50.0 | 651 | 226 | 12.0 | - 288 | + 62 | $8 \cdot 6$ | Go |
| 4985 | 301976 | C 5245 |  |  | 652.76 | 4414 | 228 | $301340 \cdot 6$ | 653 | 231 | 12.4 | 62 | - 76 | $8 \cdot 8$ |  |
| 4986 | 271860 | C 5248 | 70-1 | 19831 | 10 715.50 | $+3.4018$ | -.0203 | 273259.2 | -17.669 | -. 227 | $9 \cdot 8$ | - 51 | - 77 | 8.8 | K |
| 4987 | 321995 | ${ }^{\text {L }} 4106$ | 66-7 | 19827 | 718.64 | 4633 | 242 | 314628.9 | 67 I | 231 | 10.5 | + 8 | - 82 | $8 \cdot 8$ | F 5 |
| 4988 | 252212 | C 5249 |  |  | 726.08 | 3710 | 187 | $25 \quad 2021.6$ | 676 | 226 | $9 \cdot 4$ | + | - 24 | $8 \cdot 7$ |  |
| 4989 | 281852 | C 5251 | 77-8 | 19837 | $736 \cdot 05$ | 4169 | 213 | 284113.0 | 683 | 228 | 9.1 | - 9 | - 6 | $6 \cdot 96$ | G 5 |
| 4990 | 292012 | C 5254 |  | 19871 | $8 \quad 1 \cdot 32$ | 4163 | 214 | 2843 3200 | 700 | 227 | 10.8 | + 23 | - 16 | $8 \cdot 6$ | K o |
| 4991 | 281855 | C 5255 | 95 | 19853 | $10 \quad 8 \quad 3 \cdot 61$ | $+3.4041$ | -. 0206 | $27 \quad 524 \cdot 1$ | -17.702 | -. 226 | 10.1 | - 10 | - 126 | $8 \cdot 2$ | G 5 |
| 4992 | 321996 | L4110 | 90-1 | 19847 | $8 \quad 4 \cdot 74$ | 4615 | 242 | 314924.5 | 703 | 230 | 12.4 | - 25 | - 15 | $8 \cdot 0$ | F 5 |
| 4993 | 321997 | L4111 | 103 | 19854 | 814.05 | 4632 | 243 | 315730.0 | 709 | 229 | 11.8 | + 26 | - 8 | $9 \cdot 0$ | F 8 |
| 4994 | 262057 | C 5258 | $113-4-5$ | 19862 | 838.30 | 3850 | 196 | $263547 \cdot 0$ | 726 | 224 | 10.5 |  | - 3 | $8 \cdot 0$ | A 2 |
| 4995 | $27 \quad 1862$ | C 5259 |  | 19865 | $844 \cdot 82$ | 3982 | 204 | 273453.7 | 730 | 223 | 9.5 | $\bigcirc$ | $+\quad 2$ | $6 \cdot 10$ | G 5 |
| 4996 | $32 \quad 1998$ | L 4112 | 6 |  | 10 845.75 | $+3.4583$ | -.0241 | $\begin{array}{llll}31 & 45 & 6.9\end{array}$ | $-17.731$ | -. 228 | 10.4 | - 64 | - 11 | $9 * 0$ |  |
| 4997 | 322000 | L 4114 | $120-1$ | 19869 | 90.61 | 4593 | 243 |  | 741 | 228 | $9 \cdot 9$ | - 10 | - 56 | $8 \cdot 0$ | Fo |
| 4998 | 292015 | C 5260 |  |  | $9 \quad 4.37$ | 4193 | 217 | 2985101 | 743 | 225 | II.4 | + | - 15 | 8.8 |  |
| 4999 | 292016 | C 5261 |  |  | $9 \quad 4.97$ | 4248 | 221 | $293155 \cdot 2$ | 744 | 226 | 11.8 | + 11 | - 12 | 9.6 |  |
| 5000 | 292017 | C 5262 | 124 |  | $9 \quad 5 \cdot 24$ | 4146 | 215 | 2849 1.5 | 744 | 225 | I1.6 | + 32 | - 99 | 8.8 | Go |



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| No. | B.D. | A.G.C. | W.B. (2). | Lslsnde. | R.A. 1910\% | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | $\underset{\text { R. } \mathrm{RA} \text { A. }}{ }$ | $\begin{gathered} \text { Dec. } \\ \text { ".001. } \end{gathered}$ | Mag. | Spectral Type. |
|  |  |  |  |  | n m | $s$ | 8 | - , " |  | " |  |  |  |  |  |
| 5051 | 312126 | ${ }_{\text {L }} 4155$ |  |  | 1016 3.11 | $+3.4228$ | -.0231 | $30 \quad 53 \quad 32.9$ | -18.019 | -.211 | 12.0 | - 24 | - 45 | $8 \cdot 8$ |  |
| 5052 | 271879 | C 5312 | 255 |  | $16 \quad 7 \cdot 17$ | 3726 | 198 | $\begin{array}{llll}27 & 9 & 3 \cdot 9\end{array}$ | 022 | 208 | 12.2 | + 26 | - 69 | 8.8 | Go |
| 5053 | 271878 | C 5313 | 256 |  | $16 \quad 7 \cdot 31$ | 3751 | 200 | $27 \quad 20 \quad 22 \cdot 1$ | 022 | 208 | II.6 | + 19 | - 15 | 8.6 | G 0 |
| 5054 | 292033 | C 5315 | 262 | 20062-3 | $16 \quad 24.30$ | 3959 | 214 | $28 \quad 59 \quad 24.9$ | 033 | 208 | $9 \cdot 6$ | $+\quad 45$ | - 28 | $8 \cdot \mathrm{I}$ | K 5 |
| 5055 | 262077 | C 5318 | 277 |  | 1722.54 | 3541 | 189 |  | 070 | 204 | 10.3 | + 4 | - 15 | $9 \cdot 0$ |  |
| 5056 | 252237 292036 | C 5319 C 5320 | 279 |  | IO $177 \begin{array}{ll}17.79 \\ 17 & 31.85\end{array}$ | $+3.3490$ | -.0185 | 253344.4 | -18.073 | --204 | 11.9 | - 39 | - 63 | 9.0 |  |
| 5058 | 29 25 223 2238 | C 5320 | 283 |  | 1731.85 1736.68 | 3994 3500 | 218 | $\begin{array}{lll}29 & 30 & 0.2 \\ 25 & 40 & 5.2\end{array}$ | 076 079 | 206 | 12.2 12.6 |  <br>  <br> $+\quad 13$ | - 96 | 9.6 8.8 |  |
| 5059 | 252240 | C 5325 |  | 20099 | 1738.69 | 3423 | 181 | $\begin{array}{lll}25 & 3 & 1.4\end{array}$ | -80 | 203 | 10.4 | $\begin{array}{r}1 \\ +\quad 13 \\ -\quad 32 \\ \hline\end{array}$ | - 10 | $7 \cdot 81$ | F 5 |
| 5060 | $25 \quad 2241$ | C 5326 |  | 20103 | $1740 \cdot 30$ | 3445 | 183 | 25144 | 081 | 203 | 11.8 | - 68 | - 49 | $9 \cdot 0$ |  |
| 5061 | 312131 | $\mathrm{L}_{4} 162$ | 285-6 | 20094 | $101745 \cdot 30$ | $+3.4161$ | -.0230 | $\begin{array}{llll}30 & 47 & 9.2\end{array}$ | -18.084 | -.207 | 10.4 | + 22 | - 3I | 8.6 | A 3 |
| 5062 | $25 \quad 2242$ | C 5327 |  |  | 1748.31 | 3476 | 185 | $2530 \quad 57 \cdot 2$ | 086 | 204 | 12.8 | - 16 | + 10 | 9.6 |  |
| 5063 | 312133 | $\mathrm{L}_{4} \mathrm{H}_{164}$ | 290 | 20105 | 1754.54 | 4225 | 235 |  | 090 | 206 | 9.6 | 50 | - 30 | $7 \cdot 57$ | K o |
| 5064 | 252243 | C 5329 |  | 20116 | 1816.88 | 3458 | 184 | $25 \quad 2750 \cdot 8$ | 104 | 201 | 12.0 | 54 | - 82 | 9.3 |  |
| 5065 | 271883 | C 5328 |  |  | $18 \quad 17.19$ | 3698 | 200 | $\begin{array}{llll}27 & 23 & 8.4\end{array}$ | 105 | 203 | 12.0 |  | 23 | 9.6 |  |
| 5066 | 302004 | $\mathrm{L}_{4} 165$ | 296 |  | $1018 \quad 23.32$ | $+3.4076$ | -. 0226 | $\begin{array}{llll}30 & 18 & 15.8\end{array}$ | -18.108 | -. 206 | 12.2 | - 28 | - 26 | 8.8 |  |
| 5067 | 271884 | C 5330 | 297 | 20117 | $18 \quad 23 \cdot 98$ | 3639 | 196 | 265656.6 | 108 | 203 | $12 \cdot 2$ | + 15 | - 13 | 8.9 | F 8 |
| 50 | 302005 | $\mathrm{L}_{4} \mathrm{I}_{166}$ | 303 | 20125-7 | $18 \quad 36 \cdot 34$ | 4038 | 224 | 30417.2 | 116 | 205 | $9 \cdot 2$ | $\bigcirc$ | - 21 | $6 \cdot 46$ | K。 |
| 5069 | 262081 | C 5336 | 312 | 20135-6 | $18 \quad 48.75$ | 3513 | 188 | $\begin{array}{llll}26 & 1 & 29.4\end{array}$ | 124 | 201 | 10.1 | + 4 | - 72 | 6:87 | K o |
| 5070 | 302007 | L 4170 | 314 |  | $18 \quad 57 \cdot 17$ | 4106 | 229 | 3039 29.2 | 129 | 204 | 11.0 | 79 | + 60 | $8 \cdot 7$ | G 5 |
| 5071 | 271888 | C 5338 | 317 | 20143 | 10 194.71 | $+3.3603$ | -.0194 | $264822 \cdot 9$ | -18.134 | -.201 | 11 | - 28 | + | $9 \cdot 6$ | G 5 |
| 5072 | $22^{2} 2217$ | B 4005 |  |  | 196.42 | 3281 | 174 | 24 Io 19.5 | 135 | 200 | 12.4 | + ${ }^{88}$ | - 33 | $9 \cdot 6$ |  |
| 5073 | 312136 | L 4173 | 327 | 20161 | 1955.00 | 4098 | 231 | 3049 51.2 | 165 | 203 | $9 \cdot 4$ | + 69 | - 138 | $7 \cdot 82$ | G 5 |
| 5074 | 252247 | C 534I | 334 |  | $20 \quad 2.14$ | 3367 | 180 | $25424 \cdot 6$ | 169 | 198 | $8 \cdot 8$ | + 18 | - 203 | 8.2 | G 5 |
| 5075 | $\begin{array}{llll}31 & 2137\end{array}$ | L 4176 | 343 |  | $2034 \cdot 67$ | 4105 | 231 | $\begin{array}{llll}31 & 2 & 2.4\end{array}$ | 189 | 201 | 10.6 | - $4^{8}$ | - 46 | $9 \cdot 2$ |  |
| 5076 | 312138 | L 4177 |  |  | 102035.66 | $+3.418 \mathrm{I}$ | -. 0237 | 313624.5 | $-18.190$ | -202 | 10.5 | - 13 | + 19 | 9.6 |  |
| 5077 | 252248 | C 5343 | 345 |  | 2041.68 | 3422 | 185 | $254012 \cdot 8$ | 193 | 197 | 10.4 | - | + $4^{2}$ | 9.2 |  |
| 5078 | 252249 | C 5346 | 353 | 20202-3 | 2115.91 | 3348 | 181 | 251023.0 | 214 | 195 | $8 \cdot 8$ | - 3 | - 10 | $7 \cdot 31$ | K o |
| 5079 | 262085 | C 5348 | 354 |  | 2121.29 | 3469 | 190 | $\begin{array}{llllll}26 & 12 & 7 \cdot 6\end{array}$ | 218 | 196 | 10.3 | - 33 | - 42 | 8.9 |  |
| 5080 | $27 \quad 1890$ | C 5350 | 357 | 20212 | 2138.75 | 3556 | 196 | $26 \quad 58 \quad 58.2$ | 228 | 196 | 10.5 | - $\quad 59$ | + 8 | $8 \cdot 8$ | F 8 |
| 5081 | 292046 | C 5352 | 361 |  | 10 2143.54 | +3.3784 | -. 0212 | 2849 58•I | -18.231 | --197 | 11.6 | + | 22 | $8.8{ }^{\circ}$ |  |
| 2 | 302014 | $\mathrm{L}_{4} 18 \mathrm{I}$ | 363 | 20218-9-20 | 2155.43 | 3944 | 223 | $\begin{array}{llll}30 & 8 & 2.2\end{array}$ | 238 | 199 | 10.0 | - $4^{6}$ | - 29 | $7 \cdot 81$ | F 2 |
| 5083 | 252253 | C 5354 |  |  | $2155 \cdot 63$ | 3376 | 184 | - $25 \quad 3247 \cdot 5$ | 238 | 194 | 13.0 | - 45 | + 4 | $9 \cdot 6$ |  |
| 5084 | 271893 | C 5355 | 366 | 20223 | $2157 \cdot 10$ | 3563 | 196 | $27 \quad 67 \cdot 0$ | 239 | 195 | 10.8 | + 137 | - 67 | $8 \cdot 3$ | G 5 |
| 5085 | 252254 | C 5356 | 367 | 20230-1 | $2157 \cdot 15$ | 3358 | 183 | 252421.6 | 239 | 193 | 10.8 | + 6 | - 18 | $7 \cdot 9$ | K 0 |
| 5086 | 312142 | L 4183 |  |  | 10228.56 | $+3.4096$ | -.0232 | $312051 \cdot 8$ | -18.246 | --198 | 13.3 | + 15 | - 7 | $9 \cdot 3$ |  |
| 5087 | $28 \quad 1879$ | C 5358 |  |  | 2214.42 | 3706 | 208 | 281948.0 | 250 | 195 | 13.5 | - 23 | - 39 | $9 \cdot 3$ |  |
| 5088 | 242223 | B 4018 |  |  | 2221.42 | 3202 | 172 | $24 \quad 932 \cdot 5$ | 254 | 193 | 11.5 | - 27 | - 52 | $9 \cdot 6$ |  |
| 5089. | 271895 | C 5361 | 386 |  | $2254 \cdot 14$ | 3606 | 201 | $274016 \cdot 7$ | 274 | 194 | 10.9 | - 78 | - 59 | 8.4 | Go |
| 5090 | $28 \quad 1886$ | C 5362 |  |  | $2255 \cdot 53$ | 3663 | 205 | $28 \quad 8 \quad 45 \cdot 5$ | 275 | 193 | $10 \cdot 4$ | 40 | - 39 | $9 \cdot 3$ |  |
| 5091 | 292050 | C5363 | 391 |  | 10 2311.55 | $+3.3743$ | -. 0211 | $285051 \cdot 1$ | -18.284 | --194 | 11.2 | - 47 | - 12 | $9 \cdot 3$ |  |
| 5092 | 312143 | $\mathrm{L}_{4185}$ | 390 |  | 2312.14 | 4004 | 230 | $30 \quad 54 \quad 6 \cdot 4$ | 284 | 195 | 11.4 | - $\quad 9$ | - 77 | 9.0 |  |
| 5093 | 252255 | C 5365 | 398 |  | $\begin{array}{llll}23 & 19.57\end{array}$ | 3317 | 182 | 252058.4 | 289 | 190 | II•4 | + 153 | $-136$ | $9 \cdot 2$ |  |
| $509+$ | 271896 | C 5366 | 400 |  | $23 \quad 21.96$ | 3481 | 193 | $264431 \cdot 2$ | 290 | 192 | $9 \cdot 9$ | $+\quad 3$ $+\quad 1$ | - 28 | $9 \cdot 3$ | F 5 |
| 5095 | $27 \quad 1897$ | C 5369 |  | 20291 | $2343 \cdot 61$ | 3548 | 198 | $\begin{array}{llll}27 & 23 & 0.5\end{array}$ | 303 | 191 | 8.8 | + 28 | - 25 | 8.06 | Ko |
| 5096 | 302021 | L. 4187 | 409 | 20293-6 | 10 23 57.36 | $+3.3889$ | -.0224 | 30 II 18.3 | -18.311 | -.193 | $8 \cdot 6$ | + 5 | - 25 | $6 \cdot 68$ | K。 |
| 5097 | 242227 | B 4026 |  |  | $\begin{array}{ll}24 & 2 \cdot 48\end{array}$ | 3179 | 173 | $2418 \quad 34 \cdot 5$ | 314 | 189 | 11.5 | + 12 | - 35 | 9.6 |  |
| 5098 | 262095 | C 5370 | 415 |  | $24 \quad 6 \cdot 27$ | 3416 | 190 | $26 \quad 2131 \cdot 3$ | 317 | 190 | 12.6 | + 20 | + 7 | $9 \cdot 6$ | G 5 |
| 5099 | 281887 | ${ }^{\text {C }} 5371$ |  |  | 24 Ir -68 | 3605 | 203 | $27 \quad 5734 \cdot 8$ | 320 | 192 | 12.2 | - 37 | - 32 | $8 \cdot 6$ | F 8 |
| 5100 | 281888 | C 5373 |  |  | $24 \quad 19.73$ | 3645 | 206 | 281931.9 | 325 | 191 | 13.4 |  |  | $9 \cdot 6$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Scc. Var. | Dec. 19100. | Precession. | Soc. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.coort. }}{\text { R.A. }}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m | 8 | s | - , " |  | " |  |  |  |  |  |
| 5151 | 252277 | ${ }_{\text {C }} 5429$ |  |  | I0 $33 \quad 8.50$ | $+3.3078$ | -. 0179 |  | $-18.623$ | -171 | 10.5 | 20 | $\bigcirc$ | $9 \cdot 6$ | F 8 |
| 5152 | 271914 | C 5430 | 597 | 20541 | 3311.03 | 3251 | 193 | $27 \quad 433.5$ | 625 | 171 | $9 \cdot 6$ | + 165 | 90 | $8 \cdot 7$ | K o |
| 5153 | 302043 | C 543I | 603 | 20544 | 3317.21 | 3572 | 217 | $29 \begin{array}{lll}58 & 4 \cdot 1\end{array}$ | 628 | 173 | $9 \cdot 3$ | - 16 | 56 | $8 \cdot 9$ | K o |
| 5154 | 262109 | C 5432 |  | 20548-9 | $33 \quad 30.97$ | 3168 | 186 | $26 \quad 22 \quad 59.2$ | 636 | 169 | $8 \cdot 4$ | - 5 | 19 | $8 \cdot 7$ | G 5 |
| 5155 | 262110 | C 5438 | 619-20 | 20561-2 | $\begin{array}{lll}34 & 2.46\end{array}$ | 3138 | 185 | $\begin{array}{llllll}26 & 14 & 8.9\end{array}$ | 652 | 168 | $9 \cdot 6$ | - 40 | 13 | $8 \cdot 4$ | F 2 |
| 5156 | 292071 | C 5437 |  |  | 10343.72 | +3.3513 | -. 0214 | $2940 \quad 7 \cdot 3$ | -18.653 | $-171$ | 9.9 | + 12 | - 27 | 9.01 | F 8 |
| 5157 | 292073 | C 5440 | 627-9 |  | $3430 \cdot 38$ | 3449 | 210 | 291311.9 | 667 | 170 | $9 \cdot 7$ | - 15 | $+\quad 9$ | $8 \cdot 3$ | K 2 |
| 5158 | 312173 | L 4245 |  |  | $3436 \cdot 94$ | 3692 | 229 |  | 67 I | 170 | 10.5 | + 34 | - 33 | $9 \cdot 3$ |  |
| 5159 | $27 \quad 1917$ | C 544 I | 637 | 20580 | $3442 \cdot 58$ | 3212 | 191 | $\begin{array}{lllll}27 & 6 & 20 \cdot 7\end{array}$ | 674 | 169 | 10.6 | + 32 | - 49 | $8 \cdot 3$ | K o |
| 5160 | 262113 | C 5443 | 650 |  | $35 \quad 5 \cdot 4 \mathrm{I}$ | 3156 | 188 | $264034 \cdot 4$ | 686 | 167 | 10.4 | 35 | 46 | $9 \cdot 2$ | K o |
| 5161 | 281914 | C 5445 | 651 | 20597 | 10 3514.45 | +3.3346 | 0202 | $\begin{array}{llll}28 & 29 & 8.6\end{array}$ | -18.691 | -. 168 | 11.4 | 50 | - 23 | $9 \cdot 0$ | F 5 |
| 5162 | 281915 | C 5446 | 659 | 20605 | $35 \quad 21.76$ | - 3342 | 202 |  | 694 | 168 | 11.5 | - 9 * | + 6 | $9 \cdot 2$ |  |
| 5163 | 281916 | ${ }_{\text {C }} 5447$ | 660 | 20606-7 | $\begin{array}{llll}35 & 22.32\end{array}$ | 3289 | 199 | $275940 \cdot 4$ | 695 | 167 | $9 \cdot 2$ |  | - ${ }^{1} 3^{*}$ | 6.93 | A 2 |
| 5164 | 292077 | C 5448 |  |  | $3544 \cdot 98$ | 3437 | 211 | $292651 \cdot 8$ | 707 | 167 | 11.0 | + 5 | - 19 | $8 \cdot 9$ |  |
| 5165 | 262116 | C 545 I | 666 | 20612 | $35 \quad 52 \cdot 97$ | 3082 | 183 | 2610 II.I | 711 | 165 | 9.4 | - 23 | + 20 | $7 \cdot 73$ | K o |
| 5166 | 302049 | L 4250 | 665 | 20610 | IO $35 \quad 55 \cdot 75$ | +3.3568 | 0223 | $3040 \quad 23 \cdot 3$ | -18.712 | -. 169 | $9 \cdot 2$ | 133 | - 89 | $8 \cdot 3$ | F 8 |
| 5167 | 302050 | L 425 I |  |  | 35 57.13 | 3503 | 218 | $30 \quad 6 \quad 42 \cdot 2$ | 713 | 169 | 11.2 |  | - 67 | $9 \cdot 2$ |  |
| 5168 | 292078 | C 5453 | 670 |  | 3614.42 | 3378 | 207 | $\begin{array}{lllllllll} & 29 & 45 \cdot 3\end{array}$ | 722 | 166 | 11.0 | + | + 23 | $8 \cdot 4$ | K o |
| 6 | 242260 | B 4078 | $674-5$ |  | 3626.01 | 2890 | 171 | 2425 51.8 | 728 | 163 | 12.1 | - 31 | - $4^{1}$ | 9.0 | G 0 |
| 5170 | 271923 | C 5454 | 676 |  | $3634 \cdot 45$ | 3135 | 189 | $\begin{array}{llll}26 & 52 & 4.4\end{array}$ | 732 | 164 | 11.4 | 80 | - 14 | $8 \cdot 9$ | F 8 |
| 5171 | $\begin{array}{ll}28 & 1917 \\ 25 & 2282\end{array}$ | C 5456 | 680 | 20622 | 10 $\begin{array}{r} \\ \\ \\ 36 \\ \hline\end{array}$ | +3.3229 2922 | -. 0197 | $\begin{array}{llll}27 & 46 & 48 \cdot 3 \\ 24 & 50 & 30 \cdot 1\end{array}$ | $\begin{array}{r}18.735 \\ \hline 39\end{array}$ | - $\begin{array}{r}\text {-164 } \\ \hline 163\end{array}$ | 10.8 11.3 | $\begin{array}{r} \\ \hline\end{array}$ | - $\quad 9$ $-\quad 16$ | 8.2 9.6 | K 5 |
| 5172 | 25.2282 | C 5459 |  |  | 36 <br> 6 <br> 6 $6 \cdot 9.95$ | 2922 | $\begin{array}{r}174 \\ 218 \\ \hline 18\end{array}$ | $\begin{array}{lllll}24 & 50 & 30 \cdot 1 \\ 30 & 16 & 3 \cdot 1\end{array}$ | 739 742 | 163 166 | II. 1.9 1 | $+\quad 31$ <br> $+\quad 33$ | - 16 | 8.6 9.2 |  |
| 55173 <br> 5174 <br> 1 | $\begin{array}{lll}30 & 2055 \\ 26 & 2120\end{array}$ | L 4254 C 546 r C |  |  | $\begin{array}{ll}36 & 52.49 \\ 36 & 57.62\end{array}$ | 3492 3050 318 | 218 183 | $\begin{array}{crrrr}30 & 16 & 3 \cdot 1 \\ 26 & 8 & 33 \cdot 2\end{array}$ | 742 744 | 166 163 | 11.9 I 1.9 | - 33 | $\begin{array}{r}8 \\ +\quad 41 \\ \hline\end{array}$ | 9.2 <br> 8.8 <br> 8 | A K 0 |
| 515174 | 262120 | C 5461 |  | 20629 | $\begin{array}{ll}36 & 57.62 \\ \\ 37 \\ \text { 1. }\end{array}$ | 3050 | 183 | $\begin{array}{llll}26 & 8 & 33.2 \\ 27 & & 3 & 36.2\end{array}$ | 744 | 163 163 | 11.9 13.4 | a | $+\quad 41$ $+\quad 13$ | 8.8 0.2 | $\mathrm{K}_{\mathrm{G}} \mathrm{O}$ |
| 5175 | 271925 | C 5462 |  |  | $\begin{array}{ll}37 & 1.67\end{array}$ | 3188 | 193 | $27 \quad 2936 \cdot 2$ | 746 | 163 | 13.4 | - 56 | + 13 | $9 \cdot 2$ |  |
| 5176 | 292083 | C 5463 | 697-8 | 20643 | 10 3719.74 | +3.3390 3452 |  |  | $\begin{array}{r}18.756 \\ \hline 761\end{array}$ | r -163 164 | 9.5 12.7 | - 61 | - 5 | 8.4 0.2 | F 8 |
| 5177 5178 | $\begin{array}{lll}30 & 2057 \\ 25 & 2285\end{array}$ | L 4257 C 5467 |  |  | $37 \quad 29 \cdot 95$ 3741.26 | 3452 2936 | 216 | $\begin{array}{cccc}30 & 5 & 0 \cdot 6 \\ 25 & 12 & 20 \cdot 3\end{array}$ | 761 767 | 164 160 | 12.7 12.8 | $\begin{array}{r}+\quad 53 \\ \hline+\quad 43 \\ \hline\end{array}$ | 1 $-\quad 53$ $-\quad 41$ | $9 \cdot 2$ 9.6 |  |
| 5178 5179 | $\begin{array}{ll}25 & 2285 \\ 29 & 2084 \\ 25 & 228\end{array}$ | C 5467 |  |  | 3741.26 37559 | 2936 3353 | 176 | $\begin{array}{llll}25 & 12 & 20 \cdot 3 \\ 29 & 17 & 16 \cdot 2\end{array}$ | 767 774 | 160 161 | 12.8 I 1.2 | $+\quad 43$ $+\quad 2$ $+\quad$ | - 41 | 9.6 8.2 |  |
| $\left\lvert\, \begin{gathered}5179 \\ 5180\end{gathered}\right.$ | $\begin{array}{lll}29 & 2084 \\ 25 & 2286\end{array}$ | C 5468 C 5469 | $706-8$ 710 | 20657 | $3755 \cdot 39$ 3755.98 | 3353 2971 | 1769 179 | $\begin{array}{llll}29 & 17 & 16 \cdot 2 \\ 25 & 37 & 18 \cdot 9\end{array}$ | 774 774 | 160 | 11.2 | + $+\quad 5$ $+\quad 5$ | $\begin{array}{r}\circ \\ +\quad 28 \\ \hline\end{array}$ | $8 \cdot 2$ | K |
| 5181 | 271927 | C 5470 | 713 | 20665 | 10 $38 \quad 5 \cdot 49$ | $+3 \cdot 3086$ | -. 0187 | 264753.9 | 18.779 | $-161$ | 10.8 | $79^{*}$ | - $65^{*}$ | $5 \cdot 55$ | A 2 |
| 51 | 302060 | C 5473 | 715-6 | $20666-7$ | 38 It. 80 | 3405 | 214 | 2951519.5 | 782 | 162 | 10.0 | 14 | + $\quad 29$ | $7 \cdot 81$ | F 2 |
| 51 | 262123 | ${ }^{\text {C }} 5475$ |  | 20676 | $\begin{array}{lll}38 & 29.15\end{array}$ | 3019 | 183 | $\begin{array}{llllllllllll} & 1 & 14 & 13\end{array}$ | 79 I | 160 | . 0 | - 131 | + 74 | $9 \cdot 3$ | G 0 |
| 5184 | 292087 | C 5476 | $7^{21-2}$ | 20674 | 3831513 | 332 I | 207 | $29 \quad 935.6$ | 792 | 160 | 10.6 | - 13 | - 118 | 8.1 | F 8 |
| 5185 | 281923 | C 5478 |  | 20685 | $3^{8} 56 \cdot 50$ | 3173 | 196 | $27 \quad 5235 \cdot 4$ | 805 | 159 | 10.5 | $-171$ | - 83 | 8.8 | F 8 |
| 5186 | 312177 | L 4262 | $74{ }^{\circ}$ |  | 10 3920.08 | $+3.3511$ | -. 0224 | 319848.0 | $-18.817$ | --160 | 11.8 | $\bigcirc$ | + 12 | $9 \cdot 6$ |  |
|  | 252290 | C 548 I | 746 |  | $3944 \cdot 43$ | 2905 | 177 | $252611 \cdot 0$ | 829 | 156 | 11.3 | 22 | - 68 | $9 \cdot 2$ |  |
| 51 | 302062 | C 5483 | 749-50 |  | $3955 \cdot 36$ | 3365 | 214 | 2959 20.1 | 835 | 159 | $9 \cdot 8$ | 11 | - 62 | $8 \cdot 7$ | G 0 |
| 5189 | 252293 | C 5484 | 756 |  | $40 \quad 10.09$ | 2829 | 171 |  | 842 | 155 | 11.5 | - 47 | - 38 | 9.01 | F 8 |
| 5190 | 242265 | B 409 I |  | 20717 | $4032 \cdot 48$ | 2751 | 166 | $\begin{array}{llll}24 & 3 & 8.4\end{array}$ | 853 | 154 | 10.8 | + 3 | - | 9.0 | K o |
|  | 281925 | C 5486 | 767 |  | IO 4044.41 | $+3.3179$ | -.0201 | $\begin{array}{llll}28 & 26 & 18.4\end{array}$ | -18.859 | --155 | 10.2 | + 19 | + 20 | 8.8 | F 5 |
| 5192 | 252295 | C 5487 | 772 |  | $4045 \cdot 91$ | 2833 | 173 | $2457 \quad 24 \cdot 2$ | 860 | 155 | 10.9 | + 3 | - 15 | $9 \cdot 2$ |  |
| 5193 | 312180 | L 4269 | 773 | 20721 | 4051.79 | 3460 | 224 | 3119823.7 | 863 | 157 | 11.3 | - 20* | - $4^{\text { }}$ | $5 \cdot 37$ | B 9 |
| 5194 | 312181 | L 4270 | 775 | 20722 | 4053.66 | 3453 | 224 | $\begin{array}{lll}31 & 6 & 6.6\end{array}$ | 864 | 157 | 10.0 | 27 | - 13 | 8.2 |  |
| 5195 | $26 \quad 2125$ | C 5488 |  | 20733-4 | 418.06 | 2928 | 180 | $\begin{array}{llll}26 & 2 & 27.8\end{array}$ | 87 I | 154 | $12 \cdot 1$ | 8 | + 17 | $8 \cdot 7$ | K |
| 5196 | 262126 | C 5489 |  | 20738-9 | 10 4113.12 | $+3.2945$ | .0182 | $\begin{array}{llll}26 & 14 & 5 \cdot 6\end{array}$ | -18.873 | $-.153$ | 10.8 | + 51 | + 16 | 8.4 | G 5 |
| 5197 | 262127 | C 5491 | 782 |  | 4122.23 | 2964 | 184 |  | 878 | 153 | 12.2 | - 102 | - 77 | $9 \cdot 6$ | G 0 |
| 5198 | $26 \quad 2128$ | C 5490 |  | 20742-3 | 4122.25 | 2926 | 181 | $\begin{array}{llllllllll}26 & 5 & 1 \\ 3\end{array}$ | 878 | 153 | 12.1 | 28 | - 29 | $8 \cdot 7$ | G 5 |
| 5199 | 312182 | $\mathrm{L}_{4} 4273$ | 781 | 20741 | 4125.08 | 3441 | 223 | $\begin{array}{llll}31 & 8 & 57 \cdot 3\end{array}$ | 879 | 156 | 10.0 | 32 | - 16 | 8.4 | Fo |
| 5200 | 252297 | C 5493 | 784 |  | $4132 \cdot 70$ | 2822 | 172 | $\begin{array}{llll}25 & 3 & 2 \cdot 1\end{array}$ | 883 | 153 | 11.8 | - | - | $8 \cdot 8$ | K |

5152. $\Sigma$ 1454. $\quad$ 5157. Burnham 5510. Numbor of observations 6. $\quad$ 5181. Burnham 5535. $\quad$ 5193-5194. Burnham 5548. 5193. Number of obscrvations 35 .

| No. | B.D. | A.G.C. | W.B. (z). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{8.000 \mathrm{I} .}{\text { R.A. }}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m s | $s$ | s | - ' " |  | " |  |  |  |  |  |
| 5201 | 262129 | C 5494 | 786 |  | $104^{1} 35.05$ | +3.2961 | -.0184 | $26 \quad 2956 \cdot 9$ | -18.884 | --153 | 13.2 | - 31 | - 38 | $9 \cdot 7$ |  |
| 5202 | 252298 | C 5495 | 787 |  | $4136 \cdot 32$ | 2829 | 173 | $25 \quad 8 \quad 44 \cdot 6$ | 885 | 153 | 13.4 | + 12 | - $\quad 39$ | $9 \cdot 2$ | K 0 |
| 5203 | $)_{24} 2269$ | C 5496 |  |  | $4152 \cdot 19$ | 2774 | ${ }^{1} 70$ | 243754.4 | 892 | 151 | 13.7 | + 15 | - 8 | 8.8 I | K 0 |
| 5204 |  | C 5497 |  |  | 4152.99 | 2776 | 170 | 243714.2 | 893 | 151 | 12.1 | - 8 | - 22 | 8.8 |  |
| 5205 | 262130 | C 5500 | 794-5 |  | $42 \quad 10.94$ | 2936 | 184 | $26 \quad 25 \quad 10.6$ | 902 | 151 | 12.9 | - I | + 24 | $9 \cdot 6$ | F 5 |
| 5206 | 312186 | L 4277 |  |  | 104215.21 | +3.3367 | -. 0220 | $\begin{array}{lll}30 & 43 & 0.7\end{array}$ | -18.904 | $-\cdot 154$ | 13.3 | - 12 | - 20 | $9 \cdot 3$ |  |
| 5207 | 292090 | C 5502 |  |  | $42 \begin{array}{ll}21.58\end{array}$ | 3166 | 203 | $28 \quad 4742 \cdot 5$ | 907 | 153 | 13.4 | + 36 | - 22 | $9 \cdot 2$ |  |
| 5208 | 302067 | L 4278 | 798-9 | 20761-2 | 4223.53 | 3335 | 217 | $3027 \quad 25.4$ | 908 | 154 | $1 \mathrm{I} \cdot 2$ | - | - 47 | 8.6 | G 5 |
| 5209 | 29 2091 |  |  |  | $4224 \cdot 31$ | 3175 | 204 | $28 \quad 53 \quad 35 \cdot 3$ | 908 | 153 | 14.3 |  |  | 10.0 |  |
| 5210 | $27 \quad 1936$ | C 5503 |  |  | $42 \quad 26 \cdot 37$ | 3024 | 191 | $\begin{array}{llll}27 & 23 & 7 \cdot 3\end{array}$ | 909 | 152 | $8 \cdot 0$ | - 8 | 15 | $7 \cdot 32$ | K 5 |
| 5211 | 252299 | C 5505 |  |  | 104252.04 | $+3.2759$ | -. 0169 | 244424.0 | -18.921 | -. 149 | 10.5 | 7 | - 78 | $9 \cdot 21$ | G 5 |
| 5212 | 262133 | C 5506 |  | 20782 | $43 \quad 3.99$ | 2871 | 180 | $25 \quad 5612 \cdot 2$ | 927 | 150 | $9 \cdot 2$ | 34 | + 3 | $9 \cdot 2$ | Ko |
| 5213 | 302069 | L. 4282 | 823 |  | 43 43.06 | 3296 | 216 | 302918.3 | 946 | 151 | 10.9 | - 15 | - $4^{8}$ | $9 \cdot 6$ |  |
| 5214 | 302072 | C 5509 | 828 | 20806-7-8-9 | 4359.55 | 3226 | 211 | 2953 33.0 | 954 | 150 | $8 \cdot 2$ | - 68* | - $53^{*}$ | $6 \cdot 29$ | K o |
| 5215 | $27 \quad 1938$ | C5511 | 832 | 20811 | 44 5.10 | 2966 | 189 | $271646 \cdot 3$ | 956 | 148 | 10.0 | + 4 | - 20 | $8 \cdot 8$ | K o |
| 5216 | $26 \quad 2135$ | C 5513 | 839 |  | 104418.36 | $+3.2855$ | -.0180 | 26 9 59.1 <br> 1   | -18.962 | --148 | 12.9 | 21 | + 22 | $9 \cdot 6$ |  |
| 5217 | 302074 | L 4287 | $84^{2}$ |  | $4433 \cdot 88$ | 3265 | 216 | $302648 \cdot 1$ | 970 | 149 | I2.4 | - 3 | - 22 | $8 \cdot 9$ | G 5 |
| 5218 | 302075 | L 4288 |  |  | $4438 \cdot 40$ | 3216 | 212 | 295931.7 | '972 | 148 | 13.5 | - 19 | $\bigcirc$ | $9 \cdot 3$ |  |
| 5219 | 292093 |  |  |  | $4454 \cdot 85$ | 3121 | 205 | $.29 \quad 7 \quad 17.4$ | 980 | 147 | 13.7 |  |  | $9 \cdot 7$ |  |
| 5220 | 281931 | C 5514 | 852 | $20830-\mathrm{I}-2-3$ | $4457 \cdot 11$ | 3054 | 199 | $28 \quad 26 \quad 57 \cdot 4$ | 981 | 147 | $8 \cdot 7$ | 2* | $+2 \mathrm{I}^{*}$ | $6 \cdot 12$ | F 5 |
| 5221 | 262136 | C 5515 | 858 | 20840 | 10 $45 \begin{aligned} & 17.78\end{aligned}$ | +3.2814 | -.0179 | $\begin{array}{llll}26 & 1 & 15 \cdot 1\end{array}$ | -18.991 | -. 145 | 11.3 | + 44 | - 70 | $9 \cdot 3$ | Go |
| 5222 | 281933 | C5516 | 861-2 |  | $\begin{array}{llll}45 & 29 \cdot 38\end{array}$ | 3053 | 199 | $28 \quad 36 \quad 6 \cdot 0$ | 996 | 146 | I1.5 | - 13 | $+\quad 9$ | $9 \cdot 3$ |  |
| 5223 | 302077 | L 4290 | 860 |  | 4531.03 | 3230 | 215 | $\begin{array}{llll}30 & 25 & 1 \cdot 3\end{array}$ | 997 | 147 | 12.3 | - 27 | + 24 | $9 \cdot 3$ |  |
| 5224 | 271942 | C 5517 | 880 |  | 45 31.49 | 2898 | 186 | 265914.2 | 997 | 145 | 10.6 | - | - 56 | $8 \cdot 9$ | K 0 |
| 5225 | $26 \quad 2137$ | C 5519 | 863 |  | $45 \quad 34 \cdot 75$ | 2815 | 179 | $\begin{array}{llll}26 & 7 & 6.8\end{array}$ | 998 | 145 | 8.4 | - II | - 37 | $7 \cdot 9$ | F 5 |
| 5226 | 302078 | L 4292 |  |  | 10 $46 \quad 9.26$ | $+3.3196$ | -. 0214 | $\begin{array}{llll}30 & 16 & 52.9\end{array}$ | $-1.9 .014$ | -. 145 | 12.3 | + 32 | - 75 | $9 \cdot 3$ |  |
| 5227 | 252306 | C 5523 |  |  | $46 \quad 11.03$ | 2691 | 170 | $245542 \cdot 5$ | 015 | 142 | $10 \cdot 0$ | + 30 | - 5 | 8.6 | F 5 |
| 5228 | 262139 | C 5524 | 872 |  | $46 \quad 12.64$ | 2796 | 179 | $\begin{array}{llll}26 & 7 & 8 \cdot 1\end{array}$ | 0.6 | 143 | 12.0 | - 73 | + 18 | $9 \cdot 0$ | G 5 |
| 5229 | 242280 | B 4116 |  |  | $4620 \cdot 50$ | 2605 | 163 |  | 020 | 142 | 9.9 | + | + 5 | $9 \cdot 2$ | Go |
| 5230 | 302079 | C 5526 | 881 |  | $4637 \cdot 59$ | 3126 | 209 | 294328.9 | 027 | 144 | $9 \cdot 7$ | 3 | - 25 | $8 \cdot 36$ | K 2 |
| 5231 | 281937 | C 5528 | 889 |  | $104647 \cdot 08$ | $+3.2936$ | -.0192 | $274627 \cdot 6$ | -19.032 | $-143$ | 10.1 | + 14 | - 37 |  |  |
| 5232 | 322079 | L. 4296 | 890 |  | $46 \quad 59 \cdot 89$ | 3325 | 227 | $315045 \cdot 6$ | 038 | 144 | 12.9 | - 27 | - 10 | $7 \cdot 8$ | Go |
| 5233 | 281942 | C 5535 | 904 |  | $47 \quad 39 \cdot 95$ | 2991 | 199 | $28 \quad 3853.4$ | 056 | 142 | 12.6 | 12 | - 21 | $9 \cdot 7$ |  |
| 5234 | 302081 | C 5538 |  |  | 4745.91 | 3117 | 210 | $\begin{array}{llll}30 & 0 & 26 \cdot 7\end{array}$ | 058 | 143 | $9 \cdot 6$ | 10 | $+4$ | $8 \cdot 9$ |  |
| 5235 | $26 \quad 2144$ | C 5539 | 907 |  | $4750 \cdot 02$ | 2747 | 177 | $\begin{array}{llll}26 & 2 & 22 \cdot 3\end{array}$ | 060 | 140 | 10.4 | 28 | + 26 | 8.8 | A 3 |
| 5236 | 312194 | L 4303 | 906 |  | $104750 \cdot 37$ | $+3.3199$ | -. 0218 | $\begin{array}{llll}30 & 51 & 44 \cdot 8\end{array}$ | - 19.060 | $-\cdot 143$ | ${ }^{9} \cdot 6$ | - 8 | - 16 | 8.2 |  |
| 5237 | 281945 | C 5540 | 909-12 |  | $47 \quad 53 \cdot 16$ | 2956 | 196 | $28 \quad 2033.4$ | 062 | 142 | 8.4 | - 28 | + 3 | $7 \cdot 44$ |  |
| 5238 | 281946 | C 5544 | 922-3 |  | $4831 \cdot 20$ | 2966 | 199 | $28 \quad 39 \quad 12 \cdot 2$ | 079 | 139 | 10.2 | - 9 | - 23 | $9 \cdot 3$ | G 5 |
| 5239 | 262145 | C 5545 | 927 | 20941 | $4840 \cdot 61$ | 2782 | 183 |  | 083 | 139 | $8 \cdot 2$ | - 25 | - 7 | $7 \cdot 28$ | Ma |
| 5240 | 312196 | L 4306 | 928 | 20938 | $4^{8} 44 \cdot 59$ | 3165 | 218 | $30 \quad 50 \quad 9 \cdot 3$ | 085 | 140 | 10.3 | + 5 | 21 | $9 \cdot 2$ | G o |
| 5241 | 31 2197 | L 4307 | 930-1 | 20940 | 104847.81 | $+3.3157$ | -.0217 | 3046 10.1 | -19.086 | -.140 | 9.3 |  | + | $8 \cdot 2$ | G o |
| 5242 | 302083 | L 4308 |  |  | $\begin{array}{ll}49 & 6 \cdot 67\end{array}$ | 3104 | 212 | $\begin{array}{llll}30 & 19 & 30.5\end{array}$ | 095 | 140 | 11.8 |  | + 9 | $8 \cdot 9$ |  |
| 5243 | 312198 | L 4310 | 942 |  | $49 \quad 23 \cdot 32$ | 3157 | 218 | $305740 \cdot 7$ | 102 | 139 | 13.2 | - 59 | + 23 | $9 \cdot 6$ |  |
| 5244 | 262146 | C 5546 |  |  | $4924 \cdot 51$ | 2754 | 181 | $2636 \quad 5 \cdot 9$ | 103 | 137 | 12.7 |  |  | $9 \cdot 6$ |  |
| 5245 | 31 2199 | L 4311 | 943 | 20958 | $4927 \cdot 54$ | 3159 | 218 | $31040 \cdot 5$ | 104 | 139 | $8 \cdot 6$ | + 27 | 21 | $7 \cdot{ }^{2}$ | F 5 |
| 5246 | 292102 | C 5547 |  |  | $104934 \cdot 20$ | $+3 \cdot 3002$ | -. 0204 | $292317 \cdot 6$ | -19.107 | -. 138 | 10.5 | - 56 | + 16 | $8 \cdot 9$ | F 8 |
| 5247 | 302085 | L 4313 | 945 | 20937-66 | 4939.28 | 3067 | 210 | $\begin{array}{llll}30 & 6 & 37 \cdot 8\end{array}$ | 109 | 138 | 9.5 | 54 | - 69 | $6 \cdot 57$ | F 8 |
| 5248 | 262147 | C 5549 | 947 | 20972-3 | 49 49.04 | 2691 | 176 | 25 58 <br> 12.6  | 113 | 136 | 9.8 | - $4^{8 *}$ | - 6* | $6 \cdot 18$ | Fo |
| 5249 | 271951 | C 5550 |  |  | $4952 \cdot 68$ | 2789 | 185 |  | 115 | 136 | 11.1 | - 40 | - 9 | 9.6 |  |
| 5250 | $24 \quad 2285$ | B 4132 |  |  | 4957.99 | 2535 | 164 | $24 \quad 14 \quad 5 \cdot 3$ | 117 | I 35 | 9.9 | - 53 | + 16 | 8.8 | A 5 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 191000 | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & 1900+ \end{aligned}$ | Annual P.M. |  | Mag. | SpectralType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.000 } \\ \text { R. } \end{gathered}$ | $\begin{aligned} & \text { Doc. } \\ & \text { N.OO1. } \end{aligned}$ |  |  |
|  |  |  |  |  | 1 m | $s$ | s | - , " |  | " |  |  |  |  |  |
| 5251 | 292104 | ${ }_{\text {C }} 5552$ |  |  | 105023.95 | $+3.2916$ | -.0198 | $284413 \cdot 5$ | -19.129 | --136 |  |  |  |  |  |
| 5252 | 252314 | C 5554 | 965 | 20990 | 5044.56 | - 2599 | 169 | $251348 \cdot 1$ | 138 <br> 138 | 133 | $12 \cdot 3$ | -- $55^{*}$ | - 17** | 4.51 | \} |
| 5253 |  |  | 966 | 20991 | 5045.06 | 2599 | 169 | ${ }_{25}^{5} \quad 1345 \cdot 9$ | 138 | 133 | 11.0 | - $55^{*}$ | - 17* | $6 \cdot 30$ |  |
| 5254 | 26 2148 | C 5557 |  |  | 5111.99 | 2667 | 176 | 26 10 13 ${ }^{\circ} \mathrm{O}$ | 150 | 132 | $9 \cdot 8$ | - 150 | - 100 | 9.6 |  |
| 5255 | 312203 | L 4319 | 972 | 21002 | 5121.56 | 3144 | 221 | $3131 \begin{array}{llll} & 31\end{array}$ | 154 | 134 | $9 \cdot 4$ | - 69 | - 47 | $8 \cdot 2$ | F 5 |
| 5256 | 281952 | C 5559 | 978 | 21008-9-10 | $105124 \cdot 65$ | +3.2840 | -. 0192 | $\begin{array}{lllll}28 & 13 & 23.9\end{array}$ | -19.155 | -.133 | 9.62 | - 338 | - 145 | 8.6 | K |
| 5257 | 312205 | L 4320 | 983 |  | $5141 \cdot 10$ | 3138 | 222 | $313442 \cdot 1$ | 162 | 134 | 10.3 | - 3 | - 15 | $9 \cdot 6$ | F 5 |
| 5258 | 262152 | C 5560 | 985 | 21020-1 | 5141.56 | 2637 | 175 | $25 \quad 58 \quad 51 \cdot 5$ | 162 | 132 | $8 \cdot 0$ | - 14 | - 25 | $6 \cdot 40$ | Ko |
| $[5259$ | 292108 | C 5563 | 990 |  | 5213.41 | 2922 | 203 | $29 \quad 25 \quad 23.9$ | 176 | 131 | 10.85 | + 252 | - 174 | $9 \cdot 2$ | K o |
| 5260 | $26 \quad 2153$ | C 5565 |  |  | 5217.27 | 2602 | 173 | 254514.0 | 177 | 130 | 10.6 | + 86 | - 31 | 8.9 |  |
| 5261 | 262154 | C 5566 | 991 |  | $10 \quad 52 \quad 20 \cdot 92$ | +3.2627 | .0175 | $\begin{array}{llll}26 & 3 & 53.2\end{array}$ | -19.179 | $-130$ | 12.2 | 31 | - 7 | $9 \cdot 6$ |  |
| 5262 | 302088 | L 4321 |  |  | 5223.30 | 2974 | 208 | $\begin{array}{llll}30 & 3 & 39.5\end{array}$ | 180 | 132 | 12.2 | 11 | - 20 | $9 \cdot 6$ |  |
| 5263 | 242291 | C 5567 | 994 |  | 5223.67 | 2505 | 160 | $2437 \quad 22 \cdot 3$ | 180 | 130 | 9.0 | 51 | + 26 | $7 \cdot 61$ | K 0 |
| 5264 | 252317 | C 5568 |  |  | $5236 \cdot 86$ | 2523 | 166 | $2454 \quad 7 \cdot 4$ | 186 | 130 | 10.2 | 19 | - 75 | $9 \cdot 3$ |  |
| 5265 | 312207 | L 4322 |  | 21041 | 5239.43 | 3063 | 218 | $\begin{array}{llll}31 & 8 & 2 \cdot 3\end{array}$ | 187 | 132 | 9.7 | - 7 | - $\quad 27$ | $7 \cdot 86$ | A 2 |
| 5266 | 312210 | L 4324 | 999 | 21047 | $1053 \quad 2.36$ | $+3.3090$ | -. 0221 | $313351 \cdot 3$ | -19.196 | -.131 | 10.8 | 18 | - 20 | $8 \cdot 28$ | A 3 |
| 5267 | 26 2156 | C 5569 | 1005-6 |  | $\begin{array}{lll}53 & 3 \cdot 68\end{array}$ | 2655 | - 179 | $26 \quad 38 \quad 29 \cdot 0$ | 197 | 129 | 11.8 | - 24 | - 6 | 8.9 | Fo |
| 5268 | 252319 | ${ }^{\text {C }} 557 \mathrm{I}$ | 1009 | 21051 | $\begin{array}{llll}53 & 17.33\end{array}$ | 2502 | 166 | $2+5125 \cdot 6$ | 203 | 128 | 10.1 | - 15 | - 21 | $7 \cdot 86$ | K 0 |
| 5269 | 271960 | C 5572 |  | 21054 | 5323.83 | 2665 | 181 | $\begin{array}{lllll}26 & 52 & 3 \cdot 7\end{array}$ | 205 | 128 | 10.8 | - 17 | + $+\quad 3$ | 8.8 | G 5 |
| 5270 | 312211 | L 4325 | IOII | 21053 | 5325.85 | 3044 | 218 |  | 206 | 130 | 10.2 | + + | + 3 | $8 \cdot 6$ | Ko |
| 5271 | 262159 | C 5575 |  |  | $105353 \cdot 30$ | $+3.2594$ | -.0175 | 261025.0 | -19.218 | -. 127 |  |  | - 63 | $8 \cdot 7$ | G 5 |
| 5272 | $28 \quad 1957$ | C 5577 | 1035-6 | 21088 | $5435 \cdot 45$ | 2777 | 195 | $28 \quad 36 \quad 31 \cdot 3$ | 235 | 127 | $8 \cdot 9$ | - 39 | + 5 | $8 \cdot 9$ |  |
| 5273 |  | C 5579 |  |  | $5447 \cdot 23$ | 2548 | 173 | $25 \quad 55$ I6.8 | 240 | 126 | $9 \cdot 7$ | - 121 | - $\quad 58$ |  |  |
| 5274 5275 | 26216 T |  |  | 21095 | 54 54 54 47.64 | 2548 2548 |  | $25 \quad 55 \quad 17 \cdot 3$ |  | 126 |  | - 121 | - 58 | $8 \cdot 7$ | K |
| 5275 |  |  |  |  | 54 47.66 |  |  | $25 \quad 5518 \cdot 1$ |  | 126 |  |  | - 58 |  |  |
| 5276 | $26 \quad 2163$ | C 5582 | 1040 | 21097 | 105457.04 | $+3.2532$ | -.0171 | $254620 \cdot 4$ | -19.244 | -. 125 | 10.0 | 111 | + 11 | 8.9 | G 5 |
| 5277 | 312216 | L 4331 |  |  | $55 \quad 1.88$ | 3014 | 219 | $312853 \cdot 6$ | 246 | 127 | 10.9 | 16 | - 15 | $9 \cdot 73$ | K |
| 5278 |  | C 5585 |  |  | $55 \quad 29.68$ | 2762 | 195 | 28 45 <br> 18.4  | 257 | 125 | 14.3 |  |  | $9 \cdot 3$ |  |
| 5279 |  | L 4332 |  |  | 5531.86 | 2984 | 217 | $312025 \cdot 4$ | 258 | 126 | - | - 56 | $+3$ | $9 \cdot 2$ | G 5 |
| 5280 | $26 \quad 2166$ | C 5586 | 1055 | 21109 | $5535 \cdot 58$ | 2518 | $17^{2}$ | $254849 \cdot 6$ | 260 | 124 | 11.9 | - 13 | - | 9.0 |  |
| 5281 | 242298 | B 4154 |  |  | 10 $5545 \cdot 87$ | +3.2386 | -. 0159 | 241123.4 | -19.264 | --123 | 11.4 | + 23 | - 50 | $8 \cdot 6$ | Go |
|  | $27 \quad 1965$ | C 5587 |  |  | $5546 \cdot 81$ | 2592 | 179 | $2648 \quad 23 \cdot 1$ | 264 | 123 | 11 | - $4^{2}$ | - 68 | $9 \cdot 3$ | Go |
| 5283 | 271966 | C 5588 |  |  | $55 \quad 52 \cdot 61$ | 2622 | 183 | $\begin{array}{lllll}27 & 12 & 16.3\end{array}$ | 266 | 123 | 12.2 | + I | $1+\quad 36$ | $9 \cdot 3$ |  |
| 5284 | 271967 | C 5590 | 1060 | 21118 | $55 \quad 53 \cdot 87$ | 2652 | 186 | $273453 \cdot 9$ | 267 | 124 | 12.1 | 4 | 20 | 9.0 |  |
| 5285 | 292110 | C 5589 | 1058 | 21117-46 | 55 54.17 | 2829 | 202 | $2942 \quad 6 \cdot 5$ | 267 | 124 | 11. | 8 | 9 | 8.16 | Fo |
| 5286 | $27 \quad 1968$ | C 5591 | 1063 | 21123 | 10564.66 | $+3.2650$ |  | $273655 \cdot 1$ | -19.271 | --124 |  |  | $+$ | $8 \cdot 2$ | Go |
| 5287 | 281959 | C 5592 |  |  | $\begin{array}{lll}56 & 7 \cdot 89\end{array}$ | 2659 | 187 | $\begin{array}{llllll}27 & 45 & 12.7\end{array}$ | 273 | 124 | 13.0 | + 14 | + 31 | $9 \cdot 6$ |  |
| 5288 | 242300 | C 5593 | 1066-7 |  | $56 \quad 7.93$ | 2404 | 162 | $24 \quad 33 \quad 9.6$ | 273 | 123 | 11.1 | + 26 | - 186 | 8.41 | G 5 |
| 5289 | 262167 | C 5594 |  |  | $56 \quad 15.98$ | 2491 | 171 | $\begin{array}{llllll}25 & 42 & 20 \cdot 8\end{array}$ | 276 | 122 | 12.9 | + 5 | 32 | $9 \cdot 3$ |  |
| 5290 | 322098 | L 4335 | 1071 |  | 5631.39 | 2985 | 221 | 314351.1 | 282 | 123 | $1 \mathrm{I} \cdot$ | 30 | 41 | $8 \cdot 38$ | G 5 |
| 5291 | 302097 | L 4336 | 1082 |  | 105654.83 | $+3.2852$ | -. 0207 | 302117.5 | -19.291 | -. 122 | 10.2 | $-\quad 45$ | + 21 | 7.26 | K |
| 5292 | 312220 | L 4337 |  |  | $\begin{array}{lll}57 & 2 \cdot 92\end{array}$ | 2932 | 216 | 312070 | 294 | 122 | 12.3 | + 11 | - 98 | $9 \cdot 2$ | Go |
| 5293 | 292112 | C 5596 | 1085 |  | $\begin{array}{ll}57 & 4.87\end{array}$ | 2733 | 197 | $2885958 \cdot 1$ | 295 | 122 | 12.4 | - 4 | - | $9 \cdot 2$ |  |
| 5294 | 281961 | C 5597 | 1089 | 21155 | $\begin{array}{lll}57 & 15.17 \\ 57 & 20.60\end{array}$ | 2675 | 192 | $282126 \cdot 7$ | 299 | 12 I | 12.5 | + 26 $+\quad 59$ | $10$ | 8.6 | $\mathrm{K}_{5}$ |
| 5295 | 302099 | L 4339 |  |  | $5720 \cdot 60$ | 2830 | 206 | $3015 \quad 25 \cdot 1$ | 301 | 121 | 13.6 | + 59 | - 15 | $9 \cdot 2$ | F 8 |
| 5296 | 312222 | L 4340 |  |  | 10 5722.36 | $+3.2918$ | -. 0216 | $\begin{array}{lllll}31 & 18 & 30.4\end{array}$ | -19.302 | --121 | 13.1 | - 46 | - 52 | $9 \cdot 2$ | G o |
| 5297 | 312223 | L 4341 | 1093 |  | $5730 \cdot 56$ | 2879 | 212 | $305425 \cdot 6$ | 305 | 121 | 11.0 | + 29 | - 15 | $8 \cdot 7$ | F 5 |
| 5298 | 242305 | B 4167 |  | 21163 | 5733.38 | 2338 | 158 | $24 \quad 931 \cdot 9$ | 306 | 118 | 11.0 | - 15 | - | $8 \cdot 3$ | A 5 |
| 5299 | 312225 | L 4342 | 1107 |  | $5756 \cdot 85$ | 2864 | 212 | $305358 \cdot 3$ | 316 | 120 | 10.4 | + 16 | - 33 | 8.2 | F 2 |
| 5300 | 262169 | C 5600 | 1108 |  | $58 \quad 12.03$. | 2473 | 173 | $26 \quad 922 \cdot 5$ | 322 | 118 | 10.6 | + 6 | - 11 | $9 \cdot 6$ |  |

5252. Numbor of observations 45 .

|  |  |  |  |  |  |  |  |  |  |  |  | Annual | I P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0 | Precession. | Sec. Var. | Epoch 1900+ | $\begin{gathered} \text { R.A. } \\ \text { s.000 I. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { *oor } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m | 8 | 8 | - , " |  |  |  |  |  |  |  |
| 5301 | 292116 | C 5603 | 1109 | 2II79-81 | $10 \quad 58 \quad 17.63$ | $+3.2729$ | -.0199 | $292452 \cdot 3$ | -19.324 | -.119 | 10.4 | + 6 | - 21 | $7 \cdot 29$ | K o |
| 5302 | $27 \quad 1970$ | C 5604 | 1111 |  | 58 19.18 | 2534 | 179 | $26 \quad 5834 \cdot 5$ | 324 | 118 | 12.4 | - 23 | - 40 | $8 \cdot 9$ |  |
| 5303 | 312228 | L 4343 | 1110 |  | $58 \quad 20 \cdot 66$ | 2866 | 213 | $31443 \cdot 2$ | 325 | 119 | 11.8 | - 123 | - IOI | $8 \cdot 7$ | G 5 |
| 5304 | 262170 | C 5605 |  |  | $58 \quad 25 \cdot 68$ | 2445 | 171 | $\begin{array}{llll}25 & 5233 \cdot 0\end{array}$ | 327 | 118 | 12.4 | 23 | + 10 | $8 \cdot 9$ |  |
| 5305 | 302100 | L 4345 |  |  | 58 30.51 | 2804 | 207 | $30 \quad 24+3.8$ | 329 | 118 | 12.1 | 9 | + 13 | $9 \cdot 2$ | Ma |
| 5306 | 322100 | L 4347 | III8 |  | 10 585279 | $+3.2901$ | -. 0218 | 314225.5 | -19.337 | -.118 | $9 \cdot 6$ | - 82 | - 4 | 8.55 | F 8 |
| 5307 | 262171 | C 5606 | 1120 | 21197-8 | 5854.09 | 2462 | 173 | 26. 15 33.0 | 338 | 116 | $9 \cdot 6$ | - 87 | + 2 | $6 \cdot 87$ | A 5 |
| 5308 | 292118 | C 5609 |  |  | $5936 \cdot 46$ | 2657 | 195 | $29 \quad 1.46 \cdot 3$ | 354 | 116 | $10 \cdot 9$ | + 3 | - 23 | $9 \cdot 6$ |  |
| 5309 | 292120 | C 5611 | I I 44 | $21219-20$ | $5942 \cdot 33$ | 2704 | 200 | 2939 29.1 | 356 | 116 | II. 2 | + 15 | - 29 | $8 \cdot 06$ | K o |
| 5310 | 28 1963 | C 5612 | I 145 |  | $5943 \cdot 15$ | 2592 | 189 | 28 I5 $2 \cdot 0$ | 357 | 116 | 10.8 | + 22 | + 16 | $8 \cdot 8$ |  |
| 5311 | 322102 | L 4353 | I 143 |  | Io 5944.05 | $+3.2889$ | -.0219 | $315517 \cdot 7$ | -19.357 | -.117 | 14.3 | - 19 | + 17 | $7 \cdot 32$ | G 5 |
| 5312 | 271973 | C 5618 |  |  | 5959.38 | 2509 | 180 | 271654.5 | 363 | I 14 | 11.6 | - II | - 15 | $9 \cdot 6$ |  |
| 53 I 3 | $25 \quad 2335$ | C 5620 | 1156 | 21237 | $11027 \cdot 40$ | 2377 | 169 | $254120 \cdot 6$ | 373 | II3 | II 126 | - 297* | - 82 * | $7 \cdot 49$ | G o |
| 5314 | 271976 | C 5622 | II 58 |  | - 34.27 | 2488 | 180 | $\begin{array}{llll}27 & 13 & 5 \cdot 3\end{array}$ | 376 | 113 | 12.9 | - 21 | - 62 | $9 \cdot 6$ |  |
| 5315 | 292122 | C 5623 | I 157 | 21239 | - 35.47 | 2660 | 199 | $292749^{\circ} 2$ | 376 | 114 | 11.9 | + 6 | - 34 | $9 \cdot 2$ | F 5 |
| 5316 | 281966 | C 5624 | I 163 |  | II 043.33 | $3 \cdot 258 \mathrm{I}$ | -.0189 | $28 \quad 30 \quad 29 \cdot 6$ | -19.379 | --Iİ 3 | 12.9 | $-\quad 46$ | - 39 | $9 \cdot 6$ |  |
| 5317 | 312231 | L 4356 |  |  | - 51.16 | 2781 | $2 \downarrow 1$ | $3 \mathrm{I} 455 \cdot 0$ | 382 | II4 | 11.5 | - 24 | - 29 | 8.8 | Ma |
| 5318 | 312232 | L 4357 |  |  | - 051.95 | 2821 | 216 | $31 \begin{array}{llll}31 & 34 & 33.9\end{array}$ | 382 | 114 | 11.7 | - 24 | - 71 | $9 \cdot 6$ | G 5 |
| 5319 | 302105 | L 4359 | 1168 -9 | 21248 | - 56.33 | 2730 | 206 | $\begin{array}{llll}30 & 29 & 7 \cdot 3\end{array}$ | 384 | II4 | 10.0 | - 43 | - 21 | $8 \cdot 2$ | K |
| 5320 | $25 \quad 2338$ | C 5628 |  |  | I 17.89 | 2283 | 160 | $244^{2} 47 \cdot 6$ | 392 | I I I | 9.8 | - 32 | - 12 | 8.81 | G 5 |
| 5321 | $27 \quad 1978$ | C 5630 |  |  | II 1 I 3134 | +3.2483 | -018I | $273156 \cdot 1$ | -19.397 | --II I | 12.1 | - 37 | + 24 | $8 \cdot 9$ |  |
| $5322$ | 271979 | C 563 I |  |  | I 40.76 | 2466 | 180 | $272156 \cdot 9$ | 400 | I 10 | 11.0 | + 14 | - 10 | $8 \cdot 8$ |  |
| 5323 | 312234 | L 436 I | 1178 |  | I 47.60 | 2776 | 213 | $\begin{array}{llll}31 & 25 & 4.9\end{array}$ | 403 | 112 | 12.2 | + 11 | - 20 | $9 \cdot 2$ | Fo |
| $5324$ | 292123 | C 5634 | 1187 |  | 21.74 | 2570 | 192 | $28 \quad 5256 \cdot 8$ | 408 | 110 | 12.4 | + 8 | - 14 | $9 \cdot 2$ |  |
| 5325 | $26 \quad 2175$ | C 5635 |  | 21275 | $27 \cdot 42$ | 2370 | 172 | $\begin{array}{llll}26 & 13 & 1 \cdot 7\end{array}$ | 410 | I 10 | $11 \cdot 7$ | - 20 | + 18 | $8 \cdot 4$ | G 5 |
| 5326 | $26 \quad 2176$ | C 5636 | 1191 | 2128I-2 | 11214.71 | +3.2352 | .0170 | 26 I 26.6 | -19.413 | $-.109$ | $9 \cdot 0$ | - $47^{*}$ | - 31* | $6 \cdot 73$ | F 5 |
| 5327 | $30 \quad 2107$ | C 5637 |  |  | $231 \cdot 10$ | 2640 | 201 | $295950 \cdot 6$ | 419 | 110 | 10.6 | + 12 | - 31 | $9 \cdot 6$ | G |
| 5328 | $25 \quad 2340$ | C 5638 | I 199 |  | $235 \cdot 52$ | 2292 | 163 | $25 \quad 18 \quad 51 \cdot 3$ | 420 | 109 | 10.8 | $+\quad 44$ | - 17 | $9 \cdot 3$ |  |
| 5329 | 302109 | C 5642 |  |  | 3 38.08 | 2589 | 198 | $2948 \quad 3 \cdot 1$ | 443. | 108 | $10 \cdot 3$ | - 20 | $+\quad 53$ | 9.51 | G 5 |
| 5330 | 292125 | C 5643 | 1222 |  | $3 \quad 38 \cdot 39$ | 2511 | 190 | $28 \quad 45 \quad 56 \cdot 4$ | 443 | 107 | $10 \cdot 6$ | - 47 | + 24 | $9 \cdot 6$ |  |
| 533 I | 292126 | C 5644 |  |  | II $3,53.52$ | $+3.2558$ | -.0196 | $293032 \cdot 6$ | -19.448 | -. 107 | 10.8 | - 37 | - 9 | $9 \cdot 6$ |  |
| 5332 | 302110 | C 5646 |  |  | $358 \cdot 48$ | 2591 | 200 | $295845 \cdot 6$ | 450 | 107 | $9 \cdot 9$ | + 3 | - 14 | $9 \cdot 2$ | Fo |
| 5333 | $25 \quad 2344$ | C 5647 | I 229 | 21327 | 359.47 | - 2243 | 160 | $25 \quad 8 \quad 45 \cdot 4$ | 450 | 106 | $8 \cdot 7$ | + $\mathbf{2}^{*}$ | - $2^{*}$ | $5 \cdot 63$ | A 2 |
| 5334 | 28 1971 | C 5648 | 1230 | 21329 | $4 \quad 4.77$ | 2476 | 188 | $\begin{array}{llll}28 & 28 & 27.9\end{array}$ | 452 | 106 | $9 \cdot 6$ | - 13 | + 18 | $8 \cdot 6$ | F 8 |
| 5335 | 302 III | L 4369 | $1231-2$ | $21331-2$ | $4 \quad 9 \cdot 87$ | 2626 | 205 | $303142 \cdot 0$ | 454 | 106 | $9 \cdot 3$ | - 17 | - 10 | 7.18 | G 5 |
| 5336 | 302113 | L 4370 |  |  | II $443 \cdot 35$ | +3.2584 | -. 0202 | $\begin{array}{llll}30 & 13 & 3.0\end{array}$ | - I9.466 | -. 106 | 10.8 | - 74 | - 25 | $9 \cdot 6$ |  |
| $5337$ | $26 \quad 2180$ | C 5651 | 1 |  | $446 \cdot 70$ | 2318 | 172 | $\begin{array}{llll}26 & 33 & 1 \cdot 2\end{array}$ | $467$ | 105 | $11 \cdot 3$ | + 9 | - 13 | $9 \cdot 7$ |  |
| 5338 | $27 \quad 1987$ | C 5656 | 25 | 21365 | $538 \cdot 97$ | 2325 | 175 | $2659588 \cdot 2$ | $485$ | 103 | 11.2 | +. 6 | - 30 | $9 \cdot 6$ |  |
| 5339 | 312236 | L 4373 | 24 | 21363 | $541 \cdot 08$ | 2599 | 206 | $\begin{array}{llll}30 & 50 & 33 \cdot 4\end{array}$ | $486$ | 104 | $8 \cdot 9$ | 19 | - 12 | $8 \cdot 2$ | A O |
| 5340 | $25 \quad 2346$ | C 5657 | 27 | 21366 | $548 \cdot 93$ | 2226 | 164 | $25 \quad 37 \quad 20.5$ | 488 | 102 | $10 \cdot 6$ | - 15 | + II | $8 \cdot 9$ | Ko |
| 534 I | 312238 | L 4375 |  |  | $\begin{array}{llll}11 & 5 & 49 \cdot 38\end{array}$ | +3.2654 | -.0213 | $\begin{array}{lllll}31 & 38 & 54\end{array}$ | - 19.488 | -. 104 | $12 \cdot 3$ | - 84 | + 22 | $9 \cdot 6$ |  |
| 5342 | 2512347 | C 5658 | 28 |  | $55 \mathrm{I} \cdot 96$ | 2204 | 162 | 25 188 19.6 | 489 | 100 | $12 \cdot 3$ | + 15 | - 32 | $9 \cdot 7$ |  |
| 5343 | 312239 | L 4376 | 30 | 21369 | $6 \quad 3.45$ | 2596 | 207 | $3058 \quad 51 \cdot 9$ | 493 | 103 | 11.7 | - 33 | - 23 | $9 \cdot 0$ | Go |
| 5344 | $312238 a$ |  |  |  | $6 \quad 5 \cdot 99$ | 2591 | 207 | $\begin{array}{llll}30 & 56 & 18 \cdot 0\end{array}$ | 494 | 103 | 14.28 | + 456 | $-212$ | $9 \cdot 0$ |  |
| 5345 | $27 \quad 1988$ | C 5659 |  | 21374 | $6 \quad 6 \cdot 14$ | 2295 | 173 | $26 \quad 45 \quad 24 \cdot 8$ | 494 | 102 | $1 \mathrm{I} \cdot 7$ | -. 19 | - 17 | $8 \cdot 4$ | K 5 |
| 5346 | 312240 | L 4377 | 3 I | 21368 | $\begin{array}{lll}11 & 6 & 8.60\end{array}$ | +3.2591 | -. 0207 | $305621 \cdot 9$ | - 19.495 | -.103 | 11.46 | + 456 | - 212 | 8.8 | K 5 |
| 5347 | 26 2181 | C 5661 | 39 | 21384 | 617.75 | 2273 | 171 | 263199 | 498 | 101 | 10.8 | - 7 | + $+\quad 7$ | $8 \cdot 7$ | K 0 |
| 5348 | $27 \quad 1989$ | C 5662 |  |  | $631 \cdot 79$ | 2334 | 178 | $27 \quad 30 \quad 23 \cdot 5$ | 503 | 101 | 11.7 | - 18 | 8 | $9 \cdot 3$ |  |
| 5349 | 292133 | C 5664 |  |  | $647 \cdot 53$ | 2416 | 188 | $28 \quad 48 \quad 42 \cdot 4$ | 508 | 101 | 13.7 |  |  | $10 \cdot 4$ |  |
| 5350 | 27 1991 | C 5665 | 49 | 21393-4 | - $65 \mathrm{I} \cdot 9 \mathrm{I}$ | 2311 | 177 | $27 \quad 1913.4$ | 510 | 100 | 8.4 | + 15 | + 22 | $7 \cdot 9$ | F 5 |


| No. | B.D. | A.G.C. | W B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.oooi. }}{\text { R. }}$ | $\begin{gathered} \text { Dec. } \\ \text { n.OOI. } \end{gathered}$ |  |  |
|  |  |  |  |  | n m 8 | s |  | - , " |  | " |  |  |  |  |  |
| 5351 | 252350 | C 5666 |  |  | $\begin{array}{llll}\text { II } & 6 & 56.77\end{array}$ | $+3.2176$ | -.0161 | 251927.0 | -19.511 | -.098 | $9 \cdot 3$ | - 28 | - 33 | $9 \cdot 2$ | F 8 |
| $5352$ | 312242 | L 4381 | 61-3 | 21412 | $725 \cdot 65$ | 2530 | 204 | $3042 \begin{array}{llll} & 4 & 29\end{array}$ | 521 | 100 | $9 \cdot 2$ | - 47 | - I4 | $8 \cdot 4$ | K |
| 5353 | 252352 | C 5667 | 77 | 21422 | 7 +1.34 | 2144 | 160 | $25 \quad 8 \quad 25.9$ | 526 | 97 | $9 \cdot 5$ | + 36 | + 18 | $8 \cdot 3$ | A 5 |
| 5354 | 302121 | C 5668 | 83 |  | $8 \quad 0.25$ | $2+63$ | 198 | 30 I $46 \cdot 5$ | 532 | 99 | $10 \cdot 3$ | + 101 | - 76 | $9 \cdot 2$ | G 5 |
| 5355 | 271992 | C 5669 | 88 | $21437-8$ | 817.07 | 2284 | 178 | $273231 \cdot 2$ | 538 | 98 | $10 \cdot 2$ | - 41 | - 44 | $7 \cdot 83$ | Fo |
| 5356 | $27 \quad 1993$ | C 5671 | 92 | 21442-3 | $\begin{array}{llll}11 & 8 & 28.38\end{array}$ | $+3.2287$ | -.0179 | $273955 \cdot 5$ | $-19.541$ | -. 097 | $9 \cdot 6$ | $+\quad 2$ | - 42 | $7 \cdot 78$ | $\mathrm{K}_{2}$ |
| 5357 | 302123 | C 5672 | 96 |  | 833.99 | 2445 | 197 | $30 \quad 2 \quad 34 \cdot 0$ | 543 | 97 | 10.1 | $+10$ | - 65 | $8 \cdot 4$ | F 8 |
| 5358 | 252353 | C 5674 |  | 21457 | 853.08 | 2142 | 162 | $25 \quad 3543 \cdot 2$ | 550 | 95 | $9 \cdot 8$ | - 53 | - 56 | $8 \cdot 6$ | F 5 |
| $5359$ | $\begin{array}{ll}31 & 2245\end{array}$ |  |  |  | 857.68 | 2490 | 204 | $30 \quad 53$ 20. I | 551 | 97 | 11.7 |  |  | 9.7 |  |
| 5360 | 242332 | B 4214 | 105 |  | $9 \quad 18.29$ | 2051 | 153 | $24 \quad 1958.6$ | 558 | 94 | $9 \cdot 5$ | 8 | - 20 | $7 \cdot 96$ | B 9 |
| 5361 | $26 \quad 2184$ | C 5676 | 116 | 21475-6 | II $945 \cdot 13$ | $+3.2155$ | -.0167 | 26 II $57 \cdot 6$ | -19.566 | -. 093 | $9 \cdot 6$ | - 80 | + 23 | $7 \cdot 57$ |  |
| $5362$ | $25 \quad 2355$ | C 5677 |  |  | $100.91{ }^{1}$ | 2085 | 158 | 25 10 56.6 | 571 | 93 | 10.8 |  |  | $9 \cdot 6$ | K 5 |
| 5363 | 252357 | C 5678 |  | 21491 | 106.15 | 2101 | 160 | $25 \quad 28 \quad 35 \cdot 0$ | 573 | 93 | II 5 | - 22 | - 35 | $8 \cdot 8$ | K |
| 5364 | $\begin{array}{lll}27 & 1998\end{array}$ | $\text { C } 5680$ | 149 |  | $10 \quad 16.39$ | 2175 | 170 | $26 \quad 45 \quad 10 \cdot 9$ | 576 | 93 | II.I | + 6 | - 15 | $8 \cdot 4$ | F 5 |
| 5365 | 271999 | C 5682 |  |  | 1030.09 | 2219 | 177 | $27 \quad 32 \quad 27 \cdot 9$ | 580 | 93 | II.O | - 89 | - 2 | $9 \cdot 2$ |  |
| 5366 | $) 281979$ | C 5683 |  | 21 499-500 | II 1031.60 | $+3.2251$ | -.0181 | $\begin{array}{lll}28 & 3 & 41 \cdot 7\end{array}$ | -19.581 | -.093 |  | - 46 | + 6 | $\} 7 \cdot 13$ | A 5 |
|  | )28 | C 568 |  | 21499-500 | 1031.89 | 2251 | 81 | $\begin{array}{llll}28 & 3 & 41 \cdot 9\end{array}$ | 58 I | 93 |  | 46 |  |  | A |
| 5368 | 272000 | ${ }_{C}{ }^{\text {C }} 5684$ |  |  | 1031.79 | 2180 | 172 |  | 58 I |  | 10.5 | - 20 | - 1 | $8 \cdot 6$ | K 0 |
| 5369 | $28 \quad 1980$ | C 5685 |  |  | 1052.09 | 2239 | 180 | $\begin{array}{llll}28 & 2 & 8 \cdot 7\end{array}$ | 587 |  | 12.0 | - 58 | - 8 | $9 \cdot 6$ |  |
| 5370 | 292140 | C 5687 |  |  | 1059.43 | 2293 | 188 | $285556 \cdot 0$ | 589 | 92 | 10.0 | $+5$ | - 31 | $9 \cdot 2$ |  |
| 5371 | $27 \quad 2002$ | C 5689 | I53 |  | II II 27.75 | $+3.2138$ | -.0170 | $264232 \cdot 6$ | $-19.598$ | -.090 | 10.1 | - 27 | - 43 | $9 \cdot 0$ | G 5 |
| 5372 | $25 \quad 2359$ | C 5690 |  |  | 1131.80 | 2016 | 154 | $24 \quad 43 \quad 8 \cdot 3$ | 599 | 90 | $10 \cdot 1$ | + 6 | - 24 | 9.54 | G |
| 5373 | 28 1981 | ${ }^{1} 5691$ |  | 21520 | I I $36 \cdot 27$ | 2209 | 179 | $275445 \cdot 9$ | 601 |  | $10 \cdot 3$ | - 9 | - 9 | $9 \cdot 0$ |  |
| 5374 | 302128 | C 5693 |  |  | II $49 \cdot 34$ | 2321 | 193 | $2947 \quad 7 \cdot 6$ | 605 | 90 | 12.9 | + 23 | + 15 | 10.4 |  |
| 5375 | 302130 | C5694 |  | 21534 | 1225.95 | 2319 | 196 | $30 \quad 3 \quad 42 \cdot 5$ | 616 | 89 | $8 \cdot 8$ | - 140 | - 2 | $9 \cdot 3$ |  |
| 5376 | 312249 |  |  |  | $\begin{array}{llll}11 & 12 & 35 \cdot 56\end{array}$ | +3.2413 | -. 0208 | $\begin{array}{llll}31 & 36 & 5 \cdot 8\end{array}$ | -19.619 | -.089 | 11.9 |  |  | $9 \cdot 7$ |  |
| 5377 | $26 \quad 2189$ | C 5696 | 178 | 21543 | $1253 \cdot 36$ | 2053 | 162 | $255710 \cdot 0$ | 624 | 87 | $10 \cdot 0$ | - 56 | - 29 | $7 \cdot 30$ | A 2 |
| 5378 | $\begin{array}{lll}28 & 1983\end{array}$ | C 5697 | 179 | 21544-5 | $1255 \cdot 49$ | 2166 | 177 | 275114.3 | 625 | 87 | $9 \cdot 1$ | 14 | - II | $6 \cdot 80$ | A 2 |
| 5379 | $25 \quad 2362$ | C 5698 | 180 | 21546 | 1258.00 | 2027 | 159 | $253236 \cdot 2$ | 625 | 87 | $9 \cdot 4$ | + 13 | - 7 | 7.84 | K |
| 5380 | 262190 | C 5699 | 184 |  | 13 20.85 | 2077 | 166 | $26 \quad 2640 \cdot 4$ | 627 | 87 | II•3 | - 27 | - 8 | $8 \cdot 3$ | K O |
| 538 I | $\begin{array}{lll}28 & 1985\end{array}$ | C 5700 |  |  | $\begin{array}{llll}11 & 13 & 27.61\end{array}$ | $+3.2185$ | -.0182 | $28 \quad 26 \quad 52.5$ | $-19.634$ | $-.087$ | 14.1 | - 1 | - 24 | 10.2 |  |
| 5382 | $28 \quad 1986$ | C 5701 |  |  | $13 \quad 33 \cdot 62$ | 2176 | 181 | $28 \quad 2110.9$ | 636 | 86 | 13.9 | + 8 | 121 | $9 \cdot 7$ |  |
| 5383 | 262192 | C 5702 | 193 | 21559 | 1336.17 | 2020 | 160 | $25 \quad 43$ 37* 3 | 637 | 86 | 11.3 | - 29 | $1+21$ | $9 \cdot 2$ | F 5 |
| 5384 | 312250 | L 4402 |  |  | $13 \quad 39.83$ | 2360 | 205 | 312114.4 | 638 | $87$ | II. 2 | 0 | $2$ | $8 \cdot 8$ | G 5 |
| 5385 | $30 \quad 2134$ | C 5703 | 201 |  | $1351 \cdot 33$ | 2253 | 191 | $294452 \cdot 3$ | 64 I | 85 | 10.9 | $+3$ | - 11 | $8 \cdot 8$ |  |
| 5386 | 262194 | C 5704 | 203 |  | 111352.29 | $+3.2016$ | -.0161 | $254742 \cdot 7$ | -19.641 | -. 086 | I I 9 | - 67 | - 8 | $9 \cdot 6$ | G 5 |
| 5387 | 242339 | C 5705 |  |  | 1353.98 | 1946 | 154 | $243448 \cdot 8$ | 642 | 86 | II•I | - 55 | + 32 | $9 \cdot 56$ | G 5 |
| 5388 | 312254 | $L_{4} 4406$ | 218 |  | $1448 \cdot 78$ | 2299 | 201 | $31043 \cdot 1$ | 658 | 85 | $9 \cdot 3$ | 2 | 8 | $8 \cdot 9$ | G 5 |
| 5389 | 292145 | C 5707 | 223 |  | $1511 \cdot 13$ | 2186 | 188 | $2922 \quad 10 \cdot 9$ | 664 | 82 | 13.6 | - 42 | - 12 | $9 \cdot 7$ |  |
| 5390 | 292144 | C 5708 | 224 |  | $15 \quad 11.25$ | 2182 | 187 | $29 \quad 18 \quad 1 \cdot 3$ | 664 | 82 | II. 4 | - 7 | - 34 | $8 \cdot 9$ | K o |
| 5391 | 312255 | L. 4407 |  |  | II 15 I2.11 | $+3.2310$ | -. 0204 | $\begin{array}{llll}31 & 24 & 28.9\end{array}$ | -19.664 | -.083 | I 1.8 | - 13 | - 59 | $9 \cdot 6$ | G 5 |
| 5392 | 292147 | C 5709 | 227 | 21594 | $15 \quad 21.43$ | 2147 | 182 | $28 \quad 48$ 10•1 | 667 | 82 | $9 \cdot 2$ | + 26 | + 10 | $7 \cdot 94$ | K ${ }_{2}$ |
| 5393 | 302137 | L 4408 | 226 | 21591 | 15 21.49 | - 2256 | 197 | $30 \quad 3648 \cdot 0$ | 667 | 82 | $9 \cdot 5$ | - 1 | - 17 | $7 \cdot 42$ | K 5 |
| 5394 | 262196 | C 5710 |  |  | $15 \quad 22.52$ | 1985 | 161 | $25 \quad 5915 \cdot 6$ | 667 | 82 | $12 \cdot 3$ | 0 | - 20 | $9 \cdot 6$ |  |
| 5395 | $28 \quad 1989$ | C 5711 |  |  | 15 27.6I | 2135 | 181 | $283925 \cdot 6$ | 669 | 82 | 13.7 | - 57 | - 53 | 10.2 |  |
| 5396 | 242344 | C 5713 |  | 21608-9 | II 1550.22 | +3.1870 |  | $24 \quad 635 \cdot 1$ | $-19.675$ | -.08I | 10.9 |  | $-106$ | $8 \cdot 8$ | G 5 |
| 5397 | 242346 | B 4250 |  |  | $1612 \cdot 13$ | $1873$ | $148$ | $24 \quad 1937 \cdot 6$ | $68 \mathrm{I}$ | $79$ | 9.8 | + 32 | - 15 | $9 \cdot 6$ |  |
| 5398 | 28 I993 | C 5715 | 241 |  | $16 \quad 23 \cdot 47$ | $2068$ | $176$ | $27 \quad 59 \quad 0 \cdot 3$ | $684$ | 80 | $9 \cdot 6$ | $+\quad 17$ | + 21 | $9 \cdot 6$ |  |
| 5399 | $26 \quad 2199$ | C 5718 | 260 |  | $\begin{array}{ll}17 & 12.33\end{array}$ | $1934$ | $160$ | $25 \quad 5841 \cdot 3$ | $697$ | 78 | 10.0 | - 18 | - 24 | $9 \cdot 6$ |  |
| 5400 | 272009 | C 5720 | 263 | 21650 | $1736 \cdot 10$ | 1997 | 170 | $272145 \cdot 2$ | $704$ | 78 | 10.5 | - 58 | $+\quad 37$ | 9.0 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910^{\circ} \mathrm{O}$. | Precession. | Sec. Var. | Dec. $1910^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectra Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.ooor. } \\ \text { R. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { Noor. } \end{aligned}$ |  |  |
|  | - |  |  |  | m | 8 | s | - , " | " | " |  |  |  |  |  |
| 5401 | 302139 | C 5721 |  | 21651 |  | $+3.2128$ | -. 0189 | $294533 \cdot 9$ | -19.705 | -.078 | $9 \cdot 3$ | + 14 | + | $8 \cdot 66$ | G 5 |
| 5402 | 242348 | B 4256 |  |  | $1746 \cdot 71$ | 1821 | 147 | $24 \quad 741 \cdot 1$ | 707 | 77 | 10.5 | + 8 | - 2 | $9 \cdot 3$ |  |
| 5403 | 322141 | L 4416 | 270 |  | 1754.91 | 2244 | 205 | $315417 \cdot 1$ | 709 | 77 | 10.6 | $\bigcirc$ | - 8 | $9 \cdot 2$ | Fo |
| 5404 | 252367 | C 5722 | 272 | 21661 | 1755.45 | 1874 | 153 |  | 709 | 75 | $8 \cdot 7$ | - 33 | $\bigcirc$ | $8 \cdot 4$ | F 8 |
| 5405 | 302141 | C 5725 | 279 | 21670 | 1821.30 | 2122. | 190 | $\begin{array}{llll}30 & 2 & 55.2\end{array}$ | 716 | 76 | 9.5 | + 17 | + | $8 \cdot 3$ | F 8 |
| 5406 | 272014 | C 5729 |  |  | 111848.33 | +3.1969 | -. 0170 | $\begin{array}{llll}27 & 30 & 29.8\end{array}$ | -19.723 | $-.076$ | 11.7 8.1 | - 40 | + $\quad 25$ | $8 \cdot 7$ |  |
| 5407 | 292153 | C 5730 | ${ }^{291}$ | 21680 | 1853.00 | 2058 | 184 | $\begin{array}{llllll}29 & 12 & 45.9\end{array}$ | 724 | 75 | $8 \cdot 1$ | + 23 | - 10 | $8 \cdot 2$ | G 5 |
| 5408 | 262204 | C 5733 | 296-7 |  | 192.54 | 1903 | 162 |  | 727 | 74 | 9.8 10.5 | - 10 | - 7 | $9 \cdot 6$ | Go |
| 5409 | 252369 | C 5734 |  | 21689 | 19 5.00 | 1854 | 155 |  | - 727 | 73 | 10.5 | - 65 | - 5 | $9 \cdot 6$ |  |
| 5410 | 302148 | C 5735 |  |  | 1933.14 | 2079 | 189 | 295925.8 | 735 | 74 | 11.0 | 29 | - 20 | 9.6 |  |
| 5411 | 292155 | C 5737 | 304 | 21703 | 111944.63 | $+3.2035$ | -.0183 | $291715 \cdot 1$ | -19.738 | -.073 | 10.9 | 10 | - 3 | 8.8 |  |
| 5412 | 281999 | C 5733 | 306 | 21705 | 19 45.10 | 1952 | 171 | 274315.5 | 738 | 73 | II•3 | - 17 | + 3 | $8 \cdot 7$ | G 5 |
| 5413 | 302149 | L 4426 |  |  | 1948.81 | 2107 | 194 | $303941 \cdot 5$ | 739 | 74 | 11.0 | - 18 | - 10 | $9 \cdot 6$ |  |
| 5414 | 302150 | L 4429 |  |  | $20 \quad 7 \cdot 29$ | 2094 | 194 | $303652 \cdot 3$ | 743 | 73 | 12.7 | - 90 | - 8 | $9 \cdot 3$ |  |
| 5415 | 292156 | C 5740 | 318 | 21715 | 2013.74 | 2027 | 185 | $292630 \cdot 9$ | 745 | 72 | 11.69 | - 230 | - 158 | $8 \cdot 8$ | K o |
| 5416 | 262208 | C 5741 | 319 |  | II 2019.04 | $+3 \cdot 1880$ | -.0163 | ${ }_{26} 3835 \cdot 5$ | -19.746 | -.072 | 10.6 | - 50 | + 13 | $8 \cdot 6$ | F 8 |
| 5417 | 302153 | $\mathrm{L}_{1} 4432$ |  | 21719 | $20 \quad 28.48$ | 2063 | 191 |  | 749 | 72 | 9.6 | $+\quad 56$ | - 65 | $7 \cdot 54$ | Fo |
| 5418 | 292157 | C 5744 | 321 |  | $20 \quad 29.96$ | 2022 | 185 | 292938.6 | 749 | 72 | 13.6 | - 37 | - 21 | 9.6 |  |
| 5419 | 282002 | C 5745 | 323 |  | $2032 \cdot 98$ | 1965 | 177 | $28 \quad 2616 \cdot 1$ | 750 | 71 | 12.9 | $+\quad 6$ | + 30 | $9 \cdot 3$ |  |
| 5420 | 312265 | L 4433 |  |  | $2037 \cdot 26$ | 2102 | 197 | $\begin{array}{lll}31 & 4 & 43.3\end{array}$ | 751 | 72 | 13.9 | + 3 | + 16 | $9 \cdot 6$ | F 5 |
| 5421 | 292159 | C 5748 | 329 |  | 112048.23 | +3.2009 | -. 0184 | $\begin{array}{llll}29 & 26 & 4.7\end{array}$ | -19.754 | -.072 | 13.4 | - 18 | - 5 | 9.6 |  |
| 5422 | 302154 | L 4434 | 330 | 21734 | $2050 \cdot 70$ | 2060 | 192 | 302854.6 | 754 | 71 | 11.0 | - 54 | + 10 | 6.88 | Fo |
| 5423 | 272021 | C 5750 |  | 21737 | 2059.61 | 1890 | 167 | $\begin{array}{llllllllllll}27 & 14 & 31.4\end{array}$ | 756 | 70 | 8.9 | - 33 | - 3 | $7 \cdot 15$ | A 2 |
| 5424 | 272019 | C 5751 |  |  | ${ }^{21} \quad 2 \cdot 17$ | 1910 | 170 | ${ }^{2} 739$ II•2 | 757 | 71 | 12.6 | + $\quad 29$ | - 28 | $9 \cdot 6$ |  |
| 5425 | 272020 | C 5752 |  |  | $21 \quad 3.39$ | 1905 | 169 | $2734 \quad 0.0$ | 757 | 71 | 11.5 | $+3$ | $\checkmark \quad 39$ | $9 \cdot 6$ |  |
| 5426 | 262212 | C 5754 |  |  | 112155.23 | +3.1791 | -.0154 | $254455 \cdot 7$ | - 19.770 | -.068 | $9 \cdot 3$ | 1 | - 20 | $9 \cdot 6$ |  |
| 5427 | 272022 | C 5755 | 347 | 21769 | $2156 \cdot 64$ | 1845 | 164 | 265324.0 | 770 | 68 | $9 \cdot 1$ | - 6 | - 8 | $8 \cdot 2$ | K 0 |
| 5428 | 262213 | C 5757 | 351 |  | $\begin{array}{lll}22 & 7 \cdot 14\end{array}$ | 1801 | 156 | $\begin{array}{ll}26 & 4 \\ 30 \cdot 2\end{array}$ | 773 | 68 | 10.3 | - 117 | + 7 | $8 \cdot 8$ | G 5 |
| 5429 | 292160 | C 5758 | 356 | 21773 | $22 \quad 10.79$ | 1937 | 178 | $28 \quad 54 \quad 9.4$ | 774 | 68 | $9 \cdot 8$ | - | - 7 | $7 \cdot 50$ | Fo |
| 5430 | 252376 | C 5759 | 360 | 21779 | $22 \quad 24.08$ | 1768 | 152 | 253123.7 | 777 | 67 | $10 \cdot 1$ | 50 | - 14 | 7.60 | Fo |
| 5431 | 262214 | ${ }_{\text {C }} 5762$ | 365 |  | $112246 \cdot 82$ | +3:1779 | -. 0156 | 26 - 35.0 | -19.782 | -.067 | 11.2 | 25 | - 10 | $8 \cdot 9$ | F 8 |
| 5432 |  | C 5763 |  |  | 2248.03 | 1710 | 145 | 243134.5 | 783 | 67 | 11.9 | - 18 | - 25 | $9 \cdot 2$ |  |
| 5433 | 242360 | C 5764 |  | 21792 | $2248 \cdot 31$ | 1711 | 145 | $2432 \quad 20 \cdot 7$ | 783 | 67 | $10 \cdot 9$ | - 152 | - 114 | $9 \cdot 26$ | Ko |
| 5434 | 272024 | C 5765 | 371 | 21793 | 2253.23 | 1820 | 164 | $265653 \cdot 1$ | 784 | 67 | $10 \cdot 1$ | $+\quad 37$ | - 21 | $8 \cdot \mathrm{I}$ | K 2 |
| 5435 | 302159 | L. $444{ }^{2}$ |  |  | $2255 \cdot 71$ | 1983 | 190 | $\begin{array}{llll}30 & 19 & 11.6\end{array}$ | 784 | 67 | 11.7 | - 55 | - $4^{6}$ | $9 \cdot 2$ | F 5 |
| 5436 |  | C 5767 |  |  | 1112312.41 | $+3 \cdot 1712$ |  | $\begin{array}{llll}24 & 48 & 6 \cdot 7\end{array}$ | -19.788 | --065 | 12.3 | - 21 | - 24 | 9•3 |  |
| 5437 | 252383 | C 5769 |  |  | 23 36.21 | 1709 | 148 | 245814.7 | 794 | 65 | 12.1 | + 33 | - 44 | $9 \cdot 6$ |  |
| 5438 | 262218 | C 5770 | 393 |  | $2414 \cdot 70$ | 1732 | 154 | $255232 \cdot 5$ | 803 | 63 | $10 \cdot 7$ | - 14 | + 12 | $8 \cdot 4$ | Fo |
| 5439 | 312270 | L 4446 | 397 | 21846 | 2431.74 | 1959 | 193 | 305525.9 | 806 | 63 | $10 \cdot 3$ | + 13 | - 139 | 7-10 | F 2 |
| 5440 | 272030 | C 5773 |  |  | 2439.42 | 1774 | 162 | $\begin{array}{lll}27 & 3 & 9.8\end{array}$ | 808 | 63 | 10.9 | - | - 12 | $9 \cdot 2$ | K。 |
| 5441 | 262219 | C 5774 | 402-3 | 21849 | 11243975 | $+3.1742$ | -. 0157 | $26 \quad 22$ 12.I | - 19.808 | -.063 | 11.4 | - 50 | + | $8 \cdot 7$ | F 5 |
| 5442 | 282008 | C 5775 | 404 |  | $2449 \cdot 92$ | 1838 | 174 | $\begin{array}{lllll}28 & 35 & 10 \cdot 3\end{array}$ | 810 | 62 | 12.1 | - 4 | + | $9 \cdot 2$ |  |
| 5443 | 272031 | C 5776 |  |  | $2456 \cdot 92$ | 1765 | 162 |  | 812 | 62 | 11.5 | + 44 | + 2 | $9 \cdot 0$ | G |
| 5444 | 292168 | C 5777 | 406 |  | $2457 \cdot 38$ | 1875 | 181 | $\begin{array}{llll}29 & 27 & 25.6\end{array}$ | 812 | 62 | 12.9 | - 15 | - 28 | $9 \cdot 7$ |  |
| 5445 | 302162 | L $444{ }^{8}$ | 408 | 21853 | $25 \quad 2 \cdot 51$ | 1924 | 189 | 303353.4 | 813 | 63 | 13.5 | - 47 | - 37 | $9 \cdot 0$ |  |
| 5446 | 252385 | C 5779 | 412 | 21858 | $\begin{array}{lll}11 & 25 & 8.04\end{array}$ | $+3.1689$ | -.0150 | $\begin{array}{lllll}25 & 26 & 35 \cdot 9\end{array}$ | $-19.815$ | -.062 | 11.7 | - 40 | + 5 | $7 \cdot 88$ | F 5 |
| 5447 | 252386 | C 5780 | 414 | 21867 | $25 \quad 17.51$ | 1682 | 150 | $252249 \cdot 8$ | 817 | 61 | II.8 | - 17 | + 14 | $8 \cdot 0$ | Ko |
| 5448 | 302163 | L 4449 | 413 | 21863 | ${ }_{2}^{5} \quad 18.42$ | 1910 | 188 | $\begin{array}{llllllllllllll}30 & 27 & 56 \cdot 4\end{array}$ | 817 | 62 | 11.9 | - 72 | - 207 | 6.78 | Fo |
| 5449 | 302164 | L 4450 | 420 |  | 25 2I•29 | 1910 | 88 | $\begin{array}{lllllllllllllll}30 & 28 & 52.8\end{array}$ | 817 | 62 | 12.9 | - 72 | - 207 | $9 \cdot 6$ |  |
| 5450 | 262222 | C5781 |  |  | 25 23.01 | 1697 | 153 | $\begin{array}{llll}25 & 48 & 0.7\end{array}$ | 818 | 61 | $10 \cdot 1$ | - 29 | - 40 | $7 \cdot 68$ | K 2 |



|  |  |  |  |  |  |  |  |  |  |  |  | Annu | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1980 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900 + | $\underset{\mathrm{R} \cdot 000 \mathrm{I} .}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.001. } \end{aligned}$ | Mag. | Spectral <br> Type. |
|  | $\bigcirc$ |  |  |  | h m s | - | 8 | - ' |  | " |  |  |  |  |  |
| 5551 | 302194 | C 5888 | 825 | 22324 | $114454 \cdot 63$ | +3.1232 | -. 0168 | $295956 \cdot 8$ | -20.003 | . 021 | $9 \cdot 5$ | + 6 | - 15 | 7.56 | K |
| 5552 | 282050 | C 5889 | 849-50 | 22349 | $46 \quad 4.37$ | 1168 | 156 | $28 \quad 35$ 50.1 | 009 | 19 | $8 \cdot 1$ | - 34 | 1 $+\quad 14$ | $7 \cdot 9$ | F 5 |
| 5553 | 26 2261 | C 5897 | 861 | 22378 | $4725 \cdot 88$ | 1086 | 140 | $\begin{array}{lllll}26 & 13 & 28.8\end{array}$ | -16 | 16 | $9 \cdot 5$ | - 110 | + 60 | $9 \cdot 6$ |  |
| 54 | 302199 |  |  |  | 4729.45 | 1150 | 166 | $301649 \cdot 8$ | 016 | 16 | 11.5 |  |  | $9 \cdot 7$ |  |
| 5555 | 312303 | L 4534 | 867 |  | $47 \quad 36.93$ | 1163 | 174 | $\begin{array}{lllllllllllllll}31 & 28.2\end{array}$ | 017 | 16 | 11.5 | 11 | 20 | $9 \cdot 7$ |  |
| 6 | 262262 | C 5898 |  |  | 114744.45 | $+3 \cdot 1072$ | -. 0137 | $25 \quad 5635.6$ | -20.017 | -.015 | $10 \cdot 0$ | + | 30 | $9 \cdot 6$ |  |
| 57 | 312306 | L 4535 | 879 | 22395 | $48 \quad 3.63$ | I139 | 170 | $304433 \cdot 1$ | 019 | 15 | $9 \cdot 7$ | - $4^{2}$ | - 107 | $8 \cdot 8$ |  |
| 5558 | 292225 | C 5901 | 880 | 22396 | $\begin{array}{ll}48 & 6.23\end{array}$ | 1108 | 157 | $28 \quad 5433.7$ | -19 | 15 | 9.5 | - 18 | - | $8 \cdot 7$ | F 5 |
| 59 | 282052 | C 5902 | 881 | 22397 | $48 \quad 7 \cdot 52$ | 1104 | 154 | 28 41 $32 \cdot 5$ | 019 | 15 | 10.0 | - | - 30 | 8.6 | K 2 |
| 5560 |  |  | 884 |  | $48 \quad 13.14$ | 1143 | 174 | $\begin{array}{llll}31 & 19 & 36 \cdot 2\end{array}$ | 020 | 14 | $9 \cdot 3$ | 70 | $+\quad 9$ | . 2 |  |
|  |  | L 4537 | 885 | 22400 | 114813.44 | +3.1143 | -. 0174 | 311938.2 | . 020 | 014 | 5 | 70 |  |  |  |
| 2 | 292226 | C 5903 |  |  | $48 \quad 30 \cdot 17$ | 1097 | 157 | $29 \quad 5779$ | 021 | 14 | 11.8 | - 21 | - 21 | $9 \cdot 6$ |  |
| 5563 | 282056 | C 5907 | 890 | 22405 | 4839.09 | 1075 | 149 | $27 \quad 5328.7$ | 021 | 14 | $1 \mathrm{I} \cdot 9$ | + 5 | $+35$ | $9 \cdot 6$ |  |
| 5564 | 302200 | C 5908 |  |  | 4854.06 | 1096 | 163 | 294923.8 | 023 | 13 | 10.1 | - 24 | + 3 | $9 \cdot 2$ |  |
| 5565 | 322199 | L 4541 |  |  | 49 II.78 | 1114 | 177 | $3143 \quad 36 \cdot 4$ | 024 | 12 | 10.9 | - 23 | $+$ | $9 \cdot 0$ |  |
| 66 | 282058 | C 5910 | 907-8 | 22424 | 114923.13 | $+3 \cdot 1061$ | -.0153 | $28 \quad 2752 \cdot 0$ | -20.025 | -.012 | 11.3 | + 10 | + | $9 \cdot 0$ | F 5 |
| 67 | \} 25 | C 5913 |  |  |  | 1013 | 130 | 25 II 28.5 | 025 | 12 | 12.0 | - 40 | + 5 | \% 8.8 |  |
| 8 |  | C 5914 | 912 |  | $49 \quad 29.99$ | 1013 | 130 | 25 II $4 \cdot 7$ | 025 | 12 | 11.5 | - 40 | + 5 |  |  |
| 5569 | 242405 | B 4392 |  |  | 49 55.12 | 0990 | 124 | $241846 \cdot 2$ | 027 | 1 | $9 \cdot 5$ | + 107 | - 26 | 8.8 | K |
| 5570 | 262268 | C 5917 |  |  | 5021.44 | 1002 | 137 | $26 \quad 1537 \cdot 2$ | 028 | 10 | 9.5 | 30 | + 8 | $9 \cdot 2$ |  |
| 5571 | 292229 | C 5918 |  |  | $115037 \cdot 43$ | $+3 \cdot 1028$ | -.0155 | 29 1 16.6 | -20.029 | -.010 | 10.1 | + 29 | - 38 | $9 \cdot 6$ |  |
| 5572 | 262270 | C 5919 | 928 | 22455 | $5046 \cdot 54$ | 0987 | 135 | $\begin{array}{llll}26 & 1 & 24.5\end{array}$ | 030 | 10 | $8 \cdot 1$ | - $4^{2}$ | - 5 | $7 \cdot 04$ | K |
| 5573 | 292231 | C 5920 |  |  | 5113.91 | 1008 | 155 | $\begin{array}{lllllllll}28 & 56 & 18.2\end{array}$ | 031 | 08 | 10.9 | 10 | - 6 | $9 \cdot 7$ |  |
| 5574 | 322205 | ${ }_{\text {L }} 4544$ | 938 | 22472 | 5122.55 | 1035 | 175 | $\begin{array}{lllllllllll}31 & 42 & 11.9\end{array}$ | 032 | 08 | 10.1 | - 21 | - 8 | 9.0 |  |
| 5575 | 262271 | C 5922 | 940 | 22471 | 5122.67 | 0970 | 134 | $25 \quad 5938 \cdot 0$ | 032 | 08 | 9.4 | + 36 | -141 | 9.0 | G |
| 6. | 292233 | C 5923 |  |  | $115135 \cdot 30$ | $+3.0996$ | OI 54 | $\begin{array}{llll}28 & 56 & 7 \cdot 6\end{array}$ | 20.032 | -:008 | $10 \cdot 1$ | + | - | 10.2 |  |
| 7. | 292234 | C 5924 | 953 | 22484 | 5137.07 | 1000 | 156 | 292133.2 | 033 | 8 | $8 \cdot 4$ | 24 | - 9 | $7 \cdot 46$ | K o |
| 5578 | 272070 | C 5925 | 957 | 22489 | 5143.38 | 0973 | 141 | 27 10 $48 \cdot 7$ |  | 8 | $8 \cdot 3$ | 122 | + 16 | $6 \cdot 87$ | F 2 |
| 5579 | 252436 | C 5926 |  |  | 5150.76 | 095 I | 130 | $25 \quad 2920 \cdot 3$ | 033 |  | 10.3 | - 10 | - 3 | 9.6 |  |
| 5580 | $124 \quad 2409$ | B. 4402 |  |  | $52 \quad 21.68$ | 0924 | 122 | $24 \quad 6 \quad 22.8$ | 035 | 6 | 10.3 | 1 | 18 | $9 \cdot 3$ | G |
| 5581 | 272071 | C 5929 | 969 |  | 115234.42 | $+3.0952$ | 0144 | $273939 \cdot 5$ | 20.035 | . 006 | 10.4 | - 9 | - 6 | $8 \cdot 7$ | K |
| 5582 | 252440 | C 5931 |  |  | $5240 \cdot 04$ | 0925 | 127 | $\begin{array}{lllll}25 & 5 & 39.4\end{array}$ | 036 | 6 | II $\cdot 3$ | - 32 | - 25 | $9 \cdot 2$ |  |
| 5583 | 272073 | C 5932 |  | 22512 | $5247 \cdot 66$ | 094 I | 142 | $\begin{array}{llll}27 & 16 & 1.7\end{array}$ | 036 | 6 | $9 \cdot 3$ | + 1 | - 143 | $7 \cdot 44$ | K。 |
| 5584 | 302205 | C 5933 | 976 |  | 5249.87 | 0964 | 159 | $294631 \cdot 9$ | 036 | 5 | 11.3 | 31 | + 5 | 9.0 |  |
| 5585 | 292237 | C 5934 | 980 | 22518 | $52 \quad 57 \cdot 35$ | 0953 | 153 | $29 \quad 3 \quad 22.2$ | 037 | 5 | $8 \cdot 9$ | - 40 | - 10 | $8 \cdot 0$ | F |
| 5586 | 25244 I | C 5937 |  | 22528 | 115316.33 | $+3.0912$ | -. 0129 | $\begin{array}{llll}25 & 28 & 2.8\end{array}$ | 20.037 | -.004 | 12.3 | - 12 | + 12 | 9.0 |  |
| 55 | 252442 | C 5938 | 990 | 22532 | $5326 \cdot 15$ | 0909 | 131 | $\begin{array}{lllll}25 & 38 & 20.4\end{array}$ | 038 | 4 | 10.5 | + 6I | - 7 | 8.0 | F 8 |
| 5588 | 252443 | C 5939 |  |  | 5329.84 | 0902 | 126 | $24 \quad 5957 \cdot 6$ | 038 | 4 | 13.1 | - 36 | - 15 | $9 \cdot 6$ |  |
| 5589 | 302207 | $\mathrm{L}_{4552}$ | 992-3 |  | $53 \quad 33 \cdot 77$ | 0944 | 162 | $\begin{array}{lllllllll}30 & 19 & 16.3\end{array}$ | 038 | 4 | 12.5 | - 14 | - 13 | $8 \cdot 9$ | G |
| 5590 | 272075 | C 5940 | 994 | 22535 | 5334.05 | 0920 | $14^{2}$ | $27 \quad 244^{6 \cdot 1}$ | 038 | 4 | 11.9 | - 48 | - 19 | 9.6 |  |
| 5591 | 302208 | L 4553 |  |  | 115338.44 | $+3.0941$ | -.0161 | $301637 \cdot 1$ | 20.038 | -.004 | 13.5 |  | - | $9 \cdot 6$ |  |
| 5592 | 272076 | C 5942 | 1000 | 22540 | $5349 \cdot 28$ | 0912 | , 142 | $\begin{array}{lllllll}27 & 20 & 17.9\end{array}$ | 039 | , | 10.1 | + 37 | + 15 | $8 \cdot 4$ | A 0 |
| 5593 | 282064 | C 5943 |  |  | 5353.24 | 0913 | 143 | 274517.8 | 039 |  | $12 \cdot 1$ | 0 | + II | $9 \cdot 2$ |  |
| 5594 | 322208 | L 4556 |  | 22543 | 5353.98 | 0946 | 173 |  | -39 | 3 | 14.3 | 93 | - 13 | 8.6 |  |
| 5595 | 312316 | L 4557 | 1007 | 22548 | $54 \quad 11.92$ | 0933 | 172 | $\begin{array}{llll}31 & 38 & 3 \cdot 1\end{array}$ | 040 | 2 | 10.7 | 10 | - 45 | $9 \cdot 0$ |  |
| 6 | 312317 | L 4558 |  | 22552 | II 54 21.14 | $+3.0925$ | -.0169 | $\begin{array}{llll}31 & 18 & 1.7\end{array}$ | -20.040 | -.002 | 11.3 | + 3 | - 69 | $9 \cdot 2$ |  |
| 97 | 242416 | B 4409 | 1011 |  | 5428.74 | 087 I | 121 | $24 \quad 2427 \cdot 4$ | 040 | 2 | 12.9 | - 12 | - 33 | $8 \cdot 8$ | K |
| 5598 | 292242 | C 5945 |  |  | $5436 \cdot 29$ | 0901 | 154 | 291556.0 | 040 | 2 | 9.7 | - 9 | - 9 | $8 \cdot 9$ |  |
| 5599 | $252445$ | C 5946 | 1012 |  | $5436 \cdot 57$ | 0872 | 125 | $25 \quad 744 \cdot 1$ | 040 | 2 | 10.0 | - 24 | + 2 | $8 \cdot 2$ | G o |
| 5600 | 272080 | C 5947 |  | 22558 | 5443.06 | 0886 | 144 | $27 \quad 37 \quad 0.0$ | 041 | 2 | 1 $1 \cdot 0$ | - 21 | + 23 | $8 \cdot 4$ | A 5 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910\%. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { Igoo+ } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.0001. }}{\text { R.A. }}$ | $\begin{gathered} \text { Dec. } \\ \text { n.00I. } \end{gathered}$ |  |  |
|  | - |  |  |  | h m | 8 | s | - ' | " | " |  |  |  |  |  |
| 5601 | 242417 | B 4413 |  | 22568 | $115520 \cdot 20$ | $+3.0849$ | -.0122 | 242644.0 | -20.042 | . 000 | 10.9 | - 27 | + 11 | $8 \cdot 9$ | G 0 |
| $5602 \mid$ | 282068 | C 5950 | 1028 |  | 5520.95 | 0873 | 149 | 2837 21.0 | 042 | $\bigcirc$ | 12.3 | - 17 | - 32 | $9 \cdot 6$ |  |
| 5603 | 262282 | C 5951 | 1033-4 |  | $5530 \cdot 77$ | 0856 | 134 | $263242 \cdot 8$ | 042 | $\bigcirc$ | II•I | - 18 | - 85 | $9 \cdot 0$ | G 5 |
| 5604 | 292245 | C 5953 |  | 22587 | $56 \quad 10.53$ | 0851 | 156 | $294120 \cdot 3$ | 043 | +.001 | $9 \cdot 3$ | + 40 | - 31 | 8.46 | F 8 |
| 5605 | 262285 | C 5954 |  |  | $5615 \cdot 31$ | 0831 | 129 | $25 \quad 5258 \cdot 2$ | 043 | 2 | II.9 | + 16 | - 9 | 9.6 |  |
| 5606 | 282069 | C 5955 | 1051-2 |  | 11 5628.17 | $+3.0837$ | 0147 | $28 \quad 27 \quad 50 \cdot 7$ | -20.044 | +.002 | I•I | + 13 | - 34 | 8.6 | K o |
| 5607 | 312321 | L 4567 |  |  | $5630 \cdot 99$ | 0849 | 168 | $312847 \cdot 8$ | 044 | 2 | $11 \cdot 7$ | - 6 | + 13 | $9 \cdot 2$ | A 0 |
| 5608 | 242418 | B 4418 | 1060 |  | $5632 \cdot 47$ | 0816 | 119 | $\begin{array}{llll}24 & 20 & 7 \cdot 9\end{array}$ | 044 | 2 | $12 \cdot 1$ | + 18 | 1 $+\quad 1$ | $9 \cdot 3$ |  |
| 5609 | 312322 | L 4568 | 1054 | 22599 | $5637 \cdot 00$ | 0844 | 165 | $\begin{array}{llll}11 & 8 & 27 \cdot 2\end{array}$ | 044 | 2 | 9.9 | 74 | - 30 | $7 \cdot 78$ | F 8 |
| 5610 | $25 \quad 2448$ | C 5956 | 1056 | 22602 | 5640.94 | 0814 | 121 | $\begin{array}{lll}24 & 43 & 6 \cdot 9\end{array}$ | -044 | 2 | 10.7 | 14 | - 7 | $8 \cdot 31$ | K |
| 5611 | 262286 | C 5957 |  |  | II 5646.86 | $+3.0817$ | -.0131 | $\begin{array}{llll}26 & 13 & 3.7\end{array}$ | -20.044 | . 022 | 10.4 | - | + 28 | $8 \cdot 7$ | K o |
| 56 | 302212 | C 5958 | 1069 | 22614 | $57 \quad 7.26$ | 0822 | 157 | $\begin{array}{llll}30 & 3 & 2.5\end{array}$ | 044 | 3 | II.I | - 19 | 1 - 39 | $8 \cdot 36$ | F 2 |
| 5613 | 312323 | L 4570 |  | 22617 | 578.95 | 0826 | 167 |  | 044 | 3 | If.I | -. 27 | $+3$ | $9 \cdot 0$ | G |
| 5614 | 322212 | L 4572 | 1075 | 22622 | 57 31.65 | 0814 | 168 | $31452 \cdot 0$ | 045 | 4 | $9 \cdot 9$ | - 40 | - 3 | $8 \cdot 8$ | F 8 |
| 5615 | 292247 | C 5960 | 1082 |  | $5745 \cdot 05$ | 0800 | 154 | 294023.0 | 045 | 4 | $9 \cdot 7$ | - $\quad 47$ | - 77 | 9.66 | G 5 |
|  | 252449 | C 5962 | 1090 | 22638 | 11586.02. | $+3.0777$ | 0122 | $24 \begin{array}{lll}57 & \mathrm{I} \cdot 8\end{array}$ | -20.045 | +.005 | $0 \cdot 0$ | 17 | - II3 | $7 \cdot 91$ | K |
| 5617 | 252450 | C 5963 | 1092 | 22640 | 5810.05 | 0776 | 123 | 252015.9 | 045 | , | 10.7 | + 34 | - 29 | $8 \cdot 25$ | F 8 |
| 5618 | 262288 | C 5964 |  |  | 5810008 | 0777 | 127 | $254939 \cdot 5$ | 045 | 6 | $9 \cdot 7$ | - I | - 24 | $8 \cdot 10$ | K |
| 5619 | 272087 | C 5966 |  |  | 58819.54 | 0776 | 138 | 273029.9 | 045 | 6 | $10 \cdot 3$ | - 3 | - 13 | $9 \cdot 2$ | K o |
| 5620 | 29225 I | C 5968 | 1104 | 22654 | $58 \quad 42 \cdot 16$ | 0768 | 152 | $\begin{array}{lllll}29 & 37 & 19.8\end{array}$ | 046 | 6 | $9 \cdot 5$ | $+\quad 7$ | - 30 | 8.46 | K 2 |
| 5621 | 302217 | L 4578 | 1106 | 22655 | $\begin{array}{llll}11 & 58 & 56.92\end{array}$ | $+3.0761$ | -.OI 55 | $301050 \cdot 8$ | -20.046 | +.007 | $9 \cdot 3$ | - 5 | - 29 | $7 \cdot 66$ | Mb |
| 5622 | 252453 | C 5971 | 1109 | 22658 | $59 \quad 8 \cdot 34$ | 0749 | 125 | 253628.0 | 046 | 7 | 10.5 | - 6 | - 19 | 9.0 | G 5 |
| 5623 | 252454 | C 5974 |  | 22666 | 5926.05 | 0741 | 123 | $25 \quad 2622.5$ | 046 | 8 | 9.7 | + 11 | + 19 | 8.00 | Go |
| 5624 | 282074 | C 5975 |  | 22668 | 5929.02 | 0741 | 145 | $283343 \cdot 0$ | 046 | 8 | 10.7 | - 34 | - 12 | $8 \cdot 4$ | F 5 |
| 5625 | 242422 | C 5976 | 1 5-6-7 |  | 59 36.11 | 0736 | 119 | $24 \quad 3714.3$ | 046 | 8 | $9 \cdot 8$ | - 15 | - 31 | $8 \cdot 41$ | F 5 |
| 5626 | 312327 | $\mathrm{L}_{4583}$ | 1137 | 22696 | $12 \quad 0 \quad 30.42$ | $+3.0707$ | -.0162 | 31205.6 | -20.046 | +.010 | $9 \cdot 7$ | + 11 | - 64 | $8 \cdot 3$ |  |
| 5627 | 322218 | L 4585 | 1146 | 22703 | - $47 \cdot 28$ | 0697 | 165 | $314241 \cdot 1$ | 046 | 10 | 10.4 | - 15 | + 18 | 8.1 | K。 |
| 5628 | 292252 | C 5981 | 1149 |  | - 54.92 | 0695 | 146 | 29 - 24.2 | 046 | 1 I | 10.7 | - 5 | - | 8.0 | K o |
| 5629 | 272092 | C 5982 |  |  | - 57.85 | 0696 | 132 | 265143.4 | 046 | 10 | 10.7 | - 14 | $+$ | $8 \cdot 9$ | Go |
| 5630 | 292253 | C 5983 | 1150 |  | 1 I 50 | 0692 | 145 | 284753.0 | 046 | 11 | 11.7 | + 127 | - 121 | $8 \cdot 6$ | G 5 |
| 5631 | 272093 | C 5985 |  |  | 12119.10 | +3.0686 | -.0133 | 265810.4 | -20.046 | +.011 | 12.5 | - 41 | - 32 | 8.8 | G 0 |
| 5632 | 272094 | C 5986 | 1156 |  | 119.22 | 0686 | 134 | $27 \quad 1013.3$ | 046 | 1 I | 12.3 | - 46 | + 13 | $9 \cdot 2$ |  |
| 5633 | 292254 | C 5987 |  |  | 120.19 | 068 I | 149 | 292858.9 | 046 | 11 | 13.3 | + 23 | - 103 | $9 \cdot 3$ |  |
| 5634 | 262299 | C 5988 | 1157 | 22713 | 120.44 | -687 | 127 | $2610 \quad 6 \cdot 2$ | 046 | II | 12.9 | + | - I38 | $9 \cdot 2$ | K o |
| 5635 | $26 \quad 2300$ | C 5989 | 1161 | 22718-9 | 130.02 | 0682 | 127 | $\begin{array}{lllll}26 & 16 & 19.8\end{array}$ | 046 | 11 | 11.7 | - 4 | - $\quad 39$ | $8 \cdot 3$ | K 2 |
| 5636 | 302223 | L 4590 | 1172 | 22730-1 | $12 \quad 2 \begin{array}{lll}12 & 7\end{array}$ | $+3.0654$ | -.0152 | 295925.6 | -20.045 | +.013 | 10.3 | - 38 | - 35 | 8.46 | K 2 |
| 5637 | 312328 | L 4591 |  |  | 2 II .81 | 0649 | 156 | $304546 \cdot 0$ | 045 | 14 | 11.4 | + 7 | - 26 | $9 \cdot 3$ | A 2 |
| 5638 | 312329 | L 4597 |  | 22760 | 310.15 | 0615 | 157 | $3055 \quad 17.2$ | 044 | 14 | 9.8 | - 19 | + 5 | 8.0 | K 5 |
| 5639 | $26 \quad 2307$ | C 5997 | 1205 |  | $325 \cdot 34$ | 0628 | 123 | $\begin{array}{llllll}25 & 52 & 45.9\end{array}$ | 044 | 15 | $9 \cdot 9$ | + 22 | - 56 | 8.6 | F 8 |
| 5640 | 312331 | L 4598 | 1207 | 227 | 3 31.13 | 0599 | 161 | $\begin{array}{llll}31 & 33 & 5 \cdot 7\end{array}$ | 044 | 15 | $10 \cdot 3$ | 15 | - | $7 \cdot 24$ | A 0 |
| 5641 | 242429 | B 4448 |  | 22765 | $\begin{array}{llll}12 & 3 & 33 \cdot 19\end{array}$ | $+3.0631$ | -.0113 | $\begin{array}{llll}24 & 23 & 29.4\end{array}$ | -20.044 | +.015 | $9 \cdot 9$ | 9 | - 28 | $9 \cdot 2$ |  |
| 5642 | 312332 | L 4600 | 1213-4 | 22770 | $340 \cdot 65$ | 0597 | 155 | $304635 \cdot 4$ | 043 | 15 | 10.4 | 12 | - 13 | $7 \cdot 78$ | K 2 |
| 5643 | 282082 | C 5998 |  |  | 350.31 | 0604 | 139 | $\begin{array}{lllllllllll}28 & 29 & 5.5\end{array}$ | 043 | 16 | 11.3 |  |  | $9 \cdot 3$ | K O |
| 5644 | 282083 | C 5999 | 1217 |  | 355.43 | 0500 | 141 | $\begin{array}{llllllllll}28 & 40 & 16.8\end{array}$ | 043 | 16 | 11.9 | - 29 | - 53 | $9 \cdot 6$ | G 5 |
| 5645 | $25 \quad 2465$ | C 6000 |  |  | $356 \cdot 95$ | 0616 | 120 | $\begin{array}{lllll}25 & 18 & 4.2\end{array}$ | 043 | 16 | 11.7 | - 15 | - 14 | 8.8 |  |
| 5646 | 272100 | C 6001 | 1218-9 | 22783 | $\begin{array}{llll}12 & 4 & 1.90\end{array}$ | $+3.0605$ | -.0130 | $265943 \cdot 7$ | -20.043 | +.016 | $10 \cdot 1$ | + 48 | - 35 | 7-16 | K o |
| 5647 | 252466 | C 6003 | 1 |  | 421.73 | 0605 | 118 | $\begin{array}{llll}25 & 12 & 7 \cdot 1\end{array}$ | 042 | 17 | 11.5 | - 11 | - 28 | $9 \cdot 3$ |  |
| 5648 | 312335 | L 4604 |  |  | 438.68 | 0559 | 160 | $313145 \cdot 7$ | 042 | 17 | 11.5 | + 117 | - 74 | $9 \cdot 2$ |  |
| 5649 | 302230 | I. 4605 | 15-6 | 22801 | $447 \times 44$ | 0564 | 149 | 2957 41.8 | 042 | 17 | $9 \cdot 1$ | - 20 | + 4 | $7 \cdot 81$ | K o |
| 5650 | 292258 | C 6005 | 17 |  | $453 \cdot 12$ | 0569 | 140 | $284^{2} 23.2$ | 041 | 18 | 11.7 | + 28 | - 14 | 9.2 | G 5 |

5603. Burnham 5992. 5622. Close double Burnham 6015. Number of obscrvations 4. 5625. Close doublo Burnham 6016. 5640. Number of observations 6.

| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Deo. 1910.0. | Precession. | Soc. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { Igoot } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.ocot }}{\text { R.A. }}$ | Dec. |  |  |
|  | - |  |  |  | h m | s | s | - , " |  | " |  |  |  |  |  |
| 5651 | 292259 | C 6007 |  | 22812 | $\begin{array}{llll}12 & 5 & 16.30\end{array}$ | $+3.055^{2}$ | -.0145 | $292545 \cdot 2$ | -20.041 | +.019 | 12.3 | - 28 | - 9 | 9.6 |  |
| 5652 | 272102 | C 6009 | 29-30 |  | 527.09 | 0559 | 133 | $\begin{array}{lllll}27 & 32 & 53.8\end{array}$ | 040 | 19 | 12.9 | - 25 | + 7 | $9 \cdot 3$ | F 8 |
| 5653 | 31 2336 | L 4608 | 31 | 22813 | 530.43 | 0533 | 154 | $305348 \cdot 7$ | 040 | 19 | $13 \cdot 1$ | - 4 | 12 | $9 \cdot 3$ | F 5 |
| 5654 | 252468 | C 6010 | 32 | 22825 | 531.63 | 0576 | 114 | $244541 \cdot 5$ | 040 | 19 | 11.3 | 5 | - 20 | 8.71 | F 5 |
|  | 262311 | C 6011 | 35 | 22827 | 533.85 | 0564 | 124 | $262346 \cdot 7$ | 040 | 19 | 12.0 | 9 | 29 | $8 \cdot 9$ |  |
| 5656 | $30 \quad 2231$ | $\mathrm{L}_{4} 4609$ |  | 22832 | $12 \quad 547 \cdot 43$ | $+3.0528$ | -0150 | 301737.9 | -20.040 | +.020 | 12.6 | + 4 | + 9 | $9 \cdot 2$ |  |
| 5657 | $26 \quad 2313$ | C 6014 | 46 |  | 550.12 | 0560 | 122 | $254957 \cdot 9$ | 039 | 20 | 11.3 | + 11 | - 43 | 9.2 | G 5 |
| 5658 | 292263 | C 6015 | 49-50 | 22836-7 | 553.86 | 0530 | 145 | 29348.5 | 039 | 20 | $9 \cdot 3$ | - 27 | - 3 | $7 \cdot 76$ | Ko |
| 5659 | 282084 | C 6016 | 54-5 | 22842-3-4 | ${ }_{6}^{6}$ I1.86 | 0534 | 134 | $27.4657 \cdot 0$ | 039 | 2 I | 10.0 | - 13 | - 10 | $5 \cdot 78$ | ${ }^{\text {A }} 2$ |
|  | 252470 | C 6017 |  | 22854 | $6 \quad 29 \cdot 41$ | 0550 | 114 | $24{ }^{2} 49 \mathrm{II}$ - 8 | 038 | 2 I | 11.5 | 59 | 48 | 9•11 | G 5 |
| ;661 | $26 \quad 2314$ | C 6018 | 66 |  | $\begin{array}{lll}12 & 6 & 33.22\end{array}$ | $+3.0535$ | -.0124 | 2629 29•I | $-20.038$ | . 02 I | 12.2 | + 19 | 30 | 9.2 | Go |
| ;662 | 292264 | C 6019 |  |  | -0 | 0504 | 144 | 293633.7 | 038 | 21 | 12.7 | + 28 | - 19 | $9 \cdot 6$ |  |
| 5663 | 252471 | C 6020 |  |  | 641.51 | 0541 | 116 | 25151516.8 | 037 | 21 | 11.5 | - 73 | - 29 | $7 \cdot 9$ | G 5 |
| 5664 | 252472 | C 6021 |  |  | $7 \quad 1 \cdot 44$ | 0531 | 116 | $\begin{array}{llllll}25 & 17 & 15.9\end{array}$ | 037 | 22 | 12.1 | - 7 | 20 | $9 \cdot 6$ |  |
| 5665 | 262315 | C 6022 | 83 |  | $7 \quad 1 \cdot 54$ | 0523 | 122 | $26 \quad 1412 \cdot 9$ | 037 | 22 | 11.9 | - 97 | + 55 | $8 \cdot 9$ | G 0 |
| ;666 | 262316 | C 6023 | 89-90-1 | 22876 | $\begin{array}{llll}12 & 7 & 17.28\end{array}$ | $+3.0514$ | -.0123 | $26 \quad 2217.9$ | -20.036 | +.023 | 10.1 | - $37^{*}$ | - 38* | 5.81 | K |
| 5667 | 292265 | C 6024 | 96 | 22880-1 | 726.77 | 0484 | 140 | 29 2 <br> 19.2  | 035 | 23 | 10.7 | + 77 | - 60 | $6 \cdot 40$ | F 2 |
| 5668 | 262318 | C 6027 |  |  | 751.03 | 0501 | 121 | 26429.6 | 034 | 24 | 11.0 |  | - 6 | $9 \cdot 6$ |  |
| 5669 | 282087 | C 6028 | 105 | 22893 | $751 \cdot 12$ | 0483 | 133 | $275251 \cdot 5$ | 034 | 24 | $9 \cdot 7$ | - 8 | - 16 | $8 \cdot 0$ | F 5 |
| 5670 | 302238 | L 4619 |  |  | $8 \quad 7 \cdot 69$ | 0445 | 149 | $302958 \cdot 3$ | 033 | 24 | 10.5 | - 131 | - 129 | 9.0 |  |
| 5671 | 282089 | C 6030 | 113 |  | $\begin{array}{llll}12 & 8 & 18.68\end{array}$ | $+3.0466$ | -.0133 | $\begin{array}{lll}28 & 3 & 39 \cdot 1\end{array}$ | -20.033 | +.025 |  | - 4 | - 9 | 8.8 |  |
| 5672 | 292267 | C 603I | 118 | 22906-7 | 829.64 | 0449 | 140 | $\begin{array}{llll}29 & 8 & 7 \cdot 7\end{array}$ | 032 | 25 | 10.1 | + 11 | 1 | $7 \cdot 73$ | K 5 |
| 5673 | 312340 | L 4622 | 120 | 22911-2 | $844 \cdot 17$ | 0422 | 151 | $3046 \quad 59.2$ | 03 I | 25 | $9 \cdot 5$ | - 48 | - 11 | $7 \cdot 46$ | ${ }^{\text {A }} 2$ |
| 5674 | $3022{ }^{1}$ | C 6032 |  |  | $846 \cdot 34$ | 0433 | 143 | $294527 \cdot 0$ | 031 | 25 | $11 \cdot 3$ | - 38 | - | 9.41 | K o |
| 5675 | 272103 | C 6033 | 129 |  | $857 \cdot 43$ | 0452 | 129 | $27 \quad 3237.9$ | 031 | 26 | 13.3 | 69 |  | $9 \cdot 6$ |  |
| 5676 | 312341 | L 4624 |  |  | $\begin{array}{llll}12 & 9 & 1.61\end{array}$ | $+3.0408$ | 0152 | $31 \quad 3.48 \cdot 5$ | -20.030 | 026 | $10 \cdot 7$ | + 23 | 21 | 8.2 | G 5 |
| 5677 | 312342 | L 4625 | 130 | 22921-2 | $9 \quad 2 \cdot 36$ | 0403 | 155 | $3127 \quad 50 \cdot 4$ | 030 | 26 | 11.1 | 4 | 11 | 8.6 | K |
| 5678 | 292268 | C 6034 |  | 22928 | 919.44 | 0426 | 137 |  | 029 | 27 | 11.3 | - 13 | - 20 | 8.8 | K 5 |
| 5679 | 312343 | L 4627 | 143 | 22936-7 | 936.41 | 0384 | 153 | $\begin{array}{llllllllll}31 & 19 & 20.0\end{array}$ | 028 | 27 | 11.3 | - $9^{2}$ | - 113 | 8.4 | G o |
| ;680 | 272105 | C6035 | 146 | 22939 | 944.57 | 0435 | 124 | $27.020 \cdot 7$ | 028 | 27 | 10.3 | + 12 | - 34 | 7.47 | G 5 |
| 5681 | 242441 | B 4472 | 150-1 | 22944 | $12 \quad 953.88$ | $+3.0466$ | -. 0107 | $24 \quad 953.6$ | -20.027 | +.028 | $10 \cdot 1$ | 17 |  | $7 \cdot 38$ | G 5 |
| 5682 | 292269 | C 6038 | 153 | 22952-3 | $10 \quad 18.87$ | 0390 | 138 | 29751 -0 | 026 | 29 | 9.3 | . 3 | - 6 | $8 \cdot 7$ | G 5 |
| 5683 | 302245 | L 4632 | 155-6 | 22957 | 1028.78 | 0363 | 148 | 303829.4 | 025 | 29 | $9 \cdot 6$ | - 24 | + $\quad 37$ | $8 \cdot 2$ | F 8 |
| 5684 | 272108 | C 6041 |  |  | 1112.97 | 0395 | I23 | $264746 \cdot 2$ | 022 | 30 | 10.3 | 25 | - 23 | $9 \cdot 3$ |  |
| 5685 | 292271 | C 6042 |  | 22981 | 1117.11 | 0356 | 138 | $291756 \cdot 6$ | 022 | 31 | 10.3 |  | - 28 | $9 \cdot 6$ |  |
| 5686 | 282095 | C 6043 | 172-3 | 23009 | 121129.99 | $+3.0360$ | -.0133 | $28 \quad 3256 \cdot 9$ | -20.021 | +.031 | 10.1 | + 4 | - 20 | $8 \cdot 3$ | F 8 |
| 5687 | $26 \quad 2321$ | C 6044 | 174 | 22990 | II $35 \cdot 38$ | 0391 | 118 | $\begin{array}{llllll}26 & 15 & 39.4\end{array}$ | 020 | 31 | $9 \cdot 7$ | - $\quad 3$ | + 6 | $8 \cdot 14$ | F 5 |
| 5688 | 292272 | C 6045 |  | 22994 | II 42.94 | 0341 | 137 | $292018 \cdot \mathrm{I}$ | 020 | 31 | 10.3 | + $4^{8}$ | - 66 | $9 \cdot 3$ | G 5 |
| 5689 | 242443 | B 4476 | 179-80-1 | 22995-6 | $1147 \cdot 43$ | 0413 | 108 | $242644 \cdot 1$ | $\bigcirc 19$ | 3 I | 10.1 | - 16* | - 18* | $5 \cdot 06$ | K |
| 5690 | 302251 | L 4638 | 187 | 23003 | 1214.35 | 0304 | 146 | $\begin{array}{llllll}30 & 33 & 56 \cdot 9\end{array}$ | 017 | 31 | 11.6 | + 33 | - 74 | $9 \cdot 3$ |  |
| 5691 | 282097 | C 6050 | 191 | 23007 | 121224.06 | $+3.0337$ | 0131 | 2814.24 .7 | -20.017 | +.033 | II.I | + 24 | + |  | Ma |
| 5692 | 252481 | C 6051 | 193 | 23011 | $1237 \cdot 87$ | 0380 | 111 | $\begin{array}{lllllllll}25 & 7 & 3\end{array}$ | 016 | 33 | 11.7 | + 12 | - $4^{2}$ | 8.8 | K o |
| 5693 | 292274 | C 6052 | 197 | 23013 | 1247.31 | 0308 | 140 |  | -15 | 33 | $1 \mathrm{I} \cdot 9$ | - 43 | - 1 | $8 \cdot 8$ | G o |
| 5694 | 292275 | C 6053 | 199 | $23017-8-9-20$ | 1258.64 | 0298 | 142 |  | 014 | 34 | 10.9 | - 35* | + 30* | $5 \cdot 68$ | A 0 |
| 5695 | $25 \quad 2482$ | C 6054 | 205 | 23030 | 1315.10 | 0356 | 113 | $25 \quad 3317 \cdot 3$ | 012 | 34 | 11.3 | 17 | - 6 | 9.0 | G 5 |
| 5696 | $26 \quad 2323$ | C 6055 |  |  | $\begin{array}{lllll}12 & 13 & 18.36\end{array}$ | $+3.0346$ | . 0117 | $\begin{array}{llll}26 & 4 & 18.0\end{array}$ | -20.012 | +.034 | 10.5 |  | + | $8 \cdot 4$ | F 2 |
| 5697. | 282100 | C 6056 | 218 | 23044 | -13 39.21 | 0306 | 127 | $\begin{array}{lll}27 & 48 & 0.8\end{array}$ | -10 | 35 | $9 \cdot 9$ | - 25 | + 3 | $7 \cdot 40$ | A 2 |
| 5698 | 312350 | L 4642 | 225-6 | 23051 | 1359.50 | 0240 | 144 | $3045 \quad 6 \cdot 8$ | 009 | 35 | 10.9 | + $7^{8}$ | - 116 | $6 \cdot 14$ | Fo |
| 5699 | $\begin{array}{llll}26 & 2324\end{array}$ | C 6058 | 229 | 23057 | 148.90 | 0310 | 119 | $\begin{array}{lllllllll}26 & 41 \\ 19 & 19.9\end{array}$ | 008 | 36 | 12.5 | - 14 | + 53 | 7.50 | F 8 |
| 5700 | $25 \quad 2485$ | C 6059 |  |  | $1417 \cdot 27$ | 0341 | 108 | $2447 \quad 28.8$ | 007 | 36 | 12.3 | - I | - 38 | $9 \cdot 2$ |  |


| No． | B．D． | A．G．C． | W．B．（2）． | Lalande． | R．A．1910．0． | Precession． | Sec．Var． | Dec．1910\％ | Precession． | Sec． Var． | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | Annual P．M． |  | Mag． | Spectral Typo． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { B.000I. } \end{aligned}$ | Dec． $\% \cdot 001 .$ |  |  |
|  | － |  |  |  | h m s | 8 | s | －＇＂ | ＂ | ＂ |  |  |  |  |  |
| 5701 | 312351 | L 4644 | 234 |  | 121423.35 | ＋3．0222 | －．0146 | $\begin{array}{llll}30 & 58 & 7.8\end{array}$ | －20．006 | ＋．036 | 13.2 | － 46 | ＋ 2 | $9 \cdot 3$ |  |
| 5702 | 242445 | B 4489 | 235－6 | 23063 | 1425.60 | 0349 | 103 | $\begin{array}{llll}24 & 4 & 7 \cdot 3\end{array}$ | 006 | 36 | $12 \cdot 9$ | ＋ 1 | ＋ 16 | 8.6 | K o |
| 5703 | 252486 | C 6060 |  |  | 1429.04 | 0325 | 111 | $252046 \cdot 0$ | 006. | 36 | 13.1 | － 27 | － 1 | $8 \cdot 7$ | G 0 |
| 5704 | 262326 | C 6061 | 238－9 | 23065 | 1429.82 | 0304 | 117 | $26 \quad 3029.8$ | 006 | 36 | 12.7 | － 17 | － 23 | $6 \cdot 39$ | A 2 |
| 5705 | 282103 | C 6062 | 240 | 23066－7 | $1430 \cdot 21$ | 0265 | 13 I | $\begin{array}{llll}28 & 33 & 2 \cdot 6\end{array}$ | 006 | 36 | 12.7 | － 144 | － 127 | $9 \cdot 6$ |  |
| 57 | 252487 | C 6063 | 244 | 23032 | 121443.36 | $+3.0315$ | ． 0111 | 2533 37•I | －20．005 | ＋．037 | II．5 | ＋ 27 | － 18 | $7 \cdot 67$ | A 5 |
| 5707 | 252488 | C 6065 | 250 |  | 1455.97 | 0323 | 107 | $24 \quad 47 \quad 3.2$ | 003 | 37 | 12.5 | － 9 | － 13 | $9 \cdot 1$ | G 5 |
| 5708 | 282106 | C 6067 | 252 | 23080－1 | 1459.21 | 0248 | 130 | 283934.8 | 003 | 37 | 11.5 | －151＊ | －142＊ | $6 \cdot 30$ | F 5 |
| 5709 | 302255 | L 4646 | 253 | 23082 | $15 \quad 0.23$ | 0207 | 143 | $30 \quad 40 \quad 3.6$ | 003 | 37 | 11．5 | － 37 | ＋ 14 | 8.8 | G 5 |
| 5710 | 292280 | C 6068 | 258 | 23096－7 | $15 \quad 19.15$ | 0231 | 133 | $28 \quad 57$ 5I．7 | 001 | 38 | 11.5 | － 3 | － 3 | $6 \cdot 53$ | A 2 |
| 5711 | 31 2353 | L 4647 | 260 | 4 | 121527.48 | $+3.0184$ | －．0145 | $3059 \mathrm{II} \cdot 0$ | －20．000 | ＋．038 | $10 \cdot 3$ | － 63 | $\bigcirc$ | $8 \cdot 8$ | K 2 |
| 5712 | 262329 | C 6070 | 270 | 23118 | 1546.69 | 0266 | 116 | $\begin{array}{llll}26 & 30 & 3.4\end{array}$ | 19.998 | 38 | 12.6 | － 102 | ＋II | $6 \cdot 11$ | A 3 |
| 5713 | 272114 | ${ }^{\text {C } 6071}$ |  | 23120 | 1548.31 | 0253 | 121 | $\begin{array}{llllll}27 & 7 & 18.5\end{array}$ | 998 | 38 | 124，41．9 | － 52 ＊ | －119＊ | $5 \cdot 72$ | K o |
|  |  | C 6072 |  |  | 16 9．11 | 0233 | 123 | $\begin{array}{llllll}27 & 3 & 3 & 20 \cdot 9\end{array}$ | 996 |  | $12.4$ | ＋ 26 | － 126 |  | F 2 |
| $\left\lvert\, \begin{aligned} & 715 \\ & 575 \end{aligned}\right.$ | $\}^{272115}$ | C 6073 |  |  | $16 \quad 9.79$ | 0233 | 123 | $273325 \cdot 0$ |  | 39 | $12.4$ | ＋ 26 | － 126 | $\}^{6.30}$ | F 2 |
| 5716 | 262330 | C 6074 | 284 |  | $\begin{array}{llll}12 & 16 & 13.76\end{array}$ | $+3.0258$ | －．0114 |  | －19．996 | ＋．040 | $2 \cdot 5$ |  | －II |  | G 0 |
| 5717 | 252492 | C 6075 |  |  | $1615 \cdot 21$ | 0289 | 105 | 244258.4 | 996 | 40 | 13.0 | ＋ 26 | － 29 | $8 \cdot 7$ |  |
| 5718 | 242448 | C 6076 |  |  | 1617.70 | 0290 | 105 | $2436 \quad 10 \cdot 9$ | 995 | 40 | 12.3 | 9 | － 4 | $9 \cdot 2$ |  |
| 5719 | 262331 | C 6077 | 288 |  | 1621.47 | 0251 | 116 | 262534.2 | 995 | 40 | 12 | － 9 | ＋I | $8 \cdot 6$ | A 0 |
| 5720 | 262332 | C 6078 | 289 | 23134 | I6 $33 \cdot 14$ | 0250 | 114 | $\begin{array}{llllllllllllllll}26 & 13 & 12.7\end{array}$ | 994 | 40 | 12.5 | 30 | － 48 | $8 \cdot 4$ | K o |
| 5721 | 252493 | C 6079 |  | 23136 | 121632.88 | ＋3．0264 | －．0109 | $253140 \cdot 0$ | －19．994 | ＋．040 | 13.7 | － 168 | ＋ 159 | 7.35 | K 。 |
| 5722 | 322234 | L 4651 | 292 | 23140 | $1639 \cdot 80$ | 0123 | 149 | $\begin{array}{llll}31 & 48 & 7 \times 9\end{array}$ | 993 | 40 | 12.3 |  |  |  |  |
| 5723 | 252495 | C 608I |  | 23132 | 1654.95 | 0255 | 109 | $252948 \cdot 1$ | 991 | 4 I | I1．3 | － 3 | －$\quad 9$ | ${ }^{7} 110$ | A 3 |
| 5724 | 252496 | C 6082 |  |  | $17 \quad 0.70$ | 0262 | 106 | $25<40 \cdot 3$ | 991 | 41 | 12.9 | － 45 | ＋ 4 | 8.8 | F 8 |
| 5725 | 272116 | C 6083 | 304 |  | $17 \quad 12.81$ | 0212 | 119 | $27 \quad 628 \cdot 1$ | 989 | 42 | 12.5 | 17 | ＋ 25 | 8.2 | G 5 |
| 5726 | 272117 | C 6084 | 305 |  | $\begin{array}{lllll}12 & 17 & 17.70\end{array}$ | ＋3．0210 | OI 18 | $\begin{array}{llll}27 & 2 & 55.5\end{array}$ | －19．989 | ＋．042 | 12.5 | － | $\bigcirc$ | $9 \cdot 7$ | G |
| 5727 | 282109 | C 6085 |  |  | 1724.99 | 0190 | 124 | $274832 \cdot 4$ | 988 | 42 | I1．5 | － 16 | － 25 | $8 \cdot 8$ | Go |
| 5728 | 262336 | C 6086 | 300 |  | 1726.21 | 0226 | 113 | 26 II $7 \cdot 4$ | 988 | 42 | 12.9 | ＋ 29 | － 3 | $9 \cdot 3$ |  |
| 5729 | 252498 | C 6088 | 314 | 23160 | 1739.43 | 0239 | 107 |  | 986 | 42 | $\underline{11.1}$ | － 45 | －II | $6 \cdot 02$ | A 0 |
| 5730 | 262337 | C 6089 |  | 23169 | 1758.96 | 0206 | 113 | $26 \quad 2043 \cdot 9$ | 984 | 43 | $\underline{11.8}$ | 6＊ | －14＊ | $4 \cdot 78$ | F 5，A 3 |
| 5731 | 262338 | C 6090 |  |  | $\begin{array}{lll}12 & 18 & 0.03\end{array}$ | ＋3．0206 | － 0113 | $261940 \cdot 4$ | －19．984 | $+.043$ | 13.1 | 7 | － 13 | $8 \cdot 8$ |  |
| 5732 | 272118 | C 6091 | 320 |  | $\begin{array}{lll}18 & 3 \cdot 34\end{array}$ | －186 |  | $27 \quad 7 \quad 16 \cdot 7$ | 984 | 43 | 13.7 | － 36 | － 15 | $8 \cdot 0$ | K 2 |
| 5733 | 272119 | C 6092 |  |  | $\begin{array}{ll}18 & 8.22\end{array}$ | 0172 | 122 | $27 \quad 37 \quad 57 \cdot 8$ | 983 | 43 | 13.5 | 18 | ＋ 8 | $8 \cdot 3$ | K 2 |
| 5734 | 322239 | L 4660 | 323 | 23176 | 18 11．61 | 0069 | 147 | 3 I 4453.5 | 983 | 44 | 13.1 | － 3 | － 17 | $8 \cdot 2$ | K 。 |
| 5735 | 312357 | $\mathrm{L}_{4} 661$ |  |  | $18 \quad 15.99$ | 00780 | 145 | $\begin{array}{llll}31 & 18 & 0.3\end{array}$ | 982 | 44 | 12.5 | I | ＋ 22 | 8.6 |  |
| 5736 | 312358 | L 4662 | 329 |  | 121834.84 | $+3.0072$ | －．0144 | 31.633 .5 | －19．980 | ＋．044 | 12.5 | － $5^{2}$ | ＋ 15 | $9 \cdot 2$ |  |
| 5737 | 262340 | C 6095 | 330 |  | 1837.20 | o188 | 113 | 262182.7 | 980 | 44 | 13.1 | － 4 | － 2 | $9 \cdot 2$ | K。 |
| 5738 | 252501 | C 6096 | 338 | 23195 | $1858 \cdot 36$ | 0208 | 106 | $\begin{array}{lllll}25 & 5 & 33.2\end{array}$ | 977 | 45 | 9.9 | ＋ 51 | － 14 | $7 \cdot 34$ | K 2 |
| 5739 | 272120 | C 6097 |  |  | 18 58．88 | 0160 | 116 | $27 \quad 3 \quad 53.2$ | 977 | 45 | 11.9 | ＋ 18 | ＋ 23 | 9.2 | G o |
| 5740 | 272122 | C 6098 |  |  | 1910.27 | Or 44 | 18 | $\begin{array}{llll}27 & 28 & 44.7\end{array}$ | 976 | 46 | 12.7 | － 40 | 21 | $8 \cdot 9$ | F 5 |
| 5741 | 272121 | C 6099 |  |  | 1219 IIPI | $+3.0153$ | －．0116 | $\begin{array}{llll}27 & 6 & 3 \cdot 1\end{array}$ | －19．976 | $+.046$ | 12.7 | － 17 | ＋ 35 | $9 \cdot 6$ |  |
| 5742 | 242452 | B 4510 | 347 |  | 1931.97 | 0207 | 101 | $\begin{array}{llll}24 & 28 & 52 \cdot 0\end{array}$ | 973 | 46 | 12.3 | － 20 | － 19 | $9 \cdot 2$ | K o |
| 5743 | 262343 | C 6100 | 348 | 23207 | $1932 \cdot 53$ | －161 | 112 | 262115 | 973 | 46 | $1{ }^{1} \cdot 9$ | ＋ 2 | － 16 | $6 \cdot 65$ | A 3 |
| 5744 | 292284 | C 6101 | 354 |  | $1942 \cdot 37$ | 0091 | 127 | $285420 \cdot 0$ | 972 | 46 | 13.7 | ＋ $4^{6}$ | － 41 | 9.7 |  |
| 5745 | 242453 | B 4511 | 350 |  | $1946 \cdot 48$ | 0211 | 098 | $24 \quad 1 \quad 14.3$ | 97 I | $4^{6}$ | 13.1 | 6 | 32 | $9 \cdot 6$ |  |
| 5746 | 262344 | C 6102 | 351－2 | 23211 |  |  | －－0114 | $\begin{array}{lllll}26 & 35 & 51 \cdot 9\end{array}$ | －19．971 | $+\cdot 046$ | 13.1 | $-{ }^{17} 7^{*}$ | －23＊ | $5 \cdot 10$ | A 2 |
| 5747 | 282111 | C 6103 | 355 |  | 1954.77 | －109 | 122 | 27 58 22.8 | 970 | 47 | 13.7 | 26 | － 30 | $9 \cdot 7$ |  |
| 5748 | 262345 | C6104 |  | $23214-5$ | $1955 \cdot 86$ | 0157 | 1116 | $\begin{array}{llll}26 & 4 & 53.8\end{array}$ | 970 | 47 | II | ＋ 14 | － 11 | $6 \cdot 31$ | A 5 |
| 5749 | 322241 | L 4666 | 359 | 23221 | 20 I． 89 | －0002 | 146 |  | 969 | 47 | 11.9 I． | － 152 | 16 $+\quad 7$ |  | Go |
| 5750 | 312362 | L 4667 |  | 23225 | 2019.90 | $2 \cdot 9998$ | 144 | $313157 \cdot 2$ | 967 | 48 | 11．6 | － $4^{8}$ | ＋ 7 | $7 \cdot 66$ | K |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
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|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.ooot. }}{\text { R.A. }}$ | $\underset{\text { Dec. }}{\text { D }}$ |  |  |
|  | - |  |  |  | $n \mathrm{~m} ~ \mathrm{~s}$ | 8 | 8 | - " | " | " |  |  |  |  |  |
| 5751 | 262347 | C6105 |  |  | 122031.52 | $+3.0140$ | -. 0109 | $26 \quad 3 \begin{aligned} & 34.5\end{aligned}$ | -19.966 | +.048 | 11.1 |  |  |  | F 8 |
| $5752$ | 242455 | B 4514 | 375-6 | 23236 | 2043.58 | 0177 | 100 | $2425 \quad 32 \cdot 8$ | 964 |  | 10.7 | + 39* | - 8 $^{*}$ | 6.08 | K 0 |
| 5753 | 302267 | ${ }^{\text {L }} 4670$ | 377 |  | 2044.25 | 0015 | 135 | $3027 \quad 2 \cdot 0$ | 964 |  | 9.9 | - 6 | - 9 | 9.0 |  |
| 5754 | 272129 | C 6ro9 |  |  | 2121.74 | 0083 | 117 | $271631 \cdot 3$ | 959 | 49 | 11.9 | + 12 | - 14 | $9 \cdot 0$ | F 5 |
| 5755 | 262350 | C6110 | 395 | 23258 | 2129.22 | OIIO | 110 | 26 10 49.5 | 958 | 49 | 11.4 | 3 | - 19 | 8.8 | K o |
| 5756 | 302268 | L 4672 | 397-8 |  | 122133.18 | +2.9982 | -.0135 | 303721.4 | -19.957 | +.049 | 13.6 | 12 | + 16 | $9 \cdot 6$ |  |
| 5757 | 302269 | C 6112 |  |  | $2135 \cdot 68$ | $3 \cdot 0007$ | 130 | $294327 \cdot 6$ | 957 | 50 | 13.5 | - 3 | - 3 | $9 \cdot 3$ |  |
| 5758 | 282115 | C 6115 | 406 | 23267 | $2154 \cdot \mathrm{II}$ | 0054 | 118 | 2746 | 955 | 50 | 11.8 | - 17* | - 18* | $5 \cdot 15$ | A 5 |
| 5759 | 262351 | C 6116 | 414 |  | $\begin{array}{lll}22 & 16.38\end{array}$ | 0074 | 112 | $\begin{array}{lllll}26 & 38 & 55.8\end{array}$ | 951 |  | $1 \mathrm{I} \cdot 3$ | - 52 | - 26 | $9 \cdot 2$ | K o |
| 5760 | 272133 | C6117 |  |  | 2217.73 | 0054 | 116 | $27 \quad 1946 \cdot 8$ | 951 | 51 | 11.7 | - 32 | 11 | $9^{\circ}$ | G 5 |
| 5761 | . 292288 | C 6118 | $4^{16-7}$ | 23279-80 | $12 \begin{array}{lll}22 & 27.25\end{array}$ | $+3.0007$ | -. 0124 | $28467 \cdot 1$ | -19.950 | +.051 | 12.2 | - 66* | - $87 *$ | $4 \cdot 56$ | K。 |
| 5762 | 272134 | C 6ir 9 |  | 23281 | $22 \quad 29.40$ | 0049 | 116 | $\begin{array}{llll}27 & 19 & 26.8\end{array}$ | 950 | 51 | $10 \cdot 3$ | + 1* | - 13* | $5 \cdot 04$ | A 2 |
| 5763 |  |  |  |  | $2243 \cdot 30$ | 0036 | 116 |  | 948 | 52 | 11.9 | + 30 | - 242 |  |  |
| $5764$ | 272135 | C 6121 |  |  | $2243 \cdot 29$ | 0036 | 116 | 27 31 <br> $16 \cdot 1$  | 948 | 52 | 11.3 | + 30 | - 242 | ${ }^{8.6}$ | K 2 |
| $\|5765\|$ |  |  |  |  |  | 0036 | 116 | $273145 \cdot 6$ | 948 | 52 | 1.3 .9 | + 30 | - 242 |  |  |
| 5766 | 252506 | C 6122 |  |  | $122244 \cdot 66$ | $+3.0097$ | -.0103 | $\begin{array}{llll}25 & 23 & 2.7\end{array}$ | -19.947 | +.051 | 12.9 | 21 | + 26 | 10.0 |  |
| 5767 | 252507 | C 6124 |  | 23306 | 22 57-12 | 3.0098 | 102 | $25 \quad 9618 \cdot \mathrm{I}$ | - 945 | 52 | 10.5 | - 34 | + 63 | $8 \cdot 2$ |  |
| 5768 | 282116 | C 6125 | 421-2 | 23301-2 | $23 \quad 3 \cdot 34$ | $2 \cdot 9993$ | 123 | $28 \quad 3628 \cdot 1$ | 945 | 52 | 11.7 | + 7 | - 19 | 8.0 | Ko |
| 5769 | 252508 | C 6126 | 412-23-4 | 23304 | $\begin{array}{ll}23 & 4 \cdot 39\end{array}$ | 3.0107 | 099 | 2443 32.0 | 944 | 52 | $10 \cdot 1$ | - 10 | - II | 8.86 | K o |
| 5770 | 262352 | C 6127 |  | 23308 | $\begin{array}{lll}23 & 8.38\end{array}$ | $3 \cdot 0056$ | 109 | $\begin{array}{llll}26 & 24 & 37 \cdot 7\end{array}$ | 944 | 52 | 11.5 | + 10 | - 5 | $6 \cdot 57$ | A 3 |
| 5771 | 282118 | C 6128 | 426 |  | $\begin{array}{llll}12 & 23 & 16.94\end{array}$ | $+3.0007$ | -.0118 | $\begin{array}{llll}27 & 55 & 16.5\end{array}$ | -19.943 | +.053 | 11.2 | - 36 | -. 24 | $8 \cdot 4$ | F。 |
| 57 | 302273 | L 4676 |  | 23324 | $23 \quad 34.99$ | $2 \cdot 9922$ | 134 | 301855.5 | 940 | 54 | $11 \cdot 3$ | + 16 | + 25 | $8 \cdot 7$ | K o |
| 577 | 252510 | C 6130 | 437 |  | 2343.78 | $3 \cdot 0065$ | 103 | $253156 \cdot 1$ | 939 | 54 | $11 \cdot 3$ | - 1 | - 35 | $8 \cdot 6$ | G 5 |
| 5774 | 302279 | L 4677 |  | 23332 | $24 \quad 4 \cdot 14$ | $2 \cdot 9913$ | 131 | $\begin{array}{llll}30 & 5 & 17.0\end{array}$ | 935 | 54 | 11.7 | + 6 | - 18 | $8 \cdot \mathrm{I}$ | K 5 |
| 5775 | 272138 | C613I | 440 | 23334 | $24 \quad 8.53$ | $3 \cdot 0017$ | 110 | $\begin{array}{lllllllllll}26 & 43 & 29.7\end{array}$ | 935 | 54 | 11.8 | 18 | 28 | $6 \cdot 48$ | A. 3 |
| 5776 | 262353 | C 6132 | 444-5 | 23338 | $12 \begin{array}{llll}124 & 14.92\end{array}$ | $+3.0025$ | 108 | $\begin{array}{llll}26 & 23 & 50 \cdot 5\end{array}$ | -19.934 | +-054 | 11.3 | - ${ }^{11}$ | 33* | 6.69 | A 3 |
| 5777 | 262354 | C 6133 | 450-1 | 23341 | 24 25-12 | $3 \cdot 0019$ | 108 | $\begin{array}{llll}26 & 24 & 39 \cdot 2\end{array}$ | 932 | 55 | 11.7 | - 14* | - 22* | $5 \cdot 38$ | A op |
| 5778 | 292292 | C 6134 | 452 | 23345 | 2427.80 | $2 \cdot 9923$ | 126 |  | 932 | 55 | 11.5 | - 11 | - 4 | $8 \cdot 8$ | Go |
| 5779 | 322250 | L 4681 | 460 | 23349 | 2438.76 | $2 \cdot 9832$ | 140 | 315320.6 | 930 | 55 | 11.9 | + 104 | - 33 | 8.1 | Go |
| 5780 | 292293 | C 6135 | 461 |  | 2439.95 | $2 \cdot 9936$ | 122 | $28 \quad 4731 \cdot 0$ | 930 | 55 | 12.1 | + 16 | - 43 | $9 \cdot 6$ |  |
| 5781 | 242464 | C 6136 | 465 | 23357 | $\begin{array}{llll}12 & 24 & 56.94\end{array}$ | +3.0060 | -.0097 | $\begin{array}{llll}24 & 36 & 23.3\end{array}$ | -19.927 | +.056 | 10.3 | - 18* | - 8* |  | F 5 |
| 5782 | 302280 | L 4682 | 467 | 23360 23364 | $\begin{array}{ll}25 & 1.48 \\ 25 & \text { 1.51 }\end{array}$ | 2.9885 | 129 | $295926 \cdot 9$ | 927 | 56 | 12.6 | + $\quad 37$ | - 52 | 8.8 8.8 |  |
| 5783 | 302281 | L 4683 |  | 23364 | $25 \quad 1.51$ | $2 \cdot 9883$ | 129 | $30037 \cdot 4$ | 927 | 56 | 12.5 | - 26 | - 30 | 8.8 | G 5 |
| 5784 | 312371 | L 4684 | 469 |  | $\begin{array}{ll}25 & 4.97 \\ 25 & 4.06\end{array}$ | 2.9843 | 136 | 31749.0 | 926 | 56 | 12.9 | 13 | 42 | 9.3 | G 5 |
| 5785 | 252511 | C 6137 |  |  | 2511.06 | $3 \cdot 0041$ | 099 | $\begin{array}{llll}25 & 1 & 7 \cdot 0\end{array}$ | 925 | 57 | 13.5 |  |  | $9 \cdot 6$ |  |
| 5786 | 302283 | L 4686 |  |  | $12 \begin{array}{llll}12515.27\end{array}$ | +2.9858 | -.0131 | $\begin{array}{llll}30 & 31 & 8.8\end{array}$ | -19.924 | +.056 | 13.7 | - 70 | + 18 | $9 \cdot 3$ |  |
| 5787 | 252513 | C 6139 | 478 | 23373 | $25 \quad 25 \cdot 88$ | 3.0040 | 098 | 245012.8 | 923 | 57 | 12.7 | - $4^{2}$ | - 32 | 7.86 | F 5 |
| 5788 | 262356 | C 6140 | 479-80 | 23374 | 2528.40 | $2 \cdot 9981$ | 109 | $2637 \quad 6.6$ | 922 | 57 | 13.5 | + 15 | + 3 | 8.6 | G 5 |
| 5789 | 252514 | C 614i |  | 23375 | 2530.04 | $3 \cdot 0032$ | 098 | $25 \quad 2 \begin{array}{lll}26\end{array}$ | 922 | 57 | 13.3 | 6 | - 20 | 8.65 | K o |
| 5790 | 292294 | C 6142 |  |  | $2542 \cdot{ }^{\circ}$ | $2 \cdot 9899$ | 121 | $28 \quad 54 \quad 16.8$ | 920 | 57 | 12 I | 39 | 29 | $9 \cdot 6$ |  |
| 5791 | 282123 | C 6143 |  |  | 122545.77 | +2.9926 | -.0116 | $\begin{array}{llll}28 & 3 & 25.3\end{array}$ | -19.919 | +*057 | 12.1 | - 17 | + 1 | $9 \cdot 3$ | K 2 |
| 5792 | 312373 | $\mathrm{L}_{4} 687$ | 487 |  | 2550.13 | $2 \cdot 9804$ | 137 | $\begin{array}{llll}31 & 29 & 22.6\end{array}$ | 919 | 58 | 11.8 | - 10 | + 78 | $9 \cdot 0$ | K |
| 5793 | 252517 | C 6145 | 497 | 23396 | $2630 \cdot 96$ | $3 \cdot 0003$ | 097 | $\begin{array}{lllll}25 & 3 & 52.9\end{array}$ | 912 | 59 | 10.5 | - 8* | - 17* | $5 \cdot 39$ | A 3 p |
| 5794 | 322252 | L 4690 |  | 23402-3 | 26 33.37 | 2.9763 | 140 | 315513.1 | 912 | 59 | 14.3 | + 14 | 19 $+\quad 19$ | $7 \cdot 38$ | F 5 |
| 5795 | 242466 | B 4532 | 500-1 |  | $2633 \cdot 77$ | $3 \cdot 0028$ | 094 | $\begin{array}{llll}24 & 16 & 9.8\end{array}$ | $9{ }^{12}$ | 59 | 10.7 | - 56 | + 45 | $7 \cdot 11$ | G o |
| 5796 | 282125 | C 6146 |  | 23401 | 122634.54 | +2.9895 | -.0117 | 281340.0 | -19.911 | +-059 | 10.4 | + 9 | + 8 | $8 \cdot 7$ | G 5 |
| 5797 | 272142 | C 6147 |  |  | $2657 \cdot 32$ | 9929 | 108 | 265444.0 | 908 | 60 | 11.3 | + 16 | - 0 | $9 \cdot 3$ |  |
| 5798 | 252518 | C 6148 | 511 |  | $\begin{array}{ll}27 & 3\end{array}$ | 9987 | 098 | $\begin{array}{llll}25 & 7 & 5 \cdot 3\end{array}$ | 906 | 60 | 12.3 | - 9 | - 21 | $9 \cdot 2$ |  |
| 5799 | 272143 | C 6149 | 512 | 23422 | $\begin{array}{ll}27 & 4.62\end{array}$ | 9903 | 111 | $273345 \cdot 7$ | 906 | 60 | $10 \cdot 9$ | - 3 | - 64 | $8 \cdot 4$ | K o |
| 5800 | 262359 | C 6150 | 513 | 23423 | $27 \quad 4.84$ | 9944 | 105 | 26224.0 | 906 | 60 | $10 \cdot 7$ | - 24 | - 17 | $8 \cdot 4$ | A o |


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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19ro\%. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch rg00 | $\underset{\text { B.ooor }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { Dooi. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m | 8 | s | - , |  | * |  |  |  |  |  |
| 5851 | 272158 | C 6201 | 714 | 23680 | $1236 \quad 29 \cdot 57$ | $+2.9615$ | -.0104 | $27 \quad 38 \quad 0.4$ | -19.792 | +.077 | 9.5 | 15 | - 5 | 8.1 | F 5 |
| 5852 | 312397 | L 4739 | 721 | 23682 | $3643 \cdot 35$ | 9447 | 122 | $3055 \quad 50 \cdot 2$ | 789 | 77 | $9 \cdot 5$ | 25 | + 9 | 6.88 | A 2 |
| 5853 | 312398 | ${ }_{\text {L }} 4741$ | 731 | 23701 | 37 <br> 15.47 | 9432 | 120 | $\begin{array}{llll}30 & 52 & 1.7\end{array}$ | 782 | 78 | 10.3 | $\begin{array}{r}13 \\ +\quad 13 \\ \hline\end{array}$ | 1 $+\quad 1$ | 9.6 | F 8 |
| 5854 | 272163 | C 6203 | 739 | 23705 | 37 <br> $74 \cdot 58$ | 9616 | 098 | $\begin{array}{llll}26 & 51 & 9.6\end{array}$ | 775 | 79 | $1 \mathrm{I} \cdot 7$ | + 12 | + 76 | 9.6 | K |
| 5855 | 302315 | L 4745 | 742 |  | 3748.08 | 9446 | 117 | 301414.1 | 774 | 78 | II. 6 | 10 | + 28 | $9 \cdot 6$ |  |
| 5856 | 292316 | C6204 |  |  | $123749 \cdot 61$ | +2.9503 | --01II | 295 50.1 | -19.774 | +.080 | 12.I | + 48 | - 31 | 9.6 |  |
| 5857 | 292317 | C 6207 |  |  | $\begin{array}{ll}38 & 8 \cdot 12\end{array}$ | 9467 | 114 | $2936 \quad 9.4$ | 769 | 80 | 13.3 | - 43 | - 112 | 10.2 |  |
| 5858 | 292318 | C 6208 |  |  | 38 12.00 | 9463 | II4 | 2939 20.1 | 768 | 80 | 12.8 | - 48 | + 6 | $9 \cdot 36$ | G 0 |
| 5859 | 292319 | C 6209 |  | 23717-9 | 3814.08 | 9502 | 109 | 285116.0 | 768 | 80 | 10.7 | $+\quad 14$ | - 36 | $7 \cdot 47$ | F 2 |
| 5860 | $26 \quad 2382$ | C 62II | 750 | 23724 | $38 \quad 29.29$ | 9616 | 095 | $\begin{array}{llll}26 & 24 & 1114\end{array}$ | 764 | 80 | 10.7 | + | - 1 | $8 \cdot 4$ | G 5 |
| 5861 | 252548 | C 6213 |  | 23728 | 123838.02 | +2.9689 | -. 0086 | $244735 \cdot 8$ | $-19.762$ | +.08I | $9 \cdot 7$ | 12 | - 12 | 8.16 | K |
| 5862 | 252549 | C 6214 |  | 23730 | $38 \quad 46 \cdot 79$ | 9670 | 088 | $25 \quad 6 \quad 10.9$ | 760 | 8 I | II. 3 | + | - 28 | 8.8 | F |
| 5863 | 262383 | C 6215 | 757-8 | 23735 | 38 52.33 | 9595 | 096 | $2637 \mathrm{II} \cdot 3$ | 758 | 8 I | 10.3 | + 20 | - 20 | $6 \cdot 71$ | Fo |
| 5864 | 272165 | C 6217 |  |  | $3853 \cdot 49$ | 9579 | 097 | $265447 \cdot 7$ | 758 | 81 | 12.5 | - 31 | - 22 | $9 \cdot 3$ | G o |
| 5865 | 312401 | L 4752 | 762 |  | 38 58.15 | 9350 | 122 | $\begin{array}{llllllllllll}31 & 17 & 46 \cdot 3\end{array}$ | 757 | 8 I | 13.1 | + 56 | - 202 | $9 \cdot 3$ | G 5 |
| 5866 | $\begin{array}{lll}24 & 2488 \\ 26\end{array}$ | B 4591 | 761 |  | 12390010 | +2.9694 | -.0084 | $\begin{array}{lll}24 & 29 & 19.0\end{array}$ | -19.756 | +.082 | 12.9 | + 4 | + | $8 \cdot 9$ | K o |
| 5887 | $\begin{array}{llll}26 & 2384 \\ 26 & 2385\end{array}$ | ${ }^{\text {C } 6218}$ |  |  | 39 10.00 | 9603 | 094 | 261629.3 | 754 | 82 | 12.9 | - 56 | - 32 | $9 \cdot 2$ | G 5 |
| 5868 | $\begin{array}{lll}26 & 2385 \\ 28 & 2145\end{array}$ | C 6219 |  | 23740-1 | 39 II•59 | 9607 | 093 | 26 10 22.7 | 754 | 82 | 10.9 | + 11 | + 18 | $7 \cdot 56$ | A 3 |
| 5869 | $28 \quad 2145$ | C 6220 |  |  | 39 34.05 | 9514 | 102 | 2749 10.9 | 748 | 82 | $9 \cdot 7$ | + | - 77 | 8.6 | F 8 |
| 5870 | 252554 | C 622I | 773 |  | $3954 \cdot 33$ | 9645 | 086 | 25 - 55.9 | 743 | 83 | 11.8 | 14 | + 17 | 9.6 |  |
| 5871 | 282146 | C 6222 | 776 | 23757-8 | 123955.90 | +2.9468 | -.0105 | $28 \quad 28 \quad 27 \cdot 3$ | -19.742 | $+.083$ | 10 | 31 | + 30 | 8.0 | K o |
| 5872 | 252555 | C 6223 |  |  | $3957 \cdot 47$ | 963 I | 087 | $\begin{array}{lllllll}25 & 15 & 2 \cdot 1\end{array}$ | 742 | 83 | 10.7 | - 62 | + 9 | 8.8 |  |
| 5873 | 292320 | C 6225 |  | 23764 | $40 \quad 19.71$ | 9409 | 110 | $2921 \quad 2 \cdot 6$ | 736 | 84 | 10.2 | + 30 | - 66 | $8 \cdot 2$ | K |
| 5874 | $\begin{array}{lll}24 & 2489 \\ 28 & 4148\end{array}$ | B 4594 | 787 |  | $4037 \cdot 22$ | 9672 | 080 | $\begin{array}{lll}24 & 5 & 9 \cdot 3\end{array}$ | 732 | 85 | 10.5 | - 28 | - 6 | 8.2 | Ma |
| 5875 | 282148 | C 6227 | 788 | 23780 | 4038.49 | 9477 | 102 | 2753 II-I | 732 | 84 | 9.0 | 7 | - 34 | $7 \cdot 53$ | Ko |
| 5876 | 28. 2149 | C 6228 |  | 23782 | $124040 \cdot 61$ | $+2.9458$ | -.0103 | 281416.4 | - 19.731 | +.084 | 10.1 | - 63 | + 89 | 8.6 | G o |
| 5877 | 282150 | C 6229 | 790 |  | 4044.70 | 9477 | 101 | 2749 35-1 | 730 | 84 | 10.7 | + 51 | - 50 | $9 \cdot 2$ | G 5 |
| 5878 | 302321 | L 4757 |  | 23792 | $412 \cdot 59$ | 9336 | 114 | $\begin{array}{llll}30 & 16 & 4.9\end{array}$ | 725 | 85 | $9 \cdot 3$ | - 108 | + 7 | $7 \cdot 97$ | G o |
| 5879 | 302322 | L 4758 | 801 | 23794 | $41 \quad 6.54$ | 9310 | 116 | 304122.2 | 724 | 85 | 10.7 | - 1 | + 46 | $8 \cdot 4$ | F 8 |
| 5880 | 292323 | C 6234 |  | 23795 | 418.51 | 9385 | 109 | 291838.9 | 724 | 85 | 12.3 | 45 | - 35 | $9 \cdot 6$ | F 5 |
| 5881 | $25 \quad 2556$ | C 6233 | 800 |  | $\begin{array}{llll}12 & 41 & 8.72\end{array}$ | +2.9591 | -. 0087 | 252451.0 | -19.724 | +.086 | II. 6 | + 22 | + 15 | 9.6 |  |
| 5882 | 272167 | C 6235 |  | 23796 | $4112 \cdot 10$ | 9475 | 100 | 273715.6 | 723 | 85 | $2 \cdot 3$ | + 19 | - 17 | $9 \cdot 6$ | Ma |
| 5883 | 252559 | C 6236 |  |  | $4128 \cdot 65$ | 9597 | 086 | $25 \quad 6 \quad 46 \cdot 5$ | 719 | 86 | $\mathrm{II}_{1} 7$ | - 34 | - 25 | 8.8 |  |
| 5884 | 252560 | C 6237 |  |  | $4130 \cdot 17$ | 9592 | 085 | $\begin{array}{llllllllllllllllll}25 & 13 & 0.6\end{array}$ | 718. | 86 | II.7 | - 24 | + 5 | $9 \cdot 2$ |  |
| 5885 | 302324 | L 4760 |  | 23811 | 4138.07 | 9326 | 112 | $\begin{array}{lllll}30 & 5 & 32.8\end{array}$ | 716 | 86 | 10.7 | 8 | - 33 | 8.6 | F 5 |
| 5886 | 292325 | C 6238 |  | 23813 | 124142.24 | +2.9358 | --0109 | $292848 \cdot 3$ | -19.715 | +.086 | 10.9 | - 3 | - 50 | $9 \cdot 2$ | K。 |
| 5887 | 272168 | C 6240 | 813 |  | 423.53 | 9491 | 094 | $26 \quad 5018.7$ | 709 | 87 | 12.7 | + 45 | 71 | $9 \cdot 6$ | Go |
| 5888 | 242492 | B 4600 |  |  | $42 \quad 4.42$ | 9628 | 080 | $\begin{array}{llll}24 & 12 & 6 \cdot 4\end{array}$ | 709 | 88 | 12.2 | 14 | - 40 | $9 \cdot 6$ |  |
| 5889 | 242493 | C 624I | 816 | 23820 | $42 \quad 7 \cdot 31$ | 9605 | 082 | 243831.6 | 708 | 88 | $9 \cdot 6$ | - 91 | - 238 | $6 \cdot 72$ | F 5 |
| 5890 | 272169 | C 6242 | 820 | 23833 | 4227.82 | 9445 | 098 | $272745 \cdot 3$ | 703 | 87 | 12.5 | + 43 | - 2 | $9 \cdot 2$ | F 8 |
| 5891 | $25 \quad 2561$ | C 6244 | 838 |  | $1242 \begin{array}{ll}1 / 12\end{array}$ | +2.9580 | -.0083 | $244415 \cdot 3$ | -19.697 | +.089 | II•I | 32 | + 20 | 8.8 |  |
| 5892 | 282151 | C 6245 |  | 23857 | 43 I 2.82 | 9399 | 099 | $\begin{array}{lllll}27 & 54 & 3.2\end{array}$ | 69 I | 89 | -1 | - 22 | - 8 | 9.6 | Go |
| 5893 | 302329 | L 4766 | 833 | 23869-70-71 | $43 \quad 26 \cdot 38$ | 9270 | 110 |  | 687 | 89 | 9.5 | - 61 | + | 7-11 | Fo |
| 5894 | 312408 | L 4767 |  |  | $4330 \cdot 59$ | 9191 | 117 |  | 686 | 89 | 11.8 | + 62 | - 8 | $9 \cdot 6$ |  |
| 5895 | $24 \quad 2495$ | C 6246 | 834 | 23872 | 43 33.75 | 9570 | 08 I | $2435 \mathrm{II} \cdot 3$ | 685 | 90 | 9.9 | - 34 | + 10 | $7 \cdot 31$ | G 5 |
| 5896 | 272172 | C 6248 | 836 | 23877 | 124338.60 | $+2.9402$ | -. 0097 | 273554.3 | -19.684 | +.089 | $9 \cdot 3$ | + 17 | - 45 | $8 \cdot 2$ | G 5 |
| 5897 | $25 \quad 2564$ | C 6249 |  |  | 43 53.01 | 9505 | 086 | 253738.4 | 680 | 90 | 10.9 | - 40 | - 31 | $9 \cdot 3$ |  |
| 5898 | 312409 | L 4769 | 840 | 23881 | 4353.25 | 9204 | 113 | $305315 \cdot 2$ | 680 | 90 | 10.4 | - 45 | + 5 | 7.74 | Ko |
| 5899 | 312410 | L 4770 | 844 |  | $44 \quad 0.45$ | 9177 | 116 | 311527.4 | 678 | 90 | 12.2 | 45 | + ${ }^{2}$ | 8.02 | F 8 |
| 5900 | 282152 | C 6250 | 843 |  | $44 \quad 2 \cdot 13$ | 9352 | 100 | $\begin{array}{llll}28 & 16 & 29.3\end{array}$ | 677 | 90 | 11.7 | - 38 | + 13 | $8 \cdot 1$ | F 8 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0 | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{gathered} \text { Spectral } \\ \text { Type. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R A. ${ }^{3} .0001$. | Dec. . |  |  |
|  |  |  |  |  | 1 m |  | $s$ | - " | " | " |  |  |  |  |  |
| 5951 | 292346 | C 6303 |  |  | $125316 \cdot 50$ | +2.8985 | -.0097 | $292757 \cdot 4$ | -19.507 | $+\cdot 105$ | II.9 | + 20 | + 9 | $9 \cdot 6$ |  |
| 5952 | $\begin{array}{lll}29 & 2345 \\ 29 & 2347\end{array}$ | C 6304 | 1012 |  | 5318.14 | 9023 | 095 | $28 \quad 55 \quad 3 \cdot 3$ | 506 | 106 | 12.5 | + 7 | - 13 | $9 \cdot 6$ |  |
| 5953 | 292347 | C 6305 | 1015 |  | 53 21-12 | 8994 | 096 | $291845 \cdot 7$ | 505 | 105 | 12.7 | + 32 | - 10 | $9 \cdot 6$ |  |
| 5954 | $\begin{array}{lll}26 & 2409 \\ 31 & 2428\end{array}$ | C 6306 | 1014 | 24145 | 5322.66 | 9192 | 082 | $26 \quad 25 \quad 22 \cdot 6$ | 505 | 106 | $1 \mathrm{I} \cdot 0$ | + 18 | - 15 | 9.0 |  |
| 5955 | 3 I 2428 | L 4802 | 1022 |  | $5355 \cdot 52$ | 8816 | 107 |  | 494 | 107 | $10 \cdot 3$ | 23 | - 5 | $9 \cdot 2$ | F 5 |
| 5956 | $26 \quad 2+10$ | C 6309 | ${ }^{1024}$ | 24165 | 12546.01 | $+2.9173$ | -.0081 | $26 \quad 24 \quad 27.9$ | -19.490 | +-108 | 6 | 28 | + 3 | $8 \cdot 9$ | K o |
| 5957 | 272198 |  |  |  | $54 \quad 6 \cdot 67$ | 9125 | 084 | $27 \quad 6 \quad 5 \cdot 4$ | 490 | 108 | 13.4 |  | - | $10 \cdot 9$ |  |
| 5958 | $\begin{array}{llll}30 & 2349\end{array}$ | L 4803 | 1025-7 |  | 5410.90 | 888 I | 100 | $3030 \quad 21.5$ | 488 | 107 | 12.7 | 20 | - 8 | 9.0 |  |
| 5959 5060 | 292348 | C 6311 |  | 24172-3 | $5+13.90$ | 9002 | 093 | $28 \quad 48 \quad 19.2$ | 487 | 108 | 10.3 | - 35 | + 6 | 6.61 | A 5 |
| 5960 | 272199 | C 6312 |  |  | $54 \quad 1+79$ | 908 I | 087 | 274052.9 | 487 | 108 | 13.7 | $+55$ | + 27 | 10.0 |  |
| 5961 | 282170 | C 6313 | 1030 |  | 125420.51 | $+2.9058$ | -.0089 | $275746 \cdot 9$ | -19.485 | +•108 | $9 \cdot 7$ | - 117 | - 92 | $7 \cdot 82$ | G 5 |
| 5962 | 272201 | C 6314 |  | 24177 | $5421 \cdot 71$ | 9083 | 087 | $27 \quad 3619.2$ | 485 | 108 | 10.1 | + 10 | - | 8.4 | G 5 |
| 5963 | 312431 | $\mathrm{L}_{4} \mathrm{COO}_{4}$ |  |  | $55 \quad 6 \cdot 30$ | 8819 | 102 | $30 \quad 55 \quad 20 \cdot 5$ | 469 | 108 | 11.7 | + 100 | - 90 | $9 \cdot 3$ | G |
| 5964 | $\begin{array}{ll}30 & 2351 \\ 28 & 2171\end{array}$ | L 4805 | 1041-2 |  | $55 \quad 8.91$ | 8845 | 100 | $\begin{array}{llllllllllll}30 & 32 & 45\end{array}$ | 468 | 109 | 10.6 | + 23 | - 61 | $8 \cdot 7$ | G。 |
| 5965 | $28 \quad 2171$ | C 6315 | 1043-4 | $24196 \cdot 7-224$ | 5512.26 | 8990 | 091 | $28 \quad 33 \quad 5 \cdot 0$ | 467 | 109 | 10.7 | + 22 | - | 7.09 | F 5 |
| 5966 | 292350 | C 6316 | 1045 | 24198-9-216 | $12 \begin{array}{llll}55 & 13.47\end{array}$ | +2.8977 | .0092 | $28 * 43888$ | $-19.467$ | +.109 | II.3 | 60 | + 19 | $8 \cdot 3$ | F 5 |
| 5967 | 292351 | C 6318 |  |  | $5534 \cdot 30$ | 8938 | 093 | $29 \quad 7 \quad 0.6$ | 460 | 110 | 11.5 | 32 | - 21 | $9 \cdot 3$ |  |
| 5968 | 242518 | B 4659 | 1054 | z4208 | $5543 \cdot{ }^{6}$ | 9279 | 068 | 24 II 45.6 | 456 |  | $9 \cdot 9$ | + 6 | - | $9 \cdot 3$ | K o |
| 5969 | 312434 | L 4809 | 1061 |  | 55 58-13 | 8763 | 103 |  | 451 | 110 | 11.3 | 2 I * | - $24^{*}$ | $5 \cdot 08$ | K o |
| 5970 | 242522 | B 4663 | 1064 | $22^{220-1}$ | $56 \quad 12.05$ | 9271 | 068 | $24 \quad 8 \quad 13.0$ | 446 | 113 | 10.1 | 13 | 29 | 8.07 | F 5 |
| 5971 | 312436 | L 48 II |  |  | 125633.05 | +2.8764 | -. 0101 | 305959.5 | -19.439 | +.111 | 9.7 | 31 | + 8 | 9.0 | G 5 |
| 5972 | $25 \quad 2583$ | C6321 | 1075-6 | 24237 | $5640 \cdot 82$ | 9213 | 070 | 24486 | 436 | 112 | $9 \cdot 9$ | + 20 | - $\quad 37$ | $7 \cdot 86$ | K o |
| 59 | 262415 | C 6322 | 1079 |  | $5648 \cdot 23$ | 9119 | 076 | $\begin{array}{llll}26 & 6 & 24.9\end{array}$ | 434 | 112 | 10.5 | + 29 | - 57 | $9 \cdot 6$ |  |
| 5974 | 262416 | C 6323 | 1083 |  | $5658 \cdot 24$ | 9115 | 076 | $26 \quad 5 \quad 90$ | 430 | 112 | 10.3 | + 9 | - 13 | $9 \cdot 3$ |  |
| 5975 | 302353 | $\mathrm{L}_{4813}$ | 1087 |  | $57 \quad 7 \cdot 15$ | 8814 | 097 | $30 \quad 6 \quad 40 \cdot 2$ | 427 | 112 | 12.5 | + 23 | - $\quad 33$ | $9 \cdot 6$ |  |
| 5976 | 31:2439 | L 4814 |  |  | 125725.46 | +2.8683 | -.0104 | 313843.8 | -19.420 | +-112 | II.5 | 14 | $+52$ | $9 \cdot 6$ |  |
| 5977 | 292357 | C 6325 | 1094 | 24260-1 | $5745 \cdot 68$ | 8841 | 092 | 292833.0 | 413 | 113 | $9 \cdot 6$ | - $4^{6}$ | - 28 | $8 \cdot 2$ | G 0 |
| 5978 | 262418 | C 6326 |  |  | $5757 \cdot 65$ | 9099 | 075 | $\begin{array}{lllll}25 & 56 & 4 \cdot 3\end{array}$ | 408 | 115 | 11.9 | + 51 | - 74 | $9 \cdot 2$ | F 5 |
| 5979 | $\begin{array}{lll}31 & 2442 \\ 31 & 2443\end{array}$ | L 4817 | 1099 | 24268 | $\begin{array}{ll}58 & 3.29 \\ 58 & 20.59\end{array}$ | 8725 | 098 | $30 \quad 5027.4$ | 406 | 113 | $9 \cdot 2$ | - 70 | + 21 | 8.2 | Fo |
| 5980 | 312443 | L 4819 | rio7 | 24276 | $58 \quad 20 \cdot 59$ | 8721 | 098 | $3045 \quad 51 \cdot 7$ | 400 | 114 | 10.1 | - 63 | + 15 | 8.8 | G o |
| 5981 | 312444 | L 4820 | 1108 |  | 125820.93 | +2.8657 | -. 0103 |  | -19.400 | +.114 | 10.9 | + 42 | - 118 | $9 \cdot 6$ | G 5 |
| 5982 | 242530 | C 6331 | III 3 |  | 58 <br> 8.36 | 9170 | 067 | $243840 \cdot 3$ | 390 | 116 | $9 \cdot 1$ | $+{ }^{+}$ | + 2 | 8.91 | G 5 |
| 5983 | 242531 | B 4679 |  | ${ }^{2} 4290-1$ | $5848 \cdot 21$ | 9193 | 065 | $2418 \quad 36 \cdot 0$ | 390 | 117 | $8 \cdot 8$ | 49 | - 3 I | 7-21 | Ma |
| 5984 | 262420 | C 6333 |  | 24297 | 598.20 | 9041 | 075 |  | 382 | 116 | 10.4 | - 40 | - 37 | $8 \cdot 8$ | F 5 |
| 5985 | 242532 | B 468I-2 | III6 |  | $59 \quad 17 \cdot 69$ | 9194 | 065 | $24 \quad 7 \quad 36 \cdot 1$ | 379 | 118 | 11.5 | + 34 | - 7 | $8 \cdot 9$ |  |
| 5986 | 292360 | C 6335 |  | 24301 | 125919.75 | +2.8834 | -. 0089 | $\begin{array}{llll}28 & 56 & 4 \cdot 5\end{array}$ | -19.378 | $+\cdot 116$ | 10.4 | 10 | - 80 | 8.8 | F 8 |
| 5987 | $26 \quad 2.421$ | C 6336 | III9 |  | $\begin{array}{ll}59 & 24 \cdot 20\end{array}$ | 9061 | 075 | $25 \begin{array}{lll}25 & 7 \cdot 9\end{array}$ | 376 | 117 | 12.4 | $\begin{array}{r} \\ +\quad 25 \\ \hline\end{array}$ | + 10 | 9.7 | G 5 |
| 5988 | 312445 | L 4821 | 1122 |  | 5931.72 | 8623 | 100 | $\begin{array}{llll}31 & 29 & 6.9\end{array}$ | 373 | 116 | 10.4 | + 35 | - 30 | $7 \cdot 38$ | G 5 |
| 5989 | 312446 | L 4822 | 1123 |  | $5934 \cdot 12$ | 8642 | 099 | $\begin{array}{llllll}31 & 14 & 24.0\end{array}$ | 373 | 116 | II•I | 21 | + 12 | $8 \cdot 9$ | F 5 |
| 5990 | 312448 | L. 4824 |  |  | $59+42 \cdot 71$ | 8660 | 097 | 3057004 | 369 | 117 | I2.I | 3 | + 53 | $9 \cdot 6$ | G 5 |
| 5991 | $30 \quad 2360$ | L 4825 | 1127 | 24310 | 125954.97 | +2.8674 | -.009 | $30 \quad 42 \quad 10.8$ | -19.365 | +.118 | 10.0 | 47 | 3 | $9 \cdot 2$ |  |
| 5992 | $28 \quad 2179$ | C 6337 | 1130 |  | 5958.80 | 8840 | 86 | $28 \quad 35 \quad 26 \cdot 2$ | 363 | 117 | 9.5 | - 9 | - 10 | 8.9 | F 8 |
| 5993 | 272209 | C 6338 |  |  | $13 \quad 00.99$ | 8978 | 77 | $\begin{array}{llllllllllll}26 & 47 & 3\end{array}$ | 363 | 117 | 13.6 | - 37 | + 4 | 10.0 |  |
| 5994 | 272210 | C, 6339 | 1131-2 |  | - 14.86 | 8974 | 77 | $\begin{array}{llll}26 & 45 & 2.5\end{array}$ | 357 | 117 | 13.3 | + 5 | + 4 | $9 \cdot 7$ |  |
| 5995 | 242536 | C $634^{\circ}$ |  |  | - 48.06 | 9114 | 66 |  | 345 | 119 | 10.5 | + 17 | - 30 | $9 \cdot 6$ |  |
| 5996 | $25 \quad 2591$ | C 6342 | $1150-1$ |  | 13 I 100.46 | +2.905 1 | -.0070 | $\begin{array}{llll}25 & 27 & 49.8\end{array}$ | - 19.340 | +.120 | 11.8 | + 7 | - 8 | $9 \cdot 7$ |  |
| 5997 | 272212 | C 6343 | 1154 | 24340 | 121.04 | 8919 | 77 | $\begin{array}{llll}27 & 4 & 3.5\end{array}$ | 332 | 119 | $9 \cdot 8$ | - 5 | + | $7 \cdot 8$ | K |
| 5998 | 242537 | B 4691 | 1155 | 24343 | 125.31 | 9125 | 65 | $24 \quad 1930.0$ | 331 | 120 | 12.1 | - 73 | - 140 | 8.9 |  |
| 5999 | 28 2181 | C 6344 |  |  | 1. 28.20 | 8849 | 81 | $27 \quad 54 \quad 23 \cdot 9$ | 329 | 119 | 13.9 | - $\quad 36$ | $+\quad 39$ | 10.2 |  |
| 6000 | 272213 | C 6345 | 1157-8 |  | $130 \cdot 81$ | $894^{2}$ | 76 | $264^{2} \quad 34 \cdot 9$ | 328 | 120 | 12.7 | $+\quad 9$ | - 34 | 10.0 |  |



| No. | B.D. | A.g.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectra Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s.000 } \end{aligned}$ | $\begin{gathered} \text { Dec. } \\ { }_{*} \cdot \circ 0 \mathrm{I} . \end{gathered}$ |  |  |
|  | - |  |  |  | h m | 8 | 8 | , | " | " |  |  |  |  |  |
| 6051 | 302383 | L. 4854 | 117 | 24574 | $\begin{array}{llll}13 & 9 & 26.76\end{array}$ | +2.8395 | -. 0084 | $301742 \cdot 1$ | -19.133 | +.127 |  | - | 21 | $7 \cdot 9$ | G 5 |
| $6052$ | 318463 | $\mathrm{L}_{4} 4855$ |  |  | 931.41 | 8340 | 86 | 305120.6 | 131 |  |  | - 116 | + 71 | $9 \cdot 6$ |  |
| $6053$ | 262439 | C 6405 | 120 | 24577-8 | $934 \cdot 32$ | 8761 | 65 | 26 10 34.0 | 129 | 134 | 9.6 | - 6 | 6 | $7 \cdot 36$ | F 5 |
| $6054 \mid$ | 312464 | L $4857^{\circ}$ |  |  | 958.39 | 8259 | 90 | $\begin{array}{ll}31 & 3241 \cdot 3\end{array}$ | 119 | 131 | 9.7 | 15 | - 26 | $8 \cdot 8$ | B 9 |
| 6055 | 302384 | C 6407 |  | 24594 | 1021.37 | 8405 | 83 | $295242 \cdot 4$ | 109 | 134 | $9 \cdot 1$ | + 44 | $-4^{2}$ | 8.56 | Go |
| 6056 | 282201 | C 6408 |  |  | 131032.09 | +2.8583 | -.0072 | $275246 \cdot 9$ | -19.104 | + $\cdot 135$ | 13.3 |  |  | 10.4 |  |
| 6057 | 292385 | C 6411 | 148 | 24619 | 1120.98 | 8435 | 78 | $\begin{array}{llllllllllll}29 & 13 & 2.6\end{array}$ | 082 | 135 | $8 \cdot 3$ | - 25 | - 6 | $7 \cdot 36$ | K o |
| 6058 | 302387 | C 6412 | 155 |  | 1132.49 | 8372 | 80 | 294921.4 | 077 | 136 | II-3 | - 20 | + 3 | $9 \cdot 7$ |  |
| 6059 | 312466 | L 4864 | 170 |  | II 58.98 | 8208 | 87 | $312217 \cdot 0$ | 065 | 135 | 8.I | - 28 | - 75 | $8 \cdot 3$ | G 5 |
| 6060 | 262444 | C 6414 | 167-9 | 24641-2 | $12 \quad 0.90$ | 8675 | 65 | 2623 49-I | 064 | 137 | 8.5 | 31 | - $\quad 39$ | $8 \cdot 2$ | F 8 |
| 6061 | 282205 | C $6+16$ | 171 | 24643-4 | 13 12 $3 \cdot 13$ | +2.8508 | -.0073 | 2813 of 1 | -19.063 | $+\cdot 136$ | $9 \cdot 1$ | $+4^{2}$ | - 357 | $8 \cdot 4$ | K o |
| 6062 | 292386 | C 6417 | 185 | 24665 | 1241.81 | 8365 | 78 | 293189 | 046 | 137 | $9 \cdot 7$ | + 3 | $\begin{array}{r}\text { - } \\ -\quad 26 \\ \hline\end{array}$ | $8 \cdot 4$ | K o |
| 6063 | $\begin{array}{ll}31 & 2467 \\ 27\end{array}$ | L 4867 |  |  | 1252.98 | 8159 | 87 | 31 33 4.8 | 04 I | 137 | $9 \cdot 5$ | - 91 | - | $9 \cdot 3$ | G 5 |
| 6064 | $27 \quad 2230$ | C 6418 |  |  | $13 \quad 7 \cdot 46$ | 8530 | 69 | 273818.0 | 034 | 139 | 12.0 | - 51 | + 20 | $9 \cdot 7$ |  |
| 6065 | 312468 | L 4870 | 193 | 24679 | $13 \quad 7 \cdot 94$ | 8197 | 84 | $\begin{array}{lllll}31 & 5 & 15.8\end{array}$ | 034 | 137 | 9.5 | + 8 | - 21 | $8 \cdot 13$ | Fo |
| 6066 | 242559 | B 4749 |  |  | 131311.72 | +2.8846 | -.0053 | $\begin{array}{llll}24 & 7 & 8 \cdot 3\end{array}$ | -19.032 | $+140$ | 9.9 | 21 | + 16 | $8 \cdot 9$ | A 2 |
| 6067 | $\begin{array}{llll}28 & 2207 \\ 28 & 208\end{array}$ | C 642I | 202 |  | 1341.25 | 8486 | 70 | $27 \quad 5543 \cdot 8$ | 019 | 140 | $9 \cdot 5$ | 10 | - 51 | 8.8 | G 5 |
| $6068$ | $\begin{array}{lll}28 & 2208 \\ 28 & \end{array}$ | C 6422 | 204 |  | $\begin{array}{ll}13 & 42.89\end{array}$ | 8427 | 72 | $\begin{array}{lllllll}28 & 32 & 21.9\end{array}$ | -18 | 139 | $9 \cdot 8$ | 25 | + 15 | 9.2 |  |
| 6069 | $\begin{array}{lll}28 & 2209 \\ 27 & 2033\end{array}$ | C 6423 | 205 |  | 1348.90 | - 8417 | 72 | 28378.5 | 015 | 139 | 9.9 | - 36 | - 13 | $9 \cdot 0$ |  |
| 6070 | 272233 | C 6424 | 207 | ${ }^{2} 4701$ | $1357 \cdot 67$ | 8587 | 65 | $\begin{array}{llll}26 & 46 & 0.4\end{array}$ | OII | 140 | II.I | + 6 | - 23 | $8 \cdot 9$ | F 5 |
| 6071 | 29 2389 | C 6425 |  |  | $\begin{array}{llll}13 & 14 & 12.01\end{array}$ | +2.8375 | -.0074 | $285540 \cdot 0$ | -19.004 | +.139 | 11.3 | - 13 |  | $9 \cdot 2$ |  |
| 6072 | 272234 | C 6426 |  | 24711 | 1420.29 | 8570 | 64 | $26 \quad 5020 \cdot 8$ | 001 | 141 | 11.0 | - 8 | + 22 | $8 \cdot 3$ | A 2 |
| 6073 | $\begin{array}{llll}27 & 2235\end{array}$ | C 6427 |  | 24715 | 1429.69 | 8570 | 64 |  | 18.996 | 141 | 11-3 | + 34 | - 38 | $9 \cdot 0$ |  |
| 6074 | 28 28 25 26 | C 6428 | 221-2 |  | $1430 \cdot 45$ | 8395 | 73 | 2837 31.5 | 996 | 140 | 12.9 | - 14 | - 47 | $9 \cdot 3$ |  |
| 6075 | $25 \quad 2619$ | C 6430 | 225 | 24718 | $1434 \cdot 75$ | 8725 | 55 | $25 \quad 4 \quad 59 \cdot 2$ | 994 | 143 | $9 \cdot 5$ | - 220 | + 44 | 8.2 | G 5 |
| 6076 | 282212 | C 643 I | 230 |  | 131445.69 | +2.8438 | -. 0069 | $\begin{array}{llll}28 & 6 & 16.6\end{array}$ | -18.989 | +.140 | 12 | 33 | - 59 | $9 \cdot 6$ | G 5 |
| 6077 | 292391 | C 6432 |  | 24724 | $1447 \cdot 53$ | 8346 | 73 | $29 \quad 2 \quad 17 \cdot 2$ | 988 | 140 | 9.5 | 28 | + 122 | $7 \cdot 04$ | G 5 |
| 6078 | 252620 | C 6433 | 236 |  | $15 \quad 4.89$ | 8664 | 58 | $25 \quad 36 \quad 7 \cdot 7$ | 980 | 142 | 12.9 | - 1 | $1+\quad 25$ | 9.7 |  |
| 6079 | 272237 | C 6434 |  |  | 15 8.81 | 8496 | 67 | $272236 \cdot 3$ |  | 142 | $9 \cdot 7$ | - 19 | - 19 |  |  |
| 6080 | 242563 | B 4762 |  |  | 1532.42 | 8789 | 5 I | 24 $\begin{aligned} & 6 \\ & 3\end{aligned} 3 \cdot 7$ | 967 | 144 | $9 \cdot 6$ | - 22 | - 9 | 8.6 | F 8 |
| 608 I | 282213 | C 6435 | 243-4 | 24736 | $13 \begin{array}{llll}15 & 159.01\end{array}$ | $+2.8366$ | -.0070 | $28 \quad 3437 \cdot 1$ | -18.964 | $+\cdot 14^{2}$ | $8 \cdot 6$ | - 29 | + 20 | $8 \cdot 1$ | G 5 |
| $6082$ | 272238 | C 6437 | 255 |  | $16 \quad 9.93$ | 8492 | 65 | $\begin{array}{llllll}27 & 7 & 15 \cdot 8\end{array}$ | 949 | 143 | $8 \cdot 9$ | 22 | + 29 | $8 \cdot 9$ |  |
| 6083 | 322342 |  |  |  | $\begin{array}{ll}16 & 14.96\end{array}$ | 8021 | 84 | 314650.9 | 947 | 142 | 11.6 |  |  | 10.4 |  |
| 6084 | 252623 | C 6438 | 256 | 24764 | 1621.75 | 8675 | 55 | $\begin{array}{llll} & 5 & 7.19 .7\end{array}$ | 943 | 145 | $9 \cdot 1$ | 25 | - $4^{2}$ | $8 \cdot 21$ | K。 |
| 6085 | 312474 | L 4882 | 282 | ${ }^{24791}$ | 1726.83 | 8063 | 79 | 305935.0 | 912 | 139 | $9 \cdot 5$ | - 53 | + 10 | $8 \cdot 9$ | Go |
| 6086 | 262450 | C 6443 | 285 | 24794 | 131740.45 | $+2.8513$ | -.0059 | 2628 8.1 | -18.906 | $+\cdot 147$ | $9 \cdot 0$ | - 10 | - 6 | $7 \cdot 72$ | K |
| 6087 | 252625 | C 6444 | 287 | 24796 | 1742.81 | 8619 7096 | 55 |  | 905 | 147 | 9.1 | - 83 | - $4^{1}$ | 6.98 | A 5 |
| 6088 | 312475 |  |  |  | $1745 \cdot 63$ | 7996 | 81 | 313152.0 | 903 | 144 | 12.4 |  |  | 9.7 |  |
| 6089 | $27 \quad 2243$ | C 6445 |  |  | $1757 \cdot 22$ | 8391 | 65 | $\begin{array}{llll}27 & 38 & 6 \cdot 5\end{array}$ | 898 | 146 | 9.9 | 12 | + 7 | 9.0 |  |
| 6090 | $27 \quad 2244$ | C 6446 |  |  | 1759.75 | 8436 | 63 | $27 \quad 936 \cdot 4$ | 896 | 146 | II.O |  |  | $9 \cdot 0$ |  |
| 6091 | 272245 | C 6449 | 293 |  | $\begin{array}{llll}13 & 18 & 2.53\end{array}$ | +2.8452 | 0062 | 265923.2 | -18.895 | +-147 | $1{ }_{1} \cdot 3$ |  | + 25 | $8 \cdot 3$ |  |
| 6092 | 312477 | L 4883 | 295 | 24804 | $\begin{array}{ll}18 & 2.64 \\ 18\end{array}$ | 8068 | 77 | $304549 \cdot 2$ | 895 | 137 | $9 \cdot 8$ | + 16 | - 37 | $6 \cdot 92$ | K 。 |
| 6093 | $25 \quad 2626$ | C 6448 | 292 |  | $\begin{array}{lll}18 & 3.13\end{array}$ | 8665 | 52 | $\begin{array}{lllllllllll}24 & 46 & 19.9\end{array}$ | 895 | 148 | 10.8 | + 5 | - 7 | $9 \cdot 6$ |  |
| 6094 | 292400 | C 6450 |  |  | $\begin{array}{ll}18 & 10.35\end{array}$ | 8187 | 73 | $2935 \quad 24 \cdot 5$ | 89 r | 146 | 12.1 | - 1 | + 21 | $9 \cdot 3$ |  |
| 6095 | 252627 | C 645 I |  |  | $18 \quad 15 \cdot 61$ | 8646 | 53 | $24544^{6 \cdot 3}$ | 889 | 148 | 10.9 | 7 | - 9 | $9 \cdot 3$ |  |
| 6096 | 302391 | L 4886 | 297 |  | 131818.57 | +2.8098 | -. 0075 | $302410 \cdot 6$ | $-18.887$ | + 145 | 11.9 | + 30 | - 1 | $9 \cdot 6$ |  |
| 6097 | $26 \quad 2452$ | C 6452 | 296 | 24808 | $18 \quad 19.06$ | 8484 | 60 | $\begin{array}{llll}26 & 35 & 9.4\end{array}$ | 887 | 147 | 10.4 | + 131 | + 14 | $7 \cdot 54$ | F 8 |
| 6098 | 292401 | C 6453 |  |  | $18 \quad 19.85$ | 8243 | 70 | $285926 \cdot 4$ | 887 | 146 | 12.3 | - 33 | - 45 | 9.6 |  |
| 6099 | 282221 | C 6455 |  |  | 1825.40 | 8303 | 68 | $\begin{array}{ll}28 & 22 \\ 2184\end{array}$ | 884 | 146 | 12.9 | - 15 | + <br> $+\quad 24$ |  |  |
| 6100 | 262453 | C 6454 | 300 | 24813 | 1825.49 | 8507 | 58 | $261836 \cdot 1$ | 884 | 148 | 11.8 | - 18 | + <br> $+\quad 5$ | $8 \cdot 9$ | G 5 |
| 605 I. Burnham 6428. 609 r. Burnham 6467 . |  |  |  | 6070. Number of observations 7 . 6092. Burnham 6468. |  |  | 6072, 6090. Number of observations 6 6093. Numbor of obsorvations 4. |  |  |  |  | 6089. Burnham $6+65$. 6097. Burnham 6470. |  |  |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { Igoot } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & 8.0001 . \end{aligned}$ | Dec. ".001. |  |  |
|  | - |  |  |  | $\begin{array}{lll}\mathrm{h} & \mathrm{mm}\end{array}$ | $s$ | s | - , " | " | " |  |  |  |  |  |
|  | 292403 | C 6457 |  | 24822 | $13 \begin{array}{llll}18 & 45 \cdot 81\end{array}$ | +2.8230 | -.0069 | 2859 33.1 | -18.874 | +.147 | 12.9 | - 4 | - 7 | $9 \cdot 2$ | K |
| $6102$ | 292404 | C 6458 | 307 |  | 1850.22 | 8170 | 72 | $2932 \begin{array}{ll}29 & 42\end{array}$ | - 872 | 146 | $12 \cdot 1$ | + 7 | 9 | $9 \cdot 2$ |  |
| 6103 | 272247 | C 6459 | 310 |  | 1857.85 | 8438 | 60 | $26 \quad 5214.8$ | 868 | 148 | 12.1 | + 30 | - 53 | 9.6 |  |
| 6104 | 312480 | L 4887 | 316 | 24835 | 19 15.71 | 8002 | 78 | 3 I - $36 \cdot 9$ | 859 | 146 | 13.5 | 35 | - 48 | 9.3 | G 5 |
| 6105 | 292405 | C 6460 | 323 | 24838 | 1923.01 | 8137 | 73 | 29424.9 | 855 | 147 | 11.37 | 343 | + 239 | $8 \cdot 86$ | K 5 |
| 61 | $26 \quad 2455$ | C 6461 | 325 | 24832-7 | $13 \quad 1930.71$ | +2.8507 | -.0056 | $26 \quad 12.4$ | $-18.852$ | $+\cdot 150$ | $9 \cdot 7$ | - 37 | $\bigcirc$ | $7 \cdot 98$ | K |
| 6107 | 302394 | L 4890 |  |  | 2013.64 | 8061 | 74 | $\begin{array}{llll}30 & 9 & 59.6\end{array}$ | 830 | 147 | 12.8 | + 10 | + 53 | $9 \cdot 3$ |  |
| 6108 | 312483 | L 4892 | 334 | 24859 | 2014.77 | 7968 | 77 | 31.25 .5 | 830 | 149 | $9 \cdot 7$ | + 44 | - 22 | $9 \cdot 3$ | F 2 |
| 6109 | 252630 | C 6464 | 337 |  | 2021.59 | 8576 | 51 | $\begin{array}{llll}25 & 5 & 19.7\end{array}$ | 826 | 152 | 10.7 | - 6 | - 21 | $9 \cdot 6$ |  |
| 6110 | 242578 | B 4778 | 344 | 24862-3 | $2049 \cdot 18$ | 8639 | 47 | $24 \quad 1923.9$ | 812 | 152 | 10.7 |  | $14^{*}$ | $5 \cdot 75$ | A 2 |
| 6111 | 312485 | L 4894 | 345 | 24866 | $13 \quad 2049 \cdot 19$ | +2.7929 | 0077 | $\begin{array}{llll}31 & 12 & 8.7\end{array}$ | $-18.812$ | +.149 | $0 \cdot 8$ | 51 | - 103 | $9 \cdot 6$ |  |
| 6112 | 282224 | C 6469 | 346-7 | 24867 | $2053 \cdot 22$ | 8222 | 65 | $28 \quad 2656 \cdot 8$ | 810 | 151 | 10.2 | + 19 | - 35 | $8 \cdot 6$ | F 8 |
| 6113 | $26 \quad 2460$ | C 6470 | 353 | 24871 | 218.38 | 8464 | 55 | $\begin{array}{lll}26 & 1 & 1.9\end{array}$ | 803 | 152 | $0 \cdot 3$ | - $\quad 38$ | - 8 | $8 \cdot 7$ | F 2 |
| 6114 | 262461 | C 647 I | 358 | 24876 | 2123.65 | 8443 | 56 | $\begin{array}{llll}26 & 9 & 2 \cdot 3\end{array}$ | 795 | 152 | $10 \cdot 3$ | - 30 | - 15 | $9 \cdot 0$ |  |
| 6115 | 252633 | C 6472 |  |  | $2134 \cdot 46$ | 8560 | 50 | $245545 \cdot 6$ | 790 | 154 | II.I | - 21 | + 12 | $9 \cdot 6$ |  |
| 6116 | 272251 | C 6473 | 370 |  | 132155.27 | +2.8273 | 062 | $\begin{array}{lllll}27 & 40 & 37.9\end{array}$ | -18.779 | $+\cdot 152$ | 12.3 | 53 | - 74 | 10.2 |  |
| 6117 | 312487 | L 4899 | 373 | 24892 | 2156.54 | 7896 | 75 | 311097 | 778 | 151 | $9 \cdot 3$ | 45 | + 33 | $7 \cdot 92$ | F 5 |
| 6118 | 252634 | C 6474 | 371 |  | 2157.78 | 8516 | 50 |  | 778 | 154 | 12.0 | 110 | + 24 | $9 \cdot 6$ |  |
| 6119 | 242583 | B 4783 | 374 | 24893 | $\begin{array}{ll}22 & 9.73\end{array}$ | 8635 | 45 | ${ }^{2} 4$ I. $30 \cdot 2$ | 772 | 154 | 10.5 | - 137 | + 49 | $8 \cdot 4$ | K o |
| 6120 | 282226 | C 6475 | 377-8 |  | $22 \quad 11.73$ | 8160 | 65 | $28 \quad 39 \quad 58.2$ | 771 | 152 | 12.1 | - 13 | + 3 | $9 \cdot 3$ | G 5 |
| 6121 | 312489 | L 4903 | 387 | 24903 | 132228.82 | +2.7863 | -.0076 | $\begin{array}{llll}31 & 18 & 17.3\end{array}$ | -18.762 | +-152 | 10.1 | - 20 | - 1 | $8 \cdot 9$ |  |
| 6122 | 27.2252 | C 6476 | 389 |  | 2238.14 | 835 I | 56 | 264326.0 | 757 | 154 | 9.6 | 43 | - 49 | $8 \cdot 7$ |  |
| 6123 | 292408 | C 6477 | 393 | 24911 | 2258.67 | 8064 | 67 | $29 \quad 20 \quad 27.9$ | 746 | 154 | 10.6 | - $4^{8}$ | - 7 | $8 \cdot 2$ | Ko |
| 6124 | 252637 | C 6478 | 397 | 24914 | 2313.51 | 8534 | 48 | $\begin{array}{llllll}24 & 46 & 40 \cdot 3\end{array}$ | 739 | 156 | 10.8 | 24 | + 6 | 8.81 | G 5 |
| 6125 | $25 \quad 2638$ | C 6479 |  |  | $23 \quad 17.53$ | 8461 | 50 | $25 \quad 28.33 \cdot 3$ | 737 | 156 | 10.5 | , | - 18 | $9 \cdot 0$ |  |
| 61 | 252639 | C 648 r | 400 | 24919 | 132328.29 | +2.8519 | -.0047 | 245217.2 | -18.731 | +.156 | $\cdot 3$ | + 3 | - 21 | 8.41 | F 5 |
| 6127 | 272255 | C 6482 | 408 | 24922 | 2341.30 | 8261 | 58 | $\begin{array}{lllll}27 & 18 & 29 \cdot 1\end{array}$ | 724 | 156 | $10 \cdot 6$ | $\underline{+}$ | + 8 | $8 \cdot 0$ | F 5 |
| 6128 | 292409 | C 6483 | 412 | 24934 | $23 \quad 52 \cdot 39$ | 8084 | 65 | $285448 \cdot 3$ | 719 | 155 | 10.6 | + 3 | - 39 | 9.0 |  |
| 6129 | 312493 | L 4907 | 418 | 24941 | $24 \quad 9.04$ | 7772 | 75 | $313655 \cdot 1$ | 710 | 153 | 11.5 | - 2 | + | $7 \cdot 12$ | K 2 |
| 6130 | 272257 | C 6486 | 419 |  | $24 \quad 13.37$ | 8206 | 59 | 274049.0 | 708 | 155 | 11.7 | + 20 | + 43 | 8.7 |  |
| 6131 | 282228 | C 6487 | 420 |  | $13{ }^{1} 24.13 .97$ | +2.8192 | -.0060 | $274851 \cdot 4$ | -18.707 | +•155 | 1.6 | + 45 |  | $8 \cdot 4$ | K 2 |
| $6_{6132}{ }^{6}$ | 242588 | B 4798 | 422 |  | 2424.22 | 8578 | 44 | $24 \quad 2477$ | 702 | 158 | 12.3 | - 5 | - 28 | 8.9 |  |
| 6133 | 292410 | C 6488 | 424 | 24953 | 24.27 .78 | 8065 | 65 | $\begin{array}{llll}28 & 55 & 0.0\end{array}$ | 700 | 156 | 12.2 | - 93 | - 100 | $8 \cdot 2$ | Go |
| 6134 | 2924 II | C 6489 |  | 24956 | 2437.75 | 8078 | 63 | $28 \quad 45 \quad 7 \cdot 3$ | 695 | 156 | 11.9 | + 14 | - 15 | $8 \cdot 4$ | K。 |
| 6135 | 272258 | C 6490 |  |  | $2443 \cdot 48$ | 8215 | 57 | $27 \quad 27$ 51•I | 692 | 157 | 11.7 |  |  | $9 \cdot 6$ |  |
| 6136 | 312494 | L 4910 | 431 | 24964 | 132444.85 | +2.7820 | -.0072 | $\begin{array}{lll}31 & 1 & 34 \cdot 1\end{array}$ | -18.691 | +. 154 | $10 \cdot 7$ | 31 | - 16 | $8 \cdot 15$ | G 5 |
| 6137 | 312495 | L 4913 | 436 | 24970 | $25 \quad 1.58$ | 7751 | 74 |  | 682 | 155 | $12 \cdot 3$ | - 27 | - 30 | $9 \cdot 2$ | G 5 |
| 6138 | 252640 | C 6495 |  |  | ${ }_{25}^{5} 1 \mathrm{I} \cdot 19$ | 8462 | 47 | 24 24 28 8 $4^{2 \cdot 5}$ | 677 | 159 | 13.7 | - 41 | $1+\quad 2$ | 10.9 |  |
| 6139 | 282231 | C 6496 | 448-9 | 24986 | 25 $\quad 34 \cdot 89$ | 8117 787 | 60 | $\begin{array}{llll}28 & 8 & 24.0\end{array}$ | 664 | 158 | 10.4 | + 7 | + 20 | 8.8 |  |
| 6140 | 302405 | L 4917 |  |  | 25 52.88 | 7876 | 68 | $\begin{array}{llll}30 & 13 & 8.2\end{array}$ | 655 | 150 | II-3 | 22 | - 25 | $9 \cdot 6$ |  |
| 6141 | 292417 | C 6499 | 461 | 24997 | $\begin{array}{llll}13 & 26 & 5 \cdot 18\end{array}$ | +2.8004 | -.0063 | $\begin{array}{llll}29 & 1 & 57.7\end{array}$ | -18.648 | +.158 | 10.9 |  | - 6 | 8.6 | G 5 |
| 6142 | 282232 | C 6500 | 462 | 25000 | 26 11.10 | 8103 | 59 | $\begin{array}{llll}28 & 6 & 45 \cdot 6\end{array}$ | 645 | 158 | , | 54 | - 191 | 8.9 |  |
| 6143 | 242592 | C 6501 | 465-6 | 25006 | $2631 \cdot 24$ | 8460 | 45 | $244^{11} 50 \cdot 2$ | 634 | 161 | II•1 | - 16 | - 38 | $7 \cdot 96$ | G 5 |
| 6144 | 242593 | C 6502 | 469-70 | 25007 | $2636 \cdot 20$ | 8457 | 45 | $\begin{array}{llll}24 & 42 & 4.9\end{array}$ |  | 161 | 11.5 | + 3 | + 11 | 7.51 | F 2 |
| 6145 | 31 2498 | L 4919 |  |  | $2644 \cdot 39$ | 7757 | 70 | 31022.0 | 627 | 157 | 12.0 | - 19 | + 2 | 9.6 |  |
| $6{ }^{61} 46$ | 272262 | C 6504 | 474 | 25016 | $132646 \cdot 91$ | +2.8224 | -.0053 | $26 \quad 5115 \cdot 1$ | -18.626 | +.160 | II.5 | + 37 | + 33 | $7 \cdot 15$ | A 5 |
| 6147 | 312499 | L 4920 | 452 |  | 26 47.84 | 7738 | 71 | $\begin{array}{llll}31 & 9 & 19.3\end{array}$ | 625 | 157 | It.7 | - 40 | $\begin{array}{r} \\ +\quad 8 \\ \hline\end{array}$ | $9 \cdot 6$ |  |
| 6148 | 29242 I | C 6507 | 481 |  | $\begin{array}{ll}27 & 4.23\end{array}$ | 7931 | 64 |  | 617 | 160 | $12 \cdot 1$ | - 35 | - 34 | $9 \cdot 2$ |  |
| 6149 | $28 \quad 2235$ | C 6509 |  |  | 2721.80 | 8112 | 57 | 27 43 <br> 1519  | 607 | 160 | 13.1 | - 57 | + 6 | $9 \cdot 7$ |  |
| 6150 | 302411 | L 4924 | 489 |  | 2734.45 | 7818 | 65 | $301543 \cdot 1$ | 600 | 159 | 11.5 | - 14 | $\bigcirc$ | $8 \cdot 9$ | K |


| No. | B.D | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & 8.000 \text { I. } \end{aligned}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m | 8 | s | - , " | " | n |  |  |  |  |  |
| 6151 | 272264 | C 6510 | $4^{88}$ | 25036 | $13 \begin{array}{llll} & 27 & 36.37\end{array}$ | $+2.8178$ | -.0054 | $\begin{array}{lllll}27 & 3 & 52.7\end{array}$ | -18.599 | + 161 | 10.7 | + 3 | 8 | $7 \cdot 83$ | K 5 |
| $6152$ | 292423 | C 6511 |  | 25045 | 2752.00 | 7949 | 61 | $\begin{array}{llll}29 & 2 & 52.5\end{array}$ | 591 580 | 161 | 11.1 | $+\quad 49$ | + 10 | $8 \cdot 8$ | G 5 |
| 6153 | 312503 | ${ }_{\text {L }} 4928$ |  | 25051 | 28 II.65 | 7718 | 69 |  | 580 | 158 | 11.7 | - 19 | - 9 | $8 \cdot 4$ | K o |
| 6154 | 282236 | C 6513 |  |  | $28 \quad 30 \cdot 14$ | 8001 | 58 | $\begin{array}{llllllll}28 & 25 & 17 \cdot 9\end{array}$ | 570 | 162 | 11.5 | - 28 | - 50 | $9 \cdot 6$ |  |
| 6155 | $25 \quad 2643$ | C 6514 |  | 25057 | $\begin{array}{ll}28 & 32 \cdot 37\end{array}$ | 8397 | 43 | $24 \quad 48 \quad 49 \cdot 5$ | 569 | 164 | 11.9 | + $4^{8}$ | $-217$ | 6.18 | G 5 |
| 6156 | 312506 | L 4929 |  |  | $13 \begin{array}{lll}138 & 38.27\end{array}$ | $+2.7722$ | -. 0067 | $\begin{array}{llll}30 & 47 & 1.8\end{array}$ | -18.565 | +-161 | 12.7 | + 25 | $-\quad+$ | 9.0 |  |
| 6157 | 312507 | L 4930 | $5^{11-2}$ | 25064 | 2839.08 | 7671 | 69 |  | 565 | 160 | 11.1 | + 22 | + $\quad 5$ | $7 \cdot 5+$ | K o |
| 6158 | 272265 | C 6515 |  | 25070 | $\begin{array}{lll}28 & 44.93\end{array}$ | 8172 | 51 |  | 562 | 163 | 13.2 | - ${ }^{1}$ | + ${ }^{8}$ | $9 \cdot 3$ |  |
| 6159 | 302415 | L 4931 | 513-4 |  | $2847 \cdot 81$ | 7747 | 66 | 303156.9 | 560 | 162 | 13.3 | - 17 | + 15 | $9 \cdot 2$ |  |
| 6160 | 262468 | C 6517 | 516 | 25071 | $28 \quad 54.53$ | 8222 | 49 | $\begin{array}{llll}26 & 20 & 32 \cdot 6\end{array}$ | 556 | 163 | 12.9 | + 14 | - 11 | 8.8 | G 5 |
| 6161 | 302416 | $L_{4932}$ |  |  | $13 \quad 29 \quad 6.62$ | $+2.7766$ | 0065 | $\begin{array}{llll}30 & 17 & 5 \cdot 5\end{array}$ | -18.550 | $+\cdot 162$ | 11.9 | - 113 | - 32 | $9 \cdot 2$ |  |
| 6162 | 282237 | C 6519 | 528 |  | $2920 \cdot 20$ | 8046 | 55 | $274849 \cdot 4$ | $54^{2}$ | 163 | 11.8 | 0 | - 22 | 8.6 |  |
| 6163 | 302419 | L +935 | 531-2 |  | 2922.35 | 7718 | 65 | 303754 | 542 | 162 | 12.6 | + 45 | + 85 | $9 \cdot 3$ | K o |
| 6164 | 302420 | L 4936 |  |  | ${ }^{29} 29.4 .46$ | 7767 | 64 | 30 I1 53.1 | 540 | 163 | 11.4 | - 31 | + 79 | 8.4 | G o |
| 6165 | 282238 | C 6520 | 534 |  | 2932.72 | 8029 | 56 | $275443 \cdot 7$ | 535 | 163 | 11.8 | - 54 | - 19 | $9 \cdot 0$ |  |
|  | $\}_{272268}$ | C6524 | 546 547 | 25081 | $\begin{array}{llll}13 & 30 & 10.63 \\ & 30 & \text { II } 26\end{array}$ | +2.8144 | -. 0050 | $\begin{array}{llll}26 & 44 & 14.0 \\ 26 & 44 & 17.5\end{array}$ | -18.514 | +165 +165 |  | 17 $+\quad 17$ $+\quad 17$ | - II | $\} 8.0$ | F 2 |
| $\left\lvert\, \begin{aligned} & 6167 \\ & 6168\end{aligned}\right.$ | 312510 | L 4925 |  | 25125 | 30 30 30 11.26 | 8144 7665 | 50 65 | $\begin{array}{llll}26 & 44 & 17 \cdot 5 \\ 30 & 46 & 48.9\end{array}$ | 514 505 50 | 165 164 165 | 12.0 11.5 | $+\quad 17$ <br> $+\quad 17$ <br> $+\quad 20$ | - 11 | $9 \cdot 2$ |  |
| $6_{6169}$ | 292431 | C 6527 | 551 | 25126 | $30 \quad 28.78$ | 7841 | 60 | $291749^{\circ} \mathrm{O}$ | 504 | 165 | 11.7 | - 63 | - $\quad 39$ | $8 \cdot 6$ | G 5 |
| 6170 | 282241 | C 6528 |  |  | $3037 \cdot 65$ | 7991 | 55 | $27 \quad 5812 \cdot 5$ | 499 | 165 | 11.5 | - 13 | - 5 | $8 \cdot 2$ | G 5 |
| 6171 | 322363 | L 4947 |  |  | $13 \quad 30 \quad 42 \cdot 69$ | +2.7537 | 0069 | $\begin{array}{lllll}31 & 44 & 357\end{array}$ | -18.496 | $+\cdot 162$ | 12.3 | 13 | $\bigcirc$ | $9 \cdot 6$ | K |
| 6172 | 302421 | L 4948 | 566-7-8 | 25138 | 3053.72 | 7671 | 64 |  |  | 164 | 11.0 | - 40 | - | 8.8 | F 8 |
| 6173 | 252649 | C 6529 | 562 | 25134 | $3054 \cdot 98$ | 8193 | 43 | $25 \begin{array}{llllllll} & 15 & 58.5\end{array}$ | 489 | 168 | 11.5 | - 45 | + 45 | $8 \cdot 8$ |  |
| 6174 | 292432 | C 6530 | 570 | 25145 | $31 \quad 6 \cdot 34$ | 7787 | 60 | 293543.0 | 483 | 165 | 11.7 | + 15 | - $4^{6}$ | $8 \cdot 8$ |  |
| 6175 | 242604 | B 4826 | 583 |  | 3151.03 | 8361 | 39 | $24 \quad 23 \quad 38.2$ | 458 | 170 | 10.6 | + 11 | - 6 | 8.01 | G 5 |
| 6176 | 312517 | L 4951 | 588 |  | $\begin{array}{llll}13 & 32 & 6 \cdot 19\end{array}$ | +2.7526 | 0067 | 31 28 15 <br> 1   | -18.449. | $+\cdot 165$ | 11.5 | 7 | - 4 | $9 \cdot 6$ |  |
| 6177 | 302424 | L 4952 | 589 | 25 161-2 | $32 \quad 7.06$ | 7678 | 62 | 301400 | $44^{8}$ | 165 | $9 \cdot 6$ | 61 | + 98 | $8 \cdot 3$ | Go |
| 6178 | 262473 | C 6534 | 593 | 25169-71 | 3230.19 | 8127 | 46 |  | 435 | 169 | 10.2 | - 35 | - 41 | $8 \cdot 4$ | Fo |
| 6179 | 292435 | C 6535 |  |  | $3230 \cdot 52$ | 7787 | 57 | $\begin{array}{lllll}29 & 14 & 8.8\end{array}$ | 435 | 166 | 10.8 | + 26 | + 26 | $9 \cdot 3$ |  |
| 6180 | 282244 | C 6537 | 597-8 |  | $3243 \cdot 65$ | 7878 | 54 | $\begin{array}{lllllll}28 & 25 \quad 22.7\end{array}$ | 427 | 167 | 10.5 | + 13 | $+4^{6}$ | $8 \cdot 1$ | F 8 |
| 6181 | 252652 | C 6538 | 596 | 25176 | $13 \quad 3245.03$ | +2.8263 | . 0041 | $\begin{array}{llll}25 & 4 & 19.5\end{array}$ | -18.427 | +.170 | 9.6 | - 9 | - 13 | $5 \cdot 90$ | Ma |
| 6182 | 292436 | C 6539 |  |  | 3248.00 | 7812 | 56 | $28 \quad 57 \quad 10 \cdot 2$ | 425 | 167 | 10.3 | + 17 | - 15 | $8 \cdot 9$ |  |
| 6183 | $26 \quad 2474$ | C 6540 | 603 |  | $33 \quad 3.03$ | 8082 | 46 | $\begin{array}{llll}26 & 36 & 0.2\end{array}$ | $4^{16}$ | 170 | $11 \cdot 1$ | - 21 | - 7 | $9 \cdot 6$ |  |
| 6184 | 302428 | L 4957 | 604-5-6 | 25183 | $\begin{array}{lll}33 & 5 \cdot 24\end{array}$ | 7610 | 62 |  | 45 | 168 | 10.0 | 112 | + 25 | $8 \cdot 7$ | G |
| 6185 | $25 \quad 2655$ | C 6542 |  |  | $\begin{array}{ll}33 & 8.93\end{array}$ | 8201 | 42 | $2532 \quad 5 \cdot 9$ | 413 | 170 | 10.3 | 8 | - 34 | $9 \cdot 3$ |  |
| 6186 | 272273 | C 6546 | 617 | 25194 | 133341.43 | +2.7988 | -. 0049 | $27 \quad 1549 \cdot 3$ | -18.394 | + 171 | $9 \cdot 7$ | $+\quad 4$ | - 3 | $8 \cdot 4$ | G 5 |
| 6187 | 302430 | C 6548 |  |  | $\begin{array}{ll}34 & 8.26\end{array}$ | 7650 | 59 | 29565993 | 379 | 169 | 12.7 | $+\quad 32$ | + 19 | $9 \cdot 6$ |  |
| 61 | 282245 | C 6549 |  | 25210 | $3410 \cdot 47$ | 7917 | 50 | $27444^{1 \cdot 1}$ | 377 | 170 | 10.1 | - 35 | - 19 | $8 \cdot 2$ | A 5 |
| 6189 | 302431 | C 6550 |  |  | $3416 \cdot 16$ | 7661 | 58 | 294932.9 | 374 | 169 | 12.4 | 22 | - 122 | $9 \cdot 6$ |  |
| 6190 | 242611 | C $655^{2}$ |  | 25221 | 3439.03 | 8257 | 38 | $244^{2} 25.9$ | 361 | 173 | 11.0 | 13 | + 13 | 8.31 | G 5 |
| 6191 | 242612 | C 6553 |  | 25222 | 133442.71 | +2.8269 | .0038 | $2435 \quad 20 \cdot 5$ | -18.358 | + 173 | 9.6 | + 26 | - $3^{8}$ | $7 \cdot 71$ | F 0 |
| 6192 | 312522 | L 4963 | 650 | 25229 | $35 \quad 0.75$ | 7418 | 63 |  | 348 | 166 | 10.8 | 75 | + $+\quad 52$ | 8.6 | F 8 |
| 6193 | 272275 | C 6555 |  | 25227 | $35 \quad 3.03$ | 7979 | 47 | $27 \quad 0 \quad 58.3$ | 346 | 173 | 10.7 | 6 | + 12 | $9 \cdot 6$ | A |
| 6194 | 302432 | L 4964 | 651 |  | $\begin{array}{lll}35 & 4.06\end{array}$ | 7554 | 58 | $\begin{array}{llllllllllll}30 & 29 & 18.5\end{array}$ | 346 | 170 | $\mathrm{II}^{1} \mathrm{I}$ | 17 | + 1 | $9 \cdot 0$ |  |
| 6195 | 272276 | C 6556 | 653 | 25232 | $35 \quad 13.77$ | 7959 | 48 | $\begin{array}{lllll}27 & 8 & 33.2\end{array}$ | 340 | 173 | 10.4 | 26 | - 6 | $7 \cdot 16$ | K 0 |
| 6196 | 252658 | C 6557 |  |  | $1335 \quad 32 \cdot 36$ | +2.8204 | 0038 | $2459 \quad 3.0$ | -18.329 | +.175 | 11.3 | 5 | - 69 | $9 \cdot 6$ |  |
| 6197 | 292444 | C 6558 |  |  | 3544.03 | 7744 | 52 | $\begin{array}{lllllll}28 & 48 \\ 7\end{array} 7.6$ | 322 | 172 | 11.9 | 16 | - 5 | $9 \cdot 6$ |  |
| 6198 | $26 \quad 2481$ | C 6559 | $667-8$ | 25242 | $3548 \cdot 37$ | 8034 | 44 | $\begin{array}{lllll}26 & 22 & 56 \cdot 3\end{array}$ | 320 | 173 | 11.6 | 25 | + 11 | $8 \cdot 2$ | G 5 |
| 6199 | 272277 | C 6560 | 669 | 25243 | 3550.92 | 7967 | 46 | $\begin{array}{llll}26 & 56 & 8.8\end{array}$ | 318 | 174 |  | - 55 | + 10 | $9 \cdot 7$ |  |
| 6200 | 302434 | L 4970 | 670-1 |  | $35 \quad 52.07$ | 7528 | 57 | $302940 \cdot 9$ | 318 | 171 | 11.3. | + 8 | - 44 | $8 \cdot 8$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. $1910^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Epoch$1900+$ | Annual P.M. |  | Mag. | SpectraType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.OOO I. }}{\text { R.A. }}$ | Dec. ".001. |  |  |
|  | $\bigcirc$ |  |  |  | $\mathrm{h} . \mathrm{m}$ s | 8 | s | , |  | " |  |  |  |  |  |
| 6201 | 292446 | C 6562 | 678 | 25254 | $\begin{array}{llll}13 & 36 & 7.41\end{array}$ | +2.7648 | -.0055 | 2929 1.5 | -18.308 | +.172 | 12.7 |  | - 16 | $8 \cdot 4$ | K |
| $6202$ | 312526 | L 4971 | 685-6 | 25259 | $\begin{array}{lll}36 & 9.83\end{array}$ | 7393 | 62 |  | 307 | 171 | 9.8 | - 65 | + 86 | $6 \cdot 08$ | G 5 |
| 6203 | $28 \quad 2248$ | C 6564 | 697 | 25264 | $36 \quad 29.88$ | 7757 | 51 |  | 295 | 173 | 11.4 | - 47 | - 10 | $6 \cdot 36$ |  |
| 6204 | 262483 | C 6567 | 705 |  | $3650 \cdot 56$ | 8002 | 43 |  | 283 | 176 | 11.5 |  | + 25 | $9 \cdot 6$ |  |
| 6205 | $26 \quad 2486$ | C 6572 |  |  | 3750.53 | 8017 | 4 I | $26 \quad 423.2$ | 247 | 177 | 11.3 | 25 | - 20 | $9 \cdot 7$ |  |
| 6206 | 242622 | C 6573 | 726-7 | 25296 | 13383843 | +2.8179 | -.0035 | $243946 \cdot 2$ | -18.239 | +178 | 7 | - 31 | - 8 | 8.76 | G 5 |
| 6207 | 282250 | C 6574 |  |  | $\begin{array}{lll}38 & 14.85\end{array}$ | 7730 | 49 | $\begin{array}{llll}28 & 19 & 44 \cdot 8\end{array}$ | 232 | 176 | $9 \cdot 6$ | - 29 | + | $9 \cdot 2$ |  |
| 6208 | 282251 | C 6575 | 737 | 25307 | $\begin{array}{llll}38 & 19.25\end{array}$ | 7687 | 50 | 283925.0 | 229 | 176 | 9.7 | + 14 | - 8 | $8 \cdot 26$ | F 5 |
| 6209 | 282252 | C 6576 | 739 |  | $\begin{array}{llll}38 & 25.44\end{array}$ | 7800 | 47 | $\begin{array}{lllll}27 & 43 & 28.9\end{array}$ | 226 | 177 | 10.5 | - 10 | + 10 | $9 \cdot 3$ |  |
| 6210 | 282253 | C 6577 | 747 | 25324 | 3849.74 | 7766 | 47 | 275423.0 | 211 | 177 | 9.6 | 6 | + 10 | $8 \cdot 9$ | K |
| 6211 | 302439 | L 4985 | 755 | 25329 | 133856.42 | +2.7480 | . 0054 | 30757.1 | -18.207 | +-176 | $10 \cdot 3$ | + 18 | 20 | 8.9 | A 0 |
| 6212 | 252666 | C 6578 | 757-9 |  | $39 \quad 3 \cdot 56$ | 8136 | 35 | $244^{8} 46 \cdot 8$ | 202 | 180 | 10.8 | - 30 | - 32 | 8.8 |  |
| 6213 | 252669 | C 6579 | 764 |  | 3912.24 | 8067 | 36 | 252220.5 | 197 | 180 | 11.5 | - 12 | - 7 | $9 \cdot 6$ |  |
| 6214 | 30244 I | C 6580 | 768-70 |  | 3916.96 | 7492 | 54 | $2957 \quad 29.9$ | 194 | 176 | 10.7 | - 18 | + 22 | $9 \cdot 3$ |  |
| 6215 | $26 \quad 2488$ | C 6582 | 784 |  | $3958 \cdot 35$ | 8003 | 37 | $254412 \cdot 3$ | 169 | 180 | 9.7 | - 78 | - 11 | 8.8 | Go |
| 6216 | 282254 | C 6583 | 787 | 25351 -2 | $1340 \quad 1.24$ | +2.7717 | . 0046 | $\begin{array}{llll}28 & 2 & 17.2\end{array}$ | $-18.167$ | +.178 | $9 \cdot 7$ | + 1 | + 14 | $7 \cdot 06$ | A 3 |
| 6217 | 242629 | B 4875 |  |  | $4020 \cdot 38$ | 8188 | 31 | $24 \quad 7$ II. 6 | 155 | 183 | $9 \cdot 9$ | - 7 | - 19 | $8 \cdot 2$ | A 5 |
| 6218 | 292454 | C 6584 | 790-1 | 25361 | $40 \quad 22.98$ | 7527 | 51 | 292544.0 | 154 | 179 | $9 \cdot 9$ | - 5 | - 3 | $8 \cdot 3$ | G 5 |
| 6219 | 252674 | C 6585 | 796 |  | $4039 \cdot 50$ | 8064 | 34 | $\begin{array}{lllll}25 & 5 & 32 \cdot 2\end{array}$ | 143 | 182 | 10.1 | 16 | - 47 | $9 \cdot 7$ |  |
| 6220 | 282257 | C 6588 | 812-3 |  | 4059.03 | 7612 | 48 | $\begin{array}{lllllllllll}28 & 38 & 23.5\end{array}$ | 131 | 179 | 10 | + 11 | - 27 | $9 \cdot 6$ |  |
| 6221 | 322385 | L 4995 |  | 25384 | 134115.16 | +2.7158 | -.0059 | 315634.2 | -18.121 | + 177 | 14.3 | I |  | 8.9 |  |
| 6222 | 312536 | L 4996 | 820 |  | 4136.55 | 7272 | 55 | 31333.2 | 108 | 179 | $9 \cdot 3$ | - 5 | - 6 | $8 \cdot 6$ | K o |
| 6223 | 272285 | C 6590 | 822 | 25394 | $4142 \cdot 94$ | 7715 | 44 | $274036 \cdot 2$ | 104 | 181 | 10.2 | 26 | + $\quad 3$ | $8 \cdot 3$ | K |
| 6224 | 312537 | L 4998 |  |  | 4159.68 | 7199 | 57 | 313016.1 | 093 | 178 | 10.8 | - 43 | + 8 | $9 \cdot 6$ | F 5 |
| 6225 | 312540 | L 5000 | 833 | 25410 | $42 \quad 10 \cdot 80$ | 7214 | 56 | 312059.0 | . 086 | 180 | 11.8 | - 196 | - 90 | $6 \cdot 55$ | F 5 |
| 6226 | 272288 | C 6594 | 829 | 25405 | $1342 \begin{array}{lll}11 & 02\end{array}$ | +2.7707 | --0043 | 273836.3 | -18.086 | + 182 | II. 2 | + 2 | - 30 | $8 \cdot 1$ | F 2 |
| 6227 | 312539 | L 5001 |  | 25406 | $\begin{array}{llll}42 & 11.78\end{array}$ | 7274 | 53 | 305438.4 | 086 | 180 | 11.1 | - 1 | - 45 | 8.6 | K o |
| 6228 | 242635 | C 6593 | 827 |  | $4212 \cdot 15$ | 8085 | 31 | 243624.2 | 086 | 185 | 11.4 | + | - 22 | $9 \cdot 7$ |  |
| 6229 | 282259 | C 6597 | 839-40 | 25412 | 4226.44 | 7603 | 46 | $\begin{array}{lllll}28 & 23 & 33.7\end{array}$ | 077 | 181 | 10.1 | + 24 | - ${ }^{10}$ | $8 \cdot 4$ |  |
| 6230 | 262494 | C 6599 | 844 | 25414-6 | $4232 \cdot 60$ | 7886 | 37 | $\begin{array}{llllllll}26 & 9 & 12.9\end{array}$ | 073 | 184 | 10.8 | - 14 | - 67* | $5 \cdot 91$ | F 5 |
| 6231 | 242637 | C 6600 | 863-4 |  | 134340.66 | $+2.8055$ | -.0030 | 243343.5 | -18.030 | + 187 | $9 \cdot 5$ | 40 | - 62 | 9•16 | K |
| 6232 | 312544 | L 5007 |  |  | $43 \quad 53.25$ | 7189 | 53 |  | 2 | 181 | 10.5 | - $4^{6}$ | - 18 | $9 \cdot 6$ |  |
| 6233 | 272293 | C 6601 | 868 |  | $4353 \cdot 45$ | 7748 | 39 | $265748 \cdot 6$ | 021 | 185 | 10.3 | - 12 | + 8 | $9 \cdot 0$ | F 8 |
| 6234 | 322390 | L 5009 | 874 |  | 4354.70 | 7082 | 56 | 315323.9 | 021 | 181 | 14.3 | + 26 | - 36 | $8 \cdot 8$ |  |
| 6235 | 322391 | L 5010 | 882 |  | $4416 \cdot 71$ | 7076 | 56 | $315057 \cdot 4$ | 006 | 181 | 14.3 | - 56 | + 11 | $8 \cdot 2$ |  |
| 6236 | 25 2681 | C 6602 | 883 | 25463 | 134426.69 | $+2.8006$ | -.0031 | 244824.9 | - 18.000 | $+\cdot 187$ | $9 \cdot 7$ | - 18 | - $4^{6}$ | 9•11 | G 5 |
| 6237 | 302449 | L 5011 | 886-7 | 25464-5 | $4426 \cdot 91$ | 7287 | 51 | 301833.2 | 000 | 183 | $8 \cdot 5$ | + 6 | - | $8 \cdot 0$ | Ko |
| 6238 | 252680 | C 6603 |  |  | $4426 \cdot 92$ | 7903 | 35 | $253741 \cdot 0$ | 000 | 186 | 10.4 |  | + 9 | $9 \cdot 2$ | Go |
| 6239 | 242644 | B 4890 | 884 |  | $44 \quad 27 \cdot 94$ | 8044 | 30 | $243013 \cdot 1$ | 17.999 | 187 | 10.1 | - 20 | + 29 |  |  |
| 6240 | 312547 | L 5012 | 891 |  | $4435 \cdot 07$ | 7097 | 54 | $\begin{array}{llll}31 & 38 & 13.3\end{array}$ | 995 | 182 | 10.0 | 16 | + $38 *$ | $5 \cdot 81$ | K |
| 6241 | 282262 | C6605 | 890 | 25467 | $134437 \cdot 51$ | +2.7549 | -.0043 | 28 19 46.3 | - 17.993 | +.184 | 10.0 | - 17 | - 26 | $7 \cdot 25$ | G 5 |
| 6242 | 272296 | C 6607 |  | 25475 | 44 58.14 | 7658 | .40 | $27 \quad 2544.9$ | 980 | 186 | $9 \cdot 91$ | - 364 | - 78 | $7 \cdot 26$ | K 2 |
| 6243 | 312550 | L 5018 | 911 | 25487 | $45 \quad 25.76$ | 7136 | 53 | 31102.8 | 962 | 184 | 9.0 | - 32 | - 3 | $7 \cdot 8$ | K 0 |
| 6244 | $28 \quad 2265$ | C 6610 | 915 | 25489 | $45 \quad 37 \cdot 15$ | 7563 | 42 | $28 \quad 56 \cdot 3$ | 955 | 187 | 10.3 | + 4 | - $\quad 27$ | 9.0 | G 5 |
| 6245 | 292459 | C 6611 | 921-2 |  | $4549 \cdot 87$ | 7353 | 46 | 293138.0 | 946 | 186 | 11.4 | - 9 | - 32 | $9 \cdot 6$ |  |
| 6246 | 292460 | C 6612 | 925-6 |  | $1345 \quad 57.08$ | +2.7338 | -.0046 | 293638.8 | -17.942 | + 186 | 11.4 | - 13 | $+30$ |  |  |
| 6247 | 302451 | C 6613 | 927-8 |  | $45 \quad 58.93$ | 7321 | 47 | 294333.4 | 940 | 186 | 11.0 | - 2 | + 27 | $8 \cdot 91$ | K |
| 6248 | 312553 | L 5022 |  |  | $46 \quad 3 \cdot 91$ | 7043 | 53 | $314045 \cdot 1$ | 937 | 184 | 11.9 | 13 | - 27 | $9 \cdot 3$ |  |
| 6249 | 272299 | C 6614 | 934 |  | $\begin{array}{llll}46 & 14.64\end{array}$ | 7715 | 36 | $\begin{array}{lllll}26 & 44 & 7 \cdot 1\end{array}$ | 930 | 188 | $9 \cdot 2$ | - 5 | - 10 | $8 \cdot 8$ | Go |
| 6250 | 282266 | C 6615 | 935 |  | $46 \quad 20.74$ | 7547 | 41 | 275858.6 | 926 | 188 | 10.9 | - 11 | - 13 | $9 \cdot 6$ | G |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot \mathrm{O}$ | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sce.Var. | $\begin{aligned} & \text { Epoch } \\ & \text { Igoo+ } \end{aligned}$ | Annual P.M. |  | Mag. | Spectral Туре. |
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|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { RA. } \\ & \text { s.000 } . \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & .001 . \end{aligned}$ |  |  |
|  | - |  |  |  | .h mi s | s | s | -', |  | " |  |  |  |  |  |
| 6251 | 242649 | B 4907 | 941 | 25505 | $134645 \cdot 4^{6}$ | $+2.8041$ | . 0026 | $\begin{array}{llll}24 & 5 & 16.8\end{array}$ | -17.910 | $+\cdot 190$ | 9.9 | - 13 | - 33 | 8.6 | K |
| $6252$ | 242650 | B 4908 |  |  | 4650.44 | 8024 | 27 | $\begin{array}{lllll}24 & 12 & 35.9\end{array}$ | 907 808 |  | $9 \cdot 7$ | $\begin{array}{r}17 \\ +\quad 1 \\ \hline\end{array}$ | - 90 | $8 \cdot 8$ | K |
| 6253 | 272301 | C 6618 | 947 | 25516 | $47 \quad 3.90$ | 7582 | 39 | $27 \quad 3426.7$ | 898 | 189 | $9 \cdot 1$ | - 13 | + 7 | 8.4 | G 5 |
| 6254 | 252689 | C 6619 | 945-6 | 25513-4 | 47 5.42 <br> 17 0.87 | 7900 | 31 | $\begin{array}{llll}25 & 8 & 32 \cdot 5\end{array}$ | 897 |  | 9.0 | - 17 | - 63 | $7 \cdot 66$ | Ko |
| 6255 | $30 \quad 2454$ | L 5024 | 950-1 |  | $47 \quad 9 \cdot 87$ | 7213 | 47 |  | 894 |  | $10 \cdot 1$ | 77 | + 16 | $9 \cdot 3$ |  |
| 6256 | $30 \quad 2456$ | L 5026 | 965-6-8 |  | $13473+95$ | $+2.7171$ | 0047 | $\begin{array}{llll}30 & 27 & 8.9\end{array}$ | $-17.878$ | + 187 | $9 \cdot 9$ | 57 | $+30$ | $8 \cdot 8$ | G |
| 6257 | 25 2691 | C 6623 | 964 | 25532-3 | $4738 \cdot 56$ | 7887 | 30 | $25 \quad 8 \quad 0 \cdot 1$ | 875 | 191 | $9 \cdot 0$ | 0 | - 22 | $8 \cdot 2$ | K |
| 6258 | 252692 | C 6624 | 971 |  | $47 \quad 44 \cdot 27$ | 7840 | 31 | $252847 \cdot 5$ | 872 | 19 x | $9 \cdot 7$ | 74 | + 71 | 7.92 | F 8 |
| 6259 | 262501 | C 6625 | 982 |  | 48 1.30 | 7690 | 35 |  | 860 | 190 | 10.5 | + 35 | - 52 | 8.8 | A 2 |
| 6260 | $30 \quad 2457$ | L 5031 | 985-6 |  | $\begin{array}{lll}48 & 4 \cdot 84\end{array}$ | 7132 | 48 | $\begin{array}{llll}30 & 37 & 9.5\end{array}$ | 858 | 187 | 10.8 | - 22 | - 44 | 9.6 |  |
| 6261 | 312556 | L 5032 |  |  | 134811.91 | +2.7020 | 0050 | $\begin{array}{lll}31 & 22 & 10.8\end{array}$ | -17.853 | $+\cdot 187$ | 10.8 | - 21 | + 16 | 9.6 |  |
| 6262 | 262502 | C 6626 |  |  | $4817 \cdot 61$ | 7734 | 34 | 261148 | 850 | 191 | 11.1 | - 31 | - 0 | $9 \cdot 6$ |  |
| 6263 | 242654 | B 4913 |  | 25548 | $4^{8} \quad 22.28$ | 8014 | 25 | $24 \bigcirc 26 \cdot 2$ | 846 | 194 | $10 \cdot 1$ | + 7 | - | 8.02 | F 5 |
| 6264 | 282269 | C 6629 | 1000-1 | 25560 | $4^{8}+77 \cdot 74$ | 7389 | 4 I | $\begin{array}{llll}28 & 38 & 9.4\end{array}$ | 829 | 190 | 10.9 | - 28 | + 9 | 8.8 | F 5 |
| 6265 | 282272 | C 6633 | 1004 | 25563 | $4^{8} 56.88$ | 7437 | 39 | 281535.0 | 823 | 191 | 10.14 | $+168$ | - $4^{14}$ | 8.8 | K 0 |
| 6266 | 282273 | C 6634 | 1005 | 25566 | 134858.01 | $+2.7460$ | 0038 | $\begin{array}{llll}28 & 5 & 22.9\end{array}$ | -17.823 | +-101 | 10.2 | - 98 | + 108 | 8.8 | Go |
| 6267 | 292464 | C 6636 | 1007-8 | 25575 | $49 \quad 5 \cdot 38$ | 7318 | 42 | $29 \quad 527.0$ | 818 | 190 | 10.4 | - 90* | + 14* | $5 \cdot 84$ | A 5 |
| 6268 | 252696 | C 6635 | 1006 | 25565 | $49 \quad 6.83$ | 7818 | 30 |  | 817 | 194 | 11.7 | + 50 | - 22 | 9.0 |  |
| 6269 | 272306 | C 6639 |  |  | $49 \quad 10.97$ | 7531 | 37 | $2731+5 \cdot 7$ | 814 | 191 | 11.6 | + 30 | $+{ }^{\circ}$ | $8 \cdot 6$ | K |
| 6270 | 242658 | C 6638 | 1009 |  | 4911.75 | 7918 | 26 | $2+3613.0$ | 813 | 194 | 12.8 | - | - 1 | 8.06 | K o |
| 6271 | 242659 | C $66{ }_{4} 1$ | 1010 |  | 13 4915.95 | +2.7920 | 026 | $243450 \cdot 0$ | -17.811 | +•194 | 12.7 | 32 | 12 | $9 \cdot 6$ |  |
| 6272 | 282274 | C 6642 |  | 25582 | 4923.64 | 7469 | 37 | 275617.4 | 806 | 192 | 11.8 | + 34 | - 27 | $8 \cdot 2$ | K 5 |
| 6273 | 292467 | C 6644 | 1017-8 |  | 4927.11 | 7308 | 42 | $\begin{array}{llll}29 & 5 & 20.4\end{array}$ | 803 | 191 | 12.3 | + 91 | - 54 | $9 \cdot 6$ |  |
| 6274 | 262504 | C 6645 | 1021 | 25585 | 4931.41 | 7711 | 31 | $26 \quad 722 \cdot 8$ | 801 | 194 | 12.0 | - $\mathbf{1}^{1}$ | - 7 | $9 \cdot 2$ | F 5 |
| 6275 | 292471 | C $66+6$ | 1036 | 25606 | $50 \quad 3.56$ | 7335 | 40 | $284^{6} 14^{\prime} \cdot 1$ | 779 | 192 | 10.8 | - 7 | - 14 | 8.0 | Ko |
| 6276 | 252698 | C 6649 |  | 25610 | $13 \quad 5015.99$ | +2.7755 | . 030 |  | -17.770 | + 195 | $9 \cdot 9$ | - I | - $4^{2}$ | $9 \cdot 0$ | F 8 |
| 6277 | 302461 | L 5040 | 1051-2 | 25616 | $5022 \cdot 23$ | 7199 | 45 |  | 766 | 191 | 10.1 | 39 |  | $7 \cdot 38$ | F 2 |
| 6278 | $30-2462$ | L 5041 | 1058-9-60 | 25618 | $5032 \cdot 85$ | 7052 | 46 |  | 759 | 191 | 10.1 | 22 | -- 37 | 8.4 | Fo |
| 6279 | 252702 | C 6651 | 1077 | 25642 | $5146 \cdot 97$ | 7808 | 26 |  | 708 | 198 | 8.0 | - 139 | + 20 | 8.8 | G 5 |
| 6280 | 292473 | C 6652 | 1083-4 | 25646 | 5159.94 | 7231 | 39 | $29645 \cdot 6$ | 700 | 194 | 9.0 | - 6 | + 5 | $7 \cdot 11$ | A 0 |
| 628 T | 262508 | C 6654 | 1080-1 | 25643-4-5 | $13 \begin{array}{lll}132 & 1.70\end{array}$ | $+2.7615$ | -.0030 | $\begin{array}{llll}26 & 21 & 32 \cdot 3\end{array}$ | -17.698 | + 197 |  |  |  | $6 \cdot 69$ | F 0 |
| 6282 | 312560 | ${ }^{\text {L }} 5047$ | 1089 | 25651 | 5211.96 | 6978 | 45 | $3048 \quad 24.0$ | 691 | 192 | 8.8 | - 64 | $+49$ | $8 \cdot 9$ |  |
| 6283 | 282278 | C 6657 | 1097 | 25658-60 | $5227 \cdot 61$ | 7386 | 36 | 275559.5 | 680 | 196 | 9.2 | + 23 * | - $57^{*}$ | 5-18 | K o |
| 6284 | 292475 | C 6658 |  |  | 5235.92 | 7262 | 37 | $284640 \cdot 8$ | 675 | 195 | 9.5 | - 27 | + 13 | 9.0 | K o |
| 6285 | 302464 | L 5050 | 1109 | 25664 | 5238.67 | 6992 | 44 | 303657.8 | 673 | 193 | 9.8 | + 32 | - 104 | $9 \cdot 2$ |  |
| 6286 | 302466 | L 5051 | 1107-8 | 25667 | 13524300 | +2.6973 | -.0044 |  | $-17.670$ | + 193 | $9 \cdot 8$ | - 13 | - $4^{2}$ | $8 \cdot 7$ |  |
| 6287 | 272312 | C 6661 | 1117 | 25679 | $\begin{array}{llll}53 & 13.29\end{array}$ | 7516 | 31 | $26 \quad 5136 \cdot 6$ | 649 | 198 | 9.7 | - 2 | + 4 | 8.6 | K |
| 6288 | $30 \quad 2468$ | L 5057 | 1123 |  | 5318.97 | 7043 | 42 | $\begin{array}{llll}30 & 8 & 12.7\end{array}$ | 645 | 196 | 10.5 | + | + 20 | $9 \cdot 2$ |  |
| 6289 | $25 \quad 2708$ | C 6663 | 121 | 25682 | $53 \quad 19 \cdot 95$ | 7708 |  |  |  | 200 |  |  | - 57 | 8.2 | K |
| 6290 | 272313 | C 6664 |  |  | $5328 \cdot 50$ | 7472 | 34 | $27 \quad 7 \quad 34.2$ | 639 | 198 | II.I | $84$ | $+4^{\circ}$ | $9 \cdot 6$ |  |
| 6291 | 252709 | C 6665 | 1124 |  | 135345.64 | +2.7707 | -.0026 | 252153.8 | -17.627 | +.200 | 11.1 | 14 | - 2 | $9 \cdot 3$ |  |
| 6292 | 24267 I | B 4940 | 1137 | 25691 | $54 \quad 3 \cdot 98$ | 7833 | 22 | 242311.4 | 614 | 202 | 9.6 | - 23 | - 1 | 8.6 | F 5 |
| 6293 | 272314 | C 6668 |  |  | $5433 \cdot 69$ | 7391 | 32 | $272954 \cdot 8$ |  | 198 | 9.6 | $+\quad 29$ $+\quad 58$ | + 80 | 9.6 |  |
| 6294 | 252712 272315 | C 6669 |  | 25709 | $5445 \cdot 13$ | 7715 7388 |  |  | 585 | 201 | 9.2 | - 58 | - 56 | 7.31 | G 5 |
| 6295 | 272315 | C 6670 |  |  | 5455.93 | 7388 | 32 | $27 \quad 2648.4$ | 578 | 199 | 9.6 | + 41 | - 27 | $9 \cdot 6$ |  |
|  |  | C 6671 | 1152 | 25713-4 | $135456 \cdot 97$ | +2.7556 | 0028 | $\begin{array}{llll}26 & 15 & 9.8 \\ 26 & 15 & 8\end{array}$ | -17.577 | +.201 |  |  | - 26 |  |  |
| $6297$ | 27 2316 | C 6674 | 1 | 25713-4 | 5457.25 <br> 55 | 7556 | 28 | $\begin{array}{lllll}26 & 15 & 12.1 \\ 27 & 5 & 17\end{array}$ | 577 | 201 | $9 \cdot 6$ | $+\quad 17$ | - 26 | \}7.01 | A 5 |
| 6298 | 272316 | C 6674 | 1161 |  | $\begin{array}{llll}55 & 10 \cdot 68\end{array}$ | 7403 | 32 |  | 568 | 200 | $10 \cdot 7$ | - 7 | + | $9 \cdot 6$ |  |
| 6299 6300 | 25 25 25 2713 | C 6675 | 1162 |  | $\begin{array}{ll}55 & 16.29 \\ 55 & 17.71\end{array}$ | 7757 | 24 | $\begin{array}{llll}24 & 44 & 15 \cdot 6 \\ 25 & 13 & 23.2\end{array}$ | 563 562 | 202 | 9.5 10.1 | $+$ | 1 $+\quad 1$ $+\quad 1$ | 8.06 0.3 | For |
|  | 252714 | C 6676 |  | 25722 |  |  |  | $2513 \quad 23.2$ |  | 202 |  |  |  | 9. | F 8 |


|  | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{array}{\|c} \text { Spectral } \\ \text { Type. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  |  |  |  |  |  |  |  |  |  |  | R.A. ".0001. | Dec. ".001. |  |  |
|  |  |  |  |  | h m s | 8 | ${ }^{8}$ | - , | " | " |  |  |  |  |  |
| 6351 | 272342 | C 6735 | 60 | 26004 | $14 \quad 6 \quad 4.44$ | $+2.7161$ | -.002 1 | 27 I 32.4 | -17.089 | $+.215$ | 10.6 | - II9 | - 47 | $8 \cdot 4$ | G 5 |
| 6352 | 252737 | C 6736 | 63 | 26012 | $6 \quad 17 \cdot 68$ | 7385 | 17 | 25314.0 | 078 | 216 | II.9 | ${ }^{17}{ }^{*}$ | - $72^{*}$ | $4 \cdot 82$ | F 5 |
| 6353 | 312590 | L 5111 |  |  | 621.03 | 6456 | 34 | $\begin{array}{llllllllll}31 & 22 & 39\end{array}$ | 076 | 209 | 10.0 |  | 38 | $8 \cdot 9$ |  |
| 6354 | 322437 | L 5112 |  |  | 6 22-12 | 6358 | 35 | 315717.0 | 075 | 208 | 14.3 | - 13 | 14 $+\quad 14$ | $9 \cdot 5$ |  |
| 6355 | 282294 | C 6738 | 66 | 26022 | 623.94 | 6992 | 24 | $28 \quad 329.0$ | 074 | 213 | 10.6 | + 31 | - 39 | $8 \cdot 2$ | G 5 |
| 6356 | 242697 | C 6739 |  | 26026 | $14 \quad 6 \quad 44.06$ | $+2.7507$ | . 0014 | 243749.0 | -17.058 | + 217 | 10.9 | + 18 | - 9 | 9.5 |  |
| 6357 | 252739 | C 6740 |  |  | 78.04 | 7444 | 15 | $24 \quad 5923.4$ | 040 | 218 | II. 8 | - 39 | - 45 | $9 \cdot 3$ |  |
| 6358 | 302488 | L 5115 |  |  | 718.59 | 6549 | 30 |  | 032 | 210 | II-I | + 13 | - I4 | 9.2 |  |
| 6359 | $30 \quad 2489$ | C 6742 |  |  | 721.77 | 6652 | 28 | $\begin{array}{llll}30 & 1 & 5.2\end{array}$ | 029 | 212 | 11.4 | - 31 | + 19 | $9 \cdot 6$ |  |
| 6360 | 282297 | C 6743 | 95-6 |  | 731.88 | 6899 | 24 | $\begin{array}{llll}28 & 27 & 31.4\end{array}$ | 022 | 215 | 10.1 | - 8 | + 34 | $8 \cdot 3$ | Go |
| 6361 | 312592 | L 5117 | 102 |  | $14 \quad 7 \quad 48.22$ | $+2.6352$ | 0033 | $314341 \cdot 1$ | -17.009 | +.210 | 12.0 | 28 | - 83 | 9.5 |  |
|  | 282299 |  |  |  | $8 \quad 7 \cdot 29$ | 6990 | 22 | 2747 24.2 | 16.994 | 216 | 13.2 |  |  | 9.9 |  |
| 6363 | 292505 | C 6746 | 115 | 26063 | $826 \cdot 16$ | 6765 | 26 | $2982 \mathrm{I} \cdot 0$ | 980 | 214 | 8.0 | - 32 | - 12 | $7 \cdot 56$ | F 2 |
| 6364 | 242700 | B 5007 | 118 | 26062 | 8 34-17 | 7524 | 12 | $2414 \begin{array}{llll} & 12.3\end{array}$ | 974 | 221 | It.I | - $\quad 27$ | - 14 | 8.8 |  |
| 6365 | 252740 | C 6747 | 15 |  | 835.94 | 7393 | 14 | $25 \quad 6 \quad 15 \cdot 1$ | 972 | 220 | 12.5 | - II | + 4 | $9 \cdot 5$ |  |
| 6366 | $26 \quad 2538$ | C 6749 |  |  | I4 8888.86 | +2.7224 | -.0017 | 26 I2 12.1 | -16.970 | + 219 | 11.6 | - 50 | + | 9.6 |  |
| 6367 | 252741 | C 6750 |  |  | 842.96 | 7413 | 14 | $24 \quad 57 \quad 23.5$ | 967 | 220 | 12.2 | - 25 | - | $9 \cdot 2$ |  |
| 6368 | $27 \quad 2347$ | C 6751 |  |  | 843.26 | 7012 | 21 | 2732 59-1 | 966 | 217 | 13.9 |  |  | 10.8 |  |
| 6369 | $25 \quad 2742$ | C 6752 |  |  | $846 \cdot 88$ | 7298 | 16 | $254155 \cdot 1$ | 964 | 217 | 12.4 | + 28 | + 11 | $9 \cdot 2$ |  |
| 6370 | 302493 | L 5118 | 127-8 | 26077 | 858.06 | 6520 | 29 | 303155.1 | 955 | 212 | $11 \cdot 2$ | - $\quad 56$ | + 18 | $8 \cdot 2$ | G 5 |
| 6371 | 242705 | B 5009 | 129 | 26078 | $14 \quad 9 \quad 10.41$ | +2.7523 | 0010 | $24 \quad 9 \quad 10.8$ | - 16.945 | + 221 | 10.3 | - 16 | - 31 | 9.5 |  |
| 6372 | $28 \quad 2302$ | C 6753 | 133 |  | 913.96 | 6912 | 22 | $28 \quad 543.9$ | 943 | 216 | $2 \cdot 0$ | - 24 | + 28 $+\quad 15$ | $8 \cdot 8$ |  |
| 637 | 252744 | C 6754 | 138 | 26088 | 933.55 | 7356 | 14 | 25 11 54.7 | 927 | 221 | II. 3 | - 62 | + 15 | $8 \cdot 2$ | A 0 |
| 6374 | $26 \quad 2542$ | C 6755 | 140 |  | 938.79 | 7150 | 18 | 26315114 | 923 | 219 | 12.6 | - 29 | - 6 | 8.8 |  |
| 6375 | 312595 | L 5124 | 147 |  | 949.72 | 6310 | 30 | $313657 \cdot 1$ | 915 | 214 | 12.7 | - 25 | - 11 | $7 \cdot 25$ | A 0 |
| 6376 | 292508 | C 6756 | 148 | 26099 | $14 \quad 9.54 \cdot 57$ | $+2.6660$ | -. 0026 | 293133.7 | -16.911 | +.216 | 11.7 | + $4^{2}$ | - | $6 \cdot 76$ | Fo, $\mathrm{A}_{2}$ |
| 6377 | 302494 | L 5127 | 153-4 | 26105 | Io 1.67 | 6472 | 29 | 303759.5 | 905 | 214 | 12.7 | - 306 | + 158 | 8.05 | K 5 |
| 6378 | 282304 | C 6757 | 151 |  | I0 4.98 | 6903 | 21 | 28 - $32 \cdot 0$ | 903 | 219 | 12.4 | + 10 | - 16 | 8.8 |  |
| 6379 | $28 \quad 2305$ | C 6758 | 152 |  | 10 6.74 | 6847 | 22 | $\begin{array}{llllllll}28 & 21 & 14.9\end{array}$ | 901 | 218 | 12.8 | + 16 | - 9 | $9 \cdot 3$ |  |
| 6380 | $27 \quad 2349$ | C 6759 |  | 26103 | Io 9.67 | 7044 | 18 | $\begin{array}{lllll}27 & 6 & 57 \cdot 4\end{array}$ | 899 | 219 | 13.1 | 16 | - 13 | $8 \cdot 4$ | F 8 |
| 6381 | 292509 | C 6760 | 163 | 26117 | $14 \begin{array}{lll}10 & 29.77\end{array}$ | +2.6648 | -.0025 | 293017.5 | -16.883 | +-216 | 12.7 | + 16 | - 32 | $8 \cdot 2$ | F 5 |
| 6382 | $25 \quad 2746$ | C 6761 |  |  | 1037.50 | 733 I | 14 | 251215.5 | 877 | 222 | 12.4 | + 22 | + <br> + | $9 \cdot 3$ |  |
| 6383 | 272351 | C 6762 | 168 | 26120 | Io $42 \cdot 5 \mathrm{I}$ | 7058 | 18 | $265638 \cdot 0$ | 873 | 22 | . | + 19 | - $4^{2}$ | 8.8 | F 8 |
| 6384 | 302497 | L 5132 |  |  | 10 44.68 | 6525 | 28 | 301119.1 | 871 | 215 | 13.2 | + 5 | + 43 | $9 \cdot 5$ |  |
| 6385 | $25 \quad 2747$ | C 6763 |  |  | 10 49.77 | 7291 | 13 | $252550 \cdot 6$ | 868 | 223 | 13.0 | - 5 | + $+\quad 67$ | $9 \cdot 5$ |  |
| 6386 | 292510 | C 6766 | 174 |  | 141053.83 | $+2.6646$ | -.0025 | 292658.8 | -16.864 | $+\cdot 218$ | 13.2 |  | - 43 | $9 \cdot 5$ |  |
| 6387 | 242707 | B 5020 | 173 | 26122-40 | 10 54.31 | 7492 | , | $24 \quad 6 \quad 21 \cdot 2$ | 864 | 224 | 12.1 | + 2 | - 8 | $6 \cdot 72$ | F o |
| 6388 | $26 \quad 2544$ | C 6765 |  |  | $1054 \cdot 79$ | 7217 | 15 | $255336 \cdot 9$ | 863 | 222 | 13.4 | + 37 | - 15 | $9 \cdot 2$ |  |
| 6389 | 302498 | L 5133 | 181 |  | 1118.91 | 6442 | 28 | 303517.0 | 845 | 216 | 12.7 | + 3 | + 45 | $9 \cdot 3$ |  |
| 6390 | $28 \quad 2309$ | C 6768 | 182 |  | $1124 \cdot 80$ | 6845 | - 20 | $28 \quad 986$ | 840 | 219 | 10.1 | + 15 | + 7 | 7-16 | A 2 |
| 6391 | 292511 | C 6769 | 184 |  | 141128.09 | +2.6697 | -.0023 | $29 \quad 244 \cdot 5$ | -16.837 | $+\cdot 218$ | 10.8 | + | - 13 | $8 \cdot 9$ |  |
| 6392 | 262546 | C 6771 |  | 26145 | 1221.75 | 7155 | 15 | 26.415 .0 | 795 | 224 | 12.9 | - 6 | - 22 | $8 \cdot 9$ |  |
| 6393 | 312599 | L 5137 | 190 |  | 1222.20 | 6229 | 29 | $\begin{array}{llllllllllll}31 & 38 & 35\end{array}$ | 794 | 215 | 12.4 | + 32 | - 48 | $9 \cdot 5$ |  |
| 6394 | 272354 | C 6772 | 204 |  | 1225.95 | 6998 |  | $27 \quad 24^{1.6}$ | 791 | 222 | 12.2 | + 31 | + 61 | $8 \cdot 9$ | F 8 |
| 6395 | 292515 | C 6775 | 210 |  | 1234.04 | 6656 | 22 | 296500 | 785 | 219 | 12.3 | 10 | - I | $8 \cdot 9$ | F 5 |
| 6396 | 262547 | C 6774 |  | 26151 | $1412 \begin{array}{llll}12 & 348\end{array}$ | $+2.7103$ | -.0016 | 262152.0 | -16.785 | +.224 | 12.7 | - 38 | + 19 | $8 \cdot 9$ |  |
| 6397 | 262548 | C 6776 | 209 |  | 1236.59 | 7069 | 15 | 263421.8 | 783 | 223 | 13.1 | + 26 | - 24 | $9 \cdot 5$ |  |
| 6398 | 272356 | C 6778 | $215-7$ |  | 1249.42 | 7031 | 16 | 264659.9 | 773 | 223 | 12.0 | + 22 | - 29 | $8 \cdot 8$ |  |
| 6399 | 242712 | C 6779 | 216 |  | 1252.14 | 7372 | 10 | $24 \quad 3635 \cdot 3$ | 771 | 225 | 13.0 | + 18 | - 9 | $9 \cdot 3$ |  |
| 6400 | 252752 | C 6780 |  |  | $1255 \cdot 82$ | 7323 | II | $245451 \cdot 5$ | 768 | 225 | 12.6 | + 10 | - 22 | $9 \cdot 5$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annu | al P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910\%. | Precession. | Sec. Var. | De ${ }^{\text {a }} 191000$ | Precession. | Sec. Var. | Epoch 1900+ | $\underset{\text { R.000I. }}{\text { R.A. }}$ | Dec. | Mag. | Speotral |
|  | $\bigcirc$ |  |  |  | h m s | 8 | s | - ' " | " | " |  |  |  |  |  |
| 6401 | 272357 | C 6781 |  | 26164 | $\begin{array}{llll}14 & 13 & 9.57\end{array}$ | +2.6874 | -.0018 | $274^{2} \quad 0.5$ | $-16.757$ | $+\cdot 222$ | 11.7 | - 4 | + 64 | 9.0 |  |
| 6402 | $28 \quad 2312$ | C 6785 | 238 | $26184$ | -1348.49 | 6810 |  | $275917 \cdot 1$ | 725 | 222 | 12.0 | + 24 | - 6 | $9 \cdot 5$ |  |
| 6403 | 242714 | B 5035 |  |  | 1353.07 | 7440 |  | $24 \quad 1 \quad 28 \cdot 3$ | 722 | 228 | I I•I | - I | - 26 | $9 \cdot 3$ |  |
| 6404 | 272360 | C 6788 | 246 |  | $145 \cdot 76$ | 6930 | 16 | $\begin{array}{lllllll}27 & 12 & 4.3\end{array}$ | 711 | 224 | $10 \cdot 1$ | - 7 | - 46 | $8 \cdot 0$ | G 5 |
| 6405 | 242715 | B 5038 | 248 |  | $14 \quad 14.89$ | 7371 | 8 | $242452 \cdot 2$ | 704 | 228 | 11.7 | 8 | + 2 | $9 \cdot 5$ |  |
| 6406 | $25 \quad 2757$ | C 6791 | 255 |  | $14 \quad 1432.74$ | $+2.7159$ | -.0012 | 2543 13.3 | -16.690 | +.226 | $10 \cdot 9$ | - 18 | + 1 | $8 \cdot 9$ |  |
| 6407 | $29 \quad 2524$ | C 6792 |  | 26208 | 1434.44 | 6646 | 21 | $2851 \quad 7 \cdot 7$ | 688 | 222 | $9 \cdot 8$ | - 82 | + 57 | $7 \cdot 56$ | F 5 |
| 6408 | 302505 | L 5149 | 269 |  | $\begin{array}{ll}15 & 0.43\end{array}$ | 6393 | 24 | $\begin{array}{llll}30 & 15 & 35 \cdot 3\end{array}$ | 667 | 220 | $10 \cdot 6$ | - 16 | + 26 | $9 \cdot 3$ |  |
| 6409 | 302507 | L 5152 |  |  | $15 \quad 23.68$ | 6415 | 23 | $30 \quad 4 \quad 8 \cdot 5$ | 648 | 220 | $10 \cdot 7$ | - 48 | + 6 | $9 \cdot 2$ |  |
| 6410 | 312603 | L 5153 | 279 | 26228 | $15 \quad 28.26$ | 6241 | 24 | $\begin{array}{llll}31 & 3 & 10.7\end{array}$ | 645 | 220 | I 1-1 | + 47 | - $4^{1}$ | $8 \cdot 8$ |  |
| 6411 | $26 \quad 2553$ | C 6796 | $28.1-2$ | 26235 | $\begin{array}{llll}14 & 15 & 57 \cdot 85\end{array}$ | $+2.7016$ | -.0013 | 2624 I2.3 | - I6.62I | $+\cdot 228$ | $10 \cdot 3$ | - 7 | - I4 | $8 \cdot 7$ |  |
| 6412 | 312605 | L 5155 |  | 26239 | 1612.44 | 6257 | 24 | $305031 \cdot 2$ | 609 | 221 | $9 \cdot 6$ | - 12 | - 8 | $6 \cdot 34$ | A 2 |
| 6413 | 292526 | C 6797 |  |  | 1616.71 | 6590 | 20 | $285432 \cdot 9$ | 605 | . 224 | 11.5 | + 28 | - 9 | 9.5 |  |
| 6414 | $27 \quad 2366$ | C 6798 |  |  | $16 \quad 19 \cdot 13$ | 6843 | 15 | $27 \quad 24 \quad 4 \cdot 3$ | 603 | 226 | $11 \cdot 9$ | + 22 | 0 | $9 \cdot 2$ |  |
| 64 I5 | $25 \quad 2759$ | C 6799 | 291 |  | $1626 \cdot 60$ | 7205 | 9 | $25926 \cdot 5$ | 597 | 229 | $10 \cdot 0$ | 0 | + I | $8 \cdot 2$ | F 8 |
| 6416 | 312608 | L 5158 |  |  | $14 \quad 1630.61$ | +2.6119 | -.0025 | $313343 \cdot 1$ | -16.594 | $+.221$ | 12.4 | - 2 | + | $9 \cdot 5$ |  |
| 6417 | $27 \quad 2367$ | C 6800 | 295 | 26249 | 1631.03 | 6907 | 14 | $26598 \cdot 0$ | 594 | 228 | II.I | + 11 | - 7 | $7 \cdot 40$ | A 2 |
| 6418 | 302509 | L 5160 |  |  | $1633 \cdot 26$ | 6382 | 23 | $\begin{array}{llll}30 & 4 & 23.7\end{array}$ | 592 | 220 | 12.4 | - 65 | - II | $9 \cdot 5$ |  |
| 6419 | 312609 | L 5162 | 299 | 26259 | 1638.03 | 6259 | 24 | $30 \quad 45 \quad 37 \cdot 8$ | 588 | 220 | 11.0 | - 43 | - 16 | $9 \cdot 5$ |  |
| 6420 | $26 \quad 2554$ | C 6802 | 297-8 | 26252-3 | $1642 \cdot 19$ | 6984 | 13 | $26 \quad 2915 \cdot 9$ | 584 | 229. | $9 \cdot 6$ | - | 0 | $6 \cdot 86$ | K o |
| 642 I | 25 2761 | C 6801 |  |  | $14 \quad 1642.68$ | $+2.7172$ | -.0009 | $\begin{array}{llll}25 & 19 & 21 \cdot 7\end{array}$ | -16.584 | +.230 | 11.2 | + 35 | - 19 | $9 \cdot 5$ |  |
| 6422 | 242723 | B 5050 | 308-9 | 26268 | 177.06 | 7289 | 7 | $243246 \cdot 4$ | 564 | 230 | 10.2 | - 21 | - 66 | $8 \cdot 21$ | K o |
| 6423 | 312612 | L 5168 |  |  | 1726.00 | 6149 | 24 |  | 549 | 222 | 11.6 | - 68 | - 34 | $8 \cdot 9$ |  |
| 6424 | $24 \quad 2724$ | B 5054 | 321-2 | 26274 | 1733.44 | 7276 | 7 | 2433 20.3 | 542 | 231 | 11.8 | - 36 | 0 | $9 \cdot 0$ |  |
| 6425 | $26 \cdot 2557$ | C 6805 | 329 |  | 1749.96 | 6959 | 12 | 2628 29.1 | 529 | 230 | 10.4 | + 18 | + II | $9 \cdot 5$ |  |
| 6426 | 302512 | L 5 I69 |  | 26294 | $\begin{array}{llll}14 & 18 & 4.49\end{array}$ | +2.6344 | -.0022 | $30 \quad 2 \quad 51.8$ | -16.517 | +.223 | 10.57 | - 512 | - 322 | $8 \cdot 6$ |  |
| 6427 | $24 \quad 2725$ | B 5057 |  |  | $18 \quad 6.26$ | 7345 | 4 | $24 \quad 2 \quad 52 \cdot 3$ | 515 | 233 | 11.5 | + 1 | - 23 | $8 \cdot 4$ |  |
| 6428 | 302513 | C 6808 |  | 26300 | $\begin{array}{lll}18 & 16.87\end{array}$ | 6385 | 20 | $294650 \cdot 8$ | 506 | 225 | 8.6 | - 32 | - 33 | $6 \cdot 56$ | M $b$ |
| $6+29$ | $27 \quad 2371$ | C 6809 |  |  | $18 \quad 27.41$ | 6868 | 13 | $26 \quad 56 \quad 16 \cdot 2$ | 498 | 229 | 11.0 | - 10 | + 21 | $9 \cdot 2$ |  |
| 6430 | 262559 | C 6810 | 344 | 26301 | $18 \quad 29.37$ | 7028 | 10 | $25 \quad 57 \quad 37 \cdot 3$ | 496 | 230 | 10.6 | - 60 | - 29 | $8 \cdot 2$ | F 5 |
| 6431 | $25 \quad 2765$ | C 68II |  |  | $\begin{array}{llll}14 & 18 & 37.00\end{array}$ | $+2.7080$ | -.0009 | $2537 \quad 26 \cdot 7$ | - 16.490 | +.231 | 11.6 | + 16 | - 10 | $9 \cdot 5$ |  |
| 6432 | $25 \quad 2766$ | C 6812 |  |  | $1841 \cdot 22$ | 7142 | 8 | $25^{\circ} 144094$ | 486 | 232 | $1 \cdot 4$ | - 81 | + 62 | $9 \cdot 2$ |  |
| 6433 | 242728 | B 5059 | 352-3 |  | 1853.80 | 7253 | 5 | $243057 \cdot 6$ | 476 | 233 | $10 \cdot 0$ | + 22 | - 2 | $8 \cdot 2$ | K o |
| 6434 | $25 \quad 2770$ | C 6814 | 359 | 26311 | $19 \quad 4.45$ | 7050 | 9 | $254444 \cdot 8$ | 467 | 232 | $9 \cdot 8$ | - 117 | $1+85$ | $6 \cdot 15$ | $\mathrm{F}_{2}$ |
| $6+35$ | 312614 | L $5^{17} 76$ |  |  | 19 II.84 | 6108 | 22 | 3111129.1 | 461 | 224 | II•I | - 35 | + 14 | 9.5 |  |
| $6+36$ | 242730 | C 6816 |  |  | $141947 \cdot 17$ | +2.7210 | -.0005 | $243958 \cdot 8$ | -16.431 | $+.234$ | 11.5 | - 29 | + 37 | $9 \cdot 5$ |  |
| 6437 | $25 \quad 2773$ | C 6817 | 371 |  | I9 49.33 | 7162 | $6$ | $2457 \quad 9 \cdot 9$ | 430 | 234 | 11.0 | - $4^{2}$ | + 14 | $9 \cdot 0$ |  |
| $6+38$ | $25 \quad 2774$ | C 6818 |  | 26333 | $1951 \cdot 78$ | 7050 | 7 | $25 \quad 38 \quad 6 \cdot 4$ | 427 | 233 | 11.8 | - 30 | - 64 | $9 \cdot 0$ |  |
| 6439 | $27 \quad 2374$ | C 6819 | 374 | 26335 | 1952.00 | 6707 | 13 | $274046 \cdot 5$ | 427 | 230 | 10.5 | - 15 | - 14 | $8 \cdot 2$ | Ma |
| 6440 | 302514 | L 5181 | 382 | 26343-4 | 20 I.49 | 6231 |  | 302236.5 | 420 | 224 | 10.2 | + I | - 20 | $8 \cdot 3$ | K |
| 6441 | $28 \quad 2318$ | C 6820 | 381 | 26341 | $1420 \quad 1.95$ | +2.6679 | -.0014 | $27 \quad 49 \quad 16 \cdot 3$ | -16.419 | +.230 | $10 \cdot 1$ | - 1 | - 7 | 6.61 | K. 5 |
| $64+2$ | $26 \quad 2563$ | C 6821 |  | 26342 | 208.82 | . 6964 | 9 | $26646 \cdot 0$ | 413 | 233 | 11.4 | + 26 | - 51 | $7 \cdot 93$ | M a |
| 6443 | 292529 | C 6823 |  |  | 2011.29 | 6371 | 18 | 293412.2 | 411 | 227 | 12.2 | - 56 | - 58 | $9 \cdot 5$ |  |
| 6444 | 3 I | $\mathrm{L}_{5183}$ |  | 26350 | $20 \quad 20 \cdot 39$ | 6134 | 21 | $3052 \quad 3 \cdot 4$ | 404 | 225 | 12.8 | $-\quad 42$ | - 46 | $9 \cdot 3$ |  |
| $6+45$ | $25 \quad 2775$ | C 6826 | 385 |  | $20 \quad 24.86$ | 7117 | 6 | 25.859 .3 | 400 | 234 | 12.0 | + 17 | - 27 | $9 \cdot 5$ |  |
| 6446 | $30 \quad 2517$ | L 5185 |  | 26360-1 | $142040 \cdot 42$ | +2.6239 | --0019 | 3014 II•4 | -16.387 | +.225 | II. 6 | 12 | 10 | $8 \cdot 9$ |  |
| 6447 | $26 \quad 2566$ | C 6827 | 390 | 26357 | $2043 \cdot 21$ | 6956 | 8 | 26453.0 | 385 | 233 | II•3 | - 5 | + 10 | $8 \cdot 9$ |  |
| $6+48$ | 292530 | C 6828 | 399 |  | 210.06 | 6446 | 16 | $29 \quad 1 \quad 17.5$ | 370 | 229 | I 2.6 | + 6 | 11 | $9 \cdot 5$ |  |
| 6449 | 2812322 | C 6829 | 402 |  | 215.02 | 6610 | 13 | $28 \quad 4 \quad 5 \cdot 1$ | 366 | 231 | 12.8 | 5 | - | .9.5 |  |
| 6450 | $26 \quad 2567$ | C6830 | 401 | 26368 | $2 \mathrm{I} \quad 6.25$ | 6865 | 10 | $2634 \quad 7 \cdot 9$ | 365 | 233 | 12.8 | - 2 | + 12 | 9.0 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Soc. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec. Var. | $\underset{\text { Epoch }}{\text { Epo }}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \end{aligned}$ |  |  |  |
|  | - |  |  |  | h m | s | s | - , " |  | " |  |  |  |  |  |
| 6501 | 312632 | L 5226 | 594 |  | 143019.13 | +2.5754 | -.0014 | 312251.0 | - 15.887 | +.235 | 12.2 | + 18 | + 9 | 8.8 | K。 |
| 6502 | 302535 | C 6890 | 593 |  | 3020.90 | 6063 | 11 | $294547 \cdot 0$ | 885 |  | 11.2 | - 25 | $\bigcirc$ | $9 \cdot 01$ | K 2 |
| 6503 | 292553 | C 6889 |  | 26603 | $3020 \cdot 99$ | 28 | 9 | $28 \quad 5259.0$ | 885 | 240 | 10.6 | + $4^{2}$ | - 157 | $8 \cdot 3$ |  |
| 6504 | 252797 | C 6888 | 588-9-90 | 26601-2 | $3023 \cdot 18$ | 6959 |  | $244740 \cdot 4$ | 883 | 246 | 10.8 | + 11 | - 9 | $8 \cdot 3$ |  |
| 6505 | 252799 | C 6892 | 597-8 |  | $3044 \cdot 49$ | 6944 |  | 24 49, 57.3 | 864 | 246 | 12.2 | - | + 14 | $9 \cdot 5$ |  |
| 6506 | 282345 | C 6893 |  |  | $143044 \cdot 76$ | +2.6275 | -.0009 | $28 \quad 34$ 41.6 | - 15.864 | $+\cdot 240$ | 11.8 | $+32$ | + 19 | $9 \cdot 2$ |  |
| 6507 | 302536 | L 5230 | $60{ }^{\circ}$ | 26616-7 | 3045.72 | 5982 | 11 | $\begin{array}{llll}30 & 8 & 9 \cdot 2\end{array}$ | 863 | 238 | 11-5,11-7 | $+149 *$ | + 120* | $4 \cdot 48$ | Fo |
| 6508 | 292555 | C 6894 | 602 | 26619 | 3048.23 | 6234 | 9 | $28 \quad 4720 \cdot 5$ | 86 I | 240 | 9.7 | - 26 | - 57 | $7 \cdot 93$ | Go |
| 6509 | 282347 | C 6896 | 607 | 26625 | 310.31 | 6414 | 7 | $\begin{array}{llll}27 & 47 & 5 \cdot 2\end{array}$ | 850 | 243 | 10.9 | 47 | + 35 | $9 \cdot 2$ |  |
| 6510 | 252802 | C 6900 | 617 |  | $3150 \cdot 34$ | 6834 |  | $\begin{array}{lllll}25 & 19 & 59.3\end{array}$ | 805 | 247 | $8 \cdot 5$ | $+4^{1}$ | - 91 | 7.94 | F 2 |
| 6511 | 242743 | C 6901 | 618-9 | 26643 | 143152.46 | +2.6958 | +.0002 | $243 \epsilon 42 \cdot 2$ | -15.803 | +. 249 | $0 \cdot 6$ | + '13 | 10 | $8 \cdot 6$ |  |
| 6512 | 272396 | C 6904 |  |  | $32 \quad 5 \cdot 41$ | 6566 | - | 2648 4.0 | 792 | 245 | 10.6 | 17 | + 22 | 8.93 | G 5 |
| 6513 | 242744 | B 5110 | 624 | $26651-2$ | 3213.07 | 6993 | + | $\begin{array}{llll}24 & 22 & 29.3\end{array}$ | 785 | 249 | 10.4 | 51 | + 45 | 7.71 | K o |
| 6514 | 282348 | C 6905 | 629 | 26667-8 | $3227 \cdot 13$ | 6362 | - 6 | $27 \quad 5236 \cdot 9$ | 772 | 243 | 9.8 | 12 | + | $6 \cdot 96$ | F 2 |
| 6515 | 242745 | B 5112 | 620 | 26660-1 | 3228.79 | 7050 | + | $24 \bigcirc 48.6$ | 771 | 250 | $10 \cdot 6$ | - | - 31 | $8 \cdot 0$ | K 5 |
| 6516 | 292557 | C 6906 | 632 |  | $143240 \cdot 55$ | $+2.6169$ | -.0007 | $\begin{array}{llll}28 & 53 & 3.9\end{array}$ | -15.760 | $+\cdot 243$ | 10.9 | + 29 | - 10 | $9 \cdot 5$ |  |
| 6517 | 252804 | C 6907 | 633-4 | 26670-1 | 3251.72 | 6895 | + | 24 51 15.1 | 750 | 249 | $10 \cdot 0$ | - | - 20 | $7 \cdot 56$ | A 0 |
| 6518 | 312634 | L 5233 |  |  | $3257 \cdot 38$ | 5606 | 12 |  | 745 | 238 | $1 \cdot 2$ | 16 | + 16 | 9.5 |  |
| 6519 | 262586 | C 6908 | 636 | 26676 | 3258.01 | 6640 | - 1 | $\begin{array}{llll}26 & 17 & 1 \cdot 2\end{array}$ | 744 | 247 | $\mathrm{II}^{1} 2$ | + 16 | + 25 $+\quad 1$ | $9 \cdot 5$ |  |
| 6520 | $28 \quad 2349$ | C 6909 | 638 | 26682 | 330.60 | 6283 | - 6 | $\begin{array}{llllll}28 & 13 & 37.7\end{array}$ | $74^{2}$ | 243 | II. 6 | - 3 | + 16 | $8 \cdot 43$ | A 3 |
| 6521 | 282350 | C 6911 | 643 |  | $14 \quad 33 \quad 5 \cdot 77$ | $+2.6251$ | 06 | $28 \quad 23 \quad 25.8$ | -15.737 | $+\cdot 243$ | 12.4 | + 37 | - 33 | $8 \cdot 8$ | G 5 |
| 6522 | 272400 | C 6912 |  |  | 3313.46 | 6481 | 3 | $27 \quad 737 \cdot 0$ | 730 | 245 | 12.3 |  | + 33 | var. | Ma |
| 6523 | 292560 | C 6913 | 650 |  | $33 \quad 22.92$ | 6145 | 7 | $28 \quad 5457 \cdot 4$ | 722 | 243 | 12.8 | 36 |  | $9 \cdot 3$ |  |
| 6524 | 312636 | L 5238 | 655 |  | 33 34-84 | 5614 | 12 | $313720 \cdot 5$ | 711 | 239 | 12.2 | 4 | + 12 | $9 \cdot 5$ |  |
| 6525 | 282351 | C 6914 | 658-60 | 26700 | $3347 \cdot 58$ | 6206 |  | $2832 \quad 17.5$ | 699 | 244 | $9 \cdot 6$ | 112 | + $4^{\circ}$ | $8 \cdot 7$ | Go |
| 6526 | 252806 | C 6915 | 665-6 |  | $14 \quad 34 \quad 15 \cdot 18$ | +2.6743 | +.0001 | $253246 \cdot 1$ | -15.674 | +. 249 | 10.8 | 16 | - 14 | 8.8 |  |
| 6527 | 292562 | C 6917 | 669 |  | 34 31.16 | 6040 | - 8 | 29 19 5.9 | 660 | 244 | 11.0 | + $4^{\circ}$ | + 20 | 9.5 | F 5 |
| 6528 | 242750 | B 512I |  | 26709 | $3435 \cdot 85$ | 6952 | + | $\begin{array}{lllll}24 & 19 & 36 \cdot 5\end{array}$ | 656 | 252 | 10.4 | $\bigcirc$ | - 23 | $9 \cdot 5$ |  |
| 6529 | 252808 | C 6920 | 673-4 | $26713-4$ | $3445 \cdot 24$ | 6833 |  | $\begin{array}{llllllllllllll}24 & 58 & 58\end{array}$ | 647 | 251 | $8 \cdot 8$ | 29 | - 25 | 8.4 | K |
| 6530 | 302541 | L 5240 | 678-9 | 26716 | 34 47.91 | 5822 | - 9 | 302412.0 | 644. | $24^{2}$ | $8 \cdot 2$ | 9 | + 15 | $7 \cdot 9$ | K 。 |
| 6531 | 282352 | C 692I | 676-7 | 26715 | $143450 \cdot 47$ | +2.6179 | -. 0006 | $\begin{array}{lllll}28 & 3241.6\end{array}$ | -15.642 | $+245$ | $9 \cdot 0$ | - ${ }^{2}$ | + 14 | $8 \cdot \mathrm{I}$ | Fo |
| 6532 | 312638 | L 5241 | 687 |  | 3458.58 | 5671 | 10 | $\begin{array}{llllllllllll}31 & 8 & 37 \cdot 6\end{array}$ | 635 | 241 | $9 \cdot 2$ | 30 | + 26 | $8 \cdot 6$ | K ○ |
| 6533 | $27 \quad 2403$ | C 6922 | 688 |  | $\begin{array}{llll}35 & 11.48\end{array}$ | 6497 | 1 | $264734 \cdot 5$ | 623 | 248 | $9 \cdot 6$ | - 18 | - 15 | $8 \cdot 8$ |  |
| 6534 | 272404 | C 6923 | 690 | 26726 | 3521.72 | 6418 | 2 | 27 II 40.2 | 614 | 248 | 10.0 | + 7 | - 35 | 8.43 | F 2 |
| 6535 | 312639 | L 5243 |  |  | $35 \quad 28 \cdot 19$ | 5587 | 9 | $312951 \cdot 2$ | 608 | 240 | 10.0 | 42 | + | -8.8 | G 5 |
| 6536 | 292565 | C 6929 | 713 | 26754 | 143613.50 | +2.6093 | 0005 | $284847 \cdot 0$ | - 15.566 | +. 246 | 10.4 | + 13 | + | $8 \cdot 4$ | $\mathrm{K}_{5}$ |
| 6537 | 262590 | C 6930 |  | 26756-7-8 | $36 \quad 20.58$ | 6580 | 0 | 26 II $45 \cdot 4$ | 560 | 251 | 10 | + 14 | + | $8 \cdot 6$ | F |
| 6538 | 292566 | C 6931 |  |  | $3622 \cdot 60$ | 5981 | 6 | $292243 \cdot 5$ | 558 | 245 | II.I | - 25 | - 14 | 8.4 | K |
| 6539 | 312642 | L 5247 | 714-5 | 26765 | $\begin{array}{lll}36 & 26 \cdot 55\end{array}$ | 5693 | 9 | $304952 \cdot 3$ | 554 | 242 | $10 \cdot 2$ | + 84 | - $4^{2}$ | 7.70 |  |
| 6540 | 312643 | L 5249 | 718-9 | 26769 | $36 \quad 36 \cdot 68$ | 5673 | 9 | $30 \quad 54 \quad 27.6$ | 545 | 243 | 10.6 | + 68 | - 40 | $7 \cdot 9$ | Go |
| 6541 | 282356 | C 6932 | 716 |  | $1436 \quad 38.42$ | $+2.6278$ | -.0003 | $\begin{array}{llll}27 & 47 & 9 \cdot 4\end{array}$ | -15.543 | +.249 | 11.0 | + 13 | 14 | 8.87 | ${ }_{\text {G }}^{5}$ |
| 6542 | 312644 | L 5251 | 729 | 26780 | $3654 \cdot 99$ | 5510 | - 9 | $314037 \cdot 1$ | 528 | 242 | 10.0 | - 36 | - 77 | $7 \cdot 9$ | F 5 |
| 6543 | 262591 | C 6933 | 728 | 26778 | $\begin{array}{ll}37 & 0.69\end{array}$ | 6509 | + 1 | $26 \quad 30 \quad 0.7$ | 523 | 251 | 10.8 | + 19 | - 54 | $8 \cdot 9$ |  |
| 6544 | 302549 | C 6935 |  | 26767 | $\begin{array}{lll}37 & 10.86\end{array}$ | 5882 | - 6 | $294641 \cdot 8$ | 513 | 245 | II.4 | - 3 | - 4 | $8 \cdot 9$ |  |
| 6545 | 242757 | B 5130 |  |  | $37 \quad 17.08$ | 6936 | $+\quad 7$ | $24 \quad 6 \quad 26 \cdot 0$ | 508 | 255 | H.6 | - 154 | $+6$ | $9 \cdot 3$ |  |
| 6546 |  |  | 745 |  | $1437 \quad 24.54$ | +2.5439 |  | 315724.8 | -15.501 |  |  | - 12 |  | $8 \cdot 2$ |  |
| 6547 | 292568 | C 6937 | 744 | 26798 | 3728.93 | 5939 | - 5 | 292651.9 | 497 | 246 | 10.6 | + 24 | - 163 | $7 \cdot 91$ | Go |
| 6548 | 242760 | B 5131 |  | 26799 | $3740 \cdot 89$ | 6842 | + 5 | 243514.11 | 486 | 255 | 11.5 | + 37 | - 17 | $9^{\circ} \mathrm{O}$ |  |
| 6549 | 282360 | C 6939 | 753 |  | $\begin{array}{llll}37 & 42 \cdot 68 \\ 37 & 45\end{array}$ | 6179 | - 4 | 28 Io 22.8 | 484 | 248 | 10.4 | 14 $+\quad 14$ | $+\quad 9$ $+\quad 1$ | 8.9 |  |
| 6550 | 252816 | C 6940 | 750 | 26806-7 | 37 45.13 | 6780 | + 4 | $2455 \quad 23 \cdot 1$ | 482 | 255 | II.0 | 48 |  | $7 \cdot 61$ | G 5 |


| No． | B．D． | A．G．C． | W．B．（2）． | Lalande． | R．A． $1910 \cdot 0$. | Precession． | Sec．Var． | Dec．1910．0． | Precession． | Soc． Var． | Epoch 1900＋ | Annual P．M． |  | Mag． | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { B.000 } . \end{aligned}$ | Dec． ＂．001． |  |  |
|  |  |  |  |  | h m s | 8 | s | －，＂ | ＂ | ＂ |  |  |  |  |  |
|  | 262592 | C 694 I | 755－6 | 26808 | $143750 \cdot 51$ | ＋2．6515 | ＋．0001 | $\begin{array}{lll}26 & 22 & 2.4\end{array}$ | －15．477 | $+\cdot 252$ | 11.2 | － 58 | ＋ 25 | 8.14 | Fo |
| 6552 | $\begin{array}{ll}25 & 2817 \\ 31 & 2647\end{array}$ | C 6942 |  | 26820 | 3818.00 | 6770 | ＋$\quad 5$ | $245449 \cdot 1$ | 451 | 255 | 10.6 | － 14 | － 1 | 9．2 |  |
| 6553 6554 | $\begin{array}{ll}31 & 2647 \\ 25 & 2819\end{array}$ | L 5259 <br> C 6944 |  |  | $38 \quad 22.06$ 38 |  |  |  | 448 | 243 | 10.9 | － 3 | － 28 | $8 \cdot 8$ | K o |
| 6554 6555 | ［ $\begin{aligned} & 25 \\ & 29 \\ & 29 \\ & 29570\end{aligned}$ | C 6944 | 783 | 26838 | $\begin{array}{ll}38 & 56 \cdot 32 \\ 39 & 0.28\end{array}$ | 6691 5896 |  | $\begin{array}{llll}25 & 16 & 35 \cdot 1 \\ 29 & 28 & 13 \cdot 4\end{array}$ | 416 412 | 256 248 | 10.1 10.0 | $\begin{array}{r}12 \\ \hline+\quad 6\end{array}$ | a $+\quad 37$ $+\quad 1$ | $\begin{array}{r} 9 \cdot 3 \\ 8 \cdot 3 \\ \hline \end{array}$ | 3 |
| 6556 | $25 \quad 2820$ | C 6945 | 779－80 | 26836 | 1439 － 3.03 | $+2.6776$ | ＋．0006 | $244744 \cdot 0$ | －15．409 | ＋． 256 | 11.2 | － 47 | － 17 | 9.2 |  |
| 6557 | 252821 | C 6947 |  |  | 3918.06 | 6664 | ＋ | $25 \quad 22 \quad 59 \cdot 7$ | 395 | 255 | 11.9 | －$\quad 39$ | － 2 | $9 \cdot 2$ |  |
| 6558 | 302557 | L 5264 |  |  | 39 24－10 | 5764 |  | $30456 \cdot 1$ | 390 | 248 | 11.8 | ＋ 14 | －91 | $8 \cdot 9$ | K |
| 6559 | 272411 | C 6948 | 793 |  | $3924 \cdot 18$ | 6336 | $\bigcirc$ | $27 \quad 7 \quad 53.4$ | 390 | 252 | 12.8 | － 209 | － 2 | $9 \cdot 5$ |  |
| 6560 | 272412 | C 6949 | 794 | 26852 | 3926.65 |  | － | $27 \quad 222.3$ | 387 | 252 | 10.8 | － 26 | － 62 | 8.8 |  |
| 6561 | 272413 | C 6950 | 795 | 26853 | 143928.05 | 2.6377 | ＋．0002 | $265436 \cdot 4$ | －15．386 | ＋．253 | 13.0 |  | 21＊ | $4 \cdot 93$ | M a |
| 6562 | 312648 | L 5266 | 796 | 26862 | $3930 \cdot 19$ | 5558 ！ | － 6 | 315 | 384 | 245 | 11.2 | ＋ 29 | ＋ 56 | $8 \cdot 8$ | Go |
| 6563 | 302560 | L 5267 | 797 |  | $3936 \cdot 94$ | 5680 | － 7 | 302825.4 | 378 | 247 | 13.2 | － 14 | ＋ 1 | $9 \cdot 3$ |  |
| 6564 | 282363 | C 6954 |  |  | 40 4－01 | 6180 | － 1 | $27 \quad 5218 \cdot 3$ | 352 | 252 | 12 | － 6 | ＋ 12 | $9 \cdot 5$ |  |
| 6565 | 302564 | L 5268 |  |  | $40 \quad 32 \cdot 35$ | 5756 | － 5 | 295833.9 | 326 | 249 | 11.0 | ＋ 6 | － $4^{2}$ | $9 \cdot 3$ |  |
| 6566 | 272415 | C 6955 |  |  | $144033 \cdot 37$ | ＋2．6324 | ． 0000 | $27 \quad 3 \quad 33.2$ | －15．325 | ＋．253 | 10.7 | 8 | ＋ 4 | $9 \cdot 5$ |  |
| 6567 | 252826 | C 6956 |  |  | $4044 \cdot 10$ | 78 | ＋ 7 | $25 \quad 8 \quad 35 \cdot 6$ | 315 | 258 | 10.2 | ＋ 32 | ＋ 15 | $8 \cdot 7$ |  |
| 6568 | $\}_{272417}$ | C 6957 | 828 | 26908－9 | $41 \quad 3 \cdot 30$ | 6238 | ＋ | $\begin{array}{llll}27 & 27 & 1 & 3.9\end{array}$ | 297 | 254 | $9 \cdot 0$ | －36＊ | ＋8＊ | 5．12 | A 0 |
| 6569 |  |  |  | 2608 | $41 \quad 3 \cdot 40$ | 6238 | ＋ 2 | 272711.7 | 297 | 254 | 10.8 | －36＊ | ＋8＊ | $2 \cdot 70$ | K 。 |
| 6570 | 302565 | L 5273 | 831－3 | 26915 | $4^{11} 5 \cdot 27$ | 5601 |  | 304029.4 | 295 | 248 | $10 \cdot 2$ | ＋ 4 | － 26 | $7 \cdot 65$ | K o |
| 6571 | $25 \quad 2829$ | C 6958 | 825 | 26906 | $\begin{array}{llll}14 & 41 & 5.51\end{array}$ | ＋2．6680 | ＋．0007 | $25 \quad 511.5$ | －15．295 | ＋ 258 | $0 \cdot 4$ |  | ＋ | 8.4 |  |
| 6572 | 312651 | L 5274 | 837 | 26917 | 4114.83 | 5547 | － 6 | $305449 \cdot 3$ | 286 | 248 | － | ＋ 8 | － 23 | 8.6 | A 2 |
| 6573 | 292575 | C 6959 |  | 26919 | $4130 \cdot 75$ | 5814 | － 3 | 293338.8 | 271 | 251 | 10.9 | － | － 1 | $9 \cdot 5$ | G 5 |
| 6574 | 242770 | B 5151 |  | 26927 | 4151.89 | 6844 | ＋ 9 | $\begin{array}{lllll}24 & 6 & 15.9\end{array}$ | 251 | 261 | 10.1 | 45 | ＋ 47 | $9 \cdot 2$ |  |
| 6575 | 282365 | C 6960 | 851 | 26939. | $42 \quad 7 \cdot 80$ | 6128 | － | 275328.9 | 236 | 254 | 11.7 |  | － 30 | $8 \cdot 2$ | K。 |
| 6576 | 302568 | C 6961 | 858 |  | 14.4222 .51 | $+2.5724$ | －．0003 | $29542 \cdot 6$ | －15．222 | $+\cdot 250$ | 8 | 26 | － 19 | 9.41 | F |
| 6577 | 242771 | B 5154 | 856 | 26943 | $\begin{array}{lll}42 & 28.47\end{array}$ | 6851 | ＋ |  | 216 | 261 | 12.2 | 18 | － $3^{2}$ | 9.5 |  |
| 6578 | 282366 | C 6963 | 861 |  | $42 \quad 29.08$ | 6044 | － 1 | $281648 \cdot 2$ | 216 | 252 | ． 5 |  | － 97 | $8 \cdot 2$ | F 5 |
| 6579 | 262598 | C 6962 | 859 | 26945－6－7 |  | 6420 | ＋ |  | 215 | 257 | － | 8 | － 24 | $8 \cdot 16$ | K 5 |
| 6580 | 312656 | L 5283 |  |  | $42.43 \cdot 43$ | 5488 |  | $31055 \cdot 3$ | 202 | 249 | 11.8 | － 5 | － 17 | $8 \cdot 4$ |  |
| 6581 | 252831 | C 6964 | 868 | 26953 | 1442  <br> 1 $43 \cdot 85$ | ＋2．6670 | ＋．0007 | $24 \quad 57 \quad 32 \cdot 5$ | －15．202 | $+\cdot 260$ | 12.2 | ＋ 17 | ＋ 18 | $9 \cdot 0$ |  |
| 6582 | 312657 | L 5284 |  |  | 4243.89 | 5379 | － 5 | $31322 \cdot 5$ | － 201 | 248 | 12.3 | ＋ 13 | ＋ 23 | $9 \cdot 2$ |  |
| 6583 | 312658 | L 5287 | 878 |  | 4258.83 | 5451 | 4 | $\begin{array}{lllllllllllll}31 & 9 & 23.6\end{array}$ | 187 | 249 | II．1 | － 58 | － 25 | $8 \cdot 8$ | Go |
| 6584 | 242775 | B 5157 | 882 | 26965 | 4317.90 | 6807 | $+10$ | $24 \quad 9 \quad 19.2$ | 169 | 262 | 11.0 | － 6 | ＋ 6 | 8.6 | A 2 |
| 6585 | $28 \quad 2367$ | C 6967 | 886 | 26974 | $4324 \cdot 84$ | 5989 |  | $28 \quad 2646.4$ | 162 | 254 | II•3 | ＋ 37 | － 49 | $9 \cdot 5$ |  |
| 6586 | 282368 | C 6968 | 888－90 | 26976 | $14 \begin{array}{lll}14329.29\end{array}$ | ＋2．5959 | ． 0000 | 283520.6 | －15．158 | ＋－253 | II．0 | ＋ 131 | － 21 | $8 \cdot 7$ | G o |
| 6587 | 272421 | C 6969 |  |  | $4332 \cdot 48$ | 6183 | ＋ 2 | $27 \quad 26 \quad 27 \cdot 4$ | 155 | 256 | 11.4 | － 71 | － 19 | $9 \cdot 5$ |  |
| 6588 | 242776 | B 5160 |  | 26949 | 4338.77 | 6741 | ＋ | $24 \quad 28 \quad 21 \cdot 2$ | 149 | 262 | 10.4 | － 8 | ＋ 8 | $7 \cdot 51$ | K o |
| 6589 | $\begin{array}{lll}26 & 2603 \\ 25 & 2835\end{array}$ | C 6971 | 894 |  | $4351 \cdot 90$ 4356.95 | 6480 |  | 25 5 5 $5049 \cdot 9$ | 137 | 259 | 10.8 | ＋ 23 | － | $8 \cdot 6$ | $\mathrm{K}_{\mathrm{K}} \mathrm{o}$ |
| 6590 | $25 \quad 2835$ | C 6972 |  | 26956 | $43 \quad 56 \cdot 95$ | 6673 | ＋ 8 | $244^{8} \quad 34 \cdot 5$ | 132 | 261 | 11 | － 1 | 19 | 8.71 | K 2 |
| 6591 | 282370 | C 6974 | 903 | 26987 | $1444 \quad 2 \cdot 19$ | ＋2．6078 | ＋．0002 | $\begin{array}{lllllllllllllll}27 & 55 & 18.8\end{array}$ | －15．127 | $+256$ | 11.4 | － 10 | ＋ 8 | 9.0 | $\mathrm{F}_{2}$ |
|  | $\}_{24} 2779$ | C 6976 | 908 | 26992 | $44 \quad 23 \cdot 87$ | 6677 | 9 | 244424.7 | 106 | 262 | $9 \cdot 7$ | － 64 | ＋ 29 | 6.05 | F 5 |
| 6593 |  |  |  |  | 4424.01 | 6677 | 9 |  | 106 | 262 | 10.2 | － 64 | ＋ 29 |  | 5 |
| 6594 6595 | $\begin{array}{lll}25 & 2838 \\ 26 & 2606\end{array}$ | C 6979 |  |  | $\begin{array}{rr}44 & 47.95 \\ 45 \\ 4.70\end{array}$ | 6628 | 8 | $\begin{array}{llll}24 & 57 & 29 \cdot 2 . \\ \\ 26 & 5 & 6.2\end{array}$ | 083 | 262 | $8 \cdot 6$ | － 18 | － 17 | 8.8 | K。 |
| 6595 | 262606 | C 6981 |  |  | $45 \quad 4 \cdot 70$ | 6409 | 6 | $\begin{array}{llll}26 & 5 & 6 \cdot 2\end{array}$ | 067 | 260 | 10.4 | 20 | －331 | $9 \cdot 2$ |  |
| 6596 | 272423 | C 6982 |  |  | $1445 \quad 8.24$ | ＋2．6264 | $+\cdot 0005$ | $26 \begin{array}{lll}26 & 1 & 1 \cdot 4\end{array}$ | $-15.063$ | $+\cdot 259$ | 10.4 | － 24 | ＋ 44 | $9 \cdot 2$ |  |
| 6597 | 252839 | C 6983 |  |  | $45 \quad 16 \cdot 27$ | 6512 | ＋ 8 | $25 \begin{array}{lllllllll} & 31 & 28.9\end{array}$ | 056 | 261 | 8.8 | － 9 | － 32 | 6.78 | K o |
| 6598 | 262607 | C 6985 | 930 | 27031 | $45 \quad 26.29$ | 6335 | ＋ 6 | $262554 \cdot 6$ | 046 | 260 | $9 \cdot 8$ | ＋ 18 | 6 | $9 \cdot 0$ | $\mathrm{A}^{\mathrm{K}} 2$ |
| 6599 | 302572 | L 5292 |  |  | 4532.85 | 5566 | －${ }^{2}$ |  | 040 | 253 | 10.1 | － 13 | ＋ 24 | $9 \cdot 5$ | K |
| 6600 | 262608 | C 6986 |  |  | $4552 \cdot 66$ | 6383 | ＋ 7 | $\begin{array}{llll}26 & 8 & 3 \cdot 1\end{array}$ |  | 261 | $9 \cdot 8$ | － 9 |  | $8 \cdot 7$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \times 0$. | Precession. | Sec. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B. R, A. }}{\substack{\text { reor } \\ \hline}}$ | $\begin{aligned} & \text { Dec. } \\ & \text { Deor } \end{aligned}$ |  |  |
|  | - |  |  |  | h m |  |  | $\bigcirc$ - |  |  |  |  |  |  |  |
| 6601 | 252841 | C 6987 | 938 | 27046-7 | $1445 \quad 57 \cdot 26$ | +2.6579 | +.0009 | $25 \quad 5 \quad 34.4$ | -15.016 | +.263 | $9 \cdot 2$ | - 8 | 3. | $6 \cdot 56$ | B 9 |
| 6602 | 292581 | C 6989 | 946 | 27057 | $46 \quad 5 \cdot 92$ | 5816 |  | $28 \quad 59 \quad 17.6$ | 008 | 256 | 12.7 | + 17* | $9^{*}$ | $5 \cdot 66$ | A 2 |
| 6603 | 312663 | L 5293 |  |  | $46 \quad 8 \cdot 39$ | 1 I | - 2 | $3057 \quad 3.6$ | 005 | 252 | 12.8 | + II | + 78 | $9 \cdot 3$ | G |
| 6604 | 242786 | B 5182 | 945 | 27055-6 | 4614.31 | 6725 | 10 | $2416 \quad 59.2$ | 000 | 264 | 10.8 | + 125 | + 28 | $5 \cdot 81$ | Go |
| 6605 | 302574 | L 5297 |  |  | $46 \quad 52 \cdot 75$ | 5478 | 1 | $\begin{array}{llll}30 & 32 \quad 16.7\end{array}$ | 14.962 | 254 | 10.3 | - | 32 | $9 \cdot 5$ |  |
| 6606 | 31 2668 | L 5298 | 963-4 | 27078 | 1447 0 53 | +2.5420 | 02 | $3048 \quad 2 \cdot 0$ | - 14.955 | +-254 | - | 22 | - 14 | 8.6 | K o |
| $6607$ | 302575 | L 5300 | 967-8 |  | $47 \quad 9.44$ | 5436 |  |  | - 946 | 254 | II.O | - 43 | - 44 | $9 \cdot 5$ |  |
| 6608 | 262614 | C 6996 |  |  | 47 40.34 | 6274 | + $\quad 7$ | $26 \quad 29$ 50.2 | 916 | 262 | 10.0 | $\begin{array}{r} \\ +\quad 15 \\ \hline\end{array}$ | + 5 | $9 \cdot 3$ |  |
| 6609 | 302576 | L 5302 |  | 27101 | $4745 \cdot 43$ | 5575 |  | 295843 | 911 | 256 | $10 \cdot 3$ | - 26 | + 15 | $9 \cdot 3$ |  |
| 6610 | 252842 | C 6997 | 979 | 27097-8 | 4748.99 | 6535 | + 10 | 25731.5 | 908 | 265 | 10.0 | 16 | + 13 | 9.0 |  |
| 661 I | 302577 | C 6999 |  | 27108 | $144^{8} \quad$ I-19 | $+2.5588$ | -0000 | 295225.2 | -14.896 | $+\cdot 256$ | $9 \cdot 5$ | 43 | + 35 | $9 \cdot 26$ | F 8 |
| 66 | 242790 | B 5187 | 991 | 27119 | 48 <br> 8.98 | 6703 | $+12$ | $2410 \quad 9.5$ | 869 | 267 | 8.4 | + 2 | - 5 | 7.31 | K。 |
| 6613 | 292590 | C 7003 | 1003 | 27132 | $48 \quad 50 \cdot 73$ | 5619 | + | 293733.2 | 847 | 258 | $9 \cdot 2$ | + | - 51 | $8 \cdot 26$ | G 5 |
| 6614 | 282377 | C 7004 | 2 | 27131 | 4853.03 | 5977 |  | $275158 \cdot 3$ | 845 | 261 | $9 \cdot 0$ | 13 | + 35 | 8.2 | G 5 |
| 6615 | $27 \quad 2430$ | C 7005 | 1004-5 | 27134 | $4^{8} \quad 57 \cdot 4^{8}$ | 6180 |  | 264959.2 | 841 | 263 | $9 \cdot 7$ | 19 | - 9 | 8.0 | A 0 |
| 6616 | 31 2672 | L. 5310 | 1007 | 27139 | 144859.99 | $2 \cdot 5203$ | 01 | 313426.6 | $-14.838$ | +.253 | 8 | 22 |  | $8 \cdot 6$ | Fo |
| 6617 | 292592 | C 7008 |  | 27145 | $4920 \cdot 66$ | 5762 | $+\quad 2$ | $\begin{array}{llllllll}28 & 52 & 24.9\end{array}$ | 818 | 259 | $10 \cdot 0$ | - 63 | + 61 | $8 \cdot 2$ | G 5 |
| 6618 | 252845 | C 7010 | 1022 | 27147-8 | $4940 \cdot 49$ | 6484 | + 11 | 25 II $46 \cdot 0$ | 799 | 267 | $9 \cdot 8$ | - 62 | + 17 | 8.8 | F 8 |
| 661 | 312673 | L 5314 |  |  | $4956 \cdot 65$ | 523 I |  | 3 I 1930.6 | 783 | 255 | $10 \cdot 3$ | + 17 | - 5 | 8.8 | Fo |
| 6620 | 272434 | C 7014 | 1041 |  | $5046 \cdot 54$ | 6074 | + 7 | 27104.2 | 733 | 264 | 10.1 |  |  | 9.5 |  |
| 6621 | 302582 | L 5322 | 1045 | 27195 | 145047.23 | $\cdot 5402$ | -.0001 | $\begin{array}{lllllllllll}30 & 25 & 43.3\end{array}$ | -14.733 | +. 258 | 6 | 17 | $+\quad 37$ | $6 \cdot 84$ | F 2 |
| 66 | 272435 | C 7015 | 1043 | 27191 | 5048.78 | 6133 | + | $26 \quad 526 \cdot 8$ | 731 | 265 | 8.8 | - 6 | 19 | 8.6 | G 5 |
| 662 | 322528 | L 5326 | 1055 |  | $51 \quad 6.58$ | 00 | - 1 | $314720 \cdot 3$ | 714 | 255 | 10.7 | + 10 | 32 | $9 \cdot 0$ | K 2 |
| 6624 | 262623 | C 7018 | 1054 | 27201 | 5112.87 | 6308 | + 10 | $25 \quad 56 \quad 28.5$ | 707 | 266 | 10 | 12 | - | $8 \cdot 8$ | F 5 |
| 6625 | 282381 | C 7019 | 1059 | 27207 | $51 \quad 19.34$ | 5903 | $+\quad 5$ | 275725.5 | 701 | 262 | 10.0 | 16 | + | $8 \cdot 9$ |  |
| 6626 | 302583 | L 5327 |  |  | 145132.82 | +2.5391 | -.0001 | 302325.8 | -14.688 | +.259 | - 9 | 7 | - 1 | $9 \cdot 5$ |  |
|  | 312675 | L 5329 |  |  | $5147 \cdot 78$ | 5252 | + | $31 \quad 022.3$ | 673 | 258 | 10.0 | - 15 | + 14 | $8 \cdot 6$ | Fo |
| 66 | 242798 | C 7022 | 1069-70 | 27224 | $\begin{array}{lll}52 & 1.36\end{array}$ | 652 I | 13 | $\begin{array}{llll}24 & 45 & 0 \cdot 7\end{array}$ | 659 | 270 | 10.4 | + $\quad 38$ | 22 | $6 \cdot 94$ | K |
| 6629 | 252850 | C 7024 | 1074 |  | $52 \quad 12 \cdot 23$ | 6383 | 11 | $25 \quad 2659 \cdot 9$ | 649 | 268 | 10.4 | 43 | + 35 | $8 \cdot 2$ | F 5 |
| 6630 | 302586 | L 5331 | 1078 | 27240 | 52 18.95 | 5403 | 3 | $3014.42 \cdot 4$ | -642 | 260 | 2 | 3 | - 16 | $8 \cdot 6$ | F |
|  | 31 2676 | L5332 | 1084 |  | 145222.32 | +2.5129 | . 0000 | 313023.2 | $-14.639$ | +-257 | II•I | $\bigcirc$ | + | $8 \cdot 7$ | G 5 |
| 6632 | 302587 | C 7025 |  | 27246 | $5226 \cdot 25$ | 5487 |  | 295016.6 | 635 | 259 | 12.4 | 53 | $+$ | $8 \cdot 91$ | F 8 |
| 6633 | 302589 | L 5334 | 1087 | 27254 | $5234 \cdot 19$ | 5403 | 2 | $\begin{array}{llllllllll}30 & 12 & 48.4\end{array}$ | 627 | 259 | 12.0 | 33 | + 32 | $9 \cdot 0$ | F 5 |
| 6634 | 292599 | C 7026 |  |  | $5237 \cdot{ }^{2}$ | 5658 | 5 | ${ }^{28} 58952 \cdot \mathrm{I}$ | 623 | 263 | $1 \mathrm{I} \cdot 6$ | - 15 | - 28 | $9 \cdot 5$ |  |
| 6635 | 292600 | C 7027 | 1096 |  | $5242 \cdot 24$ | 5672 | 5 | $\begin{array}{lllll}28 & 55 & 39 \cdot 8\end{array}$ | 619 | 263 | $2 \cdot$ | + 7 | + 5 | $9 \cdot 2$ |  |
| 6636 | 252851 | C 7029 |  |  | $14 \quad 52 \cdot 56.52$ | +2.6423 | +.0013 |  | -14.604 | +.270 | 10.0 |  |  | 8.8 | K 5 |
| 6637 | 262626 | C 7030 | 1102 | 27269 | $5257 \cdot 05$ | 6202 | 9 | $\begin{array}{lllllll}26 & 17 & 39.5\end{array}$ | 604 | 268 | IT.8 | - 4 | + 8 | $9 \cdot 3$ | Go |
| 6638 | 262625 | C 7031 |  |  | 5259.63 | 6231 | 11 |  | 601 | 268 | I1.4 |  | + 55 | $9 \cdot 5$ |  |
| 6639 | 252853 | C 7032 | 1109 | 27277-8 | 5326.86 | 6312 | 12 | $\begin{array}{llll}25 & 41 & 3 \cdot 3\end{array}$ | 574 | 269 | 8.0 | 39 |  | $7 \cdot 28$ | G 5 |
| 6640 | 252855 | C 7035 | 1114 | 27284-5 | 5343.99 | 6434 | 13 | $\begin{array}{llll}25 & 2 & 4.5\end{array}$ | 557 | 271 | 2 | 53 | + 9 | $7 \cdot 21$ | Ko |
| 6641 | 302591 | C 7036 | 1124 | 27296 | $14 \quad 54 \quad 1.96$ | +2.5450 | +.0004 | $294943 \cdot 6$ | -14.539 | +.261 | $0 \cdot 8$ | + 43 | -71 | $8 \cdot 21$ | $\mathrm{F}_{2}$ |
| 6642 | 302593 | L 5339 | 1122-6 |  | $54 \quad 4 \cdot 65$ | 5273 |  |  | 536 | 259 | $1 \mathrm{I} \cdot 8$ | - 45 | + 10 | 9.0 | K |
| 6643 | 302592 | L 5338 |  |  | $54 \quad 4.95$ | 5360 |  | $\begin{array}{llllllllllll}30 & 14 & 28.5\end{array}$ | 536 | 259 | 10.4 | + 13 | - 181 | $9 \cdot 0$ |  |
| 6644 | 272438 | C 7037 | 1125 | 27299 | 54.18 .55 | 5995 |  | 27 10 $36 \cdot 4$ | 522 | 267 | $9 \cdot 6$ | + 46 | - 6 | $7 \cdot 50$ | F 8 |
| 6645 | 242803 | B 5206 | 1140-1 | 27304-11 | $5449 \cdot 84$ | 6511 | 15 | $243142 \cdot 6$ | 491 | 274 | 9.2 | 10 | + 5 | $7 \cdot 16$ | Fo |
| 6646 | $25 \quad 2856$ | C 7039 | 1142 | 27307-8 | $145452 \cdot 61$ | +2.6338 | $+.0013$ | $25 \quad 24,26 \cdot 3$ | $-14.488$ | +270 | $8 \cdot 2$ |  | 12 | $7 \cdot 43$ | G 5 |
| 6647 | 302594 | L 5342 | 1149 |  | $55 \quad 6.02$ | 5282 |  | $\begin{array}{llll}30 & 29 & 3.9\end{array}$ | 474 | 261 | $9 \cdot 6$ | + 15 | - 24 | $8 \cdot 9$ | G |
| 6648 | $27 \quad 2440$ | C 7040 |  | 27321 | $\begin{array}{llll}55 & 13.17\end{array}$ | 5879 |  | $\begin{array}{lllll}27 & 38 & 52 \cdot 8\end{array}$ | 467 | 267 | 10.0 | $\begin{array}{r} \\ +\quad 2 \\ \hline\end{array}$ | - 2 | $9 \cdot 2$ | G 5 |
| 6649 | 272441 | C 7041 |  | 27334 | 5539.62 | 5873 |  | $27 \quad 3754.5$ | 440 | 267 | $9 \cdot 8$ | 19 $+\quad 16$ | - 4 | $9 \cdot 5$ |  |
| 6650 | 302596 | L 5346 | 1166 | 27341 | $5544 \cdot 77$ | 5322 |  |  | 435 | 262 | 9.2 | + 16 | + 11 | $8 \cdot 36$ | K |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 . | Precession. | Sec. Var. | Dec. 19r0.a. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. <br> 8.0001 . | $\begin{aligned} & \text { Dec. } \\ & \sim \cdot \infty 0 \mathrm{I} \text {. } \end{aligned}$ |  |  |
|  | ${ }^{\circ}$ |  |  |  | h m s | 8 | 8 | - " |  | " |  |  |  |  |  |
| $\|6651\|$ | $\begin{array}{lll}27 & 2442\end{array}$ | C 7042 | 1172 | 27343 | $1455 \quad 59 \cdot 56$ | +2.5889 | +.0009 | 273059.2 | -14.420 | +-268 | $9^{\circ} 0$ | 18 | + 38 | 8.6 | Ko |
| $6652$ | 292609 | C 7045 |  | 27377 | 5656.67 | 5568 |  | 28 <br> 6649.9 | 362 | 266 | 8.6 | - 33 | + 40 | $8 \cdot 2$ | $\text { F } 8$ |
| $\|6653\|$ | 362640 | C 7046 | 1195 | 27375 | $5659 \cdot 67$ | 6146 | 12 | $\begin{array}{llll}26 & 9 & 15.3\end{array}$ | 359 | 272 | 9.6 | + 3 | + 1 | 9.0 |  |
| $6654$ | 312684 | L 5356 |  | 27389 | $57 \quad 13.42$ | 4952 | 4 | 31443.4 | 345 | 261 | 8.8 | - 50 | - $5^{2}$ | $8 \cdot 2$ | M a |
| 6655 | 242810 | B 5215 | 1199 |  | 5719.02 | 6527 | 15 | ${ }_{24}^{4} \begin{aligned} & 12 \\ & 129\end{aligned}$ | 340 | 277 | 10.1 | + $4^{8}$ | + 48 | 9.5 |  |
| 6656 | 302601 | ${ }^{\text {C } 7048}$ | 1204 |  | 145732.61 | $+2.5358$ | $+\cdot 0006$ | $295136 \cdot 2$ | -14.326 | + 264 | $9 \cdot 2$ | - 7 | + 10 | $9 \cdot 3$ |  |
| 6657 | 252860 | C 7049 |  |  | $58 \quad 0.02$ | 6310 | 15 | $2514.3 \cdot 5$ | 298 | 275 | 10.6 | - 51 | + 4 | $9 \cdot 3$ |  |
| 6658 | 25 2861 | C 7050 | 1214 | 27409-10 | $\begin{array}{lll}58 & 9.95\end{array}$ | 6281 | 14 | $252148 \cdot 5$ | 288 | 275 | 10.6 | - 5* | - 58* | $4 \cdot 93$ | K. 5 |
| 6659 | 302602 | L 5359 | 1218-9 |  | $\begin{array}{llll}58 & 12.70\end{array}$ | 5147 | 5 | $\begin{array}{lll}30 & 45 & 2 \cdot 7\end{array}$ | 285 | 263 | 11.8 | + 11 | - 30 | $9 \cdot 5$ |  |
| 6660 | 242811 | C 7052 |  |  | $\begin{array}{llll}58 & 17.88\end{array}$ | 6407 | 15 | $2443 \quad 5 \cdot 3$ | 280 | 277 | 10. | + 29 | - 16 | 8.86 | Ko |
| 6661 | 292612 | C 7053 | 1222 |  | $1458 \quad 22 \cdot 74$ | +2.5432 | $+\cdot 0007$ | 292533.3 | -14.275 | +.266 | 10.8 | - 15 | + 15 | $9 \cdot 5$ |  |
| 6662 | $27 \quad 2445$ | C 7054 | 1228 |  | $5844 \cdot 17$ | 5776 |  | $\begin{array}{llllll} \\ 27 & 46 & 19 \cdot 1\end{array}$ | 253 | 270 | 11.8 | + 24 | - II | $9 \cdot 0$ | G |
| 6663 | $28 \quad 2389$ <br> 25 | C 7055 |  |  | $58 \quad 44 \cdot 49$ | 5732 | 9 |  | 252 | 270 | 11.8 | - 47 | - 17 | $9 \cdot 5$ |  |
| 6664 | 252863 | C 7056 | 1231 | 27426-7 | $5858 \cdot$ I3 | 6292 | 15 | 25146.6 | 238 | 276 | 10.0 | 14 | $+\quad 57$ | $8 \cdot 7$ | K 2 |
| 6665 | $2{ }^{24} 2814$ | B 5220 | 1232 |  | 593.30 | 6468 | 16 | $242032 \cdot 1$ | 233 | 277 | 12.4 | 24 | + 6 | $8 \cdot 8$ | K o |
| 6660 | 282391 | C 7058 | 1243-4 | 27445-6 | $14 \quad 5915.94$ | +2.5585 | +-0009 | $283710 \cdot 9$ | -14.220 | +. 268 | . 0 | 4 | + 2 | $6 \cdot 90$ | A 0 |
| 6667 | 292614 | C 7059 |  |  | 5928.57 | 5351 | 8 | $294059 \cdot 5$ | 207 | 267 | 10.5 | - 49 | 21 | $9 \cdot 2$ |  |
| 6668 | $26 \quad 2646$ | C 7061 | 1251 | 27458 | 5954.92 | 6038 | 13 | $26 \quad 23 \quad 26 \cdot 6$ | 180 | 274 | 10.2 | + 3 | - 30 | $7 \cdot 9$ | Go |
| 6669 | $27 \quad 2446$ | ${ }^{\text {C }} 7062$ | 1253 |  | 5956.92 | 5821 | 11 |  | 178 | 272 | 10.6 | $\begin{array}{r} \\ +\quad 8 \\ \hline\end{array}$ | - 5 | 6.89 | K o |
| 6670 | 282392 | C 7063 | 1256 |  | 59 59.71 | 5586 | 9 | $\begin{array}{llll}28 & 32 & 24 \cdot 7\end{array}$ | 175 | 269 | I1.2 | 21 | - 23 | $9 \cdot 2$ |  |
| 6671 | 292617 | C 7064 |  |  | $15 \quad 0 \quad 19.25$ | +2.5319 | +.0008 | $29+417.6$ | -14.155 | +.267 | 12.8 | + 24 | + 30 | $9 \cdot 5$ |  |
| 6672 | 302608 | C 7065 |  |  | - 22.63 | 5187 | 7 | 301948.6 | 151 | 266 | 12.1 | + 19 | + 20 | $9 \cdot 3$ |  |
| 6673 | 292618 | C 7066 | 1265 | 27479 | - 27.51 | 5383 | 8 | $292545 \cdot 3$ | 146 | 268 | 10.5 | - 2 | + | $7 \cdot 81$ | A 2 |
| 6674 | 272447 | C 7067 | 1268 | 27481 | - $35 \cdot 30$ | 5836 | 12 |  | 139 | 273 | 10.5 | - 133* | - 20* | $4 \cdot 67$ | K 。 |
| 6675 | 252867 | C 7070 | 1271 |  | - $48 \cdot 71$ | 6306 | 15 | $24 \quad 59 \quad 7 \cdot 7$ | 124 | 278 | 10.8 |  | - 5 | $8 \cdot 7$ | K 5 |
| 6676 | 262647 | C 7071 | 1272 | 27491-2 | $15050 \cdot 29$ | $+2.6138$ | $+\cdot 0014$ | $254844^{1 / 1}$ | -14.123 | $+\cdot 276$ | $9 \cdot 2$ | - 65 | - 76 | 8.1 | F 8 |
| 66771 |  | L 5373 |  |  | 122.21 | 5102 | 7 | $\begin{array}{llllllllll}30 & 36 & 10.8\end{array}$ | 090 | 265 | 11.9 | - | - 8 | $9 \cdot 5$ |  |
| 6678 | 312690 | L 5375 | 1283 |  | 123.22 | 4970 | 7 |  | $089^{\circ}$ | 265 | 11.0 | 21 | + | $9 \cdot 5$ |  |
| 6679 | 242817 | B 5234 |  | $27511-3$ | 159.27 | 6392 | 17 | $24{ }^{26} 44 \times 7$ | 051 | 280 | 11.2 | 12 | + | 9.0 |  |
| 6680 | 312695 | L 5378 | 1297 | 27525 | 25.05 | 4902 | 7 | 312448.6 | 045 | 265 | 10.2 | + 4 | - 17 | 7.9 | K 5 |
| 6681 | 292621 | C 7076 | 1299 | 27536 | $\begin{array}{llll}15 & 2 & 16.54\end{array}$ | +2.5359 | +-0009 | 292051.9 | -14.033 | $+270$ | I1.2 | + 10 | + 14 | 8.2 |  |
| 6682 | 292622 | C 7078 | 1300 | 27538 | 220.39 | 5263 | 8 | $294648 \cdot 6$ | 029 | 269 | 11.6 | + 1 | + 11 | 8.8 |  |
| 6683 | 252871 | C 7077 | 1298 | 27526-8 | 221.59 | 62151 | 15 |  | 028 | 278 | 11.6 | - | - 5 | $8 \cdot 6$ | G 0 |
| 6684 | $27 \quad 2450$ | C 7079 | 1301-3 | 27540 | 227.89 | 5904 | 13 | $\begin{array}{llll}26 & 47 & 6 \cdot 4\end{array}$ | 021 | 276 | 11.8 | - 13 | - $4^{1}$ | $8 \cdot 3$ | K 2 |
| 6685 | 312697 | L 5380 |  |  | 234.44 | 4843 | 6 | $\begin{array}{llll}31 & 37 & 3.8\end{array}$ | 015 | 265 | 12 | 14 | 15 | $9 \cdot 2$ |  |
| 6686 | 292624 | C 7080 |  | 27549 | $\begin{array}{llll}15 & 2 & 36.86\end{array}$ | +2.5309 | +.0009 | $2932 \quad 24 \cdot 1$ | $-14.012$ | $+\cdot 270$ | 12.2 | 8 | - 61 | $8 \cdot 6$ | K |
| 6687 | 312696 | L 5381 | ${ }^{1} 306$ | 27556 | $237 \cdot 66$ | 4863 | , | 313125.4 | OII | 265 | 12.8 | - 30 | + 36 | 8.6 | G 5 |
| 6688 | 292626 | C 7081 | 1304 | 27551 | $240 \cdot 33$ | 5354 | 9 | 291953.9 | -008 | 271 | 12.4 |  |  | $8 \cdot 9$ | A |
| 6689 | 302612 | L 5383 |  |  | $\begin{array}{ll}3 & 4.28\end{array}$ | 5021 | 8 |  | 13.983 | 266 | 12.4 | - 26 | + 8 | $9 \cdot 5$ |  |
| 6690 | 302611 | L 5384 |  |  | $3 \quad 7.70$ | 5115 | 9 | $\begin{array}{llllll}30 & 21 & 24.9\end{array}$ | 980 | 267 | 10.8 | + 28 | - 8 | 8.6 |  |
| 6691 | 292627 | C 7083 | 1319 | 27586 | $\begin{array}{llll}15 & 3 & 8.73\end{array}$ | +2.5411 | 11 | 29 I 9-1 | - 13.979 | $+\cdot 272$ | 10.8 | - 35 | + 14 | 8.1 | F 8 |
| 6692 | 252873 | C 7084 | 1322 | 27570-2 | 320.89 | 6210 | 17 | $2513 \quad 9 \cdot 1$ | 966 | 280 | 11.1 | +138* | -183* | $5 \cdot 03$ | Fo |
| 6693 | $27 \quad 2456$ | C 7087 |  |  | $357 \cdot 13$ | 5701 | 13 | $273543 \cdot 1$ | 928 | 276 | 10.4 | + 74 | + 5 | $9 \cdot 5$ |  |
| 6694 | 292628 | C 7088 | 11 |  | 41.44 | 5412 | 11 | $28 \quad 55 \quad 28 \cdot 7$ | 924 | 272 | 12.0 | + 68 | + 102 | $9 \cdot 5$ |  |
| 6695 | 292629 | C 7089 | 19 | 27602 | $+11.60$ | 5422 | 11 | $285148 \cdot 5$ | 913 | 272 | 10.2 | + 14 | + | $7 \cdot 35$ | G 5 |
| 6696 | 272457 | C 7090 | 25-6 |  | $15 \quad 421.54$ | +2.5808 | +.0014 | $27 \quad 3{ }^{2} \mathbf{2 1 \cdot 2}$ | -13.903 | + 277 | 11.0 | 16 | 6 | 8.0 | K |
| 6697 | 262656 | C 7091 | 28-9 | 27614 | 430.64 | 5891 | 14 | $26 \quad 3844.4$ | 893 | 278 | 10.9 | -* | - 29* | $5 \cdot 73$ | K。 |
| 6698 | 252876 | C 7093 | 33 | 27619-20 | $440 \cdot 25$ | 6137 | 16 | $25 \quad 278.9$ | 883 | 281 | $11 \cdot 2$ | 12* | + 6* | $5 \cdot 94$ | K o |
| 6699 | 312702 | L 5390 |  |  | + 45.29 | 4858 | 8 |  | 87.8 | 268 | 11.2 | + | - 18 | 8.6 | K o |
| 6700 | 242823 | B 5248 | 36 |  | $456 \cdot 14$ | 6312 | 19 | $243425 \cdot 6$ | 866 | 283 | 12.2 | + 13 | $+31$ | $9 \cdot 5$ | - |



|  |  |  |  |  |  |  |  |  |  |  |  | Annua | al P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{O}$. | Precession. | Sec. Var. | Dee. 1910\%. | Precession. | Sec. Var. | Epoch $1900+$ | $\underset{\text { R. . A. }}{\text { R }}$ | $\begin{gathered} \text { Dec. } \\ \sim=001 . \end{gathered}$ | Mag. | Spectral Type. |
|  | $\bigcirc$ |  |  |  | h m 8 | $s$ | s | - , |  | " |  |  |  |  |  |
| 6751 | 252896 | C7153 | 275 |  | $\begin{array}{llll}15 & 15 & 5 \cdot 30\end{array}$ | $+2.5926$ | +.0020 | $\begin{array}{llll}25 & 31 & 18.8\end{array}$ | -13.2II | $1 \cdot 290$ | 10.8 | + | $+7$ | 8.1 | Ko |
| 6752 | $30 \quad 2642$ | L 5448 | 281 | 27963 | $15 \quad 7 \cdot 72$ | 4864 | 15 | $301437 \cdot 0$ | 209 | 277 | I I. 3 | - 38 | + 25 | 8.1 | F 2 |
| 6753 | $25 \quad 2897$ | C 7154 | 277 | 27955 | $15 \quad 8 \cdot 75$ | 5983 | 21 | $25 \quad 1512.2$ | 208 | 291 | 12.0 | + 6 | - 20 | $8 \cdot 5$ | G 5 |
| 6754 | 2612677 | C 7155 |  | 27958 | $15 \quad 10.28$ | 5817 | 20 | 26 I 17.8 | 206 | 288 | 11.42 | - 398 | - 116 | 8.1 | G 0 |
| 6755 | $28 \quad 2419$ | C7156 |  |  | I $5 \quad 14.44$ | 5259 | 16 | $2831 \quad 26 \cdot 3$ | 201 | 282 | 11.7 | - 7 | $+4^{6}$ | 8.8 |  |
| 6756 | 312721 | L 5449 |  |  | $\begin{array}{llll}15 & 15 & 21.62\end{array}$ | $+2 \cdot 4674$ | $+.0014$ | $311117 \cdot 2$ | -13.194 | +.277 | 10.8 | - 31 | - 16 | $9^{\cdot 1}$ | G 0 |
| 6757 | 302643 | C 7158 |  |  | 1551.63 | 4930 | 15 | $2953 \quad 37 \cdot 5$ | 161 | 280 | 10.0 | - 18 | - 14 | $8 \cdot 14$ | Ko |
| 6758 | 302647 | C 7162 | 309 | 27999 | $1625 \cdot 14$ | 4906 | 15 | $295631 \cdot 6$ | 124 | 280 | $9 \cdot 1$ | - 96* | - $5^{8 *}$ | $5 \cdot 57$ | K |
| 6759 | $28 \quad 2.420$ | C 7163 | 308 | 27998 | 1629.43 | 5336 | 16 | $28 \quad 4 \quad 28 \cdot 2$ | 119 | 283 | $9 \cdot 6$ | - 16 | + 6 | $8 \cdot 2$ | G 5 |
| 6760 | 292656 | C7165 |  |  | $1634 \cdot 37$ | 4986 | 15 | $29 \quad 35 \quad 19.6$ | 114 | 282 | $9 \cdot 4$ | - 18 | + 21 | $8 \cdot 9$ |  |
| 6761 | 302648 | C 7166 | 313 | 28006 | $\begin{array}{llll}15 & 16 & 36.07\end{array}$ | $+2.4872$ | +.0015 | 3044.1 | -13.112 | +.279 | $10 \cdot 2$ | - 56 | - 17 | $8 \cdot 6$ | K o |
| 6762 | 312723 | L 5460 |  |  | 176.66 | 4575 | 14 | $\begin{array}{llllll}31 & 15 & 53.8\end{array}$ | 078 | 277 | 11.9 | - 21 | + 10 | $9 \cdot 2$ |  |
| 6763 | 252901 | C 7167 |  |  | $17 \quad 9.58$ | 5999 | 22 | 25 0 28.1 | 075 | 294 | $12 \cdot 2$ | + 26 | - 36 | $9 \cdot 2$ |  |
| 6764 | 312724 | L 5461 | 326 | 28028 | 17 II•2I | 4443 | 14 | $\begin{array}{llll}31 & 4^{8} & 1 \cdot 7\end{array}$ | 073 | 276 | 11.6 | - 161 | + 143 | 6.86 | F 5 |
| 6765 | 252902 | C 7168 | 319 | 28020-1 | $17 \quad 13.52$ | 5939 | 21 | $25 \quad 1655 \cdot 6$ | 070 | 292 | 12.8 | - 18 | - 22 | $6 \cdot 44$ | K o |
|  |  | C 7170 |  |  | $15 \quad 17 \quad 17.05$ | $+2 \cdot 548 \mathrm{I}$ | 018 | 27 21 35.2 | -13.066 | +.287 | 13.0 | - 33 | + 14 | $9 \cdot 0$ |  |
| $6767$ | $\int^{27} \quad 2488$ | C717I |  |  | 1718.26 | + 5479 | 18 | $272147 \cdot 8$ | 065 | 287 | 12.4 | - 33 | + 14 | $8 \cdot 5$ |  |
| 6768 | $26 \quad 2681$ | C7169 | 321 |  | $17 \begin{array}{ll}17 & 17.58\end{array}$ | 5805 | 20 | 2553 36.0 | 066 | 291 | 13.0 | - 40 | - 117 | $8 \cdot 3$ | K o |
| $6769$ | 272479 | C 7173 |  |  | 17 38.53 | 5487 | 19 |  | 043 | 287 | 12.6 |  |  | 9-1 |  |
| 6770 | 242850 | C 7172 | 333 | 28035 | $1740 \cdot 11$ | 6064 | 22 | $243958 \cdot 6$ | 041 | 294 | 12.9 | - 17 | - 16 | 7-16 | A 0 |
| 6771 | 312725 | L 5465 |  |  | $\begin{array}{lllll}15 & 17 & 43.86\end{array}$ | $+2.4457$ | 14 | 314126.0 | -13.037 | $+\cdot 276$ | 12.2 | - | - 27 | var. | Md |
| 6772 | 312726 | L 5466 | 345-6 |  | $1750 \cdot 16$ | 4640 | 15 | $305547 \cdot 7$ | 030 | 277 | 12.8 | - 12 | - 5 | $9 \cdot 5$ |  |
| 6773 | $27 \quad 248 \mathrm{I}$ | C 7176 |  |  | 18 2.11 | 5384 | 18 | $27 \quad 4316 \cdot 3$ | -16 | 288 | 13.4 | + 21 | - 28 | $9 \cdot 5$ |  |
| 6774 | 312727 | L 5467 |  |  | $18 \quad 2 \cdot 19$ | 4563 | 15 |  | 016 | 278 | 13.8 | - 11 | + 35 | 9.08 | G 5 |
| 6775 | $28 \quad 2423$ | C7177 |  | 28052 | $18 \quad 7 \cdot 47$ | 5236 | 17 | $282148 \cdot 0$ | 011 | 286 | 13.6 | + 23 | - 13 | $9 \cdot 5$ |  |
| 6776 | $25 \quad 2904$ | C 7178 | 352 | 28056-7 | $15 \quad 18 \quad 20.62$ | +2.5857 | $+\cdot .0022$ | $2533 \quad 57 \cdot 2$ | -12.996 | +. 293 | 10.6 | 8 | - 3 | $7 \cdot 8$ | A 0 |
| 6777 | $26 \quad 2685$ | C7181 | 359 | 28064 | $1833 \cdot 12$ | 5770 | 21 | $255644^{\circ} 0$ | 982 | 292 | $10 \cdot 4$ | + 14 | - 20 | $7 \cdot 38$ | K O |
| 6778 | $28 \quad 2425$ | C7183 | 362 | 28083 | $18 \quad 58 \cdot 96$ | 5215 | 18 | $282240 \cdot 0$ | 953 | 286 | 10.4 | + 9 | + 7 | $7 \cdot 46$ | Ko |
| 6779 | 312729 | L 5475 | 373 |  | $193 \cdot 92$ | 4626 | 16 | $\begin{array}{llll}30 & 52 & 6 \cdot 7\end{array}$ | 949 | 278 | 10.4 | + 14 | - 14 | 8.14 | F 8 |
| 6780 | 322577 | L 5477 | 379 |  | 1913.65 | 4376 | 15 | $315237 \cdot 1$ | 937 | 277 | $9 \cdot 8$ | - 43 | - 138 | $8 \cdot 54$ | F 8 |
| 678 I | 302653 | L 5478 | 377 | 28100 | $15 \quad 19829.21$ | $+2.4679$ | +.0017 | $303644 \cdot 1$ | -12.920 | $+\cdot 281$ | 9*9, $1 \times 12$ | + 101* | - 198* | $5 \cdot 05$ | G 0 |
| 6782 | 292660 | C7188 | 378 | $28101$ | $1931 \cdot 24$ | 4978 | 18 | 29218.9 | 917 | 284 | 10.6 | - 64 | - 56 | $9 \cdot 2$ | G 5 |
| 6783 | $25 \quad 2908$ | C7189 | 387 | 28111-2 | $1959 \cdot 36$ | 5819 | 22 | $25 \quad 3615 \cdot 2$ | 886 | 295 | $9 \cdot 4$ | - 5 | - 23 | 8.I | F 5 |
| 6784 | 252910 | C7190 |  | 2811506 | $205 \cdot 96$ | 5865 | 22 | $\begin{array}{lllll}25 & 23 & 6 \cdot 4\end{array}$ | 879 | 294 | . 10.2 | - II | - 5 | 8.1 | K |
| 6785 | 242855 | B 5304 |  |  | $20 \quad 8 \cdot 70$ | 6089 | 24 | 24214.9 | 876 | 297 | I 1.0 | - | - 13 | $9 \cdot 2$ |  |
| 6786 | 242856 | B 5305 |  | 28120 | $15 \quad 20 \quad 21.27$ | $+2 \cdot 6083$ | +.0024 | $242142 \cdot 9$ | -12.862 | $+\cdot 297$ | 10.5 | 1 | + 3 | $8 \cdot 9$ |  |
| 6787 | 312732 | L 5482 |  |  | 2022.90 | 4564 | 16 | 31023.0 | 860 | 280 | II. 6 | - 39 | - 10 | $9 \cdot 5$ |  |
| 6788 | 302656 | L 5483 | 408 |  | 2116.47 | 4697 | 18 | $\begin{array}{llll}30 & 22 & 30.9\end{array}$ | 800 | 281 | $10 \cdot 7$ | - 14 | - 23 | $9 \cdot 2$ | K o |
| 6789 | 292663 | C 7194 | 409 | 28145 | 2118.43 | $49^{14}$ | 19 | $292746 \cdot 6$ | 798 | 285 | $9 \cdot 7$ | - 15 | - 32 | $8 \cdot 8$ | K |
| 6790 | 252912 | C7193 | 404 | 28139-40 | $2120 \cdot 36$ | 5898 | 24 | $25.8 \quad 8.9$ | 795 | 296 | $10 \cdot 5$ | + 9 | - 98 | $7 \cdot 96$ | F 5 |
| 6791 | $28 \quad 2431$ | C 7195 |  |  | $\begin{array}{llll}15 & 21 & 22.82\end{array}$ | +2.5093 | +.0019 | $284038 \cdot 5$ | -12.793 | +.287 | 11.2 | - 19 | - 14 | 9.1 |  |
| 6792 | $27 \quad 2484$ | C 7196 | 426-8 |  | 2153.20 | 5486 | 21 | $265637 \cdot 5$ | 758 | 291 | 10.6 | - 15 | + 8 | $8 \cdot 3$ | F 5 |
| 6793 | $27 \quad 2485$ | C 7197 |  |  | $2156 \cdot 79$ | 5394 | 20 | $27 \quad 20 \quad 23.6$ | 754 | 290 | $9 \cdot 8$ | - 16 | - 25 | $8 \cdot 7$ |  |
| 6794 | 292664 | C 7199 |  | 28177 | $22 \quad 15 \cdot 37$ | 4851 | 18 | 293837.8 | 734 | 285 | 10.6 | - 18 | - 54 | $9 \cdot 5$ |  |
| 6795 | 272487 | C 7200 | 436 |  | $22 \quad 24 \cdot 85$ | 5455 | 22 | $\begin{array}{llll}27 & 2 & 4.4\end{array}$ | 723 | 292 |  | - 58 | - 38 | $8 \cdot 7$ |  |
| $6796$ | $28 \quad 2432$ | C 7201 |  | 28188 | $\begin{array}{llll}15 & 22 \quad 43 \cdot 92\end{array}$ | $+2.5125$ | +.0019 | $28 \quad 2632 \cdot 8$ | -12.701 | $+289$ |  |  | $-\quad 16$ | $7 \cdot 64$ | K 2 |
| $6797$ | $27 \quad 2489$ | C 7204 |  |  | 22 48-37 | $5291$ | $21$ | $27 \quad 43 \quad 1 \cdot 9$ | 696 | 291 |  | $1+\quad 17$ | $\text { - } \quad 39$ | 8.1 | F 8 |
| $6798$ | 292667 | C 7205 | 452 |  | $23 \quad 2.23$ | 4992 | $20$ | $28 \quad 58 \quad 55 \cdot 5$ | 681 | 287 | 11.8 | $\text { - } \quad 37$ | - 17 | $8 \cdot 5$ | Ko |
| $6799$ | 272491 | C 7206 | 453 | 28198 | $23 \quad 7 \cdot 10$ | 5315 | $21$ | $2735 \quad 25 \cdot 1$ | 675 | 291 | 11.6 | - 39 | + 8 | $8 \cdot 1$ | K 5 |
| 6800 | 242864 | B 5318 |  |  | 23 II.30 | 6065 | 25 | $24 \quad 1346 \cdot 8$ | 670 | 300 | 10.4 | + 6 | - 40 | $8 \cdot 6$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$ | Precession. | Sec. Var. | Dec. 191000. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\xrightarrow[\text { R. A. }]{\substack{\text {. } \\ \hline}}$ | Dec. $\% .001$ |  |  |
|  | - |  |  |  | $\mathrm{nc}^{\mathrm{m}} \mathrm{m}$ | 8 | 8 | - " " |  | " |  |  |  |  |  |
| 6801 | 252916 | C 7207 | 463 | 28186-211 | $15 \quad 23$ 46.61 | +2.5794 | $+\cdot 0024$ | 252451.9 | -12.631 | + 298 |  | + 2* | - 39* | $6 \cdot 26$ |  |
| $6802$ | 292670 | C 7208 | 480 | 28232 | 247.01 | 4867 | 19 | $292456 \cdot 5$ | 607 | 287 | 12.7 | - 133* | + $76 *$ | 3.72 | $\mathrm{Fop}$ |
| $6803$ | 262690 | C 7210 | 478-9 |  | 2411.45 | 5523 | 22 | $2635 \quad 23.7$ | 602 | 294 | 11.2 | - 15 | - 12 | $9 \cdot 2$ |  |
| 6804 | 302661 | L 5494 | 485 |  | $2421 \cdot 46$ | 4619 | 19 |  | 591 | 283 | 11.4 | 3 | 19 $+\quad 1$ | $8 \cdot 8$ |  |
| 6805 | 302662 | L. 5495 | 489 | 28241 | 2428.71 | 4641 | 19 | $\begin{array}{llll}30 & 19 & 0.0\end{array}$ | 583 | 284 | 11.2 | 7 | - 35 | $8 \cdot 7$ |  |
| 68 | 272493 | C7213 | 7 |  | $152431 \cdot 22$ | $+2 \cdot 5464$ | 0022 | $26 \quad 4919.4$ | -12.580 | +-294 | 11.0 | - 17 | - 57 | 8.5 | G 5 |
| 6807 | 262692 | C 7214 | 490 | 28240 | 2438.68 | 5662 | 23 | $255^{56} 12 \cdot 2$ | 572 | 297 | 10.2 | - 4 | + 7 | $8 \cdot 2$ | Ko |
| 6808 | $28 \quad 2435$ | C 7216 |  |  | $2446 \cdot 86$ | 5201 | 21 | $2756 \quad 28.3$ | 562 | 292 | 10.2 | - 13 | - 55 | 9.1 |  |
| 6809 | $27 \quad 2494$ | C 7217 | 496 | 28244 | $2455 \cdot 58$ | 5313 | 21 | $272652 \cdot 0$ | 552 | 293 | 10.0 | - 36 | + + | $7 \cdot 53$ | F 8 |
| 6810 | $25 \quad 2922$ | C 7219 | 497 | 28245-73 | $25 \quad 2 \cdot 32$ | 5724 | 23 | $253745 \cdot 2$ | 545 | 298 | 10.6 | + 31 | 1 $-\quad 27$ | 8.2 | K |
| 68 | 312738 | L 5498 |  |  | $\begin{array}{lll}15 & 25 & 7.52\end{array}$ | +2.4379 | +.0019 | $\begin{array}{llll}31 & 19 & 27.6\end{array}$ | -12.539 | $+\cdot 283$ | 12.4 | - 45 | $\square 18$ | $9 \cdot 1$ |  |
| 6812 | 312739 | L 5499 | 508 |  | $2510 \cdot 16$ | 4474 | 18 | $\begin{array}{llllllllll}30 & 56 & 27.2\end{array}$ | 536 | 283 | 10.8 | + 11 | + 13 | 9-1 |  |
| 6813 | 272495 | C 7220 | 517 | 28260 | $2534 \cdot 28$ | 5310 | 22 | $272431 \cdot 1$ | 508 | 293 | 10.0 | - 14 | + 8 | $8 \cdot 5$ | K。 |
| 6814 | 242873 | B 5334 |  | 28271 | 25 59.81 | 6041 | 27 | $24 \quad 733.7$ | 479 | 303 | $9 \cdot 8$ | - 27 | 22 | $7 \cdot 54$ | A 2 |
| 6815 | 292674 | C 7222 |  |  | $26 \quad 5 \cdot 74$ | 4864 | 21 | $2915 \quad 25.9$ | 472 | 289 | 11.2 | 43 | - 27 | 9.5 |  |
| 6816 | 262694 | ${ }^{\text {C }} 7221$ | 523 | 28275-6 | $\begin{array}{llll}15 & 26 & 7 \cdot 42\end{array}$ | +2.5663 | +.0024 | $2549 \quad 0.8$ | - 12.471 | +-298 | $1 \mathrm{I} \cdot 1$ | + 6 | + | $7 \cdot 88$ | K 2 |
| 6817 | 272496 | C 7223 | 526 | 28281 | $26 \quad 9 \cdot 69$ | 5273 | 22 | 27 3111.3 | 468 | 294 | - 0 | + | + 27 | $8 \cdot 7$ | F 8 |
| 68 | 242874 | B 5336 | 525 | 28280 | 2615.98 | 6050 | 27 | $\begin{array}{llllllllllll}24 & 3 & 53.9\end{array}$ | 461 | 303 | 11.2 | + 3 | - 49 | $7 \cdot 47$ | A 0 |
| 6819 | 312741 | L 5503 |  |  | $26 \quad 21 \cdot 27$ | 4368 | 19 |  | 455 | 283 | 11.8 | - 63 | + 20 | $9 \cdot 5$ |  |
| 6820 | $28 \quad 2438$ | C 7226 |  |  | $26 \quad 25 \cdot 60$ | 5070 | 21 | 282149.9 | 450 | 291 | 12.0 |  |  | $9 \cdot 5$ |  |
| 682 x | 252925 | C 7225 | 527 | 28287-308 | $1 \begin{array}{llll}15 & 26 & 27 \cdot 85\end{array}$ | +2.5694 | +.0024 | 253916.7 | - 12.447 | +.299 | $1 \mathrm{I} \cdot 0$ |  | - | $8 \cdot 7$ |  |
| 6822 | $28 \quad 2439$ | C 7227 | 535 | 28291-2 | $2633 \cdot 71$ | 5161 | 21 | $275756 \cdot 6$ | 440 | 293 | $9 \cdot 8$ | - 21 | - | $8 \cdot 3$ | A o |
| 6823 | 292677 | C 7228 |  |  | $2643 \cdot 64$ | 4762 | 20 | $293730 \cdot 9$ | 429 | 288 | 12.2 |  | - 23 | 9.5 |  |
| 6824 | 312742 | L 5507 | 538 | 28299 | 2644.33 | 4276 | 18 | $\begin{array}{lllllllllll}31 & 35 & 38.2\end{array}$ | 428 | 282 | $9 \cdot 2$ | 31 | - 17 | $6 \cdot 35$ | A 2 |
| 6825 | 292676 | C 7229 |  |  | $2645 \cdot 80$ | 4931 | 21 | $28 \quad 55 \quad 10 \cdot 9$ | 427 | 290 | 11.0 | + 74 | - 90 | $9 \cdot 1$ |  |
| 6826 |  | L 5510 | 549-50 |  | $15 \quad 271150$ | +2.4420 | +.0019 | $305833 \cdot 0$ | -12.397 | +. 284 | $9 \cdot 8$ | - 20 |  | $8 \cdot 9$ | Fo |
| 68 | 312746 | L5511 |  |  | 2717.01 | 4368 | 20 | 311048.5 | 391 | 284 | 10.8 | + 30 | + 18 $+\quad 1$ | $9 \cdot 1$ |  |
| 68 | 272499 | C 7232 | 556 | 28311 | 27 24.15 | 5220 | 22 | $273841 \cdot 7$ | 383 | 294 | II. 2 | - 9 | + | $8 \cdot 7$ |  |
| 6829 | 302670 | L 5513 | 566 | 28321 | $27 \quad 26.92$ | 4579 | 20 | $\begin{array}{lllllllllllll}30 & 18 & 53.6\end{array}$ | 379 | 286 | 11.8 | , | - 10 | $8 \cdot 8$ | K |
| 6830 | 262697 | C 7234 | 559 | 28315 | $2730 \cdot 20$ | 555 I | 24 | $\begin{array}{llllll}26 & 12 & 13.9\end{array}$ | 376 | 298 | 12.0 |  | - $\quad 27$ | $8 \cdot 5$ |  |
| 6831 | 302672 | L 5514 | 569 | 283 | 152736.49 | +2.4595 | +.0020 | $\begin{array}{lll}30 & 14 & 0.2\end{array}$ | -12.369 | $+\cdot 287$ | 12.1 | + 16 | - 7 | $9 \cdot 5$ |  |
| 6832 | 242880 | B 5342 |  | 28339 | 2810.06 | 5948 | 26 | 242321.8 | 330 | 303 | 9.8 | + 11 | + 14 | $9 \cdot 5$ |  |
| 6833 | 242882 | B 5346 | 591 |  | $2840 \cdot 99$ | 5985 | 27 | 241150 | 294 | 305 | $9 \cdot 8$ | - 33 | + 54 | $8 \cdot 7$ |  |
| 6834 | 292680 | C 7239 | 5 | 28364 | $28 \quad 58 \cdot 37$ | 4871 | 21 | $2859 \begin{array}{llll}25 \cdot 5\end{array}$ | 274 | 292 | $9 \cdot 4$ | - 2 | $\begin{array}{r}\text { 1 } \\ \hline\end{array}$ | $8 \cdot 9$ |  |
| 6835 | 272502 | C 7240 | 606 |  | $29 \quad 6 \cdot 16$ | 5166 | 22 | $274422 \cdot 1$ | 265 | 296 | 10.2 |  | + 4 | $8 \cdot 8$ |  |
| 6836 | 302673 | L. 5518 | 610 |  | $\begin{array}{llll}15 & 29 & 7.48\end{array}$ | +2.4423 | +.0020 | 304757.0 | -12.264 | +.286 | 10.8 | 23 | + 4 | $8 \cdot 6$ | G 5 |
| 6837 | 302675 | L 5520 | 613-4 |  | $2916 \cdot 31$ | 4474 | 20 | $3035 \quad 3.2$ | 254 | 285 | II.1 | - 24 | + 5 | $8 \cdot 1$ | Ko |
| 6838 | 312750 | L 5521 | $617-8$ | 28380 | 2918.00 | 4202 | 19 | $313945 \cdot 1$ | 252 | 284 | 6 | - 20* | - 26* | $4 \cdot 17$ | B 5 |
| 6839 | 282443 | C 7242 | 611 | 28373 | 2919.25 | 5143 | 22 | $\begin{array}{llll}27 & 49 & 47\end{array}$ | 250 | 296 |  | - 61 | - 129 | $8 \cdot 3$ |  |
| 6840 | 242884 | B 5348 | 609 | 28368-75 | 2919.99 | 5896 | 27 | 243212.1 | 250 | 304 | 11.6 | - 6 | + 34 | $8 \cdot \mathrm{I}$ |  |
| 6841 | 272504 | C 7243 |  |  | 152921.41 | +2.5277 | +.0023 | $271446 \cdot 1$ | -12.248 | + 297 | 4 | - 33 | - 24 | 9.2 |  |
| 6842 | 292681 | C 7244 |  |  | $2927 \cdot 06$ | 4696 | 21 | 2940 15.2 | 241 | 290 | $2 \cdot 4$ | - 23 | $\bigcirc$ | $9 \cdot 5$ |  |
| 6843 | 272506 | C 7245 |  |  | 2935.59 | 5342 | 23 | 265653.0 | 231 | 298 | 11.3 | + 45 | - 25 | $9 \cdot 5$ |  |
| 6844 | 292682 | C 7246 | 632 | 28392 | $2957.79$ | 4708 | 21 | $293435 \cdot 1$ | 206 | 291 | 10.6 | + 48 | - 64 | $8 \cdot 7$ | G 5 |
| 6845 | $\left\}_{272}\right.$ |  |  |  | $30 \quad 2.65$ | 5320 | 23 | 27 - 34.5 | 200 | 298 | 12.9 | - 13 | $+7$ | $8 \cdot 9$ |  |
| 6846 |  | C 7247 |  | 28391 | 15303.20 | +2.5320 | +.0023 | $27 \quad 038.8$ | - 12.200 | +-298 | 12.6 | - 13 | + 7 |  |  |
| 6847 | 242886 | B 5353 |  | 28390 | $30 \quad 7.44$ | 5874 | 27 | $243435 \cdot 1$ | 125 | 305 | 13.1 | + 7 | - | $9 \cdot 2$ |  |
| 6848 | 272509 | C 7248 | 635 | 28398-9 | 3016.85 | 5362 | 24 | $264^{88} 38 \cdot 1$ | 184 | 298 | $11 \cdot 1$ | + 10 | - 18 | $8 \cdot 3$ |  |
| 6849 | 292684 | C 7252 |  | 28431 | $3048 \cdot 70$ | 4732 | 22 | $\begin{array}{llllllllllll}29 & 24 & 40 \cdot 1\end{array}$ | 148 | 292 | 12.0 | - ${ }^{\circ}$ | + 7 | $9 \cdot 5$ |  |
| 6850 | 272512 | C 7253 | 651 | 28417-30 | 3052.63 | 5303 | 24 | $\begin{array}{lll}27 & 1 & 1.7\end{array}$ | 142 | 299 | 11.0 | $+90 *$ | - 102* | $2 \cdot 31$ | A 0 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annue | al P．M． |  |  |
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| No． | B．D． | A．G．C． | W．B．（2）． | Lalande． | R．A． 19100. | Precession． | Sec．Var． | Dec．1910．0． | Precession． | Sec. Var. | Epoch 1900＋ | R．A． －•0001． | Dec． ＂．001． | Mag． | Spectral Type． |
|  | 。 |  |  |  | h m | s | s | －．．${ }^{\text {a }}$ |  | ＂ |  |  |  |  |  |
| 6851 | 272514 | ${ }_{\text {C }} 7254$ | 653 |  | $15 \quad 30 \quad 52.94$ | $+2.5172$ | ＋．0022 | $\begin{array}{llllllllllll}27 & 34 & 19\end{array}$ | －12．142 | ＋．297 | 12.0 | ＋ 43 | － 33 | $8 \cdot 7$ |  |
| 6852 | 272513 | C 7255 | 654 | 28429－32 | $3053 \cdot 56$ | ＋ 5257 |  | $271241 \cdot 1$ | 141 | 298 | 12.2 | － 44 | ＋ 40 | $8 \cdot 8$ |  |
| 6853 | 252932 | C 7256 | 652 |  | 3057.53 | 5697 |  | $25 \begin{array}{llll}25 & 18 & 7\end{array}$ | 137 | 305 | 11.2 | ＋ 56 | － 114 | $8 \cdot 5$ | G 5 |
| 6854 | 252933 | C 7257 | 655 |  | 3058.08 | 5735 | 26 |  | 136 | 306 | 1.6 | － 5 | － 72 | $9 \cdot 5$ |  |
| 6855 | 302677 | L 5528 |  |  | $3135 \cdot 88$ | 4493 | 22 | $\begin{array}{llllllllll}30 & 18 & 50 \cdot 9\end{array}$ | 092 | 289 | $9 \cdot 7$ | － 4 | － 25 | $9 \cdot 1$ |  |
| $68 ; 6$ | 262703 | ${ }^{\text {C }} 7261$ |  |  | 153136.07 | ＋2．5453 | ＋．0025 | $\begin{array}{llll}26 & 19 & 6.6\end{array}$ | －12．092 | $+300$ | 10.8 | ＋ 12 | － 39 | $9 \cdot 5$ |  |
| 6857 | 252936 | C 7262 | 674 |  | 3150.94 | 5764 | 27 | $24 \quad 56 \quad 29 \cdot 4$ | 074 | 305 | 10.2 | － 8 | $1+6$ | $9 \cdot 1$ |  |
| 6858 | 292686 | C 7263 |  | 28455 | $3154 \cdot 13$ | 4810 | 23 | $29 \quad 5 \quad 5 \cdot 3$ | 07 I | 294 | 11.0 | $\bigcirc$ | ＋ 13 | $9 \cdot 2$ | K |
| 6859 | 242892 | B 5362 |  |  | $326 \cdot 46$ | 5858 | 27 | 2430 2I•I | 056 | 307 | 12.2 | 10 | $+$ | $9 \cdot 2$ |  |
| 6860 | $28 \quad 2447$ | C 7266 | 688－9 | 28469 | 3215.83 | 4875 | 22 | 284225.7 | 046 | 294 | $9 \cdot 5$ | 11 | ＋ | $8 \cdot 3$ | F 8 |
| 6861 | 252938 | C 7264 |  | 28465 | 153215.92 | ＋2．5612 | 026 | $253438 \cdot 7$ | 12.045 | －303 | 11.4 | 14 | － 5 | 8.8 |  |
| 6862 | 252937 | ${ }^{\text {C }} 7265$ |  |  | 3216.81 | 5705 | 27 | 25 10 $15 \cdot 3$ | 044 | 305 | 2.4 | 39 | ＋ 70 | $9 \cdot 2$ |  |
| 6863 | 272517 | C 7270 | 701 |  | $3246 \cdot 79$ | 5161 | 23 | $272820 \cdot 3$ | 009 | 299 | 11.4 | $+\quad 41$ | － 16 | $9 \cdot 5$ | A |
| 6864 | 242894 | B 5364 | 697 | 28479－80 | 32 47－18 | 5928 | 28 | $\begin{array}{lllll}24 & 8 & 41 \cdot 7\end{array}$ | 009 | 309 | 9.4 | － | －II | 8.5 |  |
| 6865 | 302681 | L 5534 | 714 |  | $\begin{array}{ll}33 & 7 \cdot 16\end{array}$ | 4459 | 22 |  | 11．986 | 290 | 9.8 | －． 39 | $+44$ | $9 \cdot 5$ |  |
| 6866 | 302682 | L 5536 | 717 | 28505－6 | 153312.47 | ＋2．4468 | ＋．0022 | $\begin{array}{llll}30 & 17 & 19.3\end{array}$ | － 11.980 | ＋．290 | $9 \cdot 1$ | ＋ 75 | － 55 | $6 \cdot 52$ | F 5 |
| 6867 | $27 \quad 2520$ | C 7273 | 719 | 28501－3 | 3319.61 | 5250 | 23 | $27 \quad 3 \quad 22 \cdot 3$ | 971 | 300 | $9 \cdot 4$ | ＋ 19 | － 1 | $9 \cdot 2$ | K 0 |
| 6868 | 282451 | C 7274 | 734－5 |  | 33 51．28 | 4870 | 23 |  | 34 | 296 | $8 \cdot 8$ |  | t | 9－1 | G o |
| 6869 | 262708 | C 7276 |  |  | $\begin{array}{lll}34 & 4 \cdot 34\end{array}$ | 5500 | 26 | $255550 \cdot 6$ | 919 | 304 | $9 \cdot 4$ | ＋ 14 | － 38 | 8.5 | G 5 |
|  | $\} 302684$ |  |  |  | 3413.73 | 4418 | 23 | 302350.5 | 908 | 290 | 10.6 | 11 | ＋ 22 | $\} 8.2$ | F 8 |
| 6871 |  | L 5543 | 751 | 28537－8 | I5 3414.12 | ＋2．4418 | ＋－0023 | 302347.8 | －11．907 | －290 | 8 | 11 | ＋ 22 |  |  |
| 6872 | 252943 | C 7278 |  |  | 3417.49 | 5609 | 27 | 252633.2 | 903 | 306 | $0 \cdot 0$ | ＋ 10 | － $4^{6}$ | 9.2 |  |
| 6873 | 252944 | C 7279 | 45 | 28499－529 | 3418.60 | 5744 | 28 | 24 51 4 4－1 | 902 | 307 | 11.7 | ＋ 19 | － 25 | $9 \cdot 2$ |  |
| 6874 | 242901 | C 7280 | 750 | 28533－4 | $3424 \cdot 81$ | 5751 | 28 | $244858 \cdot 7$ | 895 | 308 | 9.8 | 4 | －$\quad 36$ | 7－12 | Mb |
| 6875 | 322607 | L 5545 | 782－3－4 | 28571 | $35 \quad 6.21$ | 4029 | 22 | 315041.5 | 846 | 287 | ． 8 | － 6 | 16 | $7 \cdot 7$ | A 3 |
| 6 | 262712 | C 7281 | 771 |  | 153513.16 | ＋2．5456 | ＋．0026 | $\begin{array}{llll}26 & 2 & 19.5\end{array}$ | －11．838 | ＋－304 | $9 \cdot 2$ | ＋ 20 | － 15 | $8 \cdot 1$ |  |
| 68 | 282454 | C 7283 |  | 28580－1 | $3540 \cdot 43$ | 5002 | 24 | $\begin{array}{llll}27 & 55 & 0.9\end{array}$ | 806 | 300 | $9 \cdot 0$ | － 46 | ＋ 64 | $8 \cdot 8$ | G 5 |
| 6878 | 302689 | L 5549 | 795－6 |  | $3547 \cdot 12$ | 436 I | 23 | $\begin{array}{lllllllllllllllll}30 & 29 & 57\end{array}$ | 798 | 293 | $9 \cdot 3$ | － 6 | － 26 | $8 \cdot 6$ | K 5 |
| 6879 | 292694 | C 7285 | 799 | 2858 | $3555 \cdot 17$ | 4613 | 23 | $29 \quad 298.7$ | 788 | 296 | $9 \cdot 1$ | － 26 | － 27 | $8 \cdot 1$ | F 8 |
| 6880 | 302691 | L 5553 |  |  | $3638 \cdot 11$ | 4318 | 23 | $3036 \quad 12.2$ | 738 | 292 | 2 | 4 | － 34 | $9 \cdot 5$ |  |
| 1 | 282456 | C 7286 | 837 | 28604－5 | 153654.80 | ＋2．494I | －024 | $\begin{array}{llll}28 & 4 & 38.5\end{array}$ | －11．718 | ＋－300 | 9.9 | － 30 | ＋ 20 | $8 \cdot 7$ | K |
|  | 312762 | L 5555 | 846－7－8 | 28615 | $3657 \cdot 38$ | 4012 | 22 | $31.4537 \cdot 7$ | 715 | 290 | 10.0 | －$\quad 59$ | ＋ 59 | $8 \cdot 8$ | G 5 |
| 6883 | 272522 | C 7287 |  |  | 3659.13 | 5148 | 25 | 27． $1250 \cdot 2$ | 713 | 302 | 11.5 | ＋ 49 | － 1 | $9 \cdot 5$ | K 0 |
| 6884 | 302692 | L 5556 | 849 |  | $\begin{array}{lll}37 & 5.84\end{array}$ | 4395 | 24 | $301539 \cdot 3$ | 705 | 294 | 9.6 | －$\quad 27$ | ＋ 32 | $7 \cdot 61$ | $\mathrm{K}_{2}$ |
| 6885 | 292699 | C 7289 |  | 28628 | 3719.86 | 4578 | 23 | 29316.0 | 688 | 296 | $9 \cdot 8$ | ＋ 15 | － 71 | 8.6 | K |
| 6886 | 252950 | C 7291 |  | 28627 | 153725.73 | ＋2．5474 | $+\cdot 0026$ | 2548 3．1 | －11．681 | ＋ 307 | ． 6 | 32 | ＋ 21 | $9 \cdot 5$ |  |
| 6887 | 302694 | L 5558 | 871 | 28643 | 3731.55 | 4416 | 24 | $30842 \cdot 0$ | 674 | 295 | I1．0 | ＋ 29 | ＋ 8 | $9 \cdot 1$ | G。 |
| 6888 | $26 \quad 2720$ | C 7294 |  |  | $3749 \cdot 96$ | 5325 | 26 |  | 653 | 305 | 110 | － 15 | － 17 | $9 \cdot 2$ | K o |
| 6889 | 262719 | C 7293 |  | 28648 | 3750.22 | 5417 | 26 | $\begin{array}{lll}26 & 1 & 2.8\end{array}$ | 652 | 306 | 11.0 | ＋ 1 | － 29 | $8 \cdot 7$ |  |
| 6890 | 282460 | C 7296 | 874 | 28655－6 | 3752.29 | 4873 | 25 |  | 650 | 300 | 10. | － 56 | ＋ 4 | $8 \cdot 1$ | K 5 |
| 6891 | 252953 | C 7295 | 873 | 28649 | 153753.62 | ＋2．5580 | $+\cdot 0027$ | $\begin{array}{llll}25 & 19 & 2.4\end{array}$ | －11．648 | ＋．308 | $1 \cdot 4$ | ＋ 27 | － 29 | 9．5 |  |
| 6892 | 272526 | C 7297 |  |  | $\begin{array}{ll}38 & 5.76\end{array}$ | 5129 | 26 | $271241 \cdot 6$ | 634 | 303 | 13.4 | － 5 | ＋ 11 | $9 \cdot 5$ | F 8 |
| 6893 | 312764 | $\mathrm{L}_{5} 561$ | 883－4 |  | 3810.69 | 4135 |  | 3111122.0 | 628 | 291 | 12.4 | ＋ 15 | － 12 | $9 \cdot 1$ | K |
| 6894 | 302695 | C 7298 | 902 | 28678 | $38 \quad 36 \cdot 58$ | 4453 | 24 | 295449.5 | 597 | 295 | ． 6 | － 52 | － 158 | $8 \cdot 61$ | G 5 |
| 6895 | 302696 | L 5564 |  |  | $38 \quad 36 \cdot 76$ | 4238 | 23 | 304524.8 | 597 | 293 | 12.5 | ＋ 16 | ＋ 13 | 9.1 |  |
| 6896 | 302697 | L 5565 | 903 |  | 153837.56 | ＋2．4224 | $+\cdot 0023$ | 304834.9 | －11．596 | ＋．292 | 12.8 | ＋ 2 | － 35 | $8 \cdot 9$ | Go |
| 6897 | 282462 | C 7300 |  |  | 3856.16 | 4796 | 25 | $\begin{array}{lllll}28 & 31 & 1.4\end{array}$ | 574 | 300 | 12.8 | － 13 | $+\quad 9$ | 9．5 | K |
| 6898 | 272528 | C 7299 | 905 |  | 3856.88 | 5134 | 25 | $27 \quad 748 \cdot 7$ | 573 | 303 | 12.5 | － 26 | ＋ 29 | 8.7 | G 5 |
| 6899 | $26 \quad 2722$ | C 7301 | 904－6 | 28684－6－7 | 3857.73 | 5265 | 27 | $263449 \cdot 4$ | 572 | 306 | $1 \mathrm{I} \cdot \mathrm{I}$ | －75＊ | ＋30＊ | $3 \cdot 93$ | A 0 |
| 6900 | 292701 | C 7303 |  |  | 3858.46 | 4482 | 24 | 294615.5 | 571 | 297 | 13.0 | － $4^{6}$ | +76 | $9 \cdot 51$ | K 。 |


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| No. | B.D. | A.G.c. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { Igoot } \end{aligned}$ | R.0001. | $\begin{gathered} \text { Dec. } \\ .001 . \end{gathered}$ | Mag. | Spectra Type. |
|  | - |  |  |  | h m s | s | 8 | , |  | " |  |  |  |  |  |
| 6901 | 252954 | C 7302 |  | 28683 | 153889.43 | $+2.5607$ | +-0029 | $25 \quad 734.4$ | -11.570 | +.310 | II.8 | + 12 | 33 | 8.8 |  |
| 6902 | 322619 | L 5569 |  | 28699 | $395 \cdot 38$ | 3905 | 23 | $3 \mathrm{I} 594 \mathrm{~T} \cdot 7$ | 564 | 290 | I. 4 | 12 | 6 | $7 \cdot 03$ | K $2{ }^{\prime}$ |
| 6903 | 252955 | C 7304 |  |  | $39 \quad 5 \cdot 64$ | 5458 | 28 | $2545 \quad 19 \cdot 2$ | 563 | 308 | 12.8 | - 15 | - 12 | 9.2 |  |
| 6904 | 282464 | C 7306 |  |  | 3917.60 | 4776 | 25 | $283424^{\circ} \mathrm{L}$ | 548 | -300 | 13.2 | - 20 | + 15 | $9 \cdot 5$ | F 8 |
| 6905 | 322620 | L $557^{\circ}$ | 918 |  | 3926.57 | 3913 | 23 | $\begin{array}{llll}31 & 56 & 4.4\end{array}$ | 538 | 290 | 11.8 | + 8 | + | $9 \cdot 1$ |  |
| 6906 | $28 \quad 2465$ | C 7307 |  |  | 153936.04 | +2.4722 | $+\cdot 0025$ | $2846 \quad 10.0$ | -II.526 | + $\cdot 300$ | 1.3 | - 34 | - 27 | $8 \cdot 7$ | K |
| 6907 | 312770 | L 5571 |  |  | 3937.95 | 4116 | 23 | $31885 \cdot 1$ | 524 | 293 | 12.8 | + $\quad 27$ | - $4^{\circ}$ | $9 \cdot 2$ | F 5 |
| 6908 | 312771 | L 5572 | 919-21 | 28709 | 3938.07 | 3979 | 23 | 314021.5 | 524 | 291 | 11.2 | + 53 | - 143 | $7 \cdot 30$ | F 8 |
| 6909 | 252956 | C 7308 |  |  | 3944.29 | 5640 | 29 | $24 \begin{array}{lll}26 & 2.6\end{array}$ | 517 | 311 | 11.6 | - 92 | - 13 | $9 \cdot 5$ |  |
| 6910 | 302699 | C 7309 | 924 | 28711 | 39 47.03 | 4413 | 24 | $2959 \quad \mathrm{I} \cdot 5$ | 513 | 296 | 9.8 | $+36$ | - 30 | $8 \cdot 2 \mathrm{I}$ | F 5 |
| 6911 | 282466 | C 7310 | 925 |  | 153950.02 | +2.4818 | +-0025 |  | - 11.510 | +-301 | 11.6 | + $\quad 2$ | 25 | 9.5 | G* 5 |
| 6912 | 252957 | C7313 | $93^{2}$ | 28713-4 | 403.61 | 5562 | 29 | $251449 \cdot 5$ | 494 | 310 | . 4 | - 16 | - 19 | 8.1 | K 5 |
| 6913 | 242914 | ${ }^{\text {C }} 7314$ | 938-9 | 28718-9 | 4015.01 | 5676 | 29 | $244437 \cdot 2$ | 480 | 312 | 10.2 | - 16 | - 23 | 7-21 | A 2 |
| 6914 | 252958 | C 7315 | 941 |  | 40 22.81 | 5620 | 29 | $245840 \cdot 0$ | 470 | 3 II | 10.9 | - 41 | - 20 | $9 \cdot 2$ |  |
| 6915 | 252959 | C7318 | 953-4 |  | $4040 \cdot 86$ | 5628 | 29 | $24 \quad 55 \quad 8.0$ | 449 | 312 | 12.0 | 6 | - 22 | $9 \cdot 2$ |  |
| 69 | 272532 | C 7320 |  |  | 154050.85 | +2.5128 | $+\cdot 0025$ | $27 \quad 115.1$ | -11.437 | +-306 | 11.0 | + 20 | + 27 | $9 \cdot 5$ | Ko |
| 6917 | 252963 | C 7323 | 964 | 28738-9 | 41 6.81 | 5605 | 29 | $24 \quad 59 \quad 27 \cdot 3$ | 418 | 312 | 10.4 | 11 | - 43 | $7 \cdot 41$ | A. 2 |
| 6918 | 292705 | C 7325 |  |  | 4112.24 | 4605 | 25 | 2978.2 | 4 II | 300 | 10.9 | - 29 | + 28 | $9 \cdot 5$ | Go |
| 6919 | 242917 | B 5404 | 965 | 28742 | 4113.14 | 5685 | 29 | $2438 \quad 27 \cdot 6$ | 410 | 313 | II•4 | $+$ | - 11 | $8 \cdot 8$ |  |
| 6920 | $28 \quad 2469$ | C 7326 | 971 -2 | 28749 | 4125.67 | 4693 | 25 | $2845 \quad$ I.6 | 395 | 301 | $9 \cdot 6$ | - 78 | + 28 | $7 \cdot 90$ | Go |
| 6921 | 242919 | B 5409 |  |  | $154145 \cdot 70$ | +2.5738 | $+\cdot 0030$ | 242231.3 | -11.371 | $+\cdot 314$ | 10.0 | - 5 | - 13 | 9.1 |  |
| 6922 | 292707 | C 7330 | 987 |  | 423.80 | 4556 | 26 |  | 350 | 300 | $9 \cdot 2$ | - 21 | - 21 | $8 \cdot 70$ |  |
| 6923 | 312776 | L 5580 |  |  | $4254 \cdot 29$ | 3942 | 25 | 313327.7 | 289 | 293 | 9.4 | - 4 | - 34 | $8 \cdot 9$ | F 8 |
| 6924 | 252965 | C 7333 | 1005 | 28776-7 | $43 \quad 0.99$ | 5488 | 30 | 252146.4 | 281 | 312 | 9.8 | - 31 | + 45 | $8 \cdot 7$ | G 5 |
| 6925 | 31 2777 | L 5582 |  | 28792 | $43 \quad 16.75$ | 4049 | 26 | $31 \quad 730 \cdot 0$ | 262 | 295 | $9 \cdot 5$ | + | $+4$ | 8.8 | A. 5 |
| 6926 | 272537 | C 7334 |  |  | 154320.90 | +2.4895 | +.0026 | $27 \quad 480.8$ | - 11.257 | + 305 | . 6 | - 41 | - 88 | $9 \cdot 1$ | G 5 |
| 6927 | 292713 | C 7336 | 1024 | 288 | 4326.48 | 4497 | 26 | $29 \begin{array}{llllllll} & 22 & 56.5\end{array}$ | 250 | 301 | 8.8 | - 16 | - 25 | 8.80 | K 5 |
| 6928 | 272538 | C 7335 | 1022 | 28794 | $43 \quad 26.82$ | 4966 | 26 | 2730.11 .4 | 250 | 305 | 10.4 | + 4 | - 16 | 8.09 | K ${ }_{2}$ |
| 6929 | 31 2779 | L 5583 | 1027-8 | 28805 | 43 32.64 | 4118 | 25 | $3050 \cdot 38 \cdot 3$ | 243 | 296 | $9 \cdot 6$ | - 3 | - 33 | $7 \cdot 64$ | A 0 |
| 6930 | $26 \quad 2728$ | C 7338 |  |  | 43 34-29 | 5294 | 28 | $26835 \cdot 1$ | 241 | 311 | II.2 | 24 | 14 | $9 \cdot 1$ | K 5 |
| 6931 | 282475 | C 7342 | 1035 | 28817-8 | 1543 59.17 | $+2.4648$ | +.0026 | $284442 \cdot 4$ | -11.2II | + 303 | $9 \cdot 6$ | - 40 |  | $7 \cdot 43$ | $\mathrm{F}_{2}$ |
| 6932 | 302707 | C 7343 |  |  | $44 \quad 3.05$ | 4300 | 25 | $\begin{array}{llll}30 & 6 & 17.5\end{array}$ | 206 | 299 | 11.7 | + 11 | - 6 | $9 \cdot 5$ | K o |
| 6933 | 272540 | C 7344 |  |  | $44 \quad 7 \cdot 47$ | 5073 | 27 | 27 I 115.3 | 201 | 308 | 12.0 | - 11 | + 33 | $9 \cdot 5$ | A 5 |
| 6934 | $\begin{array}{llll}26 & 2731 \\ 31 & 2782\end{array}$ | C 7345 |  | 28821 | 44 19.11 | 5307 | 28 | 26 2 20.4 | 187 | 311 | 11.8 | + 6 | 10 | $9 \cdot 5$ | K 0 |
| 6935 | 312782 | L 5591 |  |  | $4425 \cdot 11$ | 3891 | 25 | $\begin{array}{llllllllllll}31 & 38 & 10.8\end{array}$ | 179 | 293 | 11.6 | 36 | 20 | $9 \cdot 5$ | G 5 |
| 6936 | 302709 | L 5593 |  |  | $1544 \begin{array}{ll} \\ 28.78\end{array}$ | +2.4244 | +.0025 | 301721.6 | -11.175 | +.298 | 10.8 | 80 | + 49 | $9 \cdot 2$ | G 5 |
| 6937 | $26 \quad 2735$ | C 7348 | 1060 | 28836-7 | 44 40.44 | 5245 | 28 | $261621 \cdot 4$ | 161 | 310 | 11.4 | - 25 | + 28 | $8 \cdot 9$ | Go |
| 6938 | 302710 | L 5596 | 1063 | 28845 | $4449 \cdot 94$ | 4270 | 25 | 308570 | 149 | 299 | 11.8 | - 99 | - 27 | 8.8 |  |
| 6939 | 282477 | C 7350 |  | 28843 | 44 51.91 | 4711 | 26 | 282557.0 | 147 | 304 | 10.9 | + $3^{*}$ | - 18* | var. | G op |
| 6940 | 312784 | L 5597 |  |  | 4520.07 | 3837 | 25 | $\begin{array}{llllllllllll}31 & 46 & 16 \cdot 3\end{array}$ | 113 | 294 | 12.4 | - 32 | $+78$ | $9 \cdot 5$ | G 5 |
| 6941 | 312785 | L 5599 |  |  | $154530 \cdot 65$ | $+2 \cdot 3906$ | $+.0025$ | 312948.0 | -11.100 | +.295 | II.0 | - 15 | $\bigcirc$ | 9.5 | K。 |
| 6942 | 292718 | C 7352 | 1073 |  | $4532 \cdot 15$ | 4595 | 26 | $285040 \cdot 6$ | 098 | 302 | 10.8 | - | - 7 | $9 \cdot 33$ | K 2 |
| 6943 | 252973 | C 7353 | 1075 | 28864 | $4544 \cdot 88$ | 5357 | 28 | 2544184 | 082 | 313 | 9.5 | - 16 | - | $8 \cdot 3$ | G 5 |
| 6944 | 262737 | C 7355 | 1083 | 28867-8-9 | 45 49.14 | 5210 | 28 | 262036.5 | 077 | 311 | 10.2 | - 55 | - 81* | $4 \cdot 73$ | G 5 |
| 6945 | 262738 | C 7356 | 1085 |  | $45 \quad 54 \cdot 88$ | 5310 | 28 | 2555 II•7 | 070 | 31.2 | $9 \cdot 4$ | + 25 | - 83 | 8.5 | G 5 |
| 6946 | 272545 | C 7358 | 1087 |  | $\begin{array}{llll}15 & 46 & 3.38\end{array}$ | $+2.4903$ | +.0027 | $27 \quad 3447 \cdot 2$ | -11.060 | $+\cdot 307$ | 12.0 |  | - 16 | 8.9 | F 8 |
| 6947 | 312786 | L 5601 |  |  | 46 10.19 | 3875 | 26 | $31 \begin{array}{lllllllll} & 31 & 50 \cdot 3\end{array}$ | 052 | 295 | II.8 | - | 17 $+\quad 17$ | 9-1 | G 5 |
| 6948 | 262741 | C 7359 | 1090 | 28876 | $46 \quad 13.99$ | 5177 | 28 | $26 \quad 27 \quad 5 \cdot 0$ | 047 | 310 | II.I | + 12 | + 27 | $8 \cdot 6$ | F 5 |
| 6949 | 252976 | C 7361 | 1101 |  | $46 \quad 36 \cdot 75$ | 5558 | 30 | 2450 II•I | $\bigcirc$ | 316 | 10.2 | - 1 | - 28 | $8 \cdot 5$ |  |
| 6950 | 262744 | C 7362 | 1114 | 28900 | $47 \quad 2.86$ | 5182 | 28 | $26 \quad 2230 \cdot 4$ | 10.988 | 312 | 10.6 | - 65 | - 43 | $8 \cdot 7$ | K |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0 | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.000. }}{\substack{\text { R. }}}$ | Dec. ".001. |  |  |
|  | - |  |  |  | $\mathrm{h}^{\mathrm{h}} \mathrm{m}$ | 8 | 8 | - . ${ }^{\prime}$ | " | " |  |  |  |  |  |
| 6951 | 252978 | C 7363 |  |  | 154713.59 | +2.5425 | +.0030 | 252123.7 | -10.975 | +-313 | II.2 | $\bigcirc$ | - 56 | $8 \cdot 6$ |  |
| 6952 | 272548 | C 7364 |  |  | 4717.32 | 4972 | 27 | $\begin{array}{llll}27 & 13 & 4.2\end{array}$ | 970 | 308 | I 1.8 | - 7 | 4 | 9.5 | G 5 |
| 6953 | 252979 | C 7365 |  |  | $47 \quad 22.98$ | 5398 | 30 | $25 \quad 27 \quad 27 \cdot 3$ | 963 | 315 | 12 | + | + 26 | $9 \cdot 2$ |  |
| 6954 | 252980 | C 7366 |  |  | 47 27.21 | 5408 | 30 | $25 \quad 2455 \cdot 2$ | 958 | 315 | 12.0 | - | - 31 | 9.1 |  |
| 6955 | 312790 | L 5609 | 1134 |  | $47 \quad 39 \cdot 70$ | 3936 | 26 | $31 \begin{array}{llll}13 & 36.2\end{array}$ |  | 297 | II.I | - 15 | + 139 | $9 \cdot 5$ | G 5 |
| 6956 | 252981 | C 7367 | 1129 | 28914 | $154740 \cdot 78$ | +2.5366 | +.0029 | $25 \quad 3428.5$ | -10.94I | + 315 | 9.6 | + 13 | + 8 | $7 \cdot 9$ | Ko |
| 6957 | 302716 | L 5610 |  |  | - 4741.50 | 4114 | 26 | $\begin{array}{llll}30 & 33 & 15 \cdot 0\end{array}$ | 941 | 299 | 11.8 | $+\quad 14$ $+\quad 16$ | - 21 | $9 \cdot 5$ |  |
| 6958 | 292724 | C 7368 |  |  | $4747 \cdot 49$ | 4355 | 26 | $2937 \quad 37 \cdot 3$ | 933 | 302 | 10.7 | + 16 | - 32 | 9.15 | F 8 |
| 6959 | 292725 | C 7369 | 1139 |  | $4750 \cdot 33$ | 4395 | 27 |  | 930 | 303 | 10.4 | 37 | + 50 | $9 \cdot 5$ | G 5 |
| 6960 | 312791 | L 5612 |  |  | $48 \quad 12 \cdot 50$ | 3963 | 26 |  | 903 | 298 | 9.8 | 10 | - 19 | 8.8 | K 2 |
| 6961 | 292727 | C 7370 | 1145 | 28930 | $\begin{array}{llll}15 & 48 & 18.92\end{array}$ | +2.4529 | $+\cdot 0027$ | $285444 \cdot 9$ | -10.895 | + 304 | $9 \cdot 8$ | - 2 | + | $8 \cdot 5$ | K 5 |
| 6962 | 312792 | L. 5613 | 1150 |  | $48 \quad 19.38$ | 392 I | 26 |  | 894 | 297 | II•I | - | - 35 | $9 \cdot 2$ | G 5 |
| 6963 | 31 2793 | L 5615 |  |  | $48 \quad 23 \cdot 87$ | 3982 | 26 | 31017.3 | 889 | 298 | 11.0 | - | + 40 | $9 \cdot 2$ | K o |
| 6964 | 302718 | C 7372 |  |  | $48 \quad 24 \cdot 37$ | 4208 | 26 | $\begin{array}{llll}30 & 9 & 200\end{array}$ | 889 | 301 | 10.2 | + | - 22 | $7 \cdot 36$ | K 5 |
| 6965 | 292728 | C 7373 |  |  | $48 \quad 26 \cdot 35$ | 4419 | 27 | $291954 \cdot \mathrm{I}$ | 886 | 303 | 12.0 | + 7 | - $4^{1}$ | $9 \cdot \mathrm{I}$ | G 5 |
| 6966 | $28 \quad 2486$ | ${ }^{\text {C }} 7375$ |  |  | $154835 \cdot 82$ | +2.4665 | . 0027 | 282133.4 | -10.874 | + 307 | 12.4 | + 47 | - 19 | $9 \cdot 46$ | Go |
| 6967 | 292729 | C 7377 | 1162 | 28937 | $4840 \cdot 64$ | 4532 | 27 | $28 \quad 5230 \cdot 7$ | 868 | 305 | $8 \cdot 0$ | 22 | $1+16$ | $8 \cdot 1$ | K 2 |
| 6968 | 292730 | C 7378 |  | 28946 | $4^{8} 50.76$ | 445 I | 27 | 29 10 52.5 | 856 | 304 | 9.7 | '10 | - 17 | $7 \cdot 80$ | K 2 |
| 6969 | 272551 | C 7379 |  |  | $49 \quad 22 \cdot 52$ | 4880 | 27 | $27 \quad 2788$ | 817 | 310 | 12.2 | + | + | 8.8 | K |
| 6970 | $28 \quad 2487$ | C 7380 | 1 177 -8 |  | 4925.90 | 472 I | 27 | $28 \quad 454.0$ | 813 | 308 | II.O | + 7 | + 12 | $8 \cdot 42$ | K 2 |
| 697 T | 262747 | C 7382 |  |  | $154937 \cdot 96$ | $+2.5092$ | +.0028 | $263421 \cdot 9$ | -10.798 | $+312$ | $1 \mathrm{I} \cdot 8$ | - II | + 13 | $9 \cdot 1$ | G 5 |
| 6972 | 312795 | L 5620 | 1165 | 28981 | $4940 \cdot 81$ | 3823 | 26 | 313019.1 | 794 | 297 | 9.4 | - 56 | -76 | $7 \cdot 9$ | K 5 |
| 6973. | 292733 | C 7383 | I 187-8 | 28977 | $4942 \cdot 77$ | 4520 | 27 | 28519.6 | 792 | 304 | 10.2 | - 29 | - 15 | $8 \cdot 5$ | K 5 |
| 6974 | 292734 | C 7385 | 1194 |  | 49 51.02 | 4289 | 26 | 2944 II.0 | 782 | 303 | $1 \mathrm{I} \cdot 2$ | + 5 | - 56 | $8 \cdot 3 \mathrm{I}$ | K |
| 6975 | $26 \quad 2748$ | C 7384 | 1189 | 28979 | 4951.83 | 5216 | 29 | $\begin{array}{llll}26 & 3 & 13.6\end{array}$ | 781 | 314 | 10.2 | + 49 | - 12 | 9.2 | K 5 |
| 6976 |  | C 7386 |  | 28983 | 154958.05 | +2.5001 | +.0028 | $2655 \quad 32 \cdot 1$ | -10.773 | +.311 | 10.4 |  |  | $9 \cdot 5$ | Ko |
| 6977 | 282490 | C 7387 | 1200 |  | 5015.71 | 4685 | 28 | 28 10 11.4 | 751 | 308 | 10.5 | - 18 | + 62 | $9 \cdot 9$ | Go |
| 6978 | 252990 | C 7391 |  |  | $51 \quad 2.53$ | 5322 | 30 | $253^{2} 244^{1} \cdot 8$ | 694 | 317 | 9.2 | + 12 | - 68 | 9.1 |  |
| 6979 | 25 2991 | C 7392 | 1223-4 |  | 517.91 | 5485 | 31 | 24 51 56.8 | 687 | 319 | $9 \cdot 6$ | - 7 | - 15 | 9.1 |  |
| 6980 | 262753 | C 7394 | 1228 | 29026 | 5127.42 | 5022 | 29 | 264452.5 | 663 | 314 | 9.0 | 4 I | + 55 | 8.5 | F 5 |
| 6981 | 262754 | C 7395 | 1229 | 29027-8 | 155134.75 | +2.5137 | +.0030 | $26{ }^{26} 1618.1$ | -10.654 | + 315 | $9 \cdot 4$ | - 15 | + 4 | $8 \cdot 5$ | K o |
| 6982 | 292739 | C 7396 | 1241 | 29040 | $5147 \cdot 57$ | 4238 | 27 | 2947 58.0 | 638 | 305 | 9.2 | - 16 | + 4 | $7 \cdot 66$ | A 0 |
| 6983 | $28 \quad 2494$ | C 7397 | 1244-6 |  | $5159 \cdot 83$ | 4524 | 28 | 28415 | 623 | 307 | $9 \cdot 6$ | + 86 | - 144 | $8 \cdot 1$ | F 5 |
| 6984 | 272555 | C 7398 |  | 29049 | $\begin{array}{lll}52 & 19.46\end{array}$ | 4867 | 28 | $\begin{array}{llllll}27 & 18 & 46 \cdot 8\end{array}$ | 599 | 312 | 10.4 | + 17 | + 4 | $8 \cdot 1$ | K 0 |
| 6985 | 24294 I | B 5457 | 1255-6 |  | $5234 \cdot 33$ | 5526 | 3 I | $24 \quad 36 \quad 32 \cdot 0$ | 580 | 321 | 11.2 | - 7 | - 10 | 8.7 |  |
| 6986 | 252994 | C 7399 | 1257 | 29057 | $\begin{array}{lllll}15 & 52 & 36.98\end{array}$ | +2.5326 | +.003I | $\begin{array}{llll}25 & 26 & 10 \cdot 2\end{array}$ | -10.577 | + 319 | 11.0 | - 33 | + 12 | $8 \cdot 5$ | G 5 |
| 6987 | 31 2799 | L. 5627 | 1265-6 | 29065 | 5241.34 | 3772 | 27 | $3 \mathrm{I} 28 \quad 59 \cdot 2$ | 572 | 299 | 10.2 | - 7 | - 6 | $8 \cdot 1$ | Ma |
| 6988 | 252996 | C 7401 |  |  | $\begin{array}{llll}53 & 16.68\end{array}$ | 5297 | 30 | $253047 \cdot 6$ | 528 | 316 | 10.8 | + 1 | + 6 | $9 \cdot 5$ |  |
| 6989 | 242945 | B 546r |  |  | 5317.44 | 5657 | 32 | 24 I 5.1 |  | 323 | 10.6 | + $5^{8}$ | - 62 | $9 \cdot 5$ |  |
| 6990 | 252997 | C 7402 | 1283-5 |  | 53 30.41 | 5450 | 32 | $2452 \quad 16.6$ | 5 II | 320 | $9 \cdot 2$ | + II | - 108 | $8 \cdot 7$ |  |
| 6991 | 302727 | L 5628 |  |  | $155343 \cdot 63$ | +2.4059 | $+.0027$ | $302050 \cdot 7$ | -10.494 | + 303 | 9.0 | $+36$ |  | $9 \cdot 5$ |  |
| 6992 | 272558 | C 7404 | 1295 | 29091 | 5351.64 | 4887 | 29 | $\begin{array}{llll}27 & 8 & 16 \cdot 9\end{array}$ | 484 | 314 | 12.2 | - 64* | - 68* | $4 \cdot 22$ | Ko |
| 6993 | 242947 | B 5467 | 1296 | 29093 | $\begin{array}{ll}54 & \text { 1.57 }\end{array}$ | 5497 | 32 | $\begin{array}{llllllllllllll} & 3 & 36 \cdot 3\end{array}$ | 472 | 322 | 10.2 | + 18 | - 17 | $7 \cdot 9$ |  |
| 6994 | 253000 | C 7409 | 1298 | 29097-8 | 5414.97 | 5387 | 32 | $25 \quad 5 \quad 16 \cdot 0$ | 455 | 318 | 11.2 | - 9 | - 8 | $8 \cdot 9$ |  |
| 6995 | $26 \quad 2761$ | C 7412 |  |  | $5442 \cdot 35$ | 5108 | 31 | 26 II 56.7 | 42 I | 316 | 11.6 |  |  | $9 \cdot 76$ | K O |
| 6996 | 292745 | ${ }_{\text {C }} 7414$ | 1314 |  | $155443 \cdot 31$ |  | +.0028 |  | $-10.420$ | +-305 |  | - 8 |  | 9.41 | K 。 |
| 6997 | 272563 | C 7415 | 1311 | 29115 | $5446 \cdot 27$ | 4879 | 30 | $27 \quad 6 \quad 37 \cdot 7$ | 416 | 314 | 9.8 | + 27 | - 52 | 8.8 | $\mathrm{K}_{2}$ |
| 6998 | 272564 | C 7417 |  |  | $\begin{array}{ll}54 & 48 \cdot 31 \\ 54 & 50.11\end{array}$ | 4799 | 30 | $\begin{array}{lllll}27 & 2540 \cdot 3\end{array}$ | 414 | 313 | 12.0 | - 57 | - 96 |  |  |
| 6999 | 262762 28 2503 | C 7418 | 1315 1323 | 29116 | 54 <br> 54 <br> 54 <br> 50.11 | 4956 4654 | 30 29 | $\begin{array}{llll}26 & 47 & 59 \cdot 5 \\ 27 & 59 & 22 \cdot 1\end{array}$ | 412 405 | 315 311 | $9 \cdot 3$ $\mathrm{II} \cdot 2 \mathrm{I}$ | $\begin{array}{r}\text { a } \\ -\quad 31 \\ -\quad 572 \\ \hline\end{array}$ | $\begin{array}{r}\text { + } \\ \hline\end{array}$ | 8.6 8.1 | K O |
| 7000 | $28 \quad 2503$ | C 7420 | 1323 |  | $5455 \cdot 20$ | 4654 | 29 | $275922 \cdot 1$ | 405 | 311 | 11.2I | - 572 | + 304 | 8.1 | K o |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 1980.0. | Precession. | Sec. Var. | Dee. 1910\%. | Precession. | Sec. Var. | $\begin{gathered} \text { Epoch } \\ \text { igoot } \end{gathered}$ | $\begin{gathered} \text { R.A. } \\ \text { s. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { M.oor. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m | $s$ | s | - , " | " | " |  |  |  |  |  |
| 01 | 253003 | ${ }^{\text {C }} 7419$ |  |  | $15 \quad 54 \quad 57.58$ | $+2.5195$ | +.0031 | 254944.5 | - 10.402 | $+318$ | $10 \cdot 1$ | - 49 | - 139 | $8 \cdot 36$ | K 5 |
| 7002 | 253004 | C 7421 |  |  | 55 <br> 5.23 | 5283 | 32 | $25 \quad 27$ 59.3 | 395 | 320 | 13.2 | + 54 | - 51 | 9.5 |  |
| 700 | 27.2565 | C 7422 |  | 29125 | $55 \quad 6 \cdot 31$ | 4922 | 30 | 2655 10.1 | 391 | 315 | 12.6 | + 7 | + 36 | $9 \cdot 36$ | G 5 |
| 7004 | 302730 | L 5635 |  | 29131 | $55 \quad 8 \cdot 20$ | 4057 | 28 |  | 389 | 304 | 11.1 | 6 | + 19 | $7 \cdot 61$ | K 5 |
| 7005 | 253005 | C 7423 | 1324 | 29124 | $\begin{array}{lll}55 & 9 \cdot 16\end{array}$ | 5425 | 32 |  | 388 | 321 | 11.0 | - 2 | - | $8 \cdot 5$ |  |
| 70 | 302731 | L 5636 |  |  | 155512.42 | +2.4114 | +.0028 | $30 \quad 238.2$ | $-10.384$ | + 305 | 13.6 | - 8 | + 29 | $9 \cdot 5$ | G 5 |
| 7007 | $26 \quad 2763$ | C 7425 |  |  | 5512.54 | 5053 | 31 | $\begin{array}{lllll}26 & 23 & 26.9\end{array}$ | 384 | 317 | 12.5 | + 21 | - 1 | $9 \cdot 19$ | F 2 |
| 7008 | 253006 | C 7424 |  |  | $55 \quad 13.20$ | 5323 | 32 |  | 383 | 320 | 13.6 | + 25 | + | $9 \cdot 5$ |  |
| 7009 | 272567 | C 7428 |  |  | $\begin{array}{lllll}55 & 14.78\end{array}$ | 4827 | 30 | 27 17 23.7 <br> 7 8 3.7 | 381 | 313 | 13.3 | - 37 | - 36 | 9.5 | Go |
| 7010 | 253007 | C 7427 |  |  | $55 \quad 15 \cdot 20$ | 5358 | 32 | $\begin{array}{llll}5 & 8 & 42 \cdot 1\end{array}$ | 380 | 322 | 13.3 |  |  | $9 \cdot 5$ |  |
| 7011 | 292748 | C 7430 | 1340 | 29143 | $15 \quad 55 \quad 27 \cdot 66$ | +2.4203 | $+\cdot 0028$ | 29 41 18.8 | -10.365 | + 307 | $9 \cdot 8$ | + 38 | --63 | 7.21 | K 0 |
| 7012 | 253009 | C 7432 | 1344 |  | 5542.07 | 5219 | 31 | $254122 \cdot 1$ | 347 | 320 | 10.8 | + 11 | + 25 | $7 \cdot 96$ | K 2 |
| 7013 | 302733 | L 5642 |  |  | 5542.63 | 3946 | 28 | $3038 \quad 6 \cdot 1$ | 346 | 303 | 11.0 | - 9 | - 13 | $8 \cdot 7$ | Fo |
| 7014 | $26 \quad 2765$ | C 7433 |  |  | $5544 \cdot 27$ | 5098 | 31 | 26 10 30.3 | 344 | 317 | 12.2 | + 26 | $+\quad 23$ $+\quad 17$ | var. |  |
| 7015 | 242954 | B 5482 | 1366 | $29153-4-5$ | $56 \quad 10.05$ | $549^{2}$ | 32 | $243235 \cdot 7$ | 312 | 323 | 11.2 | - 3 | - 17 | $8 \cdot 21$ | K 2 |
| 7016 | 3 I 2804 | L 5643 |  | 29171 | $\begin{array}{llll}15 & 56 & 17.98\end{array}$ | +2.3674 | +.0028 | $\begin{array}{ll}\text { I } & 35 \\ 38.8\end{array}$ | -10.302 | + 300 | II•I | 10 | $\bigcirc$ | $8 \cdot 7$ | F 8 |
| 7017 | 302735 | C. 7437 | 1375 | 29174 | $5634 \cdot 54$ | 4131 | 28 | $295314 \cdot 2$ | 281 | 306 | $9 \cdot 9$ | + 5 | - 18 | 8.61 | K。 |
| 7018 | 302736 | L 5646 | 1377 | 29176 | $5637 \cdot 95$ | 4002 | 28 | $\begin{array}{llllll}30 & 2158.9\end{array}$ | 277 | 305 | $10 \cdot 4$ | + 34 | - 5 | $8 \cdot 7$ | K 0 |
| 7019 | 312805 | L 5648 | $1390-1$ | 29200 | $\begin{array}{rl}57 & 9 \cdot 56\end{array}$ | 3595 | 28 | $314920 \cdot 0$ | 237 | 300 | 10.2 | + 62 | - 48 | $6 \cdot 68$ | K 0 |
| 7020 | 242957 | C 744 I | 1 385-6 | 29184-94 | 5713.02 | 5438 | 32 | $244^{2} \quad 22.0$ | 233 | 324 | 10.7 | + 21 | -163 | $8 \cdot 71$ | K |
| 21 | 292752 | C 7444 | 1392 |  | $15 \quad 57 \quad 17.73$ | +2.4301 | +.0029 | 2912 I.0 | -10.227 | +-309 | 10.5 | 41 | - 7 | $8 \cdot 3$ | G 5 |
| 7022 | 262767 | C 7443 | 1389 | 29199 | 5719.09 | 5013 | 31 | $\begin{array}{llll}26 & 25 & 24.9\end{array}$ | 226 | 318 | $1 \cdot 2$ | - 56 | + 19 | $7 \cdot 89$ | F 2 |
| 7023 | $28 \quad 2506$ | C 7446 |  |  | $57 \quad 23.64$ | 4518 | 29 | 28 21 $50 \cdot 9$ | 220 | 311 | 12.2 |  | - 2 | $8 \cdot 7$ | F 8 |
| 7024 | 272570 | C 7445 | $1395{ }^{\circ}$ |  | $\begin{array}{lll}57 & 24 \cdot 35\end{array}$ | 4766 | 30 | 27 23 43 | 219 | 315 | 12.2 | - 6 | - 13 | $8 \cdot 3$ | K 5 |
| 7025 | 292753 | C 7448 |  |  | $\begin{array}{ll}57 & 27 \cdot 36\end{array}$ | 4362. | 29 | $28 \quad 57 \quad 29.6$ | 215 | 309 | 12. | 16 | - 15 | $9 \cdot 2$ |  |
| 70 | $27 \quad 2572$ | C 7449 |  |  | 1557 36.10 | +2.4680 | +.0029 |  | -10.204 | $+.314$ | 12.8 | - $\quad 7$ | + 14 | $9 \cdot 5$ |  |
| 7027 | 292754 | C 7452 |  |  | 5743.08 | 4380 | 29 | $28 \quad 52 \quad 27 \cdot 6$ | 195 | 310 | $2 \cdot 2$ | - 89 | - 52 | $9 \cdot 2$ | K |
| 7028 | 262768 | C $745^{\circ}$ |  |  | $5743 \cdot 16$ | 5093 | 31 | $\begin{array}{llll}26 & 4 & 45 \cdot 5\end{array}$ | 195 | 319 | 12.2 | - 20 | + 30 | $9 \cdot 5$ |  |
| 7029 | $26 \quad 2769$ | C 7451 | 1398 | 29204 | 57 44•10 | 4949 | 30 | 263920.9 | 194 | 317 | 10.0 | - 30 | - 8 | $8 \cdot 3$ | F 5 |
| 7030 | 302738 | C 7453 | 1403 | 29216 | $57 \quad 50 \cdot 19$ | 4052 | 28 | $\begin{array}{llll}30 & 6 & 9\end{array}$ | 187 | 306 | $10 \cdot 1$ | - 29* | - $24^{*}$ | $4 \cdot 91$ | A 0 |
| 7031 | 272574 | C 7456 | 1425 |  | $15 \quad 5847 \% 1$ | +2.4867 | +.0031 | $2655 \quad 5 \cdot 1$ | -10.114 | $+\cdot 317$ | $9 \cdot 8$ | 16 | - 5 | $9 \cdot 5$ |  |
| 7032 | 272575 | C 7457 | 1429-30 | 29253 | $58 \quad 54 \cdot 48$ | 4879 | 31 | $265146 \cdot 0$ | 106 | 318 | $8 \cdot 4$ | - 30 | - 78 | 7.69 | F 5 |
| 7033 | 302742 | L 5661 | 1439 |  | $59 \quad 10 \cdot 15$ | 3943 | 29 | 302519.1 | 086 | 307 | $9 \cdot 8$ | + 7 | - 14 | $8 \cdot 7$ | K 5 |
| 7034 | 292758 | C 7460 | 1443 | 29272 | 59 17.81 | 4267 | 30 | 291216.2 | 076 | 310 | $9 \cdot 4$ | 34 | - 5 | $8 \cdot 7$ | Ko |
| 7035 | 292760 | C.7461 | 1457 | 29282 | $5933 \cdot 66$ | 4290 | 30 | $\begin{array}{lll}29 & 6 & 0.3\end{array}$ | 056 | 311 | 10.5 | + 6 | - 49 | $9 \cdot 5$ | K 2 |
| 7036 |  | C 7462 | 1458-9-60 | 29284 | $15 \quad 59$ 41.66 | +2.4918 | +.003I |  | -10.046 |  | 8.6 |  |  |  | G 5 |
| 7037 | 242964 | B 5502 |  |  | 5959 | 5464 | 33 | 2427 11.1 | - 035 | 326 | 11.9 | - 1 | - 10 | $8 \cdot 8$ |  |
| 7038 | 242965 | B 5504 |  |  | $16 \quad 0 \quad 1.69$ | 5447 | 32 | $243048 \cdot 2$ | 021 | 326 | 11.4 | 16 | + 5 | $8 \cdot 7$ |  |
| 7039 | 312808 | L 5669 | 1467-8 |  | - 1.72 | 3653 | 29 |  | 021 | 303 | 10.9 | - $\quad 28$ | + 13 | $8 \cdot 7$ | K 2 |
| 7040 | 253020 | C 7468 | 1471-3 | 29307-8 | - 20.21 | 5204 | 32 | $\begin{array}{llll}25 & 29 & 37\end{array}$ | 9•998 | 323 | 11.04 | - 388 | + 698 | $7 \cdot 06$ | Go |
| 7041 | 312809 | L 5671 |  |  | $16 \bigcirc 22.53$ | +2.3684 | +-0029 | $\begin{array}{llllll}31 & 1722.6\end{array}$ | - 9.995 | +.304 | 11.0 | 106 | + II | $9 \cdot 2$ | K |
| 7042 | 253022 | C 7471 | 1488-9 |  | 1 1.52 | 5195 | 32 | $25 \quad 2855 \cdot 5$ | 945 | 323 | - | . 21 | - 2 | $9 \cdot 5$ |  |
| 7043 | 253023 | C 7472 | 1490-1 |  | 1 1.87 | 5193 | 32 | $25 \quad 2922.6$ | 945 | 323 | 13.0 | - 3 | - 15 | $9 \cdot 5$ |  |
| 7044 | 282514 | C 7474 | 1503 |  | 116.00 | 4582 | 30 | $27 \quad 530.3$ | 927 | 316 | 10.8 | - ${ }^{2}$ | 6 | $9 \cdot 1$ |  |
| 7045 | $27 \quad 2581$ | C 7475 |  |  | $120 \cdot 26$ | 4798 | 3 I | $27 \quad 229.6$ | 921 | 319 | 10.6 | $+21$ | - | $9 \cdot 5$ |  |
| 7046 | $27 \quad 2582$ | C 7477 |  | 29348 | $\begin{array}{llll}16 & 1 & 30.37\end{array}$ | +2.4813 | +.003 1 |  | $-9.909$ | $+\cdot 319$ | 11.4 | + 53 | + 15 | $9 \cdot 2$ | A 3 |
| 7047 | 253025 | C 7480 | 1517-8 | 29355 | 149.27 | 5173 | 3 I | 253138.2 | 885 | 323 | $9 \cdot 8$ | - 16 | - 56 | $9 \cdot 5$ |  |
| 7048 | 312814 | L 5678 | 1532-3 | 29370 | 158.80 | 3506 | 29 | $314935 \cdot 2$ | 873 | 303 | $9 \cdot 3$ | $+\quad 4$ | - | 7.76 | $\mathrm{A}^{2}$ |
| 7049 | 312815 | L 5679 | 1534 |  | 27.02 | 3690 | 29 | $\begin{array}{llll}31 & 9 & 37 \cdot 8\end{array}$ | 862 | 305 | $9 \cdot 2$ | + 44 | 11 | $8 \cdot 3$ | Ma |
| 7050 | 302749 | L 5683 | 1559 | 29396 | 250.77 | 3955 | 30 | $30 \quad 84774$ | 807 | 309 | $8 \cdot 8$ | - 71 | - | 7.86 | K 3 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
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| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | R.A. B.0001. | $\begin{aligned} & \text { Dec. } \\ & \text { Noor. } \end{aligned}$ | Mag. | Spectral <br> Type. |
|  | $\bigcirc$ |  |  |  | h m | 8 | s | - " | " | " |  |  |  |  |  |
| 7051 | 242972 | B 5523 | 1564-5 |  | $16 \quad 3 \begin{array}{lll}16 & \mathbf{1} 2.93\end{array}$ | +2.5367 | +.0033 | 2439 59•3 | - $9 \cdot 778$ | + 327 | $9 \cdot 8$ | $\bigcirc$ | + 16 | $8 \cdot 5$ |  |
| 7052 | 302751 | L 5684 | 1574 |  | 318.01 | 3797 | 30 | 304158.0 | - 772 | 307 | 10.4 | + 26 | - $3^{6}$ | $9 \cdot 5$ |  |
| 7053 | 253031 | C 7486 | 8-9 | 29428 | $340 \cdot 03$ | 5242 | 33 | $\begin{array}{lllll}25 & 8 & 57 \cdot 3\end{array}$ | 744 | 326 | 8.8 | - 22 | - 38 | $8 \cdot 5$ | K 2 |
| 7054 | 292774 | ${ }_{\text {C }} 7490$ |  | 29442 | $4 \quad 0.63$ | 4183 |  | $\begin{array}{lllll}29 & 14 & 6 \cdot 3\end{array}$ | 718 | 312 | $8 \cdot 9$ | + 13 | 0 | $7 \cdot 68$ | A 3 |
| 7055 | 302755 | C 7491 |  |  | $4 \quad 3 \cdot 19$ | 3948 | 30 | $30 \quad 5 \quad 52.5$ | 714 | 310 | 10.2 | - | - 46 | $9 \cdot 4$ | A 3 |
| 7056 | 292775 | C 7493 | 28 | 29446 | $\begin{array}{llll}16 & 4 & 8.74\end{array}$ | +2.4132 | +.0030 | $2925 \quad 2.0$ | $-9.707$ | $+312$ | $10 \cdot 2$ | - 3 | + 15 | 8.8 |  |
| 7057 | 292776 | C 7494 |  |  | 415.39 | 4075 | 30 | $29 \quad 37 \quad 20 \cdot 4$ | 699 | 311 | 10.0 | + 13 | - 52 | 8.9 |  |
| 7058 | 302757 | L 5697 |  |  | 454.06 | 3760 | 30 | $304413 \cdot 1$ | 650 | 307 | 9.2 | + 16 | - 5 | 9-2 |  |
| 7059 | 302758 | L 5698 | 65-6 | 29476 | $5 \quad 4 \cdot 66$ | 3789 | 30 | 3037 II.I | 636 | 308 | 10.8 | - | - 22 | 81 | K 0 |
| 7060 | 253036 | C 7496 | 61-2 |  | $5 \quad 5 \cdot 93$ | 5218 | 33 | 25 10 4.6 | 634 | 327 | 10.6 | + | - 22 | $8 \cdot 6$ | G 51 |
| 7061 | 272590 | C 7498 |  |  | $16 \quad 5 \quad 22.51$ | +2.4733 | +.0031 | $27 \quad 3 \begin{array}{llll}27 & 50.6\end{array}$ | $-9.613$ | +-32 1 | 11.0 | - 26 | - 13 | 9.8 |  |
| 7062 | 282524 | C 7500 | 74 |  | 533.48 | 4410 | 30 |  | 599 | 316 | II. 2 | - | - 3 | $9 \cdot 1$ |  |
| 7063 | 272591 282526 | ${ }_{\text {C }}^{\text {C } 7501}$ |  | 29487 | 537.90 | 4587 | 30 | $273643 \cdot 0$ | 593 | 319 | $9 \cdot 7$ | + 28 | - 11 | $7 \cdot 93$ | Fo |
| 7064 | 282526 | C 7503 | ${ }^{76}$ |  | 542.03 | 4375 | 30 | $2882455 \cdot 3$ | 588 | 315 | II-4 | - 87 | + 11 | $9 \cdot 4$ |  |
| 7065 | 312820 | L 5701 | 81 |  | 552.04 | 3642 | 29 | $\begin{array}{lll}31 & 6 & 9.9\end{array}$ | 575 | 307 | 12.0 | 21 | + 5 | $9 \cdot 4$ |  |
| 66 | 302759 | C 7506 | 80 | 29499 | $16 \quad 5 \quad 53.05$ | $+2.3923$ | +.0030 | 308575 | 9.574 | +311 | 11.5 | - 59 | + | 9-1 | K 5 |
| 7067 | 272593 | C 7505 |  | 29495 | 553.87 | 4688 | 31 | $27 \quad 1230 \cdot 0$ |  | 320 | $10 \cdot 1$ | + 21 | + 3 | $8 \cdot 1$ | K ${ }^{2}$ |
| 7068 | 31282 I | ${ }_{\text {L }} 5704$ | 85 |  | ${ }_{6} 56 \cdot 78$ | 3644 | 29 | $\begin{array}{llll}31 & 5 & 19.4\end{array}$ | 569 | 307 | $1 \mathrm{i} \cdot 8$ | + | - 21 | $9 \cdot 4$ |  |
| 7069 | 262791 | C 7507 | 83 |  | $6 \quad 3 \cdot 54$ | 4937 | 3 I | $\begin{array}{lllllllll}26 & 13 & 55\end{array}$ | 561 | 323 | 10.6 | - 22 | + 51 | $7 \cdot 7$ | G 5 |
| 7070 | $30 \quad 2760$ | C 7508 | 94 | 29502 | $6 \quad 5 \cdot 54$ | 3919 | 30 | $30 \quad 5 \quad 11.2$ | 558 | 311 | 12.0 | + | + 3 | $8 \cdot 8$ | K o |
| 7071 | 262792 | C 7509 | $\stackrel{93}{ }$ |  | 166612.96 | +2.4988 | $+\cdot 0031$ | $\begin{array}{llll}26 & 1 & 18.9\end{array}$ | - $9 \cdot 549$ | + 324 | II.6 | - 1 | + 1 | 9.2 |  |
| 7072 | 253039 | ${ }_{\text {C }} 7511$ | 99-100-1 | 29507-8 | 6 20.81 | 5062 | 32 | $254320 \cdot 1$ | 538 | 325 | 11.2 | + | + | $7 \cdot 48$ | K o |
| 7073 | 272595 | C 7513 | 102-3 | 29510 | $62 \mathrm{I} \cdot 25$ | 4742 | 32 | $265836 \cdot 0$ | 538 | 321 | 9.9 | - 20 | + 39 | 6.68 | K o |
| 7074 | 302762 | C 7515 | 115 | 29521 | $645 \cdot 79$ | 3918 | 30 | 295631.4 | 506 | 311 | 10.6 | + 34 | - 6 | $9 \cdot 4$ |  |
| 7075 | $30 \quad 2763$ | C 7518 | 125 | 29532 | $7 \quad 1 \cdot 36$ | 3926 | 30 | $30 \quad 0 \quad 17 \cdot 2$ | 486 | 312 | 10.4 | + 15 | 22 | $8 \cdot 9$ |  |
| 7076 | 302764 | C 7519 | 129 | 29534 | $\begin{array}{llll}16 & 7 & 5 \cdot 46\end{array}$ | $+2 \cdot 3906$ | $+.0030$ | $30 \quad 434^{\circ} 0$ | -9.481 | + 312 | 12.2 | - 4 | - 28 | 9.4 |  |
| 7077 | 312825 | L 5710 | 134-5 | 29536 | $7 \quad 5 \cdot 84$ | 3589 | 30 | 31123004 | 481 | 307 | 11.3 | - | - 47 | $8 \cdot 9$ | K 5 |
| 7078 | 262797 | C 752 I | 130-1-2 | 29533 | 713.70 | 4818 | 32 | 2637 54-I | 47 I | 323 | 10.4 | - 14 | 20 | $8 \cdot 2$ | F 8 |
| 7079 | 292784 | C7523 |  |  | $\begin{array}{lll}7 & 16.28\end{array}$ | 4094 | 30 |  | 467 | 314 | 12.0 | + 17 | - 43 | 9.1 | Ma |
| 7080 | 312826 | L 5711 | 1 45-6 | 29548 | $722 \cdot 25$ | 3583 | 30 |  | 460 | 307 | 10.3 | - 54 | - 179 | $7 \cdot 8$ | G 5 |
| 7081 | 272597 | C 7524 |  | 29543 | $16 \quad 7 \quad 25.44$ | +2.4688 | $+\cdot 0032$ | $27 \quad 7 \quad 36 \cdot 2$ | -9.456 | +-321 | 11.1 | + 23 | - 94 | $7 \cdot 37$ | F 5 |
| 7082 | 253042 | C 7525 | 144 | 29546 | $736 \cdot 36$ | 5178 | 33 | 25 II 59.1 | 441 | 327 | 10.6 | - | - 16 | $8 \cdot 7$ |  |
| 7083 | 242977 | B 5538 |  |  | $737 \cdot 97$ | 5463 | 33 | $\begin{array}{llll}24 & 3 & 7 \cdot 6\end{array}$ | 439 | 333 | 12.0 | 12 | + 20 | 8.7 | K o |
| 7084 7085 | 253044 | C 7528 |  |  | $740 \cdot 16$ | 5062 | 32 | $25 \quad 3912 \cdot 3$ | 436 | 326 | 11.7 | 70 | + 24 | 9.1 | K 0 |
| 7085 | 282529 | C 7529 | 163 |  | $745 \cdot 79$ | 4276 | 31 | $28 \quad 4021 \cdot 3$ | 429 | 316 | II.3 | 91 | - 59 | $7 \cdot 54$ | F 5 |
| 7086 | $26 \quad 2799$ | C 7530 | 164-5 | 29556 | $16 \quad 7 \quad 53.99$ | +2.4804 | +.0032 | $\begin{array}{llll}26 & 39 & 14.4\end{array}$ | - 9.419 | $+323$ | 12.8 | + 30 | - 13 | $9 \cdot 1$ |  |
| 7087 | 253046 | C 7533 | 167 |  | 8 8-13 | 5104 | 33 | $\begin{array}{llll}25 & 28 & 2 \cdot 3\end{array}$ | 403 | 327 | II.8 | - 76 | + 5 | $9 \cdot 4$ |  |
| 7088 | 272601 | C 7535 | 174 |  | 8 II. 84 | 4489 | 31 | $275045 \cdot 1$ | 396 | 320 | 11.0 | + 13 | - 33 | 8.8 | F 8 |
| 7089 | 262801 | C 7537 | 191 | 29587 | $84 \mathrm{I} \cdot 78$ | 4790 | 32 | 263944.7 | 357 | 323 | 10.5 | + $4^{0}$ | - 24 | $8 \cdot 3$ | K 2 |
| 7090 | 322690 | L 5718 | 198-9 |  | $845 \cdot 97$ | 3347 | 30 |  | $35^{2}$ | 305 | 14.4 | + 11 | - 19 | $9 \cdot 4$ |  |
| 7091 | 312831 | L 5720 | 202 | 29611 | $16 \quad 8 \quad 50.37$ | +2.3422 | +.0030 | $314220 \cdot 8$ | -9.346 | +-306 | 9.5 | - 34 | + 22 | $8 \cdot 5$ | F 5 |
| 7092 | 272603 | C 7539 | 203 | 29608 | $9 \quad 2.37$ | 4724 | 32 | $26544^{\circ} \mathrm{O}$ | 331 | 323 | 11.4 | + 50 | - 35 | $6 \cdot 37$ | F 2 |
| 7093 | 282534 | C 7540 | 208-9 | 29615 | 98.49 | 4231 | 31 | $284542 \cdot 3$ | 323 | 316 | $11 \cdot 9$ | - 13 | - 16 | $9 \cdot 2$ |  |
| 7094 | 262804 | ${ }^{\text {C }} 754{ }^{\text {I }}$ | 214-5 | 29621 | $925 \cdot 56$ | 4756 | 32 | $26 \quad 45 \quad 26 \cdot 7$ | 301 | 324 | 12.0 | - 17 | - 12 | $8 \cdot 7$ |  |
| 7095 | $27 \quad 2607$ | C 7542 | 228 |  | $932 \cdot 10$ | 4613 | 32 | $\begin{array}{llll}27 & 18 & 3.6\end{array}$ | 292 | 322 | $10 \cdot 7$ | - 15 | - | $8 \cdot 5$ | Ko |
| 7096 | 282535 | C 7543 | 225 |  | $16 \quad 9 \quad 36.30$ | +2.4254 | +.0031 | $2883910 \cdot 1$ | - 9.287 | + 317 | II.8 | $\bigcirc$ | + 3 | $9 \cdot 5$ |  |
| 7097 | 312834 | L 5724 | 240 |  | 951.75 | 3475 | 30 | 312727.0 | 267 | 307 | II. 6 | - 4 | - 25 | $8 \cdot 7$ |  |
| 7098 | 302773 | L 5725 |  |  | 952.88 | 3692 | 30 | $\begin{array}{lllllllllllllllll}30 & 41 & 12.9\end{array}$ | 266 | 310 | II. 8 | + 12 | + 13 | $8 \cdot 9$ |  |
| 7099 | 312835 | L 5726 |  |  | 958.96 | 3375 | 30 |  | 258 | 306 | 12.3 | 11 | - 22 | $9 \cdot 4$ |  |
| 7100 | 292792 | C 7548 | 245-6 | 29637-9 | 1010.42 | 4163 | 31 | $285735 \cdot 6$ | 243 | 316 | 10.5 | - 31 | - 7 | $7 \cdot 52$ | F 2 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910^{\circ} 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. A. }}{\substack{\text {. } \\ \hline}}$ | Dec. |  |  |
|  | - |  |  |  | h m s | 8 | 8 | , | " | " |  |  |  |  |  |
| 7151 | 282560 | C 7635 | 557 | 29936 | $16 \quad 20 \quad 51 \cdot 90$ | $+2.4138$ | +.0032 | $28 \quad 2947 \cdot 7$ | -8.403 | $+\cdot 323$ |  | - 16 | - 71 | $8 \cdot 7$ | K o |
| 7152 | 282564 | C 7637 | 564 | 29926 | 21704 | 4281 | 32 | 2757 36.2 | 383 | 325 | 10.6 | - 10 | - 12 | $8 \cdot 8$ | $\text { A } 5$ |
| 7153 | 243003 | B 5602 |  |  | 2119.28 | 5251 | 34 | $241543 \cdot 2$ | 367 | 338 | 10.1 | + | + | 7.8 | K 5 |
| 7154 | 243004 | B 5603 |  |  | 2122.42 | 5263 | 34 | 241252.1 | 363 | 338 | II 1 | + 12 | 22 | $9 \cdot 5$ |  |
| 7155 | 292824 | C 7640 |  |  | $2130 \cdot 20$ | 3864 | 32 | $292723 \cdot 6$ | 352 | 320 | 12 | 21 | - 26 | 9.2 | Mb |
| 7156 | 253079 | ${ }^{\text {C }} 7642$ | 583 | 29975 | 162148.60 | +2.4946 | +.0034 | $25 \quad 25 \quad 38.2$ | -8.328 | +•334 | 10.6 | - 2 | - 22 | $7 \cdot 9$ | K o |
| 7157 | 243006 | C 7643 | 586 |  | $2151 \cdot 92$ | - 5117 | 34 | $244543 \cdot 0$ | + 324 | 337 | 10.8 | - 37 | - 5 | 8.56 | F 8 |
| 7158 | 302811 | L 5794 | 603 | 29964 | 2216.32 | 3566 | 32 | $3028 \quad 15 \cdot 3$ | 291 | 316 | 11.4 | - 29 | - 64 | $9 \cdot 1$ | K o |
| 7159 | 253082 | C 7648 | 595 | 29985 | $2217 \cdot 18$ | 4962 | 34 | $252040 \cdot 8$ | 290 | 335 | 11.4 | + 5 | - $\quad 37$ | 8.9 | K o |
| 7160 | 272644 | C 7651 | 620 |  | 2253.22 | 4339 | 32 | $27 \quad 3956 \cdot 2$ | 241 | 327 | 9.5 | + 36 | - $\quad 30$ | $9 \cdot 5$ |  |
| 7161 | 292830 | C 7654 | 636 | 29986 | 16238.11 | +2.3961 | $+\cdot 0032$ | $29 \quad 150.2$ | -8.222 | +.323 | 11.2 | 6 | - 13 | $9 \cdot 4$ | G 5 |
| 7162 | 243008 | B 5607 |  |  | $\begin{array}{ll}23 & 9.49\end{array}$ | 5187 | 34 | $24 \quad 26 \quad 12.2$ | 221 | 339 | 9.2 | 8 | + 1 | 9.1 | K o |
| 7163 | 282569 | C 7655 |  |  | $23 \quad 10.93$ | 4075 | 32 | 283658.1 | 219 | 323 | 11.6 | + 6 | + 14 | $9 \cdot 4$ |  |
| 7164 | 272646 | C 7657 |  |  | 2338.03 | 4485 | 33 | $27 \quad 5 \quad 13 \cdot 1$ | 183 | 329 | 10.3 | + 56 | + | 9.2 | K o |
| 7165 | 253084 | C 7658 |  | 30028 | 2340.83 | 4926 | 34 | 25.2519 .3 | 179 | 335 | 10.8 | - 8 | 21 | 9.4 |  |
| 7166 | $26 \quad 2845$ | $\mathrm{C}_{\mathrm{C}}^{7662}$ | 632 |  | $16 \quad 2412 \cdot 12$ | +2.4719 | +.0033 | 26 II 1.1 | -8.137 | $+332$ | 10.3 | - 12 | 74 | 6.68 | A 3 |
| 7167 | 253086 | C 7661 |  | 30011 | 2412.60 | 4927 | 34 | $\begin{array}{lllllll}25 & 23 & 41.4\end{array}$ | 137 | 335 | 10.8 | + 9 | - 74 | 8.1 8.8 | G 5 |
| 7168 | $26 \quad 2846$ | C 7663 | 661-2-3 | 30017 | $2416 \cdot 14$ | 4571 | 33 | $264424 \cdot 6$ | 132 | 331 | 11.4 | 11 | - 43 | 8.8 8.6 | G 5 |
| 7169 | 253087 | C 7665 | $669$ |  | $2436 \cdot 16$ | 4839 | 33 | $254253 \cdot 1$ | 105 | 334 | 12.2 | + 12 | - 51 | 8.6 | F 8 |
| 7170 | 292833 | C 7666 | 675 | 30032 | $2436 \cdot 65$ | 3707 | 32 | $295142 \cdot 6$ | 105 | 319 | 11.5 | 43 | - 94 | 8.71 |  |
| 7171 | 272649 | C 7667 | 674 |  | 1.62442 .34 | +2.4399 | +.0033 | 272128.7 | -8.097 | +-329 | 12.0 | + 7 | - 17 | $9 \cdot 4$ | K o |
| 7172 | 312853 | L 5809 |  |  | 2451.73 | 3279 | 32 | $\begin{array}{llll}31 & 20 & 4 \cdot 7\end{array}$ | 084 | 314 | 11.7 | - $3^{8}$ | - 31 | $8 \cdot 9$ |  |
| 7173 | 292834 | C 7669 | 689 | 30041 | $2456 \cdot 95$ | 3869 | 32 | $291625 \cdot 5$ | 077 | 321 | 11.8 | - 18 | + 6 | $7 \cdot 11$ | A 2 |
| 7174 | 302816 | L 5810 | 691 |  | 2458.84 | 3426 | 32 | $304926 \cdot 7$ | 075 | 316 | 11.8 | + | - 7 | 8.8 | A 3 |
| 7175 | 253090 | C 7670 | 687-8 |  | $25 \quad 6.33$ | 5003 | 34 | $25 \quad 3 \quad 47 \cdot 8$ | 065 | 338 | 12.7 | + 12 | - 34 | 9.8 |  |
| 7176 | $24 \cdot 3013$ | B 5620 | 690 |  | $16 \quad 25 \quad 12.74$ | $+2.5246$ | +.0034 | $\begin{array}{llll}24 & 7 & 9.5\end{array}$ | -8.056 | +-341 | 12.2 | + 13 | 6 | $8 \cdot 7$ |  |
| 7177 | 282573 | C 7676 | 723-4 | 30075 | $26 \quad 22.54$ | 4001 | 32 | $\begin{array}{llll}28 & 44 & 4 \cdot 8\end{array}$ | 7.963 | 324 | $9 \cdot 1$ | - 6 | - 11 | 8.7 | F 5 |
| 7178 | 243016 | B 5623 | 717 |  | $2624 \cdot 61$ | 5250 | 34 | $\begin{array}{lllll}24 & 3 & 21 \cdot 5\end{array}$ | 960 | 341 | 9.4 | - 25 | + 8 | $8 \cdot 7$ |  |
| 7179 | 30282 I | L. 5819 | 744 | 30093-4 | $26 \quad 58.09$ | 3415 | 32 | $3046 \quad 12 \cdot 1$ | 916 | 317 | 8.8 | + 71 | -61 | $8 \cdot 6$ | K |
| 7180 | 272655 | C 7680 | 746 | 30096 | $27 \quad 7 \cdot 65$ | 4234 | 32 | $27 \quad 5119.2$ | 903 | 328 | 10.8 | + | - 45 | $9 \cdot 2$ |  |
| 7181 | 26285 I | C 7681 | 748-9 |  | $16 \quad 2711.81$ | +2.4670 | +.0033 |  | - 7.897 | +.333 | I1.5 | 7 | - 41 | $8 \cdot 3$ |  |
| 7182 | 243019 | B 5628 |  |  | $27 \quad 12.20$ | 5210 | 34 | 24 Io $43 \cdot 1$ | 897 | 341 | 11.2 | 7 | + 33 | 8.2 | F 8 |
| 7183 | 312858 | L 5822 | 755 | 30104 | $27 \quad 15.09$ | 3345 | 32 | $305948 \cdot 7$ | 893 | 316 | 11.8 | - 6 | - 26 | 8.7 | K o |
| 7184 | 292840 | C 7682 |  |  | 27 20.30 | 3802 | 32 | $292352 \cdot 5$ | 886 | 322 | II. 8 | + | - 24 | 8.7 |  |
| 7185 | 312859 | L. 5824 | 759 | 30107 | $27 \quad 25 \cdot 60$ | 3302 | 32 | $\begin{array}{llll}31 & 8 & 3 \cdot 7\end{array}$ | 879 | 316 | 11.5 | + 9 | - 14 | $7 \cdot 30$ | F 5 |
| 7186 | 282579 | C 7683 |  |  | $16 \quad 2728.06$ | $+2 \cdot 4006$ | +.0032 | $2840 \quad 3 \cdot 8$ | $-7.875$ | + 325 | 11.6 | - 5 | - 11 | $9 \cdot 2$ |  |
| 7187 | 262852 | C 7685 |  | 30139 | $2742 \cdot 12$ | 4719 | 33 | $\begin{array}{llll}26 & 2 & 7 \cdot 3\end{array}$ | 857 | 334 | 11.7 | + 10 | - 63 | 8.0 | K o |
| 7188 | 253093 | C 7687 |  |  | $2745 \cdot 04$ | 4835 | 33 | 253544.5 | 853 | 337 | 12.2 | + 48 | + 31 | $9 \cdot 1$ |  |
| 7189 | 262854 | C 7688 | 763-4-5 |  | $2751 \cdot 62$ | 4558 | 33 | 263754.9 | 844 | 332 | 12.0 | - 69 | - 256 | $8 \cdot 6$ | K o |
| 7190 | 292844 | C 7690 |  | 30131 | $28 \quad 6.68$ | 3679 | 32 | 2947 51.4 | 824 | 321 | II. 8 | 3 | + 8 | 8.06 | K o |
| 7191 | 262855 | C 7692 | 784-5 | 30153 | $16 \quad 28 \quad 12.27$ | $+2.4663$ | +.0033 | 261331.0 | $-7.816$ | + 334 | II•I | - 4 | - 66 | $7 \cdot 56$ | G 5 |
| 7192 | 243020 | C 7693 |  |  | $\begin{array}{lll}28 & 14.42\end{array}$ | 5026 | 34 | $245049 \cdot 5$ | 813 | 339 | 11.9 | - 4 | - 39 | 9.4 |  |
| 7193 | 302827 | L 5830 | 794 | 30161 | $28 \quad 27 \cdot 88$ | 3482 | 32 | $\begin{array}{llll}30 & 28 & 4.7\end{array}$ | 795 | 318 | 11.8 | + 9 | 16 | 9.2 |  |
| 7194 | 253094 | C 7694 | 789 |  | $2835 \cdot 11$ | 4972 | 34 | $25 \quad 2 \quad 24.3$ | 785 | 339 | 12.0 | 10 | 35 | $7 \cdot 83$ | A 0 |
| 7195 | 243022 | C 7695 | 793 |  | $2840 \cdot 11$ | 5022 | 34 | $24 \quad 5035 \cdot 6$ | 779 | 339 | 11.6 | 43 | 80 | 9.4 |  |
| 7196 | 243021 | B 5638 |  |  | 162841.85 | +2.5217 | +.0034 |  | $-7.776$ | +-342 | 12.0 | $+6$ | - 19 | $8 \cdot 7$ | K 2 |
| 7197 | 292846 | C 7696 | 802 |  | 2844.64 | 3918 | 32 | $28 \quad 55$ 21.3 | 773 | 324 | 11.7 | + 19 | + 3 | $9 \cdot 2$ |  |
| 7198 | 292847 | C 7697 |  |  | $2846 \cdot 41$ | 3814 | 32 |  | 770 | 323 | 11.3 | - 54 | - 74 | $8 \cdot 9$ | K |
| 7199 | 28 2581 | C 7698 | 804 | 30143 | 28 28 48.89 | 4202 | 32 | $\begin{array}{llll}27 & 53 & 58.6 \\ 30 & 18 & 55.3\end{array}$ | 767 | 329 | II•7 |  |  | 7.9 7.36 | K 5 |
| 7200 | 302829 | L 5831 | 809 | 30144 | $2849 \cdot 55$ | 3521 | 32 | $301855 \cdot 3$ | 766 | 319 | 11.0 | + 28 | -61 | $7 \cdot 36$ | K o |

7164. Burnham 7635. 7166. $\boldsymbol{\Sigma}$ 2049. 7r68. Burnham 7638. 7172. $\boldsymbol{\Sigma}$ 2053. 7r81. Burnham 7657. 7181, 7184, 7194. Number of observations 6.

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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | $\underset{\text { B.000 }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ".00 I. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | $\mathrm{h} \quad \mathrm{m}$ s | 8 | 8 | - " | " | " |  |  |  |  |  |
| 7201 | $30 \quad 2831$ | L 5835 | 812 | 30152 | 16 28 57 | +2.3494 | -0032 | 302412.1 | $-7.755$ | +.318 | 14.4 | 6 | - 16 | $8 \cdot 3$ |  |
| 7202 | $30 \quad 2832$ | L 5836 | 826-7 | 30160 | 2917.03 | 3429 | 32 | $303649 \cdot 1$ | 729 | 318 | $9 \cdot 4$ | $\pm 43$ | - 22 | $8 \cdot 8$ | Ko |
| 7203 | $28 \quad 2582$ | C 7702 | 828 | 30163 | 29 28.13 | 4171 | 32 | $27 \quad 59 \quad 3 \cdot 7$ | 714 | 328 | $10 \cdot 1$ | + 4 | $+\quad 16$ | $8 \cdot 9$ | F 5 |
| 7204 | 253097 | C 7703 | 829 | 30195 | $2936 \cdot 79$ | 4739 | 33 | 255249.5 | 703 | 336 | $8 \cdot 5$ | + 170 | - 65 | 7.8 | F |
| 7205 | 312864 | L 5837 | $835-6$ | 30171 | $2942 \cdot 70$ | 3282 | 32 | 31544.9 | 695 | 316 | $10 \cdot 0$ | + 7 | - 5 | $7 \cdot 9$ | F2 |
| 7206 | 253098 | C 7704 | 833 | 30206 | $162949 \cdot 90$ | $+2.4951$ | .0034 | 25 + $15 \cdot 7$ | - 7.685 | +•339 | $9 \cdot 5$ | - 10 | + 9 | $8 \cdot 61$ | $G 0$ |
| 7207 | $30 \quad 2834$ | L 5839 | 843-4-5 | 30179-80 | 2958.67 | 3398 | 32 | $30+114.4$ | 673 | 318 | 10.1 | - 30* | - 18* | $6 \cdot 66$ | Fo |
| 7208 | 253099 | C 7706 | 838 |  | $30 \quad 0.68$ | 4823 | 33 | $25 \quad 3257 \cdot 6$ | 671 | 338 | $12 \cdot 0$ | - 45 | + 2 | $9 \cdot 4$ |  |
| 7209 | 253100 | C 7707 |  |  | $30 \quad 5 \cdot 64$ | 4979 | 34 | $2457 \quad 3 \cdot 3$ | 664 | 340 | 12.0 | - 5 | - 12 | $9 \cdot 4$ |  |
| 7210 | 302835 | L 5840 | 857 | 30192 | $30 \quad 14.59$ | 3518 | 32 | $\begin{array}{llll}30 & 15 & 34.4\end{array}$ | 652 | 320 | II. 3 | - 24 | - 28 | $8 \cdot 3$ | K 2 |
| 7211 | $30 \quad 2836$ | L 5841 |  |  | $1630 \quad 16.46$ | +2.3559 | +.0032 | $\begin{array}{llll}30 & 7 & 5 \cdot 3\end{array}$ | - 7.650 | $+320$ | $12 \cdot 3$ | + 9 | $\pm 4$ | 9.4 |  |
| 7212 | 253101 | C 7709 | $853$ | 30220 | 3021.03 | 4788 | 33 | $25 \quad 39 \quad 52 \cdot 2$ | 643 | 337 | $11 \cdot 5$ | - 19 | - 26 | $7 \cdot 8$ | $\mathrm{K}_{2}$ |
| 7213 | 243027 | C 7710 | $862-4$ |  | $3047 \cdot 29$ | 5005 | 34 | $24+932 \cdot 8$ | 608 | 341 | 10.2 | + I | - 46 | 8.81 | Ko |
| 7214 | 312866 | L 5849 |  |  | $3137 \cdot 59$ | 3206 | 32 | $\begin{array}{llll}31 & 16 & 3.6\end{array}$ | 540 | 317 | 9.0 | - II | + 22 | $8 \cdot 5$ | G 5 |
| 7215 |  | C 7715 |  |  | 3140.04 | 3769 | 32 | 291929.9 | 536 | 325 | 13.1 | $+\quad 4^{8}$ | + 39 | $9 \cdot 4$ |  |
| 7216 | 282585 | C 7716 | 906 | 30233 | 163150.35 | $+2.4123$ | +.0033 | $\begin{array}{llll}28 & 3 & 20 \cdot 6\end{array}$ | -7.523 | +.330 | $10 \cdot 5$ | + 4 | - I | $9 \cdot 4$ |  |
| 7217 | $26 \quad 2863$ | C 7717 | 901-2 |  | 3152.93 | 4505 | 33 | $263933 \cdot 0$ | 519 | '334 | $10 \cdot 2$ | - 10 | - 30 | 9. I |  |
| 7218 | 24 303I | B 5657 |  | 30263 | 3 I 53.42 | 5076 | 34 | $243038 \cdot 3$ | 518 | $3+^{2}$ | $8 \cdot 9$ | - 34 | + 14 | 8.1 | F 2 |
| 7219 | 302841 | L 5853 | 912-3 | 30245 | 3159.99 | 3342 | 32 | $30 \quad 4712.6$ | 509 | 319 | $10 \cdot 1$ | 17 | + 28 | $8 \cdot 8$ | K 5 |
| 7220 | 292851 | C 7718 |  |  | $32 \quad 5 \cdot 47$ | 3755 | 33 | $292115 \cdot 8$ | 502 | 325 | 12.2 | 5 | - 37 | $9 \cdot 1$ | A 3 |
| 7221 | 282586 | C 7719 | 916 | 30244 | $1632 \quad 7 \cdot 67$ | +2.4119 | +.0033 | $28 \quad 322.5$ | - 7.499 | + 329 | $9 \cdot 9$ | $t \quad 4$ | + 9 | $8 \cdot 7$ | F 8 |
| 7222 | $30 \quad 2842$ | L 5856 | 930 |  | $\begin{array}{lll}32 & 18.19\end{array}$ | 3449 | 32 | $\begin{array}{llll}30 & 24 & 30 \cdot 3\end{array}$ | 485 | 320 | $11 \cdot 1$ | + 10 | $-43$ | $9 \cdot 4$ |  |
| 7223 | $25 \quad 3107$ | C 7720 |  |  | $32 \begin{array}{lll}32 & 182\end{array}$ | 4758 | 33 | $254^{2}+3$ | 484 | 338 | 12.2 | + 4 | + 7 | $9 \cdot 4$ |  |
| 7224 | $\begin{array}{llll}30 & 2843\end{array}$ | C 7721 | 931 | 30260 | 3221.75 | 3587 | 32 | $295545 \cdot 4$ | 480 | 322 | $10 \cdot 9$ | 8 | 31 | 8.86 | G 5 |
| 7225 | $31 \quad 2873$ | L 5861 | 947 | 30271 | $3256 \cdot 78$ | 3227 | 32 | $\begin{array}{llll}31 & 8 & 8.4\end{array}$ | 433 | 317 | $8 \cdot 23$ | 4 | 502 | $7 \cdot 32$ | F 8 |
| 7226 | 262864 | C 7727 | 948-9 |  | $\begin{array}{lll}16 & 33 & 8.47\end{array}$ | $+2.4476$ | $+.0033$ | $2642 \quad 57 \cdot 3$ | -7.417 | +.33t | $8 \cdot 8$ | - 19 | - 89 | $7 \cdot 8$. | F 5 |
| 7227 | $27 \quad 2659$ | C 7730 | $965-6-7$ |  | $33 \cdot 25 \cdot 72$ | 4414 | 33 | $\begin{array}{llll}26 & 56 & 3 \cdot 7\end{array}$ | 393 | 333 | $8 \cdot 2$ | - 34 | + 44 | $8 \cdot 3$ | F 5 |
| 7228 | 292858 | C 7735 | 986-8 |  | - $342 \cdot 24$ | 3827 | 33 | 29 1 2.7. | 344 | 327 | 10.6 | - 14 | - 58 | $7 \cdot 7$ | G 5 |
| 7229 | 272660 | C 7734 | 985 |  | $34 \quad 3 \cdot 27$ | 4239 | 33 | 27 32 4$\cdot 5$ | 342 | 332 | $10 \cdot 3$ | - 13 | - 35 | 8.I | G 5 |
| 7230 | 27 2661 | C 7737 | 991 | 30337 | $\begin{array}{lll}34 & 9 \cdot 87\end{array}$ | 4326 | 33 | $\begin{array}{lllllllllll}27 & 13 & 27 \cdot 1\end{array}$ | 333 | 333 | $9 \cdot 1$ | - 20 | - 45 | $7 \cdot 08$ | Ma |
| 7231 | 308851 | L 5868 |  | 30303 | $\begin{array}{llll}16 & 34 & 19.08\end{array}$ | $+2.3487$ | +.0032 | 30 II, $26 \cdot 8$ | -7.321 | +-322 | 10.1 | 6 | 18 | $9 \cdot 4$ | Ko |
| 7232 | 312879 | L 5869 | 1007 |  | $3422 \cdot 14$ | 3171 | 33 | 311551.0 | 317 | 318 | 11.0 | 5 | - 24 | $9 \cdot 4$ | Fo |
| 7233 | $27 \quad 2662$ | C 7738 | 998-9 |  | $3423 \cdot 60$ | 4243 | 33 | $27 \quad 30 \quad 58 \cdot 7$ | 315 | 332 | $10 \cdot 3$ | 1 | 19 | $9 \cdot 1$ |  |
| 7234 | 292859 | C 7739 | 1009-10 | 30319 | 3428.87 | 3634 | 32 | $2940 \quad 29.5$ | 308 | 324 | 11.0 | 6 | 28 | $8 \cdot 9$ | $K$ |
| 7235 | 302853 | L 5870 | $1011-2$ |  | 34 30.04. | 3310 | 3.2 | 3047 19.1 | 306 | 320 | 10.5 | 2 | + 46 | $8 \cdot 8$ | G 5 |
| 7236 | $27 \quad 2663$ | C $774{ }^{1}$ | 1008 |  | $\begin{array}{llll}16 & 34 & 32 \cdot 78\end{array}$ | +2.4209 | +.0033 | $\begin{array}{llll}27 & 38 & 3 \cdot 7\end{array}$ | $-7 \cdot 302$ | $+.332$ | II. 5 | 1 | - 38 | $9 \cdot 4$ |  |
| 7237 | 243036 | B 5667 | 1001 |  | $3434 \cdot 01$ | 5178 | 34 | $\begin{array}{llll}24 & 1 & 19.4\end{array}$ | 301 | 345 | II. 3 | 19 | - 12 | $9 \cdot 8$ |  |
| 7238 | 253110 | C 7740 | 1003-4 |  | 34 34.15 | +760 | 33 | $\begin{array}{lllll}25 & 36 & 18.5\end{array}$ | -301 | 339 | 11.0 | 8 | - | $8 \cdot 8$ | G 5 |
| 7239 | 292860 | C $774^{2}$ | $1018-9$ | 30328 | $3444 \cdot 06$ | 3579 | 32 | $295121 \cdot 0$ | - 287 | 323 | 10.3.9.5 | 30 | - 198 | $7 \cdot 31$ | G 5 |
| 7240 | 29 2861 | C 7743 | 1021-2 | 30333 | 3451.83 | 3580 | 32 | $295046 \cdot 8$ | 277 | 324 | 11.7 | 10 | - 44 | $9 \cdot 4$ |  |
| 7241 | 243037 | B 5674 | 1027 |  | 163514.61 | $+2.5032$ | +.0034 | 2433324.1 | $-7 \cdot 246$ | $+344$ |  | - $4^{2}$ | + 93 | $8 \cdot 6$ |  |
| 7242 | 243038 | C 7744 |  | 30342 | $35 \quad 21 \cdot 43$ | 4946 | 34 | $24 \quad 5232.8$ | 236 | 342 | $10 \cdot 3$ | - 34 | - 98 | $7 \cdot 96$ | F 5 |
| 7243 | $24 \quad 30399$ | B 5679 | 1031 |  | $35 \quad 28.05$ | 5023 | 34 | $24 \quad 35 \quad 52 \cdot 6$ | 227 | 344 | 11.4 | + 12 | - $4^{2}$ | $9 \cdot 4$ |  |
| 7244 | 272664 | C 7747 |  |  | $35 \quad 32 \cdot 52$ | 4355 | 33 | $\begin{array}{llll}27 & 3 & 49 \cdot 1\end{array}$ | 221 | 333 | 11.9 | + 6 | + 6 | $9 \cdot 4$ |  |
| 7245 | $26 \quad 2872$ | C 7749 | 1041 |  | $3535 \cdot 00$ | $44^{21}$ | 33 | 2649 16.I | 218 | 335 | 12.5 | - II | - 25 | $9 \cdot 4$ |  |
| 7246 | $26 \quad 2874$ | C 7752 | 1051 |  | $\begin{array}{llll}16 & 35 & 50.77\end{array}$ | $+2.4553$ | +.0033 | $26 \quad 1930 \cdot 9$ | $-7 \cdot 196$ | +.336 | 12.4 | - 19 | - 15 | $9 \cdot 4$ |  |
| 7247 | 292864 | C 7753 | 1058 | 30367 | $3552 \cdot 70$ | 3698 | 33 | $292336 \cdot 9$ | 194 | 325 | $9 \cdot 9$ | + 18 | + 13 | $7 \cdot 21$ | A 0 |
| 7248 | 253113 | C 7756 | 1063-4 |  | 36 18-10 | 4715 | 33 | $25 \quad 42 \quad 37 \cdot 9$ | 159 | 339 | $10 \cdot 2$ | - 14 | + II | $8 \cdot 3$ | K o |
| 7249 | $32 \begin{array}{lll}32 & 764\end{array}$ | L 5886 | 1090 |  | $36 \quad 54 \cdot 77$ | 2930 | 33 | 315726.8 | 109 | 315 |  | + 16 | + 2 |  |  |
| 7250 | 302858 | C 7760 | 1088 | 30402 | $3656 \cdot 62$ | 3501 | 32 | $30 \quad 154.7$ | 107 | 323 | $9 \cdot 4$ | - 26 | + 5 | $7 \cdot 86$ | A 0 |


| No. | B.). | A.f.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | See. Var. | Dec. 19100. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectra Type. |
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|  |  |  |  |  | h m | s | 8 | - , " |  | " |  |  |  |  |  |
| 7251 | 292867 | C 7761 | 1095 | 30409 | $\begin{array}{llll}16 & 37 & 8.43\end{array}$ | $+2 \cdot 3771$ | +.0033 | $29 \quad 520.5$ | 7.091 | $+\cdot 328$ | 11.0 | 33 | 35 | 8.0 | ${ }^{2} 2$ |
| 7232 | 253115 | C 7762 | 1091 | 30407 | 3716.68 | 4886 | $3+$ | 25 I 55-1 | 079 | 343 | 10.7 | 17 | - 11 | 6.22 | K 2 |
| 7253 | 262877 | C 7764 | $1100-1$ |  | $37 \quad 23.66$ | 4436 | 33 | $26+1+8 \cdot 6$ | 070 | 336 | 11.3 | + 26 | - 17 | 9.4 |  |
| 7254 | 282600 | C 7767 |  |  | 37 30.10 | 3823 | 33 | $28 \quad 5331 \cdot 1$ | 061 | 327 | 11.7 | - 15 | - 24 | 9.2 |  |
| 7255 | 243044 | B 3694 |  |  | $37+3 \cdot 7+$ | 5095 | 34 | 241324.2 | 042 | 346 | $12 \cdot 1$ | - 17 | - 41 | $9 \cdot 4$ |  |
| $72 ; 6$ | 302859 | L 5887 | 1116-7 | 30425 | $16374+7 \mathrm{I}$ | +2.3407 | +.0032 | $\begin{array}{llll}30 & 19 & 13.4\end{array}$ | 7.041 | + 322 | 11.5 | + 9 | - 2 | $8 \cdot 5$ | 5 |
| 7257 | 302861 | L 5888 | 1121-2 | $30+3 \mathrm{I}$ | 3751.44 | 3369 | 32 | $\begin{array}{lllll}30 & 26 & 45\end{array}$ | 032 | 321 | 11.1 | 47 | - 52 | $7 \cdot 47$ | Fo |
| 7258 | 262879 | C 7769 | 1115 |  | $37 \quad 52 \cdot 66$ | 4552 | 33 |  | 030 | 338 | 10.9 | - 11 | - 63 | $7 \cdot 62$ | K |
| 7259 | 312884 | L. 5889 | $1124{ }^{-5}$ | $30+33-4-5$ | $37 \quad 53.52$ | 2976 | 32 | $31+555 \cdot 8$ | 029 | 317 | $14.11 \cdot 2$ | - 365* | + $385^{*}$ | 3.00 | Go |
| 7260 | 272668 | C 7771 | $1119-20$ | 30427-8 | 37 57.65 | 4322 | 33 | $\begin{array}{llll}27 & 5 & 23.5\end{array}$ | 023 | 334 | 10.8 |  | - $49^{*}$ | $5 \cdot 91$ | F 2 |
| 7261 | 312886 | L 5890 | $1130-1$ | 30437 | $\begin{array}{llll}16 & 38 & 6.24\end{array}$ | $+2.3188$ | +.0032 | $\begin{array}{llll}31 & 2 & 50.3\end{array}$ | $7 \cdot 012$ | + 320 | II.I | - 29 | 7 | 6.97 | F 5 |
| 7262 | 292869 | C 7773 | $1132-3$ |  | 3814.30 | 3613 | 32 | 293534.9 | 001 | 326 | $12 \cdot 1$ | - 9 | - 26 | 8.9 | F 5 |
| 7263 | 302862 | L 5891 |  | 30444 | $\begin{array}{ll}38 & 18.09\end{array}$ | 3320 | 32 | $303543 \cdot 0$ | $6 \cdot 996$ | 322 | 11.5 | 30 | + 9 | $8 \cdot 9$ |  |
| 7264 | 253118 | C 7774 | $1134-7$ |  | $\begin{array}{llll}38 & 28.19\end{array}$ | 4724 | 33 | 2535 51•3 | 982 | 341 | $15 \cdot 9$ | 25 | + 10 | $9 \cdot 4$ |  |
| 7265 | 253119 | C 7776 | ${ }_{1}+4{ }^{2-3}$ |  | $38 \quad 31 \cdot 49$ | 4722 | 33 | $2536 \quad 2.0$ | 977 | 341 | 11.9 | 16 | +168 | $9 \cdot 4$ | G 0 |
| 7266 | 262882 | C 7779 | I 1 $67-8$ | 30467 | $\begin{array}{llll}16 & 39 & 13.63\end{array}$ | +2.4601 | $+\cdot 0033$ | 26 I 28.I | - 6.920 | +.340 | $8 \cdot 5$ | + 5 | 59 | $7 \cdot 4+$ | K o |
| 7267 | $3^{11} 2892$ | L 5899 |  | $30+78$ | 3923.70 | 2941 | 33 | $31491 \cdot 4$ | 906 | 317 | 9.8 | 44 | 16 | 8.6 | K 2 |
| 7268 | $26 \quad 2885$ | C 7781 | 1175 | 30499 | $3925.4^{\circ}$ | $45+4$ | 33 | $\begin{array}{lllllllllll}26 & 13 & 32 \cdot 0\end{array}$ | 903 | 339 | $9 \cdot 5$ | 37 | 49 | 8.1 | Ma |
| 7269 | 292873 | C 7782 | 1179-80 |  | 3926.77 | 3796 | 32 | $28 \quad 5436 \cdot 3$ | 902 | 328 | 10.4 | + 7 | 22 | $9 \cdot 1$ | K o |
| 7270 | 292874 | C 7784 |  |  | $3927 \cdot 82$ | 3634 | 33 | $29.28 \quad 24 \cdot 1$ | 900 | 327 | 10.4 | 17 | - 16 | $9 \cdot 2$ |  |
| 7271 | 253122 | C 7785 |  |  | $163937 \cdot 14$ | +2.4790 | +.003+ | ${ }_{25}^{25} 1883+7$ | 6.888 | +-343 | $9 \cdot 3$ | + 7 | 10 | $8 \cdot 3$ | F 5 |
| 7272 | 292875 | C 7789 | 1193 | 30490 | 39 57-15 | 3726 | 33 | 298856 | 860 | 328 | 10.5 | + 1 | 37 | $8 \cdot 9$ | F 8 |
| 7273 | 262888 | C 7788 | 1190 |  | $3957 \cdot 29$ | 4507 | 33 |  | 860 | 338 | 10.5 | + 23 | - 9 | $9 \cdot+$ |  |
| 7274 | 262889 | C 7790 | $1197-8$ | 30494 | 40 11.32 | 4490 | 33 | 262355.0 | 841 | 338 | 8.5 | 5 | - 29 | 8.5 | F 8 |
| 7275 | 282605 | C 7794 | 1211 | 30505 | $40 \quad 26 \cdot 47$ | 3928 | 32 |  | 820 | 330 | 8.5 | + 3 | - 7 | $8 \cdot 9$ | A 3 |
| 7276 | 292876 | C 7796 | 1233 | 30537 | 164126.30 | $+2.3567$ | 0032 | $29 \begin{array}{ll} & 37 \\ 3 & 3 \cdot 9\end{array}$ | -6.738 | + 326 | 10.0 | - 3 | 21 | $8 \cdot 7$ | 5 |
| 7277 | 282607 | C 7798 | 1236 | 30538-9 | $4^{1} 30.24$ | 3884 | 32 | $28 \quad 3118$ | 733 | 331 | 8.9 | + II | + 21 | 7.09 | F 5 |
| 7278 | 253126 | C 7797 | 1228 |  | $4132 \cdot 04$ | 4760 | 33 | $25 \quad 2112.6$ | 730 | $3+3$ | 10.7 | $\bigcirc$ | - 75 | 9.5 |  |
| 7279 | $2+3050$ | C 7799 | 1230-1-2 | 30531 | $4134 \cdot 80$ | 4922 | 33 | $244453 \cdot 2$ | 726 | 345 | $9 \cdot 9$ | 9 | - 12 | $8 \cdot 31$ | K 2 |
| 7280 | 312899 | L 5911 | 1255 | 30546 | $414+13$ | 2906 | 33 | $31 \quad 5017 \cdot 3$ | 713 | 318 | 10.7 | + 19 | - 13 | $8 \cdot 6$ | G 0 |
| 7281 | 262894 | C 7800 |  |  | 164151.89 | $+2.4375$ | +.0033 | 264521.7 | $-6.703$ | +•338 | 10.3 | 26 | - 57 | 8.6 | F 8 |
| 7282 | 272680 | C 7802 | 1245 |  | 4154.49 | 4227 | 33 | $27 \quad 17 \quad 22 \cdot 6$ | 699 | 336 | II.0 | - 13 | - $4^{1}$ | $8 \cdot 3$ | A 3 |
| 7283 | $26 \quad 2895$ | C 7803 | 1252 |  | $4157 \cdot 62$ | 4591 | 33 | $255746 \cdot 2$ | 695 | 340 | 11.6 | + 13 | - 9 | $9 \cdot 2$ |  |
| 7284 | $27 \quad 2681$ | C 7804 | 1258 |  | $42 \mathrm{I} \cdot 09$ | 4211 | 33 | $27 \quad 2025 \cdot 7$ | 690 | 336 | 11.2 |  | - 9 | 8.8 | 5 |
|  | \|-302871 | L 5913 | 1267 | 3055 | 4212.91 | 3400 | 32 | $30 \quad 10 \quad 7 \cdot 7$ | 674 | 325 | $9 \cdot 7$ | - 10 | - 53 | $8 \cdot 7$ | G |
| 7286 |  |  | 1268 |  | $1642 \cdot 13.47$ | +2.3400 | $+\cdot 003^{2}$ | $30 \quad 9 \quad 55.4$ | - 6.673 | +-325 | 0.4 |  |  |  |  |
| 7287 | 302872 | L 5915 | 1271 | 30561 | $\begin{array}{llllll}42 & 16 \cdot 38\end{array}$ | 3403 | 32 | $\begin{array}{llll}30 & 9 & 22.8\end{array}$ | 669 | 325 | 11.4 | - 1 | + 3 | $9 \cdot 4$ | G 5 |
| 7288 | 253130 | C 7805 | 1264 |  | 4217.50 | 4825 | 33 |  | 668 | 345 | 11.6 | 37 | - 92 | $9 \cdot 4$ |  |
| 7289 | 292878 | C 7807 |  |  | $44^{2} \quad 21.9+$ | 3486 | 32 | 295211.0 | 661 | 326 | 11.5 | 23 | - 33 | $9 \cdot 4$ |  |
| 7290 | 262896 | C 7806 | 1269 |  | $4^{2} 22.76$ | 4523 | 33 | 26121.0 | 660 | 340 | $8 \cdot 9$ | 10 | - 19 | $8 \cdot 3$ | G 5 |
| 7291 | 243053 | C 7808 | 1272-3 |  | 164232.02 | $+2 \cdot 4902$ | 0033 | $244722 \cdot 1$ | -6.647 | + 346 | 11.6 | 0 | - 75 | 9.1 |  |
| 7292 | 272683 | C 7810 | 1263 |  | $4^{2}+2 \cdot 95$ | 4229 | 33 |  | 632 | 336 | 10.8 | + 21 | - 34 | $8 \cdot 7$ | Ko |
| 7293 | 272686 | ${ }^{\text {C } 7815}$ |  | 30578 | $43 \quad 6.34$ | ${ }^{2} 270$ | 33 | $\begin{array}{lllll}27 & 5 & 36 \cdot 4\end{array}$ | 600 | 337 | 11.3 | 8 | 7 $+\quad 7$ | 8.9 |  |
| 7294 | 282610 | C 7820 | 1296 |  | +3 22.79 | 3837 | 32 | $28 \quad 37 \quad 2.6$ | 578 | 331 | 11.6 | - 8 | - 7 | $9 \cdot 5$ |  |
| 295 | 29 2881 | C 7822 |  |  | 43 29.10 | 3615 | 32 |  | 569 | 328 | $9 \cdot 2$ | + 11 | - 22 | 8.5 | F 8 |
| 7296 | 302875 | L 5925 | 1307 | 30605 | 164343.75 | +2.3366 | $+.0032$ | 30.1336 .6 | 6.549 | $+325$ | 11.4 | + 35 | - 33 | $9 \cdot 1$ | G 5 |
| 7297 | 282613 | C 7826 | 1308 | 30606-7 | $43 \quad 49 \cdot 78$ | 3849 | 32 | $28 \quad 3329.7$ | $54^{\circ}$ | 332 | $10 \cdot 1$ | + 34 | - 9 | $8 \cdot 3$ | G 5 |
| 7298 | 292882 | C 7829 |  |  | 4351.07 | 3519 | 32 | 294158.0 | 539 | 327 | $\mathrm{II}_{1 / \mathrm{I}}$ | - | - 33 | $9 \cdot 1$ | A 0 |
| 7299 |  |  | 1306 | 30634 | 4353.24 | 4618 | 33 | 254759.0 | 536 | $34^{2}$ | 11.4 | - 5 | - $4^{2}$ | $8 \cdot 5$ |  |
| 7300 | $\int^{2} 53136$ | C 7827 |  |  | 43 53.41 | 4618 | 33 | $254756 \cdot 8$ | 536 | $34^{2}$ | 10.5 | - 5 | - $4^{2}$ | $9 \cdot 2$ |  |


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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. $1910{ }^{\circ} \mathrm{O}$. | Precession. | Sec. Var. | Epoch 1900+ | $\begin{gathered} \text { R.A. } \\ \text { 8.0001. } \end{gathered}$ | $\begin{gathered} \text { Dec. } \\ \text { ".00 } . \end{gathered}$ | Mag. | Spectral Туре. |
|  | $\bigcirc$ |  |  |  | h m | s | 8 | - " |  | " |  |  |  |  |  |
| 7301 | 253137 | C 7831 | 1325-7 | 30648 | $1644 \quad 22.75$ | +2.4639 | $+\cdot 0033$ | $254217 \cdot 4$ | $-6.495$ | +.342 | $9 \cdot 4$ | - $2-$ | + 26 | $7 \cdot 9$ | F 8 |
| 7302 | 312908 | L. 5929 | 1333-4 | 30632 | 4426.09 | 2901 | 32 | 314456.5 | $49^{\circ}$ | 319 | $8 \cdot 9$ | $+3$ | - 37 | $8 \cdot 7$ | Ma |
| 7303 | $28 \quad 2614$ | C 7832 | 1332 | 30630 | 44 30.72 | 3990 | 32 | $\begin{array}{llll}28 & 2 & 23.8\end{array}$ | 484 | 334 | $9 \cdot 5$ | 1 | + 3 | $8 \cdot 3$ | A 3 |
| 7304 | 243058 | B 5740 | 1336 |  | 44 49.09 | 5018 | 34 | $\begin{array}{llll}24 & 16 & 49 \cdot 8\end{array}$ | 459 | 347 | $9 \cdot 4$ | . 25 | - 34 | $8 \cdot 8$ | F 8 |
| 7305 | $262904^{\circ}$ | C 7833 | $1338-9-40$ |  | $4452 \cdot 65$ | 4346 | 33 | $26 \quad 45 \quad 26 \cdot 3$ | 454 | 339 | 10.0 | + 23 | - 13 | $7 \cdot 9$ | K 2 |
| 7306 | $24 \quad 3060$ | B 5741 | I 345 |  | $1645 \quad 9 \cdot 51$ | $+2.4978$ | +.0034 | 242512.0 | - 6.430 | +.347 | $10 \cdot 6$ | - I | - 1 | $9 \cdot 2$ |  |
| $7307$ | 312910 | L 5932 |  |  | $45 \quad 18 \cdot 53$ | 2930 | 32 | $\begin{array}{llll}31 & 37 & 10.4\end{array}$ | 418 | 320 | $10 \cdot 9$ | - 24 | - 7 | $9 \cdot 4$ |  |
| 7308 | 312911 | L 5933 |  |  | $45 \quad 28 \cdot 04$ | 2989 | 32 | 312510.0 | 405 | 320 | 10.5 | - ${ }^{2}$ | $-10$ | $9 \cdot 2$ |  |
| 7309 | 302880 | C 7838 | 1363 | $30660^{\circ}$ | 45 45.21 | 3376 | 32 | $\begin{array}{llll}30 & 7 & 7 \cdot 0\end{array}$ | 381 | - 325 | $8 \cdot 5$ | $-53^{*}$ | + $75^{*}$ | $6 \cdot 68$ | K 2 |
| 7310 | $25 \quad 3145$ | C 7839 | 1356 |  | $4549 \cdot 95$ | 4638 | 33 | 253934.7 | 374 | 343 | $10 \cdot 5$ | + 1 | - 27 | $9 \cdot 1$ |  |
| 7311 | $26 \quad 2906$ | C 7840 |  | 30659 | 1645 51-2I | +2.4493 | +.0033 | 26 II 26.5 | - 6.373 | +.341 | $10 \cdot 0$ | + 14 | - 19 | $8 \cdot 2$ | F 5 |
| 7312 | 282616 | C 7842 | $1367-8$ |  | $46 \quad 3 \cdot 53$ | 3844 | 32 | $282949 \cdot 9$ | 356 | 333 | II.O | - 14 | - 21 | $8 \cdot 9$ | F 5 |
| 7313 | 322790 | L 5936 | 1374 |  | $46 \quad 4 \cdot 99$ | 2809 | 32 | $\begin{array}{lllllllllll}31 & 59 & 12.7\end{array}$ | 354 | 318 | II•3 | 33 | + 19 | $9 \cdot 4$ |  |
| 7314 | $28 \quad 2618$ | C 7844 | 1 372 - 3 |  | $46 \quad 9.59$ | 3831 | 32 | 2832 2I•3 | 347 | 333 | $10 \cdot 9$ | - 37 | + 29 | $7 \cdot 9$ | F 8 |
| 7315 | 262907 | C 7847 | 1377 | 30672 | $\begin{array}{lll}46 & 23.87\end{array}$ | 4440 | 33 | $262148 \cdot 0$ | 328 | 341 | $8 \cdot 7$ | + 17 | - 3 | 7-18 | K |
| 7316 | 272698 | C 7849 |  |  | $16 \quad 46 \quad 31 \cdot 37$ | $+2.4229$ | $+\cdot 0032$ | 27 7 14.1 | -6.317 | +.338 | $10 \cdot 1$ | + 28 | - 40 | $9 \cdot 2$ |  |
| 7317 | $28 \quad 2619$ | C 7850 | 1 385-6 |  | 4638.88 | 3778 | 32 | $284233 \cdot 9$ | 307 | 332 | $10 \cdot 2$ | + 13 | - 53 | $9 \cdot 5$ |  |
| 7318 | 282620 | C 7852 |  |  | $464^{8 \cdot 99}$ | 3975 | 32 | 28 -40.9 | 293 | 335 | $10 \cdot 9$ | + 8 | + 7 | $9 \cdot 2$ |  |
| 7319 | 253147 | C 7853 | 1388 |  | 4654.73 | 4684 | 33 | $25 \quad 2719.4$ | 285 | 345 | 10.7 | - 33 | - 7 | $9 \cdot 2$ |  |
| 7320 | 292888 | C 7854 | 1 395-6 |  | $4656 \cdot 80$ | 3667 | 32 | $29 \quad 450 \cdot 7$ | 282 | 331 | 11.0 | 24 | - 44 | 9•I |  |
| 7321 | 302884 | C 7855 |  | 30692 | $16 \quad 47 \quad 8.14$ | +2.3408 | +.0032 | $295734 \cdot 3$ | -6.267 | $+327$ | $8 \cdot 9$ | - 7* | - $7^{*}$ | $5 \cdot 86$ | $\mathrm{K}_{5}$ |
| 7322 | $30 \quad 2885$ | L. 5944 |  |  | $47 \quad 14.84$ | 3230 | 32 | 303319.1 | 257 | 325 | II.O | + 19 | - 4 | $9 \cdot 1$ | G 0 |
| 7323 | 272702 | C 7856 |  | 30693 | 47 19.08 | 4183 | 32 | $27 \quad 1533.7$ | 251 | 338 | 11.4 | + 53 | - 39 | $8 \cdot 7$ |  |
| 7324 | 312916 | L 5947 | 1417. |  | $47 \quad 28 \cdot 39$ | 2909 | 32 | $\begin{array}{llll}31 & 36 & 35 \cdot 7\end{array}$ | 238 | 320 | II•7 | + 15 | - 128 | $9 \cdot 4$ |  |
| 7325 | 243066 | B 5746 | 1410 |  | 47 31.89 | 4916 | 33 | $243437 \cdot 9$ | 233 | 347 | $11 \cdot 3$ | - 14 | - 7 | $8 \cdot 5$ |  |
| 7326 | 243065 | B 5747 |  |  | $164735 \cdot 15$ | +2.5002 | +.0034 | 24.1512 .9 | -6.229 | +-348 | 11.7 | + 19 | - 15 | $9 \cdot 4$ |  |
| 7327 | 292889 | C 7857 | 1421 | 30708 | $4740 \cdot 83$ | 3471 | 32 | $29 \quad 43 \quad 28 \cdot 7$ | 220 | 328 | II•I | $+\quad 69$ | - 87 | $8 \cdot 2$ | G 5 |
| 7328 | $28 \quad 2622$ | C 7859 | 1425 | 30713 | 47 49-70 | 3775 | 32 | $284032 \cdot 3$ | 209 | 332 | -2 | + 17 | - 20 | 9.1 |  |
| 7329 | $30 \quad 2887$ | L 5950 |  |  | 47 51.20 | 3305 | 32 | 301654.9 | 207 | 326 | 10.8 | 16 | - 27 | 9-I |  |
| 7330 | 282623 | C 7860 | 1427 | 30714 | $4752 \cdot 22$ | 3891 | 32 | $281620 \cdot 9$ | 205 | 334 | $10 \cdot 3$ | 9 | + 3 | $6 \cdot 94$ | G 5 |
| 7331 | 243069 | C 7861 | 1428-9 | 30715 | $\begin{array}{lll}16 & 48 & 1.39\end{array}$ | $+2.4850$ | +.0033 | $244^{8} \quad 26 \cdot 1$ | -6.193 | + 347 | 10.9 | + 12* | + $2^{*}$ | $5 \cdot 20$ | K |
| 7332 | 253150 | C 7862 | 1432-3 | 30720 | $\begin{array}{ll}48 & 4 \cdot 87\end{array}$ | 4648 | 33 | $\begin{array}{lllll}25 & 33 & 4.6\end{array}$ | 188 | 345 | 10.5 | - 39 | - 16 | $6 \cdot 90$ | F 2 |
| 7333 | 312920 | L 5953 | 1434 |  | $48 \quad 6.23$ | 2933 | 32 | $3 \mathrm{I} \quad 3027 \cdot 8$ | 186 | 320 | II.9 | - 23 | + 3 | $9 \cdot 4$ |  |
| 7334 | 292890 | C 7864 |  |  | $48 \quad 6 \cdot 72$ | 3671 | 32 | 29 I 36.0 | 185 | 331 | $12 \cdot 3$ | - 27 | - 14 | $9 \cdot 2$ |  |
| 7335 | 312921 | L 5954 | 1438 |  | $48 \quad 12 \cdot 27$ | 3098 | 32 | $30 \quad 57 \quad 34.4$ | 178 | 323 | 12.5 | 12 | - 9 | $9 \cdot 4$ |  |
| 7336 | $28 \quad 2624$ | C 7865 |  | 30734 | $16 \quad 48 \quad 16.41$ | $+2.3730$ | +0032 | $28 \quad 48 \quad 58 \cdot 2$ | $-6.172$ | +.332 | $10 \cdot 7$ | + 12 | + 24 | $6 \cdot 52$ | F 5 |
| 7337 | 312923 | L 5956 | 1449 |  | $48 \quad 24.49$ | 2874 | 32 | 3 I 4121.9 | 161 | 320 | 12.4 | - 17 | +19 | $9 \cdot 4$ |  |
| 7338 | $28 \quad 2626$ | C 7868 |  | 30741 | $48 \quad 39 \cdot 56$ | 3772 | 32 | $283926 \cdot 6$ | 140 | 332 | $9 \cdot 3$ | + 45 | - 9 | $9 \cdot 4$ |  |
| 7339 | 243073 | B 5757 | 1454 | 30746 | $49 \quad 0.51$ | 4888 | 33 | $\begin{array}{llll}24 & 38 & 7 \cdot 2\end{array}$ | I II | 348 | $9 \cdot 5$ | - 5 | + 30 | $9 \cdot 4$ |  |
| 7340 | $28 \quad 2629$ | C 7870 | 1465 | 30766 | $49^{20 \cdot 78}$ | 3843 |  | $28 \quad 23 \quad 24 \cdot 2$ | 082 | 333 | $8 \cdot 8$ | - 54 | + 133 | $9 \cdot 4$ | G 5 |
| 7341 | 312925 | L 5962 | 1475 | 30774 | 164933.21 | +2.2812 | $+\cdot 0032$ | 31510.4 | - 6.065 | +.320 | 12.4 | - 75* | *- 23 * | $5 \cdot 35$ | Fo |
| 7342 | 243077 | B 5761 |  |  | 49 44.03 | 5032 | 33 | $24 \quad 4 \quad 31 \cdot 3$ | 050 | 351 | $9 \cdot 3$ | - $4^{8}$ | + 5 | $8 \cdot 8$ | K 2 |
| 7343 | 26 291I | C 7876 | 1478 | 30778 | 4952.02 | 4381 | 33 | $26 \quad 28 \quad 2 \cdot 3$ | -39 | 341 | $9 \cdot 0$ | + 1 | - 33 | $8 \cdot 9$ |  |
| 7344 | $26 \quad 2912$ | C 7877 | $1480-1$ | 30776 | $4954 \cdot 32$ | 4344 |  | $263546 \cdot 1$ | 036 | 340 | $9 \cdot 5$ | + 26 | - 49 | $9 \cdot 2$ |  |
| 7345 | ¢292895 | C 7881 | 1488 | 30785 | $50 \quad 2 \cdot 60$ | 3461 |  | $29404 \mathrm{I} \cdot \mathrm{I}$ | 024 | 329 | 10.0 | + 21 | - 3 | $9 \cdot 2$ |  |
| 7346 | 31 2927 | L 5968 | 1504-5 |  | $16 \quad 50 \quad 24.96$ | +2.2970 | +.0032 | $311816 \cdot 3$ | - 5.993 | $+\cdot 323$ | $9^{\cdot 1}$ | - 43 | + 67 | $8 \cdot 9$ |  |
| 7347 | 29 2896 | C 7883 |  | 30796 | $50.27 \cdot 40$ | 3582 | - 32 | 291511.0 | 990 | 331 | $9 \cdot 4$ | 6 | - 39 | $8 \cdot 9$ | F 8 |
| 7348 | 272706 | C 7884 | 1502 | 30795 | $50 \quad 29 \cdot 10$ | 4018 | 832 | $27 \quad 44 \quad 12 \cdot 7$ | 988 | 337 | $9 \cdot 5$ | + 4 | 14 $+\quad 14$ | $8 \cdot 7$ | K |
| 7349 | 29 2897 | C 7885 |  |  | $50 \quad 34 \cdot 38$ | 3599 |  | 29 I1 $32 \cdot 9$ | 980 | 331 | $10 \cdot 1$ | + 40 | - 20 | $10 \cdot 0$ |  |
| 7350 | 302900 | L 5971 |  |  | $5051 \cdot 12$ | 3182 | 232 | 303515.0 | 957 | 326 | $9 \cdot 1$ | + 22 | - II | $8 \cdot 2$ | F 2 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.000 }}{\text { R.A. }}$ | Dec. $0.001 .$ |  |  |
|  | - |  |  |  | h m | $s$ | $s$ | - , " | " | " |  |  |  |  |  |
| 7351 | $2+3082$ | B 5765 |  |  | $165055 \cdot 62$ | +2.5041 | +.0033 | $24 \bigcirc 25 \cdot 1$ | - $5 \cdot 95 \mathrm{I}$ | +.351 | 10.0 | - 3 | 22 | 9.2 |  |
| 7352 | 243083 | B 5769 | 1521 | 30812 | 5118.21 | 4940 | 33 | $2422 \quad 23 \cdot 2$ | 919 | 351 | 10.5 | + 7 | - 32 | $8 \cdot 3$ | K 5 |
| 7353 | 282633 | C 7892 | 1527 | 30820 | 5120.47 | 3855 | 32 | $281649 \cdot 3$ | 916 | 335 | 10.5 | + 26 | + 6 | 7.12 | Fo |
| 7354 | 253156 | C 7891 | 1523-4 | 30817 | 51 21-10 | 453 I | 32 | $25 \quad 5230 \cdot 6$ | 915 | 344 | $9 \cdot 0$ | + 9* $^{*}$ | -, 29* | 6.33 | K。 |
| 7355 | 282634 | C 7893 |  |  | $5125 \cdot 12$ | 3714 | 32 | $28 \quad 45 \quad 58.6$ | 909 | 333 | 10.6 | $-4^{8}$ | - 51 | 8.7 | F 5 |
| 7356 | 292902 | C 7894 |  | 30825 | 165128.78 | $+2 \cdot 3592$ | +.0032 | 291058.7 | -5.904 | +.331 | 9.9 | + 29 | - 44 | $7 \cdot 30$ | A 5 |
| 7357 | 302902 | L 5975 | 1532 | 30830 | 5129.64 | 3097 | 32 | $305058 \cdot 5$ | 903 | 324 | 10.5 | 19 | - 6 | $8 \cdot 1$ | K 5 |
| 7358 | 253157 | C 7897 | 1540 | 30833 | $5159 \cdot 15$ | 4590 | 32 | $25 \quad 3838 \cdot 8$ | 862 | 345 | 9.7 | + 29 | - 50 | 9•1 | Ma |
| 7359 | 243088 | B 5773 | 1549-50 |  | $5217 \cdot 19$ | 4859 | 33 | $243849 \cdot 2$ | 837 | 349 | 10.0 | 10 | - | -8.5 |  |
| 7360 | 272719 | C 7900 | 1562 | 30857 | $5233 \cdot 40$ | 4110 | 32 | $27205 \mathrm{I} \cdot 2$ | 814 | 339 | 10.4 | $+34$ | 20 | 8.8 | K o |
| 7361 | 243091 | B 5776 | 1563 |  | 165242.03 | +2.4916 | 0033 | $2425 \quad 27 \cdot 2$ | - 5.802 | + 350 | $10 \cdot 3$ | - 36 | + 22 | $8 \cdot 9$ |  |
| 7362 | 312932 | L 5980 |  | 30872 | 5255.68 | 2990 | 32 | $\begin{array}{llll}11 & 9 & 8.9\end{array}$ | 783 | 323 | $9 \cdot 5$ | + 1 | - 23 | $8 \cdot \mathrm{I}$ | A 2 |
| 7363. | 282637 | ${ }^{\text {C }} 7902$ |  |  | $5259 \cdot 63$ | 3745 | 32 | $283638 \cdot 6$ | 778 | 334 | 12.1 | + 24 | + 5 | 9.2 |  |
| 7364 | 262921 | C 7903 |  |  | 53 2.11 | 4425 | 32 | $261231 \cdot 9$ | 774 | 343 | 12.3 | + 1 | - 20 | $9 \cdot 4$ |  |
| 7365 | 253162 | C 7905 | $1576-7$ |  | $\begin{array}{llll}53 & 14.07\end{array}$ | 4733 | 32 | $\begin{array}{lllll}25 & 4 & 58 \cdot 7\end{array}$ | 758 | 348 | $1 \mathrm{I} \cdot 6$ | 8 | + 12 | $9 \cdot 5$ |  |
| 7366 | 312933 | L 5983 |  | 30883 | $16 \quad 53 \quad 17.78$ | $+2.3033$ | 0032 | 305953.9 | - $5 \cdot 752$ | +-324 | $12 \cdot 1$ | + 23 | + 12 | $9 \cdot 2$ |  |
| 7367 | 282639 | C 7907 |  |  | $\begin{array}{lll}53 & 18.27\end{array}$ | 3785 | 32 | $28 \quad 2740 \cdot 3$ | 752 | 334 | $12 \cdot 1$ | + 7 | + 14 | 9-1 | F 5 |
| 7368 | 292905 | C 7908 |  | 30880 | 5318.73 | 3414 | 32 | $294348 \cdot 3$ | 751 | 329 | II•9 | + 7 | - 32 | $8 \cdot 5$ | Go |
| 7369 | 243094 | B 5779 | 1578 |  | 5319.80 | 4936 | 33 | $241952 \cdot 4$ | 749 | 351 | $12 \cdot 1$ | - 7 | + 7 | $8 \cdot 7$ | Fo |
| 7370 | 292906 | C 7910 | 1585 |  | $53 \quad 24 \cdot 24$ | 3553 | 32 | 29 I5 23.2 | 743 | 331 | 12.7 | $+3$ | - 9 | $9 \cdot 2$ |  |
| 7371 | 253165 | C 7911 | 1583-4 | 30865 | 165330.85 | $+2.4670$ | $+\cdot 0032$ | $\begin{array}{llllll}25 & 18 & 26 \cdot 6\end{array}$ | $-5.734$ | + 347 | 11.7 | 5 | - 17 | $8 \cdot 7$ |  |
| 7372 | 253166 | C 7913 | 1597-9 | 30886 | $5349 \cdot 26$ | 4618 | 32 | $25 \quad 2928.9$ | 708 | 346 | $9 \cdot 6$ | + 6* |  | $6 \cdot 69$ | K |
| 7373 | 253168 | C 7915 | 1601 |  | 53 56.15 | 4640 | 32 | $\begin{array}{lllll}25 & 24 & 8.5\end{array}$ | 699 | 346 | $9 \cdot 9$ | + 31 | - 12 | 9.2 |  |
| 7374 | 243095 | B 5785 |  | 30889-90 | $5358 \cdot 20$ | 4880 | 33 | 243112.6 | 696 | 350 | 10.9 | $\underline{+\quad 16}$ | - 37 | $6 \cdot 36$ | K o |
| 7375 | 312935 | L 5987 |  |  | $54 \quad 18.76$ | 2940 | 32 |  | 667 | 324 | $12 \cdot 9$ | + 32 | + $\quad 3$ | $9 \cdot 2$ |  |
| 7376 | 253174 | C 7922 | ${ }^{1616-7}$ | 30909 | $1654 \quad 30.59$ | $+2.4616$ | $+\cdot 0032$ | $25 \quad 2834 \cdot 3$ | $-5.651$ | + 347 | 12.3 | 8 | - 7 | 8.8 | Fo |
| 7377 | 312936 | L 5990 | 1622 |  | 5431.59 | 2976 | 32 | $\begin{array}{llll}31 & 8 & 48.7\end{array}$ | 649 | 324 | $10 \cdot 3$ | - 10 | - 20 | 8.8 |  |
| 7378 | 282642 | C 7925 | 1625 | 30920 | $5446 \cdot 54$ | 3802 | 32 | 2812119.8 | 628 | 335 | $1 \mathrm{I} \cdot 9$ | + 35 | + | 8.6 | A 3 |
| 7379 | 322824 | L 5993 | 1629 |  | 54 50.01 | 2732 | 32 | $315539 \cdot 1$ | 623 | 320 | 12.8 | 11 | + 34 | 9.1 |  |
| 7380 | 312937 | L 5992 |  |  | 5450.03 | 2941 | 32 |  | 623 | 324 | 13.1 | 30 | + 81 | $9 \cdot 4$ |  |
| I | 312938 | L 5994 |  |  | $165452 \cdot 69$ | +2.2885 | $+.0032$ | $312555 \cdot 8$ | $-5.620$ | $+323$ | 13.5 | + 54 | - 39 | 9.4 |  |
| 7382 | 282643 | C 7927 | 1628 |  | 5458.29 | 3809 | 32 | $\begin{array}{lllllll}28 & 19 & 37 \cdot 6\end{array}$ | 612 | 336 | 12.7 | + 7 | - 35 | $10 \cdot 0$ |  |
| 7383 | 312939 | L 5996 |  |  | $\begin{array}{ll}55 & 0.05\end{array}$ | 2741 |  | $3 \mathrm{I} 5343 \cdot 1$ | 610 | 321 | 13.5 | - 34 | + ${ }^{6}$ | $9 \cdot 4$ |  |
| 7384 | 302911 | L 5997 | 1633-4 | 30931 | $\begin{array}{llll}55 & 3.58\end{array}$ | 3100 | 32 | $3043 \quad 20 \cdot 2$ | 604 | 326 | 12.3 | + 10 | + 4 | $8 \cdot 7$ | G 5 |
| 7385 | $27 \quad 2728$ | C 7930 | 1635 |  | 5511.06 | 3964 | 32 | $274652 \cdot 0$ | 594 | 338 | 12 | 12 | 36 | $8 \cdot 5$ | K 5 |
| 7386 | 253175 | C 7932 | 1640 |  | $16 \quad 55 \quad 24.57$ | +2.4714 | $+.0032$ | $\begin{array}{llll}25 & 5 & 33 \cdot 0\end{array}$ | $-5.575$ | $+349$ | $10 \cdot 7$ | $\bigcirc$ | + 9 | 8.8 | Fo |
| 7387 | 312942 | L 6000 | 1647 | 30950 | $5532 \cdot 71$ | 2825 | 32 |  |  | 322 | 10.7 | + 22 | + 13 | $8 \cdot 1$ | F 5 |
| 7388 | 243099 | B 5793 | 1644 |  | $5536 \cdot 91$ | 4839 | 32 | $\begin{array}{lllll}24 & 37 & 38.0\end{array}$ | 558 | 350 | 12.3 | - 7 | - 18 | 8.9 |  |
| 7389 | 243101 | B 5795 | 1650 | 30951 | $5555 \cdot 78$ | 4914 | 32 | $\begin{array}{llll}24 & 20 & 26 \cdot 7\end{array}$ | 531 | 352 | 10.9 | - 7 | - 91 | $7 \cdot 8$ | K。 |
| 7390 | 262928 | C 7936 | 1653 |  | 55 56.29 | 4253 | 32 | 264428.5 | 531 | 342 | 10.9 | 26 | - 15 | $9 \cdot 4$ |  |
| 7391 | 292915 | C 7937 |  |  | 16 $\quad 56$ | +2.3402 | +.0032 | $2941 \begin{array}{lll} \\ 29 & 2 \cdot 1\end{array}$ | $-5.520$ | $+\cdot 330$ | 12.2 | + 4 | - 37 | $7 \cdot 76$ | A 0 |
| 7392 | 272733 | C 7940 |  | 30969 30967 | 56 16.49 <br> 56  | 4050 | 32 | 27 26 $59 \cdot 2$ <br> 26 35  | 502 | 339 | $10 \cdot 7$ | $+\quad 21$ $+\quad 27$ | - 10 | $7 \cdot 26$ | Mb |
| 7393 | 262930 | C 7939 | 1661 | 30967 | $\begin{array}{llll}56 & 17.37\end{array}$ | 4294 | 32 | $\begin{array}{llll}26 & 35 & 0.5\end{array}$ | 501 | 343 | 12.3 | + 27 | - 39 | 9.2 |  |
| 7394 | 312946 | L 6008 | 1685 |  | $5637 \cdot 25$ | 2978 | 32 | $\begin{array}{llll}31 & 4 & 17.7\end{array}$ | 473 | 325 | 11.5 | + 4 | + | $9 \cdot 4$ |  |
| 7395 | $26 \quad 2932$ | C $794{ }^{2}$ | 1680 | 30977 | 5639.08 | 4349 | 32 | $\begin{array}{llllllllllll}26 & 22 & 377\end{array}$ | 471 | 343 | $10 \cdot 9$ | + 6 |  | $8 \cdot 3$ | Ma |
| 7396 | 312947 | L 6009 | 1689 | 30996-7 | $1656 \quad 50.73$ | +2.2980 | +.0032 | $\begin{array}{llll}31 & 3 & 30.6\end{array}$ | - 5.454 | +-325 | 11.3 | - 36* | + 21* | 3.92 | A 0 |
| 7397 | 243104 | B 5803 | 1686 | 30983 | 56 56.51 | 4852 | 32 | $243236 \cdot 0$ | 446 | 35 I | 12.0 | + 3 | - 14 | $8 \cdot \mathrm{I}$ | A 0 |
| 7398 | 262934 | C 7945 | 1690 | 30986 | $\begin{array}{lll}57 & 3.04\end{array}$ | 4279 | 32 |  | 437 | 342 | $1 \mathrm{I} \cdot 0$ | + 30 | - 44 | $8 \cdot \mathrm{I}$ | K 5 |
| 7399 | 25 28 28 2648 | C 7946 |  |  | 57 8.75 <br> 78  | 4508 | 32 | 254739.9 | 429 | 346 | 11.7 | - 3 | + $\quad 25$ | 8.6 | F 8 |
| 7400 | 282648 | C 7947 |  |  | 5714.25 | 3620 | 32 | $28 \quad 5431 \cdot 5$ | 42 I | 333 | II 3 | - 19 | + 28 | $9 \cdot 4$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19 roo. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | $\mathrm{Sec} .$Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectra Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\xrightarrow[8.0001]{\text { R.A. }}$ | $\begin{gathered} \text { Dec. } \\ \text { n.0oı. } \end{gathered}$ |  |  |
|  | 。 |  |  |  | h m s | ${ }^{5}$ | s | - ' " | " | " |  |  |  |  |  |
| 7401 | 253179 | C $79+8$ | 1697-8 |  | $16 \quad 57 \quad 26 \cdot 77$ | $+2 \cdot+697$ | +.0032 |  | - $5 \cdot 404$ | +•349 | 12.1 | - 2 | 26 | 8.7 |  |
| 7402 | 292920 | C 7953 |  |  | $5731 \cdot 80$ | 3414 | 32 | 293548.7 | 397 | 331 | 12.3 |  |  | $9 \cdot 4$ |  |
| 7403 | 292919 | C 7952 |  |  | 57 32.21 | 3582 | 32 | $29 \quad 147.4$ | 396 | 333 | 12.6 | - 22 | 1 | $9 \cdot 5$ |  |
| 7404 | 272738 | ${ }^{\text {C } 7950}$ | 1707 | 31010 | $57 \quad 32 \cdot 85$ | 4074 |  | 271944.7 | 395 | 340 | 10.9 | 12 | 72 | $6 \cdot 37$ | F 5 |
| 7405 | 253180 | C 7955 |  | 31021 | $5756 \cdot{ }^{2}$ | 4510 | 32 | $254544 \cdot 5$ | 362 | 346 | 10. | 3 | 39 | $8 \cdot 6$ |  |
| 7406 | 312950 | L 6014 |  |  | $\begin{array}{lll}16 & 58 & 0.16\end{array}$ | +2.2799 | +.0032 | $\begin{array}{lllll}31 & 36 & 37.0\end{array}$ | - $5 \cdot 357$ | + 323. | 11.9 | + | - 2 | 9.4 |  |
| 7407 | 312951 | L6015. |  |  | $\begin{array}{lll}58 & 3.83\end{array}$ | 2873 | 32 | $\begin{array}{llllllll}31 & 22 & 13.0\end{array}$ | 352 | 324 | 11.7 | + 36 | - 37 | $8 \cdot 8$ | F 5 |
| 7408 | ${ }^{2} 43105$ | B 5811 |  | 31025 | $58 \quad 7 \cdot 32$ | +857 | 33 | $242935 \cdot 1$ | 347 | 352 | 12.0 | + 6 | $+3$ | $8 \cdot 7$ | K 0 |
| 7409 | 253182 | C 7956 | 1719-20 |  | $58 \quad 20 \cdot 11$ | 4672 | 32 | $25 \quad 9 \quad 59.1$ | 329 | 349 | $9 \cdot 7$ | + | + 19 | 7.91 | K 2 |
| $7{ }^{10}$ | 253183 | C 7959 | 1735 | 31041 | $58 \quad 37 \cdot 25$ | +541 | 32 | $253755^{-1}$ | 305 | 347 | 8.7.9.7 | - 3 | $+103$ | $5 \cdot 95$ | K 0 |
| $77_{11}$ | 292924 | C 7964 |  | 31057 | $16 \quad 58 \quad 59.70$ | +2.3452 | $+.0031$ | $2925 \quad 29 \cdot 8$ | - 5.273 | $+\cdot 332$ | 9.6 | 10 | 11 | $7 \cdot 51$ | F o |
| $77^{12}$ | 262937 | C 7965 | 1750 |  | $\begin{array}{lll}59 & 3 \cdot 39\end{array}$ | 4233 | 31 | 26 43:26.5 | 268 | 343 | 12.2 | 19 | 22 | 8.8 |  |
| 7413 | 253186 | C 7966 | 1748-9 |  | $59 \quad 5 \cdot 40$ | 4690 | 32 | $25 \quad 4+4 \cdot 5$ | 265 | 350 | 11.9 | + 12 | 20 | 8.8 |  |
| 7414 | $27 \quad 27{ }^{2}$ | C 7968 |  |  | $59 \quad 12 \cdot 53$ | 3895 | 31 | 275415.0 | 255 | 338 | 12.9 | 28 | + 11 | 9.4 |  |
| 7415 | 302925 | C 7971 | 1758 |  | 5913.72 | 3295 | 31 | $2956+9 \cdot 8$ | 253 | 330 | 12.3 | 16 | - 12 | $8 \cdot 6$ |  |
| $7+16$ | 253187 | C 7969 | 1754 | 31085 | 165914.75 | +2.4499 | +.0032 | $\begin{array}{lll}25 & 46 & 9 \cdot 3\end{array}$ | - 5.252 | +-347 | 12.3 | - 34 | $-109$ | 8.7 | G |
| $7+17$ | 253189 | C 7970 |  |  | 5918.14 | 4573 | 32 | $25 \quad 30 \quad 5 \cdot 9$ | 247 | 348 | 12.8 |  | 10 | 8.8 |  |
| 7418 | 253190 | C 7973 | 1759-60 |  | 5926.89 | 4716 | 32 | $245831 \cdot 5$ | 235 | 350 | 11.9 |  | + 29 | $8 \cdot 7$ |  |
| $7+19$ | 312953 | L 6027 | 1772 | 31073 | $59 \quad 28.61$ | 2721 | 32 | $\begin{array}{llllllllllll}31 & 29\end{array}$ | 232 | 322 | 10.7 | - ${ }^{2}$ | - 16 | $8 \cdot \mathrm{I}$ | A 2 |
| 7420 | 292927 | C 7976 |  | 31071 | 5932.06 | 3394 | 31 | 293622.4 | 228 | 332 | 10.1 | 10 | 30 | $7 \cdot 96$ | K 2 |
| $7+21$ | 282657 | C 7979 | ${ }^{1776}$ | 31074 | $16 \quad 5943 \cdot 36$ | +2.3864 | +.0031 | 275958.0 | - 5.212 | $+\cdot 338$ | $9 \cdot 1$ | 43 | - 26 | 8.8 | F 2 |
| 7422 | 243112 | B 5828 |  |  | $17 \times 8.47$ | 4912 | 32 | 241419.4 | 176 | 353 | $9 \cdot 7$ |  | 28 | $9 \cdot 3$ |  |
| 7423 | 292931 | C 7983 | 1797-8 |  | $040 \cdot 13$ | 3543 | 3 I | $\begin{array}{lllllll}29 & 4 & 16 \cdot 9\end{array}$ | 132 | 334 | 9.5 | - 4 | - 14 | $9 \cdot 1$ |  |
| 7424 | 262942 | C 7982 | 1795 |  | - 40.28 | 4269 | 31 | 263338.4 | 132 | 344 | $9 \cdot 6$ | 17 $+\quad 17$ | - 31 | $9 \cdot 3$ |  |
| $7{ }^{2} 5$ | 272748 | C 7985 | 1800 | 31108 | - $53.9+$ | 4092 | 31 | 27 10 57.1 | 112 | 341 | $9 \cdot 3$ | + 15 | 13 | $8 \cdot 5$ | Fo |
| 7426 | 312956 | L 6040 |  | 31130 | 17 1. 6.98 | +2.2793 | +.0032 | $\begin{array}{llll}31 & 32 & 8.0\end{array}$ | - 5.094 | $+\cdot 323$ | $9 \cdot 7$ | + 24 | - 23 | $7 \cdot 7$ | K 2 |
| $7{ }^{7} 27$ | $28 \quad 2661$ | C 7989 | 1818 | 31134 | I 11.51 | 3790 | 31 |  | 087 | 337 | 9.4 | - 15 | + 5 | $7 \cdot 20$ | K 。 |
| 7428 | 243115 | B 5837 | 1810 |  | 113.32 | 4899 | 32 | $241538 \cdot 2$ | 085 | 353 | 10.9 | + 14 | + | $8 \cdot 9$ |  |
| 7429 | 282662 | C 7990 |  | 31129 | 114.56 | 3617 | 31 |  | 083 | 335 | 10.5 | $+\quad 18$ | - 59 | $8 \cdot 2$ | Ma |
| 7430 | 292933 | C 7991 | 1823 | 31133 | 117.38 | 332 I | 31 | $294754 \cdot 8$ | 079 | 331 | 10.5 | + 7 | $-4^{2}$ | $8 \cdot 1$ |  |
| 7431 | 262944 | C 7992 | 1822 | 31131 | 17.15124 .64 | $+2.4307$ | $+\cdot 0032$ | $\begin{array}{llll}26 & 23 & 49 \cdot 2\end{array}$ | $-5.069$ | + $3+4$ | 11.5 | + 21 | - 24 | $8 \cdot 7$ |  |
| $7+32$ | 272751 | C 7993 | 1824 |  | 126.90 | 4052 | 31 | 27 17 <br> $10 \cdot 6$  | 066 | $3+1$ | 10.9 | - 12 | - 17 | $9 \cdot 4$ |  |
| 7433 | 272752 | C 7994 | 1825 |  | 129.32 | +137 | 31 | $\begin{array}{llllllllllll}26 & 59 & 52 \cdot 7\end{array}$ | 062 | 342 | 11.2 | + 16 | + 22 | $8 \cdot 2$ | K 2 |
| $7+3+$ | 253195 | C 7996 |  |  | 138.58 | 4482 | 32 |  | 049 | 347 | 12.2 | + 1 | - 22 | $9 \cdot 3$ |  |
| $7+35$ | 253194 | C 7997 |  |  | $138 \cdot 85$ | 4504 | 32 | 254111.0 | 049 | 347 | 11.9 | + 7 | - | 8.8 |  |
| $7+36$ | 282665 | C 8000 |  | 31147 | $\begin{array}{llll}17 & 1 & 56 \cdot 18\end{array}$ | +2.3785 | +.0031 | $28 \quad 1236 \cdot+$ |  | + 337 |  |  |  | 8.8 |  |
| 7437 | 262946 | C 7999 |  | 31144. | 157.50 | 4251 | 31 | $263457 \cdot 1$ | - 023 | 344 | 10.5 | - 16 | - II | $8 \cdot 1$ | F 5 |
| 7438 | 253197 | C 8001 |  |  | 2 1.15 | 4518 | 31 | $253742 \cdot 1$ | 017 | 348 | 11.2 | - 10 | $\bigcirc$ | $8 \cdot 3$ | K o |
| 7439 | 312958 | L 6044 |  |  | 23.88 | 2904 | 31 | $\begin{array}{lllll}31 & 8 & 55 \cdot 6\end{array}$ | 013 | 326 | $11 \cdot 7$ | + | + 187 | 8.8 |  |
| 7440 | 292935 | C 8002 | 1843 | 31161 | $27 \cdot 56$ | 3331 | 31 | $294440 \cdot 4$ | 008 | 332 | II 11 |  | 7 | $7 \cdot 56$ | A 2 |
| 7441 | 262947 | C 8003 |  | 31155 |  |  | +.0031 | 263453.3 |  |  |  | + 10 | - 15 | 8.8 |  |
| 7442 | 312962 | L 6045 |  |  | 216.11 | 2874 | 31 | $31.1432 \cdot 2$ | 4.996 | 326 | 12.3 | - 27 | - 109 | $8 \cdot 7$ |  |
| 7443 | 262948 | C $800+$ | 1845-6 |  | 226.71 | 4159 | 31 | $265346 \cdot 4$ | 981 | 343 | $12 \cdot 5$ | + 3 | 21 | $9 \cdot 3$ |  |
| 7444 | 262949 | C 8005 | $1847-8$ |  | 230.46 | 4181 | 31 | $2648 \quad 57 \cdot 4$ | 976 | 344 | I2.9 | + 10 | 55 | $9 \cdot 3$ |  |
| 7445 | 262951 | C 8008 | 1853-4 |  | $239 \cdot 33$ | 4188 | 31 |  | 964 | 344 | 12.5 | - 3 | 22 | $9 \cdot 3$ |  |
| $7+46$ | 262950 | C 8007 | 1850 | 31186 | $\begin{array}{llll}17 & 2 & 39.36\end{array}$ | +2.4319 | +.0032 | $\begin{array}{lllll}26 & 19 & 28.3\end{array}$ | - 4.964 | + 346 | $12 \cdot 3$ | 0 | 3 | $8 \cdot 9$ |  |
| 7447 | 262952 | C 8009 | 1855 |  | 239.75 | 4230 | 31 | $26 \quad 38 \quad 17 \cdot 0$ | 963 | 344 | 12.0 | - 25 | - 6 | $9 \cdot 1$ | G 5 |
| 7448 | 253199 | C 8010 |  |  | $2+1 \cdot 96$ | 4550 | 31 | $25 \quad 2951 \cdot 9$ | 960 | 349 | $11 \cdot 9$ | + 12 | - 30 | $9 \cdot 3$ |  |
| 7449 | $2+3121$ 26 | B 5850 | 1857 |  | 250.05 | 4934 | 31 | $\begin{array}{lll}24 & 5 & 29 \cdot 8\end{array}$ | 949 | 355 |  |  | - 14 | 8.1 | Ma |
| 7450 | 262954 | C 8013 |  | 31180 | 3 3.53 | 4387 | 32 | $26420 \cdot 0$ | 929 | 347 | 109 | + 18 | + 8 | 8.8 |  |
| 7405, 7438. Number of observations 6. |  |  |  |  |  |  | 7427. $\sum^{2120 .}$ |  | 74+7. Burnham 7871. |  |  |  |  |  |  |


| No． | B．D． | A．g．C． | W．B．（2）． | Lalande． | R．A． $1910 \cdot 0$. | Precession． | Sec．Var． | Dec． 191000 | Procession． | Sec． Var | $\begin{aligned} & \text { Epoch } \\ & \text { Igoo+ } \end{aligned}$ | Annual P．M． |  | Mag． | Spectral Type． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. } \mathrm{Cooor}}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { D.oor. } \end{aligned}$ |  |  |
|  |  |  |  |  | $n \mathrm{~m}$ | － |  | －， |  | ＂ |  |  |  |  |  |
| $7+51$ | 302929 | L． 6049 | 1875 | 31190 | $1 \begin{array}{lll}17 & 3 & 9.53\end{array}$ | ＋2．308＋ | $+\cdot 0031$ | $\begin{array}{llll}30 & 32 & 0.9\end{array}$ | $-4.921$ | ＋ 328 | 10.6 | ＋ 23 |  | $8 \cdot 7$ |  |
| $7+52$ | 292938 | C 8016 | 1874 |  | $311+3$ | $35+7$ | 31 | $2885916 \cdot 3$ | 918 | 335 | $10 \cdot 6$ | ＋ 17 | － 39 | $8 \cdot 7$ | A 3 |
| 7453 | 272761 | C 8017 |  |  | 317.57 | 4086 | 31 | $27 \quad 742 \cdot 0$ | 910 | $34^{2}$ | 11.5 | ＋ 33 | － | $9 \cdot 2$ | K |
| $7+54$ | 282670 | C 8018 | 29 |  | 318.26 | 3575 | 31 | $28 \quad 53 \quad 26 \cdot 9$ | 909 | 335 | 11.1 | － 25 | － 45 | $9 \cdot 3$ |  |
| 7455 | 312964 | L 6051 | 3 | 31201 | $327 \cdot 12$ | 2894 | 31 |  | 896 | 326 | 10.1 | 8 | ＋+ | $8 \cdot 3$ | K |
| 7456 | 253201 | C 8022 | 1 |  | $\begin{array}{llll}17 & 3 & 31.98\end{array}$ | $+2 \cdot 4675$ | ＋．0031 | $25 \quad 127.9$ | $-4.889$ | ＋－352 | 11.9 | － 13 | － 11 | 9．1 |  |
| 7457 | 312965 | L 6053 | 12 | 31203 | 338.47 | 2871 | 31 | 311244.6 | －880 | 326 | 11.9 | ＋ 1 | －+5 | $8 \cdot 7$ | A 3 |
| 7458 | 282671 | C 8026 | 20 | 31213－4 | 354.67 | 3761 | 31 | 28 If 19．2 | 857 | 338 | 9.9 | － 35 | ＋ 3 | 8.1 | K o |
| $7+59$ | 262959 | C 8025 | 17 |  | 355.05 | 4213 | 31 | 26 ＋0 $3 \cdot 4$ | 857 | 344 | 10.9 | － 3 | －$\quad 29$ | $8 \cdot 9$ |  |
| $74^{60}$ | 282672 | C 8027 | 22 | 31216 | $357 \cdot 24$ | $378+$ | 31 | $28 \quad 934 \cdot 2$ | 854 | 338 | 10.5 | ＋ 21 | 3 | $9 \cdot 3$ |  |
| $7+6 \mathrm{I}$ | $2+312+$ | B 5859 | 19 | 31207－8 | $17+2.64$ | $+2 \cdot 7761$ | $+\cdot 0031$ | ${ }^{2}+4155 \cdot 8$ | － 4.846 | $+\cdot 352$ | 12.5 | ＋ 17 | 55 | $8 \cdot 1$ | A 2 |
| $7+62$ | 272763 | C 8029 |  | 31222 | ＋10．40 | ＋04＋ | 31 | $27 \quad 15 \quad 16 \cdot 1$ | 835 | $34^{2}$ | 13.1 | － 23 | ＋ 28 | $8 \cdot 3$ | Fo |
| $7+63$ | 302930 | L． 6036 |  |  | $+12.77$ | 3159 | 31 | $301530 \cdot 0$ | 832 | 329 | 13.3 | ＋ 15 | － 8 | $9 \cdot 2$ |  |
| $7+64$ | $27 \quad 2764$ | C 8031 |  | 31228 | ＋22．63 | ＋053 | 31 | $27 \quad 134.0$ | 818 | 342 | $12 \cdot 9$ | － 5 | ＋ | 7.8 | F 2 |
| 7465 | 302931 | L 6058 |  | 31234－52 | $+25.04$ | 3033 | 31 | $30395+3$ | $8 \mathrm{I}+$ | 327 | 13.3 | ＋ 15 | － 36 | 8.8 |  |
| 7468 | 292942 | C 8032 |  |  | $17+28.46$ | ＋2．3＋53 | ＋．0031 | 291613.8 | $-4.809$ | ＋．334 | 12.5 | 4 | ＋ 15 | $\because 1$ | K 2 |
| 7467 | 312967 | L 6061 | 46 | 31248 | $+35.05$ | 2829 | 31 |  | 800 | 325 | 11.7 | － | － 19 | $6 \cdot 61$ | K 2 |
| 7468 | 262960 | C 8034 | ＋3－＋ |  | $+{ }^{+6.07}$ | ＋194 | 31 | $26 t^{2} 50 \cdot 4$ | 784 | $3+4$ | 12.6 | 13 $+\quad 1$ | － 98 | $9 \cdot 3$ |  |
| 7469 | 282677 | C 8035 | ${ }^{8}$ | $312+9-50$ | ＋+7.69 | 3721 | 31 | $\begin{array}{lllll}28 & 21 & 9 \cdot 9\end{array}$ | 782 | 338 | 12.1 | － 22 | － 137 | $6 \cdot 99$ | F 2 |
| 7470 | 302932 | L $606+$ |  |  | $+{ }^{8.32}$ | $314+$ | 31 | $\begin{array}{llll}30 & 17 & 27.0\end{array}$ | 781 | 330 | 11.6 | 11 | 11 | 8.5 | A 0 |
| 7471 | $28 \quad 2676$ | C 8036 | ＋9 |  | $17 \quad 4+8.61$ | $1+2 \cdot 3779$ | ＋．0031 |  | $-4.781$ | ＋ 338 | 12.8 | － 6 | ＋ 8 | $9 \cdot 3$ |  |
| 7472 | $2+3127$ | B 5863 | $4^{\circ}$ | 31240－2－3－4 | ＋ $50 \cdot 26$ | ＋782 | 31 | $2+3611.6$ | 778 | 353 | 12.9 | － $3^{*}$ | －58＊ | 6.82 | A o |
| 7473 | 282678 | C 8037 | 52－3 |  | $+54.95$ | 3584 | 31 | $\begin{array}{llllll}28 & 49 & 8.6\end{array}$ | 772 | 336 | 11.7 | － 10 | －+ | $9 \cdot 3$ |  |
| 7474 | $2929+6$ | C 8038 |  |  | 516.39 | 3337 | 31 | $2938 \quad 16.8$ | 741 | 33.2 | 8.8 | 7 | － 6. | 9．1 |  |
| 7475 | $27 \quad 2766$ | C 8039 | 60 |  | 518.61 | 3897 | 31 |  | ＇738 | $34^{\circ}$ | 10.0 | ， | － 10 | 8.9 | K 2 |
| 7476 | ${ }^{2}+3131$ | B 5866 | 69 |  | $17 \quad 5+1 \cdot 43$ | $+2.480+$ | $+\cdot 0031$ | 243017.4 | $-4.706$ | ＋ 353 | 9.5 | $\bigcirc$ | ＋ 14 | $9 \cdot 2$ |  |
| 7477 | 292948 | C 8045 |  |  | $6 \quad 3.20$ | 3372 | 31 | $2930 \begin{array}{lll}29 & 1.1\end{array}$ | 675 | $33+$ | 10.8 | － 5 | － 22 | $9 \cdot 3$ |  |
| 7478 | 302936 | L． 5077 |  | 31281 | $6 \quad 5 \cdot 98$ | 2972 | 31 | $\begin{array}{llllllllllllllllll}30 & 49 & 8.2\end{array}$ | 671 | 328 | $9 \cdot 3$ | ＋ 22 | － 5 | 8.6 | $\mathrm{A}_{2}$ |
| 7479 | 302939 | L 6078 | 89 88 | 31285 | $\begin{array}{lll}6 & 14.82\end{array}$ | 3079 | 31 | $\begin{array}{lllll}30 & 27 & 59 \cdot 8\end{array}$ | 659 | 330 | $10 \cdot 1$ | － 10 | a | 8.1 | G 5 |
| 7480 | 302938 | L 6079 | 88 |  | 614.83 | 3081 | 31 | $\begin{array}{llll}30 & 27 & 35.9\end{array}$ | 659 | 330 | 11.7 | 10 | ＋ 16 | $9 \cdot 3$ |  |
| 748 I | $26 \quad 2963$ | C 8046 | $8+-5$ | 31279－80 | $17 \quad 6 \quad 18.69$ | ＋2．4225 | ＋．0031 | $\begin{array}{llll}26 & 34 & 3 \cdot 0\end{array}$ | $-4.653$ | ＋ 346 | $10 \cdot 3$ | ＋ 3 | － 4 | $7 \cdot 00$ | K o |
| 7482 | 243133 | B 5871 | 87 |  | $6 \quad 26 \cdot 47$ | 4896 | 32 | ${ }^{26}+8 \quad 57 \cdot 2$ | 642 | 355 | 11.3 | － 20 | － 3 | $8 \cdot 7$ |  |
| 7483 | 243135 | B 5873 | 95 |  | $638 \cdot 10$ | 4873 | 32 | $2+1341 \cdot 2$ | 626 | 355 | 11.7 | － 15 | ＋+ | $9 \cdot 3$ |  |
| 7484 | 292950 | C 8048 |  |  | $644 \cdot 15$ | 3513 | 31 | $\begin{array}{llllll}29 & 0 & 44.9\end{array}$ | 617 | 336 | 11.9 | ＋ 23 | － 38 | $9 \cdot 1$ |  |
| 7485 | 292951 | C $80+9$ | 105 |  | 655.49 | 3432 | 31 | $2916+2 \cdot 3$ | 601 | 335 | 11－1 | － | － 16 | $8 \cdot 3$ | Ma |
| 7486 | $2+3137$ | B 5874 | 101 |  | $17 \quad 6 \quad 55 \cdot 96$ | $+2 \cdot 760$ | $+.0031$ | 243814.9 | － 4.600 | ＋ 353 | 10.3 | －161 | ＋223 | 8.3 | K c |
| 7487 |  | C 8050 |  |  | $6 \quad 59.79$ | 4552 | 31 | $\begin{array}{llllllll}25 & 23 & 14.3\end{array}$ | 595 | 350 | 12.7 | － 22 | ＋ 16 | $9 \cdot 3$ |  |
| 7488 | $2+3140$ | B 5878 |  | 31298－300 | 719.55 | 4837 | 32 | $2420+9 \cdot 6$ | 567 | 355 | 10.3 | 12＊ | ＋14＊ | $6 \cdot 19$ | A 3 |
| 7489 | 312977 | L 6087 | 125 | 31317 | $731 \cdot 10$ | 2816 | 31 |  | 550 | 326 | $9 \cdot 1$ |  | － 13 | $7 \cdot 53$ | K。 |
| $7+90$ | 243141 | B 5879 |  | 31308 | $733 \cdot 40$ | 4832 | 32 | ${ }^{2}+2141 \cdot 4$ | 547 | ． 355 | $9 \cdot 7$ | ＋ 15 | ＋ 28 | $7 \cdot 0+$ | F 2 |
| 7491 | 312979 | L． 6088 | 129 | 31321 | $17 \quad 7 \quad 45.95$ | ＋2．2883 | ＋．0031 | $31 \quad 3 \quad 52.8$ | $-4.529$ | ＋ 327 | $9 \cdot 9$ | ＋ 10 | ＋ 84 | $8 \cdot 2$ | Go |
| 7492 | 292952 | C 8056 | 130 | 31323 | 77 <br> 8 <br> 8 | 3298 | 31 | $\begin{array}{lllllll} & 29 & 4^{2} 10.4\end{array}$ | 523 | 333 | $9 \cdot 9$ | － 7 | － 19 | 8.8 | $\mathrm{A}^{2}$ |
| $7+93$ | 262967 | C 8058 | 139 |  | 8 8 8 10.15 | 4167 | 31 | $\begin{array}{lllll}26 & 43 & 45 \cdot 0\end{array}$ | 495 | $3+5$ | $9 \cdot 5$ | ＋ 13 | － 19 | $8 \cdot 7$ | K。 |
| 7494 | 262968 | C 8059 |  |  | 813.57 | 4285 | 31 | $\begin{array}{llll}26 & 18 & 33.8\end{array}$ | 490 | 347 | $10 \cdot 3$ | ＋ 24 | －$\quad 27$ | $9 \cdot 3$ |  |
| 7495 | 292954 | C 8064 | 155 | 31331 | 824.23 | 3337 | 31 | $2933 \quad 29.5$ | 475 | 334 | $11 \cdot 3$ | ＋ 23 | $-4^{2}$ | $9 \cdot 3$ |  |
| 7496 | 253212 | C 8063 | 144 | 31326－7 | $17 \quad 8 \quad 25.50$ | $+2.455^{2}$ | $+\cdot 0031$ | $\begin{array}{lllll}25 & 21 & 18.3\end{array}$ | $-4.473$ | ＋ 351 | $9 \cdot 7$ | ＋ 22 | ＋ 60 | 8.6 | Go |
| 7497 | $2+3145$ | C 8065 | 156 |  | 835.43 | 4698 | 31 | $\begin{array}{llllllllll}24 & 49 & 26 \cdot 6\end{array}$ | 459 | 353 | 11.1 | － 20 | － 6 | $9 \cdot 2$ |  |
| 7498 | 292958 | C 8066 | 161 | 31333 | $837 \cdot 22$ | 3313 | 31 | $2938 \quad 5 \cdot 2$ | 456 | 333 | $10 \cdot 3$ | ＋ 19 | － | $8 \cdot 9$ |  |
| 7499 | 262970 | C 8067 | 162－3 |  | $8+5 \cdot 46$ | 4138 | 31 | $\begin{array}{lllll}26 & 49 & 2 \cdot 5\end{array}$ | 445 | 345 | $10 \cdot 1$ | － 15 | ＋ | $9 \cdot 2$ |  |
| 7500 | 282690 | C 8068 |  |  | 852.40 | 3764 | 31 | $28 \quad 6 \quad 25.3$ | 435 | 340 | 10.5 | ＋ 2 | － 5 | $9 \cdot 3$ | G 5 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Dec, 1910.0 | Precession | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | SpectralType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\sim}{\text { R }}$ | $\underset{N .00}{\text { Dec. }}$ |  |  |
|  |  |  |  |  | $\mathrm{n} \mathrm{m}^{\mathrm{m}}$ | s | s | - '" |  | " |  |  |  |  |  |
| 7501 | 282692 | C 8069 |  |  | $17 \quad 9 \quad 10.30$ | +2.3682 | $+.0031$ | $28 \quad 2241.8$ | - 4.410 | + 338 | 11.9 | - I | - 25 | $9 \cdot 2$ |  |
| 7502 | 282693 | C 8070 |  | 31348 | 913.44 | 3586 | 31 | $28 \quad 4216 \cdot 7$ | 405 | 337 | 11.9 | - 29 | - 37 | $8 \cdot 9$ |  |
| 7503 | 302946 | C 8071 | 177 |  | 915.70 | 3192 | 31 | 301110.5 | 402 | 332 | 11.5 | - 7 | + 77 | $8 \cdot 23$ | F 5 |
| 7504 | 302947 | L 6097 | 179 |  | 917.96 | 3134 | 31 |  | 399 | 331 | 12.8 | - 16 | - 30 | $9 \cdot 3$ |  |
| 7505 | 302949 | L 6100 |  |  | 925.99 | 2990 | 31 | $304030 \cdot 7$ | 387 | 329 | 12.5 | + 31 | - 33 | $9 \cdot 3$ |  |
| 7506 | 253215 | C 8072 | 175-6 | 31349-50 | $17 \quad 9 \quad 26.61$ | +2.4619 | $+\cdot 0031$ | $\begin{array}{llll}25 & 5 & 31.7\end{array}$ | - 4.386 | $+\cdot 35^{2}$ | II•1 | + 13 | - 50 | $7 \cdot 11$ | K 5 |
| 7507 | 282694 | C 8073 | 191 | 31359 | $935 \cdot 29$ | 3779 | 3 I | $28 \quad 2 \quad 15 \cdot 2$ | 374 | 340 | 10.8 | + 18 | + 22 | $8 \cdot 2$ | G 5 |
| 7508 | 262973 | C 8074 | 192-3 |  | 940.48 | 4332 | 31 | $26 \quad 644.4$ | 367 | 348 | 12.8 | - 13 | - | $9 \cdot 3$ |  |
| 7509 | 282695 | C 8075 | 199 | 31364 | $949 \cdot 58$ | 3539 | 31 | $285054 \cdot 5$ | 354 | 337 | 11.9 | + 32 | - 38 | $9 \cdot 3$ | F 5 |
| 7510 | 243151 | B 5906 |  |  | $1016 \cdot 00$ | 4914 | 30 | $24 \bigcirc 50$ | 316 | 357 | 11.5 | + 14 | - 56 | $9 \cdot 7$ |  |
| 7511 | 262976 | C 8077 | $210-1$ |  | $17{ }^{10} 1017.80^{\circ}$ | $+2.4279$ | +.0030 | $\begin{array}{lllll}26 & 17 & 4 \cdot 1\end{array}$ | - 4.313 | +-348 | 11.7 | + 22 | + 27 | $8 \cdot 8$ | G 5 |
| 7512 | 282697 | C 8078 | 215 | 31382 | 1023.32 | 3518 | 30 | $28 \quad 5424 \cdot 7$ | 306 | 337 | 12.0 | + 24 | - 26 | 8.9 | A 5 |
| 7513 | 262977 | C 8079 | 214 |  | $1027 \cdot 00$ | 4093 | 30 | $2655 \quad 58 \cdot 3$ | 300 | 345 | 11. | - | - | $8 \cdot 7$ | G 5 |
| 7514 | 262978 | C 808I | 220-1 |  | $1034 \cdot 34$ | 4250 | 30 | $262249{ }^{\circ} \mathrm{O}$ | 290 | 347 | 12.9 | + 10 | - 23 | $9 \cdot 3$ |  |
| 7515 | 312983 | L 6104 | 229-30 |  | IO $40 \cdot 23$ | 2851 | 30 | 31.541 .8 | 281 | 328 | $\cdot 2$ | + 35 | - $4^{1}$ | $9 \cdot 3$ |  |
| 7516 | 292963 | C 8084 |  | 31395 | $17 \quad 1041 \cdot 78$ | $+2 \cdot 3286$ | +.0030 | 294024.5 | - 4.279 | $+\cdot 333$ | 12.1 | + II | 28 | $8 \cdot 7$ |  |
| 7517 | 262979 | C 8082 | 223 |  | $1042 \cdot 31$ | 4106 | 30 | $26 \quad 52 \quad 59 \cdot 2$ | 279 | 345 | 12.1 | - 9 | - 39 | $8 \cdot 9$ |  |
| 7518 | 282700 | C 8083 | 224 |  | IO $42 \cdot 54$ | 3755 | 30 | $28 \quad 5 \quad 39 \cdot 0$ | 278 | 34 I | II.9 | + 13 | - 56 | $9 \cdot 2$ | F 5 |
| 7519 | 262980 | C 8085 |  | 31396 | IO 54.42 | 4312 | 30 | $\begin{array}{llll}26 & 9 & 19.5\end{array}$ | 26 I | 348 | 11.7 | + 10 | - 34 | $6 \cdot 95$ | Ko |
| 7520 | 243154 | B 5908 | 235 | 31398 | 11 4.12 | 4860 | 30 | 241053.7 | 247 | 356 | 11.5 | - 39 | - 20 | $8 \cdot 1$ | Fo |
| 7521 | 282702 | C 8086 | 239 |  | 171188 | +2.3757 | +.0030 | $\begin{array}{llll}28 & 4 & 39.8\end{array}$ | $-4.2{ }^{2}$ | +.338 | 11.9 | + 19 | - 29 | 8.6 | F 5 |
| 7522 | 312985 | L. 6107 | 243-4 |  | 118.15 | 2859 | 30 | $\begin{array}{llll}31 & 3 & 26 \cdot 2\end{array}$ | 242 | 325 | 12.I | - 17 | + 38 | 9.1 |  |
| 7523 | 253221 | C 8087 | 242 | 35407-9-10-5x | 1120.04 | 4649 | 30 | $24564 \mathrm{I} \cdot \mathrm{I}$ | 225 | 353 | 12 | - 18* | - 163* | $3 \cdot 16$ | A 2 |
| 7524 | 302956 | L 6109 |  | $3^{1423}-4$ | 1145.79 | 3057 | 30 | $\begin{array}{llll}30 & 24 & 7 \cdot 2\end{array}$ | - 188 | 33 I | $8 \cdot 9$ | + | + 15 | $8 \cdot 1$ | G 5 |
| 7525 | 253224 | C 8092 | 250 |  | 1156.62 | 4616 | 30 | $\begin{array}{lllll}25 & 3 & 1 \cdot 7\end{array}$ | 173 | 353 | $9 \cdot 9$ | + | - 4 | $9 \cdot 7$ |  |
| 7526 | 292971 | C 8094 | 257 | 31430 | $\begin{array}{llll}17 & 12 & 5 \cdot 38\end{array}$ | +2.3308 | +.0030 | $293420 \cdot 8$ | $-4 \cdot 160$ | +.334 | $9 * 9$ | + | - | 8.7 |  |
| 7527 | 253226 | C 8093 |  |  | $\begin{array}{lll}12 & 6.38\end{array}$ | 4368 | 30 | $255557 \cdot 7$ | 159 | 349 | 10.5 | + 13 | + $4^{2}$ | $9 \cdot 3$ |  |
| 7528 | 253228 | C 8096 | 262 | $31432-3$ | 1222.21 | 4441 | 30 | $25406 \cdot 0$ | 136 | 350 | 10.3 | + 9 | + 18 | $9 \cdot 3$ | Go |
| 7529 | $27 \quad 2780$ | C 8098 | 268 | 31438 | 1223.03 | 3992 | 30 | $\begin{array}{llll}27 & 14 & 9 \cdot 3\end{array}$ | 135 | 344 | $9 \cdot 1$ | - 59 | - 104 | $6 \cdot 75$ | K o |
| 7530 | 253229 | C 8100 | 280 |  | 1248.85 | 4478 | 30 | $253138 \cdot 1$ | 098 | 351 | $10 \cdot 7$ | - 15 | 32 | $9 \cdot 3$ |  |
| 7531 | 272782 | C 8103 |  |  | $\begin{array}{llll}17 & 12 & 58.10\end{array}$ | +2.3832 | 0030 | $\begin{array}{lllll}27 & 46 & 53 \cdot 3\end{array}$ | $-4.085$ | $+\cdot 342$ | $10 \cdot 9$ | + 14 | + 11 | 9.1 |  |
| 7532 | 282708 | C8105 | 288-9 |  | 1258.81 | 3619 | 30 | $28 \quad 3020 \cdot 7$ | 084 | 339 | $10 \cdot 3$ | + 7 | - 4 | $8 \cdot 6$ | A o |
| 7533 | 262990 | C 8104 |  | 31457 | 1259.09 | 4151 | 30 | $264040 \cdot 7$ | 083 | 346 | $10 \cdot 3$ | - 29 | - 14 | $9 \cdot 3$ | G 5 |
| 7534 | 292975 | C 8106 |  |  | $13 \quad 9.45$ | 3309 | 30 | 2936318.2 | 069 | 334 | 10.9 | + 3 | $-34$ |  |  |
| 7535 | 262992 | C8109 | 293 | 3146 | 1324.66 | 4110 | 30 | $264^{8} 4^{1 \cdot 0}$ | 047 | 346 | $10 \cdot 7$ | 4 | + 49 | $8 \cdot 1$ | F 5 |
| 7536 | 262993 | C 8110 | 294 | 31466-7 | $17 \begin{array}{llll}17 & 13 & 27.90\end{array}$ | +2.4297 | . 0030 | $\begin{array}{llll}26 & 9 & 17.0\end{array}$ | $-4.042$ | $+34^{8}$ | 10.9 | - 37 | - | 8.7 |  |
| 7537 | 262994 | C 8113 | 299 | 31471-3 | 1331.48 | 4349 | 30 | $\begin{array}{llllllllllll}25 & 58 & 13\end{array}$ | 037 | 349 | 10.5 | 2 | + $+\quad 17$ | $7 \cdot 06$ | B 9 |
| 7538 | 243159 | B 592 I | 297 |  | 1333.15 | 4700 | 30 |  | 035 | 354 | $1 \mathrm{I} \cdot 3$ | - 8 | + 2 | $9 \cdot 3$ |  |
| 7539 | 253232 | C8115 | 306 | 31480-1 | 1340.01 | 4483 | 30 | $\begin{array}{llllll}25 & 29 & 32 \cdot 5\end{array}$ | 025 | 351 | 10.9 | - 25 | P <br> $+\quad 12$ | $8 \cdot 7$ | F 5 |
| 7540 | 253231 | C 8114 |  |  | 1340.13 | 4586 | 30 | $\begin{array}{llll}25 & 7 & 19.9\end{array}$ | 025 | 353 | 11.I | 40 | - 108 | $9 \cdot 2$ |  |
| 7541 | 31 2993 | L. 6125 |  | 31501 | $\begin{array}{llll}17 & 14 & 2.39\end{array}$ | +2.2664 | +.0030 | $\begin{array}{llll}31 & 36 & 52.7\end{array}$ | $-3.993$ | +-326 | ${ }_{11} 1$ | 5 | - 21 | $7 \cdot 20$ | $\mathrm{B}_{9}$ |
| 7542 | 292978 | C 8117 |  | 31498 | $14 \quad 3.33$ | 3463 | 29 |  | 992 | 337 | 11.0 | 9 | - 13 | $7 \cdot 07$ | Ma |
| 7543 | 292979 | C 8118 |  |  | 1410.51 | 3370 | 29 | 29.193 .9 | 982 | 336 | 1.4 | 50 | + 208 | $8 \cdot 1$ | K 2 |
| 7544 | 312994 | L. 6127 |  | 31509 | $14 \quad 13.72$ | 2684 | 30 |  | 977 | 326 | 12.0 | 3 | 3 | $8 \cdot 7$ |  |
| 7545 | 282713 | C 8120 | 326 | 31503 | $14 \quad 16.33$ | 3515 | 29 | $284944 \cdot 9$ | 973 | 338 | 11.8 | 12 | - 25 | 8•I | A 2 |
| 7546 | 272784 | C 8122 | 324-5 |  | $17 \begin{array}{llll}17 & 14 & 18.59\end{array}$ | +2.4048 | +-0029 | 27 - 32.9 | - 3.970 | + 346 | 11.6 | - 36 | + 2 | 9.1 |  |
| 7547 | 292981 | C 8125 |  | 31512 | 1424.31 | 3463 | 29 | $\begin{array}{llll}29 & 0 & 7.5\end{array}$ | 962 | 337 | 9.9 | - 24 | - 46 | $7 \cdot 30$ | Fo |
| 7548 | 272786 | C 8126 |  |  | 1433.23 | 3816 | 29 | $\begin{array}{lllllllllllllll}27 & 48 & 10.8\end{array}$ | 949 | 343 | 10.4 | - 33 | - 34 | $9 \cdot 3$ |  |
| 7549 | 272787 | C 8127 | 342-3 | 31525 | $1448 \cdot 14$ | 4038 | 29 | $\begin{array}{llll}27 & 1 & 54.8 \\ 25 & \text { I }\end{array}$ | 928 | 346 | 10.5 | - 26 | - 35 | $8 \cdot \mathrm{I}$ | K o |
| 7550 | 253239 | C 8128 | 341 | 31523-4 | $1450 \cdot 57$ | 4361 | 29 | $\begin{array}{llll}25 & 54 & 1.3\end{array}$ | 924 | 350 | 9.5 | + 6 | + 51 | $6 \cdot 77$ | K o |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910^{\circ} \mathrm{O}$. | Precession. | Sec. Var. | Dec. 191000 | Precession. | Sec. Var. | $\begin{array}{\|l\|} \text { Epoch } \\ \text { 1goot } \end{array}$ | Annual P.M. |  | Mag. | $\begin{gathered} \text { Spectral } \\ \text { Type. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R. A.A. | $\begin{aligned} & \text { Dec. } \\ & \therefore \text {.oor. } \end{aligned}$ |  |  |
|  | - . |  |  |  | n m | s | s | - ' |  | " |  |  |  |  |  |
| 7551 | $28 \quad 2718$ | C 8129 |  |  | $\begin{array}{lll}17 & 15 & 2.81\end{array}$ | $+2.3654$ | +.0029 | $28 \quad 2042 \cdot 9$ | $-3.907$ | +-340 |  |  |  |  |  |
| 7552 | $28 \quad 2719$ | C 8132 | 361 | 31545 | 1516.71 | 3483 | + 29 | $285459 \cdot 8$ | - 887 | 337 | 10.2 | + 32* | - 15* | $5 \cdot 78$ | K o |
| 7553 | 282720 | C 8133 |  |  | 1519.05 | 3605 | 29 | 2883013.7 | 884 | 339 | $9 \cdot 3$ | - II | + 23 | $8 \cdot 9$ |  |
| 7554 | 272790 | C 8135 | 375 | 31562 | 1548.43 | 3933 | 29 | $27 \quad 2235.2$ | 842 | 344 | $8 \cdot 7$ | - 14 | - 16 | 7.06 | Ma |
| 7555 | $28 \quad 2722$ | C 8136 | 376 | 31566 | 1550.35 | 3716 | 29 | $\begin{array}{llll}28 & 7 & 5.8\end{array}$ | 839 | 340 | $9 \cdot 3$ | + | $+4$ | 7.02 | A 0 |
| 7556 | 302965 | L. 6139 |  |  | $17 \quad 16 \quad 1.42$ | +2.2983 | +.0030 | $303244 \cdot 5$ | $-3.823$ | $+\cdot 33 \mathrm{I}$ | 10.5 | - 18 | + ${ }^{2}$ | $9 \cdot 2$ |  |
| 7557 | 292987 | C 8141 | 396 |  | $16 \quad 2.22$ | 3413 | 29 | $29 \quad 7 \quad 55 \cdot 9$ | 822 | 336 | II. 2 | + 17 | - 57 | $8 \cdot 9$ |  |
| 7558 | $28 \quad 2723$ | C8142 | 397 |  | $16 \quad 5 \cdot 55$ | 3697 | 29 | 28 10 $34 \cdot 3$ | 817 | 341 | 11.9 | + 47 | - 24 | $9 \cdot 3$ |  |
| 7559 | 243164 | C 8140 | 391-2 |  | $16 \quad 5 \cdot 84$ | 4634 | 30 | $2+54 \quad 9 \cdot 3$ | 817 | 354 | 11.9 | $+3$ | - 1 | $9 \cdot 3$ |  |
| 7560 | 253245 | C 8143 | . 399 | 31577-9 | $16 \quad 23 \cdot 56$ | 4405 | 29 | $254^{2}-56 \cdot 3$ | 791 | 351 | $12 \cdot 1$ | + I | 16 | $9 \cdot 2$ |  |
| 7561 | $28 \quad 2724$ | C 8144 |  | 31584 | $17 \begin{array}{lll}16 & 25 \cdot 61\end{array}$ | $+2.3582$ | $+.0029$ | 283328.0 | $-3.788$ | +-339 | $10 \cdot 3$ | - 3 | - 22 | $8 \cdot 7$ | F 8 |
| 7562 | 253246 | C 8145 | 403-5 | 31581-2 | 1629.67 | 4429 | 29 | $253743 \cdot 0$ | -783 | 351 | 9.5 | + $14^{*}$ | - 19* | $5 \cdot 32$ | A 2 |
| 7563 | 263002 | C 8146 |  |  | 1640.53 | 4236 | 29 | $261819 \cdot 6$ | 767 | 349 | $9 \cdot 5$ | - 6 | - 45 | $9 \cdot 3$ |  |
| 7564 | 263003 | C 8147 |  |  | 1652.63 | 4139 | 29 | $263830 \cdot 5$ | 750 | 347 | $9 \cdot 9$ | + 10 | - 9 | 8.9 | G 5 |
| 7565 | 272792 | C 8148 | $4^{16}$ |  | $17 \quad 2.93$ | 3855 | 29 | $27 \quad 37 \quad 7 \cdot 4$ | 735 | 343 | 11.1 | - 5 | - 77 | $8 \cdot 9$ | G 5 |
| 7566 | 302970 | L 6149 | 424 |  | $\begin{array}{lll}17 & 17 & 4.75\end{array}$ | $+2.3050$ | +.0029 | 3018 22.1 | $-3.732$ | $+332$ | $10 \cdot 5$ | + 16 | - ${ }^{23}$ | 8.6 |  |
| 7567 | 243167 | B 5935 | 418 | 31602-3-4 | 1711.75 | 4716 | 30 |  | 722 | 356 | 10.5 | - 13* | - I* | 5-12 | A 0 |
| 7568 | 243168 | B 5936 | 427 |  | $1725 \cdot 18$ | 4706 | 30 | $243721 \cdot 0$ | 703 | 356 | $11 \cdot 3$ | + 2 | - 17 | $9 \cdot 3$ |  |
| 7569 | 253249 | C8151 | 432-3 | 31617 | 1734.40 | 4376 | 29 | $254747 \cdot 2$ | 690 | 351 | $9 \cdot 7$ | 10 | $+\quad 3$ | 8.8 | F 5 |
| 7570 | 263005 | C 8152 | $43^{6-9}$ | 31621 | $1741 \cdot 96$ | 4301 | 29 | $\begin{array}{llll}26 & 3 & 29.9\end{array}$ | 679 | 350 | II•I | 15 | + 55 | $8 \cdot 3$ | K o |
| 7571 | 313004 | L 6156 |  |  | $17 \quad 1750.21$ | $+2.2723$ | +.0030 | $312041 \cdot 2$ | - 3.667 | $+327$ | 10.5 | 22 | + 22 | 6.85 | F 8 |
| 7572 | 272794 | C 8153 | 445 |  | 1751.70 | 4021 | 29 | 27 I 54.5 | 665 | 346 | 11.5 | - 91 | - 7 | $9 \cdot 3$ |  |
| 7573 | 263007 | C 8155 | 450-1 | 31640 | 1758.51 | 4280 | 29 | $26 \quad 7 \quad 35 \cdot 1$ | 655 | 349 | 12.2 | + 1 | - $4^{2}$ | $9 \cdot 1$ |  |
| 7574 | $28 \quad 2728$ | C 8156 |  | 31648-50 | 1759.65 | 3487 | 29 | $285044^{\circ} \mathrm{O}$ | 654 | 338 | $9 \cdot 3$ | + 3 | - 4 | $6 \cdot 33$ | F 8 |
| 7575 | $27 \quad 2795$ | C 8158 | 455 |  | $18 \quad 4.23$ | 3945 | 29 | $27 \quad 17 \quad 30.0$ | 647 | 345 | $9 \cdot 9$ | - 26 | - 14 | $9 \cdot 3$ |  |
| 7576 | 313005 | L 6162 |  |  | $17 \quad 18 \quad 10.20$ | $+2.2529$ | +.0029 | $315657 \cdot 3$ |  | $+325$ | 12.1 | + 16 | - 18 | $9 \cdot 3$ |  |
| 7577 | 253250 | C 8161 |  |  | 1822.57 | 4454 | 29 | 253016.0 | 621 | 352 | 10.7 | 12 | - $\quad 27$ | $9 \cdot 2$ | F 5 |
| 7578 | 263008 | C 8162 |  |  | $18 \quad 29.16$ | 4296 | 29 | $\begin{array}{lllll}26 & 3 & 37 \cdot 3\end{array}$ | 611 | 350 | 11.6 |  |  | 9.4 |  |
| 7579 | 263009 | C 8163 | 466-7 | 31660 | 1831.52 | 4264 | 29 | $\begin{array}{llll}26 & 10 & 27 \cdot 5\end{array}$ | 608 | 349 | 10.7 | 26 | - 36 | 8.8 | Go |
| 7580 | 263010 | C 8164 |  |  | $18 \quad 32.03$ | 4135 | 29 | $26 \quad 37 \quad 22.9$ | 607 | 347 | 10.9 | 12 | 20 | $8 \cdot 7$ | A |
| 7581 | 253252 | C 8165 | 473 | 31662 | $17 \quad 18 \quad 45 \cdot 57$ | +2.4602 | +.0029 | $2458 \quad 9 \cdot 5$ | - $3 \cdot 588$ | + 355 | $8 \cdot 9$ | + 56 | - 179 | $6 \cdot 78$ | F 5 |
| 7582 | 302976 | L 6168 | 489 | 31683 | $19 \quad 2.64$ | 2943 | 29 | 303648.8 | 563 | 331 | $9 \cdot 9$ | - 3 | - | $8 \cdot 7$ | A 0 |
| 7583 | 272797 | C 8167 | 490 | 31684 | 1914.51 | 3748 | 29 | $275635 \cdot 8$ | 546 | 342 | $10 \cdot 3$ | 42 | + 13 | $7 \cdot 9$ | F 5 |
| 7584 | 292999 | C 8170 |  | 31695 | 1927.90 | 3303 | 29 | $292545 \cdot 3$ | 526 | 336 | 10.3 | - 1 | - 15 | $9 \cdot 1$ |  |
| 7585 | 253254 | C 8169 |  | 31687-8 | 1928.41 | 4355 | 29 | $2550 \quad 12.6$ | 526 | 351 | $9 \cdot 1$ | 2 | + | $8 \cdot 5$ | F 5 |
| 7586 | 272800 | C 8173 |  |  | 171944.70 | $+2 \cdot 3776$ | +.0029 | 275014.7 | $-3 \cdot 503$ | + 343 | 11.1 | - 10 | + 9 | $9 \cdot 3$ |  |
| 7587 | 282731 | C 8174 | 507 |  | 1949.11 | 3691 | 29 | $28 \quad 7 \quad 36 \cdot 4$ | 497 | 342 | 10.1 | + $4^{6}$ | - 16 | $9 \cdot 3$ |  |
| 7588 | 313010 | L 6174 | 517 | 31720 | 1959.26 | 2804 | 29 | $31 \begin{array}{lll}11 & 2 & 30 \cdot 3\end{array}$ | 482 | 329 | 9.5 | + 12 | + | $8 \cdot 9$ |  |
| 7589 | 293001 | C 8175 |  | 31713 | $20 \quad 0899$ | 3385 | 29 | $29850 \cdot 6$ | $4^{80}$ | 337 | 10.8 | + 24 | 45 | $9 \cdot 3$ |  |
| 7590 | 293002 | C 8178 | 521-2 | 31730 | 2028.77 | 3436 | 29 | $28 \quad 58 \quad 12.6$ | 440 | 338 | $9 \cdot 9$ | 10 | 28 | $9 \cdot 3$ | A |
| 7591 | 313017 | L 6177 | 535 | 31745 | $17 \quad 20 \quad 57 \cdot 54$ | +2.2732 | +.0029 | $\begin{array}{llll}31 & 15 & 4 \cdot 5\end{array}$ | - 3.398 | $+\cdot 328$ | $9 \cdot 6$ | - | + 15 | $9 \cdot 1$ | G 5 |
| 7592 | 302982 | L 6182 | 559 |  | 2127.63 | 2858 | 29 | $304955 \cdot 5$ | 355 | 330 | $8 \cdot 5$ | + 6 | - 3 | $8 \cdot 7$ |  |
| 7593 | 263016 | C 8182 | 556-7 |  | 2135.86 | 4126 | 29 | $26 \quad 36 \quad 2 \cdot 1$ | 343 | 348 | $9 \cdot 2$ | 16 | + 16 | 8.7 | Fo |
| 7594 | 253260 | C 8183 |  |  | $2140 \cdot 69$ | 4497 | 29 | $251746 \cdot 6$ | 336 | 354 | 10.1 | 34 | - 1 | $9 \cdot 3$ |  |
| 7595 | 272805 | C 8184 | 566 |  | $2146 \cdot 93$ | 3800 | 29 | $27 \quad 43 \quad 10 \cdot 2$ | 327 | 343 | $9 \cdot 7$ | 38 | 21 | $8 \cdot 7$ | K 5 |
| 7596 | 282737 | C 8185 |  |  | $17 \quad 2147.83$ | +2.3649 | +.0029 | 281403 | $-3.326$ | +.341 | $9 \cdot 7$ | - 4 | + 11 | $8 \cdot 7$ |  |
| 7597 | 263017 | C 8186 | 568-9 | 31768-9 | $2152 \cdot 13$ | 4052 | 29 | $26 \begin{array}{lllllllllll} & 51 & 19.8\end{array}$ | 320 | 346 | 10.8 | + 11 | - 16 | $8 \cdot 9$ |  |
| 7598 | 313020 | L 6185 | 578 |  | $2155 \cdot 79$ | 2739 | 29 |  | 315 | 328 | 11.5 | + 19 | - 8 | $9 \cdot 3$ |  |
| 7599 | 302983 | L 6186 | 576 |  | 2157.33 | 3047 | 29 | $\begin{array}{lllllllll}30 & 13 & 19.9\end{array}$ | 312 | 333 | 10.8 | - 1 | + $3^{6}$ | 9-1 |  |
| 7600 | $28 \quad 2738$ | C 8188 |  |  | $22 \quad 6.00$ | 3567 | 28 | $28,30 \quad 9 \cdot 2$ | 300 | 340 | 11.5 | + 18 | + 31 | $8 \cdot 3$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | Annual P.M. |  | Mag. | Spectra Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { m.000 } . \end{aligned}$ | Dec. $N .001 .$ |  |  |
|  | - |  |  |  | h im s | 8 | s | - , " | " | " |  |  |  |  |  |
| 7601 | 272808 | C 8189 | 580 |  | $\begin{array}{llll}17 & 22 & 9.89\end{array}$ | $+2 \cdot 3897$ | $+\cdot 0028$ | $27 \quad 2259.5$ | - 3.294 | + 345 | 11.7 | + 26 | - 67 | $7 \cdot 7$ | K |
| $7602$ | $\begin{array}{ll}27 & 2809\end{array}$ | C 8191 | 589-91-2 | 31780-3 | 2224.50 | 4020 | 28 | $26 \quad 57 \quad 22.5$ | 273 | 347 | 11.9 | - 1 | $\begin{array}{r}\text { + } \\ +\quad 37 \\ \hline\end{array}$ | $6 \cdot 36$ | A 5 |
| 7603 | $25 \quad 3263$ | C 8192 | 588 |  | 2228.64 | 4554 | 28 | $25 \quad 452.8$ | 267 | 356 | 12.5 | - 8 | - 15 | $8 \cdot 9$ |  |
| 7604 | 293011 | C 8193 |  |  | 2230.53 | 3194 | 28 | 2943 54. 1 | 265 | 335 | 12.7 | - 8 | - 17 | $9 \cdot 1$ |  |
| 7605 | 243181 | B 5967 | 543 |  | $2230 \cdot 56$ | 4796 | 28 | 24 I2 44.1 | 265 | 358 | II.5 | 8 | - 18 | $8 \cdot 7$ | A 2 |
| 76 | 243182 | B 5970 | 544 |  | $17 \begin{array}{llll}17 & 22 & 33.65\end{array}$ | +2.4808 | +.0028 | $24 \quad 9 \quad 59.8$ | - 3.260 | +-358 | 11.3 | + 11 | + 21 | $8 \cdot 7$ | A 2 |
| 7607 | 243184 | B 5972 | 549 |  | $2236 \cdot 52$ | 4750 | 28 | $242230 \cdot 5$ | 256 | 357 | 11.7 | - 2 | + 2 | $8 \cdot 7$ |  |
| $\left\lvert\, \begin{gathered} 7608 \\ 7600 \end{gathered}\right.$ | $\}_{29} 3012$ | C 8194 |  | 31796 | $2244 \cdot 36$ | 3254 | 28 | 2931588.6 | 245 | 336 | 11.9 <br> 1.8 | $\begin{array}{r} \\ +\quad 15 \\ +\quad 15 \\ \hline\end{array}$ | $-\quad 23$ <br> $-\quad 23$ | 77.61 | Fo |
| 7609 | $\left.\right\|_{28} ^{2741}$ | C 8195 |  |  | $2244 \cdot 83$ $2255 \cdot 45$ | 3253 3480 | 28 28 | $\begin{array}{rrrr}29 & 32 & 2 \cdot 9 \\ 28 & 46 & 50 \cdot 2\end{array}$ |  | 336 339 | 11.8 | + 15 | \begin{tabular}{\|}
\hline
\end{tabular} | \} |  |
|  |  |  |  |  |  |  |  |  |  | 339 |  |  |  |  |  |
| 76 II | 272813 | C 8196 | 606 |  | $17 \begin{array}{lll}17 & 23 & 0.37\end{array}$ | $+2.3915$ | +.0028 | $27 \quad 18 \quad 25.2$ | $-3.222$ | + 346 | - 0 | + 15 | + 26 | $7 \cdot 8$ | A 5 |
| 7612 | 302984 | L 6193 | 615 |  | 23 I-41 | 2837 | 28 | $3052 \quad 51 \cdot 7$ | 220 | 331 | II. 8 | + 17 | - 14 | $8 \cdot 3$ |  |
| 7613 | 282742 | C 8197 |  |  | $23 \quad 8.99$ | 3442 | 28 | $\begin{array}{llll}28 & 54 & 9 \cdot 8\end{array}$ | 209 | 338 | $2 \cdot \mathrm{I}$ | - 15 | + 22 | $9 \cdot 3$ |  |
| 7614 | 263018 | C 8198 | 616 |  | $\begin{array}{llll}23 & 12.48\end{array}$ | 4148 | 28 | 262951.0 | 204 | 349 | 12.1 | + 1 | + 33 | $9 \cdot 3$ |  |
| 7615 | 263020 | C 8199 | 617-8 |  | 23 <br> 13.89 | 4027 | 28 | $\begin{array}{llll}26 & 55 & 1.7\end{array}$ | 202 | 347 | 12.5 | + 15 | - 20 | $9 \cdot 3$ |  |
| 7616 | 313027 | L 6200 | 629 | 31822-3 | I7 2320.79 | +2.2750 | $+.0029$ | 31985 | - 3.192 | + 329 | II.3 | - 230 | + 89 | $8 \cdot 1$ |  |
| 76 | 313026 | L 6199 |  | 31819-20 | 2321.48 | 2704 | 29 | 311754.1 | 191 | 328 | 110, $10^{\circ} 3$ | + 22 | - 134 | $7 \cdot 04$ | F 8 |
| 7618 | 302987 | L 6203 |  |  | 2341.55 | 2815 | 28 | 3056 18.I | 162 | 330 | II.8 | - 11 | - 13 | 9-1 |  |
| 7619 | 293016 | C 8204 |  |  | 23 47.19 | 3137 | 28 | $295344 \cdot 6$ | 154 | 334 | $2 \cdot \mathrm{I}$ | + 7 | - 10 | $8 \cdot 9$ |  |
| 7620 | 282745 | C 8203 |  |  | 2348.43 | 3513 | 28 | $28 \quad 3917.5$ | 153 | 339 | II 5 | - 20 | - 55 | $8 \cdot 3$ | K 2 |
| 7621 | 313029 | L 620 5 | 641 |  | $172350 \cdot 47$ | $+2.26 \mathrm{II}$ | +.0029 | 313451.8 | $-3.150$ | $+\cdot 327$ | 12.1 | 13 | - 43 | 9.1 |  |
| 76 | 302990 | L 6208 |  | 31848 | $2357 \cdot 16$ | 3049 | 28 | 30 10 53.6 | 140 | 333 | $1 \mathrm{I} \cdot 7$ | + 24 | - 43 | 8.9 |  |
| 7623 | 313031 | L 6209 | 643 |  | 2358.58 | 2625 | 29 | $3132 \begin{array}{llllll}31 & \\ 3\end{array}$ | 138 | 327 | II•9 | + 3 | - 30 | $9 \cdot 3$ |  |
| 7624. | 263023 | C 8207 | 638 | 31842-5 | 2358.79 | 4039 | 28 | $26 \quad 5146 \cdot 2$ | 138 | 348 | II•I | - 53 | + 280 | 8.0 | G 5 |
| 7625 | 272817 | C 8208 | 639 | 31843 | 23 59.19 | 3973 | 28 | $27 \quad 5 \quad 28 \cdot 1$ | 137 | 347 | II.I | + 2 | + 372 | $8 \cdot 6$ | G |
| 7626 | 302993 | L 6212 |  |  | $17{ }^{17} 2419.31$ | +2.2958 | $+.0028$ | $3028 \quad 9 \cdot 1$ | $-3 \cdot 108$ | $+\cdot 332$ | $9 \cdot 9$ | + 23 | + 20 | 8.9 | F 5 |
| 7627 | 272819 | C 8212 |  |  | 2428.86 | 3780 | 28 | $274432 \cdot 2$ | 094 | 344 | $8 \cdot 7$ | - 34 | $+\quad 35$ | $8 \cdot 5$ | K 0 |
| 7628 | 243188 | B 5989 | 649 |  | 2431.55 | 4806 | 28 | 24835.9 | 090 | 358 | $9 \cdot 9$ | - 1 | + 2 | 8.9 | F 5 |
| 7629 | 282748 | C 8213 |  |  | $2435 \cdot 46$ | 3541 | 28 | $28 \quad 3251 \cdot 9$ | 085 | 340 | $10 \cdot 7$ | + 16 | - 28 | $9 \cdot 3$ |  |
| 7630 | 293018 | C 8214 | 659 |  | $2439 \cdot 30$ | 3318 | 28 | $29 \quad 17 \quad 23.3$ | 079 | 337 | $10 \cdot 7$ | + 27 | 13 | $9 \cdot 2$ | F 2 |
| 7631 | 293020 | C 8216 | 662 |  | $17 \quad 24$ 41.02 | +2.3191 | +.0028 | 294223.4 | - 3.077 | + 335 | 10.9 | + 21 | - 30 | $9 \cdot 3$ |  |
| 7632 | 263026 | C 8217 |  |  | 24 47.26 | 4261 | 28 | $26 \quad 443 \cdot 2$ | 068 | 351 | 10.5 | - 1 | + 30 | $8 \cdot 8$ |  |
| 7633 | 302997 | L 6215 |  | 31875 | 2454.20 | 3004 | 28 | 30 I9 4-I | 058 | 333 | $9 \cdot 3$ | - 4 | - I | 8.2 |  |
| 7634 | 293025 | C 8219 | 666 | 31875 | $2454 \cdot 86$ | 3127 | 28 | $295437 \cdot 5$ | 057 | 334 | $10 \cdot 3$ | + 28 | - 13 | 8.41 | A 0 |
| 7635 | $28 \quad 2749$ | C 8218 |  |  | $2455 \cdot 19$ | 3585 | 28 | 282348.6 | 056 | 341 | II. 1 | 41 | + 28. | $8 \cdot 9$ | G 5 |
| 76361 | 293026 | C 8222 | 673 | 31880 | $\begin{array}{llll}17 & 25 & 2.47\end{array}$ | $+2.3127$ | 0028 | $295436 \cdot 0$ | $-3.046$ | +-334 | 10.9 | + 45 | - | 8.71 | F 8 |
| 7637 | 263027 | C 8223 | 670-1-2 | 31878 | $25 \quad 9.50$ | 4052 | 28 | $26{ }^{26}$ 0.1 | 036 | 348 | $9 \cdot 3$ | + 7 | - 143 | $8 \cdot 2$ | Go |
| 7638 | 263028 | C 8225 |  | 31882 | $25 \quad 16.82$ | 4203 | 28 | $261634 \cdot 0$ | 025 | 350 | 10.5 | - 16 | -. 16 | $8 \cdot 7$ | G |
| 7639 | 293027 | C 8229 |  |  | 2533.97 | 3369 | 28 | $29 \quad 6 \quad 20 \cdot 2$ | 001 | 338 | II.I | - 2 | - 15 | 9-1 | G 5 |
| 7640 | 313040 | L 6219 | 698-9 | 31909 | $25 \quad 38.49$ | 2556 | 29 | 314323.5 | 2.994 | 327 | II. 5 | + 12 | - 20 | $8 \cdot 7$ | A 3 |
| 764 I | 272822 | C 8230 |  | 31896 | 172540.61 | +2.3713 | 0028 | $27 \quad 57 \quad 7 \cdot 1$ | $-2.991$ | $+\cdot 343$ | 9.6 | - 23 | + 29 | $8 \cdot 0$ | A 2 |
| 7642 | 282757 | C 8231 |  |  | $2542 \cdot 38$ | 3434 | 28 | $28 \quad 53 \quad 7 \cdot 3$ | 988 | 339 | II.5 | + 5 | - II | $8 \cdot 6$ | A 0 |
| 7643 | 243191 | B 5996 | 692 |  | 2543.78 | 4838 | 28 | 24 - 38.9 | 986 | 359 | I1.8 | - 9 | - 9 | $9 \cdot 7$ |  |
| 7644 | 293028 | C 8233 |  |  | $2547 \cdot 70$ | 3256 | 28 | $2928 \quad 17 \times 0$ | 981 | 336 | II 5 | - 26 | - 43 | $9 \cdot 3$ | A 3 |
| 7645 | 293029 | C 8236 |  |  | 25 51.88 | 3257 | 28 | $2928 \quad 9.4$ | 975 | 336 | 12.0 | - 5 | - 295 | $9 \cdot 4$ |  |
| 7646 | 243192 | B 5999 | 697 |  | 172555.66 | +2.4638 | +.0028 | $2443 \quad 37 \cdot 7$ | -2.969 | + 356 | II•9 | - 15 | + 9 | 9•I |  |
| 7647 | 253274 | C 8234 | 700-1-2 |  | 2556.02 | 4554 | 28 | 25 I 45.5 |  | 355 | 10.9 | - 15 | - 14 | $8 \cdot 9$ |  |
| 7648 | 243193 | C 8235 |  |  | 25 56.27 | 4584 | 28 | $2455 \quad 23 \cdot 3$ | 968 | 355 | 12.7 | - 1 | + 25 | $9 \cdot 2$ |  |
| 7649 | 272824 | C 8238 | 704 | 31914 | 26 I.30 | 3820 | 28 | $\begin{array}{lll}27 & 35 & 1 \cdot 3\end{array}$ | 961 | 345 | $11 \cdot 9$ | + 28 | + 3 | $8 \cdot 5$ | F 8 |
| 7650 | 253275 | C 8240 | 707-8 |  | $26 \quad 16 \cdot 26$ | 4523 | 28 | 25 | 940 | 355 | 12.5 | - 13 | + $+\quad 9$ | $8 \cdot 9$ |  |


|  | B．D． | A．G．C． | W．B．（2）． | Lalande． | R．A．9910．0． | Precession． | Sec．Var． | Dec．1910．0． | Precossion． | $\begin{aligned} & \text { Sec. } \\ & \text { Sar. } \end{aligned}$ | $\underset{\substack{\text { Epoch } \\ 1900+}}{ }$ | Annual P．M． |  | Mag． | SpectraType． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No． |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.A.A. } \\ 0.0001 . \end{gathered}$ | De De |  |  |
|  | － |  |  |  | h m |  | ${ }^{8}$ |  |  |  |  |  |  |  |  |
| ${ }_{7651} 7$ | 293030 | ${ }^{\text {C } 8241}$ |  |  | ${ }_{17} 726 \quad 21.88$ | ＋2．3335 | ＋－0028 | 291220.0 | 2.931 | ＋．338 | 12.7 |  | 11 | $9 \cdot 3$ |  |
| 7652 | 303006 | L 6232 | 729 |  | ${ }^{26} 36 \cdot 05$ | 2803 |  | $3055 \quad 30 \cdot 5$ | 911 | 330 | $10 \cdot 1$ | ＋ 29 |  | $8 \cdot 7$ |  |
| 3 | 29 26 3033 3033 | C ${ }^{\text {C } 8244}$ | 734 | 31940 | 2645.57 | 3220 |  |  | 897 | 337 | 9．1 | － 3 |  | 8.01 | K |
| 7655 | 26 24 31937 | B 6006 | 731 733 |  | 26 26 26 $56 \cdot 35$ | 4265 4806 |  | $\begin{array}{lll}26 & 2 & 1.4 \\ 24 & 6 & 35 \cdot 7\end{array}$ | 890 881 | 351 360 | $\begin{array}{r} 10.5 \\ 9.7 \end{array}$ |  | －${ }^{4}$ | ${ }_{8.1}^{9.4}$ | K 5 |
| 56 | 263034 | C 8247 | 736 | 31950 | 17276.05 | ＋2．4223 | ＋．0028 | $261040 \cdot 9$ | － 2.868 | ＋ 351 | 12.5 |  | ＋14＊ | 4.48 | K。 |
| 7657 | 313047 | L 6235 | 756－7 | 31970 | $2730 \cdot 88$ | 2705 |  | $\begin{array}{llllllllllllllllll}31 & 13 & 29.3\end{array}$ | 832 | 329 | 10.1 |  | ＋${ }^{*}$ | 5.82 | K。 |
| 76 | 28 28 26 3036 | C 8252 C 8253 | 755 $752-4$ |  | 2738.58 | 3629 |  | $\begin{array}{llllll}28 & 12 & 12.8 \\ 26 & 6 & 12.8\end{array}$ | 821 | 343 | $10 \cdot 1$ | ＋ 34 | － $4^{6}$ | 8.6 | K。 |
| 7660 | 26 303036 | C | 752－4 | 31981 | 27 28 28 88.25 | $\begin{aligned} & 4239 \\ & 3230 \end{aligned}$ |  | $\begin{array}{llll}26 & 6 & 52 \cdot 5 \\ 29 & 31 & 16.4\end{array}$ | 815 778 | 350 337 | 9.3 9.9 |  | －${ }^{2}$ | 9.3 8.7 | 5 |
| 61 | 303013 | L． 6238 | 780 |  | 172815.78 | $+2.2963$ | ＋．0028 | 302310.9 | － 2.767 | ＋ 333 | 2 |  | － 131 | $7 \cdot 11$ | K。 |
|  | 282767 | C 8260 | 778 | 31985－6 | 2817.47 | 3545 | 28 | $\begin{array}{llll}28 & 28 & 19.8\end{array}$ | 765 | 341 | 9 | ＋ $7^{*}$ | ＋ 24 ＊ | 5.58 | A。 |
| 7663 | 313050 263088 | L 6239 | 785 |  | 2819.71 | 2745 |  | $\begin{array}{llll}31 & 5 & 76\end{array}$ | 761 | 330 | $10 \cdot 3$ |  |  |  |  |
| 7664 7665 7 | $\begin{array}{ll}26 & 3038 \\ 25 & 3283\end{array}$ | C ${ }_{\text {C }} 8264{ }^{\text {C }} 8265$ | 793 |  | 28 28 28 49.79 | 4123 4327 | 28 28 | $\begin{array}{llll}26 & 30 & 9.4 \\ 25 & 47 & 26.7\end{array}$ | 721 718 | 349 353 | ${ }_{9 \cdot 1}^{9 \cdot 3}$ |  | $+\quad 32$ <br> $+\quad 38$ | 6.85 8.3 | A 5 A 2 |
| 7666 | 282771 | C 826 | 802 | 32009 | $17 \quad 2851.88$ | ＋2．3425 | ＋．0028 | $28526 \cdot 1$ | －2．715 | ＋•339 | 10.5 |  |  | $8 \cdot 1$ | 2 |
| 76 | 253284 | C 8266 | 794 | 32000 | 2854.04 | 4374 | 28 | $25 \quad 3729.3$ | 712 | 354 | $10 \cdot 3$ | ＋ 21 | ＋ 11 | $8 \cdot 9$ |  |
| 7668 |  | C ${ }^{\text {C } 8270}$ | $821$ |  | 2922.87 | 4030 | 28 | $264856 \cdot 2$ | 670 | 348 | 10.6 | $\begin{array}{r}\text {＋} \\ +\quad 39 \\ \hline\end{array}$ | －$\quad 68$ | 8.4 |  |
| 77869 | 282776 253290 | C ${ }_{\text {C }}$ 8272 ${ }^{\text {C }} 8276$ | $\begin{gathered} 829-30 \\ 840-1 \end{gathered}$ | 32034 | 29 <br> 29 <br> 29 <br> $6 \cdot 15$ | 3435 | 28 28 | 28 49 <br> 25 31.0 | 657 | 346 | 10.3 | ＋ 14 | － 15 | 8.6 | Fo |
| 7670 | 253290 | C 8276 | $840-1$ |  | 2956.95 | 4533 | 28 | $\begin{array}{llll}25 & 2 & 59.8\end{array}$ | 621 | 356 | 9.5 | ＋ 24 |  | $9 \cdot 4$ |  |
| 7671 | 263043 | C 8283 |  | 32052－4 | $17 \quad 3019.83$ | ＋2．4050 | ＋．0027 | $264356 \cdot 3$ | － 2.588 | ＋．350 | 10.3 |  | － 8 | 8.7 | K。 |
| 7672 | 293049 | C 8886 | 871 | 32068 | 3027.89 | 3388 | 27 | $28 \quad 58$ | 576 | 339 | 10.7 | ＋ 5 | ＋ 25 | 8.2 | F 5 |
|  | 253296 | $\mathrm{C}_{\mathrm{C}} 8285$ | 863－4 | 32056－8 | 3028.31 | 4417 | 27 | $25 \quad 27 \quad 7 \cdot 5$ | 576 | 354 | 10.1 | ＋ 18 | ＋ 73 | $8 \cdot 3$ |  |
| 7774 | 293050 272841 | C ${ }_{\text {C }} 8288$ |  | 32061 | 30 $29 \cdot 10$ | ${ }^{3331}$ | 27 | 29 9 $24 \cdot 7$ <br> 27 11 6.7 | 574 | 338 | $10 \cdot 5$ | －${ }^{88}$ | ＋12 | 8.1 | F； |
|  |  |  | 878 |  | 304777 | 3917 |  | 27116.7 | 548 | 347 | 10.5 |  | － 51 | 9.3 |  |
|  | 293054 | ${ }_{\text {C }} \mathrm{C} 891$ |  | 32077 | $17 \quad 3053 \cdot 37$ | ＋2．3126 | ＋．0027 | 294922.4 | － 2.539 | $+\cdot 336$ | $9 \cdot 5$ |  |  | 7.71 | Ma |
|  | 28 28 26045 279 | C 8293 | 885 | 32078 | 31  <br> 31 0.37 <br> 31 2.93 | 3596 | 27 27 | $\begin{array}{lllll}28 & 16 & 4 \cdot 3 \\ 26 & 26 & 50 .\end{array}$ | 529 525 | 342 | 9.6 |  | －$\quad 9$ | 7.9 9.3 |  |
| 7679 | 282780 | C 8205 | 886 |  | $\begin{array}{ll}31 & 4.65\end{array}$ | 3661 | 27 | $\begin{array}{llll}28 & 28 & 55 \cdot 1\end{array}$ | 523 | 343 | 10.4 | － 4 | ＋ $+\quad 8$ | 9•1 |  |
| 7 | 243210 | B 6033 |  |  | 3124.24 | 4666 | 27 |  | 495 | 358 | 10.3 | ＋ $4^{2}$ | － 29 | $9 \cdot 3$ |  |
| 81 | 243212 | B6036 | 892 |  | $17 \quad 3128.16$ | ＋2．4708 | ＋．0027 | $242429 \cdot 1$ | $-2.489$ | ＋－358 | 9.0 |  |  | 7.40 | K 5 |
| $7{ }_{7}^{7682}$ | 253301 272846 | C 8300 C 8304 c | 896 | 32094－5 | $3135 \cdot 71$ 3225.29 32 |  |  |  | 478 | 353 | 9.7 | ＋ 5 | － 47 | $9 \cdot 1$ |  |
| 7683 7684 | 272846 | ${ }_{\text {c }} 8304$ | 927 |  | 3225.29 | 3801 |  |  |  | 346 | 9.9 |  |  | $9 \cdot 3$ |  |
| 17684 | 263048 | C 8303 |  | 3212－6 | 3225.55 | 4249 | 27 | $\begin{array}{llll}26 & 1 & 1.7\end{array}$ | 406 | 352 | $10 \cdot 1$ | ＋ 9 |  |  |  |
| 7685 | 282787 | C 8307 | $94^{2}$ | 32133 | 3235.56 | 3598 | 27 | 2814250 | 392 | 343 | 10.2 |  | ＋ 11 | $6 \cdot 48$ | K 5 |
| 7686 | 253308 | C 8309 | 945 | 32136－7 | $173245 \cdot 38$ | ＋2．4347 | ＋．0027 | 254019.3 | 2.377 | ＋ 353 | $8 \cdot 3$ |  |  | $7 \cdot 27$ | K。 |
|  | 272849 | C8311 | 955 |  | $3247 \cdot 27$ <br> 324 <br> 1762 | 3780 4368 | 27 |  | 375 | 345 | 9．3 |  | － 70 | $6 \cdot 57$ | Ma |
| 7689 | 293061 | C 8313 |  |  | 3230.74 | ${ }_{3136}$ | 2 |  | 374 | 354 336 | 9．9 |  |  | ${ }_{9} 9.1$ |  |
| 7690 | 263051 | C 8316 | 965 | 32162 | $33^{10.13}$ | 4084 | 27 | 26 34 <br> 1 51.8 | 342 | 350 | 10.1 |  | 22 | 9－1 | Go |
| 769 I | 303033 | ${ }_{\text {L }} 62{ }^{2} 3$ | 975 | 32173－4 | 173311.21 | ＋2．2800 | ＋．0027 | 305024.6 | － 2.340 | ＋ 331 | 10.1 |  |  | 5.76 | A |
| 7692 | 243215 | ${ }^{\text {B } 6044}$ |  | 32160 | 3316.52 | 4652 |  |  | 332 | 358 | 10．3 | $\begin{array}{r}17 \\ \hline+\quad 6 \\ \hline\end{array}$ | ＋ 17 | $8 \cdot 3$ |  |
|  | 293062 24 3216 | C 8317 | ${ }_{969} 98$ |  | 33117.94 33 22.42 |  | 27 | $\begin{array}{lllllllll}29 & 17 & 18.5 \\ 24 & 23 & 45.7\end{array}$ | 330 324 | 338 358 | 10.9 |  | － 13 | 9.3 8.8 |  |
| 7695 | 293064 | C 8320 | 96 | 32184 | 33 30．51 | 3081 | 27 27 | $\begin{array}{llllll}29 & 56 & 8.6\end{array}$ | 312 312 | 335 | 10.7 | $+\quad 21$ <br> $+\quad 25$ | － 18 | $8 \cdot \mathrm{II}$ | A |
|  | 272852 | C 8319 |  |  | 173330.69 | $+2 \cdot 3733$ | ＋－0027 | $274^{6} \quad 32 \cdot 0$ | 2.312 | ＋ 345 | 11 －I |  | ＋${ }^{32}$ |  |  |
| 7697 | 313057 | L 6276 | 993 |  | 3330.87 | 2492 | 27 | 3148820.9 | 311 | 327 | 10.9 | ＋ 13 | － 12 | 8.9 |  |
|  | 31 31 24588 3217 | L 6277 | 997 |  | 33 <br> 33 <br> $39 \cdot 26$ <br> 10 | 2577 |  |  | 299 | 328 | 10.7 |  |  | $9 \cdot 3$ |  |
|  | 243217 | B6052 | 988 1002 |  | $3345 \cdot 10$ 3348.12 | 4806 | 27 | $\begin{array}{llll}24 & 1 & 45 \cdot 6\end{array}$ | 291. | 360 | 11.2 |  | － 20 | ${ }^{9 \cdot 1}$ |  |
| 7700 | 313060 | L6278 | 1002 |  | $3348 \cdot 12$ | 2577 | 27 | 3132119 | 286 | 328 | 11.4 | － 10 |  | $9 \cdot 3$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | ] P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Preccssion. | Sec. Var. | Epoch 1900+ | $\underset{\text { R. } . \text { A. }}{\text { R. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ".001, } \end{aligned}$ | Mag. | Spectral Type. |
|  |  |  |  |  | h m s | 8 | s |  |  | " |  |  |  |  |  |
| 7701 | 243218 | B 6054 | 991-2 | 32186 | $17 \quad 33 \quad 48.63$ | +2.4713 | $+\cdot 0027$ | $242146 \cdot 7$ | - 2.286 | $+\cdot 359$ | $9 \cdot 1$ | - 17* | - $3^{*}$ | $5 \cdot 67$ | A 0 |
| 7702 | 313062 | L 6280 | 1006 | 32201 | $3354 \cdot 91$ | 2670 | 27 | $\begin{array}{lllllllllll}31 & 145\end{array}$ | 277 | 329 | $8 \cdot 5$ | + 8 | + 5 I | $8 \cdot 8$ | G 5 |
| 7703 | 313064 | L 6287 |  |  | $34 \quad 17 \cdot 93$ | 2714 | 27 |  | 243 | 330 | $9 \cdot 5$ | + 27 | + 2 | $9 \cdot 3$ |  |
| 7704 | 313065 | L 6289 | 1037 | 32222 | 34 41.56 | 2725 | 27 |  | 209 | 330 | $9 \cdot 3$ | 8 | - 5 | $8 \cdot 9$ |  |
| 7705 | 253313 | C 8329 | 1031 | 32216-7 | $3446 \cdot 34$ | 4370 | 26 | $25 \quad 34 \quad 6 \cdot 5$ | 202 | 354 | $9 \cdot 3$ | I I | - 27 | $8 \cdot 3$ | K 0 |
| 7706 | $27 \quad 2856$ | C 8330 |  |  | 173450.90 | $+2.3769$ | +.0026 | $27 \quad 38 \quad 22 \cdot 3$ | - 2.196 | $+\cdot 345$ | $9 \cdot 8$ | - 17 | + 1 | $9 \cdot 3$ | A 3 |
| 7707 | 303037 | L 6291 | 1047 | 32240 | $35 \quad 4.49$ | 2973 | 26 | $\begin{array}{llllll}30 & 15 & 45\end{array}$ | 176 | 335 | 10.5 | - 1 | - 25 | $8 \cdot 7$ | A 2 |
| 7708 | 263053 | C 8331 | 1043 |  | $\begin{array}{lll}35 & 6 \cdot 47\end{array}$ | 4079 | 26 | $263438 \cdot 5$ | 173 | 350 | 10.4 | + 20 | $+\quad 5$ | $8 \cdot 7$ | A 2 |
| 7709 | 253314 | C 8332 | 1044 | 32230-2 | $\begin{array}{lll}35 & 9 \cdot 67\end{array}$ | 4429 | 26 | 25 21 24.9 | 168 | 355 | II $\cdot 3$ | + II | - 31 | $9 \cdot 3$ |  |
| 7710 | 293074 | C 8333 |  |  | $35 \quad 16.07$ | 3363 | 26 | $28593 \mathrm{I} \cdot 3$ | 159 | 340 | II•3 | + 20 | - 65 | $9 \cdot 2$ | G 5 |
| 771 I | 272858 | C 8336 | IO56 | 32243 | $17 \quad 35 \quad 29 \cdot 76$ | +2.3924 | $+.0026$ | $27 \quad 6 \quad 10.5$ | - 2.139 | $+348$ | 10.5 | - 22 | - 109 | $7 \cdot 34$ | F 5 |
| 7712 | 263054 | C 8338 | IO58-9 | 32247 | 3536.23 | 4010 | 26 | $264830 \cdot 6$ | 130 | 349 | 10.7 | + 21 | - 91 | $8 \cdot 2$ | G 0 |
| 7713 | 253315 | C 8339 | 1057 | 32244-5 | $3538 \cdot 47$ | 4426 | 26 | 25 2I $4 \mathrm{I} \cdot 6$ | 127 | 355 | 10.6 | + 7 | - 7 | $8 \cdot 7$ |  |
| 7714 | 313071 | L 6300 |  | 32269 | $3547 \cdot 64$ | - 2441 | 27 | $\begin{array}{lllll}31 & 56 & 8.6\end{array}$ | II3 | 326 | 10.5 | - 28 | - 36 | $7 \cdot 8$ | K 5 |
| 7715 | 303039 | L 6299 | 1082 | 32267 | 35 49•19 | 2958 | 26 | 30 I 8 12.I | III | 335 | $9 \cdot 5$ | + 1 | - 81 | $7 \cdot 11$ | F 2 |
| 7716 |  | C 8343 |  |  | 173554.63 | +2.4418 | $+.0026$ | $\begin{array}{llll}25 & 23 & 13.8\end{array}$ | - 2.103 | $+\cdot 354$ | 12.9 |  |  | $9 \cdot 3$ |  |
| 7717 | 253316 | C 8344 | 1075 | 32261 | 3556.82 | 4517 | 26 | 25218.0 | 100 | 356 | 10.9 | - 19 | - 25 | $8 \cdot 9$ |  |
| 7718 | 243223 | B 6075 | 1076 | 32260 | $3558 \cdot 71$ | 4678 | 26 | $242746 \cdot 9$ | 097 | 358 | 10.I | - 11 | - 54 | $8 \cdot 2$ | A 0 |
| 7719 | 293076 | C 8346 |  | 32279 | 3614.38 | 3208 | 26 | 292915.7 | 075 | 337 | $10 \cdot 3$ | + $4^{8}$ | + 7 | $9 \cdot 3$ |  |
| 7720 | 303040 | L 6308 | I 106-8 | 32295 | $36 \quad 24 \cdot 57$ | 2784 | 27 | $30 \quad 518 \cdot 2$ | 060 | 33 I | $9 \cdot 9$ | + 7 | - 45 | $8 \cdot 9$ | K 5 |
| 7721 | 293078 | C 8348 |  |  | $17 \quad 36 \quad 25.59$ | +2.3081 | +.0026 | $295359 \cdot 7$ | - 2.058 | $+335$ | 10.7 | + 13 | + 29 | $9 \cdot 2$ |  |
| 7722 | 253319 | C 8349 | I 101-2-3-4 | 32289 | $3631 \cdot 54$ | 4489 | 26 | $25746 \cdot 2$ | 050 | 355 | 10.3 | + 29 | - 25 | $8 \cdot 9$ |  |
| 7723 | 313075 | L 6309 | III7 | 32300 | $3633 \cdot 52$ | 2658 | 27 | 3 I 1459.1 | 047 | 330 | II I I | - 3 | + 12 | $6 \cdot 30$ | M a |
| 7724 | 293079 | C 8350 |  | 32296 | $3634 \cdot 21$ | 3269 | 26 | 29179.6 | 046 | 339 | $10 \cdot 7$ | + 24 | - 97 | $7 \cdot 46$ | Ko |
| 7725 | 282800 | C 835 I | I 120 |  | $3655 \cdot 83$ | 3578 | 26 | $281530 \cdot 6$ | $\mathrm{OI}_{4}$ | 343 | 9.5 | + 14 | - 5 | $9 \cdot 3$ | G 5 |
| 7726 | 253322 | C. 8352 |  | 32304 | $17 \quad 36 \quad 58.84$ | +2.4410 | $+\cdot 0026$ | $\begin{array}{llll}25 & 24 & 9 \cdot 6\end{array}$ | - 2.010 | $+\cdot 354$ | 10.5 | + 4 | - 11 | $8 \cdot 9$ |  |
| 7727 | 313076 | T 6314 | 1150 | 32328 | 3717.80 | 2628 | 27 | 31207.0 | $1 \cdot 983$ | 329 | II.0 | $1-30$ | - 82 | $6 \cdot 43$ | K o |
| 7728 | 293082 | C 8358 |  | 32327 | $3723 \cdot 15$ | 3136 | 26 | $294237 \cdot 1$ | 975 | 336 | $10 \cdot 3$ | + 20 | - 20 | $8 \cdot 5$ | K 2 |
| 7729 | 243225 | B6082 | I $137^{-8}$ | 32323 | $\begin{array}{lll}37 & 23.62\end{array}$ | 4648 | 26 | $243326 \cdot 4$ | 974 | 358 | $9 \cdot 5$ | - 13* | + $49 *$ | $6 \cdot 46$ | K |
| 7730 | 263060 | C 8357 |  |  | $37 \quad 23.96$ | 4242 | 26 | $25 \quad 59 \quad 19 \cdot 7$ | 974 | 352 | II. 5 | + 20 | - 38 | $9 \cdot 3$ |  |
| 7731 | 313077 | L 6316 | I I 54 | 32334 | $\begin{array}{llll}17 & 37 & 26.18\end{array}$ | $+2.2631$ | +.0027 | 3 ll 1929.6 | - 1•970 | +.329 | $10 \cdot 6$ | - 5 | + I | $8 \cdot 5$ | A 0 |
| 7732 | 243226 | B6083 |  |  | $3727 \cdot 48$ | 4660 | 26 | $243050 \cdot 7$ | 969 | 359 | $10 \cdot 7$ | - 16 | - 6 | $9 \cdot 3$ |  |
| 7733 | 253324 | C 8359 | I 1 47-8-9 |  | 37 31•73 | 4469 | 26 | 25 II 28.3 | 962 | 355 | $9 \cdot 7$ | 10 | - 11 | $9 \cdot 3$ |  |
| 7734 | 272866 | C 8364 | 1167 |  | $3755 \cdot 60$ | 3726 | 26 | $2745 \quad 5 \cdot 2$ | 928 | 345 | 10.1 | + 13 | + 28 | $9 \cdot 3$ |  |
| 7735 | 243228 | B6087 | 1165-6 | 32341 | 38 I.44 | . 4630 | 25 | $24^{\circ} 37$ 2.0 | 919 | 359 | II.7 | 6 | - 52 | $7 \cdot 41$ | K o |
| 7736 | 272867 | C 8365 | 1172 |  | $\begin{array}{lll}17 & 38 & 2.23\end{array}$ | +2.3935 | $+\cdot 0025$ | $\begin{array}{lll}27 & 2 & 23.0\end{array}$ | $1 \cdot 918$ | + 348 | $12 \cdot 3$ |  | - 41 | 9•3 |  |
| 7737 | $27 \quad 2868$ | C 8366 | 1175 |  | 3883.26 | 3678 | $25$ | $27 \quad 5443 \cdot 7$ | 917 | 344 | $1 \mathrm{I} \cdot 9$ | - 8 | - 10 | 9-1 | Fo |
| 7738 | $28 \quad 2803$ | C 8367 |  |  | $\begin{array}{ll}38 & 3 \cdot 39 \\ 38 & 8.92\end{array}$ | 3575 | 26 | $\begin{array}{llll}28 & 15 & 27.4\end{array}$ | 917 | $343$ | $10 \cdot 7$ | - 20 | - 21 | $8 \cdot 0$ | Ko |
| 7739 | 293087 | C 8372 |  | 32362 | $\begin{array}{llr}38 & 8.92\end{array}$ | 3154 | 26 | $293836 \cdot 6$ | 908 | 336 | II. 5 | + 14 | -6I | $8 \cdot 2$ | Ko |
| 7740 | 313079 | L 6319 | 1191-2 |  | 38 15.07 | 2520 | 26 | $313952 \cdot 0$ | 899 | 328 | II.9 | $\bigcirc$ | - 128 | $8 \cdot 9$ | G 5 |
| 7741 | 272870 | C 8374 | 1194 | 32366 | $\begin{array}{llll}17 & 38 & 27 \cdot 76\end{array}$ | +2.3743 | +.0025 | 27 4114*7 | - I.88I | $+\cdot 345$ | II•I | $+\quad 9$ | $+\quad 45$ | $6 \cdot 52$ | A 3 |
| 7742 | 253327 | C8373 | $1189-90$ | 32364 | $\begin{array}{lll}38 & 29 \cdot 17\end{array}$ | 4388 | 25 | $25 \quad 28 \quad 5 \cdot 4$ | 879 | 355 | II. 2 | - 3 | - 8 | $8 \cdot 3$ | A 2 |
| 7743 | 313081 | L 6321 | 1198-9 |  | 38 30.96 | 2513 | 26 | $314058 \cdot 5$ | 876 | 328 | II.9 | + 12 | - 17 | $8 \cdot 9$ | K 2 |
| 7744 | 243229 | B6099 |  | 32367 | $38 \quad 38 \cdot 77$ | 4664 | 25 | $\begin{array}{llll}24 & 29 & 15 \cdot 5\end{array}$ | 865 | 360 | I 10.5 | + 30 | + 20 | $9 \cdot 3$ |  |
| 7745 | 243231 | B6I00 | I 196 | 32370 | $3846 \cdot 96$ | 4630 | 25 | 243632.5 | 853 | 359 | 10.6 | - $4^{6}$ | - II5* | $5 \cdot 59$ | K 5 |
| 7746 | 263065 | C 8376 |  |  | $\begin{array}{llll}17 & 38 & 47.94\end{array}$ | $+2.4227$ | +.0025 | 26 I $633 \cdot 9$ | - 1.852 | +.353 | $9 \cdot 9$ | + 12 | - 8 | $9 \cdot 3$ |  |
| 7747 | 253328 | C 8377 | 1205 | 32376 | $38 \quad 50 \cdot 43$ | 4280 | 25 | $25 \quad 5033 \cdot 7$ | 848 | 354 | $9 \cdot 9$ | 13 | + 10 | $7 \cdot 9$ | K 2 |
| 7748 | 263066 | C 8380 | 1210 | 32386 | $\begin{array}{ll}39 & 1.47\end{array}$ | 4063 | 25 | $2635 \quad 36 \cdot 5$ | 832 | 351 | II.3 | + 24 | - 7 | $8 \cdot 0$ | K |
| 7749 | 293091 | C 8383 | 1217 | 32394 | $39 \quad 7 \cdot 85$ | 3207 | 26 | $2927 \quad 38 \cdot 5$ | 823 | 338 | $10 \cdot 3$ | - 13 | - 27 | $6 \cdot 55$ | A 5 |
| 7750 | 243233 | B6Ior | 1221 |  | 3924.71 | 4692 | 25 | $242257 \cdot 9$ | 798 | 360 | I I 3 | + 6 | - 20 | $9 \cdot 2$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P．M． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No． | B．D． | A．G．C． | W．B．（2）． | Lalande． | R．A． $1910 \cdot 0$. | Precession． | Sec．Var． | Dec．1910．0． | Precession． | Sec． Var. | Epoch $1900+$ | $\begin{aligned} & \text { R.A. } \\ & \text { R.000 } . \end{aligned}$ | Dec． ＂：ool． | Mag． | $\begin{array}{\|l\|l} \text { Speotral } \\ \text { Type. } \end{array}$ |
|  | － |  |  |  | h m 8 | 8 | 8 | $\checkmark$＇ | － | ＂ |  |  |  |  |  |
| 7801 | 253348 | C． 8436 | 1359－60 |  | $174413 \cdot 11$ | ＋2．4377 | ＋．0025 | $\begin{array}{llll}25 & 27 & 35.5\end{array}$ | －1－379 | ＋ 355 | 11．1 | － 31 | － 34 | $9 \cdot 2$ |  |
| 7802 | 293116 | C 8440 | 1364 |  | 4414.77 | 3225 | 25 | $292137 \cdot 7$ | 377 | 339 | 11.0 | ＋ 13 | － 28 | －8．9 |  |
| 7803 | 282835 | C 8439 |  | 32571 －2 | $44 \quad 5 \cdot 36$ | 3399 | 25 | 284719.4 | 376 | 341 | 11.3 | ＋ 41 | － 29 | $8 \cdot 3$ | Mb |
| 7804 | 26 3081 | C 8438 |  |  | $4415 \cdot 41$ | 3935 | 25 | $26 \quad 59 \quad 24.9$ | 376 | 349 | 11.5 | 39 | ＋ 59 | $9 \cdot 3$ |  |
| 7805 | 282837 | C 8442 |  | 32576－7 | 4419.41 | 3434 | 25 | $284018 \cdot 0$ | 370 | 341 | II．I | 15 | － 17 | $8 \cdot 7$ | K。 |
| 7806 | 303061 | L 6354 |  |  | $174422 \cdot 57$ | ＋2．2908 | $+.0025$ | 3023 1．5 | －I．366 | ＋ 334 | 9.9 | 7 | － 23 | 7.91 | Ma |
| 7807 | 303062 | L 6355 |  |  | 4429.77 | 2793 | 25 | 30450.8 | 355 | 332 | $9 \cdot 9$ | － 11 | ＋ 25 | $9 \cdot 1$ |  |
| 7808 | 293117 | C 8446 | 1377 |  | 4433.34 | 3242 | 25 | $2918 \quad 2.0$ | 350 | 339 | II－3 | － 35 | － 50 | $9 \cdot 3$ |  |
| 7809 | 272892 | C 8447 |  |  | 4446.07 | 3902 | 25 | $27 \quad 5 \quad 53 \cdot 1$ | 331 | 348 | 9．1 | － 18 | ＋ 3 | 8.7 | F 5 |
| 7810 | 293120 | C 8450 | 1393 | 32608 | $45 \quad 4 \cdot 62$ | 3272 | 25 | 29 II $54 \cdot 5$ | 304 | 339 | $9 \cdot 5$ | 12 | － 54 | $9 \cdot 1$ | K |
| 7811 | 253353 | C 8451 | 1390－1 | 32603 | $174510 \cdot 18$ | ＋2．4320 | ＋．0024 | $25 \quad 39 \quad 8 \cdot 3$ | －1．296 | ＋•355 | $1 \mathrm{I} \cdot 7$ |  | －45＊ | $5 \cdot 34$ | Ko |
| 7812 | 29 3121 | C 8452 | 1395 |  | $45 \quad 13.76$ | 3266 | 25 | $\begin{array}{llllll}29 & 12 & 58.9\end{array}$ | 291 | 339 | 10.5 | ＋ 31 | － $4^{\circ}$ | $9 \cdot 3$ | F 8 |
| 7813 | 293122 | C 8454 | 1399－400 | 32623 | $45 \quad 27 \cdot 17$ | 3280 | 25 | $2910 \quad 17.7$ | 272 | 339 | 10.1 | ＋ 40 | － 24 | 9－I | A o |
| 7814 | 243263 | B6147 |  | 32617 | $45 \quad 36 \cdot 73$ | $473{ }^{\circ}$ | 24 | 241212.7 | 258 | 360 | $9 \cdot 3$ | － 4 | ＋． 23 | 8.5 | A 2 |
| 7815 | 263087 | C 8458 | 1417－43 |  | $46 \quad 18.20$ | 457 | 24 | $261245 \cdot 6$ | 197 | 352 | 10.1 | ＋ 5 | － 4 | 8.8 |  |
| 6 | 243264 | B6157 |  | 32643 | $17 \quad 46 \quad 19.29$ | $+2 \cdot 4647$ | ＋．0024 | 242938.0 | $-\mathrm{r} 1 \mathrm{I}^{6}$ | $+\cdot 359$ | $9 \cdot 7$ | － 7 | － 20 | 7.01 | A o |
| 7817 | 313100 | L 6364 | 1425 | 32673 | $4628 \cdot 18$ | 2689 | 25 | $\begin{array}{llll}31 & 3 & 48.5\end{array}$ | 183 | 331 | $9 \cdot 1$ | $+$ | － 19 | $7 \cdot 8$ | Fo |
| 7818 | 282844 | C 8459 |  |  | $46 \quad 28 \cdot 87$ | 3488 | 25 | $28 \quad 2840 \cdot 5$ | 182 | 342 | 10.1 | ＋ 29 | － 27 | $9 \cdot 3$ |  |
|  | $)_{25} 3357$ | C 8460 |  | 32661 | $4635 \cdot 06$ | 4414 | 24 | $\begin{array}{llll}25 & 18 & 57.4 \\ 25 & 18 & 52.7\end{array}$ | 173 | 356 356 |  |  |  |  | A 2 |
|  | $\int^{25} 3357$ |  |  |  | $4635 \cdot 19$ | 4415 | 24 | $25 \quad 18 \quad 52.7$ |  | 356 | 6.6 | － 3 | － 7 | $\}^{6 \cdot 57}$ | A 2 |
| 7821 | 293123 | C 8463 | 1431－2 | 32677 | $174640 \cdot 24$ | ＋2．3273 | ＋．0024 | 29 I1 $7 \cdot 8$ | － 1.165 | ＋－339 | 10 | ＋ 6 | －${ }^{2}$ | $9 \cdot 3$ |  |
| 7822 | 313102 | L 6369 |  |  | $4642 \cdot 80$ | 2543 | 25 | $\begin{array}{llll}31 & 31 & 8.7\end{array}$ | 162 | 329 | 10.5 | ＋ 56 | ＋ 42 | $9 \cdot 3$ |  |
| 7823 | 253358 | C 8461 | 1424 |  | $4642 \cdot 99$ | 4474 | 24 | $25 \quad 6 \quad 21.5$ | 161 | 357 | 10.7 | ＋ 7 | ＋ 10 | $9 \cdot 3$ |  |
| 7824 | 282845 | C 8464 |  | 32678 | $46 \quad 44 \cdot 14$ | 3554 | 25 | 281529.9 | 160 | 343 | 9.9 | ＋ 2 | － 67 | $8 \cdot 3$ | F 8 |
| 7825 | 293126 | C 8466 | 1438 | 32688 | 4653.54 | 3223 | 24 | $292045 \cdot 2$ | 146 | 339 | $9 \cdot 8$ | ＋21＊ | ＋ $40^{*}$ | $5 \cdot 61$ | K o |
| 6 | 272897 | C 8467 |  |  | $174657 \cdot 48$ | ＋2．3645 | ＋．0024 |  | － $1 \cdot 14^{\circ}$ | ＋－344 | $10 \cdot 1$ |  | 8 | $8 \cdot 6$ |  |
| 7 | 263091 | C 8468 | 1439 |  | 478.74 | 4075 | 24 | $26 \quad 2923.5$ | 124 | 351 | $11 \cdot 3$ | ＋ 27 | － 5 | $9 \cdot 3$ |  |
|  | 272898 | C 8472 |  |  | $47 \quad 26 \cdot 49$ | 3696 | 24 | $274650 \cdot 1$ | 098 | 345 | 12.3 | ＋ $+\quad 22$ + | ＋ <br> $+\quad 23$ | $9 \cdot 3$ |  |
| 7829 | 303068 | C 8474 |  |  | $47 \quad 26 \cdot 56$ | 2984 | 25 | $\begin{array}{llll}30 & 7 & 10.7\end{array}$ | 098 | 335 | 10.9 | ＋ 10 | － 26 | $8 \cdot 16$ | Ma |
| 7830 | 303069 | C 8477 |  |  | $4730 \cdot 05$ | 3015 | 25 | $\begin{array}{llll}30 & 1 & 9.9\end{array}$ | 093 | 336 | 10.4 | － 18 | ＋ 15 | $6 \cdot 68$ | A 2 |
| 7831 | 272900 | C 8476 |  | 32702 | 1747 32．21 | ＋2．3862 | ＋．0024 | $271257 \cdot 1$ | －1．090 | ＋ 348 | 11.7 | ＋ 29 | － $4^{2}$ | 8.8 |  |
| 7832 | 263096 | C 8475 | 1448 |  | 4732.31 | 414 I | 24 | $\begin{array}{lllllllllll}26 & 15 & 39.4\end{array}$ | 089 | 352 | 11.5 | － 5 | $-23$ | $9 \cdot 4$ |  |
| 7833 | 272901 | C 8478 | 1449－50 | 32703 | 4733.78 | 3899 | 24 | $\begin{array}{lllll}27 & 5 & 29.7\end{array}$ | 087 | 348 | $11 \cdot 3$ |  | ＋ 3 | $8 \cdot 3$ |  |
| 7834 | 303071 | C 8480 |  |  | 47 37．14 | $294{ }^{\circ}$ | 25 |  | 082 | 335 | II．I | － 7 | － 72 | $8 \cdot 5$ | F 5 |
| 7835 | 282849 | C 848 I | 1457 |  | 4741.76 | 3528 | 24 | $28 \quad 20 \quad 15.4$ | 076 | 343 | 11.7 | $+31$ | － 9 | $9 \cdot 3$ |  |
| 7836 | 243270 | B6164 | 1458 |  | 1747 51．20 | ＋2．4587 | 0024 | $\begin{array}{lllll} & 41 & 57.0\end{array}$ | － 1.062 | ＋－358 | 11.8 | － 32 | ， | $8 \cdot 7$ |  |
| 7837 | 313106 | L 6379 | 1465 |  | 47 55．13 | 2634 | 25 | $\begin{array}{lllll} & 1 & 13 & 38.2\end{array}$ | 056 | 330 | 12.5 | 3 | － 9 | $9 \cdot 3$ |  |
| 7838 | 253360 | C 8482 | 1463 |  | 4759.67 | 4468 | 24 | $\begin{array}{llll}25 & 7 & 7 \cdot 2\end{array}$ | 050 | 357 | 11．3 | － 13 | － 3 | $9 \cdot 2$ |  |
| 7839 | 282852 | C 8483 | 1472 |  | 4813.14 | 3551 | 24 | 281537.0 | 030 | 343 | 11.7 | ＋$\quad 5$ | － 21 | $8 \cdot 7$ |  |
| 7840 | 24327 I | B6170 | 1470 | 32718 | $\begin{array}{lll}48 & 20 \cdot 18\end{array}$ | 4692 | 24 | $\begin{array}{llllll}24 & 19 & 33.8\end{array}$ | 020 | 360 | 11．6 | － 23 | － 30 | $7 \cdot 04$ | K 2 |
| 7841 | 263099 | C 8485 |  | 32722 | 174820.54 | ＋2．3961 | ＋．0024 | 265229.0 | － 1.019 | ＋ 350 | 11.2 | － 9 | － 10 | $8 \cdot 3$ | K。 |
| 7842 | 263100 | C 8486 |  | 32726 | 4828.54 | 4125 | 24 | $261846 \cdot 1$ | 008 | 352 | 12.3 | ＋ 17 | 43 | $7 \cdot 9$ | A 。 |
| 7843 |  | C 8488 |  |  | $\begin{array}{llll}48 & 32 \cdot 36\end{array}$ | 3148 | 24 | 293459.2 | 002 | 338 | 13.1 |  |  | $9 \cdot 3$ |  |
| 7844 | 272903 | C 8489 | 1483 |  | $48 \quad 35 \cdot 77$ | 3654 | 24 | $275439 \cdot 6$ | 0.997 | 345 | 12.1 | － 2 | 11 | $8 \cdot 9$ |  |
| 7845 | 313110 | L 6382 | 1488 | 32748 | $48 \quad 36 \cdot 30$ | 2660 | 25 | $3 \mathrm{I} 83^{1} \mathrm{I}$ | 996 | 330 | 12.5 | － 2 | － 30 | 8.8 | K 2 |
| 7846 | 263102 | C 8490 |  |  |  | ＋2．4061 | $+\cdot 0024$ | $263145 \cdot 5$ | －0．991 | ＋．351 | 12.3 | － 9 | － 19 | $9 \cdot 2$ |  |
| 7847 | 253364 | C 8492 | $1482-4$ | 32735－76 | 4843.33 | 4497 | 24 | 25 ○ $48 \cdot 8$ | 986 | 358 | 11．5 | － 21. | － 6 | $7 \cdot 71$ | K |
| 7848 | 243274 | C 8493 | 1485 |  | $4844 \cdot 46$ | 4547 | 24 | 245014.0 | 984 | 358 | 11.9 | － 2 | － 32 | $9 \cdot 4$ |  |
| 7849 | 272904 | C 8494 |  | 32746 | $48 \quad 48 \cdot 18$ | 3916 | 24 | 27 I 29.5 | 979 | 349 | 10.9 | － 8 | － 28 | $8 \cdot 7$ |  |
| 7850 | 263106 | C 8497 |  |  | $4^{8} 54 \cdot 43$ | 3949 | 24 | 2654 49．3． | 970 | 349 | 10.5 | － 25 | － 55 | $9 \cdot 2$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & 0.0001 . \end{aligned}$ | $\begin{aligned} & \text { Deo. } \\ & \text { ת.00 } \end{aligned}$ |  |  |
|  |  |  |  |  | h m s | 8 | 8 | - " " | " | " |  |  |  |  |  |
| 51 | 253365 | C 8496 |  |  | 1748 55.18 | +2.4322 | +.0024 | $253737 \cdot 2$ | -0.969 | + 355 | - |  | + 27 | 8.7 |  |
| 2 | 272905 | C 8498 | 1493 | 32750 | $4^{8} 57 \cdot 12$ | 3861 | 24 | $27 \quad 1252 \cdot 5$ | 966 | 348 | 10.7 | + 24 | - 22 | 7.8 | A 3 |
| 7853 | 272906 | C 8499 | 1496 |  | 49 I-44 | 3668 | 24 | $275150 \cdot 1$ | 960 | 345 | 12.1 | - 27 | + 50 | $8 \cdot 2$ | K o |
| 78854 | 303074 | L 6388 | 1504 | 32764 | $49 \quad 3 \cdot 59$ | 2779 | 25 | $304548 \cdot 6$ | 957 | 332 | 12.4 | 37 | - 9 | $8 \cdot 5$ | Mb |
| 7855 | 293132 | C 8501 |  |  | 4911.84 | 3098 | 24 | $2944 \quad 28 \cdot 2$ | 945 | 337 | 11.4 | 13 | - 37 | $9 \cdot 1$ |  |
| 7856 | 272908 | C 8502 | 1505 |  | 174916.04 | +2.3756 | +-0024 | $\begin{array}{llll}27 & 34 & 3.7\end{array}$ | -0.938 | +-346 | 12.0 | - 21 | + | $9 \cdot 2$ |  |
| 7857 | 313114 | L 6391 | 1513 |  | 4916.49 | 2575 | 25 | $\begin{array}{lllllllllllllllll}31 & 24 & 16.8\end{array}$ | 938 | 329 | 12.5 | + 16 | - 20 | $9 \cdot 3$ |  |
| 7858 | 303077 | L. 6392 | 1514 | 32775-820 | 49 21-27 | 2724 | 25 | $\begin{array}{llll}30 & 56 & 8.1\end{array}$ | 931 | 331 | 11.7 | - 20. | $+10$ | $8 \cdot 9$ | A 3 |
| 7859 | 293134 | C 8505 |  |  | 4924.53 | 3110 | 24 | 294159.5 | 926 | 337 | 10.5 | + $10^{\circ}$ | - 12 | $8 \cdot 1$ | A 5 |
| 7850 | 263110 | C 8504 |  |  | 4927.04 | 4087 |  | $\begin{array}{lllll}26 & 26 \quad 17 \cdot 2\end{array}$ | 922 | 351 | 12.1 |  | - 7 | $9 \cdot 3$ |  |
| 7861 | 313115 | L 6393 | 1520 | 32781-2 | 1749 30.79 | +2.2704 | $+.0025$ | 3059 52.1. | 0.917 | + 33 I | 11.4 | 26 | 12 | $8 \cdot 3$ | K o |
| 7862 | 282858 | C 8507 |  |  | 4938.02 | 3440 | 24 | $28 \quad 37$ II 6 | 906 | 341 | 12.3 | - 6 | - 13 | 8.8 | K 2 |
| 7863 | 253368 | C 8506 | 1515-6 | 32773-816 | $4938 \cdot 49$ | 4496 | 24 | $25 \quad 40 \cdot 9$ | 906 | 358 | 12.1 | - 63 | - 31 | 8.06 | K o |
| 7864 | 293135 | C 8508 |  |  | $4943 \cdot 63$ | 3169 | 24 | 293025.6 | 898 | 338 | 11.9 | + | - 109 | $9 \cdot 1$ |  |
| 7865 | 313116 | L. 6395 |  |  | 49 47.04 | 2458 | 25 | 31 4555.7 | 893 | 327 | 11.5 |  | - 26 | $9 \cdot 3$ |  |
| 78 | $27 \quad 2910$ | C 8509 | 1531 |  | 1749 50.19 | +2.3809 | +.0024 | $\begin{array}{llll}27 & 23 & 9.9\end{array}$ | - 0.889 | +-347 | 11.5 | - 3 | - 12 | 9.1 | ${ }^{\text {A }} 2$ |
| 7867 7868 | 243275 | B6185 |  | 32785-830 | $49.54 \cdot 89$ | 4557 | 24 | $244741 \cdot 9$ | 882 | 358 | 10.3 | + | + 28 | $8 \cdot 1$ | Fo |
| 78868 | 263112 | C 8512 | 1533-4 |  | $4955 \cdot 94$ | 4191 | 24 | $\begin{array}{llll}26 & 4 & 43 \cdot 1\end{array}$ | 880 | 353 | 11.9 | + 26 | + 17 | $9 \cdot 3$ |  |
| 7869 7870 | 263113 | C 8514 |  |  | 50 | 4073 | 23 | $26 \quad 29 \quad 7 \cdot 5$ | 874 | 351 | 11.8 | 12 | - 6 | $9^{9}$ |  |
| 7870 | 313119 | L 6397 | 1542 |  | $50 \quad 8 \cdot 10$ | 2440 | 24 | 31 4917.5 | 863 | 327 | 11.7 | + 4 | - 23 | $9 \cdot 1$ |  |
| 1 | 272912 | C 8516 | 1541 |  | $17 \quad 5016.07$ | +2.3874 | +.0023 | $27 \quad 945 \cdot 3$ | -0.851 | + 348 | $12 \cdot 1$ | 6 | - 30 | $9 \cdot 3$ |  |
| 7872 | 303078 | L 6401 |  | 32832 | 5023.58 | 2895 | 24 | $3023 \quad 15 \cdot 2$ | 840 | 334 | 10.7 | - 14 | - 15 | $7 \cdot 46$ | A 3 |
| 7873 | $27 \quad 2914$ | C 8517 | 1552 | 32815 | 5030.87 | 3815 | 23 | $272144^{\circ} \mathrm{O}$ | 829 | 347 | II.9 | - 45 | -131 | $7 \cdot 9$ | F 8 |
| 7874 | 293139 | C 8519 |  | 32856 | $5040 \cdot 19$ | 3069 | 24 | 294945.6 | 816 | 336 | 11.3 | - 12 | - 12 | 8.06 | F2 |
| 7875 | 293141 | C 8521 | I 564 |  | $5051 \cdot 14$ | 3157 | 24 | $2932 \quad 27 \cdot 3$ | 800 | 337 | 12.0 | + 14 | - 13 | $9 \cdot 4$ |  |
| 7 | 243276 | B6192 | 1557 |  | $17 \quad 50 \quad 51 \cdot 98$ | $+2.4700$ | +.0023 | $\begin{array}{lllll}24 & 17 & 12.8 \\ 25\end{array}$ | -0.799 | $+360$ | 11.5 | + 5 |  | 8.6 | A 0 |
| 7877 | 253374 | C 8520 |  |  | $5053 \cdot 12$ | 4370 | 23 | $25 \quad 27 \quad 477$ | 797 | 355 | 11.6 |  | - 8 | $9 \cdot 1$ |  |
| 7878 | 272916 | C 8523 | 1563 | 32836 | 5054.95 | 3736. | 23 | $273738 \cdot 6$ | 794 | 346 | 11.5 | 6 | - 47 | 7.9 | K o |
| 7879 | 253375 | C 8525 | 1566-7 | 32839 | $51 \quad 6.46$ | 4479 | 23 | $25 \quad 355.5$ | 778 | 357 | 12.3 | 2 | - 33 | 8.7 8.8 |  |
| 7880 | 253376 | C 8526 |  |  | $5113 \cdot 64$ | 4309 | 23 | $253936 \cdot 1$ | 767 | 354 | 11.7 | 6 | - | 8.8 | A 0 |
| 7881 | 303083 | C 8527 | 1581 |  | 175122.61 | +2.3005 | +•0024 | 30154.7 | - 0.754 | $+\cdot 336$ | 11.9 | + 4 | - 23 | $9 \cdot 3$ |  |
| 78 | 303084 | L. 6410 | 1583 |  | 5123.48 | 2742 | 24 |  | 753 | 332 | 12.2 | + 9 | - 23 | $9 \cdot 3$ |  |
| 78 | 243277 | B 6197 | 1576 |  | 5125.83 | 4710 | 23 | $241448 \cdot 1$ | 750 | 360 | 11.7 | - 16 | - 11 | $8 \cdot 7$ | A 0 |
| 7884 | 253378 | C 8529 |  |  | $5130 \cdot 36$ | 4276 | 23 | $254633 \cdot 1$ | 743 | 354 | 12.1 | + 22 | - 26 | 9.2 |  |
| 7885 | 313123 | L 6412 | 1593 |  | $5143 \cdot 70$ | 2592 | 24 | $3120 \quad 27.2$ | 723 | 329 | II. 5 | + 4 | 21 | 8.8 | K O |
| 7886 | 253379 | C 8530 | 1584-6 | 32862 | $175145 \cdot 72$ | +2.4424 | +.0023 | $251532 \cdot 5$ | $-0.721$ | +•356 | 11.4 |  | - 38 | $8 \cdot 1$ |  |
| 7887 | 263120 | C 8531 |  |  | $5147 \cdot 32$ | 4193 | 23 | $26 \quad 3 \quad 49 \cdot 9$ | . 718 | 353 | II•I | + 1 | + $\mathbf{2}^{*}$ | $5 \cdot 48$ | F 5 |
| 7888 | 253382 | C 8533 |  |  | $5154 \cdot 85$ | 4416 | 23 | $\begin{array}{llll}25 & 17 & 0.5\end{array}$ | 707 | 356 | 11.9 | + 2 | - 53 | $9 \cdot 3$ |  |
| 7889 | 253381 | C 8534 | 1589-90 | 32868 | 5155.97 | 4456 | 23 | $25 \quad 8 \quad 44 \cdot 3$ | 705 | 356 | 10.6 | + 4 | - 4 | 8.06 | $\mathrm{A}^{3} 3$. |
| 7890 | 243278 | B 6201 | 1592 |  | 520.20 | 4645 | 23 | $242843 \cdot 0$ | 699 | 359 | 10.7 | 4 | - 5 | $8 \cdot 2$ | Fo |
| 7891 | ع6 3124 | C 8536 |  |  | $17 \quad 5217.49$ | +2.4111 | +.0023 | $262041 \cdot 5$ | -0.674 | +-352 | 11.1 | + 59 | - | $8 \cdot 7$ |  |
| 7892 | 253385 | C 8538 | 1606 | 32888 | $5225 \cdot 33$ | 4496 | 23 | $25 \quad 0 \quad 13.4$ | 663 | 358 | $10 \cdot 7$ | + 1 | - 19 | $8 \cdot 6$ |  |
| 7893 | 263126 | C 8539 |  |  | $52 \quad 39 \cdot 79$ | 4028 | 23 | $263746 \cdot 1$ | 642 | 350 | 10.5 | - 22 | + 28 $+\quad 68$ | $8 \cdot 7$ |  |
| 7894 | 272921 | C 8540 | 1616 |  | $5242 \cdot 40$ | 3789 | 23 | 272632.8 | 638 | 347 | 10.9 | + 4 | - 68 | $9 \cdot 3$ |  |
| 7895 | 263129 | C 8542 |  |  | $5259 \cdot 10$ | - 4025 | 23 | $26 \quad 38 \quad 14.3$ | 613 | 350 | 10.5 | + 3 | - 20 | $9 \cdot 1$ |  |
| 7896 | 243281 | B6208 |  |  | $17 \quad 53 \quad 2.05$ | $+2.4695$ | +.0023 | 241743.1 | -0.609 | $+360$ | 10.8 | - 5 | - 52 | $9 \cdot 3$ |  |
| 7897 | 303087 | L. 6421 | 1631 |  | $\begin{array}{lll}53 & 3.07\end{array}$ | 2892 | 24 | $\begin{array}{llllllllllllllllllll}30 & 23 & 14.6\end{array}$ | 608 | 333 | 11.4 | - 11 | + | $9 \cdot 3$ |  |
| 7898 | 253389 | C 8544 |  |  | 5312.19 | 4334 | 23 | $\begin{array}{lllll}25 & 34 & 8.8\end{array}$ | 594 | 355 | 11.9 | + <br> $+\quad 18$ | - 33 | $9 \cdot 3$ |  |
| 7899 | 253391 | C 8545 |  |  | 5312.60 | 4245 | 23 | $255^{2} 45^{\circ} \mathrm{O}$ | 594 | 353 | $12 \cdot 0$ | + 38 | $\begin{array}{r}1 \\ \hline \quad 25 \\ \hline\end{array}$ | $9 \cdot 3$ |  |
| 7900 | 253390 | C 8546 | 1629-32 | 32917 | $53 \quad 14.63$ | 4433 | 23 | $25 \begin{array}{lllllll}5 & 13 & 19.7\end{array}$ | 591 | 356 | $\mathrm{II}^{-3}$ | - 5 | + 3 | $8 \cdot 7$ | A 2 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0 | Precession. | Soc. Var. | Epoch 1900+ | $\begin{aligned} & \text { R. A. } \\ & 8.000 \mathrm{I} . \end{aligned}$ | Dec. ".001. | Mag. | Speetral Туре. |
|  | - |  |  |  | h m s | 8 | s | - , | " | * |  |  |  |  |  |
| 7901 |  | C 8549 |  |  | $17 \begin{array}{lll}17 & 53 & 17.18\end{array}$ | $+2.3190$ | +.0024 | $292537 \cdot 6$ | -0.587 | + 338 | 12.5 | + 6 | $+\quad 55$ $+\quad 68$ |  |  |
| 7902 | $24 \quad 3283$ | B6214 | 1635 | 32921 | $5331 \cdot 32$ | 4776 | 23 | $24 \quad 0 \quad 15 \cdot 2$ | 567 | 361 | $9 \cdot 7$ | 2 | 68 | $6 \cdot 36$ | Go |
| 7903 | 293151 | C 8553 |  |  | 53 34.68 | 3150 | 24 | $293315 \cdot 3$ | 562 | 337 | II. 5 |  |  | $9 \cdot 7$ |  |
| 7904 | 253392 | C 8554 | 1643-5. | 32931 | 53 40.16 | 4436 | 23 | $\begin{array}{lllll}25 & 12 & 32 \cdot 5\end{array}$ | 554 | 356 | $10 \cdot 4$ | + 9 | $+33$ | $9 \cdot 3$ |  |
| 7905 | 243284 | B 6215 | 1641 | 32928 | 53 41•00 | 4743 | 23 | $24 \quad 722 \cdot 5$ | 552 | 360 | I I-4 | + 14 | - 23 | $9 \cdot 4$ |  |
| 7906 | 263134 | C 8556 |  |  | 1753 46.15 | +2.4036 | +.0023 | $263553 \cdot 7$ | - 0.545 | +.351 | $10 \cdot 3$ | - 7 | + 12 | $8 \cdot 6$ |  |
| 7907 | $30 \quad 3089$ | L 6430 |  |  | 5353.03 | 2918 | 23 | $\begin{array}{llll}30 & 18 & 9 \cdot 5\end{array}$ | - 535 | 334 | $10 \cdot 3$ | + 10 | - 31 | $8 \cdot 9$ |  |
| 7908 | $28 \quad 2872$ | C $8559^{\circ}$ | 1661 |  | $54 \quad 1.95$ | 3621 | 23 | 28 ○ 8.3 | 522 | 344 | II $\cdot 5$ | - 3 | - 58 | $8 \cdot 7$ | G 5 |
| 7909 | 293153 | C 8561 |  |  | $54 \quad 5 \cdot 27$ | 3173 | 23 | $2928 \quad 38 \cdot 4$ | 517 | 337 | 12.5 | - 30 | - 5 | $8 \cdot 9$ |  |
| 7910 | 293154 | C 8565 |  |  | $54 \quad 10.96$ | 3171 | 23 | $292856 \cdot 6$ | 509 | 337 | 12.5 | + 10 | - 21 | 9. I |  |
| 7911 | $28 \quad 2873$ | C 8564 |  | 32949 | 1754 12.13 | +2.3543 | +.0023 | 28 I $545 \cdot 9$ | -0.507 | +.343 | 12.2 | + 31 | - 24 | $8 \cdot 5$ | G 5 |
| 7912 | 272922 | C 8563 | 1663 |  | 5412.64 | 3664 | 22 | $275129 \cdot 7$ | 506 | 345 | 12.5 | + 23 | + 80 | $8 \cdot 5$ | G 5 |
| 7913 | 293155 | C 8566 |  |  | $54 \quad 12 \cdot 98$ | 3190 | 23 | $2925 \quad 18 \cdot 3$ | 506 | 337 | I2.9 | + 18 | - 6 | $9 \cdot 1$ |  |
| 7914 | 293156 | C8567 |  | 32952-4 | 5416.07 | 324 I | 23 | 2915 25.3 | 501 | 339 | 12.0 | + 66* | - 27* | 3.82 | Ko |
| 7915 | 243285 | B6219 |  | 32948 | $54 \quad 22 \cdot 37$ | 4622 | 22 | 2433 7-4 | 492 | 359 | 11.7 | 15 | - 36 | $9 \cdot 1$ | A 0 |
| 7916 | 282874 | C 8568 |  |  | $17 \quad 54 \quad 29.52$ | +2.3524 | $+.0023$ | 28 19 31.4 | $-0.482$ | +.343 | I2.3 | - 59 | - 10 | $9 \cdot 2$ |  |
| 7917 | 272923 | C 8569 |  | 32969 | 54 36.02 | 3799 | 22 | $272418 \cdot 0$ | 472 | 347 | 11.0 | + 52 | - 2 | $8 \cdot 0$ | K 2 |
| 7918 | 272925 | C 8571 | 1675 |  | $5447 \cdot 26$ | 3622 | 22 | $275950 \cdot 8$ | 456 | 344 | 10.7 | 0 | - 20 | $8 \cdot 7$ | Go |
| 7919 | 253396 | C 8572 |  | 32979 | $54 \quad 58 \cdot 83$ | 4490 | 22 | 25 I 2.6 | 439 | 358 | $10 \cdot 1$ | - 31 | - 5 | $8 \cdot 36$ | F 8 |
| 7920 | 303093 | C8573 | 1685 | 32998-9 | 55 3.51 | 2950 | 23 | 30 II $46 \cdot 9$ | 432 | 334 | 10.5 | I* | + * $^{*}$ | $4 \cdot 48$ | Fo |
| 7921 | 272927 | C 8575 |  |  | $17 \quad 55 \quad 18.72$ | $+2 \cdot 3789$ | +.0022 | $27 \quad 26 \quad 5 \cdot 6$ | -0.410 | $+347$ | 11.0 | - 26 | - 16 | $9 \cdot 3$ |  |
| 7922 | 293158 | C 8576 |  |  | $55 \quad 20 \cdot 33$ | 3078 | 23 | 2947 3.1 | 408 | 336 | 10.5 | + 32 | - 9 | 9•I |  |
| 7923 | 303095 | L 6445 |  |  | $55 \quad 29.84$ | 2824 | 23 | $303548 \cdot 5$ | 394 | 333 | $10 \cdot 5$ |  |  | $9 \cdot 3$ |  |
|  |  |  |  |  | $5535 \cdot 01$ | 2994 | 23 | $30 \quad 3 \begin{array}{llll}30 & 19\end{array}$ | 386 | 335 | II. 5 | 17 $+\quad 17$ | + 14 | $8 \cdot 0$ | $\begin{cases}\text { A O }\end{cases}$ |
| $7925$ | $\int^{30} 3096$ | C 8579 | 1702-4 | 33019-20 | $55 \quad 36 \cdot 54$ | 2994 | 23 | $\begin{array}{llll}30 & 3 & 16.6\end{array}$ | 384 | 335 | $9 \cdot 6$ | + 17 | + 14 | $6 \cdot 92$ | Go |
| 17926 | $28 \quad 2878$ | C 8580 | 1705 | 33018 | $175541 \cdot 36$ | $+2.3546$ | +.0023 | 28 15 0.1 | -0.377 | $+\cdot 343$ | 10.0 | $+\quad 9$ | - 23 | $8 \cdot 3$ |  |
| 7927 | 263142 | C 8582 | 1690-706 |  | $5545 \cdot 96$ | 4065 | 22 | $26 \quad 2933.4$ | 370 | 351 | - 0 | - 18 | - 3 I | $9 \cdot 3$ |  |
| 7928 | 293160 |  |  |  | 55 55.77 | 3167 | 23 | 292937.4 | 356 | 337 | II•2 |  |  | $\} 0.1$ |  |
| 7929 | 293160 | C 8583 | 1722 |  | $55 \quad 55 \cdot 89$ | 3166 | 23 | 292949.9 | 356 | 337 | 10.9 |  | $17$ | $\int 9 \cdot 1$ |  |
| 7930 | 243294 | B6230 |  |  | $55 \quad 57 \cdot 34$ | 4703 | 22 | 2415 39.5 | 354 | 360 | $10 \cdot 7$ | - 4 | - 38 | $8 \cdot 7$ | A 2 |
| 7931 | 3.03100 | L 6450 |  | 33040 | $\begin{array}{lll}17 & 56 & 4.39\end{array}$ | $+2.2781$ | +.0023 | $304356 \cdot 4$ | -0.343 | +-332 | 11.1 | + 12 | + 1 | 8-1 | K o |
| 7932 | $28 \quad 2881$ | C 8584 |  | 33034 | $56 \quad 5 \cdot 12$ | 3579 | 23 | $28 \quad 8 \quad 12 \cdot 3$ | 342 | 343 | 11.7 | - 27 | - 13 | $8 \cdot 9$ |  |
| 7933 | 253399 | C 8585 |  |  | $\begin{array}{llll}56 & 12 \cdot 39\end{array}$ | 4494 | 22 | $245956 \cdot 8$ | 332 | 357 | $12 \cdot 4$ | + 17 | + 12 | 9.I |  |
| 7934 | 243298 | B 6238 | 1729 | 33036 | 56 18.30 | 4547 | 22 | $244853 \cdot 5$ | 323 | 358 | $9 \cdot 9$ |  | - 4 | $8 \cdot 8$ |  |
| 7935 | 303101 | L 6452 |  |  | $56 \quad 39 \cdot 29$ | 2882 | 23 | $302439 \cdot 0$ | 293 | 333 | II. 5 | + 47 | - 5 | 9.1 |  |
| 7936 | 303101 |  |  |  | $175640 \cdot 40$ | $+2.2879$ | +.0023 | $\begin{array}{llll}30 & 24 & 4 \cdot 7\end{array}$ | -0.291 | +.333 | 10.8 |  |  |  |  |
| 7937 | $28 \quad 2882$ | C 8586 | 1741 | 33067 | $5645 \cdot 29$ | 3402 | 23 | $28 \quad 4322.8$ | 284 | 34 I | 9.5 | - II | - I5 | $7 \cdot 37$ | A 2 |
| 7938 | 293164 | C 8588 |  | 33070 | $56 \quad 52 \cdot 72$ | 3265 | 23 | 291027.5 | 273 | 338 | I $2 \cdot 1$ | + 16 | + 1 | $9 \cdot 1$ |  |
| 7939 | 263143 | C 8587 | 1742 |  | $5653 \cdot 16$ | 4006 | 22 | $264141 \cdot 2$ | 272 | 350 | 11.7 | + 15 | - 4 | $9 \cdot 3$ |  |
| 7940 | 253402 | C 8590 | 1745 |  | $56 \quad 59.45$ | 4233 | 22 | $255439 \cdot 0$ | 263 | 353 | I I 5 | + 5 | + 13 | 9-I |  |
| 7941 | 27 293I | C 8591 | I 749 |  | $17 \quad 57 \quad 7 \cdot 14$ | $+2.3635$ | +.0022 | $27 \quad 5658.6$ | $-0.252$ | +•344 | I 2.9 | - 9 | + 17 | $9 \cdot 4$ |  |
| 7942 | 293165 | C 8592 | 1759 | 33085 | 57 11.45 | 3143 | 23 | 2934 II.6 | 246 | +339 | $9 \cdot 8$ | - 90 | +163 | $7 \cdot 16$ | G 5 |
| 7943 | 243304 | B 6246 | 1747 | 33073 | $57 \quad 14 \cdot 28$ | 4736 | 22 | $24 \quad 8 \quad 31 \cdot 7$ | 242 | 360 | II. 1 | + 32 | - 12 | $8 \cdot 7$ |  |
|  | $\text { 26 } 3 \text { I45 }$ | C 8594 |  | 33082 | $\begin{array}{llll}57 & 18 \cdot 79\end{array}$ | 4048 | 22 | $\begin{array}{llll}26 & 3.3 & 6 \cdot 4\end{array}$ | 235 | 351 | $\text { I2. } 5$ | + 27 | - 17 |  |  |
| $7945$ | $\}^{26} 3145$ | C 8595 |  |  | $57 \quad 18 \cdot 94$ | 4047 | 22 | $263258 \cdot 8$ | 235 | 351 | $12.8$ | + 27 | - 17 | $\}^{8 \cdot 3}$ |  |
| 7946 | $26 \quad 3146$ | C 8596 |  |  | $1757 \quad 22.92$ | +2.4124 | +.0022 | 2617822.7 | - 0.229 | + 352 | 12.2 | 2 | $+6$ | $8 \cdot 6$ |  |
| 7947 | $28 \quad 2886$ | C 8598 |  | 33092 | 57 23.20 | 3461 | 23 | $283139 \cdot 2$ | 228 | 342 | 12.9 | - 8 | - 10 | $8 \cdot 8$ | A |
| 7948 | $27 \quad 2932$ | C 8599 | 1761 |  | $5724 \cdot 32$ | 3677 | 22 | $2748 \quad 24.7$ | 227 | 345 | 12.4 | + 9 | + 2 | $9 \cdot 3$ |  |
| 7949 | 243305 | C 8600 |  |  | 57 28.58 | 4523 | 22 | 24. $5353 \cdot 0$ | 222 | 357 | I 2.4 | I | 10 | $9 \cdot 7$ |  |
| 7950 | 313143 | L 6456 | I 776 |  | 57 37•14 | 2457 | 23 | $3144+4^{\circ}$ | 208 | 327 | I 2.4 | - 5 | + 3 | $9 \cdot 3$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | SpectraType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\sim}{\text { R. A. }}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h m s | 8 | s | - , | " | " |  |  |  |  |  |
|  | 272934 | C 8602 |  |  | 175742.50 | $1+2 \cdot 3867$ | $+.0022$ | $\begin{array}{lllll}27 & 9 & 58.4\end{array}$ | -0.200 | +-348 | 11.7 |  |  | $9 \cdot 4$ |  |
|  | 243307 | B 6255 | 1766 | 33097 | $5746 \cdot 87$ | 4703 | 22 | $24 \quad 15029$ | 194 | 360 | 10.8 | - 20 | 25 | $7 \cdot 20$ | K o |
| 7953 | 243308 | C 8603 | 1773-4 | 33103 | 5753.93 | 4503 | 22 | $\begin{array}{llll}24 & 58 & 0.9\end{array}$ | 184 | 357 | ${ }_{11} .8$ | 13 | 8 | $8 \cdot 11$ | K 5 |
| 7954 | 253404 | C 8604 |  | 33105 | 5754.94 | 4353 | 22 | 252924.9 | 182 | 355 | 10.5 | + 16 | 7 | 7.56 | A 0 |
| 7955 | 303106 | L 6457 |  | 33115 | 57 59-15 | 2807 | 23 | $303844^{\circ}$ | 176 | 332 | $10 \cdot 1$ | 7 | + 6 | 7.09 | K 5 |
| 7956 | 272938 | C 8605 |  |  | $17 \begin{array}{lll}17 & 58 & 0.95\end{array}$ | +2.3877 | +.0022 | $27 \quad 754 \cdot 0$ | -0.174 | $+\cdot 348$ | 11.3 | - 26 | - 32 | $9 \cdot 2$ |  |
| 7957 | 263148 | C 8606 |  |  | $\begin{array}{lll}58 & 6.28 \\ 58\end{array}$ | +000 | 22 | $264^{26} 42423$ | 166 | 350 | II. 3 | - 47 | - 72 | $9 \cdot 3$ |  |
| 7958 | 26 26 25 149 | C 8608 | 1786 | 33117 | 5816.56 | 3938 | 22 | $26 \quad 55 \quad 26 \cdot 2$ | 151 | 349 | 11.5 | - 71 | + 6 | $9 \cdot 3$ |  |
| 7959 | 253409 <br> 25 | C 8609 |  |  | $\begin{array}{lll}58 & 20.81 \\ 58\end{array}$ | 4251 | 21 | $25 \quad 5047 \cdot 4$ | 144 | 354 | 12.7 | + 15 | - 14 | $9 \cdot 3$ |  |
| 7960 | 253410 | C 8610 | 1791 | 33132 | $58 \quad 22 \cdot 81$ | 4490 | 21 | $25 \bigcirc 43 \cdot 3$ | 142 | 358 | 12.5 | - 24 | - 29 | $9 \cdot 1$ |  |
| 7961 | 272940 | C 8611 |  |  | $17 \quad 58 \quad 29.45$ | +2.3640 | +.0022 | $275554 \cdot 6$ | -0.132 | +-344 | 14.9 | - | - 15 | 9.4 |  |
| 7962 | 253411 | C 8614 |  |  | $58 \quad 39 \cdot 35$ | 4310 | 21 | $2538 \quad 28.9$ | 118 | 354 | 11.3 | - 27 | - 36 | $9 \cdot 1$ |  |
| 7963 | 253412 | C 8615 |  |  | 5840.00 | 4268 | 21 | 2547 21-2 | 117 | 354 | 11.5 | + 3 | - 23 | $9 \cdot 3$ |  |
| 7964 | 243311 | C 8617 | 1802-3 |  | $58 \quad 48 \cdot 59$ | 4496 | 21 | 245933.2 | 104 | 357 |  | + 10 | - 22 | $8 \cdot 26$ | $\mathrm{K}^{2}$ |
| 7965 | 263151 | C 8618 | 1805 |  | 5851.05 | 4112 | 22 | $26 \quad 1936.8$ | 101 |  | $8 \cdot 96$ | + 278 | - 580 | 7-10 | K o |
| 7966 | 303109 | L. 6463 |  | 33143 | $17 \quad 58 \quad 52.84$ | $+2.2766$ | +.0022 | $304639 \cdot 6$ | -0.098 | +-332 | $9 \cdot 3$ | 33 | + 5 | 8.9 |  |
| 7967 | 303111 | L 6465 |  | $33151-2$ | 59 9.14 | 2837 | 22 | $\begin{array}{llllllllllllll}30 & 33\end{array}$ | 074 | 333 | 12.3 | - 47 | + $9^{2}$ | $6 \cdot 76$ | F 2 |
| 7968 | 282895 | C 8623 |  |  | 59 10.11 | 3484 | 22 | $\begin{array}{lllll}28 & 26 & 59 & 7\end{array}$ | 073 | 342 | $1 \mathrm{I} \cdot 8$ | + 5 | + 23 | 9.1 |  |
| 7969 | 313151 | L 6466 | 1835 |  | 5919.28 | 2402 | 22 | $315455 \cdot 4$ | 059 | 327 | 12.1 | + 25 | - 32 | $8 \cdot 9$ |  |
| 7970 | 263155 | C 8624 | 1827-9 | 33149 | $59 \quad 20.91$ | 3971 | 22 | $2648 \quad 38 \cdot 3$ | 057 | 350 | 11.8 | - | - 16 | $8 \cdot 7$ | A 0 |
| 7971 | 243315 | B 6276 |  |  | 175923.84 | +2.4705 | +.002 I | $241503 \cdot 1$ | -0.053 | $+\cdot 360$ | 13.1 | + 17 | - 9 | $8 \cdot 7$ |  |
| 7972 | 253414 | C 8625 |  |  | $5927 \cdot 67$ | 4438 | 21 | 251132.6 | 047 | 356 | 12.6 | + 26 | - 8 | $9 \cdot 3$ |  |
| 7973 | 303112 | L 6468 |  | 33168 | 5929.71 | 2902 | 22 | $302045 \cdot 3$ | 044 | 334 | II. 8 | + 12 | +61 | $8 \cdot 1$ | F 8 |
| 7974 | 253415 | C 8627 | 1833 | 33157 | $5932 \cdot 67$ | 4390 | 21 | 252141.7 | 040 | 356 | 12.4 | - 20 | + 18 | $8 \cdot 7$ |  |
| 7975 | 263157 | C 8629 |  |  | $5933 \cdot 77$ | 4193 | 21 | $26 \quad 255.7$ | 038 | 353 | 13.3 | + 17 | + 8 | $8 \cdot 5$ |  |
| 7976 | 263158 | C 8630 | 1837-8 | 33167 | 175941.25 | +2.39+3 | +.0022 | 265422.4 | -0.027 | + 349 | 13.1 | + 8 | - 51 | 8.9 |  |
| 7977 | 272943 | C 8631 |  |  | $5942 \cdot 21$ | 3666 | 22 | 275032.9 | 026 | 345 | 12.5 | - 22 | - $\quad 38$ | $9 \cdot 2$ |  |
| 7978 | 313152 | L 6472 | 1841 |  | 59 44.31 | 2393 | 22 |  | 023 | 326 | 11.9 | - 15 | + 18 | 8.1 | K o |
| 7979 | 282903 | C \$632a |  |  | - $5947 \cdot 57$ | 3619 | 22 | $28 \quad 0 \quad 4 \cdot 2$ | - 018 | 344 | 14.0 |  |  | 10.6 |  |
| 7980 | 243318 | C 8635 | 1843 |  | $18 \quad 0 \quad 6.22$ | 4520 | 21 | 245416.9 | + 009 | 357 | 11.7 | 18 | - 29 | 8.8 |  |
| 7981 | 293176 | C 8637 | 1847 |  | $\begin{array}{lll}18 & 0 & 7.38 \\ & 0 & 12.83\end{array}$ | $+2.3120$ | $+.0022$ | $\begin{array}{llll}29 & 38 & 3+3\end{array}$ | $+0.011$ | $+\cdot 336$ | 13.3 | + 17 | $+\quad 8$ + | $9 \cdot 7$ |  |
| 7982 | 282905 | C 8638 |  |  | 0 <br> 0 <br> 0 <br> 0 12.838 | 3452 | 122 | 28 38 13.9 <br> 26 38  | 019 | 342 | 12.4 12.1 | $\begin{array}{r}1 \\ +\quad 31 \\ +\quad 18 \\ \hline\end{array}$ | $\begin{array}{r} \\ +\quad 4 \\ \hline\end{array}$ | $9 \cdot 3$ |  |
| 7983 | 263160 | C 8640 | 1848 -9 | 33184-5 | - 17.62 | 4019 | 122 | $\begin{array}{llll}26 & 38 \\ 3 & 53 \cdot 1\end{array}$ | 026 | 350 | $12 \cdot 1$ | 18 | - 58 | $7 \cdot 00$ | F 2 |
| 7984 | 303113 253420 | L 6474 d |  | 33193 | 027.64 030.10 | 2891 | 22 <br> 21 |  | 040 | 333 | 12.2 | - 15 | - 288 | 6.66 | F 5 |
| 7985 | 253420 | C 8642 | 1854 |  | - $30 \cdot 10$ | 4396 | 21 | $25 \quad 2025.7$ | 044 | 356 | 12.3 | + 4 | - 17 | $9 \cdot 1$ |  |
| 7986 | 282909 | C 8644 | 1875 |  | $18 \quad 0 \quad 45.96$ | +2.344 1 | +.0022 | $28 \quad 35 \quad 27.6$ | + ${ }^{\circ} 0.067$ | + 342 | 11.7 | + 6 | + 16 | $9 \cdot 4$ |  |
| 7987 | 272946 | C 8645 | 1881 |  | - $55 \cdot 36$ | 3638 | 22 | $\begin{array}{llll}27 & 56 & 9.9\end{array}$ | 081 | 344 | 11.5 | + 23 | - 49 | $8 \cdot 7$ |  |
| 7988 | 253422 | C 8646 | 1877 |  | - 58.19 | 4397 | 21 | 252016.3 | 085 | 356 | 10.8 | - | - 30 | $9 \cdot 3$ |  |
| 7989 | 243321 | B 6285 | 1882 |  | 12.90 | 4548 | ${ }^{21}$ | $2+4829.9$ | 092 | 358 | 12. | - 12 | + 11 | $9 \cdot 4$ |  |
| 7990 | 272948 | C 8648 | 1887-8-9 |  | 13.86 | 3884 | 22 | $27 \quad 6 \quad 33.3$ | 093 | 348 | 12. | + 9 | - 27 | 7-16 | A 2 |
| 7991 | 303117 | L 6479 | 1904 | 33233 | $\begin{array}{llll}18 & 1 & 23.79\end{array}$ | +2.2839 | +.0022 | $303245 * 0$ | +0.122 | +.333 | 11.9 | + 11 | + 7 | 8.8 |  |
| 7992 | 293180 | C 8651 | 1906-7 | 33234 | 129.29 | 3295 | 22 | $\begin{array}{ll}29 & 427.8\end{array}$ |  | 339 | 11.8 | - 4 | - 3 | $7 \cdot 6$ | K O |
| 7993 | 253423 | C 8652 | 1903 |  | 133.32 | 4246 | 21 | $25 \quad 5149.5$ | 136 | 354 | 12.1 | - 31 | - 24 | $9 \cdot 2$ |  |
| 7994 | 272951 | C 8653 |  | 33237 | $136 \cdot 10$ | 3751 | 22 | $27 \quad 3323.8$ | 140 | 346 | 12.9 | + 17 | + 3 | $7 \cdot 9$ | A 0 |
| 7995 | 282914 | C 8654 | 1918-9 | 33256-9 | 155.74 | 3416 | 22 | $28 \quad 40 \quad 38 \cdot 9$ | 169 | 341 | 11.5 | 7 | - 13 | $7 \cdot 8$ | K 2 |
| 7996 | 24. 3323 | B 6296 |  |  | $\begin{array}{lll}18 & 2 & 2.34\end{array}$ | +2.4560 | $+.0020$ | 2445 51.4 | $+0.178$ | +.358 | 12.2 | 7 | - 19 | $9 \cdot 2$ |  |
| 7997 | 253426 | C 8655 | 1921 | 33267 | 219.71 | 4329 | 21 | $2534 \quad 6 \cdot 9$ |  | 355 | 11.9 | + 29 | - 1 | 8.6 |  |
| 7998 | 253427 | C 8656 | 1923-4 | 33270 | 219.92 | 4301 | 21 | 254027.7 | 204 | 354 | 11.9 | $+\quad 19$ | - 7 | $8 \cdot 1$ |  |
| 7999 | 313164 | L 6488 |  |  | 233.38 | 2469 | 22 |  | 224 | 326 | 12.0 | + | - 8 | $9 \cdot 2$ |  |
| 8000 | 243327 | B 6302 | 1929 |  | 235.03 | 4662 | 20 | $24 \quad 2414.8$ | 226 | 359 | 12.8 | 4 | - 19 | $6 \cdot 94$ | Ko |
| 7963, 7994. 7999. Number of observations 6. 7974. $\Sigma 2268$. |  |  |  |  |  |  | 7964. Number of observations 7 7975. Burnham 8326. |  |  |  |  | $\begin{aligned} & 7965 . \\ & 7983 . \end{aligned}$ | Burnham 8 Burnham 83 |  |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 . | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. <br> Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\xrightarrow[s .000 \text { I. }]{\text { R. }}$ | $\begin{aligned} & \text { Dec. } \\ & 0.001 \end{aligned}$ |  |  |
|  |  |  |  |  | h mas | 8 |  | - , | " | n |  |  |  |  |  |
| 8051 | $25 \quad 3+43$ | C 8696 | I I I-2 |  | $\begin{array}{llll}18 & 6 & 35 \cdot 37\end{array}$ | +2.4468 | $+\cdot 0020$ | $25 \quad 5 \quad 50 \cdot 5$ | $+0.576$ | $+.356$ | 12.8 | + 1 | - 14 | $8 \cdot 6$ |  |
| $8052$ | 303142 | L 6522 |  | 33455 | $637 \cdot 64$ | 2754 | 21 | $30 \quad 4924.4$ | 580 | 332 | 12.5 | + 32 | - 45 | 8.02 | F 8 |
| 8053 | 293193 | C 8700 |  |  | $640 \cdot 28$ | 3154 |  | $293240 \cdot 0$ | 583 | 337 | 12.3 | + 108 | + 118 | $9 \cdot 2$ |  |
| 8054 | 282935 | C 8702 | 126 |  | $64^{8 \cdot 02}$ | 3494 | 20 | $282545 \cdot 3$ | 595 | 342 | 13.0 | - 4 | + 36 | $9 \cdot 2$ |  |
| 8055 | $25 \quad 3447$ | C 8701 |  |  | $650 \cdot 17$ | 4239 |  | 2554 | 598 | 352 | I I 3 | - 26 | - I | $9 \cdot 2$ |  |
| 8056 | 293195 | C 8706 | 133 |  | $18 \quad 7 \quad 452$ | +2.3302 | +.0020 | $29 \quad 3 \quad 36 \cdot 6$ | $+0.619$ | $+\cdot 339$ | 12.5 | - 6 | - I5 | $8 \cdot 2$ | $\text { G } 5$ |
| $8057$ | $27 \quad 2969$ | C 8707 |  |  | 716.06 | 3635 |  | 2757 30.1 | . 636 | 344 | 12.7 | $+6$ | + I | $8 \cdot 4$ | Ko |
| 8058 | 313194 | L 6530 |  |  | $722 \cdot 85$ | 2384 | 21 | $315857 \cdot 0$ | 645 | 326 | 11.7 | + 12 | - 62 | $9 \cdot 0$ |  |
| 8059 | 263187 | C 8709 | 141 | 33458 | $7 \quad 27 \cdot 16$ | 4022 | 20 | $\begin{array}{llll}26 & 39 & 0.6\end{array}$ | 652 | 349 | 10.8 | + 16 | + 21 | $7 \cdot 7$ | G 5 |
| 8060 | 313196 | L 6533 | 154 | 33488 | 734.31 | 2626 | 21 | $311350 \cdot 3$ | 662 | 330 | 12.0 | - 5 | + 1 | 8-10 | K 2 |
| 8061 | 243355 | C 871I | 143-7-8 |  | 18735.41 | +2.4505 | +.0020 | 2458 II.O | $+0.664$ | $+\cdot 356$ | 12.I | + 24 | + 12 | $8 \cdot 46$ | G 5 |
| 8062 | 253452 | C 8712 | $\text { I } 50$ |  | 7 4I•12 | $44^{11}$ | 20 | $\begin{array}{llll}25 & 18 & 3.4\end{array}$ | 672 | 355 | II.9 | + 6 | - 2 | $8 \cdot 4$ | G 0 |
| 8063 | 253453 | C8713 | I 56 |  | $7 \quad 52 \cdot 84$ | 4343 | 20 | $25 \quad 3222.8$ | 689 | 354 | II.2 | + 2 | + 19 | $6 \cdot 84$ | K |
| 8064 | 29 3198 | C 8715 |  | 33534 | 7 56.19 | 3048 | 20 | 295319.0 | 694 | 335 | 13.1 | + 20 | - 56 | $7 \cdot 36$ | K o |
| 8065 | 29 3199 | C8714 | 165 | 33533 | $756 \cdot 25$ | 3122 | 20 | $2938 \quad 58 \cdot 3$ | 694 | 336 | II.4 | + 13 | - 12 | $7 \cdot 46$ | A 2 |
| 8066 | 303144 | C 8716 |  | 33542 | $18 \quad 8 \quad 0.00$ | +2.2982 | -. 0020 | $\begin{array}{lll}30 & 6 & 13.7\end{array}$ | +0.700 | +.335 | $2 \cdot 9$ | + 5 | $+38$ | 7.9 |  |
| 8067 | 282939 | C 8718 |  |  | $8 \quad 4.56$ | 3534 | 20 | 2817 49.1 | 706 | 343 | 12.6 | + 4 | - 7 | $8 \cdot 7$ |  |
| 8068 | 253455 | C 8717 | 164 |  | $8 \quad 5 \cdot 96$ | 4395 | 20 | $252125 \cdot 5$ | 708 | 355 | 12.9 | - 2 | - 21 | $8 \cdot 6$ | Go |
| 8069 | 28 294I | C 8719 |  |  | $8 \quad 6 \cdot 04$ | 3360 | 20 | $285221 \cdot 7$ | 708 | 340 | 12.8 | - 17 | + 1 | $9 \cdot 2$ |  |
| 8070 | 272974 | C 8720 |  |  | $8 \quad 8 \cdot 49$ | 3683 | 20 | $27 \quad 48 \quad 3 \cdot 0$ | 712 | 345 | 12.9 | + 13 | + 37 | $8 \cdot 8$ |  |
| 807 I | 272975 | C 872I | 166 |  | $18 \quad 8 \quad 10.50$ | $+2 \cdot 3812$ | +.0020 | $272156 \cdot 1$ | +0.715 | +.346 | 12.3 | + 7 | - 17 | 8.8 |  |
| 8072 | 313199 | L 6545 | 180 | 33519 | 830.93 | 2579 | 21 | 312256.7 | 745 | 329 | 11.8 | - 6* | + 16* | $5 \cdot 02$ | Ma |
| 8073 | 272977 | C 8727 | 176 | 33510 | $832 \cdot 86$ | 3737 | 20 | $27 \quad 3714.5$ | 747 | 345 | 11.7 | + 13 | - 12 | $8 \cdot 2$ | A 2 |
| 8074 | 293203 | C 8729 | 181 | 33570 | $836 \cdot 75$ | 3110 | 20 | $294137 \cdot 4$ | 753 | 336 | 11.7 | $+\quad 21$ | + 3 | $8 \cdot 2$ |  |
| 8075 | 243358 | B 6349 |  |  | $850 \cdot 11$ | 4659 | 19 | $242541 \cdot 5$ | 773 | 359 | I 1 -9 | + 27 | 0 | 7.06 | K o |
| 8076 | 313203 | L 6548 | 207 |  | I8 9 II. 30 | +2.2524 | +.002I | $\begin{array}{llll}31 & 33 & 22.8\end{array}$ | $+0.803$ | +-328 | II.6 | + 6 |  | $8 \cdot 6$ |  |
| 8077 | 25 3461 | C 8732 | 203 |  | 914.00 | - 4320 | 20 | $2537 \quad 26 \cdot 3$ | -807 | 354 | 11.7 | + 16 | - 20 | $8 \cdot 0$ | K |
| 8078 | 253463 | C 8734 |  |  | $925 \cdot 89$ | 4423 | 20 | 25 I5 53.I | 825 | 355 | $11 \cdot 0$ | - 6 | - 6 | $8 \cdot 0$ | G 5 |
| 8079 | 282955 | C 8737 | 210 | 33560 | $927 \cdot 31$ | 3556 | 20 | 28 I $348 \cdot 9$ | 826 | 343 | $10 \cdot 9$ | 5 | + 108 | $8 \cdot 2$ | F 8 |
| 8080 | $28 \quad 2956$ | C 8739 | 2 I I | 33563 | $930 \cdot 19$ | 3560 | 20 | $\begin{array}{llll}28 & \text { I } 3 & 9.4\end{array}$ | 831 | 343 | 10.9 | - 5 | + 108 | $8 \cdot 2$ | F 8. |
| 8081 | 243364 | B6357 |  |  | $18 \quad 930 \cdot 80$ | $+2.4556$ | . 0020 | 2447 49'I | $+0.832$ | +.357 | 12.3 | - 28 | + 16 | $9 \cdot 2$ |  |
| 8082 | 313207 | L $655^{2}$ | 217 |  | $936 \cdot 96$ | 2548 | 21 |  | 841 | 329 | II.9 | + 14 | - 5 | $9 \cdot 2$ |  |
| 80831 | 263192 | C 8740 |  |  | $938 \cdot 53$ | 4076 | 20 | $26 \quad 28 \quad 20 \cdot 9$ | 843 | 350 | II.9 | + 17 | - 4 | $9 \cdot 0$ | A 5 |
| 8084 | 303150 | L 6554 | 222 |  | $949 \cdot 22$ | 2769 | 2 I | $304725 \cdot 6$ | 859 | 332 | II. 1 | - 20 | + 33 | $9 \cdot 2$ |  |
| 8085 | 263195 | C $874^{2}$ | 216 |  | $949 \cdot 39$ | 4149 | 20 | 26 I3 10.8 | 859 | 351 | 9.8 | + 17 | - $4^{1}$ | $7 \cdot 35$ | K O |
| 8086 | 293204 | C 8745 |  |  | $\begin{array}{lll}18 & 10 & 2.75\end{array}$ | $+2 \cdot 3075$ | $+.0020$ | $294^{8} 44 \cdot 7$ | $+0.878$ | $+336$ | $10 \cdot 1$ | + 24 | - 75 | $9 \cdot 2$ |  |
| 8087 | 253464 | C 8744 |  |  | $10 \quad 4.28$ | 4339 | 19 | 2533388.4 | 88 I | 354 | $9 \cdot 8$ | - 7 | - II | $8 \cdot 4$ | K o |
| 8088 | 293205 | C 8746 |  |  | $10 \quad 8.09$ | 3158 | 20 | $293236 \cdot 2$ | 886 | 337 | 10.1 | + 29 | - 7 | $9 \cdot 2$ |  |
| 8089 | 263199 | C 8749 |  |  | 1018.55 | 4002 | 19 | $264348 \cdot 7$ | 902 | 349 | $9 \cdot 9$ | + 7 | - 22 | 8.1 | F 5 |
| 8090 | 253465 | C $875^{2}$ |  |  | $1030 \cdot 84$ | 4417 | 19 | $251728 \cdot 0$ | 919 | 355 | $10 \cdot 6$ | - I7 | - 57 | $9 \cdot 2$ |  |
| 8091 | $28 \quad 2960$ | C 8753 | 236 | 33607 | $181035 \cdot 60$ | $+2.3570$ | $+.0020$ | 28 II 25.0 | $+0.926$ | +-343 | $10 \cdot 7$ | + I I | - 29 | $6 \cdot 90$ | K |
| 8092 | 3 L 3211 | L 6558 |  | 33623 | 1041.82 | 2541 | 20 | $313042 \cdot 0$ | 935 | 328 |  | - I2 | $+\quad 53$ | $8 \cdot 1$ | F 2 |
| 8033 | 243368 | B 6365 | 239 | 33606 | $1046 \cdot 20$ | 4750 | 19 | $24 \quad 642 \cdot 4$ | 942 | 361 |  | - 11 | - 19 | $8 \cdot 2$ | Ko |
| 8094 | 243369 | B 6370 | 232 |  | II 9.8 I | 4577 | 19 | $244352 \cdot 8$ | 976 | 357 | 10.9 | + 10 | + 9 | 9•1 |  |
| 8095 | 293213 | C 8758 | 254 | 33640 | II 14.35 | 3270 | 20 | 29 II 5.8 | 983 | 338 | 10.4 | + 23 | - 238 | $6 \cdot 49$ | Go |
| 8096 | 243370 | C 8757 |  |  | $\begin{array}{lllll} \\ 8 & \text { II } \\ 15 & 5.99\end{array}$ | $+2.4518$ | +.0010 | $\begin{array}{llll}24 & 56 & 19.8\end{array}$ | $+0.985$ | $+\cdot 356$ | II•7 | 5 | - 2 | $9 \cdot 2$ |  |
| $8097$ | 293215 | C 8762 |  | $33649$ | $\text { II } 27 \cdot 75$ | 3208 | - 20 | $29 \quad 2312.7$ | 1.002 | 337 | 11.7 | 5 $+\quad 19$ | - 41 | $9 \cdot 2$ |  |
| $8098$ | $293216$ | C 8765 | $263$ | $33660$ | 11938.37 | $3299$ | 20 | $29 \quad 5 \quad 33 \cdot 3$ | 018 | 339 | 10.5 | $+36$ | - 29 | $9 \cdot 2$ |  |
| $8099$ | $27 \quad 2988$ | C 8772 | 272-3 |  | 122.93 | $3880$ | $19$ | $\begin{array}{llll}27 & 9 & 27 \cdot 2\end{array}$ | $054$ | $347$ |  | $+\quad 16$ | + 26 | $8 \cdot 0$ |  |
| 8100 | 253475 | C 8773 |  | 33679 | $12 \quad 7 \cdot 16$ | 4284 | 19 | $254548 \cdot 4$ | $060$ | 353 | 9. I | + 9 | - 16 | $8 \cdot 2$ | Ko |
| 8062. Burnham 84 II . |  |  |  | 8065. Number of observations 7. 8076. $\Sigma^{22} 29$. |  |  | 8073. $\Sigma 2292$. <br> 8079, 8080. Burnham 843 I. |  |  |  | 8074. Number of observations 6. |  |  |  |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910^{\circ}$ | Precession. | Sec. Var. | Dec. $1910^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Epoch <br> $1900+$ | $\underset{\text { B.000 I. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { n.001. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m s | 8 | 8 | , " |  | " |  |  |  |  |  |
| 8 IOI | 303162 | L. 6572 |  |  | $\begin{array}{llll}18 & 12 & 26.90\end{array}$ | +2.2906 | $+\cdot 0020$ | $3022 \quad 7 \cdot 2$ | + 1.088 | +.333 | 8.8,10.3 | + 35 | + 17 | $6 \cdot 98$ | K o |
| 8102 | 303163 | L 6573 |  |  | $1238 \cdot 37$ | 2808 | 20 | 304054.5 | 105 | 332 | 9.I | - 12 | + 1 | $9 \cdot 2$ |  |
| 8103 | 282971 | C 8778 |  |  | $1242 \cdot 82$ | 3587 | 20 | $28 \quad 8 \quad 35.8$ | 112 | 342 | 9.1 | - 17 | + 21 | 8-I | K 5 |
| 8104 | 303167 | L 6578 | 304 |  | $13 \quad 4.69$ | 2878 | 20 | 3027 40.I | 143 | 333 | 10.3 | - 28 | 2 | 9.I |  |
| 8105 | 303168 | C 8784 | 305 |  | $13 \quad 6.06$ | 2974 | 20 | $30 \quad 914.1$ | 145 | 334 | $9 \cdot 9$ | - 12 | - 9 | 8.86 | A 0 |
| 8106 | 27 2991 | C 8783 | $301-2$ |  | $\begin{array}{llll}18 & 13 & 9.41\end{array}$ | +2.3908 | +.0019 | $27351 \cdot 7$ | $+1.150$ | $+34^{8}$ | $9 \cdot 5$ | + 21 | - 56 | $8 \cdot 2$ | Go |
| 8107 | $26 \quad 3209$ | C 8785 |  | 33720 | 1320.18 | 4002 | 19 | $264435 \cdot 4$ | 166 | 349 | $9 \cdot 7$ | + 17 | + 6 | $8 \cdot 6$ | G |
| 8108 | 293226 | C 8788 |  | 33736 | I 334.58 | 3153 | 20 | $29344^{8 \cdot 9}$ | 187 | 337 | $9 \cdot 8$ | $+\quad 9$ | - 63 | $8 \cdot 6$ |  |
| 8109 | 263212 | C 8792 |  |  | I 352.83 | 4201 | 19 | 26338.0 | 213 | 352 | 11.0 | - 7 | + 6 | $9 \cdot 0$ |  |
| 8110] | 272994 | C 8795 | 330 |  | $14 \quad 3.57$ | 3730 | 19 | $274026 \cdot 2$ | 230 | 344 | 10.3 | 0 | - 9 | 9.0 |  |
| 81II | 263215 | C 8797 |  |  | 18 If II. 20 | $+2.4036$ | $+\cdot 0018$ | 2638 I•I | + 1.240 | $+\cdot 348$ | 10.5 | + 250 | + 92 | $9 \cdot 2$ |  |
| 8112 | 293229 | C 8799 | 340 | 3377 | 1428.33 | 3180 |  | $292953 \cdot 6$ | 265 | 336 | $10 \cdot 3$ | + 7 | - 19 | $9 \cdot 2$ |  |
| 8113 | 293230 | C 8800 |  | 33776 | $1430 \cdot 18$ | 3234 | 19 | 29 I9 8.6 | 268 | 337 | II•1 | $+\quad 4$ | - 30 | $9 \cdot 2$ |  |
| 8 II 4 | 25 3481 | C 8802 | 342 | 3377 I-2 | 1439.39 | 4422 | 18 | $\begin{array}{lllll}25 & 17 & 38.4\end{array}$ | 281 | 355 | $8 \cdot 7$ | - 16 | -. I3 | $8 \cdot 6$ | Ko |
| 8II5 | 243377 | B6399 | 345 | 33779 | $1446 \cdot 92$ | 4674 | 18 | 2424144 | 292 | 359 | $8 \cdot 2$ | - 32 | - 59 | $8 \cdot 0$ | K 2 |
| 8 II 6 | 253485 | C 8807 | 361 | 33788-9 | $\begin{array}{llll}18 & 15 & 5.86\end{array}$ | +2.4390 | +.0018 | $25 \quad 2437 \cdot 2$ | + 1.320 | +.354 | 10.1 | 0 | + 5 | 8.8 |  |
| $8 \mathrm{II} 7$ | 313232 | L 6590 |  |  | $\begin{array}{lll}15 & 6.24\end{array}$ | 2399 | 19 |  | 320 | 325 | $11.0,12 \cdot 6$ | - II | + 24 | 9.1 |  |
| $8118$ | 31.3233 | L 6591 |  |  | $15 \quad 7.86$ | 2667 | 19 | $\begin{array}{lllll}3 I & 8 & 38 \cdot 2\end{array}$ | ${ }^{2} 23$ | 329 | 10.9 | + 9 | - 17 | $9 \cdot 1$ |  |
| $8 \mathbf{8 1 9} \mid$ | $30^{\circ} 3175$ | L 6593 |  |  | 1513.64 | 2854 | 19 | $30 \quad 33$ I.3 | 331 | 332 | II. 5 | + 10 | - 2 | $9 \cdot 1$ |  |
| 8120 | 243379 | B 6405 |  |  | $15 \quad 15.67$ | 4714 | 18 | $241558 \cdot 3$ | 334. | 360 | II .8 | + 16 | $-49$ | $9 \cdot 2$ |  |
| 8121 | 272997 | C 8809 |  |  | $\begin{array}{llll}18 & 15 & 16.08\end{array}$ | $+2.3878$ | +.0018 | $271045 \cdot 6$ | + I•334 | +.346 | II•2 | + 16 | + 13 | $9^{\circ} \mathrm{O}$ |  |
| 8122 | 24 3381 | B 6406 |  | 33801 | 1528.43 | + 4674 | 18 | $24 \quad 24 \quad 29.3$ | 352 | 359 | 10.0 | + 12* | - $4^{*}$ | $5 \cdot 49$ | K 5 |
| 8123 | 303177 | L 6596 |  |  | I 536.84 | 2749 | 19 | $\begin{array}{lllll}30 & 53 & 15.4\end{array}$ | 365 | 331 | $10 \cdot 4$ | + 22 | + 8 | $9 \cdot 2$ |  |
| 8124 | 293234 | C 8812 | 375 | 33816 | I 5 39.51 | 3167 | 19 | $293249 \cdot 7$ | 369 | 336 | II.O | + 31 | + 5 | $9 \cdot 2$ | A 2 |
| 8125 | 303179 | L 6598 |  |  | I5 49.81 | 2718 | 19 | $30592 \mathrm{I} \cdot 2$ | 384 | 330 | $9 \cdot 7$ | + 21 | + 8 | $9 \cdot 2$ |  |
| 8126 | 273000 | C 8818 | 381 | 33828 | $\begin{array}{lll}18 & 16 & 1.59\end{array}$ | $+2 \cdot 3798$ | +.0018 | $\begin{array}{lll}27 & 27 & 26 \cdot 7\end{array}$ | + 1.401 | $+\cdot 345$ | II•I | - 2 | 20 | $8 \cdot 2$ | Ko |
| 8127 | 282979 | C 8820 |  |  | $\begin{array}{ll}16 & 4.57\end{array}$ | - 3406 | 19 | $28 \quad 46 \quad 1 \cdot 3$ | 405 | 339 | 10.8 | 3 | $+21$ | $9^{\circ}$ |  |
| 8128 | 25 349I | C 8819 |  |  | $16 \quad 5 \cdot 38$ | 4293 | 18 | $25 \quad 45 \quad 17 \cdot 3$ | 406 | 353 | I $2 \cdot 1$ | 9 | - I | $9 \cdot 2$ |  |
| 8129 | 273001 | C 8821 | 387 |  | $16 \quad 9.87$ | 3662 | 19 | 2754 58.0 | 413 | 343 | $12 \cdot 3$ | - 7 | - 45 | $9 \cdot 2$ |  |
| 8130 | 293236 | C 8823 | 398 | 33853 | $16 \quad 23 \cdot 67$ | 3144 | 19 | 2937 36.3 | 433 | 335 | 11.6 | + 15 | - 8 | $6 \cdot 14$ | Ko |
| 8131 | 313239 | L 6606 | 402 |  | $\begin{array}{lllll}18 & 16 & 24.72\end{array}$ | +2.2683 | +.0019 | $\begin{array}{llll}31 & 617.2\end{array}$ | + 1.434 | +.330 | $12 \cdot 0$ | - 17 | - 10 | $8 \cdot 6$ | A 0 |
| 8132 | 253493 | C 8822 | 396 | 33842-4 | $1627 \cdot 45$ | 4369 | 18 | $25 \quad 29 \quad 29 \cdot 3$ | - 438 | 354 | I2.1 | + 23 | 19 | $8 \cdot 2$ | A 0 |
| 8133 | 263219 | C 8824 |  | 33848 | $1630 \cdot 63$ | 4088 | 18 | $26 \quad 28 \quad 5 \cdot 4$ | 443 | 350 | 11.7 | + 3 | - 25 | $8 \cdot 4$ |  |
| 8134 | 293237 | C 8825 |  | 33860 | $1635 \cdot 39$ | 3212 | 19 | $292428 \cdot 1$ | 450 | 336 | 12.4 | + 24 | + 19 | $8 \cdot 2$ | A 0 |
| 8135 | 293239 | C 8827 |  | 33861 | $1637 \cdot 63$ | 3232 | 19 | $292034 \cdot 5$ | 453 | 337 | II.9 | + 16 | - 10 | $9 \cdot 2$ |  |
| 8136 | $28 \quad 2980$ | C 8829 | 414 | 33866 | I8 16 55.04 | $+2 \cdot 3355$ | +.0019 | 2856 | +1.478 | +.338 | '10. 1 | - 8* | - $3^{*}$ | $6 \cdot 54$ | B 8 |
| 8137 | 313242 | L 6610 | 420 | 33886 | 1710.00 | 2709 | 19 | 31 I 33.1 | - 500 | 330 | 10.8 | - 27 | - 17 | $8 \cdot 0$ | A 0 |
| 8138 | 273003 | C 883I |  | 33880-1 | 1714.70 | 3792 | 18 | $27 \quad 29$ 11.4 | $507$ | 345 | II. 2 | + 49 | $+85$ | $7 \cdot 13$ | G 5 |
| 8139 | 293241 | C 8833 | 431 | 33892 | 17 29.03 | 3089 | 19 | $294856 \cdot 7$ | 528 | 335 | II.6 | + $5^{*}$ | + $57 *$ | $5 \cdot 54$ | A 2 |
| 8140 | 28 298I | C 8834 | 430 | 33889-90 | 1730.32 | 3391 | 19 | $284936 \cdot 6$ | 530 | 339 | I I $\cdot 2$ | $+\quad 4^{*}$ | + $4^{6}$ | $5 \cdot 05$ | A 5 |
| 8141 | $28 \quad 2982$ | C 8835 |  |  | $\begin{array}{lllll}18 & 17 & 36.99\end{array}$ | $+2.3553$ | +.0019 | $281731 \cdot 7$ | +1.539 | +-342 | 10.6 | - 12 | - 7 | $8 \cdot 6$ |  |
| 81.42 | 243394 | B 6425 |  |  | $1738 \cdot 98$ | 4719 | 18 | $241546 \cdot 9$ | - 542 | +359 | 10.8 | - 7 | - 47 | $9 \cdot 2$ | Ko |
| 8143 | 263222 | C 8836 |  | 33891 | 1739.50 | 4034 | 18 | $263951 \cdot 5$ | 543 | 349 | 10.9 | + 41 | - 12 | $8 \cdot 4$ | Go |
| 8144 | 293242 | C8837 |  |  | I7 $40 \cdot 72$ | 3250 | 19 | $2917 \quad 29 \cdot 5$ | 545 | 337 | 10.7 | + 28 | $+1$ | $9 \cdot 1$ |  |
| 8145 | 243395 | C 8838 | 435 | 33896 | $1747 \cdot 12$ | 4508 | 18 | $25 \quad 04^{8 \cdot 9}$ | 554 | 357 | 10.6 | 18 | - 19 | $6 \cdot 86$ | B 3 |
| $8146$ | 313248 | L 6614 | $44^{8}$ |  | 181748.49 | +2.2647 | +.0019 | $311341 \cdot 3$ | + I.556 | $+329$ | II.I | - 5 | $\bigcirc$ | $9 \cdot 2$ |  |
| $\begin{aligned} & 8147 \\ & 0 \end{aligned}$ | $28 \quad 2983$ | C 8840 | 444 |  | 1751.03 | $3429$ | $19$ | $2842 \begin{aligned} & \\ & 23 \cdot 1\end{aligned}$ | - 560 | 340 | 10.9 | + 21 | + 10 | $8 \cdot 4$ | F 8 |
| 8148 | 253501 | C 8839 | 442 |  | 1752.76 | 4223 | 18 | $26 \bigcirc 43 \cdot 4$ | 562 | 352 | 10.5 | - 9 | + 34 | $9 \cdot 2$ |  |
| 8149 | 273005 | C 8841 |  |  | 1756.83 | 3708 | 18 | $27 \quad 46 \quad 24 \cdot 3$ | 568 | 344 | 10.9 | + 18 | $\bigcirc$ | $9 \cdot 1$ |  |
| 8150 | 293244 | C 8843 | 458-9 |  | $18 \quad 18.87$ | 3276 | 18 | $291241 \cdot 7$ | 600 | 337 | $9 \cdot 5$ | + 24 | - 21 | $8 \cdot 8$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. <br> Var. | Epoch <br> $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { B.oooI. } \end{aligned}$ | $\begin{gathered} \text { Dec. } \\ \text { ". }-\infty 01 . \end{gathered}$ |  |  |
|  |  |  |  |  | h m s | $s$ | $s$ | - , " | " | " |  |  |  |  |  |
| $8201$ | 263255 | C 8906 | 587 | 34129-30 | $\begin{array}{llll}18 & 22 & 41.83\end{array}$ | +2.4189 | $+\cdot 0017$ | 26 10 27.7 | + 1.982 | +-349 | $10 \cdot 6$ | 12 | + II | $6 \cdot 83$ | B 3 |
| $8202$ | 283000 | C 8908 |  | 34140 | $2247 \cdot 88$ | 3614 | 17 | 28. $8 \quad 12 \cdot 2$ | 991 | 341 | I 1.7 | + 49 | $-7$ | $8 \cdot 2$ | B 9 |
| 8203 | 313268 | L 6660 |  |  | $2248 \cdot 59$ | 2482 | 18 | $314746 \cdot 0$ | 992 | 325 | 12.9 | - 9 | $+34$ | $9 \cdot 2$ |  |
| 8204 | 263256 | C 8909 | 590 |  | 22 5I.58 | 4161 | 17 | $26 \quad 1615 \cdot 5$ | 996 | 349 | 12.1 | + 25 | + 2 | $9 \cdot 1$ |  |
| 8205 | 263257 | C 8910 | 592 | 341 37-9 | 2252.08 | 4122 | 17 | $262426 \cdot 6$ | 997 | 348 | II.5 | + 6 | + 11 | $6 \cdot 87$ | B 3 |
| 8206 | 243416 | B 6473 | 589 | 34133 | $\begin{array}{llll}18 & 22 & 52 \cdot 18\end{array}$ | $+2.4716$ | +.0016 | $2418 \quad 58 \cdot 5$ | + 1.997 | $+\cdot 358$ | 12.0 | - 2 | - 30 | $8 \cdot 6$ | Ko |
| 8207 | 273023 | C 891I | 595 | 34142 | $2254 \cdot 16$ | 3864 | 17 | $\begin{array}{llll}27 & 17 & 25 \cdot 5\end{array}$ | 2.000 | 345 | 12.0 | - | - 7 | $8 \cdot 6$ | B 9 |
| 8208 | 313269 | L 6663 | 602 | 34154 | $2254 \cdot 64$ | 2561 | 18 | $\begin{array}{lllllllllllll}31 & 32 & 54\end{array}$ | 001 | 326 | II.I | + 18 | + 13 | $8 \cdot 0$ | K 2 |
| 8209 | 263259 | C 8913 | 600 | $3414 \mathrm{I}-7$ | 23 3.72 | 4126 | 17 | $26 \quad 234^{2 \cdot 2}$ | 014 | 348 | 10.2 | + 3 | - 11 | $6 \cdot 36$ | B 3 |
| 8210 | 253527 | C 8914 |  |  | 23 5.07 | 4263 | 16 | $255510 \cdot 7$ | 016 | 351 | 10.9 | - 33 | - 2 | $9 \cdot 0$ |  |
| 82 II | 29 326I | C 8918 |  |  | $\begin{array}{lll}18 & 23 & 10.72\end{array}$ | $+2.3067$ | $+\cdot 0017$ | 2956 32.0 | + 2.024 | $+.333$ | I 1.6 | + 6 | + 11 | $9 \cdot 2$ |  |
| 8212 | 253528 | C 8920 |  |  | 2321.00 | 4293 | 16 | $254858 \cdot 5$ | 039 | 352 | II.4 | + 29 | + 20 | $8 \cdot 6$ | G 5 |
| 8213 | 253529 | C 8921 |  |  | $2323 \cdot 13$ | 4284 | 16 | 25 51 1.1 | 042 | 352 | 12.4 | - | + 2 | $9 \cdot 1$ |  |
| 8214 | 303206 | L 6666 | 610-1 | 34168 | 23 26.30 | 2764 | 18 | 3054 47.0 | 047 | 330 | 12.2 | - 24 | $+3 \mathrm{l}$ | $7 \cdot 36$ | Ko |
| 8215 | 253530 | C 8922 |  |  | $23 \quad 26 \cdot 32$ | 4299 | 16 | $254755 \cdot 2$ | 047 | $35^{2}$ | I2.1 | + 21 | $+3$ | $9 \cdot 2$ |  |
| 8216 |  | C 8924 |  |  | $18 \quad 2341 \cdot 87$ | $+2.3589$ | +.0017 | $\begin{array}{lllllllllll}28 & 13 & 43.8\end{array}$ | + 2.069 | +.34 1 | 12.4 | - 45 | - 14 | $9 \cdot 2$ |  |
| 8217 | 293262 | C 8925 |  |  | $23 \quad 42 \cdot 47$ | 3192 | 17 | $293228 \cdot 9$ | 070 | 335 | 12.1 | + 22 | 0 | $9 \cdot 2$ |  |
| 8218 | 28 3001 | C 8927 |  |  | 2344.94 | 3599 | 17 | 28 II $47 \cdot 8$ | 074 | 341 | II.9 |  |  | $9 \cdot 2$ |  |
| 8219 | $28 \quad 3002$ | C 8929 | 616 |  | $2346 \cdot 83$ | 3395 | 17 | $28 \quad 5224.2$ | 076 | 338 | 12.4 | $-23$ | - 7 | $8 \cdot 7$ | B 8 |
| 8220 | 24342 I | C 8926 |  |  | 2347.89 | 455 I | 16 | $245455 \cdot 4$ | 078 | 355 | 10.2 | + 9 | + 25 | $9 \cdot 2$ |  |
| 8221 | 313271 | L 6668 | 621 |  | $18 \quad 23 \quad 48 \cdot 69$ | +2.2439 | +-0018 | $3 \mathrm{I} \quad 5615 \cdot 8$ | + 2.080 | +.324 | 12.6 | - | - 14 | $7 \cdot 8$ | K 0 |
| 8222 | 273029 | C 8932 | 619 | 34177 | 23 54.60 | 3823 | 17 | $272631 \cdot 9$ | 088 | 344 | I 1.5 | + 23 | + 14 | $9 \cdot 2$ | G 5 |
| 8223 | 303208 | L 6669 |  |  | $24 \quad 3 \cdot 36$ | 2941 | 17 | 302120.8 | 100 | 332 | II.9 | - 20 | - 4 | $9 \cdot 2$ |  |
| 8224 | 243425 | B6483 | 620 | 34180 | $24 \quad 4.09$ | 4629 | 16 | 2438826.6 | 101 | 356 | 9.1 | - 5 | + 18 | $6 \cdot 82$ | B 9 |
| 8225 | 253535 | C 8934 |  |  | $24 \quad 5 \cdot 54$ | 4375 | 16 | 253214.5 | 103 | 353 | II. 6 | + 15 | - 25 | $8 \cdot 6$ | B 9 |
| 18226 | 313272 | L 6671 | 636 | 34212-4 | $18 \quad 2423.54$ | +2.2696 | +.0018 | $31830 \cdot 1$ | + 2.130 | $+\cdot 328$ | $10 \cdot 0$ | - 13 | - 26 | $7 \cdot 7$ | M b |
| 8227 | 263267 | C 8937 |  |  | $24 \quad 23.98$ | 4034 | 17 | 2643 39•8 | 130 | 347 | II.9 | - 14 | + 37 | $9 \cdot 2$ |  |
| 8228 | 263269 | C 8940 | 635 |  | $2433 \cdot 23$ | 4023 | 17 | 2646 0.1 | 144 | 347 | $9 \cdot 4$ | - 22 | - 6 | $9 \cdot 0$ | A 0 |
| 8229 | 283004 | C 894I | 637 |  | $2434 \cdot 87$ | 3499 | 17 | $28 \quad 3222.8$ | 146 | 339. | $15 \cdot 9$ | + 16 | - 3 | $9 \cdot 2$ |  |
| 8230 | 313275 | L 6675 | 648-9 |  | $2447 \cdot 92$ | 2543 | 18 | $\begin{array}{lllllllllll} \\ 1 & 37 & 36.8\end{array}$ | 165 | 326 | 10.9 | - 12 | - 28 | 8.8 |  |
| 8231 | 263271 | C 8942 |  |  | $18 \quad 2453.47$ | +2.4149 | +.0016 | $\begin{array}{lll}26 & 20 & 0.8\end{array}$ | +2.173 | +•349 | 10.4 | + 9 | $\bigcirc$ | $8 \cdot 7$ | A 0 |
| 8232 | 283005 | C 8943 | 646-7 |  | $2453 \cdot 60$ | 3384 | 17 | $28 \quad 55 \quad 27 \cdot 8$ | 173 | 337 | $10 \cdot 3$ | + 10 | + II | $9 \cdot 3$ | A 2 |
| 8233 | 293264 | C 8944 |  |  | $2453 \cdot 75$ | 3065 | 17 | $2958 \quad 7 \cdot 0$ | 173 | 333 | $9 \cdot 5$ | - 6 | + II | 8.11 | A 0 |
| 8234 | 303211 | C 8945 |  |  | $25 \quad 4.02$ | 3019 | 17 | $\begin{array}{llll}30 & 7 & 10.6\end{array}$ | 188 | 332 | 10.3 | - 8 | - 28 | $9 \cdot 0$ |  |
| 8235 | 293267 | C 8949 |  |  | $25 \quad 18.27$ | 3242 | 17 | $292345 \cdot 7$ | 209 | 335 | 10.6 | + 38 | - 15 | $9 \cdot 2$ |  |
| 8236 | 283008 | C 8953 | 662 |  | $\begin{array}{llll}18 & 25 & 30 \cdot 36\end{array}$ | +2.3402 | +.0017 | 285211.7 | + 2.226 | +.338 | 10.5 | + 6 | - 23 | $9 \cdot 2$ |  |
| 8237 | $25 \quad 3538$ | C 8954 | 659 |  | $2534 \cdot 22$ | 4282 | 16 | $255245 \cdot 4$ | 232 | 351 | $10 \cdot 7$ | + 6 | $+10$ | 9.1 | A 2 |
| 8238 | 293269 | C 8958 |  | 34264 | $2542 \cdot 49$ | 3214 | 17 | 292934.5 | 244 | 335 | 8.6 | - 14 | + 47 | $7 \cdot 7$ | G 5 |
| 8239 | 293270 | C 8960 |  |  | $2542 \cdot 59$ | 3100 | 17 | 29 51 49.5 | 244. | 333 | $9 \cdot 8$ | + 18 | + 26 | $8 \cdot 4$ | K |
| 8240 | 263275 | C 8957 |  |  | $2543 \cdot 27$ | 4200 | 16 | 26 IO 4.5 | 245 | 350 | I I 3 | - 24 | + 41 | 9.I |  |
| 8241 | 273037 | C 896I | 665 |  | $18 \quad 2546 \cdot 58$ | +2.3843 | +.0017 | $27 \quad 23 \quad 39 \cdot 3$ | +2.250 | +•344 | II•I | + 16 | - 37 | $9 \cdot 2$ |  |
| 8242 | 283009 | C 8962 | 670-2 |  | 2548.65 | 3362 | 17 | 29 - 17.2 | + 253 | +337 | 11.2 | - 7 | - 7 | $9 \cdot 0$ |  |
| 8243 | $25 \quad 3540$ | C 8964 |  |  | 2554.95 | 4332 | 16 | $25 \quad 42 \quad 25 \cdot 3$ | 262 | 352 | I1.1 | 5 | + 14 | 8.8 | F 8 |
| 8247 | 263277 | C 8966 |  |  | 25 56.96 | 4039 | 17 | 2643 30.1 | 265 | 347 | 10.9 | + 7 | -. 57 | $8 \cdot 8$ | G 5 |
| $82+5$ | 25 354I | C 8965 | 673 | 34265 | $25 \quad 57.07$ | 4250 | 16 | 2559 41•6 | 265 | $35^{\text {I }}$ | 10.1 | - 9 | + 12 | $7 \cdot 9$ | A 2 |
| $\left\|\begin{array}{lll} 8 & 2 & 4 \\ 8 \rightarrow & 6 \end{array}\right\|$ | $\} 29327 \mathrm{I}$ | C 8968 |  |  | $\begin{array}{llll}18 & 25 & 59.92\end{array}$ | +2.3101 | +.0017 | 295 I 5 $1 \cdot 0$ | +2.269 | $+\cdot 333$ | 12.0 |  |  | $8 \cdot 6$ | A 2 |
| 8247 | 24 3437 |  |  |  | $26 \quad 0.21$ | 3101 | 17 | $29515 \mathrm{I} \cdot 9$ | 270 | 333 | 12.2 | $1+36$ | - 2 | $8 \cdot 6$ | A 2 |
| 8248 | 243437 | B 6498 |  |  | $26 \quad 4.02$ | 4653 | 16 | $243428 \cdot 0$ | 275 | 356 | 1 I .8 | + 9. | - $5^{\circ}$ | $9 \cdot 2$ | K |
| 8249 | 293272 | C 8969 |  |  | $26 \quad 4 \cdot 83$ | 3084 | 17 | $2955 \quad 7 \cdot 2$ | 276 | 333 | 12.2 | + 17 | - 16 | $8 \cdot 7$ |  |
| 8250 |  | C 8970 |  |  | $26 \quad 7 \cdot 05$ | 3088 | 17 | $295426 \cdot 8$ | 279 | - 333 | 12.4 | + 3 | - 23 | $9 \cdot 2$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | al P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | $\underset{\text { R. }}{\substack{\text { RA. } \\ \hline}}$ | Dec. <br> ".001. | Mag. | $\begin{array}{\|c} \text { Spectral } \\ \text { Type. } \end{array}$ |
|  | $\bigcirc$ |  |  |  | h m | 8 | s | - , " |  | " |  |  |  |  |  |
| 8251 | 283011 | C 8974 |  |  | $18 \quad 2612.10$ | +2.3538 | +.0017 | $28 \quad 2542 \cdot 2$ | + 2.287 | +.340 | 12.0 |  |  | $9 \cdot 2$ |  |
| 8252 | 253542 | C 8971 | 681 |  | 2612.27 | + 4271 | 16 | $25 \quad 55 \quad 28 \cdot 9$ | 287 | 350 | 12.6 | - | - 20 | $9 \cdot 2$ |  |
| 8253 | 263279 | C 8975 | 682 |  | $26 \quad 16 \cdot 69$ | 4078 |  | 2635 50.2 | 293 | 347 | 10.8 | + 73 | - ${ }^{2}$ | $8 \cdot 4$ | G 5 |
| 8254 | 253543 | C 8976 |  | 34279 | $26 \quad 18.98$ | 4334 |  | $\begin{array}{llll}25 & 42 & 15 \cdot 4\end{array}$ | 297 | 35 I | 10.6 | + $4^{8}$ | + 57 | 8.2 | G 5 |
| 8255 | 313279 | L 6688 |  |  | $26 \quad 22.84$ | 2497 | 17 | 314723.6 | 302 | 325 | 11.4 | + 1 | + 20 | 8.2 | A 2 |
| 8256 | 313280 | L 6689 |  |  | $18 \quad 2626.30$ | +2.2706 | +.0017 | $\begin{array}{lll}31 & 8 & 3.3\end{array}$ | + 2.307 | $+\cdot 328$ | 11.9 | + 16 | - 9 | 9•I |  |
| 8257 | 263281 | C 8980 |  |  | 26 31.63 | 4163 |  | 261818.6 | 315 | 348 | 11.0 | + 27 | - 6 | $9 \cdot 2$ |  |
| 8258 | 253545 | C 8981 |  |  | $2636 \cdot 93$ | 4499 | 16 | $25 \quad 7 \quad 45 \cdot 9$ | 323 | 353 | 12.9 | + 3 | - 18 | $9 \cdot 2$ |  |
| 8259 | 263282 | C 8985 | 710 |  | 2648.08 | 4042 | 16 | $264338 \cdot 6$ | 339 | 346 | 12.1 | + 6 | - 15 | $9 \cdot 0$ | K |
| 8260 | 253547 | C 8984 |  |  | 2648.47 | 4465 | 16 | 251457.9 | 339 | 353 | 11.0 | - 5 | + 8 | $9 \cdot 2$ |  |
| 8261 8262 | 243442 | B 6506 |  |  | $\begin{array}{lll}18 & 26 & 50.67\end{array}$ | +2.4727 | +.0016 | $24.19{ }^{2} 6.2$ | + 2.343 | + 357 | 10.0 | + 22 | - 6 | ${ }^{9 \cdot 1}$ | F 5 |
| 8262 8263 | 31 3281 <br> 25 3549 | L 6692 |  |  | 2656.63 | 2581 | 176 | $\begin{array}{llll}31 & 32 & 6.4\end{array}$ | 351 | 326 | 12.3 | $\begin{array}{r} \\ -\quad 31 \\ +\quad 13 \\ \hline\end{array}$ | - 22 | $8 \cdot 4$ |  |
|  | $\begin{array}{llll}25 & 3549 \\ 24 & 3443\end{array}$ | C 8989 |  |  | $2722 \cdot 10$ | 4515 | 16 | $\begin{array}{lllll}25 & 4 & 49\end{array}$ | 388 | 354 | 12.3 | 13. | + 11 | $9 \cdot 3$ |  |
| 8265 | 25 355 | C 8990 | 729 | 34320 | $2725 \cdot 54$ 2728.96 | 4670 4510 | 16 | $\begin{array}{llll}24 & 31 & 45 \cdot 8 \\ 25 & 5 & 57 \cdot 7\end{array}$ | 393 | 356 | 12.1 | + $+\quad 17$ $+\quad 11$ | - 23 | 9.2 7.96 | $\mathrm{Ma}^{\text {a }}$ |
| 8266 | $\begin{array}{lll}31 & 3282 \\ 28\end{array}$ | L 6697 | 732 |  | $18 \quad 2733.33$ | +2.2695 | +.0017 | 31 10 54.9 | +2.404 | +-328 | 2 |  | - 23 | 8.8 |  |
| 8267 | 283013 | C 8993 |  | 34330-1 | 2733.33 | 3542 | 17 | 2825 54.0 | 404 | 340 | 10.6 | + 19 | + 9 | 7.45 | B 9 |
| 8268 | 303218 | L $669{ }^{8}$ |  |  | 2738.69 | 2978 | 17 | $301652 \cdot 0$ | 412 | 332 | 10.7 | - 25 | - 7 | $9 \cdot 0$ |  |
| 8269 | 273043 | C 8995 | 736 |  | $2744 \cdot 78$ | 3738 | 16 | $274630 \cdot 6$ | 42 I | 343 | I1.0 | + 25 | + 5 | $8 \cdot 7$ |  |
| 8270 | 243444 | C 8996 | 737-8 | 34352 | 2752.03 | 4543 | 16 | 245910.0 | 432 | 354 | 10.3 | + 5 | - 18 | $8 \cdot 96$ | Fo |
| 8271 | 243445 | C 8997 | 739 |  | $18 \quad 2754.02$ | +2.4573 | +.0016 | $245250 \cdot 4$ | + 2.434 | +.354 | 9.5 | + 21 | - 26 | $9 \cdot 6$ |  |
| 8272 | 253557 | C 9000 | 744-5 |  | $28 \quad 6.93$ | 4517 | 16 | $25 \quad 456 \cdot 9$ | 453 | 354 | 10.2 | + 17 | - 12 | $9 \cdot 2$ |  |
| 8273 | 243446 | C 9005 | 756-7 |  | 28 2Y. 86 | 4541 | 16 | 25 - $4 \cdot 8$ | 475 | 355 | $9 \cdot 6$ | - 28 | + 6 | $7 \cdot 71$ | A 5 |
| 8274 | 283016 | C 9008 | 764-5 |  | 2823.50 | 3427 | 17 | $2849{ }^{24 \cdot 7}$ | 477 | 338 | 9.2 | + 30 | - 11 | 8.6 | K 2 |
| 8275 | 253560 | C 9006 |  |  | $28 \quad 24 \cdot 10$ | 4330 | 16 | $2544.45 \cdot 7$ | 478 | 351 | $9 \cdot 6$ | I | - 18 | $9 \cdot 0$ |  |
| 8276 | 23 3361 | B6521 |  |  | $18 \quad 28 \quad 26.37$ | +2.4817 | +.0016 | $24 \quad 04 \mathrm{4} \cdot 2$ | + 2.48 I | +.358 | $9 \cdot 6$ | + 32 | - 34 | $9^{9 \cdot 2}$ | F |
| 8277 | 253564 | C 9013 | 779 |  | 2855.98 | 4423 | 16 | $252520 \cdot 0$ | 524 | 352 | $8 \cdot 3$ | - 5 | + 34 | $7 \cdot 53$ | G 5 |
| 8278 | 283018 | C 9016 | 783 |  | 29 1.69 | 3579 | 17 | 28 19 33.2 | 532 | 340 | $9 \cdot 9$ | - 16 | + 10 | 9.1 |  |
| 8279 | 253565 | C 9015 | 780 |  | $29 \quad 2 \cdot 52$ | 4275 | 16 | $25 \quad 56 \quad 37 \cdot 4$ | 533 | 350 | 10.0 | + 2 | + 5 | $9 \cdot 3$ |  |
| 8280 | 243449 | B 6530 |  |  | 29 5-01 | 4802 | 16 | $24 \quad 425 \cdot 5$ | 537 | 358 | $9 \cdot 6$ | + 15 | + 8 | 8.0 | F 0 |
| 8281 | 243450 | B6531 |  |  | $\begin{array}{llll}18 & 29 & 5.76\end{array}$ | +2.4652 | +.0016 | 24.3641 .4 | + 2.538 | +-356 | $9 \cdot 9$ | 19 $+\quad 19$ | + 13 | $7 \cdot 71$ | Fo |
| 8282 | 263288 | C 9017 |  |  | $29 \quad 8.97$ | 4159 | 16 | 26210.3 | 543 | 348 | 10.1 | + 3 | + 5 | $9 \cdot 2$ |  |
| 8283 | 303223 | L 6715 | 794 | $344{ }^{18-9}$ | $29 \quad 23.44$ | 2922 | 17 | $\begin{array}{llll}30 & 29 & 9 \cdot 7\end{array}$ | 564 | 331 | 9.3 | - $\mathrm{I}^{*}$ | - $7^{*}$ | $5 \cdot 37$ | B 8 |
| 8284 | 293285 | C 9021 | 796 |  | 2929.11 | 3163 | 17 | $294^{2} 30 \cdot 0$ | 572 | 334 | 10.2 | + 13 | - 21 | $9 \cdot 2$ |  |
| 8285 | 313287 | L 6716 |  |  | $2937 \cdot 90$ | 2595 | 17 | $\begin{array}{llllllllllllll} & 31 & 31\end{array}$ | 585 | 326 | $10 \cdot 3$ | + I | - 26 | $8 \cdot 7$ |  |
| 8286 | 283019 | C 9022 |  |  | 182939.75 |  | +.0017 | 282215.0 | + 2.587 | + $340^{\circ}$ | 10.5 |  |  | $9 \cdot 2$ |  |
| 8287 | 303226 | C 9023 | 805 |  | 2951.06 | 3046 | 17 | $30.3033 \cdot 1$ |  | 333 | 9.7 | + 12 | - 18 | $8 \cdot 31$ |  |
| 8288 | 303227 | L 6720 | 818-9 | 34440 | 2957.54 | 2819 | 17 | 304923.6 | 614 | 329 | $9 \cdot 6$ | + 6 | + | $6 \cdot 43$ | B 3 |
| 8289 | 283020 | C 9025 | 816 |  | $\begin{array}{lll}30 & 0.87\end{array}$ | 3385 | 16 | $28 \quad 59$ I0. 5 | 618 | 336 | I1.2 | + 18 | - | $9 \cdot 3$ |  |
| 8290 | 253569 | C 9026 | 808-9 |  | $30 \quad 4 \cdot 18$ | 4270 | 15 | $255^{88} 33 \cdot 2$ | 62 | 349 | 11.4 | + 4 | + 12 | $9 \cdot 6$ |  |
| 8291 | 293287 | C 9027 | 820 |  | $\begin{array}{llll}18 & 30 & 4.88\end{array}$ | $+2.3100$ | +.0016 | $2955 \quad 20 \cdot 7$ | + 2.624 | $+\cdot 332$ | 12.2 | - 7 | + 8 | $9^{\cdot 2}$ |  |
| 8292 | 293288 | C 9029 |  |  | $3025 \cdot 36$ | 3263 | 16 | $2923 \begin{array}{ll}29 & 39.9\end{array}$ | 653 | 334 | 11.3 | + 12 | -. 26 | $9 \cdot 2$ |  |
| 8293 | 303234 | L 6726 | 834 |  | $3025 \cdot 67$ | 2928 | 16 | $302855^{\circ} 8$ | 654 | 330 | $10 \cdot 4$ | + 2 | + 35 | $9 \cdot 1$ | K o |
| 8294 | 263293 | C 9031 | 829 |  | $\begin{array}{llll}30 & 29.75\end{array}$ | 4015 | 16 | 265157.0 | 660 | 346 | 11.0 | + 14 | + 94 | $9 \cdot 2$ |  |
| 8295 | 253571 | C 9030 | 826 |  | 303070 | 4500 | 15 | 251014.0 | 661 | 352 | 10.0 | + 12 | 17 | $9 \cdot 2$ |  |
| 3296 | 283021 | C 9032 |  | 34453-4 | $18 \quad 3034.92$ | +2.3616 | +.0016 | $\begin{array}{llll}28 & 13 & 28.4\end{array}$ | + 2.667 | + 340 | 9.2 | + 25 | - 13 | $7 \cdot 41$ | B 8 |
| 8297 | 303236 | L 6729 | 844 |  | $3043 \cdot 19$ | 2936 | 16 | $3027 \quad 38.6$ | 679 | 330 | 10.4 | + 18 | + 6 | 8.6 | B 9 |
| 8298 | 293291 | C 9036 | 847 | 34465 | $3050 \cdot 65$ | 3180 | 16 |  | 690 | 333 | $9.5$ |  | - 95 | 6.75 7.6 | Ko |
| 8299 | 283024 | C 9037 |  |  | $3057 \cdot 80$ | 3480 |  | $28415 \cdot 6$ | 700 | 338 | $9 \cdot 0$ | - 3 | + 16 | $7 \cdot 6$ | A 2 |
| 8300 | 313296 | I. 6731 | 859 |  | $31 \quad 7 \cdot 61$ | 2547 | 16 | 314158.1 | 714 | 324 | II.I | $+4^{1}$ | - 42 | $9 \cdot 2$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | IP.M. |  |  |
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| No | B.D. | A.G.C. | W.B. (2) | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession | Sec. Var. | Epoch $1900+$ | $\underset{\text { R. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dee. } \\ & =001 \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  |  | s | $s$ | - " |  | " |  |  |  |  |  |
| 8301 | 313297 | L 6734 | 864-5 |  | $\begin{array}{lll}18 & 31 & 8.98\end{array}$ | +2.256I | $+.0016$ | $313927 \cdot 3$ | + 2.716 | +-324 | $10 \cdot 6$ | - 27 | 16 | $8 \cdot 5$ | A 5 |
| 8302 | 293293 | C 9042 | 856 |  | 3110.08 | 3107 | 16 | $295445 \cdot 8$ | 718 | 332 | 9.4 | + 2 | 12 | $7 \cdot 41$ | A 0 |
| 8303 | 303238 | L 6735 | 860-1 |  | 3112.31 | 2949 | 16 | 302531.0 | 721 | 330 | $9 \cdot 8$ | + 8 | 10 | $8 \cdot 7$ |  |
| 8304 | 263298 | C 9043 | 855 |  | $3 \mathrm{I} 15 \cdot 11$ | 3995 | 16 | $265638 \cdot 2$ | 725 | 345 | II.O | 8 | + 12 | $9 \cdot 1$ | A |
| 8305 | 263300 | C 9045 | 862-3 |  | $3 \mathrm{I} \quad 2 \mathrm{I} \cdot \mathrm{I} 5$ | 3977 | 16 | $27 \quad 0 \quad 24.8$ | 734 | 345 | II.3 | + 13 | - 16 | $9 \cdot 3$ |  |
| 8306 | 243458 | B 6552 |  |  | $\begin{array}{llll}18 & 31 & 33 \cdot 36\end{array}$ | $+2.4671$ | +.0015 | $2.43438 \cdot 1$ | + 2.75 I | $+\cdot 355$ | $9 \cdot 5$ | - 5 | - 6 | $8 \cdot 6$ | Goo |
| 8307 | 313299 | L 6737 | 884-5 |  | 3 I 56.66 | 2485 | 16 | $315428 \cdot 3$ | 785 | 323 | $9 \cdot 9$ | + 10 | + 8 | $9 \cdot 2$ |  |
| 8308 | 253578 | C 9049 |  | 34510 | $\begin{array}{lll}32 & 5 \cdot 37\end{array}$ | 4472 | 15 | $251735 \cdot 9$ | 798 | 351 | $9 \cdot 2$ | + 3 | + 6 | 8.1 | B 9 |
| 8309 | 273053 | C 9050 | 886-8 | 34519-20 | 32 10.51 | 3943 | 16 | 278814.6 | 805 | 344 | $9 \cdot 5$ | + 2 | - 26 | $8 \cdot 0$ | K o |
| 8310 | 293295 | C9051 |  |  | 32 II .40 | 3070 | 16 | $\begin{array}{llll}30 & 2 & 59.6\end{array}$ | 806 | 332 | 10.0 | + 16 | - 2 | $8 \cdot 3 \mathrm{I}$ | A 0 |
| 8311 | 3 I 3300 | L 6741 |  |  | $\begin{array}{llll}18 & 32 & 12.39\end{array}$ | +2.2605 | $+.0016$ | $\begin{array}{lll}31 & 32 & 4.8\end{array}$ | + 2.808 | $+325$ | 10.4 | + 20 | + 47 | $9 \cdot 0$ | G 5 |
| 8312 | $30 \quad 3243$ | L 6742 | 896 |  | 32 14.51 | 2904 | 16 | $\begin{array}{llll}30 & 35 & 12.8\end{array}$ | 8 II | 329 | 11.0 | + 3 | - 37 | $9 \cdot 2$ |  |
| 8313 | 253579 | C 9052 |  |  | $\begin{array}{llll}32 & 15.94\end{array}$ | 4317 | 15 | $255022 \cdot 6$ | 813 | 348 | 10.7 | 8 | + 8 | $9 \cdot 2$ |  |
| 8314 | 25 3581 | C 9053 |  | 3452 I | 32 18.16 | 4377 | 15 | $2537 \quad 52 \cdot 2$ | 816 | 350 | $9 \cdot 6$ | + | - 23 | $8 \cdot 5$ | $\mathrm{A}_{5}$ |
| 8315 | 293296 | C 9057 | 916 |  | $3246 \cdot 36$ | 3103 | 16 | $2956 \quad 0.4$ | 857 | 332 | $10 \cdot 3$ | $-12$ | + 28 | $8 \cdot 31$ | K 2 |
| 8316 | 303244 | L 6746 | 917 | 34550 | $\begin{array}{llll}18 & 32 & 48.49\end{array}$ | +2.293I | $1+.0016$ | 303031.4 | + 2.860 | $+\cdot 329$ | $8 \cdot 8$ | - 17 | + 49 | 6.62 | G 5 |
| 8317 | 263306 | C 9056 | 911 |  | 3248.86 | 4248 | 15 | $26 \quad 5 \quad 20 \cdot 2$ | 860 | 348 | $9 \cdot 8$ | + 13 | - 7 | $9 \cdot 1$ |  |
| 8318 | 293297 | C 9059 | 919 |  | $3256 \cdot 72$ | 3125 | 16 | 2953 I.3 | 872 | 332 | 10.5 | + 24 | + 4 | $9 \cdot 2$ |  |
| 8319 | 303245 | L 6751 |  | 34558 | $33 \quad 6.84$ | 2976 | 16 | $3022 \quad 1 \cdot 6$ | 886 | 330 | $9 \cdot 4$ | + 17 | - 25 | $7 \cdot 46$ | G 5 |
| 8320 | 293299 | C 9068 | 930 |  | $\begin{array}{lll}33 & 18.57\end{array}$ | 3157 | 16 | $2947 \quad 0.0$ | 903 | 333 | 10.5 | 0 | - 55 | $9 \cdot 6$ |  |
| 8321 | 243469 | B 6570 | 928 | 34562 | $\begin{array}{llll}18 & 33 & 28.06\end{array}$ | +2.4739 | +.0015 | 242134.5 | + 2.917 | $+\cdot 356$ | $10 \cdot 0$ | - 42 | - 123 | $7 \cdot 43$ | F 8 |
| $8322$ | 28 3030 | C 9070 |  |  | $\begin{array}{llll}33 & 29.07\end{array}$ | 3449 | 16 | $284930 \cdot 7$ | - 918 | 337 | II•3 | - 26 | + 23 | $9 \cdot 8$ |  |
| 8323 | 293300 | C 9071 | 935 |  | $\begin{array}{lll}33 & 29.85\end{array}$ | 3100 | 16 | $2958 \quad 16 \cdot 2$ | 920 | 332 | II.5 | + 13 | - 11 | $9 \cdot 2$ |  |
| 8324 | 28303 I | C 9072 |  |  | 33 35-28 | 3606 | 16 | $\begin{array}{llll}28 & 18 & 2 \cdot 3\end{array}$ | 927 | 340 | II•9 | + 3 | + 6 | $9 \cdot 2$ |  |
| 8325 | $30 \quad 3248$ | L 6758 |  |  | $3342 \cdot 47$ | 2896 | 16 | $30 \quad 38$ II. 6 | 937 | 329 | II 13 | $+13$ | + 9 | $8 \cdot 4$ | G 5 |
| 8326 | 283032 | C 9077 | 945 |  | $\begin{array}{llll}18 & 33 & 43.87\end{array}$ | +2.3404 | $+.0016$ | $285846 \cdot 2$ | + 2.940 | $+336$ | 10.8 | + 25 | - 5 | $8 \cdot 0$ | K 2 |
| 8327 | 253585 | C 9076 | 940 |  | $33 \quad 47 \cdot 07$ | 4548 | 15 | $\begin{array}{llll}25 & 2 & 42 \cdot 4\end{array}$ | 944 | 353 | 12.2 | + 2 | + 1 |  |  |
| 8328 | 293302 | C 9080 | 958-9 |  | 33 59.72 | 3245 | 16 | $293017 \cdot 3$ | 963 | 333 | $10 \cdot 0$ | - 18 | $+\quad 78$ | $6 \cdot 76$ | K |
| 8329 | 2633 II | C 908 I |  |  | 34 5.6I | 4186 | 15 | 261933.2 | 972 | 346 | I I-1 | - 7 | - 29 | $9 \cdot 6$ |  |
| 8330 | 263312 | C 9082 |  |  | $\begin{array}{lll}34 & 6.28\end{array}$ | 4048 | 15 | $2648 \quad 8 \cdot 9$ | 972 | 345 | II.4 | - 2 | + 6 | $9 \cdot 2$ |  |
| 8331 | 283037 | C 9087 | 972 | 34597 | $18 \quad 34 \quad 27 \cdot 98$ | +2.3535 | +.0015 | $\begin{array}{llll}28 & 33 & 3 \cdot 9\end{array}$ | $+3.003$ | $+337$ | 8.8 | - 10 | $+\quad 23$ | 6.59 | A 0 |
| 8332 | 317311 | L 6765 |  |  | $3432 \cdot 52$ | 2630 | 16 | $3 \mathrm{I} 294 \mathrm{I} \cdot 3$ | OII | 325 | 11.6 | - 9 | 16 | $8 \cdot 6$ |  |
| 8333 | 313313 | L 6764 | 977 |  | $3432 \cdot 63$ | 2711 | 16 | 3 I I4 $415 \cdot 9$ | 011 | 325 | $11 \cdot 2$ | $+33$ | + 7 | $7 \cdot 7$ | G 5 |
| 8334 | 313314 | L 6766 | 978 |  | 3436.49 | 2720 | 16 | $\begin{array}{llllllllllllllll}31 & 12 & 39.7\end{array}$ | 015 | 326 | 12.2 | $+\quad 18$ | 2 | 9. I |  |
| 8335 | 263313 | C 9088 |  |  | 34 4190 | 4046 | 15 | 2649 I $3 \cdot 0$ | 024 | 345 | II•I | + II | + 9 | $9 \cdot 1$ |  |
| $8336$ | $28 \quad 3039$ | C 9090 | 979 |  | $18 \quad 3445 \cdot 2 \mathrm{I}$ | +2.3445 | +.0015 |  | + 3.028 | $+336$ | 10.92 |  |  | $8 \cdot 2$ | G 5 |
| $\|8337\|$ | 253590 | C 9089 | 974-5 | 34612 | $3445 \cdot 49$ | 4512 | $15$ | 25 II I5.9 | 028 | 351 | 9.8 | - 14 | - 6 | $7 \cdot 71$ | Fo |
| $8338$ |  | ${ }^{C} 9104$ |  |  | $3445 \cdot 74$ | 3451 | 15 | $28 \quad 5012 \cdot 7$ | 029 | 336 | 13.2 | - 2 | - 53 | $9 \cdot 3$ |  |
| 8339 | 28 3038 | C 9091 |  |  | 34 47-11 | 3635 | 15 | 28 13 24.1 | 03 I | 339 | II•3 | + 5 | $+\quad 36$ | $8 \cdot 4$ | K 0 |
| 8340 | 273067 | C 9093 |  |  | $3448 \cdot 47$ | 3719 | 15 | $27 \quad 56 \quad 16.5$ | 032 | 340 | $12 \cdot 3$ | + 8 | + 9 | 9.0 |  |
| 8341 | 283040 | C 9094 | $982$ | 34618 | $\begin{array}{llll}18 & 34 \quad 50.78\end{array}$ | +2.3517 | +.0015 | $28 \quad 37 \quad 4 \cdot 7$ | + 3.037 | $+\cdot 337$ | 11.0 | + 13 | - 9 | $8 \cdot 0$ | Fo |
| 8342 | 3 I 3315 | L 6770 | 989 |  | $3450 \cdot 78$ | $2698$ | 16 | $\begin{array}{llll}31 & 17 & 9 \cdot 9\end{array}$ | 037 | 326 | 11.6 | - 13 | - I4 | $8 \cdot 8$ |  |
| 8343 | 24 | B658ı |  | 34615 | $3459 \cdot 17$ | 4687 | 14 | $24 \quad 34 \quad 4 \cdot 4$ | 048 | 354 | 10.7 | + 41 | - 49 | $8 \cdot 0$ | F 5 |
| 8344 | 26 | C 9096 |  |  | $35 \quad 0.75$ | 3988 | 15 | 27 I $30 \cdot 2$ | 051 | 344 | 13.0 | + 9 | - 12 | $9 \cdot 2$ |  |
| 8345 | 303252 | L 6771 |  |  | $35 \quad 2 \cdot 25$ | 2850 | 16 | $3048 \quad 21.0$ | 052 | 328 | 12.4 | $+\quad 9$ | + 28 | $9 \cdot 2$ |  |
| 8346 | 243482 | B 6586 |  | 34620 | $18 \quad 35 \quad 6.54$. | $+2.4782$ | +.0014 | $241332 \cdot 2$ | + 3.060 | +.355 | $12 \cdot 2$ | $+9$ | - 25 | $8 \cdot 6$ | G 5 |
| 834\% | 303253 | L 6775 | 999 |  | $35 \quad 9.31$ | 2889 | 16 | $304048 \cdot 9$ | 062 | 329 | 13.3 | - 8 | - 4 | $9 \cdot 1$ | - A |
| 8348 | 31 | L 6776 |  |  | $35 \quad 10.06$ | 2597 | 16 | 31 | 064 | 324 | 13.8 | + 65 | - 58 | $9 \cdot 2$ |  |
| 8349 | 303255 | L. 6777 | 1004 |  | 3512.86 | 2985 | 16 | $\begin{array}{lllll}30 & 22 & 18.8\end{array}$ | 068 | 330 | 10.3 | + 13 | - II | 7.3I | M a |
| 8350 | $27 \quad 3069$ | C 9099 |  |  | $35 \quad 15 \cdot 90$ | 3769 | 15 | $274637 \cdot 5$ | 072 | 341 | $12 \cdot 2$ | + 58 | - 15 | $9 \cdot 0$ | F 8 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B. } .000 \mathrm{I} .}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { r.001. } \end{aligned}$ |  |  |
|  | - |  |  |  | $\mathrm{hr} \mathrm{m}^{\text {m }}$ | s | 8 | - " |  | " |  |  |  |  |  |
| 8351 | 263318 | C 9098 | 993 |  | 183516.01 | $+2.4185$ | +.0015 | $26 \quad 2039 \cdot 4$ | $+3.072$ | +-346 | 13.4 | + 29 | + 13 | $9 \cdot 3$ |  |
| 8352 | 313320 | L $677^{8}$ |  |  | $35 \quad 16.67$ | 2766 | 16 | $314840 \cdot 2$ | + 073 | +326 | 13.8 | 19 $+\quad 19$ | - 22 | $8 \cdot 6$ | A 0 |
| 8353 | 3 I 332 I | L 6779 | 1007-8 |  | $35 \quad 18.09$ | 2676 | 16 | $312141 \cdot 1$ | 075 | 325 | II.4 | + 14 | - 26 | 8.0 | K 2 |
|  | 243484 | B 6592 C 9108 |  |  | $\begin{array}{llll}35 & 33 \cdot 18\end{array}$ | 4764 | 14 | 241753.0 | 097 | 355 | II•5 | + 22 | - 35 | $9 \cdot 2$ |  |
| 8355 | 293310 | C 9108 |  |  | 35 54•80 | 3276 |  | 292615.1 | 128 | 333 | If.O | - | - 61 | $8 \cdot 7$ | K 2 |
| 8356 | 253594 | $\mathrm{C}_{9105}$ |  |  | $18 \quad 35 \quad 56 \cdot 15$ | +2.4344 | +.0015 | $2548 \quad 1 \cdot 7$ | + 3.130 | +-349 | 10.2 | + 22 | - 7 | $8 \cdot 6$ | A 0 |
| $8357$ | 263319 | $\mathrm{C}_{\mathrm{C}} 9107$ | 1022 | 34655 | 3556.90 | 4142 | 15 | $26 \quad 30 \quad 19.6$ | 131 | +.346 | $9 \cdot 6$ | $\begin{array}{r} \\ +\quad 8 \\ \hline\end{array}$ | - 22 | $7 \cdot 7$ | Fo |
| 8358 | 263320 | C9109 |  | 34657 | $3559 \cdot 64$ | 4257 | 15 | $\begin{array}{llll}26 & 6 & 23 \cdot 8\end{array}$ | 135 | 348 | 10.7 | - 9 | + 3 | 8.5 |  |
| 8359 | 243489 | C9III |  | 34660 | $36 \quad 8.24$ | 4591 | 14 | $245534 \cdot 2$ | 148 | 352 | $9 \cdot 9$ | 0 | + 11 | $8 \cdot 46$ | K O |
| 8360 | 253595 | C9112 |  |  | 3613.02 | 4429 | 15 | 253018.5 | 155 | 349 | $10 \cdot 2$ | + 21 | + 3 | $9 \cdot 2$ |  |
| 8361 | 24 3491 | B 6598 | 1027 | 34666 | $\begin{array}{llll}18 & 36 & 22.90\end{array}$ | $+2.4679$ | +.0014 | 2437 11.4 | $+3 \cdot 169$ | +.353 | $9 \cdot 7$ | - 7 | + 4 | $8 \cdot 0$ | K |
| 8362 | 263322 | C 9117 | 1033-4 |  | $36 \quad 30 \cdot 35$ | 3996 | 15 | $\begin{array}{llll}27 & 1 & 9.2\end{array}$ | 180 | 344 | 10.0 | - 17 | + 6 | 8.8 |  |
| 8363 | 303262 | L 6785 | 1038 | 34680-2 | 3636.08 | 2870 | 16 | $3045 \quad 55 \cdot 3$ | 188 | 328 | $9 \cdot 8$ | + 7 | + 45 | $6 \cdot 48$ | K o |
| 8364 | 263324 | C 9119 |  | 34675 | 3643.23 | 4277 | 15 | $\begin{array}{lll}26 & 2 & 49.2\end{array}$ | 198 | 348 | 10.5 | + 13 | + 27 | $6 \cdot 74$ | B 9 |
| 8365 | 313324 | L 6786 | 1040-1 |  | $3643 \cdot 89$ | 2616 | 16 | 313433.6 | 199 | 324 | $9 \cdot 9$ | + 8 | - 29 | $8 \cdot 0$ | K |
| 8366 | 263325 | C 9122 |  |  | $18 \quad 3658 \cdot 17$ | $+2.4146$ | $+\cdot 0015$ | $263036 \cdot 2$ | + 3.220 | + 346 | 10.1 | - 66 | + 12 | $9 \cdot 6$ |  |
| 8367 | 303264 | C 9124 | 1046 |  | $\begin{array}{ll}37 & 1.34\end{array}$ | 3047 | 16 | $\begin{array}{lllllllllll}30 & 12 & 18.5\end{array}$ | 224 | 330 | 11.8 | -. 5 | - 14 | 8.46 | A 0 |
| 8368 | 313327 | L. 6792 | 1051-2 | 34705 | $37 \quad 6.06$ | 2624 | 16 |  | 231 | 324 | 10.8 | + 3 | + 26 | $7 \cdot 7$ | A 5 |
| 8369 | 293314 | $\mathrm{C}_{\mathrm{C}} 9127$ |  |  | $3712 \cdot 15$ | 3199 | 16 | $294238 \cdot 8$ | 240 | 332 | 12.5 | + 28 | + 18 | 9.2 |  |
| 8370 |  | C 9126 |  |  | 3716.03 | 4596 | 14 | $245540 \cdot 1$ | 245 | 352 | 13.0 | + 15 | + 10 | $9 \cdot 2$ |  |
| 8371 | 243493 | B 6602 | 1048 | 34694 | $18 \quad 37 \quad 17.76$ | +2.4648 | +.0014 | 244423.7 | + 3.248 | + 353 | I2.1 | + 14 | + 23 | $7 \cdot 79$ | A 5 |
| ${ }_{8}^{8} 372$ | 303268 | L 6793 |  |  | $\begin{array}{llll}37 & 17.80\end{array}$ | 3009 | 16 | $\begin{array}{lllllllllll}30 & 19 & 56\end{array}$ | 248 | 330 | 2.0 | - 17 | + 17 | 8.4 | K 5 |
| 8373 | 273078 | C 9134 |  |  | $\begin{array}{llll}37 & 26 \cdot 31\end{array}$ | 3912 | 15 | $\begin{array}{lllll}27 & 19 & 26 \cdot 2\end{array}$ | 260 | 343 | 12.0 | $+\quad 23$ | -. 77 | $9 \cdot 2$ |  |
| 8374 | 263329 | C 9133 | 1058 |  | $\begin{array}{lll}37 & 27 \cdot 20\end{array}$ | 4265 | 15 | $\begin{array}{llll}26 & 6 & 8.7\end{array}$ | 261 | 348 | $12 \cdot 2$ |  | + 7 | $9 \cdot 1$ |  |
| 8375 | 313328 | L 6796 | 1062-3 |  | $37 \quad 27 \cdot 37$ | 2617 | 16 | $\begin{array}{llll}31 & 35 & 16.9\end{array}$ | 262 | 324 | 13.3 | 10 | + 8 | $9 \cdot 2$ |  |
| 8376 | 313330 | L 6797 | 1064-6 |  | $\begin{array}{ll}18 & 37 \\ & 30.35\end{array}$ | $+2 \cdot 2655$ | +.0016 | $\begin{array}{llll}31 & 28 & 5 \cdot 7\end{array}$ | $+3.266$ | +-325 | 12.23 | + 66 |  | $8 \cdot 8$ |  |
| 8377 | 263330 | C 9135 |  | 34712 | $3733 \cdot 83$ | 4209 | 15 | $\begin{array}{llllllllll}26 & 17 & 490\end{array}$ | 271 | 347 | 12.5 | - 9 | - 6 | 8.8 |  |
| 8378 | 273079 | C 9136 | 1060 |  | $3735 \cdot 87$ | 3766 | 15 | 274935.6 | 274 | 341 | 13.8 | - 37 | + 18 | $9 \cdot 6$ |  |
| 8379 | 283052 | C 9137 |  |  | $37 \quad 39.99$ | 3590 | 15 | $28 \quad 2449 \cdot 3$ | 280 | 338 | 12.4 | - 16 | - 25 | 8.2 | A 2 |
| 8380 | 293317 | C9139 |  |  | $3744 \cdot 91$ | 3299 | 15 | $2923 \quad 32 \cdot 2$ | 287 | 333 | 13.2 | $+\quad 37$ | - 1 | $9 \cdot 1$ | A 5 |
| 8381 | 273080 | C 9r38 | 1070 | 34719 |  | $+2 \cdot 3764$ | +.0015 | 275021.6 | + 3.288 | + 341 | 12.5 |  | - 13 | 8.0 | A 2 |
| 8382 838 8 | 303269 | L 6799 |  |  | 37 47.96 | 2876 | 16 | 304614.9 | 291 | 328 | 13.2 | - 1 | - 19 | 9.2 |  |
| 8383 <br> 8384 |  | C 9142 | 1074 |  | 3748.49 | 3051 | 16 | 301220.1 | 292 | 330 | 12.8 | 19 | - 60 |  | G 5 |
| 8384 | $\}^{30} 3271$ | C9143 | 1075 |  | $3748 \cdot 82$ | 3049 | 16 | $301234 \cdot 2$ | 292 | 330 | I2.6 | + 19 | - 60 | $\}^{6 \cdot 88}$ | G 5 |
| 8385 | 303270 | L 6801 |  |  | $3748 \cdot 57$ | 2894 | 16 | $304248 \cdot 3$ | 292 | 328 | 13.1 | + 18 | + 9 | 9.I |  |
| 8386 | 283053 | C 9141 | 1072 |  | $18 \quad 3749.29$ | +2.3646 | +.0015 | $\begin{array}{llll}28 & 14 & 3 \cdot 3\end{array}$ | $+3.293$ | +-339 | 13.0 | + 25 | - 5 | $9 \cdot 2$ |  |
| 8387 | 283054 | C 9144 |  |  | $3751 \cdot 56$ | 3665 | 15 | 28 10 1900 | 296 | 339 | 12.4 | + 69 | - 25 | $9 \cdot 0$ |  |
| 8388 | 293318 | C 9145 |  |  | $\begin{array}{ll}37 & 52 \cdot 17\end{array}$ | 3216 | 16 | 293956.0 | 297 | 332 | 12.2 | + 38 | + 3 | $9 \cdot 2$ |  |
| 8389 |  | C 9146 |  |  | $3754 \cdot 83$ | 3441 | 15 | $28 \quad 5531 \mathrm{l} 3$ | 301 | 336 | 12.2 | + 6 | + 11 | $9 \cdot 2$ |  |
| 8390 | 293320 | C 9149 |  |  | $38 \quad 12.55$ | 3272 | 15 | $29 \quad 2917.5$ | 327 | 333 | 10.1 | - 3 | - 16 | $9 \cdot 2$ |  |
| 8391 | 31 3332 | L6803 | 1091-2 | 34754 | $18 \quad 38 \quad 17.42$ | +2.2640 | +.0015 | 313149.9 | $+3.333$ | +-324 | 10.8 | + II | + 16 | $6 \cdot 47$ | A 0 |
| 8392 | 243499 | C 9150 | 1084 | 34736-9 | 3818.63 | 4596 | 14 | 245638.9 | - 335 | 352 | 10. | - 13 | - 14 | $7 \cdot 91$ | K 5 |
| 8393 | 263333 | C9151 |  |  | $\begin{array}{llll}38 & 21.44\end{array}$ | 4267 | 14 | $\begin{array}{lllll}26 & 6 & 37 \cdot 5\end{array}$ | 339 | 347 | 10.2 | + 2 | - 17 | 9.6 |  |
|  |  | C 9156 |  |  | $\begin{array}{llll}38 & 37 \cdot 65 \\ 38 & 38.31\end{array}$ | 3851 | 14 | $\begin{array}{llll}27 & 33 & 16.5\end{array}$ |  | 341 | 11.7 | 10 | $+\quad 10$ | \} 8.8 | A 0 |
| $8395$ | $\int^{27} 3084$ | C 9157 |  |  | $\begin{array}{ll}38 & 38 \cdot 34\end{array}$ | 3850 | 14 | . 273322.5 | 364 | 34 I | 11.7 | 10 | $+10$ | $\}^{8.8}$ | A |
| 8396 | 273085 | C 9161 | 1105 | 34769-70 |  |  | +-0015 |  |  | +-340 | 8:6 | 3 | $\bigcirc$ |  |  |
| 8397 | 273086 | C 9162 |  |  | 3855.74 | 3844 | 14 | 273456.8 | - 389 | 341 | 11.0 | 18 | + 26 | $8 \cdot 4$ | A 2 |
| 8398 | 25.3606 | C 9164 |  |  | $39 \quad 6 \cdot 35$ | 4391 | 14 | $25415 \cdot 1$ | 404 | 348 | $9 \cdot 8$ | $+\quad 39$ | - 13 | $8 \cdot 2$ | K |
| 8399 | 253607 | C 9165 |  |  | 39 11.81 | 4493 | 14 | $\begin{array}{lllllllll}25 & 19 & 27.7\end{array}$ | 412 | 350 | $11 \cdot 0$ | + 27 | $+\quad 59$ | $9 \cdot 0$ |  |
| 8400 | 273087 | C 9166 |  |  | 3912.98 | 3764 | 14 | $2752 \quad 6 \cdot 0$ | 413 | 340 | 10.8 | - 13 | + 43 | 8.6 |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | I P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec. Var. | Epoch $1900+$ | $\begin{gathered} \text { R.A. } \\ \text { B.0001. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \\ & \end{aligned}$ | Mag. | Spectral Туре. |
|  | $\bigcirc$ |  |  |  | h m 8 | 8 | 8 | - , | " | " |  |  |  |  |  |
| 8401 | $28 \quad 3063$ | C 9167 | I 122 | 34794-5 | $\begin{array}{llll}18 & 39 & 19 \cdot 16\end{array}$ | +2.3660 | +.0015 | $\begin{array}{llll}28 & 12 & 48 \cdot 4\end{array}$ | + 3.422 | +.339 | $8.8,10 \cdot 4$ | - 7 |  | $7 \cdot 52$ | B 9 |
| 84.02 | 283064 | C9169 |  |  | 3922.92 | 3559 | 15 | 283328.5 | - 428 | 337 | $10 \cdot 3$ | - 8 | - 73 | $8 \cdot 0$ |  |
| 8403 | 253608 | C 9168 |  | 34789 | 3924.87 | 4479 | 14 | $25 \quad 2239 \cdot 3$ | - 430 | 349 | $11 \cdot 1$ | 23 | $+10$ | $8 \cdot 6$ | A 2 |
| 8404 | 243504 | B 6619 |  |  | $3926 \cdot 64$ | 4826 | 13 | 24759.1 | 433 | 355 | 11.0 | - 7 | - 40 | $8 \cdot 7$ | $\mathrm{A}$ |
| 8405 | 293326 | C 9172 |  |  | 3932.08 | 3210 | 15 | $29435 \cdot 8$ | $44^{1}$ | 332 | 10.8 | + 13 | - 15 | 8.8 |  |
| 8406 | $28 \quad 3065$ | C9171 | 1133 |  | $18 \quad 3933.51$ | $+2 \cdot 3688$ | +.0015 | 28729.9 | + 3.444 | +.339 | 12.0 | + 14 | + 12 | $9 \cdot 1$ |  |
| 8407 | $30 \quad 3279$ | L 6815 | $1137-9$ | 34815 | $3936 \cdot 16$ | 2800 | 15 | $31245 \cdot 2$ | - 446 | 326 | 10.2 | - 6 | - 16 | $8 \cdot 0$ | B 9 |
| 8408 | 283066 | C 9174 | 1136 |  | 39 37.31 | 3474 | 15 | $285047 \cdot 3$ | $44^{8}$ | 336 | $11 \cdot 3$ | - 13 | + 2 | $8 \cdot 5$ | A 5 |
| 8409 | 31 3344 | L 6816 |  |  | 39 39.52 | 2523 | 15 | 3155 | 451 | 322 | II•4 | - 15 | - 12 | $8 \cdot 6$ |  |
| 8410 | 293327 | C9175 |  |  | 39 40.02 | 3208 | 15 | 2943 35.5 | 452 | 332 | $11 \cdot 7$ | - 4 | - 9 | $9 \cdot 3$ | A 2 |
| 841 I | 253610 | C 9176 | 1138 |  | 183950.62 | $+2.4572$ | +.0014 | $25 \quad 314.7$ | $+3.467$ | $+352$ | 11.6 | - 17 | - 25 | $9 \cdot 3$ |  |
| 8412 | 273088 | C 9177 |  |  | $3952 \cdot 62$ | 3824 | 14 | 273959.2 | 470 | 340 | II. I | + 13 | + 3 | $9 \cdot 2$ |  |
| 8413 | 273089 | C 9178 |  |  | $3952 \cdot 96$ | 3837 | 14 | $273728 \cdot 6$ | 471 | 340 | 12.0 | 17 | $+36$ | $9 \cdot 2$ |  |
| 8414 | 263339 | C 9179 |  |  | $3956 \cdot 49$ | 4264 | 14 | $26843 \cdot 0$ | 476 | 347 | 12.1 | + 3 | + 21 | $9 \cdot 9$ |  |
| 8415 | 27 3091 | C9180 | 1149 | 34825-6 | $40 \quad 7 \cdot 77$ | 3722 | 15 | 28 I 14.5 | $49^{2}$ | 339 | 11.1 | + 7 | - 44 | $8 \cdot 5$ | K o |
| 8416 | 303281 | L 6819 |  |  | $\begin{array}{llll}18 & 40 & 14.86\end{array}$ | $+2.3032$ | +.0015 | $\begin{array}{llll}30 & 18 & 47 \cdot 7\end{array}$ | + 3.502 | +.330 | I 1.2 | + 2 | + 7 | $8 \cdot 0$ | A 0 |
| 8417 | 243509 | B 6628 |  |  | $40 \quad 17.89$ | 4723 | 14 | $24318 \cdot 1$ | 507 | 354 | 10.8 | + 27 | + I | $9 \cdot 0$ |  |
| 8418 | 313347 | L 6820 |  |  | $40 \quad 20 \cdot 04$ | 2633 | 15 | $\begin{array}{llll}31 & 35 & 29.4\end{array}$ | 510 | 324 | II. 2 | - 36 | - 54 | $9 \cdot 1$ |  |
| 8419 | 253614 | C 9182 | 1155 |  | $40 \quad 27 \cdot 14$ | 4443 | 14 | $253127 \cdot 1$ | 520 | 349 | 11.3 | - 4 | + 21 | $8 \cdot 4$ |  |
| 8420 | 313348 | L 6822 |  | 34853 | $40 \quad 28 \cdot 70$ | 2556 | 15 | $315017 \cdot 1$ | 522 | 323 | $9 \cdot 8$ | - 26* | - 142* | $5 \cdot 52$ | Fo |
| 842 I | $24 \quad 3513$ | B6631 |  |  | $18 \quad 40 \quad 32.04$ | $+2.4789$ | +.0013 | $\begin{array}{llll}24 & 17 & 9 \cdot 3\end{array}$ | + 3.527 | +.355 | II.I | + 19 | $+54$ | $9 \cdot 2$ |  |
| 8422 | 263341 | C 9186 | 1159 |  | $40 \quad 36.00$ | 4270 | 14 | 26819.0 | 533 | 346 | II•9 | + 21 | + II | $7 \cdot 7$ | G 5 |
| 8423 | 313350 | L 6823 | 1167 |  | $4038 \cdot 72$ | 2730 | 15 | $\begin{array}{llllllllllllllll}31 & 17 & 23.0\end{array}$ | 536 | 325 | 12.6 | + 9 | - 24 | $9 \cdot 2$ |  |
| 8424 | 313351 | L 6824 | 1168 |  | $4039 \cdot 28$ | 2704 | 15 | 312225.3 | 537 | 325 | II $\cdot 4$ | - 2 | - 9 | $8 \cdot 6$ | G 5 |
| 8425 | 29333 I | C9187 | 1165 |  | $4040 \cdot 98$ | 3168 | 15 | $295243 \cdot 8$ | 540 | 331 | I2.5 | + 10 | + 14 | $9 \cdot 2$ |  |
| 8426 | 273095 | C 9188 | I 166 | 34859-61 | $18 \quad 4047 \cdot 63$ | $+2.3729$ | +.0015 | 28 ○ 32.5 | + 3.549 | +.339 | - 9.6 | + I | - 18 | $7 \cdot 24$ | Fo |
| 8427 | 303284 | L 6827 |  |  | $40 \quad 49 \cdot 84$ | 2849 | 15 | $30 \quad 5445 \cdot 9$ | 552 | 327 | II. 8 | + 18 | - 21 | $9 \cdot 0$ |  |
| 8428 | 273096 | C 9189 | 1170 |  | $4054 \cdot 03$ | 3897 | 14 | $27 \quad 2617.4$ | 558 | 341 | 10.9 | $+\quad 38$ | + 36 | $8 \cdot 0$ | G 5 |
| 8429 | 293332 | C 9190 | 1173 |  | $40 \quad 56.02$ | 3185 | 15 | $294937 \cdot 8$ | 561 | 332 | I $1 \cdot 9$ | + 9 | - 6 | $9 \cdot 1$ | A 0 |
| 8430 | 303285 | L 683I |  |  | $410 \cdot 10$ | 3038 | 15 | $30 \quad 18 \quad 23 \cdot 6$ | 567 | 330 | I $1 \cdot 7$ | $+35$ | + 1 | 9-1 |  |
| 8431 | 24.3518 | B 6637 |  |  | 18419.02 | +2.4652 | +.OOI 4 | $244721 \cdot 9$ | $+3.580$ | +.353 | II.O | $+8$ | - 35 | $9 \cdot 0$ |  |
| 8432 | 263344 | C 9193 | $1176-7$ |  | 4 III .48 | 4282 | 14 | $26 \quad 6 \quad 18 \cdot 9$ | 583 | 346 | 10.7 | + 27 | 18 $+\quad 18$ | $7 \cdot 8$ | B 9 |
| 8433 | 263345 | C 9195 |  |  | 4112.57 | 4238 | 14 | 26 15 31.7 | 585 | 346 | 11.8 | - 1 | +-22 | $9 \cdot 6$ |  |
| 8434 | 243519 | C 9194 |  |  | 4113.51 | 4614 | 14 | $245535 \cdot 9$ | 586 | 352 | 11.4 | + 1 | + 4 | $9 \cdot 2$ |  |
| 8435 | 293335 | C 9197 |  |  | $4126 \cdot 33$ | 3334 | 15 | $292044 \cdot 1$ | 605 | 334 | $9 \cdot 7$ | $+7$ | - 15 | $9 \cdot 2$ | F 8 |
| 8436 |  | C 9198 |  |  | $18 \quad 4128 \cdot 36$ | $+2.3364$ | +.0015 | 29 14 48.2 | $+3.608$ | +.334 | $12 \cdot 3$ | + 38 | + 37 |  |  |
| 8437 | $30 \quad 3289$ | C 9204 | 1207 |  | 4153.72 | 3103 | 15 | $30 \quad 650 \cdot 0$ | - 644 | 33 I | $9 \cdot 9$ | + 30 | - 8 | $8 \cdot 56$ | A 2 |
| 8438 | 243523 | B 6643 |  |  | $4154 \cdot 66$ | 4673 | 14 | 2443 46.2 | 645 | 353 | 10.4 | $+\quad 12$ | -78 | $9 \cdot 2$ |  |
| 8439 | 283073 | C9205 |  | 34908 | $4157 \cdot 37$ | 3690 | 15 | $28 \quad 941 \cdot 6$ | 649 | 338 | $9 \cdot 6$ | + 9 | + 17 | 8. I | K o |
| 8440 | 273101 | C 9207 | 1206 |  | $42 \quad 0.54$ | 3928 | 14 | $27 \quad 20 \quad 57 \cdot 7$ | 654 | 341 | $10 \cdot 2$ | + 17 | +1 | 9.1 |  |
| 8441 | 243526 | B 6647 | 1 |  | $18 \quad 42 \quad 11.82$ | $+2.4672$ | +.0013 | $244415 \cdot 2$ | + 3.670 | +.352 | 8.6 | + 6 | + 15 | $8 \cdot 6$ | A 2 |
| 8442 | 283074 | C 9212 |  |  | $4226 \cdot 36$ | 3628 | 14 | $28 \quad 2259.3$ | 691 | 337 | 10.8 | + 12 | + 8 | $9 \cdot 3$ |  |
| 8443 | 263349 | C 9211 | 1218 | 3493 I-2 | $\begin{array}{lll}42 & 26.87\end{array}$ | 4157 | 14 | $263355 \cdot 1$ | 692 | 344 | 10.0 | + $9^{*}$ | + 26* | $4 \cdot 92$ | K o |
| 8444 | 293339 | C 9213 |  |  | $42 \quad 27.46$ | 3377 | 14 | 291326.8 | 693 | 333 | 10.4 | + 26 | - 63 | 10.0 |  |
| 8445 | 283075 | C 9214 |  |  | $42 \quad 30 \cdot 33$ | 3672 | 14 | $2814 \quad 6 \cdot 7$ | 697 | 337 | 11.2 | + 48 | - 6 | $9 \cdot 2$ |  |
| $8446$ | 303290 | L 6849 | 1229 |  | 184233.05 | $+2.3035$ | +.0014 | $302051 \cdot 3$ | $+3.700$ | +.329 | 11.4 | + 8 | - 20 | $9 \cdot 2$ |  |
| $8447$ | 243527 | B6651 | 1223 | 34935 | $4240 \cdot 56$ | 4780 | 13 | $242122 \cdot 3$ | 711 | . 354 | $9 \cdot 1$ | - 21 | + 4 | $8 \cdot 2$ |  |
| 3448 | 283076 | C 9216 | 1235 |  | $4245 \cdot 37$ | 3717 | $14$ | $\begin{array}{lll}28 & 5 & 4.5\end{array}$ | 718 | -338 | $9 \cdot 5$ | + 22 | + II | $9 \cdot 2$ |  |
| $3449$ | 303292 | L 6854 |  |  | $4254 \cdot 83$ | $3002$ | $14$ | $\begin{array}{lllll}30 & 27 & 49 \cdot 4\end{array}$ | 732 | 329 | 10.2 | + 35 | - 59 | $9 \cdot 1$ |  |
| 3450 | 253623 | C9218 | 1238 | 34957 | $4^{2} \quad 56 \cdot 35$ | 4479 | 13 | 2526 3I•I | 734 | 350 | $9 \cdot 2$ | - 2 | - 13 | 8.0 | A 0 |

$8422,8432,8436,8446$. Number of observations 6.

| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epach $1900+$ | Annual P.M. |  | Mag. | Spectra Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.A } \\ \text { B.000I. } \end{gathered}$ | Dec. $0.001 .$ |  |  |
|  | $\bigcirc$ |  |  |  | h m | 5 | 8 | - , |  | " |  |  |  |  |  |
| 8451 | 263354 | C 922I |  |  | $\begin{array}{llll}18 & 42 & 58.96\end{array}$ | +2.4210 | +.0014 | $26 \quad 2323.6$ | + 3.738 | +.344 | 10.6 | - 24 | - 4 | 9.I |  |
| 8452 | 243531 | B 6654 | 1246 | 34966 | $\begin{array}{lll}43 & 6.87 \\ 43 & 8.77\end{array}$ | 4800 | 13 | $\begin{array}{lllllllllll}24 & 17 & 21.6\end{array}$ | 749 | 354 | I2.4 | $\begin{array}{r} \\ +\quad 55 \\ \hline 16\end{array}$ | 29 | 9.1 |  |
| 8453 8454 | 243532 <br> 27 <br> 1515 | C 9222 |  |  | $43 \quad 8.77$ | 4609 | 13 | $24 \quad 58 \quad 5 \mathrm{I} \cdot 5$ | 752 | 351 | 12.5 | - 16 | - 0 | 9.8 8.0 |  |
| 8454 8455 | 273111 | C 9223 |  | 34976 | $43 \quad 10.42$ | 3925 | 14 | $\begin{array}{lll}27 & 23 & 0.3\end{array}$ | 754 | 340 | 11.6 | + | - 63 | 8.0 | K ${ }^{\text {K }}$ 2 |
| 8455 | 303294 | L 6859 | 1252 |  | $43 \quad 12 \cdot 23$ | 2996 | 14 | $30 \quad 29$ 21.0 | 756 | 329 | 10.6 | + 30 | + 3 | $7 \cdot 71$ |  |
| 8456 | 263356 | C 9224 |  |  | $\begin{array}{lll}18 & 43 & 12.68\end{array}$ | +2.4144 | +.0014 | $26 \quad 37$ 29-1 | $+3.757$ | +-343 | 12.6 | - 11 | - $4^{8}$ | 9.0 |  |
| 8457 | 303295 | L 6860 | 1254 |  | $43 \cdot 13 \cdot 88$ | 2941 | 14 | 304010 | 759 | 328 | 11.8 | - 18 | $-4^{2}$ | $8 \cdot 8$ |  |
| 8458 | 243533 | B 6656 |  |  | $4317 \cdot 64$ | 4799 | 13 |  | 764 | 354 | 13.2 | + 20 | + 7 | $9 \cdot 3$ |  |
| 8459 | 243534 | B 6657 |  |  | $43 \quad 18.27$ | 4794 | 13 | $24 \quad 18 \quad 55 \cdot 3$ | 765 | 354 | 12.0 | + 33 | + 4 | $9 \cdot 2$ |  |
| 8460 | 243535 | B 6658 |  |  | 4318.60 | 4673 | 13 | $24 \quad 45 \quad 7 \cdot 2$ | 766 | 352 | 11.8 | + 14 | - 8 | $9 \cdot 2$ |  |
| 8461 | 243536 | C 9225 |  |  | $18 \quad 4318.77$ | +2.4618 | +.0013 | $24 \quad 57 \quad 8.2$ | + 3.766 | +-351 | 12.2 | - 32 | + 12 | 9.I |  |
| 8462 | 313362 | L 6862 |  |  | 43 20.31 | 2705 | 14 | 312527.0 | 768 | 323 | 11.8 | - 26 | + 26 | $9 \cdot 2$ |  |
| 8463 | 243537 | B 6660 | 1251 | 34980 | 4327.05 | 4803 | 13 | 24 17 11 | 778 | 354 | 10.4 | $+$ | - 20 | 8.4 | Fo |
| 88464 | 24 3538 | B 6664 |  | 34988 | 4338.42 | 4732 | 13 | $24324 \mathrm{I} \cdot \mathrm{I}$ | 794 | 353 | 11.0 | + 32 | - 39 | $8 \cdot 2$ | G 5 |
| 8465 | 283078 | C9236 | 1265 |  | 43 42.27 | 3652 | 14 | $\begin{array}{llllll}28 & 19 & 30.4\end{array}$ | 799 | 337 | 8 | + 33 | + 1 | $8 \cdot 6$ |  |
| 8466 | 28308 r | C 9238 |  |  | $18 \quad 43$ 48.14 | +2.3486 | +.0014 | 2885314.1 | + $3 \cdot 808$ | +-334 | 10.2 | 30 | + 47 | $8 \cdot 1$ | ${ }^{\text {A }} 2$ |
| 8467 | 313365 | L 6865 |  | 34989 | 43 48.22 | 2745 | 14 | 31  <br> 18 23.0 | 808 | 324 | 10.0 | - 22 | + 4 | 7-10 | G. 5 |
| 8468 | 303297 | L 6866 |  |  | 43 50.42 | 3050 | 14 |  | 8 II | 329 | 11.5 | + 13 | + 12 | $9 \cdot 2$ |  |
| 8469 | 313367 | L 6867 | 1277 |  | $43 \quad 56 \cdot 89$ | 2819 | 14 |  | 820 | 325 | 10.2 | + 25 | - 62 | $9 \cdot 2$ |  |
| 8470 | 273115 | C 9240 |  | 35012 | $44 \quad 0.93$ | 3905 | 14 | $27 \quad 28 \quad 12.0$ | 826 | 340 | 11.0 | + 3 | $+\quad 2$ | 8.6 |  |
| 8471 | 303298 | L 6869 |  |  | $\begin{array}{lll}18 & 44 & 2.37\end{array}$ | +2.2833 | +.0014 | 31131 1 1 | + 3.828 | $+\cdot 325$ | 11.6 | - 15 | + 12 | $9 \cdot 2$ |  |
| 8472 | 243540 | B 6666 | 1274 | 35008 | $44 \quad 3 \cdot 40$ | 4813 | 13 | $2415 \quad 36 \cdot 9$ | 830 | 354 | $10 \cdot 5$ | + 35 | -71 | $8 \cdot 6$ |  |
| 8473 | 283084 | C 9242 | 1278 |  | $44 \quad 6 \cdot 12$ | 347 I | 14 | $28 \quad 5636 \cdot 4$ | 834 | 334 | 11.4 | + 45 | + 76 | $8 \cdot 4$ |  |
| 8474 | 283085 | C 9244 |  |  | 44 12.01 | 3568 | 14 | $\begin{array}{llllllllllll}28 & 37 & 18.6\end{array}$ | 842 | 336 | 11.6 | + 16 | - 19 | 8.4 | G 5 |
| 8475 | 283086 | C 9245 |  |  | 44 12.61 | 3590 | 14 | $\begin{array}{llll}28 & 32 & 38.4\end{array}$ | 843 | 336 | 11.0 | + 4 | - 2 | $7 \cdot 6$ | K 2 |
| 8476 | 313368 | L 6870 |  |  | $184415 \cdot 22$ | +2.2744 | +.0014 | $\begin{array}{llll}31 & 19 & 13.3\end{array}$ | $+3.847$ | + 324 | 12.4 | - | - 17 | $9 \cdot 2$ |  |
| 8477 | 283087 | C 9247 | 1292 |  | $4429.47{ }^{\circ}$ | 3471 | 14 | $\begin{array}{llll}28 & 57 & 2 \cdot 9\end{array}$ | 867 | 334 | $10 \cdot 4$ | + 30 | + 20 | 8.4 | A 5 |
| 8478 | 313369 | L 6875 |  | 35045 | $4433 \cdot 52$ | 2641 | 14 | 313923.0 | 873 | 322 | $9 \cdot 6$ | - 6 | - 21 | $5 \cdot 78$ | ${ }^{\text {B }} 3$ |
| 8479 | 253630 | C 9248 |  |  | $4439 \cdot 64$ | 4345 | 13 | 255648.0 | 882 | 346 | $9 \cdot 2$ | + 20 | + 14 | 8.4 | Ko |
| 8480 | 253631 | C 9249 | 1297 |  | $444^{1 \cdot 23}$ | 4433 | 13 | $\begin{array}{llllll}25 & 38 & 14.9\end{array}$ | 884 | 348 | 10.0 | + 27 | - $4^{2}$ | $9 \cdot 2$ |  |
| 8481 | 293352 | C 9250 |  |  | $18444^{1} \cdot 62$ | +2.3190 | +.0014 | 29538.9 | + 3.884 | +.330 | 9.6 | + 30 | - 57 | $8 \cdot 4$ |  |
| 8482 | 303301 | C 9252 |  |  | $4445 \cdot 77$ | 3122 | 14 | $\begin{array}{llll}30 & 6 & 41\end{array} 7$ |  | 330 | $9 \cdot 4$ | + 75 | + 17 | $9 \cdot 0$ |  |
| 8483 | 303303 | L 6880 |  |  | $45 \quad 7 \cdot 18$ | 2974 | 14 | $303556 \cdot 1$ | 921 | 327 | $9 \cdot 6$ |  | + 18 | 8.6 |  |
| 8484 | 303304 | L 6883 |  |  | 45 23.18 | 3082 | 14 | 3015151.4 | 944 | 329 | 10.3 | 11 | + 7 | 9.1 |  |
| 8485 | 283091 | C 926ı | 1320 |  | 4532.44 | 3535 | 14 | $284532 \cdot 0$ | 957 | 335 | 10.9 | 3 | + | 8.8 |  |
| 8486 | 243545 | C $9260^{\circ}$ | 1314 | 35062 | $1845 \quad 32 \cdot 60$ | +2.4632 | $+\cdot 0013$ | $245637 \cdot 9$ | + 3.957 | +-351 | 10.8 | + 4 | - 15 | 6.56 | A o |
| 8487 | 273122 | C 9263 |  | 35069-70 | $45 \quad 38 \cdot 52$ | 3872 | 14 | $27 \begin{array}{lll}37 & 0.9\end{array}$ | 966 | 340 | 10.8 | + 8 | + 4 | $7 \cdot 00$ | K o |
| 8488 | 263365 | C 9265 | 1322 |  | $4543 \cdot 25$ | 4300 | 13 | $\begin{array}{lllll}26 & 7 & 38 \cdot 2\end{array}$ | 973 | 345 | 11.6 | + 33 | - 5 | 9.2 |  |
| 8489 | 313371 | L 6889 |  |  | $4544 \cdot 77$ | 2712 | 14 |  | 975 | 323 | 11.8 | - 4 | - 4 | 8.6 | A o |
| 8490 | 273125 | C 9267 |  |  | $45 \quad 47 \cdot 78$ | 3847 | 14 | $27 \quad 42 \quad 18 \cdot 4$ | 979 | 339 | 12.0 | + 17 | - 95 | 8.8 |  |
| 8491 | 253633 | C 9268 |  |  | $1845 \quad 50.22$ | $+2.4486$ | +.0013 | $25 \quad 2816.6$ | + 3.983 | +-349 | 12.2 | + 1 | - 10 | 8.8 |  |
| 8492 | 273126 | C 9271 | 1332 | 35079-81 | 45 51.65 | 3876 | 14 |  | 985 | 340 | 11.8 | + 64 | - 3 | $8 \cdot 7$ | F 5 |
| 8493 | 243547 | B 6682 |  |  | $4554 \cdot 26$ | 4864 | 1 13 | $\begin{array}{llll}24 & 6 & 34 \cdot 2\end{array}$ | 988 | 355 | 12.2 | - 7 | - 9 | $9 \cdot 2$ |  |
| 8494 | 293357 | C 9272 | 1336-7 |  | 45 56.28 | 3396 |  | 291353.0 | 991 | 333 | 11.4 | + 1 | - 4 | $8 \cdot 4$ |  |
| 8495 | 303306 | L 6891 |  |  | $45 \quad 59 \cdot 32$ | 2953 | 14 | 3041 <br> $10 \cdot 3$ | 996 | 327 | 12.3 | 13 | + 37 | $9 \cdot 2$ |  |
| 8496 | 303307 | L 6893 |  |  | $\begin{array}{lll}18 & 46 & 0.84\end{array}$ | +2.3019 | +.0014 | $30 \quad 28 \quad 33 \cdot 3$ | + 3.998 | + 328 | 12.8 | - 11 | + 6 | 9.1 |  |
| 8497 | 283093 | C 9274 |  |  | $46 \quad 4 \cdot 58$ | 3729 | 13 | $\begin{array}{llll}28 & 6 & 54 \cdot 5\end{array}$ | $4 \cdot 003$ | 336 | 13.0 | + 9 | - 3 | $8 \cdot 5$ | A 2 |
| 8498 | $26 \quad 3368$ | C 9277 | 1344 | 35093 | $46 \quad 17.54$ | 4249 | 13 | $\begin{array}{llll}26 & 19 & 12.7\end{array}$ | 022 | 344 | 12.6 | + 13 | + 30 | 6.92 | A 2 |
| 8499 | 303312 | L 6899 |  |  | $46 \quad 18.00$ | 2985 | 14 |  | 022 | 327 | 12.6 | - 19 | + 18 | $9 \cdot 0$ | A 2 |
| 8500 | 313373 | L 6900 |  |  | $46 \quad 19.65$ | 2694 | 14 | $\begin{array}{llll}31 & 31 & 30.5\end{array}$ | 025 | 322 | 12.5 | - 9 | - 25 | $6 \cdot 50$ | B 9 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 19100 | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | SpectralType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { B. } 000 \mathrm{I} . \end{aligned}$ | Dce. ".001. |  |  |
|  | - |  |  |  | h m s | s | 8 | - ' | " | " |  |  |  |  |  |
| 8501 | 283095 | C 9278 |  | 35100 | $18 \quad 46$ 21.72 | +2.3652 | +.0013 | $28 \quad 2256 \cdot 4$ | + 4.028 | +.335 | 11.9 | - | - 7 | $9 \cdot 1$ | $\mathrm{A}_{2}$ |
| 8502 | 293361 | C 9281 | 1350 | 35116 | 4633.91 | 3256 | 14 | $294237 \cdot 6$ | 045 | 330 | $10 \cdot 2$ | + 11 | - 16 | $7 \cdot 46$ | $\text { B } 8$ |
| 8503 | 313375 | L 6906 |  |  | $4639 \cdot 37$ | 2639 | 14 | $314230 \cdot 9$ | 053 | 321 | 1 1. 6 | + 11 | - 3 | 9.0 |  |
| 8504 | 233477 | B 6687 |  | 35105 | $4640 \cdot 44$ | 4898 | 12 | 24 ○ $3 \cdot 6$ | 054 | 354 | 10.8 | - | - 23 | 7.06 | K 5 |
| 8505 | 293363 | C 9285 |  |  | $4646 \cdot 27$ | 3427 | 14 | $29 \quad 8 \quad 49 \cdot 6$ | 063 | 332 | [156, $3^{3} \mathrm{3}$ | + 17 | - 20 | $9 \cdot 1$ |  |
| 8506 | 303317 | L 6909 | 1360 |  | 1846 50.77 | +2.3088 | +.0014 | $\begin{array}{lllll}30 & 16 & 19.1\end{array}$ | + 4.069 | + 329 | 10.9 | - 17 | - 44 | $8 \cdot 8$ | A 2 |
| 8507 | 283098 | C 9287 |  |  | $4654 \cdot 97$ | 3537 | 13 | $284657 \cdot 0$ | - 075 | 334 | 10.2 | + 18 | + $\quad 35$ | $9 \cdot 2$ |  |
| 8508 | 283099 | C 9288 |  | 35142-5 | $47 \quad 4.48$ | 3645 | 13 | $28 \quad 25 \quad 10 \cdot 3$ | 088 | - 335 | $11 \cdot 1$ | - 10 | - 8 | 8.0 | K。 |
| 8509 | $24355^{2}$ | B 6696 |  |  | $47 \quad 7.06$ | 4731 | 12 | 243649.9 | 092 | 352 | 10.7 | - 8 | - 20 | $8 \cdot 5$ | B 8 |
| 8510 | 303321 | C 9292 | 1375 |  | $47 \quad 13.94$ | 3116 | 14 | 30111.0 | 102 | 329 | 11.9 | 2 | + | $8 \cdot 5$ |  |
| 8511 | 273132 | C 9291 | 1374 |  | 184715.82 | +2.3879 | +.001 3 | $27 \quad 37 \quad 28.2$ | $+4 \cdot 105$ | + 339 | 9.6 | - 14 | + 4 | $8 \cdot 2$ | G 5 |
| 8512 | 313376 | L6911 | 1380 |  | $47 \quad 18.61$ | 2789 | 14 |  | 109 | 323 | 11.4 | $+\quad 18$ | - 13 | $9 \cdot 1$ |  |
| 8513 | 313377 | L 6913 |  |  | 4725.94 | 2749 | 14 | $\begin{array}{llll}31 & 22 & 30 \cdot 1\end{array}$ | 119 | 323 | 12.2 | - | - 16 | $9 \cdot 1$ |  |
| 8514 | 293367 | C 9295 |  |  | $4731 \cdot 14$ | 3290 | 14 | 2937803 | 127 | 331 | $10 \cdot 1$ | + 8 | - 11 | $8 \cdot 4$ | K 2 |
| 8515 | 303323 | L 6914 | 1386 |  | $47 \quad 32.07$ | 3100 | 14 | $301440 \cdot 3$ | 128 | 329 | 11.5 | 3 | - 9 | $9 \cdot 2$ |  |
| 8516 | 303324 | C 9298 | 1390 |  | $184745 \cdot 38$ | +2.3148 | +.0014 | $\begin{array}{llll}30 & 5 & 28.3\end{array}$ | + 4.132 | $+329$ | 10.5 | - 25 | - 12 | $9 \cdot 2$ |  |
| 8517 | 313378 | L 6918 | 1393 |  | 4748.67 | 2748 | 14 |  | 147 | 322 | $9 \cdot 8$ | + 57 | + 30 | $9 \cdot 2$ |  |
| 8518 | 283104 | C 9301 | 1401 | 35186-9-91 | $\begin{array}{lll}48 & 3.57\end{array}$ | 3576 | 13 |  | 173 | 334 | 11.4 | + $\quad 5$ | + 13 | $6 \cdot 43$ | K o |
| 8519 | 30.3326 | L 6919 |  |  | $48 \quad 4 \cdot 46$ | 2984 | 14 |  | 174 | 326 | 10.5 | 2 | - 16 | $9 \cdot 0$ |  |
| 8520 | 293371 | C 9303 | 1406 |  | $4^{8} \quad 9 \cdot 30$ | 3183 | 14 | $29595 \cdot 7$ | 181 | 329 | II.1 | 5 | + 9 | $8 \cdot 31$ | A |
| 8521 | 303327 | L 6923 |  |  | 184823.06 | +2.2881 | +.0014 | 305831.7 | + 4.201 | $+\cdot 325$ | 12.2 | - 13 | + 4 | $9 \cdot 2$ |  |
| 8522 | 293372 | C 9306 | 1411 |  | $48 \quad 23 \cdot 32$ | 3443 | 13 | $29 \quad 746 \cdot 6$ | 201 | 332 | 11.8 | + 9 | - | $9 \cdot 0$ |  |
| 8523 | 263373 | C 9305 |  |  | $48 \quad 23.35$ | 4269 | 13 | $\begin{array}{llllll}26 & 17 & 31.9\end{array}$ | 201 | 345 | . 8 | + 21 | - 15 | $9 \cdot 2$ |  |
| 8524 | 243555 | B6711 |  |  | 4824.44 | 4795 | 12 | $24.2427 \cdot 3$ | 203 | 352 | 11.5 | - 10 | - 4 | 8.8 | B 9 |
| 8525 | 313382 | L 6924 | 1415 | 35208 | $48 \quad 28.89$ | 2785 | 14 | $\begin{array}{llll}31 & 17 & 7.5\end{array}$ | - 209 | 324 | 11.4 | + 18 | + 17 | 8.6 | B 9 |
| 8526 | 283106 | C 9307 | 1413 | 35205-6 | $18 \quad 48 \quad 28.99$ | +2.3583 | +.0013 | $283937 \cdot 6$ | + 4.209 | $+\cdot 334$ | 11.4 | 18 | - 7 | 8.2 | Go |
| 8527 | 273142 | C 9308 |  |  | $48 \quad 30 \cdot 62$ | 4024 | 13 | $\begin{array}{lll}27 & 9 & 0.5\end{array}$ | 211 | 341 | 10.4 | + 15 | + 54 | $7 \cdot 6$ | A 5 |
| 8528 | 303329 | L 6926 |  |  | $48 \quad 3.44$ | 3022 | 14 | 303122.3 | 215 | 327 | 11.6 | - 10 | - 5 | $8 \cdot 7$ |  |
| 8529 | 253650 | C 9310 |  | 35204 | $48 \quad 35 \cdot 43$ | 4376 | 13 | $2555 \quad 2 \cdot 0$ | 218 | 346 | 11.4 | + 7 | - 6 | $7 \cdot 7$ | F 2 |
| 8530 | 243556 | B6714 | 1412 |  | $48 \quad 38 \cdot 38$ | 4846 | 12 | $24 \quad 1343.2$ | 222 | 353 | 12.6 | 2 | + 27 | $9 \cdot 2$ |  |
| 8531 | 263375 | C9311 |  |  | $18 \quad 4838 \cdot 57$ | $+2.4318$ | +.0013 | $\begin{array}{llll}26 & 7 & 27.7\end{array}$ | + 4.223 | + 345 | 12.2 | + 9 | 8 | $9 \cdot 2$ |  |
| 8532 | 263376 | C 9313 |  |  | $48 \quad 38 \cdot 87$ | 4202 | 13 | $\begin{array}{llll}26 & 32 & 4\end{array}$ | 223 | 344 | 11.8 | - 38 | - 88 | $9 \cdot 2$ |  |
| 8533 | 243558 | C 9316 |  |  | $48 \quad 46 \cdot 85$ | 4643 | 12 | 245758.3 | 235 | 350 | $9 \cdot 8$ | + 5 | - II | 8.68 | K o |
| 8534 | 263378 | C 9318 |  |  | $48 \quad 47.04$ | 4174 | 13 | $\begin{array}{llll}26 & 38 & 9 \cdot 3\end{array}$ | 235 | 343 | 10.4 | - 17 | + 8 | $8 \cdot 0$ | A o |
| 8535 | 263379 | C 9319 |  |  | $48 \quad 48 \cdot 50$ | 4235 | 13 | $\begin{array}{llllllllllll}26 & 25 & 16.8\end{array}$ | 237 | 344 | 10.6 | + 58 | + 152 | 7.9 | Go |
| 8536 | 293375 | C 9324 |  |  | 184857.16 | +2.3362 | +.0013 | $292442 \cdot 4$ | + 4.249 | +.331 | 10.5 | + 12 | - 39 | $8 \cdot 1$ | A 0 |
| 8537 | 26. 3380 | C 9323 |  |  | $48 \quad 58.83$ | 4191 | 13 | 2634443 | 252 | 344 | 10.0 | - 7 | + 4 | $8 \cdot 1$ | B9 |
| 8538 | 303332 | L 6930 |  |  | $49 \quad 7.06$ | 2913 | 14 |  | 263 | 325 | $9 \cdot 6$ | + 1 | + 29 | $9 \cdot 2$ |  |
| 8539 | 313384 | L 6933 | 1443 |  | $49 \quad 23.95$ | 2788 | 14 | $31 \begin{array}{llllllll}31 & 54\end{array}$ | 287 | 324 | $9 \cdot 7$ | - 6 | + 12 | 8.6 | F |
| 8540 | 303333 | L 6934 | 1446 |  | $4930 \cdot 34$ | 3090 | 14 | $\begin{array}{lllllllllllllll}30 & 19 & 22.8\end{array}$ | 296 | 328 | 10.6 | + 25 | + 13 | 8.6 |  |
| 854 I | 253654 | C 9330 | 1442 | 35242 | I8 4939.06 | +2.4565 | +.0013 |  | +4.309 | + 349 | 10.4 | + 15 | - 11 | 7.61 | G 5 |
| 8542 | 313386 | L 6937 | 1458 |  | 4941.62 | 2776 | 14 | 312035.2 | 313 | 323 | 10.6 | + 9 | + 13 | $8 \cdot 8$ |  |
| 8543 | 243568 | B 6721 | 1445 | 35241 | 49 42.32 | 4869 | 12 | $24 \quad 958 \cdot 7$ | 314 | 352 | If. 1 | - I | - 16 | $8 \cdot 4$ | A |
| 8544 | 253655 | C 9332 | 1447 |  | $49+4 \cdot 98$ | 4424 | 13 | 254624.5 | 317 | 347 | 10.8 | - 11 | - 7 | $8 \cdot 5$ |  |
| 8545 | 243569 | B 6722 | 1448 |  | 49 47•81 | 4723 | 12 | $2442 \quad 0.9$ | 321 | 350 | 11.0 | 9 | - II | 8.6 |  |
| 8546 | 263385 | C 9335 | 1459 |  | $184956 \cdot 15$ | +2.4332 | $+.0013$ | $\begin{array}{llll}26 & 6 & 10.6\end{array}$ | + 4.333 | + 345 | II.I | + 4 | + | $9 \cdot 2$ |  |
| 8547 | 253656 | C 9336 |  |  | 4959.07 | 4470 | 13 | $25 \quad 3646 \cdot 9$ | 337 | 348 | 10.1 | - 21 | - 10 | $9 \cdot 3$ |  |
| 8548 | 283112 | C 9338 |  |  | $\begin{array}{ll}50 & 2.34\end{array}$ | 3561 | 13 | $28 \quad 4615 \cdot 2$ | 342 | 333 | 10.2 | + 30 | - 6 | 9.1 |  |
| 8549 | 293382 | C 9340 |  |  | 5013.29 | 3405 | 13 | $291754 \cdot 9$ | 358 | 331 | 11.0 | - 36 | - 21 | 9.1 |  |
| 8550 | 293384 | C 9341 | 1474 |  | 5014.58 | 3336 | 13 | 293144.2 | 359 | 330 | $8 \cdot 9$ | + 16 | - 18 | 8.4 | A |


|  | B.D. | A.G.C. | W B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annnal P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.A. } \\ 8.000 \mathrm{I} . \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & =., 00 \mathrm{r} \end{aligned}$ |  |  |
|  | - |  |  |  | h m s | 8 | 8 | - " | " | " |  |  |  |  |  |
| 855 I | 293385 | C 9343 |  |  | $18 \quad 5025 \cdot 10$ | +2.3398 | +.0013 | 291932.9 | + 4.374 | +.331 | $10 \cdot 0$ | - 9 | + 15 | $9 \cdot 0$ |  |
| 8552 | 273150 | C 9345 | 1489 | 35296-7 | $50 \quad 38 \cdot 59$ | 385 I | 13 | 2747 5I•2 | 394 | 337 | $8 \cdot 5$ | 4 | - 71 | $5 \cdot 82$ | $\mathrm{K}_{2}$ |
| 8553 | 293386 | C 9348 | 1488 |  | $5043 \cdot 83$ | 3302 | 13 | 293921.0 | 401 | 329 | 8.8 | + 29 | + 56 | $8 \cdot 6$ |  |
| 8554 | 233494 | B 6734 |  |  | $50 \quad 59 \cdot 85$ | 4913 | 1 I | $24 \quad 157.5$ | 424 | 352 | 10.2 | 5 | - 54 | $9 \cdot 3$ |  |
| 8555 | 293389 | C 9351 | 1497 |  | 510.71 | 3220 | 13 | $29 \quad 56 \quad 0.8$ | 425 | 328 | $9 \cdot 4$ | 1 | - 15 | $9 \cdot 2$ |  |
| 8556 | 233495 | B 6735 |  |  | $18 \quad 513.30$ | +2.4918 | +.001 1 | $24 \quad 0 \quad 47 \cdot 8$ | + 4*429 | +.352 | $9 \cdot 2$ | 4 | - 45 | $9 \cdot 2$ |  |
| 8557 | 303342 | C 9352 |  |  | 519.85 | 3136 | 13 | $30 \quad 12 \quad 52.5$ | 438 | - 327 | $9 \cdot 8$ | - 11 | - 34 | $9 \cdot 0$ |  |
| 8558 | 293391 | C 9358 | 1508 | 35293-332 | 5121.71 | 3227 | 13 | $2955 \quad 2 \cdot 4$ | 455 | 328 | $9 \cdot 6$ | + 26 | + 26 | $7 \cdot 66$ | G 5 |
| 8559 | $30 \quad 3344$ | L 6957 |  |  | 5126.27 | 2887 | I 3 | 31 I 55.0 | 461 | 324 | $9 \cdot 6$ | - 18 | + 13 | $7 \cdot 32$ | K 2 |
| 8560 | 303345 | L 6959 |  |  | $5132 \cdot 96$ | 2970 | 13 | 3045 51.4 | 471 | 325 | $9 \cdot 8$ | + 9 | - 27 | $8 \cdot 6$ | G 0 |
| 856 I | 243579 | B 6743 | 1512 |  | $18 \quad 5137 \cdot 81$ | $+2.4762$ | +.0012 | 2435 51•9 | $+4.478$ | $+350$ | 10.3 | + 26 | a, 21 | $8 \cdot 6$ |  |
| 8562 | 273157 | C 9362 |  |  | 5138.30 | 3907 | 13 | $273736 \cdot 8$ | 479 | 338 | $10 \cdot 6$ | - 3 | - 27 | $9 \cdot 1$ |  |
| 8563 | 263394 | C 9364 | 1520 | 35335-6-7 | $5143 \cdot 19$ | 4121 | 12 | 2653 I3.I | 485 | 340 | 10.2 | + 15 | - 26 | $8 \cdot 5$ |  |
| 8564 | 303348 | L 6963 |  |  | $5148 \cdot 10$ | 3003 | I 3 | $303952 \cdot 1$ | 492 | 325 | 10.3 | 1 $+\quad 17$ | + 1 | 8.2 | G 5 |
| 8565 | \}29 3399 | C 9367 | I 538 |  | $5157 \cdot 11$ | 3474 | 13 | $29636 \cdot 8$ | 505 | 332 | 10.6 | + 23 | - 6 | $\} 8.6$ |  |
| 8566 |  |  |  |  | $185157 \cdot 12$ | $+2 \cdot 3474$ | +.0013 | $29 \quad 6 \quad 33 \cdot 5$ | $+4.505$ | +.332 | II.0 | + 23 | - 6 |  |  |
| 8567 | 253663 | C 9368 |  | 35352 | $52 \quad 0.87$ | 4492 | 12 | $25 \quad 3443 \cdot 3$ | 511 | 346 | $9 \cdot 6$ | - 11 | - 5 | 7.8 | A 0 |
| 85681 | 3133991 | L 6968 |  |  | $\begin{array}{lll}52 & 6 \cdot 42\end{array}$ | 2805 | 13 | $\begin{array}{llllllllllllll}31 & 18 & 42.5\end{array}$ | 518 | 323 | 10.2 | 6 | $1+12$ | $9 \cdot 2$ |  |
| 8569 | 313400 | L 6969 |  |  | 52 11.74 | 2881 | 13 | $\begin{array}{llll}31 & 4 & 3 \cdot 3\end{array}$ | 526 | 324 | . 2 | + 14 | - 17 | $9 \cdot 2$ |  |
| 8570 | 293402 | C 9370 |  |  | $5216 \cdot 48$ | 3365 | I 3 | $292853 \cdot 3$ | 533 | 330 | $10 \cdot 3$ | + 7 | - 28 | $9 \cdot 0$ |  |
| 8571 | 30335 I | C 9372 | I 548 | 35369 | $18 \quad 5220 \cdot 80$ | $+2.3150$ | +.0013 | 30 II $42 \cdot 6$ | + 4.539 | +.327 | 10.6 | + 28 | + 6 | $7 \cdot 31$ | A 0 |
| 8572 | 303352 | L 6975 | 1556 |  | 5238.09 | 3039 | 13 | $3034 \quad 7 \cdot 3$ | 563 | 326 | -I | + 1 | $+5$ | $9 \cdot 1$ |  |
| 8573 | 243586 | B675I |  |  | $5245 \cdot 01$ | 4840 | 11 | 2420 19.3 | 573 | 351 | I | - 16 | + 9 | $8 \cdot 6$ |  |
| 8574 | $31 \begin{array}{ll}31 & 3404\end{array}$ | L 6979 |  |  | $5247 \cdot 40$ | 2718 | 13 | $\begin{array}{llll}31 & 36 & 26 \cdot 7\end{array}$ | 576 | 32 I | 10.4 | - 24 | - 30 | $8 \cdot 7$ |  |
| 8575 | 303355 | L 6978 | 1558 |  | $5248 \cdot 03$ | 3000 | 13 | 304154.4 | 578 | 325 | II.O | - I | + 12 | $9 \cdot 1$ |  |
| 8576 | 263398 | C9379 | 1557 |  | $18 \quad 52 \begin{array}{lll}180.33\end{array}$ | +2.4250 | +.0012 | $26 \quad 27 \quad 34 \cdot 2$ | + 4.58 I | +.342 | II•I | 12 $+\quad 10$ | 17 $+\quad 1$ | $9 \cdot 2$ |  |
| 8577 | 263401 | C 9382 | 1563 |  | $\begin{array}{ll}53 & 2.77\end{array}$ | 4245 | 12 | $26 \quad 2845 \cdot 4$ | 598 | 342 | 11.0 | - 10 | + 3 | $9 \cdot 2$ |  |
| 8578 | $28 \quad 3125$ | C9383 |  | 35400-1 | $53 \quad 3 \cdot 76$ | 3786 | I 3 | $28 \quad 443 \cdot 6$ | 600 | 336 | 10.8 | + 7 | + 72 | $7 \cdot 19$ | K o |
| 8579 | 293409 | C 9386 |  |  | $\begin{array}{ll}53 & 6 \cdot 62\end{array}$ | 3304 | 13 | $294220 \cdot 4$ | 604 | 329 | II•I | + 12 | + 16 | $8 \cdot 8$ |  |
| 8580 | 243590 | B6753 |  |  | $53 \quad 8 \cdot 53$ | 4840 | I I | $242039 \cdot 2$ | 607 | 35 I | II. 8 | - | - 39 | $9 \cdot 0$ |  |
| 8581 | 313405 | L 6984 | 1578 |  | $\begin{array}{lll}18 & 53 & 9.69\end{array}$ | $+2.2857$ | +.0013 | 311018.9 | $+4.608$ | +.323 | 12.0 | $\div$ | + 3 | 8.8 |  |
| 8582 | 25 | C 9385 |  |  | 53 9.91 | 438 I | 12 | $26 \quad 0 \quad 10 \cdot 1$ | 609 | - 344 | 12.6 | + 7 | - 7 | $9 \cdot 2$ |  |
| 8583 | 273168 | C 9387 |  |  | $5310 \cdot 53$ | 3943 | 13 | $27 \quad 32 \quad 29.0$ | 609 | 338 | 12.4 | + 9 | + 7 | $9 \cdot 2$ |  |
| 8584 | 303358 | C 9390 |  |  | $\begin{array}{llll}53 & 11.87\end{array}$ | 3183 | 13 | $\begin{array}{llll}30 & 6 & 36 \cdot 1\end{array}$ | 611 | 327 | 12.4 | $+\quad 29$ | + 25 | $8 \cdot 7$ |  |
| 8585 | 283126 | C 9388 |  |  | $\begin{array}{llll}53 & 12.78\end{array}$ | 3759 | 13 | 281031.0 | 613 | 335 | 12.9 | $\pm 6$ | + 35 | $9 \cdot 2$ |  |
| 8586 | 293410 | C 9392 |  |  | $\begin{array}{llll}18 & 53 & 15.51\end{array}$ | +2.3285 | +.0013 |  | + 4.617 | +-329 | $12 \cdot 2$ | - 10 | - 1 | 8.I |  |
| 8587 | 233506 | B 6755 | $1573$ |  | $\begin{array}{llll}53 & 18 \cdot 86\end{array}$ | 4935 | 11 | $24 \quad 0 \quad 5 \cdot 3$ | 621 | 352 | $12 \cdot 9$ | + 24 | - 2 | $9 \cdot 3$ |  |
| 8588 | 27 3170 | C 9394 | 1577 |  | $53 \quad 20 \cdot 25$ | 4049 | 12 | 27 10 28.7 | 623 | 339 | 13.0 | + 25 | + 13 | $9 \cdot 1$ |  |
| 8589 <br> 8590 | 253670 | C 9396 |  |  | 5322.53 | 4376 | 12 | 26 I 30.6 | 627 | 344 | I 2.8 | - 8 | - 15 | $9 \cdot 0$ |  |
| 8591 | 313406 | L 6987 |  |  | I8 $\quad 53 \quad 22.89$ | +2.2806 | +.0013 | $312026 \cdot 1$ | + 4.627 | +.322 | 13.0 | + 21 | - | $9 \cdot 2$ |  |
| 8592 | 25 3671 | C 9397 |  | 35405 | $5323 \cdot 18$ | 4417 | 12 | $25 \quad 5247 \cdot 8$ | - 627 | 344 | 12.8 | + 7 | - 9 | $8 \cdot 2$ | A 0 |
| 8593 | 313407 | L 6988 | 1587-8-9 |  | 53 25.11 | 2887 | 13 | 315453.9 | 630 | 324 | 13.0 | - 14 | - 5 | 9.0 |  |
| 8594 | 25.3672 | C 9399 |  | 35407 | $\begin{array}{lll}53 & 28 \cdot 25\end{array}$ | 4390 | 12 | $25 \quad 5834 \cdot 0$ | 635 | $344$ | II 16 | - 8 | + 16 | $7 \cdot 34$ | A 0 |
| 8595 | 263405 | C 9400 | 1584 |  | $5328 \cdot 68$ | 4153 | 12 | $264^{8} \quad 56 \cdot 3$ | 635 | 34 I | 12.2 | - 16 | + 3 | $9 \cdot 2$ |  |
| 8596 | 313410 | L 6989 |  |  | $18 \quad 5333 \cdot 18$ | +2.2829 | +.0013 | $\begin{array}{llll}31 & 16 & 24.8\end{array}$ | + 4.642 | +.323 | 12.0 | + 3 | - 9 | $8 \cdot 6$ | A 2 |
| 8597 | 263406 | C 9402 |  |  | $5333 \cdot 46$ | 4183 | 12 | $264^{2} 44 \cdot 2$ | 642 | 341 | 12.0 | + 16 | - 21 | $9 \cdot 2$ |  |
| 8598 | $25 \quad 3675$ | C 9403 |  |  | 53 36.25 | 4594 | 12 | 25144570 | 646 | 347 | 12.6 | $+6$ | $+6$ | $9 \cdot 2$ |  |
| 8599 | 313411 | L 6992 |  |  | 53 41.22 | $2640$ | $\text { I } 3$ | $315248 \cdot 8$ | 65.3 | 320 | 10.6 | + 26 | + 15 | 7.10 | A 3 |
| 8600 | 243592 | B6759 | 1590 | 35441 | 53 48.24 | 4762 | $12$ | $243845 \cdot 8$ | 663 | 349 | II. 0 | + 2 | + 2 | $8 \cdot 7$ |  |
| 8565-6. These stars form the pair $\Sigma_{2419}$, magnitudes 8.7 and 8.8. Number of observations 4 and 2. <br> 8572,8573 . Number of observations 6. 8589 . There is no star corresponding to this number. <br> 8594. Number of obscrvations 7. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 19100. | Precession. | $\begin{aligned} & \text { Sec. } \\ & \text { Var. } \end{aligned}$ | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectra Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. 8.0001. | Dec. ".001. |  |  |
|  | $\checkmark$ |  |  |  | h m | s | 8 | - , | " | " |  |  |  |  |  |
| 8601 | 273176 | C 9407 |  |  | 185354.81 | +2.3913 | +.0013 | $27 \quad 3942 \cdot 9$ | $+4.672$ | + 337 | II.4 | - | + | $9 \cdot 2$ |  |
| 8602 | 273177 | C 9408 | 1596 |  | $5355 \cdot 65$ | 3942 | 13 | $273339 \cdot 6$ | -674 | 338 | 11.8 | + 38 | + 4 | $9 \cdot 2$ |  |
| 8603 | 283131 | C 9409 |  |  | $54 \quad 2.79$ | 3747 | 13 | 2814 I1-3 | 684 | 334 | 11.4 | + 31 | - 19 | $9 \cdot 2$ |  |
| 8604 8605 | 293416 | C 9413 |  |  | 5420.51 | 3234 |  | 2958 I4.I | 709 | 327 | 11.0 | 18 $+\quad 18$ | + 12 | $8 \cdot 7$ |  |
| 8605 | $30 \quad 3364$ | L 7005 |  |  | $54 \quad 24 \cdot 77$ | 3085 |  | $302744 \cdot 6$ | 715 | 325 | 11.6 | - 13 | - 2 | $8 \cdot 7$ |  |
| 8606 | 243595 | B 6763 | 1606 | 35440 | $18 \quad 5429.47$ | $+2.4782$ | +.0011 | $24 \quad 35 \quad 12.5$ | $+4.721$ | + 349 | 12.2 | + 16 | - | $7 \cdot 46$ | B 9 |
| 8607 | 273183 | C 9417 |  | 35454-5 | $5430 \cdot 34$ | 3808 | 13 | $28 \quad 2 \quad 23.4$ | 723 | 335 | 12.0 | - 9 | - 15 | $7 \cdot 6$ | Ko |
| 8608 | 25368 I | C 9415 |  |  | 5432.41 | 4615 | 12 | $\begin{array}{llllllllll}25 & \text { II } & 39.9\end{array}$ | 725 | 346 | 12.0 |  |  | $9 \cdot 6$ |  |
| 8609 | 253682 | C 9416 | 1608-9 |  | $5432 \cdot 61$ | 4605 | 12 | 251351.0 | 726 | 346 | II.6 | + 5 | + 4 | $9 \cdot 16$ | Go |
| 8610 | 273184 | C 9420 | 1614 |  | $5439 \cdot 38$ | 3925 | 12 | $\begin{array}{lllll}27 & 38 & 19.5\end{array}$ | 735 | 336 | 12.0 | - 9 | - 4 | $8 \cdot 6$ |  |
| 86II | 273185 | C 9422 | 1615 |  | 18, 5440.63 | +2.3916 | +.0012 | 2740 II $\cdot 2$ | + 4.737 | $+\cdot 336$ | 12.6 | + $4^{1}$ | + 25 | $8 \cdot 6$ |  |
| 8612 | 273186 | C 9425 | 1618 |  | $5443 \cdot 21$ | 3938 | 12 | $273548 \cdot 6$ | 741 | 337 | 12.0 | - 22 | - 3 | $8 \cdot 4$ |  |
| 8613 | 253683 | C 9428 | 1619-20 |  | 5449.76 | 4636 | 12 | $\begin{array}{llll}25 & 7 & 34 \cdot 3\end{array}$ | 750 | 346 | 11.2 | + 7 | + 16 | 7.91 | K 5 |
| 8614 | 253684 | C 9430 |  |  | 54 50.31 | 4457 | 12 | 254613.7 | 751 | 344 | 11.7 | + 15 | - 16 | $9 \cdot 2$ |  |
| 8615 | 253685 | C 9431 |  | 35463 | 54 53.11 | 4410 | 12 | $255620 \cdot 8$ | 755 | 343 | 10.4 | - 23 | + 4 | $8 \cdot 2$ | B 9 |
| 8616 | 243596 | B 6773 |  |  | $18 \quad 5454.49$ | +2.491I | +.0011 | $24 \quad 7 \quad 35 \cdot 2$ | + 4.757 | + 350 | 11.4 | $+3$ | $-62$ | $8 \cdot 7$ |  |
| 8617 |  | C 9432 |  |  | 5454.97 | 4371 | 12 | $\begin{array}{llllllllllll}26 & 4 & 44 \cdot 3\end{array}$ | 757 | 343 | 12.6 |  |  | $9 \cdot 2$ |  |
| 8618 | 253687 | C 9434 |  |  | 55 3.00 | 4577 | 12 | $252043 \cdot 1$ | 769 | 346 | II.4 | + 23 | + 13 | $8 \cdot 6$ | A |
| 8619 | 273188 | C 9435 | 1629 |  | $55 \quad 3.51$. | 3921 | 12 | $273945 \cdot 4$ | 770 | 336 | II. 8 | - 29 | - 22 | $9 \cdot 2$ |  |
| 8620 | 293423 | C 944 ${ }^{\text {I }}$ |  | 35488 | 55 21.57* | 3218 | 13 | $\begin{array}{llll}30 & 3 & 80\end{array}$ | 795 | 326 | II. 6 | + 52 | + 185 | $6 \cdot 55$ | G 0 |
| 8621 | 273193 | C 9442 |  |  | $\begin{array}{llll}18 & 55 & 29.64\end{array}$ | +2.4008 | +.0011 | 272221.3 | $+4.807$ | $+\cdot 337$ | II.2 | - 2 | + 11 | $9 \cdot 2$ |  |
| 8622 | 243598 | C 9443 | 1642-3 |  | 5533.42 | 4665 | 12 | $25 \quad 2 \begin{array}{lll}2 & 10.0\end{array}$ | 812 | 348 | II.8 | - 29 |  | $9 \cdot 0$ |  |
| $\|8623\|$ | 263414 | C 9446 |  |  | $5537 \cdot 69$ | 433 I | 12 |  | 818 | 342 | 11.8 | - 14 | - 26 | $9 \cdot 2$ |  |
| $\|8624\|$ | 293427 | C 9448 |  |  | $5548 \cdot 32$ | 3333 | 13 | 294048.3 | 833 | 328 | 10.8 | + 37 | + 16 | $9 \cdot \mathrm{I}$ |  |
| 8625 | 313419 | L 7024 | 1661 |  | $5549 \cdot 79$ | 2760 | 13 | $\begin{array}{lllllllllllllll}31 & 33 & 23.8\end{array}$ | 835 | 320 | 12.2 | + 10 | + 32 | $8 \cdot 2$ | Fo |
| 8626 | 293429 | C 9449 |  |  | $18555 \mathrm{I} \cdot 36$ | +2.3394 | +.0013 | $\begin{array}{ll}29 & 2841 \cdot 7\end{array}$ | $+4.837$ | $+\cdot 329$ | 12.0 | + 47 | + 2 | $8 \cdot 6$ |  |
| 8627 | 303376 | L 7025 |  |  | 55 56.88 | 3019 | 13 | $3043 \quad 12 \cdot 7$ | 845 | 323 | II.9 | - 2 | + 4 | $9 \cdot 2$ |  |
| 8628 | 313420 | L 7026 | 1665 |  | 55 58.33 | 2781 | 13 | $312930 \cdot 8$ | 847 | 321 | II.9 | + 14 | + 16 | $9 \cdot 2$ |  |
| $8629$ | 273195 | C 9452 |  |  | $\begin{array}{ll}56 & \text { I-14 }\end{array}$ | 4086 | 12 | $\begin{array}{llll}27 & 6 & 44 \cdot 6\end{array}$ | 851 | 339 | 12.5 | + 4 | - 20 | $8 \cdot 8$ |  |
| 8630 | 263418 | C 9453 |  | 35511 | $56 \quad 5 \cdot 5 \mathrm{I}$ | 4372 | 12 | $\begin{array}{lllll}26 & 6 & 19.7\end{array}$ | 857 | 343 | 12.6 | + 66* | - 19* | $5 \cdot 28$ | K |
| 8631 | 293432 | C 9458 |  |  | $18 \quad 56 \quad 14.30$ | +2.3335 | +.0013 | $2941 \begin{array}{lll}1 & 12 \cdot 8 \\ 26\end{array}$ | + 4.870 | + 328 | 13.2 |  |  | $9 \cdot 1$ |  |
| 8632 | 263419 | C 9457 |  |  | $\begin{array}{llllllll}56 & 15 \cdot 79\end{array}$ | 4326 | 12 | 261625.0 | 872 | 342 | 13.2 | + 22 | + 17 | $9 \cdot 8$ |  |
| 8633 | 313422 | L 7027 | 1679 |  | 56 I6.55 | 2761 | 13 | $313357 \cdot 9$ | 873 | 320 | 12.6 | + 30 | - 1 | $9 \cdot 0$ |  |
| 8634 | 263420 | C 9459 |  | 35520 | $\begin{array}{llll}56 & 19.44\end{array}$ | 4339 | 12 | $\begin{array}{llllllllllllll}26 & 13 & 359\end{array}$ | 877 | 342 | 12.8 | + 17 | - 22 | 8.6 |  |
| 8635 | 26342 I | C 9460 |  | 3552 I-2-3 | $56 \quad 21 \cdot 47$ | 4166 | 12 | $26 \quad 50 \quad 23 \cdot 8$ | 880 | 340 | 12.6 | $+3$ | - II | $6 \cdot 70$ | B 8 |
| 8636 | 243602 | C 9461 | 1673 |  | I8 5623.75 | +2.4669 | +.0011 | $25 \quad 254.6$ | $+4.883$ | + 347 | 13.0 | - 2 | II | $9 \cdot 1$ |  |
| 8637 | 243603 | C 9462 | 1674-5 |  | $5627 \cdot 65$ | 4666 | 1 I | $25 \quad 3 \quad 25 \cdot 3$ | -889 | 347 | 12.4 | - 4 | + 5 | $8 \cdot 6$ |  |
| 8638 | 293434 | C 9466 | 1698 |  | $5637 \cdot 72$ | 3464 | 13 | $2915 \quad 54.4$ | 903 | 330 | 12.2 | + 12 | - 17 | 8.6 |  |
| 8639 | 253694 | C 9464 |  |  | $5637 \cdot 85$ | 4492 | 11 | 254123.2 | 903 | 344 | $\mathrm{II}^{1} 8$ | + 6 | - 21 | $9 \cdot 2$ |  |
| 8640 | 283146 | C 9468 |  |  | $5641 \cdot 57$ | 3563 | 13 | 2855 54-I | 908 | 334 | 12.9 | $+10$ | 8 | 8.1 | A |
| 8641 | 283148 | C 9471 |  |  | $18 \quad 5643.02$ | +2.3543 | $+\cdot 0013$ | $\begin{array}{lllll}28 & 59 & 59.9\end{array}$ | $+4.910$ | +.33I | 12.4 | + 8 | + 16 | 8.5 | A |
| 8642 | 273198 | C 9469 |  |  | $5643 \cdot 76$ | 3975 | 12 | 27 31 5-I | 912 | 337 | I2.2 | - 15 | + 4 | 8.8 |  |
| 8643 | 283147 | C 9472 | 1691 |  | $5643 \cdot 80$ | 3676 | 13 | $283^{22} 59^{\circ} \mathrm{L}$ | 912 | 333 | II. 8 | + 20 | + 25 | $7 \cdot 7$ | K o |
| 8644 8645 | 313425 | L 703 I C 9470 |  |  | 5648.30 56 56.98 | 2866 | 13 | $\begin{array}{lllll}31 & 1 & 4 & 31.5 \\ 28 & 18 & 450\end{array}$ | 918 | 321 | 12.4 | + 18 | - 3 | $9 \cdot 2$ |  |
| 8645 |  | C 9470 |  |  | $56 \quad 52 \cdot 98$ | 3746 | 13 | $28 \quad 1845 \cdot 0$ | 924 | 334 | 13.5 |  |  | $9 \cdot 2$ |  |
| 8646 | 293437 | C 9474 | 1707 |  | $\begin{array}{llll}18 & 56 & 55 \cdot 19\end{array}$ | +2.3369 | +.0013 | 293520.4 | + 4.928 | + 329 | II•7 | + 33 | - 22 | $9 \cdot 2$ |  |
| 8647 | 263424 | C 9478 |  | 35564-7 | 5711.33 | 4136 | 12 | $265754 \cdot 4$ | 950 | 339 | 12.0 |  | - 18 | 8.8 | A |
| $\|8648\|$ | 283151 | C 948 I | 1714 |  | $5717 \cdot 41$ | 3601 | 12 | $2849 \quad 3 \cdot 3$ | 959 | 332 | II. 8 | + 23 | + 53 | $9 \cdot 3$ |  |
| 88649 |  | C 9479 |  | 35569 | $5717 \cdot 61$ | 4271 | 12 | $\begin{array}{llllllllll}26 & 29 & 34\end{array}$ | 959 | 341 | 12.4 | + 11 | - 7 | 8.2 | A 5 |
| 8650 | 263426 | C 9480 |  | 35568 | $57 \quad 17.92$ | 4316 | 12 | $26 \quad 1959.8$ | 960 | 342 | 11.7 | + 32 | + 3 | 8.6 | A |


|  |  |  |  |  |  |  |  |  |  |  |  | Annu | al P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { sooot } \end{aligned}$ | R.A. $8.0001$ | $\begin{aligned} & \text { Dec. } \\ & \text { D.Oor. } \end{aligned}$ | Mag. | Type. |
|  | - |  |  |  | h m | 8 | 8 | - , " | " | " |  |  |  |  |  |
| $\left\lvert\, \begin{array}{\|c\|c} 8651 \\ 86-2 \end{array}\right.$ | 303388 | L 7036 |  |  | $18 \quad 57 \quad 34 \cdot 68$ | $+2.3147$ | +.0013 | 302053.0 | $+4.983$ | +-325 | 11.9 | + | - 14 | 8.7 |  |
| $8652$ | 263428 | C 9482 |  |  | 5736.33 | 4249 | 12 | $263439 \cdot 3$ | 986 | $34^{\circ}$ | 11.8 | + 25 | - 22 | $9 \cdot 0$ |  |
| $8653$ | 273203 | C 9483 |  | 35587-8 | $5736 \cdot 60$ | 4097 | 12 | $27 \quad 646 \cdot 2$ | 986 | 339 | 11.8 | - | - 5 | 8.0 |  |
| 8654 | 263429 | C 9484 | 1721 | 35584-5 | $5737 \cdot 98$ | 4366 | 12 | $26 \quad 947 \cdot 0$ |  | 342 | 11.7 | - $3^{*}$ | - 7* | 5.50 | B 3 |
| 8655 | 283153 | C 9487 |  | 3558 | $5743 \cdot 99$ | 3761 | 12 | 281659.6 | 997 | 334 | 12.2 | 10 | $+6$ | 6.78 | B 5 |
| 8656 | 263430 | C 9486 | 1722 |  | $185745 \cdot 71$ | +2.4338 | +.0012 | $\begin{array}{llll}26 & 16 & 2 \cdot 3\end{array}$ | + 4.999 | + 342 | 12.0 | - 18 | 5 | $8 \cdot 6$ |  |
| 8657 | 293444 | C 9488 | 1726 | 35602 | 5748 | 3436 | 13 | 2923 23.2 | $5 \cdot 003$ | 329 | 12.6 | + 16 | - 8 | $6 \cdot 64$ | A o |
| 8658 | 243607 | B 6796 |  |  | 5750.09 | 4941 | 11 | $24452 \cdot 6$ |  | 351 | 11.9 | + | - 9 | $9 \cdot 2$ |  |
| 8659 | 243608 | B6797 |  |  | $5752 \cdot 34$ | 4719 | 11 | 245348.6 | 008 | 347 | 12.2 | - 3 | + 4 | $6 \cdot 92$ |  |
| 8660 | 273204 | C 9490 |  |  | 5754.92 | 4057 | 12 | 271548.2 | 012 | 338 | 12.0 | + 16 | - 8i | 9.0 |  |
| 8661 | 293445 | C 9492 | 1732 |  | $185755 \cdot 15$ | +2.3506 | $+\cdot 0013$ | $29 \quad 931 \cdot 0$ | $+5.012$ | +•330 | 11.8 | + 12 | + 11 | 8.2 | A 3 |
| 8662 | 303389 | L 7042 |  |  | 5758.97 | 2995 | 13 | 305122.2 | 0.8 | 323 | 12.2 | + | - 4 | $9 \cdot 0$ |  |
| 8663 | 313431 | L 7045 |  |  | $\begin{array}{ll}58 & 7 \cdot 16\end{array}$ | 2888 | 13 | 311221.8 | 029 | 320 | 12.4 | - 21 | $-31$ | $9 \cdot 2$ |  |
| 8664 | 273206 | C 9493 |  |  | $\begin{array}{lll}58 & 8.20\end{array}$ | 3850 | 12 | 275914.1 | 03 I | 334 | 12.5 | - | + 17 | 8.4 |  |
| 8665 | 273207 | C 9496 |  |  | $58 \quad 13 \cdot 12$ | 4043 | 12 | $271910 \cdot 6$ | 038 | 337 | 12.0 | $+4^{\circ}$ | - 4 | $8 \cdot 5$ |  |
| 8666 | 253703 | C 9495 |  |  | $18 \quad 58 \quad 13.58$ | +2.4520 | +.0011 | $253736 \cdot 6$ | $+5.038$ | + 343 | 12.2 | + 17 | + 86 | $9 \cdot 0$ |  |
| 86671 | $28 \quad 3156$ | C 9501 | 1744 |  | 5815.98 | 3596 | 12 | $285144 \cdot 1$ | - 042 | 331 | 12.9 | + 8 | + 16 | $9 \cdot 6$ |  |
| 8668 | 303390 | L 7051 |  |  | $58 \quad 32.03$ | 2978 | 12 | $305536 \cdot 0$ | 064 | 321 | 11.8 | + 34 | - 45 | 8.5 |  |
| 8669 | 233536 | B 6804 |  |  | 5836.60 | 4952 | 10 | $24 \quad 3 \quad 36 \cdot 2$ | 07 I | 349 | 12.4 | + 38 | - $4^{6}$ | 8.8 | K o |
| 8670 | 273212 | C 9506 |  |  | $5840 \cdot 46$ | 3946 | 12 | $274010 \cdot 0$ | 076 | 335 | 12.2 | 32 | + 23 | $9 \cdot 0$ |  |
| 8671 | 303392 | L 7053 | 1767 |  | $18 \quad 58 \quad 40.96$ | $+2.3166$ | +-0012 | $3018 \quad 50 \cdot 2$ | $+5.077$ | $+\cdot 325$ | 12.4 | + 13 | - 14 | 8.6 |  |
| 8672 | 273213 | C 9507 |  |  | $5841 \cdot 47$ | 3944 | 12 | 274044.9 | 077 | 335 | 12.0 | - 25 | + 17 | 8.8 |  |
| 8673 | 283160 | C 9508 |  | 35638 | $58.42 \cdot{ }^{8}$ | 3827 | 12 | $\begin{array}{llll}28 & 5 & 0.9\end{array}$ | 0.79 | 334 | 12.3 | + 10 | - 39 | 8.6 |  |
| 8674 | 293453 | C 9516 | 1775 | 35661-2 | 59 '8.79 | 3515 | 12 | $29 \quad 940 \cdot 5$ | 116 | 329 | 10.6 | + 26 | - 23 | $7 \cdot 73$ | K o |
|  | 31 3441 |  |  |  | 5914.88 | 2879 | 13 | $\begin{array}{llllllllllll}31 & 16 & \end{array}$ | 125 | 320 | 10.6 | + | - 11 | $8 \cdot 2$ | A 3 |
| 8676 |  | L 7055 | 1781 |  | $18 \quad 5915.26$ | +2.2879 | +.0013 | $\begin{array}{llll}31 & 16 & 5 \cdot 4\end{array}$ | + 5.125 | $+320$ | 12.3 | + 3 | 11 |  |  |
| 8677 | 253709 | C 952 I |  |  | 5928.03 | 4457 | 11 | $25 \begin{array}{lll}25 & 5 \cdot 8\end{array}$ | 143 | 342 | 11.2 | + 51 |  | 9.1 |  |
| 8678 | 253708 | C 9522 | 1780 |  | 5928.78 | 4658 | 11 | $\begin{array}{llllll}25 & 9 & 34 \cdot 8\end{array}$ | 144 | 345 | 11.6 | - 5 | - 6 | $8 \cdot 3 \mathrm{I}$ | A 0 |
| 8679 | 31 3442 <br> 28  <br> 1  | L 7058 |  |  | $59 \quad 29.69$ | 2794 | 13 |  | 146 | 319 | 12.3 | - 1 | $+$ | 9-1 |  |
| 8680 | 283166 | C 9524 |  |  | $5934 \cdot 35$ | 3775 | 12 | $\begin{array}{llll}28 & 17 & 9.5\end{array}$ | 152 | 333 | 11.6 | 30 | + | $9 \cdot 0$ |  |
| 8681 | 253710 | C 9525 | 1788 | 35673 | $18 \quad 59$ 37.21 | +2.45 I I | +.0011 | $254136 \cdot 3$ | + $5 \cdot 156$ | + 343 | 1.0 | 7 | 14 | 6.93 | B 8 |
| 8682 | 293457 | C 9529 |  |  | $5942 \cdot 90$ | 3302 | 12 | 2953 35. 1 | $1{ }^{1} 4$ | 326 | $11 \cdot 3$ | - 13 | - 5 | 7.91 | $\mathrm{K}_{2}$ |
| 8683 | 253711 | C 9528 | 1793 | 35688 | - $5945 \cdot 39$ | 4449 | 11 | 2555 II. 2 | 168 | 342 | 11.4 | + 24 | + 15 | 8.0 | A 0 |
| 8684 | 243619 | C9531 |  |  | - 5953.19 | 4683 | 11 | $25 \quad 440 \cdot 6$ | 179 | 346 | 11.3 | , | + 17 | 8.8 |  |
| 8685 | 313445 | L 7065 | 1811 | 35706 | 1859 56.77 | 2800 | 13 | $\begin{array}{llll}31 & 3241.5\end{array}$ | 184 | 319 | 10.0 | 33 | - 45 | 8.6 | K 5 |
| 8686 | 273225 | C 9536 |  |  | $19 \quad 3.76$ | +2.3928 | . 0012 | 274615.8 | + 5.194 | + 335 | 11.7 | 40 | - 36 | $9^{9} 0$ |  |
| 8687 | 253712 | C 9537 | 1804 |  | - $7 \cdot 90$ | 4457 | 11 | $\begin{array}{llll}25 & 54 & 6 \cdot 3\end{array}$ | 199 | 342 | 11.8 | + 15 | + 60 | $9 \cdot 2$ |  |
| 8688 | 263437 | C 9538 |  |  | - 12.70 | 4273 | 11 | $263342 \cdot 7$ | 206 | 340 | II. 8 | + 11 | - 56 | $9 \cdot 0$ |  |
| 8689 | $28 \quad 3172$ | C 9540 |  |  | - 23.14 | 3629 | 12 | 284825.0 | 221 | 331 | 12.4 | - 14 | + | $9 \cdot 2$ |  |
| 8690 | $25 \quad 3713$ | C 9541 |  |  | - 29.71 | 4622 | 11 | $25 \quad 1924$ | 230 | 345 | 12.3 | + 28 | 12 | 9.0 |  |
| 8691 | 303397 | $\mathrm{L}_{7067}$ |  |  | $19 \quad 0 \quad 29.73$ | +2.3015 | +.0012 | 305254.2 | + 5.230 | +.322 | 12.0 | + 7 | + 12 | 8.8 |  |
| 8692 | 293460 | C $954{ }^{2}$ | 1826 |  | $\bigcirc 33.93$ | - 3267 | 这 | $\begin{array}{llll}30 & 1 & 59.9\end{array}$ | + 236 | 326 | 11.8 | + 15 | - 8 | 9.1 |  |
| 8693 | 303399 | L 7069 |  |  | - $37 \cdot 31$ | 3056 | 12 | $304351 \cdot 7$ | 241 | 322 | 12.6 | + 19 | + | $9 \cdot 2$ |  |
| 8694 | 273228 | C 9544 | 1831 | 35726-7 | - 44.4 I | 4101 | 11 | 27 II $7 \cdot 8$ | 251 | 337 | 11.4 | + 21 | - 25 | $7 \cdot 05$ | B 9 |
| 8695 | 283174 | C 9545 |  |  | - $46 \cdot 51$ | 3719 | 12 | $283043 \cdot 8$ | 254 | 332 | 12.4 | + 15 | + 6 | 9.0 |  |
| 8696 | 303402 | L 7073 |  |  | $19 \bigcirc 52.55$ | +2.3017 | +.0012 | 305210.6 | $+5.262$ | $+\cdot 322$ | 12.0 | - 13 | + 20 | 9.2 |  |
| 8697 | 313448 | L 7076 | 1845-6 |  | - $055 \cdot 17$ | 2906 | 12 | 311349.1 | + 266 | 320 | 12.1 | + 7 | + 6 | 8.2 | A 0 |
| 8698 | 273229 | C 9548 |  |  | - 55.29 | 4032 | 11 | $2725{ }^{2} 2.6$ | 266 | 336 | 12.8 | 12 | 5 | $9 \cdot 2$ |  |
| 8699 | 253714 | C 9547 |  |  | - $55 \cdot 63$ | 4560 | 11 | $25 \quad 3313.3$ | 267 | 344 | 12.8 | 33 | - 39 | $9 \cdot 2$ |  |
| 8700 | 253715 | C9551 |  | 35736-7 | I $2 \cdot 19$ | 4534 | 11 | 2539 4.1 | 276 | 343 | 12.4 | + 5 | + 4 | $8 \cdot 2$ | A 0 |


| No. | B. $\mathrm{D}_{\text {i }}$ | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P. M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\xrightarrow[\text { R. A. }]{\text { R. }}$ | Dec. *.001. |  |  |
|  | $\bigcirc$ |  |  |  | h m m | 8 | 8 | - " | " | " |  |  |  |  |  |
| 8701 | 263439 | C 9553 | 1841 |  | 19 $\mathrm{I} \quad 2.94$ | +2.4381 | +.0011 | 26124.9 | + 5.277 | +.341 | I2.9 | + 21 | 0 | $9 \cdot 0$ |  |
| 8702 | 243624 | B6832 |  |  | 19.79 | 4774 | 1 I | $244^{6} 50 \cdot 5$ | 287 | 346 | 12.6 | - 6 | - 30 | $8 \cdot 6$ |  |
| 8703 | 263441 | C 9555 | 1848 |  | 114.46 | 4374 | 1 I | $261346 \cdot 7$ | 293 | 341 | 12.6 | + 32 | - 17 | $9 \cdot 2$ |  |
| 8704 | 273235 | C 9559 | 1853 | 35759-61 | 120.07 | 3857 | 12 | $\begin{array}{llll}28 & 3 & 7 \cdot 8\end{array}$ | 301 | 333 | 12.8 | + 10 | + 3 | $7 \cdot 6$ | A 0 |
| 8705 | 253717 | C 9558 |  | 35753-4 | I 22.37 | 4523 | II | $25 \quad 42 \quad 5 \cdot 4$ | 304 | 343 | 12.6 | + 23 | + 14 | $7 \cdot 6$ | A 0 |
| 8706 | 283180 | C 9562 | 1859 |  | 19 1 28.32 | $+2.3601$ | $+.0012$ | $\begin{array}{llll}28 & 56 & 8.8\end{array}$ | +5.313 | +.329 | 12.5 | + 6 | + 17 | $9 \cdot 2$ |  |
| 8707 | 303409 | L 7083 | 1861 | 35774 | I 30.06 | 3105 | 12 | $3035 \quad 5 \mathrm{I} \cdot 4$ | 315 | 323 | 12.8 | + 25 | - 16 | $6 \cdot 39$ | Ma |
| 8708 | 3 I 3453 | L 7085 |  | 35779 | 132.11 | 2795 | 13 |    <br> 1 36 34.2 | 318 | 319 | 12.6 | + $55^{*}$ | - $4^{*}$ | $5 \cdot 80$ | K 5 |
| 8709 | $27 \quad 3237$ | C 9563 |  |  | 132.68 | 3984 | 12 | $27 \quad 37 \quad 1 \cdot 7$ | 319 | 335 | 12.9 | + 39 | - 14 | $9 \cdot 0$ |  |
| 8710 | 31 3455 | L 7086 | 1868 |  | 136.05 | 2840 | 12 | $\begin{array}{lllll}31 & 2753.9\end{array}$ | 323 | 319 | 12.8 | + 23 | + 8 | $9 \cdot 0$ |  |
| 87 II | $25 \quad 3719$ | C 9564 |  | 35769-71 | $19 \quad 140.43$ | $+2.4501$ | +.0011 | $\begin{array}{llll}25 & 47 & 5 \cdot 4\end{array}$ | + 5.330 | +•343 | 13.0 | - 25 | - 41 | $7 \cdot 22$ | K o |
| 8712 | 313457 | L 7088 | 1872 |  | $146 \cdot 19$ | 2892 | 12 | 31188.0 | 338 | 320 | 12.6 | + 8 | - 13 | $8 \cdot 0$ | G 5 |
| 8713 | 263445 | C 9565 |  |  | I 49.29 | 4203 | 11 | 265114.3 | 342 | 338 | 12.6 | - I | - 15 | $9 \cdot 2$ |  |
| 8714 | 293467 | C 9566 |  |  | 152.17 | 3499 | 12 | 291741.8 | 346 | 328 | I 2.8 | + 9 | - 37 | $9 \cdot 0$ |  |
| 8755 | 293468 | C 9567 |  |  | 153.15 | 3519 | 12 | $291330 \cdot 6$ | 347 | 328 | 12.0 | + 16 | - 9 | $9 \cdot 0$ |  |
| 8716 | 273240 | C 9570 |  |  | 1920.11 | $+2.4087$ | +.001 1 | 27 I6 II•I | + $5 \cdot 357$ | +.336 | 12.2 | + 6 | - 9 | $8 \cdot 0$ | A 0 |
| 8717 | 27324 I | C 9571 |  |  | 21.85 | 4122 | 1 I | $27 \quad 850.6$ | 360 | 336 | I 1.6 | 0 | - 6 | $8 \cdot 0$ | F 5 |
| 8718 | 263446 | C 9572 |  |  | 214.95 | 4390 | 1 I | $\begin{array}{llll}26 & 12 & 0.8\end{array}$ | 378 | 340 | $2 \cdot 2$ | - 21 | - 10 | $9 \cdot 2$ |  |
| 8719 | 313459 | L 7095 | 1890 |  | 215.38 | 2878 | 12 | $\begin{array}{llll}31 & 2150.4\end{array}$ | 379 | 319 | 12.6 | + 26 | + 1 | $9 \cdot 2$ |  |
| 8720 | 293472 | C 9574 | 1885 | 35812 | 216.89 | 3357 | 12 | 2947 I.8 | 38 I | 326 | $12 \cdot 1$ | + 16 | - 4 | $6 \cdot 62$ | K 5 |
| 8721 | 263447 | C 9573 | 1880 |  | 19 2 8.08 | +2.4223 | +.001 I | $264747 \cdot 0$ | + $5 \cdot 382$ | +.338 | 12.5 | - I | + 20 | $9 \cdot 2$ |  |
| 8722 | 293473 | C 9575 | 1886 |  | 218.87 | 3532 | 12 | -29 II 45.4 | 384 | 328 | 11.2 | + 15 | - 45 | $8 \cdot 0$ |  |
| 8723 | 283186 | C 9577 | 1887-9 | 35804-5 | 219.92 | 3597 | 12 | $285830 \cdot 5$ | 385 | 329 | I•O | - 13 | - 6 | $8 \cdot 0$ | A 0 |
| 8724 | $28 \quad 3187$ | C 9578 |  | 35806 | 221.46 | 3683 | 12 | $28 \quad 4049 \cdot 2$ | 387 | 330 | II.O | + 9 | - 20 | $7 \cdot 7$ |  |
| 8725 | 293475 | C 9580 |  |  | $235 \cdot 00$ | 3501 | 12 | 29 I8 24.2 | 406 | 328 | I 1.7 | - 2 | $+\quad 19$ | $9 \cdot 0$ |  |
| 8726 | 303412 | L 7098 |  |  | 19 235.89 | $+2 \cdot 3047$ | +-COI2 | 3049 18.1 | $+5.408$ | +.322 | 12.0 | + 12 | - 16 | $9 \cdot 2$ |  |
| 8727 | 243636 | B 6843 | 1894 |  | $237 \cdot 97$ | 4855 | 10 | 243053.9 | 410 | 347 | 10.4 | 0 | + 2 | $8 \cdot 5$. |  |
| 8728 | 303413 | L 7099 |  |  | 239.99 | 3206 | 12 |  | 413 | 325 | . 2 | + 49 | - 30 | $8 \cdot 2$ | K o |
| 8729 | $28 \quad 3189$ | C 9581 |  |  | $241 \cdot 87$ | 3762 | 12 | $28 \quad 2510.7$ | 416 | 33 I | II.8 | + 41 | + I | $8 \cdot 7$ |  |
| 8730 | 273245 | C 9582 |  |  | $245 \cdot 79$ | 4005 | 12 | 2734 44•I | 421 | 335 | 12.9 | - $3^{6}$ | - 164 | $9 \cdot 2$ |  |
| 8731 | 243640 | B 6846 | 1902 | 35819-20 | $19 \quad 2 \quad 53.26$ | $+2.4968$ | +.0010 | $24 \quad 638 \cdot 6$ | +5.432 | + 347 | $9 \cdot 2$ | + 4 ${ }^{\text {* }}$ | $+3{ }^{*}$ | $5 \cdot 72$ | A 5 |
| 8732 | 283192 | C 9585 |  |  | 253.90 | 3717 | 12 | $28 \quad 3448 \cdot 5$ | - 433 | 330 | I 2.2 | - 38 | -74 | $9 \cdot 2$ |  |
| 8733 | $25 \quad 3724$ | C 9583 | 1904 |  | $254 \cdot 37$ | 4623 | 1 I | $\begin{array}{lllllllll}25 & 22 & 42 \cdot 3\end{array}$ | 433 | 343 | $12 \cdot 3$ | + 31 | + 19 | $9 \cdot 2$ |  |
| 8734 | 313465 | L 7102 | 1920 |  | 30.16 | 2812 | 12 | $\begin{array}{lll}31 & 36 & 2.7\end{array}$ | 441 | 318 | $11 \cdot 9$ | + 13 | + 4 | 9•I |  |
| 8735 | 28 31931 | C 9588 | 1914 | $35^{8} 36-7$ | $3 \quad 3 \cdot 4^{2}$ | 3746 | 12 | $28 \quad 2912.2$ | $44^{6}$ | 330 | $9 \cdot 6$ | + $54^{*}$ | + $68 *$ | $5 \cdot 46$ | A 5 。 |
| 8736 | 263452 | C 9592 |  |  | $19 \quad 319.66$ | $+2.4366$ | +.0011 | 26 I $8 \quad 54 \cdot 3$ | + 5.469 | +.340 | 12.1 | + 8 | - 4 | $8 \cdot 4$ | Ko |
| 8737 | 273248 | C 9593 |  |  | 321.04 | 3998 | 12 | $27 \quad 37 \quad 16 \cdot 3$ | 47 I | 334 | 10.4 | + 7 | - 9 | $8 \cdot 7$ | A |
| 8738 | 283198 | C 9594 | I |  | $325 \cdot 54$ | 3581 | 12 | $29 \quad 3 \quad 42 \cdot 4$ | 477 | 328 | 10.2 | + 13 | + 44 | $8 \cdot 7$ |  |
| 8739 | 263453 | C 9595 |  |  | $330 \cdot 05$ | 4296 | II | $26 \quad 3417.2$ | - 483 | 339 | II.3 | 0 | $+35$ | 8.6 |  |
| 8740 | 253725 | C 9596 |  |  | 3 32.10 | 4697 | II | $25 \quad 7 \quad 32.5$ | 486 | 345 | II.6 | $+16$ | - 15 | 9.1 |  |
| 8741 | 243643 | B 6855 |  | 35853 | 19334.20 | +2.4899 | +.0010 | $2423 \quad 5 \cdot 7$ | $+5.489$ | $+\cdot 346$ | 11.2 | + 3 | - 17 | $8 \cdot 7$ | A 2 |
| 8742 | 253726 | C 9598 | 4 |  | 3 41.33 | 4504 |  | $2549 \cdot 55 \cdot 4$ | 499 | 342 | 10.6 | - 3 | + 4 | $8 \cdot 6$ | A 2 |
| 8743 | 283201 | C 9604 |  |  | $346 \cdot 53$ | 3769 |  | $28 \quad 2542 \cdot 7$ |  | 330 | 10.6 | + 27 | + 25 | $9 \cdot 2$ | Ma |
| 8744 | 243644 | B 6858 | 8 |  | 35 I .06 | 4859 |  | $2432 \begin{array}{llll} & 22 \cdot 4\end{array}$ | 513 | 346 | 10.8 | + 12 | - 9 | $9 \cdot 2$ |  |
| 8745 | $27 \quad 3253$ | C 9505 | 21 |  | 4 I•I4 | 3951 | 12 | $\begin{array}{llll}27 & 48 & 15.9\end{array}$ | 527 | 334 | I I $\cdot 0$ | + 28 | + 16 | $9 \cdot 1$ |  |
| 8746 | 283202 | C 9606 |  |  | $\begin{array}{llll}19 & 4.40\end{array}$ | $+2.3759$ | +.0012 | $\begin{array}{lll}28 & 28 & 15.0\end{array}$ | + 5.527 | $+.330$ | 12.8 |  |  | $9 \cdot 6$ |  |
| 8747 | 303425 | C 9607 | 24 | 35882 | $4 \quad 2.09$ | 3276 | $12$ | $\begin{array}{llll}30 & 6 & 36 \cdot 3\end{array}$ | -528 | . 324 | 10.2 |  | + 107 | $8 \cdot 06$ | G 5 |
| 8748 | 253730 | C 9608 |  |  | 414.73 | $4653$ |  | $\begin{array}{lllll}25 & 18 & 14.2\end{array}$ | 546 | - 343 | 12.4 | + 33 | - 5 | $9 \cdot 2$ |  |
| $8749$ | 303427 | L 7114 | 52 |  | 4 17.6I | $3152$ | $12$ |  | 550 | - 322 | II.O | - 3 | - 23 | $8 \cdot 7$ |  |
| 8750 | $24 \cdot 3650$ | B 6862 | 27 | 35881-3 | 4 18.2I | 4850 | $10$ | $2435 \quad 0.3$ | 55 I | I 346 | 11.6 | + 8 | + 2 | $6 \cdot 66$ | B 5 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { B. } 000 \text { r. } \end{aligned}$ | Dec. <br> *oor. |  |  |
|  | - |  |  |  | b m | a | a | - , | " | " |  |  |  |  |  |
| 8751 | 293482 | C 9612 |  |  | $\begin{array}{ll}19 & 4 \\ 18.36\end{array}$ | +2.3515 | +.0012 | $291842 \cdot 1$ | + $5 \cdot 55 \mathrm{I}$ | + 327 | 13.0 | $+$ | - 36 | $9 \cdot 2$ |  |
| 8752 | 253732 | C 9610 |  |  | 419.60 | 4658 | 11 |  | 553 | 343 | 12.8 | - 12 | - 23 | 9.2 |  |
| 8753 | 253733 | C 9611 | 30 | 35889-92 | 421.24 | 4498 | 11 | $25 \quad 52 \quad 10 \cdot 2$ | 555 | 341 | 11.2 | + + | - 2 | 7.26 | K o |
| 8754 8755 | 283204 | C 9613 | 34 |  | $42 \mathrm{I} \cdot 89$ | 3828 | 12 | $\begin{array}{llllllllll}28 & 14 & 29.8\end{array}$ | 556 | 331 | 12.2 |  | + 6 | 8.8 |  |
| $8755$ | $\} 293483$ | C 9615 |  | 35907 | 422.93 | 3414 | 12 | 293928.8 |  | 325 | 11.9 |  | + 2 | 8.0 | o |
| 8756 |  |  |  |  | I9 423.01 | +2.3414 | +.001 2 | 293928.5 | + $5 \cdot 558$ | + 325 | 10.6 |  | + |  |  |
| 8757 | 293484 | C 9616 |  |  | 423.87 | 3357 | 12 | 2951000 | + 559 | 325 | 12.4 | + $\quad 27$ | - 21 | 9-1 |  |
| 8758 | 253734 | C 9614 | 31 |  | 424.99 | 4494 | 11 | 255314.5 | 560 | 34 I | 13.0 | - 7 | + 6 | $8 \cdot 7$ |  |
| 8759 | 253735 | C 9618 | 36 | 35903 | 434.26 | 4675 | 10 | $\begin{array}{llll}25 & 14 & 0.5\end{array}$ | 573 | 343 | 11.5 |  | - 76 | $7 \cdot 56$ | F 8 |
| 8760 | 303430 | L 7117 |  |  | $435 \cdot 48$ | 3028 | 12 | $\begin{array}{lll}30 & 57 & 2.4\end{array}$ | 575 | 320 | $12 \cdot 1$ | - 13 | + 15 | $8 \cdot 8$ |  |
| 8761 | 303429 | L 7118 | 48 |  | 19436.43 | +2.3168 | +.0012 | $\begin{array}{lll}30 & 29 & 9.5\end{array}$ | + $5 \cdot 576$ | +-323 | 12.1 | - 6 | - 17 | $7 \cdot 66$ | K 5 |
| 8762 | 253736 | C 9619 | 37 |  | $436 \cdot 61$ | 4525 | 11 | $254649 \cdot 3$ | 577 | 342 | 13.1 | + 15 | + $\quad 24$ | $8 \cdot 7$ | A 0 |
| 8763 | 283207 | C 9621 |  |  | $+37.57$ | 3829 | 12 | $\begin{array}{lllllllllll}28 & 14 & 53.9\end{array}$ | 578 | 331 | 13.0 | + 20 | + 8 | $9 \cdot 6$ |  |
| 8764 | 263458 | C 9620 |  | 35917-8-9 | 438.38 | 4199 | 11 | $26 \quad 57 \quad 4.0$ | 579 | 337 | 11.5 | + 22 | - 20 | 8.0 | A o |
| 8765 | 303432 | L 7121 | 51 |  | $439 \cdot 60$ | 3201 | 12 | 302237.6 | 581 | 323 | 12.8 | + 12 | - 15 | 9.I |  |
| 8766 | 243654 | B6865 | 47 |  | 19 4 51.06 | +2.4960 | 0010 | 24 II 28.5 | + $5 \cdot 597$ | + 347 | II. 6 | + 6 | - | $9 \cdot 0$ |  |
| 8767 | 233572 | B 6866 | 49 | 35928-9 | $452 \cdot 61$ | 5002 | 10 |  |  | 348 | 11.5 | - | - 12 | $6 \cdot 96$ | K 2 |
| 8768 8769 | 283208 | C 9623 |  |  | 453.02 | 3622 | 12 |  | 600 | 328 | 11.0 | 1 | + 15 | $9 \cdot 1$ |  |
| 8769 | 263460 | C 9624 |  |  | $457 \cdot 55$ | 4172 | 11 | $\begin{array}{llll}27 & 3 & 7 \cdot 3\end{array}$ | 606 | 337 | 11.7 | + | - $4^{2}$ | $9 \cdot 1$ |  |
| 8770 | 313473 | L 7125 |  | 35948 | $5 \quad 5 \cdot 02$ | 2734 | 12 | $\begin{array}{llll}31 & 55 & 3.6\end{array}$ | 617 | 316 | 11.6 | + 7 | - 7 | $8 \cdot 5$ |  |
| 8771 | $28 \quad 3210$ | C 9625 | 61 |  | $19 \quad 511.03$ | +2.3828 | $+.0012$ | $\begin{array}{lllll}28 & 15 & 52.2 \\ 29\end{array}$ | + $5 \cdot 625$ | +-331 | 10.5 | + 5 | - 20 | 8.6 |  |
| 8772 | 293488 | C 9626 |  |  | 516.43 | 3551 | 12 | $\begin{array}{lll}29 & 13 & 8.8\end{array}$ | 632 | 327 | 11.0 | + 24 | - 25 | $8 \cdot 8$ |  |
| 8773 | 28321 I | C 9627 | 73 |  | 521.03 | 3724 | 12 | 2837 48-1 | 639 | 330 | $1 \mathrm{I} \cdot 7$ | - 4 | + 10 | $9 \cdot 2$ |  |
| 8774 | 303439 | L 7129 | 74 |  | 522.11 | 3097 | 12 | $304444^{\circ} \mathrm{O}$ |  | 321 | 12.1 | - 5 | - 7 | $8 \cdot 6$ | $\text { A } \circ$ |
| 8775 | 293489 | C 9628 |  |  | $522 \cdot 35$ | 3349 | 12 | $2954 \quad 23.7$ | 641 | 324 | $1 \mathrm{I} \cdot 5$ | + 22 | + 7 | $8 \cdot 5$ | A o |
| 8776 | 303438 | C 9629 |  | 35957 | $19 \quad 5 \quad 22.39$ | +2.3274 | $+\cdot 0012$ | $\begin{array}{llll}30 & 9 & 24.0\end{array}$ | $+5 \cdot 641$ | +-323 | 11.2 | + | + 2 | 6.88 | K 5 |
| 8777 | 273257 | C 9630 |  |  | 525.82 | 4050 | 11 | $27 \quad 30 \quad 0.0$ | 646 | 334 | 11.9 | $+$ | + 12 | $8 \cdot 6$ |  |
| 8778 | 293490 | C 9632 |  |  | 526.02 | 3378 | 12 | $294832 \cdot 5$ | 646 | 325 | 12.2 | + 5 | - 36 | $8 \cdot 5$ |  |
| 8779 | 243655 | B 6868 |  |  | 526.33 | 4833 | 10 | $244035 \cdot 2$ | 646 | 345 | 12.2 | 17 | - 60 | 8.16 | K 2 |
| 8780 | 253737 | C 9631 |  |  | 529.67 | 4698 | 10 | $25 \quad 1029.7$ | 651 | 343 | 12.3 | 24 | $-\quad 72$ | $7 \cdot 96$ | F 8 |
| 8781 |  | C 9633 |  |  | $19 \quad 5 \quad 30.32$ | +2.3392 | +-0012 |  | + 5.652 | +•325 | 11.6 |  | - 14 |  |  |
| 8782 | $26 \quad 3462$ | C 9634 | 75 | 35960 | 535.26 | 4252 | 11 | $26 \quad 47 \quad 24.5$ | 659 | 337 | 12.2 | + 18 | - 4 | 8.6 |  |
| 8783 | 303440 | L 7134 |  |  | 539.96 | 3237 | 12 |  | 665 | 323 | 10.6 | + 9 | - 33 | 9.2 |  |
| 8784 | 263464 | C 9638 |  |  | $543 \cdot 50$ | 4415 | 11 |  |  | 339 | 10.8 | - 58 |  | 9.0 |  |
| 8785 | $30344^{2}$ | L 7139 |  | 35989 | 554.3 I | 3200 | 12 | $\begin{array}{lllllllllll}30 & 25 & 15\end{array}$ | 685 | 323 | 9.6 | + 10 | + 11 | 6.68 | B 9 |
| 8786 | 293496 | C 9643 | 93-4 |  | $19 \quad 6 \quad 0.96$ | +2.3560 | $+\cdot 0012$ | $291243 \cdot 3$ | + 5.695 | $+\cdot 326$ | 8.8 | + 7 | + 6 | $8 \cdot 2$ | A 0 |
| 8787 | 253739 | C 9642 |  |  | $\begin{array}{ll}6 & 1.53\end{array}$ | 4653 | 10 | $25 \quad 2124.2$ | 695 | 342 | 11.0 | - 23 | + 30 | $9 \cdot 7$ |  |
| 8788 | 243659 | C 9645 | 92 |  | $\begin{array}{lll}6 & 9.96\end{array}$ | 4740 | 10 | $25 \quad 2 \begin{array}{lll}25 & 21.8\end{array}$ | 707 | 343 | 10.9 | + 22 | + 7 | 8.8 |  |
| 8789 | 253740 | C 9647 |  |  | $\begin{array}{lll}6 & 13.54\end{array}$ | 4540 | 11 | $2546 \quad 23 \cdot 4$ | 712 | 341 | II• 1 | + 6 | + 23 | 9.2 |  |
| 8790 | 273260 | C 9648 |  |  | 6 18.11 | 3990 | II | $\begin{array}{llll}27 & 44 & 3.4\end{array}$ | 719 | 333 | II.8 | + 5 | - | $9 \cdot 2$ |  |
| 8791 | 283219 | C 9649 |  |  | $\begin{array}{lll}19 & 6 & 22.26\end{array}$ | $+2.3812$ | +.0011 | $\begin{array}{llll}28 & 21 & 26.4\end{array}$ | + $5 \cdot 724$ | $+\cdot 330$ | II. 6 | + 25 | + 17 | $9 \cdot 2$ |  |
| 8792 | 253741 | C 9650 |  |  | $632 \cdot 94$ | 4502 | 11 | $\begin{array}{lllll}25 & 55 & 5 \cdot 9\end{array}$ | 739 | 340 | 10.4 | - 23 | + 27 | $8 \cdot 8$ |  |
| 8793 | 253742 | C 9651 | 110 |  | $639 \cdot 34$ | 4658 | 10 | $255_{21} 2124 \cdot 3$ | 748 | 342 | 10.7 | + 9 | - 26 | 9.0 |  |
| 8794 | 283222 | C 9652 |  |  | $644 \cdot 22$ | 3855 | II |  | 755 | 33 I | $10 \cdot 3$ | + 34 | - 39 | $9 \cdot 0$ |  |
| 8795 | 283223 | C 9653 |  |  | $645 \cdot 20$ | 3865 | II | 28 II 9.6 | 757 | 33 I | 12.2 | - 30 | + 12 | $9 \cdot 1$ |  |
| 8796 | 313478 | L 7149 |  | 36038 | $196645 \cdot 92$ | +2.2758 | +.0012 | $315356 \cdot 1$ | + $5 \cdot 758$ | $+315$ | 9.6 | + 30 | + 22 | $7 \cdot 6$ | K。 |
| 8797 | $30 \quad 3450$ | C 9656 |  |  | $65 \mathrm{I} \cdot 59$ | 3276 | 12 | $\begin{array}{lllllllllll}30 & \text { II } & 59.5\end{array}$ | 765 | 323 | 13.2 | - 46 | + 53 | $9 \cdot 2$ |  |
| 8798 | 283225 | C 9659 |  |  | $\begin{array}{ll}7 & 1.65\end{array}$ | 3864 | 11 | 28 II $55^{\circ}$ | 779 | 331 | 9.5 | + 52 | + 46 | $8 \cdot 7$ |  |
| 8799 | 243666 | B 6880 |  |  | $\begin{array}{lll}7 & 3\end{array}$ | 4853 | 10 | $\begin{array}{lll}24 & 39 & \text { I } \cdot 8 \\ 30\end{array}$ | 782 | 344 | 11.6 | + 49 | - 11 | $9 \cdot 0$ |  |
| 8800 | 303453 | L 7155 |  |  | 716.57 | 3057 | 12 | $30 \quad 56 \quad 23 \cdot 3$ | 800 | 319 | 11.8 | - 3 | -. 9 | $8 \cdot 2$ |  |

8755-6. Theso stars form the pair $\Sigma 2466$, magnitudes 8.0 and 8.5. 8756. Number of observations 2. 8775. Number of observations 4. 8788, 8793 . Number of observations 6.

| No. | B. D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | De : 19100. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { s.000 I. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & { }_{N} . \infty 0 \mathrm{t} . \end{aligned}$ |  |  |
|  | - |  |  |  | h m | $s$ | ${ }^{8}$ | , | " | " |  |  |  |  |  |
| 8801 | 303454 | L 7156 |  |  | $19 \quad 718.15$ | +2.3034 | +.0012 | 31059.2 | + 5.802 | +.319 | 12.0 | + 6 | - 21 | $9 \cdot 2$ |  |
| 8802 | 313483 | L 7157 |  | 36063 | 719.23 | 2890 | 12 | 312913.6 | 804 | 317 | 10.6 | + 50 | - 36 | $7 \cdot 14$ | Fo |
| 8803 | 253745 | C 9662 |  |  | 719.46 | 4696 | 10 |  | 804 | 341 | 12.2 | + 4 | - 6 | $8 \cdot 16$ | K 5 |
| 8804 | 313485 | L 7158 |  |  | 719.88 | 2986 | 12 | 311022.7 | 805 | 318 | 11.8 | + 5 | + 21 | 8.0 | B 9 |
| 8805 | 243667 | B 6883 | 130 |  | 722.41 | 4896 | 10 | $2430 \quad 5 \cdot 3$ | 808 | 345 | 12.1 | - 24 | - 78 | $9 \cdot 0$ |  |
| 8806 | 283227 | C 9666 |  |  | $19 \quad 7 \quad 28.78$ | $+2.3833$ | +.0011 | $281912 \cdot 2$ | + 5.817 | +.330 | 11.6 | + 24 | + 39 | 8.2 | F |
| $8807$ | 243668 | C 9667 | 142-3 |  | 733.87 | 4759 | 10 | 25 - $36 \cdot 2$ | 824 | 343 | II. 6 | + | + I | $8 \cdot 46$ | A o |
| $\mid 8808$ |  | C 9669 |  |  | $735 \cdot 18$ | 3411 | 12 | $2946 \quad 4 \cdot 3$ | 826 | 324 | 12.0 |  |  | 9.2 |  |
| 8809 | 263470 | C 9670 |  |  | 739.08 | 4207 | 10 | 27 - 37.8 | 832 | 335 | II.2 | + 26 | $+\quad 38$ | $9 \cdot 7$ |  |
| 8810 | 263472 | C 9675 |  | 36022 | $745 \cdot 18$ | $44^{21}$ | 1 I | 261450.1 | 840 | 338 | 10.8 | + | $+34$ | 8.I |  |
| 8811 | 263473 | C 9676 |  | 36120 | 19745.38 | +2.4299 | +.0011 | 264116.0 | $+5.841$ | + 336 | II.0 | - | - 8 | 8.6 |  |
| 8812 | 263474 | C 9678 |  | 36070-127 | 751.72 | 4328 | 11 | 263512.0 | - 849 | 337 | 10.0 | $+\quad 39$ | - 31 | $6 \cdot 32$ | F 5 |
| 8813 | 273274 | C 9680 |  |  | 753.75 | 4155 | 11 | 271211.9 | 852 | 334 | II. 6 | - 18 | $+3$ | $9 \cdot 2$ |  |
| 8814 | 263475 | C 9682 |  |  | $757 \cdot 46$ | $44^{23}$ | 11 | $261450 \cdot 7$ | 857 | 338 | 10.0 | + 12 | - 23 | $9 \cdot 2$ |  |
| 8815 | 263476 | C 9681 | 159 | 36076 | $757 \cdot 52$ | 4456 | 11 | $\begin{array}{llll}26 & 7 & 42 \cdot 3\end{array}$ | 857 | 339 | 10.2 | 9 | - 3 | $7 \cdot 42$ | A 0 |
| 8816 | 293506 | C 9686 |  | 36090 | $\begin{array}{lll}19 & 8 & 0.43\end{array}$ | +2.3423 | +.0012 | 294423.9 | $+5.862$ | +-324 | 10.7 | $+37$ | - 18 | $7 \cdot 36$ | K |
| 8817 | 263477 | C 9687 | 165 | 36082 | $8 \quad 4.75$ | 4465 | 10 | $\begin{array}{lllllllllllll}26 & 56 \cdot 8\end{array}$ | 867 | 339 | 11.7 | - 29 | + 24 | 7.40 | A 3 |
| 8818 | 313495 | L 7167 | 178 |  | 811.52 | 2951 | 12 | 3119 II•1 | 877 | 318 | 10.2 | - 5 | - 5 | $9 \cdot 1$ |  |
| 8819 | 313497 | L 7170 |  | $36111{ }^{\circ}$ | 818.87 | 3009 | 11 | $\begin{array}{lllll}31 & 7 & 57.9\end{array}$ | 887 | 318 | 12.2 | * | - 7* | $5 \cdot 77$ | A : |
| 8820 | 263479 | C 9694 |  |  | $832 \cdot 10$ | $44^{20}$ | 10 | $261636 \cdot 8$ | 906 | 338 | $11 \cdot 2$ | + 25 | - 15 | 9.1 |  |
| 8821 | 293511 | C 9695 |  |  | $19 \quad 8 \quad 33.27$ | $+2 \cdot 3482$ | +.00 12 | 293338.9 | + 5.907 | $+\cdot 325$ | 0.6 |  | - 26 | 8.8 | A |
| 8822 | 253748 | C 9696 |  |  | $843 \cdot 19$ | 4608 | 10 | $253554 \cdot 6$ | 92 I | 340 | 10.8 | - 1 | + 11 | 9.0 |  |
| 8823 | 303464 |  |  |  | 853.25 | 3296 | 12 | 3011582.1 | 035 | 322 | 7.6 |  | - 14 | $7 \cdot 61$ | A 0 |
| 8824 | 30346 | C 9699 | 196 |  | $853 \cdot 82$ | 3297 | 12 | $301144 \cdot 8$ | 936 | 322 | 11.0 | + 14 | - 14 | 761 | A 0 |
| 8825 | 293513 | C 9698 | 195 |  | 853.47 | 3345 | 12 | $3020 \begin{array}{llll} & 11.6\end{array}$ | 935 | 323 | 11.8 | - 4 |  | 9.2 |  |
| 8826 | 293514 | C 9701 |  | 36135 | I9 856.27 | +2.3399 | +.0012 | 29 51 18.8 | + 5.939 | +.324 | $9 \cdot 8$ | + 26 | - 14 | $8 \cdot 2$ | A 2 |
| 8827 | 243677 | B 6896 | 193 |  | 857.61 | 4929 | 9 | $24 \begin{array}{llll}24 & 28.5\end{array}$ | 94 I | 344 | 9.5 | + 65 | - 18 | 8.0 | F 5 |
| 8828 | 273285 | C 9703 |  |  | 92.70 | 4084 | 11 | $27 \quad 2923.0$ | 948 | 333 | 12.0 | - 5 | + 12 | $9 \cdot \mathrm{I}$ |  |
| 8829 | 273287 | C 9707 |  |  | $915 \cdot 30$ | 4071 | II | $27324 \mathrm{I} \cdot \mathrm{I}$ | 966 | 333 | 10.8 | + 16 | - 9 | $8 \cdot 7$ |  |
| 8830 | 283237 | C 9709 |  |  | $916 \cdot 43$ | 3849 | 11 | 28 19 20.2 | 967 | 330 | 12.7 | + 12 | - | $9 \cdot 1$ |  |
| 8831 | $26 \quad 3485$ | C 9708 |  |  | $19 \quad 917 \cdot 47$ | $+2.4367$ | +.0010 | $26 \quad 2929.5$ | + 5.969 | + $\cdot 337$ | 12.2 | + 3I | $+\quad 40$ | $8 \cdot 4$ |  |
| 8832 | 303470 | L 7188 |  |  | 920.97 | 3226 | 12 | $302657 \cdot 6$ | 974 | 322 | 12.5 | + 9 | - 22 | $9 \cdot 2$ | A |
| 8833 | 283240 | C 9712 |  | 361 53-5 | 923.32 | 3631 | 11 | $29442 \cdot 5$ | 977 | 327 | 10.8 | - 14 | + 35 | $6 \cdot 93$ | A 0 |
| 8834 | 303471 | L 7190 |  |  | 928.41 | 3107 | , 12 | 305059.7 | 984 | 320 | 12.2 | + 6 | - 1 | $9 \cdot 2$ |  |
| 8835 | 283241 | C 9713 |  |  | $930 \cdot 32$ | 3807 | 11 | $\begin{array}{ll}28 & 28 \quad 40 \cdot 9\end{array}$ | 987 | 329 | 13.0 | + 24 | + 6I | $9 \cdot 9$ |  |
| 8836 | 293517 | C 9715 |  | 36168 | I9 $935 \cdot 77$ | +2.3394 | +.0012 | 295334.0 | + 5.994 | $+\cdot 323$ | 11.0 |  | - 7 | $8 \cdot 0$ | A O |
| 8837 | 263488 | C 9716 | 214 |  | 939.54 | 4436 | 10 | $\begin{array}{llll}26 & 15 & 4.8\end{array}$ | $6 \cdot 000$ | 338 | 12.0 | + 15 | $\bigcirc$ | $9 \cdot 2$ |  |
| 8838 | 273290 | C 9717 |  |  | $940 \cdot 52$ | 4083 | 11 | 273054.6 | 001 | 333 | 11.2 | - 23 | + 10 | $8 \cdot 8$ |  |
| 8839 | 293518 | C 9719 |  |  | $951 \cdot 28$ | 3575 | 11 | 291715.6 | 016 | 326 | 12.4 | + 16 | - 24 | $8 \cdot 5$ |  |
| 8840 | 243682 | B 6903 |  | $36171-2$ | 953.91 | 4815 | 10 | $245^{2} 24^{\circ} \mathrm{O}$ | 020 | 343 | 11.8 | - 8 | - 15 | 8.6 | A 0 |
| 8841 | 243683 | B6905 |  |  | $19 \quad 955.94$ | +2.4922 | $+\cdot 0009$ | $\begin{array}{llll}24 & 28 & 377\end{array}$ | $+6.022$ | + 344 | $2 \cdot 5$ | - 10 | - 11 | $8 \cdot 4$ | A 0 |
| 8842 | 253755 | C 9723 | 216 |  | 958.61 | 4492 | 10 | $26 \quad 3 \quad 38 \cdot 0$ | 026 | 339 | 12.2 | + 11 | + 10 | $9 \cdot 1$ |  |
| 8843 | 283245 | C 9725 | 226 | 36178 | 959.47 | 3678 | 11 | $\begin{array}{llll}28 & 56 & 14.7\end{array}$ | 027 | 327 | - | + 1 | + 29 | $8 \cdot 5$ |  |
| 8844 | 303473 | L 7197 | 230 |  | $10 \quad 0.92$ | 3199 | 11 | $303341 \cdot 4$ | 029 | 321 | 13.0 | + 19 | + 5 | $9 \cdot 2$ |  |
| 8845 | 273298 | C 9726 | 225 |  | $103 \cdot 11$ | $4{ }^{160}$ | 11 | $27 \quad 1514.1$ | 032 | 333 | 12.4 | 6 | + 3 | $9 \cdot 1$ |  |
| 8846 | 263490 | C 9727 | 229 |  | 191010.12 | +2.4426 | +.0010 | $\begin{array}{llll}26 & 18 & 8.6\end{array}$ | $+6.042$ | + 337 | 12.4 | + 14 | + 10 | 9.2 |  |
| 8847 | 253757 | C 9728 |  | 36179 | 1011.78 | 4619 | 10 | $\begin{array}{llllllllll}25 & 36 & 13.5\end{array}$ | 044 | 339 | 11.8 | + 3 | - 1 | $6 \cdot 80$ | A 0 |
| 8848 8849 | 243684 | B 6907 |  |  | 1013.35 | 4915 |  | $243040 \cdot 2$ | 047 | 344 | 11.6 | + 10 | + 8 | 9.0 |  |
| 8849 885 | 273302 | C 9731 | 242 |  | $1030 \cdot 60$ | 4172 | 11 | $\begin{array}{llllll}27 & 13 & 35.9\end{array}$ | 070 | 333 | 12.2 | - 7 | - 17 | $8 \cdot 8$ |  |
| 8850 | 263492 | C 9734 |  |  | 1034.98 | 4273 | 10 |  | 076 | 335 | 11.8 | - 49 | - 26 | $8 \cdot 7$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession | Sec. Var. | Dec. 1910.\%. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & 0.0001 . \end{aligned}$ | $\begin{aligned} & \text { Doc. } \\ & \text { Noor. } \end{aligned}$ |  |  |
|  | - |  |  |  | 1 m | 8 | s | - , " |  | " |  |  |  |  |  |
| 8851 | 243687 | B691I |  | 36198-9 | 191035.73 | +2.4825 | +.0009 | $2{ }^{2} 5128.2$ | +6.078 | + 343 | 12.2 | - 7 | + 13 | $7 \cdot 16$ | B 8 |
| 8852 | 283250 | C 9735 |  | 36213 | 10 $43 \cdot 65$ | 3803 | 11 | $2831+3.9$ | 089 | 328 | 11.9 | - 3 | - 10 | $8 \cdot 7$ |  |
| 8853 | 303479 | C 9737 |  | 36222 | 10 51.15 | 3317 | II | $301140 \cdot 8$ | 099 | 322 | II•3 | + 22 | - 6 | $7 \cdot 76$ | A 0 |
| 8854 | 293524 | C 9738 |  |  | 1056.15 | 3455 | 11 | $29+353 \cdot 5$ | 106 | 323 | 11.4 | + 26 | - 17 | $8 \cdot 7$ |  |
| 8855 | 293525 | C 9740 |  |  | 110.15 | 3495 | 11 | $2936 \quad 0.5$ | 111 | 324 | 10.8 | 9 | - 106 | $9 \cdot 0$ |  |
| 8856 | 293527 | C 9742 |  |  | 19 II 1.53 | +2.3498 | +-0011 | 293518.4 | +6.113 | $+\cdot 324$ | 10.8 | + 8 | - 22 | $8 \cdot 7$ | A 0 |
| 8857 | 293526 | C 974 ${ }^{1}$ | 259 |  | 111.78 | 3610 | II | 291229.3 | 114 | 325 | 12.0 | + 6 | - 24 | 9.2 |  |
| 8858 | $\} 283253$ | C 9743 |  |  | $\begin{array}{ll}11 & 2.84\end{array}$ | 3746 | II | $28+425 \cdot 5$ | 115 | 327 | 13.1 | + 21 | - 22 | 39.0 |  |
| 88859 | $\int_{28}{ }^{2} 563$ | C974 |  | 36234 | $11 \quad 3.25$ | 3746 | 11 | $28 \quad 4427 \cdot 5$ | 116 | 327 | 14.2 | + 21 | - 22 | \} 9.0 |  |
|  | $2+3689$ | B 691 4 |  |  | 116.02 | 4956 | 9 | $2433 \quad 4.7$ | 120 | 343 | 13.0 | + II | - 1 | 8.8 |  |
| 8861 | 253761 | C $97+4$ |  |  | 19 II 6.82 | +2.4617 | +.0010 | $25{ }^{2} 3^{8}$ 21-1 | +6.121 | +.338 | 12.7 | + 20 | - 16 | $9 \cdot 2$ |  |
| 8862 | 263496 | C 9745 | 257 | 36230 | 11785 | 4360 | 10 | $263+23 \cdot 4$ | 122 | 336 | 13.0 | + 26 | 14 $+\quad 14$ | $8 \cdot 2$ | A 0 |
| 8863 | 273304 | C 9746 |  |  | 11993 | $+122$ | 11 | 272533.5 | $12+$ | 332 | 12.6 | + 12 | + 32 | 9.1 |  |
| 8864 | 253762 | C 9748 |  |  | 1119.70 | 4768 | 9 |  | 139 | 340 | 11.8 | + 11 | - 2 | 9.1 |  |
| 8865 | 273307 | C 97+? | 271 | 36257 | 1122.55 | 4017 | 11 | $27+8 \quad 13 \cdot 2$ | 143 | 331 | 10.9 | + 2 | - 8 | $6 \cdot 69$ | B 8 |
| 8866 | 283257 | C 9750 |  |  | 191123.36 | $+2.3893$ | $+\cdot 0011$ | $281417 \cdot 3$ | +6.144 | + 329 | 11.4 | - 7 | - 21 | 8.0 |  |
| 8867 | 313514 | L 7212 |  | 36266 | 1124.01 | 2868 | 12 | $317210 \cdot 1$ | 145 | 315 | 10.8,12.2 | + $4^{\circ}$ | + 11 | $6 \cdot 70$ | K o |
| 8868 | 293529 | C 9751 |  |  | 1125.67 | 3566 | 11 | 29.2212 .4 | 147 | 325 | 10.6 | + 4 | + 8 | 8.0 | K 2 |
| 8869 | 263498 | C 9753 |  |  | $11{ }^{1} \cdot 97$ | 446 | 10 | $26 \quad 12 \quad 57 \cdot 2$ | 170 | 337 | 10.6 | + 26 | - 52 | $9 \cdot 1$ |  |
| 8870 | 253767 | C 9756 |  |  | 1149.07 | 4634 | 10 | 2535 53.1 | 179 | 337 | $11 \cdot 4$ | 11 | - 82 | 9.6 |  |
| 8871 | 303491 | L 7218 |  | 36282-3 | 191155.02 | $+2 \cdot 3277$ | +.0011 | $\begin{array}{llll}30 & 22 & 7 \cdot 3\end{array}$ | +6.188 | +.321 | 10.2 | + 20 | - 44 | $6 \cdot 13$ | M a |
| 8872 | 293532 | C 9759 |  |  | 1155.20 | 3524 | 11 | 293152.5 | 188 | 324 | 11.5 | + 6 | 11 | $9 \cdot 2$ |  |
| 8873 | 293533 | C 9760 | 290 |  | II 55.26 | 3407 | 11 | $295540 \cdot 3$ | 188 | 322 | II. 8 | + 17 | - 15 | $9 \cdot 2$ |  |
| 8874 | 253768 | C 9758 |  |  | 1156.81 | 4643 | 10 | $25 \begin{array}{lllll}254 & 14.4\end{array}$ | 190 | 338 | 11.6 | + 25 | + 18 | 9.0 |  |
| 8875 | 273308 | C 9761 |  |  | 1157.89 | 3970 | 11 | 275914.7 | 192 | 330 | II.0 | + 15 | - II | 8.8 |  |
| 8876 | 293534 | C 9762 | 300 |  | 19124.48 | $+2 \cdot 3606$ | +.0011 | 29.15150 .4 | +6.201 | +.325 | 12.2 | $+30$ | 12 | 9.0 |  |
| 8877 | 283260 | C 9763 |  | 36287 | 124.81 | 3690 | 11 | $28 \quad 57 \quad 55 \cdot 7$ | 201 | 326 | 12.2 | 3 | - 71 | $8 \cdot 1$ | G o |
| 8878 | 243696 | B 6921 |  |  | $\begin{array}{lll}12 & 5.27\end{array}$ | 4898 | I | $2437 \quad 52 \cdot 2$ | 202 | 343 | 11.0 | - | - 45 | 8.6 |  |
| 8879. | 283261 | C 9764 |  |  | 125.53 | 3735 | 11 | 284841.0 | 202 | 327 | 12.2 | + 19 | - 9 | 9.0 |  |
| 8880 | 283262 | C 9765 |  |  | $12 \quad 9.34$ | 3855 | 11 | $\begin{array}{lllllllllll}28 & 23 & 55 \cdot 8\end{array}$ | 207 | 328 | II.8 | 4 | + 25 | 8.8 |  |
| 8881 | 283263 | C 9766 |  |  | $\begin{array}{llll}19 & 12 & 11.95\end{array}$ | $+2.3730$ | $+\cdot 0011$ | $\begin{array}{llll}28 & 50 & 5 \cdot 7\end{array}$ | +6.211 | $+\cdot 327$ | 12.4 |  |  | $9 \cdot 6$ |  |
| 8882 | 283264 | C 9769 |  |  | 1216.76 | 3818 | 11 | 283144.5 | 218 | 328 | 11.8 | - 2 | + 23 | $9 \cdot 1$ |  |
| 8883 | 273313 | C $977{ }^{\circ}$ |  | 36293-4 | $12 \quad 19.36$ | +169 | 10 | $27 \quad 1747 \cdot 9$ | 221 | 333 | . 0 | + 3 | - 8 | $6 \cdot 26$ | B 9 |
| 8884 | 273314 | C 9771 | 304 | 36298-9 | 1223.02 | 4037 | II | $\begin{array}{llll}27 & 46 & 0.8\end{array}$ | 226 | 331 | 12.3 | 3 | + 3 | 6.06 | F $8 p$ |
| 8885 | 303493 | L 7223 | 309 |  | 1223.59 | 3171 | 11 | $304+24 \cdot 1$ | 227 | 319 | 12.3 | - 13 | -. 5 | $8 \cdot 7$ |  |
| 8886 | 243698 | B6925 |  | 36292 | 191224.45 | +2.4903 | $+\cdot 0009$ | 243726.0 | +6.228 | +-342 | I1.3 | - 83 | - 153 | $8 \cdot 0$ | G 5 |
| 8887 | 303495 | L 7224 |  | 36309-10 | 1228.33 | 3130 | 11 | $30{ }^{3} \mathbf{5} 242 \cdot 2$ | 233 | 319 | 13.4 | - 71 | - IOI | 6.86 | Ko |
| 8888 | 263504 | C 9773 |  | 36302 | 1229.41 | $433+$ | 10 | $264233 \cdot 5$ | 235 | 335 | 13.5 | + 8 | - 13 | 7.11 | F 8 |
| 8889 | 303494 | L 7225 |  | 36311-2 | 1229.98 | 3069 | 12 | $31+53.7$ | 236 | 318 | 12.9 | + 18 | - 15 | $6 \cdot 75$ | B 9 |
| 8890 | 313517 | L 7227 |  |  | 1232.25 | 2954 | 11 | $312746 \cdot 2$ | 239 | 316 | 12.3 | + 8 | 8 | 8.2 | A 0 |
| 8891 | 253770 | C 9774 |  |  | $19 \begin{array}{lll}12 & 33.79\end{array}$ | $+2.4572$ | +.0010 | 255059.4 | +6.241 | +.338 | 11.9 | 4 | + 3 | 8.8 |  |
| 8892 | 313518 | L 7228 |  |  | 1234.31 | 3002 | 11 | $\begin{array}{lllll}31 & 18 & 12.9\end{array}$ | 242 | 317 | 13.1 | 3 | + 4 | 8.8 |  |
| 8893 | $28 \quad 3268$ | C 9775 | 312 |  | $\begin{array}{ll}12 & 36.09\end{array}$ | 3939 | 11 | $\begin{array}{lllll}28 & 7 & 149\end{array}$ | 244 | 329 | 13.2 | + 6 | + 34 | $8 \cdot 1$ | A 2 |
| 8894 | 233613 | B 6927 | 308 |  | 1239.71 | 5054 | 9 |  | 250 | 345 | 12.7 | + 9 | - $\quad 29$ | $9 \cdot 1$ |  |
| 8895 | 253772 | C 9777 | 316 |  | 1253.25 | +668 | 10 | $25 \quad 3032 \cdot 9$ | 268 | 339 | 12.6 | + 18 | + 28 | $9 \cdot 1$ |  |
| 8896 | $2+3699$ | B 6928 | 315 |  | $\begin{array}{llll}19 & 12 & 53.69\end{array}$ | $+2.5041$ | +.0009 | ${ }_{24}^{24} 7 \begin{array}{lll}7 & 12.4\end{array}$ | + 6.269 | + $34+$ | 11.2 | + 3 | - 3 | 8.4 | B 9 |
| 8897 | 263506 | C 9778 |  |  | 1253.91 | 4443 | 10 | $261950 \cdot 1$ | 269 | 336 | 12.0 | + 10 | + 13 | 9-1 |  |
| 8898 | 263507 | C 9781 |  |  | $13 \quad 4.24$ | ${ }^{260}$ | 10 | $26 \quad 5947 \cdot 7$ | 284 | 333 | 12.7 | + 20 | + 24 | 8.8 |  |
| 8899 | 243701 | B6930 |  |  | $13 \quad 7.58$ | $49^{2}+$ |  | $2434 \quad 6 \cdot 2$ | 288 | 343 | 12.7 | - 3 | - 10 | 9.0 |  |
| 8900 | 303497 | L 7231 | 333 | 36342-3 | 1315.54 | 3108 |  | 305844.7 | 299 | 317 | 12.0 | + 5 | $+$ | 8.0 | M a |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec, 1910.0. | Precession. | Sc. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. | Dec. $0.001 .$ |  |  |
|  | - |  |  |  | h m | 8 | 8 | - , " | " | " |  |  |  |  |  |
| 8901 | 273321 | C 9783 |  |  | 191318.50 | +2.4203 | +.0010 | 271229.6 | $+6.303$ | $+332$ | 12.4 | + 33 | + 30 | $9 \cdot 2$ |  |
| 5902 | 263509 | C 9784 |  | 36334 | 1322.42 | 4358 |  | 2639 II.4 |  | 334 | 12.2 | + | - | 8.4 |  |
| 8903 | 243704 | B 6932 | 325-6 |  | 1322.94 | 503 I |  | 241022.8 | 310 | 344 | 12.6 | - 5 | - 14 | 9.2 |  |
| 8904 | 253778 | C 9785 | 334 |  | 1329.60 | 4539 | 10 | $26 \quad 7 \quad 77$ | 319 | 336 | 12.2 | + 20 | + 36 | 9.1 |  |
| 8905 | 293542 | C 9787 |  |  | I3 41.92 | 3502 | 1 I | 294015.0 | 336 | 322 | 10.8 | + 18 | - 20 | 8.8 | A |
| 8906 | 283275 | C 9786 | 346 | 36357-8 | 19 13 $42 \cdot 18$ | $+2.3805$ | +.001 1 | ${ }^{28} 37723 \cdot 0$ | +6.336 | + 326 | 12.0 | - 14 | - 88 | $8 \cdot 2$ | F 2 |
| 8907 | 243706 | C 9788 |  |  | $1347 \cdot 74$ | 4793 | 9 | $25 \quad 432 \cdot 2$ | 344 | 34 I | 12.4 | + 29 | + $4^{0}$ | $7 \cdot 41$ | A $\circ$ |
| 8908 | 273324 | C 9792 |  |  | 1354.90 | 4050 | I | 274617.0 | 354 | 330 | 11.6 | - 8 | - 13 | $9 \cdot 1$ |  |
| 8909 | 313526 | L 7238 |  |  | 1359.78 | 2862 | - 12 | $3 \mathrm{I} 495 \cdot 3$ | 360 | 313 | 11.4 | - 31 | + $\quad 22$ | $8 \cdot 6$ |  |
| 8910 | 273326 | C 9795 |  |  | $14 \quad 1 \cdot 16$ | 4071 | 11 | $27 \quad 42 \quad 15 \cdot 2$ | 362 | 330 | 12.2 | - | - 13 | 8.8 |  |
| 89 II | 253779 | C 9794 |  |  | $1914 \begin{array}{ll}14 & 2.22\end{array}$ | $+2.4629$ | +-0010 | 254117.8 | + $6 \cdot 364$ | + 337 | 12.7 | $+37$ | $\bigcirc$ | 8.6 | A 0 |
| 8912 | 263513 | C 9796 | 351 |  | $14 \quad 3.83$ | 4266 | 10 | 27 - 31.7 | 366 | 333 | 12.4 | - 4 | + 21 | 8.8 |  |
| 8913 | 273327 | C 9798 |  |  | $14 \quad 7 \cdot 38$ | 4077 | 11 | 27413.3 | 371 | 330 | 12.5 | + | - 16 | $9 \cdot 2$ |  |
| 8914 | 313530 | L 724 I | 359 |  | 1488.75 | 2988 | 1 I | 312428.2 | 373 | 315 | 12.2 |  | + 5 | $8 \cdot 2$ | K |
| 8915 | 253780 | C 9797 |  |  | $14 \quad 9.82$ | 4762 | 9 | $\begin{array}{llll}25 & 12 & 3.5\end{array}$ | 374 | 339 | 12.9 | + 145 | $+226$ | $8 \cdot 36$ | G |
| 8916 | 273328 | C 9799 |  |  | $1914 \begin{array}{lll}19 & 41\end{array}$ | +2.3974 | +.001I | $\begin{array}{llll}28 & 3 & 4.5\end{array}$ | +6.376 | $+329$ | 12.9 |  |  | $9 \cdot 2$ |  |
| 8917 | 243708 | B $694^{\circ}$ | 357 | 36371 -2 | 1426.03 | 5020 | 9 | $241452 \cdot 3$ | 397 | 342 | 11.9 | + 62 | + 162 | 7.06 | G 5 |
| 8918 | 293548 | C 9804 |  |  | 1431.01 | 3524 | 11 | 293717.5 | 404 | 322 | 12.9 | + 19 | - 18 | $9 \cdot 0$ |  |
| 8919 | 303502 | L 7244 | 373 | 36400-1 | 1432.29 | 3159 | 1 I | 305129.2 | 405 | 318 | 11.6 | + 10 | + 27 | $6 \cdot 48$ | A 0 |
| 8920 | 273333 | C 9805 | 369 |  | 1433.40 | $413^{6}$ | 11 | $\begin{array}{ll}27 & 29 \\ 157\end{array}$ | 407 | 331 | 12.7 | 12 | 20 | $9 \cdot 1$ |  |
| 8921 | 253784 | C 9803 |  |  | 191434.21 | +2.4545 | . 0010 | $26 \quad 5 \quad 50 \cdot 9$ | +6.408 | +.336 | II. 6 | + 7 | + 9 | 8.8 |  |
| 8922 | 253785 | C 9806 |  |  | $1439 \cdot 36$ | 4551 | 9 | $25 \quad 5943 \cdot 8$ | 415 | 336 | II. 6 | + 2 | + 24 | 9.1 |  |
| 8923 | 253786 | C 9807 |  | 36398 | $1446 \cdot 87$ | 4580 | 9 | $255334 \cdot 1$ | 425 | 336 | $1 \mathrm{I} \cdot 0$ | - 15 | + 8 | $7 \cdot 32$ | B 5 |
| 8924 | 313535 | L 7246 |  |  | $1453 \cdot 67$ | 2877 | 12 | $\begin{array}{llll}31 & 48 \\ 9.0\end{array}$ | 435 | 313 | 10.8 | - 24 | + 2 | $9 \cdot 0$ | G 5 |
| 8925 | 293550 | C. 9808 | 380 |  | $1455 \cdot 64$ | 3479 | 11 | 2947 32.0 | 437 | 32 I | 10.4 | - 25 | - 28 | 8.0 | A 0 |
| 8926 | 303505 | L 7249 |  |  | $\begin{array}{lllll}19 & 15 & 14.87\end{array}$ | +2.3194 | 0011 | $304557 \cdot 2$ | + 6.464 | +-319 | 11.0 | - 20 | - 2 I | 9.0 |  |
| 8927 | 28 3282 | C 9810 |  |  | $15 \quad 15.75$ | 3786 | 1 I | 28 44 <br> 17  |  | 325 | 11.8 | - 15 | - 32 |  |  |
| 8928 | 31 31538 | L 7250 | 389 |  | 1515.77 | 2966 | 12 | $\begin{array}{lllllllll}31 & 31 & 20.5\end{array}$ | 465 | 315 | $\underline{11.0}$ | + 34 | + 11 | $8 \cdot 4$ | A |
| 8929 8930 | 273339 | C 9812 |  |  | 15 <br> 15 22.89 | 4031 | 11 | $275326 \cdot 1$ | 475 | 328 | 12.0 | + 6 | - | 9.1 |  |
| 8930 | $3^{1 \times 3540}$ | L $725^{2}$ | 394 |  | $15 \quad 23.30$ | 2950 | 12 | $3 \mathrm{I} 345 \mathrm{I} \cdot 2$ | 476 | 314 | 11.0 | + 7 | + 11 | $8 \cdot 6$ |  |
| 893 I | 273340 | C 9813 |  | 36431-2-3 | $1915 \quad 27.24$ | +2.4255 | +.0010 | $27 \quad 544.3$ | +6.481 | +.332 | 10.5 | + 12 | - 20 | 7.02 | K 5 |
| 8932 | 26352 I | C 9814 | 392 | 36435-6-7 | 1531.52 | 4347 | 10 | $2646 \quad 0 \cdot 1$ |  | 333 | 10.8 | + 21 | - 5 | $7 \cdot 36$ | A 2 |
| 8933 | 253790 | C 9815 |  |  | 1534.26 | 4539 | 10 | $\begin{array}{llll}26 & 4 & 9.5\end{array}$ | 491 | 335 | 11.0 | + 49 | + 8 | $9 \cdot 2$ |  |
| 8934 | 27 3342 <br> 31  | C 9819 |  |  | 1544.71 | 4176 | 10 | $\begin{array}{lllll}27 & 23 & 19.5\end{array}$ | 505 | 330 | $9 \cdot 8$ | - 32 | + 19 | 9.1 |  |
| 8935 | 31 3544 | L 7262 | 408 | 36473 | 16 I•61 | 2891 | 12 | 314758.8 | 529 | 313 | 10.0 | + 28 | - 4 | $6 \cdot 64$ | B 5 |
| 8936 | 61313545 | $\mathrm{L}_{\mathrm{C}} 7263$ |  |  | $19 \begin{array}{lll}16 & 5.23\end{array}$ | $+2 \cdot 3004$ | + -001 1 |  | +6.534 | +-314 | $10 \cdot 4$ | + 6 | + 2 | $9^{\cdot 2}$ |  |
| 8937 8938 | 26 3524 | C 9825 C 9828 cer | 411 |  | 16 <br> 16 <br> 16 <br> 19.09 | 4324 | 10 | 26 52 $38 \cdot 9$ <br> 29 2  | 553 | 333 | II.4 | - 10 | - 26 | $8 \cdot 6$ | A |
| 8938 | 28 3292 | C 9828 |  |  | $1621 \cdot 15$ | 3714 | 1 | $\begin{array}{llll}29 & 2 & 10.5\end{array}$ | 555 | 324 | 11.4 | + 25 | - 1 | 9.1 |  |
| 8939 8940 | 26 26325 | C 9826 |  |  | $1622 \cdot 15$ | 4378 | 10 | $\begin{array}{llllllllllllllllll}26 & 41 & 0 \cdot 3\end{array}$ | 557 | 333 | 11.8 | - 11 | - 10 | 9.0 |  |
| 540 | 28 2293 |  | 418 |  | $16 \quad 22 \cdot 64$ | 3898 | 11 | $28 \quad 2344 \cdot 7$ | 557 | 326 | 11.8 | + 4 | + | 8.1 | A 0 |
| 8941 | 283294 | C 9830 | 42 I |  | $19 \quad 16 \quad 23.86$ | +2.3919 | +.0011 | $\begin{array}{llll}28 & 19 & 15 \cdot 1\end{array}$ | +6.559 | $+327$ | 11.7 | + | + 7 | $8 \cdot 5$ |  |
| 8942 | 263527 | C9831 |  | 36480 | 16.27 .33 | 4435 | - | $\begin{array}{lllll}26 & 28 & 42 \cdot 2\end{array}$ | 564 | 334 | 12.6 | - 8 | - 44 | $7 \cdot 55$ | F 5 |
| 8943 | 3263528 | C 9832 |  | 36483 | $1627 \cdot 60$ | 4431 |  | $\begin{array}{ll}26 & 29 \\ 39.2\end{array}$ | 564 | 334 | 12.5 | - 26 | + 27 | $7 \cdot 40$ | K |
| 8944 | 303516 | L 7266 | 427 |  | 1629.91 | 3163 |  | $\begin{array}{llll}30 & 55 & 7 \cdot 5\end{array}$ | 568 | 316 | 12.3 | + 7 | - 21 | $9 \cdot 1$ |  |
| 8945 | 283295 | C 9834 |  |  | $1630 \cdot 44$ | 3829 | 11 | $28 \quad 38 \quad 34 \cdot 3$ | 568 | 325 | 11.0 | 17 $+\quad 1$ | - 2 | $9 \cdot 1$ |  |
| 8946 | 30 3517 | L 7267 | 429 |  | 191631.23 | +2.3225 | +-0011 | 304228.5 | +6.569 | +-318 | 12.6 | - 19 | - | $9 \cdot 2$ |  |
| 8947 | 27 3348 | C 9835 |  | 36492 | 1632.06 | 4084 |  | $274430 \cdot 6$ | 570 | 329 | 10.0 | - 15 | + 3 | $7 \cdot 9$ | A 3 |
| 8948 | 24 3717 | C 9836 |  |  | $1634 \cdot 91$ | 4849 | 9 | $\begin{array}{llll}24 & 57 & 28 \cdot 3\end{array}$ | 574 | 340 | 12.6 | 30 | + 2 | $9 \cdot 2$ |  |
| 8949 | 28 3297 | C 9838 |  |  | $1636 \cdot 21$ | 3837 |  | $\begin{array}{llll}28 & 37 & 6 \cdot 9\end{array}$ | 576 | 326 | 13.0 |  |  | 10.4 |  |
| 8950 |  | C 9840 |  |  | 1643.37 | 3640 | II | $\begin{array}{ll}29 & 18 \\ 23.3\end{array}$ | 586 | 324 | 13.5 |  |  | $9 \cdot 2$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precossion. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | $\begin{array}{\|l} \text { Spectral } \\ \text { Type. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { R.OOOI } \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & n .001 . \end{aligned}$ |  |  |
|  | - |  |  |  | m | $s$ | $s$ | - , " |  | " |  |  |  |  |  |
| 8951 | 263530 | C 9839 |  |  | $19 \quad 1643.39$ | +2.4474 | +.0010 | 262052.0 | + 6.586 | +•334 | 12.6 | - | + | 9.1 |  |
| 8952 | 293560 | C 9843 |  |  | 1649.73 | 3578 | 11 | 293124.4 | 595 | 322 | 13.0 | $\bigcirc$ | - 51 | $9 \cdot 2$ |  |
| 8953 | 253797 | C 9842 | 433 |  | 1653.67 | 4798 | 9 | $25 \quad 930 \cdot 1$ | 600 | 338 | 12.1 | + 15 | - 18 | $9 \cdot 2$ |  |
| 8954 | 293561 | C 9845 |  |  | 1655.22 | 3603 | 11 | 292620.6 | 602 | 322 | 12.0 | + 19 | + 4 | $9 \cdot 0$ |  |
| 8955 | 313550 | L 7273 |  | 36474 | 1659.71 | 2863 | 12 | $315549 \cdot 1$ | 609 | 311 | 11.2 | - 2 | - 8 | $6 \cdot 64$ | B 9 |
| 8956 | 313554 | L 7276 |  |  | 191713.55 | $+2.2865$ | +.0012 | 315549.5 | $+6.628$ | +-311 | $9 \cdot 7$ | 12 | + 6 | $8 \cdot 7$ |  |
| 8957 | 313555 | L 7280 | 451 |  | 1721.66 | 3088 | II | $\begin{array}{llll}31 & 12 & 0.6\end{array}$ | 639 | 314 | 10.4 | $+\quad 36$ | + 10 | 9.1 |  |
| 8958 | 283299 | C 9851 |  |  | $17 \quad 27.74$ | 3852 | II | 283550.9 | 647 | 326 | 10.6 | - | + 15 | $9 \cdot 2$ |  |
| 8959 | 273354 | C 9853 |  |  | 1740.08 | 4052 | 11 | $275346 \cdot 5$ | 664 | 328 | 10.4 | - 12 | - 2 | 9-1 |  |
| 8960 | 253802 | C 9855 | 460 | 36540 | 1745.19 | 4732 | 9 | $2526,1 \cdot 0$ | 67 I | 337 | 9.2 | + 9 | - 2 | $7 \cdot 26$ | B 3 |
| 8961 | 293566 | C 9857 |  |  | 191749.73 | +2.3558 | +.0011 | $293747 \cdot 2$ | + 6.677. | $+\cdot 321$ | 9.8 | - | - | $8 \cdot 7$ |  |
| 8962 | 253803 | C 9858 | 467 | 36549 | $1756 \cdot 38$ | 4742 | 9 | $25^{2} 4^{1} 4^{\circ} \mathrm{O}$ | 686 | 337 | 10.1 | + 15 | - 6 | $7 \cdot 26$ | B 3 |
| 8963 | 263533 | C 9860 |  |  | $\begin{array}{ll}18 & 0.37\end{array}$ | 4454 | 10 | $26 \quad 2754.8$ | 692 | 333 | 10.4 | + 4 | - 33 | $7 \cdot 7$ | F 5 |
| 8964 | 293567 | C 986I |  |  | $18 \quad 0.49$ | $3+42$ | 11 |  | 692 | 319 | 11.8 | + 37 | - | $9 \cdot 0$ |  |
| 8965 | 273357 | C 9862 |  | 36558 | $18 \quad 3.87$ | 4232 | 相 | $\begin{array}{lllll}27 & 16 & 8.7\end{array}$ | 697 | 330 | 12.0 | $+\quad 5$ | - 4 | $8 \cdot 6$ | F |
| 8966 | 253805 | C 9863 | 466 |  | $19 \begin{array}{lll}18 & 6.61\end{array}$ | $+2.4770$ | +.0008 | 25 I8 13.I | + 6.701 | $+338$ | 12.3 | + 52 | + 120 | $9 \cdot 0$ |  |
| 8967 | 303523 | C 9864 |  |  | 187.06 | 3416 | 11 | 30.738 .1 | 701 | 318 | 12.6 | + 23 | - 4 | $9 \cdot 0$ |  |
| 8968 | 303524 | C 9865 |  | 36569 | $18 \quad 7 \cdot 34$ | 3396 | 11 | 30 II 35.9 | 702 | 318 | 11.7 | + 11 | + 28 | 8.01 | G 5 |
| 8969 | 313559 | L 7294 |  |  | 188.08 | 3007 | 11 | $\begin{array}{lllllllllllll}31 & 29 & 55\end{array}$ | 703 | 313 | 12.2 | - 38 | - 20 | $9 \cdot 2$ |  |
| 8970 | 293568 | C 9866 |  | 36570 | $\begin{array}{ll}18 & 9.34\end{array}$ | 3531 | I I | $2944 \quad 3 \cdot 9$ | 704 | 320 | 11.8 | $+\quad 37$ | - 4 | $7 \cdot 21$ | A 2 |
| 8971 | 273358 | C 9867 |  |  | 191813.03 | $+2.4165$ | $+\cdot 0010$ | $273057 \cdot 7$ | +6.709 | + 329 | 1.4 | - 35 | - 57 | $9 \cdot 2$ |  |
| 8972 | 303527 | L 7298 |  |  | $\begin{array}{lll}18 & 19.48\end{array}$ | 3194 | 11 | $30 \quad 53 \quad 8 \cdot 7$ | 718 | 315 | 10.8 | - 30 | - 7 | 9.0 |  |
| 8973 | 253808 | C 9872 |  |  | 1828.69 | 4632 | 9 | 2549 43.0 | 731 | 336 | 10.9 | - 10 | - 33 | $9 \cdot 1$ |  |
| 8974 | 293571 | C 9873 |  |  | $18 \quad 29 \cdot 18$ | 3468 | II | $295752 \cdot \mathrm{I}$ | 732 | 319 | 10.2 | + 22 | $\underline{11}$ | 8.51 | A 5 |
| 8975 | 313563 | L 7300 |  |  | 1843.8 + | 2873 | 11 | $315751 \cdot 4$ | 752 | 311 | 11.2 |  | 17 $+\quad 17$ | $8 \cdot 5$ | A 2 |
| 8976 | 303531 | L 7301 |  |  | $19 \begin{array}{lll}18 & 46 \cdot 14\end{array}$ | +2.3216 | +.0011 | 3049 35.2 | + 6.755 | $+\cdot 316$ | 10.4 | + 2 | + 27 | $9 \cdot 0$ |  |
| 8977 | 283306 | C 9876 |  |  | 1849.21 | 3748 | 11 | 29 - 37.0 | 759 | 323 | 10.6 | - 11 | - 25 | $9 \cdot 2$ |  |
| 8978 | 263534 | C 9877 | 495-6 | 36599-60c-1 | $18 \quad 53.19$ | 4318 | 10 | $26 \quad 59$ 15.0 | 765 | 33 I | II. 6 | - 20 | - 40 | $8 \cdot 0$ | Ko |
| 8979 | 243727 | B 6986 |  |  | 1859.23 | 4925 | 9 | $2445 \mathrm{Ir} \cdot 2$ | 773 | 339 | . 2 | 6 | + 15 | $8 \cdot 4$ | K 2 |
| 8980 | 253810 | C 9882 |  |  | $19 \quad 3.54$ | 4820 | 8 | $\begin{array}{llll}25 & 9 & 9.8\end{array}$ | 779 | 338 | 11.8 | $+10$ | + 19 | $8 \cdot 56$ | Go |
| 8981 | 313564 | $\mathrm{L}_{73}{ }_{4}$ | 506-7 |  | 19197.00 | $+2.3118$ | +.0011 | 31.10157 | +6.783 | +-313 | 10.9 | - 5 | - 10 | 8.6 |  |
| 8982 | 253811 | C 9885 | 501 | 36611 | 1989.71 | 4568 | 10 | $26 \quad 5$ 21.I | 787 | 334 | 11.7 |  | - $15^{*}$ | $4 \cdot 92$ | B 5 |
| 8983 | 293573 | C 9888 |  |  | 19 I1.42 | 3527 | 11 | 294714.7 | 789 | 320 | 12.0 |  |  | 9.0 |  |
| 8984 | 313566 | L 7305 | 511 |  | 19 I2.41 | 3068 | 11 | 312021.6 | 791 | 313 | 12.0 | 15 | - 41 | $9 \cdot \mathrm{I}$ |  |
| 8985 | 313567 | L 7308 |  |  | 19 14.3I | 3001 | 11 | $313345 \cdot 4$ | 793 | 312 | 11.5 | $+32$ | + 18 | $8 \cdot 2$ | A 2 |
| 8986 | 293576 | C 9894 |  | 36623 | $\begin{array}{llllll}19 & 19 & 15 \cdot 38\end{array}$ | +2.3437 | +.0011 | $\begin{array}{lll}30 & 5 & 50.8\end{array}$ | + 6.795 | +-319 | 12.0 | + 14 | + 23 | 7.31 | K O |
| 8987 |  | C 9897 |  |  | 1926.14 | 3742 | 11 | $29 \quad 3 \quad 20.2$ | 810 | 323 | 13.0 |  |  | $9 \cdot 2$ |  |
| 8988 | 253813 | C 9896 |  |  | 1926.40 | 4663 | 9 | $254453 \cdot 3$ | 810 | 336 | II.4 | - 32 | - 12 | $8 \cdot 7$ | A |
| 8989 | 283312. | C 9901 |  |  | $1935 \cdot 65$ | 3895 | 11 | 283124.9 | 823 | 325 | 12.8 | + 12 | + 3 | 9•1 |  |
| 8990 | 313570 | L 7311 |  |  | 1938.58 | 3029 | 11 | $\begin{array}{lllllllllll}31 & 29 & 12.9\end{array}$ | 827 | 312 | 10.5 | 9 | - 10 | $8 \cdot 0$ | A 0 |
| 8991 | 313573 | L 7314 | 528 |  | $\begin{array}{llll}19 & 19 & 58.39\end{array}$ | +2.308I | +.0011 | 31.19 .33 .9 | +6.854 | +.313 | 10.0 | - 18 | + 12 | $8 \cdot 7$ |  |
| 8992 | 273369 | C 9906 |  |  | $20 \quad 2.80$ | - 4102 | 10 | $274836 \cdot 5$ | 860 | 328 | 11.5 | + 20 | Io | $8 \cdot 7$ | A 0 |
| 8993 | 283315 | C 9908 |  |  | $20 \quad 3.43$ | 3996 | 10 | $\begin{array}{llll}28 & 11 & 8 \cdot 7\end{array}$ | 861 | 326 | 12.0 |  |  | $9 \cdot 1$ |  |
| 8994 | 273367 | C 9907 |  |  | $20 \quad 3.73$ | 4164 | 10 | $27 \quad 3515 \cdot 4$ | 861 | 328 | 12.6 | + 9 | + | $9 \cdot 2$ |  |
| 8995 | 273373 | C9913 |  |  | 2016.73 | 4169 | 10 | $27 \quad 35 \quad 9.2$ | 879 | 328 | 12.4 |  |  | 9.9 |  |
| 8996 | 313577 | L 7318 |  |  | $1920 \quad 18.76$ | +2.3144 | +.0011 | 31749.8 | + 6.882 | +-314 | 12.8 |  | - 5 | $9 \cdot 1$ |  |
| 8997 | 293583 | C 9918 |  |  | 2026.71 | 3740 | 11 | $29 \quad 6 \quad 4.9$ | 893 | 322 | 11.6 | + 3 l | - 16 | $9 \cdot 2$ |  |
| 8998 | 293584 | C 9921 | 544 | $36676-7$ | $2034 \cdot 63$ | 3642 | 11 | 29264 I•I | 904 | 321 | 10.3 | + $7^{*}$ | + 10* | $4 \cdot 86$ | B 3 |
| 8999 | 263539 | C 9923 | 542 |  | $20 \quad 38.25$ | 4322 | 10 |  | 909 | 330 | 11.8 | - 10 | + 2 | 9.0 |  |
| 9000 | 263540 | C 9926 | 543 |  | $2041 \cdot 33$ | 4559 | 9 | 261029.4 | 913 | 333 | 12.0 | + 35 | + 15 | $9 \cdot 0$ | A |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. $8.0001 .$ | Dec. |  |  |
|  | - |  |  |  | h m s | s | s | $\bigcirc$, | " | " |  |  |  |  |  |
| 9001 | 273379 | C 9928 |  | 36683 | $192045 \cdot 73$ | +2.4081 | +.0010 | $27 \quad 5439 \cdot 9$ | + 6.919 | $+\cdot 327$ | 12.8 | - 3 | + 8 | $6 \cdot 36$ | B 8 |
| 9002 | 283319 | C 9929 |  | 36674-86 | $2046 \cdot 28$ | 3942 | 10 | $\begin{array}{lllllll}28 & 24 & 13.6\end{array}$ | 920 | 325 | 12.2 | $+\quad 10$ | $\bigcirc$ | $7 \cdot 59$ | K o |
| 9003 | 303542 | L 7325 | 557 | 36689 | $20{ }^{2} 8.87$ | 3228 | 11 | $305215 \cdot 1$ | 923 | 316 | 12.8 | - | + 9 | 7.20 | B 8 |
| 9004 | 313581 | L 7326 | 559 |  | 2052.44 | 2965 | 11 | 314459.9 | 928 | 311 | 12.1 | + 13 | + 19 | $9 \cdot 0$ |  |
| 9005 | 273380 | C 9933 |  |  | 2053.90 | 4142 | 10 | $274150 \cdot 8$ | 930 | 328 | 12.6 | + 17 | $+3$ | $9 \cdot 0$ |  |
| 9006 | 263544 | C 9935 |  |  | 19211.77 | $+2.4399$ | +.0010 | 264623.4 | +6.941 | +.331 | 12.7 | + 4 | - 12 | $9 \cdot 1$ |  |
| 9007 | 263545 | C 9936 | $55^{8}$ |  | $21 \quad 1.77$ | 4336 | 10 | $27 \quad 0 \quad 7 \cdot 8$ | 941 | 329 | 13.1 | - 10 | - 3 | 9.2 |  |
| 9008 | 283320 | C 9937 |  |  | $\begin{array}{ll}21 & 4.19\end{array}$ | 3788 | 11 | $\begin{array}{lllll}28 & 57 & 27.9\end{array}$ | 944 | 323 | 12.5 | + 4 | - 12 | $9 \cdot 0$ |  |
| 9009 | $\begin{array}{lll}31 & 3583\end{array}$ | L 7328 |  |  | $\begin{array}{lll}21 & 8.89\end{array}$ | 3046 | 1 I | $312933 \cdot 5$ | 951 | 313 | 12.7 | + 30 | + 45 | 9.2 |  |
| 9010 | 28332 I | C 9940 |  |  | 2112.41 | 3844 | 11 | $2845 \quad 53.8$ | 955 | 324 | 13.9 | 17 | $+3$ | $9 \cdot 6$ |  |
| 9011 | 263546 | C 9939 |  |  | $19 \begin{array}{llll}19 & 21 & 14.87\end{array}$ | +2.4528 | + 0009 | $261843 \cdot 1$ | +6.959 | + 333 | 13.3 | + 3 | - 28 | $9 \cdot 2$ |  |
| 9012 | 273384 | C 9943 | 572 |  | 2117.60 | 4225 | 10 | 2724 49•1 | 962 | 328 | 13.0 | $+14$ | + 12 | $9 \cdot 2$ |  |
| 9013 | 263547 | C 9944 |  |  | 2121.09 | 4474 | 10 | $\begin{array}{ll}26 & 30 \\ 39.0\end{array}$ | 967 | 332 | $11 \cdot 2$ | $\bigcirc$ | + 4 | $9 \cdot 2$ |  |
| 9014 | 293588 | C 9946 |  |  | 2128.18 | 3540 | 11 | $\begin{array}{llll}29 & 50 & 3 \cdot 5\end{array}$ | 977 | 320 | 13.0 | + 11 | - 12 | $9 \cdot \mathrm{I}$ |  |
| 9015 | 313587 | L 7333 |  |  | 2128.49 | 3010 | 1 I | $313732 \cdot 1$ | 977 | 312 | 12.2 | + 58 | - 100 | 8.2 | Go |
| 9016 | 253822 | C 9945 |  |  | $192131 \cdot 35$ | $+2.4805$ | +.0009 | $\begin{array}{llllll}25 & 17 & 43 \cdot 8\end{array}$ | + 6.981 | $+\cdot 336$ | 12.2 | + 24 | $\bigcirc$ | $8 \cdot 5$ | K |
| 9017 | 253823 | C 9948 |  |  | $2133 \cdot 62$ | 4742 |  | 253145.9 | 984 | 335 | 12.4 | + 2 | - | $8 \cdot 5$ | B 9 |
| 9018 | 243737 | B 7012 |  | 36717 | 2142.25 | 4951 | 8 | 24 4 $4588 \cdot 2$ | 996 | 338 | 12.17 | - 137* | -631* | 6.17 | F 8 |
| 9019 | 253824 | C 9949 |  |  | 2142.29 | 4743 | 9 | $253156 \cdot 7$ | 996 | 335 | 11.7 | - | - 59 | $8 \cdot \mathrm{I}$ |  |
| 9020 | 263549 | C 9950 | 588 |  | 2146.03 | 4573 | 9 | $26 \quad 944.8$ | 7.001 | 333 | 12.0 | $+10$ | + 62 | $8 \cdot 2$ |  |
| 9021 | 303548 | C 9953 |  |  | 19 21 47.79 | +2.3418 | +.0011 | 301552.1 | $+7.004$ | $+\cdot 317$ | $2 \cdot 4$ | + 28 | - 24 | $9 \cdot 2$ |  |
| 9022 | 253826 | C 9955 |  |  | $2156 \cdot 17$ | 4857 | 9 | $25 \quad 6 \quad 46 \cdot 6$ | 015 | 337 | 12.2 | - 3 | - 2 | 9.0 |  |
| 9023 | 253827 | C 9956 |  |  | 2157.24 | 4639 | 9 | 255529.4 | 017 | 333 | I 1.2 | + 8 | - 12 | 7.28 | B 8 |
| 9024 | 303554 | L 7338 | 599 |  | $\begin{array}{ll}22 & 1.65\end{array}$ | 3263 | 11 | 304810.0 | 022 | 315 | II. 8 |  | - 10 | 8.8 | G 5 |
| 9025 | 293590 | C 9959 |  |  | $22 \quad 1.94$ | 3614 | II | $2936 \quad 1.0$ | 023 | 320 | $12 \cdot 1$ | - | - 2 | $9 \cdot 2$ |  |
| 9026 | 243740 | C 9960 |  |  | $19 \quad 22 \quad 7 \cdot 14$ | +2.4886 | $+\cdot 0009$ | $\begin{array}{llll}25 & 0 & 35 \cdot 9\end{array}$ | $+7.030$ | +.338 | 12.2 |  | - 31 | $8 \cdot 7$ |  |
| 9027 | 283328 | C 9965 |  | 36757-8 | 22.12 .68 | 3908 | 11 | $28 \quad 3447 \cdot 3$ | 038 | 324 | 10.9 | + 28 | + 4 | $8 \cdot 0$ | A 0 |
| 9028 | 243742 | B 7017 | 598 | 36745-7 | $\begin{array}{lll}22 & 13.61\end{array}$ | 4924 | 9 | $24 \quad 5223.8$ | 039 | 337 | 11.7 | $+33$ | + 12 | 8.0 | B 9 |
| 9029 | 293592 | C 9968 |  |  | 2229.47 | 3692 | 11 | 292059.2 | 061 | 321 | 11.6 | - 5 | - 36 | $9 \cdot 2$ |  |
| 9030 | 28333 I | C 9969 |  | 36767-8 | $2231 \cdot 20$ | 3944 | 10 | $28 \quad 27 \quad 54.9$ | 063 | 324 | 10.5 | + 7 | - 11 | 8.4 | A 2 |
| 9031 | 303560 | L 7343 | 626 |  | 192244.49 | +2.3211 | +.0011 | $31020 \cdot 6$ | $+7.08 \mathrm{I}$ | +-313 | 1197 | + 16 | + 18 | 9.2 |  |
| 9032 | 253833 | C 9973 |  |  | $2246 \cdot 31$ | 4783 | 9 | $\begin{array}{lll}25 & 25 & 11.0\end{array}$ | 083 | 334 | 11.2 | - 6 | - 6 | $8 \cdot 5$ |  |
| 9033 | $\}_{25} 3834$ | C 9975 | 623 |  | $2252 \cdot 30$ | 4812 | 9 | $\begin{array}{lllll}25 & 18 & 57.5\end{array}$ | 092 | 335 | 10.8 | $+37$ | + 4 | 3.5 |  |
| 9034 |  | C 9976 |  |  | $2252 \cdot 77$ | 4812 | 9 | $\begin{array}{lllll}25 & 18 & 56.9\end{array}$ | 092 | 335 | 10.7 | + 37 | + + | \} | A |
| 9035 | 273391 | C 9978 | 625 | 36785 | 2254.12 | 4318 | 10 | $27 \quad 8 \quad 22 \cdot 2$ | 094 | 329 | $9 \cdot 6$ | + 69 | + 87 | $7 \cdot 8$ | F 8 |
| 9036 | 263554 | C 9979 |  |  | 192255.67 | +2.4594 | +.0009 | $26 \quad 7 \quad 52 \cdot 7$ | + 7.096 | +.332 | $9 \cdot 8$ | - 10 | + | 8.6 | A 5 |
| 9037 | 293595 | C 998I |  |  | 2259.98 | 3584 | 11 | $2944 \mathrm{I}^{1} \cdot 8$ | 102 | 318 | 10.4 | + 6 | - 27 | $9 \cdot 2$ | A 0 |
| 9038 | 303563 | C 9983 |  |  | $23 \quad 2.99$ | 3479 | 11 | $\begin{array}{llll}30 & 622.2\end{array}$ | 106 | 317. | 10.6 | - 16 | - 8 | $9 \cdot 0$ |  |
| 9039 | 313592 | L 7349 | 635-6 |  | $\begin{array}{lll}23 & 5.34\end{array}$ | 3172 | ${ }^{11}$ | $31982 \cdot 1$ | 109 | 313 | 11.6 | + 18 | - 14 | $7 \cdot 9$ | Go |
| 9040 | 303565 | L 7351 | 640 |  | 2312.03 | 3239 | 11 | $305551 \cdot 0$ | 118 | 313 | 11.8 | 16 | 20 | $9 \cdot 2$ |  |
| 9041 | 313594 | L 7352 |  |  | $19 \begin{array}{llll}19 & 3 & 12.35\end{array}$ | $+2.2990$ | $+\cdot 0011$ | $\begin{array}{llll}31 & 45 & 49 & 7\end{array}$ | + 7.119 | + 310 | 11.8 | + 26 | + 14 | $9 \cdot 2$ |  |
| 9042 | 293597 | C 9984 |  | 36802 | $\begin{array}{llll}23 & 12.95\end{array}$ | 3714 | 11 | ${ }_{29} 217858.7$ | 120 | 320 | 11.5 | + 5 | - 14 | 8.6 | A 2 |
| 9043 | 253838 | C 9987 |  |  | $23 \quad 25.35$ | $4^{863}$ | 9 | $\begin{array}{llll}25 & 8 & 40 \cdot 5\end{array}$ | 137 | 335 | 11.4 | - 20 | - 38 | $9 \cdot 6$ |  |
| 9044 | 303573 | C 9992 |  |  | 2335.02 | 3450 | 11 |  | 150 | 316 | 11.4 | 12 | - I | $9 \cdot 0$ |  |
| 9045 | 303574 | L 7357 |  |  | 2335.46 | 3365 | 11 |  | 150 | 315 | II-2 | 12 | 20 | 8.8 |  |
| 9046 | 283339 | C 9993 |  |  | 192338.04 | +2.3837 | +.0011 | $\begin{array}{lllll}28 & 53 & 10.7\end{array}$ | + 7.154 | +-321 | 11.8 |  | - 18 | $9 \cdot 0$ |  |
| 9047 | 273395 | C 9995 |  |  | $2340 \cdot 34$ | 4132 | 10 | $27 \quad 50 \quad 20 \cdot 9$ | 157 | 325 | II. 6 | - 3 | + 33 | 9.0 |  |
| 9048 | 243750 | B 7034 |  |  | 2348.25 | 5072 | 8 | $24 \quad 22 \quad 4 \cdot 6$ | 168 | 339 | 11.0 | + 18 | - 16 | $8 \cdot 2$ | K 5 |
| 9049 | 303578 | C 9998 |  |  | $2351 \cdot 50$ | 3451 | 11 |  | 172 | 316 | 10.5 | - 1 | + 23 | $8 \cdot 3 \mathrm{I}$ | A 2 |
| 9050 | 293602 | Ci0000 | 660 |  | 2353.95 | 3728 | 11 | 291647.9 | 176 | 320 | 11.5 | + 6 | - 16 | 9.1 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19 roo. | Precession. | Sec. Var. | Dec. 1910\%. | Precession. | Sec. Var. | $\begin{gathered} \text { Epoch } \\ \text { igoo+ } \end{gathered}$ | Annual P.M. |  | Mag. | Spectral туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{8.000 \mathrm{t}}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & .001 . \end{aligned}$ |  |  |
|  | - |  |  |  | h m s | 8 | 8 | $\bigcirc$, |  | " |  |  |  |  |  |
| 9051 | 303579 | L. 7365 |  |  | 192355.21 | $+2 \cdot 3298$ | +.0011 | 304543.7 | + 7.177 | +-314 | 11.4 | 23 | - 65 | 9.0 |  |
| $9052$ | 283342 | $\mathrm{C}^{\text {C }} 10001$ |  |  | 2356.05 | 3849 | 1 I | $2885122 \cdot 1$ | 178 18 18 | 322 | $10 \cdot 9$ | - $\quad 2$ | + 12 | $9 \cdot 0$ |  |
| 9053 | 283343 | $\mathrm{C}^{\text {C } 10003}$ |  |  | $23 \quad 59.28$ | 3988 | 10 | $\begin{array}{llll}28 & 22 & 2.8\end{array}$ | 183 | 323 | II. 1 | + | - 24 | $9 \cdot 2$ |  |
| 9054 | 253843 | $\mathrm{C}^{\text {C } 1000} 4$ | 662 |  | $24 \quad 2 \cdot 33$ | 4635 | 9 | $\begin{array}{llll}26 & 1 & 18.0\end{array}$ | 187 | 332 | 12.4 | - 17 | + 130 | 8.6 | F 5 |
| 9055 | 263559 | C 10005 | $66_{4}$ |  | $24 \quad 4 \cdot 59$ | 4388 | 10 | $26 \quad 55 \quad 52 \cdot 8$ | 190 | 329 | 12.4 | 8 | - 1 | $8 \cdot 6$ |  |
| 9056 | 283344 | C 10006 |  |  | 192412.99 | +2.4029 | +-0010 | 281354.4 | $+7.201$ | $+324$ | ${ }_{11} \cdot 8$ | + 12 | + 28 | 9.2 |  |
| 9057 | 303584 | ${ }^{\text {C }} 10008$ |  |  | $2426 \cdot 74$ | 3489 | 11 | $30 \quad 7 \quad 57 \cdot 9$ | 220 | 316 | 12.4 | + | - 6 | 8.8 |  |
| 9058 | 283347 | C 10009 |  |  | $2+30 \cdot 45$ | 3937 | I | $28 \quad 3413.7$ | 225 | 323 | 12.8 | + 15 | + 19 | $9 \cdot 2$ |  |
| 9059 | 273397 | C 10010 | 680 | 36866-9 | $2+36 \cdot 76$ | 4171 | 10 | 274413.0 | 234 | 326 | ${ }_{1} 1.6$ | + 1 | - 6 | $8 \cdot 2$ | A O |
| 9060 | 293608 | C 10012 |  |  | ${ }^{2}+37 \cdot 78$ | 3672 | 11 | 293026.6 | 235 | 319 | 12.7 | + 28 | + 9 | 8.6 | A 2 |
| 1 | 293609 | $\mathrm{C}^{\text {d } 10014}$ | 681 |  | $192440 \cdot 11$ | $+2 \cdot 3741$ | +.0011 | ${ }_{29} 15 \begin{aligned} & 58 \\ & 5\end{aligned}$ | $+7.238$ | + 319 | II. 6 | + 20 | - 32 | $6 \cdot 76$ | K。 |
| 9062 | 243758 | B 704I |  | 36860-1-2 | $2+4 \mathrm{I}-49$ | 4964 |  | $244^{8} 38 \cdot 9$ | 240 | 337 | II.3 | - 18 | - 8 | $7 \cdot 26$ | $\mathrm{K}_{2}$ |
| 9063 | 263562 | C 10015 |  |  | $2+42 \cdot 98$ | 4530 | 9 | $\begin{array}{llllll}26 & 25 & 55 \cdot 9\end{array}$ | 242 | 331 | 12.8 | - 9 | + 19 | $9 \cdot 2$ |  |
| 9064 | 273400 | C 10019 | 686-7 |  | $2+52.73$ | 4328 | 10 | $271047 \cdot 3$ | 256 | 328 | 12.2 | - 10 | - | 9.0 |  |
| 9065 | 243759 | B $704^{6}$ | 685 | $36882-3-4-5$ | $2457 \cdot 62$ | 5053 | 9 | $24 \quad 28 \quad 55 \cdot 9$ | 262 | 337 | 7 | - 93* | - $113{ }^{*}$ | $4 \cdot 63$ | M a |
| 66 | 283352 | C 10020 |  |  | $192+57.73$ | $+2.4018$ | +.0010 | $\begin{array}{llll}28 & 18 & 2.4\end{array}$ | $+7 \cdot 262$ | + 324 | 10.7 | + | + 26 | 8.8 | A o |
| 9067 | 283353 | C 10022 |  |  | 257.14 | 3922 | 11 | $\begin{array}{llllllllllll}28 & 38 & 54.9\end{array}$ | 275 | 321 | 12.2 | + 20 | 28 | 9.0 | A |
| 9068 | 293610 | C 10023 |  |  | $25 \quad 7 \cdot 57$ | 3529 | 11 | 308125.1 | 276 | 317 | I2.1 | 22 | 26 | $8 \cdot 7$ |  |
| 9069 | 313608 | L 7377 | 701 |  | $25 \quad 10.65$ | 3197 | 11 |  | 280 | 311 | II. 3 | 57 | 70 | 8.1 | G 5 |
| 9070 | 243761 | B 7050 | 694 | $36895-6-7-8$ | 25 11.73 | 5029 | 9 | $243457 \%$ | 281 | 337 | I2.1 |  | 5* | $5 \cdot 98$ | K |
| 9071 | 293612 | C 10024 | 700 |  | 192512.36 | +2.3701 | +.0011 | $292535 \cdot 6$ | $+7.282$ | +-319 | 12.6 | + 21 | - 38 | $9 \cdot 2$ |  |
| 9072 | 313609 | L 7381 |  | 36914 | 2515.17 | 2978 | 11 | 315324.1 | 286 | 308 | 13.0 |  | - 15 | 7.81 | F 8 |
| 9073 | 303588 | $\begin{array}{ll}\mathrm{L} & 7380\end{array}$ |  |  | 2515.58 | 3323 | 11 | $\begin{array}{lllllllll}30 & 43 & 54.9\end{array}$ | 287 | 314 | $\cdot 1$ | + 6 | 21 | $9 \cdot 2$ |  |
| 9074 | 313610 | L 7382 | 705 |  | 2518.50 | 3201 | 11 | $\begin{array}{lllll}31 & 8 & 53.0\end{array}$ | 291 | 311 | 11.7 | 3 | - 13 | $7 \cdot 8$ | Ko |
| 9075 | 273404 | C 10026 | 708 | 36913-5 | 2528.55 | 4179 | 10 | $274435 \cdot 7$ | 304 | 325 | 11.6 | + 2 | + 23 | $8 \cdot 0$ | Fo |
| 9076 | 313612 | L 7384 |  |  | $1925 \quad 32.75$ | +2.3121 | +.0011 | $\begin{array}{llllll}31 & 25 & 4.5\end{array}$ | +7.310 | $+.310$ | 12.6 | 4 | - 18 | $9^{9} 2$ |  |
| 9077 | 263566 | C 10027 |  |  | 2533.94 | 4513 | 10 | 26. 3149.8 | 352 | 329 | 13.0 | $\bigcirc$ | - 9 | $8 \cdot 0$ | B 8 |
| 9078 | 303589 | C 10030 |  |  | 25 37.18 | 3509 | 11 | $\begin{array}{llll}30 & 6 & 39.9\end{array}$ | 316 | 317 | 12.3 | + 23 | + 15 | $8 \cdot 36$ | A ${ }_{\text {c }}$ |
| 9079 | 263567 | C 10029 |  |  | 2539.31 | 4617 | 9 | $\begin{array}{llll}26 & 8 & 49.4\end{array}$ | 319 | 335 | 12.2 | + 6 | + 32 | $8 \cdot 6$ | F |
| 9080 | 273405 | C 10032 |  |  | $2543 \cdot 64$ | 4273 | 10 | ${ }^{27} \quad 2449.8$ | 325 | 326 | 12.6 | 6 | - | $9 \cdot 2$ |  |
| 9081 | 303590 | L 7388 |  | 36925 | 192544.38 | $+2 \cdot 3438$ | +.0011 | 302145.0 | + 7.326 | $+\cdot 316$ | 13.1 | + 29 | + 21 | $7 \cdot 46$ | K o |
| 9082 | 313618 | L 7391 | 721 |  | 2553.39 | 3124 | 11 |  |  | 310 | $10 \cdot 38$ | 12 | - 423 | $6 \cdot 98$ | G 5 |
| 9083 | 243764 | C 10034 | 713-4 |  | 2558.57 | 4916 | 9 |  | 345 | 335 | 11.7 | - | - 17 | 9.2 |  |
| 9084 | 303595 | L 7392 |  | 36932 | 2559.97 | 3388 | 11 |  | 347 | 313 | 10.9 | + 21 | + | $8 \cdot 8$ | A 0 |
| 9085 | 313622 | L 7393 | 727 |  | $26 \quad 3.04$ | 3199 | II |  | 351 | 311 | 11.9 | - 2 | - | $8 \cdot 1$ | B 9 |
| 9086 | 273407 | ${ }_{\text {C }} 10036$ |  |  | $1926 \quad 5 \cdot 68$ | $+2.4342$ | +.0010 | $27 \quad 1037.4$ | $+7.355$ | + 327 | 12.1 | 19 | + 10 | $9 \cdot 2$ |  |
| 9087 | 243765 | B 7061 |  | 36934 | $26 \quad 19.45$ | 4965 | 9 | $2452 \quad 3 \cdot 5$ | 373 | 335 | 11.0 | 34 | - 2 | 8.0 | K o |
| 9088 | 253855 | C 10038 | 729 |  | ${ }^{26} \quad 19.68$ | 4714 | 9 | $\begin{array}{llllll}25 & 48 & 50 \cdot 9\end{array}$ | 374 | 332 | 12.6 | 10 | + II | $8 \cdot 6$ | A |
| 9089 | 283363 | C 10039 | 735 |  | ${ }^{26} 119.82$ | 3967 | 11 | $\begin{array}{lllllllllll}28 & 32 & 13.5\end{array}$ | 374 | 322 | $1 \mathrm{I} \cdot 9$ | 10 | - 5 | $8 \cdot 2$ | K 2 |
| 9090 | 293617 | C 10042 |  |  | $26 \quad 26 \cdot 78$ | 3804 | II | $29 \quad 713.2$ | 383 | 319 | 12.7 | 12 | + 25. | $9 \cdot 2$ |  |
| 9091 | 243766 | B 7062 |  |  | 192628.98 | +2.5149 | $+.0008$ | 241021.9 | + $7 \times 386$ | +-338 | 12.4 | + 74 | + 31 | $9 \cdot 2$ |  |
| 9092 | 293618 | C 10044 | 747 |  | 26 36.42 | 3584 | 11 | $295342 \cdot 3$ | 396 | 316 | $1{ }^{1} \cdot 9$ | + 24 | + 7 | 9.0 |  |
| 9093 | 243767 | B 7066 |  | $36944-5$ | 2639.23 | 5135 | 8 | $2+13$ | 400 | 338 | $10 \cdot 6$ | + 2 | 6 | $8 \cdot 5$ |  |
| 9094 | 243768 | B 7068 |  | 36954-5 | 26 $26-5 \cdot 68$ | 4954 | 10 | $\begin{array}{lllllllllllllllllll}24 & 55 & 53.8 \\ 27 & 3 & 6.6\end{array}$ | 418 | 334 | 10.6 10.6 | - 10 | , | $8 \cdot 1$ | Go |
| 9095 | 263570 | C 10047 | 749 |  | 26-53.23 | 4385 | 10 | $\begin{array}{llll}27 & 3 & 6.6\end{array}$ | 419 | 328 | 10.6 | - 5 | $+3$ | $8 \cdot 7$ | A 5 |
| 9096 | 273409 | C 10048 |  |  | 192656.72 | +2.4099 | +.0010 | $\begin{array}{llll}28 & 5 & 30 \cdot 2\end{array}$ | $+7 \cdot{ }^{24}$ | +-324 | 10.6 | + 3 | + 7 | 9.1 |  |
| 9097 | 273410 | C 10049 |  | 36969-70 | $27 \quad 5 \cdot 50$ | 4190 |  | 274612.5 | 436 | 324 | 12.3 | - $2^{*}$ | *- 9* | $3 \cdot 24$ | Ko, Ao |
| 9098 | 293620 | C 10051 |  |  | $27 \quad 5 \cdot 52$ | 3639 | II | $2943 \quad 25 \cdot 2$ | 436 | 317 | 52.0 | + 22 | - 2 | $9 \cdot 2$ |  |
| 9099 | 313630 | L 7401 | 761 |  | $\begin{array}{ll}27 & 6.24 \\ & 77\end{array}$ | 3062 | 11 |  | 437 | 309 | 12.1 | + 6 | + 10 | $8 \cdot 5$ | B 9 |
| 9100 | 303603 | L 7400 | 758 |  | $27 \quad 7 \cdot 26$ | 3444 | II | $302354 \cdot 2$ | $43^{8}$ | 314 | 11.7 | - 9 | + 10 | 7•81 | K |


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec.Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R. } .0001}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { Nooi. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m s | 8 | 8 | - , " |  | " |  |  |  |  |  |
| 9101 | 273411 | C 10052 |  | 36971 -3 | $\begin{array}{lll}19 & 27 & 7.58\end{array}$ | +2.4189 | +.0010 | $27 \quad 46 \quad 32 \cdot 7$ | $+7 \cdot 438$ | +-325 | 12.0 | 8* | 8* | $5 \cdot 36$ | B 9 |
| 9102 | 313631 | L 7402 | 762 | 36987 | $\begin{array}{lll}27 & 8.48\end{array}$ | 3034 | 1 I | 317727.3 | 440 | 308 | 11.8 | + 14 | 7 | $7 \cdot 54$ | K 2 |
| 9103 | 273412 | C 10053 |  |  | 2713.58 | 4292 | 10 | $\begin{array}{lllllllllll}27 & 24 & 16.2\end{array}$ | 447 | 325 | 12.0 | + 8 | 1 | $9 \cdot 1$ |  |
| 9104 | 283367 | C 10054 |  |  | 2713.79 | 4030 | 10 | $\begin{array}{llllllllll}28 & 21 & 3.9\end{array}$ | 447 | 321 | 11.4 | + | 7 | $9 \cdot 1$ |  |
| 9105 | 303605 | C 10055 |  |  | $27 \cdot 22 \cdot 16$ | 3493 | 11 |  | 458 | 316 | 10.8 | 18 | - | 8.41 | A. 2 |
| 9106 | 273413 | C 10056 | 764 |  | 192731.05 | +2.4366 | +-0010 |    <br> 7 8 49 <br> -1   | $+7.470$ | +•326 | II.6 | - 6 | + 11 | 8.8 | A. 5 |
| 9107 | 293623 | C 10057 |  |  | 2731.42 | 3703 | 11 | $2931 \quad 7 \cdot 4$ | 471 | 317 | II. 3 | + 29 | - 4 | $8 \cdot 6$ |  |
| 9108 | 273415 | C 10059 | 767 |  | $2733 \cdot 88$ | 4198 | 10 | $274540 \cdot 4$ | 474 | 324 | 12.3 | - $\quad 37$ | - 39 | $9 \cdot 1$ |  |
| 9109 | 273414 | C 10058 |  |  | $2734 \cdot 15$ | 4250 | 10 | 273422.9 | 474 | 325 | 11.8 | + 32 | $+{ }^{2}$ | $9 \cdot 2$ | M a |
| 9110 | 283370 | C 1006I |  |  | 2738.24 | 4052 | 10 | $\begin{array}{llllll}28 & 17 & 19.6\end{array}$ | 480 | 322 | 12.0 | + 20 | + II | 9.0 | A |
| 9111 | 263573 | C 10062 | 770 | 36995 | $192740 \cdot 42$ | +2.4563 | +.0009 | 262532.9 | $+7 \cdot 483$ | $+\cdot 329$ | II.I | $+\quad+$ | + 29 | $5 \cdot 96$ | K。 |
| 9112 | 273417 | ${ }^{\text {C } 10063}$ | 772 |  | 2744.44 | 4349 | 10 |  | 488 | 326 | 11.4 | $+4$ | - 15 | $9 \cdot 2$ |  |
| 9113 | 283373 | C 10066 |  |  | 2753.83 | 3989 | 11 | 28 31 $33 \cdot 8$ | 501 | 321 | 10.8 | + 5 | + $\quad 37$ | $8 \cdot 2$ | Fo |
| 9114 | 263574 | C 10067 |  | 37009 | 27 56.09 | 4467 | 10 | $264743 \cdot 3$ | 504 | 328 | $1 \mathrm{I} \cdot \mathrm{O}$ | - 21 | + 14 | $7 \cdot 7$ | B 8 |
| 9115 | 303610 | L 7412 |  |  | $28 \quad 3.45$ | 3353 | II | 3045 I 9.2 | 514 | 313 | $1{ }^{1}$ | + 12 | + 27 | $9 \cdot 2$ |  |
| 9116 | 303611 | C 10068 |  |  | 19281500 | $+2.3538$ | +.0011 | $30736 \cdot 1$ | + 7.530 | $+315$ | 10.8 | 7 | 13 | 8.71 | A 0 |
| 9117 | 283375 | C 10070 | 789 |  | $28 \quad 19.76$ | 3874 | 11 | 28574.4 | 536 | 319 | 11.7 | - 22 | - 64 | $8 \cdot 8$ |  |
| 9118 | 313643 | L 7417 |  |  | $28 \quad 20.55$ | 3084 | 11 | 314032.9 | 537 | 309 | 11.4 | + 1 | - 3 | 8.2 | M b |
| 9119 | 253864 | C 10069 | 787 |  | 2821.47 | 4844 | 9 | 2524119 | 538 | 332 | II.2 | + ${ }^{24}$ | + 83 | $6 \cdot 90$ | F 2 |
| 9120 | 293628 | C 10072 |  | 37025 | $28 \quad 23.77$ | 3577 | 11 | $295946 \cdot 4$ | 541 | 315 | $1 \mathrm{I}_{2}$ | + 2 | + 20 | $7 \cdot 71$ | K 2 |
| 9121 | 303613 | L 7420 |  | 37036 | 192824.00 | $+2 \cdot 3278$ | +.0011 | 311820.5 | $+7.542$ | +-312 | . 0 | - 14 | + 34 | $8 \cdot 1$ |  |
| 9122 | 273421 | C 10074 |  |  | $28 \quad 28.74$ | 4122 | 10 |  | 548 | 323 | 11.4 | $+\quad 34$ | - | 8.0 | A. |
| 9123 | 293629 | C 10075 |  |  | $28 \quad 32 \cdot 47$ | 3696 | II | 293522.3 | 553 | 317 | 11.2 | 21 | 30 | $9 \cdot 0$ | A 0 |
| 9124 | 273423 | C 10076 |  |  | ${ }^{28} 42 \cdot 19$ | 4315 | 10 | 272253.4 | 566 | 325 | $1 \mathrm{I} \cdot 6$ |  |  | 9.0 |  |
| 9125 | 273425 | C 10079 |  |  | $2845 \cdot 97$ | 4220 | 10 | $274346 \cdot 9$ | 571 | 324 | 11.8 | + 13 | + 15 | 8.8 | A 3 |
| 9126 | 253868 | C 10077 | 795 |  | 192847.01 | +2.4894 | +.0009 | $251352 \cdot 1$ | + 7.573 | +-333 | 2.0 | 24 | - 69 | 9.0 |  |
| 9127 | 263578 | C 10080 |  |  | $28 \quad 50.06$ | 4636 |  | $2612 \quad 6.0$ | 577 | 329 | 12.2 | - 33 | - 177 | $9 \cdot 2$ |  |
| 9128 | 273426 | C 1008I |  |  | 2851.22 | 4358 | 10 |  | 578 | 326 | 10.8 | - 23 | - 66 | 8.8 |  |
| 9129 | 313647 | L 7427 |  |  | $2856 \cdot 17$ | 3186 | 11 | $312136 \cdot 5$ | 585 | 310 | 10.5 | + 10 | - 26 | $9 \cdot$ |  |
| 9130 | 313650 | L 7432 |  |  | 2919.45 | 3157 | 11 |  | 617 | 310 | 10.7 | + 15 | 33 | 9.0 |  |
| 9131 | 263580 | C 10086 |  |  | 19 2923.46 | $+2.4658$ | +.0009 | $\begin{array}{llll}26 & 8 & 44.7\end{array}$ | $+7.622$ | +•328 | 11.2 | 22 | + 9 | $9 \cdot 2$ |  |
| 9132 | 303621 | L 7434 |  |  | 2923.72 | 3315 | 11 | $30 \quad 5643 \cdot 4$ | 622 | 311 | 11.0 | + | - 17 | 8.8 |  |
| 9133 | 303622 | L 7435 |  | 37077-8 | 2925.22 | 3286 | 1 I |  | 624 | 312 | II. 2 | + 4 | + 16 | $6 \cdot 74$ | F 2 |
| 9134 | 273428 | C 10089 | 823-4 | 37074-5 | $2932 \cdot 12$ | 4377 | 10 | 27 II 33.2 | 634 | 325 | 11.6 | 50 | - 154 | 8.5 | F 5 |
| 9135 | 283379 | C 10090 |  |  | 2932.63 | 4063 | 10 | 28 19 <br> 16.7  | 634 | 321 | 11.8 |  |  | 9.1 | A |
| 9136 |  | $\mathrm{C}^{\text {C }} 10087$ |  |  | 192932.97 | $+2.4683$ | +.0009 |  | + 7.635 | + 329 | II. 8 | + 9 | - 8 | $9 \cdot 1$ |  |
| 9137 | 263582 | C 10091 |  |  | $2936 \cdot 79$ | 4623 | 9 | $\begin{array}{llll}26 & 17 & 1.4\end{array}$ | 640 | 328 | 12.2 | + 34 | - 36 | $9 \cdot 2$ |  |
| 9138 | 273429 | C 10093 |  |  | 2938.06 | 4334 | 10 | $\begin{array}{lllll}27 & 21 & 3.4\end{array}$ | 642 | 325 | 11.6 | - 26 | - 18 | $9 \cdot 2$ |  |
| 9139 | 303623 | L $744^{\circ}$ |  |  | 2938.93 | 3367 | 11 | $3046 \quad 39 \cdot 5$ | 643 | 312 | H1.8 | + II | + | 8.6 |  |
| 9140 | 273430 | C 10094 | 829 | 37082 | $2940 \cdot 38$ | 4281 | 10 |  | 645 | 324 | 11.6 | + 8 | + | $8 \cdot 6$ | A o |
| 9141 | 293639 | C 10095 | 831 |  | 192941.32 | +2.3731 | +.001 1 | 293056.5 | + 7.646 | +-316 | 11.4 | + 24 | + | $8 \cdot 7$ |  |
| 9142 | 313653 | L 7441 |  |  | $2942 \cdot 22$ | 3106 | 11 | $313954 \cdot 8$ | 647 | 309 | 11.6 | a <br> $+\quad 38$ | + $+\quad 9$ | 9.1 |  |
| 9143 | 303625 | L 7442 |  |  | 2944.06 | 3449 | 11 | 302951.6 | 650 | 313 | 10.8 | - 13 | + 13 | 8.6 |  |
| 9144 | 303629 | C ioiol | 849 |  | 304.25 | 3563 | 11 | $30 \quad 7 \mathrm{II} \cdot 0$ | 677 | 314 | II. 2 | - 3 | + 6 | 8.81 | A 2 |
| 9145 | 293642 | C ioioo |  |  | $30 \quad 4.59$ | 3819 | 11 | 29 13 <br> 18.9  | - 678 | 317 | $\mathrm{II}^{1} 8$ | 11 | - $3^{8}$ | $9 \cdot 0$ |  |
| 9146 | 253873 | C 10099 | 841 |  | $1930 \quad 5.42$ | +2.4855 | +.0009 | 2525560 | $+7.679$ | +.331 | 12.2 | + 14 |  | $9 \cdot 2$ |  |
| 9147 | 253875 | C 10102 | 852 | 37106 | $30 \quad 17.83$ | 4742 | 9 | 255157.9 |  | 330 | 11.0 | + 22 | + 11 | $6 \cdot 92$ | A 2 |
| 9148 | 243780 | B 7099 | 821 |  | 3018.26 | 5129 | 8 | $24233^{1 / 1}$ | 696 | 335 | 11.6 | - 5 | 4 | $9 \cdot 0$ | A 2 |
| 9149 | 273433 | $\mathrm{C}_{\mathrm{C}} 10104$ |  |  | 3018.85 | 4139 | 10 | $28 \quad 5 \quad 28.6$ | 697 | 322 | 12.4 |  |  | 10.4 |  |
| 9150 | 253876 | C 10103 | 853 | 37107-9 | 3018.87 | 4810 | 9 | $253637 \cdot 0$ | 697 | 331 | 11.4 | - 5 | + 6 | 7.56 | K。 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | $\begin{aligned} & \text { R A. } \\ & \text { B.000 } \end{aligned}$ | Dec. ".001. | Mag. | Spectral Type. |
|  | $\bigcirc$ |  |  |  | h m s | s | s | - , | " | " |  |  |  |  |  |
| 9151 | 303632 | L $7+55$ | 866 |  | $1930 \quad 24.91$ | +2.3439 | +.001 I | $3033+8 \cdot 2$ | $+7 \cdot 705$ | $+312$ | 12.4 | + 33 | + 3 | $9 \cdot 2$ | A 0 |
| 9152 | 253877 | C 10108 |  | 37119 | 3029.71 | 4932 | 9 | $25 \quad 9 \quad 23 \cdot 1$ | 711 | 332 | $11 \cdot 4$ | $+\quad 24$ | . 22 | $7 \cdot 21$ | M a |
| 9153 | 283392 | C 10111 | 863 | 37132 | 3034.41 | 4106 | 10 | $\begin{array}{llll}28 & 13 & 9 \cdot 2\end{array}$ | 718 | 32 I | 11.1 | - 6 | - 4 | 8.1 | B 9 |
| 9154 | $\begin{array}{lll}25 & 3879\end{array}$ | C 10112 | 864 |  | $3040 \cdot 92$ | 4873 | 9 | $\begin{array}{lllllllllllllll}25 & 23 & 16.0\end{array}$ | 726 | 331 | 11.6 | - 21 | + 7 | $8 \cdot 7$ | F |
| 9155 | $27 \quad 3+35$ | C10113 |  | 37138 | 3044.11 | $434^{2}$ | 10 | 272211.4 | 731 | 324 | 11.0 | - 4 | - 20 | $8 \cdot 6$ |  |
| 9156 | 3113663 | L 7460 |  |  | 1930 46.31 | $+2.3181$ | $+.0012$ | $\begin{array}{llll}31 & 27 & 440\end{array}$ | + $7 \cdot 734$ | +.309 | 12.0 | + 14 | + 9 | $9 \cdot 0$ |  |
| 9157 | 283394 | C 10115 |  |  | $30+7 \cdot 22$ | +045 | 10 | $282654 \cdot 2$ | 735 | 320 | 10.5 | + 12 | - 2 | $9 \cdot 2$ |  |
| 9158 | 263591 | C 10114 |  |  | $3049 \cdot 33$ | 4658 | 9 | $\begin{array}{lllll}26 & 12 & 13.9\end{array}$ | 738 | 328 | 11.6 | + 15 | + 13 | $9 \cdot 2$ |  |
| 9159 | 283397 | ${ }_{\text {C }} 10117$ |  |  | $30 \quad 59.88$ | 3863 | II | $\begin{array}{llll}29 & 6 & 26 \cdot 3\end{array}$ | 752 | 317 | 11.2 | - 11 | - $5^{8}$ | $9 \cdot 0$ | A 0 |
| 9160 | 283398 | C 10120 |  |  | $3 \mathrm{I}+13$ | 3975 | 11 | $28 \quad 4239 \cdot 6$ | 757 | 319 | 11.6 | + 47 | - 43. | $9 \cdot 2$ |  |
| 9161 | $30 \quad 3637$ | L 7465 |  |  | $1931+46$ | $+2.334^{2}$ | +.0011 | $3055 \quad 36 \cdot 7$ | + $7 \cdot 758$ | $+310$ | $12 \cdot 1$ | - 9 | - 4 | $9 \cdot 2$ |  |
| 9162 | 283399 | C 10122 | 882-3 | $37158-9$ | 315115 | 3907 | 11 | $28 \quad 57 \quad 18 \cdot 3$ | . 759 | 318 | 11.4 | 4 | + 15 | $8 \cdot 2$ | K 2 |
| 9163 | ${ }^{2}+3785$ | B 7106 |  | 37149 | $315 \cdot 38$ | 4991 | 9 | $24 \quad 57 \quad 17 \cdot 5$ | 759 | 332 | 11.5 | + 1 | 21 | $8 \cdot 31$ | A 0 |
| 9164 | 253881 | C 1012I | 877-8 |  | $3 \mathrm{I} \quad 7 \cdot 04$ | 4757 | 9 |  | 761 | 330 | 12.4 | + 13 | - 16 | $8 \cdot 8$ | Fo |
| 9165 | $2+3786$ | B 7108 | 880 |  | $3111 \cdot 22$ | 5141 | 8 | $2422 \quad 55 \cdot 3$ | 767 | 334 | I 1.9 | - 3 | - 3 | $9 \cdot 1$ |  |
| 9166 | 293651 | C IOI28 | 891 | 37171-3 | 193116.34 | $+2 \cdot 3822$ | +.001 1 | 291552.4 | + 7.774 | $+317$ | 11.4 | + 13* | + 18* | $5 \cdot{ }^{2}$ | F 5,Ao |
| 9167 | 243788 | B 7111 |  | 37155 | 3116.58 | 5025 | 9 | $244958 \cdot 9$ | $77+$ | 333 | 12.2 | + 4 | + 6 | $8 \cdot 8$ | A 0 |
| 9168 | 263594 | C 10127 |  | 37166-9 | 3118.51 | 4442 | 10 | $\begin{array}{lrrl}27 & 1 & 34.7\end{array}$ | 777 | 325 | 12.4 | + 37 | + $3+$ | $6 \cdot 72$ | A 3 |
| 9169 | 313666 | $\begin{array}{lr}\mathrm{L} & 7468 \\ \mathrm{C} & \end{array}$ |  |  | 3120.03 | 3038 | 12 | $\begin{array}{llll}31 & 58 & 1 \cdot 7\end{array}$ | 779 | 306 | 13.1 | - 4 | + 2 | $9 \cdot 2$ |  |
| 9170 |  | C IOI 29 |  |  | 3120.47 | 3757 | 11 | $292951 \cdot 3$ | 779 | 316 | 13.6 | + 3 I | - 8 | $9 \cdot 2$ |  |
| 9171 | $30 \quad 3640$ | L 7469 |  |  | 193122.89 | $+2 \cdot 3448$ | $+.0011$ | $303444 \cdot 9$ | + 7.783 | +.311 | $13 \cdot 5$ |  |  | $9 \cdot 2$ |  |
| 9172 | 253883 | C IOI 30 | 892-3 |  | 3124.28 | 4761 | 9 | $255021 \cdot 0$ | 785 | 330 | 11.6 | + 1 | - 12 | $8 \cdot 5$ |  |
| 9173 | $30 \quad 3641$ | L 7470 | 907 |  | 3124.46 | 3444 | 1 I | $3035 \cdot 31.4$ | 785 | 311 | 13.4 | + 2 | - 66 | $9 \cdot 2$ |  |
| 9174 | $28 \quad 3402$ | C IOI 33 | 902-4 |  | 3124.74 | 3930 | 11 | $\begin{array}{lllll}28 & 53 & 19.9\end{array}$ | 785 | 317 | 12.6 | + 27 | + 11 | $9 \cdot 0$ |  |
| 9175 | 243789 | B 7113 | 890 |  | 3125.35 | 5119 | 8 | $2428 \quad 30 \cdot 0$ | 786 | 334 | 13.2 | + 23 | - 30 | $9 \cdot 2$ |  |
| 9176 | 293653 | C 10134 |  |  | 193127.18 | $+2 \cdot 3734$ | +.0011 | $29358 \cdot 1$ | + 7.788 | +-315 | 12.8 | + 13 | - II | $8 \cdot 4$ |  |
| 9177 | $25 \quad 3884$ | C IOI 32 | 897-9 |  | 3127.21 | 4769 | 9 | $2548 \quad 39 \cdot 6$ | 789 | 330 | 12.6 | + 10 | + 9 | $8 \cdot 2$ | K 5 |
| 9178 | 283404 | C 10137 |  |  | 3134.85 | 4034 | 11 | $28 \quad 31 \quad 23 \cdot 9$ | 799 | 319 | $1 \cdot 9$ | - 5 | - 6 | $8 \cdot 8$ | A 0 |
| 9179 | 313669 | L 7474 |  |  | $3 \mathrm{I} 35 \cdot 89$ | 3282 | 11 | 31.9824 .0 | 800 | 310 | 13.0 | + 21 | $\bigcirc$ | $9 \cdot 2$ |  |
| 9180 | 253885 | C 10138 | 909 |  | 3139.80 | +693 | 9 | $26 \quad 630 \cdot 4$ | 805 | 327 | 12.4 | - 9 | - 9 | $9 \cdot 2$ |  |
| 9181 | $27 \quad 3+37$ | C 10140 |  |  | $1931+2.92$ | $+2.4273$ | +.0010 | $27 \quad 39 \quad 55 \cdot 3$ | +7.810 | $+322$ | 10.8 | + 15 | - 18 | $8 \cdot 6$ | K 2 |
| 9182 | 243793 | C IOI 39 |  |  | $3143 \cdot 94$ | 4986 | 9 | $2+5958 \cdot 0$ | 811 | 332 | 12.0 | + II | - 26 | $9 \cdot 2$ |  |
| 9183 | 273438 | C 10142 |  |  | 3147.80 | $+261$ | 10 | $27 \quad 4240 \cdot 8$ | 816 | 322 | 11.1 | - 7 | + 14 | $8 \cdot 8$ | A 0 |
| 9184 | 243795 | C 1014I |  |  | $3148 \cdot 82$ | 4998 | 9 | $24 \quad 57 \quad 17 \cdot 1$ | 818 | 332 | 12.0 | + 21 | - 21 | $9 \cdot 2$ |  |
| 9185 | 263599 | C IOI 44 |  | 37187 | 3153.22 | +480 | 10 | 265434.3 | 823 | 325 | I 1.2 | + 31 | - 20 | $8 \cdot 0$ | B 9 |
| 9186 | 293655 | C 1014 ${ }^{6}$ |  |  | 193153.60 | +2.3659 | +.001 1 | $29 \quad 52 \quad 7 \cdot 0$ | $+7.824$ | +.314 | 11.2 | $+31$ | - 41 | $8 \cdot 4$ | A 2 |
| 9187 | 293656 | C IoI49 |  |  | 3159.41 | 3753 | II | $293237 \cdot 6$ | 832 | 315 | 12.5 | + 8 | 28 | 9.1 |  |
| 9188 | 303645 | L 7479 | 929 | 37210 | $32 \quad 2.04$ | 3311 | 11 | $31437 \cdot 9$ | 835 | 310 | II. 6 | - | + 2 | $7 \cdot 6$ | B 2 |
| 9189 | 243797 | C 10148 |  | 37193 | $\begin{array}{ll}32 & 2.16\end{array}$ | 4996 | 9 | $2458 \quad 29.5$ | 836 | 332 | 13.0 | + I | - 8 | 8.01 | B 9 |
| 9190 | 253889 | C IoI50 | 922 |  | $32+40$ | 4828 | 9 | $2536 \quad 52 \cdot 5$ | 838 | 33 I | $13 \cdot 2$ | I | + 14 | $7 \cdot 46$ | B 5 |
| 9191 | $30 \quad 3646$ | C IoI5I |  |  | 19 $32+69$ | +2.3569 | +.0011 | 30 II $27 \cdot 7$ | + 7.839 | $+312$ | 12.8 | + 15 | + 12 | $8 \cdot 2$ |  |
| 9192 | 253891 | C IOI52 | 931 |  | $\begin{array}{llll} & 32 & 17.40\end{array}$ | 4901 | 9 | $252046 \cdot 2$ | 856 | 331 | 12.0 | + 26 | 21 | $8 \cdot 4$ | A 0 |
| 9193 | 313672 | L 7484 |  |  | $\begin{array}{llll}32 & 17.55\end{array}$ | 3288 | 11 | $3110 \quad 5 \cdot 3$ | 856 | 309 | 11.7 | + 27 | + 17 | $9 \cdot 0$ |  |
| 9194 | 263601 | C IOI 54 | 932 |  | $\begin{array}{llll}32 & 18.76\end{array}$ | 4651 | 9 | $2617 \quad 34.2$ | 858 | 328 | 12.4 | + 37 | + 34 | $8 \cdot 6$ |  |
| 9195 | 243798 | B 7129) | 930 |  | 3218.86 | 5115 | 9 | $24314+6$ | 858 | 334 | 12.0 | + 63 | + 24 | S.I | G 5 |
| 9190 | 263602 | C 10157 |  |  | $1932 \quad 22.85$ | +2.4591 | +.0010 | $263115 \cdot 3$ | + 7.863 | $+327$ | 11.6 | + 15 | + 8 | $9 \cdot 2$ |  |
| 9197 | 243799 | C 10158 |  |  | $32 \quad 25 \cdot 28$ | 497 I | 9 | $\begin{array}{llll}25 & 5 & 7 \cdot 8\end{array}$ | 866 | 332 | 13.1 | $+\quad 23$ | 0 | 9.1 |  |
| 9198 | 263603 | C 10159 | 935-6 | 37217-9 | 3226.41 | 4453 | 10 | $\begin{array}{llll}27 & 2 & 1 \cdot 7\end{array}$ | 868 | 325 | 11.4 | + 7 | 7 | $8 \cdot 5$ | A 5 |
| 9199 | 293658 | C 10160 |  |  | $32 \quad 26.70$ | 3854 |  | 291219.3 | 868 | 316 | 12.9 | + 1 | - 27 | $9 \cdot 2$ |  |
| 9200 | 263606 | C 10163 |  |  | $3237 \cdot 48$ | 4528 | 10 | $26+5 \quad 58 \cdot 4$ | 883 | 326 | 12.6 | 18 | + 12 | $9 \cdot 2$ |  |


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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Epoch $1900+$ | $\begin{gathered} \text { R.A. } \\ \text { 8.000 I. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ".OOI. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m s | 8 | 8 | - , " | " | " |  |  |  |  |  |
| 9201 | 243801 | B 7136 | 941 | 37222 | $1932 \begin{array}{lll}17.85\end{array}$ | $+2.503 \mathrm{I}$ | +.0009 | 24 51 $48 \cdot 2$ | + 7.883 | +.333 | II.4 | + 18 | $+\quad 5$ | $8 \cdot 8$ | A 0 |
| 9202 | 243802 | C 10166 |  |  | $3241 \cdot 42$ | 5007 |  | $245722 \cdot 6$ | 888 | 332 | 12.8 | + | + 3 | $9 \cdot 2$ |  |
| 9203 | 263608 | C 10167 | 945 |  | $3241 \cdot 52$ | 4608 |  | $26 \quad 28 \quad 6 \cdot 1$ | 888 | 327 | 12.3 | + 3 | + 13 | $8 \cdot 6$ |  |
| 9204 | 243803 | B 7141 | 943 | 37212 | $3243 \cdot 00$ | 5048 |  | $24 \quad 48 \quad 1 \cdot 3$ | 890 | 333 | 12.4 | + 28 | + 9 | $8 \cdot 6$ | B 9 |
| 9205 | 313678 | L 7487 | 954 |  | $3243 \cdot 52$ | 3248 | 11 | 31 19  | 891 | 309 | 10.8 | + 8 | + II | 8.0 |  |
| 9206 | $24 \quad 3803$ |  |  |  | 193243.55 | +2.5049 | $+.0009$ | $244759 \cdot 2$ | + 7.89 I | $+333$ | $9 \cdot 6$ | + 28 | + 9 | $8 \cdot 6$ |  |
| 9207 | 243807 | B 7143 |  |  | 3250.05 | 5204 | 8 | 24128.9 | 900 | 335 | II.0 | + | + 12 | $8 \cdot 6$ | $\text { B } 9$ |
| 9208 | 303654 | L 7494 | 966 |  | 3258.07 | 3402 | 11 | $304833 \cdot 7$ | 910 | 310 | II I I | $+$ | - 9 | $8 \cdot 6$ | A |
| 9209 | 243810 | C 10174 |  |  | $33 \quad 1.66$ | 4977 |  | $25 \quad 5 \quad 12.5$ | 915 | 331 | 12.1 | $+$ | + 13 | $9 \cdot 2$ |  |
| 9210 | 243809 | B 7146 | 957 |  | $33 \quad 1 \cdot 92$ | $5044$ |  | $244942 \cdot 5$ | 916 | 332 | 11.0 | + 16 | $4$ | $8 \cdot 6$ |  |
| 92 II | 273444 | C 10175 | 962-3 |  | $1933 \quad 3 \cdot 94$ | $+2.4284$ | +.0010 | $27 \quad 4058 \cdot 3$ | $+7.918$ | +.321 | I I*7 | + 20 | 10 | $7 \cdot 8$ | Ko |
| 9212 | 303655 | L 7496 | 971 | 37261 | 33 4-38 | 3338 | I I | 3124.2 | 919 | 309 | 12.0 | $+\quad 17$ | + 7 | $8 \cdot 2$ | A 3 |
| 9213 | 303656 | L 7497 | 1017 |  | $33 \quad 8 \cdot 51$ | 3318 | II | $\begin{array}{llll}31 & 6 & 18.9\end{array}$ | 924 | 309 | 13.2 | + 34 | - 20 | $8 \cdot 6$ |  |
| 9214 | 303658 | C 10178 |  | 37268 | 3319.65 | 3605 | 11 | $30 \quad 7 \quad 23.4$ | 939 | 312 | II 15 | + 6 | + 9 | $7 \cdot 46$ | B 9 |
| 9215 | 253893 | C 10179 | 976 |  | $33 \quad 26 \cdot 77$ | 4944 | 9 | 25 I $343 \cdot 3$ | 949 | . 330 | 11.4 | + 11 | + 2 | $8 \cdot 36$ | A 5 |
| 9216 | 243813 | B 715I |  |  | I9 3330.08 | $+2.5199$ | +.0008 | 24 I4 59.3 | + 7.953 | $+\cdot 334$ | 12.2 | + 7 | - II | 9•I |  |
| 9217 | 273446 | C 10182 |  |  | 33 31.62 | 4207 | 10 | $27 \quad 598 \cdot 9$ | 955 | 320 | II $15,13 \cdot 4$ | + 19 | + 27 | $8 \cdot 5$ | K o |
| $9218$ | $25 \quad 3895$ | C IOI8I |  |  | 33 33.07 | 4755 | 9 | $25 \quad 57 \quad 8 \cdot 2$ | 957 | 328 | 11.9 | - | + I | $8 \cdot 2$ | G 5 |
| 9219 | 26 3614 | C 10183 |  |  | 33 34.07 | 4689 | - 9 | $\begin{array}{llll}26 & 12 & 4.7\end{array}$ | 959 | 327 | 11.7 | - | - 22 | $9 \cdot 2$ |  |
| 9220 | 293670 | C 10185 |  | 37276 | $3334 \cdot 52$ | 3890 | $I I$ | $29752 \cdot 2$ | 959 | 316 | II•I | $+\quad 19$ | - | $6 \cdot 26$ | B 5 |
| 9221 | 283412 | C 10184 | 988 | 37274 | $1933 \quad 34 \cdot 83$ | +2.4121 | +.001 I | 28 I7 57.7 | + 7.960 | +.320 | 11.4 | + | - 70 | $6 \cdot 67$ | Go |
| 9222 | 313685 | L 7501 |  |  | 3334.88 | 3104 | I2 | $\begin{array}{lllll}31 & 51 & 15.9\end{array}$ | 960 | 306 | - I | + 47 | 11 | $8 \cdot 6$ |  |
| 9223 | $28 \quad 3413$ | C 10187 |  |  | $3335 \cdot 66$ | 4040 | I I | $283535 \cdot 5$ | 96 I | 319 | $11 \cdot 7$ | + 33 | 20 | $9 \cdot 2$ |  |
| 9224 | 253896 | C iol86 | 993 |  | 33 38.19 | 4915 |  | $25 \quad 20 \quad 50.7$ | 964 | 330 | 11.8 | + 7 | + 2 | $8 \cdot 0$ | A 2 |
| 9225 | 263615 | C 10188 |  | 37270 | $33 \quad 39 \cdot 34$ | 4702 | 9 | $26 \quad 922.2$ | 966 | 327 | $12 \cdot 3$ | - 12 | $+\quad 4$ | $7 \cdot 44$ | G 5 |
| 9226 | 313687 | L 7502 |  |  | $193345 \cdot 98$ | +2.3154 | +.0012 | $314146 \cdot 9$ | + 7.975 | +.306 | $12 \cdot 1$ | + 3 | - 4 | $7 \cdot 8$ | Ko |
| $\|9227\|$ | 303660 | C IoI90 |  |  | 3350.06 | 3584 | II | 301312.0 | 980 | 311 | 11.I | $-6$ | - 8 | 7.91 | A 0 |
| $9228$ | 293572 | C 10192 |  | 37287 | $3355 \cdot 32$ | 3815 | 11 | 2924 41.5 | 987 | 315 | $9 \cdot 8$ | + 11 | + 15 | $7 \cdot 26$ | A 2 |
| $\mid 9229$ | $28 \quad 3416$ | C ioly | 997-8 |  | $3356 \cdot 14$ | 4119 | II | 28 I9 20.8 | 988 | 320 | 11.0 | + 19 | + 15 | $8 \cdot 8$ | A 0 |
| 9230 | 233717 | B 7156 |  |  | $3356 \cdot 17$ | 5253 | 8 | $24 \quad 3 \quad 28.5$ | 988 | 335 | 11.0 | + 5 | - I | $8 \cdot 0$ | A 0 |
| 9231 | 313688 | L 7505 | 1008 |  | $1934 \quad 0.31$ | +2.3150 | +.0012 | $314310 \cdot 5$ | + 7.994 | +•306 | $10 \cdot 3$ | + 8 | - 21 | $8 \cdot 2$ |  |
| 9232 | 243814 | B 7160 | 995 | 37283 | $34 \quad 1.45$ | 5059 | 9 | 2448 51.0 | - 995 | +332 | 11.2 | + 9 | - | $8 \cdot 2$ | B 9 |
| 9233 | 273447 | C Ior93 | 999 |  | $34 \quad 1.88$ | 442 I | I I | 27 I3 II. 6 | 996 | 324 | 12.0 | + 10 | + II | $9 \cdot 2$ |  |
| 9234 | 313689 | L 7506 |  |  | $34 \quad 4.73$ | 3280 | 12 | $3 \mathrm{I} 1650 \cdot 7$. | $8 \cdot 000$ | 308 | 12.6 | + 10 | 2 | 9*I |  |
| 9235 | 243815 | B 716I |  | 37285 | $34 \quad 7 \cdot 58$ | 5139 | 9 | $243032 \cdot 6$ | 003 | 333 | 12.7 | + 15 | - 4 | $7 \cdot 9$ | A 2 |
| 9236 | 293673 | C 10197 | 1013 |  | 1934 8.19 | $+2.3880$ | +.001 1 | 29 II 24.8 | $+8.004$ | +.316 | 10:7 | + 33 | + 5 | $8 \cdot 6$ |  |
| 9237 | $25 \quad 3898$ | C 10195 |  |  | $\begin{array}{ll}34 & 8.86\end{array}$ | 4857 |  | 253534.8 | . 005 | 328 | $12 \cdot 3$ | 5 | + 34 | $9 \cdot 2$ |  |
| 9238 | 293675 | C 10198 |  |  | $34 \quad 10.33$ | 3897 | I I | $29 \quad 8 \quad 6.8$ | 007 | 316 | 13.4 | - 1 | - 5 | $9 \cdot 9$ |  |
| $9239$ | 3303664 | C 1020I |  |  | $\begin{array}{ll}34 & 13.95 \\ 34 & 13.98\end{array}$ | 3609 | I I | $\begin{array}{ll}30 & 9 \\ 30 & 8.6\end{array}$ | 012 | 312 | 12.4 | $+\quad 36$ | + 40 | 9.1 |  |
| 9240 | )303664 |  |  |  |  | 3609 | I I | $\begin{array}{llll}30 & 9 & 1.6\end{array}$ | 012 | 312 | 14.2 | $+36$ | + 40 | $\int^{9 \cdot 1}$ |  |
| 9241 | 253900 | C Ior99 | 1009 | 37291 | 193414.09 | $+2.4800$ | +.0009 | $254846 \cdot 0$ | $+8.012$ | $+328$ | I 1.8 | + 19 | + 11 | $7 \cdot 72$ | B 9 |
| 9242 | 313691 | L 7508 |  |  | $34 \quad 17.73$ | $3204$ | $12$ |  | 017 | 307 | II. 2 | + 19 | + 15 | $8 \cdot 1$ |  |
| 9243 | 253903 | C 10212 | 1029 | 37317-8 | $3446 \cdot 75$ | 4816 | $\text { . } 9$ | $254625 \cdot 5$ | 056 | 328 | $11 \cdot 3$ | + 14 | $0$ | $7 \cdot 7$ | A 3 |
| 9244 | 313694 | L 7517 |  |  | $3448 \cdot 93$ | $32 \mathrm{II}$ | $\text { I } 2$ | $\begin{array}{llll}31 & 33 & 13.9\end{array}$ | $059$ | 307 | II•I | $+\quad 11$ | + 15 | $7 \cdot 90$ | K 0 |
| 9245 | 313695 | L 7518 |  |  | $3454 \cdot 96$ | 3173 | 12 | $\begin{array}{llll}31 & 4 \mathrm{I} & 8.4\end{array}$ | 067 | 306 | 10.8 | $+\quad 17$ | - II | $9 \cdot 0$ |  |
| 9246 | 31 3696 | L 7519 | 1042 |  | $193457 \cdot 50$ | $+2 \cdot 3280$ | +.0012 | $\begin{array}{llll}31 & 19 & 28.8\end{array}$ | $+8.070$ | $+\cdot 308$ | II 6 | - 6 | + II | 9.0 |  |
| 9247 | 303673 | L 7522 |  |  | $\begin{array}{lll}35 & 8 \cdot 27\end{array}$ | 3373 | 12 | 31049.8 | 084 | 308 | $10 \cdot 0$ | ${ }^{2}$ | 16 | $7 \cdot 9$ | A 0 |
| 9248 | 303674 | L 7523 |  |  | $35 \quad 8.79$ | 3462 | 12 | $304230 \cdot 8$ | 085 | 309 | II.4 | 62 | + 13 | $9 \cdot 2$ |  |
| 9249 | 313699 | L 7526 |  |  | $35 \quad 15.06$ | 3144 | 12 | $\begin{array}{llll}31 & 48 & 7 \cdot 4\end{array}$ | 093 | 305 | $12 \cdot 1$ |  | $-\quad 14$ | $9.0$ |  |
| 9250 | 243825 | C 10220 | 1043-4-5 |  | $35 \quad 15.09$ | 5009 | 9 | $\begin{array}{llll}25 & 3 & 21.4\end{array}$ | 094 | 329 | I 1.6 | - 6 | $\begin{array}{r} 1+ \\ +\quad 15 \end{array}$ | $8 \cdot 46$ | A 0 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \%$. | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. 1.0001. | Dec. ".001. |  |  |
|  | - |  |  |  | h m s | s | 8 | $\bigcirc$ |  | " |  |  |  |  |  |
| 9251 | 273452 | C 10223 | 1050 |  | $193521 \cdot 11$ | +2.4430 | +.0011 | $271450 \cdot 7$ | $+8 \cdot 102$ | +-322 | 11.8 | + | - 13 | $8 \cdot 8$ |  |
| 9252 | 313700 | L 7527 |  |  | 3521.41 | 3196 | 12 | $\begin{array}{lllllllllllll}31 & 37 & 43.9\end{array}$ | 102 | 305 | $11 \cdot 2$ | + 10 | + 18 | $8 \cdot 2$ |  |
| 9253 | 313701 | L 7528 |  |  | 3521.69 | 3278 | 12 | $\begin{array}{lllll}31 & 21 & 8.5\end{array}$ | 102 | 307 | 12.4 | - 37 | - 9 | $8 \cdot 6$ |  |
| 9254 | 243827 | C 10227 | 1060-1 |  | $35 \quad 37 \cdot 74$ | 5025 | 9 | $25042 \cdot 1$ | 124 | 330 | 12.0 | + II | + 11 | 9.2 |  |
| 9255 | 303675 | L 7534 |  |  | $35 \quad 39 \cdot 19$ | 3401 | 12 | $3056 \quad 27 \cdot 9$ | 126 | 308 | 12.1 | 21 | - 13 | $9 \cdot 2$ |  |
| 9256 | 253909 | $\begin{array}{lll}\text { C } & 10228 \\ \text { B } & 7176\end{array}$ |  |  | 193539.94 | +2.4799 | +-0009 | $\begin{array}{lllll}25 & 52 & 35 \cdot 6\end{array}$ | + 8.127 | +-326 | 12.3 | + 40 | - 8 | 9-1 |  |
| 9257 | 243828 | B 7176 |  |  | $3541 \cdot 29$ | 5066 |  | 245123.6 | 129 | 330 | 12.5 | + 27 | + 21 | $9 \cdot 1$ |  |
| 9258 | 283424 | C 10230 |  |  | $3544 \cdot 79$ | 3924 | 11 | $29 \quad 6 \quad 24 \cdot 9$ | 134 | 315 | 11.8 | + 16 | - 3 | $9 \cdot 0$ |  |
| 9259 | 293684 | C 10234 |  | 37376 | $3549 \cdot 32$ | 3689 | II | 295643.9 | 139 | 312 | 9.6 | - 2* | + $35^{*}$ | 4.79 | K |
| 9260 | 293685 | C 10235 | 1085 |  | 35 51-10 | 3754 | 11 | 2943 +3 | - 142 | 313 | II.8 | - 23 | - 12 | $8 \cdot 6$ | M a |
| 9261 | 313708 | L 7537 |  |  | 1935 51.15 | +2.3193 | +.0012 | 313954.5 | $+8.142$ | +.305 | 11.8 | + 14 | - 25 | 8.8 |  |
| 9262 | 263628 | C 10232 |  |  | 3551.90 | 4625 | 10 |  | 143 | 325 | 11.6 | + 60 | - 18 | 9.1 |  |
| 9263 | 273454 | $\mathrm{C}^{\text {C }} 10237$ | 1084 |  | 3554.43 | 4254 | 11 | $2756 \quad 20 \cdot 2$ | $1{ }^{1} 6$ | 319 | $10 \cdot 6$ | + 1 | + 16 | $8 \cdot 6$ | Fo |
| 9264 | 303677 | C 10240 |  | 37384 | 35 57-10 | 3618 | 11 | $\begin{array}{llll}30 & 12 & 4\end{array}$ | 150 | 310 | 10.2 | $\bigcirc$ | - 13 | 7-11 | B 9 |
| 9265 | 293686 | C 10241 | 1088 |  | $\begin{array}{lll}36 & 0.87\end{array}$ | 3806 | 11 | 293229.0 | 155 | 314 | 12.2 | 11 | - 15 | $7 \cdot 6$ | A 0 |
| 9266 | 243832 | B 7180 |  | 37374-5 | $1936 \quad 4.49$ | $+2.5206$ | +.0008 | ${ }^{2} 41947.9$ | + 8.159 | +-333 | 12.6 |  |  | $7 \cdot 05$ | K o |
| 9267 | 253913 | ${ }_{C} 10242$ | 1086-7 |  | $36 \quad 5 \cdot 30$ | 4953 | 9 | $25181829 \cdot 1$ | 160 | 329 | 12.5 | + II | - 6 | $8 \cdot 7$ |  |
| 9268 |  | C 10243 |  |  | $\begin{array}{lll}36 & 6 \cdot 34\end{array}$ | 4385 | 11 | $\begin{array}{llll}27 & 27 & 0.0\end{array}$ | 162 | 321 | 13.9 | + 25 | + 14 | $9 \cdot 2$ |  |
| 9269 | 273457 | C 10245 |  |  | $\begin{array}{lll}36 & 7 \cdot 82\end{array}$ | 4369 | 11 | 273034.9 | 164 | 321 | 12.8 | $-15$ | - 8 | 8.8 |  |
| 9270 | 283428 | C 10246 |  |  | $3610 \cdot 40$ | 4037 | 11 | 2843 14-I | 167 | 317 | 12.5 | + 25 | + 12 | 8.5 | K |
| 9271 | 303678 | L 7541 |  |  | $1936 \quad 10.67$ | +2.3551 | +.0011 | $302647 \cdot 8$ | $+8 \cdot 168$ | +-310 | 12.5 | - 18 | - 56 | $9 \cdot 2$ |  |
| 9272 | 303680 | L 7543 |  |  | $36 \quad 17.32$ | 3514 | 12 | $303452 \cdot 6$ | 177 | 309 | 12.6 | + 28 | + 21 | $9 \cdot 2$ |  |
| 9273 | 293688 | C 10249 |  |  | 36 -18.96 | 3917 | 11 | $\begin{array}{lllll}29 & 9 & 36 \cdot 4\end{array}$ | 179 | 315 | 13.0 | $+\quad 14$ | + 6 | 9.1 | A 2 |
| 9274 | 243834 | B 7184 | 1090 |  | $\begin{array}{llll}36 & 19.97\end{array}$ | 5066 | 9 | $\begin{array}{llll}24 & 53 & 0.6\end{array}$ | 180 | 330 | 13.1 | + 7 | - 2 | $9 \cdot 2$ |  |
| 9275 | 26363 I | C 10250 |  |  | $3622 \cdot 20$ | 4511 | 10 | $265930 \cdot 0$ | 183 | 323 | 12.5 | + 14 | + 24 | $9 \cdot 1$ | A 0 |
| 9276 | 253914 | $\mathrm{C}^{10251}$ |  |  | $1936 \quad 26.37$ | +2.4780 | +.0009 | $\begin{array}{lllll}25 & 58 & 54 \cdot 2\end{array}$ | + 8.189 | +-326 | 12.8 | - 9 | + <br> $+\quad 38$ | 9.1 | A |
| 9277 | 313711 | L 7547 |  |  | $36 \quad 29 \cdot 61$ | 3224 | 12 | $\begin{array}{llllllllllll}31 & 35 & 34.9\end{array}$ | 193 | 306 | 12.8 | + 24 | + 26 | 9.2 |  |
| 9278 | 263632 | C 10253 |  | 37402 | $\begin{array}{lll}36 & 32 \cdot 30\end{array}$ | 4568 | 10 | 264713.2 | 196 | 324 | 10.2 | - 1 | + 13 | $7 \cdot 20$ | B 8 |
| 9279 | 253915 | C 10252 | 1096 |  | $3633 \cdot 57$ | 4990 | 9 | $\begin{array}{lllllll}25 & 11 & 12.7\end{array}$ | 198 | 329 | 12.7 | + 13 | - 35 | $9 \cdot 1$ |  |
| 9280 | 283430 | C 10258 |  |  | 3641.47 | 4094 | II | $28 \quad 3228.8$ | 209 | 317 | $11 \cdot 9$ | + 21 | - 2 | $9 \cdot 2$ |  |
| 9281 | 253917 | C 10257 | 1101 | 37405 | $193642 \cdot 71$ | $+2.4751$ | $+.0009$ | $\begin{array}{llll}26 & 6 & 24 \cdot 7\end{array}$ | $+8.210$ | $+\cdot 326$ | 11.6 | + | 13 $+\quad 13$ | 7.7 | B 8 |
| 9282 | 313713 | $\begin{array}{ll}\text { L } & 7551\end{array}$ |  |  | $3643 \cdot 30$ | 3152 | 12 |  | 211 | 305 | 11.3 | - 1 | - 8 | $7 \cdot 6$ | B 9 |
| 9283 | 303685 | L 7550 |  |  | $3644 \cdot 26$ | 3474 | 12 | $\begin{array}{lllllllllllllllll}30 & 44 & 29.4\end{array}$ | 212 | 309 | 12.2 | + 26 | + $+\quad 27$ $+\quad 10$ | $9 \cdot 1$ 8.6 |  |
| 9284 | 313715 | L 7553 |  |  | $3651 \cdot 28$ | 3358 | 12 | $\begin{array}{llll}31 & 8 & 54.1\end{array}$ | 222 | 307 | 11.6 | + 11 | + 10 | 8.6 |  |
| 9285 | 303687 | L 7555 |  |  | $3655 \cdot 48$ | 3377 | 12 | $\begin{array}{llll}31 & 5 & 9 \cdot 6\end{array}$ | 227 | 308 | 12.0 | + 7 | + 5 | $9 \cdot 2$ |  |
| 9286 | 243838 | B 7198 | 1108 | 37415-6 | 19370.26 | +2.5207 | +-0008 | 242148.9 | +8.234 | +•331 | 10.0 | + 24 | $+45$ | $8 \cdot 2$ | F 8 |
| 9287 | 253922 | C 10265 | 1111 |  | $\begin{array}{lll}37 & 1.98\end{array}$ | 4968 | 9 | 251734.0 | 236 | 327 | 12.0 | + 4 | + 5 | $9 \cdot 2$ |  |
| 9288 | 273461 | C 10268 | 1117 | 37423-4 | $37 \quad 5 \cdot 93$ | 4378 | 1 | $27 \begin{array}{llllllllll} & 31 & 12.8\end{array}$ | 241 | 320 | 11.6 | + | - 10 | $8 \cdot 0$ | G 5 |
| 9289 | 313716 | L 7560 |  |  | $\begin{array}{lll}37 & 8.34\end{array}$ | 3313 | 12 | $\begin{array}{lllll}31 & 19 & 2 \cdot 1\end{array}$ | 244 | 306 | $12 \cdot 1$ | + $\quad 8$ | - 8 | $8 \cdot 6$ | A o |
| 9290 | 313717 | L 7561 | 1130 | 37440 | $3710 \cdot 80$ | 3349 | 12 | 31 II 48.9 | 248 | 306 | 12.0 | + 25 | + 4 | $7 \cdot 11$ | Ko |
| 9291 | 263640 | C 10269 | 1118-9 | 37430 | $1937 \quad 10.87$ | $+2.4540$ | +.0010 | 2655 21-1 | $+8.248$ | +-322 | II•9 | + 7 | + 22 | 8.1 | A o |
| 9292 |  | $\mathrm{C}^{\text {C } 10270}$ |  |  | $\begin{array}{ll}37 & 13.67\end{array}$ | 4570 | 10 | $\begin{array}{llllll}26 & 48 \\ 40 \cdot 2\end{array}$ | 251 | 323 | $13 \cdot 1$ |  |  | $9 \cdot 2$ |  |
| 9293 | 273462 | C 10271 | 1128 | 37434-5 | $\begin{array}{llll}37 & 14.71\end{array}$ | 4368 | 11 | 273348.0 | 253 | 320 | 12.9 | - 27 | - 37 | $8 \cdot 2$ | F 5 |
| 9294 | 263641 | C 10272 | 1127 |  | $\begin{array}{llll}37 & 16.22\end{array}$ | 4505 | 10 | $\begin{array}{lllllll}27 & 3 & 17 & 1 \\ 30 & 5 & 1\end{array}$ | 255 | 322 | I1.7 | + 20 | + 1 | 9.2 |  |
| 9295 | 303688 | L 7563 |  |  | 3718.54 | 3479 | 12 | 304514.2 | 258 | 308 | II•9 | + 22 | 8 | $9 \cdot 2$ |  |
| 9296 | 313718 | I. 7564 |  |  | 193718.61 | $+2.3117$ | +.0012 | $315942 \cdot 7$ | $+8.258$ | +-303 | II.2 | + 43 | - 33 | 8. 5 |  |
| 9297 | 313719 | L 7565 |  |  | 3723.33 | 3152 | 12 |  | 264 | - 304 | 12.0 | + 10 | + 2 | $8 \cdot 8$ |  |
| 9298 | 263642 | C 10274 |  |  | 37 30.72 | 4674 | 9 | $\begin{array}{lll}26 & 26 & 2 \cdot 8\end{array}$ | 274 | 324 | 11.8 | + 46 | + $4^{0}$ | 10.4 |  |
| 9299 | 313720 | L 7573 |  |  | $3741 \cdot 29$ | 3304 | 12 | $\begin{array}{llll}31 & 22 & 41 \cdot 3\end{array}$ | 288 | 305 | 11.4 | + 12 | + 94 | 8.8 |  |
| 9300 | 303690 | L 7572 | 1143 |  | $3741 \cdot 62$ | 3572 | 12 | $3026 \quad 57 \cdot 2$ | 289 | 309 | 12.1 | + 7 | $+\quad 24$ | $9 \cdot 0$ | A |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { 8.0001. } \end{aligned}$ | Dec. ".001. |  |  |
|  | - |  |  |  | h 'm s | 8 | s | - " | " | " |  |  |  |  |  |
| 9301 | 273466 | C 10279 | 1140 | 37455-6 | 193741.75 | +2.4392 | +.0010 | $\begin{array}{llll}27 & 29 & 40 \cdot 3\end{array}$ | + 8.289 | +-320 | 11.0 | + 26 | $\bigcirc$ | $7 \cdot 7$ | $\mathrm{A}_{\boldsymbol{r}} 3$ |
| 9302 | 303692 | L 7574 | 1144 | 37464 | $3743 \cdot 42$ | 3555 | 12 | 303038.4 | 291 | 309 | -I | + 37 | + 13 | 7-16 | K o |
| 9303 | 283434 | C 10280 |  |  | 37 43.81 | 3999 | 11 | $28 \quad 56 \quad 2 \cdot 1$ | 291 | 315 | 1.6 | + 10 | + 29 | $9 \cdot 0$ |  |
| 9304 | 243842 | B 7208 | 1136 |  | $3744 \cdot 70$ | 5242 | 8 | ${ }^{2}+1530 \cdot 1$ | 293 | 331 | 11.0 | - 14 | - 22 | 9.2 |  |
| 9305 | 283435 | C 10281 |  |  | 3748.02 | 4074 | 11 | $28 \quad 3957 \cdot 0$ | 297 | 316 | 10.6 | + 32 | + | 9.2 |  |
| 9306 | $27 \quad 3468$ | $\mathrm{C}_{1} 10282$ | 1145 |  | I9 3752.46 | +2.4482 | . 0010 | $2710+3$ | $+8.303$ | +.321 | 10.7 | + 19 | - 20 | 9.2 |  |
| 9307 |  | C 10285 |  |  | 386.11 | 4492 | 10 | $\begin{array}{llll}27 & 8 & 39.9\end{array}$ | 32 I | 321 | 12.9 8.8 |  |  | $9 \cdot 2$ |  |
| 9308 | 303697 | L 7576 | 1159 | 37478 | $\begin{array}{lll}38 & 8.60\end{array}$ | 3536 | 12 | $303547 \cdot 7$ | 324 | 308 | 8.8 | + 29 | + 26 | $6 \cdot 9+$ | K 2 |
| 9309 | 303698 | L 7577 |  |  | $\begin{array}{lll}38 & 12.08 \\ 38 & 12.16\end{array}$ | 3468 | 12 | $\begin{array}{llll}30 & 50 & 7 \cdot 8\end{array}$ | 329 329 | 307 | 10.9 | - 76 | 1 $+\quad 13$ $+\quad 4$ | 9.1 |  |
| 9310 | 273471 | C 10287 | 1156 | 37472-3-4 | 38 12.16 | 4485 | 10 | 27 10 13.3 | 329 | 321 | 10.4 |  | + 4 | $6 \cdot 74$ | B 8 |
| 9311 | 243844 | B 7216 |  |  | 193816.66 | $+2.5185$ | 0008 | 24308.7 | $+8.335$ | +.331 | 10.7 | + 3 | - 5 | 8.8 |  |
| 9312 | 273474 | C 10289 |  |  | $38 \quad 20 \cdot 50$ | 4270 | 11 | $\begin{array}{llllll}27 & 58 & 34.9\end{array}$ |  | 318 | 11.8 | + | + | 9.0 |  |
| 9313 | 273475 | C 10291 |  |  | $38 \quad 22.81$ | 4293 | 11 | $275334 \cdot 8$ | 343 | 318 | 10.9 | + 24 | - 40 | 9.2 |  |
| 9314 | 263645 | C 10290 | 1162 |  | $\begin{array}{ll}38 & 23.09\end{array}$ | 4685 | 9 | $\begin{array}{lllllllllllllll}26 & 25 & 45\end{array}$ | 344 | 324 | 11.8 | - 4 | + 26 | $9 \cdot 2$ |  |
| 9315 | 263646 | C 10292 | 1164 |  | 3826.00 | 4542 | 10 | $\begin{array}{lllll}26 & 58 & 19.6\end{array}$ | 347 | 322 | $1 \mathrm{I}^{1} 2$ | - 21 | + 43 | 8.4 | K |
| 9316 | 313722 | L 7579 | 1175 |  | I9 38830.79 | +2.3344 | 012 | $\begin{array}{llll}31 & 17 & 0.7\end{array}$ | + $8 \cdot 354$ | +.306 | 11.5 | + 32 | - 19 | $7 \cdot 8$ | A 2 |
| 9317 | 283438 | C 10295 |  |  | $\begin{array}{ll} \\ 8 & 31-39\end{array}$ | 4051 | 11 | $\begin{array}{llll}28 & 47 & \text { 1.3 }\end{array}$ | 355 | 316 | 11.5 | + 10 | - 21 | $9 \cdot 0$ |  |
| 9318 | 293700 | C 10297 |  |  | $3835 \cdot 30$ | 3722 | 12 | $295751 \cdot 3$ | 360 | 311 | $1 \mathrm{I} \cdot 4$ | + | - | 9.0 |  |
| 9319 | 293702 | C 10298 | 1178 |  | $38 \quad 37 \cdot 11$ | 3914 | 11 | $\begin{array}{llll}2917 & 1.0\end{array}$ | 362 | 313 | 12.1 | + 33 | + 44 | 8.0 | F 5 |
| 9320 | 313723 | L 7581 | 1182 |  | $38 \quad 38 \cdot 46$ | 3332 | 12 | 311943.7 | 364 | 306 | 11.8 | - 7 | - 19 | $8 \cdot 1$ |  |
| 9321 | 263647 | C 10299 | 1173-4 |  | 193839.46 | $+2.4573$ | $+\cdot 0010$ | $\begin{array}{llll}26 & 51 & 50 \cdot 8\end{array}$ | $+8.365$ | $+\cdot 323$ | 10.4 | + 35 | + 46 | 8.4 | G 5 |
| 9322 | 313724 | L 7582 | 1185 |  | 38 42.32 | 3248 | 12 |  | 369 | 304 | 11.8 | - 13 | - 54 | $9 \cdot 1$ |  |
| 23 | 243847 | B 7219 |  |  | $3844 \cdot 60$ | 5165 | 8 | $\begin{array}{lllllllllll}24 & 36 & 13.8\end{array}$ | 372 | 330 | 12.4 | + 3 | + 2 | 9.2 |  |
| 9324 | 253928 | C 10302 |  |  | $3849 \cdot 21$ | 4816 | 9 | $25576 \cdot 0$ | 378 | 325 | 11.8 | + 25 | + 24 | 9.0 |  |
| 9325 | 293704 | C 10304 |  |  | 3849.23 | 3704 | 12 | 30216.8 | 378 | 310 | 12.3 |  | - 18 | $9 \cdot 2$ |  |
| 9326 | 263649 | C 10303 |  | 37495 | 1938 51.58 | +2.4529 | +.0010 | $\begin{array}{llll}27 & 2 & 25.6\end{array}$ | $+8 \cdot 38 \mathrm{I}$ | + 322 | $11 \cdot 2$ | + 37 | $\bigcirc$ | 8.5 | A 0 |
| 9327 | 283445 | C 10307 | 1192 |  | $38 \quad 57 \cdot 95$ | 4235 | 11 | $\begin{array}{llll}28 & 8 & 3.6\end{array}$ | 390 | 318 | 12.2 | + 25 | + 27 | $8 \cdot 5$ | F 5 |
| 9328 | 313727 | L 7589 | 1199 |  | $3859 \cdot 37$ | 3278 | 12 | 313154.9 | 392 | 305 | 11.6 | - 5 | -216 | 8.4 |  |
| 9329 | 273480 | C 10309 |  | 37503-5 | $39 \quad 6.76$ |  | 10 | $\begin{array}{llll}27 & 24 & 47\end{array}$ | 401 | 319 | 10.6 | - 8 | + | $8 \cdot 2$ | A o |
| 9330 | 283447 | C 10311 | 1201 |  | 3912.90 | 3968 | 11 | $\begin{array}{llll}29 & 7 & 0.7\end{array}$ | 409 | 314 | 11.2 | + 57 | + 47 | 6.44 | A 5 |
| 9331 | 273482 | C 10310 |  |  | 19 $39 \begin{aligned} & 13.21\end{aligned}$ | $+2.4318$ | +.0011 | $\begin{array}{lllll}27 & 50 & 29.7\end{array}$ | $+8.410$ | $+\cdot 318$ | 1.8 | - 8 | + 15 | 8.7 | A 0 |
| 9332 | 273484 | C 10312 | 1202 | 375 19-20-3 | 3918.74 | 4493 | 10 | 27 II $40 \cdot 2$ |  | 320 | 11.7 | - 11 | - 1 | $7 \cdot 45$ | Ko |
| 9333 | 243849 | B 7229 |  | 37513 | $\begin{array}{llll}39 & 19.38\end{array}$ | 5226 | 8 |  | 418 | 330 | IIII | + 60 | - 293 | $6 \cdot 76$ | F 8 |
| 9334 | 273485 | C 10315 | 1203 |  | 3922.98 | 4350 | 11 | $274342 \cdot 0$ | 423 | 318 | II.4 | + 43 | $1+\quad 26$ | 8.6 |  |
| 9335 | 263650 | C 10316 | 1204 |  | $3925 \cdot 35$ | 4622 | 10 | $\begin{array}{lll}26 & 43 & 0.9\end{array}$ | 426 | 322 | 12 | + 5 | $+54$ | 7.8 | F o |
| 9336 | 283449 | C 10318 |  |  | 193926.87 | $+2.4091$ | +-0011 | 284183 | $+8.428$ | +. 315 | 11-9 |  |  | 9.0 |  |
| 9337 | 263651 | C 10319 | 1207 |  | 3933.27 | 4600 | 10 | $\begin{array}{lllll}26 & 48 \\ 14.0\end{array}$ | 436 | 322 | 10.5 | 1 | - 7 | $9 \cdot 6$ |  |
| 9338 | 303706 | L 7592 |  | 37537 | 39 37-12 | 3596 | 12 | $30 \quad 2747.9$ | 442 | 307 | $10 \cdot 3$ | 12 | + 27 | 6.06 | B 9 |
| 9339 | 293710 | C 10320 | 1210 | 37539 | 39 41-43 | 3722 | 12 | $\begin{array}{llll}30 & 1 & 4 \cdot 1\end{array}$ | 447 | 309 | $10 \cdot 2$ | + 4 | + 9 | $7 \cdot 12$ | A 0 |
| 9340 | 303708 | L 7597 |  |  | $3948 \cdot 27$ | 3525 | 12 | $3043 \quad 10.0$ | 456 | 307 | 10.4 | + 13 | + 12 | $8 \cdot 6$ |  |
| 9341 | 273488 | C 10323 |  |  | 193949.23 | +2.4393 | +.0011 | 2735 33.1 | $+8.458$ | +-319 | 11.6 | + 28 | + 21 | $9 \cdot 2$ |  |
| 9342 | 273489 | C 10324 |  |  | 3950.02 | 4385 | 11 | $\begin{array}{llllllll}27 & 37 & \text { II } 8\end{array}$ | 459 | 318 | 12.3 | + 8 | + 15 | 9. 1 |  |
| 9343 | 313735 | L | 1222 |  | $3955 \cdot 05$ | 3228 | 12 | $\begin{array}{llll}31 & 45 & 4 \cdot 8\end{array}$ | 465 | 303 | $10 \cdot 3$ | + 35 | - 13 | 8.2 | F 8 |
| 9344 |  | C 10327 |  |  | 3957.71 | 3964 | 11 | $\begin{array}{llllll}29 & 10 & 12.9 \\ 25 & 33 & 21.8\end{array}$ | 469 | 313 | 12.2 |  |  | 9.2 |  |
| 9345 | 253933 | C 10326 |  | 37542-3 | 3958.40 | 4933 | 9 | $\begin{array}{llll}25 & 33 & 21.8\end{array}$ | 469 | 326 | 11.7 | + 4 | $+13 *$ | $5 \cdot 45$ | G 5 |
| 9346 | 303709 | L 7600 |  |  | 193959.92 | $+2 \cdot 3623$ | $+\cdot 0012$ | $\begin{array}{llll}30 & 23 & 7 \cdot 3\end{array}$ | $+8.472$ | +-308 | II•I | + 23 | 11 | $9 \cdot 0$ |  |
| 9347 | 313738 | L 7606 | 1235 | 37570 | $40 \quad 11.08$ | 3199 | 12 | 3151490 | 486 | 303 | 11.0 | + 26 | + 10 | $7 \cdot 65$ | A 2 |
| 9348 | 273490 | ${ }^{\text {C } 10330}$ |  |  | $40 \quad 12.47$ | 4254 | 11 | $\begin{array}{lllll}28 & 7 & 30 \cdot 7\end{array}$ | 488 | 317 | $10 \cdot 6$ | 12 | - 19 | $8 \cdot 6$ | A 2 |
| 9349 | 263654 | C 1033 I | 1227-8 | 37560-1-2 | 4014.66 | 4578 | 10 | $\begin{array}{llllllllllll}26 & 55 & 10.8\end{array}$ | 491 | 321 | 10.1 |  | - 3 | $6 \cdot 56$ | Ko, Ao |
| 9350 | 27349 I | C 10333 | 1229-30-1 | 37564 | $4015 \cdot 67$ | 4497 | 10 | 271329.5 | $49^{2}$ | 320 | 9.7 | + 19 | + 20 | 8.0 | K |


| N | B.D. | A.c.C. | W.B. (2). | Lalande. | R.A. $19 \mathrm{r} \times \mathrm{O}$. | Precession. | See. Var. | Dec. 19 100. | Precession. | Sec.Var. | $\begin{gathered} \text { Epoch } \\ \text { 1goot } \end{gathered}$ | Annual P.M. |  | Mag. | Spectral |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.000. }}{\text { R.A. }}$ | Dece. |  |  |
|  | - |  |  |  | h m |  | 8 | - , " |  |  |  |  |  |  |  |
| ${ }^{9501}$ | 293782 | C 10530 |  |  | $19+9 \quad 3.84$ | +2.3919 | 0012 | $294841 \cdot 5$ | + 9.183 | +.306 | 10.2 |  |  | $9 \cdot 1$ |  |
| ${ }_{9}^{9502}$ | 303793 3 II 3822 | ${ }^{\text {C } 10531}$ |  |  |  | 3830 <br> 386 |  | $\begin{array}{llll}30 & 8 & 14.4\end{array}$ |  | 304 | 12 | + 16 | - 10 | $9{ }^{9} 0$ |  |
| 9504 | 273544 | C 10532 |  | 37906 | +912.26 | 4381 | $1{ }_{\text {I }}$ | $\begin{array}{ll} \\ 21 & 6843\end{array}$ | 194 | 312 | ${ }_{12.4}^{12.4}$ | $+\quad 39$ <br> $+\quad 65$ | - 10 | ${ }_{8} 9.6$ | F 2 |
| 9505 | 283513 | C 10533 |  | 37907 | $49 \quad 12.29$ | 4208 | 12 | $284532 \cdot 5$ | 194 | 309 | 11.0 |  | $\pm$ | $7 \cdot 17$ | A. |
| 9506 | 293783 | C 10534 |  |  | $\begin{array}{ll}19 & +9 \quad 13.97\end{array}$ | +2.3882 | +-0012 | $295716 \cdot 1$ | + 9.197 | $+\cdot 306$ | 12.0 |  |  | 8.4 | A 2 |
| 9507 | 263704 | C 10536 C 10541 | 1537 |  | 4918.25 +926.35 | 4671 4370 |  | $\begin{array}{llll}27 & 0 & 58.7 \\ 28 & 9 & 5.6\end{array}$ |  | 315 311 | 13.0 | + | + 6 | 8.0 | F 8 |
| 9509 | $2+3919$ | B 7336 |  |  | 4926.35 4926.77 | 4370 5401 |  | 28 9 <br> $2852 \cdot 6$  <br> 24 9 <br> 29.6  | 213 213 | 325 | 13.2 12.8 |  |  | $9 \cdot 2$ 9.1 |  |
| 9510 | 263706 | C 10542 | 1544 | 37918 | 4928.99 | ${ }^{8} 46$ | 10 |  | 216 | 317 | 12.9 |  | + 6 | $8 \cdot 6$ | A 。 |
| 95 II | 254011 | C 10543 |  |  | 194930.00 | +2.4948 | +.0010 | 2557 <br> 18.6 | + 9.217 | + 319 | 13.3 | + | + 10 | 9.1 |  |
| 9512 | 283514 | ${ }^{\text {C }} 10545$ |  |  | 4930.87 | 4316 | ${ }^{11}$ | $28 \quad 2224.5$ | 219 | 310 | 12.3 | + | + 16 | 8.4 | F 2 |
| ¢ $\begin{aligned} & 9513 \\ & 9514\end{aligned}$ | 263708 | C 10546 | 1546 | 37922 $37927-8$ | +935.15 | 4870 |  | $2615 \begin{array}{llll}26.8\end{array}$ | 224 | 318 | 11.4 | + 24 | + 25 | $7 \cdot 7$ |  |
| ¢9514 95 | 27 <br> 27 <br> 27 <br> 3545 <br> 84 |  |  | 37927-8 | +935.69 +936.40 | 4452 4510 | 11 | 27 <br> 27 <br> 27 <br> 18 <br> 8 | 225 226 | 312 313 313 | 12.0 12.7 | + 16 | + $\begin{array}{r}17 \\ + \\ +\end{array}$ | $7 \cdot 7$ 9.2 | K 2 |
| 9516 | 283515 | C 10552 |  |  | 194939.98 | +2.4342 | -001 1 | 281652.7 | + 9.230 | + 311 | 13.0 |  |  | 8.4 | A 3 |
| ${ }_{0}^{9517}$ | 254013 | Cr 10551 | 1549 |  | $4942 \cdot 02$ | 4999 | 10 | $25460 \cdot 1$ | 233 | 320 | 12.7 |  | - 48 | $9 \cdot 2$ |  |
| $\left\|\begin{array}{l} 9518 \\ 9519 \\ 9 \end{array}\right\|$ | 254014 | C 10553 | 1550 |  | $4943 \cdot 17$ | 5071 |  | $\begin{array}{lllll}25 & 29 & 9.4\end{array}$ | 234 | 321 | 13.4 | + 25 | - | 9.2 |  |
| 9520 | 263710 | C 10557 |  |  | $\begin{array}{r}49 \\ +9 \\ \hline 9.17\end{array}$ | 4803 | 10 | $\begin{array}{llll}25 & 28 & 3 & 3.9 \\ 26 & 32 & 46.8\end{array}$ | 236 255 | 321 317 | $\xrightarrow[12 \cdot 2]{12 \cdot 6}$ | $\begin{array}{r}+\quad 9 \\ +\quad 3 \\ \hline\end{array}$ | 7 <br> $+\quad 8$ | $9 \cdot 2$ $9 \cdot 2$ |  |
| 9521 | 263711 | C 10560 | 1560 |  | 19 50. $2 \cdot 52$ | +2.4747 | 010 | $26454^{\circ} \mathrm{O}$ | + 9.259 | +•316 | 11.4 |  |  | 8.0 | A 0 |
| 9522 | 293791 | C 10562 | 1562 |  | $50 \quad 3.47$ | 3991 | 13 | $293612 \cdot 7$ | 261 | 306 | 12.4 | + 20 | - 5 | $9 \cdot 2$ |  |
|  | 283517 | C 10563 |  |  | $\begin{array}{lll}50 & 5.11 \\ 50\end{array}$ | 4384 | 12 | $\begin{array}{lllll}28 & 8 & 50.3\end{array}$ | 263 | 311 | $12 \cdot 2$ | + 12 |  | 9.2 |  |
| - 9524 | 26 28 28 3518 | Crio564 | ${ }^{1561}$ | 37945-6 | $\begin{array}{ll}50 & 8.86 \\ 50 & 9.43\end{array}$ | $\begin{array}{r}4853 \\ +298 \\ \hline\end{array}$ | 10 | $\begin{array}{llllll}26 & 21 & 31.6 \\ 28 & 28 & 27 \cdot 3\end{array}$ | 268 268 | 317 310 | 12.4 <br> $12 \cdot 1$ <br> 1 | + 8 | + 19 | $6 \cdot 81$ 9.2 | A 0 |
| 9526 | 283521 | C 10570 | 1575 |  | 195023.02 | $+2 \cdot 4387$ | 012 | $28 \quad 9 \quad 7 \cdot 2$ | + 9.286 | +.311 | 10.6 | + 17 | + | 8.8 | Fo |
| 9527 | 273550 | C 10571 |  |  | 5027.39 | 4402 |  | $\begin{array}{llll}28 & 6 & 2 \cdot 3\end{array}$ | +292 | 312 | 10.4 | - $\quad 3$ | + | $9 \cdot 2$ |  |
| ${ }_{0}^{9528}$ | 313830 | L 7747 |  |  | $50 \quad 35.92$ | 3544 | 13 | 31.1424 .3 | 303 | 300 | 11.6 | + 17 | - | 9.1 |  |
| ¢9530 9 | 254018 233829 | Cr 10572 B 7349 |  | 37960 | 50 <br> 50 <br> 50 <br> 1.98 | 4942 5435 |  | $\begin{array}{ccc}26 & 2 & 9 \cdot 0 \\ 24 & 4 & 58.6\end{array}$ |  | 319 | ${ }_{10} 9.8$ | - | - 15 | $8 \cdot 7$ | A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{9}^{9531}$ | 293793 | C 10574 |  |  | I9 5042.05 | +2.3908 | +-0013 | $295625 \cdot 3$ | + 9.311 | +.305 | 10.0 | + 10 | - 16 | 9.2 |  |
| ${ }_{9}^{9532} 9$ | 303803 | C 10576 |  |  | 5045.54 | 3809 |  | $3018 \quad 5 \cdot 2$ | 315 | 303 | 11.2 | + 49 | - 13 | 8.8 |  |
| ${ }_{9}^{9533}$ | 25 30 38019 3804 | C 10575 |  |  | 5045.89 5046.50 | +955 | 10 | $\begin{array}{lllll}25 & 59 & 30 \cdot 3 \\ 30 & 28 & 4.8\end{array}$ | 316 316 | 318 | 11.4 | - 17 |  | 9.0 8.46 | A 0 |
| 9535 | 293795 | C 10577 | 1589 |  | $5047 \cdot 43$ | 3952 | 13 | 29 47 <br> 19.6  | 318 | 305 | 11.0 | + 3 | [ 17 | 8.2 | A 5 |
| 9536 | 273553 | ${ }_{\text {C }} 10578$ |  |  | 195054.74 | +2.4405 | +.0012 | $28 \quad 6 \quad 46 \cdot 9$ | + 9.327 | +.312 | 11.3 |  | - 16 | 10.4 |  |
| ${ }_{9}^{9537}{ }_{9}{ }^{5}$ | 26 3717 31 2835 | C 10579 | 1593-4 | 37982 | 5057.09 | 4674 | 11 | $27 \quad 537 \cdot 0$ | 330 | 315 | 10.8 | + 44 | + 18 | 8.5 | A 。 |
| 95939 | 31 24924 | B 7353 |  | 37981 | $\begin{array}{ll}51 & 0.78 \\ 51 & 3.23\end{array}$ | 3381 <br> 5298 | 14 | $\begin{array}{lllll}31 & 50 & 23.5 \\ 24 & 39 & 4.0\end{array}$ | $\begin{array}{r}335 \\ 338 \\ \hline\end{array}$ | 298 322 | $11 \cdot 7$ 11.2 | $+\quad 9$ <br> $+\quad 19$ | - 23 | 9.1 |  |
| 9540 | 243925 | C 10582 |  |  | 517.05 | 5188 | 9 | $25 \quad 540 \cdot 3$ | 343 | 321 | 12.0 | 2 | - 34 | 7.81 | $\mathrm{K}_{2}$ |
| 9541 | 283526 | C 10587 |  |  | $19 \begin{array}{lll}19 & 7.72\end{array}$ | +2.4329 | +.0012 | $28 \quad 2517 \cdot 1$ | + 9.344 | + 309 | 13\%, $12 \cdot 8$ |  |  | 9.9 |  |
| ${ }^{9542}$ | 243926 | C 10583 |  |  | $\begin{array}{ll}51 \\ 51 \\ 58 \\ 81 & 89\end{array}$ | 5216 |  | $2458 \quad 57 \cdot 2$ | 345 | 321 | 11.0 |  | + 11 | $9 \cdot 0$ |  |
| 99543 9 | 31 25837 4020 |  | 1598 | 37987 | $\begin{array}{ll}51 \\ 51 & 10.12 \\ 51 & 10.71\end{array}$ | 3452 5005 | 14 | $\begin{array}{llll}31 & 35 & 53.0 \\ 25 & 49 & 5 \cdot 3\end{array}$ | 347 347 | 299 318 | 12.2 | $+\quad 35$ $+\quad 32$ | - ${ }^{+}$ | 8.0 |  |
| 9545 |  | C 10585 | 19.8 | 37987 | 5111.52 | 5005 4818 | 10 | 25 49 <br> 26 33 <br> 63  <br> 4 4 | 347 349 | 318 316 | 11.0 13.9 |  |  | 8.1 9.2 | F 8 |
| 9546 | 263720 | C 10586 | 1603 |  | 19 5114.91 | +2.4769 | +-0011 | $264431 \cdot 9$ |  |  | 12.0 |  |  | 8.6 |  |
| 9547 | 293799 | C 10589 | 1612 |  | 5119.47 | 3927 | 13 | $295434 \cdot 7$ | 359 | 305 | 12.2 |  | - 7 | 8.5 | A |
| ${ }^{954} 9$ | 263721 | C 10588 | 1605 |  | 5121.93 | 4829 | 11 | 2631411 | 362 | 316 | 11.4 | + 16 | + | 9.0 | A 0 |
| 9549 | 263723 | C 10591 | 1611 |  | 5127.28 | 4874 |  | 262043.5 | 369 | 316 | 12.0 |  |  | 8.8 |  |
| 9550 | 303805 | L 7762 |  |  | 5129.19 | 3788 | 13 | $3025 \quad 18.5$ | 371 | 302 | 12.4 | 39 | 15 | 8.7 |  |




| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910\%. | Precession. | Sec. Var. | Epoch | Annual P.M. |  | Mag. | Spectral Туре. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s. } 000 \mathrm{I} . \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & =001 . \end{aligned}$ |  |  |
|  | $\bigcirc$ |  |  |  | h m s | s | $s$ | - , " |  | " |  |  |  |  |  |
| 9651 | 283576 | C 10725 |  |  | $1957 \quad 15 \cdot 19$ | +2.4393 | +.0013 | 2831 | + 9.814 | + 307 | 12.2 | - 12 | + 1 | 8.8 |  |
| 9652 | 273587 | C 10726 | 1806 | 38260-1 | $57 \quad 23 \cdot 64$ | $+660$ | 12 | $27 \quad 3015 \cdot 9$ | 825 | 309 | II.7 | + 39* | 6* | 4.74 | A 5 |
| 9653 | 303853 | L 7861 |  | 38267 | 5725.03 | 3731 | 14 | $30 \quad 58 \quad 53 \cdot 3$ | 827 | 297 | 12.5 | - | 3 | 6.71 | B 8 |
| 9654 | 283577 | ${ }_{\text {C }} 10727$ | 1813 |  | 57 26.13 | 4297 |  | 285328.8 | 828 | 304 | 10.9 | - 13 | - 5 | $8 \cdot 1$ | K |
| 9655 | 243969 | B 7425 |  |  | $5727 \cdot 48$ | 5431 |  | 242639.0 | 830 |  | II. 5 | + 17 | + 9 | 8.8 | Fo |
| 96 | 254067 | C 10728 | 1808-9-10 |  | 195729.44 | +2.5187 | +.0010 | 2525 50.9 | $+9.832$ | +.316 | . 1 | + 29 | - 4 | 8.8 | A 3 |
| 9657 | 263762 | C 10729 |  |  | 5729.49 | 4878 | 11 | $263928 \cdot 0$ | 832 | 312 | 12.5 | - 14 | + 21 | 9.0 |  |
| 9658 | 263763 | C 10731 |  | 38263 | 57 31.63 | 4807 | 11 | 265624.3 | 835 | 311 | II. 6 | + 5 | + 6 | $7 \cdot 38$ | K 2 |
| 9659 | 283578 | C 10734 | 1815 |  | 57 38.26 | 4368 | 13 | 28389.5 | 844 | 305 | 12.2 | - 15 | + 7 | $9 \cdot 2$ |  |
| 9660 | 293851 | C 10736 | 1816 |  | 5738.47 | 4184 | 13 | 29 I9 $44 \cdot 8$ | 844 |  | 11.4 | - 20 | - 18 | 9.2 |  |
| 96 | 313888 | L 7867 | 1826 |  | 195751.05 | $+2.3656$ | 0014 | $311649 \cdot 2$ | + 9.860 | +.296 | 13.3 | + 20 | + | $9 \cdot 0$ |  |
| 9662 | 293855 | C 10739 |  |  | $5751 \cdot 30$ | 4066 | 13 | 2946 51.4 | 860 | 301 | 10.0 | - 24 | - 12 | $8 \cdot 6$ |  |
| $9663$ | 313889 | $\begin{array}{ll}\text { L } & 7869 \\ \text { C }\end{array}$ |  |  | 57 51.64 | 3589 | 14 | 3131519.7 | 861 | 295 | -12.7 | + 8 | + 7 | 9.1 |  |
| 9664 | 283580 | C 10740 |  |  | $5754 \cdot 16$ | 4288 | 13 | $285721 \cdot 8$ | 864 | 304 | II.7 | + 19 | + 13 | $9 \cdot 2$ |  |
| 9665 | 293857 | C 10742 |  |  | $5755 \cdot 5^{2}$ | 4017 | 13 | $2958 \quad 6 \cdot 9$ | 865 | 301 | II. 0 | 11 | - 26 | $8 \cdot \mathrm{I}$ | K |
| 9666 | 243975 | B 7429 | 1822 | 38327 | 195755.89 | +2.54II | +.0009 | $\begin{array}{lll}24 & 33 & 1.2\end{array}$ | + 9.866 | $+\cdot 318$ | 11.8,12.9 |  | 6* | $5 \cdot 75$ | B 8 |
| 9667 | 313891 | L 7870 |  |  | $5757 \cdot 34$ | - 3491 | 14 | $315232 \cdot 5$ | 868 | 294 | 12.3 | + 6 | - 25 | $9 \cdot 0$ |  |
| 9668 | ${ }^{26} 3764$ | C 10743 | 1825 |  | $58 \quad 0.31$ | 4793 | 11 | $\begin{array}{llll}27 & 1 & 19.7\end{array}$ | 871 | 311 | II. 8 | - 4 | + 11 | $8 \cdot 7$ | A 0 |
| 9669 | 293858 | C 10747 | 1837 |  | 58 4-10 | 4206 | 13 | $2916 \quad 26 \cdot 7$ | 876 | 303 | $\cdot 2$ | + 23 | - 34 | $8 \cdot 7$ |  |
| 9670 | $26 \quad 3765$ | C 10746 | 1829 |  | $\begin{array}{lll}58 & 5 \cdot 86\end{array}$ | 4797 | 11 | $27 \quad 040 \cdot 9$ | 879 | 311 | 12.1 | + 23 | + ${ }^{2} 4$ | $9 \cdot 2$ |  |
| 967 I | 293859 | C 10748 |  |  | 195888.46 | $+2.4121$ | 0014 | $2935 \cdot 43 \cdot 7$ | + 9.882 | + 302 | 12.5 | - 11 | - 38 | 9.1 |  |
| 9672 | 293860 | C 10750 |  |  |  | 3984 | 14 | $30 \quad 616.8$ | 883 | 300 | 12.6 | - 4 | - 8 | $9 \cdot 2$ |  |
| 9673 | 243977 | B 7430 | 1832 | 38296-7 | $\begin{array}{llll}58 & 12.37\end{array}$ | 5381 | 10 | 244178 | 887 | 318 | $1 \mathrm{I} \cdot 2$ | + 59* | + 59* | $5 \cdot 32$ | Fo |
| 9674 | 283585 | C 10752 |  | 38305 | $\begin{array}{llll}58 & 15 \cdot 16\end{array}$ | 4467 | 12 | 281738.6 | 890 | 306 | 12.3 | + 12 | + 12 | 8.6 | A 0 |
| 9675 | $2+3978$ | B 7432 | 1839 |  | $58 \quad 17 \cdot 10$ | 5507 | 9 | 24 10 $36 \cdot 7$ | 893 | 320 | 13.0 | 4 | + 16 | $9 \cdot 0$ | F 2 |
| 9676 | 293861 | C 10753 |  |  | 1958817.56 | +2.4111 | +.0014 | $2938 \quad 35 \cdot 3$ | + 9.893 | + 302 | 12.7 | 11 | - 23 | 8.6 |  |
| 9677 | 313895 | L 7878 |  |  | 58 19.89 | 3630 |  | 312413.3 |  | 295 | - | - 36 | - 36 | $8 \cdot 5$. |  |
| 9678 | 243979 | B 7434 |  | 38302 | 58 20.81 | 5330 | 10 | $24 \quad 54 \quad 12.2$ | 897 | 317 | II. 5 | + 5 | - |  |  |
| 9679 | 30 <br> 3862 <br> 28 | L 7879 <br> C  <br> 10754  |  | 38317 | $\begin{array}{llll}58 & 21.43\end{array}$ | 3779 | 14 | $\begin{array}{llll}30 & 52 & 0.5\end{array}$ | 898 | 297 | 12.3 | + 3 | + 23 | 6.60 | B |
| $\|9680\|$ | $28 \quad 3587$ | C 10754 |  |  | $58 \quad 23 \cdot 32$ | $+^{290}$ | 13 | $285841 \cdot 5$ | 901 | 304 | 12.3 | - 8 | + 19 | $9 \cdot 2$ |  |
| 968 I | 273591 | C 10758 | 1852 |  | 195883.56 | +2.4706 | +.0011 | $27 \begin{array}{llll}27 & 32.8\end{array}$ | + 9.914 | +•309 | . 4 | + | + 3 | 8.8 |  |
| 9682 | 283589 | C 10759 | 1855 |  | $5835 \cdot 01$ | 4402 | 13 | $28 \quad 33 \quad 53.2$ | 916 | 305 | . 3 | 22 | - 88 | 9.2 |  |
| 9683 | 313898 | L 7881 |  |  | $58+0.81$ | 3686 | 14 |  | 923 | 295 | 12.3 | + 19 | - | 9.2 |  |
| 9684 | 293864 | C 10761 |  |  | $5841 \cdot 16$ | 4053 | 14 | 295252.4 | 923 | 300 | $1 \mathrm{I} \cdot 9$ | + 12 | - 14 | $9 \cdot 2$ |  |
| 968; | 313901 | L 7884 |  |  | $58 \quad 48 \cdot 34$ | 3648 | 14 |  | 932 | 295 | II. 2 | + 35 | - 16 | 8.8 |  |
| 9686 | 303863 | L 7888 |  |  | 195859.05 | $+2.3830$ | +.0014 |  | + 9.946 | +-298 | 11.6 | 32 | + 12 | $9 \cdot 2$ |  |
| 9687 | 293867 | C 10766 | 1871 |  | 59 <br> 9.39 | 4189 | 13 | 2923 41.6 | 951 | 302 | $1 \cdot 1$ | . 1 | - 8 | 9-1 |  |
| 9688 | 283595 | C 10767 | 1873 | 38349-50 | $\begin{array}{llll}59 & 6 \cdot 78\end{array}$ | 4489 | 12 | $281545 \cdot 5$ | 956 | 305 | 1.2 | + | - 15 | $6 \cdot 79$ | B 9 |
| 9689 | 313904 | L 7891 |  |  | 5914.92 | 3635 |  | $\begin{array}{lllllllllllll}31 & 26 & 39.6\end{array}$ |  | 294 | 12.6 | + 25 | - 21 | $9 \cdot 0$ |  |
| 9690 | 313905 | L 7892 |  | 38368 | $5916 \cdot 55$ | 3562 | 15 | $314221 \cdot 3$ | 968 | 293 | $1 \mathrm{I} \cdot$ |  | - | $6 \cdot 53$ | K |
| 9691 | 263768 | C 10770 | 1879 |  | 195918.54 | +2.4982 | +.0012 | 262111.7 | + 9.97I | +311 | 12.2 | - 18 | - 14 | $9 \cdot 2$ |  |
| 9692 | 273593 | C 10771 | 1884 | 38355-8 | 5919.07 | +546 | 12 | 28 3 21-0 | - 971 | 306 | 11.6 | + 72 | -71 | 7.6 | G 5 |
| 9693 | 263769 | C 10772 | 1883 | 38356 | 5921.47 | 4910 | 12 | $26 \quad 38 \quad 20 \cdot 9$ | 974 | 310 | It.5 | + 1 | + 3 | $7 \cdot 7$ | B 8 |
| 9694 | 273594 | C 10774 |  |  | $5932 \cdot 72$ | +680 | 12 | $273312 \cdot 7$ | 989 | 308 | 11.8 | + 14 | - 18 | $9 \cdot 0$ |  |
| 9695 | 313907 | L 7896 |  |  | $5939 \cdot 32$ | 3580 | 15 | 313959.4 | 997 | 293 | 11.6 | - 2 | $\bigcirc$ | $8 \cdot 0$ |  |
| 9696 |  | $\begin{array}{lll}\text { C } 10775 \\ \text { B } & 74\end{array}$ |  |  | I9 5942.25 | +2.4779 | +.0012 |  | $+10.001$ | +-309 |  |  |  | $9 \cdot 0$ |  |
| 9697 | ${ }^{2}+3987$ | B 7443 |  | 38372 | 5943.02 | 5403 | 10 | $244043 \cdot 1$ | 002 | 317 | II. 4 | - 13 | - 26 | $8 \cdot 7$ | A |
| 9698 | 293871 | C 10777 | 1904-5 |  | $59+6.85$ | 4119 | 14 |  | 006 | 300 | II 22 | + 21 | + 25 | 8.6 |  |
| 9699 | 283601 | C 10779 |  |  | $59 \quad 53 \cdot 33$ | 4311 | 13 | 2859 II.4 | 015 | 303 | 11.6 | + 25 | + 6 | $9 \cdot 1$ |  |
| 9700 | 293872 | C 10780 | 1906-10 | 38380 | $5955 \cdot 35$ | 4134 | 14 | $293921 \cdot 9$ | 017 | 301 | 10.10 | + 515 | - 528* | $5 \cdot 68$ | K |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P. M . |  |  |
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| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 19 ro 0. | Precession. | Sec. Var. | Dec. 1910.0. | Procession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | $\begin{gathered} \text { R.A. } \\ \text { s.0001. } \end{gathered}$ | $\underset{\sim \cdot \circ 0 \mathrm{i} .}{\text { Dec. }}$ | Mag. | Spectral Type. |
|  |  |  |  |  | h m | 8 | s | - , " | " | " |  |  |  |  |  |
| 9701 | 283602 | C 10782 |  |  | 195959.65 | +2.4384 | +.0013 | $\begin{array}{llll}28 & 43 & 3 \cdot 4\end{array}$ | $+10.023$ | +-304 | $9 \cdot 8$ | - 15 | + 3 | $9 \cdot 0$ |  |
| $9702$ | 283603 | C 10783 |  |  | $5959 \cdot 85$ | 4403 | 13 | 283838.4 | 023 | 304 | 12.1 | + 24 | - 14 | $9 \cdot 2$ |  |
| 9703 | 293873 | C 10786 | 1915-6 | 38392 | 20 - 6.30 | 4116 | 14 | $2944 \quad 7 \cdot 6$ | 03 I | 300 | 10.8 | - 8 | + 6 | $6 \cdot 84$ | K 2 |
| 9704 | 313914 | L 7903 |  |  | - $7 \cdot 77$ | 3612 | 15 | $\begin{array}{llll}31 & 35 & 3.7\end{array}$ | 033 | 294 | 11.8 | + 12 | + 6 | 9.2 |  |
| 9705 | 313915 | L 7904 |  |  | - 11.35 | 3639 | 14 | $\begin{array}{llll}31 & 2926.3\end{array}$ | 037 | 294 | 11.4 | + 16 | + 8 | 8.2 | A 0 |
| 9706 | 293875 | C 10792 | 1925-6 |  | $20 \quad 0 \quad 12.34$ | $+2.4098$ | +.0014 | 294828.5. | $+10.038$ | + 300 | If. 6 | + 18 | + 13 | 8.4 |  |
| 9707 | 283604 | C 10790 |  |  | - 12.93 | 4468 | 13 | $28 \quad 2442 \cdot 6$ | 039 | 305 | 12.7 | - $4^{2}$ | - I | $7 \cdot 7$ |  |
| 9708 | 313916 | L 7907 |  |  | - 13.45 | 3608 | 15 |  | 040 | 294 | 13.0 |  | 10 | 9.2 |  |
| 9709 | 254083 | C 10789 |  |  | - 14.94 | 5080 | 1 I | $\begin{array}{llll}26 & 1 & 0.9\end{array}$ | 042 | 312 | 12.9 | - I | + 14 | 9.0 |  |
| 9710 | 26377 I | C 10791 | 1919-20 |  | - 14.95 | 4951 | 12 | $263137 \cdot 3$ | 042 | 310 | 12.5 | 10 | - 15 | 8.8 | K 2 |
| 9711 | 273598 | C 10794 | 1922 | 38395 | $20 \quad 0 \quad 15.43$ | +2.4767 | +.0012 | $27 \quad 15 \quad 8.3$ | +10.042 | +-308 | 12.3 | + 19 | - 12 | $8 \cdot 7$ | A 0 |
| 9712 | 303871 | L 7908 |  |  | - 21.85 | 3813 | 14 | $3042 \quad 9.6$ | 051 | 296 | $12 \cdot 1$ | $\bigcirc$ | $+$ | $8 \cdot 5$ | A 0 |
| 9713 | 254085 | C 10799 |  | -38401 | - 23.69 | 5201 | 11 | $\begin{array}{llllllllll}25 & 32 & 10.8\end{array}$ | 053 | 314 | $10 \cdot 7$ | - 59 | - 53 | 8.0 | K。 |
| 9714 | 293876 | C 10800 |  |  | - 30.00 | 4074 | 14 | $295456 \cdot 6$ | 061 | 299 | 10.9 | + 13 | + 52 | $9 \cdot 2$ |  |
| 9715 | 303875 | L 7910 |  | 38418 | - 38.55 | 3786 | 14 | 3059 15.2 | 073 | 296 | 10.7 | $+\quad 30$ | + 22 | $6 \cdot 87$ | A 2 |
| 9716 | 303874 | C 10801 |  |  | $20 \quad 39.30$ | +2.3976 | +.0014 | $3017 \quad 15.2$ | +10.073 | $+\cdot 298$ | 1.8 | - 5 | - 16 | 8.16 | A 3 |
| 9717 | 3 I 392 I | L 7913 |  |  | - 39.69 | 3533 | 15 | 31543.2 | 073 | 292 | I2.5 | - 10 | - 27 | 8.7 |  |
| 9718 | 313919 | L 7912 |  |  | - $40 \cdot 15$ | 3665 | 14 | $\begin{array}{lllllllllllll}31 & 25 & 39.9\end{array}$ | 074 | 294 | 12.5 | + 27 | - 17 | 9.0 |  |
| 9719 | 243991 | B 7454 |  | 38408 | - 41.89 | 5417 | 10 | $2440 \quad 38 \cdot 7$ | 076 | 316 | II.9 | - 5 | - 18 | $8 \cdot 2$ | A 0 |
| 9720 | 313923 | L 7915 |  | 38427 | - 45.44 | 3596 | 15 | $314050 \cdot 8$ | 080 | 293 | 1 I .8 | + 40 | - 16 | $8 \cdot 1$ | A 0 |
| 9721 | 293880 | C 10805 |  |  | $20 \quad 0 \quad 47 \cdot 93$ | +2.4272 | +.0013 | 29 II 24.4 | $+10.083$ | $+\cdot 302$ | II.9 | + | + 19 | $9 \cdot 1$ | A 0 |
| 9722 | 263775 | C 10806 | 1941-2 |  | - 50.50 | 4932 | 12 | 263888.5 | 087 | 310 | II.8 | - | + 6 | $9 \cdot 2$ |  |
| 9723 | 263778 | C 10808 |  |  | - 57.09 | 5010 | 11 |  | 095 | 311 | . 2 | - 8 | - 3I | $9 \cdot 6$ | A o |
| 9724 | 313924 | L 7919 |  |  | - $57 \cdot 19$ | 3644 | 15 |  | 095 | 294 | 10.6 | + 37 | - 3 | $8 \cdot 4$ |  |
| 9725 | 293882 | C 10810 | 1950 |  | - 58.19 | 4057 | 14 | $30 \quad 033 \cdot 4$ | 096 | 299 | $12 \cdot 1$ | + 19 | - | $9 \cdot 2$ |  |
| 9726 | 263779 | C 10809 | 1948-9 |  | 20 I 1-01 | +2.492 I | +.0012 | 264133.0 | +10.100 | $+\cdot 309$ | II.9 | + 65 | - 15 | 8.8 |  |
| 9727 | 26.3780 | C 10813 |  |  | 12.92 | 5038 | 11 | $2613 \quad 37 \cdot 2$ | 102 | 310 | 12.5 | + 8 | 17 $+\quad 17$ | $8 \cdot 5$ |  |
| 9728 | 303878 | L 7922 |  |  | I 3.80 | 3933 | 14 | 302831.6 | 103 | 297 | 12.7 | + 7 | - 19 | $8 \cdot 5$ | A 0 |
| 9729 | 313925 | L 7923 | 1957 |  | I $4 \cdot 40$ | 3523 | 15 | $315746 \cdot 8$ | 104 | 291 | 12.0 | - I* | - 12* | $5 \cdot 69$ | B 0 |
| 9730 | 254090 | C 10814 |  | 38430 | I 8.42 | 5144 | 1 I | $25 \quad 48 \quad 25 \cdot 8$ | 109 | 312 | 12.9 | + 24 | - 378 | $7 \cdot 8$ | G 5 |
| 9731 | 303881 | C 10818 | 1960 |  | 20.112 .72 | +2.3996 | +.0014 | $\begin{array}{llll}30 & 15 & 2.4\end{array}$ | +10.115 | + 298 | 12.7 |  | - 32 | 7.91 | K o |
| 9732 | 313926 | L 7926 |  |  | 113.04 | 3575 | 15 |  | 115 | 292 | 12.8 | + 164 | - 96 | $9 \cdot 2$ |  |
| 9733 | 273603 | C 10819 |  |  | 116.64 | 4600 | 12 | $27 \quad 57 \quad 51 \cdot 5$ | 120 | 305 | 12.9 | + 4 | + | $9 \cdot 2$ |  |
| 9734 | 273605 | C 1082 I |  |  | 120.21 | 4716 | 12 | $273058 \cdot 2$ | 124 | 307 | $12 \cdot 1$ | $+\quad 36$ | + 17 | $9 \cdot 2$ |  |
| 9735 | 313930 | L 7928 | 1971 |  | 123.80 | 3540 | 15 | 315519.3 | 129 | 291 | 12.7 | - | - II | 9.0 |  |
| 9736 | 254093 | C 10824 |  |  | $20 \quad 125.96$ | +2.5296 | +.0010 | $251230 \cdot 8$ | +10.131 | +-314 | $1 \mathrm{I} \cdot 9$ | + 6 | - 21 | $8 \cdot 21$ |  |
| 9737 | $26 \quad 3783$ | C 10825 | 1967-8 | 38443 | 128.01 | 4907 |  | $264632 \cdot 5$ | 134 | 309 | 12 -1 | + 18 | - 12 | $8 \cdot 0$ | B 8 |
| 9738 | 273607 | ${ }^{\text {C }} 10828$ | 1975 | 38449 | $1{ }^{1} 42.27$ | 481 I | 12 | $\begin{array}{llll}27 & 9 & 59 \cdot 7\end{array}$ | 152 | 308 | 11.5 | + 45 | + 31 | $8 \cdot \mathrm{I}$ | F 8 |
| 9739 | 263786 | ${ }^{\text {C }} 10829$ | 1977-8 |  | I 44.40 | 4928 | 12 | $26 \quad 42 \quad 22 \cdot 5$ | 154 | 309 | 13.0 | $+3$ | - 32 | 9.1 |  |
| 9740 | 273608 | C 10830 |  |  | 149.07 | 4703 | 12 | $27 \quad 3547 \cdot 9$ | 160 | 306 | 12.0 | + 4 | + 16 | $9 \cdot 2$ |  |
| 9741 | 293887 | C 1083 I |  |  | $20 \quad 1 \begin{array}{lll} \\ 20 & \text { 1 } 87\end{array}$ | $+2.4177$ | +.0014 | 2936 59.1 | +10.164 | +-299 | II•7 | + 1 | - 28 | $8 \cdot 6$ | Ko |
| 9742 | 313932 | L 793I |  |  | 155.08 | 3608 | 15 | 314251.6 | 168 | 292 | 11.0 | + 6 | - 10 | $8 \cdot 7$ | A 0 |
| 9743 | 254097 | C 10832 | 1986-7 |  | 22.83 | 5272 | 10 | $25 \quad 2034.4$ | 178 | 314 | 11.7 | - 10 | - 19 | $7 \cdot 8$ |  |
| 9744 | 243997 | B 7469 |  |  | 25.82 | 555 I | 9 | $24 \quad 12 \quad 7 \cdot 7$ | 181 | 316 | 12.2 | - 16 | + 10 | $8 \cdot 2$ | A 0 |
| 9745 | 293889 | C 10834 | 1996-7 |  | 25.89 | 4059 | 15 | $\begin{array}{llll}30 & 4 & 20.5\end{array}$ | 181 | 299 | II.6 | + | - 84 | 8.21 | F 8 |
| 9746 | 273612 | C 10833 | 1993 | 38466-8 | $20 \quad 2 \quad 6.30$ | $+2.4636$ | +.0013 | $275225 \cdot 1$ | $+10 \cdot 182$ | +304 | 12.2 | + 7 | + 22 | $7 \cdot 8$ | K 5 |
| 9747 | 283617 | ${ }^{\text {C }} 10835$ |  |  | 28.62 | 4427 | 13 | $28 \quad 418.6$ | 185 | 302 | 12.2 | - 20 | - 47 | $9 \cdot 1$ |  |
| 9748 | 293890 | C 10836 C L |  |  | 29.52 | 4226 | 14 |  | 186 | 300 | 13.4 | + 11 | - 9 | $9 \cdot 1$ | A 2 |
| 9749 | 29 29 298989 | C 10837 |  |  | $\begin{array}{ll}2 & 12.55 \\ 2 & 15.28\end{array}$ | 4211 | $15$ |  | 190 | 299 | 13.0 | + + $+\quad 11$ $+\quad 17$ | + 20 | 9.2 |  |
| 9750 | 293892 | C 10838 |  |  | 215.28 | 4213 | 15 | $293021 \cdot 2$ | 193 | 299 | 12.5 | + 17 | - 9 | 9.0 |  |


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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | - R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | $\begin{aligned} & \text { Sec. } \\ & \text { Var. } \end{aligned}$ | $\begin{aligned} & \text { Epoch } \\ & \text { Igoot } \end{aligned}$ | $\begin{aligned} & \text { R.A. } \\ & \text { 8.000 r. } \end{aligned}$ | Dec. $" .001 .$ | Mag. | Spectral Type. |
|  |  |  |  |  | h m | $s$ | s | - " | " | " |  |  |  |  |  |
| 9751 | 293893 | C 10839 |  |  | $20 \quad 2 \quad 16.23$ | $+2.4286$ | +.0014 | 29 13 55.0 | +10.195 | +-300 | 11.3 | + 3 | 24 | $8 \cdot 6$ | K o |
| 9752 | 233894 | B 7477 |  |  | 221.32 | 5579 |  | $24 \quad 5 \quad 53.9$ | 201 | 317 | 12.5 | + 4 | 20 | $9 \cdot 2$ |  |
| 9753 | 303888 | C 10842 | 2006-7 |  | $222 \cdot 43$ | 4029 | 15 | $301211 \cdot 0$ | 202 | 298 | 12.9 | + 20 | + 24 | $9 \cdot 1$ |  |
| 9754 | 254099 | C 10840 | 2000-1 | 38479 | 223.36 | 5312 | 10 | 25 II 59.2 | 203 | 314 | 13.4 | + 6 | - 15 | 8.11 | A 0 |
| 9755 | 273613 | C 10843 | 2005 | 38456-8 | 226.06 | 4643 | 13 | $\begin{array}{llll}27 & 52 & 2 \cdot 5\end{array}$ | 207 | 304 | 9.6 | + 32 | + 1 | $8 \cdot 4$ | K 5 |
| 9756 | 303890 | L 7941 |  |  | $20 \quad 2 \quad 26.71$ | +2.3911 | +.0015 | $303886 \cdot 5$ | +10.208 | +-297 | 12.2 | - 6 | + 10 | 9.2 |  |
| 9757 | $28 \quad 3619$ | C 10844 | 2010 |  | 228.00 | 4439 | 14 | $28 \quad 3934 \cdot 3$ | 209 | 303 | 12.3 | 6 | - $\quad 36$ | 8.6 |  |
| 9758 | 283621 | ${ }^{\text {C } 10846}$ |  |  | $237 \cdot 85$ | 4338 | 14 | $29 \quad 3 \quad 25 \cdot 1$ | 222 | 301 | 12.2 | - 27 | + 14 | $9 \cdot 2$ |  |
| 9759 | 273616 | C 10845 |  | 38500 | $238 \cdot 56$ | 4718 | 13 | $27 \quad 35 \quad 26 \cdot 0$ | 223 | 305 | 11.4 | + 15 | 21 | $9 \cdot 2$ |  |
| 9760 | 313939 | L 7944 |  |  | $244 \cdot 20$ | 3671 | 16 | $3132 \cdot 24 \cdot 3$ | 230 | 293 | 10.9 | 5 | - 20 | 8.8 |  |
| 9761 | 244002 | B 7484 | 2021 |  | $\begin{array}{lll}20 & 2 & 53.74\end{array}$ | +2.5567 | +.0009 | 241039.0 | +10.242 | +.317 | 10.2 | 44 | + 139 | $8 \cdot 5$ | G |
| 9762 | $27 \quad 3619$ | C 10849 |  | 38514-37 | $253 \cdot 89$ | 4739 | 13 | $27 \begin{array}{llllllllll} & 31 & 13.6\end{array}$ | 242 | 306 | 10.8 | 8 | + 26 | $8 \cdot 2$ | F 5 |
| 9763 | 254103 | C 10850 | 2028-9 | 38513 | $258 \cdot 37$ | 5265 | 10 | 252531.9 | ${ }^{2} 47$ | 312 | 10.2 | - 4 | 4 | $8 \cdot 6$ | K |
| 9764 | 303894 | C 10853 | 2038-9 |  | $3{ }^{3} \cdot 95$ | 4029 | 15 | 301454.0 | 254 | 297 | II. 2 | 25 | + 9 | $9 \cdot 3$ |  |
| 9765 | 303895 | L 7947 |  |  | 3 5-19 | 3839 | 15 | $3057 \quad 2.0$ | 256 | 294 | II. 5 | $\begin{array}{r} \\ +\quad 7 \\ \hline\end{array}$ | 0 | 8.8 | A 2 |
| 9766 | 31. $39+4$ | L 7948 |  |  | $20 \quad 3 \quad 11.33$ | +2.3603 | +.0016 |  1 48 <br> $7 \cdot 3$   | +10.264 | +291 | 12.2 | + | + 24 | $9 \cdot 2$ |  |
| 9767 | 303900 | L 7950 | $20+5$ |  | 318.02 | 3832 | 15 | 305928.5 | 272 | 294 | 2 | 21 | - 33 | 8.8 |  |
| 9768 | 293897 | C 10856 | 2046-7 |  | 323.18 | 4244 | 14 | 292738.8 | 278 | 299 | $2 \cdot 2$ | - I | - 21 | $9 \cdot 0$ |  |
| 9769 | $25+105$ | C 10858 | 2042-4 |  | 328.15 | 5150 | 11 | $25 \begin{array}{llll}55 & 15.7\end{array}$ | 285 | 310 | $9 \cdot 4$ | - I | - 72 | 8.2 | F 8 |
| 9770 | 283626 | C 10862 |  |  | $334 \cdot 36$ | 4350 | 14 | $29356 \cdot 2$ | 292 | 300 | 11.3 | + 12 | - 18 | 9.0 |  |
| 9771 | 313947 | L 7956 |  |  | $20 \quad 3 \quad 36.55$ | +2.3591 | 0016 | 315317.5 | $+10.295$ | + 290 | 11.3 | + | - 27 | $9 \cdot 2$ |  |
| 9772 | 303901 | L 7957 | 10 |  | $34^{2} 2 \cdot 80$ | 3906 | 15 | $304446 \cdot 0$ | 303 | 295 | 11.2 | + 30 | + $\quad 2$ | 9.1 |  |
| 9773 | 273621 | C 10864 |  |  | 344.91 | 4769 | 13 | $27 \quad 2720.9$ | 306 | 305 | 11.0 | + | - 26 | 9.0 |  |
| 9774 | 244008 | B 7488 |  |  | $350 \cdot 87$ | 5537 | 9 | $242125 \cdot 1$ | 313 | 315 | 10 | + 6 | - 7 | 8.8 |  |
| 9775 | 313950 | L 7959 |  |  | 352.46 | 3760 | 15 |  | 315 | 293 | 11.4 | 3 | - 2 | $9 \cdot 1$ |  |
| 9776 | 263799 | C 10868 | 14 |  | $20 \quad 4 \quad 1.48$ | $+2.5012$ | +.0012 | 263024.4 | +10.326 | +-308 | 11.2 | + 5 | + 32 | 9.0 |  |
| 977 | 303903 | L 7962 |  |  | $4 \quad 5 \cdot 31$ | 3832 | 15 | 31219.1 | 331 | 294 | 12.6 | - 4 | - $\quad 3$ | $9 \cdot 2$ |  |
| 9778 | 313953 | L 7963 |  |  | 410.42 | 3620 | 16 |  | 337 | 291 | 10.8 | + 12 | - 16 | 8.0 | A 0 |
| 9779 | 303906 | L 7966 | 30 |  | 417.58 | 3966 | 15 | 303345.8 | 346 | 295 | 11.0 | + 3 | + 6 | 8.4 | K |
| 9780 | 263801 | C 10872 |  |  | 419.70 | 4947 | 12 | $\begin{array}{llll}26 & 47 & 8.2\end{array}$ | 349 | 308 | 11.6 | + 18 | + | $9 \cdot 2$ |  |
| 9781 | 254111 | C 10871 |  |  | $20 \quad 4 \quad 19.78$ | +2.5227 | 0011 | 253929.5 | +10.349 | +-311 | 11.8 | + 33 | - 4 | 9.0 |  |
| 97 | 303907 | C 10874 |  |  | $420 \cdot 28$ | 4056 | 15 | $301346 \cdot 3$ | 350 | 296 | 12.3 | - 6 | + 4 | . $9^{\circ}$ |  |
| 9783 | 273623 | C 10877 | 31 |  | 426.37 | 4755 | 13 | $27 \quad 3314.6$ | 357 | 305 | 12.3 | + 11 | - 14 | 8.6 | A 0 |
| 9784 | 273624 | C 10879 | 32 | 38587 | 426.82 | 4652 | 13 | 2757 28.1 | 358 | 303 | 12.0 | + 7 | + 16 | 8.2 | A 3 |
| 9785 | 254113 | C 10882 | 33 | 38586 | $432 \cdot 00$ | 5124 | 11 | $\begin{array}{llllllllll}26 & 5 & 17.7\end{array}$ | 364 | 310 | 12.2 | + 26 | + 30 | 8.1 | Fo |
| 9786 | 263803 | C 10886 | 39-40 |  | $20 \quad 434.94$ | +2.4912 | 0012 | $265633 \cdot 1$ | +10.368 | + 307 | $12 \cdot 3$ | - 6 | + | $8 \cdot 0$ | B 9 |
| 9787 | 293907 | C 10888 |  |  | $441 \cdot 17$ | 4239 | 15 | $293347 \cdot 7$ | 376 | 298 | 11.7 | + 15 | + | $9 \cdot 2$ |  |
| 9788 | 263804 | ${ }^{\text {C } 10887}$ | 49 |  | $443 \cdot 34$ | 4937 | 12 | $26515 \cdot 2$ | 378 | 307 | I2.I | $+$ | 31 | $9 \cdot 2$ |  |
| 9789 | 293908 | C 10890 |  |  | $445 \cdot 17$ | 4195 | 15 | $2944 \quad 4.3$ | 381 | 297 | 12.5 | - 1 | - 34 | $9 \cdot 0$ |  |
| 9790 | 293909 | C 10892 |  |  | 447.39 | 4116 | 15 | $\begin{array}{llll}30 & 2 & 2.8\end{array}$ | 384 | 296 | 12.2 | - 4 | + 8 | 7.96 | K 5 |
| 9791 | 303911 | C 10893 | 61 |  | $20 \quad 448.76$ | +2.4057 | +.0015 | 301525.0 | +10.385 | +.295 | 12.7 | 21 | - 5 | 8.8 |  |
| 9792 | 244015 | B 7498 | $51-2$ | 38595 | $450 \cdot 41$ | 5517 | 9 | $24 \quad 2945 \cdot 9$ | 387 | 314 | 12.7 | - 8 | - 73 | $7 \cdot 9$ | G 5 |
| 9793 | 254115 | C 10891 |  |  | $450 \cdot 51$ | 5232 | 11 | $2540 \quad 8 \cdot 7$ | 387 | 310 | 12.3 | 20 | 25 | $9 \cdot 0$ |  |
| 9794 | 244016 | B 7499 | 53-4 | 38594 | 451.01 | 5543 | 9 | 242314.7 | 388 | 314 | 12.1 | + 13 | + 25 | 8.0 | G 5 |
| 9795 | 313962 | L 7981 |  |  | 453.89 | 3628 | 16 | 315024.4 | $39^{2}$ | 291 | 11.4 | + 20 | - 40 | 8.8 | F 8 |
| 9796 | 254116 | C 10894 |  | 38607 | $20 \quad 456.74$ | +2.5149 | +.0011 | $26 \quad 041 \cdot 3$ | +10.395 | $+309$ | 12.9 | + | - 14 | 7•8 | B 3 |
| 9797 | 293910 | C 10896 |  |  | $5 \quad 2 \cdot 29$ | 4110 | 15 | $30 \quad 427.6$ | 402 | 296 | 12.2 | + | + 9 | 8.71 | A 0 |
| 9798 | 313964 | L 7985 | 23 |  | $5 \quad 4 \cdot 76$ | 3785 | 15 | $311647 \cdot 5$ | 405 | 292 | 12.3 | + 24 | + 20 | $8 \cdot 1$ | $\mathrm{K}_{2}$ |
| 9799 | 244017 | C 10895 |  |  | $5 \quad 6 \cdot 49$ | 5381 | 10 | $25 \quad 4 \quad 25.9$ | 407 | 312 | 12.7 | + II | - 2 | $8 \cdot 7$ |  |
| 9800 | 244018 | B 7505 | 65-6 | 38611 | $5 \quad 7.09$ | 5519 | 10 | $\begin{array}{llll}24 & 30 & 8.8\end{array}$ | 408 | 315 | 13.1 | - | - 24 | $8 \cdot 7$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B. D. | A.G.C. | W. B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | $\underset{\text { 8.000 }}{\text { R.A. }}$ | $\begin{gathered} \text { Dec. } \\ \text { ".001. } \end{gathered}$ | Mag. | Spectral Type. |
|  | $\bigcirc$ |  |  |  | h m s | s | 8 | - , |  | " |  |  |  |  |  |
| 9801 | 303914 | L 7986 |  |  | $20 \quad 5 \quad 9 \cdot 13$ | +2.3853 | +.0015 | 315214.9 | +10.4II | $+.293$ | 13.2 | - 5 | - 16 | $9 \cdot 2$ |  |
| 9802 | 313965 | I. 7987 |  |  | 5 II-14 | 3808 | 15 | 3112214.9 | 413 | 292 | 13.4 | - 11 | + 15 | $9 \cdot 2$ |  |
| 9803 | $28 \quad 3639$ | C 10899 |  | 38617 | 516.20 | 4546 | 13 | $\begin{array}{llll}28 & 25 & 15.9\end{array}$ | 419 | 302 | $12 \cdot 3$ | 9 | - 20 | 8.2 | K 5 |
| 9804 | 293911 | C 10900 | 81 |  | 517.88 | 4163 | 15 | $2953 \quad 20 \cdot 8$ | 422 | 297 | 12.2 | $\bigcirc$ | - 76 | 8.8 |  |
| 9805 | 263808 | C Iogoi | 78-9 | 38619 | 5.22.19 | 4923 | 12 | $265648 \cdot 0$ | 427 | 306 | I 2.8 | 13 | - 2 | 8.8 | A o |
| 9806 | 273628 | C 10905 | 88 |  | $20 \quad 5 \quad 28.98$ | +2.4815 | +.0012 | 2723 I•5 | +10.435 | $+\cdot 304$ | 12.7 | + 1 | + 2 | $9^{\circ} \mathrm{O}$ |  |
| 98072 | 244024 | B 7509 |  |  | $533 \cdot 12$ | 5476 | 10 | $244^{2} \quad 27 \cdot 9$ | 44 I | 313 | 12.6 | - 6 | - 2 I | $9 \cdot 2$ |  |
| 9808 | 303917 | L $799^{2}$ |  |  | 534.40 | 3836 | 15 |  | $44^{2}$ | 292 | 12.6 | + 20 | - 24 | $8 \cdot 0$ | K 5 |
| 9809 | 254121 | C 10910 |  |  | $5 \quad 35 \cdot 54$ | 5177 | II | $25 \quad 5613.9$ | 444 | 309 | 13.1 | + 15 | - 4 | $9 \cdot 2$ |  |
| 9810 | 283642 | C 10911 |  |  | $5 \quad 37 \cdot 39$ | 4555 | 13 | $28 \quad 2434 \cdot 7$ | $44^{6}$ | 302 | 13.3 | $+\quad 4$ | + 22 | $9 \cdot 2$ |  |
| 981 I | 273630 | C 10914 |  |  | $20 \quad 545 \cdot 22$ | +2.4711 | +.0013 | $27 \quad 48 \quad 26 \cdot 0$ | $+10.456$ | $+\cdot 303$ | II•I | - 9 | - II | $8 \cdot 6$ |  |
| 9812 2 | 293918 | C 10918 | II 4 |  | 5 56.11 | 4158 | 15 | $2957 \quad 6 \cdot 8$ | 469 | 296 | 12.3 | - 23 | - 24 | $9 \cdot 2$ |  |
| 9813 | 273631 | C 10919 | 113. | 38650 | 558.59 | 4651 | 13 | $\begin{array}{llll}28 & 3 & 32.6\end{array}$ | 472 | 303 | $10 \cdot 8$ | 11 $+\quad 129$ | - 2 | $8 \cdot 2$ | K 5 |
| 9814 | 303920 | L 8000 |  |  | $\begin{array}{ll}6 & 0.35\end{array}$ | 4026 | 16 | $\begin{array}{llll}30 & 27 & 8.4\end{array}$ | 474 | 294 | 13.1 | + 22 | - 4 | $9 \cdot 0$ |  |
| 9815 | 273632 | C 10920 |  |  | $\begin{array}{ll}6 & 1 \cdot 77\end{array}$ | 4810 | 13 | $27 \quad 26 \quad 10.4$ | 476 | . 304 | 13.3 | + 29 | + 6 | 9.1 |  |
| 9816 | 2638 II | C 10922 | I 15 | 386 | $20 \quad 6 \quad 3 \cdot 61$ | $+2 \cdot 4903$ | +.0013 | $27 \quad 359.6$ | +10.478 | +.306 | 13.4 | - 15 | - 18 | 8.1 | K 5 |
| 9817 | 293919 | C IOg24 |  | 38663 | 64.55 | 4290 | I 5 | 2927 4I•I | 480 | 298 | 12.5 | I | - 22 | 8.0 | K 2 |
| 9818 | 313971 | L 8004 |  |  | 6 9.01 | 3671 | 17 | $\begin{array}{llll}31 & 46 & 9 \cdot 7\end{array}$ | 485 | 290 | 13.2 | 1 | - 20 | $9 \cdot 2$ |  |
| 9819 | 254124 | C 10925 | 117-8 |  | $6 \quad 9 \cdot 14$ | 5348 | II | 25 I6 III.8 | 485 | 310 | 12.5 | + 4 | + 34 | 7.86 | K o |
| 9820 | 273634 | C Iog27 |  |  | 611.56 | 4763 | 14 | $27 \quad 38 \quad 2 \cdot 3$ | 489 | 303 | 13.3 | I | - 30 | $9 \cdot 1$ |  |
| 9821 | 313972 | L 8006 |  |  | $20 \quad 6 \quad 19.76$ | $+2 \cdot 3647$ | +.0017 | 3185215.9 | +10.499 | $+289$ | 12.9 |  | - 4 | $8 \cdot 7$ |  |
| $9822$ | 273636 | C I0930 | 130 | 38669-72 | 620.25 | 467 I | 14 | 28 O 111.5 | 499 | 302 | 13.1 | + 2 | - 10 | $7 \cdot 6$ | B 5 |
| $9823$ | 283644 | C 10932 |  |  | $6 \quad 22.69$ | 4433 | 14 | $28 \quad 5557 \cdot 6$ | 502 | 299 | 12.7 | - 27 | - 4 | $9 \cdot 2$ |  |
| $9824$ | 293920 | C 10935 |  | 38680 | $624 \cdot 20$ | 4294 | 15 | 292754.4 | 504 | 297 | $12 \cdot 7$ | + 5 | - 26 | $8 \cdot 7$ |  |
| $9825$ | 244027 | C 10934 | 132 |  | $626 \cdot 92$ | 5392 | I I | $25631 \cdot 6$ | 507 | 3 II | 12.9 | - I | - 14 | $8 \cdot 7$ |  |
| 9826 | $26 \quad 3814$ | C 10936 |  |  | $20 \quad 6$ 31.18 | $+2.5100$ | O12 | $261812 \cdot 1$ | +10.513 | $+307$ | 13.5 | $+5$ | - II | $9 \cdot 2$ |  |
| 9827 | 303922 | L 8007 | 152 |  | $632 \cdot 20$ | 3899 | 16 | $30 \quad 57 \quad 38 \cdot 9$ | 514 | 292 | 12.5 | - 7 | + 32 | $8 \cdot 0$ | B 9 |
| 9828 | 244028 | B 7526 |  |  | $635 \cdot 50$ | 5567 | 10 | $242323 \cdot 5$ | 518 | 313 | 13.0 | + 18 | - 16 | $9 \cdot 2$ |  |
| 9829 | 293924 | C 10939 |  | 38687 | 637.08 | 4320 | 15 | $292255 \cdot 5$ | 520 | 298 | 13.2 | + 8 | + 13 | $8 \cdot 8$ |  |
| 9830. | . 244029 | B 7527 | 138 | 38681 | $638 \cdot 61$ | 5473 | 11 | $244657 \cdot 5$ | 522 | 312 | 13.3 | + 7 | + 12 | $6 \cdot 98$ | A $0^{\circ}$ |
| 9831 | $27 \quad 3637$ | C 1094I |  |  | $20 \quad 6 \quad 46 \cdot 77$ | +2.4779 | +.0014 | $27 \quad 3616 \cdot 9$ | $+10.532$ | +:304 | 11.7 | + 17 | - 4 | 9.2 |  |
| 9832 | $26 \quad 3815$ | C 10942 |  | 38690 | $64^{8 \cdot 11}$ | 5022 | 13 | $\begin{array}{lllll}26 & 38 & 13\end{array}$ | 534 | 306 | 12.6 | - 0* | - $7^{*}$ | $5 \cdot 46$ | A 2 |
| 9833 | 313975 | L 8014 |  |  | 649.69 | 3693 | 17 | $3 \mathrm{I} 44 \mathrm{II} \cdot 0$ | 536 | 290 | 12.7 | 0 | - 5 | $8 \cdot 4$ | K 0 |
| 9834. | . 283645 | C 10945 | 153 | 38696-7 | 650.03 | 4637 | 14 | $2810 \quad 2.9$ | 536 | 302 | 13.8 | $+31$ | + 15 | $6 \cdot 94$ | B 3 |
| 9835 | 283646 | C 10949 |  | 38701 | $652 \cdot 5^{2}$ | 4399 | 15 | $29 \quad 5 \quad 49 \cdot 3$ | 540 | 298 | 12.9 | - 1 | - 23 | $7 \cdot 44$ | B 9 |
| 9836 | $27 \quad 3638$ | C 10948 |  |  | $20 \quad 6 \quad 53.55$ | $+2.4819$ | +.0013 | 27.2712 .6 | +10.540 | +.304 | $12 \cdot 3$ | - 22 | + I | 8.6 | K o |
| 9837 | 293926 | C IO950 | 160-2 |  | 654.51 | 4161 | 16 | $30 \quad 25.6$ | 542 | 295 | $12 \cdot 2$ | - 6 | + I | $7 \cdot 71$ | A 5 |
| 9838 | 303926 | L 8017 |  |  | $657 \cdot 81$ | 4046 | 16 | $\begin{array}{llll}30 & 26 & 33 \cdot 9\end{array}$ | 546 | 294 | $12 \cdot 3$ | + 2 | - 14 | $9 \cdot 2$ |  |
| 9839 | 303927 | L 8018 |  |  | $658 \cdot 42$ | 3976 | 16 | $3042 \begin{array}{lll} \\ 3 & \text { I }\end{array}$ | 546 | 293 | II. 5 | + 4 | + 45 | $9 \cdot 2$ |  |
| 9840 | 263816 | C 10952 |  |  | $7 \quad 9 \cdot 93$ | 4922 | 13 | $\begin{array}{lllll}27 & 3 & 38 \cdot 9\end{array}$ | 561 | 305 | 12.4 | + 5 | + 9 | $8 \cdot 2$ | A 2 |
| 9841 | 283648 | C 10953 |  |  | $20 \quad 711.40$ | $+2.4438$ | $+.0014$ | $28 \quad 57 \quad 58.6$ | $+10.563$ | +. 298 | I 2.6 | - 18 | + | 8.5 | A 2 |
| 9842 | $28 \quad 3649$ | C 10954 |  |  | 712.20 | 4541 | 14 | 283354.9 | 564 | 299 | 12.7 | + II | + 15 | 9. I | A 0 |
| 9843 | 283647 | C 10955 | 173 |  | 712.52 | 4634 | 14 | 28 I2 15.2 | 564 | 300 | 13.3 | 2 | $+\quad 27$ | 8.5 |  |
| 9844 | 30 3929 | IL 8026 | 183-4 |  | $717 \cdot 97$ | 403 I | 16 | $30 \quad 3119.2$ | 571 | 292 | $13 \cdot 1$ | - 13 | - 4 | $6 \cdot 72$ | B 9 |
| 9845 | 273640 | C 10959 |  |  | 7 2I•43 | 4707 |  | 275531.0 | 575 | 301 | 12.7 | + 7 | - 5 | $9 \cdot 0$ | A 0 |
| 9846 | 629 3928 | C log61 |  |  | $20 \quad 7 \quad 25.45$ | $+2.4319$ | +.0015 | $292616 \cdot 7$ | +10.580 | $+297$ | 12.I. | + 16 | - II | $8 \cdot 0$ |  |
| 9847 | 254138 | C Iog62 | 187 |  | 729.05 | 522 I | 12 | $25 \quad 5220 \cdot 0$ | 584 | 307 | 12.8 | + 3 | - 72 | $9 \cdot 1$ | G 5 |
| 9848 | 254140 | C Iog63 | 191 |  | $735 \cdot 25$ | 5389 | II | 25118.8 | 592 | 309 | - 12.9 | - 5 | - 23 | $8 \cdot 61$ | Ko |
| 9849 | 25414 I | C 10964 |  |  | $7 \quad 36 \cdot 73$ | 5156 | 12 | $26 \quad 8.46 \cdot 3$ | 594 | 307 | 12.5 | + 8 | + 25 | $9 \cdot 2$ |  |
| 9850 | 29393 I | C 10966 |  | 38731 | $737 \cdot 52$ | 4380 | 15 | $29136 \cdot 1$ | 595 | 297 | 12.7 | + 46 | - 20 | 8.8 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910.0 | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral <br> Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.A. } \\ 8.0001 . \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & 0.001 \end{aligned}$ |  |  |
|  | $\bullet$ |  |  |  | h m s | s | s | - " | " | " |  |  |  |  |  |
| 985 I | 283652 | C 10967 | 198 |  | 20739.22 | +2.4615 | +.0014 | 28 18 31.3 | $+10.597$ | $+300$ | $12 \cdot 1$ | + 28 | - 6 | $9 \cdot 2$ | B 9 |
| 9852 | 313982 | L $\mathrm{L}_{\text {Co3 }}$ |  |  | 7 40.46 | 3838 | 16 | $\begin{array}{llllll}31 & 15 & 44.4\end{array}$ | 599 | 291 | I I. 8 | 3 | + 24 | $8 \cdot 6$ |  |
| 9853 | $254^{\text {I }} 44$ | C 10970 |  |  | $745 \cdot 34$ | 5165 | 12 | $26 \quad 7 \quad 4.0$ | 605 | 307 | 13.1 | + 17 | + 37 | $9 \cdot 2$ |  |
| 9854 | $28 \quad 3653$ | C 1097I |  | $38744-5$ | $745 \cdot 60$ | 4465 | 15 | $28 \quad 5355 \cdot 1$ | 605 | 298 | 12.3 | + 1 | - 5 | $7 \cdot 34$ | K 2 |
| 9855 | 273642 | C 10972 |  |  | $752 \cdot 82$ | 4905 | 13 | $271031 \cdot 6$ | 6 I 4 | 304 | 12.0 | 15 | - 46 | $8 \cdot 8$ |  |
| 9856 | 263825 | C I0974 |  | 38751 | $20 \quad 8 \quad 2.29$ | +2.5065 | +.0013 | 263224.5 | $+10 \cdot 626$ | $+\cdot 305$ | I I. 8 | + $5^{*}$ | - 19* | $5 \cdot 77$ | K 2 |
| 9857 | 263826 | C 10975 |  | 38754 | $8 \quad 5 \cdot 19$ | 5044 | 13 | $2637 \quad 37 \cdot 7$ | 629 | 305 | I I 8.8 | + 4 | + 5 | $7 \cdot 10$ | B 8 |
| 9858 | $254^{15} 4$ | C 10976 |  |  | $8 \quad 6.04$ | 5164 | 12 | $\begin{array}{llll}26 & 8 & 3 & 39 \cdot 7\end{array}$ | 630 | 307 | 12.6 | + 2 | + 22 | $9 \cdot 2$ |  |
| 9859 | $254^{1}+6$ | C 10977 |  |  | $8 \quad 6.77$ | 5174 | 12 | $26 \quad 6 \quad 6 \cdot 2$ | 631 | 307 | 12.6 | + 46 | + 16 | $9 \cdot 2$ |  |
| 9860 | 303933 | L 8034 | 22I-2 |  | $8 \quad 9.45$ | 3888 | 16 | $31 \quad 642 \cdot 1$ | 634 | 291 | 12.4 | + 8 | - 15 | $8 \cdot 8$ |  |
| 986 I | $26 \quad 3827$ | C Iog80 |  |  | $20 \quad 8 \quad 11 \cdot 30$ | $+2.5084$ | $+.0012$ | $26 \quad 28 \quad 28.5$ | +10.637 | $+306$ | 13.1 | + 4 | + 6 | $7 \cdot 56$ | B 8 |
| 9862 | 283656 | C 10982 |  |  | $8 \quad 12.59$ | $44^{87}$ | 15 | $28 \quad 50 \quad 37 \cdot 7$ | 638 | 298 | 12.7 | + 57 | + 14 | $8 \cdot 6$ | Fo |
| 9863 | 263828 | C iog8i | 219 | 38759 | 814.25 | 5150 | 12 | $261234 \cdot 5$ | 640 | 306 | 12.4 | - 3* | - 16* | $5 \cdot 91$ | B 8 |
| 9864 | 244035 | B 7549 |  |  | 816.18 | 5567 | 10 | $24 \quad 2912.9$ | 643 | 312 | 13.7 | + 15 | - 9 | $9 \cdot 2$ |  |
| 9865 | 283658 | C Iog85 |  |  | $8 \quad 18.98$ | 4468 | 15 | $\begin{array}{lllll}28 & 55 & 17.8\end{array}$ | 646 | 298 | 13.1 | + 42 | - 120 | $8 \cdot 6$ |  |
| 9866 | 283637 | C 10986 |  |  | $20 \quad 8 \quad 19.85$ | +2.4545 | $+\cdot 0015$ | $\begin{array}{llll}28 & 37 & 34.4\end{array}$ | $+10.647$ | $+300$ | 13.5 | - 9 | - I | $9 \cdot 2$ |  |
| 9867 | 283661 | C 10990 | 230 |  | $830 \cdot 30$ | 4655 | 14 | $28 \quad 1225 \cdot 8$ | 660 | 300 | 12.2 | + 1 | - 5 | $8 \cdot 7$ | A. |
| 9868 | 283662 | C 10991 |  |  | $837 \cdot 52$ | 4469 | 15 | $28 \quad 56 \quad 25 \cdot 4$ | 669 | 298 | I 2.8 | + 54 | + 32 | $9 \cdot 2$ |  |
| 9869 | 283664 | C 10992 | 233 |  | $840 \cdot 15$ | 4426 | 15 | $29 \quad 6 \quad 32 \cdot 0$ | 672 | 297 | 12.7 | - 3 | - 22 | $8 \cdot 6$ | A 0 |
| 9870 | 293935 | C 10997 | 235 |  | $84 \mathrm{I} \cdot 54$ | 4168 | 16 | $30 \quad 5 \quad 53 \cdot 2$ | 675 | 295 | I $2 \cdot 5$ | 8 | 4 | $9 \cdot 1$ |  |
| 9871 | 283663 | C 10996 |  |  | $\begin{array}{llll}20 & 8 & 42.67\end{array}$ | $+2.4492$ | $+.0015$ | 285124.9 | $+10.676$ | $+\cdot 297$ | I 3.5 | - I | $\bigcirc$ | 9.0 |  |
| 9872 | 254549 | C 10995 | 232 |  | $844 \cdot 72$ | 5359 | 11 | $25 \quad 2247 \cdot 9$ | 677 | 308 | II.I | + 39 | + 104 | $7 \cdot 36$ | F 2 |
| 9873 | 313988 | L 8042 | 246 | 38789 | $845 \cdot 02$ | 3709 | 17 | $314841 \cdot 0$ | 678 | 289 | 11.8 | + 20 | - 34 | $8 \cdot 0$ | A 2 |
| 9874 | 254150 | C 10998 |  |  | $846 \cdot 51$ | 5311 | 12 | $25 \quad 3448 \cdot 6$ | 680 | 307 | 12.6 | + 16 | $+60$ | $9 \cdot 0$ |  |
| 9875 | 303942 | L 8043 |  |  | $847 \cdot 35$ | 4030 | 16 | $30 \quad 37 \quad 25 \cdot 5$ | 68 I | 293 | I 2.5 | 12 | - | 8.8 | A 0 |
| 9876 | 25 415I | C 11000 |  |  | $20 \quad 8 \quad 52.91$ | $+2.5325$ | +.0012 | $253140 \cdot 1$ | +10.688 | +.308 | 12.9 | + 29 | + 14 | $9 \cdot 2$ |  |
| 9877 | 244039 | B 7558 |  |  | $852 \cdot 99$ | 5637 | 10 | $241340 \cdot 9$ | 688 | 311 | II•9 | - 5 | - 3 | $9 \cdot 2$ | A 2 |
| 9878 | $27 \quad 3649$ | C 11001 | 248 |  | $90 \cdot 11$ | 4765 | 14 |  | 697 | 301 | 11.2 | + 21 | $+38$ | $8 \cdot 6$ | A 0 |
| 9879 | 293940 | C 11004 | 259 |  | 9 10.61 | 4197 | 16 | 30 I 24.0 | 710 | 294 | II. 6 | $+3$ | - 2 | $9 \cdot 0$ |  |
| 9880 | 26383 I | CIIOO5 | 257 | 38795-6 | 913.70 | 4966 | 13 | $27 \quad 04^{8 \cdot 2}$ | 714 | 303 | 10.4 | + 5 | $\bigcirc$ | $7 \cdot 9$ | B 9 |
| 9881 | $30 \quad 3946$ | L. 8055 | 269 | 38816 | $20 \quad 9 \quad 24.98$ | +2.4153 | +.0016 | 301224.4 | +10.728 | +.293 | 11.4 | + 7 | - 29 | $7 \cdot 93$ | G 5 |
| 9882 | $25+154$ | C IIOIo |  |  | $926 \cdot 95$ | 5401 | 11 | 25 15 1-3 | 730 | 308 | 10.1 | - 28 | - 2 | $9 \cdot 0$ |  |
| 9883 | $2+4045$ | C IIoII |  |  | 928.29 | 5469 | 11 | $\begin{array}{llll}24 & 58 & 10.9\end{array}$ | 732 | 309 | 10.8 | $+207$ | + 3 | $8 \cdot 5$ | M 6 |
| 9884 | 303947 | L $\mathrm{L}^{\text {8 }} 8058$ |  |  | $933 \cdot 8 \mathbf{I}$ | 3987 | 16 | $30 \quad 5025 \cdot 0$ | 738 | 290 | 10.1 | 4 | - 52 | $8 \cdot 6$ |  |
| 9885 | 244047 | B 7572 | 275 | 38817 | $943 \cdot 19$ | 5643 | 10 | $241512 \cdot 5$ | 750 | 311 | $10 \cdot 4$ | 16 | + II | 8. I | B 8 |
| 9886 | 273652 | Ciloiz | 287 |  | $20 \quad 952 \cdot 90$ | +2.4808 | +.0014 | $274125 \cdot 4$ | +10.762 | $+300$ | 10.6 | + 6 | + 6 | $8 \cdot 4$ | A 2 |
| 9887 | 273653 | C 11015 |  | 38834-5 | $955 \cdot 34$ | 4916 | 13 | $271544^{\circ} 1$ | 765 | 301 | 10.6 | + 41 | $+10$ | $8 \cdot 0$ | Go |
| 9888 | 263835 | C inor9 |  |  | $10 \quad 0.76$ | 5111 | 13 | $26 \quad 2840 \cdot 6$ | 772 | 304 | $12 \cdot 0$ | 21 | + 1 | $8 \cdot 8$ |  |
| 9889 | 254158 | C IIOI8 |  |  | $10 \quad 0.92$ | 5375 | 12 | $25 \quad 23$ 40.3 | 772 | 307 | 12.2 | - 5 | + 24 | $9 \cdot 2$ |  |
| 9890 | $26 \quad 3836$ | C IIO22 |  |  | 103.05 | 5073 | 14 | $26 \quad 38 \quad 9.6$ | 774 | 303 | 11.9 | $+\quad 37$ | + 104 | $9 \cdot 2$ |  |
| 9891 | 273655 | C 11024 |  |  | 2010 14.71 | $+2.4877$ | +.0014 | $272625 \cdot 4$ | +10.789 | +.301 | 12.2 | + 13 | + 13 | 9.0 |  |
| 9892 | 313999 | L 8072 |  |  | $\text { IO } \quad 32 \cdot 39$ | 3885 | $17$ | $\begin{array}{lllll}31 & 17 & 25.9\end{array}$ | 810 | 288 | 11.4 | + 25 | - I5 | $8 \cdot 8$ |  |
| 9893 | $28 \quad 3675$ | C 11028 | 309 | 38856 | Io $32 \cdot 71$ | 4634 | $15$ | $28 \quad 2518.1$ | 81 I | 298 | $11 \cdot 7$ | + 5* | - 25 * | $5 \cdot 20$ | A 3 |
| 9894 | 293947 | C IIO3I | 310 |  | $\text { IO } 33.09$ | 4434 | $16$ | $\begin{array}{llllllllllll}29 & 12 & 18 \cdot 3\end{array}$ | 81 I | 295 | II. 6 | + $+\quad 27$ | - 31 | $9 \cdot 2$ |  |
| 9895 | 303953 | L 8073 |  |  | $1037 \cdot 18$ | 4087 |  | 303214.6 | 816 | 292 | 11.6 | $+6$ | $+6$ | $9 \cdot 2$ |  |
| 9896 | 293948 | C IIIO33 | 314 | 38866 | $201040 \cdot 21$ | $+2.4255$ | +.0017 | $295413 \cdot 0$ | $+10.820$ | $+\cdot 293$ | 11.9 | + 9 | 9 | $6 \cdot 94$ | B 3 |
| 9897 | 244053 | B 7581 | 307-8 | 38853-4 | IO $40 \cdot 22$ | 5581 | 11 | $243415 \cdot 6$ | 820 | 309 | 12.4 | - 10 | - 10 | $8 \cdot 0$ | B 9 |
| 9898 | 314001 | L 88076 |  | 38869 | 1042.04 | 3771 | 18 | $314326 \cdot 9$ | 822 | 287 | II. 6 | - 3 | $+\quad 4$ | $7 \cdot 38$ | B 5 |
| 9899 | 303955 | L 88077 |  |  | 1044.69 | 4067 |  | $\begin{array}{llll}30 & 37 & 29.7\end{array}$ | 826 | 292 | II. 5 | - 20 | + 31 | $9 \cdot 1$ | A 2 |
| 9900 | 314003 | L. 8078 |  |  | $1049 \cdot 74$ | 3911 | 17 | 311249.9 | 832 | 288 | 11.2 | + 18 | $+34$ | $8 \cdot 0$ | F |
| 9862, 986,9868 . Number of observations 6. 9869. This star is a close double. |  |  |  |  |  | 9863. Number of observations $22 . \quad$ 9866. Number of obscrvations 3. 9871. This star js a close clouble, Burnham 13514 . Number of observations 4. |  |  |  |  |  |  |  |  |  |


| No. | B.D. | A.G.c. | W.B. (2). | Lalande. | R.A. 19 ra 0. | Precession. | Sec. Var. | Dec. 1910'0. | Precession. | $\begin{aligned} & \text { Sec. } \\ & \text { Var. } \end{aligned}$ | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{array}{\|c} \text { Spectral } \\ \text { Type. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { 8. } 000 \mathrm{I} . \end{aligned}$ | Dec. Noor. |  |  |
|  | - |  |  |  | h m | s | 8 | - , " | " | " |  |  |  |  |  |
| 9901 | 263838 | C 11035 | 320-1 |  | 201058.85 | $+2.5001$ | +.0014 | $\begin{array}{lll}26 & 59 & 9.6\end{array}$ | +10.843 | +.302 | 11.8 |  |  |  | A 0 |
| 9902 | 293949 | C 11038 |  |  | 1059.72 | 4193 | 17 | 30948.1 | 844 |  | 11.4 | - | + 44 | $8 \cdot 8$ |  |
| 9903 | 314004 | L 8084 | 332 |  | 110.32 | 3742 | 18 | 315181 | 845 | 285 | 12.5 | - 3 | - $\quad 5$ | 8.8 |  |
| 9904 | 263840 | C 11036 | 322 |  | $\begin{array}{ll}11 & 0.82\end{array}$ | 5117 | 14 | $2631 \quad 6.2$ | 846 | 303 | 12.3 | + 18 | + $4^{1}$ | 9.0 |  |
| 9905 | $2+4060$ | C 11037 |  |  | 112.43 | 5473 | 12 | $\begin{array}{llll}25 & 2 & 46 \cdot 9\end{array}$ | 847 | 308 | 12.3 | - 3 | - | 9.06 | A 。 |
| 9906 | 244058 | B 7587 | 319 |  | 20113.06 | $+2.5548$ | +.0011 | $2444 \quad 0.9$ | +10.848 | + 309 | 12.5 | + 30 | + 21 | $9 \cdot 2$ |  |
| 9907 | $2{ }^{2} 44063$ | B 7588 | 331 |  | 1114.91 | 5524 | 12 | $245043 \cdot 2$ | 863 | 307 | 12.6 | + 17 | + 2 | $9 \cdot 2$ |  |
| 9908 | 293952 | C 11040 | 336 |  | 1116.31 | 4340 | 17 | $2937 \begin{array}{lll}3 & 3\end{array}$ | 864 | 294 | 12.3 | - 22 | + 16 | 9.0 |  |
| 9909 | 293953 | C IIIO4I | 337 |  | $1117 \cdot 19$ | 4320 | 17 | $294145 \cdot 1$ | 865 | 293 | 12.4 | - | - 16 | 9. I |  |
| 9910 | 314006 | L 8087 | 343 |  | 1119.22 | 3909 | 17 | 311529.1 | 868 | 287 | 13.0 | + 20 | + 4 | 8.6 |  |
| 9911 | 303958 | L 8089 |  |  | 20 Il $20 \cdot 30$ | +2.3992 | $+\cdot 0017$ | $\begin{array}{llllllll}30 & 56 & 49.2\end{array}$ | +10.869 | +.289 | 12.4 | + 6 | $-10$ | 8.7 | A 0 |
| 9912 | 254165 | C 11045 | 338 | 38896 | 1127.07 | - 5415 | 12 | 251859.8 | 878 | 306 | $1 \cdot 1$ | - 2* | - 2* | $4 \cdot 82$ | B 3 |
| 9913 | 303959 | L 8091 |  |  | 1130.41 | 455 | 17 | $30204^{1 \cdot 2}$ | 882 | 292 | 11.9 | + 12 | - 12 | 8.4 |  |
| ${ }_{9}^{9914}$ | 27 27 27 36663 | C 11048 C 11050 |  |  | $\begin{array}{llll}11 & 31 \cdot 76 \\ \text { I1 } & 38.33\end{array}$ | 4931 | 14 | 27 18 23.0  <br> 27 1 5  | 883 | 300 | 12.4 | $+\quad 14$ $-\quad 14$ $+\quad 1$ | - 14 | $9 \cdot 2$ |  |
| 9915 | 273663 | C 11050 |  |  | 1138.33 | 4945 |  | $\begin{array}{llllllllllllllllll}27 & 15 & 28.8\end{array}$ | 891 | 300 | 13.5 | + 28 | - 23 | 9.2 |  |
| 9916 | 273664 | ${ }_{\text {C } 11051}$ |  |  | 20 I1 40.71 | +2.4935 | $+.0014$ | $27 \begin{array}{lllllll}27 & 54\end{array}$ | +10.894 | $+300$ | 12.9 | + 19 | $+\quad 33$ | $9 \cdot 2$ |  |
| 9917 | 293959 | C 11053 | 349 | 38929 | 11 +1.54 | 4315 | 17 | 2944 41.1 | 895 | 293 | 11.8 | - 14 | - 2 | $8 \cdot 0$ |  |
| 9918 | 283679 | C 11054 |  |  | 1146.09 | 4514 | 16 | $28 \quad 5832.8$ | 901 | 295 | 11.9 | - 6 | + $\quad 27$ | 9.0 | . |
| 9919 | 254169 | C 111057 |  |  | $1150 \cdot 89$ | 5349 | 13 | $\begin{array}{lllllllll}25 & 36 & 51 \cdot 9\end{array}$ | 907 | 305 | 12.2 | + 30 | + 13 | $9 \cdot 2$ |  |
| 9920 | 263843 | C 11058 | 354 |  | $1155 \cdot 03$ | 5142 | 13 | $262822 \cdot 1$ | 912 | 303 | 12.7 | + 7 | - 39 | $9 \cdot 2$ |  |
| 9921 | 283680 | C 11060 |  |  | 201155.57 | +2.+534 | $+\cdot 0016$ | $285438 \cdot 0$ | +10.912 | +-295 | $12 \cdot 1$ | - 12 | + 28 | 9. 1 |  |
| 9922 | 254170 | C 11059 |  |  | 1157.05 | 5262 | 13 | 255856.6 | 914 | 304 | 11.5 | + 6 | + 18 | 8.6 | A 2 |
| 9923 | 283681 | C 11061 |  |  | 11 58.81 | 4668 | 15 | 28 23 <br> $17 \%$  | 916 | 297 | 12.3 | + 14 | + 9 | 9.2 |  |
| 9924 | 303962 | L. 8097 |  |  | 1159.41 | 3991 | 17 | $305947 \cdot 3$ | 917 | 289 | 12.5 | - 2 | - 31 | $9 \cdot 2$ |  |
| 9925 | $27 \quad 3666$ | C 11062 | 356 | 38939-40 | $12 \quad 2.36$ | 4882 | 15 | $\begin{array}{lllllllll}27 & 32 & 15.9\end{array}$ | 92 I | 300 | 12.0 | 32* | + $6 *$ | 4.73 | K 5 |
| 9926 | 303966 | L 8098 | 362 |  | 20124.27 | +2.4133 | $+\cdot 0017$ | $302756 \cdot 0$ | +10.923 | +.291 | 12.3 | - | - 6 | 9.0 | A |
| 9927 | 303967 | L 8099 | 364 |  | $12 \quad 6.88$ | 4001 | 17 | $\begin{array}{llll}30 & 58 & 1 \cdot 5\end{array}$ | 926 | 289 | 11.6 | - 75 | - $4^{2}$ | $7 \cdot 7$ | G 5 |
| 9928 | 233948 | B 7596 | 360 |  | 1212.83 | 5716 | 10 | $24 \quad 5 \quad 35 \cdot 4$ | 934 | 310 | $12 \cdot 3$ | + 10 | + | $9 \cdot 6$ |  |
| 9929 | 314010 | L 8102 |  |  | 1221.21 | 3799 | 18 | 314428.9 | 944 | 286 | 12.9 | + | $+32$ | $9 \cdot 2$ |  |
| 9930 | 314012 | L 8105 | 376 |  | 1225.55 | 3823 | 18 | 313926.8 | 949 | 286 | $12 \cdot 5$ | + 35 | + 4 | 8.7 |  |
| 9931 | 283682 | C 11068 |  |  | 201225.60 | $+2.4578$ | +.0016 | $28 \quad 46 \quad 13.2$ | +10.949 | +-296 | 13.2 | - 29 | - 65 | 9.0 |  |
| 9932 | 244070 | B 7600 | 368 | 38946 | 1227.59 | 5663 | 11 | $2420 \quad 1 \cdot 9$ | 952 | 309 | 12.4 | + 12 | - 16 | 8.8 |  |
| 9933 | 314014 | L 8107 | 383 |  | 1233.48 | 3828 | 18 |  | 959 | 286 | 12.7 | + 9 | + 28 | 8.8 |  |
| 9934 | 263849 | $\mathrm{C}^{\text {c } 11072}$ | 374 | 38958 | 1235.25 | 5216 | 13 | $261245 \cdot 1$ | 961 | 303 | 12.5 | + 26 | + 8 | $7 \cdot 28$ | G 5 |
| 9935 | 254173 | C 11073 |  |  | 1239.14 | 5366 | 13 | $253545 \cdot 8$ | 966 | 304 | 12.5 | - 2 |  | 8.0 | A 2 |
| 9936 | 273668 | C 11074 |  | 38962-3 | $201242 \cdot 91$ | +2.4903 | $+\cdot 0014$ | $27 \quad 2953.2$ | +10.970 | +-299 | 11.6 | + 21 | - 15 | $6 \cdot 69$ | A $\circ p$ |
| 9937 | 293964 | C 11075 |  |  | 1243.08 | 4399 | 16 | 292933.7 | 970 | 293 | 12.3 | - 24 | - 28 | $8 \cdot 7$ |  |
| 9938 | 283684 | C 111076 | $384-5$ |  | 1244.59 | 4563 | 16 | 28 51 $15 \cdot 3$ | 972 | 294 | $12 \cdot 3$ | + 5 | + 3 | $8 \cdot 1$ | A 2 |
| 9939 | 24 28 28 3685 | B 7607 | 387 | $38967$ | 1256.00 | 5656 | 11 | 2423 36.2 | 986 | 308 | 12.3 | + 13* | - 20* | $5 \cdot 45$ | K O |
| 9940 | 283685 | C 11080 |  | $38972-3$ | 1256.88 | 4720 | 15 | $\begin{array}{lllllllllll} & 88 & 14\end{array}$ | 987 | 296 | 12.9 | + 5 | + 10 | $7 \cdot 7$ | A 。 |
| 9941 | 273671 | C 11079 |  |  | 201257.09 | +2.4979 | + -0014 | $271215 \cdot 1$ | +10.988 | +-299 | 11.9 | + 25 | + 51 | $9 \cdot 2$ |  |
| 9942 | 263850 | C 11082 |  |  | $13 \quad 5 \cdot 92$ | 5087 | 14 | 26.46 33.3 | 998 | 301 | 13.0 | + 18 | + 26 | $7 \cdot 9$ | A 0 |
| 9943 | 254178 | $\mathrm{C}_{\mathrm{C}}^{1} \mathrm{I} 10838$ |  |  | $\begin{array}{llll}13 & 7 \cdot 17\end{array}$ | 5250 | 13 | $\begin{array}{llll} & 6 & 6121.2\end{array}$ | 11.000 | 303 | 12.7 | + 19 | + 15 | 8.6 |  |
| 9944 | 314016 | L 8ili | 405 |  | 1312.38 | 3793 | 18 | $\begin{array}{lllllllllllll}31 & 49 & 28.9\end{array}$ | 006 | 285 | 11.6 | - 25 | - 31 | $8 \cdot 0$ | G 5 |
| 9945 | 254180 | C 11084 | 396-7 |  | $1316 \cdot 17$ | 5299 | 13 | $255448 \cdot 4$ | OII | 303 | 12.5 | + 6 | + 1 | 8.8 | A 0 |
| 9946 | 293969 | C 11085 |  |  | 201318.58 | +2.4297 | +.0017 | $295535 \cdot 1$ | +11.014 | +291 | 12.9 |  | + | $8 \cdot 5$ |  |
| 9947 | 293968 | C 111086 |  |  | 1319.05 | 4321 | 17 | 295020.4 | 014 | 292 | 13.5 | + $\quad 27$ | - 5 | $8 \cdot 0$ |  |
| 9948 | 314020 | L 8116 | 411 | 38998-9 | 1319.39 | 3955 | 17 | $\begin{array}{llllll}31 & 13 & 37 \cdot 7\end{array}$ | 015 | 287 | 12.9 | + 10 | + 33 | 6.83 | A o |
| 9949 | 293971 | C 11089 |  |  | 13 28.13 | 4303 | 17 | $295455 \cdot 2$ | 025 | 291 | 11.9 | + 11 |  | 9.0 |  |
| 9950 | 293970 | C 11088 |  |  | 1328.48 | 4488 | 16 | 29 11 55.2 | 026 | 293 | 12.5 |  | - 19 | $9 \cdot 1$ |  |


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| No. | B.D. | A.G.C | W.B. (2). | Lalande. | R.A. 191000. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. | Epoch | $\underset{\text { R. A. A. }}{\substack{0001 .}}$ | Dec. ".001. | Mag. | Spectral Type, |
|  | - |  |  |  | b m | s | s | - ' " | * | " |  |  |  |  |  |
| 10,051 | $28 \quad 3736$ | C 11251 |  |  | $20 \quad 20 \quad 38 \cdot 16$ | +2.4709 | +.0018 | $28 \quad 5017 \times 9$ | +11.543 | +.290 | $11 \cdot 1$ | 6 | - 1 | $9 \cdot 2$ |  |
| 10,052 | $\}_{28} 3738$ | C I1253 | 662 |  | $2039 \cdot 14$ | 4646 | 18 | $29 \begin{array}{llll}29 & 5 & 24 \cdot 3\end{array}$ | 545 | 289 | $11 \cdot 1$ | - 24 | - 18 | 8.4 | A 0 |
| 10,053 |  | C 11253 | 662 |  | 2039.45 | 4646 | 18 | $\begin{array}{llll}29 & 5 & 26.2\end{array}$ | 545 | 289 | 13.7 | - 24 | + 18 |  |  |
| 10,054 | 273718 | C 11252 |  |  | 2040.06 | 4981 | 17 | 27440.0 | 546 | 293 | 10.5 | 10 | + 10 | 9.2 |  |
| 10,055 | 304015 | L 8203 | 670 |  | $2042 \cdot 19$ | 4224 | 19 | $30+5 \quad 29 \cdot 4$ | 548 | 284 | $11 \cdot 3$ | 9 | + + | 8.0 |  |
| 10,056 | 254226 | C 11254 | 663 | 39305 | $2020+6.87$ | $+2.5487$ | $+.0014$ | $253727 \cdot 2$ | +11.554 | $+\cdot 298$ | 10.7 | + | - 6 | $8 \cdot 2$ | K 5 |
| 10,057 | 244116 | B 7684 | 67 I |  | $2055 \cdot 61$ | 5661 | 13 | $2+5313 \cdot 2$ | 564 | 300 | 11.0 | - 25 | + 2 | 8.0 | A 0 |
| 10,058 | 263891 | C 11261 |  |  | $20 \quad 56.78$ | 5206 | 16 | $264928 \cdot 0$ | 566 | 296 | 12.5 | - 17 | - io | 8.6 | A 3 |
| 10,059 | 314069 | L 8207 | 682 |  | 2057.67 | 3927 | 20 | $315456 \cdot 3$ | 567 | 280 | 11.9 | + 22 | + 15 | $8 \cdot 7$ | K 0 |
| 10,060 | 254228 | C 11262 | 674 | 39315 | 2059.15 | 5440 | 15 | $25 \quad 5060$ | 568 | 297 | 11.3 | + 5 | - 9 | $7 \cdot 15$ | K 2 |
| 10,061 | 273720 | C 11263 |  |  | $20 \quad 20 \quad 59.43$ | $+2.5072$ | +.0016 | $272255 \cdot 1$ | +11.569 | + 293 | 6 | - 72 | - 48 | 9.0 |  |
| 10,062 | 304017 | L 8208 | 684 |  | 210.41 | 4253 | 20 | $3040 \quad 9.5$ | 570 | 284 | $2 \cdot 0$ | + 9 | + $+\quad 9$ | $9 \cdot 2$ |  |
| 10,063 | 283740 | C 11264 | 676 | 39320-1 | $\begin{array}{lll}21 & 1.30\end{array}$ | 4865 | 17 | $\begin{array}{llllllll}28 & 13 & 57 \cdot 9\end{array}$ | 571 | 291 | 11.6 | + 19 | - 22 | 8.0 | F 2 |
| 10,064 | 294025 | C 11266 |  |  | $21 \quad 5.23$ | 4595 | 18 | $2919 \begin{array}{llll} & 19 & 5\end{array}$ | 576 | 288 | 12.8 | + 8 | - 40 | 9.0 |  |
| 10,065 | 314072 | L 821I |  |  | 2114.45 | 4079 | 19 | 312138.0 | 587 | 282 | 12.5 | + 1 | - 30 | $9 \cdot 2$ |  |
| 10,066 | $26 \quad 3892$ | $\mathrm{Cl}_{\mathrm{C}}^{1} 11270$ |  |  | 202120.96 | +2.5202 | . 0016 | $\begin{array}{llll}26 & 5 & 2.4\end{array}$ | +11.59+ | +.294 | 12.6 | + 17 | + 1 | $9 \cdot 2$ |  |
| 10,067 | 304022 | L 8213 |  |  | 2121.26 | 4145 | 19 | $\begin{array}{llll}31 & 6 & 54 \cdot 8\end{array}$ | 595 | 283 | 12.0 | - 7 | + 7 | $9 \cdot 2$ |  |
| 10,068 | 304023 | C 11273 | 693 | 39414 | 2123.16 | +362 | 20 | $\begin{array}{lllll}30 & 16 & 30 \cdot 9\end{array}$ | 597 | 285 | 11.3 |  | + 9 | $8 \cdot 11$ |  |
| 10,069 | 254231 | C 11271 |  |  | 2123.46 | 5545 | 14 | $252458 \cdot 6$ | 597 | 299 | 12.3 | - 12 | - 19 | $8 \cdot 4$ | G 5 |
| 10,070 | 304024 | L 8217 |  |  | 2126.96 | 4210 | 20 | $30 \quad 5223.8$ | 602 | 283 | $13 \cdot 1$ | + $4^{2}$ | + 91 | 9.2 |  |
| 10,071 | 314076 | L 8219 | 699-700 |  | 202130.43 | +2.3999 | +.0020 | 314059.5 | +11.606 | +.280 | 12.2 | + 4 | + 20 | 9.0 |  |
| 10,072 | 294027 | C 11279 |  |  | 2132.83 | 4570 | 18 | $2927 \quad 56 \cdot 4$ | 609 | 287 | 12.4 | + 24 | + 21 | 9.0 | A 2 |
| 10,073 | 244122 | B 7695 |  |  | 2139.82 | 5759 | 13 | $2430 \quad 35 \cdot 5$ | 617 | 302 | 10.1 | 12 | - 26 | $9 \cdot 0$ |  |
| 10,074 | 244125 | C 11283 |  |  | $2149 \cdot 98$ | 5636 | 13 | $25 \quad 3 \quad 22.5$ | 629 | 299 | 9.1 | + 12 | - 12 | $8 \cdot 21$ | $\mathrm{A}^{2}$ |
| 10,075 | 263897 | C 11285 |  |  | 2149.98 | 5319 | 16 | $26 \quad 2437 \cdot 6$ | 629 | 296 | 10.5 | - 25 | + 20 | $8 \cdot 2$ | F 5 |
| 10,076 | 254233 | C 11289 |  |  | 202153.27 | +2.5425 | $+.0015$ | $255747 \cdot 6$ | +11.633 | +.296 | 10.6 | + | + | 8.5 |  |
| 10,077 | 273727 | C 11293 | 713 |  | $22 \quad 3.52$ | 5110 | 17 | 2727 18 <br> 1  | 645 | 292 | 10.4 | 8 | + 4 | $9 \cdot 6$ |  |
| 10,078 | 254234 | C 11296 | 712 | 39359 | $22 \quad 7 \cdot 80$ | 5481 | 14 | 254428.8 | 650 | 297 | 11.8 | - |  | $8 \cdot 6$ | F |
| 10,079 |  | C 11299 |  |  | 2217.39 | 5436 | 15 | $25 \quad 5636 \cdot 4$ | 661 | 296 | 12.3 | + 30 | - 14 | $9 \cdot 2$ |  |
| 10,080 | 234018 | B 7700 | 714 |  | 2217.88 | 5851 | 12 | $\begin{array}{lll}24 & 9 & 0.4\end{array}$ | 662 | 302 | 11.1 | + II | - 15 | 9.0 |  |
| 10,081 | 283747 | C 11303 | 718 |  | 202224.77 | $+2.4660$ | +.0019 | 2910 15.1 | +11.670 | +.288 | 11.3 | + 47 | + 54 | 8.8 |  |
| 10,082 | 273731 | C 11307 |  |  | $2234 \cdot 14$ | 4953 | 18 | 2759 21.1 | 681 | 291 | 11.6 | 28 | + 2 | $9 \cdot 2$ |  |
| 10,083 | $2+4130$ | B 7701 |  |  | $2237 \cdot 69$ | 5678 | 14 | $245547 \cdot 4$ | 685 | 299 | 11.7 | - | - 18 | $9 \cdot 1$ |  |
| 10,084 | 314079 | L 8229 |  |  | $2239 \cdot 31$ | 4153 | 20 |  | 687 | 282 | 12.0 | + 14 | - 12 | $9 \cdot 2$ |  |
| 10,085 | 263902 | C 11309 |  |  | 2240.07 | 5299 | 16 | $\begin{array}{llll}26 & 33 & 8 \cdot 0\end{array}$ | 688 | 294 | 10.3 | 12 | 22 | 9.2 |  |
| 10,086 | 304034 | L 8232 |  |  | 202249.00 | $+2.4201$ | +.0020 | $\begin{array}{lll}31 & 0 & 42 \cdot 9\end{array}$ | +11.699 | $+\cdot 283$ | 10.9 | - 22 | - 8 | 9.0 |  |
| 10,087 | 254237 | C 11312 | 723 | 39406 | 2252.71 | 5621 | 13 | $2511133 \cdot 2$ | 703 |  | 10.6 | + 18 | - 8 | $8 \cdot 01$ | A 2 |
| 10,088 | 254238 | C11313 |  |  | $2255 \cdot 34$ | 5452 | 15 |  | 706 | 296 | 12.4 | + 38 | + 2 | $9 \cdot 2$ |  |
| 10,089 | 283754 | C 11316 |  |  | 2259.64 | 4703 | 19 | 29.2029 .9 | 711 | 288 | 11.8 | + 15 | - 26 | $9 \cdot 2$ |  |
| 10,090 | 273733 | C 11317 |  |  | $23 \quad 1.09$ | 5014 | 18 |   <br> 6 $18 \cdot 3$ | 713 | 290 | 11.9 | + 25 | + 1 | $8 \cdot 8$ | A |
| 10,091 | 254239 | C 11320 |  |  | $20 \quad 23 \quad 7 \cdot 41$ | +2.5613 | +.0013 | 251434.0 | +11.721 | +-298 | 12.1 | + | - 1 | 9-1 |  |
| 10,092 | 244133 | B 7708 | 730 |  | $23 \quad 9.07$ | 5816 | 13 | $242149 \cdot 6$ | 723 | 301 | 11.4 | - 10 | - 18 | $9 \cdot 6$ |  |
| 10,093 | 294038 | $\mathrm{C}^{\text {C }} 11324$ | 745 | 39408 | 2317.93 | 4450 | 20 | $\begin{array}{lll}30 & 4 & 23.3\end{array}$ | 733 | 284 | 9.0 | + 21 | - 13 | $7 \cdot 21$ | A |
| 10,094 | 254242 | C ${ }^{\text {C }} 111323$ | 737 | 39402 | $\begin{array}{lll}23 & 19.04 \\ 23 & 26.58\end{array}$ | 5593 | 14 | $\begin{array}{llll}25 & 20 & 34.5\end{array}$ | 734 | 297 | 10.3 | + 14 | $+\quad 9$ | $8 \cdot 8$ |  |
| 10,095 | 244134 | B 7712 | 744 |  | 2326.58 | 5808 | 13 | $\begin{array}{llll}24 & 25 & 2.5\end{array}$ | 743 | 301 | 10.9 | + 11 | - II | $8 \cdot 4$ | F 5 |
| 10,096 | 304036 | L 8239 | 751 |  | $2023 \quad 29.88$ | +2.4212 | +.0020 | $\begin{array}{lll}31 & 1 & 26 \cdot 0\end{array}$ | +11.747 | +.282 | 10.4 | + 11 | - 13 | $8 \cdot 8$ |  |
| 10,097 | 273738 | C 1133I |  |  | 2333.93 | 4961 | 19 | 28 1 15511 | 752 | 291 | 11.1 | + 1 | + 12 | $8 \cdot 6$ | F 2 |
| 10,098 | 273739 | C 11332 |  |  | 23 47.63 | 5031 | 18 | $274536 \cdot 6$ | 768 | 289 | 9.9 | - 4 | + 6 | $8 \cdot 7$ |  |
| 10,099 | 314089 | L 8243 | 766. |  | 2351.09 | 4110 | 20 | $\begin{array}{lllllllllllll}31 & 26 & 52 \cdot 2\end{array}$ | 772 | 280 | 11.0 | + 7 | - 4 | $9 \cdot 2$ |  |
| 10,100 | 254247 | C 11334 | 762 | 39442 | 2358.04 | 5486 | 15 | $25 \quad 50 \quad 57 \cdot 2$ | 780 | . 294 | 10.6 | - | - 25 | $7 \cdot 8$ | A 3 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. I910.0. | Precession. | Sec. Var. | Dec. 1910.0 | Precession. | Sec. Var. | Epoch $1900+$ | $\begin{gathered} \text { R.A. } \\ \text { s.0001. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & =001 \text {. } \end{aligned}$ | Mag. | Spectral Type. |
|  | $\bigcirc$ |  |  |  | h m s | s | s | $\bigcirc$ | " | " |  |  |  |  |  |
| 10,101 | 29 4041 | C II 337 |  |  | $20 \quad 24 \quad 6.38$ | +2.4571 | +.0020 | 2939 16.1 | +11.790 | $+.285$ | II•3 |  | + 7 | 9.0 |  |
| 10,102 | 304038 | C II 340 |  |  | $2410 \cdot 16$ | 4425 | 20 |  | 795 | 283 | I I. 9 | + | + 19 | $9 \cdot 2$ |  |
| 10,103 | 294043 | C II 339 |  |  | $24^{10.48}$ | 4531 | 20 | $2949 \begin{array}{lllll} & 19 & 3\end{array}$ | 795 | 284 | 12.9 | $+6$ | - 19 | $9 \cdot 1$ |  |
| $10,104$ | 294044 | C II 344 |  | 39445 | 2419.77 | 4530 | 20 | $2950 \quad 9 \cdot 1$ | 806 | 284 | II 14 | + 10 | + 5 | $8 \cdot 2$ | A 0 |
| 10,105 | 273747 | C II 346 | 773 |  | $24 \quad 22 \cdot 94$ | 5180 | 17 | 271053.0 | $810$ | 292 | I $2 \cdot 3$ | - 37 | - 10 | $9 \cdot 0$ |  |
| 10,106 | 263905 | C II 347 | 774 |  | 202423.60 | $+2.5196$ | +.0017 | $27 \quad 6 \quad 49 \cdot 2$ | +1I.811 | $+\cdot 292$ | 12.0 | - 9 | - 10 | $8 \cdot 8$ | 10 |
| 10,107 | 24 414I | B 7722 | 775-6 | 39441 | 2429.90 | 5743 | 14 | $244^{6} \quad 24 \cdot 6$ | 818 | 299 | 12.1 | - 1 | + 33 | $8 \cdot 6$ | Ao |
| 10,108 | 283761 | C I 1354 |  | 39482 | 2443.97 | 4830 | 19 | $\begin{array}{llllllllllll} & 38 & 30 \cdot 7\end{array}$ | 835 | 287 | II.I | $+\quad 42$ | - 31 | $8 \cdot 6$ |  |
| 10,109 | 31.4098 | L 8251 | 796 |  | 24 49.02 | 4006 | 21 | $\begin{array}{llll}31 & 55 & 28 \cdot 2\end{array}$ | 840 | 277 | 1 1.5 | + 30 | $-\quad 33$ | $8 \cdot 6$ |  |
| 10,110 | 304045 | L 8253 | 795 |  | 24 51.02 | 4317 | 21 | $30 \quad 43 \quad 26 \cdot 2$ | 843 | 281 | I I. 8 | $+\quad 3$ | $+\quad 29$ | 8.8 |  |
| IO, II I | $28 \quad 3762$ | C 11355 | 791 | 39460-1 | $202451 \cdot 70$ | $+2.4938$ | +.0018 | $2813{ }^{29} 1{ }^{2} 1$ | +II.844 | +.287 | I I $\cdot 3$ | + 10 | - 26 | $8 \cdot 2$ | F |
| 10,112 | $28 \quad 3763$ | C 11356 | 793 | 39466-9 | 2454.41 | 4877 | 18 | $\begin{array}{llll}28 & 28 & 36 \cdot 3\end{array}$ | 847 | 287 | 10.8 | + 35 | + 15 | $7 \cdot 8$ | A o |
| 10, 113 | 304047 | L 8256 |  |  | $2455 \cdot 71$ | 4247 | 2 I | $31 \quad 0 \quad 15.5$ | 848 | 280 | II. 5 | + 15 | + 16 | $9 \cdot 0$ |  |
| 10, 114 | 283764 | C 11359 | 799 |  | $2459 \cdot 78$ | 4930 | 19 | $\begin{array}{llll}28 & 16 & 0.9\end{array}$ | 853 | 287 | II•I | - 9 | + 8 | $9 \cdot 0$ |  |
| 10,115. | 294051 | C II 361 |  |  | 250.75 | 4571 | 20 | $294344 \cdot 7$ | 854 | 284 | II. 6 | + 25 | + 2 | $9 \cdot 2$ |  |
| 10,116 | 273752 | C 11362 |  |  | $20 \quad 25 \quad 4.47$ | +2.5147 | $+.0017$ | $\begin{array}{llll}27 & 22 & 17.9\end{array}$ | +II.859 | $+.290$ | 12.5 | - 6 | - 7 | $9 \cdot 2$ |  |
| 10, 117 | 304050 | L 8258 |  |  | $25 \quad 8.20$ | 4280 | 21 |  | 863 | 280 | $12 \cdot 3$ | + 16 | + 34 | $9 \cdot 2$ |  |
| IO, 118 | 273753 | C 11363 |  |  | 25 II.85 | 5097 | 18 | $273524 \cdot 1$ | 867 | 289 | 12.5 | + 33 | + 10 | $9 \cdot 2$ |  |
| 10,119 | 314100 | L 8260 |  |  | 2512.85 | 4081 | 22 | $\begin{array}{llll}31 & 40 & 16.7\end{array}$ | 869 | 278 | 12.5 | - 7 | - 20 | 9•I |  |
| I0, 120 | 294052 | C II 369 |  |  | 2513.58 | 4591 | 20 | $293946 \cdot 3$ | 869 | 284 | $12 \cdot 1$ | - 3 | - 3 | $8 \cdot 4$ | A 0 |
| 10,121 | 273755 | C II 368 |  |  | $20 \quad 2514.44$ | $+2.5107$ | +.0018 | $27 \quad 33 \quad 5 \cdot 4$ | +11.870 | +.289 | I2.I | $+\quad 42$ | - 13 | $8 \cdot 6$ | K 5 |
| 10,122 | 273756 | C II 371 | 802 | 39483 | 2516.54 | 4961 | 19 | $\begin{array}{llll}28 & 9 & 43 \cdot 8\end{array}$ | 873 | 287 | II.9 | + 31 | + 12 | $7 \cdot 6$ | A 2 |
| 10, 123 | 273757 | C II 372 | 803 | 39488 | 25 21.47 | 4987 | 19 | $\begin{array}{llll}28 & 3 & 33 \cdot 3\end{array}$ | 879 | 287 | $12 \cdot 1$ | $+\quad 78$ | + 56 | $7 \cdot 6$ | F 2 |
| IO, 124 | 273758 | C I I 374 |  |  | 25 23.12 | 5189 | 17 | $\begin{array}{lllll}27 & 13 & 3.9\end{array}$ | 88 I | 290 | I 1.7 | + 32 | - 7 | $9 \cdot 2$ | A 0 |
| 10, 125 | 294053 | C II375 |  |  | $25 \quad 23.19$ | 4600 | 20 | $2938 \quad 23 \cdot 5$ | 881 | 284 | II. 8 |  | + 5 | $9 \cdot 2$ |  |
| 10,126 | 244145 | B 7733 |  | 39489 | $202530 \cdot 12$ | +2.5759 | +.0014 | $244625 \cdot 5$ | +II.889 | +.298 | 12 | - 12 | 17 | $8 \cdot 4$ | K 5 |
| $10,127$ | 294055 | CII382 | 808 |  | 2530.41 | 4484 | 20 | $30 \quad 6 \cdot 42 \cdot 3$ | 889 | 279 | 12.5 | - 9 | - 10 | 9-1 |  |
| 10,128 | 314104 | L 8264 |  |  | 25 30.71 | 4096 | 22 | $31 \begin{array}{llll} & 38 & 24.0\end{array}$ | 889 | 278 | 12.7 | - II | - 20 | $9 \cdot 0$ |  |
| 10,129 | 263911 | C II383 |  |  | . $2538 \cdot 18$ | 5296 | 17 | $2646 \quad 59.9$ | 898 | 292 | $12 \cdot 1$ | - 19 | $+\quad 29$ | $9 \cdot 0$ | A 2 |
| IO, 130 | 263912 | C II384 | 809 | 39495 | $2540 \cdot 47$ | 5331 | 17 | $26 \quad 38 \quad 17 \cdot 2$ | 901 | 292 | 11.5 | + 6 | + 8 | $8 \cdot 2$ | Ko |
| 10, 131 | 294057 | C II 387 | 817 | 39502-5 | 202543.06 | $+2.4500$ | +.0020 | $30 \quad 4 \quad 4.3$ | +11.904 | $+\cdot 282$ | 12.2 | $+\quad 7^{*}$ | - $4^{*}$ | 4.09 | F $5 P$ |
| 10, 132 | 273760 | C II388 |  |  | $2545 \cdot 36$ | 5016 | 18 | $27 \quad 58$ 32.0 | 907 | 288 | 13.1 | + I | + 20 | $9 \cdot 0$ |  |
| 10,133 |  | C II 391 |  |  | 25 50.85 | 5203 | 17 | 27 II 32.4 | 913 | 290 | 13.7 |  |  | $9 \cdot 2$ |  |
| 10, 134 | 294059 | C II 395 |  |  | 2553.72 | 4678 | 19 | $292152 \cdot 3$ | 916 | 284 | $12 \cdot 3$ | - 2 | - 30 | $9 \cdot 2$ |  |
| 10,135 | 27 3761 | C II 400 |  |  | $2558 \cdot 72$ | 5082 | 18 | $274236 \cdot 1$ | 923 | 289 | 10.8 | - 4 | - 8 | $8 \cdot 7$ |  |
| 10,136 | 254260 | C II 399 |  |  | 2025 59.13 | $+2.5460$ | $+\cdot 0016$ | $26 \quad 6 \quad 35 \cdot 3$ | +11.923 | +. 294 | II. 5 | - 29 | + I | 9-1 |  |
| 10,137 | 254262 | C II 1403 |  |  | $26 \quad 2 \cdot 22$ | 5464 | 16 | $26542 \cdot 1$ | 926 | 293 | 12.5 | + 27 | + 1 | $9 \cdot 1$ |  |
| 10,138 | 244149 | B 7739 |  |  | $26 \quad 3 \cdot 83$ | 5729 | $15$ | $24565 \mathrm{I} \cdot 0$ | 928 | 296 | 12.1 | + 4 | + 23 | $9 \cdot 2$ |  |
| 10,139 | 24.4151 | B 7742 | 827 |  | 2613.01 | 5730 | $\text { I } 5$ | 24574.9 | 939 | 296 | II. 8 | - 5 | + 27 | $9 \cdot 2$ |  |
| 10,140 | 304055 | C II 406 | 837 | 39530 | 2618.53 | 4465 | 21 | $\begin{array}{llll}30 & 15 & 19.5\end{array}$ | 946 | 281 | 10.4 | + 4 | - 15 | $7 \cdot 71$ | A 3 |
| 10,14 4 | $27 \quad 3765$ | C II408 | 838 |  | $\begin{array}{lll}20 & 26 & 27.38\end{array}$ | +2.5126 | +.0019 | 2733 50.1 | +11.956 | +.289 | 10.8 | 16 | 4 | $8 \cdot 0$ | B9 |
| 10,142 | 304057 | L 8272 | 839 |  | 2629.89 | 4376 | 22 | $30.37{ }^{124.2}$ | 959 | 280 | $9 \cdot 5$ | - 1 |  | $8 \cdot 5$ | Ko |
| 10,143 | 273768 | C II412 | 842 |  | 2638.81 | 5137 | 19 | 273148.8 | 969 | 290 | 10.1 | - 13 | 2 | $6 \cdot 90$ | F 8 |
| 10,144 | 254265 | C 11419 | 850-1 |  | 2656.52 | 5625 | 16 | $25 \quad 27$ 51.0 | 990 | 295 | $8 \cdot 8$ | - 10 | + 5 | $9 \cdot 0$ |  |
| 10,145 | 273773 | C 11420 | 855 |  | $26 \cdot 59 \cdot 14$ | 5114 | 19 | $27 \quad 3915.5$ | 993 | $289$ | $9 \cdot 4$ | $+22$ | + 43 | $8 \cdot 4$ |  |
| 10,146 | 273775 | C II 421 |  |  | $20 \quad 27 \quad 1 \cdot 95$ | $+2.5036$ | +.0019 | $27 \quad 59 \quad 3 \cdot 3$ | +11.996 | $+\cdot 287$ | 11.5 | 12 | 8 | $8 \cdot 8$ |  |
| 10,147 | 25.4266 | C II 422 |  |  | $27 \quad 5.88$ | 5575 | 17 | $254128 \cdot 5$ | 12.001 | 294 | 10.7 | - 15 | - II | 9.1 |  |
| 10,148 | 263917 | C II 424 | 856 | 39558 | $27 \quad 7 \cdot 82$ | 5416 | 17 | $26 \quad 22 \quad 57 \cdot 1$ | 003 | 292 | $10 \cdot 3$ | - 17 | - 22 | $7 \cdot 7$ | K o |
| 10,149 | 254268 | C II 1427 | 863 |  | $2712 \cdot 36$ | 5464 | $17$ | $261047 \cdot 7$ | 008 | 292 | II 3 | 0 | + 5 | $8 \cdot 8$ | A 0 |
| 10,150 | 294067 | C 11429 | 865 | 39571 | 2712.45 | 4550 | $2 I$ | 2959 IIPI | 009 | 282 | 11.3 | + 52 | + 33 | $8 \cdot 8$ | G |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 19100. | Precossion. | Sec. Var. | Epoch <br> 1900+ |  | $\begin{aligned} & \text { Dec. } \\ & =001 . \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m | 5 | s | - | n | " |  |  |  |  |  |
| IO, 151 | 283779 | C 11432 |  |  | $20 \quad 2730 \cdot 16$ | $+2 \cdot 4893$ | +.0020 | $28 \quad 36 \quad 51 \cdot 2$ | +12.029 | +.284 | $12 \cdot 4$ | - II | - 6 | $9^{\cdot 2}$ |  |
| 10, 152 | 294070 | C II 434 |  |  | 27 35-17 | 4697 | 20 | $2925 \quad 26 \cdot 2$ | 035 | 283 | II.O | - 17 | - 38 | $8 \cdot 4$ | Ma |
| 10,153 | 254270 | C II 433 | 873-4 |  | 27 36.71 | 5677 | 16 | 25 16 58.0 | 037 | 294 | II•7 | + 13 | 34 | 9.1 |  |
| IO, I 54 | 283780 | C II 435 | 876 |  | 27 39.08 | 4971 | 19 | $\begin{array}{llll}28 & 18 & 9 \cdot 9\end{array}$ | 040 | 284 | 11.5 | - 4 | - 10 | 9.I | Ko |
| IO, I 55 | 244154 | B 7753 |  |  | 27 41.41 | 5874 | 14 | $24 \quad 258 \cdot 6$ | 042 | 296 | 10.9 | + 17 | $+3$ | $9 \cdot 6$ |  |
| IO, 156 | 25 4271 | C 11436 |  |  | $20 \quad 2744.72$ | $+2.5487$ | $+.0017$ | $26 \quad 7 \quad 23.7$ | +12.047 | $+\cdot 292$ | II.5 | + 5 | + 7 | $9 \cdot 2$ |  |
| IO, 157 | 294072 | C II $44^{2}$ |  |  | 28 I.44 | 4615 | 2 I | $294733 \cdot 0$ | 066 | 282 | II-9 | + 9 | - 3 | $9 \cdot 1$ |  |
| IO, 158 | 294074 | C II 4443 | 891 | 39600 | $28 \quad 2 \cdot 34$ | 4575 | 2 I | $295721 \cdot 0$ | 067 | 281 | 11.4 | + 21 | + 28 | $7 \cdot 31$ | $\mathrm{K}_{2}$ |
| IO, 159 | 26392 I | C II $444^{\circ}$ | 887 |  | $28 \quad 3.42$ | 5347 | 18 | 2644 46.1 | 068 | 290 | 12.1 | + 17 | - | $8 \cdot 2$ | K 2 |
| 10,160 | 254272 | C11444 |  | 39594-5 | $28 \quad 7 \cdot 14$ | 5636 | 16 | $25 \quad 30 \quad 0.8$ | 072 | 294 | $12 \cdot 1$ | + I | - 21 | $6 \cdot 29$ | A 2 |
| IO, 161 | 263922 | C II 447 | 898 |  | $\begin{array}{llll}20 & 28 & 13.66\end{array}$ | +2.5345 | +.0018 | 2646 I I. 6 | +12.080 | $+290$ | 10.9 | + 9 | - 33 | $8 \cdot 6$ | Ko |
| 10,162 | 244557 | C III $44^{6}$ | 892-3 | 39599 | $28 \quad 13.82$ | 5741 | 15 | $25 \quad 2 \quad 48 \cdot 2$ | 080 | 295 | I I. 5 | 12 $+\quad 12$ | + 1 | $7 \cdot 8 \mathrm{I}$ | A 0 |
| 10,163 | 294075 | CIIf5I | 903 |  | $28 \quad 16.70$ | 4767 | 20 | 29 II 32.4 | 083 | 283 | $9 \cdot 4$ | + 7 | - 7 | $9 \cdot 1$ |  |
| 10,164 | $27 \quad 3780$ | C II 453 | 909-10 | 39627 | $28 \quad 39 \cdot 56$ | 5250 | 18 | $\begin{array}{llllll}27 & 12 & 29.6\end{array}$ | 110 | 289 | $9 \cdot 5$ | - 10 | + 18 | $8 \cdot 4$ | Ko |
| 10,163 | 283786 | CIIt56 |  |  | $28 \quad 57 \cdot 26$ | 4889 | 20 | $28 \quad 44 \quad 52 \cdot 2$ | 130 | 284 | $10 \cdot 3$ | - 3 | - 12 | $8 \cdot 0$ | K 2 |
| I 0, 166 | 263928 | CII457 |  | 39644 | 2029 3.10 | +2.5328 | +.0018 | $26 \quad 54 \quad 19.9$ | +12.137 | +.288 | 10.2 | + 1 | $\bigcirc$ | $8 \cdot 0$ | K ${ }^{2}$ |
| 10,167 | 283787 | C II 458 |  |  | 296.40 | 4894 | 20 | $28 \quad 44$ II.4 | 141 | 284 | $10 \cdot 0$ | - 35 | + 17 | $8 \cdot 2$ | K o |
| 10,168 |  | C II 459 |  |  | 296.61 | 4900 | 20 | $28 \quad 4242 \cdot 9$ | 141 | 284 | I 2.4 |  |  | $9 \cdot 2$ |  |
| IO, 169 | 294078 | C II 460 |  |  | 297.41 | 4574 | 21 | $\begin{array}{llll}30 & 2 & 59 \cdot 6\end{array}$ | 142 | 280 | 12.1 | 3 | $+16$ | $9 \cdot 2$ |  |
| 10,170 | 254277 | C inf6i | 926 |  | 2913.43 | 5709 | 15 | $25 \quad 1545 \cdot 0$ | 149 | 291 | I $1 \cdot 7$ | - 7 | $\bigcirc$ | 9. I |  |
| 10,171 | 283790 | C $11465^{\circ}$ |  |  | $20 \quad 29 \quad 19.24$ | $+2.4942$ | $+.0020$ | $28 \quad 33$ 24-I | $2 \cdot 156$ | +.284 | 12.5 | $+3$ | + 2 | $8 \cdot 8$ | K o |
| IO, 172 | 304069 | L 8301 |  |  | 2924.3 I | 4435 | 22 | $303748 \cdot 4$ | 162 | 278 | 12.7 | $+\quad 4$ | + 5 | $9 \cdot 2$ |  |
| 10,173 | 314125 | L $\quad 8302$ | 939 |  | $2924 \cdot 36$ | 4233 | 22 | $3 \mathrm{I} 2543 \cdot 0$ | 162 | 276 | II•3 | + 16 | + 1 | $8 \cdot 0$ |  |
| 10,174 | 314126 | L. 8303 | 940 | 39668 | $2926 \cdot 72$ | 4254 | 22 | 3 I 210.6 | 165 | 276 | II $\cdot 7$ | + 14 | - 23 | $7 \cdot 6$ | B |
| 10,175 | 263930 | C II 466 | 936-7 |  | $2930 \cdot 58$ | 5278 | 18 | $\begin{array}{lllll}27 & 8 & 59.6\end{array}$ | 169 | 287 | 12.7 | + 19 | + 27 | $8 \cdot 8$ | A 2 |
| 10,176 | 294080 | C II 4780 |  | 39672 | $20 \quad 2939.50$ | $+2.4789$ | $+.0020$ | 2913 I. 1 | +12.180 | +.282 | I•2 | - 31 | - 22 | 7.50 | K 5 |
| 10,177 | 304071 | L 8307 |  |  | $2945 \cdot 14$ | 4485 | 22 | $3027 \quad 27 \cdot 0$ | 186 | 279 | I I•7 | - 4 | + 16 | $9 \cdot 0$ |  |
| 10,178 | 294082 | C II 473 | 946 |  | $2946 \cdot 22$ | 4728 | 20 | 2928 29.I | 187 | 281 | II 15 | + 10 | - 39 | 9.1 |  |
| 10,179 | 254280 | $\mathrm{C}^{1}$ II471 |  | 39669 | $2946 \cdot 28$ | 5658 | 16 | $253142 \cdot 2$ | 187 | 293 | I I - 9 | + 9 | - II | $8 \cdot 5$ |  |
| 10,180 | 25428 I | C II 472 |  | 39670 | $2946 \cdot 68$ | 5649 | 16 | $\begin{array}{llll}25 & 34 & 8.8\end{array}$ | 188 | 293 | II. 5 | + 26 | 19 | $7 \cdot 76$ | A 0 |
| 10,181 | 314128 | L 83309 |  |  | $20 \quad 2953.22$ | $+2.4107$ | $+.0023$ | $3 \mathrm{I} 57 \quad 50 \cdot 5$ | +12.195 | +.274 | II 3 | - 8 | - 26 | 9-1 |  |
| 10,182 | 314129 | L 8310 |  |  | $2953 \cdot 92$ | 4200 | 23 | 3 I 3554.4 | 196 | 275 | $10 \cdot 9$ | $\bigcirc$ | - 36 | $8 \cdot 6$ |  |
| IO,183 | $27 \quad 3788$ | C II 477 | $95 \mathrm{I}-2$ | 39682-5 | $2958 \cdot 31$ | 5190 | 19 | $27 \quad 33$ 49.3 | 201 | 286 | 10.5 | + 19 | 0 | $7 \cdot 8$ | A 5 |
| IO,184 | 273787 | C 11478 |  | 39686 | $2958 \cdot 98$ | 5130 | 19 | 2749 | 202 | 285 | 12.4 | + 34 | $+\quad 25$ $+\quad 25$ | $\} 8 \cdot 4$ | A 0 |
| 10,185 | f 378 | -1178 |  | 39686 | $2959 \cdot 25$ | 5130 | 19 | $27 \quad 49 \quad 5 \cdot 6$ | 202 | 285 | 11.9 | $+34$ | + 25 | $\int^{8 \cdot 4}$ | A |
| 10,186 | 254284 | C 11480 | 953 | 39687 | $20 \quad 30 \quad 6 \cdot 37$ | $+2.5713$ | +.0016 | $\begin{array}{llll}25 & 18 & 29.9\end{array}$ | +12.2II | $+.292$ | I 1.8 |  | - 7 | $8 \cdot 16$ | $\mathrm{K}_{5}$ |
| IO, 187 | 294085 | C II 483 | 963-5 | 39695 | $30 \quad 14.76$ | 4761 | 21 | $292240 \cdot 4$ | 220 | 281 | 11.6 | + 6 | + 9 | $8 \cdot 4$ | A 0 |
| 10,188 | 314133 | L 8314 |  |  | $30 \quad 15.07$ | 4138 | 24 | 31 52 17  | 221 | 273 | 12.0 | + I | - 5 | $8 \cdot 7$ |  |
| 10,189 | 244165 | B 7783 | 959 |  | $3019 \cdot 35$ | 5895 | 15 | 243050.8 | 226 | 294 | 10.8 | - | - 16. | $8 \cdot 8$ | A 2 |
| 10,190 | 314134 | L 8315 |  |  | $30 \quad 20 \cdot 55$ | 4167 | 24 | $\begin{array}{lll}31 & 46 & 2 \cdot 6\end{array}$ | 227 | 274 | II•I | 10 | - 2 | $8 \cdot 7$ | A |
| 10, 191 | 244168 | B 7785 |  |  | $203032 \cdot 61$ | $+2.5961$ | +.0014 | 24 | +12.241 | +. 294 | 11.4 | 0 | - 30 | $9 \cdot 2$ |  |
| 10,192 | 283794 | CII486 |  |  | $3040 \cdot 88$ | 5000 | 20 | 282529  | 250 | 284 | 10.7 | + 3 | - 7 | $9 \cdot 2$ |  |
| 10,193 | 273796 | CII 489 |  |  | $30 \quad 47 \cdot 96$ | 5153 | 20 | $\begin{array}{lllllllllllllll}27 & 47 & 16 \cdot 7\end{array}$ | 259 | 285 | $9 \cdot 6$ | + 23 | + 20 | $8 \cdot 6$ | A 5 |
| 10,194 | 314137 | L 8322 |  |  | $3048 \cdot 22$ | 4312 | 23 | $311415 \cdot 1$ | 259 | 275 | $9 \cdot 9$ | 7 | - 7 | $8 \cdot 6$ |  |
| 10,195 | $25 \quad 4289$ | C II 490 |  |  | $3050 \cdot 98$ | 5528 | 18 | $261033 \cdot 6$ | 262 | 289 | 10.1 | + 6 | + 15 | $9^{\cdot 1}$ |  |
| 10,196 | 314139 | L 8324 |  |  | 203058.85 | +2.4168 | +.0024 | $31495 \cdot 5$ | +12.271 | +.274 | $10 \cdot 3$ | $+43$ | + 35 | $9 \cdot 2$ |  |
| 10,197 | 283799 | C I 1495 | 990 | 39734 | 316.23 | 5052 |  | $\begin{array}{lllll}28 & 14 & 14.9\end{array}$ | 280 | 284 | II 5 | - 2 | 1 $+\quad 27$ | $8 \cdot 8$ | A 2 |
| Io,198 | 304086 | L 8327 |  |  | $3 \mathrm{I} \quad 9.5 \mathrm{I}$ | 4515 | 22 | $\begin{array}{llll}30 & 27 & 28 \cdot 0\end{array}$ | 284 | 277 | $12 \cdot 1$ | - 3 | - 4 | $9 \cdot 2$ |  |
| 10,199 | $244^{176}$ | B 7795 |  |  | 3 I 22.50 | 5935 | 15 | $\begin{array}{lllllllllllll}24 & 24 & 49\end{array}$ | 299 | 293 | $12 \cdot 1$ | $+10$ | - 20 | $9 \cdot 2$ |  |
| 10,200 | 273799 | C II497 | 996 | 39743 | 3122.70 | 5091 | 20 | $28 \quad 5 \quad 39 \cdot 6$ | 299 | 284 | 12.8 | - 25 | -71 | $8 \cdot 2$ | A 2 |

$10,157,10,184,10,185$. Number of observations 4. $10,165,10,168$. Number of observations 6. 10,184,10,185. These stars form the $\boldsymbol{\rho}^{\text {pair }} \boldsymbol{\Sigma} 2698$, magnitudes $9 \cdot 0$ and $8 \cdot 1$.

|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0 | Precession. | Sec. Var. | Epoch $1900+$ | $\begin{gathered} \text { R.A. } \\ \text { 8.0001. } \end{gathered}$ | $\begin{gathered} \text { Dec. } \\ \text { ".001. } \end{gathered}$ | Mag. | Spectral Type. |
|  | $\bigcirc$ |  |  |  | hm s | s | s | $\bigcirc$ |  | " |  |  |  |  |  |
| 10,201 | 314143 | L 8330 |  | 39754 | 203123.07 | +2.4201 | +.0024 | 314327.1 | +12.299 | $+\cdot 273$ | 11.3 |  |  | $8 \cdot 2$ | K. 5 |
| 10,202 | 294091 | C II 498 |  |  | $\begin{array}{llll}31 & 23.78\end{array}$ | 4705 | 22 | 294214.5 | 300 | 279 | $2 \cdot 3$ | - 13 | - 15 | $9 \cdot 1$ |  |
| 10,203 | 294092 | C II 499 | 1001 | 39750 | 3125.45 | 4647 | 22 | $295632 \cdot 2$ | 302 | 279 | 1.6 | 3 | I | $7 \cdot 41$ | B 5 |
| 10,204 | 304087 | C II500 |  |  | $3126 \cdot 10$ | 4587 | 22 |  | 303 | 277 | 2. | 3 | - I | $9 \cdot 2$ |  |
| 10,205 | 294094 | C II 502 |  |  | $3131 \cdot 20$ | 4616 | 22 | $30+33 \cdot 9$ | 308 | 278 | 12.3 | I I | $-4$ | $9 \cdot 2$ |  |
| 10,206 | 244177 | B 7796 | 998-9 |  | 203131.73 | +2.5882 | +.0015 | $243936 \cdot 2$ | +12.309 | $+\cdot 292$ | 12.5 | - 7 | - 52 | $9 \cdot 2$ |  |
| 10,207 | 314145 | L. 8336 |  |  | $3135 \cdot 42$ | 4260 | 24 | $3130+3 \cdot 6$ | 313 | 274 | 11.7 | - 24 | $+3$ | $9 \cdot 2$ |  |
| 10,208 | 273800 | C II 506 | 1010 | 39762 | 31 +1.52 | 5275 | 19 | $27 \quad 20 \quad 15.7$ | 320 | 284 | $9 \cdot 9$ | - 6 | - 5 | $8 \cdot 2$ | A 0 |
| 10,209! | 244183 | C II 510 | 1019 | 39769-71 | $\begin{array}{lll}32 & 1 \cdot 72\end{array}$ | 5777 | 15 | $\begin{array}{llll}25 & 10 & 0 \cdot 9\end{array}$ | 343 | 291 | $10 \cdot 0$ | - 9 | + 9 | $7 \cdot 46$ | A 0 |
| 10,210 | 263935 | CII5II |  |  | $32 \quad 3 \cdot 20$ | 5376 | 19 | $26554^{8 \cdot 5}$ | 345 | 286 | 10.3 | + 31 | + 10 | $9 \cdot 0$ |  |
| 10,2 I I | $27 \quad 3803$ | C 11513 |  |  | $2032 \quad 8.66$ | $+2.5270$ | +.0019 | $27 \quad 23 \quad 52.4$ | +12.352 | +.285 | $9 \cdot 9$ | + 55 | + 45 | $9 \cdot 2$ |  |
| 10,212 | $28 \quad 3805$ | C 11514 |  | 39787 | $\begin{array}{lll}32 & 12.19\end{array}$ | 5015 | 20 | $\begin{array}{llll}28 & 28 & 54.9\end{array}$ | 355 | 283 | 10.5 | + 18 | - 7 | $8 \cdot 8$ |  |
| 10, 213 | 294097 | C 11516 | 1028 |  | 3214.74 | 4622 | 22 | $30 \quad 645 \cdot 6$ | 358 | 278 | 10.7 | 44 | + 34 | $8 \cdot 7$ |  |
| 10, 214 | 254299 | C II515 | 1024 | 39785 | 3216.88 | 5691 | 17 | $25 \quad 3412.4$ | 361 | 290 | 9.7 | $14 *$ | + ${ }^{\text {* }}$ | $6 \cdot 29$ | A 2 |
| 10,215 | 244184 | B 7799 | 1025 |  | $\begin{array}{llll}32 & 18.33\end{array}$ | 5877 | 15 | 2444 3I•7 | 363 | 292 | II-I | - 13 | - 17 | $9 \cdot 2$ |  |
| 10,216 | 254300 | C 11517 |  |  | $20 \quad 32 \quad 18.42$ | $+2.5636$ | +.0017 | $2549 \quad 3 \cdot 9$ | +12.363 | +.289 | $10 \cdot 7$ | + 22 | + 12 | $9 \cdot 2$ |  |
| 10,217 | 254301 | C II519 |  |  | $\begin{array}{llll}32 & 38.54\end{array}$ | 558 I | 17 | $26 \quad 5 \quad 1 \cdot 9$ | 386 | 288 | 10.3 | + 23 | + 24 | $9 \cdot 0$ |  |
| 10,218 | 263937 | C II 523 |  |  | 32 42.13 | 5535 | 18 |  | 390 | 287 | 11.0 | - 23 | - 16 | var. |  |
| 10,219 | 273807 | C II524 |  |  | $3243 \cdot 22$ | 5169 | 20 | $\begin{array}{lllll}27 & 52 & 25 \cdot 8\end{array}$ | 391 | 283 | 10.1 | $+\quad 23$ | - 15 | $9 \cdot 2$ |  |
| 10,220 | 283810 | C II 525 |  |  | $32+6 \cdot 56$ | 4928 | 21 | $28 \quad 53$ 41.4 | 395 | 280 | 10. 1 | + 2 | + 41 | $8 \cdot 8$ | K 0 |
| 10,22 1 | 304097 | L 8345 |  |  | 203256.18 | $+2.4547$ | +.0022 | $3028 \quad 36 \cdot 3$ | +12.406 | $+.276$ | $10 \cdot 1$ | + 28 | - 18 | $9 \cdot 0$ |  |
| 10,222 | 244189 | B 7806 | $10+4$ |  | $32 \quad 59 \cdot 55$ | 5960 | 15 | $\begin{array}{llll}24 & 25 & 9 \cdot 0\end{array}$ | 410 | 292 | 10.3 | + 3 | - 6 | $9 \cdot 2$ |  |
| 10,223 | $27 \quad 3809$ | C II 527 |  |  | $\begin{array}{lll}33 & 1.83\end{array}$ | 5231 | 20 | $\begin{array}{llll}27 & 38 & 8.8\end{array}$ | 413 | 283 | II.I | + 20 | $+\quad 18$ | $9 \cdot 2$ |  |
| 10,224 | 304099 | L 83346 |  |  | 33 4.06 | 4398 | 24 | 315 | 415 | 274 | 12.0 | - 2 | + 18 | 9•1 |  |
| 10,225 | 263938 | C 11529 |  |  | $33 \quad 7 \cdot 93$ | 5434 | 18 | $26 \quad 45 \quad 53 \cdot 4$ | 420 | 286 | II•2 | $+40$ | + 1 | $8 \cdot 5$ | A 2 |
| 10,226 | 254302 | C II533 | 1051 | 39828 | $20 \quad 3314.30$ | +2.5577 | +.0017 | 2688584.1 | +12.427 | +.288 | 10.4 | + 11* | - $15 *$ | $5 \cdot 52$ | B 9 |
| 10,227 | $\begin{array}{lll}31 & 4153\end{array}$ | L 8349 |  |  | $3317 \cdot 52$ | 4331 | 24 | 312244.2 | 430 | 273 | $11 \cdot 3$ | - 14 | - 26 | $8 \cdot 8$ |  |
| 10,228 | 254304 | C II 537 |  |  | 33 27.09 | 5599 | 17 | $26 \quad 4 \quad 0 \cdot 3$ | $44^{1}$ | 288 | 11.9 | $+33$ | + 39 | $9 \cdot 1$ |  |
| 10,229 | 244194 | B 7810 | 1063 | 39837 | 3333.92 | 5921 | 15 | $\begin{array}{llll}24 & 38 & 20.7\end{array}$ | 449 | 291 | $12 \cdot 2$ | $\bigcirc$ | 21 | $9 \cdot 0$ |  |
| 10,230 | 304102 | L 8352 |  |  | $33+0.69$ | 4546 | 24 | $30 \quad 3241 \cdot 9$ | 457 | 275 | $12 \cdot 3$ | + 11 | - 7 | $9 \cdot 2$ |  |
| 10,231 | 294108 | C II 544 |  |  | $20 \quad 3343 \cdot 78$ | +2.4767 | +.0023 | $293842 \cdot 9$ | +12.460 | +.278 | 12.7 | + 20 | - 18 | $8 \cdot 8$ | A |
| 10,232 | 27 3813 | C II 543 |  |  | 3344.45 | 5282 | 20 | $27 \quad 2817.8$ | 461 | 284 | $12 \cdot 7$ | - 6 | - 30 | $9 \cdot 2$ |  |
| 10,233 | 254305 | C 11542 | 1073 |  | $3345 \cdot 75$ | 5688 | 18 | $254156 \cdot 4$ | 463 | 288 | $12 \cdot 5$ | 16 | - 22 | $9 \cdot 1$ |  |
| 10,234 | 304105 | L 8355 |  |  | 33 47.94 | 4490 | 24 | $30 \quad 47 \quad 9 \cdot 2$ | 465 | 275 | 11.4 | - 15 | + 21 | $8 \cdot 5$ | A 0 |
| 10,235 | 294109 | CII 545 |  |  | 33 48.07 | 4640 | 23 | $30 \quad 10 \quad 23.7$ | 465 | 276 | $12 \cdot 3$ | + 4 | $+22$ | $8 \cdot 7$ |  |
| 10,236 | 244198 | B 7813 |  |  | $2033+8 \cdot 69$ | +2.6024 | +.0014 | 24 II 16.2 | +12.466 | +.292 | $12 \cdot 3$ | - 7 | - 13 | 9•1 |  |
| 10,237 | 314158 | L 8357 |  | 39856 | 3349.89 | 4252 | 25 | $\begin{array}{llllllllllll}31 & 44.6\end{array}$ | 467 | 272 | 12.5 | + 21 | + 8 | $7 \cdot 66$ | A 0 |
| 10,238 | 294110 | C I 1546 |  |  | 3350.00 | 4716 | 23 | 295158.8 | 468 | 277 | 12.0 | + 22 | - 15 | $8 \cdot 6$ |  |
| 10,239 | 304106 | L 8356 |  |  | $3350 \cdot 35$ | 4514 | 24 | $304117 \cdot 3$ | 468 | 274 | $10 \cdot 3$ | - 10 | - 28 | $8 \cdot 0$ |  |
| 10,240 | 314159 | L 8358 | 1083 | 39857-8 | $3352 \cdot 20$ | 4374 | 24 | $\begin{array}{lllll}31 & 15 & 28 \cdot 3\end{array}$ | 470 | 273 | $10 \cdot 8$ | - 1* | - $9^{*}$ | $6 \cdot 24$ | A 0 |
| 10,241 | 314160 | L 8360 | 1084 | 39861-2 | $20 \quad 33 \quad 53.37$ | +2.4386 | +.0024 | $31 \begin{array}{lll}31 & 128.7\end{array}$ | +12.47 | +.273 | $9 \cdot 6$ | - $40^{*}$ | - $4^{6 *}$ | $6 \cdot 38$ | Fo |
| 10,2 ${ }^{2}$ | 244199 | B 7818 |  |  | $34 \quad 5 \cdot 18$ | 6015 | 15 |  | 485 | 291 | 10.7 | - 14 | - 21 | $9 \cdot 1$ |  |
| 10,243 | 294112 | C 11551 | 1089 |  | $34 \quad 6 \cdot 54$ | 4833 | 22 | 292423.6 | 486 | 278 | $10 \cdot 9$ | + 2 | - 7 | $8 \cdot 0$ | A 2 |
| 10,244 | 254306 | C 11548 | 108 |  | $34 \quad 7.06$ | 5627 | 18 | $25 \quad 59 \quad 50 \cdot 9$ | 487 | 287 | $12 \cdot 1$ | + 17 | - 6 | $8 \cdot 8$ |  |
| 10,245 | 244200 | B 7820 | 1087 |  | $34^{10.71}$ | 6003 | 16 | $2418 \quad 47 \cdot 9$ | 491 | 290 | 12.0 | - 28 | - 140 | $8 \cdot 6$ |  |
| 10,246 | 263941 | C II 553 |  |  | 203414.66 | +2.5455 | +.0019 | $264546 \cdot 3$ | +12.496 | +.285 | 13.3 | + 44 | + 11 | $8 \cdot 0$ | F 8 |
| 10,247 | 314164 | L 18368 |  |  | $3415 \cdot 70$ | 4275 | 25 |  | $497$ | 271 | 12.5 | + 39 | + 8 | $8 \cdot 7$ |  |
| 10,248 | 244202 | B 7824 |  | 39868 | $\begin{array}{ll}34 & 16.47\end{array}$ | 5882 | 17 | $245157 \cdot 2$ | 498 | 289 | 12.9 | - 8 | - II | 8.I |  |
| 10,249 | 244203 | B 7825 |  |  | 3418.98 | 5861 | 17 | $24 \quad 58 \quad 0.3$ | 501 | 289 | $12 \cdot 3$ | - 21 | - 33 | $8 \cdot 7$ |  |
| 10,250 | 294115 | C 11555 |  |  | $\begin{array}{lll}34 & 19.87\end{array}$ | 4778 | - 23 | 2939 3-1 | 502 | 277 | 12.9 | - 64 | + 26 | $9 \cdot 2$ |  |


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| No. | B D. | A.g.c. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Sec. Var. | Dec. 1910\%. | Precession. | Sec. Var. | Epoch 1900+ | $\underset{\text { 3.000. }}{\text { R.A. }}$ | Doc. | Mag. | Spectral Type. |
|  | - |  |  |  | m | s | s | - , " |  |  |  |  |  |  |  |
| 10.251 | $31+165$ | L. 8370 | 1106 | 39878 | $203422 \cdot 11$ | $+2.4338$ | +.0024 | 312640.8 | +12.504 | $+.272$ | 11.9 | + 11 | + 21 | $8 \cdot 1$ |  |
| 10, 252 | 294116 | C 11556 |  |  | $3424 \cdot 60$ | 4800 | 23 | $2934 \begin{array}{ll}29 & 2.7\end{array}$ | 507 | 277 | 12.7 | - | + 4 | 8.6 |  |
| 10,253 | 304108 | C 11560 |  | 39887 | 3426.47 | 4632 | 23 | $\begin{array}{llllllllll}30 & 15 & 42 \cdot 0\end{array}$ | 509 | 275 | 11.5 | + 14 | + 9 | $7 \cdot 46$ | A 0 |
| 10, 254 | 254308 | C 11558 | 1098 |  | 3428.88 | 5795 | 17 |  | 512 | 289 | 13.0 | + 5 | - 8 | $8 \cdot 8$ |  |
| 10,255 | 304109 | L. 8372 | 1111 |  | 3430.07 | 4495 | 24 | $304937 \cdot 4$ | 513 | 273 | I3.1. | + 18 | + 27 | 8.6 |  |
| Io,256 | 314166 | L. 8374 |  |  | 2034 31.51 | $+2.4262$ | +.0025 | $314542 \cdot 9$ | +12.515 | +.271 | 12.1 |  |  | 8.6, |  |
| 10,257 | 314167 | L. 8377 | 1114 |  | 3439.03 | 4288 | 25 | 3140 | 523 | 271 | 11.5 | + 22 | - 9 | 9.0 |  |
| 10,258 | $24+205$ | B 7834 |  | 39890 | $3449 \cdot 63$ | 5981 | 16 | $24 \quad 27$ 4r-I | 535 | 290 | 10.4 | + 12 | - 35 | $7 \cdot 7$ | B 9 |
| 10,259 | 254310 | C 11568 | 1113 | 39893 | 3452.00 | 5811 | 17 | $\begin{array}{lllllllllll}25 & 14 & 3 \cdot 2\end{array}$ | 538 | 288 | 10.9 | + | - 21 | $7 \cdot 71$ | A 0 |
| 10,260 | 304115 | L 8379 |  |  | $34 \quad 59 \cdot 18$ | 4428 | 24 |  | 546 | 273 | 10.6 | 19 | - 5 | 9.2 |  |
| 10,261 | 263943 | C 11571 |  |  | $20 \quad 35 \quad 5 \cdot 26$ | 5557 | 019 | $26 \quad 2259 \cdot 6$ | $2 \cdot 553$ | + 286 | $1 \cdot 3$ | - 14 | 13 | 8.8 |  |
| 10,262 | 234088 | B 7838 |  |  | $\begin{array}{llll}35 & 7 \cdot 46\end{array}$ | 6072 | 15 | $24 \quad 4 \quad 2.0$ | 556 | 291 | $12 \cdot 1$ | + | + 20 | 9.2 |  |
| 10,263 | 234090 | B 784 I | $1120-1$ |  | 3511.14 | 6066 | 15 | $24 \quad 5 \quad 58.0$ | 560 | 290 | 12.2 | +121 | + 8 | 8.7 |  |
| 10,264 | 29412 I | C 11572 |  | 3992 I | $35 \quad 17 \cdot 21$ | 4709 | 24 | 308157.0 | 567 | 275 | 12.7 | - $33^{*}$ | - $79^{*}$ | $5 \cdot 86$ | K o |
| 10,265 | $30+119$ | L 8380 | 1134 |  | $\begin{array}{llll}35 & 19.35\end{array}$ | 4529 | 25 | $30 \quad 45 \quad 23.0$ | 569 | 273 | 12.3 | + 9 | + 15 | $8 \cdot 4$ | A. |
| 10,266 | 254312 | C 11573 | 1135 | 39923 | 203529.05 | +2.5706 | +.0019 | $2545 \quad 9.6$ | 12.580 | + 287 | 12.3 | 42 |  | $7 \cdot 02$ | K 5 |
| 10,267 | 283828 | C 11577 | 1139 | 39931 | 3534.01 | 5011 | 23 | $284^{6} \quad 52 \cdot 4$ | 586 | 278 | 11.9 | 4 | + 9 | 8.0 | F 5 |
| 10,268 | 283829 | C 11558 |  |  | $35 \quad 37 \cdot 61$ | 5093 | 22 | 28 26 16.6 | 590 | 279 | 10.9 | - 33 | + 7 | $9 \cdot 2$ |  |
| 10,269 | 263946 | C 11579 |  |  | 3540.41 | 5582 | 19 |  | 593 | 285 | 12.5 | - 5 | + 13 | $9 \cdot 1$ |  |
| 10,270 | 263947 | C 11580 |  |  | 3541.02 | 5568 | 19 | $\begin{array}{lllllllllllll}26 & 45 \cdot 8\end{array}$ | 594 | 285 | 10.0 | + 15 | + 23 | $7 \cdot 04$ | Fo |
| 10,271 | 273820 | C 11581 |  | 39933 | $203542 \cdot 5 \mathrm{I}$ | +2.5250 | $+\cdot 0021$ | $274615 \cdot 4$ | +12.596 | $+\cdot 281$ | I2.I | 28 | - 32 | 8.0 | K 5 |
| 10,272 | 304122 | L 8381 | II49 |  | $3544 \cdot 57$ | 4520 | 25 | $30 \quad 50 \quad 2 \cdot 3$ | 598 | 272 | 12. | 28 | - 5 | $8 \cdot 6$ | A 0 |
| 10,273 | 273821 | C 11585 |  |  | 3547.32 | 5205 | 21 | 2758811.8 | 601 | 280 | 11.9 | 39 | + 26 | $9 \cdot 2$ |  |
| 10,274 | 304123 | L 8383 | 1138 |  | 3547.93 | 4531 | 25 | 3047 36.1 | 602 | 273 | 11-1 | 35 | - 22 | 8.1 | K 5 |
| 10,275 | 254316 | C 11584 |  | 39935 | 3548.60 | 5659 | 19 | $25 \quad 59 \quad 24 \cdot 7$ | 603 | 285 | 11.9 | 11 | + 18 | 8.8 | K o |
| 10,276 | 283833 | C 11586 | 1151 |  | 2035 51•91 | +2.5142 | +.0022 | 288151.8 | +12.606 | +.279 | $12 \cdot 3$ | - 4 | - 39 | 8.8 |  |
| 10.277 | 294124 | C 11587 | 1153 | 39945 | $35 \quad 52 \cdot 93$ | 4681 | 24 | $\begin{array}{lllllllllll}30 & 11 & 10.4\end{array}$ | 607 | 274 | I | - 9 | - 32 | $7 \cdot 66$ | A 0 |
| 10,278 | 304126 | L 8386 | 1154 | 39948 | 3554.86 | 4606 | 24 | $30 \quad 2947.0$ | 610 | 274 | ${ }^{11} \cdot 3$ | + 14 | - 26 | $7 \cdot 46$ | K 2 |
| 10,279 | 244207 | B 7851 | 1148 -50 |  | 35 57.17 | 5982 | 16 | $243232 \cdot 1$ | 612 | 289 | 12.0 | + 19 | 14 $+\quad 14$ |  |  |
| 10,280 | 314172 | L 8388 | 1156 |  | 3559.59 | $4+13$ | 25 |  | 615 | 271 | 11.2 |  | - 35 | $9 \cdot 1$ |  |
| 10,281 | 244208 | $\begin{array}{lll}\text { B } & 785 \\ \text { C }\end{array}$ |  |  | $20 \quad 36$ | $+2 \cdot 5896$ | 0017 | $2+5610 \cdot 3$ | +12.616 | + 288 | II•1 | 14 | - 15 | $9 \cdot 2$ |  |
| 10,282 | 254318 | C 11590 |  |  | $\begin{array}{lll}36 & 7 \cdot 90\end{array}$ | 5656 | 19 | $26 \quad 1$ <br> $1 \cdot 9$ | 624 | 285 | 11.2 | - 30 | - 6 | $9 \cdot 2$ |  |
| 10,283 | 304128 | C $1159+$ |  |  | $36 \quad 12 \cdot 30$ | 4661 | 24 | $30 \quad 1745 \cdot 3$ | 629 | 274 | 12.1 | + | - | $9 \cdot 2$ |  |
| 10,284 | 263952 | C 11592 |  |  | $\begin{array}{ll}36 & 12.85\end{array}$ | 5446 | 20 | $26 \quad 57 \quad 37 \cdot 2$ | 630 | 283 | 11.5 | - 50 | + 24 | $9 \cdot 0$ |  |
| 10,285 | 263953 | C 11597 |  |  | $\begin{array}{ll}36 & 19.40\end{array}$ | 5495 | 20 | $2645 \quad 24 \cdot 3$ | 637 | 283 | 11.6 | + 10 |  | $8 \cdot 1$ | A o |
| 10,286 | 254323 | C 11598 | 1159 |  | $2036 \quad 21.56$ | +2.5728 | $+.0020$ | 254313.6 | +12.640 | +.286 | $2 \cdot 2$ | + | - 25 | 8.1 | G 5 |
| 10,287 | 254324 | C 11600 | 1161 | 39957 | $36 \quad 26 \cdot 2 \mathrm{I}$ | 5786 | 18 |  | 645 | 286 | 11.4 | - 10 | - 11 | $8 \cdot 6$ | A 2 |
| 10,288 | 294128 | C 11602 | 1171 |  | 3632.02 | 4870 | 23 | $\begin{array}{llllll}29 & 27 & 38.9\end{array}$ | 652 | 276 | 11.1 | + 14 | - 5 | $9 \cdot 2$ |  |
| 10,289 | 263955 | C 11605 |  |  | $3641 \cdot 17$ | 5562 | 20 | $\begin{array}{llllll}26 & 29 & 19.7\end{array}$ | 662 | 284 | 10.9 | + 26 | + 10 | 8.7 |  |
| 10,290 | 314174 | L 8394 | 1179 |  | $3645 \cdot 51$ | 4359 | 26 | $31 \begin{array}{llll}31 & 39.4\end{array}$ | 667 | 269 | 11.7 | + 17 | + 41 | 9.0 |  |
| 10,291 | 283841 | C 11610 |  |  | 203650.09 | +2.5054 | +.0023 | 284231.5 | +12.672 | +-277 | 11.7 | + 15 | + | $9 \cdot 0$ | F |
| 10,292 | 254329 | C 11609 | 1175 | 39969 | $3650 \cdot 46$ | 5728 | 18 | $2545 \quad 33 \cdot 7$ | 673 | - 285 | $10 \cdot 0$ | + 12 | - 26 | 6.75 | A 0 |
| 10,293 | 294131 | C 11612 | 1181 |  | $3652 \cdot 16$ | 4871 | 23 | $\begin{array}{llll}29 & 29 & 3.7\end{array}$ | 674 | 276 | $10 \cdot 3$ | + 10 | + 34 | 6.09 | A |
| 10,294 | 304134 | L 8397 |  |  | 3655.71 | 4496 | 25 | 312  <br> 18 18.1 | 678 | 271 | 9.7 | + 6 | - 19 | 8.4 | A 2 |
| 10,295 | 294134 | C 11613 | 1184 |  | $37 \quad 7 \cdot 47$ | 4758 | 24 | $29 \begin{array}{lllll} & 58 & 35\end{array}$ | 692 | 274 | $10 \cdot 1$ | + 11 | - 3 | $7 \cdot 8$ |  |
| 10,296 | 314181 | L 8402 |  | 39999-40000 | $2037 \quad 23.91$ | $+2.4271$ | +.0026 | $315912 \cdot 1$ | +12.710 | +.268 | $9 \cdot 1$ |  | - 18* | $5 \cdot 77$ | $\mathrm{G}_{5}$ |
| 10,297 | 273829 | C 11621 |  | 39996 | $\begin{array}{ll}37 & 31.83\end{array}$ | 5385 | 20 | $27 \quad 20 \quad 7 \cdot 4$ | 719 | 281 | 10.0 | + 4 | + | $8 \cdot 5$ | A 0 |
| 10,298 | 294135 | C 11623 | 1195 |  | $37 \quad 33.28$ | 4793 | 24 | 295216.0 | 721 | 274 | $9 \cdot 7$ | +175 | - 39 | 8.8 | G 5 |
| 10,299 | $28 \quad 3849$ | C 11622 | 1196 | 40003 | 3733.38 | 4991 | 23 | $29 \quad 2 \quad 19.6$ | 721 | 276 | $8 \cdot 7$ | - 18 | - 16 | 8.0 | F 8 |
| 10,300 | 304138 | L. 8406 |  | 40009 | 37 37.28 | 4538 | 25 | $30554^{6 \cdot 1}$ | 725 | 271 | 9-1 | + 12 | $-\quad 31$ | $7 \cdot 45$ | K 2 |


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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. $1910^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Epoch 1900+ | $\begin{gathered} \text { R.A. } \\ 3.000 \mathrm{I} . \end{gathered}$ | $\begin{gathered} \text { Dec. } \\ \text { P.00 } \end{gathered}$ | Mag. | Spectral <br> Туре. |
|  | - |  |  |  | h m | 8 | 8 | - |  | " |  |  |  |  |  |
| IO, 35 I | 314210 | L. 8454 | I 324-5 | 40126 | 204132.56 | $+2.4500$ | +.0027 | $312648 \cdot 6$ | +12.988 | $+.267$ | 1I•9 |  | - 14 | $8 \cdot 0$ | K 2 |
| IO, 352 | $29+167$ | C 117707 |  |  | 4134.56 | 4863 | 26 | $29 \quad 56 \quad 25 \cdot 5$ | 990 | 271 | II $\cdot 0$ | 15 | 26 | $9 \cdot 2$ |  |
| IO, 353 | 254364 | C 11706 | 1320 |  | $4136 \cdot 78$ | 5810 | 20 | $25+6+1 \cdot 2$ | 993 | 280 | II. 6 | 7 | + 5 | $8 \cdot 0$ | B 9 |
| IO, 354 | 263979 | C II 709 |  |  | $41 \quad 42 \cdot 39$ | 5591 | 22 | $26{ }^{26} 444$ | 999 | 279 | II 5 | -15 |  | $9 \cdot 2$ |  |
| I 0,355 | 244235 | B 7921 |  |  | $41.42 \cdot 79$ | 6117 | 18 | $\begin{array}{llll}24 & 22 & 5 & 3\end{array}$ | 13.000 | 285 | 11.6 | - 16 | 18 | $9 \cdot 2$ |  |
| 10,356 | 304166 | L. 8456 |  |  | $204148 \cdot 43$ | $+2.4684$ | $+.0027$ | $30+238 \cdot 6$ | $+13.006$ | +.269 | II•I | 15 | - 5 | $8 \cdot 6$ |  |
| 10.357 | 304167 | C 11715 | 1329 | 40139 | 4156.81 | 4764 | 26 | $\begin{array}{llll}30 & 23 & 27.0\end{array}$ | O15 | 270 | $10 \cdot 1$ | 11* | + 23 * | $4 \cdot 34$ | K O |
| 10,358 | 304169 | CII717 | I 333 |  | 426.61 | 4783 | 26 | $301947 \cdot 3$ | 026 | 269 | II $\cdot 5$ | + 15 | + 10 | $8 \cdot 6$ |  |
| 10,359 | 314212 | L 8460 |  |  | $4^{2} \quad 20.21$ | 4420 | 28 | 3 II 512.8 | 041 | 264 | II•7 | - 4 | - 13 | $9 \cdot 2$ |  |
| 10.360 | 263982 | C II723 |  |  | 4220.87 | 5543 | 22 | $27 \quad 2 \quad 56 \cdot 1$ | 042 | 277 | II•7 | 17 | - 25 | $9 \cdot 3$ |  |
| 10.361 | 314213 | L 8461 | 1 338 |  | $2042 \quad 27 \cdot 97$ | +2.4397 | $+.0028$ | $\begin{array}{llll}31 & 57 & 6.6\end{array}$ | +13.050 | $+\cdot 264$ | $10 \cdot 1$ | + 7 | + 1 | $8 \cdot 2$ | K 5 |
| 10,362 | 304170 | L 8462 |  |  | $42 \begin{array}{ll}42 & 29\end{array}$ | 4633 | 27 | 3059 | 05 I | 267 | 11.5 | - 2 | - 13 | $9 \cdot 2$ |  |
| 10,363 | 314214 | L 81864 | 1345 |  | $4238 \cdot 19$ | 4478 | 28 | $\begin{array}{lllll}31 & 38 & 22 \cdot 1\end{array}$ | 061 | 265 | $10 \cdot 9$ | - 5 | $+\quad 1$ | $9 \cdot 0$ |  |
| 10,364 | $29+176$ | C II 730 |  |  | $4^{2} \quad 48 \cdot 38$ | 5028 | 25 | $29 \quad 20 \quad 56 \cdot 2$ | 072 | 271 | 11.2 | + 9 | 1 | $9 \cdot 2$ |  |
| 10.365 | 234148 | B 7928 | I $34{ }^{\text {I }}$ - | 40157 | $4248 \cdot 56$ | 6186 | 17 | $24 \quad 755 \cdot 7$ | 073 | 284 | $10 \cdot 9$ | + 26 | + 16 | 7.07 | A 2 |
| 10,366 | 254371 | C 11729 |  |  | $204249 \cdot 58$ | $+2.5777$ | +.0021 | $26 \quad 1 \begin{array}{lll}36 & 5 \cdot 8\end{array}$ | +13.074 | $+\cdot 280$ | 11.4 | - 4 | 9 | $9 \cdot 2$ |  |
| I0,367 | 314216 | L 8467 | I 349 |  | $42 \quad 51 \cdot 98$ | 4484 | 28 | $3138815 \cdot 6$ | 076 | 265 | 10.7 | 26 | 6 | 9•1 |  |
| I 0.368 | $27 \quad 3865$ | C 11733 |  |  | $43 \quad 0.58$ | 5383 | 24 | $274751 \cdot 2$ | 086 | 274 | $10 \cdot 7$ | - 4 | + 6 | $8 \cdot 4$ |  |
| I0.369 | $28 \quad 3885$ | C II 736 |  |  | $43 \quad 3.05$ | 5231 | 25 | $28 \quad 29 \quad 23.4$ | 089 | 274 | $11 \cdot 2$ | - 13 | $+36$ | $9 \cdot 2$ |  |
| 10.370 | 263986 | C II 1737 | I 354 |  | $43 \quad 7 \cdot 76$ | 5618 | 23 | $26+651 \cdot 3$ | 094 | 278 | 11.7 | 32 | + 22 | 9•I |  |
| 10.371 | $244^{241}$ | C11738 | I 353 | 40166 | 2043 9.71 | +2.5989 | +.0019 | $25 \quad 5 \quad 3 \cdot 6$ | $+13.096$ | $+\cdot 281$ | II•I | 27 | - 49 | $8 \cdot 16$ | G 5 |
| IO, 372 | $30+172$ | L 48472 |  |  | $43 \quad 18.06$ | 4747 | 28 | $30 \quad 35 \quad 24.1$ | 105 | 267 | II•I | 2 | + 63 | $9 \cdot 2$ |  |
| 10,373 | $3 \mathrm{I}+218$ | L. 8477 |  |  | 43 21.71 | 4450 | 29 | $314937 \cdot 5$ | 109 | 263 | II.7 | 18 | + 20 | $9 \cdot 0$ |  |
| 10.374 | 314220 | L |  | 4018 | 43 28.10 | 4449 | 29 | $315027 \cdot 1$ | 116 | 263 | $10 \cdot 3$ | $\bigcirc$ | 8 | $7 \cdot 7$ | A O |
| 10.375 | 304173 | L. 8482 |  |  | $43 \quad 37 \cdot 55$ | 4719 | 28 | $30 \quad 44 \quad 12 \cdot 2$ | 127 | 267 | 10.7 | + 13 | + 23 | $9 \cdot 0$ |  |
| 10,376 | 294178 | C 11748 |  |  | 2043 4I•40 | $+2.4878$ | 027 | $30+26 \cdot 5$ | +13.131 | +.269 | $10 \cdot 3$ | - 19 | $\bigcirc$ | $9^{\cdot 1}$ |  |
| 10.377 | 263993 | C 11749 | 1371 |  | $43 \quad 43 \cdot 96$ | 5599 | 23 | $26 \quad 55 \quad 2 \cdot 3$ | 134 | 276 | $8 \cdot 8$ | - 9 | - 31 | $9 \cdot 2$ |  |
| 10,378 | 254375 | C 11752 |  | 40186 | $43 \quad 5.07$ | 5838 | 21 | $25 \quad 5046 \cdot 7$ | 146 | 279 | 10.3 | + 15 | - 2 | $7 \cdot 00$ | B 9 |
| 10.379 | 294181 | C II755 |  |  | $44 \quad 1.83$ | 5064 | 26 |  | 153 | 270 | II• 7 | + 13 | - 18 | $8 \cdot 0$ | Ko |
| 10,380 | 273868 | C 11754 | 1376 | $40192-3-4$ | $\begin{array}{ll}44 & 2.47\end{array}$ | 5528 | 24 |  | 154 | 275 | 11.5 | + 16 | - 20 | $6 \cdot 95$ | A 5 |
| 10,381 | 314221 | L 8486 | 1379 | 40201 | $20 \quad 44 \quad 2.88$ | +2.4526 | +.0029 | $\begin{array}{llll}31 & 34 & 52 \cdot 3\end{array}$ | +13.155 | +.264 | 12.I | + 7 | + 10 | $7 \cdot 8$ | A 0 |
| 10,382 | 294182 | C 11757 |  |  | $44 \quad 4.88$ | 4960 | 27 | $294536 \cdot 4$ | 157 | 269 | 12.1 | + 25 | - 4 | 9.1 |  |
| 10,383 | 314222 | L $\quad 8488$ | $1383-4$ | 40205 | $44 \quad 6 \cdot 60$ | 4586 | 28 | $312024 \cdot 0$ | 159 | 265 | 11.7 | + 17 | + 2 | $7 \cdot 8$ | A 2 |
| 10,384 | 314224 | L/ 8489 |  |  | 44 II 62 | 4451 | 29 | $315416 \cdot 2$ | 164 | 263 | $12 \cdot 3$ | + 12 | - 19 | $9 \cdot 2$ |  |
| 10,385 | $2442 \dot{4}$ | B 7939 | 1377 |  | 4414.57 | 6174 | 19 | $\begin{array}{llll}24 & 18 & 26 \cdot 6\end{array}$ | 167 | 282 | 12.1 | 23 | + 14 | $9 \cdot 0$ |  |
| 10,386 | 314225 | L. 8490 |  |  | $204415 \cdot 10$ | +2.4474 | +.0029 | 314854.4 | +13.168 | $+.264$ | $12 \cdot 1$ | + 25 | - 29 | $8 \cdot 6$ | A 0 |
| 10,387 | 263995 | C II 761 |  | 40203-4 | $44 \quad 15 \cdot 98$ | 5563 | 23 | $\begin{array}{llll}27 & 7 & 29.8\end{array}$ | 169 | 276 | 11.7 | - 9 | - 13 | $8 \cdot 0$ | Fo |
| 10,388 | 273871 | C I1762 |  |  | 44 17.62 | 5469 | 24 | $27 \quad 3312 \cdot 3$ | 171 | 275 | $12 \cdot 1$ | + 32 | + 28 | $8 \cdot 2$ |  |
| 10,389 | $24 \quad 4247$ | B 794I | 1385 |  | $44 \quad 19.88$ | 6159 | 19 | $2+23 \quad 8 \cdot 5$ | 173 | 282 | $12 \cdot 3$ | - 7 | - $4^{8}$ | $9 \cdot 0$ |  |
| 10,390 | $25+378$ | CII 765 | 1387 | 40207 | $44 \quad 22.49$ | 5800 | 21 | $26 \quad 3 \quad 44 \cdot 6$ | 176 | 278 | I 2.7 | - 15 | + 17 | $8 \cdot 0$ | K 5 |
| 10,391 | $28 \quad 3888$ | C I 1767 | 1391 |  | $2044 \quad 22 \cdot 75$ | +2.5326 | +.0025 | 28 II $49 \cdot 6$ | +13.176 | +.273 |  | - 13 | + 20 | $7 \cdot 7$ | K o |
| 10,392 | $27 \quad 3872$ | C 11768 |  |  | $\begin{array}{lll}44 & 23 \cdot 87\end{array}$ | 5530 | 24 | $\begin{array}{llll}27 & 17 & 9 \cdot 6\end{array}$ | 178 | 275 | 12.6 | 1 $+\quad 36$ | - 7 | $9 \cdot 2$ |  |
| 10,393 | 263996 | C 11769 |  |  | $4428 \cdot 43$ | 5601 | 23 | $\begin{array}{lllll}26 & 58 & 28 \cdot 0\end{array}$ | $183$ | 276 | $12 \cdot 3$ | - 13 | - 16 | $9 \cdot 0$ |  |
| 10,394 | $27 \quad 3873$ | C 11772 | I 394 |  | 44 29.11 | 5391 | 25 | $275458 \cdot 3$ | 183 | 274 | I 1.8 | - 8 | $+5$ | $7 \cdot 9$ | M $b$ |
| 10,395 | 263997 | C M 1773 |  |  | $4433 \cdot 14$ | 5580 | 23 | $27+22.6$ | $188$ | 276 | 11.5 | 5 | - 14 | $9 \cdot 0$ |  |
| 10,396 | 263998 | C 11774 | I 395 |  | $204433 \cdot 60$ | +2.5710 | +.0022 |  | +13.188 | +. 276 | II.I | + 6 | + 16 | $9 \cdot 0$ | A 0 |
| 10,397 | $30+184$ | L. 8494 | 1404 |  | $4446 \cdot 32$ | 4642 | 28 | 311012.5 | 202 | 264 | II.3 | - 5 | $+10$ | $8 \cdot 4$ | A 0 |
| 10,398 | 244249 | B 7946 | I 397 | 40228 | $44 \quad 48 \cdot 87$ | 6148 | 19 | $\begin{array}{llll}24 & 28 & 36 \cdot 4\end{array}$ | 205 | 281 | I I 3 | $\square 8$ | + 11 | $8 \cdot 2$ | A 2 |
| 10,399 | $28 \quad 3890$ | C II 779 | 1403 | 40239 | 4451.82 | 5274 | 25 | $\begin{array}{llll}28 & 28 & 9 \cdot 3\end{array}$ | 208 | 272 | I 1-3 | $+40$ | + 55 | $8 \cdot 4$ | G 5 |
| 10,400 | 304185 | L. 8496 |  | 40242 | 4454.41 | 4813 | 27 | $\begin{array}{llll}30 & 27 & 39.3\end{array}$ | 211 | 266 | $9 \cdot 4$ | - 15 | - 77 | $7 \cdot 36$ | K 5 |

$10,366,10,380,10,390,10,400$. Number of observations 6.

|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. |  | $\begin{aligned} & \text { R.A.A, } \\ & \text { B.ooor } . \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & * \cdot 00 \text { I. } \end{aligned}$ | Mag. | Type. |
|  | - |  |  |  | h m s | 8 | 8 | - " |  | " |  |  |  |  |  |
| 10,401 | 254383 | C II785 | 1409 |  | $2045 \quad 5 \cdot 7 \mathrm{I}$ | +2.5969 | +.002 I | $25 \quad 2018.8$ | +13.224 | $+\cdot 279$ | $10 \cdot 0$ | - 7 | + 13 | $7 \cdot 76$ | B 9 |
| 10,402 | 264001 | C II789 | 1412 |  | $45 \quad 8 \cdot 77$ | 5627 | 23 | $26 \quad 54 \quad 49 \cdot 7$ | 227 | 275 | $10 \cdot 3$ | $+$ | + 14 | $8 \cdot 8$ |  |
| 10,403 | 294193 | C II791 |  |  | $45 \quad 10.95$ | 5113 | 27 | $29812 \quad 9 \cdot 3$ | 229 | 270 | $10 \cdot 0$ | 25 | $+\quad 34$ | $8 \cdot 8$ |  |
| 10,404 | 254384 | C 11790 | 1411 |  | 45 II.05 | 5971 | 2 I | $\begin{array}{llll}25 & 20 & 10 \cdot 7\end{array}$ | 229 | 279 | II•I | + 7 | + 13 | $7 \cdot 56$ | B 9 |
| 10,405 | 244251 | B $795^{2}$ | 1413 |  | $45 \quad 13.22$ | 6125 | 19 | 2437 II•I | 232 | 281 | II•I | 128 | - 220 | $9 \cdot 6$ |  |
| 10,406 | 304189 | L. 8501 |  |  | 2045 22.30 | -2.4754 | +.0029 | 304529.6 | +13.242 | $+\cdot 266$ | $10 \cdot 1$ | + 13 | - 3 | $9 \cdot 2$ |  |
| 10,407 | 304190 | L 8502 | I 422 |  | 4528.40 | 4689 | 29 | 311224.3 | 248 | 265 | 10.6 | 1 $+\quad 9$ | + 3 | $8 \cdot 8$ |  |
| 10,408 | 314230 | L 8505 | I 430 |  | $4536 \cdot 92$ | 4472 | 30 | $315725 \cdot 6$ | 258 | 262 | $9 \cdot 9$ | - 137 | - 281 | $8 \cdot 4$ | K 2 |
| 10,409 | $27 \quad 3880$ | C II805 |  |  | 45 40.10 | 5543 | 24 | $27 \quad 2028.0$ | 261 | 273 | II $1 \cdot 7$ | + 9 | - 36 | $9 \cdot 2$ |  |
| 10,410 | 244253 | B 7954 | 1426 | 40259 | $45 \quad 45 \cdot 69$ | 6I53 | 19 | $243153 \cdot 0$ | 267 | 280 | 10.7 | - 28 | - 20 | $8 \cdot 6$ | A, 0 |
| 10,4II | 264005 | C I I 806 | 1427 |  | $204546 \cdot 98$ | +2.5715 | +.0022 | $26 \quad 34 \quad 9 \cdot 9$ | + 13.269 | +. 275 | II. 2 | + 3 | - 5 | $8 \cdot 0$ | A 0 |
| 10,4I2 | 254387 | C in 808 | 1431 | 40263 | 45 52.18 | 5962 | 21 | $\begin{array}{llll}25 & 26 & 9 \cdot 3\end{array}$ | 274 | 278 | $9 \cdot 7$ | $+\quad 98$ | + 2 | $7 \cdot 86$ | G 5 |
| 10,4I3 | 304191 | C in 809 | 1438 | 40278 | $45 \quad 52 \cdot 27$ | 4869 | 28 | 30 I8 57.5 | 274 | 265 | $9 \cdot 4$ | 2 | + | $7 \cdot 91$ | K 2 |
| 10,414 | 29 4195 | C II8Io |  |  | 4559.99 | 5021 | 27 | $294034 \cdot 5$ | 283 | 268 | I I 6 | + II | + 4 | $8 \cdot 6$ |  |
| 10,4I5 | 254390 | C if8il |  |  | $46 \quad 8 \cdot 22$ | 5888 | 22 | $25 \quad 4819.0$ | 292 | 277 | I I. 9 | - . I | - 24 | $9 \cdot 8$ |  |
| 10,416 | $28 \quad 3898$ | C 11814 |  | 40288 | $20 \quad 46 \quad 10 \cdot 37$ | $+2.5258$ | +.0027 | $28 \quad 39 \quad 27 \cdot 2$ | +13.294 | $+\cdot 270$ | II.5 | + 33 | - 14 | $8 \cdot 0$ |  |
| 10,417 | 254391 | C II8I2 |  | 40283 | $\begin{array}{ll}46 & 10.44\end{array}$ | 5903 | 22 | $\begin{array}{llll}25 & 44 & 8 \cdot 8\end{array}$ | 294 | 277 | II.9 | - 4 | - 9 | $8 \cdot 2$ | A 0 |
| 10,418 | 264008 | C In8i6 | I 443 | 40289-90 | 4614.71 | 5621 | 24 | $\begin{array}{llll}27 & 2 & 30 \cdot 8\end{array}$ | 299 | 274 | 10.9 | + 7 | + 8 | 7.04 | B 9 |
| 10,419 | 283900 | C II817 |  |  | $46 \quad 23 \cdot 62$ | 5174 | 27 | $\begin{array}{lll}29 & 2 & 59.0\end{array}$ | 309 | 269 | I I 5 | + 9 | - 28 | $8 \cdot 6$ |  |
| 10,420 | 264009 | C II818 |  |  | $46 \quad 28 \cdot 30$ | 5795 | 22 | 26 I5 47.3 | 314 | 275 | $12 \cdot 5$ | - 22 | + 3 | $9 \cdot 1$ |  |
| 10,42 I | 264010 | C 11820 | I 45 I |  | $20 \quad 46 \quad 32 \cdot 74$ | $+2.5794$ | +.0023 | 26 I6 29.8 | +13.319 | $+\cdot 274$ | $\cdot 1$ | + 10 | - 9 | $9 \cdot 0$ |  |
| 10,422 | 304197 | L 8513 |  |  | $46 \quad 40 \cdot 89$ | 4723 | 29 | $31 \quad 1 \quad 1.6$ | 327 | 264 | II.I | + 8 | 2 | $7 \cdot 7$ | A 0 |
| 10,423 | $27 \quad 3886$ | C 11822 |  |  | $464^{2 \cdot 78}$ | 5542 | 25 | $\begin{array}{llll}27 & 26 & 26 \cdot 6\end{array}$ | 330 | 273 | II. 5 | + 50 | + 13 | 10.0 |  |
| 10,424 | $28 \quad 3902$ | C II 823 |  | 40308 | $4644 \cdot 02$ | 5335 | 26 | $\begin{array}{llll}28 & 22 & 9 \cdot 8\end{array}$ | 331 | 271 | II 19 | + 24 | + 6 | $8 \cdot 6$ |  |
| 10,425 | 294200 | C II826 |  |  | $46 \quad 47 \cdot 24$ | 5047 | 28 | 2938 29.1 | 334 | 267 | $12 \cdot 3$ | 16 | - 19 | $8 \cdot 4$ | A |
| 10,426 | 294201 | CII829 | 1459 |  | $204651 \cdot 96$ | $+2.4948$ | +.0028 | $30437 \cdot 1$ | +13.339 | $+.265$ | 11.0 | - 26 | - 10 | $7 \cdot 96$ | F 5 |
| 10,427 | 304199 | L 8518 | 1460 | 40318 | $4652 \cdot 01$ | 4831 | 29 | 3034 3I.4 | 340 | 264 | 10.9 | + 43 | + 45 | $6 \cdot 75$ | A 2 |
| 10,428 | 254395 | C II828 |  |  | $4652 \cdot 37$ | 5966 | 22 | $25 \quad 3013 \cdot 6$ | 340 | 278 | 11.2 | - 15 | II | 9•I |  |
| 10,429, | 304201 | L 8519 | 1461 |  | 4654.02 | 4794 | 29 | $\begin{array}{llll}30 & 44 & 20.7\end{array}$ | 342 | 264 | II.9 | + 7 | $\bigcirc$ | 9.I |  |
| 10,430 | 294202 | C 11830 |  |  | $46 \quad 57 \cdot 71$ | 5091 | 28 | $2928 \quad 0.0$ | 346 | 267 | I 1.5 | - 17 | - 13 | $9 \cdot 0$ |  |
| 10,43I | 294204 | CII83I |  |  | $20 \quad 47 \quad 439$ | $+2.4979$ | +.0029 | $295745 \cdot 6$ | +13.353 | $+\cdot 266$ | I I. 4 | + | $+3$ | $9 \cdot 0$ |  |
| 10,432 | 264012 | C II834 | I 464 |  | $47 \quad 16 \cdot 75$ | 5816 | 22 | $\begin{array}{lllll}26 & 14 & 20 \cdot 9\end{array}$ | 366 | 275 | I I $\cdot 8$ | - 1 | + 33 | $9 \cdot 1$ |  |
| I 0,433 | $28 \quad 3904$ | C II837 |  |  | $47 \quad 20 \cdot 79$ | 5250 | 27 | $\begin{array}{lllll}28 & 48 & 19 \cdot 3\end{array}$ | 371 | 270 | I I $\cdot 5$ | - 16 | + 38 | $9 \cdot 2$ |  |
| I 0,434 | $28 \quad 3905$ | C II838 |  |  | 4725.58 | 5351 | 26 | 28 21 50.4 | 376 | 271 | II•I | - 5 | + 21 | $9 \cdot 0$ |  |
| I 0,435 | 294210 | C II842 | 1473 |  | 4734.09 | 5155 | 28 | $291438 \cdot 6$ | 385 | 268 | $9 \cdot 9$ | - 28 | - 35 | $8 \cdot 6$ |  |
| 10,436 | 264013 | C II84I |  |  | $2047 \quad 34 \cdot 85$ | $+2.5636$ | +.0024 | $27 \quad 5 \quad 29.2$ | +13.386 | $+\cdot 272$ | 9•1 | - 28 |  | $7 \cdot 7$ | A 3 |
| 10,437 | $27 \quad 3890$ | C 11843 | 1476 | 40335-6 | $4738 \cdot 96$ | 5457 | 26 | $275446 \cdot 0$ | 391 | 270 | $9 \cdot 2$ | + $5^{*}$ | - 13* | var. | F 8 |
| 10,438 | 264014 | C 11848 |  |  | $4754 \cdot 04$ | 5822 | 23 | $\begin{array}{lllll}26 & 15 & 59.4\end{array}$ | 407 | 273 | $10 \cdot 7$ | $+\quad 26$ | $+46$ | $9 \cdot 2$ |  |
| 10,439 |  | C I 1849 |  |  | 4758.25 | 583 I | 23 | $\begin{array}{lllll}26 & 13 & 47 \cdot 9\end{array}$ | $41 \text { I }$ | 274 | II 5 |  |  | 9.2 8.8 |  |
| 10,440 | 294213 | C 11852 | 1482 |  | $\begin{array}{ll}48 & 9 \cdot 88\end{array}$ | 5057 | 28 | $294343 \cdot 4$ | 424 | 265 | 10.4 | + 21 | - I | $8 \cdot 8$ |  |
| 10,441 | 244260 | B 7973 |  |  | $20 \quad 48 \quad 13.62$ | $+2.6230$ | +.0020 | 242214.2 | +13.428 | $+\cdot 278$ | I I I I | + 20 | - 45 | $8 \cdot 8$ |  |
| 10,442 | $27 \quad 3897$ | C 11854 |  |  | $\begin{array}{lll}48 & 16 \cdot 38\end{array}$ | 5580 | 25 | $27 \quad 2431 \cdot 0$ | 43 I | 271 | 10.9 | + 6 | - 4 | $9 \cdot 0$ |  |
| 10,443 | 264017 | C 11853 | 1485 | 40357-8 | 4816.50 | 5723 | 24 | 264534.9 | $43 I$ | 273 | $9 \cdot 5$ | - 56* | - $7 \mathrm{I}^{*}$ | $4 \cdot 76$ | G 5 |
| 10,444 | 283907 | C II855 |  |  | 48 I8.22 | 5335 | 27 | $28 \quad 30 \quad 56 \cdot 2$ | $433$ | 268 | II. 5 | + 15 | + 6 | $8 \cdot 0$ | K 2 |
| 10,445 | 29 42I4 | C 11857 |  |  | $\begin{array}{ll}48 & 19.96\end{array}$ | 5098 | 28 | $2934 \quad 7 \cdot 9$ | 435 | 266 | 12.1 | - 3 | + 17 | $9 \cdot 2$ |  |
| 10,446 | 283910 | C 11860 |  |  | $20 \quad 48 \quad 29.68$ | $+2.5386$ | +.0026 | $\begin{array}{llll}28 & 18 & 26 \cdot 5\end{array}$ | +13.446 | $+\cdot 269$ | I2.I | - 28 | $+9$ | $9 \cdot 0$ |  |
| 10,447 | 304210 | C II86I |  |  | $48 \quad 30 \cdot 67$ | 4935 | 29 | $\begin{array}{lllll}30 & 17 & 26 \cdot 7\end{array}$ | 447 | 263 | I I $\cdot$ I | - 49 | -189 | $9 \cdot 2$ |  |
| 10,448 | 294217 | C 11863 | 1499 |  | $48 \quad 40 \cdot 79$ | 5002 | 29 | 30 1 1 17.5 | 458 | 264 | 10.5 | - I | - 13 | $9 \cdot 0$ |  |
| 10,449 | 294218 | C 11864 | 1501 |  | $48 \quad 42 \cdot 47$ | 5028 | 29 | $295436 \cdot 4$ | 459 | 265 | $10 \cdot 1$ | - II | - 9 | $8 \cdot 4$ |  |
| 10,450 | 254401 | CII865 | 1498 |  | $4^{8} \quad 48 \cdot 03$ | 5854 | 23 | 26 II $57 \cdot 8$ | 465 | 273 | 10.7 | + II | - 2 | $8 \cdot 8$ |  |


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec. <br> Var. | Epoch$1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. 8.0001. | $\begin{aligned} & \text { Dec. } \\ & \text { D.001. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | 3 | 8 | - , " |  | " |  |  |  |  |  |
| 10,451 | 244263 | B 7978 | 1505 | +0381 | $20{ }^{8} 857.69$ | +2.6201 | +.0020 | 243428.8 | $+13.476$ | + 277 | 9.8 | 11 | - 35 | 6.91 | K 5 |
| 10,452 | 31424 | L 8541 |  | 40395 | $49 \quad 5 \cdot 48$ | $+692$ | 31 | 3123 11.1 | $4^{8} 4$ | 260 | 11.1 | + 5 | + 7 | $8 \cdot 1$ | K 2 |
| 10.453 | 283915 | C 11868 | 1509 | 40393 | +9 8.76 | 5247 | 28 | $28 \quad 5930 \cdot 6$ | 488 | 267 | 11.5 | - 12 | - 8 | 8.0 | B 9 |
| 10,454 | $31+249$ | L. $85+3$ |  |  | 4913.09 | +676 | 31 | $\begin{array}{llll}31 & 28 & 9.8\end{array}$ | 492 | 260 | 11.1 | 22 | 8 | 8.6 |  |
| 10,455 | 283916 | C 11870 | 1515 | 40397 | +9 16.34 | 5291 | 28 | $\begin{array}{llll}28 & +8 & 19.0\end{array}$ | +96 | 267 | 11.5 | 14 | + 2 | $7 \cdot 7$ | A 0 |
| 10.456 | $29+221$ | C 11873 | 1518-9 | 40403-4 | $20+920 \cdot 68$ | +2.5179 | +.0029 | 291836.7 | +13.501 | + 266 | 12.1 | + 15 | - $5^{2}$ | 6.40 | K 2 |
| 10.457 | $24+265$ | B 7980 |  |  | +9 22.32 | 6146 | 22 | $2+529 \cdot 4$ | 502 | 276 | 11.7 | + 34 | - 20 | 8.8 |  |
| 10,458 | 283917 | C 11875 |  |  | 4928.35 | 5340 | 27 | $\begin{array}{llllll}28 & 36 & 21 \cdot 3\end{array}$ | 509 | 268 | If. 5 | - If | - 6 | $8 \cdot 8$ |  |
| 10,459 | $2+{ }^{2}+266$ | B 7986 | 1527 | 40414 | $4945 \cdot 89$ | 6277 | 21 | $\begin{array}{llll}24 & 16 & 36 \cdot 8\end{array}$ | 528 | 276 | 12.1 | + 10 | - $\quad 35$ | 8.6 | F 2 |
| 10.460 | 273903 | C 11880 |  |  | $4946 \cdot 49$ | 5613 | 26 | $\begin{array}{llll}27 & 24 & 3.5\end{array}$ | 528 | 269 | 12.1 | + 12 | 19 $+\quad 19$ | $9 \cdot 2$ |  |
| 10,461 | $30{ }^{3218}$ | $\begin{array}{lll}\text { L } & 8552\end{array}$ |  | 40430 | $204948 \cdot 51$ | +2.4891 | 0031 | $303636 \cdot 5$ | +13.531 | $+262$ | 11.0 | $+\quad+$ | + 9 | $7 \cdot 76$ | B 9 |
| 10, 462 | $30 \quad 4219$ | L 8553 |  |  | 4949.50 | +760 | 31 | 311019.2 | 532 | 261 | $12 \cdot 1$ | + | + 10 | 8.6 |  |
| 10,463 | $31+254$ | L 8554 |  | 40434 | 4950.34 | $473+$ | 3 I |  | 532 | 260 | $9 \cdot 9$ | + 31 | + 34 | 6.90 | A 5 |
| 10, 464 | 273905 | C 11885 | 1534 |  | $4953 \cdot 63$ | 5619 | 26 | $\begin{array}{lllllllllll}27 & 23 & 5 \cdot 5\end{array}$ | 536 | 269 | $11 \cdot 9$ | + 13 | + <br> + | $9 \cdot 0$ | A 0 |
| 10,465 | 234175 | B 7989 |  |  | +9 58.+3 | 6315 | 20 | $\begin{array}{llll}24 & 6 & 35 \cdot 8\end{array}$ | 541 | 277 | 11.7 | + 10 | + 10 | $9 \cdot 1$ |  |
| 10,466 | 283920 | C 11887 | 1538-9 |  | $20 \quad 50 \quad 9.46$ | $+2.5231$ | +.0028 | $29 \quad 9 \quad 27.9$ | +13.552 | +.265 | 9.5 | + | - 3 | 7.56 | B 9 |
| 10,467 | $30+225$ | L 8560 | 1530 |  | 5017.20 | 4821 | 31 | $30 \quad 57 \quad 30 \cdot 2$ | 561 | 260 | 10.7 | - | - 15 | 9.0 | A |
| 10, 468 | 294227 | C 11888 |  |  | 50 23.38 | 5187 | 28 | 292240.9 | 568 | 265 | 10.5 | + 10 | - 28 | $9 \cdot 1$ |  |
| 10,469 | 273907 | C 11890 |  |  | 5026.49 | 5543 | 27 | $27{ }^{26} 565 \cdot 1$ | 571 | 268 | 11.7 | - 15 | - 13 | $9 \cdot 2$ |  |
| 10,470 | 283921 | C 11891 | 1549 | 40451 | j0 29.98 | 5355 | 28 | $28 \quad 38 \quad 21 \cdot 2$ | 575 | 267 | 10.5 | + I | - 10 | $8 \cdot 0$ | Fo |
| 10,471 | 273909 | C 11893 |  |  | 20 50 33.12 | +2.5458 | +-0027 | $281047 \cdot 0$ | $+13.578$ | +. 267 | 10.9 | + 12 | 11 | $6 \cdot 44$ | B 3 |
| 10,472 | 254410 | C 11895 | 1550 |  | $5036 \cdot 31$ | 6078 | 23 | $25 \begin{array}{lllllll} & 18 & 14.2\end{array}$ | 582 | 273 | 10.9 | + 1 | + 10 | $8 \cdot 96$ | K 2 |
| 10,473 | 283923 | C 11897 |  |  | $5041 \cdot 73$ | 5371 | 28 |  | 588 | 266 | $\mathrm{H}_{12} 3$ | - 45 | + 54 | $9 \cdot 6$ |  |
| 10, 474 | 273911 | C 11898 |  | 40456-7 | $50+3 \cdot 42$ | 5564 | 27 | $27 \quad 42 \begin{array}{llllll} & 53\end{array}$ | 589 | 268 | 12.0 | $7 *$ | - $2^{*}$ | $5 \cdot 24$ | K 2 |
| 10,475 | $25+415$ | C 11903 | 1560-1 |  | 519.30 | 6038 | 21 | $\begin{array}{lllllllllllll}5 & 32 & 28.5\end{array}$ | 617 | 273 | 10.1 | 4 | + + | $8 \cdot 5$ | A 0 |
| 10,476 | 273915 | C 11904 | 1565 | 40478 | $20-111.41$ | +2.5566 | $+\cdot 0027$ | $274456 \cdot 0$ | +13.619 | +.268 | 9.9 | 87 | 79 | 8.0 | G 5 |
| 10,477 | 283925 | C 11906 |  |  | $\begin{array}{lll}51 & 19.39\end{array}$ | 5416 | 28 | $28 \quad 2647 \cdot 5$ | 628 | 266 | $9 \cdot 7$ | 10 | + 15 | $9 \cdot 1$ |  |
| 10,478 | $24+276$ | B 7999 | 1569 | 40490 | $5130 \cdot 56$ | 6182 | 23 | $\begin{array}{lllllllllll}24 & 53 & 14.8\end{array}$ | 640 | 273 | $9 \cdot 5$ | - 15 | $-7^{2}$ | 8.0 | Fi |
| 10,479 | $29423+$ | C 11908 | 1577 |  | $5135 \cdot 22$ | 5205 | 29 | $29 \begin{array}{lll}29 & 4 \cdot 8\end{array}$ | 645 | 264 | 10.0 | + 22 | + 4 | $9 \cdot 1$ | $\mathrm{A}_{2}$ |
| 10,480 | 264028 | C 11910 |  |  | $5140 \cdot 59$ | 5858 | 25 | $\begin{array}{lllll}26 & 26 & 32.0\end{array}$ | 651 | 271 | 11.5 | - | 7 | $9 \cdot 2$ |  |
| 10,481 | 264029 | C 11912 |  |  | $205143 \cdot 19$ | $+2 \cdot 5787$ | $+\cdot 0026$ | $26{ }^{26} 4634 \cdot 8$ | $+13.653$ | +.270 | - | + 26 | - 24 | $9 \cdot 0$ |  |
| 10,482 | $30+239$ | L 8575 |  |  | 5152.40 | $+983$ | 31 |  | 663 | 261 | $9 \cdot 7$ | + 11 | + 25 | $9 \cdot 1$ |  |
| 10,483 | 264031 | C 11915 |  |  | 5157.20 | 5817 | 26 | $263937 \cdot 7$ | 668 | 270 | 10.1 | + | $+\quad 29$ | 8.8 |  |
| 10,484 | 314267 | L 8576 |  | 40520 | 521.12 | 4659 |  |  | 672 | 257 | 10.8 | - 1 | - 6 | $7 \cdot 8$ | A 2 |
| 10,485 | 254418 | C 11917 | 1586-7 |  | $\begin{array}{lll}52 & 2.65\end{array}$ | 6043 | 24 | $\begin{array}{llll}25 & 36 & 3 \cdot 2\end{array}$ | 674 | 272 | 11.4 | 11 | 10 | 9.0 |  |
| 10,486 | 283935 | $\mathrm{C}_{1} 1918$ |  | 40513-5 | $20 \quad 52 \quad 3.93$ | +2.5451 | +.0028 | $\begin{array}{llll}28 & 21 & 20.2\end{array}$ | +13.675 | +. 265 | 10.9 | + 30 | + 22 | 8.0 | $\mathrm{F}_{5}$ |
| 10,487 | $31+268$ | L 8858 |  | 40526 | $\begin{array}{lll}52 & 9.77\end{array}$ | +681 | 33 | $\begin{array}{lll}31 & 45 & 0.2\end{array}$ | 682 | 258 | 10.5 | + 12 | - 24 | $7 \cdot 6$ | Ko |
| 10,488 | 273924 | C 11919 | 1596 | 40518 | $52 \quad 10 \cdot 70$ | 5700 | 26 | $\begin{array}{llllll}27 & 13 & 49 \cdot 3\end{array}$ | 683 | 268 | 11.4 | - 1 | + 24 | $6 \cdot 76$ | K。 |
| 10,489 | 283936 | C 11921 |  | 40527 | $52 \begin{array}{ll}5 & 19.45\end{array}$ | 5485 | 28 | $2813+8 \cdot 1$ | 692 | 265 | 10.5 | + 10 | + 21 | 8.5 | A 0 |
| 10,490 | 264033 | C 11923 | 1600 | 40535 | 5231.53 | 5722 | 26 | $27 \quad 931 \cdot 0$ | 705 | 269 | 10.1 | + 5 | 6 | 8.0 | K。 |
| 10,491 | 294240 | C 11927 | 1603 |  | $20 \quad 5235 \cdot 24$ | +2.5108 | +.0031 | $29 \begin{array}{llll} & 56 & 36 \cdot 2\end{array}$ | +13.709 | $+.262$ | 10.1 | - 20 | + 5 | 8.4 |  |
| 10,492 | 304242 | L. 8582 | 1605 |  | $5238 \cdot 32$ | 4981 | 32 | 303023.6 | 712 | 260 | 9.4 | + 15 | + 31 | $9 \cdot 2$ |  |
| 10.493 | $30 \quad 4244$ | C 11934 |  |  | $5259 \cdot 14$ | 5027 | 31 | 302028.6 | 734 | 260 | 8.6 | 18 | - 15 | $9 \cdot 2$ |  |
| 10,494 | 314279 | L 8589 B 805 |  |  | $\begin{array}{lll}53 & 0.31\end{array}$ | 4819 | 33 | $3114+1 \cdot 9$ | 735 | 258 | 9.4 | 18 | + 19 | $8 \cdot 6$ | A 2 |
| 10,495 | ${ }^{2}+4^{28 i}$ | B 8017 |  |  | $53 \quad 13.76$ | 6330 | 22 |  | 750 | 273 | 8.8 | 7 | 22 | 9.0 |  |
| 10,496 | $29+249$ | C $119+3$ |  |  | $2053+2 \cdot 79$ |  |  |  |  | $+\cdot 261$ |  | - 14 | - 8 | 8.8 |  |
| 10,497 | $25+{ }^{22}$ | C 119+1 | 1631 | 40572 | $53+3 \cdot 90$ | 5980 | 25 | $\begin{array}{lllll}26 & 3 & 188\end{array}$ | 782 | 269 | $8 \cdot 9$ |  | + 88 | 6.90 | G O |
| 10,498 | $29+251$ | C 11948 |  |  | 5349.04 | 5087 | 32 | 30 10 $4+4$ | 787 | 260 | $9 \cdot 7$ | 7 | 16 | $9 \cdot 2$ |  |
| 10,499 | 283947 | C 111949 |  |  | $53-50 \cdot 78$ | $5+68$ | 29 |  | 789 | 263 | 10.1 | + 18 | 7 | 9.2 |  |
| 10,500 | 283951 | C 11956 | 1648 | 40612 | $5+13.74$ | 5346 | 30 | $29 \quad 2+6 \cdot 2$ | 813 | 262 | 9.4 | + 25 | - | $7 \cdot 7$ | F 5 |


| No. | B.D. | A.g.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$ | Precession. | Scc. Var. | Dec. $1910 \cdot 0$. | Precession. | Sec.Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Dec. ".001. |  |  |
|  | - |  |  |  | h m s | 5 | s | - , " | " | " |  |  |  |  |  |
| 10,501 | 283952 | C 11958 |  | 40615 | $20 \quad 54 \quad 16.35$ | +2.5373 | +.0030 | 285541.9 | +13.816 | $+.262$ | $9 \cdot 6$ | 31 | + 16 | $8 \cdot 4$ | K o |
| 10,502 | 304254 | L 8602 |  | 40620-1 | 5418.81 | 4919 | 33 | $\begin{array}{lll}30 & 57 & 6.6\end{array}$ | 819 | 257 | $9 \cdot 9$ | - 30 | - 17 | $8 \cdot 0$ | K 2 |
| 10,503 | 254425 | C 11959 |  |  | $\begin{array}{lll}54 & 18.97\end{array}$ | 6058 | 25 | $254414 \cdot 2$ | 819 | 270 | 9.7 | 30 | - 54 | 8.6 |  |
| 10,504 | 304255 | L 8603 |  |  | $5419 \cdot 15$ | 4906 | 33 | $31 \begin{array}{llll} & 0 & 26.9\end{array}$ | 819 | 258 | $9 \cdot 9$ | - 23 | - 18 | $9 \cdot 2$ |  |
| 10,505 | 264045 | C in96ı | 1653 |  | 5424.47 | 5889 | 26 |  | 825 | 268 | $9 \cdot 7$ | 5 | + 9 | $9 \cdot 0$ |  |
| 10,506 | 294253 | C 11965 | 1655 | 40626 | $205428 \cdot 80$ | +2.5129 | +.0032 | $30 \quad 2 \begin{array}{lll} & 48 \cdot 2\end{array}$ | +13.829 | + 260 | $9 \cdot 7$ | + 38 | + 13 | $6 \cdot 64$ | K o |
| 10,507 | 254426 | C 11962 |  |  | $54 \quad 30 \cdot 74$ | 6015 | 25 |  | 831 | 268 | $9 \cdot 9$ | - 20 | - 10 | $9 \cdot 8$ |  |
| 10,508 | 273934 | C II 966 |  |  | $5430 \cdot 76$ | 5600 | 29 | 275453.7 | 831 | 264 | 10.7 | + 64 | + 28 | $8 \cdot 6$ |  |
| 10,509 | 254428 | C 11963 |  |  | 54 31.13 | 6022 | 25 | $25 \quad 5536 \cdot 7$ | 832 | 268 | 10.9 | + 19 | + 21 | $9 \cdot 0$ |  |
| 10,510 | 294254 | C 11968 | 1658 | 40631 -2 | $5435 \cdot 07$ | 5291 | 31 | 29 I9 48.5 | 836 | 261 | 10.9 | + 20 | + 18 | $8 \cdot \mathrm{I}$ | A o |
| 10,511 | 304259 | C 11970 |  |  | $205440 \cdot 48$ | +2.5081 | +.0032 | 30 16 32-I | +13.842 | +.259 | 12.5 | + 52 | + 16 | $8 \cdot 4$ |  |
| 10,512 | 294255 | C 11971 |  |  | 54 42.80 | 5184 | 32 | 2949 23.3 | 844 | 260 | 12.2 | - 28 | - 3 | 8.8 |  |
| 10,513 | 294256 | C 11972 |  |  | 54 43.31 | 5133 | 32 | $\begin{array}{llll}30 & 3 & 1.6\end{array}$ | 845 | 260 | II. 1 | + 10 | - 13 | $8 \cdot 6$ |  |
| 10,514 | 314292 | L 8612 |  | 40654 | 5459.66 | 4856 | 34 |  | 862 | 256 | $10 \cdot 2$ | + 14 | + 37 | $7 \cdot 17$ | B 9 |
| 10,515 | 244291 | C 11976 |  |  | $55 \quad 9.40$ | 6211 | 25 | $25 \quad 4 \begin{array}{llll} & 19.3\end{array}$ | 872 | 270 | 11.3 | 15 | - 5 | $9 \cdot 2$ |  |
| 10,516 | 304262 | L 8614 | 1671 |  | $2055 \quad 10.75$ | +2.4900 | +.0034 | 317866 | +13.874 | $+\cdot 256$ | 10.5 | + 25 | - 22 | $7 \cdot 9$ |  |
| 10,517 | 254430 | C 11979 |  |  | $55 \quad 12.93$ | 6172 | 25 | $25 \begin{array}{lll}25 & 16 & 8.9\end{array}$ | 876 | 270 | $11 \cdot 1$ | + | 12 | 9•1 |  |
| 10,518 | 314297 | L 8616 |  |  | $55 \quad 18.24$ | 4726 | 35 |  | 881 | 254 | 10.3 | 30 | - $\quad 39$ | $8 \cdot 1$ | F 8 |
| 10,519 | 314296 | L 8617 |  |  | $55 \quad 19.79$ | $48+4$ | 34 |  | 883 | 256 | 10.7 | + 23 | + 75 | $9 \cdot 2$ |  |
| 10,520 | 244295 | B 8037 |  |  | $55 \quad 26 \cdot 97$ | 6317 | 23 | 24 4 $3456 \cdot 7$ | 890 | 271 | 10.6 | 3 | + 27 | $9 \cdot 2$ |  |
| 10,52I | 314298 | L 8621 |  |  | $205531 \cdot 14$ | +2.4811 | +.0035 | $31 \begin{array}{llll}31 & 32 & 57\end{array}$ | + 13.895 | $+\cdot 254$ |  | + 10 | 20 | $8 \cdot 7$ |  |
| 10,522 | 304267 | L 8627 |  |  | 5552.85 | 4964 | 34 | $\begin{array}{lllllllllllll}30 & 55 & 13.8\end{array}$ | 918 | 256 | $8 \cdot 7$ | + 1 | + 27 | $9 \cdot 1$ |  |
| 10,523 | 283960 | C I 1990 |  |  | 56 8.10 | 5415 | 31 | $285544 \cdot 1$ | 934 | 260 | $8 \cdot 9$ | + 1 | - 50 | $9 \cdot 0$ |  |
| 10,524 | 254433 | C I 1993 |  |  | $5633 \cdot 46$ | 6009 | 26 | 26 II $4 \cdot 3$ | 960 | 266 | 9.2 | 43 | + 54 | $9 \cdot 2$ |  |
| 10,525 | 283962 | C I 1997 |  |  | $5640 \cdot 45$ | 5538 | 30 | $\begin{array}{llll}28 & 25 & 7 \cdot 7\end{array}$ | 967 | 260 | $9 \cdot 7$ | 25 | 20 | 9.2 |  |
| 10,526 | 283963 | C 11998 |  |  | $205640 \cdot 55$ | $+2.5458$ | $+\cdot 0031$ | $2847 \begin{array}{llll}13.9\end{array}$ | +13.968 | +.259 | $8 \cdot 9$ | + 12 | - 8 | 8.6 |  |
| 10,527 | 304276 | L 8634 |  |  | $564{ }^{1} \cdot 63$ | $5069$ | 34 | $3032 \quad 35 \cdot 7$ | 969 | 256 | $9 \cdot 3$ | + 43 | + 16 | $8 \cdot 6$ |  |
| 10,528 | 264048 | C II 1999 | 1702 |  | $5645 \cdot 16$ | 5889 | 28 | $264646 \cdot 1$ | 972 | 264 | 9.6 | + 22 | + | $9 \cdot 0$ |  |
| 10,529 | 283964 | C I 2000 |  |  | $5646 \cdot 60$ | 5396 | 29 | $\begin{array}{llll}29 & 4 & 53.0\end{array}$ | 974 | 259 | 9.7 | 4 | - 10 | $9 \cdot 11$ 8.6 |  |
| 10,530 | 294272 | C i200I | 1703-5 |  | $5646 \cdot 85$ | 5324 | 30 | $29 \quad 24 \quad 28.7$ | 974 | 259 | 9.6 | + 8 | + 27 | $8 \cdot 6$ |  |
| 10,531 | 24.4299 | B 8045 | 1706 | 40722 | $205656 \cdot 34$ | +2.6359 | $+\cdot 0023$ | $243044 \cdot \mathrm{I}$ | +13.984 | +.269 | 9.1 | - 8 | - | $8 \cdot 6$ |  |
| 10,532 | 314309 | L 8638 |  | 40738 | 57 3.10 | 4785 | 36 | $\begin{array}{llllll}31 & 49 & 24.7\end{array}$ | 991 | 253 | $9 \cdot 5$ | + 16 | + | $8 \cdot 0$ | F 5 |
| 10,533 | 294277 | C 12005 |  |  | $57 \quad 18.61$ | 5325 | 31 | $29 \begin{array}{llllllllll} & 27 & 3 & 9\end{array}$ | 14.007 | 258 | $8 \cdot 7$ | + 28 | - 7 | $8 \cdot 5$ |  |
| 10,534 | 264050 | C I2011 |  |  | $5735 \cdot 42$ | 5989 | 28 | 2622 4 <br> 15  | -025 | 264 | $9 \cdot 4$ | - 3 | + 6 | 8.4 | A 2 |
| IO, 535 | 304285 | L 8643 | 1725 |  | $57 \quad 38.34$ | 4979 | 35 | $\begin{array}{llll}31 & 2 & 30 \cdot 7\end{array}$ | 028 | 255 | $9 \cdot 5$ | + 14 |  | 8.7 |  |
| 10,536 | 273946 | C 12013 |  | 40758-60 | $205750 \cdot 05$ |  | $+.0030$ |  | $+14.040$ | +.262 | $9 \cdot 3$ | - 1 | - 55 | $7 \cdot 6$ | F 8 |
| 10,537 | 264051 | ${ }^{\text {C }} 12015$ | 1728 |  | $5753 \cdot 30$ | 5889 | 29 | $26 \begin{array}{llll}26 & 30.7\end{array}$ | 043 | 263 | $9 \cdot 7$ | + 51 | + 31 | 9.0 |  |
| 10,538 | 294282 | C 12017 |  | 40763 | $5754 \cdot 89$ | 5379 | 33 | 29 I6 $34 \cdot 6$ | 045 | 258 | $9 \cdot 5$ | + 18 | - 9 | 7.8 | B |
| 10,539 | 294283 | C 12021 |  |  | 57 59.71 | 5179 | 34 | 30 II 33.6 | 050 | 256 | 10.1 | + 26 | + 5 | 8.6 |  |
| 10,540 | 254438 | C 12018 |  |  | $57 \quad 59.99$ | 6059 | 27 | $\begin{array}{lllll}26 & 4 & 55 \cdot 6\end{array}$ | 050 | 265 | II.I | 21 | + | $9 \cdot 2$ |  |
| 10,54] | 264052 | C 12020 |  |  | $20 \quad 58 \quad 2.04$ | +2.5966 | $+\cdot 0028$ | 263159.6 | $+14.053$ | +.264 | II•3 | + 26 | + 12 | $9 \cdot 1$ |  |
| 10,542 | 264053 | C 12022 | 1734 |  | $58 \quad 2 \cdot 88$ | 5916 | 29, | $264632 \cdot 0$ | 053 | 263 | 11.3 | + 16 | + $\quad 5$ | $9 \cdot 0$ |  |
| 10,543 | 264054 | C 12024 |  |  | $\begin{array}{llll}58 & 12.54 \\ 58\end{array}$ | 5859 | 29 |  | 063 | 263 | 11.7 | + 21 | - 19 | 9.2 <br> 8.8 <br> 8 |  |
| 10,544 | 314316 | L 8650 |  | 40776 | 58 13.45 | 4803 | 36 |  | 064 | 251 | 11.0 | + 7 | - 23 | 8.8 | A |
| 10,545 | 304289 | L 8649 |  |  | $\begin{array}{llll}58 & 13.54\end{array}$ | 5113 | 35 | $303040 \cdot 1$ | 064 | 255 | 11.7 | - 33 | - 57 | $9 \cdot 2$ |  |
| 10,546 |  | C 12025 |  |  | $20 \quad 58 \quad 16.56$ | +2.6177 | +.0026 | $\begin{array}{llll}25 & 32 & 0.3\end{array}$ | +14.068 | $+\cdot 266$ | IIPI | + 38 | - ${ }^{\circ}$ | 9.2 7.81 |  |
| 10,547 | 294284 | C 12029 | ${ }^{1} 748$ | 40783 | $58 \quad 27 \cdot 75$ | 5196 | 34 | $\begin{array}{lllll}30 & 9 & 59.9\end{array}$ | 079 | 256 | 10.4 | $\begin{array}{r} \\ +\quad 21 \\ +\quad 18 \\ \hline\end{array}$ | + $\quad 24$ | $7 \cdot 81$ | A 2 |
| 10,548 | 273951 | C 12028 |  | 40778 | $\begin{array}{llll}58 & 29.25\end{array}$ | 5691 | 31 | $\begin{array}{lllll}27 & 53 & 23.9 \\ 27 & 5 & 3\end{array}$ | 081 | 261 | 10.9 10.9 | 18 $+\quad 18$ $+\quad 1$ | 7 $+\quad 7$ $+\quad$ | 9.0 7.16 |  |
| 10,549 | $27395^{2}$ | C 12031 | 1749 | $40781-2$ | 58 58 $33 \cdot 10$ | 5785 | 30 | $\begin{array}{llll}27 & 27 & 7.8 \\ 25 & 48 & 6.8\end{array}$ | 085 | 262 | 10.1 | II | + 22 | $7 \cdot 16$ 8.0 | $\mathrm{G}_{5}$ |
| 10,550 | 254442 | C 12032 | 1753 | 40785 | $58 \quad 39 \cdot 48$ | 6130 |  | $25486 \cdot 8$ | 091 | 265 | 10.5 |  |  | 8.0 | G 5 |


| No. | B.D. | A.G.C. | W. B. (2). | Lalande. | R.A. 19100. | Preeession. | Sec. Var. | Deo. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R. R.A. | Dec. ".001. |  |  |
|  | - |  |  |  | h m | 8 | s | - " | " | " |  |  |  |  |  |
| 10.551 | $25+443$ | C 12035 | 1756 | 40788 | $2058+6 \cdot 57$ | +2.6060 | +.0027 | $26 \quad 9 \quad 10 \cdot 2$ | +14.099 | $+\cdot 26_{4}$ | 9.8 | - | + 13 | $7 \cdot 42$ | K 5 |
| 10,552 | $30+293$ | ${ }_{\text {C }} 12037$ | 1761 |  | $58+77 \cdot 86$ | 5167 | 34 | 301949.4 | 100 | 254 | 9.8 | + 15 | + 9 | $8 \cdot 0$ |  |
| 10,553 | 264060 | C 12039 |  |  | $58 \quad 52.28$ | 5985 | 28 | $263129 \cdot 6$ | 105 | 263 | 11.2 | + 12 | - 18 | $9 \cdot 2$ |  |
| 10.554 | 304294 | L 8659 |  |  | $58 \quad 58.77$ | +997 | 35 | $\begin{array}{lllll}31 & 6 & 30.1\end{array}$ | $1 I^{\prime}$ | 254 | 10.4 | 17 | 2 | $8 \cdot 6$ | A o |
| 10,555 | 273953 | $\mathrm{Cl}_{120} \mathrm{l}^{1}$ | 1764 | 40798-9 | $58 \quad 59.29$ | 5685 | 31 | $27 \begin{array}{lll} & 58 & 2.2\end{array}$ | 112 | 261 | 10.4 | + 5 | + 15 | $7 \cdot 7$ | A 2 |
| 10,556 | 283970 | $\mathrm{Cl}_{12042}$ | 1765 |  | $20 \quad 59 \quad 5 \cdot 75$ | $+2 \cdot 55+6$ | +.0033 | $28 \quad 37+5 \cdot 5$ | +14.119 | $+\cdot 258$ | 10.3 | - 13 | + 18 | $8 \cdot 2$ | K o |
| 10,557 | $29+286$ | C 12043 | 1768 |  | 59 10.57 | 5332 | 34 | $\begin{array}{lllll}29 & 37 & 25 \cdot 4\end{array}$ | $12+$ | 256 | 11.0 | - $\quad 37$ | + 23 | $8 \cdot 5$ |  |
| 10,558 | $29+285$ | C 12045 |  |  | 59 10.92 | 5308 | 34 | 2943 2.2 | $12+$ | 256 | 11.3 | + 14 | - 64 | $9 \cdot 0$ |  |
| 10,559 | $31+320$ | L 8661 | 1773 | 40811 | 5911.70 | 4801 | 37 | $315937 \cdot 9$ | 125 | 250 | 11.4 | 11 $+\quad 1$ | - 18 | $7 \cdot 17$ | K 2 |
| 10.560 | $23+222$ | B 8063 |  | +0800 | 5911.84 | 6484 | 24 | 24 5 | 125 | 268 | 12.6 | 1 | 5 | $7 \cdot 74$ | M a |
| 10,561 | $254+44$ | $\mathrm{C}_{\mathrm{C}} \mathrm{I} 20+4$ | $1766-7$ | 40801 | $20 \quad 59 \quad 13.72$ | +2.6190 | +.0027 | 253349.7 | +14.127 | +.265 | 11.9 | + 18 | + 19 | 8.0 | A2 |
| 10,562 | 244307 | C 12046 |  |  | $59 \quad 16 \cdot 59$ | 6268 | 26 | 25 10 55.3 | 130 | 266 | 11.7 | + 7 | - 1 | $8 \cdot 7$ |  |
| 10,563 | 283972 | $\mathrm{C}^{\text {C } 12049}$ |  |  | 5924.99 | 5595 | 32 | $2826 \begin{array}{lll}26 & 4\end{array}$ | 138 | 258 | 10.9 | + 10 | 17 $+\quad 17$ | $9 \cdot 0$ |  |
| 10, 564 | 264062 | C 12050 |  |  | 5926.7 t | 5904 | 30 |  | 140 | 262 | 11.7 | - 25 | 1-32 | 7.23 | K 5 |
| 10.565 | 314321 | L 8664 | 1778 | 40817 | 5927.90 | 4888 | 37 |  | 142 | 251 | 12.2 | + 3 | - 15 | 8.2 | K o |
| 10,566 | 283974 | C 12059 | 1780-1 | 40821 | 2059 39.62 | +2.5536 | +.0033 | 284410.4 | +14.154 | +. 258 | 12.1 | + 15 | - 14 | $6 \cdot 97$ | Ko |
| 10,567 | 294292 | C 12060 |  |  | $59+0.99$ | 5233 | 35 | 30759.0 | 155 | 254 | 11.5 | + 23 | - 22 | 8.8 |  |
| 10.568 | 264064 | ${ }_{\text {C }} 12062$ |  |  | $59+6 \cdot 89$ | 6016 | 29 | $26 \quad 28$ 2.3 | 161 | 262 | 12.0 | - 3 | + 32 | 8.6 |  |
| 10,569 | 254448 | $\mathrm{C}_{\mathrm{C}} 12064$ | 1783 |  | $59+9 \cdot 6$ | 6213 | 27 | $253020 \cdot 5$ | 164 | 264 | 11.1 | - 15 | + 26 | $8 \cdot 6$ |  |
| 10.570 | 304299 | L 8669 | 1794 | 40834 | 5953.64 | 5111 | 36 | $\begin{array}{lllllllllllllll}30 & 42 & 19.7\end{array}$ | 168 | 253 | 11.2 | + 39 | + 10 | 7.81 | K 2 |
| 10,571 10,572 | 304302 23 4228 | L 86674 | 1797 |  | $21 \quad 00.67$ | +2.5020 | $+.0036$ | 31 7 16.7 <br> 24   | +14.175 | $+\cdot 252$ | 12.1 | + $\quad 38$ | + 8 | 9.1 |  |
| 10,572 | 234228 | B 8073 |  |  | $\bigcirc 4.60$ | 6512 | $2+$ | $\begin{array}{llll}24 & 2 & 12: 2 \\ 25 & 5\end{array}$ | 179 | 267 | 12.1 | - 6 | - 19 | $9 \cdot 1$ |  |
| 10,573 | 254450 | C 12069 |  | 40839 | $\bigcirc 9.18$ | 6119 | 28 | $25 \quad 5954 \cdot 5$ | 184 | 263 | 12.2 | + | - 22 | $8 \cdot 2$ | K 2 |
| 10,574 | 294296 | C 12073 |  |  | - $15 \cdot 38$ | $53+7$ | 34 | 29 40 16.3 | 190 | 255 | 11.9 | - 38 | - 22 | $9 \cdot 8$ |  |
| 10,575 | 254452 | C 12074 |  |  | - 19.44 | 6203 | 27 | $\begin{array}{llll}25 & 36 & 4 \cdot 4\end{array}$ | 195 | 264 | 12.3 | + 10 | - + | $9 \cdot 2$ |  |
| 10,576 |  | C 12076 |  |  | 21024.76 | +2.5884 | +.0030 | 271017.4 | +14.200 | $+\cdot 261$ | 13.8 |  |  | $9 \cdot 2$ |  |
| 10,577 | $24+312$ | B 8076 | 1802 |  | - 24.75 | 6449 | 25 | $242319 \cdot 1$ | 200 | 266 | 11.7 | - 13 | - 20 | 8.8 | F 8 |
| 10,578 | 304304 | L. 8680 |  |  | - 30.67 | 5116 | 36 | $304451 \cdot 0$ | 206 | 252 | 11.9,13.5 | + 5 | + 20 | $9 \cdot 2$ |  |
| 10,579 | 314324 | L 4868 I | 1809 |  | - 35.53 | +912 | 37 | $\begin{array}{llllllllll}31 & 39 & 57 \cdot 0\end{array}$ | 211 | 250 | 10.7 | - 34 | - 55 | $8 \cdot 5$ | Ko |
| 10,580 | 314325 | L 8682 | 1810-18 | 40864 | - 36.92 | 4992 | 36 | $\begin{array}{llllllllllll}31 & 18 & 47.8\end{array}$ | 213 | 250 | II. 1 | + 27 | - 18 | $8 \cdot 1$ | A 5 |
| 10,581 | 273959 | C 12082 | 1808 | 40862 | $21042 \cdot 34$ | +2.5727 | +.0032 | 275653.7 | $+14.218$ | +. 258 |  | + 7 | + 10 | 8.8 | A 2 |
| 10,582 | 304306 | L 8685 |  |  | - 51.83 | 5101 | 36 | $\begin{array}{llllllllllll}30 & 51 & 9.3\end{array}$ | 228 | 251 | 9.7 | - 17 | - + | $9 \cdot 2$ |  |
| 10,583 | 304307 | L 8687 |  |  | - 53.2 I | 5167 | 36 | $\begin{array}{lllll}30 & 33 & 32 \cdot 9\end{array}$ | 229 | 252 | $9 \cdot 3$ | - 5 | + 4 | 8.4 |  |
| 10,584 | 273963 | C 12090 |  |  | 1 8.50 | 5688 | 32 | 28 10 $48 \cdot 3$ | 245 | 257 | 11.7 |  |  | $9 \cdot 2$ |  |
| 10,585 | 314329 | L 8692 |  |  | 116.19 | 4979 | 37 |  | 253 | 250 | 11.9 | + 17 | - 16 | 9.2 |  |
| 10,586 | 264066 | C 12091 |  | 40882 | $21.150 \cdot 1$ | +2.606I | +.0029 | $\begin{array}{lllllll}26 & 23 & 47 \cdot 51\end{array}$ | +14.253 | +.261 | $9 \cdot 3$ | 9 | - 3 | $8 \cdot 0$ | A 2 |
| 10,587 | 244317 | B 8082 | 1822 |  | 117.37 | 6493 | 25 |  | 254 | 266 | 12.1 | 6 | - 14 | 9 - I |  |
| I0,588 | 244319 | B 8083 |  | 4088 I | 117.88 | 6393 | 26 | $24 \begin{array}{llll}24 & 5\end{array}$ | 255 | 265 |  | - 5 | - 44 | $8 \cdot 2$ | K 2 |
| 10,589 | 264067 | C 12092 |  |  | 1 18.40 | 6082 |  | 26174197 | 255 | 261 | 13.0 | + 16 | + 13 | $9 \cdot 2$ |  |
| 10,590 | 244320 | C 12094 |  |  | 1 22.87 | 6331 | 27 | $\begin{array}{llll}25 & 4 & 9 \cdot 1\end{array}$ | 260 | 264 | $12 \cdot 1$ | - 5 | - 17 | 9.0 |  |
| IO,591 | 283982 | C 12095 |  |  | 21.123 .36 | $+2.5673$ | +-0032 | $\begin{array}{llll}28 & 16 & 19.5\end{array}$ | +1+260 | +-257 | 11.5 | - 18 | + 8 | 9.2 8.6 |  |
| 10,592 | 264070 | C 12099 |  |  | 129.71 | 5959 | 30 |  | 267 <br> 270 | 261 | 11.9 | - 138 | - 146 | 8.6 |  |
| 10,593 | 234235 | B 8087 | 1827 |  | I 33.20 | 6506 | 25 | ${ }^{2}+12126.4$ | 270 | 266 | $10 \cdot 3$ | + 10 | - 3 | $8 \cdot 4$ | F 8 |
| 10,594 | 283984 | C 12103 | 1834-5 | $40900-1$ | 139.54 | 5581 |  | 28.44 11.5 | 277 | 256 |  | 4 | - 7 | 8.0 | K 2 |
| 10,595 | 283985 | C 12106 |  | 40906 | $1+5.25$ | 5656 | 33 | $28 \quad 234^{2 \cdot 0}$ | 283 | 257 | 11.9 | $+\quad 9$ | + 14 | $8 \cdot 2$ |  |
| 10,596 | 294304 | C 1212108 B 8 |  |  | 21.147 .27 | $+2 \cdot 5+56$ | +.0035 | $2920 \quad 4.3$ | +14.285 | +.254 | 11.5 | + 25 | - 13 | 9.0 |  |
| 10,597 | 244322 | B 8090 |  |  | 150.63 | 6412 | 26 | $244239 \cdot 6$ | 288 | 264 | 11.9 | + 11 | + $1+$ | 9.0 |  |
| 10,598 | 244323 | B 8091 |  |  | $1{ }^{1} 1.91$ | 6382 | 27 | 24 51 $34 \% 7$ | 290 | 263 | 11.9 | - I | + 11 | $9^{\circ} \mathrm{O}$ |  |
| 10,599 | 304313 | $\begin{array}{ll}\mathrm{L} & 8702 \\ \mathrm{C} & 12\end{array}$ | 1849 |  | $157 \cdot 31$ | 5050 | 37 | 3111220.4 | 295 | 249 | 12.2 | - 5 | $\bigcirc$ | $8 \cdot 5$ |  |
| 10,600 | 304314 | C12112 |  |  | 157.71 | 5221 | 36 | 302557.0 | 295 | 251 | 11.4 | + | $+7$ | 8.6 |  |
|  |  |  |  |  | 10,559, 10, | 560, 10,573. | Number | of observations |  |  |  |  |  |  |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | $\underset{\text { R.0001. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { n.001. } \end{aligned}$ | Mag. | Spectral Type. |
|  | - |  |  |  | b m s | s | 5 | $\checkmark$ " | $*$ | * |  |  |  |  |  |
| 10,601 | 234236 | B 8092 | $18+3$ | 40913 | 21 I 59.68 | +2.6527 | +.0025 | $24 \quad 8 \quad 2 \mathrm{I} \cdot \mathrm{I}$ | +14.297 | $+\cdot 265$ | II•9 |  |  | $7 \cdot 9$ | Fo |
| $10,602$ | 294307 | C 12114 |  |  | $2 \quad 0.77$ | 5348 | 36 | 29 51 $26 \cdot 4$ | 299 | 253 | 11.3 | + 10 | - 3 I | $8 \cdot 4$ |  |
| 10,603 | 234237 | B 8093 |  |  | $2 \quad 3.95$ | 6521 | 25 | $24 \quad 1039 \cdot 8$ | 302 | 265 | $12 \cdot 1$ | - 3 | + 7 | $9 \cdot 1$ |  |
| 10,604 | 294308 | C 112116 |  |  | 212.71 | 5300 | 36 | $\begin{array}{llll}30 & 6 & 3 \cdot 7\end{array}$ | 311 | 252 | II•3 | + 16 | $+\quad 34$ $+\quad 1$ | $9 \cdot 3$ |  |
| 10,605 | 304316 | L 8707 | 1853 |  | 215.31 | 5151 | 37 | $30 \quad 46 \quad 58 \cdot 4$ | 313 | 251 | II•I | + 5 | + 1 | $8 \cdot 7$ |  |
| 10,606 | 273970 | C 12120 |  | 40934 | $\begin{array}{llll}21 & 26.98\end{array}$ | +2.5743 | +.0033 | $28 \quad 3 \quad 8 \cdot 2$ | +14325 | +.257 | 11.7 | + 25 | + 7 | $8 \cdot 7$ | A 0 |
| 10,607 | 264073 | C 12121 | 1856 | 40930 | $2 \quad 28.54$ | 6052 | 30 | $\begin{array}{lllll}26 & 33 & 49 \cdot 1\end{array}$ | 327 | 260 | $9 \cdot 7$ | + 33 | - 7 | $6 \cdot 23$ | K 2 |
| 10,608 | 254463 | C 12122 | 1859-61 |  | 232.62 | 6307 | 28 | $\begin{array}{lllll}25 & 18 & 26 \cdot 4\end{array}$ | 331 | 261 | II.0 | - 2 | - 6 | 8.31 | K 5 |
| 10,609 | 294313 | C 12128 |  |  | $235 \cdot 49$ | 5351 | 36 | $295437 \cdot 1$ | 334 | 252 | 10. 3 | + | - 7 | $8 \cdot 8$ |  |
| 10,610 | 304318 | L 8712 | I 866 | 40951 | 243.62 | 5154 | 37 | $30+9 \quad 23.7$ | 342 | 250 | 9•I | 8 | + 3* | $5 \cdot 86$ | F 5 |
| 10,611 | $25+465$ | C 12130 | 1864 |  | 21247.73 | $+2.6133$ | +.0029 | 26 II $46 \cdot 8$ | +14.346 | $+.260$ | $9 \cdot 8$ | - 10 | - 18 | 8.I | K 2 |
| 10,612 | 294314 | C 12132 |  |  | $248 \cdot 74$ | 5418 | 35 | $2937 \quad 26 \cdot 6$ | 347 | 253 | $10 \cdot 8$ | - 15 | $+\quad 29$ | $9 \cdot 3$ |  |
| 10,613 | 294315 | C I2I35 |  |  | 31.98 | 5323 | 37 | $\begin{array}{llll}30 & 5 & 9.2\end{array}$ | 361 | 252 | $10 \cdot 3$ | + 19 | - 7 | $8 \cdot 8$ |  |
| 10,614 | 234244 | B 8100 | 1872 |  | $3 \quad 3 \cdot 79$ | 6536 | 27 | 24 II $40 \cdot 0$ | 363 | 264 | $10 \cdot 2$ | - 3 | - 7 | $9 \cdot 4$ |  |
| 10,615 | 283988 | C 12136 |  |  | $3 \quad 453$ | 5533 | 35 | $29 \quad 7 \quad 20 \cdot 5$ | 364 | 253 | 11.0 | - 3 | + 2 | 9.1 |  |
| 10,616 | 304322 | C 12147 | 1881 | 40979 | $21 \quad 3 \quad 20.50$ | +2.5299 | +.0037 | $\begin{array}{llll}30 & 14 & 1.7\end{array}$ | +14.380 | +.251 | $9 \cdot 3$ | + 13 | - 5 | $7 \cdot 51$ | B 8 |
| 10,617 | 304323 | L 872I |  |  | 322.59 | 5238 | 38 | $3030 \quad 5 \mathrm{I} \cdot 6$ | 382 | 250 | $10 \cdot 9$ | - 10 | + 44 | $9 \cdot 3$ |  |
| 10,618 | 234249 | B 8103 | 1880 |  | 3 30.12 | 6560 | 25 | $\begin{array}{lllll}24 & 6 & 44.8\end{array}$ | 390 | 264 | 11. 5 | + 6 | + 8 | $8 \cdot 8$ | A 2 |
| 10,619 | 304325 | L 8782 | 1 |  | 333.67 | 5096 | 38 | 311084.7 | 393 | 248 | $10 \cdot 8$ | + 24 | $+\quad 27$ | $8 \cdot 7$ |  |
| 10,620 | 304327 | C12154 | 4 |  | $340 \cdot 09$ | 5292 | 37 | $\begin{array}{llll}30 & 18 & 4 \cdot 1\end{array}$ | 400 | 250 | $1 \mathrm{I} \cdot 7$ | + 5 | $+20$ | $9 \cdot 3$ |  |
| 10,621 | 283992 | C12153 |  |  | $21 \quad 3 \quad 40 \cdot 34$ | $+2.5578$ | 0035 | $28 \quad 58 \quad 7 \cdot 8$ | +14.400 | $+\cdot 253$ | 11.7 | $\bigcirc$ | + 3 | $9 \cdot 3$ |  |
| 10,622 | 304328 | L 8727 |  |  | 343.09 | 5210 | 38 | $3040 \quad 57 \cdot 0$ | 403 | 250 | II $\cdot 5$ | + 13 | + 21 | $9 \cdot 3$ |  |
| 10,623 | 273982 | C12157 |  |  | $343 \cdot 74$ | 5930 | 32 | $\begin{array}{lllll}27 & 17 & 23.4\end{array}$ | 403 | 256 | 10.5 | $\pm 63$ | $\cdots 7$ | $9 \cdot 0$ |  |
| 10,624 | 294320 | C12158 | 11 |  | $352 \cdot 29$ | 5360 | 37 | $30 \quad 0 \quad 30 \cdot 9$ | 412 | 250 | $10 \cdot 2$ | - 40 | - 76 | $9 \cdot 0$ |  |
| 10,625 | $31+344$ | L 8729 | 16 |  | $4 \quad 6 \cdot 56$ | 4984 | 39 | 3 I $4448 \cdot 3$ | +26 | 247 | $9 \cdot 6$ | - 3 | $+\quad 20$ | $8 \cdot 4$ |  |
| 10,626 | 294322 | CI2I64 |  |  | $\begin{array}{llll}21 & 4 & 6.57\end{array}$ | +2.5399 | +.0037 | 295119.2 | +14.426 | +.251 | $9 \cdot 9$ | $+\quad 9$ | + 28 | 9•1 |  |
| 10,627 | 304332 |  |  |  | 4 19.12. | 5136 | 38 | $31551 \cdot \mathrm{I}$ | 439 | 249 | 11.4 |  |  | $9 \cdot 3$ |  |
| 10,628 | 283996 | C 12166 | 18 | 41011-2 | 419.87 | 5743 | 34 | $\begin{array}{llll}28 & 15 & 29.8\end{array}$ | 440 | 254 | 8.9 | + 41 | + 25 | $8 \cdot 6$ | K o |
| 10,629 | 304333 | L 8732 |  |  | 4 21.02 | 5143 | 38 | $31 \begin{array}{lll}11 & 38 \cdot 1\end{array}$ | +41 | 249 | 10.8 | + 5 | + 14 | $9 \cdot 7$ |  |
| 10,630 | 314345 | L 8734 | 25 |  | $4 \quad 25 \cdot 74$ | 4989 | 40 | $\begin{array}{llllllll}31 & 45 & 37 \cdot 9\end{array}$ | 446 | 247 | $10 \cdot 3$ | + II | + 13 | $8 \cdot 7$ | A 0 |
| 10,631 | 314347 | L 88737 |  |  | 21439.51 | +2.5071 | +.0039 | $\begin{array}{llll}31 & 25 & 10.4\end{array}$ | +14.460 | $+\cdot 247$ | $8 \cdot 9$ | + 19 | + 15 | $9 \cdot 3$ |  |
| 10,632 | 264079 | C12171 | 27 |  | $443 \cdot 65$ | 6024 | 31 | $26 \quad 56$ | 464 | 256 | $9 \cdot 1$ | + 6 | + 26 | $9 \cdot 1$ |  |
| $10,633$ |  | C 12174 | 28 | 41026 | $449 \cdot 58$ | 5419 | 38 | 2950 | 470 | 250 | 10.6 |  |  | $\}_{5 \cdot 57}$ | A 0 |
| $10,634$ | $j^{29}+324$ | C12174 | 28 | 41026 | $449 \cdot 77$ | 5419 | 38 | 295029.5 | +70 | 250 | $8 \cdot 5$ | + 17* | - 8* | \} $5 \cdot 57$ | A |
| 10,635 | 294326 | C12176 |  |  | $453 \cdot 73$ | 5524 | 37 | 292123.4 | 474 | 251 | $8 \cdot 9$ | + 4 | + 25 | $8 \cdot 5$ |  |
| 10,636 | 264087 | C 12180 | 33-4 | 41033 | 2158000 | +2.6095 | +.0032 | $26 \quad 37 \quad 23 \cdot 0$ | +14.489 | + 257 | $8 \cdot 7$ | + 6 | + 62 | $7 \cdot 8$ | F 8 |
| 10,637 | $24+333$ | C 12179 |  |  | $5 \quad 8.44$ | 6384 | - 28 | 25 10 18.5 | 489 | 260 | $9 \cdot 1$ | - 2 | - 33 | $9 \cdot 3$ |  |
| 10,638 | 284003 | C 12184 |  |  | $5 \quad 16.07$ | 5609 | 35 | $28 \quad 59 \quad 55 \cdot 8$ | 497 | 252 | $9 \cdot 4$ | + 6 | $+16$ | 9. I |  |
| 10,639 | $29+329$ | C 12185 | 40 | 41053 | $521 \cdot 10$ | 5396 | 38 | 30 0-39.1 | 502 | 250 | $9 \cdot 0$ | + 81 | + 25 | $8 \cdot 0$ | G O |
| 10,640 | $29+330$ | C 12187 |  |  | $530 \cdot 36$ | 5378 | 38 | $\begin{array}{llll}30 & 6 & 30.6\end{array}$ | 511 | 250 | 10.0 | + 24 | + 7 | $8 \cdot 8$ |  |
| 10,641 | 304336 | L 8743 |  |  | $\begin{array}{llll}21 & 5 & 31 \cdot 39\end{array}$ | +2.5154 | $+.0039$ | 3 I | +14.512 | $+\cdot 248$ | $8 \cdot 7$ | + 78 | - 20 | $8 \cdot 4$ |  |
| 10,642 | 273986 | C 12188 |  |  | $535 \cdot 80$ | 583 I | 34 | $27 \quad 58$ I6.1 | 517 | 253 | $10 \cdot 1$ | + 4 | $+3$ | $9 \cdot 1$ |  |
| 10,643 | 284005 | C 12189 | 48-9 | 41060-2 | 536.03 | 5692 | 35 | $28 \quad 38$ I2.9 | 517 | 252 | $9 \cdot 9$ | + 6 | - 12 | $8 \cdot 6$ | F 5 |
| 10,644 | 254473 | C 12192 | 47 |  | $539 \cdot 51$ | -6198 | 31 |  | 520 | 257 | $9 \cdot 7$ | 19 | + 6 | 9. I |  |
| 10,645 | 244336 | B 8119 | 44-5 | 41057 | $539 \cdot 82$ | 6542 | 26 | 242500.9 | 521 | 260 | $9 \cdot 3$ | - II | - 6 | 8.I | A 5 |
| 10,646 | 254475 | C 12196 | 54 | 41082 | $21 \quad 6 \quad$ I.85 | $+2.6253$ | +.0031 | $255540 \cdot 5$ | +14.543 | +.257 | 10.1 | + 22 | - 10 | $8 \cdot 6$ | $\mathrm{F}_{2}$ |
| 10,647 | 264091 | C I2199 | 55-6 | 41084 | $6 \quad 3 \cdot 65$ | 6190 | 31 | $2614 \begin{array}{lll}26.6\end{array}$ | 544 | 257 | $9 \cdot 7$ | - 35 | + 37 | $8 \cdot 0$ | K 2 |
| 10,648 | 284008 | C 12200 | 61 |  | 6 7.45. | 5707 | 36 | $28374 \mathrm{I} \cdot \mathrm{I}$ | 548 | 252 | $9 \cdot 3$ | - 7 | + 2 | $9 \cdot 3$ |  |
| 10,649 | 284009 | C 12203 |  |  | $\begin{array}{ll}6 & 14.47\end{array}$ | 5614 | 36 | $29 \quad 5 \quad 1 \cdot 0$ | 555 | $25 \text { I }$ | 10.2 | - 0 | + 21 | $9 \cdot 0$ |  |
| 10,650 | 284010 | C 12204 |  |  | $616 \cdot 65$ | 5713 | 36 | $28 \quad 36 \quad 59 \cdot 6$ | 558 | 252 | II.9 | + 8 | - 27 | $9 \cdot 4$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \times 0$. | Preocssion. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. E.0001. | $\begin{aligned} & \text { Dec. } \\ & \text { Noor. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | 8 | 5 | - , | " | * |  |  |  |  |  |
| 10,651 | 314358 | L. 8749 | 69 | 41103 | $\begin{array}{llll}21 & 6 & 16.67\end{array}$ | +2.5020 | +.0041 | $315020 \cdot 8$ | +14.558 | +. 244 | $9 \cdot 1$ | 22 | - I | $7 \cdot 42$ | K o |
| 10,652 | 264092 | $\mathrm{C}^{1} 2205$ | 68 |  | 621.42 | 6059 | 32 | 265558.8 | 562 | 255 | 9.5 | - 31 | 7 | $7 \cdot 8$ |  |
| 10,653 | 304340 | L 8758 |  |  | $640 \cdot 93$ | 5269 | 40 | $30+5{ }^{3} \quad 2 \cdot 1$ | 582 | 247 | 10.7 | - 51 | 48 | $9 \cdot 3$ |  |
| 10,654 | $31+364$ | L 8759 | 76 |  | 6 41.61 | 5019 | 4 I | 315356 | 583 | 244 | H1.1 | + 11 | + 9 | $9 \cdot 3$ |  |
| 10,655 | 294337 | C 12216 | 79 |  | $648 \cdot 30$ | 5578 | 37 | $29 \begin{array}{llll} & 19 & 10.3\end{array}$ | 589 | 250 | 10.9 | + 13 | 3 | 9.0 |  |
| 10,656 | 254477 | $\mathrm{C}_{\mathrm{C}} \mathbf{1} 2219$ | 80 |  | $\begin{array}{lll}21 & 7 & 2.30\end{array}$ | +2.6289 | +.003 1 | $25 \quad 5059.6$ | $+14.603$ | $+.256$ |  | 12 | + 2 | 9.0 | A o |
| 10,657 | 294340 | $\mathrm{C}^{\text {C }} 1222 \mathrm{I}$ | 83 |  | $7 \quad 4 \cdot 28$ | 5396 | 39 | 3012 <br> 129 | 605 | 248 | 10.5 | + 18 | + 18 | 8.66 | A |
| 10,658 | 294339 | $\mathrm{C}^{\mathrm{C}} 12223$ | 82 |  | $7 \quad 5.04$ | 5548 | 38 | 29292922.8 | 606 | 249 | 11.9 | + 19 | + 27 | 9.1 |  |
| 10,659 | 273994 | $\mathrm{C}_{\mathrm{C}} 12222$ |  |  | 76.08 | 5866 | 35 | $27 \quad 57 \quad 50 \cdot 2$ | 607 | 252 | II•I | + 21 | + 15 | 8.8 |  |
| 10,660 | ${ }^{27} 3995$ | C 12224 |  |  | $7 \quad 6.79$ | 5849 | 36 | $\begin{array}{llll}28 & 2 & 46 \cdot 3\end{array}$ | 608 | 252 | 12.1 | 11 | + 25 | 8.8 |  |
| 10,661 | $30+341$ | L 8765 |  |  | $\begin{array}{llll}21 & 7 & 9.96\end{array}$ | +2.5236 | +-0040 | $3057 \quad 38.7$ | +14.611 | $+.246$ | 11.5 | + 37 | + 14 | $9 \cdot 3$ |  |
| 10,662 | 284016 | C 12225 | 85 |  | 713.57 | 5640 | 37 | 29.41813 .1 | 614 | 250 | 11.7 | + 43. | + 45 | $9 \cdot 0$ |  |
| 10,663 | 304342 | L 8770 |  |  | 727.65 | 5337 | 41 | $30 \quad 3146 \cdot 4$ | 629 | 247 | 11.0 | - 25 | - 32 | $9 \cdot 3$ |  |
| 10,664 | 264097 | C 12226 | 95 | 41141 -2 | 731.76 | 6034 | 33 | 27 I1 6.5 | 633 | 253 | $9 \cdot 7$ | + $\quad 29$ | + 13 | $7 \cdot 56$ |  |
| 10,665 | 254478 | C 12228 | 100 |  | 736.63 | 6279 | 31 | $25 \quad 57 \quad 53.9$ | 638 | 255 | 10.5 | + | + 7 | 8.6 | $\text { G } 5$ |
| 10,666 | 284019 | $\mathrm{C}_{12231}$ | 107 |  | 21750.98 | +2.5739 | +.0037 |  | +14.652 | +.250 | H1.1 | 41 | + 42 | 9.1 |  |
| 10,667 | 244347 | C 12234 |  |  | 757.29 | 6469 | 29 |  | 658 | 257 | 11.6 | + 11 | - 41 | 8.8 | A 2 |
| 10,668 | 304349 | ${ }_{\text {L }} 8777$ |  |  | $757 \cdot 87$ | 5335 | 41 | $30 \quad 35 \quad 47 \cdot 4$ | 659 | 246 | 11.5 | + 33 | - 19 | $9 \cdot 3$ |  |
| 10,669 | 294342 | $\mathrm{C}^{\text {C }} 12237$ | 109-10-11 | $4^{1162}$ | 757.95 | 5600 | 38 | $29 \quad 2033.7$ | 659 | 248 | $9 \cdot 5$ | + | + 9 | $6 \cdot 77$ | B 9 |
| 10,670 | 254481 | C 12238 | 108 |  | $8 \quad 2 \cdot 15$ | 6294 | 31 | 2555 50.0 | 663 | 255 | II.I | + 2 | + | $9 \cdot 0$ |  |
| 10,671 | 294343 | ${ }_{\text {C }} 12240$ |  |  | $\begin{array}{llll}21 & 8 & 5.73 \\ & 8 & 7.55\end{array}$ | +2.5543 | +.0038 | 2937488.4 | +14.666 | +.248 | 10.9 | 18 $+\quad 18$ | $\begin{array}{r} \\ -\quad 23 \\ +\quad 25 \\ \hline\end{array}$ |  |  |
| 10,672 | 304351 | $\mathrm{C}_{1} 12242$ | 116 | 41165 | $8 \quad 7 \cdot 55$ | 5413 | 40 | $\begin{array}{llllllllll}30 & 14 & 56.6\end{array}$ | 668 | 247 | $9 \cdot 1$ 0.6 | 19 $+\quad 19$ | a | $6 \cdot 75$ 8.15 |  |
| 10,673 | $26+100$ | ${ }_{\text {C }} 12243$ | 118 |  | 821.77 | 6061 | 33 | $\begin{array}{lllll}27 & 8 & 3 & 32 \cdot 2\end{array}$ | 682 | 253 | $9 \cdot 6$ | 16 | - 9 | 8.1 8.2 | Ko |
| 10,674 | 254484 | C 12244 | 121-2 |  | 832.84 | 6302 | 31 | $\begin{array}{lllll}25 & 56 & 32 \cdot 8\end{array}$ | 693 | 254 | 10.3 | - 27 | a | 8.2 8.2 |  |
| 10,675 | 304352 | L 8783 | 131 |  | 834.08 | 5365 | 40 | $3031 \begin{array}{lll} & 35 \cdot 5\end{array}$ | 694 | 245 | 10.7 | - 16 | - | $8 \cdot 2$ |  |
| 10,676 | 284023 | C 12247 | 128-30 |  | 21836.50 | $+2.5773$ | +.0037 | 28351.0 | +14.697 | +. 249 | 11 | - 14 | 10 | 8.0 | K 5 |
| 10,677 | 284021 | C 12246 | 126 |  | 836.57 | 5793 | 36 | $28 \quad 2926.6$ | 697 | 249 | II•9 | + 25 | + 2 | 9-1 |  |
| 10,678 | 274003 | C 12248 |  |  | 837.66 | 5898 | 35 | $2758827 \cdot 0$ | 698 | 253 | 11-3 | - 23 | - 18 | $8 \cdot 5$ | F 8 |
| 10,679 | 314377 | L 8785 | 134 |  | $844 \cdot 81$ | 5124 | 42 | $\begin{array}{llllllllllll}31 & 39 & 36 \cdot 6\end{array}$ | 705 | 243 | 11.4 | + 6 | + 11 | $8 \cdot 2$ | B 9 |
| 10,680 | 294344 | C 12249 |  |  | 845.44 | 5452 | 39 | $\begin{array}{llll}30 & 8 & 33.5\end{array}$ | 706 | 246 | 12.4 | - 2 | + | $9 \cdot 1$ |  |
| 10,681 | 244351 | B 8131 | 133 | 41194 | 21854.20 | +2.6526 | +.0029 | 2449 39.0 | +14.714 | +. 256 | 11.3 | 13 | - | 8.0 | F 8 |
| 10,682 | 294347 | C 12251 |  |  | 858.48 | 5443 | 39 | 301231.0 | 719 | 246 |  | - 17 | - 27 | $8 \cdot 2$ |  |
| 10,683 | 274006 | $\mathrm{C}_{12252}$ | 139 |  | 94.80 | 5863 | 37 | 28 11153.5 | 725 | 250 | 10.8 | , | - 7 | $8 \cdot 1$ | $\mathrm{K}_{5}$ |
| 10,684 | 274007 | C 12253 |  | 41211 | 95.51 | 5948 | 36 | $27476 \cdot 0$ | 726 | 250 | 12.1 | 20 | - 23 | $8 \cdot 1$ | K 5 |
| 10,685 | 294348 | C 12254 | 145 | $41215-6-7-9$ | $96 \cdot 3 \mathrm{I}$ | 5520 | 39 | 295126.5 | 726 | 246 | 11.6 |  | - 59* | $3 \cdot 40$ | K o |
| 10,686 | 304356 | Lr 8790 | 147 |  | $\begin{array}{llll}21 & 9 & 8.98\end{array}$ | +2.5399 | +.0041 | $\begin{array}{llll}30 & 26 & 9 \cdot 2\end{array}$ | +14.729 | $+\cdot 245$ | 10.9 | - 17 | + 105 | 7.31 | Go |
| 10,687 | 294349 | C 12258 |  |  | 918.74 | 5569 | 39 | $293854 \cdot 0$ | 739 | 247 | 13.5 | + $\quad 25$ | - 39 | $7 \cdot 9$ |  |
| 10,688 | 284024 | C 12259 | 150 |  | 919.63 | 5855 | 37 | $\begin{array}{lll}28 & 16 & 6 \cdot 0\end{array}$ | 740 | 250 | 11.5 | - 53 | + 9 | $9^{\circ}$ |  |
| 10,689 | 254485 | $\mathrm{C}^{\text {C } 12260}$ | 151 |  | 925.06 | 6317 | 32 | $255732 \cdot 1$ | 745 | 254 | 11.2 | - 9 | + 17 | $9 \cdot 0$ | G 5 |
| 10,690 | 294350 | C 12262 |  |  | $927 \cdot 22$ | 5645 | 39 | $2917 \quad 53.5$ | 747 | 247 | 12.1 |  |  | $9 \cdot 3$ |  |
| 10,691 | 254488 | C 12265 | 159 | $4^{1237-8}$ | $21 \quad 938.17$ | +2.6454 | +.003 1 | $25 \quad 1634.8$ | +14.758 | +. 255 | II.5 | + 12 | + 14 | $8 \cdot 51$ | K 2 |
| 10,692 | 304360 | L 8796 | 166 |  | $949 \cdot \mathrm{II}$ | 5387 | 41 | $\begin{array}{llll}30 & 34 & 20 \cdot 3\end{array}$ | 769 | 24 | 11.0 | 23 | + 16 | $\stackrel{9}{8.1}$ |  |
| 10,693 | 284027 | C 12266 |  |  | 954.55 | 5731 | 38 | $\begin{array}{lllll}28 & 56 & 16.9\end{array}$ | 774 | 247 | ${ }_{1} 1.6$ | 3 | - 11 | 8.6 |  |
| 10,694 | 234269 | B 8137 |  |  | $956 \cdot 08$ | 6672 | 28 | $\begin{array}{llll}24 & 10 & 7 \cdot 5\end{array}$ | 776 | 257 | II-1 | - 18 | - 10 | $8 \cdot 6$ | Fo |
| 10,695 | 264107 | C 12267 |  |  | 10 I. 38 | 6169 | 34 | $264640 \cdot 4$ | 781 | 251 | 11.7 | + 26 | + 56 | $9 \cdot 1$ | F 8 |
| 10,696 | 304362 | L 8801 |  |  | $\begin{array}{llll}21 & 10 & 8.47\end{array}$ | +2.5265 | +.0042 | $\begin{array}{ccc}31 & 11 & 0.2 \\ 25 & 53 & 5.8\end{array}$ | +14.788 | +.243 |  |  | - 14 |  |  |
| 10,697 | 254490 | C 12271 | 172 |  | 10 14.23 | 6348 | 32 | $\begin{array}{llllllll}25 & 53 & 15.8\end{array}$ | 793 | 253 | 11.7 | $\left\lvert\, \begin{array}{ll} + & 15 \\ + & 26 \end{array}\right.$ | $\left\lvert\, \begin{array}{lr} -\quad 3 \\ + & 13 \end{array}\right.$ | $7 \cdot 87$ $6 \cdot 25$ | Fo |
| 10,698 | 294354 | C 12272 <br> L 2802 |  | $41269$ | $\begin{array}{ll}10 & 19.48 \\ 10 & 20.22\end{array}$ | 5619 | 39 | $\begin{array}{lllll}29 & 31 & 41 \cdot 9 \\ 31 & 36 & 37 \cdot 4\end{array}$ | 799 | 246 | 11.7 $12 \cdot 1$ 11 | $+\quad 26$ $-\quad 8$ | + 13 | 6.25 8.4 | Ko |
| 10,699 | 314384 | L 8802 | 177 | 41270 | 1020.22 | 5177 | 43 | $\begin{array}{lllll}31 & 36 & 37.4 \\ 30 & 35 & 10.7\end{array}$ | 799 800 | 244 | 12.1 11.9 |  | $\begin{array}{r} \\ \hline\end{array}$ | 8.4 7.56 |  |
| 10,700 | $30+365$ | L 8803 | 176 |  | 1021.05 | 5397 | 41 | $3035 \quad 19.7$ | 800 | 244 |  | $1+22$ | + | $7 \cdot 56$ | A 0 |


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|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.A. } \\ \text { B.0001. } \end{gathered}$ | $\begin{gathered} \text { Dec. } \\ \text { ".001. } \end{gathered}$ |  | pe. |
|  | $\bigcirc$ |  |  |  | h m s | S | s | - |  | " |  |  |  |  |  |
| 10,701 | 284030 | $\mathrm{C}^{\text {C }} 12274$ |  |  | $2110 \quad 30.21$ | +2.5689 | $+\cdot 0038$ | $2912+1 \cdot 4$ | +14.809 | $+.247$ | 12.3 | - 6 | - 9 | $9 \cdot 0$ |  |
| 10,702 | 304366 | C 12275 |  |  | $1031 \cdot 34$ | 5463 | $4{ }^{1}$ | $\begin{array}{llll}30 & 16 & 6.8\end{array}$ | 810 | 245 | 12.1 | $+94$ | + 44 | $8 \cdot 2$ |  |
| 10,703 | 284031 | O 12276 |  |  | Io 33.70 | 5793 | 38 | $284^{2} 46 \cdot 9$ | 813 | 248 | 13.2 | + 47 | - 40 | $9 \cdot 0$ |  |
| 10,704 | 294356 | C 12278 |  |  | 1033.79 | 5580 | 39 | $294437 \cdot 9$ | 813 | 245 | 12.4 | + 8 | - 7 | $8 \cdot 4$ |  |
| 10,705 | 274014 | C 12281 | 179 | 41277-8 | 10 40.01 | 5984 | 37 | $27 \quad 46 \quad 52.8$ | 819 | 249 | 11.3 | + 26 | + 16 | $8 \cdot 5$ | K o |
| 10,706 | 304368 | L 88813 |  |  | 211050.42 | +2.5353 | +.0042 | $30 ; 110 \cdot 7$ | +14.829 | $+\cdot 242$ | 10.5 | + 2 | 1 | $9 \cdot 3$ |  |
| 10,707 | $27 \quad 4017$ | C 12284 |  |  | II $7 \cdot 64$ | 6040 | 37 | $\begin{array}{llll}27 & 33 & 3\end{array}$ | 846 | 249 | 10.9 |  |  | $9 \cdot 4$ |  |
| 10,708 | 274018 | C 12286 |  |  | II 14.17 | 6000 | 38 | $27 \quad 45 \quad 51.8$ | 852. | 248 | 11.5 | + 1 | - 20 | $9 \cdot 7$ |  |
| 10,709 | 284032 | C 12291 |  |  | II 21.74 | 5729 | 39 | $\begin{array}{llll}29 & 7 & 8.6\end{array}$ | 860 | 246 | 10.5 | - 10 | + 8 | $8 \cdot 6$ | A 0 |
| 10,710 | 254493 | C 12290 | 201-2 | 41308 | II 24.19 | 6453 | 32 | $25 \quad 28$ I 2.2 | 862 | 253 | II.I | + 8 | + 16 | $8 \cdot 4$ | K 5 |
| 10,711 | 274021 | C 12292 | 205 |  | 21 II 27.47 | $+2.6004$ | +.0038 | $27 \quad 46 \quad 17 \cdot 6$ | +14.865 | +.248 | II•5 | + 23 | - 59 | 9•I |  |
| 10,712 | 274023 | C 12296 | 210 | 41324-5 | I I $42 \cdot 18$ | 6036 | 37 | $\begin{array}{llllllllllllllll}27 & 38 & 7 \cdot 5\end{array}$ | 880 | 249 | $9 \cdot 9$ | 10 | - $4^{2}$ | 8.1 | K 2 |
| 10,713 | 244357 | C 12298 | $212-3$ | 41326 | I] $58 \cdot 56$ | 6543 | 31 | $\begin{array}{llll}25 & 3 & 34 \cdot 7\end{array}$ | 896 | 253 | $9 \cdot 5$ | 52 | 22 | $7 \cdot 06$ | G 5 |
| 10,714 | 314393 | L. 8820 | 220-1 | 41339 | 12 I.43 | 5209 | 44 | 3140 I 4.5 | 899 | 240 | $9 \cdot 9$ | + 7 | - 48 | $7 \cdot 99$ | A 3 |
| 10,715 | 304373 | L 8824 |  |  | 12 II 00 | 5414 | 42 | $3043+6 \cdot 5$ | 908 | 242 | $9 \cdot 9$ | - 15 | - 30 | $9 \cdot 0$ |  |
| 10,716 | 254498 | C 12301 | 228 | 41340 | 211219034 | +2.6375 | +.0033 | $\begin{array}{lllllllllllll}5 & 58 & 28 \cdot 5\end{array}$ | +14.916 | +.25I | $9 \cdot 4$ | + 9 | + 20 | $7 \cdot 26$ | $\mathrm{F}_{2}$ |
| 10,717 | 304376 | L 8825 |  |  | $12 \cdot 22.85$ | 5380 | 43 | $30 \quad 5457 \cdot 9$ | 919 | , 241 | $9 \cdot 7$ | - 15 | 7 | $9 \cdot 1$ |  |
| 10,718 | 304379 | L 8888 | 231 |  | 1230.59 | 5369 | 43 | $30 \quad 58 \quad 55 \cdot 0$ | 927 | 240 | $8 \cdot 9$ | - 17 | 0 | 8.0 | A 2 |
| 10,719 | 254500 | C 12307 |  |  | 1249.55 | 6358 | 34 | $26 \quad 7 \quad 6 \cdot 6$ | 945 | 250 | $8 \cdot 5$ | + 22 | $+\quad 45$ | 8.8 |  |
| 10,720 | 26 fil8 | C 12310 | 243 |  | 1257.49 | 6213 | 36 | $26 \quad 52 \quad 50.2$ | 953 | 248 | $8 \cdot 7$ | + 1 | + 40 | $8 \cdot 5$ | K 2 |
| 10,721 | 294365 | C 12314 |  |  | $\begin{array}{llll}21 & 13 & 5 \cdot 61\end{array}$ | $+2.5620$ | +.0042 | $29518 \cdot 5$ | $+14.961$ | $+\cdot 242$ | $9 \cdot 7$ | $+\quad 4$ | + 9 | $9 \cdot 0$ |  |
| 10,722 | 24.4361 | C 12313 |  |  | 135.99 | 6540 | 32 | 25 II 49.7 | 961 | 252 | $10 \cdot 1$ | + 27 | - 37 | $9 \cdot 3$ |  |
| 10,723 | 304386 | C 12325 |  |  | 1322.69 | 5531 | 43 | $\begin{array}{llll}30 & 18 & 59.7\end{array}$ | 977 | 24 I | $9 \cdot 7$ | $+\quad 40$ | 4 | 8.4 I | A o |
| 10,724 | 314401 | L |  |  | 1323.83 | 5221 | 46 | $314720 \cdot 1$ | 979 | 238 | $10 \cdot 1$ | - 9 |  | $8 \cdot 8$ |  |
| 10,725 | 314402 | L 8835 |  | 41388 | $13 \quad 33.37$ | 5282 | 45 | 3 I $3120 \cdot 3$ | 988 | 237 | $9 \cdot 5$ | + 24 | $t$ | $7 \cdot 8$ | G o |
| $\left.\begin{array}{l} 10,726 \\ 10,727 \end{array}\right\}$ | \} 314403 | L 8836 |  |  | $\begin{array}{llll}21 & 13 & 33.79 \\ & 13 & 34.18\end{array}$ | $+2.5252$ | $+\cdot 0045$ | $\begin{array}{lll}31 & 39 & 51.6\end{array}$ | +14.988 | +-239 | 10.0 8.6 | $+{ }^{2}$ | + 7 | $39 \cdot 0$ |  |
| 10,727 10,728 | $\left\lvert\, \begin{array}{ll} \\ 29 & 4366\end{array}\right.$ | C 12328 | 260-1 |  | $\begin{array}{lll}13 & 34.18 \\ 13 & 38.12\end{array}$ | 5251 | 45 | $\begin{array}{rrr}31 & 40 & 2.8 \\ 29 & 16 & 45.5\end{array}$ | 989 992 | 239 | 8.6 10.3 |  |  | $\int 9.0$ |  |
| 10,728 | 29 31 43 4 | LI 8838 | 260-1 |  | 1338.12 | 5751 | 4 I | $\begin{array}{llll}29 & 16 & 45 \cdot 5\end{array}$ | 992 | 242 | $10 \cdot 3$ | - 9 | 21 | $9 \cdot 0$ |  |
| 10,730 | 284044 | C 12332 |  |  | $1341 \cdot 95$ | 5271 | 45 | $\begin{array}{lll}31 & 35 & 27 \cdot 8 \\ 28 & 52 & 16 \cdot 3\end{array}$ | 996 | 238 | I•3 | + 2 | 9 | $9 \cdot 3$ |  |
|  |  |  |  |  |  | , |  | 28,163 | 898 | 43 | 10.5 | + |  | $9^{\circ} \mathrm{O}$ |  |
| 10,731 | 304389 | L 884I |  |  | 211345.06 | +2.5444 | +-0044 | $30 \quad 46 \quad 38 \cdot 0$ | +14.999 | +.239 | $10 \cdot 2$ | + 9 | + 23 | $8 \cdot 0$ | A 0 |
| 10,732 | 294372 | C I2337 |  |  | $14 \quad 9.44$ | 5627 | 43 | $295645 \cdot 0$ | $15 \cdot 022$ | 241 | $10 \cdot 2$ | + 20 | + 9 | 8.11 | B 5 |
| 10,733 | 304393 | C 12339 | 278 | $4^{1411}$ | 1410.20 | 5525 | 44 | $30 \quad 2638 \cdot 6$ | 023 | 240 | $10 \cdot 7$ | - 36 | 14 | 8.11 | A 0 |
| 10,734 | 284047 | C 123311 |  |  | 1414.54 | 5813 | 4 I | $29 \quad 2+4 \cdot 2$ | 028 | 243 | II. 5 | - 17 | + 13 | $8 \cdot 8$ |  |
| 10,735 | 244368 | B 8165 |  |  | 1419.53 | 6654 | 31 | 2443 36-I | 032 | 251 | 11.7 | $+80$ | 12 | $8 \cdot 4$ | G 5 |
| 10,736 | 294374 | C I2343 | 283 | 41416 | $\begin{array}{llll}21 & 14 & 20.43\end{array}$ | +2.5577 | +•0043 | $301239 \cdot 1$ | +15.033 | +.241 | II•I | - 1 | + 10 | $7 \cdot 96$ | A 0 |
| 10,737 | 314408 | L 48849 | 287 |  | 1432.57 | 5258 | 46 | $31+530 \cdot 9$ | 045 | 237 | II.8 | 23 | - 26 | $9 \cdot 3$ | A 0 |
| 10,738 | 294376 | C 123348 |  |  | 1433.50 | 5773 | 42 | 291654.8 | 046 | 24 I | 11.9 | 28 | 6 | $8 \cdot 7$ |  |
| 10,739 | $24+370$ | B 8171 | 285-6 | 41420 | 1438.68 | 6743 | 3 I | 241650.8 | 051 | 251 | 10.6 | 11 | 9 | 6.80 | K O |
| 10,740 | $28+05 \mathrm{I}$ | C I235I |  |  | $1455 \cdot 31$ | 5801 | 41 | 29 II $7 \cdot 4$ | 067 | 242 | 11.5 | + 5 | + 11 | $9 \cdot 0$ |  |
| 10,741 | $\begin{array}{lll}25 & +507\end{array}$ | C 12352 | 291 | 41435 | 211459.07 | +2.6455 | +.0034 | $25512 \cdot 7$ | $+15.070$ | +.247 | $10 \cdot 9$ | 121 | + 16 | $8 \cdot 5$ | G 5 |
| 10,742 | 254508 | C I 2354 |  | 41439 | $15 \quad 1.79$ | 6483 | - 34 | $25+240 \cdot 2$ | 073 | 248 | 10.5 | 9 | 2 | $8 \cdot 2$ | $\mathrm{F}_{2}$ |
| 10,743 | $24+373$ | C 12356 | 292-3 | 41440 | $15 \quad 4.23$ | 6599 | 33 | $\begin{array}{llll}25 & 6 & 2 \cdot 4\end{array}$ | 075 | 249 | II. 1 |  | 14 | 8.8I | A 0 |
| 10,744 | $29+378$ | C 123358 | 296-7 | 41446 | $15 \quad 9.65$ | 5771 | 42 | 292148.6 | 081 | 241 | $10 \cdot 3$ | 12 | 4 | $7 \cdot 12$ | B 9 |
| 10,745 | 314416 | L 8855 | 300 | 41450 | $15 \quad 10.48$ | 5266 | 47 | $\begin{array}{llll} & 31 & 4 & 4\end{array}$ | 081 | 236 | II•3 | + 19 | - 20 | $7 \cdot 33$ | K 2 |
| 10,746 | $24+375$ | B 8175 |  |  | $2115 \quad 25.45$ | +2.6682 | +.0032 | $244137 \cdot 8$ | +15.096 | +.250 | II•2 | + 30 | + 31 | 9•3 |  |
| 10,747 | 294380 | C 12363 | 306 |  | I5 29.45 | 5791 | 43 | $291848 \cdot 0$ | 100 | 241 | II•9 | $+\quad 52$ | $+\quad 39$ | $9 \cdot 3$ |  |
| 10,748 | $30+396$ | L ${ }_{\text {L }}$ 886I |  |  | $1542 \cdot 26$ | 5536 | 45 | $\begin{array}{lllll}30 & 34 & 59 \cdot 4\end{array}$ | 112 | 238 | 12.3 | - 6 | $+\quad 39$ | $9 \cdot 3$ |  |
| 10,749 | 294382 | C 12369 |  |  | 1543.66 | 5615 | 44 | $\begin{array}{lllll}30 & 12 & 12.6\end{array}$ | 113 | 239 | 12.5 | - 14 | + 5 | $9 \cdot 3$ |  |
| 10,750 | 274042 | C 1237 I |  | $4^{1} 472$ | 1549.37 | 6171 | 38 |  | 119 | 244 | II. 3 | + 37 | - 30 | $8 \cdot 6$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Doc. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | SpectralTypo. |
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|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { V.ooor. } \end{aligned}$ | $\begin{aligned} & \text { Doc. } \\ & \text { N. } \mathrm{Oc} \text {. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | 8 | s | - ' |  | " |  |  |  |  |  |
| 10,751 | 294383 | C 12373 | 316 |  | 2115 51.48 | $+2.5728$ | +.0043 | 293958.8 | $+15 \cdot 121$ | +.240 | 10.3 |  | - 5 | $8 \cdot 2$ | F 5 |
| 10,752 | 264130 | C 12372 |  | 41473 | 1552.08 | 6231 | 38 | $27 \begin{array}{llll} & 7 & 24.0\end{array}$ | 121 | 245 | $1 \mathrm{I} \cdot 7$ | + 108 | + 17 | $8 \cdot \mathrm{I}$ | G 5 |
| 10,753 | 304398 | L. 8864 |  |  | 15 55.91 | 5499 | 46 | $\begin{array}{llllllllllll}30 & 47 & 18.9\end{array}$ | 125 | 237 | II•I | - 17 | - 4 | $9 \cdot 0$ |  |
| 10,754 | 264131 | C 12374 |  |  | $16 \quad 0.56$ | 6363 | 37 | $\begin{array}{llllllllll}26 & 27 & 18.6\end{array}$ | 129 | 246 | $\mathrm{II}^{1} 3$ | - | - | $9 \cdot 3$ |  |
| 10,755 | 284057 | C 12379 |  |  | 1620.96 | 5911 | 42 | $28 \quad 4843 \cdot 1$ | 149 | 241 | $9 \cdot 2$ | 8 | 25 | $8 \cdot 6$ |  |
| 10,756 | 244379 | B 8185 | 330-1 |  | 211638.48 | $+2.6720$ | +.0032 | $24 \quad 37 \quad 13.7$ | +15.166 | +-248 | $10 \cdot 1$ | $\bigcirc$ | - 5 | $8 \cdot 4$ | K o |
| 10,757 | 314421 | L 8870 |  |  | $1639 \cdot 33$ | 5329 | 47 |  | 166 | 235 | 10.9 | 12 | - 18 | $9 \cdot 3$ |  |
| 10,758 | 254513 | C 12381 | 332 | 41503 | 1639.65 | 6488 | 36 | $25 \begin{array}{lll}25 & 5 & 8.4\end{array}$ | 167 | 245 | II•I | - 10 | - 26 | $7 \cdot 7$ | K 5 |
| 10,759 | 274044 | C 12382 | 333 | 41505 | $1640 \cdot 17$ | 6208 | 39 | $27 \begin{array}{llll}20 & 9 \cdot 1\end{array}$ | 167 | 244 | 10.9 | 10 | + 17 | 8.2 | F 8 |
| 10,760 | 284058 | C 12383 | 335 | 41506 | 1641.60 | 5991 | 41 | $\begin{array}{llll}28 & 27 & 3.8\end{array}$ | 169 | 241 | ${ }_{1} \cdot 7$ | - 9 | + 23 | $7 \cdot 6$ | F 8 |
| 10,761 | 294386 | C 12385 | 338 | 41511 | $211644 \cdot 80$ | $+2.5733$ | +.0043 | $294457 \cdot 9$ | +15.172 | +.239 | II.I | - | + 13 | $8 \cdot 7$ |  |
| 10,762 | 264133 | $\mathrm{C}_{12388}$ |  |  | 1658.73 | 6290 | 38 | $26 \quad 5642 \cdot 7$ | 185 | 244 | II•I | + 36 | + 14 | $9 \cdot 3$ |  |
| 10,763 | 294391 | C 12398 | 354 | 41537 | 1719.33 | 5718 | 45 | $295328 \cdot 6$ | 205 | 238 | 9.7 | + 10 | - 46 | $8 \cdot 5$ |  |
| 10,764 | 284063 | C 12400 |  |  | 1731.29 | 5946 | 42 | $284645 \cdot 6$ | 216 | 239 | $1 \mathrm{I} \cdot 7$ | + 40 | + 8 | $9 \cdot 3$ |  |
| 10,765 | 274049 | C 12402 | 358 | 41552 | 17 39.81 | 6067 | 42 | 28 10 59.3 | 224 | 241 | 11.4 | - 38 | - 52 | $8 \cdot 2$ | K 2 |
| 10,766 | 304408 | L 8877 |  |  | $211748 \cdot 15$ | . 5496 | +.0047 | $\begin{array}{llll}31 & 2 & 36.4\end{array}$ | +15.232 | +.235 | 12.7 | + 10 | + 60 | $9 \cdot 3$ |  |
| 10,767 | 244384 | B 8193 | 362-3 | 41553 | 1750.77 | 6805 | 33 |  | 234 | 247 | 11.7 | + 28 | - 18 | $7 \cdot 8$ | A 2 |
| 10,768 | 254519 | C 12406 | 367 |  | $1755 \cdot 12$ | 6596 | 35 |  | 239 | 245 | 11.9 | $\bigcirc$ | + | 8.0 | A 3 |
| 10,769 | 304410 | C 12407 | 372 |  | 1756.23 | 5631 | 46 | $\begin{array}{llllllllllll}30 & 24 & 4\end{array}$ | 240 | 236 | 10.8 | - 22 | + 4 | 8.5 |  |
| 10,770 | 244385 | B 8196 | 374 |  | 18 II.73 | 6751 | 33 | $24 \quad 3714.7$ | 254 | 247 | 11.9 | 93 | + 61 | $9 \cdot 3$ |  |
| 10,771 | 254521 | $\mathrm{Cl}_{12411}$ | 377 |  | $21 \quad 18 \quad 12.84$ | +2.6473 | +.0037 | 26.731 .0 | + 15.255 | +.243 | 12.1 | + 18 | $\bigcirc$ | 9.0 | K 5 |
| 10,772 | 244386 | B 8197 | 379 |  | $18 \quad 23.09$ | - 6747 | 33 | $24 \quad 3956 \cdot 4$ | 265 | 247 | $11 \cdot 3$ | - 13 | + 15 | $9 \cdot 0$ | G 5 |
| 10,773 | 284066 | $\mathrm{C}^{\mathrm{C}} 12415$ |  |  | $18 \quad 24 \cdot 68$ | 5951 | 43 | 28 51 $57 \cdot 4$ | 266 | 239 | $12 \cdot 1$ | - 6 | + 6 | $8 \cdot 5$ | A 0 |
| 10,774 | 284067 | C 12416 |  |  | $1825 \cdot 34$ | 5979 | 43 | $28 \quad 4317 \cdot 3$ | 267 | 239 | 12.3 | + 38 |  | $9 \cdot 1$ |  |
| 10,775 | 254522 | C 12414 | 382 | 41573 | $18 \quad 26.37$ | 6537 | 36 | $2548 \quad 26 \cdot 1$ | 268 | 244 | 11.7 | + 5 | + 14 | 8.7 | K 2 |
| 10,776 | 294395 | C 12418 |  |  | 211829.54 | +2.5797 | +.0044 | $293851 \cdot 3$ | +15.271 | +.238 | 12.3 | + 12 | - 5 | $8 \cdot 4$ |  |
| 10,777 | 31443 I | L 8883 | 392-3-4 | 41587 | 1844.22 | 5410 | 48 |  | 285 | 233 | 12.3 | + 19 | - 34 | 8.6 | F 5 |
| 10,778 | 254524 | C 12422 |  |  | $1845 \cdot 96$ | 6559 | 37 | $2543 \begin{array}{ll}35 \cdot 9\end{array}$ | 287 | 244 | $11 \cdot 3$ | - 18 | 18 | $9 \cdot 3$ |  |
| 10,779 | 304415 | C 12426 | 396 |  | $1849 \cdot 31$ | 5674 | 46 | $\begin{array}{llll}30 & 18 & 16.0\end{array}$ | 290 | 235 | 11.9 | - 47 | - 12 | $9 \cdot 0$ |  |
| 10,780 | 294397 | C 12425 | 395 | 41588 | 1849.81 | 5750 | 45 | $29 \quad 55 \quad 29.5$ | 290 | 236 | $11 \cdot 3$ | + 27 | - 3 | $6 \cdot 28$ | K |
| 10,781 | 304417 | C 12428 |  |  | 211856.89 | $+2.5676$ | +.0046 | 3018.39 .0 | +15.297 | +. 235 | 12.5 | - 6 | + 20 | $9 \cdot 7$ |  |
| 10,782 | 244389 | C 12430 |  |  | 19 4.20 | 6678 | 35 | 25 | 304 | 245 | 14.0 | + 11 | + | $9 \cdot 1$ |  |
| 10,783 | 284072 | C 12435 |  |  | 1910.55 | 6028 | 44 | 28 | 310 | 238 | 12.3 | + 20 | 17 $+\quad 1$ | 8.8 |  |
| 10,784 |  | L 8888 |  |  | 19 11.25 | 5409 | 48 | $31 \begin{array}{lllllll}38 & 33\end{array}$ | 310 | 233 | 13.1 | + 40 | - 38 |  |  |
| 10,785 | 31 4432 |  | 402-3 | 41608 | 19 11.25 | 5409 | 48 | 31 $3834 \cdot 8$ | 310 | 233 | I | + 40 | - 38 | $8 \cdot 4$ | F 2 |
| 10,786 |  |  |  |  | 211911.40 | +2.5409 | +.0048 | $313836 \cdot 2$ | +15.310 | +.233 | . 8 | + 40 | - 38 |  |  |
| 10,787 | 294400 | C 12437 | 404 | 41609-10 | 1915.83 | 5894 |  |  |  | 238 | 10.9 | - 22 |  | $7 \cdot 7$ | F 8 |
| 10,788 | 294401 | $\mathrm{C}_{12440}$ |  |  | 1922.26 | 5882 | 45 | 29 I9 588.3 | 320 | 237 | 12.9 | - 13 | + 10 | 9.5 |  |
| 10,789 | 254527 | C 12439 | 405 |  | 1922.78 | 6506 | 38 | $\begin{array}{llllllllll}26 & 5 & 12.2\end{array}$ | 321 | 242 | 13.3 | + 14 |  | $9 \cdot 0$ |  |
| 10,790 | 294403 | C 12442 | 409-10 | 41618-9 | 1925.41 | 5865 | 45 | $2925 \quad 38 \cdot 2$ | 324 | 237 | 11.9 | + $\quad 27$ | + 11 | $8 \cdot 0$ | G 5 |
| 10,791 | 244390 | B 8201 |  |  | 211926.50 | $+2.6785$ | +.0034 | $24 \quad 3439 \cdot 8$ | +15.325 | +.246 | 13.7 | -61 | - 137 | 8.6 | G 5 |
| 10,792 | 304420 | L 8890 |  |  | 1933.61 | 5579 | 48 | $\begin{array}{llll}30 & 52 & 6.7\end{array}$ | 33 I | 233 | 13.3 | + 15 | - 16 | $9 \cdot 3$ | A 3 |
| 10,793 | 304421 | L 8891 L 889 |  | 41643 | 1937.68 | 5609 | 47 | $3043050 \cdot 2$ | 335 | 233 | II•9 | + 9 | - 5 | $7 \cdot 66$ | K 2 |
| 10,794 | 314435 | $\begin{array}{lr}\mathrm{L} & 8892 \\ \mathrm{C}\end{array}$ |  |  | 1937.72 | 5370 | 50 |  | 335 | 231 | 13.2 | + 6 | - 25 | $9 \cdot 0$ |  |
| 10,795 | 264145 | C 12447 |  |  | 19 41.13 | 6383 | 40 |  | 338 | 240 | 13.5 | + 10 | - 16 | $9 \cdot 0$ | F 8 |
| 10,796 | 274055 | C 12449 |  |  | 211942.93 | $+2.6126$ | +.0043 | $\begin{array}{llll}28 & 7 & 36 \cdot 3\end{array}$ | +15.340 | +.238 | 13.9 | + 20 | + | $9 \cdot 3$ |  |
| 10,797 | 274054 | C 12448 |  |  | 1942.99 | 6223 | 41 | $\begin{array}{llll}27 & 37 & 20.9\end{array}$ | 340 | 239 | 13.5 | 25 | - 9 | 9. 1 |  |
| 10,798 | 274056 | C 12453 |  | $41634$ | 1955.06 | 6139 | 43 | $\begin{array}{lll}28 & 5 & 6.8\end{array}$ | 351 | 238 | 10.5 | - 25 | - 17 | 8.4 | Fo |
| 10,799 | 294406 | C 12455 | $4^{22}{ }^{-6}$ | $41636$ | 1955.11 | 5913 | 44 | $2914446 \cdot 0$ | 352 | 237 | 12.3 | + 28 | - | $8 \cdot 6$ |  |
| 10,800 | 244393 | B 8209 |  |  | 1957.14 | 6833 | 34 | $24 \quad 22$ 11.2 | 353 | 245 | $11 \cdot 9$ | + 44 | - | 9.0 |  |

[^21]| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Doc. 1910.0. | Precession. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { I } 900+ \end{aligned}$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. 8.000 I. | Dec. ".001. |  |  |
|  | - |  |  |  | h m | 8 | 8 | - | " | " |  |  |  |  |  |
| 10,801 | 244394 | B 8210 |  | 41637 | $21 \quad 20 \quad 6 \cdot 36$ | $+2.6735$ | $+.0035$ | 245531.4 | +15.362 | + 244 | 10.9 | $+30$ | + 11 | $6 \cdot 22$ | A 0 |
| 10,802 | 234305 | B 8212 |  |  | $2020 \cdot 76$ | 6882 | 33 | $24 \quad 8 \quad 29 \cdot 9$ | 376 | 246 | 12.1 | $+\quad 19$ | + 17 | $6 \cdot 42$ | K o |
| 10,803 | 264146 | C 12461 |  |  | $20 \quad 24.35$ | 6499 | 38 | $261441 \cdot 5$ | 379 | 241 | $1 \mathrm{I} \cdot 5$ | + 36 | - 9 | 9.1 | Fo |
| 10,804 | 244396 | $\begin{array}{ll}\text { B } & 8213\end{array}$ |  |  | $20 \quad 29.72$ | 6768 | 35 |  | 384 | 244 | 12.3 | + 73 | - 6 | 8.4 | K o |
| 10,805 | 31 4437 | L 8896 | 438 | 41667 | 2030.91 | 5498 | 49 | 312314.0 | 385 | 231 | 12.5 | + 15 | + 27 | $8 \cdot 7$ | F 8 |
| 10,806 | 304428 | L 8895 | 437 | 41649 | $212031 \cdot 19$ | +2.5669 | $+\cdot 0047$ | $30 \quad 32 \quad 57 \cdot 5$ | +15.385 | +.233 | 12.3 | + 29 | + 4 | 6.72 | A 2 |
| 10,807 | 25453 I | C 12462 | 434 | 41658 | $2034 \cdot 21$ | 6587 | 37 | 254713.3 | 388 | 241 | II• 7 | + 28 * | $-7^{*}$ | $5 \cdot 74$ | Fo |
| 10,808 | 294407 | C 12465 |  |  | $2038 \cdot 16$ | 5808 | 46 | $29 \begin{array}{lll}29 & 3.9\end{array}$ | 392 | 234 | 11.9 | - 10 | - 6 | c. 3 |  |
| 10,809 | 314440 | L 8903 | 446 |  | $2045 \cdot 44$ | 5480 | 49 | 313022.1 | 399 | 231 | 12.5 | + 14 | - 58 | 9.I |  |
| 10,810 | 254533 | C 12468 |  | 41674 | 2048.02 | 6646 | 37 | $25 \quad 2933.9$ | 401 | 242 | 12.7 | + 20 | + 12 | 7.06 | A 0 |
| 10,8II | 264149 | C 12469 | $44^{2}$ |  | $212050 \cdot 42$ | +2.6508 | $+.0038$ | $26 \quad 1436.5$ | +15.403 | + 241 | $1 \mathrm{I} \cdot 7$ | - | - 29 | $8 \cdot 6$ | K 2 |
| 10,812 | 264150 | C 12470 |  |  | 2054.79 | 6427 | 39 | $26 \quad 4125 \cdot 7$ | 407 | 240 | 12.1 | + 1 | - 9 | $9 \cdot 3$ | K 2 |
| 10,813 | 234307 | B 8216 |  |  | 2058.14 | 6913 | 34 | $\begin{array}{llll}24 & 2 & 12.4\end{array}$ | 410 | 245 | 12.8 | - 3 | - 19 | $9 \cdot 0$ |  |
| 10,814 | 304430 | L 8907 |  |  | $21 \quad 1 \cdot 12$ | 5629 | 49 | $3048 \quad 43 \cdot 3$ | 413 | 232 | 12.5 |  | + 4 | 9.0 |  |
| 10, 815 | 26415 I | C 12472 |  | 41684 | $21 \quad 2.25$ | 6366 | 41 | $\begin{array}{llll}27 & 1 & 48.7\end{array}$ | 414 | 239 | 12.7 | + | + 17 | 6.88 | B 8 |
| 10,816 | 264153 | C 12474 | 453 |  | $\begin{array}{llll}21 & 21 & 9.67\end{array}$ | +2.6420 | $+.0041$ | $26+525 \cdot 6$ | +15.421 | +.239 | 12.7 | + | + | 8.8 |  |
| 10,817 | 234308 | B 8217 |  | 41686 | 2113.77 | 6907 | 34 | $24 \quad 611.0$ | 425 | 245 | 12.2 | + 24 | - 15 | $7 \cdot 9$ | A 2 |
| 10,818 | 30443 I | L 8910 | 458 |  | 2118.53 | 5581 | 49 | 31.518 .6 | 429 | 232 | 12.2 | + | $+37$ | $8 \cdot 5$ |  |
| 10,819 | 264155 | C 12478 | 457 |  | 2I 25.42 | 6423 | 41 | $26 \quad 4616 \cdot 5$ | 436 | 239 | 13.1 | + 18 | + 10 | 8.6 | A 2 |
| 10,820 | 264154 | C 12479 |  |  | 2125.58 | 6484 | 40 | $26 \quad 2644 \cdot 0$ | 436 | 240 | 12.3 | - 27 | + 10 | $9 \cdot 0$ | G o |
| 10,82 1 | 284085 | $\mathrm{C}^{\circ} 1248 \mathrm{I}$ | 459 | 41697-9 | 21 2125.86 | +2.5985 | $+.0045$ | $29 \quad 4 \quad 23 \cdot 3$ | +15.436 | +.236 | 10.6 | + 4 | + 13 | 7-16 | A 0 |
| 10,822 | 264156 | C 12483 | 460 |  | 2132.05 | 6416 | 4 I | 264933.6 | 442 | 238 | 11.5 | - 108 | - 158 | 8.4 | G 5 |
| 10,823 | 31 4443 | L 8912 | 463 |  | $2133 \cdot 46$ | 5445 | 51 |  | 443 | 230 | II.5 | - | - 52 | $8 \cdot 7$ |  |
| 10,824 | 304434 | C 12489 |  |  | 2153.55 | 5757 | 47 |  | 462 | 232 | 10.8 | - 43 | + 3 | 8.6 |  |
| 10,825 | 264159 | C 12491 |  |  | 2213.23 | 6476 | 41 | 2635 II•7 | 480 | 239 | 12.7 | + 26 | 6 | $9 \cdot 3$ |  |
| 10,826 | 244400 | B 8219 |  |  | 212214.28 | +2.6829 | $+.0035$ | $24 \quad 39 \quad 6 \cdot 2$ | +15.481 | + 243 | 13.4 | - 15 | + | $9 \cdot 3$ |  |
| 10,827 | 244402 | B 8220 |  |  | $22 \quad 18.34$ | 6862 | 35 | $24 \begin{array}{llll}28 & 22.8\end{array}$ | 485 | 243 | 13.1 | + 12 | - | $9 \cdot 3$ | $\text { F } 8$ |
| 10,828 | 294414 | C 12497 |  |  | 2224.96 | 5794 | 48 | 301021.5 | 491 | 233 | 12.3 | - | + 5 | 9.0 |  |
| 10,829 | 304436 | L 8922 |  |  | 2225.62 | 5598 | 50 | 319815 | 492 | 231 | 12.7 | + 13 | + 1 | $9 \cdot 3$ |  |
| 10,830 | 314450 | L 8926 |  |  | $2249 \cdot 6 \mathrm{I}$ | 5526 | 51 |  | 514 | 229 | 12.3 | 22 | - | $9 \cdot 3$ |  |
| 10,831 | 314451 | L 8927 |  |  | 212251.09 | $+2.5489$ | +.005 1 | 3144 41-3 | +15515 | +.229 |  | - II | - 11 | $9 \cdot 0$ |  |
| 10,832 | 314452 | L. 8928 | 489 |  | $2252 \cdot 38$ | 5537 | 51 | $\begin{array}{llll}31 & 30 & 57.9\end{array}$ | - 516 | 229 | $9 \cdot 8$ | - 3 | + 24 | $8 \cdot 6$ | A 2 |
| 10,833 | 304438 | L 8929 |  |  | 2254.78 | 5755 | 49 | $\begin{array}{lllll}30 & 26 & 14.5\end{array}$ | 519 | 231 | II. 5 | + 70 | $+4$ | $9 \cdot 3$ |  |
| Io,834 | 314453 | L 8930 |  |  | 2256.34 | 548 I | 52 |  | 520 | 228 | 11.4 | $+\quad 19$ | - 15 | $8 \cdot 7$ | B 8 |
| 10,835 | 264163 | C 12506 | 488 |  | 2257.39 | 6422 |  | 2658 3-1 | 52 I | 237 | $9 \cdot 6$ | + | 3 | $9 \cdot 0$ |  |
| 10,836 | 314454 | L 8935 |  |  | 212324.93 | $+2.5589$ | +.0051 | $311948 \cdot 7^{\circ}$ | +15.546 | + 229 | - | + 34 | + 15 | $8 \cdot 6$ |  |
| 10,837 | 254539 | ${ }^{\text {O }} 12512$ |  |  | 2327.77 | 6728 | 38 | $25 \begin{array}{lllllll}21 & 19.7\end{array}$ | 549 | 240 | 10.4 | - 3 | - 21 | 9.01 | K。 |
| 10,838 | 274065 | $\mathrm{C}^{\mathrm{C}} 12513$ |  |  | $\begin{array}{llll}23 & 28.42\end{array}$ | 6311 | 44 |  | 550 | 236 | $10 \cdot 7$ | + 19 | + 6 | $9 \cdot 1$ |  |
| 10,839 | 274066 | C 12514 | 505 | 41761-2 | $\begin{array}{llll}23 & 33.06\end{array}$ | 6340 | 43 | $27 \quad 28 \quad 57 \cdot 5$ | 554 | 235 | $9 \cdot 5$ | - 10 | + 19 | 8.0 | K 5 |
| 10,840 | 314457 | L 8937 |  |  | $23 \quad 38.77$ | 5536 | 51 | $313728 \cdot 1$ | 559 | 228 | 10.5 | + 39 | 4 | $9 \cdot 3$ |  |
| 10,841 | 264164 | C 12516 | 507 | 41767-9-70 | 212342.03 | +2.6393 | +-0043 |  | +15.562 | +.236 | $0 \cdot 2$ | + 26 * | + $22 *$ | $5 \cdot 38$ | A 0 |
| 10,842 | 314459 | L 8939 |  |  | 23 54.47 | 5588 | 52 | 312413.0 | 574 | 228 | 10.3 | - II | - II | $7 \cdot 9$ | K。 |
| 10,843 | 234318 | B 8236 | 513 | 41775 | 23 58-12 | 6941 | 35 |  | 577 | 241 | 11.6 | + | - 12 | $7 \cdot 8$ | K 5 |
| 10, 844 | 264169 | C 12526 |  |  | $24 \quad 4.03$ | 644 I | 42 | $27.05 \cdot 6$ | 582 | 236 | 12.0 | + 6 | + 1 | $8 \cdot 7$ | A 2 |
| 10,845 | 304446 | L 8940 | 521 |  | $24 \quad 6.01$ | 5679 | 51 |  | 584 | 229 | 11.8 | 23 | - 4 | $8 \cdot 5$ |  |
| 10,846 | 264170 | C 12531 | 520 |  | 212411.36 | +2.6410 | +.0042 | 27 II 6.1 | +15.589 | +.236 | $12 \cdot 1$ | - 14 | - 2 | $8 \cdot 7$ |  |
| 10,847 | 254540 | C 12532 |  |  | 2413.50 | 6656 | 40 | 25 50 38.1 | 591 | 238 | 12.3 | + 5 | - 24 | $9 \cdot 3$ |  |
| 10,848 | 234319 | B 8238 | 519 |  | 2414.90 | 6943 | 35 | 241432.0 | 592 | 241 | 11.5 | + 28 | + 8 | $9 \cdot 4$ | M a |
| 10,849 | 314462 | L 8944 | 526 | 41787 | $2417 \cdot 44$ | 5512 | 53 |  | 595 | 227 | 10.4 | + $94 *$ | + 62 * | $5 \cdot 74$ | F 0 |
| 10,850 | 244406 | B . 8240 | 522 |  | 2421.09 | 6937 | 36 | $\begin{array}{lllllllll}24 & 17 & 17.8\end{array}$ | 598 | 241 | 11.7 | + 29 | - 23 | $9 \cdot 7$ | F 5 |



| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 191000 | Precession. | Soc. Var. | Dec. 1910.0. | Precession. | $\begin{aligned} & \text { Soc. } \\ & \text { Var. } \end{aligned}$ | Epoch 1900+ | Annual P.M. |  | Mag. | $\begin{array}{\|c} \hline \text { Spectral } \\ \text { Type. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & \text { s.000I. } \end{aligned}$ | $\begin{aligned} & \text { Doe. } \\ & \text { Dooi. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m s | 5 | 8 | - , " |  | " |  |  |  |  |  |
| 10,951 2 | 294459 | C 12710 |  |  | 213250.99 | $+2.6206$ | $+\cdot 0054$ | $29 \quad 27 \quad 15.7$ | +16.054 | +.222 | 12.7 | + 22 | 45 | $8 \cdot 5$ |  |
| 10,952 | 244438 | C 12709 | 742 |  | 3251.65 | 6958 | 44 | $251240 \cdot 0$ | 055 | 229 | 12.3 | - 7 | + 10 | $8 \cdot 41$ | K o |
| 10,953 2 | 274117 | C 12711 |  |  | $3254 \cdot 23$ | 6553 | 49 | $27 \begin{array}{llllllll} & 32 & 14.6\end{array}$ | 057 | 225 | 13.1 | + 49 | - 1 | $8 \cdot 8$ | G 5 |
| 10,954 | $31+506$ | L 9030 |  |  | 3254.43 | 5749 | 60 |  | 057 | 218 | 12.5 | + 20 | + 14 | $9 \cdot 3$ |  |
| 10,955 ${ }^{2}$ | 294460 | C 12714 | 750-1 |  | $3258 \cdot 58$ | 6128 | 55 | 295325.4 | 061 | 221 | 12.3 | 17 | - 19 | $9 \cdot 3$ |  |
| 10,956 2 | 264215 | C 12713 |  | 42 3 5 | $213259 \cdot 57$ | +2.6658 | $+.0048$ | $26 \quad 57 \quad 25 \cdot 4$ | +16.062 | +.226 | 11.4 | - | - 10 | $8 \cdot 7$ | K 5 |
| 10,957 2 | 284140 | C 12717 |  |  | 3310.17 | 6401 | 52 | $28 \quad 2533 \cdot 5$ | 071 | 224 | 10.5 | - 14 | - 9 | 9.0 |  |
| 10,958 ${ }^{2}$ | 244439 | C 12720 | 762 |  | 3317.62 | 6971 | 44 | 25 II 23.3 | 077 | 228 | 10.7 | + 27 | + 12 | $9 \cdot 3$ |  |
| 10,959 | 314508 | L 9034 |  |  | $\begin{array}{llll}33 & 19.33\end{array}$ | 5786 | 59 | $314455 \cdot 3$ | 079 | 218 | 10.9 | $+\quad 57$ | + 73 | $9 \cdot 0$ |  |
| 10,960 2 | 244440 | B 8316 |  |  | 3321.60 | 7014 | 43 | $24 \quad 56$ 36.1 | 081 | 228 | 10.0 | - 19 | - 14 | $8 \cdot 6$ | K 2 |
| 10,961 | 284141 | C 12722 | 767 | 42157 | 21 3321.65 | +2.6290 | +.0053 | $29 \quad 4 \quad 5 \cdot 9$ | $+16.081$ | +.223 | $9 \cdot 9$ | 18 | + 12 | 8.0 | F 8 |
| 10,962 | 314510 | L 9038 |  |  | 3344.50 | 5866 | 58 |  | 102 | 218 | $10 \cdot 1$ | - 22 | - 9 | $9 \cdot 3$ |  |
| 10,963 | 284143 | C 12729 | 774 |  | 33 50.29 | 6269 | 53 | 291452.5 | 106 | 222 | $9 \cdot 3$ | - 9 | - 29 | $8 \cdot 7$ |  |
| 10,964 | 254579 | C 12730 | 772 |  | 3352.82 | 6823 | 46 | $26 \quad 7 \quad 56 \cdot 5$ | 108 | 227 | 10.3 | 9 | + 18 | 9.1 | A 3 |
| 10,965 | 26422 I | C 12731 | 775 |  | 3355.00 | 6708 | 48 | $2647 \quad 53 \cdot 3$ | 110 | 225 | $9 \cdot 3$ | 71 | - 56 | 8.8 | F 8 |
| 10,966 | 294464 | C 12732 | 779-81-2-3 | 42181 | 21344.30 | $+2.6238$ | $+\cdot 0055$ | $\begin{array}{llll}29 & 27 & 7 \cdot 9\end{array}$ | +16.118 | +.221 | 9.5 | - 4 | - 14 | 8. I | A 0 |
| 10,967 | 284145 | C 12733 |  |  | 3413.22 | 6408 | 54 | $28 \quad 32 \begin{array}{llll} & 10 \cdot 3\end{array}$ | 126 | 221 | II.I | + | + 14 | $9 \cdot 3$ |  |
| 10,968 | 274121 | $\mathrm{C}^{\text {C } 12735}$ |  | 42187 | 3416.07 | 6592 | 50 | $27 \quad 3031.9$ | 128 | 224 | 10.8 | + 9 | + 6 | $8 \cdot 4$ |  |
| 10,969 | 294466 | $\mathrm{C}^{\text {C } 12736}$ |  |  | $3416 \cdot 72$ | ${ }_{6144}$ | 56 | $295950 \cdot 8$ | 129 | 220 | $10 \cdot 3$ | - | - 9 | $9 \cdot 3$ |  |
| 10,970 | 294467 | C 12739 |  |  | $3426 \cdot 32$ | 6112 | 56 | 30 II $34 \cdot 3$ | 137 | 218 | 11.4 | + 87 | $+76$ | $9 \cdot 3$ |  |
| 10,971 | 284147 | $\mathrm{C}_{\mathrm{C}}^{12740}$ |  |  | $213427 \cdot 36$ | $+2.6362$ | +.0054 | $\begin{array}{llll}28 & 49 & 30 \cdot 0\end{array}$ | +16.138 | +.221 | 10.7 | - 14 | $\begin{array}{r}\text { P } \\ +\quad 29 \\ \hline\end{array}$ | 8.8 |  |
| 10,972 | 274122 | C 12741 | 792 | 42196 | 34 30.95 | 6638 | 49 | $27 \quad 16 \quad 57 \cdot 2$ | 141 | 225 | $10.3{ }^{\circ}$ | + | - 28 | 8.6 |  |
| 10,973 | 244445 | C 12746 |  | $4^{2200-1}$ | 3441.82 | 7018 | 43 |  | 150 | 227 | $8 \cdot 9$ | - 11 | + 33 | $6 \cdot 30$ | G 5 |
| 10,974 | 304491 | L 9048 | 805 |  | $3444 \cdot 74$ | 6045 | 57 | 303543.5 | 153 | 218 | 10.1 | - 12 | + 36 | $8 \cdot 5$ |  |
| 10,975 | $30449^{2}$ | L 9049 |  |  | $3445 \cdot 21$ | 6007 | 58 | $\begin{array}{llll}30 & 48 & 6 \cdot 9\end{array}$ | 153 | 218 | $10 \cdot 9$ | $+\quad 40$ | + 2 | 9.0 |  |
| 10,976 | 25458 I | C 12750 | 804 |  | $2135 \quad 1.55$ | $+2.6890$ | +.0047 | $25 \begin{array}{llll}5 & 53 & 39 \cdot 3\end{array}$ | +16.167 | +.225 | 10.6 | 28 | - 55 | 8.7 | Ko |
| 10,977 | 314522 | L ${ }^{\text {L }} 9052$ | 814-5 |  | $\begin{array}{llll}35 & 16.89\end{array}$ | 5931 | 60 | 31 17 15.1 <br> 1 5  | 18 I | 216 | H1. 2 | 16 | - 41 | $8 \cdot 2$ | F 8 |
| 10,978 | 234361 | B 8331 |  | 42221 | $35 \quad 17.44$ | 7198 | 42 |  | 181 | 228 | 10.4 | + 7 | - 4 | 7.21 | K 2 |
| 10,979 | 304495 | C 12754 |  |  | $35 \quad 21.94$ | 6106 |  |  | 185 | 217 | II.3 | + 26 | + <br> $+\quad 4$ <br> 10 | 8.71 8.4 | M ${ }_{\text {K }}$ |
| 10,980 | 254582 | C 12753 | 813 |  | 35 24.19 | 6849 |  | $\begin{array}{lllll}26 & 11 & 2.9\end{array}$ | 187 | 225 | II-9 | - 6 | - 10 | $8 \cdot 4$ | K 。 |
| 10,981 | 314523 | L 9055 |  |  | $2135 \quad 25 \cdot 32$ | +2.5870 | +.0061 | $\begin{array}{llll}31 & 37 & 37.4\end{array}$ | +16.188 | $+\cdot 216$ | 11.9 | + 28 | + 31 | $9 \cdot 0$ |  |
| 10,982 | 254583 | C 12757 |  |  | $35 \quad 28.49$ | 6942 |  | $25 \begin{array}{lllllllllll} & 38 & 54 \cdot 6\end{array}$ | 191 | 225 | 11.8 | - 9 | - 22 | $9 \cdot 3$ |  |
| 10,983 | 304496 | L. 9056 | 826 |  | 3530.88 | 5968 |  |  | 193 | 216 | 10.7 | + 7 | + 31 | $8 \cdot 1$ | F 8 |
| 10,984 | 4294474 | C 12759 |  | 42242 | 35 33.81 | 6224 |  | $294455 \cdot 7$ | 195 | 220 | 1 | $+35$ | + | 8.6 | F 2 |
| 10,985 | 5 244449 | B 8337 |  |  | $35 \quad 39 \cdot 69$ | 7131 | 43 | $2432 \begin{array}{ll}29 \cdot 1\end{array}$ | 200 | 22 | II 3 | - 2 | 27 | $8 \cdot 7$ | K。 |
| 10,986 | 294475 | C 12760 |  |  | $213540 \cdot 40$ |  | +.0057 | $30 \quad 8 \quad 50.0$ | $+16.201$ | +.218 | 11.1 | + 14 | - | $9 \cdot 3$ |  |
| 10,987 | 7284153 | C 12761 |  |  | 3547.48 | 6405 |  | $284643 \cdot 1$ | 207 | 219 | 10.3 | - 7 | - | $9 \cdot 0$ |  |
| 10,988 | - 294476 | C 12764 | 828 | 42250 | 35 51.26 | 6270 |  | $29 \quad 32 \quad 10.7$ | 210 | 219 | 10.5 | + 13 | $+$ | 8.2 | A 2 |
| 10,989 | 9304498 | L 9058 | 829 |  | 35 52.84 | 6052 | 59 | $304347 \cdot 5$ | 211 | 216 | $10 \cdot 7$ | + 22 | + 30 | $8 \cdot 5$ | F 8 |
| 10,990 | 274128 | C 12766 |  |  | $36 \quad 0 \cdot 10$ | 6584 | 51 | $27 \quad 47 \quad 58.3$ | 218 | 221 | 11.5 | + 3 | 19 | $9 \cdot 0$ |  |
| 10,991 | I 264232 | C 12771 | 832 | 42251 | $\begin{array}{llll}21 & 36 & 5 \cdot 97\end{array}$ | $+2.6782$ | $2+\cdot 0048$ | $2640 \quad 16 \cdot 2$ | $+16.223$ | +.223 | 11.7 | + 6 | + 23 | $8 \cdot 7$ |  |
| 10,992 | 2254586 | C 12768 |  |  | $36 \quad 6 \cdot 12$ | 6965 |  | $25 \quad 35 \quad 39 \cdot 7$ | 223 | 224 | 11.5 | + | + 6 | $9 \cdot 3$ |  |
| 10,993 | 3264230 | C 12770 |  |  | $\begin{array}{lll}36 & 6 \cdot 52\end{array}$ | 6797 |  | $2634 \quad 59 \cdot 9$ |  | 223 | II•9 | - 1 | - 20 | $9 \cdot 3$ |  |
| 10,994 | 4244450 | B 8340 |  |  | $\begin{array}{lll}36 & 8.36\end{array}$ | 7133 | 343 | $2435 \quad 28.4$ |  | 226 | 12.4 | - 19 | - 41 | 8.6 | K |
| 10,995 | 5304499 | L 9063 |  |  | $\begin{array}{llll}36 & 15 \cdot 38\end{array}$ | 6002 | 259 | $\begin{array}{llll}31 & 3 & 24.7\end{array}$ | 231 | 216 | 12.5 | 19 | $+2$ | 8.8 |  |
| 10,996 | 6254588 | C 12773 |  |  | $2 \mathrm{I} \quad 36 \quad 18.79$ | +2.6950 | +.0046 | $25424 \mathrm{I} \cdot 4$ | +16.234 | +.224 | 11.7 | + 29 | + 8 | $9 \cdot 3$ |  |
| 10,997 | 7274131 | C 12774 |  |  | $36 \quad 22 \cdot 76$ | 6566 |  | $275715 \cdot 3$ | $3 \quad 237$ | 221 | $10 \cdot 9$ | + 43 | 1 <br> $+\quad 29$ | 8.8 |  |
| 10,998 | $8{ }^{28} 4161$ | C 12781 | 851 | 42273-4 | $3643 \cdot 37$ | 6506 |  | $282045 \cdot 4$ |  | 219 | 8.5 | + 108 | + 36 | 7.33 | $3 \quad \mathrm{G} 5$ |
| 10,999 | 9274132 | C 12783 |  |  | $3654 \cdot 37$ | -6630 |  | 273934.9 |  | 220 | $10 \cdot 9$ | - 17 | - 21 | $8 \cdot 6$ |  |
| I1,000 | - 304501 | L 9070 |  |  | $3658 \cdot 53$ | 36040 |  | $30 \quad 5748.8$ |  | 215 |  | + 24 | $+31$ | 9-1 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.000 }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { Moor. } \end{aligned}$ |  |  |
|  | - |  |  |  | n m s | s | $s$ | - , " | " | " |  |  |  |  |  |
| II,001 | 264237 | C 12786 | 856 | 42286 | $2137 \quad 1.90$ | +2.6859 | +.0049 | $26 \quad 20 \quad 36 \cdot 8$ | $+16.270$ | +.222 | 9•I | + 264 | - 86 | 7*43 | G 5 |
| 11.002 | 284162 | C 12787 | 860 | 42293 | $\begin{array}{ll}37 & 2.23\end{array}$ | 6410 | 56 | $28 \quad 55 \quad 53.2$ | 27 I | 218 | $9 \cdot 3$ | $+\quad 57$ | - 17 |  | G |
| 1 1,003 | 294481 | C 12789 | 865-6 | 42296 | $\begin{array}{lll}37 & 3.92\end{array}$ | 6239 | 58 | 2953318.4 | 272 | 217 | $9 \cdot 9$ | + 6 | + 10 | $7 \cdot 36$ | K 2 |
| 11,004 | 294482 | C 12790 |  |  | $\begin{array}{ll}37 & 6.96\end{array}$ | 6220 | 58 | $\begin{array}{rrrr}30 & 8 & 8.7\end{array}$ | 275 | 217 | 10.9 | - 40 | 16 $+\quad 16$ | $9 \cdot 1$ |  |
| 11,005 | 304502 | L 9072 | 868 |  | 37 II $3^{8}$ | 6006 | 61 | 311042.5 | 278 | 215 | 10.5 | + 38 | + 17 | $8 \cdot 4$ | F 5 |
| 1 1,006 | 274133 | C 12792 |  |  | 213718.39 | +2.6670 | +.005 1 | $27 \quad 2916.6$ | +16.284 | + 220 | $10 \cdot 3$ | + 22 | + 43 | $9 \cdot 1$ |  |
| 11,007 | 31 4529 | L 9083 | 883 |  | 3753.27 | 5934 | 62 | $31 \begin{array}{llllllllll}31 & 40 & 19\end{array}$ | 314 | 213 | 9.7 | + | + 15 | $9 \cdot 0$ |  |
| I 1, 008 | 254596 | $\mathrm{C}^{\text {C } 12801}$ |  |  | 38 10.81 | 6921 | 49 | $\begin{array}{llll}26 & 8 & 20.6\end{array}$ | 329 | 221 | $10 \cdot 1$ | - 14 | - 21 | $9 \cdot 9$ |  |
| 11,009 | 274138 | $\mathrm{Cl}^{\text {C }} \mathrm{I} 2803$ |  |  | $\begin{array}{llll} \\ 88 & 13 \cdot 19\end{array}$ | 6617 | 54 |  | 331 | 218 | 10.7 | - 40 | - 3 | $9 \cdot 3$ |  |
| 11,010 | 264242 | C 12804 |  |  | $\begin{array}{llll}38 & 14.77\end{array}$ | 6876 | 50 | $26 \quad 2450 \cdot 6$ | 332 | 220 | 10.5 | + 15 | + 16 | $9 \cdot 0$ |  |
| II,O11 | 274139 | C 12805 | 887 |  | 213815.02 | +2.6603 | +.0054 | 28 - $34 \cdot 5$ | +16.332 | +-218 | 10.5 | + 17 | - | $9 \cdot 0$ |  |
| 11,012 | 304507 | $\mathrm{L}_{\mathrm{L}} 90888$ |  |  | 3820.00 | 6053 | 61 | $\begin{array}{lll}31 & 6 & 9 \cdot 6\end{array}$ | 337 | 214 | 10.9 | - 46 | - 35 | $9 \cdot 3$ |  |
| $1 \mathrm{II}, 013$ | 284166 | C 12807 |  |  | $\begin{array}{lll}38 & 23.90\end{array}$ | 6557 | 55 | 28 17 $52 \cdot 1$ <br> 1   | 340 | 217 | 11.3 | + 15 | - 5 | $9 \cdot 0$ | G |
| $1 \mathrm{II}, \mathrm{OI4}$ | 304509 | L 9090 |  |  | $\begin{array}{lll}38 & 29.49\end{array}$ | 6061 | 61 | $\begin{array}{llll}31 & 5 & 1.6\end{array}$ | 345 | 214 | 10.9 |  |  | $8 \cdot 8$ |  |
| II,OI5 | 314532 | L 9092 | 894-7 |  | $38 \quad 33.99$ | 5992 | 62 | $\begin{array}{llll}31 & 28 & 10.5\end{array}$ | 348 | 213 | $9 \cdot 9$ | + 86 | - 25 | $8 \cdot 4$ | G 5 |
| 11,016 | 264243 | C 12809 |  |  | $2138839 \cdot 17$ | +2.6837 | +.0050 | $\begin{array}{llll}26 & 42 & 16 \cdot 4\end{array}$ | +16.353 | +.219 | 1-1 | - 20 | + II | 9.0 |  |
| 11,017 | 304510 | L 9094 | 901 |  | 3841.50 | 6102 | 6 I | $305328 \cdot 1$ | 355 | 213 | 10.7 | + 11 | - 3 | $8 \cdot 4$ | K 5 |
| 11,018 | 244455 | C12813 | 904-5 | 42363 | 394.91 | 7112 | 46 | $25 \quad 648.8$ | 375 | 221 | $8 \cdot 6$ | - | - II | $7 \cdot 66$ | A 2 |
| 11,019 | 314534 | $\mathrm{L}_{\mathrm{L}} \mathrm{C} 9097$ |  |  | 3912.66 | 6023 | 63 |  | 38 I | 212 | 10.7 | + | - 15 | $9 \cdot 3$ | K o |
| 11,020 | 254599 | C 12816 |  |  | 3923.47 | 7088 | 47 |  | 390 | 221 | 11.0 | + | - 10 | $9 \cdot 3$ |  |
| 11,021 | 254600 | C 12817 | 909 |  | 213923.56 | $+2.7031$ | +.0048 | $253850 \cdot 8$ | +16.390 | +.220 | $8 \cdot 7$ | - 18 | - 5 | 8.4 |  |
| 11,022 | 244457 | B 8361 | 911 | 42375 | 3927.51 | 7210 | 46 | $243349 \cdot 8$ | 393 | 219 | 11.3 | + 23 | + 21 | $8 \cdot 8$ | K 5 |
| 1 1,023 | 254603 | C 12822 |  |  | $3930 \cdot 23$ | 7047 | 47 |  | 396 | 220 | 11.4 | - 4 | + 31 | $9 \cdot 3$ |  |
| 11,024 | 264249 | C 12823 |  |  | $3930 \cdot 25$ | 6819 | 52 | $265556 \cdot 3$ | 396 | 218 | 10.9 | - 4 | - 21 | $9 \cdot 0$ |  |
| 11,025 | 254605 | C 12825 |  |  | 3938.61 | 7005 | 49 | 255024.0 | 403 | 220 | 12.1 | + 4 | - 19 | $9 \cdot 3$ |  |
| I 1,026 | 284167 | $\mathrm{C}_{\mathrm{C}} 12826$ |  |  | $213940 \cdot 47$ | +2.6466 | +.0058 | $29 \quad 0 \quad 18 \cdot 3$ | +16.404 | +.214 | 10.9 | + 8 | - 38 | $8 \cdot 7$ | A 3 |
| 11,027 | 244458 | C 12827 |  |  | 39 43-16 | 7119 | 46 | 25 9 IO.I | 407 | 21 | 12.5 | - 6 | + $+\quad 7$ | $9 \cdot 3$ |  |
| 11,028 | 274144 | C 12828 | 922-4 |  | $3949 \cdot 28$ | 6722 | 53 | $27 \quad 3246 \cdot 2$ | 412 | 216 | 11.3 | + 5 | + 49 | $8 \cdot 6$ |  |
| 11,029 | 31 4536 | L 9099 | 935 |  | 3952.60 | 6060 |  |  | 415 | 211 | I1.5 | - 7 | - 6 | 9.0 |  |
| 11,030 | 274145 | C 12829 | 926-7 | 42392-416 | $3952 \cdot 67$ | 6743 | 53 | $\begin{array}{llll}27 & 26 & 3 \cdot 3\end{array}$ | 415 | 217 | 10.7 | + 77 | + | $8 \cdot 0$ | F 5 |
| 11,031 | 244459 | B 8365 |  | 42394 | 21403.43 | +2.7190 | +.0046 | 244555.9 | +16.424 | +.220 | II.5 | + 16. | - 15 | 7.86 | A 3 |
| 11,032 | 254607 | $\mathrm{C}_{\mathrm{C}} \mathrm{I} 2834$ |  |  | $40 \quad 4 \cdot 96$ | 6971 | 50 | $26 \quad 6 \quad 16.9$ | 425 | 219 | 10.7 | + 154 | + 58 | $8 \cdot 2$ | G 5 |
| I1,033 | 284169 | C 12835 |  | 42404-5 | $40 \quad 7 \cdot 15$ | 6594 | 56 | $\begin{array}{llll}28 & 20 & 8 \cdot 6\end{array}$ | 427 | 215 | 12.8 | + $214 *$ | - $240^{*}$ | 4.73 | F 5 |
| 111,034 11,035 | 23 264384 26 | (B 836 <br> C 2836 |  |  | 4012.59 | 7289 |  | 24 10 21.3 | 431 | 221 | II.O | + 14 | + 50 | $8 \cdot 2$ | F 8 |
| 11,035 | 264253 | C 12836 |  |  | $40 \quad 13.62$ | 6885 | 51 | $26 \quad 38 \quad 32 \cdot 6$ | 432 | 218 | $11 \cdot 7$ | - | - 89 | 8.4 | Go |
| 11,036 | 254608 | C 12837 |  |  | 214019.51 | +2.7013 | +.0050 | $25 \quad 52 \begin{array}{llll}58 & 3\end{array}$ | +16.437 | + 219 | 12.5 | - 18 | - 19 | 7.8 | K 2 |
| 11,037 | 284171 | C 12839 |  | 42409-11 | 4019.59 | 6594 | 56 | $28 \quad 22$ II-1 | 437 | 215 | 11.I | - 8* | - 60* | $6 \cdot 90$ | A 5 |
| 11,038 | 284173 | C I2842 |  |  | $40 \quad 24.70$ | 6512 | 58 | 28 51 $15 \cdot 1$ | $44^{1}$ | 214 | II•5 | - 26 | - 55 | 7.23 | K 0 |
| 111,039 | 30 4515 | $\mathrm{L}_{\mathrm{C}} \mathrm{C}$ 9104 | 941 |  | $40 \quad 27.78$ | 6113 | 62 | $\begin{array}{llll}31 & 6 & 26 \cdot 2\end{array}$ | 444 | 211 | 11.9 | + 55 | + ${ }^{+} 26$ | 8.8 | K 2 |
| 11,040 | 284174 | C I2844 |  |  | $40 \quad 29 \cdot 26$ | 6527 | 57 | $28 \quad 46 \quad 50 \cdot 7$ | 445 | 213 | 12.0 | - 17 | + 8 | $7 \cdot 12$ | A |
| II,041 | 294496 | C 12846 | 943 | 42417 | 214029.50 | $+2.633 \mathrm{I}$ | +.0060 | 29540.0 | +16.445 | +-212 | 11.7 | + 17 | - 24 | $8 \cdot 2$ | K |
| I1,042 | 244463 | C 12847 | 940 | 42391-415 | $4034 \cdot 13$ | 7126 | 46 | 251352.0 | 449 | 219 | 12-0,114+ | + $24 *$ | + $\mathbf{2}^{*}$ | $4 \cdot 27$ | F 5 |
| I 1,043 | 244464 | B ${ }^{\text {8 }} 371$ |  |  | $4037 \cdot 48$ | 7286 | 45 | $2414 \begin{array}{llll}56\end{array}$ | 452 | 220 | 11.3 | - 12 | - 57 | $9 \cdot 3$ |  |
| 111,044 | 244465 | B ${ }^{\text {B }} 8372{ }^{\text {B }} 8373$ |  |  | $4045 \cdot 34$ | 7256 | 45 | $\begin{array}{lllll}24 & 27 & 1.0\end{array}$ | 459 | 220 | II•I |  | - 58 | $7 \cdot 8$ | F 5 |
| 1 1,045 | 244467 | B 8373 | 949 |  | $40.55 \cdot 95$ | 7288 | 46 | $241636 \cdot 0$ | 467 | 220 | 9.9 | + 24 | + 26 | 8.2 | K 0 |
| 11,046 | 314539 | $\mathrm{L}_{4} 9110$ |  |  | $214057 \cdot 65$ | $+2.6087$ | +.0064 | 311939.9 | +16.469 | +.210 | II•5 | + 19 | + 34 | 9.I |  |
| II, 047 | $26 \quad 4255$ | C I2851 |  |  | 41.3 .34 | 6953 | 5 | $\begin{array}{llll} \\ 26 & \text { 21 } & 5 \cdot 3\end{array}$ | $\begin{array}{r} \\ 474 \\ \hline\end{array}$ | 217 | $12 \cdot 1$ | 1 $+\quad 19$ $-\quad 17$ | 34 13 | $9 \cdot 1$ $9 \cdot 3$ |  |
| II, 048 | 274151 | C 12853 |  |  | $41 \quad 6.77$ | 6674 | 56 | 28 1 10.1 | 476 | 215 | I2.I | + 11 | 5 | 8.8 |  |
| 11,049 | 294499 | C I2854 |  | 42434 | $41 \quad 7 \cdot 64$ | 6332 | 61 | 2959 41-2 | 477 | 212 | 12.0 | + 37 | 5 | $8 \cdot 8$ | G |
| 11,050 | 314540 | L 91II | 957 |  | 4110.41 | 6050 | 65 | $\begin{array}{llll}31 & 34 & 6.2\end{array}$ | 479 | 208 | 12.3 | - 12 | $+\quad 29$ | 8.6 | $\mathrm{K}_{2}$ |


| No. | B.D. | A.g.c. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 19100. | Precossion. | Sec. Var. | $\begin{aligned} & \text { Epoch } \\ & \text { 1900+ } \end{aligned}$ | Annual P.M. |  | Mag. | Spectra Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { R.A. } \\ & 8.0001 \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.OOI. } \end{aligned}$ |  |  |
|  | - |  |  |  | $\mathrm{h}^{\mathrm{m}} \mathrm{m}$ | 8 | 8 | - , | " | " |  |  |  |  |  |
| I 1, 051 | 284178 | C 12856 | 954 |  | 214111.29 | +2.6538 | +.0059 | $28 \quad 49 \quad 27 \cdot 8$ | +16.480 | +.213 | 11.2 | + 41 | 7 | 8.0 | K o |
| 11,052 | 254611 | C 12855 |  |  | 4111.41 | 7090 | 49 | $25 \quad 32 \quad 16 \cdot 2$ | 480 | 217 | 12.5 | + 16 | 16 | $9 \cdot 3$ | K 5 |
| II, 053 | 274152 | C 12858 |  |  | 4115.70 | 6772 | 54 | $27 \quad 27 \quad 55 \cdot 6$ | 484 | 215 | 12.9 | - 10 | 21 | $9 \cdot 3$ |  |
| II, 054 | 264256 | C 12857 | 956 |  | 4116.06 | 6859 | 53 | $265649 \cdot 3$ | 484 | 215 | 11.9 | + 24 | - | 8.4 | K o |
| 11,055 | 264257 | C 12859 | 958 | 42436 | 4118.58 | 6921 | 52 | $26 \quad 35 \quad 5 \cdot 3$ | 486 | 216 | $1 \mathrm{I} \cdot 2$ | - 3 | + 7 | $7 \cdot 18$ | B 9 |
| 11,056 | 234387 | B 8380 |  |  | 214121.32 | $+2.7321$ | +-0045 | $24 \quad 7 \quad 21.6$ | $+16.488$ | + 219 | 11.6 | 4 | 9 | 8.2 | F 8 |
| I 1,057 | 284180 | C 12862 |  |  | 4138.84 | 6638 | 57 | $\begin{array}{llllllllll}28 & 18 & 55 \cdot 5\end{array}$ | 503 | 213 | 11.1 | + 10 | + 17 | 8.8 | F 5 |
| I 1,058 | 28418 I | C 12864 |  | 42453 | 4144.92 | 6616 | 57 | $28 \quad 27 \begin{array}{lllll} & 24 & 8\end{array}$ | 508 | 213 | 10.7 | + 16 | + 22 | 8.2 | A 0 |
| I 1,059 | 274156 | C 12866 |  |  | 4148.75 | 6660 | 57 |  | 5 II | 213 | 10.9 | - 31 | 22 | 8.5 | A 0 |
| I 1,060 | 254614 | C 12865 | 965 |  | $4150 \cdot 12$ | 7047 | 5 I | $25 \quad 5322.6$ | 512 | 217 | $10 \cdot 3$ | $+\quad 43$ | 3 | 8.6 | G 5 |
| 11,06I | 294505 | C 12869 | 972-3 |  | 214151.38 | $+2.6447$ | +.0060 | $2927 \quad 3 \cdot 6$ | +16.513 | $+\cdot 212$ | 10.2 | - | 31 | $9 \cdot 3$ |  |
| 11,062 | 24447 I | C 12867 | 967 | 42454-5 | 4151.64 | 7165 | 48 | 25 10 $5 \cdot 6$ | 514 | 218 | 10.1 | + 10* | + $\mathrm{I}^{*}$ | $6 \cdot 56$ | B 8 |
| 11,063 | 254616 | ${ }_{\text {C }} 12873$ | 979 |  | $42 \quad 12.53$ | 7116 | 49 | 253119.5 | 53 I | 216 | 10.7 | - 30 | - 2 | 8.0 | K 5 |
| I I, 064 | 244473 | C 12875 | 981-2 | $4^{2} 47^{2-3}$ | 4217.99 | 7178 | 48 | $25.846 \cdot 9$ | 535 | 217 | $9 \cdot 7$ | + 108* | $+13^{*}$ | $6 \cdot 48$ | K o |
| II,065 | 304521 | L. 9119 |  |  | $42 \quad 27 \cdot 34$ | 6182 | 64 | $\begin{array}{llll}31 & 2 & 39 \cdot 4\end{array}$ | 543 | 208 | 11.1 | 12 | - 16 | $8 \cdot 4$ |  |
| I I, 066 | 274160 | $\mathrm{C}_{\mathrm{C}}^{12876}$ |  |  | 214228.13 | +2.6817 | +.0055 | $27 \quad 2239 \cdot 6$ | +16.544 | +.214 | 10.8 | - 2 |  | 8.6 | A 0 |
| I 1,067 | 264265 | $\mathrm{Cl}_{12877}$ |  |  | 4229.07 | 6989 | 53 | $26 \quad 2015 \cdot 2$ | 544 | 215 | 9.9 | - 5 | + 6 | $8 \cdot 2$ | F 8 |
| 11,068 | 264264 | C 12878 |  |  | 4229.86 | 6894 | 54 | $265459 \cdot 7$ | 545 | 214 | 10.6 | - 2 | + 6 | $9 \cdot 1$ |  |
| 11,069 | 274161 | C 12880 |  |  | $4238 \cdot 10$ | 6711 | 56 | 28 1 50.7 | 552 | 213 | 11.4 | - 39 | + 10 | $9 \cdot 3$ |  |
| 11,070 | 264267 | C 12882 | 988 |  | $4246 \cdot 43$ | 6906 | 54 | $265311 \cdot 2$ | 559 | 214 | 12.5 | - 1 | + 12 | $9^{\circ} 0$ |  |
| 11,071 | 264266 | C 12883 |  |  | $214246 \cdot 59$ | +2.6917 | $+\cdot 0054$ | $26 \quad 49 \quad 19.6$ | +16.559 | +.214 | 10.3 | + | + | $8 \cdot 5$ |  |
| 11,072 | 294508 | ${ }^{\text {C }} 12885$ |  | 42490 | 4253.76 | 6435 | 61 | $2941 \cdot 6 \cdot 6$ | 565 | 210 | $10 \cdot 1$ | + 4 | - 31 | 8.5 | K o |
| 11,073 | 264268 | C 12886 | 993 |  | 4255.97 | 6852 | 55 |  | 567 | 213 | $10 \cdot 7$ | + 15 | + 32 | $8 \cdot 7$ | K |
| 11,074 | 304523 | C 12888 | 1001 |  | $42 \quad 59 \cdot 23$ | 6329 | 64 |  | 569 | 209 | 11.6 | + 6 | - 22 | $9 \cdot 1$ |  |
| I 1,075 | 254617 | C 12889 |  |  | $43 \quad 3.72$ | 7072 | 52 | $25 \quad 5453 \cdot 6$ | 573 | 215 | 9.9 | + 25 | + 26 | $9 \cdot 3$ |  |
| 11,076 | 27 4163 | C 12892 |  |  | $21 \quad 4317.82$ | +2.6788 | +.0057 | $27 \quad 4029.8$ | +16.584 | +.212 | 9.5 | 22 | - 9 | 8.5 | K 2 |
| 11,077 | 28419 I | C 12894 | 1007 | 42509 | 4321.95 | 6685 | 58 | $28817 \begin{array}{llll} & 51.2\end{array}$ | - 588 | 212 | 10.5 | - | - 8 | $8 \cdot 7$ | K |
| 11,078 | 274164 | C 12896 | 1008 | 42511 | 4325.52 | 6711 | 58 | $28 \quad 9 \quad 26 \cdot 3$ | 591 | 212 | II.I | + | + 14 | 8.5 | A 2 |
| 11,079 | 304525 | L 9128 |  |  | $43 \quad 36 \cdot 77$ | 6238 | 65 | $30 \quad 55 \quad 32 \cdot 4$ | 600 | 207 | II.1 | + 3 | + 2 | 8.8 | G 5 |
| 11,080 | 234397 | B 8401 |  |  | $43 \quad 38 \cdot 50$ | 7380 | 46 | $24 \quad 347 \cdot 0$ | 601 | 216 | 10.6 | + 30 | + 31 | 8.2 | F 5 |
| 11,081 | 244477 | B 8402 |  |  | $2143 \quad 39.25$ | $+2.7320$ | +.0047 | $242656 \cdot 8$ | ${ }^{\circ}+16.602$ | +.216 | 13.5 | + 25 |  | 8.8 | K 2 |
| 11,082 | 274165 | C 12897. |  |  | 43 39.58 | 6769 | 58 | $27 \quad 5047 \cdot 8$ | 602 | 211 | 11.1 | + 25 | + 23 | 9.4 |  |
| 1 1,083 | 284193 | C 12898 |  | 42516 | 43 40.82 | 6642 | 58 | 283611.5 | 603 | 211 | 10.9 | + 15 | + 12 | $8 \cdot 5$ | A 2 |
| II, 084 | 284194 | C 12899 |  |  | 43 41.52 | 6567 | 61 | 29.2384 .0 | 604 | 209 | 11.2 | $+$ | + 23 | $8 \cdot 7$ | K o |
| 11,085 | 304527 | L 9131 | 1016 |  | $4344 \cdot 64$ | 6208 | 65 | $\begin{array}{llll}31 & 6 & 39.6\end{array}$ | 606 | 206 | 11.9 | $+$ | - 4 | 8.1 | B 8 |
| 11,086 | 294512 | C 12902 | 1017 | 42520 | $214350 \cdot 43$ | +2.6526 | +.0062 | $2918 \quad 32 \cdot 6$ | +16.611 | + 209 | 10.4 | + | - | $8 \cdot 1$ | K |
| 11,087 | 274166 | C 12903 | 1019 | 42522 | $4355 \cdot 87$ | 6711 | 58 | $281345 \cdot 0$ |  | 212 | 10.9 | - 14 | - 17 | 8.5 | A 5 |
| 1 1, 088 | 284195 | C 12904 | 1020 | 42525 | 4357.62 | 6684 | 58 | $\begin{array}{llllllllllll}28 & 23 & 49 \cdot 8\end{array}$ | 617 | 212 | $10 \cdot+$ | + 44 | + 28 | 8.1 | F 8 |
| II,089 | $28+196$ | C 12907 |  |  | $\begin{array}{ll}44 & 1.67\end{array}$ | 6599 | Ko | $28 \quad 5438 \cdot 0$ | 620 | 210 | 11.1 | 40 | + 34 | 9-1 |  |
| 11,090 | 234399 | B 8406 |  | 42524 | $44 \quad 4 \cdot 30$ | 7392 | 46 | $\begin{array}{llll}24 & 2 & 48 \cdot 7\end{array}$ | 622 | 216 | 8.5 |  |  | $7 \cdot 28$ | K 5 |
| I I, 09I | 284197 | ${ }_{\text {C }} 12908$ |  |  | $2144 \quad 5 \cdot 79$ | +2.6682 | +.0059 | $28 \quad 25 \quad 33 \cdot 2$ | +16.624 | +.211 | 12.9 | $\bigcirc$ | 43 | 8.8 |  |
| I I, 092 | 244479 | B 8407 |  |  | 44 I 1.68 | 7262 | 49 | $245334 \cdot 0$ | 628 | 215 | 12.5 | 10 | -22 | $9 \cdot 3$ |  |
| 11,093 | 294516 | C 12914 |  |  | 4428.43 | 6493 | 62 | $293545 \cdot 3$ | 642 | 209 | 11.5 | 7 | - 20 | $9 \cdot 3$ |  |
| I 1, 094 | 284200 | ${ }_{\text {C }}^{\text {C }} 12915$ | 1030 | 42543 | $4431 \cdot 75$ | 6716 | 60 | 2817484.4 | 645 | 211 | 11.0 | + 14 | + 7 | 8.6 | K o |
| 11,095 | 294518 | C 12918 |  |  | $4435 \cdot 37$ | 6477 | 62 | $294236 \cdot 7$ | 648 | 209 | II•I | + 13 | - 15 | $9 \cdot 3$ |  |
| 1 1, 096 | 304534 |  |  |  | ${ }^{21} 4441.67$ | +2.6309 | +.0066 | 3041133.7 | +16.653 | +.206 | 12.7 | + 20 | - | $9 \cdot 3$ |  |
| 11,097 | 264274 | ${ }^{\text {C }} 12919$ |  |  | $4447 \cdot 77$ | 6894 | 56 | $27 \quad 1540.5$ | 658 | 212 | 10.7 | + | + | $9 \cdot 3$ |  |
| 11,098 | 254621 | C 12920 | 1035 |  | 4449.98 | 7213 | 51 | 251727.5 | 659 | 214 | $9 \cdot 1$ | + | + 3 | $7 \cdot 96$ | Fo |
| I 1,099 | 254622 | C 12922 | 1039 |  | 4459.01 | 7089 | 53 | $\begin{array}{llll}26 & 5 & 16.4\end{array}$ | 667 | 213 | 10.5 | + 6 | 13 $+\quad 13$ | 9.1 | A |
| 11,100 | 254623 | C 12924 |  |  | 45 I 3.62 | 7180 | 51 | $25 \quad 33 \quad 18.6$ | 679 | 212 | 10.7 | 9 | - 27 | 9.0 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. $1910{ }^{\circ}$ | Precession | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { B.OOOI. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ".001. } \end{aligned}$ |  |  |
|  | - |  |  |  | m | 8 | s | - , " | " | " |  |  |  |  |  |
| II, IOI | 294521 | $\mathrm{C}^{\text {C }} 12927$ | 1047 |  | $\begin{array}{llll}21 & 45 & 20.69\end{array}$ | $+2.6573$ | +.0062 | $2916 \quad 6.4$ | +16.684 | $+\cdot 207$ | 10.1 | $+$ | - I | $9 \cdot 3$ | Ma |
| 11,102 | 304537 | C 12929 | 1050 |  | $45 \quad 25.97$ | 6393 | 65 | 30203.4 | 689 | 205 | 11.3 | + 19 | + | $8 \cdot 36$ | A |
| 11,103 | 304538 | C 12930 | 1052 |  | $45 \quad 26 \cdot 39$ | 6393 | 65 | $302020 \cdot 2$ | 689 | 205 | 13.4 | + 31 | + | $9 \cdot 7$ |  |
| 11,104 | 284203 | ${ }^{\text {C }} 12933$ |  |  | $45 \quad 35 \cdot 31$ | 6697 |  | $28 \quad 34 \quad 25 \cdot 2$ | 696 | 209 | $10 \cdot 3$ | + 10 | + 9 | 8.7 | F 8 |
| 11,105 | 294524 | C I2934 | 1055 |  | $4538 \cdot 41$ | 6509 |  | 294123.5 | 699 | 207 | 10.1 | + 6 | - 14 | $9 \cdot 1$ |  |
| 11,106 | 274177 | C 12935 |  |  | $214543 \cdot 65$ | +2.6893 | +-0057 | 2724 49•1 | +16.703 | +.210 | 10.9 |  | - 17 | $9 \cdot 3$ |  |
| 11,107 | 284204 | C 12936 |  |  | $4548 \cdot 28$ | 6756 |  | $28 \quad 1 \begin{array}{llll} & 4.6\end{array}$ | 707 | 209 | 11.3 | + | + 27 | $9 \cdot 3$ |  |
| 11, 108 | 294525 | C 12937 | 1063 | 42589 | 45 51.73 | 6505 | 64 | $2945 \quad 17.5$ | 709 | 206 | - | + 20* | - 27* | $5 \cdot 00$ | A 0 |
| 11, IO9 | 254626 | C 12938 | 1060-1 |  | 45 54-24 | 7193 | 52 | $25 \quad 3420.9$ | 711 | 211 | 10.7 | - 35 | - 2 | 8.2 | A o |
| 11, IIO | 294526 | C 12939 | 1072 |  | $46 \quad 2 \cdot 72$ | 6578 | 63 | 29 21 15.2 | 718 | 206 | 10.0 | - 25 | - 5 | $8 \cdot 2$ |  |
| 11, 111 | 244483 | C 12940 | 1069-71 | 42594 | $21 \quad 46 \quad 6 \cdot 73$ | $+2.7261$ | +.0052 | $251032 \cdot 7$ | +16.721 | +.210 | 9.1 | 17 | - 3 | $7 \cdot 26$ | F 5 |
| II, 112 | 254627 | C 12941 |  |  | $\begin{array}{lll}46 & 7 \cdot 59\end{array}$ | 7214 | 52 | $252824 \cdot 0$ | 722 | 212 | $10 \cdot 1$ | + 59 | - | 8.4 |  |
| 11,112 | 314556 | L 9148 |  | 42601 | 4688.80 | 6222 | 69 |  | 723 | 204 | 9.0 | + 18 | - | $7 \cdot 30$ | K o |
| 11,114 | 314557 | L 9150 |  |  | $46 \quad 23 \cdot 68$ | 6195 | 69 |  | 735 | 204 | 11.3 |  | - 13 | $9 \cdot 3$ |  |
| 11,115 | 304541 | L 915I |  |  | $46 \quad 24.79$ | 6389 | 67 |  | 736 | 204 | $1 \mathrm{I} \cdot 1$ | + 35 | - 26 | $9 \cdot 0$ |  |
| 11,116 | 244484 | B 8427 |  |  | $2146 \quad 29.12$ | +2.7360 | +.0050 | $243535 \cdot 0$ | +16.739 | +.212 | II.I | 10 | + | 8.7 |  |
| 11, 117 | 284209 | C 12947 | 1082 | 42611 | $4635 \cdot 45$ | 6761 | 61 | $28 \quad 2047 \cdot 8$ | 745 | 208 | 10.9 | - 32 | - 20 | 8.0 | G 5 |
| 11,118 | 304542 | L 9153 |  |  | $4636 \cdot 79$ | 6406 | 66 | $\begin{array}{llll}30 & 27 & 3.6\end{array}$ | 746 | 204 | $10 \cdot 3$ | + 33 | - 45 | $8 \cdot 6$ |  |
| II, 119 | 304543 | C 12949 |  |  | 4648.64 | 6437 | 66 | $\begin{array}{llllllllll}30 & 18 & 10.5\end{array}$ | 755 | 204 | 10.5 | - 32 | - 39 | $9 \cdot 3$ |  |
| 11,120 | 2842 IO | C 12951 |  |  | $47 \quad 0.04$ | 6705 | 62 | $28 \quad 45 \quad 0.2$ | 764 | 206 | $10 \cdot 3$ | + 171 | + 185 | $9 \cdot 3$ | K o |
| 11,121 | 304546 | L 9161 |  |  | $21 \begin{array}{lll} \\ & 47 & 9.45\end{array}$ | +2.6281 | +.0069 |  | +16.772 | +.203 | $9 \cdot 8$ | - 18 | - 10 | $9 \cdot 3$ |  |
| 11,122 | 264283 | C 12955 | IIOI |  | $4730 \cdot 39$ | 7113 | 56 | $\begin{array}{llllllllllll}26 & 18 & 55 \cdot 9\end{array}$ | 788 | 209 | 8.7 |  | - 39 | $8 \cdot 0$ | F 8 |
| 11,123 | 284212 | C 12956 |  |  | 4743.04 | 6765 | 63 | $28 \quad 3017.4$ | 799 | 205 | $9 \cdot 1$ | - 26 | - 112 | $9 \cdot 0$ | F 8 |
| İ1,124 | 244486 | B 8432 | ${ }_{1104}$ |  | 4743.42 | 7438 | 50 |  | 799 | 211 | $9 \cdot 3$ | - 88 | - 133 | 8.4 | G 5 |
| II, 125 | 314562 | L 9164 | $1107-8$ | 4265.5 | $4747 \cdot 83$ | 6260 | 70 |  | 802 | 202 | 8.9 | + 11 | 6 | $7 \cdot 49$ | K 2 |
| 11,126 | 294533 | C 12957 | 1 106 |  | $214749 \cdot 32$ | +2.6482 | +.0067 | $30 \quad 1223.5$ | +16.803 | +-203 | 10. | + 20 | + 19 | $8 \cdot 7$ |  |
| 11,127 | 244487 | C 12958 |  |  | $4757 \cdot 57$ | 7315 | 52 | $\begin{array}{lllll}25 & 5 & 54 \cdot 6\end{array}$ | 810 | 210 | 10.5 | + 8 | - 4 | 9.0 | K o |
| 111,128 | 274184 | C 12960 |  | 42657 | $48 \quad 5 \cdot 94$ | 6958 | 59 | $272240 \cdot 8$ | 817 | 207 | 10.1 | + 17 | + 3 | 8.7 | $\wedge_{3}$ |
| 11,129 | 294535 | $\mathrm{C}_{\text {C }} \mathbf{1} 2961$ | 1113 | 42660 | $\begin{array}{lll}48 & 7.55\end{array}$ | 6566 | 65 |  | 818 | 203 | $10 \cdot 1$ | + 28 | - 19 | $8 \cdot 4$ | B 9 |
| 11,130 | 274185 | C 12962 |  |  | $\begin{array}{llll}48 & 13 & 53\end{array}$ | 6941 | 59 | $27 \quad 3018.0$ | 823 | 206 | 10.7 | - 28 | + 15 | $9 \cdot 3$ |  |
| 11, 131 | 264286 | C 12963 | 1117 |  | 214822.01 | $+2.7131$ | +.0056 | $26 \quad 20 \quad 1 \cdot 2$ | +16.829 | +.208 | II. 1 |  | $\bigcirc$ | 8.6 |  |
| 11, I32 | 274186 | C 12965 |  |  | $48 \quad 24 \cdot 10$ | 6925 | 60 | $27 \quad 38 \quad 6 \cdot 4$ | 831 | 206 | 11.6 | + 76 |  | $9 \cdot 0$ |  |
| 111,133 | 284215 | C $\begin{aligned} & \text { C } \\ & \mathrm{B}\end{aligned} 28966$ | 1119 | $4^{2667-8}$ | $48 \quad 28.81$ | 6807 | 62 | $\begin{array}{llllll}28 & 22 & 18.6\end{array}$ | 835 | 205 | 9.8 | - $45^{*}$ | - $74^{*}$ | $5 \cdot 62$ | F 5 |
| II, 134 | 244489 | B 88438 |  | 42665 | $\begin{array}{llll}48 & 31.59\end{array}$ | 7400 |  |  | 837 | 210 | 11.0 | - 21 | - 29 | 8.4 | G 5 |
| 11,135 | 244490 | B 8439 |  |  | $48 \quad 36 \cdot 36$ | $744{ }^{1}$ | 51 | $\begin{array}{lllll}24 & 22 & 16.9\end{array}$ | 841 | 211 | $10 \cdot 3$ | 4 | - 3 | $9 \cdot 3$ |  |
| $11,136$ |  | B 8440 |  | 42669 |  | +2.7433 | +.0050 |  | +16.842 | +.210 | 11.3 | - I | + 18 | 8.6 | G 5 |
| 11,137 | 264288 | C ${ }_{\text {C }} 12968$ |  |  | $4846 \cdot 58$ | 7070 | 57 | $\begin{array}{llllllllll}26 & 47 & 10 \cdot 5\end{array}$ | 849 | 206 | 11.9 | + 27 | - 14 | $9 \cdot 1$ |  |
| 11,138 | 264289 | C 12969 |  |  | 48 51-28 | 7018 | 58 | $27 \quad 7 \begin{array}{llll} & 722.4\end{array}$ | 853 | 206 | 11.7 | - 16 | - $4^{6}$ | 9.1 |  |
| 11,139 | 254635 | Crraio | 1129 | 42679 | $48 \quad 57.97$ | 7276 | 53 | $25 \quad 30 \quad 5 \cdot 0$ | 858 | 208 | H.6 | + $\mathrm{I}^{*}$ | + 1* | $5 \cdot 05$ | B 3 |
| 11,140 | 304550 | L 9174 |  |  | $49 \quad 2 \cdot 42$ | 6460 | 69 | $\begin{array}{llll}30 & 32 & 28.9\end{array}$ | 861 | 20 | 12.9 | - 43 | - 36 | 9.1 |  |
| 11,141 | 304551 | C 12971 |  |  | 21492.91 | +2.6491 | +.0068 | 302145.0 | +16.862 | +-201 | 12.3 | + 31 | - 32 |  |  |
| 11,142 | 254636 | C 12973 |  | 42685 | $\begin{array}{lll}49 & 8.85\end{array}$ | 7306 | 54 | $25 \quad 20 \quad 7 \cdot 5$ | 866 | 210 | 11.9 | $+\quad 7$ | - 6 | 8.46 | K 5 |
| I 11,143 11,144 | $\begin{array}{lll}26 & 4292 \\ 31 & 4569\end{array}$ | Cr 12975 |  |  | 49 I 3.16 | 7064 | 59 | 26533139.8 | 870 | 205 | 11.7 | + 16 | $\bigcirc$ | $9 \cdot 3$ |  |
| I I, 144 <br> I, I45 | 31 24 24 4 |  |  |  | 49 I5.85 | 6275 | 71 |  | 872 | 199 | 11.7 |  |  | $9 \cdot 3$ |  |
| 11,145 | 244494 | C 12978 |  |  | 49 40.80 | 7338 | 54 | $25 \quad 1213.6$ | 892 | 207 | 10.9 | + 12 | + 18 | $9 \cdot 3$ |  |
| 11, 146 | 244495 | B 8446 | 1145 |  | $214944 \cdot 36$ | +2.7382 | +.0053 | $245523 \cdot \mathrm{I}$ | +16.894 | +. 208 | 10.0 | 18 | - 14 | 9.0 |  |
| II, 147 | 254637 | C 12979 |  |  | 4948.91 | 7186 | 57 | 261221.9 | +898 | 207 | 11.1 |  | - 4 | 9.1 |  |
| 11, 148 | 274191 | C 129881 <br> B | 1153 | 42712-3 | $4953 \cdot 25$ | 6917 | 63 | $27 \quad 5511 \cdot 9$ | 901 | 203 | 8.8 | - 124 | - 107 | 6.71 | A 2 |
| II, 149 II, 150 | 244497 294539 | Br 8447 | 1155 | 42714 | $\begin{array}{ll}50 & 2 \cdot 11 \\ 50 & 6 \cdot 38\end{array}$ | 7378 6635 | 53 | $245946 \cdot 7$ | 908 | 207 | $9 \cdot 7$ | + 20 | + 18 | $8 \cdot 2$ | Ko |
| 11,150 | 294539 | C 12982 |  |  | $50 \quad 6 \cdot 38$ | 6635 | 67 | 2941 1.5 | 912 | 201 | $9 \cdot 4$ | + 47 | - 14 | $9{ }^{\circ}$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Soc.Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\mathrm{R} \cdot \mathrm{O} \cdot \mathrm{~A} .}{\mathrm{R} .}$ | $\begin{aligned} & \text { Doc. } \\ & .001 . \end{aligned}$ |  |  |
|  |  |  |  |  | h m s | s | 8 | - , |  | " |  |  |  |  |  |
| I 1, 151 | 294540 | C 12983 |  |  | $2150 \quad 7.26$ | $+2.6656$ | +.0067 | 293319.8 | $+16.912$ | +201 | 10.6 | + 28 | + 61 | 9-1 |  |
| I 1, 152 | 294541 | C 12985 | 1164 | 42728 | $50.30 \cdot 19$ | 6626 | 68 |  | 930 | 200 | 9.6 | - 9 | - 5 | $8 \cdot 4$ | K o |
| II,153 | 304554 | L 9189 |  |  | 5035.79 | 6397 | 72 | $\begin{array}{llll}31 & 11 & 6.9\end{array}$ | 935 | 199 | $9 \cdot 7$ | 0 | - 19 | $8 \cdot 0$ | F 8 |
| 11,154 | 314573 | L 9193 |  |  | $5046 \cdot 18$ | 6323 | 73 |  | 943 | 198 | $9 \cdot 3$ | - 26 | - 134 | $9 \cdot 0$ | G 5 |
| II, 155 | $31+574$ | L 9192 |  | 42741 | $5046 \cdot 70$ | 6278 | 74 | $315431 \cdot 1$ | 943 | 198 | $9 \cdot 5$ | + 161 | - 250 | $7 \cdot 6$ | K o |
| II, 156 | 284232 | C 12988 | 1176 | 42745 | $215055 \cdot 51$ | $+2.6783$ | +.0065 | $28 \quad 55 \quad 23 \cdot 2$ | +16.950 | +201 | $9 \cdot 7$ |  | - 3 | 8.4 | K 2 |
| I 1, 157 | 304556 | L 9197 |  |  | $5056 \cdot 25$ | 6402 | 72 | $311243 \cdot 6$ | 951 | 198 | 10.3 | + | + 13 | 8.2 | K。 |
| 11,158 | 314577 | L 9198 |  | 42748 | $5057 \cdot 55$ | 6283 | 74 |  | 952 | 197 | 10.7 | - + | - 3 | 7-10 | K 5 |
| II I, 59 | 244498 | B 8450 |  |  | $5058 \cdot 42$ | 7406 | 53 | $24 \quad 5788$ | 952 | 206 | 9.0 |  | +16 | $9 \cdot 3$ |  |
| 11,160 |  | B 8451 |  |  | , 510.25 | 7405 | 53 | $24 \quad 58 \quad 4 \cdot 2$ | 953 | 206 | 11.2 | + 24 | + 4 | $9 \cdot 3$ |  |
| II, 161 | 314580 | L 9200 |  | 42751 | $21 \begin{array}{lll}51 & 1.20\end{array}$ | $+2.6299$ | +.0074 | 314941.8 | +16.954 | + 197 | 10.1 | $\bigcirc$ | - 15 | 8.4 | K 5 |
| 11,162 | 264300 | C 12991 |  |  | 513.09 | 7189 | 58 | $\begin{array}{lllllllllll}26 & 22 & 51 \cdot 2\end{array}$ | 956 | 204 | 11.3 | + 24 | - 14 | $9 \cdot 3$ | F 8 |
| 11,163 | 264303 | O 12995 |  |  | 5115.40 | 7195 | 58 | $26 \quad 2222.0$ | 965 | 204 | 10.7 | + 35 | + 12 | 9.1 | F 8 |
| II, 164 | 254643 | ${ }_{\text {C }} 12998$ | 1181 | 42754 | 5120.92 | 7331 | 56 | $25 \quad 3021 \cdot 2$ | 970 | 204 | 10.6 | + 34 | + 6 | 8.8 | G 5 |
| I 1, 165 | 304557 | L 9203 |  |  | $5121 \cdot 23$ | 6499 | 70 | $304^{2} 36 \cdot 1$ | 970 | 198 | 11.4 | 12 | - 13 | $9 \cdot 0$ |  |
| 11,166 | 304558 | C 13000 | 1189 |  | $21 \quad 5125.40$ | +2.6553 | +.0070 | $\begin{array}{llll}30 & 24 & 5.5\end{array}$ | +16.973 | + 198 | 10.1 | 42 | $\begin{array}{r} \\ +\quad 14 \\ \hline\end{array}$ | 7.96 | K 0 |
| II, 167 | $26+304$ | C 12999 |  |  | 5125.63 | 7108 | 60 | $26 \quad 58 \quad 2 \cdot 6$ | 973 | 203 | 11.5 | - | 10 | $9 \cdot 0$ | K 5 |
| 11,168 | 244502 | B 8454 | 1187 | 42757 | 5127.08 | 7469 | 53 | $2436 \begin{array}{lllll} & 39 \cdot 7\end{array}$ | 974 | 206 | 10.1 | + 11 | - 13 | 8.6 | K 5 |
| II, 169 | 284235 | C 13002 |  |  | $5130 \cdot 11$ | 6813 | 66 | 284958.6 | 977 | 201 | 11.4 | + 12 | - $4^{8}$ | $9 \cdot 0$ |  |
| 11,170 | 284237 | C 13007 | 1200 | 42766 | 5143.99 | 6792 | 66 | $\begin{array}{llll}29 & 0 & 0.8\end{array}$ | 987 | 200 | 10.5 | - 17 | - 26 | $9 \cdot 0$ |  |
| II, 171 | 254644 | C 13008 | 1197 |  | 215146.06 | +2.7269 | +.0058 | $25 \begin{array}{llll}25 & 39 \cdot 3\end{array}$ | $+16.989$ | +.203 | $8 \cdot 7$ | + | - 26 | 8.6 | G 5 |
| II, 172 | 284238 | $\mathrm{C}_{13013}$ |  |  | $5152 \cdot 16$ | 6764 | 67 | $291135 \cdot 5$ | 994 | 200 | 11.4 | - 8 | - 29 | $9 \cdot 0$ |  |
| 11,173 | 304560 | L 921I | 1206 | 42828 | $5152 \cdot 26$ | 6493 | 72 | $30 \quad 5016.9$ | 994 | 197 | 10.5 | - 7 | - 11 | $7 \cdot 7$ | K 5 |
| I1,174 | 294543 | ${ }^{\text {C }} 13015$ |  |  | 5153.37 | 6600 | 70 | 30 I1 52.5 | 995 | 197 | 10.7 | + 15 | + 25 | $9 \cdot 3$ |  |
| 11,175 | 284239 | C 13016 | 1207 | 42779 | 5155.70 | 6801 | 66 | $28 \quad 58 \quad 36 \cdot 0$ | 997 | 200 | 10.3 | - 13 | - 29 | 8.6 |  |
| 11,176 | 254648 | C 13020 | 1214 |  | 215214.21 | +2.7273 | +.0058 |  | +17.011 | +.203 | 10.5 | + 160 | + 18 | $9 \cdot 0$ |  |
| 11,177 | 254647 | C 13021 | 1215 |  | 5214.45 | 7257 | 58 | $\begin{array}{ccc}26 & 8 & 0.3\end{array}$ | 011 | 203 | 10.7 | - 19 | - 25 | $9 \cdot 4$ |  |
| 11,178 | 254649 | ${ }^{\text {C }} 13022$ |  |  | 5215.67 | 7286 | 58 | $255640 \cdot 4$ | 012 | 203 | 11.7 | + 2 | + 12 | $9 \cdot 0$ | A |
| [1,179 | 264310 | ${ }^{\text {C } 13023}$ |  |  | $52 \quad 16.09$ | 7107 | 60 | $27 \quad 6 \quad 16 \cdot 2$ | 012 | 202 | 11.3 | + 23 | + + | 9.0 |  |
| I 1, 180 | 254650 | C 13024 | 1221 |  | $52 \quad 26.28$ | 7313 | 57 | $254725 \cdot 0$ | 020 | 203 | 10.5 | 26 | 26 | $9 \cdot 3$ |  |
| 11,181 | 314583 | L. 9218 | 1225 |  | 215231.91 | +2.6383 | +.0075 | $313636 \cdot 8$ | +17.025 | +. 195 | 10.9 | + 19 | + | $9 \cdot 3$ | A 0 |
| I 1, 182 | 304562 | C 13028 |  |  | 5235.61 | + 6579 | 71 |  | 027 | 197 | 11.5 | + 32 | + | $9 \cdot 3$ |  |
| I1,183 | 244506 | B 8465 | 1218 |  | 5250.61 | 7466 | 55 | 245022.8 | 039 | 204 | $9 \cdot 2$ | + 6 | + 20 | 8.01 | K 5 |
| 11,184 | 284243 | C 13030 |  |  | 5255.73 | 6874 | 67 | $28 \quad 41 \begin{array}{ll} \\ 32.0\end{array}$ | 043 | 199 | $9 \cdot 9$ | 5 | + | $9 \cdot 1$ |  |
| I1,185 | 314586 | L 9223 | 1235 |  | $52 \quad 57.89$ | 6426 | 74 | $3125 \quad 59 \cdot 2$ | 045 | 196 | $9 \cdot 6$ | 30 | - 23 | $7 \cdot 7$ | K 5 |
| II, 186 | $27{ }^{2} \mathbf{4 1 0}$ | C 13032 | 1234 |  | $21 \begin{array}{lll} \\ & 53 & 2.97\end{array}$ | +2.7055 | +.0063 | $\begin{array}{lllll}27 & 33 & 55 \cdot 7\end{array}$ | +17.048 | +.200 | 10.1 | 18 | $\bigcirc$ | 8.4 | G 5 |
| 11,187 | $26+313$ | C 13034 |  |  | $\begin{array}{lll}53 & 8.70\end{array}$ | 7141 | 61 | 27 I 135.8 | 053 | 201 | 10.5 | - 2 | - 3 | $8 \cdot 7$ |  |
| 11,188 | 274211 | C 13036 |  |  | $\begin{array}{lll}53 & 9 \cdot 18\end{array}$ | 7055 | 63 | $27 \quad 3456 \cdot 0$ | 053 | 200 | 10.7 | 42 | - 22 | 9.0 |  |
| I 1,189 | 284247 | C 13037 | 1238 | 42835 | $\begin{array}{lll}53 & 9.95\end{array}$ | 6928 | 66 |  | 054 | 200 | 10.1 | - 13 | - 34 | $7 \cdot 98$ | K o |
| II,190 | 314590 | L 9227 | 1247 |  | $53 \quad 23 \cdot 38$ | 6433 | 74 |  | 064 | 195 | 10.7 | 32 | + | 8.8 |  |
| II, 191 | 284248 | C 13039 |  |  | 215327.02 | +2.6918 | +.0067 | $28 \quad 3027.3$ | +17.067 | $+\cdot 198$ | 11.2 | $+110$ | + 41 | 8.6 |  |
| I1,192 | 284249 | C 13040 |  | 42849 | 53 27.16 | 6858 | 67 | $28 \quad 52 \begin{array}{ll} & 56 \cdot 1\end{array}$ | 067 | 198 | 10.7 | 19 | - $4^{6}$ | $7 \cdot 25$ | K 5 |
| 11,193 | 304568 | L 9228 |  |  | $5332 \cdot 38$ | 6558 | 73 | $304445 \cdot 9$ | 071 | 196 | 11.3 | - 0 | + 2 | $9 \cdot 3$ |  |
| II, 194 | 284251 | C 13042 | 1253 | 42852 | $5335 \cdot 85$ | 6948 | 66 | $\begin{array}{llll}28 & 20 & 29 \cdot 3\end{array}$ | 074 | 199 | 10.9 | $+10$ | - 13 | $7 \cdot 9$ | A 0 |
| 11,195 | 274213 | C 13045 |  |  | 5343.02 | 7080 | 63 | $27 \quad 3052.4$ | 079 | 199 | 12.2 | 2 | + 13 | $9 \cdot 3$ |  |
| 11,196 | 264315 | C 13046 |  |  | 215343.72 | +2.7248 | +.0060 | $\begin{array}{lllll}26 & 25 & 34 \cdot 8\end{array}$ | +17.080 | $+\cdot 201$ | 12.6 | $+\quad 10$ $+\quad 36$ | - 45 | $9 \cdot 3$ |  |
| 11,197 | 264316 | C 13047 | 1255 |  | $53+5 \cdot 91$ | 7194 | 61 | $26 \quad 4712.5$ | 081 | 200 | 11.2 | + 36 | - 15 | $8 \cdot 8$ | G 5 |
| 11,198 | 244509 | B 8470 | 1254 | 42855 | $53.45 \cdot 95$ | 7564 | 53 | $\begin{array}{llll}2+19 & 7 \cdot 4\end{array}$ | 081 | 203 | $10 \cdot 5$ | - 3 | + 17 | 8.4 | A 0 |
| 11,199 | $284^{25} 5$ | ${ }^{\text {C } 13048}$ | 1257 |  | $5346 \cdot 41$ | 6965 | 67 | 28 15 44.6 | 082 | 199 | 11.7 |  | - 32 | $9 \cdot 0$ |  |
| 1 1,200 | 284254 | C 13049 |  |  | 5349.05 | 6850 | 68 | 28 59 | 084 | $19^{8}$ | 11.7 | + 21 | + 23 | $9 \cdot 3$ |  |


|  | B.D. | A.g. . | w.B. (2). | Lalande. | R.A. 19100. | Precession. | Soo. Var. | Deo. 19, io.o. | Proossion. | Soc. | ${ }_{\text {Epooh }}^{\text {Eno }}$ | Annaal P. |  | Mag. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  |  |  |  |  |  |  |  |  |  |  |  | De. |  |  |
|  | - |  |  |  |  |  |  | ${ }^{6}$ |  |  |  |  |  |  |  |
| 11,201 11,202 | 25 4652 |  |  |  |  | $\begin{aligned} & 9.70202 \\ & 73929 \end{aligned}$ |  |  | ${ }_{11} 1.90$ | $\begin{array}{r} +201 \\ 202 \end{array}$ | $\begin{gathered} 10 \cdot 5 \\ 9 \cdot 5 \end{gathered}$ |  |  | 8.6 9.3 |  |
|  |  | ${ }^{\text {c }} 13059$ | 127 |  | 54 54 55 | 7181 | 52 |  | 11 | 199 | 9.5 |  |  | 8.7 | A |
| 11,204 |  | ${ }_{\text {L }}^{\text {L }}$ | 1278-9 |  | 5428.57 | 6513 6811 | 75 |  | 124 | 194 | ${ }_{8}^{9.7}$ |  |  | ${ }_{8}^{8.7}{ }_{6} \cdot 8$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | - 304574 |  |  |  | ${ }^{21} 54464.50$ |  |  |  |  |  | 8.7 |  |  | $0 \cdot 0$ |  |
| (1, | 29 274525 |  |  |  | 5452.34 |  | 68 |  | $\begin{aligned} & 132 \\ & 145 \end{aligned}$ | $\begin{aligned} & 195 \\ & 199 \end{aligned}$ | 9.5 |  |  | ${ }_{8.6}$ |  |
| 11, | 294554 |  | ${ }_{1288}^{1288}$ |  | 5511.02 55 520.91 | 682 | 21 | $\begin{array}{ccccc}30 & \\ 30 & 6 & 5 \cdot 3 \\ 20 & 27 & 12.4\end{array}$ | 146 155 | 195 | ${ }_{8.1}^{9.1}$ |  |  | 7.91 |  |
| 11, | 294556 | C | 1297 |  |  |  |  |  |  | 195 | 8.7 |  |  |  |  |
|  | 274220 | $\mathrm{c}_{\mathrm{c}}$ |  |  | 215532 | 98 |  |  |  |  |  |  |  | 8.5 |  |
|  | $2{ }_{24}^{25} 4655$ |  | 1305 | 42912 |  | 7388 7529 |  |  |  | $\begin{aligned} & 198 \\ & 199 \end{aligned}$ | \% 3 |  |  | ${ }_{8}^{9.8}$ |  |
| 11,214 | 254657 | Cr 13082 | 17 | 4242 | ${ }_{55} 59.97{ }^{5}$ | 7405 | 59 | 254330.0 | 175 | 199 | 9.7 |  |  |  |  |
|  | 264323 | C 13085 | 1317 | ${ }^{22921}$ |  | 7316 |  |  | 183 | 198 | 9. |  |  | 7.7 |  |
| 11,216 | ${ }^{26} 4324$ | ${ }_{\text {C }}^{\text {C } 13088}$ | 320 |  | 56 11.06 | 2.7268 |  |  | 199 |  |  |  |  | 8.0 |  |
| 11,217 <br> 11,218 <br> 1 | 27 274248 | Cr ${ }_{\text {Cr }} 13089$ |  |  | 9 |  |  |  |  | 94 |  |  |  |  |  |
| 11,299 | 254658 |  |  |  |  | ${ }_{7376}$ | 60 |  | 208 | 197 | 8.5 |  |  | 8.2 |  |
| 11,220 | 264327 |  |  |  |  |  | 65 |  | ${ }^{213}$ | 196 | 9.9 |  |  | 9.3 |  |
|  | 304584 | L 9266 | ${ }^{1347}$ | 42947 | ${ }^{21} 56$ | 2.6609 |  |  |  |  |  |  |  |  |  |
| $\xrightarrow{111,222}$ |  | Cr ${ }_{\text {Cr }}^{13097}$ | 1343-4 |  |  |  |  |  |  |  | $92$ |  |  |  |  |
| H, 224 | $3{ }^{24} 4586$ | L 9267 | 1349 | 42952 |  | 6600 |  | 25 <br> 31 | 224 | ${ }_{191}$ |  |  |  | 49 |  |
|  | 304587 | C 13102 | ${ }^{350}$ |  |  | 6728 | 5 |  |  | ${ }^{191}$ | 9 5 |  |  | 8.66 |  |
|  | 25 4661 | ${ }_{\text {c }}$ |  |  | 57.473 |  |  |  |  |  | $\xrightarrow{11 \cdot 3}$ |  |  |  |  |
| ¢11,227 |  |  | 1351 | 42955 |  |  |  |  | 231 245 | 93 | 9.1 10.7 |  |  |  |  |
|  | ${ }_{23}^{28448}$ | ${ }^{\text {B }}$ | ${ }^{1361}$ | 962 |  | 7673 | 66 | 24, |  | ${ }_{1}^{198}$ | io. |  |  | 8.6 |  |
| 11,230 | 274234 | C 1 |  |  |  |  |  |  |  | 195 | ${ }^{110}$ |  |  | 9.3 |  |
| $\xrightarrow{11,231} \mathbf{1 1 , 2 3 2}$ | 24 254521 |  | 1370 | 42972 | 57733.76 | 2.7606 7415 | - ${ }^{5}$ |  |  |  |  |  |  |  |  |
| $\xrightarrow{11,233}$ | 27 2235 | Crinl |  |  |  | ${ }_{737}^{745}$ |  | (1) |  | 194 | 10.3 |  |  | 8.6 |  |
| $\underset{1112,234}{11,235}$ | 28423 |  | ${ }^{1387}$ |  |  | 73 | 75 |  | 288 285 | 93 97 9 | 8.9 8.7 |  |  | 8.5 |  |
|  | 254663 |  | 393 | 998 | 215821.88 |  |  |  |  |  |  |  |  |  |  |
|  | 28 284337 | Cr Cl3 C 131 |  |  |  |  |  | 29, | 290 | 191 | 10.9 10.9 |  |  | ${ }^{9.3}$ |  |
|  | 274384 |  |  | 43015 |  |  |  |  |  | 94 |  |  |  | 8.8 |  |
| H1,240 | 264339 | C 1 |  |  |  | 7262 | 66 |  | 306 | 194 | $9 \cdot 9$ |  |  | 9.7 |  |
| ${ }_{11,241}$ | 294 |  |  |  | 215847.89 |  |  |  |  |  | $10 \cdot 2$ |  |  |  |  |
| 2 | 384599 | ${ }_{\text {Cr }}^{\text {Cr }} 13134$ | 1408 | 43018 |  |  |  | 30 |  | ${ }^{189}$ | 9.5 |  | 26 | 8.23 |  |
|  | ${ }^{28} 82484$ |  | 1409 |  |  | 6675 |  |  | 311 323 | 191 188 | ${ }_{10}^{10.1}$ |  |  |  |  |
| 11,245 | 294568 | C 13138 |  |  | $59122 \cdot 15$ | 6880 | 75 | 29 | 325 | 189 | 9 |  |  | $7{ }^{\circ} \mathrm{O}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 30 |  |  |  |  | +6759 | 77 | ${ }^{30} 30334 \cdot 8$ |  | 88 | 9.7 |  |  | $\begin{aligned} & 8.2 \\ & 7.200 \end{aligned}$ | ${ }^{\text {A }}$ |
|  | 25466 |  |  |  |  | ${ }_{7505}$ | [ 75 |  | 32 | +194 | (10.4 |  |  | 9.3 |  |
|  | 264342 | c | 1424 | 43029 | 59 | 7379 | 65 | $263050 \cdot 7$ | 338 | 193 | 10.2 |  |  | 8.6 |  |


| No. | B.D. | A.G.C. | W.B. (2) | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Preccssion. | Sec. <br> Var. | Epoch <br> $1900+$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectrвl } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\text { R.0001. }}{\text { R. }}$ | $\begin{aligned} & \text { Dec. } \\ & =001 \end{aligned}$ |  |  |
|  | $\bigcirc$ |  |  |  | h m s | s | s | - " |  | " |  |  |  |  |  |
| II, 25 I | 234456 | B 8498 |  |  | 215934.56 | $+2.7714$ | +.0059 | 24 II 26.5 | +17.342 | +.195 | $11 \cdot 1$ | $+36$ | $+\quad+$ | $9 \cdot 3$ |  |
| I1,252 | $26+343$ | C 13146 |  |  | $5935 \cdot 86$ | 7340 | 65 | $\begin{array}{llll}26 & 47 & 54 \cdot 0\end{array}$ | 343 | 192 | 10.9 0.8 |  | 4 | $9 \cdot 4$ |  |
| II, 253 | 274243 | C 13147 | 1438 | 43043 | 5954.43 | 7182 | 70 | $27 \quad 5445 \cdot 3$ | 356 | 191 | $9 \cdot 8$ | + 15 | 4 | $7 \cdot 7$ | Mb |
| II 1,254 | 304597 | C 13149 | 1440 |  | 59 57.01 | 6795 | 78 | $\begin{array}{lllllllllll}30 & 27 & 17 \cdot 0\end{array}$ | 358 | 187 | $10 \cdot 6$ | 1 I | 10 | $8 \cdot 2$ | K 2 |
| II 1,255 | 254669 | C 13152 |  |  | $22 \quad 0 \quad 22 \cdot 37$ | 7442 | 64 | $\begin{array}{llllllllll}26 & 1 & 43 \cdot 3\end{array}$ | 376 | 192 | $9 \cdot 5$ | - 2 | 22 | $9 \cdot 4$ |  |
| I 1, 256 | 244525 | C 13153 | I $447{ }^{-9}$ |  | $22 \quad 0 \quad 24.28$ | $+2.7587$ | +.006I | $251320 \cdot 0$ | $+17.378$ | +-193 | 10.8 | - 2 | - 7 | 7-11 | A 0 |
| I 1, 257 | 294573 | C 13157 |  | 43067-8 | - 32.87 | 6957 | 75 | $293122 \cdot 0$ | 384 | 189 | 10.9 | + 9 | 17 | $8 \cdot 7$ | K 5 |
| II, 258 | 254670 | C 13156 |  |  | - 33.94 | 7447 | 64 | 2613134.8 | 385 | 192 | 10.7 | + 5 | $\bigcirc$ | $9 \cdot 2$ |  |
| II , 259 | 314617 | L 9297 | 1470 |  | - 41-16 | 6633 | 82 |  | 390 | 185 | $10 \cdot 6$ | + 16 | + 1 | 8.8 | G 5 |
| I I, 260 | 264346 | C 13158 |  |  | - $41 \cdot 16$ | 7302 | 69 | $27 \quad 1444.6$ | 390 | 191 | 11.7 | - 35 | - 77 | $9 \cdot 4$ |  |
| 11,261 | 304604 | C 13160 |  |  | $22 \quad 0 \quad 48.08$ | $+2.6838$ | $+.0078$ | $\begin{array}{llll}30 & 20 & 29.2\end{array}$ | +17.395 | +.186 | II•7 | + 3 | $-\quad 27$ | 9-1 |  |
| I I, 262 | 284281 | C 13162 |  |  | - 53.90 | 7010 | 75 | 2911432.4 | 399 | 189 | II.I |  |  | 9.8 |  |
| I I, 263 | 244526 | C 13167 | $1477-8$ |  | 12.52 | 7602 | 62 |  | 406 | 192 | $11 \cdot 9$ | + 18 | + II | $9 \cdot 2$ |  |
| II, 264 | 254671 | C 13168 |  | 43081 | 13.70 | 7458 | 65 | $261480 \cdot 1$ | 407 | 192 | 10.7 | + $28^{*}$ | + 30* | $5 \cdot 93$ | K o |
| 11,265 | 294578 | C 13169 | 1479-80 |  | $15 \cdot 61$ | 6986 | 75 | $2925 \quad 50.8$ | 408 | 188 | 11.4 | $+26$ | - 29 | $8 \cdot 7$ | G 5 |
| I 1, 266 | 274251 | C 13174 |  |  | 22122.16 | $+2.7258$ | +.0070 | $27 \quad 409.4$ | $+17.420$ | $+\cdot 189$ | II.9 | $+28$ | + 21 | 9.4 |  |
| II, 267 | $28 \quad 4284$ | C 13175 | 1487 | 43107 | 129.96 | 7134 | 73 | $2831635 \cdot 3$ | 425 | 188 | $9 \cdot 6$ | + $24^{*}$ | - 17* | $5 \cdot 58$ | A 0 |
| I 1, 268 | 254672 | C 13177 | 1490-4 |  | 1 $35 \cdot 87$ | 7609 | 62 | $\begin{array}{lllll}25 & 16 & 4 \cdot 2\end{array}$ | 430 | 191 | 11.5 | - 17 | - 27 | $9 \cdot 4$ |  |
| I I, 269 | 294582 | C 13178 | 1501-2 |  | 1 41.22 | 6997 | 75 | 2928 8-1 | 434 | 187 | 10.7 | - 51 | - 24 | $7 \cdot 7$ | Ma |
| I 1,270 | 314627 | L 9306 |  |  | $142 \cdot 66$ | 6684 | 82 | 312953.4 | 435 | 185 | 1.1.6 | - 20 | $+5$ | $9 \cdot 2$ |  |
| 11,271 | 274252 | C 13179 | 1503 | 43110 | 22 I 47.82 | $+2.7289$ | + 0069 | $27 \quad 32 \begin{array}{lll}27 & 1 \cdot 4\end{array}$ | +17.438 | +.188 | $11 \cdot 2$ | + 42 | - 209 | 8. 1 | G 0 |
| II, 272 | 244529 | B 8520 | 1510 | 43114 | $2 \quad 1.49$ | 7690 | 61 | $2445 \quad 53 \cdot 0$ | $44^{8}$ | 191 | 11.9 | + 12 | - 8 | $8 \cdot 9$ |  |
| II, 273 | 304612 | L 9311 | 1515 |  | 211.57 | 6826 | 80 | $3040 \quad 53.7$ | 455 | 184 | 11.5 | - 25 | + 8 | $8 \cdot 7$ | K 0 |
| II, 274 | 264348 | C 13182 |  | 43123 | 212.65 | 7450 | 66 | $26 \quad 2955 \cdot 9$ | 456 | 190 | 11.8 | + 8 | - 39 | $8 \cdot 7$ | F 5 |
| I I, 275 | 24453 I | B 852I | 1514 | 43122 | 214.96 | 7702 | 61 | $24 \quad 4246 \cdot 5$ | 458 | 190 | 10.3 | 12 | + $\quad 1$ | $7 \cdot 9$ | B 9 |
| 11, 276 | 294585 | C 13184 |  |  | $22=28.65$ | $+2.6919$ | +.0078 | $30 \quad 8 \quad 0.2$ | +17.468 | +.184 | 12.5 | 22 | + 14 | 8.71 | Fo |
| 11,27? | 294584 | C 13185 |  |  | 229.29 | 7037 | 76 | $292136 \cdot 4$ | 468 | 186 | 12.6 | - 12 | - 27 | $9 \cdot 4$ |  |
| 11,278 | $304^{614}$ | C 13187 |  |  | 231.71 | 6866 | 79 | $\begin{array}{llll}30 & 29 & 25.4\end{array}$ | 470 | 184 | 11.1 | + 9 | - 6 | 8. I | K 5 |
| I 11,279 | 284289 | C 13186 |  | 43136 | $232 \cdot 20$ | 7125 | 75 | $28 \quad 4638 \cdot 9$ | 470 | 186 | I 2.5 | - 10 | + 16 | $8 \cdot 8$ |  |
| II, 280 | 274255 | C 13188 |  |  | $238 \cdot 40$ | 7261 | 72 | $275245^{\prime 2}$ | 475 | 187 | $12 \cdot 1$ | - 30 | - 1 | $8 \cdot 3$ | K |
| I I, 28 I | 254675 | C I3I9I | 1530 |  | $22 \quad 247 \cdot 50$ | $+2.7618$ | +.0063 | $252451 \cdot 0$ | +17.482 | $+\cdot 190$ | 12.5 | + 1 | + 0 | $8 \cdot 9$ |  |
| II, 282 | 244532 | B 8526 | 1532 | 43138 | $24^{8 \cdot} 78$ | 7717 | 6I | $244^{2} 1818.8$ | 482 | 190 | 11.9 | $+\quad 44$ | + 14 | $8 \cdot 9$ |  |
| III, 283 | 244533 | B 8525 |  | 43137 | $249 \cdot 22$ | 7689 | 61 | $\begin{array}{lllll}24 & 54 & 19.2\end{array}$ | $4^{82}$ | 190 | 11.0 | + 220* | + 18* | 3.96 | F 5 |
| II 1,284 | 254676 | C 13192 | 1534 | 43144 | $250 \cdot 90$ | 7510 | 66 | 26 II 0.8 | $4^{88}$ | 189 | II•9 | - 9 | $+30$ | $7 \cdot 9$ | Ko |
| II , 285 | 314634 | L 9316 | 1538 |  | 251.58 | 6658 | 85 | $\begin{array}{llll}3153 & 20 \cdot 2\end{array}$ | 484 | 182 | $12 \cdot 7$ | + 18 | + 1 | $9 \cdot 4$ | A 2 |
| 11,286 | 274256 | C 13193 |  |  | $22 \quad 2 \quad 55 \cdot 79$ | $+2.7324$ | +.0070 | $27 \quad 2947 \cdot 9$ | $+17.487$ | $+\cdot 187$ | $12 \cdot 1$ | $+31$ | $+\quad 47$ | $8 \cdot 9$ |  |
| II 1,287 | 264350 | $\mathrm{C}_{1} 13194$ |  |  | $256 \cdot 31$ | 7453 | $67$ | $\begin{array}{llll}26 & 36 & 4.4\end{array}$ | 487 | 188 | $11 \cdot 3$ | + 4 | - 3 | $8 \cdot 7$ |  |
| II I, 288 | 294586 | C 13196 | I 543 | 43160 | $3 \quad 4 \cdot 12$ | . 6976 | 78 | $295242 \cdot 5$ | 493 | 184 | 10.8 | + 6 | - 23 | $7 \cdot 41$ | K o |
| II, 289 | 264351 | C 13200 |  |  | $\begin{array}{lll}3 & 12.47\end{array}$ | 7365 | 70 | $\begin{array}{lllll}27 & 15 & 53.8\end{array}$ | 499 | 187 | 12.7 | + 24 | - 24 | $8 \cdot 8$ |  |
| 11,290 | 274258 | C I 3203 |  |  | 318.39 | 7261 | 73 | $28 \quad 0 \cdot 7 \cdot 0$ | 503 | 186 | 12.5 | + 23 | $+\quad 2$ | $9 \cdot 2$ |  |
| I I , 291 | 244536 | C 1.3202 |  |  | $\begin{array}{llll}22 & 3 & 19.83\end{array}$ | $+2.7661$ | +.0064 | $251148 \cdot 7$ | +17.504 | +.189 | II. 5 | + 21 | $+32$ | $8 \cdot 26$ | A 2 |
| I I , 292 | 284293 | C 13204 |  |  | 322.92 | 7187 |  | $28 \quad 3122.6$ | 506 | 185 | 13.3 | $+\quad 40$ | - 30 | $9 \cdot 1$ |  |
| I I, 293 | 244537 | B 853 I | 1552 | 43166 | $3 \mathrm{28.84}$ | 7750 | 61 | $24 \quad 34 \quad 35 \cdot 5$ | 511 | 189 | 10.5 | + 9 | - 8 | $8 \cdot 6$ | F 2 |
| I I, 294 | 274260 | C 13207 |  |  | 3 3 1.06 | 7292 | 72 | $274938 \cdot 3$ | 512 | 186 | 12.5 | - 3 | - 58 | $9 \cdot 1$ |  |
| II, 295 | 254677 | C 13206 |  |  | $331 \cdot 96$ | 7565 | 66 | $25 \quad 5514.0$ | 513 | 187 | 11.9 | - 5 | - 15 | $8 \cdot 9$ |  |
| II I, 296 | 314636 | $\begin{array}{lr}\text { L } & 9325 \\ \text { C }\end{array}$ | 3-4 |  | $22 \quad 350 \cdot 30$ | $+2.6735$ | +.0084 | $\begin{array}{llll}31 & 35 & 27.0\end{array}$ | $+17.526$ | +.181 |  |  |  | 9.1 |  |
| I I 1,297 | 264352 | C 13211 | - | 43184 | $354 \cdot 27$ | 7482 | $68$ | 263424.0 | $529$ | 186 | 10.6 | + 7 | + 8 | $8 \cdot 8$ |  |
| I1,298 | 274262 | C 13213 |  |  | $4 \quad 0.35$ | 7302 | 73 | $275046 \cdot 8$ | $533$ | 185 | $9 \cdot 9$ | + 17 | - 28 | $8 \cdot 7$ |  |
| 11,299 | 284295 | C 13214 | 6-7 | 43193-4 | $4 \quad 0.37$ | 7097 | 78 | $291438 \cdot 6$ | 533 | 184 | $9 \cdot 0$ | + 12 | - 22 | $8 \cdot 0$ | A 0 |
| I 1,300 | 244540 | C 13215 | 12 | 43195-6 | $4 \quad 7 \cdot 88$ | 7693 | 63 | 25614.1 | 538 | 188 | $9 \cdot 3$ | - 37 | - 32 | $6 \cdot 03$ | Fo |
| 11,254, 11,263, 11,265, 11,298. Number of observations 6. |  |  |  |  |  | 11,283. Number of observations 55. |  |  |  |  | 11,291. Burnham 11,507. |  |  |  |  |



| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Precession. | Sec. Var. | Dec. 19100 | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{\sim}{R .0001} .$ | $\begin{aligned} & \text { Dec. } \\ & \text { D. } \cdot 002 . \end{aligned}$ |  |  |
|  | 。 |  |  |  | n m | 8 | s | - , " |  | " |  |  |  |  |  |
| 11,451 | 294648 | C 13404 | 375-6 | 43733 | $22 \quad 1930.74$ | +2.7451 | +.0093 | $29 \begin{array}{ll} & 59 \\ 10.8\end{array}$ | +18.150 | + 162 | 10.0 | 20 | - 11 | $8 \cdot 8$ | K 5 |
| 1 1,452 | 294647 | C 13403 |  |  | $1930 \cdot 85$ | 7515 | 91 | 2930 30 <br> 1  | 150 | 162 | 1.0 | 12 | + 14 | $9 \cdot 4$ | F 5 |
| 11,453 | 254720 | C 13406 | 374-7 |  | 1934.32 | 8014 |  | $25 \quad 32 \quad 52 \cdot 9$ | 152 | 165 | 10.9 | - 6 | - 14 | $9 \cdot 1$ |  |
| 11,454 | 254721 | C 13407 |  |  | 1938.51 | 7928 | 79 |  | 155 | 165 | 11.9 | $+4$ | 17 $+\quad 17$ | $9 \cdot 8$ |  |
| 11,455 | 264420 | C 13408 | 378 |  | $1940 \cdot 32$ | 7851 | 82 | $26 \quad 53 \quad 58 \cdot 1$ | 156 | 165 | $9 \cdot 4$ | + | - 63 | $8 \cdot 7$ | G 0 |
| 11,456 | $24+587$ | B 8624 | 379 |  | $22 \quad 1944.19$ | $+2.8133$ | +.0073 | $2435 \quad 52 \cdot+$ | +18.158 | +.165 | 10.4 | 13 | 18 | 8.8 |  |
| 11,457 | $30+703$ | L 9453 |  |  | 1949.78 | 7352 |  | $30{ }^{8} \quad 20 \cdot 7$ | 162 | 161 | 8.6 | $+3$ | - 3 | $7 \cdot 46$ | Mb |
| 11,458 | 274310 | C 13412 |  |  | $1950 \cdot 65$ | 7686 | 87 | $\begin{array}{llll}28 & 15 & 6.5\end{array}$ | 162 | 163 | II.1 | + 43 | + 24 | $9 \cdot 8$ |  |
| 11,459 | 264423 | ${ }_{\text {C }}$ C 13414 |  |  | $20 \quad 1.00$ | 7880 | 81 | $26+434 \cdot 5$ | 169 | 164 | 12.5 | + 13 | + 66 | $9 \cdot 4$ |  |
| 11,460 | 264424 | C 13415 |  |  | 2010.26 | 7831 | 83 | 27 10 2.4 | ${ }^{1} 74$ | 164 | 12.1 | + 18 | + 43 | $9 \cdot 2$ |  |
| 11,461 | 274311 | C 13417 |  |  | $2220 \quad 20.22$ | $+2.7778$ | $+.0085$ | $27 \quad 3746 \cdot 3$ | +18.180 | $+\cdot 163$ | 12.6 | + 34 | $+\quad 29$ $+\quad$ | 9.5 |  |
| 11,462 | 254723 | C 13418 | 391 | 43763 | $20 \quad 24.82$ | 7950 | 80 | $26 \begin{array}{llllllll} & 15 & 33 \cdot 1\end{array}$ | 183 | 164 | 11.9 | - 19 | + | $8 \cdot 7$ | G 0 |
| 11,463 | 29.4652 | C 13420 | 393 |  | 2026.84 | 7484 | 93 | 2957 1.0 | 184 | 161 | 11.8 | + $\quad 27$ | $\bigcirc$ | 9.2 | A 0 |
| 11,464 | 314680 | L. 9458 | 395 |  | 2032.96 | 7215 | 102 | $315931 \cdot 8$ | 188 | 159 | 10.5 | - 8 | + 31 | $8 \cdot 1$ | K 2 |
| 11,465 | 274315 | C 13422 | 396 | 43792 | 2039.02 | 7711 | 88 | $\begin{array}{lllllllll}28 & 13 & 46 \cdot 7\end{array}$ | 192 | 163 | $9 \cdot 3$ | 22 | - 24 | $8 \cdot 3$ | K |
| I 1,466 | 254726 | C 13424 | 403 | 43782 | 222050.78 | +2.7.974 | 0080 | $26 \quad 9$17 1 | 18.199 | $+\cdot 164$ | 8.5 | 24 | 24 | 8.8 | A 0 |
| 11, 467 | 264428 | C 13427 |  |  | 2056.71 | 7900 | 82 | 26470.6 | 203 | 163 | $9 \cdot 1$ | 21 | - 12 | 8.6 | G 5 |
| 11,468 | 264429 | C 13428 |  |  | 21.1 .06 | 7850 | $8_{4}$ | 27 II 59-3 | 205 | 162 | $9 \cdot 9$ | - 11 | + | $9 \cdot 2$ | K |
| 11,469 | 264430 | C 13433 |  |  | 2128.70 | 7872 | 84 | $27 \quad 718.0$ | 222 | 162 | $9 \cdot 3$ | + | + 22 | 8.9 | K o |
| 11,470 | 294659 | C 13435 |  |  | $2145 \cdot 84$ | 7513 | 95 | $\begin{array}{llll}30 & 2 & 16.6\end{array}$ | 233 | 158 | $9 \cdot 7$ | 40 | + 21 | 9.1 | F |
| 11,471 | 254730 | C 13437 | 420 | 43820 | 222151.28 | +2.8079 | $+\cdot 0078$ | 252812.1 | 18.236 | + 162 | $8 \cdot 6$ | 9 | $-18$ | $7 \cdot 11$ | A 0 |
| 11,472 |  | ${ }^{\text {C }} 13438$ |  |  | 2154.98 | 7696 | 91 | 2883828.4 | 238 | 159 | $9 \cdot 9$ |  |  | $9 \cdot 4$ |  |
| 11,473 | 274317 | ${ }^{\text {C }} 13439$ | 425 |  | $2156 \cdot 81$ | 7769 | 88 | $\begin{array}{llll}28 & 3 & 36.6\end{array}$ | 239 | 160 | $8 \cdot 2$ | 30 | + 14 | $7 \cdot 27$ | K o |
| 11,474 | $28+369$ | C 13440 |  |  | $22 \quad 2.78$ | 7687 | 91 | $28 \quad 4435 \cdot 5$ | 243 | r 59 | 10.0 | 21 | - 8 | 9.4 | G 5 |
| 11,475 | 254732 | C 13442 | 429-30 |  | $2213 \cdot 17$ | 8107 | 78 |  | 249 | 161 | 8.8 | + 1 | + | 8.46 | K o |
| 11,476 | 304710 | C 13446 | 440 |  | 222222.48 | +2.7474 | +.0097 | $30 \quad 2922.8$ | +18.255 | + 157 | $9 \cdot 0$ | + 43 | - | $8 \cdot 5$ | K o |
| 11,477 | $27+319$ | C 13447 | 439 |  | 22.24 .80 | 7875 | 85 |  | 256 | 160 | $9 \cdot 3$ | + 11 | $+$ | $9 \cdot 1$ | K o |
| 11,478 | 254733 | C 13448 | 443 |  | $22 \quad 28.83$ | 8028 | 80 | $26 \quad 3 \quad 29.5$ | 259 | 162 | $9 \cdot 4$ | 45 | + | $8 \cdot 7$ | A 2 |
| 11,479 | 264433 | C 13449 | $4^{28}$ |  | $2240 \cdot 93$ | 7990 | 82 |  | 266 | 160 | 9.9 | + 11 | - 37 | $9 \cdot 2$ | K o |
| II,480 | 294663 | C 13450 |  |  | 2244.85 | 7541 | 96 |  | 268 | 157 | 10.0 | - 4 | + 12 | $9 \cdot 1$ |  |
| 11,481 | $28+372$ | C 13451 |  |  | $222247 \cdot 34$ | +2.7714 | +.0091 | $2841 \begin{array}{lll}173\end{array}$ | $+18.270$ | + 159 | 10.2 | 18 | - 30 | 9•1 | K o |
| 11,482 | 304711 | C 13452 | 450 | 43858 | 2253.20 | 7488 | 98 | $30 \quad 29 \quad 55 \cdot 7$ | 273 | 156 | $8 \cdot 9$ | - | - 31 | 7.61 | K 2 |
| 11,483 | 294667 | C 13454 |  | 43860 | 2258.44 | 7520 | 97 | 30 16 34.0 | 276 | 156 | $8 \cdot 6$ | + 22 | - 18 | 8.51 | K 5 |
| 11,484 | 274321 | C 13456 |  |  | 23 5-18 | 7839 | 87 | $27 \quad 45 \quad 26 \cdot 3$ | 280 | 158 | 10.3 | + 65 | + 40 | 9.5 |  |
| 1 1,485 | 304712 | C 13458 |  |  | $23 \quad 9 \cdot 70$ | 7500 | 98 | $\begin{array}{lllllllllllllllll}30 & 28 & 30.8\end{array}$ | 283 | 156 | 11.9 | + | 24 | $9 \cdot 4$ | K o |
| 11,486 | 314700 |  |  |  | 222311.05 | +2.7362 | +.0102 | $313239 \cdot 6$ | +18.284 | + $\cdot 155$ | 11.5 |  |  | $9 \cdot 4$ |  |
| 11,487 | 28.4375 | C 13460 |  |  | 2322.95 | 7721 |  | $284644 \cdot 6$ | 291 | 158 | 11.1 | - 16 | + 1 | $9 \cdot 4$ | A 3 |
| 11,488 | 274323 | C 13461 |  |  | 2323.73 | 7845 |  | $274644 \cdot 1$ | 291 | 158 | 10.1 | - | - 98 | $8 \cdot 7$ | F 8 |
| 11,489 | 284376 | C 13462 | $4^{62}$ |  | $23 \quad 28.86$ | 7663 | 94 | $\begin{array}{lllll}29 & 16 & 38 \cdot 2\end{array}$ | 294 | 158 | 11.3 | $+$ | - 24 | $9 \cdot 4$ |  |
| 11,490 | 304713 | L 9489 |  |  | 23 32.01 | 7416 | 101 | $311247 \cdot 3$ | 296 | 155 | 11.4 | + 3 | - 2 | $9 \cdot 4$ |  |
| 11,491 | 314701 | L. 9493 | 465 | 43882-4 | $2223 \begin{array}{lll} & 38.85\end{array}$ | +2.7398 | +.0102 | 312248.7 | $+18.300$ | +.155 | 8.6 | + 46 | + 59 | $6 \cdot 26$ | $\mathrm{K}_{2}$ |
| 11,492 | 284378 | C 13465 | 476-7 |  | 23 56.16 | 7680 | 95 | $291434 \cdot 3$ | 3 II | 157 | 10.0 | + 19 | + 14 | 8.7 | $\mathrm{A}^{2}$ |
| 11,493 | 244593 | B 8645 | 474 | 43890 | 2358.05 | 8257 | 76 | $24 \begin{array}{lllllll}24 & 38 \cdot 3\end{array}$ | 312 | 160 | 9.8 | - II | - 20 | 7.52 | K。 |
| 11,494 | 264437 | C 13466 | 478 | 43893 | 23 58.88 | 8007 | 83 | $26 \quad 33$ 36.I | 312 | 158 | 9.9 | 26 | 22 | 6.60 | K |
| 11,495 | 244594 | B 8646 | 475 | 43891 | 23 59.12 | 8267 | 76 | 24  <br> 19 $58 \cdot 1$ | 312 | 160 | 9.6 | + 4 | + | 6.71 | B 9 |
| 11,496 | 274325 | C 13468 |  |  | $22 \quad 2421.72$ | $+2.7883$ | +.0088 | 274183.6 | +18.326 | $+\cdot 156$ | 10.5 | + 8 | - 14 | $9 \cdot 2$ |  |
| 11,497 | 304718 | L 9496 |  |  | $2425 \cdot 70$ | 7483 | 102 | 30 | 328 | 155 | 10.1 | 51 | - 51 | $9 \cdot 4$ |  |
| 11,498 | 264438 | C 13470 |  |  | $2430 \cdot 16$ | 7940 | 86 | 271450.2 | 33 I | 157 | 10.5 | - 17 | + 1 | 9.4 |  |
| 11,499 | 254741 | C 13469 | 484 | 43908 | 2430.24 | 8056 | 84 | $\begin{array}{lllllllll}26 & 15 & 57.3\end{array}$ | 331 | 158 | $9 \cdot 1$ | + 28 | - 9 | $8 \cdot 7$ | Go |
| 11,500 | 294672 | C 13473 |  |  | $243+60$ | 7606 | 97 | $29 \quad 59 \quad 7 \cdot 8$ | 333 | 155 | 10.0 |  | - 69 | $8 \cdot 7$ | F 8 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annu | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Dec. 1910\%. | Precession. | Sec. Var. | Epoch <br> 1900+ | $\begin{aligned} & \text { R.A. } \\ & \text { s.0001. } \end{aligned}$ | $\begin{aligned} & \text { Doc. } \\ & \text { Noot. } \end{aligned}$ | Mag. | Spectral |
|  | - |  |  |  | h m | s | 8 | - " |  | * |  |  |  |  |  |
| 11,551 | 284398 | ${ }^{\text {C } 13532}$ |  | 44093 | $22 \quad 2926.36$ | +2.7858 | +.0099 | $29 \quad 7 \quad 35 \cdot 7$ | +18.501 | +.149 | 12.6 | + 22 | - 16 | $8 \cdot 3$ | K o |
| 11,552 | 274340 | C I 3533 |  |  | 2928.52 | 8068 | 091 |  | 503 | 150 | 12.4 | - 8 | + 8 | $9 \cdot 2$ |  |
| 11,553 | 304735 | L 9545 |  |  | $2931 \cdot 02$ | 7624 | 106 | 31.557 .6 | 504 | 147 | 11.0 | + 21 | + 8 | $8 \cdot 7$ |  |
| 11,554 | 274342 | C 13536 |  |  | 2933.35 | 7972 | 095 | 28 10 36.5 | 505 | 149 | 13.6 | + 23 | + 14 | $9 \cdot 4$ |  |
| 11,555 | 274343 | C 13537 |  |  | $2935 \cdot 64$ | 8007 | 093 | $27 \quad 5237.0$ | 506 | 149 | 11.7 | - 57 | + 6 | $8 \cdot 9$ | A 2 |
| 11,556 | 284399 | C 13539 | 596 |  | $22 \quad 29 \quad 39.25$ | $+2.7918$ | +.0097 | 284014.1 | +18.509 | $+\cdot 148$ | 12.5 | + 21 | - 18 | $9 \cdot 2$ | F 8 |
| 11,557 | 304737 | L 9547 |  |  | 2941.05 | 7625 | 108 |  | 510 | 147 | 11.9 | - 17 | - 0 | $9 \cdot 1$ |  |
| 11,558 | 284401 | C 13540 |  | 44094-110 | 29 49.12 | 7852 | 099 | $291642 \cdot 6$ | 514 | 148 | 10.7 | + | + 3 | $8 \cdot 1$ | K o |
| 11,559 | 294693 | ${ }^{\text {C } 13541}$ |  |  | 2958.05 | 7813 | 102 | $2939 \quad 9 \cdot 4$ | 519 | 147 | 11.5 | - 1 | 2 | $9 \cdot 4$ |  |
| I 1,560 | 284403 | C 13543 |  |  | 2959.41 | 7949 | 097 | $28 \quad 29$ 11.7 | 520 | 148 | 10.4 |  |  | 8.8 | K 5 |
| 11,561 | 304739 | L 9549 |  |  | $\begin{array}{lll}22 & 30 & 0.65\end{array}$ | +2.7677 | +.0106 | $304751 \cdot 4$ | $+18.520$ | +.145 | 12.5 | 21 | 28 | $9 \cdot 1$ |  |
| 11,562 | 254767 | C 13545 | 60 | $44^{121}$ | $\begin{array}{lll}30 & 8.27\end{array}$ | 8243 | 087 | $25 \quad 5516.2$ | 525 | 149 | 10.4 | + 28 | + 13 | $8 \cdot 6$ | F 8 |
| 11,563 | 254768 | C 13547 | 608 | 44137 | $30 \quad 22 \cdot 17$ | 8226 | 088 | $26 \quad 7 \quad 59.1$ | 533 | 150 | 9.9 | 21 | + | $7 \cdot 26$ | $\mathrm{K}_{2}$ |
| II, 564 | 284405 | C 13548 | $610-1$ | 44141 | 3026.04 | 7872 | 00 | $\begin{array}{lllllllllllllll}29 & 16 & 13.8\end{array}$ | 535 | 147 | 11.7 | 10 | - 10 | 8.5 | $\mathrm{F}_{2}$ |
| 11,565 | 304742 | L 9557 |  |  | 3033.79 | 7641 | 109 | 311439.1 | 539 | 146 | 11.8 | 15 | + 12 | $9 \cdot 4$ |  |
| 11,566 | 304741 | L 9556 |  |  | 223033.92 | $1+2.7664$ | +.0108 | $\begin{array}{llll}31 & 3 & 1.5\end{array}$ | 18.539 | $+\cdot 146$ | 12.3 | - | - 17 | $9 \cdot 1$ |  |
| II, 567 | 314728 | L 9558 |  |  | $3034 \cdot 64$ | 7575 | 111 |  | 539 | 145 | 12.7 | + 101 | + 23 | $9 \cdot 4$ |  |
| 11,568 | 284406 | C 13551 | , |  | 3034.97 | 7894 | oo | $29651 \cdot 4$ | 540 | 147 | 12.5 |  | - 8 | $9 \cdot 2$ | G 5 |
| 11,569 | 294699 | C 13552 | 618-20 | 44146 | $30 \quad 36 \cdot 34$ | 7851 | 101 | $292932 \cdot 8$ | 540 | 147 | 10.6 | 24 | + 22 | $7 \cdot 26$ | K 2 |
| 11,570 | 284407 | C 13553 |  |  | $3039 \cdot 16$ | 7909 | 099 | $29 \quad 000.2$ | 542 | 147 | 11.7 | 4 | - 2 | 8.8 | K o |
| 11,571 | 304743 | L 9559 |  | 44149 | 223042.21 | +2.7674 | +.0108 | 31028.6 | +18.544 | +.146 | 11.5 | + 10 | - | $8 \cdot 7$ | A 2 |
| 11,572 | 274346 | C 13554 |  |  | $3042 \cdot 37$ | 8068 | 093 | $27 \quad 37 \quad 25 \cdot 8$ | 544 | 147 | 12.9 |  | + 19 | $9 \cdot 4$ |  |
| 11,573 | 304744 | C 13555 |  | 44151 | 3051.91 | 7759 | 106 |  | 549 | 144 | 11.1 | + 29 | - 12 | $7 \cdot 56$ | K 2 |
| 11,574 | 264459 | C 13557 |  |  | 3054.57 | 8113 | 0.9 | $271640 \cdot 2$ | 550 | 147 | 12.5 | + | 12 | $9 \cdot 1$ |  |
| 11,575 | 294700 | C 13558 |  |  | 3056.80 | 7833 | 102 | $2944 \quad 7 \cdot 7$ | 552 | 146 | 12.0 | - 7 | - 50 | $8 \cdot 2$ | F 8 |
| 11,576 | 314731 | L 9561 |  |  | $22 \quad 30 \quad 57 \cdot 95$ | +2.7622 | +.0110 | 313040.1 | +18.552 | + 144 | 12.8 | + |  |  |  |
| 11,577 | 244615 | C 13560 |  | 44153 | 3100.51 | 8341 | 084 | $251357 \cdot 4$ | 554 | 148 | 13.1 | - 17 | - 8 | $8 \cdot 92$ | F 5 |
| 11,578 | 304746 | C 13562 |  |  | $\begin{array}{ll}31 & 2.32\end{array}$ | 7754 | 106 | $302551 \cdot 3$ | 555 | 144 | 13.1 | - 11 | $+$ | $9 \cdot 4$ |  |
| 11,579 | 254771 | C 13561 |  |  | $\begin{array}{lll}31 & 3.41\end{array}$ | 8305 | 085 | $2534 \quad 20 \cdot 2$ | 555 | 148 | 12.3 | - | + | $8 \cdot 7$ | F 8 |
| 11,580 | 294701 | C 13564 | 632-3 |  | $\begin{array}{lll}31 & 8.85\end{array}$ | 7871 | 101 | $292750 \cdot 0$ | 558 | 146 | 12.2 | + | - | $8 \cdot 6$ | Fo |
| 11,581 | 244617 | B 8680 | 640 | 44164 | 223124.73 | $+2.8378$ | $+\cdot 0084$ | $24 \quad 5844 \cdot 9$ | +18.567 | + 148 | 10.2 |  |  | 7.96 | K o |
| 11,582 | 314732 | L 9566 |  |  | 3130.56 | $7605$ | 112 |  | 570 | 143 | 10.7 | + 21 | + 8 | $9 \cdot 1$ |  |
| 11,583 | 294705 | C 13568 | 643-4 |  | $\begin{array}{lll}31 & 31 \cdot 36\end{array}$ | 7862 | 103 | 2938 12.0 | 571 | 145 | 9.9 | - ${ }^{2}$ | - 4 | 8.5 | F 5 |
| 11,584 | 284409 | C 13567 |  |  | 3131.54 | 7996 | 098 | $28 \quad 28 \quad 12 \cdot 3$ | 571 | 146 | 10.5 | - 31 | - 40 | $9 \cdot 2$ |  |
| 11,585 | 264462 | C 13569 |  |  | 3135.78 | 8177 | 092 | $26 \quad 52 \quad 33 \cdot 3$ | 573 | 147 | 11.7 | + 26 | - 32 | $9 \cdot 4$ |  |
| 11,586 | 284411 | C 13570 | 658 | 44191 | $\begin{array}{llll}22 & 32 & 3.95\end{array}$ | +2.7920 | +.0101 |  | +18.588 |  |  | 6 | - 14 | $8 \cdot 1$ | Ko |
| 11,587 | 264463 | C 13571 | 659-60 | 44190 | $\begin{array}{lll}32 & 7 \cdot 24\end{array}$ | 8215 | 091 | $26 \quad 39 \quad 20 \cdot 2$ |  | 146 | $8 \cdot 5$ | + 11 | - 9 | $7 \cdot 30$ | Fo |
| 11,588 | 254774 | C 13573 | $665$ |  | 3219.55 | 8279 | 089 | $\begin{array}{lll}26 & 7 & 1 \cdot 3\end{array}$ | 597 | 145 | 10.5 | + 4 | - 8 | $8 \cdot 7$ | Ko |
| 11,589 | 254775 | ( ${ }_{\text {C }} 1$ 13574 |  |  | 3221.20 322200 | 8306 | 087 | $\begin{array}{llll}25 & 52 & 21.6\end{array}$ | 598 | 145 | 11.4 0.6 | 74 | + $+\quad 36$ $+\quad 12$ | 9.4 7.10 |  |
| 11,590 | 274351 | C 13575 | 668-9 |  | $32 \quad 24.08$ | 8150 | 093 | $\begin{array}{llll}27 & 19 & 2.5\end{array}$ | 599 | 145 | $9 \cdot 6$ | 24 | + 12 | $7 \cdot 10$ | K o |
| 11,591 | 274353 | C 13577 |  |  | $22 \quad 32 \quad 28.70$ | $+2.8063$ | $+.0097$ | $28 \quad 745 \cdot 9$ | +18.602 | +.144 | 10.7 | 27 | - 74 | $8 \cdot 9$ |  |
| 11,592 | 294708 | ${ }^{\text {C } 13578}$ |  |  | 3230.61 | 7887 | 103 | 29419.6 | 603 | 143 | 11.3 | 4 | + 20 | 9-1 |  |
| 11,593 | 304751 | C 13579 |  |  | 3232.64 | 7817 | 106 | $\begin{array}{llllllllllll} & 1 & 51.5\end{array}$ | 604 | 142 | 11.6 | 3 | + 12 | 9.8 |  |
| 11,594 | 304752 | C 13581 | 677 | 44212 | $32 \quad 34 \cdot 39$ | 7814 | 106 | $301930 \cdot 3$ | 605 | 142 | $9 \cdot 1$ |  | 12 | $7 \cdot 61$ | A 0 |
| 11,595 | 304753 | L 9581 |  |  | $3235 \cdot 32$ | 7745 | 110 | $\begin{array}{lll}30 & 55 & 2 \cdot 3\end{array}$ | 606 | 142 | 10.2 | 1 | 20 | $8 \cdot 3$ | K o |
| 11,596 | 264465 | C 13582 |  |  | $22 \quad 32 \quad 40.23$ | $+2.8173$ | +.0094 | 27 10 $34 \cdot 8$ | +18.608 | +.145 | 11.9 | + 51 | + 24 | 9.4 |  |
| 11,597 | 284415 | C 13583 | 683 | 44214-5 | 32 44.13 | 7941 | 102 | 291618.3 | 610 | 144 | 9.0 | 4 | + 8 | $8 \cdot 1$ | G 5 |
| 111,598 | 294710 | C 13585 | 689 |  | 3251.88 | 7847 | 106 | $\begin{array}{llllll}30 & 7 & 24.3\end{array}$ | 615 | 142 | 11.3 | - 4 | - 9 | 8.76 | A 2 |
| 11,599 | 274356 | C 13584 |  |  | 3251.98 | 8098 | 097 | $27 \quad 5437 \cdot 4$ | 615 | 144 | 10.6 | + $+\quad 7$ | + 14 | 8.8 | A 3 |
| 11,600 | 254776 | C 13586 |  |  | 3256.85 | 8278 | 090 | 261644.7 | 617 | 145 | 11.1 | - 20 | -. 5 | 9.2 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epocb $1900+$ | Annual P.M. |  | Mag. | $\begin{aligned} & \text { Spectral } \\ & \text { Type } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { R.A. } \\ =0001 . \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { Neos. } \end{aligned}$ |  |  |
|  | - |  |  |  | b m s | 8 | $s$ | - ' | * | " |  |  |  |  |  |
| 11,601 | 254777 | ${ }_{\text {C } 13587}$ | 691-703 |  | $22 \quad 3310.42$ | +2.8380 | +.0087 | 252230.0 | $+18.625$ | +-145 | 11.9 | - | - 3 | $8 \cdot 66$ | F 5 |
| 11,602 | 264466 | C 13589 | 694-5 | 44234 | 3320.63 | 8215 | 093 | $26 \begin{array}{llll}268 & 17.8\end{array}$ | 630 | 144 | 10.6 | + 31 | $\begin{array}{r} \\ +\quad 35 \\ +\quad 5 \\ \hline\end{array}$ | $8 \cdot 1$ | $\text { F } 8$ |
| 11,603 | 264467 | $\mathrm{C}_{1} 13590$ | 700-1 |  | 3323.40 | 8206 | 093 |  | 632 | 144 | 11.8 | - 6 | + 25 | 8.9 |  |
| 11,604 | 274360 | C 13591 |  |  | $3325 \cdot 22$ | 8165 | 095 | $27 \quad 26$ 38.1 | 632 | 144 | 12.3 | $+39$ | + 7 | $8 \cdot 9$ |  |
| 11,605 | 254779 | C 13592 | 717 |  | $33 \quad 30.94$ | 8328 | 087 | $25 \quad 5715 \cdot 3$ | 636 | 143 | 11.2 | - | - | $8 \cdot 1$ | K o |
| 11,606 | 284418 | ${ }^{\text {C } 13594}$ |  |  | 223333.43 | +2.8068 | +.0099 | 28 21 38.9 | +18.637 | $+\cdot 142$ | 12.7 | + 31 | - 17 | $9 \cdot 4$ |  |
| 11,607 | 284419 | $\mathrm{C}^{1} 3595$ | 706 |  | 33 34.28 | 8032 | 100 | $28 \quad 4114.7$ | 637 | 142 | 12.6 | - | + 10 | $9 \cdot 4$ |  |
| 11,608 | 254780 | C 13593 |  |  | 33 34.50 | 8366 | 087 | 253657.0 | 637 | 143 | 11.9 | + 56 | + 29 | $9 \cdot 1$ |  |
| 11,609 | 294715 | C 13596 | 713-4 | 44258-62-3 | 33 <br> 3.23 | 7950 | 104 | 292724.4 | 642 | 142 | $9 \cdot 9$ | $+\quad 30$ | - 5 | $7 \cdot 38$ | K o |
| 11,610 | 264468 | C 13597 |  |  | $3347 \cdot 43$ | 8251 | 093 | $26 \quad 450.4$ | 644 | 143 | $12 \cdot 1$ | - 27 | - 33 | $9 \cdot 4$ |  |
| 11,611 | 244623 | B 8696 |  |  | $22 \quad 3353.50$ | +2.848I | +.0083 | 243524.6 | +18.648 | +-144 | 12.1 | - 17 | - 33 | $9 \cdot 1$ |  |
| 11,612 | 314742 | L 9588 | 720 |  | 3354.52 | 7688 | 114 | $314630 \cdot 4$ | 648 | 140 | 11.0 | + 102 | + 14 | $7 \cdot 9$ | K 5 |
| 11,613 | 294717 | C 13599 |  |  | $\begin{array}{ll}34 & 1.28\end{array}$ | 7893 | 106 |  | - 652 | 140 | 13.1 | - 28 | + III | $9 \cdot 1$ |  |
| 11,614 | 284422 | C 13600 | 725-6 | 44282-3 | 3410.87 | 7988 | 103 | 2981438.6 | 657 | 142 | 9.1 | + 31 | + 7 | $8 \cdot 3$ | $\mathrm{F}^{2}$ |
| 11,615 | 274362 | C 13601 |  |  | $3414 \times 51$ | 8120 | 098 | $\begin{array}{llll}28 & 4 & 9.5\end{array}$ | 659 | 142 | 10.4 | + II | - 6 | $8 \cdot 6$ | K。 |
| 11,616 | 264470 | C 13604 |  |  | $223425 \cdot 47$ | +2.8217 | +.0095 | $27 \quad 1347 \cdot 3$ | +18.665 | $+142$ | 13.4 | + | + | $9 \cdot 4$ |  |
| [1,617 | 284424 | C 13605 | $731-2$ | 44294-5-6 | $3428 \cdot 48$ | 7997 | 103 | 291435.8 | 666 | 141 | $8 \cdot 1$ | + 32 | - 16 | $7 \cdot 9$ | A 0 |
| 11,618 | 294718 | C 13606 |  |  | 3428.90 | 7907 | 106 |  | 667 | 140 | 12.5 | + 44 | - | 9.1 |  |
| 11,619 | 294719 | $\mathrm{C}_{1} 13607$ | 733 | 44298 | 3431.40 | 7984 | 104 | $29 \quad 22 \quad 24 \cdot 6$ | 668 | 141 | 11.5 | + 4 | - | 8.7 |  |
| 11,620 | 244630 | B 8698 | 737 | 44297 | $3436 \cdot 57$ | 8523 | 083 | 242135.6 | 67 I | 143 | 11.9 | 13 | - 5 | $9 \cdot 2$ |  |
| 11,621 | 264471 | C 13608 | 739 |  | 223438.44 | +2.8256 | +.0095 |  | $+18.672$ | +.142 | 11.7 | - 15 | + | $9 \cdot 1$ |  |
| 11,622 | 294720 | C 13609 |  |  | $3439 \cdot 50$ | 7937 | 106 | $29508 \cdot 0$ | 672 | 140 | $9 \cdot 9$ | - 17 | - 29 | $8 \cdot 2$ | K 5 |
| 11,623 | 284425 | C 13610 |  |  | $3445 \cdot 08$ | 8054 | 102 | $\begin{array}{lllllllllll}28 & 48.8\end{array}$ | 675 | 141 | 13.7 | - 4 | - 6I | $9 \cdot 4$ |  |
| 11,624 | 274365 | ${ }^{\text {C }} 13611$ |  |  | 34 47-16 | 8176 | 097 |  | 676 | 141 | $12 \cdot 1$ | + 7 | + 9 | 8.7 |  |
| 11,625 | 284426 | C 13613 |  |  | $3452 \cdot 14$ | 8102 | 102 | $28 \quad 23$ 57-1 | 679 | 141 | 12.0 | + 37 | - 5 | $9 \cdot 8$ |  |
| 11,626 | 304759 | L 9591 |  |  | $223456 \cdot 54$ | +2.7850 | +.0110 | $304038 \cdot 1$ | +18.681 | +.139 | II.0 | - 20 | + 3 | 8.7 |  |
| 11,627 | 284428 | C 13616 | 748-9 |  | 3459.09 | 8046 | 103 | $28 \quad 5624.7$ | 683 | 140 | $10 \cdot 1$ | - 13 | + 25 | 8.7 | Fo |
| 1 1,628 | 254783 | C 13619 |  |  | $\begin{array}{llll}35 & 9.34\end{array}$ | 8412 | 088 | $25 \quad 3340 \cdot 9$ | 688 | 141 | 12.9 | + 10 | + 6 | $9 \cdot 1$ |  |
| 11,629 | 254785 | C I 3620 |  |  | $35 \cdot 17 \cdot 61$ | 8395 | 090 | $254538 \cdot 2$ | 692 | 141 | $11 \cdot 2$ | + 6 | - 64 | $9 \cdot 1$ |  |
| 11,630 | 274371 | C 13621 |  |  | $35 \cdot 22 \cdot 16$ | 8171 | 099 | $27 \quad 53 \quad 56 \cdot 4$ | 695 | 140 | 117 | 13 | + 5 | 9.2 |  |
| 11,631 | 294723 | C 13623 |  |  | $22 \quad 35 \quad 29 \cdot 80$ | +2.7955 | +.0107 | $29 \quad 54 \quad 16 \cdot 8$ | +18.699 | +.139 | 11.5 | - 6 | + 3 | $9 \cdot 4$ |  |
| II, 632 | 30.4761 | L 9598 | 761 |  | 35 31.50 | 7869 | 111 | $30 \quad 4037 \cdot 4$ | 700 | 137 | 8.9 | 13 | 17 $+\quad 17$ | 8.01 | K 2 |
| 11,633 | 304762 | C 13625 |  |  | 35 39.17 | 7916 | 109 | $3017 \quad 35 \cdot 1$ | 704 | 137 | 11.2 | 25 | + 25 | 8.8 |  |
| 11,634 | 254786 | ${ }^{\text {C }} 13624$ | 766-7 |  | 3539.63 | 8439 | 089 | $25 \quad 2549.2$ | 704 | 141 | 11.3 | + II | + 47 | 9.5 |  |
| 11,635 | 304763 | L 9602 |  |  | $3543 \cdot 75$ | 7835 | 113 | $311844^{\circ}$ | 706 | 137 | 11.6 | 13 | , | 8.9 |  |
| 11,636 | $30+765$ | C 13627 |  |  | 223558.69 | +2.7924 | +.0110 | $\begin{array}{llll}30 & 19 & 5.8\end{array}$ | +18.714 | +.137 | $8 \cdot 7$ | - 48 | - 80 | 8.71 | F 8 |
| I 1,637 | 284430 | C 13628 |  |  | $\begin{array}{lll}36 & 3 \cdot 46\end{array}$ | 8134 | 102 | $\begin{array}{llll}28 & 26 & 9 \cdot 4\end{array}$ | 716 | 139 | $9 \cdot 9$ | - 38 | + 31 | $8 \cdot 9$ |  |
| II, 638 | 314757 | L 9607 | 783 | 44357 | $\begin{array}{ll}36 & 8.51\end{array}$ | 7816 | 114 |  | 719 | 138 | $8 \cdot 9$ | + 77 | + 6 | 8.0 | Go |
| II,639 | 274376 | C 13629 | 788 | 44358-9 | $\begin{array}{llll}36 & 12.96\end{array}$ | 8212 | 099 | $274436 \cdot 7$ | 721 | 139 | 10.0 | - 51 | - 62 | $8 \cdot \mathrm{o}$ | Fo |
| 11,640 | 304767 | L 9609 | 792 |  | $36 \quad 17 \cdot 19$ | 7874 |  | $3051 \quad 100$ | 724 | ${ }^{1} 37$ | 10.3 | 18 | $\bigcirc$ | $8 \cdot 3$ | K 2 |
| II,641 | $25+787$ | C 13631 | 794-5-6 | 44367 | $22 \quad 36 \quad 24.54$ | +2.8373 | +.0093 | $\begin{array}{llll}26 & 16 & 5 \cdot 6\end{array}$ | +18.727 | +-139 | 9.7 | + 18 | - 8 | $8 \cdot 1$ | Ma |
| $11,642$ | \}29 7726 | C 13632 |  |  | $3630 \cdot 45$ | 8029 |  | 293122.5 | $730$ | 137 | $I I \cdot 3$ |  | - 12 |  |  |
| $11,6+3$ | $\}^{29} 7726$ | L 13632 |  |  | $36 \quad 30 \cdot 88$ | 8029 | 106 | 293124.1 | 731 | 137 | $6 \cdot 6,8 \cdot 2$ | - 34 | - 12 | 8.8 | F 8 |
| 11,644 | 314758 | $\begin{array}{ll}\text { L } & 9612 \\ \text { P } & 8711\end{array}$ | 806 |  | $36 \quad 37 \cdot 63$ | 7831 | 115 |  | 734 | 137 | 10.6 | [ $\quad 17$ | + 24 | $8 \cdot 7$ | F 8 |
| 11,645 | 244636 | B 8711 | 805 | 44379 | $3643 \cdot 23$ | 8536 | 087 | $24 \quad 44 \quad 27 \cdot 8$ | 737 | 140 | 9.8 | - 38 | - 3 | $7 \cdot 29$ | Fo |
| 11,646 | 294729 | C 13633 |  |  | $2236 \quad 56 \cdot 51$ | +2.8024 | +.0108 | $294125 \cdot 5$ | +18.744 | +137 | 9.1 | + 16 | + 12 | $8 \cdot 7$ |  |
| 1 1,647 | 294731 | C 13634 |  |  | $\begin{array}{ll}37 & 2.27\end{array}$ | 8000 | 109 | 2955 56.1 | 747 | 136 | 10.4 | + 24 | - 63 | 8-9 |  |
| 11,648 | 284435 | C 13635 |  |  | $\begin{array}{ll}37 & 2.74\end{array}$ | 8120 | 104 | $\begin{array}{lll}28 & 50 & 0.9\end{array}$ | 747 | 137 | 12.2 | + 15 | + 1 | $9 \cdot 4$ |  |
| I 1,649 | 274380 | C 13636 |  |  | $\begin{array}{lll}37 & 6.48\end{array}$ | 8184 | 102 |  | . 749 | 137 | 12.3 | + 56 | + 11 | $9 \cdot 2$ |  |
| 1 1,650 | 314760 | L 9616 |  |  | $\begin{array}{ll}37 & 12.65\end{array}$ | 7804 | 117 | $31 \quad 44 \quad 15 \%$ | 752 | 135 | II.I | - 19 | - 5 | 8.5 | G 5 |


|  |  |  |  |  |  |  |  |  |  |  |  | Annua | P.M. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | B.D. | A.G.C. | W.B. (2). | Laland | A. | Precession. |  |  |  |  |  | $\underset{\text { d.oool }}{\text { R.A }}$ | $\begin{gathered} \text { Doc. } \\ \text { Nool. } \end{gathered}$ |  | Type |
|  | - |  |  |  | b m | 8 | 8 | , | " | " |  |  |  |  |  |
|  |  | ${ }_{\text {C }} 13638$ |  |  | $22 \quad 3713.15$ | +2.8044 | +.0107 | $29344 \mathrm{r} \cdot 9$ | +18.752 | +.136 |  |  |  |  |  |
| 11,652 | $\}^{29} 4733$ | C 13639 |  |  | 3714.60 | 8045 | 107 | $2934 \begin{aligned} & \text { 27.4 }\end{aligned}$ | 753 | 136 | 12.1 | + 12 | + 2 | 8.8 |  |
| II, 653 | 254789 | C 13640 | 813 |  | $3715 \cdot 15$ | 8409 | 093 | $\begin{array}{lllll}26 & 7 & 35 \cdot 4\end{array}$ | 753 | 138 | 12.5 | - 16 | - | 9.4 |  |
| 11,654 | 304771 | C 13641 |  | 44403 | $\begin{array}{lll}37 & 18.93\end{array}$ | 7947 | 1 II | $\begin{array}{lllll}30 & 29 & 43.4\end{array}$ | 755 | 136 | 11.0 | + 55 | 22 | 6.48 8.8 | K 5 |
| I 1.655 | 274382 | C 13644 |  |  | 37 $27 \cdot 18$ | 8264 | 099 | $\begin{array}{lllll}27 & 35 & 16.9\end{array}$ | 760 | 137 | 11.7 | 17 | + 14 | 8.8 |  |
| 11,656 | 284436 | C 13646 | 822 | 44411-2 | 2237 31•79 | +2.8134 | +.0104 | $28 \quad 5015 \cdot 5$ | +18.762 | +.137 | $9 \cdot 4$ |  | 35* | $4 \cdot 85$ | A 0 |
| 11,657 | 304773 | C 13647 |  |  | 37 36.74 | 7968 | 112 | 302312.6 | 765 | 135 | 11.1 | + 41 | + 9 | 9.4 |  |
| 11,658 | 304774 | L. 9624 | 832 |  | 37 56.01 | 7885 | 116 |  | 775 | 135 | 9.5 | + 105 | - 197 | $8 \cdot 9$ | K o |
| 11,659 | 314765 | L 9628 |  |  | $\begin{array}{ll}38 & 9.25\end{array}$ | 7869 | 117 |  | 781 | 135 | 9.4 | + 3 | - 3 | $8 \cdot 5$ | K o |
| 11,660 | 264482 | C 13650 |  |  | $38 \quad 12.35$ | 8329 | 099 | $27 \quad 9 \quad 52.8$ | 783 | 136 | 10\% 5 | + 119 | 3 | $9 \cdot 2$ |  |
| 11,661 | 284439 | C 13652 |  |  | $22382 \mathrm{I} \cdot 19$ | $+2.8115$ | +.0107 | 291452.4 | +18.787 | +.135 | 10.9 | - 61 | 39 | 8.9 | G 5 |
| 11,662 | 284440 | C 13655 |  |  | $38 \quad 36.03$ | 8122 | 107 | $29 \quad 15 \quad 26.2$ | 795 | - 135 | $9 \cdot 5$ | + 6 | - 23 | $9 \cdot 2$ |  |
| 11,663 | 274388 | $\mathrm{C}_{1} 3656$ | 848-50 |  | $3842 \cdot 65$ | 8307 | 101 | $27 \begin{array}{lll}31 & 2.8\end{array}$ | 798 | 135 | $8 \cdot 9$ | + 4 | - 3 | $7 \cdot 9$ | B 9 |
| 11,664 | 274389 | C 13658 |  |  | $3843 \cdot 62$ | 8290 | 102 | $27 \quad 418$ | 799 | 135 | $9 \cdot 1$ | + 43 | + | 8.8 | Mc |
| I 1, 665 | 29 4741 | C 13660 | 852 | 44455-6-7 | $3846 \cdot 88$ | 8074 | 109 | 294515  | 800 | 134 | $\mathrm{II}_{1} 8$ | + 8* | 35* | 3.10 | G 0 |
| I 1,666 | 254795 | $\mathrm{C}_{13662}$ | 861 | 44471 | $22 \quad 3912.88$ | $+2.8543$ | +.0091 | $25 \quad 1845 \cdot 2$ | +18.814 | +.136 | $0 \cdot 4$ | 7 | 14 | $8 \cdot 9$ |  |
| 11,667 | 304782 | L 9638 |  |  | 3914.21 | 7979 | 115 | $3045 \quad 56 \cdot 5$ | 814 | 132 | $8 \cdot 6$ | + 8 | + 21 | 8.9 |  |
| 11,668 | 254796 | $\mathrm{C}_{1} 13663$ |  |  | 3914.93 | 8477 | 094 | 25.59 | 814 | 135 | $9 \cdot 9$ | - 2 | + 33 | $8 \cdot 9$ |  |
| 11,669 | 304784 | L 9639 |  |  | 3915.44 | 7935 | 117 | $311050 \cdot 9$ | 815 | 133 | 10.9 | 23 | + 8 | 8.9 | A 3 |
| 11,670 | 304785 | L 964I |  |  | 3919.60 | 7983 | II 5 |  | 817 | 132 | 10.2 | + 12 | + 2 | 8.8 | Ko |
| 11,671 | 294742 | C 13664 | 864 | 44476 | $223925 \cdot 26$ | $+2.8108$ | +.0110 | 293712.0 | $+18.820$ | +.133 | $9 \cdot 6$ | +190 | + 23 | $8 \cdot 3$ | G 5 |
| 11,672 | 314771 | L 9643 |  |  | 3928.08 | 7878 | 119 | $\begin{array}{ll}31 & 45 \\ 24 & 4\end{array}$ | 82 I | 132 | $9 \cdot 7$ | 20 | + | $8 \cdot 5$ | K 5 |
| I1,673 | 264488 | C 13665 | 866 | 44480 | $3933 \cdot 38$ | 8362 | 101 | $27 \quad 1246 \cdot 9$ | 824 | 134 | $9 \cdot 6$ | 19 | - 25 | $8 \cdot 1$ | F 5 |
| 11,674 | $28444^{2}$ | ${ }^{\text {C } 13668}$ | 871 |  | $3935 \cdot 87$ | 8167 | 108 | $\begin{array}{llll}29 & 6 & 59.9\end{array}$ | 825 | 134 | 10.5 | + 14 |  | $8 \cdot 3$ | F 5 |
| 11,675 | 254799 | C 13667 | 867 |  | 39 36.06 | 8465 | 096 |  | 825 | 134 | $10 \cdot 1$ | 24 | - 8 | $8 \cdot 9$ | K 0 |
| 11,676 | 284443 | C 13669 | 872 |  | $223942 \cdot 53$ | $+2.8203$ | +.0107 | $\begin{array}{lllll}28 & 48 & 18.6\end{array}$ | +18.828 | +.133 | $9 \cdot 8$ | 12 | - 9 | $8 \cdot 1$ | B 9 |
| 11,677 | 264489 | C 13672 | 879 |  | 3953.06 | 8380 | 101 | $\begin{array}{lllllllll}27 & 7 & 30.3\end{array}$ | 834 | 134 | $9 \cdot 8$ | 8 | 16 | $8 \cdot 3$ | K 2 |
| 11,678 | 284444 | C 13675 | 882-3 |  | 3958.79 | 8176 | 109 | $\begin{array}{lllll}29 & 8 & 17.0\end{array}$ | 836 | 133 | 10.2 | 5 | - $\quad 2$ | 8.8 | M a |
| 11,679 | 304788 | L 9645 |  |  | $40 \quad 12.46$ | 7984 | 117 | 31.15116 | 843 | 130 | $9 \cdot 9$ | 18 | - 38 | $9 \cdot 1$ |  |
| 11,680 | 254802 | C 13677 |  |  | $40 \quad 26.68$ | 8486 | 096 |  | 850 | 133 | $9 \cdot 7$ | 5 | + 20 | 8.9 |  |
| 11,681 | 294745 | C 13678 |  |  | $224031 \cdot 12$ | +2.8121 | +.0111 | $\begin{array}{llllllll}29 & 49 & 11.9\end{array}$ | +18.853 | +.131 | 10.6 | + 19 | + 9 | $9 \cdot 2$ |  |
| 11,682 | 304790 | L 9647 |  |  | 4032.88 | 8010 | 117 |  | 853 | , 130 | $9 \cdot 7$ | + 7 | + 13 | $9 \cdot 4$ |  |
| 11,683 | 254805 | ${ }_{\text {C }} 13681$ |  |  | 4111.43 | 8583 | 093 | $\begin{array}{llllllllll}25 & 25 & 17.0\end{array}$ | 873 | 132 | 9.6 | - 13 | - 4 | $8 \cdot 8$ |  |
| 11,684 | 274397 | C 13682 |  |  | 4111.94 | 8367 | 103 | $273739^{\circ} 2$ | 873 | 131 | 10.6 | + 21 | + $+\quad 29$ | 8.9 |  |
| 11,685 | 274398 | C I 3683 |  |  | 4112.99 | 8386 | 102 | $272646 \cdot 4$ | 873 | 131 | 10.5 | 27 | - 50 | $9 \cdot 4$ |  |
| 11,686 | 294752 | C 13684 | 905 |  | 224117.59 | $+2.8118$ | +.0113 | $30 \quad 5 \quad 21.5$ | +18.875 | + 129 | 10.0 | 20 | - | $8 \cdot 7$ |  |
| 11,687 | 294753 | C 13685 | 907 |  | - $4^{122.51}$ | 8132 | 113 | $295840 \cdot 8$ | 878 | 130 | $8 \cdot 7$ | - 191 | - 347 | $6 \cdot 52$ | K |
| 11,688 | 284446 | C I 3687 |  |  | 4129.42 | 8244 | 109 | $\begin{array}{lllllllllllll}28 & 55 & 18.8\end{array}$ | 88 r | 130 | 9.8 | - 29 | - 63 | $8 \cdot 9$ | K o |
| 11,689 | 264498 | ${ }^{\text {C }} 13692$ |  |  | $4147 \cdot 82$ | 8438 | 101 | $\begin{array}{lllll}27 & 5 & 13.0\end{array}$ | 890 | 130 | 10.5 | + 28 | + 10 | 9.4 |  |
| 11,690 | 294757 | C 13693 |  |  | 4148.78 | 8131 | 115 | $\begin{array}{llll}30 & 7 & 9.2\end{array}$ | 891 | 128 | 9.9 | 24 | 22 | 9.4 |  |
| 11,691 | 264499 | C 13694 | 918 |  | 224152.79 | $+2.8510$ | +.0099 | $26 \quad 2223.3$ | +18.893 | $+\cdot 131$ | 9.5 | 6 | 30 | $8 \cdot 3$ | A 2 |
| 11,692 | 254808 | C 13695 |  |  | $4155 \cdot 19$ | 8597 | 094 | $25 \quad 2844 \cdot 5$ | 894 | 131 | ${ }^{12} \cdot 1$ | - 150 | - 19 | $9 \cdot 4$ |  |
| I 1, 693 | 304797 | C 13697 |  |  | $42 \mathrm{I} \cdot 07$ | 8106 | 116 |  | 897 | 128 | 10.9 | $+\quad 17$ | - 14 | $9 \cdot 4$ |  |
| I I , 694 | 304800 | L 9658 |  |  | 4214.48 | 8084 | 117 | $3041 \begin{array}{ll}1 \cdot 9\end{array}$ | 903 | 128 | $9 \cdot 3$ |  | 34 | $8 \cdot 6$ |  |
| 11,695 | 304801 | L 9659 |  |  | 4222.97 | 8074 | 118 | $30 \quad 5026.6$ | 907 | 128 | $9 \cdot 5$ | - 2 | - 7 | $8 \cdot 3$ |  |
| 11,696 | 254809 | C 13698 | 924-5 |  | 224224.65 | +2.8604 | +.0095 | $25 \begin{array}{llll}25 & 32 & 39 \cdot 3\end{array}$ | +18.908 | $+\cdot 130$ | $9 \cdot 5$ | 32 | - | 8.26 |  |
| 11,697 | 244654 | C 13699 |  |  | 4226.01 | 8643 | 093 | $\begin{array}{llll}25 & 8 & 9.8\end{array}$ | 909 | 130 | $9 \cdot 9$ | - 52 | 16 | $9 \cdot 11$ | K o |
| 11,698 | 2548 ro | C 13700 |  |  | 4227.00 | 8625 | 094 | 25 19 $4945 \cdot 6$ | 909 | 130 | $9 \cdot 8$ | - 8 | - 29 | $7 \cdot 86$ | A O |
| 11,699 | 284450 | C 13701 |  |  | 4230.00 | 8239 | 111 | 29 16 $31 \cdot 1$ | 911 | 128 | 10.6 | - 5 | - 20 | 9.4 |  |
| 11,700 | 274405 | C 13704 | 934 |  | 4238.52 | 8368 | 107 | $28 \quad 243.6$ | 915 | 129 | 10.4 | + 20 | - | 8.8 | A 2 |

11,751-11,800
Catalogue of Stars for 1910. Zone $+24^{\circ}$ to $+32^{\circ}$.

|  |  |  |  |  |  |  |  |  |  |  |  | Annu | ual P.M. |  |  |
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| No. | B.D. | A.g.c. | W B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 19100. | Precession. | Sec. Var. | Epooh 1900+ | $\underset{\text { R.0001. }}{\text { R.A. }}$ | Dec. ".001. | Mag. | Spectral Type. |
|  |  |  |  |  | m | ${ }^{8}$ | $8$ |  | " | " |  |  |  |  |  |
| 11,751 | 284472 | C 13753 |  | 44749 | $224743 \cdot 68$ | +2.8435 | +.0115 | $\begin{array}{lll} 28 & 55 & 23.7 \end{array}$ | +19.057 | +.120 | 11.6 | + | - 21 | $8 \cdot 7$ |  |
| 111752 | 294791 | C 13754 |  |  | $4746 \cdot 44$ | 8360 | 119 | $294348 \cdot 2$ | 059 | 120 | 13.0 | - 41 | - 92 | $9 \cdot 2$ |  |
| 11,753 11,754 11 | 284473 294792 | C 13755 C 13756 C 13757 | 1060-1 |  | 47 54.29 <br> 48 3.09 | 8422 8379 | 116 | $\begin{array}{lrrr}29 & 6 & 37 \cdot 4 \\ 29 & 37 & 33.5\end{array}$ | . 062 |  | 11.9 | $+10$ | 1 $-\quad 2$ $+\quad 35$ | $9 \cdot 2$ | K O |
| 111,755 |  | C 13757 |  |  | $\begin{array}{ll}48 & 12.58\end{array}$ | 8454 | 115 | $\begin{array}{llll}28 & 52 & 55.9\end{array}$ | 071 |  | 12.7 | + 20 | $\begin{array}{r}\text { a } \\ \hline-\quad 19 \\ \hline\end{array}$ | $9 \cdot 4$ |  |
| 11,756 | 284475 | C 13758 |  | 44772 | $2248 \quad 32 \cdot 35$ | +2.8456 | +.0116 | $28 \quad 5747 \cdot 5$ | +19.079 | + 119 | I 1-1 | - 60 | - 44 | $9 \cdot 1$ | Go |
| 111757 | $31+802$ | L 9710 | 1071 |  | $4835 \cdot 91$ | 8196 | 129 |  | 081 | 118 | 10.1 | - 8 | - 26 | $9 \cdot 4$ |  |
| I1,758 | 304828 | L 9712 |  |  | $48 \quad 46 \cdot 42$ | 8252 | 127 | $311056 \cdot 9$ | 086 | 118 | $9 \cdot 8$ | + 49 | + 32 | 9.1 |  |
| I 1,759 | 264524 | ${ }^{\text {C } 13760}$ | 1072-3 | 44781 | $48 \quad 50 \cdot 47$ | 8690 | 105 | $26 \quad 2959.5$ | 087 | 120 | $8 \cdot 3$ | - 6 | - 24 | $7 \cdot 8$ | K o |
| 11,760 | 264526 | C 13762 |  |  | $49 \quad 0.99$ | 8680 | 106 | $263932 \cdot 2$ | 092 | 119 | $9 \cdot 7$ | + 5 | + 6 | $9 \cdot 2$ |  |
| II, 761 | 294797 | $\mathrm{C}_{1} 13765$ | 1081 | 44798 | $22 \quad 49$ 18.91 | +2.8356 | +-0122 | $\begin{array}{llll}30 & 17 & 1.9\end{array}$ | $+19 \cdot 100$ | +.117 | 8.8 | + 38 | - | $7 \cdot 46$ | A 2 |
| 11,762 | 294798 | ${ }^{\text {C }} 133767$ | 1083 |  | 4922.49 | 8371 | 122 | $\begin{array}{llll}30 & 8 & 32.9\end{array}$ | 102 | 117 | 9.2 | - 8 | - 4 | 8.9 |  |
| 11,763 | $27443+$ | ${ }_{\text {C }} 133769$ | 1086 | 44805-6 | 49 31.20 | 8561 | 113 |  | 105 | 118 | $9 \cdot 0$ | - 13 | - 35 | $7 \cdot 58$ | K 2 |
| 11,764 | $26+528$ | ${ }^{\text {C }} 13770$ | 1080-8 |  | 4934.44 | 8706 | 106 | $\begin{array}{lllll}26 & 32 & 38 \cdot 9\end{array}$ | 107 | 118 | $8 \cdot 9$ | - 18 | - 19 | $9 \cdot 1$ |  |
| 11,765 | $27+436$ | C 13772 | 1095-6 | 44813-5-6 | 4953.68 | 8627 | 111 | $27 \quad 32 \begin{array}{lllll} & 17.7\end{array}$ | 115 | 118 | 8.8 | - 68 | - 49 | $7 \cdot 8$ | G 0 |
| 11,766 | 254837 | $\mathrm{C}^{\text {C } 13773}$ |  |  | 224955.53 | +2.8811 | +-0101 | $25 \quad 26 \quad 47 \cdot 0$ | $+19 \cdot 116$ | +-119 | 10.0 | - 18 | + 13 | 9.4 |  |
| 11,767 | 274438 | C 13774 |  |  | $\begin{array}{lll}50 & 3.61\end{array}$ | 8649 | 110 |  | 120 | 118 | 10.4 | + 36 | - $\quad 2$ | $9 \cdot 4$ |  |
| 11,768 |  | L 4721 |  |  | $\begin{array}{lll}50 & 8.36\end{array}$ | 8233 | 130 | $\begin{array}{llll}31 & 51 & 6.5\end{array}$ | 122 | 116 | 10.4 | - 33 | - 35 | $9 \cdot 4$ |  |
| 11,769 | 294803 | C 13776 | 1105 |  | 5011.88 | 8425 | 121 | 29516.9 | 123 | 116 | $9 \cdot 4$ | + | - 16 | 9•1 |  |
| 11,770 | $28+479$ | C 13777 |  |  | $50 \quad 18.13$ | 8517 | 117 | $28 \quad 5244 \cdot 2$ | 126 | 116 | 10.0 | + 14 | - | $8 \cdot 9$ | G |
| 11,771 | 304835 | $\begin{array}{ll}\mathrm{L} & 9722\end{array}$ |  | 44840 | $225029 \cdot 19$ | $+2.8327$ | +.0127 | $305957 \cdot 8$ | +19.131 | +.115 | 10.0 | 7 | - 18 | $7 \cdot 41$ | A 0 |
| 11,772 | $30{ }^{836}$ | L 9723 | 1111 |  | 5030.01 | 8367 | 126 | 303431.4 |  | 115 | $9 \cdot 8$ | 31 | - | $8 \cdot \mathrm{I}$ | A 2 |
| 11,773 |  | ${ }_{\text {C }} 13778$ |  |  | 5032.82 | 8843 | 100 | 25.1631 .3 | 132 | 116 | 13.6 |  |  | $9 \cdot 8$ |  |
| 11,774 | 254839 | C 13779 | 12 |  | $5035 \cdot 36$ | 8842 | 100 | $25 \begin{array}{llllll} & 17 & 47.9\end{array}$ | 134 | 116 | 14.7 | + 17 | + 16 | $9 \cdot 8$ |  |
| 11,775 | $27444^{2}$ | C 13780 | 1115-6-7 | 44845-6-7 | $5037 \cdot 51$ | 8649 | 112 | $273146 \cdot 3$ | 135 | 117 | 9.9 | + 14 | + 17 | 7.30 | G 5 |
| $11,776$ | 304837 | C 13781 |  |  | 225050.88 | +2.8397 | +-OI2 2 |  | +19.140 | +.114 | 10.1 | - 13 | $+$ | $9 \cdot 4$ |  |
| $\|11,777\|$ | 294807 | C 13783 |  |  | 5054.39 | 8494 | 120 | $292047 \cdot 3$ | $14^{2}$ | 115 | 11.3 | + 7 | + | $9 \cdot 4$ |  |
| 11,778 | 254841 | C 13782 |  |  | $5054 \cdot 64$ | 8821 | 102 | $\begin{array}{lllll}25 & 38 & 8.7\end{array}$ |  | 116 | 10.9 | + 21 | + 9 | $9 \cdot 4$ |  |
|  | $30{ }^{8}{ }^{8}+^{2}$ | L 9730 | 1129 |  | 5115.28 | 8345 | 128 |  | 151 | 114 | 9.1 | - 25 | - 38 | $8 \cdot 9$ |  |
| 11,780 | 314811 | L 9731 |  |  | 5116.41 | 8268 | 132 |  | 151 | 114 | 9.5 | 43 | - 39 | $9 \cdot 4$ |  |
| $\begin{aligned} & 11,781 \\ & 11,782 \end{aligned}$ | $\begin{array}{ll}29 & 4810 \\ 31 & 4812\end{array}$ | C 13784 <br> L 9734 |  |  | 225128.62 | +2.8438 | +.0124 | $\begin{array}{lllll}30 & 9 & 21.8\end{array}$ | +19.157 | +-114 | $8 \cdot 6$ | $+$ | - $\quad 2$ | 8.28 8.6 | K o |
| $\begin{array}{ll} 11,782 \end{array}$ | $\begin{array}{ll}31 & 4812 \\ 26 & 4534\end{array}$ | L 97384 | 1135 |  | $5141 \cdot 26$ | 8305 | 132 |  | 162 | 113 | $8 \cdot 3$ | + 7 | + $\quad 2$ | $8 \cdot 6$ |  |
| 11,783 11,784 | 26 31534 315 | C 133787 |  |  | 529.04 | 8765 | 108 |  | 174 | 114 | 9.8 | + 45 | + 15 | 9.4 |  |
| 11,784 | 314815 | L 9741 | 1142 |  | $52 \quad 9 \cdot 40$ | 8295 | 133 | $\begin{array}{lllll}31 & 56 & 8 \cdot 0\end{array}$ | 174 | 113 | 10.9 | + 26 | + 25 | $9 \cdot 4$ |  |
| 11,785 | 294814 | C 13789 |  |  | $52 \quad 21 \cdot 16$ | 8524 | 122 | $293035 \cdot 8$ | 179 | 112 | 10.3 | - 7 | + 6 | $9 \cdot 4$ |  |
| 11,786 | $3048+6$ | C 13790 |  |  | 225223.54 |  | +.0126 | $302159 \cdot 1$ | +19.180 | +-112 | 10.8 |  | - II | $9 \cdot 2$ |  |
| 11,787 | 254847 | C 1 3791 |  |  | 5232.44 | +8855 | 105 | 2544 +1.3 | 184 | 114 | 11.4 | + 9 | - 1 | $9 \cdot 4$ |  |
| 11,788 | 264535 | ${ }^{\text {C } 13793}$ |  |  | $5235 \cdot 92$ | 8739 | 111 | $\begin{array}{llllllllll}27 & 8 & 54 \cdot 6\end{array}$ | 185 | 113 | 11.2 | + 31 | + 10 | $9 \cdot 4$ |  |
| 11,789 | 254848 | ${ }_{\text {C }} 13794$ | 1147 |  | $5236 \cdot 24$ | 8843 | 105 | $25 \quad 5426.4$ | 185 | 114 | $10 \cdot 1$ | - 13 | - 12 | 8.5 |  |
| 11,790 | $23+640$ | B 8793 | 1151 | +4890 | 52 41-1I | 8986 | 098 | $24 \quad 12 \quad 4.0$ | 188 | 115 | 9.4 | 8 | + 15 | 8.1 | K。 |
| 11,791 | 234641 | B 8794 |  |  | 225244.21 |  |  |  |  |  | 11.2 | 13 | - 15 | $9 \cdot 4$ |  |
| $1 \mathrm{I}, 79^{2}$ | 304848 | L. 9747 |  |  | $52 \quad 58 \cdot 57$ | - 8406 | 130 | $\begin{array}{llll}31 & 2 & 38.9\end{array}$ | 195 | 111 | $9 \cdot 8$ | - 4 | - 4 | 8.8 |  |
| 11,793 | 27 31448 318 | C 13798 |  |  | 52.59 .42 | 8721 | 113 | $27 \quad 2846 \cdot 0$ | 195 | 113 | 10.7 | 21 | + | 10.0 |  |
| 11,794 |  | $\begin{array}{ll}\mathrm{L} & 9748 \\ \mathrm{~L} & 9750\end{array}$ | 1163 | 44900 | 5259.79 | 8345 | 133 |  | 195 | 111 | $9 \cdot 2$ | - 11 | $+\quad 8$ + | 7.9 | $\mathrm{K}_{2}$ |
| 11,795 | 314818 | L 9750 | 1166 |  | $\begin{array}{lll}53 & 3.66\end{array}$ | 8368 | 132 | $\begin{array}{llll}31 & 29 & 9.5\end{array}$ | 197 | III | $10 \cdot 1$ | + 30 | + | $8 \cdot 6$ |  |
| II,796 | 284493 | C 13801 | 1168 | 44903 |  |  |  |  |  |  |  | $+\quad 39$ | $\bigcirc$ | $9 \cdot 1$ |  |
| 11,797 | 294820 | C 13802 |  |  | $53 \quad 37.71$ | $8539$ | 125 | 29.48813 .2 | 211 | 111 | 10.6 | - 28 | 2 | 9.4 |  |
| 11,798 <br> 11 <br> 11 <br> 1899 | 27 29 294525 | C 13806 |  |  | $5351 \cdot 05$ | $8704$ | 116 | $\begin{array}{lllllllllll}27 & 58 & 37.9\end{array}$ | $21.7$ | III | 11.2 | 12 | + 20 | $9 \cdot 2$ |  |
| 11,799 | 294824 | ${ }_{C} 13808$ |  |  | 5356.06 | 8542 | 125 | 2953 I-1 | 219 | 110 | $9 \cdot 1$ | - | - 4 | 8.8 |  |
| 11,800 | 294826 | C 13810 |  |  | 548.25 | 8561 | 125 | $294426 \cdot 3$ | 224 | 110 | 10.1 | - 3 | 4 | 9.1 |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910 \cdot 0$. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | $\begin{gathered} \text { Spectral } \\ \text { Type. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{8.0001}{\text { R.A. }}$ | Dec. . 001. |  |  |
|  | - |  |  |  | m | s | 8 | - ' | * | " |  |  |  |  |  |
| 11,801 | 254852 | C 1381I |  |  | $22 \quad 54 \quad 2 \mathrm{I} \cdot 39$ | +2.8907 | +.0105 | $254^{2} \quad 29 \cdot 2$ | +19.229 | +.111 | 10.1 | + 55 | - 50 | $9 \cdot 4$ |  |
| 11,802 | 284496 | C 13812 | 1187 |  | 5425.96 | 8677 | 119 | $28 \quad 2955 \cdot 4$ | 231 | 110 | $9 \cdot 9$ | $\begin{array}{r} \\ +\quad 28 \\ \hline\end{array}$ | 13 $+\quad 13$ | 8.5 | F 8 |
| 11,803 | 264539 | $\mathrm{Cl}^{\text {L }} 13813$ | 1188-9 | 44948-9 | $5435 \cdot 14$ | 8806 | 112 | $\begin{array}{llll}27 & 1 & 3 \cdot 2\end{array}$ | 235 | 110 | $9 \cdot 0$ | 9 | - 20 | $8 \cdot \mathrm{I}$ | K o |
| 11,804 | 244689 | B 8804 | 1190 |  | 5438.01 | 9016 | 100 | 242624.6 | 236 | III | $9 \cdot 3$ | 6 | - 22 | $8 \cdot 5$ |  |
| 11,805 | 264540 | C 13815 | 1191-2 | 44952-3 | 54 38.81 | 8788 | 113 | $27 \quad 1549.4$ | 236 | 110 | $9 \cdot 4$ | + 8 | + 6 | 7.8 | F 5 |
| 11,806 | 264541 | C 13819 |  |  | $225448 \cdot 85$ | +2.8821 | +.0112 | $26 \quad 55 \quad 6 \cdot 5$ | +19.241 | +.110 | 10.5 | - 18 |  | 9.4 |  |
| 11,807 | 264542 | C I 3820 |  |  | 5449.73 | 8855 | 110 | $263033 \cdot 0$ | 24 I | 110 | 11.2 | - 13 | + $4^{6}$ | $9 \cdot 4$ |  |
| 11,808 | 244691 | B 8808 | 1201 |  | $\begin{array}{lll}55 & 9.88\end{array}$ | 9015 | 101 | $2437 \quad 53.7$ | 249 | 110 | $9 \cdot 7$ | - 13 | - 8 | $8 \cdot 5$ | K o |
| 11,809 | 294828 | C 1382 I | 1184 |  | 5513.58 | 8607 | 125 | 293624.5 | 251 | 108 | 11.4 | 53 | 7 | $9 \cdot 2$ |  |
| 11,810 | 284500 | C 13822 |  |  | 5518.04 | 8664 | 122 | $\begin{array}{llll}28 & 58 & 9 \cdot 3\end{array}$ | 252 | 108 | 11.5 | 21 |  | 9.4 |  |
| 11,8II | 314821 | L 9759 |  |  | 225521.49 | +2.84.23 | +.0136 | $\begin{array}{llll}31 & 45 & 22.7\end{array}$ | +19.254 | $+107$ | 10.6 | 18 | - | 8.8 |  |
| 11,812 | 254854 | C 13823 |  |  | 5523.76 | 8960 | 105 | $25 \quad 2356 \cdot 5$ | 255 | 110 | 11.0 | + 11 | + 3 | $8 \cdot 8$ |  |
| II, 813 | 244694 | C 13824 | 1204-5-6 | 44974 | 5524.70 | 8979 | 104 | $25 \quad 941$ I-I | 255 | 110 | 11.3 | + 6 | + 13 | $8 \cdot 36$ | A 5 |
| II, 814 | 294830 | C 13825 | 12 I -2 |  | $55 \quad 29.26$ | 8616 | 125 | 29354 Tr 4 | 257. | 108 | 10.0 |  | + $+\quad 9$ | $8 \cdot 3$ |  |
| II, 815 | 274462 | C 13826 |  |  | 55 38.50 | 8784 | 116 | 273919.9 | 261 | 108 | 11.5 | + | + 9 | $9 \cdot 1$ |  |
| 11,816 | 284501 | C 13827 |  |  | $225543 \cdot 50$ | +2.8715 | +-O121 | 283119.6 | +19.263 | +.108 | 10.1 | - 22 | -13 | 8.8 |  |
| 11,817 | 264543 | C 13828 | 1222 |  | $55 \quad 55 \cdot 99$ | 8838 | 113 | $27 \quad 5 \begin{aligned} & 55 \cdot 1\end{aligned}$ | 268 | 108 | 10.1 | $+33$ | + 14 | $8 \cdot 7$ |  |
| II, 818 | 264544 | C 13829 |  |  | $\begin{array}{ll}56 & 2 \cdot 32\end{array}$ | 8903 | III | $\begin{array}{lllll}26 & 19 & 38 \cdot 1\end{array}$ | 270 | 108 | $11 \cdot 3$ | - 2 | + 7 | $9 \cdot 4$ |  |
| II, 819 | 264545 | C 13830 |  |  | $56.8 \cdot 57$ | 8886 | III | 26354 4-I | 273 | 108 | 10.6 | 16 | + 21 | $9 \cdot 1$ |  |
| II, 820 | 274467 | C 13832 |  |  | $56{ }^{\circ} 22.39$ | 8798 | 117 | $27 \quad 45 \quad 10 \cdot 2$ | 278 | 107 | 11.2 | 19 | + 7 | $9 \cdot 4$ |  |
| 11,82I | 304859 | L 9767 | 1231 | 45023 | $2256.24 \cdot 63$ | +2.8560 | +-0131 | 303559.4 | +19.279 | +.105 | 9.3 | + | + | $6 \cdot 52$ | A o |
| 11,822 | 254860 | C I 3833 |  | 45021 | 5626.78 | 8939 | 109 | 26 I 199 | 280 | 107 | $9 \cdot 3$ | + $4^{8}$ | - 5 | $8 \cdot 7$ | F 8 |
| II, 823 | 254861 | C 13835 | 1237-8 | 45029 | 56 45-16 | 8925 | 111 | $26 \begin{array}{llllll} & 17 & 54 \cdot \mathrm{I}\end{array}$ | 287 | 107 | 8.6 | + 4 | - 12 | $7 \cdot 9$ | A 5 |
| II, 824 | 264549 | C 13836 |  |  | 5649.72 | 8911 | 112 | $\begin{array}{lllllllllllllllll}26 & 30 & 40 \cdot 3\end{array}$ | 289 | 107 | 10.0 | - 115 | - 72 | $9 \cdot 4$ |  |
| 11,825 | 274470 | C 13837 |  |  | $56 \quad 50 \cdot 49$ | 8848 | 116 | $\begin{array}{llll}27 & 18 & 9 \cdot 3\end{array}$ | 290 | 107 | 10.5 | 18 | - 28 | $9 \cdot 4$ |  |
| 11,826 | 234661 | B 8824 |  |  | $22 \quad 56 \quad 52 \cdot 84$ | +2.9098 | +-0101 | $\begin{array}{llll}24 & 7 & 7 \times 4\end{array}$ | +19.290 | $+\cdot 106$ | $9 \cdot 7$ | 11 | - 23 | $9 \cdot 1$ |  |
| 11,827 | 27447 I | C 13839 | 1246 | 45040 | $57 \quad 3 \cdot 13$ | 8780 | 121 | $\begin{array}{llll}28 & 13 & 8.6\end{array}$ | 295 | 105 | $8 \cdot 4$ | + 14 | , | $8 \cdot 3$ | K o |
| 11,828 | 294838 | C 13840 | 1252 |  | 57 24.81 | 8670 | 127 | $\begin{array}{llllllllll}29 & 412.0\end{array}$ | 303 | 105 | $8 \cdot 8$ |  | - 45 | $9 \cdot 4$ |  |
| 11,829 | 284506 | C 13843 | 1266 | 45073 | $5754 \cdot 38$ | 8749 | 124 | $28 \quad 544 \mathrm{l} \cdot 4$ | 315 | 103 | $8 \cdot 2$ | $\begin{array}{r} \\ +\quad 6 \\ \hline\end{array}$ | $\begin{array}{r} \\ +\quad 3 \\ \hline\end{array}$ | $8 \cdot 3$ | K。 |
| 11,830 | 274475 | C I 3844 |  |  | $\begin{array}{lll}58 & 7.05\end{array}$ | 8851 | 118 | $\begin{array}{lll}27 & 44 & 0.3\end{array}$ | 320 | 105 | 9.7 | 30 | + $7^{8}$ | $9 \cdot 4$ |  |
| 11,831 | 314829 | $\begin{array}{ll}\mathrm{L} & 9781 \\ \text { 1 }\end{array}$ | 1271 |  | $22 \quad 5815.37$ | $+2.8562$ | +-0136 | $\begin{array}{lllll}31 & 17 & 48 \cdot 1\end{array}$ | +19.323 | + 102 | $8 \cdot 6$ | + 7 | - 111 | $6 \cdot 46$ | Fo |
| 11,832 | 29 4841 | C 13846 | 1273 |  | $\begin{array}{lll}58 & 16.35\end{array}$ | 8728 | 126 | 291914.6 | 323 | 103 | $8 \cdot 8$ | 99 | + 9 | $8 \cdot 6$ |  |
| 11,833 | 254865 | C 13847 | 1275 |  | 5818.97 | 9016 | 109 | 25411867 | 324 | 104 | $9 \cdot 8$ | 57 | + 10 | $9 \cdot 2$ |  |
| 11,834 | 304864 | C 13848 |  |  | $\begin{array}{llll}58 & 19 \cdot 14\end{array}$ | 8636 | 132 | 30265154 | 324 | 102 | 11.8 | - 32 | + 17 | $9 \cdot 4$ |  |
| 11,835 | 284510 | C 13850 |  | 45090 | $58 \quad 21 \cdot 30$ | 8779 | 124 | $28 \quad 43$ 13.1 | 325 | 103 | 10.3 | + 12 | - 45 | $8 \cdot 9$ |  |
| 11,836 | 304865 | L 9783 | 1281 |  | 225836.93 | +2.8590 | +.0136 | $\begin{array}{llll}31 & 6 & 48 \cdot 8\end{array}$ | +19.331 | +.102 | 9.6 |  | - 5 | 8.6 |  |
| 11,837 | 264555 | C I 3851 |  |  | $5841 \cdot 22$ | 8908 | 117 |  | 333 | 104 | $9 \cdot 1$ | + 16 | + 5 | $8 \cdot 5$ |  |
| 11,838 | 244702 | C I 3854 | 1292 |  | $58 \quad 57 \cdot 20$ | 9082 | 106 | $25 \quad 2 \quad 26 \cdot 0$ | 339 | 104 | 9.7 | $+\quad 17$ | - 5 | $8 \cdot 8$ | K o |
| 11,839 | 304866 | L 9786 | 1293-4 |  | $58 \quad 59 \cdot 54$ | 8596 | 137 | 31 | 340 | 101 | $9 \cdot 7$ | + 15 | - 4 | $7 \cdot 49$ | F 2 |
| II, 840 | 284511 | C I 3855 |  |  | $59 \quad 0.04$ | 8756 | 127 | 29 I5 1-1 | 340 | 102 | II•2 | 7 | + | $9 \cdot 4$ |  |
| 11,841 | 304867 | L 9787 |  |  | 225920.41 | +2.8657 | +.0134 | $30 \quad 3611.6$ | +19.348 | +-101 | 10.8 | - 10 | + 1 | $8 \cdot 1$ |  |
| II, 842 | 294846 | C 13857 | 1301 |  | 59 23.17 | 8755 | 128 | $\begin{array}{llll}29 & 25 & 1.6\end{array}$ | 349 | 101 | 10.9 | - 64 | - 102 | $8 \cdot 7$ | F 5 |
| 11,843 | 274480 | C 13858 | 1298-9-300 | 45123-4-5 | $5924 \cdot 55$ | 8900 | 119 |  | 349 | 2 | 12.4 | + 144* | + $133 *$ | var. | M a |
| II, 844 | 284513 | CC <br> B 38859 |  |  | $\begin{array}{lll}59 & 28.62\end{array}$ | 8841 | 123 |  | 351 | 100 | 13.3 |  |  | $9 \cdot 2$ |  |
| 11,845 | 244704 | B 8842 | 1302 |  | $5932 \cdot 72$ | 9124 | 105 | $244^{1} \quad 0.6$ | 353 | 102 | 11.6 | + 15 | - 3 | $8 \cdot 9$ | K 2 |
| 11,846 | 314833 | L 9790 | 1309-10 |  | $225941 \cdot 78$ | +2.8593 | +.0140 | $313145 \cdot 5$ | +19.356 | +.100 |  | + 10 | - 12 | $9 \cdot 2$ |  |
| II, 847 | 314836 | L 9791 | 1311 |  | $5942 \cdot 93$ | 8585 | 141 | $313742 \cdot 0$ | 356 | 100 | 11.0 | - 13 | - 31 | $8 \cdot 1$ | K 2 |
| 11,848 | 284515 | C 13862 |  |  | $5952 \cdot 76$ | 8855 | 124 | $\begin{array}{llll}28 & 21 & 2.7\end{array}$ | 360 | 100 | 10.0 | + 73 | + <br> $+\quad 53$ | $8 \cdot 5$ |  |
| 11,849 <br> II 850 | 274484 | C 13883 C 13864 |  |  | - 5956.66 | 8936 | 119 |  | 362 | 101 | 12.0 | - 60 | - 37 | 8.9 |  |
| 11,850 | 304868 | C 13864 |  |  | $23 \quad 0 \quad 6.57$ | 8695 | 134 | $30 \quad 27 \quad 20.5$ | 365 | 103 | 12.6 | - 17 | - 20 | $9 \cdot 4$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0. | Procession. | Sec. Var. | Dee. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual P.M. |  | Mag. | SpectraType. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. 1.0001. | $\begin{aligned} & \text { Doc. } \\ & \text { Noot. } \end{aligned}$ |  |  |
|  | - |  |  |  | h m | 8 | 8 | - , |  | " |  |  |  |  |  |
| 11,851 | 264559 | C 13867 |  |  | 23012.41 | +2.8954 | +.0118 | 27 I1 22.8 | +19.368 | +.100 | 12.0 | - | - 6 | 8.8 |  |
| 11,852 | 304869 | L $979+$ | 1317 | 45160 | - 17.15 | 8671 | 136 | $30 \quad 4923 \cdot 3$ | 369 | 99 | 10.0 | + $4^{6}$ | - $\quad 29$ | $6 \cdot 78$ | F 2 |
| II, 853 | 274485 | C 13868 |  |  | -19.40 | 8896 | 122 | $27 \quad 5940 \cdot 5$ | 370 | 100 | II-5 | + 17 | - 5 | 9.4 |  |
| 11,854 | 234673 | B 8846 | 1323-4 | 45166-7 | - $40 \cdot 32$ | 9199 | 103 | $24 \quad 2 \begin{array}{llll}24 & 10.5\end{array}$ | 378 | 101 | 10.4 | $-\quad 24$ | + II | 7-12 | F 5 |
| I I, 855 | 244706 | B 8847 |  |  | - $44 \cdot 17$ | 9136 | 108 | $24 \quad 55 \quad 55 \cdot 6$ | 379 | - 101 | 11.7 | + 72 | - 15 | $8 \cdot 8$ | K |
| II, 856 | 274487 | C I 3880 | 1326-7 | 45171 | $23 \bigcirc 45 \cdot 00$ | +2.8930 | +.0121 | $27 \quad 43000$ | +19.380 | + 100 | 11.2 | + | - 6 | 8.6 | $\mathrm{K}_{2}$ |
| 11,857 | 274488 | C 13871 | 1329-30 |  | $\bigcirc 52 \cdot 18$ | 8924 | 122 | $27 \quad 50 \quad 37 \cdot 7$ | 382 | 100 | 10.8 | - 22 | - 15 | 9.2 | G 5 |
| I 1, 858 | 264560 | C 13872 | 1332 |  | - 58.92 | 9028 | 115 | $26 \quad 2948.9$ | 385 | 99 | 13 $1,111 \cdot 5$ | + 17 | + $\quad 5$ | 8.8 | Fo |
| 11,859 | 234675 | B 8848 | $1334-5$ | 45179-80 | 15.73 | 9201 | 104 | 24 10 3.0 | 387 | 100 | 11.4 | - 17 | + 6 | 7.01 | A 0 |
| 11,860 | 254870 | C 13876 | 1336 | 45181 | I 6.48 | 9103 | 110 | 253124.9 | 388 | 99 | 10.6 | $+31$ | - 7 | 7.86 | K. |
| 11,861 | 284518 | C 13877 | 1337 |  | 23 I 188.74 | $+2.8882$ | +.OI2 | $28 \quad 30 \quad 9.5$ | +19.389 | +.098 | II-I | 45 | + 15 | $7 \cdot 41$ | K 5 |
| 11,862 | 274490 | C 13878 |  |  | 118.51 | 8937 | 122 | $275031 \cdot 1$ | 392 | 99 | -11.4 | + 16 | - 28 | 10.6 |  |
| 11,863 | 294855 | C 13879 | 1342 |  | 1 25.61 | 8756 | 134 | $3014 \begin{array}{lllllll} \\ 30\end{array}$ | 395 | 98 | 9.5 | - 17 | + 12 | $8 \cdot 26$ | K o |
| 11,864 | 284522 | C 13880 | 1351 | 45196 | 144.95 | 8902 | 126 |  | 402 | 97 | 10.6 | + 16 | + 9 | 8.6 | K。 |
| 11,865 | 244712 | B 8853 | $1352-3$ |  | 1 49.67 | 9188 | 107 | $24 \quad 36 \quad 51.7$ | 404 | 99 | 9.2 | - 4 | 6 | $9 \cdot 4$ | K 5 |
| I 1, 866 | 294856 | C 1388ı | 1357 | 45177 | 23.155 .26 | $2 \cdot 8836$ | +.0131 | $292432 \cdot 7$ | +19.406 | +.097 | $9 \cdot 6$ | - 63 | - | $8 \cdot 9$ | F 8 |
| I 1, 867 | 294857 | C 13884 |  |  | $28 \cdot 42$ | 8822 | 132 | 2941113.9 | 410 | 97 | 10.8 |  | + 14 | $9 \cdot 9$ |  |
| I 1, 868 | 294858 | C 13885 | 1367 | 452 II | 210.73 | 8789 | 135 | $\begin{array}{llll}30 & 8 & 0.6\end{array}$ | 411 | 96 | $9 \cdot 2$ | - 32 | - 7 | 8.01 | Fo |
| I 1,869 | 284523 | C 13886 |  |  | 211.86 | 8916 | 126 | $\begin{array}{llllllllllllll}28 & 28 & 497\end{array}$ | 412 | 97 | 12.3 | $-7$ | $+\quad 29$ | $9 \cdot 4$ |  |
| I 1, 870 | $2447 \times 3$ | B 8854 | 1364-5 |  | 212.47 | 9196 | 107 |  | 712 | 98 | 11.0 | + 5 | + 18 | $9 \cdot 3$ | G 0 |
| I 1, 871 | $28+524$ | C 13887 | 1368 |  | $\begin{array}{llll}23 & 2 & 12.65\end{array}$ | $+2.8910$ | +.0127 | $28 \quad 3333.4$ | $+19.412$ | . 097 | 12.2 |  | + 28 | $9 \cdot 4$ |  |
| 11,872 | 304875 | C 13888 |  |  | 214.40 | 8760 | 137 | 303130.2 | 413 | 96 | . 8 | - 17 | - 8 | 8.4 | K |
| II, 873 | 304876 | L 9804 |  |  | 219.23 | 8756 | 137 | 303631.0 | 414 | 96 | 12.6 | - 28 | - 34 | $9 \cdot 4$ |  |
| 11,874 | 294860 | C 13890 | 1372 |  | 227.93 | 8794 | 135 | 30 11 23.8 | 418 | 95 | 11.6 | + 6 | - 22 | 8.81 | A 2 |
| 11,875 | 244714 | B 8856 | 1371 |  | 228.37 | 9209 | 107 |  | 418 | 98 | 11.3 | - 5 | + 29 | 9.0 | F 8 |
| 11,876 | 264563 | C 13892 |  |  | $\begin{array}{llll}23 & 2 & 32 \cdot 58\end{array}$ |  | +.0119 | $2646 \quad 8 \cdot 1$ | +19.419 | +.096 | 13•7,12.7 | + 68 | $1+54$ | $9 \cdot 4$ |  |
| I 1, 877 | 314843 | L. 9808 |  |  | 241.69 | 8698 | 143 |  | 423 | 95 | 10.6 | - 30 | - 160 | $9 \cdot 2$ |  |
| 11,878 | 244716 | C 13894 | 1373-4 | 45224-5 | 243.55 | 9185 | 110 | $24 \quad 58 \quad 56 \cdot 5$ | 423 | 97 | $9 \cdot 1$ |  | - 38* | $4 \cdot 98$ | K |
| 11,879 | 354846 | L-9813 |  |  | 311.58 | 8710 | 143 | $313445 \cdot 4$ | 433 | 94 | 10.5 | + 24 | $\bigcirc$ | $9 \cdot 5$ |  |
| I 1, 880 | 294862 | C 13897 | 1387 | 45257-9 | 319.88 | 8869 | 133 | $2934 \quad 3.9$ | 436 | 95 | 9.5 | 7 | - 17 | $7 \cdot 25$ | B 9 |
| I 1, 881 | 294863 | C 13901 |  | 45272 | $\begin{array}{llll}23 & 3 & 27 \cdot 63\end{array}$ | +2.8845 | +.0135 | $\begin{array}{llll}29 & 57 & 8.7\end{array}$ | +19.439 | +.095 | 10.6 | + 16 | + 12 | $7 \cdot 46$ | K 5 |
| I 1, 882 | 314848 | L 9816 |  |  | 329.60 | 8711 | 145 | 31.4126 .2 | 440 | 94 | $10 \cdot 4$ | - $\quad 2$ | - 41 | 9.4 |  |
| II, 883 | 294864 | C 13903 | 1390 |  | $3 \begin{array}{ll}31.23\end{array}$ | 8825 | 137 | 30 14 $417 \cdot 3$ | 440 | 94 | 10.2 | + 12 | - 38 | 8.8 |  |
| 11,884 | 304880 | C 13902 |  |  |  | 8809 | 138 | $\begin{array}{llll}30 & 26 & 35 \cdot 3\end{array}$ | 440 | 94 | 10.6 | a | - 55 | 9.2 |  |
| I 1,885 | 284529 | C 13904 | 1391-2 | 45274 | $332 \cdot 38$ | 8903 | 131 | $29 \begin{array}{lllllllllll}29 & 12 & 19.8\end{array}$ | 441 | 95 | 10.8 | + | + 7 | 8.0 | K 2 |
| 11,886 | 304881 | L 9819 | 1393 |  | 23 $335 \cdot 49$ | +2.8771 | +.0141 | $30 \quad 58 \quad 20.9$ | +19.442 | +.094 | 9.6 | + 15 | - 23 | $7 \cdot 28$ | A 2 |
| 11,887 | 294866 | C 1 3907 |  |  | 353.13 | 8853 | 136 | 30 - 55.6 | $44^{8}$ | 94 | 11.6 | - 72 | - 31 | 8.9 |  |
| 1 1,888 | $30+883$ | L. 9822 |  |  | 357.71 | 8776 | 141 | 31.412 .9 | 450 | 93 | 11.2 | - 23 | - 13 | $9 \cdot 4$ |  |
| 11,889 | 294867 | C 13909 | 1401 | 45288 | 357.99 | 8878 | 133 | $294346 \cdot 0$ | 450 | 94 | $9 \cdot 8$ | + 31 | + 8 | 8.8 |  |
| 11,890 | 294868 | C 13910 |  |  | $4 \quad 0.06$ | 8861 | 136 | $29 \quad 58 \quad 19 \cdot 5$ | 451 | 94 | 8.5 | $+\quad+$ | - | $8 \cdot 7$ |  |
| 11,891 | 254882 | C 13911 | 1398 |  | $\begin{array}{llll}23 & 4 & 4.24\end{array}$ | +2.9147 | +.0116 | 26.2533 .3 | +19.452 | +.095 | 10.2 | + 36 | + 4 | 9.2 |  |
| 11,892 | 284533 | C 13912 | 1 |  | $4 \quad 7 \cdot 13$ | 8960 | 129 | $28 \quad 4024 \cdot 8$ | 453 | 94 |  | + 25 | - 10 | 7.50 | A 2 |
| 11,893 | 294869 | ${ }_{\text {C }} 13913$ |  |  | $4 \quad 7 \cdot 61$ | 8860 | 136 | $30 \quad 2 \begin{array}{lll}30 & 3\end{array}$ | 453 | 93 | 10.8 | + 4 | - | 8.8 |  |
| 11,894 | 304885 | C 13915 |  |  | 424.03 | 8843 | 138 | $30 \quad 22 \quad 59 \cdot 2$ | 459 | 92 | 10.3 | + 36 | + 4 | 9.4 |  |
| 11,895 | 264569 | C 13914 | 9 | 45304 | $4{ }^{24} 19$ | 9070 | 122 | $\begin{array}{lllll}27 & 16 & 17.9\end{array}$ | 459 | 93 | 10.1 | + 12 | - 16 | 8.8 | K o |
| II, 896 | 244719 | B 8866 | 10-1 |  | $23 \quad 427.06$ | +2.9258 | +.0109 | $243454 \cdot 1$ | $+19.460$ | +.094 | 10.7 | + 18 | - | 8.9 | F 8 |
| II 1,897 | 254885 | C 13917 |  |  | $439 \cdot 15$ | 9178 | 116 | 2549 41•3 | 464 | 94 | $9 \cdot 6$ | + 1 | - 9 | $8 \cdot 2$ | $\mathrm{A}^{2}$ |
| II 1,898 |  | C 13919 | 16 | 45319 | $446 \cdot 93$ | 9140 | 119 |  | 467 | 94 | $8 \cdot 9$ | + 9 | + | $7 \cdot 65$ | K。 |
| II, 899 | 304889 | L 48829 | 18 |  | 453.24 | 8812 | 142 | $\begin{array}{llll}31 & 0 & 27.4\end{array}$ |  | 91 | 10.0 | + 20 | + 1 | 9.4 |  |
| I 1,900 | 3 L 4855 | L 983I |  |  | 453.95 | 8786 | 144 | 312115.8 | 469 | 91 | 9.9 | - 10 | - 68 | 8.8 | G 5 |


| No. | B. $\mathrm{D}_{i}$ | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | Epoch 1900+ | Annual R.A. 8.0001. | I P.M. <br> Dec. <br> ".001. | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - |  |  |  | h m | 8 | $s$ | - , " | " | " |  |  |  |  |  |
| 11,901 11,902 | 274500 284536 | C 13920 C 13923 |  |  | $\begin{array}{lll}23 & 4 & 56.06 \\ & 5 & 11.15\end{array}$ | +2.9027 8957 | +.0127 +133 | $\begin{array}{rrr}28 & 5 & 55 \cdot 1 \\ 29 & 10 & 52 \cdot 9\end{array}$ | +19.470 475 | +.092 92 | $9 \cdot 4$ 9.6 | + 5 $+\quad 11$ | $\begin{array}{r}1 \\ \hline+\quad 11 \\ \hline\end{array}$ | 9.4 6.75 |  |
| 11,902 | 284536 | C 13923 | 3-25 | 45327 | 5 II.15 | 8957 | 133 | $\begin{array}{llll}29 & 10 & 52 \cdot 9 \\ 28 & 31 & 50.8\end{array}$ | 475 48 I | 92 92 | 9.6 10.2 | + II | $\begin{array}{r}+ \\ \hline\end{array}$ | $6 \cdot 75$ 9.4 | K O |
| 11,903 | 284537 | C 13924 |  |  | $5 \quad 26 \cdot 90$ | 9012 | 130 | $\begin{array}{llll}28 & 31 & 59.8 \\ 27 & 30 & 1.5\end{array}$ | 481 481 | 92 92 | 10.2 9.8 | 26 $+\quad 36$ | + $\quad 7$ | 9.4 8.6 | F 2 |
| I 1, 904 | 274501 | C 13925 | 28-9 |  | $\begin{array}{ll}5 & 28 \cdot 33 \\ 5 & 45 \cdot 08\end{array}$ | 9085 9054 | 125 | $\begin{array}{rrrr}27 & 30 & 1.5 \\ 28 & 4 & 36 \cdot 8\end{array}$ | 481 487 | 92 91 | 8.8 8.6 | $+\quad 36$ $-\quad 7$ | + 15 | 9.3 |  |
| I 1,905 | 274504 | C 13930 |  |  | $545 \cdot 98$ | 9054 | 128 | $28436 \cdot 8$ |  | 91 | $8 \cdot 6$ |  | - 15 | 93 |  |
| 11,906 | 314859 | L 9836 | 40 |  | $\begin{array}{llll}23 & 5 & 57 \cdot 39\end{array}$ | $+2.8774$ | +.0148 | 3 I 59555.4 | +19.491 | $+.090$ | $9 \cdot 2$ | $\bigcirc$ | - 27 | 6.89 | B 9 |
| 11,907 | 304894 | L 9840 | 47 |  | 6 I 3.55 | 8882 | 141 | $30 \quad 41 \quad 9.5$ | 497 | 89 | 10.2 | + 9 | + 8 | $9 \cdot 4$ |  |
| 11,908 | 254890 | C 13933 | 48 | 45362 | $6 \quad 18.67$ | 9210 | 118 | $\begin{array}{llll}26 & 2 & 5.5\end{array}$ | 498 | 92 | $9 \cdot 0$ | + 20 | - 1 | $7 \cdot 15$ | A 2 |
| 11,909 | 254891 | C I 3934 |  | 45369 | $626 \cdot 63$ | 9224 | 117 | $\begin{array}{lllll}25 & 52 & 33 \cdot 8\end{array}$ | 501 | 91 | 9.8 | + 5 | 21 | 8. |  |
| 11,910 | 254892 | C I 3935 |  |  | $635 \cdot 89$ | 9223 | 118 | $25 \quad 57 \quad 29 \cdot 8$ | 504 | 90 |  | 15 | + 9 | $9 \cdot 3$ |  |
| 11,911 | 284542 | C 13936 |  |  | 236636.05 | $+2.9053$ | +.0131 | $28 \quad 27 \quad 32 \cdot 2$ | +19.505 | +.089 | 10.6 | - 14 | + 31 | $9 \cdot 2$ |  |
| 11,912 | 304896 | L 9842 | 56 | 45374 | 637.64 | 8897 | 142 | $30 \quad 3945 \cdot 0$ | 505 | 88 | 10.0 | + 14 | 18 | $7 \cdot 56$ | K o |
| 11,913 | 244724 | B 8877 | 57 |  | 6 41.02 | 9296 | 112 | $245243 \cdot 9$ | 506 | 90 | $9 \cdot 5$ | 32 | 32 | $8 \cdot 4$ |  |
| II,914 | 274505 | C 13937 | $58 \rightarrow 9$ | 45375 | $643 \cdot 32$ | 9083 | 129 | $28 \quad 4$ II.5 | 507 | 89 | $9 \cdot 7$ | 12 | 6 | $8 \cdot 2$ | B 9 |
| 11,915 | 294876 | C I3939 | 60 |  | $648 \cdot 74$ | 8947 | 139 | $30 \quad 3 \quad 20.5$ | 508 | 88 | $8 \cdot 9$ | 16 | - 13 | $8 \cdot 6$ | K 2 |
| 11,916 | 294877 | C 13940 | 61 | 45378 | $23 \quad 6 \quad 49 \cdot 20$ | $+2.8982$ | +.0136 | $29 \quad 33114.4$ | +19.509 | $+.089$ | $9 \cdot 1$ | + 7 | + 14 | $6 \cdot 94$ | K o |
| 11,917 | 264575 | C 13942 |  |  | 652.85 | 9207 | 120 | $2618836 \cdot 6$ | 510 | 91 | 9.8 | + 55 | + 3 | $8 \cdot 9$ | F 2 |
| 11,918 | 244726 | C I 3943 |  |  | $\begin{array}{ll}7 & 1.33\end{array}$ | 9287 | 114 | $\begin{array}{llllllllllll}25 & 8 & 57.8\end{array}$ | 513 | 91 | II.O | 5 | 2 | $9 \cdot 4$, |  |
| 11,919 | 314864 | L 9884 |  |  | $7 \quad 17.80$ | 8851 | 148 | $\begin{array}{llll}31 & 35 & 52 \cdot 8\end{array}$ | 518 | 87 | $10 \cdot 6$ | 2 | - 9 | 9.4 |  |
| 11,920 | 274506 | C 13950 |  |  | 724.04 | 9146 | 126 | $27 \quad 28 \quad 13 \cdot 5$ | 520 | 88 | $9 \cdot 4$ | 17 | + 2 | $8 \cdot 6$ |  |
| 11,921 | 264580 | C 13952 | 73 | 45401 | $23 \quad 7 \quad 26.96$ | $+2.9220$ | +.0121 | 262139.9 | +19.521 | +.090 | $8 \cdot 8$ | - 144* | - 122* | 6.40 | Ko |
| 11,922 | 254894 | C I 3951 | 72 |  | 7 27.20 | 9272 | 117 | $\begin{array}{lllll}25 & 34 & 13.0\end{array}$ | 521 | 89 | 10.4 | 14 | + 10 | $9 \cdot 4$ | A 2 |
| 11,923 | 314869 | L 9849 |  |  | $741 \cdot 46$ | 8839 | 151 | 315634.4 | 526 | 87 | $9 \cdot 6$ | + 9 | + 10 | $9 \cdot 2$ |  |
| 11,924 | 234694 | B 8882 | 79 |  | 7 55-10 | 9382 | 109 | $\begin{array}{llll}24 & 2 & 16 \cdot 6\end{array}$ | 531 | 88 | 10.2 | 1 | + 6 | $9 \cdot 3$ |  |
| I I, 925 | 254895 | C 13953 | 81 | 45418 | 759.72 | 9300 | 116 | $25 \quad 2153.7$ | 532 | 89 | $9 \cdot 8$ | 12 | + 1 | $8 \cdot 7$ |  |
| 11,926 | 294880 | C 13955 |  |  | $\begin{array}{lll}23 & 8 & 2.87\end{array}$ | $+2.8976$ | +.014 ${ }^{1}$ | 301256.8 | +19.533 | $+.087$ | 11.3 | + 16 | + 3 | $9 \cdot 4$ |  |
| 1 1,927 | 274509 | C 13956 |  |  | 88.03 | 9144 | 129 | $274745 \cdot 7$ | 535 | 87 | 11-3 | + 14 | + 9 | $9 \cdot 4$ |  |
| II,928 | 244731 | C 13958 | 85 | 45427 | 8 18.13 | 9326 | 114 | $\begin{array}{llll}25 & 5 & 3 \cdot 5\end{array}$ | 538 | 88 | $9 \cdot 7$ | + 18 | - 6 | $8 \cdot 4$ | F 5 |
| 11,929 | 274511 | C 13959 | 86 |  | $8 \quad 18 \cdot 20$ | 9130 | 130 | $28 \quad 5 \quad 15 \cdot 6$ | 538 | 86 | $\cdot 2$ | - 41 | - 6 | $9 \cdot 5$ |  |
| I 1,930 | 264584 | C 13961 |  |  | $831 \cdot 60$ | 9223 | 124 | $264649^{\cdot 1}$ | 543 | 87 | 11.6 | + $5^{2}$ | + 30 | $9 \cdot 4$ |  |
| I 1,93I | 264585 | C 13962 |  |  | $23 \quad 8 \quad 35 \cdot 04$ | $+2.9254$ | +.0122 | $261937 \cdot 0$ | +19.544 | $+.087$ | 11.2 | 10 | + 14 | $9 \cdot 3$ |  |
| II,932 | 254896 | C 13964 |  |  | $837 \cdot 14$ | 9271 | 121 | $\begin{array}{llll}26 & 4 & 9.5\end{array}$ | 544 | 87 | 10.6 | - 19 | - 56 | $9 \cdot 4$ |  |
| II,933 | 284548 | C 13965 | 95 | 45445 | $84 \mathrm{I} \cdot 86$ | 9084 | 136 | $28 \quad 57 \quad 10.4$ | 546 | 86 | $8 \cdot 6$ | - 13 | - 35 | $6 \cdot 34$ | K o |
| III,934 | 264586 | C 13967 | 96 |  | $845 \cdot 97$ | 9254 | 122 | $\begin{array}{lllll}26 & 24 & 23 \cdot 5\end{array}$ | 547 | 87 | $9 \cdot 5$ | +138 | - 124 | $9 \cdot 3$ |  |
| 11,935 | 294882 | C 13969 | 104 |  | $9 \quad 6 \cdot 94$ | 9043 | 140 | 2945 I 3.8 | 554 | 85 | $8 \cdot 8$ | 7 | + 10 | $9 \cdot 3$ |  |
| 11,936 | 284549 | C 13971 | 107-8 | 45481 | $23 \quad 9 \begin{array}{lll}3 & 18 \cdot 17\end{array}$ | +2.9115 | +.0135 | 284631.8 | +19.558 | $+.085$ | $9 \cdot 3$ | $+4$ | + 24 | $8 \cdot 8$ | K o |
| I I,937 | 274515 | C 13973 | III |  | 923.40 | 9163 | 131 | $28 \quad 5 \quad 17 \cdot 2$ | 559 | 85 | $9 \cdot 4$ | + 31 | + 12 | $9 \cdot 2$ |  |
| I I ,938 | 244733 | B 8892 | 118 | 45488 | 934.90 | 9367 | 116 | 245759.4 | 563 | 85 | $8 \cdot 9$ | - 9 | + 6 | $8 \cdot 4$ | B 9 |
| 11,939 | 304906 | L 9864 |  |  | $946 \cdot 29$ | 8991 | 146 | $304954 \cdot 6$ | 566 | 84 | $8 \cdot 6$ | + 26 | + 8 | $8 \cdot 6$ | Go |
| 11,940 | 284555 | C 13978 | $131-2$ | 45496 | $959 \cdot 20$ | 9102 | 138 | $291654 \cdot 3$ | 571 | 83 | $8 \cdot 8$ | 12 | 'II | $6 \cdot 42$ | F 5 |
| I I,94] | 304907 | L 48867 | 134-5 |  | $23 \quad 10 \quad 2.24$ | $+2.8968$ | +.0149 | $\begin{array}{llll}31 & 17 & 14.3\end{array}$ | +19.572 | +.084 | $9 \cdot 0$ | + 60 | - 6 | $8 \cdot 8$ |  |
| I 1,942 | 294887 | C I 3979 | 141 |  | 10 8.13 | 9070 | 141 | 2950 | 573 | 83 | $9 \cdot 6$ | + 28 | 21 | $9 \cdot 2$ | G 5 |
| 11,943 | 284556 | C 13982 |  |  | 1018.56 | 9168 | 134 | $2826 \quad 7 \cdot 0$ | 577 | 8,3 | 10.3 | 32 | + 25 | $9 \cdot 3$ |  |
| 11,944 | 254903 | C 13984 |  |  | 1026.96 | 9337 | 120 | 2549 5I•6 | 579 | 84 | $9 \cdot 8$ | - 36 | - 6 | $8 \cdot 8$ |  |
| 11,945 | 274517 | C 13985 | $147-8$ | 45516 | Io $34 \cdot \mathrm{II}$ | 9232 | 130 | $273451 \cdot 5$ | 582 | 82 | $8 \cdot 8$ | + 13 | + | $6 \cdot 95$ | A 0 |
| 1 1,946 | 244734 | C 13986 |  |  | $231041 \times 78$ | $+2.9385$ | +.0117 | $25 \quad 9 \quad 37 \cdot 1$ | +19.584 | $+\cdot 084$ | . 2 | 13 | 15 | $9 \cdot 4$ |  |
| II 1,947 | 304909 | L 9875 |  |  | 1042.97 | 9041 | 146 | 303311.4 | 584 | 82 | 10.5 | - 2 | - 3 | $8 \cdot 8$ | F 5 |
| III,948 | 254904 | C 13988 |  |  | 10 50.67 | 9367 | 119 |  | 587 | - 83 | 11.2 | - 19 | - 18 | $9 \cdot 4$ |  |
| III,949 | 244736 | B 8898 |  |  | 1054.08 | 9400 | 116 | $25 \quad 0 \quad 35 \cdot 5$ | 588 | - 84 | $10 \cdot 3$ | $+\quad 38$ | $+\quad 19$ | $8 \cdot 9$ |  |
| 11,950 | 254905 | C 13989 |  | 45530 | 10 57.50 | 9379 | 118 | $25 \quad 2213.1$ | 589 | 83 | 10.1 | + 11 | - 20 | $8 \cdot 2$ |  |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $1910{ }^{\circ} \mathrm{O}$. | Precession. | Sec. Var. | Dec. 19 ro.o. | Precession. | Sec. Var. | Epoch $1900+$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underset{3.0001}{ }$ | $\begin{aligned} & \text { Dec. } \\ & { }^{2} . \infty 01 . \end{aligned}$ |  |  |
|  | - |  |  |  | $\begin{array}{ll}\mathrm{n} & \mathrm{m} \\ \mathrm{s}\end{array}$ | 5 | 8 | - |  | " |  |  |  |  |  |
| 11,951 | 244737 | C 13990 |  | 45531-2 | 231058.00 | +2.9391 | +.0117 | $25 \quad 10 \quad 52 \cdot 3$ | +19.589 | $+.083$ | $10 \cdot 1$ | + 5 | + 7 |  | K o |
| 11,952 | 244738 | B 8902 |  |  | 1110.59 | 9440 | 114 | $2427 \quad 2 \cdot 3$ | 593 | 83 | $10 \cdot 6$ | - 14 | $+51$ | $8 \cdot 3$ | T |
| 11,953 | 304912 | L 98876 | 163-4 |  | 1118.79 | 9020 | 149 | $\begin{array}{llll}31 & 11 & 1.8\end{array}$ | 595 | 82 | 11.0 | + 110 | + $4^{2}$ | $7 \cdot 52$ | F 8 |
| II,954 | 274521 | C 13992 | 165-6 |  | $1122 \cdot+1$ | 9244 | 131 | $27 \quad 45 \quad 25 \cdot 8$ | 596 | 81 | 10.6 | + 11* | - $3^{*}$ | $6 \cdot 50$ | G 5 |
| 11,955 | 264588 | C 13993 | 167 |  | 11 22.92 | 9283 | 128 | $\begin{array}{llll}27 & 8 & 22.5\end{array}$ | 597 | 81 | 10.8 | - 39 | - 15 | $8 \cdot 0$ |  |
| 11,956 | 264589 | C I 3994 |  |  | 23 I11 27.51 | +2.9294 | +.0127 | $265938 \cdot 3$ | +19.598 | $+.082$ | 11.2 | - 22 | - 69 | 8.8* |  |
| 11,957 | 234712 | B 89804 | $169-70$ | 45543 | 1131.62 | 9460 | 113 | $241648 \cdot 0$ | 599 | 82 | $9 \cdot 2$ | + 58 | + 10 | $6 \cdot 52$ | F 2 |
| I 1,958 | 274523 | C I 3995 | $174-5$ | 45552 | 1140.08 | 9254 | 131 | 2744 II. 6 | 602 | 81 | $10 \cdot 0$ | - 15 | 0 | $8 \cdot 4$ | Ko |
| 11,959 | 294890 | C I 3996 | 182 | 45559 | 1153.17 | 9106 | 145 | 301037.5 | 606 | 81 | 11.3,10.9 | + 273 | + 92 | $8 \cdot 06$ | K |
| 11,960 | 244739 | B 8907 | 183 |  | 1157.79 | 9430 | 118 | $245845 \cdot 7$ | 607 | 81 | 10.4 | + 16 | + 6 | $9 \cdot 7$ |  |
| 11,961 | 29 4891 | C 13998 | 184 |  | $231159 \cdot 46$ | $+2.9104$ | +.0145 | 301525.8 | +19.608 | +.081 | 11.4 | + 9 | $+\quad 9$ | $8 \cdot 96$ | Fo |
| 11.962 | 254907 | C 13997 |  |  | 1159.77 | 9387 | 121 | $\begin{array}{lllllllllll}25 & 42\end{array}$ | 608 | 81 | $10 \cdot 8$ | - 15 | - 27 | $8 \cdot 9$ |  |
| $11,963$ | 244740 | C I 39999 | 185 | 45570 | 12111.68 | 9432 | 118 | $\begin{array}{llll}25 & 2 & 45.4\end{array}$ | 6 II | 80 | 10.9 | - 17 | - 25 | $9 \cdot 0$ | G 5 |
| $11,964$ | 304913 | L. 9887 |  |  | $\begin{array}{lll}12 & 19.81\end{array}$ | 9077 | 148 | $\begin{array}{llll}30 & 50 & 50 \cdot 4\end{array}$ | 614 | 79 | 10.8 | + 8 | + 18 | $8 \cdot 8$ |  |
| 11,965 | 264590 | C 14000 | 189 |  | 12. $25 \cdot 76$ | 9310 | 129 | 27 II $57 \cdot 8$ | 616 | 79 | 10.8 | + 1 | - 44 | 8.2 | F 8 |
| 11,966 | 294893 | C14002 | 194 | 45584 | 231235.04 | +2.9147 | +.0143 | $29 \quad 5258.4$ | +19.618 | +.079 | 11.3 | - 12 | - 33 | 7.71 | ${ }^{\text {A }} 2$ |
| 11,967 | 304917 | L 9890 |  |  | 1250.62 | 9070 | 151 |  | 6231 | 78 | 11.2 | - 1 | - 3 | $8 \cdot 7$ | K. 5 |
| 11,968 | 274526 | C 14005 | 204-5 | 45594 | 1252.70 | 9267 | 135 | $\begin{array}{llll}28 & 7 & 0.7\end{array}$ | 624 | 78 | 11.0 | + 17 | + 12 | 8-2 | K 2 |
| 11,969 | 294895 | C 14006 | 206-7 | 45597 | $1255 \cdot 76$ | 9191 | 142 | $\begin{array}{llll}29 & 22 & 55 \cdot 0\end{array}$ | 625 | 79 | 11.4 | + 14 | - 18 | $7 \cdot 9$ | K 5 |
| 11,970 | 294896 | C 14008 |  |  | $13 \quad 3 \cdot 39$ | 9137 | 146 |  | 627 |  | 11.7 | + 26 | - 12 | $9 \cdot 2$ |  |
| 11,971 | 234717 | 3 8913 |  |  | $\begin{array}{lll}23 & 13 & 10.64\end{array}$ | +2.9517 | +.0113 | $24 \quad 1 \quad 4.5$ | +19.629 | +.079 | 12.4 | + 4 | 2 | $9 \cdot 4$ |  |
| 111,972 | 274527 | C 14011 |  |  | $\begin{array}{ll}13 & 12.86\end{array}$ | 9289 | 134 | $27 \quad 5531 \cdot 1$ | 630 |  | 12.0 | - 19 | + 1 | $9 \cdot 4$ |  |
| 11,973 | 304918 | L. 9893 |  |  | 1319.13 | 9130 | 148 | $\begin{array}{lllll}30 & 32 & 19.4\end{array}$ | 632 | 78 | $9 \cdot 3$ | + 21 | - | $7 \cdot 16$ | Fo |
| 11,974 | 274528 | C 14013 |  |  | 1326.29 | 9319 | 132 | $27 \quad 32 \quad 7 \cdot 9$ | 634 | 78 | $9 \cdot 6$ | - 2 | 0 | $8 \cdot 8$ |  |
| 11,975 | 294899 | C 14015 | 217 | 45 | 1330.80 | 9173 | 145 | 2958 I.8 | 635 | 78 | $9 \cdot 2$ | - 37 | - 50 | $7 \cdot 21$ | K 0 |
| 11,976 | 244746 | B 8916 | 219 | 45619 | 23 13 34.66 | +2.9507 | +.0115 | $242245 \cdot 6$ | $+19.636$ | +.078 |  | - 5 | - 34 | $8 \cdot 8$ | F 8 |
| 11,977 | 264596 | C 14016 |  | 45625 | $1350.31$ | 9356 | 130 | $\begin{array}{llll}27 & 6 & 32 \cdot 7\end{array}$ | 641 | 77 | $9 \cdot 4$ | + 22 | - 41 | $7 \cdot 40$ | F 5 |
| 11,978 | 254914 | C : 4018 |  |  | $1357 \cdot 20$ | 9408 | 126 | $\begin{array}{llll}26 & 16 & 34 \cdot 5\end{array}$ | 643 | 78 | $9 \cdot 8$ | - 26 | + 18 | $9 \cdot 4$ |  |
| 11,979 | 264597 | C 14019 |  |  | $14 \quad 3.67$ | 9372 | 130 | $\begin{array}{lllllllllll}26 & 57 & 39\end{array}$ | 645 | 77 | $9 \cdot 2$ | - 7 | $+4$ | $8 \cdot 7$ |  |
| 11,980 | 264598 | C 14020 |  |  | $14 \quad 4.31$ | 9360 | 131 | $27 \quad 9 \quad 56 \cdot 6$ | 645 | 76 | 10.4 | + 9 | - 48 | $9 \cdot 4$ |  |
| 11,981 | 264599 | C 14021 |  | 45640 | 23 144.31 | $+2.9363$ | +.0130 | $27 \quad 646 \cdot 9$ | +19.645 | +.076 |  | - 13 | - 46 | $7 \cdot 10$ | K o |
| $11,982$ |  | B 8919 |  |  | $14 \quad 18 \cdot 94$ | 9507 | 119 | $\begin{array}{llll}24 & 43 & 10.1\end{array}$ | 649 | 77 | 10.3 | - 2 | - 40 |  |  |
| 11,983 | -24.4749 |  | 233-4 | 45649 | 1418.99 | 9507 | 119 | 244312.5 | 649 | 77 | 10.5 | - 2 | - 40 | $8 \cdot 9$ | F 5 |
| 11,984 |  | B 8920 |  |  | 1419.13 | 9507 | 119 | $244312 \cdot 8$ | 649 | 77 |  | - 2 | - 40 |  |  |
| I 1,985 | 244750 | C 14024 | 239 |  | $1437 \cdot 14$ | 9494 | 120 | $25 \quad 5 \quad 5 \mathrm{I} \cdot 4$ | 654 | 76 | $9 \cdot 7$ | + 7 | + 34 | $9 \cdot 4$ |  |
| 11,986 | 254917 | C 14025 | 243 |  | 231457.92 | $+2.9453$ | +.0126 | $255921 \cdot 1$ | $+19.660$ | 1.076 |  | 9 | - 9 | $8 \cdot 2$ | A 2 |
| 11,987 | 264604 | C 14027 | 25 I | 45678 | $15 \quad 11.62$ | 9402 | 131 | $27 \quad 2.4$ | 664 |  | $8 \cdot 8$ | - 20 | - 105 | $8 \cdot 2$ | F 8 |
| I I, 988 | 294905 | C 14028 |  |  | 1514.08 | 9252 | 145 | $\begin{array}{llll}29 & 35 & 18 \cdot 7\end{array}$ | 665 | 75 | $9 \cdot 6$ | + 43 | - I 4 | $9 \cdot 5$ |  |
| 1 1,989 | 274530 | C 14031 |  |  | 1526.80 | 9339 | 137 | $\begin{array}{lllll}28 & 14 & 19.4\end{array}$ | 668 | 74 |  | + 7 | - 15 | 8.8 | F 8 |
| I I,990 | 284562 | C 14030 | 257 |  | 1528.53 | 9332 | 138 | $\begin{array}{llll}28 & 22 & 38 \cdot 7\end{array}$ | 669 | 74 | $9 \cdot 36$ | + 501 | - $4^{8}$ | 8.8 | K |
| I 1,991 | 294906 | C 14032 |  |  | $\begin{array}{llll}23 & 15 & 28.95\end{array}$ | $+2.9267$ | +.0144 | $292848 \cdot 6$ | +19.669 | +.074 |  | + 1 | - 23 | 9.4 |  |
| I 1,992 | 244752 | B 8926 | , | 45694 | 1542.46 | 9532 | 121 | $24 \quad 56$ | 673 | 75 |  | - 7 | + 11 | $8 \cdot 2$ | A 0 |
| I 1,993 | 274532 | C 14035 | 264-5 |  | 1550.71 | 9404 | 133 | $\begin{array}{lllll}27 & 18 & 23.3\end{array}$ | 675 | 74 |  | - 3 | - 12 | $9 \cdot 2$ |  |
| II,994 | 274533 | C 14037 |  | 45720 | 1611.02 | 9378 | 137 |  | 681 | 73 |  | + 23 | + 20 | $9 \cdot 0$ | K 0 |
| I 1,995 | 254922 | C 14038 |  |  | 1619.30 | 9477 | 128 | $26 \quad 14 \quad 28 \cdot 9$ | 683 | 73 | 10.4 | + 9 | + 11 | $9 \cdot 2$ | F 2 |
| I 1,996 | 284566 | C 14040 |  |  | $\begin{array}{llll}23 & 16 & 20.96\end{array}$ | $+2.9337$ | +.014 1 | $28 \quad 44 \quad 49 \cdot 5$ | +19.683 | +.072 | II. 1 | - 21 | $+\quad 27$ | $9 \cdot 5$ | F |
| 11,997 | 294908 | C I 4041 | 280 | 45735 | 1624.91 | 9271 | 148 | 2955125.6 | 685 | 72 |  | + 59* | - $67 *$ | $5 \cdot 78$ | $\mathrm{K}_{5}$ |
| 11,998 | 284568 | C 14042 | 281 | 45736 | 1625.67 | 9362 | 139 | $\begin{array}{llll}28 & 21 & 7 \cdot 8\end{array}$ | 685 | 72 |  | - 16 | - 55 | $8 \cdot 8$ | G |
| 11,999 | 264608 | C 14043 |  |  | 1626.49 | 19427 | 132 | $27 \begin{array}{llll}27 & 12 & 33.0\end{array}$ | 685 | 72 | 11.4 | + 21 | $+\quad 38$ | 9.4 |  |
| 12,000 | 274534 | C 14044 | 283 |  | 1629.18 | 9408 | 135 | $27 \quad 34 \quad 29.7$ | 686 | 72 | 11.2 | - 53 | + 1 | $9 \cdot 2$ | G |
| 11,958, 11,966. Number of obscrvations 6. <br> 11,981. Number of observations 7. <br> 11,982. Number of 0 <br>  <br> 11,983. Obscrved as onc mass. Number of obscrvations 4. <br> ${ }_{11,984}$. Number of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. $19100^{\circ}$ | Precession. | Sec. Var. | Dec. 1910.0. | Précession. | Sec. Var. | Epoch $1900+$ | $\begin{aligned} & \text { R.A. } \\ & \text { a.0001. } \end{aligned}$ | $\begin{gathered} \text { Dec. } \\ { }^{\prime} \cdot 00 \mathrm{I} . \end{gathered}$ | Mag. | Spectral Type. |
|  | - |  |  |  | h m s | 8 | 8 | - '" | * | " |  |  |  |  |  |
| 12,101 | 304977 | L 9995 |  | 46158 | 2329 11.95 | +2.9669 | +.0165 | $\begin{array}{llll}30 & 31 & 6.7\end{array}$ | +19.865 | +.049 | I I 4 | + 36 | - 2 | $8 \cdot 4$ | K 5 |
| 12,102 | 294957 | C I4I55 |  |  | 2912.87 | 9705 | 159 | 29 41 7 7.9 | 865 | 50 | 12. | 1 I | + 33 | $9 \cdot 4$ |  |
| 12,103 | 254961 | C 14156 |  |  | 2916.94 | 9857 | 138 | $25 \quad 5534 \cdot 8$ | 866 | 50 | 12.1 | 0 | 12 | $9 \cdot 2$ |  |
| 12,104 | 294959 | ${ }^{\text {C I I }} 1157$ |  |  | 29 24.61 | 9714 | 159 | $293747 \cdot 3$ | 868 | 49 | II•9 | $+\quad 8$ | - I4 | $9 \cdot 4$ |  |
| 12,105 | 304978 | L 9998 | 568 | 46164 | 29 29.12 | 9666 | 166 | 304943.0 | 869 | 49 | $12 \cdot 3$ | + 40* | - 12* | $5 \cdot 2 \mathrm{I}$ | K 2 |
| 12,106 | 254967 | C I4 159 | 573-5 | 46178 | $232956 \cdot 98$ | +2.9865 | +.0141 | $\begin{array}{lllll}26 & 13 & 5 \cdot 0\end{array}$ | +19.874 | +.049 | I I• 2 | - 13 | - 27 | $8 \cdot 9$ | Fo |
| 12,107 | 274574 | C I4160 | 577 | 46180 | 2958.61 | 9818 | 147 | $27 \quad 2816.0$ | 874 | 49 | 10.8 | + 3 I | - 5 | $8 \cdot 6$ | F 5 |
| 12,108 | 244797 | B 9030 | 576 | 46179 | 29 59.15 | 9920 | 132 | $\begin{array}{lllllllllll}24 & 45 & 38 \cdot 2\end{array}$ | 874 | 48 | $9 \cdot 3$ | + 4 | + I | $8 \cdot 8$ | $\mathrm{F}_{2}$ |
| 12,109 | 294962 | C i4i63 | 584 |  | 3018.11 | 9719 | 163 | 301343.6 | 878 | 47 | $10 \cdot 6$ | + 29 | - | $9 \cdot 2$ |  |
| I2,110 | 294963 | C 14165 | 588-9 |  | $30 \quad 23 \cdot 11$ | 9749 | 159 | $293156 \cdot 1$ | 879 | 47 | II $\cdot 3$ | 0 | + 6 | $8 \cdot 9$ | A 2 |
| I2, 1 I I | 314932 | L 10003 | 595 | 46201 | $233031 \cdot 24$ | +2.9681 | +.0171 | $\begin{array}{llll}31 & 20 & 16 \cdot 7\end{array}$ | +19.880 | $+.047$ | II.4 | - | - 8 | $7 \cdot 9$ | A 2 |
| I2, 112 | 244798 | B 9032 | 596-7 | 46211 | 3043.98 | 9939 | 133 | $\begin{array}{lllllllllll}24 & 47 & 17.4\end{array}$ | 883 | 47 | 10.8 | + 26 | + 4 | $8 \cdot 7$ | F 5 |
| I2, II 3 | 304982 | L 10006 | 599 | 4622 I | 3056.86 | 9730 | 166 | $30 \quad 3047.7$ | 885 | 46 | II 1.18 | + 431 | + 239 | $6 \cdot 72$ | G o |
| I2, II 4 | 304983 | L 10007 | 600 | 46233 | 3058.72 | 9724 | 167 | $30 \quad 40$ I-4.8 | 886 | 46 | II•3 | - 162 | - 269 | $7 \cdot 91$ | G 5 |
| I2, II 5 | 274578 | C14170 |  | 46224 | 3059.59 | 9846 | 148 | $27 \quad 31 \quad 23.5$ | 886 | 47 | I $2 \cdot 1$ | - 14 | + 9 | $9 \cdot 5$ | F 2 |
| 12,116 | 3I 4935 | L 10008 | 602 | 46227 | 23313.09 | +2.9685 | +.0173 | 3142004 | +19.886 | $+\cdot 046$ | 10.7 | $+32$ | 0 | $6 \cdot 62$ | K o |
| 12,117 | 3I 4937 | L IOOII | 6II |  | 3116.95 | 9695 | 173 | $3 \mathrm{I} 40 \mathrm{II} \cdot \mathrm{I}$ | 889 | 45 | I I $\cdot \mathrm{I}$ | 8 | - 31 | $8 \cdot 8$ | Ko |
| 12, 118 | 234769 | B 9036 | 613 | 46239 | 3125.49 | 9983 | 129 | $\begin{array}{llll}24 & 3 & 46 \cdot 8\end{array}$ | 890 | 46 | II. 2 | 10 | + 36 | $6 \cdot 60$ | Ma |
| 12,119 | 274579 | C 14173 |  | 46240-1 | $3126 \cdot 11$ | 9865 | 147 | $\begin{array}{llll}27 & 22 & 1.7\end{array}$ | 891 | 46 | I I. 2 | - I4 | - 9 | $7 \cdot 34$ | B 9 |
| 12, 120 | 264660 | C14174 |  |  | $3138 \cdot 12$ | 9877 | 147 | 27 II $20 \cdot 5$ | 893 | 46 | 12.3 | + 5 | - 9 | $9 \cdot 4$ |  |
| 12,12 1 | 314939 | LIOOI4 | 620 |  | 23 31 44.00 | +2.9700 | +.0176 | $31 \begin{array}{lll}3 & 56 & 27 \cdot 8\end{array}$ | +19.894 | +.045 | 12.1 | + 33 | - 9 | $9 \cdot 4$ |  |
| $12,122$ |  |  |  |  | 3148.98 | 9839 | 154 | $\begin{array}{llll}28 & 24 & 4 \cdot 2\end{array}$ | 895 | 46 | 8.8 | + 24 | + 2 |  |  |
| $12,123$ | -284605 |  |  |  | $3149 \cdot 37$ | 9839 | I 54 | $\begin{array}{llll}28 & 24 & 3.9\end{array}$ | 895 | 46 | 12.8 | + 24 | + 2 | $8 \cdot 8$ | F 2 |
| 12,124 |  | C 14I76 | $62 I-2$ |  | $3149 \cdot 25$ | 9839 | I 54 | $\begin{array}{llll}28 & 24 & 3 \cdot 8\end{array}$ | 895 | 46 | 12.4 | + 24 | + 2 |  |  |
| 12,125 | 254975 | C14178 | 624 |  | $3157 \cdot 34$ | 9937 | 138 | 2546 II 0 | 896 | 46 | $9 \cdot 2$ | + 3 | - 5 | $8 \cdot 2$ | A 2 |
| 12,126 | 244800 | B 9040 |  |  | $\begin{array}{llll}23 & 32 & 0.96\end{array}$ | $+2.9978$ | +.01 33 | $243^{8} \quad 56 \cdot 2$ | +19.897 | +.045 | 11.4 | + 7 | t-39 | $9 \cdot 4$ |  |
| 12,127 | 264663 | C 14179 |  |  | 3223.43 | - 9928 | 143 | $26 \quad 2437 \cdot 7$ | $901$ | 44 | $9 \cdot 8$ | - 5 | 0 | 9.2 |  |
| 12,128 | 29497 I | C14180 | 636 | 46264 | $3236 \cdot 37$ | 9798 | 166 | 30 I0 $40 \cdot 6$ | 903 | 43 | $9 \cdot 0$ | + I54 | + 63 | $7 \cdot 16$ | Go |
| 12,129 | 274582 | C 1418I |  |  | $3240 \cdot 99$ | 9885 | 152 | 275134.2 | 904 | 44 | 12.2 | + 1 | - 15 | $9 \cdot 4$ |  |
| 12,130 | 294972 | C14184 | 643-5 |  | $3245 \cdot 32$ | 9827 | 162 | $293157 \cdot 5$ | 905 | 43 | $1 \mathrm{I} \cdot 7$ | + 15 | - 24 | $9 \cdot 0$ | F 8 |
| 12,131 | 254976 | C14183 |  |  | $\begin{array}{llll}23 & 3245043\end{array}$ | +2.9962 | +.0139 | $254130 \cdot 7$ | +19.905 | +.044 | 13.4 | - 33 | - 19 | $9 \cdot 4$ |  |
| 12,132 | 244803 | C 14185 |  | 46273 | $3247 \cdot 00$ | $2 \cdot 9977$ | 137 | 25 I6 21.9 | 905 | 44 | 10.6 | 0 | + 15 | 8.6 |  |
| 12,133 | 244806 | B 9047 | 656 |  | $\begin{array}{lll}33 & 3.28\end{array}$ | $3.0015$ | 132 | 2421603 | 908 | 43 | $10 \cdot 7$ | + 25 | $1+3$ | 8.8 |  |
| I2, 134 | 314941 | L 10023 |  |  | 33113.05 | $2.975^{2}$ | 177 | 3 I | 909 | 42 | $9 \cdot 7$ | - 9 | - I3 | $9 \cdot 2$ | K 2 |
| 12,135 | 264667 | C I4187 |  |  | $33 \quad 38 \cdot 76$ | 2.994 I | 149 | $27 \quad 5 \quad 23 \cdot 0$ | 914 | $4^{2}$ | $10 \cdot 1$ | + 14 | - 8 | $9 \cdot 4$ |  |
| 12,136 | 264668 | C14189 | 68 I | 46319 | $23 \quad 34 \quad 7 \cdot 76$ | +2.9959 | +.OI $4^{8}$ | 265941.4 | +19.918 | +.04I | $9 \cdot 6$ | + 20 | + 25 | $8 \cdot 8$ | A 2 |
| 12,137 | 244809 | B 9052 |  |  | $3410 \cdot 91$ | 3.0032 | I 35 | $244543 \cdot 8$ | 919 | 41 | 10.8 | + 20 | + 15 | $9 \cdot 2$ |  |
| 12,138 | 254980 | C I4190 | $686-7-8$ | 46327 | $3417 \cdot 27$ | 3.0013 | 139 | $25 \quad 26 \quad 53 \cdot 2$ | 920 | 40 | $\cdot 2$ | + 10 | - 9 | $8 \cdot 3$ |  |
| 12,139 | 234779 | B 9055 |  |  | 3417.55 | 3.0053 | 132 | 24 II $2 \cdot 3$ | 920 | 40 | 11.2 | 15 | - 22 | $9 \cdot 0$ |  |
| 12,140 | 294974 | C 14191 | 692 |  | $34 \quad 24.07$ | 2.9880 | 164 | 293344.7 | 921 | 40 | $12 \cdot 0$ | - 33 | - 47 | $8 \cdot 8$ | F 5 |
| 12,14 1 | 304996 | C 14194 | $698$ |  | $23 \quad 3439.63$ | +2.986I | +.0169 | $30 \quad 22$ I 5.4 | +19.924 | +.040 | II. 8 | + 30 | - 16 | $8 \cdot 51$ | K 2 |
| I2,142 | 234780 | B 9058 | 699 | 46342 | $3456 \cdot 42$ | 3.0068 | 132 |  | $926$ | 39 | 11.4 | - 4 | - II | $8 \cdot 3$ |  |
| 12,143 | 274588 | C 14195 | 701 | 46343-4-5 | $3458 \cdot 63$ | $2.9959$ | 153 | $274432 \cdot 5$ | 927. | 39 | $10 \cdot 1$ | + 231 | + 234 | $6 \cdot 97$ | Go |
| 12,144 | 314946 | L 1004I | 705 |  | $35 \quad 7 \cdot 80$ | 2.9822 | 179 | $\begin{array}{llll}31 & 58 & 3.6\end{array}$ | 928 | 39 | II 18 | - 4 | + 2 | $9 \cdot 2$ | K O |
| 12,145 | 314948 | L 10042 |  |  | $35 \quad 15 \cdot 37$ | 2.9831 | 178 |  | 929 | 38 | 12.6 | + 37 | - 70 | $9 \cdot 4$ |  |
| I 2, 146 | $30 \quad 5000$ | L 10043 |  |  | $23 \quad 35 \quad 16.60$ | +2.9874 | +.0171 | $30 \quad 36 \quad 56 \cdot 3$ | +19.929 | +.038 | 12.3 | + 75 | - 20 | $9 \cdot 2$ | G 0 |
| 12,147 | 254982 | C I 4200 |  |  | $35 \quad 28.55$ | 3.0036 | 142 | 254531.7 | 93 I | - 38 | 13.2 | - 23 | - 2 | $9 \cdot 4$ |  |
| 12,148 | 264671 | C 14201 | 712 | 46363 | $35 \quad 30.07$ | 2.9998 | 150 | 27 - 56.7 | 932 | 38 | İ. 8 | $+\quad 39$ | + 28 | $6 \cdot 75$ | K o |
| 12,149 | 264672 | C 14202 |  |  | $35 \quad 30.39$ | $3 \cdot 0013$ | $148$ | $263121 \cdot 5$ | $932$ | 38 | 12.6 | $1 \begin{array}{r} 1 \\ +\quad \end{array}$ | $+3$ | 8.8 |  |
| 12,150 | 264673 | C 14203 | 713 | 46364 | 3531.63 | 3.0021 | 147 | 2618 9.1 | 9.32 | 38 | 12.2 | $+105$ | + 40 | 7.65 | G 0 |

12,105. Burnham 12,432. Number of observations 14. 12,115. Number of observations 6.
$12,122,12,124$. These stars form the pair $\Sigma 3026$, magnitudes $9 \cdot 3$ and $8 \cdot 8$. 12,124 . Number of obscrvations 3 .

|  |  |  |  |  |  |  |  |  |  |  |  | Annual | IP.M. |  |  |
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| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Soc. Var. | Epoch $1900+$ | $\begin{gathered} \text { R.A. } \\ 3.0001 \text {. } \end{gathered}$ | $\begin{aligned} & \text { Dec. } \\ & \text { N.001. } \end{aligned}$ | Mag. | Spectral Type. |
|  |  |  |  |  | h m s | z | 8 |  |  |  |  |  |  |  |  |
| 12, 151 | 234784 | B 906I | 722-3 | 46369-70 | $233546 \cdot 38$ | $+3.0094$ | +.OI 33 | $\begin{array}{llll}24 & 5 & 31.8\end{array}$ | +19.934 | $+.038$ | 11.8 | 31 | - 17 | 8.4 | K |
| 12, 152 | 234785 | B 9063 | 727-9 | 46376-8 | 35 59.33 | 3.0097 | 133 | 24 II 43.4 | + 936 | 37 | $10 \cdot 8$ | $+\quad 43$ | + 36 | $7 \cdot 82$ | F 5 |
| 12,153 | 274593 | C I 4205 | 731-2 | 46392-3 | $3610 \cdot 20$ | 3.0006 | 152 | $27 \quad 2337.8$ | 938 |  | $10 \cdot 0$ | + 1 | + 2 | $8 \cdot 6$ | A 0 |
| 12,154 | 244813 | C I 4206 | 733-6 |  | 36 II. 64 | 3.0070 | 140 | $\begin{array}{lllll}25 & 17 & 22.9\end{array}$ | 938 | 36 | 9.8 | - 7 | - 20 | $8 \cdot 3$ |  |
| 12,155 | 274594 | C 14207 |  | 46414 | $3640 \cdot 69$ | $2 \cdot 9995$ | 159 | 28 17 7.6 | 942 | 36 | $9 \cdot 3$ | + 10 | + 1 | $9 \cdot 4$ |  |
| 12,156 | 305002 | L 10052 | 747 |  | $23 \quad 3658.87$ | +2.992 | +.0175 | $30 \quad 58 \quad 7 \cdot 0$ | $+19.945$ | +.035 | 10.4 | - 33 | - 41 | $8 \cdot 9$ | K o |
| 12, 157 | 274598 | C 14212 |  |  | 3714.86 | 3.0016 | 158 | $\begin{array}{llll}28 & 9 & 8 \cdot 9\end{array}$ | 947 | 35 | $10 \cdot 7$ | 1 I | + 10 | $9 \cdot 7$ |  |
| 12, 58 | 234792 | B 9066 |  | 46449 | $\begin{array}{lll}37 & 23.87\end{array}$ | 3.0131 | 135 | $\begin{array}{lllll}24 & 17 & 38.8\end{array}$ | 949 | 35 | $10 \cdot 6$ | 2 | + 23 | $8 \cdot 7$ | K o |
| 12,159 | 24 4814 | B 9067 |  |  | 37 24.13 | 3.0119 | 137 | $2444 \begin{array}{llll}24 & 36 \cdot 7\end{array}$ | 949 | 35 | $1 \mathrm{I} \cdot 3$ | $+\quad 4$ | + 23 | $9 \cdot 0$ |  |
| 12,160 | 254987 | C142I3 | 761 |  | $3732 \cdot 01$ | 3.0104 | 141 | $25 \quad 2312 \cdot 2$ | 950 | 34 | 10.4 | - 4 | - 22 | $8 \cdot 6$ |  |
| 12,161 | 234793 | B 9069 | $762-4$ | 46450 | 2337 35.17 | $+3.0138$ | +.0135 | $241347 \cdot 6$ | +19.950 | +.034 | II•3 | - 62 | + 68 | $8 \cdot 6$ | F 5 |
| 12,162 | 244815 | C 142I4 |  |  | $3735 \cdot 61$ | 3.0113 | 140 | $\begin{array}{llll}25 & 8 & 33.0\end{array}$ | 950 | 34 | II.6 | + 10 | + 12 | $9 \cdot 3$ |  |
| 12,163 | 234796 | B 9072 | 770 | 46454 | $3742 \cdot 31$ | 3.0139 | 136 | $24 \quad 16 \quad 42 \cdot 3$ | 95 I | 34 | 11.8 | + 21 | - 14 | $8 \cdot 8$ |  |
| 12,164 | 314955 | L 10057 |  |  | $3743 \cdot 76$ | 2.9916 | 182 | 3 I | 95 I | 34 | II 1.8 | - II | $+\quad 5$ | $9 \cdot 2$ | Ko |
| 12,165 | 274600 | C142I5 |  | 46455 | 37 47-59 | $3 \cdot 0044$ | 157 | $\begin{array}{lllll}27 & 4^{8} & 52 \cdot 5\end{array}$ | 952 | 34 | I I $\cdot 9$ | 4 | - 26 | $8 \cdot 9$ | K 0 |
| I2,166. | 284616 | C 14216 |  | 46458 | 233752.87 | $+3.0031$ | +.0160 | $\begin{array}{lllll}28 & 19 & 52.9\end{array}$ | +19.953 | +.033 | 12.7 | - 5 | $+\quad 4$ | $9 \cdot 3$ |  |
| 12,167 | 274601 | C14217 | 776 | 46461 | $3755 \cdot 61$ | 3.0035 | 159 | $\begin{array}{lllll}28 & 1 & 13 & 22.4\end{array}$ | 953 | 33 | 12.0 | + 14 | + 8 | $9 \cdot 0$ | $\text { A } 0$ |
| 12,168 | 305006 | C14218 | 777-8 |  | 3755.85 | 2.9969 | 173 |  | 953 | 34 | II. 8 | - 38 | - 110 | $9 \cdot 0$ | F 8 |
| 12,169 | 244819 | B 9074 |  |  | 3814.41 | 3.0136 | 140 | $24 \quad 5519.6$ | 956 | 33 | $10 \cdot 3$ | + 25 | +61 | $9 \cdot 4$ |  |
| 12,170 | 284618 | C 14220 |  |  | 38 16.10 | 3.0023 | 164 | 29 I $43 \cdot 1$ | 956 | 33 | 1 I-2 | 16 | - 13 | $9 \cdot 4$ |  |
| 12,171. | $27+603$ | C 14223 | 787 |  | $\begin{array}{llll}23 & 38 & 28 \cdot 70\end{array}$ | $+3.0055$ | +-0159 | $28 \quad 8 \quad 37 \cdot 0$ | +19.958 | $+.033$ | $9 \cdot 4$ | - 16 | + 25 | $9 \cdot 9$ |  |
| 12,172 | 314960 | L 10062 | 795 |  | $38 \quad 47 \cdot 32$ | 2.9957 | 182 | 315 | 960 | 32 | $9 \cdot 4$ | + 36 | + 14 | $9^{\cdot 2}$ | F 8 |
| 12,173 | 244822 | B 9079 | 798-9 | 46490-2 | $39 \quad 1 \cdot 57$ | 3.0166 | 139 | 2435 50.1 | 962 | 32 | $8 \cdot 4$ | $+\quad 4$ | - 8 | $8 \cdot 0$ | K 0 |
| 12,174 | 284623 | C 14229 |  |  | 39 9.3I | 3.0058 | 164 | $2847 \quad 9.0$ | 963 | 32 | II.0 | + 66 | + 16 | $9 \cdot 4$ |  |
| 12,175 | 274606 | C 1423I | 803 |  | 39 I1.80 | 3.0082 | 159 | $27 \quad 5647 \cdot 9$ | 963 | 31 | 10.5 | + 49 | - I | $8 \cdot 8$ |  |
| 12,176 | 294982 | C 14232 | 804 |  | $233915 \cdot 38$ | +3.002 1 | +.0172 | $301346 \cdot 0$ | +19.964 | +.031 | 11.0 | $+60$ |  |  |  |
| 12,177 | 284624 | C 14234 |  | 46497 | 3916.86 | 0073 | 161 | $28 \quad 22 \quad 58 \cdot 3$ | 964 | 31 | 9.8 | 12 $+\quad 12$ | + 57 | 8.8 | K ${ }_{2}$ |
| 12,178 | 264678 | C I4237 |  |  | 39 2I•28 | 0107 | 154 | $27 \quad 1240 \cdot 0$ | 965 | 31 | II. 3 | + 128 | + 33 | $9 \cdot 4$ |  |
| 12,179, | $28+627$ | C 14239 |  | 46504-5-6 | $3927 \cdot 65$ | 0066 | 164 | 28 51 47.I | 965 | 31 | $10 \cdot 3$ | + $54 *$ | - 36* | $4 \cdot 98$ | K o |
| 12,180 | 284628 | C 14240 |  | 46509 | 39 29.22 | 0068 | 164 | $28 \quad 4748 \cdot 5$ | 966 | 31 | $9 \cdot 8$ | + 26 | $1+\quad 7$ | $8 \cdot 8$ |  |
| 12,181 | 264679 | C 1424I | 809 |  | $23 \quad 3945 \cdot 54$ | $+3.0123$ | +.0154 | $27 \quad 434.0$ | +19.968 | +.03I | $8 \cdot 7$ | + 13 | - 13 | $8 \cdot 7$ |  |
| 12,182 | 284630 | C I 4243 | 812 |  | $40 \quad 2.07$ | 0073 | 167 | 29 16 17.1 | 970 | 30 | $9 \cdot 3$ | - 17 | + 5 | $8 \cdot 6$ | Ko |
| I2,183 | 284633 | C 14247 | 818 | 46536 | $40 \quad 21 \cdot 33$ | 0107 | 162 | $\begin{array}{lllll}28 & 20 & 59 \cdot 9\end{array}$ | 972 | 29 | 10.4 | - 20 | 0 | $9 \cdot 3$ |  |
| I2,184 | 284634 | C 14250 | 819 |  | $40 \quad 3 \mathrm{I} \cdot 76$ | 0095 | 167 | $29 \quad 3 \quad 44 \cdot 3$ | 974 | 29 | 9.56 | $+705$ | + 18 | $8 \cdot 9$ | Ko |
| 12,185 | 305013 | L I 10069 |  |  | $40 \quad 39 \cdot 71$ | 0048 | 179 | $3 \mathrm{I} \quad 1 \quad 23.4$ | 975 | 29 | 10.8 | $+4^{2}$ | - 28 | $9 \cdot 2$ |  |
| 12,186 | 305014 | 110070 | 822 |  | $23 \quad 40 \quad 39.97$ | $+3.0043$ | +.0180 | 31.1124 .1 | +19.975 | +.029 | II.O | $\text { - } 8$ | + 10 | 9.4 |  |
| I2,187 | 305015 | C I4251 |  |  | $40 \quad 43.09$ | 0067 | 175 | $\begin{array}{lllll}30 & 22 & 32 \cdot 8\end{array}$ | 975 | 29 | I I. 6 | - 20 | + 14 | 9.4 |  |
| 12,188 | 314965 | L 10073 | 823 |  | $405 \mathrm{I} \cdot 3 \mathrm{I}$ | 0036 | 184 | $314131 \cdot 0$ | $976$ | 28 | 10.4 | + 3 | + 3 | $8 \cdot 8$ | Go |
| 12,189 | 254996 | C I 4252 |  |  | $4053 \cdot 39$ | 0194 | 145 | $25 \quad 3019.9$ | 976 | 28 | II. 5 | - 5 | + 9 | $9 \cdot 2$ |  |
| 12,190 | 244827 | C 14253 | 827 |  | $4055 \cdot 57$ | 0203 | 144 | $25 \quad 102 \mathrm{I} \cdot 0$ | 977 | 28 | I I 4 | + 15 | + 17 | $9 \cdot 2$ |  |
| I2,191 | 305016 | L 10074 |  | $46551-2$ | $2340 \quad 56 \cdot 47$ | $+3.0052$ | +.0181. | 311470 | +19.977 | +.028 | 10.4 | + 1 | - 16 | $8 \cdot 2$ |  |
| 12,192 | 244828 | B 9084 | 825 |  | $412 \cdot 43$ | 0211 | 143 | $24 \quad 58 \quad 20.4$ | 977 | 28 | II. 6 | + 23 | + 11 | $8 \cdot 8$ | F 5 |
| 12,193 | 254997 | C I 4254 |  |  | 417.92 | 0198 | 146 | $2537 \quad 56 \cdot 9$ | 978 | 28 | II. 6 | + 108 | - 25 | $9 \cdot 4$ |  |
| 12,194 | 254998 | C 14255 | 829 |  | 4113.97 | -196 | 147 | $25 \quad 5011.4$ | $979$ | 27 | $8 \cdot 9$ | - 41 | - $4^{2}$ | $7 \cdot 80$ | K 5 |
| 12,195 | $27 \quad 4614$ | C 14256 |  | $46561-3$ | 4116.64 | -153 | 159 | $274041 \cdot 9$ | 979 | 27 | $10 \cdot 1$ | $+3$ | - 25 | $8 \cdot 05$ | F 5 |
| 12, I96 | 294989 | C 14257 | 832 | 46564 | 23 41 21.65 | $+3.0095$ | +.0174 | $\begin{array}{llll}30 & 8 & 48 \cdot 9\end{array}$ | +19.980 | +.027 | II•3 | + 77 | - 69 | $9 \cdot 2$ |  |
| 12,197 | 314967 | L 10078 |  |  | 4125.21 | 0058 | 184 | $\begin{array}{llll}31 & 39 & 6 \cdot 2\end{array}$ | 980 | 27 | II. 6 | - 7 | - 22 | $9 \cdot 4$ |  |
| 12,198 | 294993 | C 14258 |  |  | $4146 \cdot 47$ | 0126 | 171 | $2926 \quad 23 \cdot 1$ | 983 | 27 | I $1 \cdot 2$ | $+30$ | - 21 | $9 \cdot 4$ |  |
| 12,199 | 255000 | C 14260 |  |  | 4153.44 | 0207 | 150 | $\begin{array}{llll}26 & 9 & 59 \cdot 5\end{array}$ | 983 |  | 12.0 | + 57 | + 22 | $9 \cdot 4$ |  |
| 12,200 | 274617 | C I426I | 842 | $46581-3$ | 4153.44 | 0160 | 162 | $\begin{array}{lllll}28 & 12 & 13\end{array}$ | 983 | 26 | $9 \cdot 5$ | - 4 | - 4 | $7 \cdot 25$ | K 2 |


| No. | B.D. | A.G.C. | W.B. (2). | Lalande. | R.A. 19100. | Precession. | Sec. Var. | Dec. 1910.0. | Precession. | Sec. Var. | $\begin{gathered} \text { Epoch } \\ \text { rgoot } \end{gathered}$ | Annual P.M. |  | Mag. | Spectral Type. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | R.A. 8.0001. | $\begin{aligned} & \text { Dec. } \\ & \text { D.oor. } \end{aligned}$ |  |  |
|  | - |  |  |  | m | 8 | 8 | - " |  | " |  |  |  |  |  |
| 12,251 | 244846 | B 9109 |  | 46706 | $23 \quad 46 \quad 7.95$ | $+3.0352$ | +.0146 | $2448 \quad 0.0$ | +20.009 | +.018 | 10.0 | 27 | - 29 | 8.6 | G 5 |
| 12,252 | 244847 | B 911] |  |  | $46 \quad 9 \cdot 31$ | 0354 | 145 | 244112.0 | 009 | 18 | 11.7 | - | + 8 | 9.4 |  |
| 12,253 | 274630 | C 14316 | 92 I |  | $46 \quad 18.27$ | 0311 | 161 | $27 \quad 22 \quad 57 \cdot 3$ | -10 | 18 | 11.8 | + 44 | + 10 | $9 \cdot 2$ |  |
| I2,254 | 305037 | L ioil 8 | 922 | 46708-9 | $46 \quad 20 \cdot 36$ | 0244 | 185 | $\begin{array}{lllll}31 & 7 & 2 \cdot 1\end{array}$ | 10 | 18 | 10.8 | + 20 | - 3 | $8 \cdot 6$ | A 5 |
| 12,255 | 305038 | L ios 20 | 926 | 4671 5-6 | $4634 \cdot 26$ | 0249 | 186 | $\begin{array}{llll}31 & 17 & 22.8\end{array}$ | 12 | 17 | $9 \cdot 9$ | - 4 | + 2 | $8 \cdot 7$ |  |
| 12,256 | [ 255023 | C 14317 |  |  | $234638 \cdot 51$ | $+3.0350$ | +.0151 | $254332 \cdot 0$ | +20.012 | +-017 | 10.7 | + | + | $9 \cdot 3$ |  |
| 12,257 | 274631 | C 14319 |  |  | $4653 \cdot 38$ | 0314 | 168 | $\begin{array}{llll}28 & 17 & 0.5\end{array}$ | 013 | 17 | 10.6 | + | - 29 | $9 \cdot 4$ |  |
| 12,258 | 264707 | C 14320 | 937 | 46734 | 4654.06 | 0339 | 158 | 26505093 | -13 | 17 | 9.2 | - | - 13 | $8 \cdot 4$ | K o |
| 12,259. | 244848 | B 9117 | 940 |  | 477748 | 0377 | 146 | $245148 \cdot 3$ | 014 | 17 | 12.2 | 24 | - 6 | $9 \cdot 3$ |  |
| 12,260 | 295012 | C 14323 | 941 |  | $47 \quad 12.76$ | 0293 | 180 | $30 \cdot 648 \cdot 9$ | 015 | 17 | 11.7 | 29 | 20 | $9 \cdot 5$ |  |
| 12,261 | 244851 | B 9118 |  |  | 234727.83 | $+3.0392$ | +.0145 | 243034.8 | +20.016 | +.016 | 10.2 | - 4 | + | $9 \cdot 4$ |  |
| 12,262 | 274633 | C 14325 | 947 | 46754 | $4740 \cdot 33$ | 0342 | 168 | $28+34 \cdot 1$ | 017 | 16 | $9 \cdot 6$ | + 3 | - 10 | 8.6 |  |
| 12, 263 | 314982 | $\mathrm{L}_{\mathrm{C}} 10126$ |  |  | $474 \begin{aligned} & 4-86\end{aligned}$ | 0280 | 192 | $\begin{array}{lllll}31 & 49 & 50.9\end{array}$ | 017 | 16 | 10.9 | - 19 | + 23 | $9 \cdot 2$ |  |
| 12,264 | 274634 | C 14326 | 955 | 46765 | 47 51.96 | 0346 | 168 |  | 018 | 15 | 11.5 | + 15 | - 8 | $9 \cdot 4$ |  |
| 12,265 | 284655 | C 14327 | 956 | 46773 | 4759.65 | 0346 | 170 | $\begin{array}{llll}28 & 27 & 6.7\end{array}$ | -18 | 15 | $9 \cdot 0$ | - 13 | + 19 | $8 \cdot 6$ | A 0 |
| 12,266 | 244852 | C $1+328$ | 958-9 |  | $2348 \quad 3.75$ | $+3.0396$ | +.0150 | 251652.5 | +20.019 | +.015 | $10 \cdot 7$ | + 9 | 7 | 8.8 I | A 2 |
| 12,267 | )284656 |  |  |  | $\begin{array}{ll}48 & 8 \cdot 16\end{array}$ | 0345 | 172 | $\begin{array}{lllllllll}28 & 49 & 37.8\end{array}$ |  |  | $8 \cdot 9$ |  |  | 39.4 |  |
| 12,268 | $\}^{28} 4656$ | C 14329 | 962 |  | $48 \quad 8.61$ | 0345 | 172 | $284938 \cdot 9$ | $\bigcirc 19$ | 15 | $1 \mathrm{I} \cdot 4$ | - 27 | - 24 | 5 4 |  |
| 12,269 | 284657 | C 14330 |  |  | $\begin{array}{llll}48 & 13.87\end{array}$ | 0343 | 174 | $\begin{array}{llll}29 & 6 & 29.3\end{array}$ | 020 | 15 | 9.8 | + 23 | - 17 | $9 \cdot 4$ |  |
| 12,270 | 314987 | L 10134 | 968 | 46793-5 | $48 \quad 25.23$ | 0310 | 190 | 313355.5 | 020 | 14 | $9 \cdot 6$ | - 29 | - 5 | $8 \cdot 2$ | F 8 |
| 12,271 | 295014 | $\mathrm{C}_{1} 14332$ |  | 46794 | $23 \begin{array}{llll}3 & 48 & 26.94\end{array}$ | $+3.0333$ | +.0181 | $\begin{array}{llll}30 & 13 & 7.4\end{array}$ | +20.020 | +.014 | $9 \cdot 7$ | 17 | 16 | 8.41 | $\mathrm{K}_{2}$ |
| 12,272 | $25 \quad 5034$ | C I4333 | 97 I-2-3 | 46803-4 | $48 \quad 32 \cdot 34$ | 0406 | 152 | $25 \quad 2956 \cdot 9$ | 021 | 14 | $9 \cdot 3$ | + $+\quad 79$ | - 44 | $7 \cdot 68$ | K |
| 12,273 | 295015 | C I4334 |  |  | 4833.13 | 0348 | 176 |  | 021 | 14 | $9 \cdot 9$ | + 24 | - 23 | $9 \cdot 3$ |  |
| 12,274 | 314989 | L IoI36 | 975 | 46807-8-10 | 48 37.14 | 0320 | 190 |  | 021 | 14 | $8 \cdot 9$ | + 10 | - 10 | $7 \cdot 36$ | F 2 |
| 12,275 | 314988 | L IoI 37 |  | 46809 | $48 \quad 37 \cdot 20$ | 0312 | 193 |  | 021 | 14 | 9.8 | + 12 | + 9 | $8 \cdot 2$ | Go |
| 12,276 | 284662 | ${ }^{\text {C } 14336}$ | -980 | 46820-1 | $2349 \quad 6 \cdot 92$ | $+3.0383$ | +-0170 | $\begin{array}{lllll}28 & 18 & 23.5\end{array}$ | +20.023 | +.013 | 10.0 | + 37 | + | $8 \cdot 6$ | A 。 |
| 12,277 | 234821 | B 9128 |  |  | $49 \quad 8 \cdot 43$ | 0441 | 144 | $24 \quad 1055.6$ | 023 | 13 | $9 \cdot 8$ | + 4 | + 19 | $9 \cdot 2$ |  |
| 12,278 | 295020 | C 14337 | 983 | 46830-1 | 49 19.22 | 0361 | 183 | 301612.6 | 024 | 12 | 10.0 | 54 | - 21 | 8.01 | Fo |
| 12,279 | 305044 | L 10144 | 986 |  | 49 25.25 | 0359 | 185 | 304150.4 | 025 | 12 | 10.2 | 7 | - 29 | $8 \cdot 8$ |  |
| 12,280 | 314994 | L Io146 |  |  | 49 41.91 | 0359 | 190 | $312037 \cdot 4$ | 026 | 12 | $\mathrm{II}^{1} 7$ | 11 | - 2 | $9 \cdot 4$ |  |
| 12,28I | 314993 | L 10147 |  |  | $234942 \cdot 20$ | $+3.0351$ | +.0194 | 315325.8 | +20.026 | +.012 | 10.8 | 13 | - 19 | $9 \cdot 2$ |  |
| 12,282 | 244856 | B 9132 | 988 |  | 49 44.15 | 0451 | 147 | 243724  | 026 | 12 | 10.8 | + 19 | - 35 | $8 \cdot 2$ | A o |
| 12,283. | 314995 | L 10148 |  | 46844-5 | 49 45.41 | -360 | 191 |  | 026 | 12 | II.I | - 8 | - 22 | 8.4 | K o |
| 12,284 | 284665 | C 14340 |  | 46851 | $4955 \cdot 34$ | 0397 | 175 | $\begin{array}{llll}29 & 8 & 31.8\end{array}$ | 027 | 12 | 10.9 | + 10 | - 176 | 9.0 | G 5 |
| 12,285 | 274640 | C I434I |  |  | 49 59.01 | 0423 | 164 | $27 \begin{array}{llllllllll} & 21 & 55\end{array}$ | 027 | 11 | II $\cdot 2$ | 6 | - 50 | $9 \cdot 0$ |  |
| I2,286 | 305047 | L 10151 | 991 | 46862 | 235010.75 | $+3.0383$ | +.0187 | 304945.7 | +20.028 | +.011 | 10.9 | 6 | 11 | $9 \cdot 0$ | K |
| 12,287 | 284666 | C 14345 | 996 | 46869 | 5021.77 | 0414 | 175 | $28 \quad 58 \quad 29.5$ | 028 | 10 | 12.1 | + 19 | + 12 | $6 \cdot 59$ | B 9 |
| 12,288 | 274642 | C 14346 |  | 46867 | 5025.60 | 0427 | 170 | $28 \quad 7 \quad 54 \cdot 6$ | 028 | 10 | 10.53,9.8 | + 439 | + 4 | 7.30 | G 5 |
| I 2,289 | 284667 | ${ }_{C}^{C} 14347$ | 998 | 46855 | $50 \quad 26.83$ | 0417 | 175 | $28 \quad 56 \quad 59 \cdot 3$ | 029 | 10 | 9.6 | + 6 | - 21 | 8.8 |  |
| I 2,290 | 284669 | C 14348 | 1003 |  | 5031.69 | 0422 | 174 | $284435 \cdot 9$ | 029 | 10 | $10 \cdot 1$ | 8 | - | 9.2 |  |
| I2,291 | 255042 | ${ }_{\text {C }} 14349$ | 1004-5-6 | 46881 -2 | $235048 \cdot 13$ | $+3.0470$ | +.0154 | $25 \quad 27 \quad 16.0$ | $+20.030$ | +.010 | $9 \cdot 2$ | + 9 | + 5 | $6 \cdot 67$ | K 5 |
| 12,292 | 244861 | B 9142 |  |  | 51 5.16 | 0486 | 148 | $2438 \quad 40 \cdot 2$ | 031 | $\bigcirc 9$ | 10.1 | + 142 | - 30 | 8.8 | G 5 |
| 12,293 | 274646 | C 14354 |  |  | 5125.69 | 0458 | 171 | $28 \quad 7 \mathrm{II} \cdot 5$ | 032 | 08 | 10.8 | + 3 | + 1 | $9 \cdot 4$ |  |
| I2,294 | 274647 | C 14355 |  |  | 5127.42 | 0463 | 168 | $274436 \cdot 0$ | 032 | 08 | 10.8 | + 73 | + 29 | $9 \cdot 4$ |  |
| 12,295 | 305053 | L 10159 | 1019 | 46909 | $5130 \cdot 11$ | 0432 | 185 | $30 \quad 3443 \cdot 5$ | 032 | 08 | 8.8 | 1 | - 68 | 7.51 | Fo |
| I2,296 | 244862 | B 9147 |  | 46910 | 235132.00 | $+3.0496$ | +.0150 | 245018.6 | +20.032 | +.008 | $9 \cdot 2$ | + 57 | + 58 | $8 \cdot 9$ | Go |
| 12,297 | 295027 | ${ }^{\text {C } 14356}$ |  |  | $5136 \cdot 42$ | 0450 | 178 | 292000.1 | 033 | 08 | II. 6 | + 14 | - 19 | 10.6 |  |
| 12,298 | 284670 | C 14357 | 1021 | 46915 | $5141 \cdot 49$ | 0464 | 173 | $2882233 \cdot 1$ | 033 | 07 | 10.3 | + 19 | 14 $+\quad 14$ | $9 \cdot 2$ | A O |
| 12,299 | 315000 | L 10161 |  |  | ${ }_{51} 46 \cdot 15$ | 0431 | 193 | 312911.4 | 033 | 08 | II. 8 | + 4 | + 3 | $9 \cdot 4$ |  |
| 12,300 | $274^{648}$ | C 14358 |  |  | $5150 \cdot 13$ | 0470 | 172 | $28 \quad 1214.0$ | 033 | 07 | 10.4 | + 14 | - 21 | $9 \cdot 4$ |  |


|  |  |  |  |  |  |  |  |  |  |  |  | Annual | P.M. |  |  |
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| No. | B. D. | A.G.C. | W.B. (2). | Lalande. | R.A. 1910.0 | Precession. | Sec. Var. | Dec. $1910{ }^{\circ} \mathrm{O}$ | Precession. | Sec. Var. | Epach 1900+ | $\underset{\text { R.000I. }}{\text { R.A. }}$ | $\begin{aligned} & \text { Dec. } \\ & \text { ".001. } \end{aligned}$ | Mag. | Spectral |
|  | $\bigcirc$ |  |  |  | h m | s | 8 | - | " | " |  |  |  |  |  |
| 12,301 | 305056 | L 10164 | 1031 |  | $\begin{array}{llll}23 & 52 & 12.71\end{array}$ | $+3.0453$ | +.0190 | 305455.9 | $+20.034$ | +.008 | 10.6 |  |  |  |  |
| 12,302 | 315003 | L IoI65 | 1033 |  | 5223.09 | 0449 | 196 | 3150 II. 6 | 035 |  | $9 \cdot 6$ | - 13 | + 3 | $8 \cdot 8$ | $\mathrm{Ma}$ |
| 12,303 | 264714 | C 14363 | IO34 | 46937 | $5226 \cdot 60$ | 0500 | 165 | $27422 \cdot 0$ | 035 | 6 | $8 \cdot 9$ | + 13 | - 2 | $7 \cdot 50$ | $\text { B } 9$ |
| 12,304 | 264713 | C I 4364 |  |  | $52 \quad 26 \cdot 76$ | 0507 | 160 | $26 \text { 19 17•1 }$ | 035 | 6 | $10 \cdot 0$ | + 16 | - 7 | $9 \cdot 2$ |  |
| 12,305 | 264715 | C 14365 |  |  | $\begin{array}{lll}52 & 32 \cdot 58\end{array}$ | 0501 | 167 | $27 \quad 1647 \cdot 0$ | $035$ | 6 | 10.6 | + 19? | 66 | $9 \cdot 4$ |  |
| 12,306 |  | C 14367 |  |  | $\begin{array}{llll}23 & 52 & 38.84\end{array}$ | $+3.0484$ | +.0178 | $291942 \cdot 7$ | $+20.036$ | $+.006$ | 14.1 |  |  | $\cdot 4$ |  |
| 12,307 | 27.4652 | C 14368 | 1041 |  | $5240 \cdot 45$ | 0499 | 170 | $27 \quad 5514.4$ | 036 |  | I.9 | $+\quad 4$ | + 4 | $9 \cdot 4$ |  |
| 12,308 | 264716 | C 14369 |  |  | $5242 \cdot 25$ | 0509 | 165 | 2655124.4 | 036 | 6 | 12.5 | + 23 | + 7 | $9 \cdot 4$ |  |
| 1 2,309 | 264717 | C 14370 | 1045 | 46950 | $5245 \cdot 42$ | 0508 | 166 | $\begin{array}{lllll}27 & 1 & 4 & 23 \cdot 7\end{array}$ | 036 | 5 | 10.4 | - 5 | 0 | $9 \cdot 0$ |  |
| 12,310 | 244863 | B 9155 |  |  | 5250.93 | 0534 | 150 | $24363 \mathrm{I} \cdot \mathrm{I}$ | 036 | 5 | 12.3 | + 71 | 6 | $9 \cdot 4$ |  |
| 12,311 | 244864 | B 9156 |  |  | $23 \quad 53 \quad 4 \cdot 33$ | $+3.0538$ | +.0151 | 2449 16.0 | $+20.037$ | +005 | 12.7 | + 83 | $+\quad 18$ | $9 \cdot 4$ |  |
| 12,312 | 244865 | B 9157 |  | 46965 | 5310.25 | 0542 | 150 | $\begin{array}{lllll}24 & 38 & 28.4\end{array}$ | 037 |  | II. 8 | - 3I* | - $37^{*}$ | $4 \cdot 75$ | M b |
| 12,313 | 305059 | L. 10169 |  |  | 53 II. 24 | 0490 | 188 | $\begin{array}{lllll}30 & 32 & 24.9\end{array}$ | 037 | 6 | 12.3 | + 24 | + 8 | $9 \cdot 4$ |  |
| 12,314 | 274653 | C 14374 | 1053 |  | $5315 \cdot 18$ | 0517 | 170 |  | 037 | 4 | 13.0 | + 14 | + 27 | $9 \cdot 3$ |  |
| 12.315 | 315007 | L IOI73 | 1054-6 | 4696 | $5327 \cdot 72$ | 0491 | 195 | $313145 \cdot 4$ | 038 | 4 | II•I | - I4 | - | $8 \cdot 4$ | Fo |
| 12,316 | 295034 | C I4376 |  | 46968-9 | $23 \quad 53 \quad 30.03$ | +3.0511 | +.0180 | $\begin{array}{llll}29 & 28 & 36 \cdot 7\end{array}$ | $+20.038$ | +.004 | II. 6 | $+\quad 98$ | - 39 | $8 \cdot 7$ | K o |
| 12,317 | 274655 | C 14377 |  | 46970 | 53 30.11 | 0522 | 172 | 28.929 .0 | 038 | 5 | II. 6 | + 1 | - 29 | $8 \cdot 7$ |  |
| 12,318 | 30506 I | L IOI74 |  |  | $5330 \cdot 44$ | 0501 | 190 | 303929.1 | 038 | 5 | II. 5 | - 14 | + 147 | $8 \cdot 8$ |  |
| 12,319 | 244866 | C 14378 |  |  | 5333.75 | 0548 | 154 |  | 038 | 4 | 13.0 | - 35 | - I9 | $9 \cdot 4$ |  |
| 12,320 | 315008 | L 10176 | 1036 |  | $5334 \cdot 59$ | 0493 | 197 | $3146 \quad 27 \cdot 5$ | 038 | 4 | 13.1 | + 9 | $\bigcirc$ | $9 \cdot 2$ |  |
| 12,321 | 284678 | C 14379 | 1060 | 46980-3 | 2353 47.91 | $+3.0530$ | -0174 | $28 \quad 20 \quad 17.5$ | $+20.039$ |  | 10.8 | + 6 | $\bigcirc$ | $\cdot 4$ | A 3 |
| 12,322 | 315010 | L 10178 | 1064-5 |  | 5353.94 | 0508 | 194 | 3 l 2100.9 | 039 | 3 | II. 8 | + 35 | $+10$ | $9 \cdot 0$ |  |
| 12,323 | $30 \quad 5065$ | L IOI79 |  |  | $54 \quad 7 \cdot 89$ | 0518 | 193 | $31920 \cdot 0$ | 039 | 3 | - 0 | 17 $+\quad 17$ | - 5 | 8.8 |  |
| 12,324 | 315011 | L IOI80 | 1070-1 | 46995 | $54 \quad 9 \cdot 84$ | 0517 | 195 | $312631 \cdot 3$ | 039 | 3 | 12.2 | + 33 | - 138 |  | G 5 |
| 12,325 | 305066 | C 14380 |  | 47000 | 5412.04 | 0527 | 187 | $\begin{array}{llll}30 & 19 & 10.9\end{array}$ | 040 | 3 | 12.0 | + 54 | + 7 | $8 \cdot 36$ | K 2 |
| 12,326 | 315012 | LIOI83 | 1073 |  | $23 \quad 5413.70$ | $+3.0516$ | +.0198 | $\begin{array}{llll}31 & 5250.9\end{array}$ | +20.040 | +.002 | 10.8 | + 6 | + 1 | $6 \cdot 36$ | B 5 |
| 12,327 | 255050 | C 1438I | 1076 |  | $54 \quad 18.69$ | 0562 | 161 | $26 \quad 737 \cdot 8$ | 040 | 3 | 12.2 | + 27 | - 2 | $8 \cdot 6$ |  |
| I2,328 | 255051 | C 14382 |  |  | $54 \quad 18.97$ | 0566 | 157 | $25 \quad 3647 \cdot 9$ | 040 | 3 | 13.0 | + 8 | + 11 | $8 \cdot 8$ |  |
| 1 2,329 | 244869 | C 14383 |  |  | $54 \quad 23 \cdot 67$ | 0572 | 154 | $25 \quad 4 \quad 43 \cdot 4$ | 040 | 3 | 12.0 | + 33 | + 6 | $9 \cdot 3$ |  |
| I2,330 | 284680 | C 14385 | 1078 | 47010 | $54 \quad 27 \cdot 79$ | 0548 | 177 | 2842 II•I | 040 | 3 | I 1.4 | - 3 | - 37 | $9 \cdot 4$ |  |
| 12,33 1 | 264721 | C I4386 | 1088 | 47019 | 2354 41•94 | $+3.0569$ | +.0164 | $26 \quad 46 \quad 9 \cdot 3$ | +20.04I | +.001 | - 0 | - 16 | - 12 | $8 \cdot 3$ |  |
| 12,332 | 234834 | B 9173 | 1089 |  | $5445 \cdot 50$ | 0587 | $\text { I } 49$ | 2415 50.5 | 04 I | 2 | 12.0 | + 91 | - 20 | $8 \cdot 9$ | G 5 |
| 12,333 | 284683 | C 14387 | 1093 | 47036 | $54 \quad 59.77$ | 0566 | 177 | $28 \quad 33$ 24.2 | 041 | 2 | $11^{\circ} \mathrm{O}$ | - 15 | + 18 | $9 \cdot 0$ | K 2 |
| 12,334 | 274658 | C 14388 |  |  | $55 \quad 7 \cdot 92$ | 0574 | 174 | $286646 \cdot 1$ | 041 | $2$ | $12 \cdot 2$ | + 26 | - 6 | $9 \cdot 3$ |  |
| I 2,335 | 264722 | C 14389 |  | 47046 | 5513.91 | 0587 | 163 | $\begin{array}{llll}26 & 26 & 50 \cdot 8\end{array}$ | 042 | $\bigcirc$ | 12.5 | + 16 | - 25 | $9 \cdot 0$ |  |
| 12,336 | 244872 | B 9176 | 1098 |  | $23 \quad 5516.22$ | $+3.0598$ | +.OI 52 | $244^{2} 36 \cdot 8$ | +20.042 | $000$ | 12.8 | + 6 | - 19 | $9 \cdot 4$ |  |
| 12,337 | 244871 | C 14390 | 1099-100 |  | $5516 \cdot 46$ | 0596 | 155 | $25 \quad 950 \cdot 7$ | 042 | $0$ | 12.2 | + 3 | - 9 | $9 \cdot 4$ |  |
| 12,338 | 305069 | L 10188 |  |  | $55 \quad 24 \cdot 82$ | 0564 | $193$ | $31 \begin{array}{lll}1 & 1 & 52.0\end{array}$ | $042$ |  | 11.6 | $+\quad 7$ | - 27 | $8 \cdot 7$ |  |
| 12,339 | 264727 | C 14394 | 11.10 | 47060 | 55 47.47 | 0603 | $162$ | $\begin{array}{llll}26 & 25 & 6.5\end{array}$ | 043 | $-.001$ | 10.6 | + $35^{*}$ | - $43^{*}$ | $6 \cdot 38$ | F 8 |
| 12,340 | 30507 I | LIOI92 | 1114 | 47063 | 55 51.07 | 0581 | 192 | $30 \quad 43 \quad 33 \cdot 6$ | 043 | - I | $9 \cdot 7$ | + 8 | - 65 | $8 \cdot 3 \mathrm{I}$ | Ko |
| 12,341 | 127 4661 | C I 4396 |  | 47069 | 235553.62 | $+3.0597$ | +.0175 | 281033.2 | $+20 \cdot 043$ | -.001 | $10 \cdot 8$ | $+\quad 4$ | - 20 | $9 \cdot 3$ | Ko |
| 12,342 | 255055 | C I 4395 | 1117-8-9 | 47068 | 5553.78 | 0612 | 156 | $25 \quad 20 \quad 37 \cdot 9$ | $043$ | 0 | 9.9 | + 12 | - 15 | 8. 11 | F 2 |
| 12,343 | 3305072 | L 10193 |  |  | 55 55.85 | 0581 | 196 |  | $043$ | I | $1 \mathrm{I} \cdot 6$ | - 4 | - 3 | 9.4 |  |
| I 2,344 | 4234839 | B 918I |  |  | $56 \quad 9.61$ | 0625 | 149 | $\begin{array}{llll}24 & 4 & 59 \cdot 7\end{array}$ | $043$ | I | $9 \cdot 8$ | - 44 | - 38 | $9 \cdot 0$ | G 5 |
| 12,345 | 5295042 | C I4397 | 1 126 -7 | 47075-6 | 5612.05 | 0598 | $186$ | $295342 \cdot 1$ | $043$ | 1 | $10 \cdot 0$ | $+\quad 12$ | - 3 | $8 \cdot 7$ | A 0 |
| 12,346 | 6264729 | C I4399 |  |  | 2356 I 3.53 | $+3.0613$ | +.0168 | $27 \quad 5 \quad 14.3$ | $+20.043$ | -.001 | 12.8 | - 23 | - 21 | 10.6 |  |
| 12,347 | 7284688 | C I4401 | 1131 | 47081 | 56 I9.03 | 0608 | $179$ | $\begin{array}{llll}28 & 38 & 28 \cdot 5\end{array}$ | $043$ | 1 | 12.2 | - 34 | -. 10 | $9 \cdot 4$ |  |
| 12,348 | 874663 | C I 4402 |  |  | 5622.82 | 0616 | $170$ | $\begin{array}{llll}27 & 23 & 7 \cdot 6\end{array}$ | $044$ | 2 | 11.7 | + 180 | - 2 | $9 \cdot 4$ |  |
| I 2,349 | 9295046 | C I 4406 | 1146-7-8 | 47102-3 | 5652.88 | 0619 | $190$ | $\begin{array}{llll}30 & 14 & 8.9\end{array}$ | $044$ | 3 | $9 \cdot 2$ | - 10 | - 33 | $8 \cdot 1$ | Go |
| I 2,350 | 3 I 5018 | L 10204 | $1116$ |  | 5653.26 | 0614 | 198 | $\begin{array}{llll}31 & 25 & 29.9\end{array}$ | 044 | 3 | 10.8 | + 43 | 14 <br> $+\quad 14$ | 9.4 |  |



[^22]
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[^0]:    35 Piscium. These stars form the pair $\Sigma_{12}$.
    Bradley 6. This star is a close double and forms the pair $\Sigma_{13}$, components 6.6 and 7.1 .
    ${ }_{51}$ Piscium. This is the principal star of the pair $\Sigma_{36}$, components $6 \cdot 2$ and $9 \cdot 3$.
    ${ }_{13}$ Ceti. This star is the close double Hough 212, components $5 \cdot 5$ and $6 \cdot 2$.
    Piazzi 0.130 . This star is the close double 8395 , components 6.6 and 6.7 .
    $\eta$ Cassiopciæ. This is the principal star of the binary $\Sigma 60$, components 4.0 and 7.6 .

[^1]:    39 Eridani. This is the principal star of the pair $\Sigma 516$, components 6.0 and 9.0 .
    59 Tauri. Those stars form the pair $\Sigma 528$.
    62 Tauri. This is the principal star of the pair $\Sigma_{534}$, components 6.0 and $8 \cdot 0$.

[^2]:    7 Geminorum. This star forms the pair $\beta: 1005$, components 4.2 and 9.I. The limits
    of magnitude are 3.2 and $4^{\circ}$, period $231^{\mathrm{d}} \mathrm{H}_{4}$.

    | of magnitude are $3 \cdot 2$ and 4.2 , period $231^{\text {d. }} 4$. |
    | :--- |
    | 8 Monocerotis. This is the principal star of the pair $\Sigma 900$, components 4.0 and $6 . \%$ |

[^3]:    43 Geminorum. The limits of magnitude are $3 \cdot 7$ and $4 \cdot 3$, period $10^{d .1+}$.
    ${ }_{55}$ Gominorum. This is the principal star of the pair $\sum$ 1066, components $3 \cdot 2$ and $8 \cdot 2$.

[^4]:    49 Leonis. This is the principal star of the pair $\Sigma{ }_{1} 450$.
    54 Leonis. These stars form the pair $\Sigma 1487$.
    53 Urse Majoris. These stars form the binary $\Sigma_{1523}$.

[^5]:     Bradley 1861. This star is the close double $\Sigma 1837$, components 6.8 and 8.7 . ${ }_{29}$ Boôtis. These stars form the pair $\Sigma 1864$.
    $3^{2}$ Boötis. This star is the close doublo $\Sigma 1865$, components 4.4 and 4.8 .

    > 36 Bootis. These stars form the pair $\Sigma 1877$.
    > 7 Libra. This star is the close double $\beta$ 106, components 5.8 and 6.6 .
    > 37 Boötis. These stars form the pair $\sum 1888$. Magnitudos from Struvo 19 Libræ. The limits of magnitude are 4.8 and 6.2 , period $2 \mathbb{4} .3+$.

[^6]:    44 Boötis. This is the principal star of the pair $\Sigma 1909$, components 6.2 and 5.2 .
    7 Coronæ. These stars form the pair $\Sigma 1965$.
    Coronæ. This star is the close double $\Sigma 1937$, components $15 \cdot 7$ and 6.2 .
    zi Serpentis. This star is the close double Hussey 580 , components 5.4 and 5.4
    8 Coronæ This star is the close double $\sum_{1967}$

[^7]:    $\boldsymbol{\gamma}^{\mathbf{1}}$ Sagittarii. Limits of magnitude, $4 \cdot 8$ to $5 \cdot 8$.
    70 Ophiuchi. These stars form the binary $\Sigma 2272$. Magnitudes from Struve.
    Y Sagittarii. Limits of magnitude, 5.8 to 6.6 .
    70 Ophiuchi. These stars form the binary $\sum_{222}{ }^{2}$ D2. Magnitudes from S
    43 Draconis. This is the close double $0 \sum 353$, components 4.4 and 6.5 .

[^8]:    52 Sagittarii. This is the principal star of the pair $\beta 654$.
    53 Sagittarii. This star is a close double, components $7 \cdot 1$ and 7.6 .
    18 Cygni. This is the principal star of the pair $\Sigma 2579$.
    8 Sagitto. This star is a close double, components 5.7 and $6 \cdot 0$.

[^9]:    ${ }_{1}$ Cephei. This is the principal star of the pair $\Sigma_{2} 275$.
    Groombridge 3140. This is the principal star of the pair $\Sigma 2668$, components 6.5 and 9.2 .
    6 Delphini. This is the close binary $\beta$ 151, components $4^{\circ}$ and $5 \cdot 3$.

[^10]:    8 Cephil. These stars form the pair $\Sigma$ 2806. Magnitudes from Struve.
    Piazzi XXI. 248. This is the principal star of the pair $\Sigma 2816$.
    12 Pisces Australis. This star is a close double $\beta$ 276, components 6.2 and 6.6 .
    10 Pegasi. This star is the close binary $\beta 989$, components ${ }^{\prime} 4.7$ and 5.4 .

[^11]:    Greenwior Cataloaue of Stars.

[^12]:    Royal Observatory, Greenwioh, June 1920.

[^13]:    1304, 1307, 1332. Number of observations 6. 1306. Burnham 1485.

[^14]:    
    

[^15]:    1651, 1652, 1653, 1654, 1655, 1658. Number of obscrvations 4
    $1657,1662,1666,1676,1699$. Number of observations 6.

[^16]:    2351, 2352,2355,2356,2358,2362,2363, 2364. Number of observations 4. 2360. Burnham 2721.
    2368. Burnham 2730.

    2371, 2380. Number of observations 6. 2373, 2374: $\Sigma_{716, ~ m a g n i t u d o s ~} 6.6$ and 5.8. 2373. Number of obscrvations 7. 2374. Number of observations 8. 2375. Burnham 2752. 2383. $\Sigma 7$ 29. 2393. Burnham 2777.

[^17]:    2654, 2655. $\Sigma 805$, magnitudes $7 \cdot 9$ and $8 \cdot 3$. 2658,2676. Number of observations 6. 2665, 2666. $\Sigma 808$, magnitudes $8 \cdot 1$ and $8 \cdot 1$. 2676. Burnham 3022. 268 . $\Sigma 81$.

[^18]:    325 r. This star forms the close double $O \Sigma 152$, components $6 \cdot 0$ and $7 \cdot 8$. Number of observations 7. 3252-3255, 3264, 3266-3269, 3271, 3293. Number of observations 4. 3263. Number of observations 3. 3276. Number of observations 6 3280. Burnham 3532.

[^19]:    4613,4627,4636-4638, 4643, 4647. Number of observations 4.
    4623-4. These stars form the pair $\Sigma{ }^{1} 332$, magnitudes $7^{\circ 2}$ and 7.5

[^20]:    $4662,4664,4665,4667-4672,4674-4679,4681,4682,4684,4687,4688,4692-4695,4699$. Number of observations 4
    4665. Close double Burnbam 5056.
    4669. Burnham 5062. 4670. Burnham 5063. 4674. Burnham 5067.
    4683. Close double Burnham 5078.
    4675. Close doublo Burnham 5070

    469 r. Close double Burnham 5089.

[^21]:    $10,782,10,794,10,797$. Number of observations 6. 10,783 . This is the principal star of the pair $\sum_{2792}$, magnitudes 10.0 and 8.5 . $\quad$ ro,784. Number of observations 3 . 10,784 and 10,786 . Burnham 10,949. magnitudes $7 \cdot 7$ and $7 \times 7$.

[^22]:    12,354. Number of observations 6 .
    12,355. This star is a binary $\beta 733$.
    12,363. Number of observations 1 and 2. 12,363-4. Burnham 12,723, magnitudes $9 \cdot 0$ and $8 \cdot 4$.

