

1.







S.

Monday, May 2-3, 1938. H-L cloudy with rain

Date Tuesday, May 3-4, 1938 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3101	HD 101091	11 32.9	+32 27	I-12	Astra II	<sup>set</sup> 010	+10.0 +10.5	20 <sup>00</sup>	21 <sup>40</sup>	41
3102	106677	12 11.0	+93 07	"	"	"	+10.2 +10.4	21 <sup>46</sup>	22 <sup>46</sup>	1
3103	106022	12 06.9	+29 06	"	"	"	+10.4 +10.4	23 <sup>00</sup>	23 <sup>45</sup>	2
3104	132890	14 56.5	+62 04	"	"	"	+10.0	23 <sup>52</sup>	01 <sup>10</sup>	3

④

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Instrument	REMARKS	Object	Plate No.
						MC. S.C. S.W. M.T. S.T.		
						May 2 10 -03.0 -1.6 <sup>s</sup> -13.2 -21.2 -0.7 <sup>m</sup>		
						May 3 10 -03.2 -1.68 -10.6 -22.6 -0.7		
21 46	0 32W	+32 13	1	7.47	F <sub>2</sub> 1-1-1	Suff. list. Light clouds much of time.		
22 46	1 10W	+72 53	1-2	7.55	K <sub>0</sub> 1-1-1			
23 45	2 04W	+28 52	2	6.74	F <sub>2</sub> 1-1-1			
01 10	0 40W	+61 53	2-1	7.10	A <sub>2</sub> 1-1-1	Suff. list. haze, sky slowly filling in sky thick at 1.10. closed at 2.10		
						Bright aurora 20 <sup>30</sup>		
						Grand display 22 <sup>30</sup> . Reaching to about -10° Dec on meridian. Rays meeting in fairly small area about 5+15. Rapid changes. At times definite shapes seen north		
						May 4 10 -03.7 -1.6.7 -10.3 -24.0 -0.7 <sup>m</sup>		
						May 4 -1.0 ←		

7.

Date Wed May 4-5, 1938 Hd-L Julian Day \_\_\_\_\_

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
3105	HD 68776	08 08.8	13 22	I-12	astron II	010	10.2	8 01	9 31	9	235
3106	106926	12 12.7	15 42	"	"	"	9.5	9 36	10 16	2	W/32
3107	141930	15 46.6	44 49	"	"	"	9.0-9.5	11 24	01 04	3	0 <sup>10</sup> E
3108	152896	16 51.1	29 12	"	"	"	9.5-9.0	01 08	02 38	4	0 <sup>10</sup> W
3109	179838	19 09.0	29 03	"	"	"	9.6-9.0	02 43	03 55	1	0 <sup>10</sup> E
3110	190603	20-00.7	51 56	"	"	"	9.0-	03 56	04 20	2	1 <sup>10</sup> E

Thurs 1938 May 5-6, Hd-MR. Thunderstorm in evening. Clouds  
 Fri 1938 May 6-7, Hd-MR. Thin but continuous clouds all

(6)

Date ... Julian Day ...

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Position	REMARKS												
9 31	W 3 <sup>h</sup> 51	13 14	1	7.48	K <sub>0</sub> 1, 1, 1	between W 2 <sup>h</sup> 45 and W 2 <sup>h</sup> 55 turbulence was unstable.												
1 16	W 1 <sup>h</sup> 32	15 29	1	7.53	K <sub>0</sub> 1, 1, 1													
01 04	0 12 E	44 40	1-2	7.57	A <sub>0</sub> 1, 1-1	Due came to end of run.												
02 38	0 18 W	29 07	1-2	7.44	A <sub>5</sub> 1-1-1													
05 55	0 43 E	29 09	2	6.93	A <sub>0</sub> 1-1-1	scattered clouds at 3.20, clearing again at 3.40												
04 20	1 10 E	32 02	2	5.45	B <sub>0</sub> 1-1-1	clouds during most of exposure												
						<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">C.T.</td> <td style="text-align: center;">M.E.</td> <td style="text-align: center;">S.C.</td> <td style="text-align: center;">S.W.</td> <td style="text-align: center;">M.T.</td> <td style="text-align: center;">S.T.</td> </tr> <tr> <td style="text-align: center;">May 5</td> <td style="text-align: center;">10</td> <td style="text-align: center;">-04<sup>s</sup> 0</td> <td style="text-align: center;">-1<sup>m</sup> 16<sup>s</sup> 5</td> <td style="text-align: center;">-10<sup>s</sup> 4</td> <td style="text-align: center;">-25<sup>s</sup> 2 - 0<sup>m</sup> 8</td> </tr> </table>	C.T.	M.E.	S.C.	S.W.	M.T.	S.T.	May 5	10	-04 <sup>s</sup> 0	-1 <sup>m</sup> 16 <sup>s</sup> 5	-10 <sup>s</sup> 4	-25 <sup>s</sup> 2 - 0 <sup>m</sup> 8
C.T.	M.E.	S.C.	S.W.	M.T.	S.T.													
May 5	10	-04 <sup>s</sup> 0	-1 <sup>m</sup> 16 <sup>s</sup> 5	-10 <sup>s</sup> 4	-25 <sup>s</sup> 2 - 0 <sup>m</sup> 8													
clouds look all	later, clearing now and again night.					<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">May 6</td> <td style="text-align: center;">10</td> <td style="text-align: center;">-04<sup>s</sup> 5</td> <td style="text-align: center;">-1 16<sup>s</sup> 4</td> <td style="text-align: center;">-09<sup>s</sup> 4</td> <td style="text-align: center;">-27<sup>s</sup> 8 - 0<sup>m</sup> 9</td> </tr> </table>	May 6	10	-04 <sup>s</sup> 5	-1 16 <sup>s</sup> 4	-09 <sup>s</sup> 4	-27 <sup>s</sup> 8 - 0 <sup>m</sup> 9						
May 6	10	-04 <sup>s</sup> 5	-1 16 <sup>s</sup> 4	-09 <sup>s</sup> 4	-27 <sup>s</sup> 8 - 0 <sup>m</sup> 9													



9.

Date <sup>1938</sup> *Saturday May 7-8* H-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3111	HD 106677	12 11.0	+73 07	I-12	Astra II	cut 010	+8.6 +8.3	22 02	23 02	3
3112	114446	13 05.5	+57 22	"	"	"	+8.4 +8.0	23 07	02 27	4
3113	163590	17 51.8	+32 28	"	"	"	+08.0+8.2	02 33	03 00	1
	FOCUS	-	-	"	"	"	+07.0	04 10	-	outside

③

300 + visitors. Showed Moon in 74" <sup>10'</sup>  
 P. showed Venus + Moon in 2 1/4 4" <sup>11'</sup>

Julian Day

Date

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				+43°F at 4 AM.
1 33 W	+72 52	1	7.55 K <sub>0</sub> 1-1-1	
4 04 W	+57 09	1	7.51 F8 1-1-1	Clouds <sup>30</sup> 23 - 23 <sup>50</sup> ; clear 23 <sup>50</sup> ; Filled in solid 00 <sup>00</sup>
0 07 E	+32 26	1	7.20 A0 1-2	clear again 1 <sup>00</sup> ; clouds again 3 <sup>00</sup>
OUTSIDE THROUGH BASE			- - 4 1/2 - 6 1/2	closed up 4 <sup>00</sup> SLIDE = 26.27, TILT = 19.50

1938  
Date Sunday May 8-9 Y-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3114	HD 94631	10 50.4	58 02	I-12	Astria II	010	10.5-10.3	8 24	9 54	8
3115	HD 99267	11 20.3	30 32	"	"	"	10.3 10.0	10 00	11 20	3
3116	HD 131764	14 50.4	30 28	"	"	"	10.2 10.4	11 24	12 50	4
3117	HD 145996	16 08.7	26 56	"	"	"	10.2 10.4	12 34	01 10	1
3118	HD 162668	17 49.1	30 01	"	"	"	10.5 10.2	01 14	02 20	2
3119	HD 164059	17 54.3	45 53	"	"	"	10.5 10.0	02 24	03 44	3
3120	HD 165908	18 13.2	30 33	"	"	"	10.2 10.4	03 48	04 15	4
				<u>Monday May 11-12</u>		<u>H-L</u> <u>mostly cloudy with rain</u>				

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp	REMARKS						
9 54	1 <sup>h</sup> 47 <sup>m</sup> W	57 47	1	7.56	6.5	1-1-1							
1 20	2 45 W	30 18	1	7.16	F0	1-1-1	] Sup List						
0 25	0 25 W	30 17	1	7.18	F2	1-1-1	Sup List						
0 10	0 13 E	26 50	0	6.71 6.37	F2	1-1-1	Sup List						
0 10	0 41 E	30 00	0-1	6.74	A2	1-1-1							
0 4 5	0 39 W	45 51	0-1	7.19	F5	1-1-1							
0 5	0 53 W	30 32	0-1	5.71	F3	1-1-1							
							CT.	M.C.	S.C.	S.W.	M.T.		S.T.
							May 9	10	-05.7 <sup>s</sup>	-1 15.9 <sup>m</sup>	-04.7 <sup>s</sup>	-32.3 <sup>s</sup>	-0.9 <sup>m</sup>
							May 10	10	-06.1	-1 15.8	-03.6	-33.9	-0.9
							May 11	10	-06.7	-1 15.6	-03.6	-35.5	-1.0
							May 12	12	-07.1	-1 15.3	+00.9	-37.2	-1.0

1933

Date Thursday May 12-13, H-MR Julian Day \_\_\_\_\_

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	How long Exp.
3121A	H.D. 89239	10 <sup>h</sup> 12.6 <sup>m</sup>	+27° 55'	I-12	Acta II	Set 010	+3.8 +3.5	21 28 <sup>m</sup>	22 45 <sup>m</sup>	1
3122	119842	13 40.5	+60 39	"	"	"	+3.5 +3.4	22 50	24 10	2
3123	132560	14 54.7	+58 02	"	"	"	+3.8 +3.5	00 16	01 30	3
3124	140117	15 36.9	+58 14	"	"	"	+3.8 +3.5	01 43	02 53	4
3124F1	166180	18 04.4	+30 57	"	"	"		03 06		1
	FOCUS	-	-	"	"	"	+3.3	03 40	-	1

Clouded over just before starting (20<sup>10</sup>-21<sup>25</sup>)

Hour Angle End	Declination	Seeing	Ptg. Mag.		+40°F at 4 A.M.	REMARKS
—	+27° 42'	3	6.44 B9	1-1-1		Supp. list. Clouds most of time. <u>Plates OK</u> Plate under test N.3.
W 1 <sup>h</sup> 31 <sup>m</sup>	+60 26	3	7.06 A0	1-1-1		Supp. list. Some cloud just front.
W 1 37	+57 52	3	7.47 F2	1-1-1		Supp. list. oc' clouds.
W 2 19	+58 07	3	7.46 K0	1-1-1		Supp. list. ← Spent some time unstacking dec. clamp. clouds continually passing over.
<del>—</del>	<del>+30 58</del>		<del>7.32 A0</del>	<del>1-1-1</del>		<del>clouds at start</del>
OUTSIDE THROUGH	BASE		- -	4½-6		SLIDE = 26.27, TILT = 19.45

	M.E.	S.C.	S.W.	M.T.	S.T.
May 13 10	-07.5	-1.15.1	+03.9	-36.8	-1.0

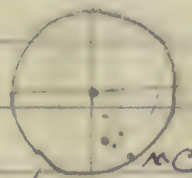
Date Friday, May 13-14, 1938 H-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Mid
3125	HD 93075	10 39.8	+57 26	I-12	Acta II	Set 010	+9.0 +9.2	20 17	21 32	1
3126	<del>106112</del> <del>106053</del>	12 07.5	+78 10	"	"	"	+8.8 +9.1	21 37	22 17	2
3127	108399	12 22.1	+72 29	"	"	"	+9.1 +9.0	22 21	23 11	3
3128	114446	13 05.5	+57 22	"	"	"	+9.3	23 15	24 25	4
3129	140084	15 36.7	+76 46	"	"	"	+8.5 +8.7	00 32	01 47	1
3130	150010	16 33.2	+72 49	"	"	"	+8.4 +8.8	01 50	02 40	2
3131	166180	18 04.4	+30 59	"	"	"	+9.0 +8.8	02 45	03 43	3
3132	189613	19 55.8	+31 33	"	"	"	+8.9 +9.0	03 48	04 16	4
	FOCUS	-	-	-	"	"	+8.7	04 20	-	0510E
Sat May 14-15				Hd - Rq U-MR Rain. 52 minutes Rq S. Clouds the rest of the night.						

Hour Angle End	Declination	Seeing	Ptg. Mag.		+45° F at 4 <sup>00</sup>	REMARKS
1 57W	+57 13	2	7.31 F0	1-1-1	Supp. Int.	[ One side of RA diff. dragging badly " " " "
1 15W	+77 55	3	<sup>5.26</sup> 6.64 A0	1-1-1	" "	
1 54W	+72 15	3-4	7.44 K0	1-1-1	" "	
2 25W	+57 05	"	7.51 F8	1-1-1	" "	
1 18W	+76 35	4	7.58 A2	1-1-1	" "	
1 15W	+72 41	4	7.45 K0	1-1-1	" "	
0 44W	+30 56	4	7.32 A0	1-1-1		Total radius of the moon, 3 <sup>18</sup> 6 <sup>09</sup> 4 <sup>09</sup>
0 34E	+31 36	3	6.69 A0	1-1-1		
OUTSIDE	THROUGH#	BASE	-	-	4 1/2 - 6	SLIDE = 26.27 TILT = 19.45

slides Hd shown 74"

# 3126



	MC	SC	SW	NT	ST
	<sup>d</sup> <sub>h</sub>	<sup>m</sup> <sub>s</sub>	<sup>m</sup> <sub>s</sub>	<sup>m</sup> <sub>s</sub>	<sup>m</sup> <sub>s</sub>
May 14 10	-08.0	-1 14.3	+9.2	-37.0	-1.0
May 16 13	-08.9	-1 14.3	+20.1	+20.4	+0.1

Reset.





Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS												
1 <sup>54</sup> W	+57 13	2-1	7.31 F0 1-1-1	Vary windy.												
3 <sup>05</sup> W	+60 26	1	7.50 F0 1-1-1	light clouds 22 <sup>00</sup> → see star for dead time												
3 <sup>41</sup> W	-60 01	1-2	6.78 A3 1-1-1	* clouds most of time. least in setting.												
2 <sup>30</sup> W	+60 25	2	7.06 A0 1-1-1	Wind many images out of field of view.												
0 <sup>39</sup> W	+30 57	0-1	7.82 A0 1-1-1	00 <sup>35</sup> - faint at 00 <sup>52</sup> a little blurry												
0 <sup>23</sup> E	131 02	0-1	6.66 B0 1-1-1	and quite visible a star to the west												
<p>* 9135 may be visible a bit later          when star on the point of foot          will not be visible</p>																
<table style="width: 100%; border: none;"> <tr> <td></td> <td>M.E.</td> <td>S.E.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T</td> </tr> <tr> <td>May 17</td> <td>10</td> <td>-09.3</td> <td>-1 14.2</td> <td>+26.2</td> <td>+19.8 +0.2<sup>m</sup></td> </tr> </table>						M.E.	S.E.	S.W.	M.T.	S.T	May 17	10	-09.3	-1 14.2	+26.2	+19.8 +0.2 <sup>m</sup>
	M.E.	S.E.	S.W.	M.T.	S.T											
May 17	10	-09.3	-1 14.2	+26.2	+19.8 +0.2 <sup>m</sup>											

Date *Tuesday May 17-18, 1938 H-L* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3139	HD 89239	10 12.6	+27 55	I-12	Astr. D	cut 010	+12.1 +12.0	20 25	21 15	3
3140	101091	11 32.9	+32 27	"	"	"	+12.3 +12.1	21 18	22 36	4
	112734	12 53.8	+28 52							
<p>Wed May 18-19 Rain Hd-MR  Thursday, 1938 May 19-20 Hd-MR Heavy mist and rain.</p>										

Light clouds early evening. Partly clearing  
at sunset.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS																												
2 24 W	+27 42	2	6.44	B9 7-1-1	Clouds much of time																												
2 24 W	+32 12	2	7.47	F2 1-1-1	Haze. Thicks 22 <sup>36</sup>																												
			6.75	A5																													
					Partly clearing 23 <sup>00</sup> . Stars jelled in. Cloud 23 <sup>55</sup>																												
					<table border="1"> <thead> <tr> <th></th> <th></th> <th>M.P.</th> <th>S.C.</th> <th>S.W.</th> <th>M.T.</th> <th>S.T.</th> </tr> </thead> <tbody> <tr> <td>May 18</td> <td>13</td> <td>-09.5</td> <td>-1 13.8</td> <td>+32.4</td> <td>+18.2</td> <td>+0.2</td> </tr> <tr> <td>May 19</td> <td>15</td> <td>-11.9</td> <td>-1 13.5</td> <td>+43.0</td> <td>+17.0</td> <td>+0.2</td> </tr> <tr> <td>May 20</td> <td>10</td> <td>-10.0</td> <td>-1 13.2</td> <td>+43.2</td> <td>+16.0</td> <td>+0.2</td> </tr> </tbody> </table>			M.P.	S.C.	S.W.	M.T.	S.T.	May 18	13	-09.5	-1 13.8	+32.4	+18.2	+0.2	May 19	15	-11.9	-1 13.5	+43.0	+17.0	+0.2	May 20	10	-10.0	-1 13.2	+43.2	+16.0	+0.2
		M.P.	S.C.	S.W.	M.T.	S.T.																											
May 18	13	-09.5	-1 13.8	+32.4	+18.2	+0.2																											
May 19	15	-11.9	-1 13.5	+43.0	+17.0	+0.2																											
May 20	10	-10.0	-1 13.2	+43.2	+16.0	+0.2																											

Date 1938 May 20-21 Friday Hd-mp Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Sec.
3141	H.D. 167134	18 <sup>h</sup> 08 <sup>m</sup> .8	16° 14'	I-12½	Astra II	.010	9.2 9.0	02 <sup>h</sup> 22 <sup>m</sup>	04 <sup>h</sup> 02 <sup>m</sup>	1
	FOCUS	-	-	"	"	"	9.5	04. 05	-	



Date 1938 May 21-22, Saturday; H-MR Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
3142	H.D. 150010	16 <sup>h</sup> 33.2	+72° 49'	I-12½"	Asho II	<sup>set</sup> -010	11.8 12.1	00 <sup>h</sup> 30 <sup>m</sup>	02 <sup>h</sup> 10 <sup>m</sup>	2
3143	162936	17 48.5	+32. 02	"	"	"	12.0 13.0	02 18	04 03	3
	FOCUS	-	-	"	"	"	12.0	04 05	-	-





Date Sunday May 22-23 Y-L Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Exposure End
3144	HD 99267	11 20.3	30 32	I-12	ashta II	010	14.8	8 30	9 40	4	2 <sup>00</sup> W
3145	HD 114723	13 07.3	32 <del>28</del> <sup>39</sup>	"	"	"	14.9	9 45	10 55	1	1 20 W
3146	HD 131764	14 50.4	30 28	"	"	"	14.9	10 59	12 09	2	1 <sup>00</sup> W
3147	HD 152224	16 47.0	32 44	"	"	"	14.8	12 15	01 13	3	0 <sup>00</sup> W
3148	HD 153897	16 57.1	27 21	"	"	"	14.9	01 17	02 27	4	1 30 W
3149	HD 162668	17 47.1	30 01	"	"	"	15.0	02 38	04 00	1	1 55 W
<p>Mon May 23-24 Hd-L Rain</p>											

Ending Time L.M.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp	REMARKS																					
20 4	2 <sup>h</sup> 00 W	30 17	1	7.16	F <sub>0</sub>	1-1-1	] = 1000 1000 3000 1000 starts, haze more clouds, more haze																					
21 1	1 29 W	32 23	1	7.16	F <sub>8</sub>	1-1-1																						
21 2	1 00 W	30 16	1	7.18	F <sub>2</sub>	1-1-1																						
21 3	0 08 W	32 38	1	7.26	K <sub>0</sub>	1-1-1																						
21 4	1 13 W	29 16	1	6.74	F <sub>5</sub>	1-1-1																						
21 11	1 55 W	29 58	1	6.74	A <sub>2</sub>	1-1-1																						
							<table border="1"> <thead> <tr> <th></th> <th></th> <th>M.C.</th> <th>S.C.</th> <th>S.W.</th> <th>M.T.</th> <th>S.T.</th> </tr> </thead> <tbody> <tr> <td>May 23</td> <td>10</td> <td>-21.7</td> <td>-12.6</td> <td>+6.6</td> <td>+10.0</td> <td>+0.0</td> </tr> <tr> <td>May 24</td> <td>10</td> <td>-12.3</td> <td>-12.3</td> <td>+08.9</td> <td>+08.2</td> <td>+0.0</td> </tr> </tbody> </table>			M.C.	S.C.	S.W.	M.T.	S.T.	May 23	10	-21.7	-12.6	+6.6	+10.0	+0.0	May 24	10	-12.3	-12.3	+08.9	+08.2	+0.0
		M.C.	S.C.	S.W.	M.T.	S.T.																						
May 23	10	-21.7	-12.6	+6.6	+10.0	+0.0																						
May 24	10	-12.3	-12.3	+08.9	+08.2	+0.0																						

27

H

Date Tues May 24-25, 1938 Hd - L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	
3150	40 98383	11 14.0	13 56	I-12	Autran II	0.10	8.2 7.0	8.30	10 10	1	
3151	105398	12 03.0	31 37	"	"	"	7.0	10 15	12 05	2	
3152	145891	16 08.3	13 04	"	"	"	7.5 8.3	12 10	01 30	3	
3153	154278	16 59.4	13 42	"	"	"	7.5 8.1	01 35	02 40	4	
3154	174504	18 45.7	45 09	"	"	"	7.5 7.9	02 45	03 50	1	
				Wednesday, May 25-26, 1938		H-L		clouds & light rain			

⑤

Ending Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS	
	W 2 <sup>45</sup>	13 43	0-1	7.58 F8	1, 1, 1	Observed brilliant pyrotechnics to S.
	3 <sup>51</sup> W	31 24	0-1	7.24 A0	1, 1, 1	
	1 <sup>11</sup> W	12 56	0	7.04 A3	1, 1, 1	Brilliant aurora at 11.30 →
	1 <sup>31</sup> W	13 39	0	7.21 K2	1, 1, 1	Arch about 20° wide in and to S
	1 <sup>00</sup> W	45 10	0-1	7.12 F0	1, 1, 1	Zenith converging at 2/5 75° from N point at altitude 5° Green and red streamers in N.

		MC	SE	SW	H.T.	ST.
May 25	10	-12.6	-1 11.9	+16.4	+07.0	+0.0
May 26	14	-13.0	-1 11.4	+22.8	+05.0	+0.0

Date Thursday, May 26-27, 1938 H-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3155	HD 77692	08 59.0	+59 45	I-12	Astria II	0100	11.5 11.4	20 32	21 06	2
3156	99946	11 24.8	+30 32	"	"	"	11.5 11.3	21 11	21 50	3
3157	152951	16 51.5	+46 41	"	"	"	10.7 10.5	00 02	00 47	4
3158	151746	16 44.2	+74 05	"	"	"	11.5 11.6	00 54	01 34	1
3159	159485	17 24.5	+58 44	"	"	"	11.3 11.1	01 38	02 13	2
3160	154494	17 00.7	+12 53	"	"	"	10.9	02 18	02 26	3
	"	"	"	"	"	"	10.7	02 26	02 38	"
3161	163590	17 51.8	+32 28	"	"	"	10.5 10.5	02 42	03 52	4
	FOCUS	-	-	"	"	"	10.5	03 55	<	

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
4 03 W	+59 34	2	6.19	A0	1-1-1 Light clouds
	+30 17	2	7.06	F0	1-1-1 haze. clouds-stargun 21 <sup>50</sup> -
					closed up 22 <sup>45</sup> . clearing again 23 <sup>30</sup> -
0 07 E	+46 36	3	6.77	A2	1-1-1
0 49 W	+73 57	3	6.82	A	2-1-1
0 47 W	+58 40	3	6.58	A2	1-1-1
1 23 W	+12 46	3	4.99	A3	3 setting 3
1 35 W	"	"	"	"	1-1-1 " 6
1 59 W	+32 25	3	7.20	A0	1-1-1
OUTSIDE	THROUGH	PAVE	-	-	4 <sup>1</sup> / <sub>2</sub> -6

Date *Friday, May 27-28, 1938 H-MR* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Shit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3162	HD 80654	09 159	+13 33	I-12	Astria II	Set 010	76.5 165	20 34	21 34	1
<p><i>Set May 28-29, 1938 Hd-S-MR</i></p> <p><i>Clouds from sunset. About 60 minutes. Showed Utesoff etc.</i></p>										

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
	19 <sup>h</sup> 19 <sup>m</sup> W	+13 22	2	7.00	F5 1-1-1	<p>clouds most of time.</p> <p>clouds for 20<sup>h</sup>.</p> <p>thinned out once or twice - but not permanently.</p> <p>           May 28, 08.    m.c.    B.C.    <span style="margin-left: 2em;">m.T.</span>    <span style="margin-left: 1em;">S.T.</span>                                     -13<sup>s</sup>.5    -1<sup>m</sup> 11<sup>s</sup>.2    +02<sup>s</sup>.7    -00<sup>m</sup>.0         </p> <p>Note: Wooden mount for 45° flat for <del>observing</del> visitors. eyepiece is split.</p>





see previous page

Ecliptic Time H.M.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+59° F at 4 A.M.	REMARKS														
03 40	01 <sup>h</sup> 46 <sup>m</sup> W	+44° 12'	2	7.56	F2	1-1-1	clearing slowly from east. heavy haze.														
	OUTSIDE	THROUGH	BASE	-	-	4 $\frac{1}{2}$ -6	SIDE = 26.27, TILT = 19.45. mild aurora. ends 03 40. <u>too many loops.</u>														
							<table border="0"> <tr> <td></td> <td></td> <td>M.C.</td> <td>S.C.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>May 30</td> <td>10</td> <td>-15.7</td> <td>-1 10.6</td> <td>+51.4</td> <td>-0.2</td> <td>-0.1</td> </tr> </table>			M.C.	S.C.	S.W.	M.T.	S.T.	May 30	10	-15.7	-1 10.6	+51.4	-0.2	-0.1
		M.C.	S.C.	S.W.	M.T.	S.T.															
May 30	10	-15.7	-1 10.6	+51.4	-0.2	-0.1															







Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
W 4 <sup>2</sup> 36	13 22	1	7.00 F5 1,1,1	Working under wind curtain for H. About to touch platform at end.
W 3 57	31 23	1	7.24 <sup>(?)</sup> A0 1,1,1	unstable at W 3 35
Outside this base				12/12 Tilt 23.15 Focus 23.1 23.3 5 1/2 23.5 9 23.3 is good
0 54 E +04 20	2-3	4.8	Bone 2,2,2	
1 44 E +26 16	2-3	5.9	Bone 2,2,2	
1 54 E +45 53	2-3	5.2	Bone 2,2,2	
2 07 E +60 23	2	2.71	Pop 3,3	Set 22
4 52 E	2		3,3	72
no filter in				
16				
Outside this base				no filter in Tilt 19.45 Focus / out 1/2 26.10 5 1/2 26.30 26.25 9 26.20



40

Strong yellow light (16<sup>h</sup>). Last wind with  
agony all  
trans. at 16<sup>h</sup>.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	M.C.	S.C.	S.W.	M.T.	S.T.	
	2 30 W	+30 17	1	7.06	F8	1-1-1	Light clouds May 31 10	-14.8	-1.10 <sup>m</sup> .2	+55.8	-0.6	0.1 <sup>m</sup>
	2 24 W	+32 05	1	7.50	G5	1-1-1	Light clouds					
	0 22 E	+46 36	1	6.77	A2	1-1-1	Light clouds					
	0 55 W	+73 57	1-0	6.82	A2	1-1-1	dec clamp causing delay					
	0 53 W	+68 40	1-0	6.58	A2	1-1-1						
	1 40 W	+32 25	1-0	7.20	A0	1-1-1						
	1 45 W	+29 13	1-0	4.82	K0	1/2 - 1/2	set 2 1/2					
	1 48 W			"	"	1/2 - 1/2	set 7 1/2					
	1 59 W	+30 09	1-0	4.74	F0	1/2 - 1/2	set 2 1/2					
	2 04 W			"	"	1/2 - 1/2	set 7 1/2					
							Jun. 1 14	M.C. -15.4	S.C. -1.09 <sup>m</sup> .9	M.T. -05.6	S.T. -0.1 <sup>m</sup>	Reset







Date Thursday, June 2-3, 1938 - M Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Star Screen</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3185	HD 99832	11 24.0	30 58	I-12	<u>Orsha II</u>	.010	+14.7 18.8	20 42	22 42	2
3186	154160	16 58.7	14 41	—	—	—	+14.2 18.8	22 51	1 01	1
3187	16916.9	18 18.3	14 57	—	—	—	+13.8 15.0 18.0	1 11	2 51	4
3188	193349	20 14.7	14 04	—	—	—	+14.0 18.4	2 58	3 48	1
F							+14.5			
Friday, 1938 June 3-4, MR-N										
3188 F <sub>2</sub>	FOCUS	—	—	I-12½	<u>Orsha II</u>	<sup>set</sup> .010	+15.6	04 30	—	3

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS																		
3	42 W	30.44	1-0	7.44	F2	1-1-1 occasional clouds For Hd.																		
6	27 W	14 34	1-0	7.52	K0	1-1-1 Hd.																		
0	58 W	14 57	1	7.40	A2	1-1-1 trouble with Cassagrain focus. Switch doesn't always act. Wasted time.																		
0	01 E	14 08	1	6.81	A0	1-1-1 took brighter of wide pair outside through base																		
						12 8																		
						<table border="0"> <tr> <td></td> <td>M.E.</td> <td>S.C.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>Jan. 3</td> <td>10</td> <td>-16.5</td> <td>-109.8</td> <td>-06.1</td> <td>-07.6</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-0.1</td> </tr> </table>		M.E.	S.C.	S.W.	M.T.	S.T.	Jan. 3	10	-16.5	-109.8	-06.1	-07.6						-0.1
	M.E.	S.C.	S.W.	M.T.	S.T.																			
Jan. 3	10	-16.5	-109.8	-06.1	-07.6																			
					-0.1																			
	OUTSIDE	THROUGH	BASE	-	-	4 1/2 - 6	slide before focus test was 26.26.																	
	setting = 2	slide = 26.20,	tilt = 19.5																					
	5	26.27,																						
	7	26.23,					slide = 26.23 seemed best. Left it there.																	



see previous page

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS	
				+54°F at 3:30 A.M.	
W 1 <sup>h</sup> 08 <sup>m</sup>	+31° 28'	1-2	7.25	AD	1-1-1 lost time in starting because of det. lamp.
E 1 <sup>h</sup> 08 <sup>m</sup>	+14 39	2-1	6.67	B9	1-1-1 sup.
E 0 39	+15 40	2-1	7.13	B9	1-1-1 clouds in west
W 0 35	+16 33	2-1	7.26	A3	1-1-1 clouds came out at 3:20.
OUTSIDE	THROUGH	BASE	-	-	4 1/2 - 6 SHIDE = 26.23, TILT = 19.5

	HR.	S.C.	S.W.	H.T.	S.T.
Jan. 4	10	-17.2	-1 09.7	-001.5	-09.4 - 02

Date Saturday, 1938 June 4.5 H-MR Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3193	HD 132890	14 <sup>h</sup> 56.5 <sup>m</sup>	+62° 04'	I-12	Acta D	Sat 010	12.8 12.7	22 54	0 04	3
3194	158485	17 24.5	+58 44	"	"	"	12.6 12.4	00 08	00 48	4
3195	165281	18 00.1	+30 24	"	"	"	12.8 12.5	00 54	02 00	1
3196	168431	18 14.5	+12 09	"	"	"	12.9 12.5	02 03	03 09	2
3197	FOCUS	199140	20 50.1	+28 08	"	"	12.8 12.5	03 13	03 50	3
		-	-	"	"	"	12.7	03 55	-	-

48

About 80+ visitors, cloudy with rain early evening  
 1-1 slide, NR strips.  
 Closing about 10<sup>45</sup> EST. more to come, about  
 40 visitors 6 Bortles.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
W 1 <sup>m</sup> 41 <sup>m</sup>	+61° 52'	1-2	7.10	A2 1-1-1	off list
E 0 03	+58° 39'	2	6.58	A2 1-1-1	
W 0 33	+30 20	2	7.08	F5 1-1-1	
W 1 27	+12 09	2	6.88	B8 1-1-1	
E 0 27	+28 14	2	6.27	B3 1-1-1	SET 3
OUTSIDE THROUGH BASE			-	A $\frac{1}{2}$ -6	SLIDE = 26.23, TILT = 19.5. SET 7



Date Sunday 1938 June 5-6 Y-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
<del>3198</del>	<del>HD 99267</del>	<del>11 20.3</del>	<del>30 32</del>	<del>I-12</del>	<del>Asbra II</del>	<del>010</del>	<del>16.6</del>	<del>8 54</del>			
3198	HD 153897	16 57.1	27 21	"	"	"	15.5 15.7	11 13	12 35	2	
3199	HD 163075	17 49.2	46 41	"	"	"	15.7 15.6	12 40	1 40	4	

Initial Time  
AST

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
	<del>30° 17'</del>		7.16	FO 1-	ruined by clouds.
0 15 W	27 16	1-2	6.79	FS 1-1-1	clear from 12.55 - 12.72
L 33 W	46 37	2	7.57	NO 1-1-1	by filling in at 1.30 + 1.45
					MR. S.C. SW M.T. S.T. Jun. 6 15 -18.4 -1.09.0 +04.4 -12.0 +0.2

Date Monday June 6-7, 1938 M Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3199 F <sub>1</sub>							above dew +16.0			4
3200	HD 124588	14 9.4	29 35	I-12	astron II	.010	+16.3	+17.420 59	21 59	1

Rising Time  
L.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS												
0 29W	29 22	3	7.04	FO AL	<p>clouds delayed starting - then cleared a little.</p> <p>Clouds at intervals throughout exposure, heavy at end.</p> <p>Still think of 29.25 with lightning all around.</p> <p>Close 49.00</p> <table border="0"> <thead> <tr> <th></th> <th>M.C.</th> <th>S.C.</th> <th>S.W.</th> <th>H.T.</th> <th>S.T.</th> </tr> </thead> <tbody> <tr> <td>Jun. 7 10</td> <td>-19.0</td> <td>-1 09.2</td> <td>+04.2</td> <td>-13.8</td> <td>-0.2<sup>m</sup></td> </tr> </tbody> </table>		M.C.	S.C.	S.W.	H.T.	S.T.	Jun. 7 10	-19.0	-1 09.2	+04.2	-13.8	-0.2 <sup>m</sup>
	M.C.	S.C.	S.W.	H.T.	S.T.												
Jun. 7 10	-19.0	-1 09.2	+04.2	-13.8	-0.2 <sup>m</sup>												

Date Tuesday June 7-8, 1938, <sup>L</sup> <sup>M</sup> Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3201	HD 108714	12 24.3	17 53	I-12 $\frac{1}{2}$	Astra II	.010	Above K <sub>2</sub> ... +15.6° - 11.6°	20 58	22 48	2
3202	" 163219	17 50.0	30 23	"	"	"	+15.4° - 19.2°	22 55	00 45	3
3203	" 169491	18 19.8	15 36	"	"	"	+15.4° - 19.4°	00 50	02 30	4
3204	" 175548	19 06.0	14 17	"	"	"	+15.2° - 19.6°	02 37	03 45	3

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS	
3 <sup>06</sup> W	17 38	0-1	7.52	A <sub>0</sub>	1-1-1	S. 1/2 N. 1/2
0 <sup>20</sup> E	30 21	0-1	7.54	A <sub>3</sub>	1-1-1	
6 <sup>55</sup> W	15 36	0-1	7.38	B <sub>4</sub>	1-1-1	
12 <sup>4</sup> W	14 15	0-1	6.72	B <sub>4</sub>	1-1-1	
					<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>Jun. 8 13</p> </div> <div style="text-align: center;"> <p>M.P.</p> <p>-20.0</p> </div> <div style="text-align: center;"> <p>S.C.</p> <p>-109.6</p> </div> <div style="text-align: center;"> <p>SW</p> <p>+08.0</p> </div> <div style="text-align: center;"> <p>M.T.<sub>s</sub></p> <p>-15.5</p> </div> <div style="text-align: center;"> <p>S.T.<sub>w</sub></p> <p>-0.3</p> </div> </div>	

Date Wednesday, June 8-9, 1935 H-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3205	HD 114446	13 <sup>05.5</sup> <del>05.3</del>	+57 22	I-12	Ast. II	010	13.2 13.0	20 48	22 08	1
3206	132560	14 54.7	+58 02	"	"	"	13.2 13.0	22 12	23 32	2
3207	166180	18 04.0	+30 59	"	"	"	13.0 12.6	23 38	01 11	3
3208	168271	18 13.8	+12 56	"	"	"	13.0 12.7	01 15	01 50	4
3209	168431	18 14.5	+12 09	"	"	"	13.0 12.8	01 54	02 54	1
3210	169223	18 18.6	+16 38	"	"	"	13.0 12.7	02 58	03 46	2
"	FOCUS	-	-	"	"	"	12.7	03 50	-	"

Ending Time  
LST.

Hour Angle End	Declination	Seeing	Ptg. Mag.		+50°F at 3:40 A.M. REMARKS	
1 51 W	+57 09	2-1	7.51	F8	1-1-1	Supp. List
1 26 W	+57 53	2	7.47	F2	1-1-1	Supp. List
0 05 E	+30 57	2	7.32	A0	1-1-1	
0 25 W	+12 55	2	6.84	B9	1-1-1	
1 28 W	+12 09	2	6.88	B8	1-1-1	double?
2 16 W	+16 39	2	7.38	K0	1-1-1	
OUTSIDE	THROUGH	BASE	-	-	4 $\frac{1}{2}$ -6	SLIDE = 26.23, TILT = 19.5.



1938 July 10

Date Thursday June 9-10 10-11 1938 H-MTR

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	
3211	HD 112734	12 53.8	+28 52	I-12	Astra II	set 010	16.6 16.5	20 48	21 33	3	
3212	113021	12 55.7	+32 18	"	"	"	16.6 16.3	21 36	22 46	4	
3213	128660	14 33.1	+43 16	"	"	"	16.6 16.3	22 51	23 51	1	
3214	166180	18 04.4	+30 59	"	"	"	16.8 16.3	23 55	01 25	2	
3215	164136	17 54.7	+30 11	"	"	"	16.5 16.5	01 28	01 40	3	
								01 40	01 46	"	
								01 46	01 49	"	
3216	189847	19 57.0	+30 57	"	"	"	16.5 16.3	01 55	02 50	4	
3217	199101	20 45.8	+33 03	"	"	"	16.5 16.2	02 53	03 45	1	
	FOCUS	-	-	"	"	"		03 50	-	"	
Saturday, June 11-12, 1938							M-MR				
cloudy - no visitors, no work							all night				





Ending Time LST	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
2	13 <sup>h</sup> W	+57 07	2	7.51	F8	1-1-1 Supp.
3	5 <sup>h</sup> W	+60 25	2	7.06	A0	1-1-1 Supp.
4	0 34 E	+12 09	2	6.88	B8	1-1-1
1	0 04 W	+16 39	2	7.38	K0	1-1-1
2	0 17 E	+30 57	2	7.08	A5	1-1-1
3	0 17 W	+31 02	2	6.66	B8	1-1-1
4	0 59 E	+42 57	2	6.53	K5	1-1-1
						<p>slit 1.5<sup>s</sup> no filter</p> <p>slit 120<sup>s</sup> 34 75 W + 1/2 glass</p>
						<p>MC.    S.C.    SW.    <u>MTW    STW</u></p> <p>Jun. 14    10    -23.2    -1 10.0    +16.3    -20.9    -0.2<sup>m</sup></p>





Date Wednesday - June 15-16, 1938, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	
3231	HD 133909	15 1.9	59 55	I-12	Astral II	.010	+19.5 +23.3	20 54	22 36	3	0.514
3232	168481	18 14.8	15 47	-	-	-	19.2 23.3	22 45	23 45	4	1.14E
3233	182381	19 19.3	15 49	-	-	-	19.0 23.2	23 47	01 40	1	0.1E
3233F	191048	20 02.8	15 47	-	-	-	19.0 23.2	01 43		2	
	Focus Test										

Friday, 1938 June 17-18, MR (plastic film) Thin but extensive clouds

Saturday, 1938 June 18-19, H-N-Y-MR, 6 visitors, cloudy.







Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS																		
23 52	1 <sup>h</sup> 34 <sup>m</sup> W	30 12	2	<del>7.38</del> 7.18	F <sub>2</sub> F <sub>2</sub>	1-1-1 * wrong star R.A. 13 50.4 ± δ = 30° 24' ± 7 arc																		
23 50	1 <sup>h</sup> 45 <sup>m</sup> W	26 53	2-1	<del>7.60</del> 6.71	F <sub>2</sub> F <sub>2</sub>	1-1-1 " " R.A. 16 07.8 δ 27° 01' ± about 6.91																		
23 54	1 <sup>h</sup> 17 <sup>m</sup> W	26 48	2-1	6.71	F <sub>2</sub>	1-1-1 some clouds																		
	0 05 E	45 37	2-1	7.57	G <sub>5</sub>	1-1-1																		
	0 54 W	44 08	2-1	7.00	A <sub>2</sub>	1-1-1																		
	2 14 W	31 53	2 1	7.18	A <sub>3</sub>	1-1-1																		
						<div style="text-align: center;"> <table border="0"> <tr> <td></td> <td>MC.</td> <td>SC.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>Jun. 20</td> <td>10</td> <td>-27.8</td> <td>-1 10.3</td> <td>+25.0</td> <td>-30.2</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-0.4</td> </tr> </table> </div>		MC.	SC.	S.W.	M.T.	S.T.	Jun. 20	10	-27.8	-1 10.3	+25.0	-30.2						-0.4
	MC.	SC.	S.W.	M.T.	S.T.																			
Jun. 20	10	-27.8	-1 10.3	+25.0	-30.2																			
					-0.4																			
						* The pen on RA setting machine clutch has been broken off. Had to set by hand.																		
						Repaired by [unclear]																		



Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
		base outside			$\frac{12}{8}$	Focus good.	
214	2 19 E	45 02	2	6.59	B9	1-1-1	
230	1 58 E	45 46	2	7.21	A0	1-1-1	Cassogram suitable, but not best yet. Patter from field of view. Wait till best of time.
250	1 17 E	44 12	2	7.4	B8	1-1-1	
257	X 50 W	15 53	2-1	7.46	B9	1-1-1	Cassogram focus on again. Focus sharp, but very faint.
300	49 W	14 54	front - 0	6.56	A0	1-1-1	Set in a bit. Could not make it go.

	MC	SC	SW	H.T.	S.T.
Jan. 21 14	-28.7	-1 10.3	+25.8	-31.8	-0.4

Date *Tuesday June 21-22 1935* S-N-L-H

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3245	NGC 6245	16 39.3	+36 35	Newtonian	Astr II		76° F	21 41	21 47	1 17
3246	5904	15 15.1	+02 20	-	-			22 41	22 49	1 47
3247	6218	16 49.8	-01 50	-	-			22 57	23 07	0 40
3248	6254	16 52.6	-04 00	-	-			23 24	23 34	1 21
3249	6402	17 34.1	-03 12	-	-			23 41	00 11	1 21
3250	6779	19 14.0	+30 03	-	-			00 20	00 40	1 21
3251	6366	17 24.1	-05 01	-	-			01 06	01 41	1 21
3252	6402	17 34.1	-03 12	-	-			01 45	02 20	1 21
3253	6934	20 30.9	+07 11	-	-		68° F	02 23	02 48	1 21
3254	7089	21 29.9	-01 07	-	-			02 52	03 02	1 21
3255	6205	16 39.3	+36 35	-	-			03 08	03 13	1 21
3256	7278	21 27.2	+11 54	-	-			03 18	03 23	1 21

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	1 18 W				<u>Focus</u> on 3 Ports. Clouds delayed start.
	1 14 W				* † ‡ Loss of Time.
	0 02 W				← <u>Refracted</u>
	0 21 W	-04 07			
	0 19 W				
	0 54 E				← <u>Recollimated</u> on X Seg; <u>reference</u> n. BSG 6512
	1 54 W	-15 05			
	2 32 W				
	0 02 E				
	0 46 E				Light Clouds
	4 15 W				Unguided Light Clouds
	0 22 E		Unguided		* Sec. Q.M. gave trouble
					† Sec. Setting + Guiding went dead. Temporarily fixed by putting wooden spacers in relay and cleaning contacts
					‡ double slide flatbed motor stalled in desc. Potenti loss through 90° to get quadrant submount spinning.

Date 1938 Wednesday June 22-23 S-N-H Julian Day

Plate No.	Object	R.A. 1900 1935	Declination 1900	Instrument	Emulsion	Blit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3257	NGC 6218	16 43.8	-01 50	Newtonian	Astro II		75°F	22 18	22 33	
3258	6254	16 53.6	-04 00	-	-			22 59	23 09	
3259	5904	15 15.1	+02 20	-	-			23 36	23 42	
3260	5272	13 39.2	+29 43	-	-			23 46	23 51	
3261	6779	19 14.0	+30 03	-	-			00 07	00 27	
3262	6366	17 24.1	-05 01	-	-			00 34	01 14	
3263	6402	17 34.1	-03 12	-	-			01 16	01 56	
3264	6366	17 24.1	-05 01	-	-			01 00	01 00	
3265	6934	20 30.9	+07 11					02 42	03 05	
3266	7039	21 29.9	-01 07					03 08	03 13	
3267	6205	16 39.3	+36 35					03 17	03 22	

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clouds in afternoon and evening. Partly clearing

Ending Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
			Poor		$\begin{matrix} d & h & MC & SC & SW & \overline{m} & \overline{m} \\ \text{June 22} & 10 & -29.3 & -1^m 10.5 & +27.7 & -33.7 & -0.4 \end{matrix}$
0 00		-03 58			Subtle Star lost 23 <sup>01</sup> closed out by clouds.
2 11 W					← sky completely clouded.
3 57 W			Faint		← Reference BSC 7324
1 03 E			gnd		
1 35 W					
2 56 W					← Referenced on star near (3.2)
2 20 W					
0 31 E					
4 23 W					Unaided
					$\begin{matrix} \text{Jun. 23} & 13 & -29.7 & -1^m 10.2 & +30.2 & \overline{+24.6} & \overline{+0.3} \\ & & & & & \text{Reset.} & \end{matrix}$
					Squalling all night



Date 1938 Thursday June 23-24, S-P-H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3268	NGC 6205	16 39.3	+36 35	Newtonian	Astra II		80°F	09 12	09 13	1 30 E
3269	5904	13 15.1	+7 20					09 24	09 29	0 20 W
	<del>5272</del>	<del>13 39.2</del>	<del>+28 43</del>					<del>09 56</del>		
3270	6218	16 48.8	-01 50					09 36	09 46	1 10 W
3271	6254	16 53.6	-01 00					09 49	09 57	1 42 E
3272	6205	16 39.3	+36 35					10 02	10 07	0 42 E
3273	6779	19 14.0	+30 03					10 18	10 38	2 52 E
3274	6366	17 24.1	-05 01					10 43	11 33	4 52 E
3275	6402	17 34.1	-03 12					11 36	12 11	1 17 W
3276	6779	19 14.0	+30 03					12 15	12 35	4 25 E
3277	6366	17 24.1	-05 01					12 43	01 23	1 54 W
3278	6402	17 34.1	-03 12					01 22	01 57	3 20 W
3279	6769	19 07.7	+00 55					02 03	02 58	1 38 W
3280	7089	21 29.9	-01 07					02 57	03 03	4 49 W
3281	7078	21 29.2	+11 54					03 08	03 10	6 30 W
(15) 3282	6205	16 39.3	+36 35					03 15	03 22	4 52 E

Ending Time III	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
19	1 33 E				Focused on 109 Virgin. Found plate in 2 min!
19	0 02 W				For high - read, again.
19	1 10 W				
19	1 09 E				
10 0	0 46 E				← Refocused on 7324
10 3	2 56 E				P developed 3269 + 3272
10 3	0 56 E				H " 3273 + 3271
10 3	0 56 E				11.00 - high - last year's X film; done 10.06 - 11.18
10 3	0 27 W				
10 3	0 56 E				← Refocused on bright star in field of 6116
10 3	1 45 W				P developed 3269, 3275
10 3	2 13 W				
10 3	1 35 W				
10 3	0 49 W				
10 3	0 30 W				clouds expected
10 3	4 52 W				Squinting all plates



Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS							
						M.R.	S.R.	S.W.	M.T.	S.T.		
	Clouded before starting exposure. Closed up 0 <sup>50</sup> .					June 24	10	-29.0	-110.1	+30.2	+23 <sup>s</sup> .0 <sup>m</sup>	+10 <sup>m</sup> .2
						June 25	10	-27.6	-110.5	+30.5	+20 <sup>s</sup> .4 <sup>m</sup>	+10 <sup>m</sup> .2
M-	showed 6 visitors over building and dome											

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Date Sunday June 26-27, 1938 S-N-H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3283	NBC 6205	16 39.3	+36 35	Newtonian	Astra II		+62°F	21 10 11	21 15 16	
3284	5904	15 15.1	+02 20					21 18 19	21 23 24	
3285	5053	13 13.3	+18 03					21 27 28	21 47 49	
3286	6205	16 39.3	+36 35					21 53 54	21 58 59	
3287	6218	16 43.8	-01 50					22 05	22 15	
3288	6254	16 53.6	-04 00					23 35	23 45	
3289	6779	19 14.0	+30 03					23 51	00 21	
3290	6402	17 34.1	-03 12					00 24	00 59	
3291	6366	17 24.1	-05 01					00 35	00 40	
3292	6934	20 30.9	+07 11					02 19	02 44	
3293	7089	21 29.9	-01 07					02 47	02 57	
3294	7078	21 27.2	+11 54					03 00	03 10	
3295	6205	16 39.3	+36 35					03 14	03 19	

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clouds all day, clearing at sunset.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	1 23 E		Poor		Focused on 137 Virginis.
	0 09 W				
	2 38 W				Good guide stars. Cluster invisible. N developed 3298-944
	0 39 E				Watch stopped.
	0 23 E				Watch reset by N. Guide star lost just at end. Thick. N developed 3295-87
	0 53 W				Cloudy. Refocused on $\lambda$ Aps. among clouds, about 23. Guide star frequently lost in clouds. Sky very bad.
	1 26 W				
	2 16 W				Clouded over ← Refocus on bright star in field of 6366. Cloud
	0 31 E				
	0 15 E				
	4 52 W				
					Squinting at plate

Date Monday June 27-28, 1938 S-PNR-H Julian Day

Plate No.	Object	R.A.		Declination		Instrument	Emulsion	Slit	Temperature	Starting Time		Ending Time		Hour Angle End
		1900	1935	1900	1935					E.S.T.	E.S.T.			
3296	NGC 5904	15	15.1	+2	20	Reichert	Eastman II		+64°F	21	15	21	20	0
3297	6205	16	39.3	+36	35	-	-			21	23	21	23	1
3298	5053	13	13.3	+18	03					21	37	22	01	2
3299	6205	16	39.3	+36	35					22	10	22	10	0
3300	6218	16	43.8	-01	50					22	19	22	27	0
3301	6254	16	53.6	-04	00					22	29	22	37	0
3303	6366	17	24.1	-05	01					22	45	23	20	0
3303	6402	17	34.1	-03	12					23	23	24	03	0
3304	6779	19	14.0	+30	03					24	02	24	22	0
3305	6366	17	24.1	-05	01					1	09	1	44	1
3306	6760	19	07.7	+00	55					1	47	2	32	1
3307	6934	20	30.9	+07	11					2	34	2	59	1
3308	6205	16	39.3	+36	35					3	02	3	07	4
3309	7089	21	29.9	-01	07					3	12	3	18	4

Ending Time EST	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					← <i>Transect star near 3</i> d h
0	09 W				MC SC SW MT ST S S S S M
1	07 E				June 27 10 +25.3 -1 10.1 +35.4 +05.5 0.0
2	59 W				clouds 21 <sup>40</sup> - 3296 + 3217
0	19 E				
0	12 E				
0	08 E				← <i>Referenced on star in field of 6366</i>
0	00 W				
0	35 W				
0	48 E				← <i>Time lost due to sticking of cutout in platform motor.</i>
1	28 W				
0	33 W				
4	33 W				
0	07 E				
					<i>Squaring all plates</i>



Date Tuesday June 28-29, 1938 S-MR-H Julian Day

Plate No.	Object	R.A.	Declination	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
		1900 1935	1900							
3310	NGC 5904	15 <sup>h</sup> 15.1 <sup>m</sup>	+02° 20'	Newtonian	Ashra II	-	+64°F	09 16	09 21	0 7 W
3311	6205	16 39.3	+36 35	"	"			09 25	09 30	1 32 E
3312	5053	13 13.3	+18 03	"	"			09 34	10 04	3 1 W
3313	6205	16 39.3	+36 35	"	"			10 09	10 14	0 17 E
3314	6218	16 43.8	-01 50	"	"			10 17	10 25	0 31 E
3315	6254	16 53.6	-04 00	"	"			10 27	10 35	0 11 E
3316	6366	17 24.1	-05 01	"	"			10 45	11 20	0 04 W
3317	6779	19 14.0	+30 03	"	"			11 26	11 46	1 20 E
3318	6402	17 34.1	-03 12	"	"			11 55	12 30	1 24 W
3319	6366	17 24.1	-05 01	"	"			00 36	01 06	1 50 W
3320	Mn. X.	17 27.1	-04 34	"	"			01 09	01 39	2 20 W
3321	6760	19 07.7	+00 55	"	"			01 41	02 26	1 20 W
3322	7089	21 29.9	-01 07		E 40			02 32	02 38	-
3323	6205	16 39.3	+36 35	"	"			02 42	02 46	1 16 W
3324	7078	21 27.2	+11 54	"	"			02 58	03 28	1 10 W

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS					
					ASC	SC	SW	MT	ST	
09 20	0 <sup>h</sup> 14 <sup>m</sup> W				← Focus on 3 stars June 28 <sup>d</sup> 13 <sup>h</sup> +24.5 <sup>s</sup> -24.3 <sup>s</sup> +27.2 <sup>s</sup> +04.5 <sup>s</sup> +0.2 <sup>m</sup>					
09 30	1 02 E									
09 40	3 11 W									
09 50	0 17 E									
10 25	0 11 E									
10 35	0 11 E				← Focus on bright star near 6366 H guiding					
11 20	0 04 W									
11 40	20 E									
12 30	1 04 W				← Focus on star near 6366					
01 06	1 50 W									
01 30	2 20 W									
02 16	1 26 W									
02 40	4 16 W				MR guiding ← Focus on ε Pegasi Filter #40					
03 20	0 10 W				Spinning cap removed					

Date *Wednesday, 1938 June 29-30* S-MR-H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3325	<i>V.G.C. 5904</i>	<i>15 15.1</i>	<i>+02 20</i>	<i>Revolman</i>	<i>E40</i>	-	<i>68° F</i>	<i>21 18</i>	<i>21 28</i>	<i>0 24 W</i>
3326	<i>6205</i>	<i>16 39.3</i>	<i>+36 35</i>		<i>"</i>			<i>21 36</i>	<i>21 42</i>	<i>0 45 E</i>
3327	<i>5053</i>	<i>13 13.3</i>	<i>+18 03</i>		<i>Orsta II</i>			<i>21 50</i>	<i>22 25</i>	<i>3 24 W</i>
3328	<i>6218</i>	<i>16 43.8</i>	<i>-01 50</i>		<i>E40</i>			<i>22 31</i>	<i>22 37</i>	<i>0 06 W</i>
<i>Thursday, 1938 June 30 - July 1, S-MR-H. rain.</i>										

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					Focus on 3 Perseus
					MC SC SW MT ST
2 03	0 24 W		high		June 29 <sup>d</sup> 10 <sup>h</sup> +23.5 <sup>s</sup> +2 <sup>m</sup> 23.5 <sup>s</sup> +39.1 <sup>s</sup> +03.0 <sup>s</sup> +0.2 <sup>m</sup>
2 12	0 45 E		and		
2 25	3 24 W		clouds		Sidereal Clock stopped at 01 <sup>h</sup> 50 <sup>m</sup> , Realt.
2 37	0 06 W		thick		MC SC SW MT ST
					June 30 <sup>d</sup> 10 <sup>h</sup> +23.0 <sup>s</sup> +35.1 <sup>s</sup> +37.8 <sup>s</sup> +01.5 <sup>s</sup> +0.4 <sup>m</sup>

Date 1938 Friday July 12

S-H

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Da
3329	NGC 6205	16 39.3	+36 35	Nust	Astrot II		62°F	2 53	2 58		
3330	6779	19 14.6	+30 03					3 04	3 16		
3331	7099	21 29.9	-01 07					3 20	3 25		
3332	7078	21 27.2	+11 54					3 28	3 32		

Cloudy all early night. <sup>partly</sup> clearing 2<sup>25</sup>

Ending Time  
E.M.T.

Hour Angle  
End

Declination

Seeing

Ptg. Mag.

REMARKS

mid ?

Trans on L Equator

Good guide stars but hard to see.

2 23 N

0 27 W

Sounding throughout.

Date Saturday July 2-3, 1938 HD-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3333	HD 154160	16 58.7	14 41	I-12	Antar II	010	17.5	10 25	11 35	1
3334	" 154278	16 59.4	13 42	"	"	"	17.2-17.3	11 38	12 38	2
3335	" 181144	19 14.2	16 19	"	"	"	17.5-17.5	12 41	1 41	3
3336	" 189213	19 53.8	28 36	"	"	"	17.5-17.3	1 44	2 40	4
3337	" 189689	19 56.2	32 31	"	"	"	17.5-17.5	2 44	3 48	1
	Focus			"	"	"				1

About 150 visitors. R.N. showed moon with  
 Hd, T showed S Carbon with 74". Cass focusing gave  
much trouble

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
5:35	W 59 <sup>m</sup>	14 35	1	7.52	K <sub>0</sub> 1, 1, 1	all lights on spec. are out. Fuses O.K. (?)
2:40	W 2 <sup>h</sup> 01	13 38	1 → 2	7.21	K <sub>2</sub> 1, 1, 1	
2:45	W 50 <sup>m</sup>	16 21	2	7.34	F <sub>5</sub> 1, 1, 1	
2:50	W 1 <sup>h</sup> 10	18 41	3	7.11	A <sub>2</sub> 1, 1, 1	
3:40	W 2 <sup>h</sup> 16	32 35	3	7.19	B <sub>9</sub> 1, 1, 1	<u>Be</u>
	Outside the base				10/0	



Date Sunday July 3-4 Young Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Est
- 3338	HD 127897 ✓ Bootis	14 11	19 42	I-12	E 33	010	17.8	9 13	9 14	1
	"	"	"	"	"	"	"	9 15	9 19	2
- 3339	HD 160762 ✓ Heracles	17 36.6	46 04	"	"	"	17.7	9 37	9 47	4
3340	HD 155092	17 04.4	28 23	"	astron	"	17.5	9 57	11 37	2
3341	HD 176003	18 53.0	44 05	"	"	"	17.6	11 41	12 41	3
3342	HD 179280	19 06.9	31 28	"	"	"	17.1	12 48	2 08	4
3343	HD 202314	21 09.9	29 29	"	"	"	17.1	2 14	3 14	5
<del>3344</del>										
Mon July 4 I-12 focus was 26.18 Tilt 19.5 changed to 22.5										
34437	Focus			I-25	E 33	010	16.2	spots 8m.		1
								Tilt 23.15		
Focus 23.3 is good Use 10MA for spots										

Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
1 <sup>h</sup> 17 <sup>m</sup> W		1	124	K <sub>0</sub>	10	Selling 2
1 22 W		1			10	" 6
1 22 E	46 01	2	3.79	B3	10	
59 <sup>m</sup> W	28 17	1	735	F <sub>0</sub> <sup>2</sup>	1-1-1	For DW Heard.
15 <sup>m</sup> W	44 06	1	700	A <sub>2</sub>	1-1-1	
1 28 W	31 29	1-2	742	F <sub>0</sub>	1-1-1	
3 <sup>m</sup> W	29 37	2	725	K <sub>0</sub>	1-1-1	

I-24 Hel

best of this  
base

set 0 focus 23.1

notifier  
10/10

" 3 23.3 best

" 6 23.5

" 10 Comp best. ~~base~~   
 notifier

6<sup>s</sup> without filters OK for comp

Found loose connection best bulb <sup>spec.</sup> OK

Selling in RA will only work one way  
needs investigation

Control clock on pier wont run. needs fixing  
OK

Date Mon July 4-5 1938 Hd          Julian Day         

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
- 3344	HD160762 c. Here.	17 36.6	46 04	I-25	E 33	010	19.2	8 47	9 07	1
								9 07	9 27	
								9 27	9 47	
- 3345	"						19.0	9 47	10 07	2
								10 07	10 27	
								10 27	10 47	
- 3346	"						19.7	10 47	11 07	3
								11 07	11 27	
								11 27	11 47	
- 3347	"						20.0	11 47	12 07	4
								12 07	12 33	
								12 33	12 53	
- 3348	"						18.7	12 53	1 13	1
								1 13	1 33	
								1 33	1 53	

{over.}

Entry Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS					
9:07			1	3.62	B3	3,3	set 0	M.R.	S.W.	MT	S.T.
9:27			2			3,3	Jul. 4 10 set 5	+19.4	+38.7	-07.8	+0.9 <sup>m</sup>
9:47			2			3,3	set 9			sidereal clock stopped.	
10:07			3			3,3	set 0				
10:27		46 01	2			3,3	" 5			spots	10 m
10:47			3			3,3	" 9				
11:07			2			3,3	set 0				
11:27			2			3,3	" 5				
11:47			2			3,3	" 9				
12:07			2+1			3,3	set 0				
12:27			1			3,3	" 5				
12:47			2			3,3	" 9				
1:07			2			3,3	set 0				
1:27			2			3,3	" 5				
1:47			2			3,3	" 9				







Timing Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp	REMARKS
1 <sup>h</sup> 20 <sup>m</sup> W	2	2	124	K0	6	Selling 1
1 <sup>h</sup> 25 W		2	124	K0	6	No comp on filter at setting 6 <sup>-</sup>
1 25 E	46 01	2	379	B3	3-3	spots 2 <sup>m</sup>
1 18 E	30 30	2	5.71	F8	2-2-2	
3 <sup>m</sup> E	31 54	2	7.18	A3	2-2-2	
?	15 06	1	7 19	F0	2-2-2	
14 <sup>m</sup> W	45 25	1	730	G5	2-2-2	
						Had a lot of trouble with focus. lost nearly 3/4 hour.
from 23:30						Low voltage limit on photograph lead
24:17.47		1.4	26.5		12/8	
1 <sup>h</sup> 20 <sup>m</sup> W		4.2	26.20		12/8	
		7	26.25		12/8	



97

Date Wednesday July 6-7, 1938 M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3356 F <sub>2</sub>							21.0 26.5			2
3357	HD. 175785	18 51.9	30 11	I-12	Antia II	.010	21.0 26.3	8 50	10 50	1
3358	178947	19 55	30 24	—	—	—	20.6 25.8	10 52	11 44	2
3359	191879	20 7.0	14 21	—	—	—	20.7 26.1	11 47	12 51	3
Thurs										
① Fixed lights on spect.										
② Took motor for focus to Allerton Armature makers and it is now in place again. handle was mechanical										
③ greased dome turning										
④ There is some point in dome opening mechanism which I could not determine where squeak was. Try to locate										
⑤										

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.
face outside at 26.25			12/8
23E 30 14		3-1	7.31 A0 1-1-1
43E 30 28		2	6.66 B9 1-1-1
29E 14 28		3	7.48 A0 1-1-1

**REMARKS**  
 focus too long set to 26.17.  
 M.C. S.W. M.T. S.T.  
 Jul. 6 10 +17.6 +29.6 -11.4 +1.0  
 Cassagrain focus refused to work fortunately star  
 light clouds great at times seemed in good focus;  
 becoming clear large puffing  
 heavy clouds at 12:55  
 remained thick closed at 2:10  
 cleared slowly later but too late  
 to make it worth opening.  
 Richmond Hill Barn observed as  
 nova with very short-lived  
 maximum.  
 Jul. 7 10 +16.6 +33.5 -13.6 +0.7  
 Best

(they said)

needs grease, being alone  
 to do night

RK

Date *Thursday July 7-8, 1938*, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3359 <sup>a</sup> F <sub>1</sub>							+20.4 +25.6			3
3360	HD. 176938	18 57.5	29 23	I-12	Auto II	1010	+20.3 +25.6	8 55	10 03	4

Friday - July 7-8. M-Hd. - Y

Went to find squawk in shutter opening.  
Lower shutter cable came off pulley. Found squawk, greased it  
and replaced cable after taking up a bit of slack.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS														
					focus a trifle long. Probably should be about 26 1/2.														
				12 8															
					base rechecked														
		+29 27	1	6.64 A0 1-1-1	light clouds at 9.25, thicker at 9.30 lightning in NE image Lost most of time after 9.45 take this as end of exposure x stopped clock and closed dome														
					still thick at 12.15														
					closed up telescope														
					<table border="0"> <tr> <td></td> <td></td> <td>M.P.</td> <td>S.P.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>Jul. 8</td> <td>.6</td> <td>+16.4</td> <td>+34.6</td> <td></td> <td>-16.4</td> <td>+0.4</td> </tr> </table>			M.P.	S.P.	S.W.	M.T.	S.T.	Jul. 8	.6	+16.4	+34.6		-16.4	+0.4
		M.P.	S.P.	S.W.	M.T.	S.T.													
Jul. 8	.6	+16.4	+34.6		-16.4	+0.4													

Date Fri July 8-9 1938 Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Etc
3361	HD 167134	18 08.8	16 14	I-12	Antara II	010	24.4	12 06	1 16	1 54
3362	" 193555	20 15.7	15 13	"	"	"	24.3	1 22	2 52	2 34
3363	" 193556	20 15.7	14 16	"	"	"	24.3	2 56	3 56	2 27
	<i>Focus</i>			"	"	"	24.3			<i>Antara II</i>

clouds and slight rain in evening  
clearing from 11.30

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS																		
1 54 W	16 10	2	7.14	F <sub>s</sub> - 1, 1, 1	panning clouds.																		
1 23 W	15 20	2	7.37	F <sub>s</sub> 1, 1, 1																			
2 27 W	14 23	1	7.12	G <sub>s</sub> 1, 1, 1	some clouds.																		
Outside these base					10/10																		
					<table border="0"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>3W</td> <td>MT</td> <td>ST</td> </tr> <tr> <td></td> <td>S</td> <td>S</td> <td>S</td> <td>S</td> <td>m</td> </tr> <tr> <td>July 9<sup>d</sup> 10<sup>h</sup></td> <td>+15.0</td> <td>+29.5</td> <td>+20.0</td> <td>-18.0</td> <td>+0.3</td> </tr> </table>		MC	SC	3W	MT	ST		S	S	S	S	m	July 9 <sup>d</sup> 10 <sup>h</sup>	+15.0	+29.5	+20.0	-18.0	+0.3
	MC	SC	3W	MT	ST																		
	S	S	S	S	m																		
July 9 <sup>d</sup> 10 <sup>h</sup>	+15.0	+29.5	+20.0	-18.0	+0.3																		

Date Saturday - July 9-10, 1938, M - T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3364	HD. 169820	18 21.4	14 55	I-12	<i>Astron II</i>	010	21.8 27.0	10 44	11 56	1
3365	190537	20 00.2	30 57	-	-	-	21.4 27.1	12 00	1 32	2
3366	194115	20 18.7	15 03	-	-	-	21.4 27.0	1 36		3
										3 46
3366F	Focus									3

*Mon July 11/38* *4d*

*I-12 Astron II 010 19.7*

About 50 visitors - showed after and M13  
with 74-inch. Moon with 4-inch.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS												
16 0	25W	14-56	1	6.73	B9	1-1-1 6 volt on spectrograph off again but found it went on if light on cross wires in finder turned on.												
22 0	22W	31 03	1	6.93	A2	1-1-1												
	18W	15 09	1-0	7.09	A0	1-1 focus at my angle in night despite moon & Cassegrain focusing motor seems gone again.												
						<table border="1"> <thead> <tr> <th></th> <th>MC</th> <th>SC</th> <th>SW</th> <th>MT</th> <th>ST</th> </tr> </thead> <tbody> <tr> <td>Jul 11<sup>d</sup> 13<sup>h</sup></td> <td>+12.5</td> <td>+38.6</td> <td>+33.6</td> <td>-23.5</td> <td>+0.6</td> </tr> </tbody> </table>		MC	SC	SW	MT	ST	Jul 11 <sup>d</sup> 13 <sup>h</sup>	+12.5	+38.6	+33.6	-23.5	+0.6
	MC	SC	SW	MT	ST													
Jul 11 <sup>d</sup> 13 <sup>h</sup>	+12.5	+38.6	+33.6	-23.5	+0.6													
	<i>Outrid there here</i>					<table border="1"> <thead> <tr> <th></th> <th>Focus</th> </tr> </thead> <tbody> <tr> <td>Set 0</td> <td>26.45.20</td> </tr> <tr> <td>" 5</td> <td>26.45.15</td> </tr> <tr> <td>" 9</td> <td>26.48.10</td> </tr> </tbody> </table>		Focus	Set 0	26.45.20	" 5	26.45.15	" 9	26.48.10				
	Focus																	
Set 0	26.45.20																	
" 5	26.45.15																	
" 9	26.48.10																	

Best ~~at~~ would  
be 26.12









Ending Time EST.	Hour Angle End	Declination		Seeing	Ptg. Mag.		REMARKS												
10 35	1 22 E	30	14	2-1	7.31	A0	1-1-1 a few light clouds.												
2 17	0 05 W	16	35	1	7.26	A3	1-1-1												
1 47	0 56 W	30	36	1	6.88	A0	1-1-1												
2 43	0 14 E	44	01	1-2	6.63	A2	1-1-1 temp down about 1° at beginning of this exposure.												
4 03	0 09 W	30	45	1-2	6.52	A0	1-1-1												
							<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>mc</th> <th>sc</th> <th>sw</th> <th>MT</th> <th>ST</th> </tr> </thead> <tbody> <tr> <td>Jul 13<sup>d</sup> 10<sup>h</sup></td> <td>+11.0<sup>s</sup></td> <td>+40.2<sup>s</sup></td> <td>+33.7<sup>s</sup></td> <td>-27.5<sup>s</sup></td> <td>+10.7<sup>m</sup></td> </tr> </tbody> </table>		mc	sc	sw	MT	ST	Jul 13 <sup>d</sup> 10 <sup>h</sup>	+11.0 <sup>s</sup>	+40.2 <sup>s</sup>	+33.7 <sup>s</sup>	-27.5 <sup>s</sup>	+10.7 <sup>m</sup>
	mc	sc	sw	MT	ST														
Jul 13 <sup>d</sup> 10 <sup>h</sup>	+11.0 <sup>s</sup>	+40.2 <sup>s</sup>	+33.7 <sup>s</sup>	-27.5 <sup>s</sup>	+10.7 <sup>m</sup>														

Date Wednesday July 13-14

Y

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3375	HD 162880	17 48.2	44 56	I-12	astrat II	010	21.6	8 51	10 31	4
3376	HD 174621	18 46.3	43 37	"	"	"	21.6	10 36	12 36	1
							21.5			
To put heat on										
1. See that pointer on scale is not in contact										
2. Insert plug for 5 V d.c. current										
3. Put pointer on gently watching needle on galvanometer and adjust position until needle is about 5 divisions to right of centre. Then clamp pointer down.										
4. Throw in 110 V switch and watch for 1 minute to see that heat comes on and off again.										
On closing up 1 <sup>st</sup> throw off 110. Then plug. Then lift pointer										



Date Thurs. July 14-15, 1938 Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>begin end</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Dec
3377	HD. 141930	15 46.6	44 <sup>47</sup> 19	12 1/2	Aslan	010	20.5 20.4	9 43	11 43	2	6 50
3378	" 163966	17 53.8	45 01	"	"	"	20.4 20.4	11 46	1 00	3	17 44
3379	" 176798	18 56.9	43 07	"	"	"	20.4 20.4	1 09	2 29	4	24 3
3380	" 212500	22 19.6	15 48	"	"	"	20.2 20.0	2 36	4 00	1	17 51
	Focus			"	"	"	20.2				17 51

Cloudy earlier

Ending Time  
EST.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS												
W 3 <sup>h</sup> 07	44 47	1	7.57	A <sub>0</sub>	1-1-1												
W 2 <sup>h</sup> 17	44 59	1	6.81	B <sub>9</sub>	1,1,1												
W 1 <sup>h</sup> 24 <sup>3</sup>	43 09	2	7.27	A <sub>3</sub>	1-1-1												
W 51 <sup>m</sup>	15 57	2	7.41	F <sub>2</sub>	1-1-1												
outside this base			12/12														
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>MC</th> <th>SC</th> <th>SW</th> <th>MT</th> <th>ST</th> </tr> </thead> <tbody> <tr> <td>Jul 15<sup>d</sup> 10<sup>h</sup></td> <td>+08.5<sup>s</sup></td> <td>+41.8<sup>s</sup></td> <td>+28.8<sup>s</sup></td> <td>-32.0<sup>s</sup></td> <td>+0.8<sup>m</sup></td> </tr> </tbody> </table>							MC	SC	SW	MT	ST	Jul 15 <sup>d</sup> 10 <sup>h</sup>	+08.5 <sup>s</sup>	+41.8 <sup>s</sup>	+28.8 <sup>s</sup>	-32.0 <sup>s</sup>	+0.8 <sup>m</sup>
	MC	SC	SW	MT	ST												
Jul 15 <sup>d</sup> 10 <sup>h</sup>	+08.5 <sup>s</sup>	+41.8 <sup>s</sup>	+28.8 <sup>s</sup>	-32.0 <sup>s</sup>	+0.8 <sup>m</sup>												



Date *Friday July 15-16, 1938, M-T* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Room</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
3381	HD. 176938	18 57.5	29 23	I-12	astr II	.010	47.4 23.1	8 52	10 02	2	1-2 E 2
3382	179218	19 6.6	15 37	-	-	-	17.3 23.1	10 05	11 22	3	3-3 E 15
3383	191671	20 6.0	27 58	-	-	-	17.4 23.1	11 25	1 57	4	4-4 V 29
3384	" 209833	22 01.1	25 28	-	-	-	17.3 23.0	2 02	2 50	1	2-2 V 15

Sat July 16-17 Hd-T  
 Cloudy. About 25 visitors showed 74"

Sunday July 17-18 M-L cloudy  
 removed camera mirror for shipment to U.S.

mon July 18-19 Partly cloudy - no work Hd-M

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 02	42 E	29 24	1	6.64 A0	1-1-1 set pointer on best control to 16.4 galv middle read 4 right.
1 22	31 E	15 41	1-3	7.13 B9	1-1-1 seeing improved greatly during this exposure.
1 40	06 W	28 05	2-1	7.5 B5	1-1-1 Hazy
2 20	03 W	28 40	2	5.58 A0	1-1-1 Light clouds

Use clamp. had to go off. Checked  
fuses etc but couldn't find trouble and  
after 25 min. no time left for another  
star so shut up left telescope vertical.

	MC	SC	SW	MT	ST
Jul 16 <sup>d</sup> 10 <sup>h</sup>	+07.0 <sup>s</sup>	+42.3 <sup>s</sup>	+27.8 <sup>s</sup>	-33.5 <sup>s</sup>	+0.8 <sup>m</sup>

Set All  
freed commutator of  
dec clamping OK now  
Hd.

Date Tues July 19-20, 1938 M-Hd Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
3385	M 13 (NGC 6205)	16 38.1	36 39	Reuterian	Astra II			9 31	9 41	A	
3386	M 57 (NGC 6720)	18 49.9	32 54	-	-			10 01	10 21	2	10 E 3
3387	NGC 6778	19 13.2	-1 47		E 40			11 21	11 46		
				Wed July 20-21		M-Hd					
				Cloudy all evening							
				Thurs July 21-22		M-Hd					
				Thick clouds							
				Fri July 22-23		Hd-L		blonds and rain			

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS					
					MC	SC	SVV	MT	ST	
7 41	W 32 <sup>m</sup>	36 35		M guiding	Jul 18 <sup>d</sup> 10 <sup>h</sup>	+05.0 <sup>s</sup>	+43.7 <sup>s</sup>	+23.7 <sup>s</sup>	-38.0 <sup>s</sup>	+0.9 <sup>m</sup>
8 24	1 00 E	32 57		Hd "	Jul 19 <sup>d</sup> 10 <sup>h</sup>	+03.0 <sup>s</sup>	+44.5 <sup>s</sup>	+24.5 <sup>s</sup>	-39.5 <sup>s</sup>	+1.0 <sup>m</sup>
4	W 02 <sup>m</sup>	-1 43	focused on slight	M "	Clouds and moonlight latter					
					Jul 20 <sup>d</sup> 10 <sup>h</sup>	+02.0 <sup>s</sup>	+46.1 <sup>s</sup>	+25.1 <sup>s</sup>	-41.5 <sup>s</sup>	+1.0 <sup>m</sup>
					Chronometer reset					
					Jul 20 <sup>d</sup> 10 <sup>h</sup>	+01.0 <sup>s</sup>	+47.1 <sup>s</sup>	+24.6 <sup>s</sup>	+17.0 <sup>s</sup>	+0.1 <sup>m</sup>
					Jul 22 <sup>d</sup> 10 <sup>h</sup>	-00.5 <sup>s</sup>	+48.2 <sup>s</sup>	+25.7 <sup>s</sup>	+15.0 <sup>s</sup>	+0.2 <sup>m</sup>
					Jul 23 <sup>d</sup> 10 <sup>h</sup>	-01.5 <sup>s</sup>	+48.7 <sup>s</sup>	+26.7 <sup>s</sup>	+13.5 <sup>s</sup>	+0.2 <sup>m</sup>

Cassgrain re-aluminized  
Put back on telescope Friday.











Date *July 25-26, Monday, 1938, M* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3401	HD 154974	17 37	16 13	I-12	<i>Reti</i>	010	21.2 27.6	8 44	9 24	3
3402	163966	17 538	45 01	—	—	—	21.1 27.5	9 27	10 31	4
3403	188170	19 488	28 44	—	—	—	21.1 27.5	10 36	11 36	1
3404	191671	20 60	27 58	—	—	—	21.1 27.5	11 41	12 57	2
3405	209205	21 56.5	31 03	—	—	—	21.1 27.5	1 01	2 21	3
3406	211733	22 14.1	15 45	—	—	—	21.1 27.5	2 24	3 18	4
3407	224801	23 55.7	44 42	—	—	—	21.0 27.5	3 23	3 41	1
F							21.1 27.5			
<p><i>July 26-27. Sky remaining mostly cloudy, partially clear at times.</i></p> <p><i>Longworth.</i></p>										

clouds low in NW.

Ending Time EST	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
9 24 3	0 14 W	16 09	3-2	7.17 F8	1-1-1	got wrong star at first. moved to new position Star Hal M.C. J.C. B.W. on plate M.T. S.T. Jul 25 10 -03.6 +49.9 +22.9 +11.0 +0.3
9 31 4	0 31 W	44 58	3	6.81 B9	1-1-1	Zor Hd. clouds over image 9.45 - 10.20
9 36 1	0 19 E	28 49	2	7.17 A0	1-1-1	Image occasionally faint. lightning in northwest.
9 41 2	0 45 W	28 05	2-3	7.5 B5	1-1-1	
9 46 3	0 19 W	31 13	3	7.49 A0	1-1-1	Image faint at times, haze.
9 51 4	0 58 W	15 56	2-3	6.91 A0	1-1-1	occasional haze
9 56 1	0 21 E	44 53	3	6.25 A0p	1-1	thick clouds shortly after exposure started
						base outside 12 8

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Date Wed July 27-28, 1938 Hd-L Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3408	H0178947	19 05.5	30 24	I-12	antna I	010	<sup>above</sup> 19.3 25.6	11 21	11 51	2
3409	" 187255	19 44.0	27 26	"	"	"	19.3 25.4	11 55	01 15	3
3410	" 189706	19 56.3	29 32	"	"	"	25.4	01 44	02 40	4
3411	" 200102	20 56.3	44 36	"	"	"	25.4	02 44	03 00	5

(4)

clearing about 11.00

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS						
51	W 47 <sup>m</sup>	30 27	1	6.66	B9	1.1, 1	For M Jul. 26	10	MC	SC	S.W	N.T. S.T. +09.6 <sup>m</sup> 9
3	1 33 W	27 32	1	7.39	A0	1.1, 1	Jul. 27	10	-06.1	+51.5	+21.5	+04.7 +0.3
	2 47 Y	29 38	1	7.60	A0	1.1, 1	haze, clouded out 12.20, clearing later.					
	2 5 <sup>m</sup> N	49 44	1-2	7.57	G5	1.1	more haze. more clouds thick at 3.00					
							Jul. 28	13	MC	SC	SW	MJ +02.3 ST <sup>m</sup> +0.3



Hour Angle End	Declination	Seeing	Ptg. Mag.		Combs	REMARKS												
21 <sup>m</sup> W	28° 18'	2	7.3	F <sub>2</sub>	1-1-1	scale at 12 2 Fin Dr. Heard												
39 <sup>m</sup> W	28 42	2-1	7.43	A <sub>2</sub>	1-1-1	" "												
56 W	43 37	2	7.53	G <sub>5</sub>	1-1-1	ended exp w/c fog!												
			7.42	F <sub>0</sub>		Fog continued thick till 7:30.												
						<table border="0" style="width: 100%; text-align: center;"> <tr> <td></td> <td>M.E.</td> <td>S.E.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>Jul. 29 10</td> <td>-08.8</td> <td>+52.7</td> <td>+20.7</td> <td>+01.0</td> <td>+0.2</td> </tr> </table>		M.E.	S.E.	S.W.	M.T.	S.T.	Jul. 29 10	-08.8	+52.7	+20.7	+01.0	+0.2
	M.E.	S.E.	S.W.	M.T.	S.T.													
Jul. 29 10	-08.8	+52.7	+20.7	+01.0	+0.2													

Date Fri July 29-30, 1938 hd-7 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature		Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
							above	below			
3415	HD 154974	17 03.7	16 13	I-12	Acta II	010	18.4	26.0	8 26	9 10	1
3416	" 155092	17 04.9	28 23	"	"	"	19.5	26.0	9 13	10 03	2
3417	" 164506	17 56.4	28 45	"	"	"	19.5	26.0	10 06	11 06	3
3418	" 165170	17 59.6	44 15	"	"	"	19.5		11 10	12 16	4
3419	" 163966	17 53.8	45 01	"	"	"	19.6	25.9	12 22	1 02	1
3420	" 198415	20 48.5	46 21	"	"	"	19.6	25.9	1 08	2 08	2
3421	" 210130	22 03.1	12 34	"	"	"	19.6	25.8	2 29	4 07	3
	" 221115										

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
9:10	W 16 <sup>m</sup>	16 10	1	7.17	F <sub>8</sub> 1,1,1	} Found these plates loaded but unlabelled spots?
10:03	W 1 <sup>h</sup> 08	28 18	2	7.33	F <sub>2</sub> 1,1,1	
11:25	W 1 <sup>h</sup> 20	28 42	2	7.43	A <sub>2</sub> 1,1,1	} Numbered correctly? most spectacular aurora numbered 3418 " 3419 " 3420
11:54	W 2 <sup>h</sup> 27	44 13	2	7.56	F <sub>2</sub> 1,1,1	
12:11	W 3 19	45 00	2-3	6.81	B <sub>9</sub> 1,1,1	
2:11	W 1 30	46 29	2	7.28	B <sub>9</sub> 1,1,1	for M α 22 <sup>h</sup> 35 <sup>m</sup>
4:03	W 2 14	12 46	2	7.70	A <sub>5</sub> 1,1,1	Haze (delayed setting on star)

	MC	SC	SW	MT	ST
Jul 30 <sup>d</sup> 10 <sup>h</sup>	-10.0	+53.3	+20.3	-0.5	+0.2

note for R.D.N:  
 These plates are numbered wrongly. Do not letter them till we try to straighten it out.



Date Sat July 30-31, 1938 Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	
3422	HD 164506	17 56.4	28 45	I-12	astray	010	21.2 27.3	10 31	11 31	4
3423	" 165170	17 59.6	44 15	"	"	"	21.2	11 35	0 45	1
3424	" 189706	19 56.3	29 32	"	"	"	20.7 27.1	0 54	2 04	2
3425	" 199479	20 52.4	43 59	"	"	"	20.7 27.1	2 08	2 38	3
3426	" 210130	22 03.1	12 39	"	"	"	20.7 27.2	2 43	4 16	4
<i>Focus test - outside through lens</i>										

130 lots of visitors. He showed d Hers, M 13  
 with 74" T showed moon Venus etc  
 with 4"

Ending Time 2.55	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 31 4	W 1 <sup>h</sup> 48	28 42	2	7.43 A <sub>2</sub>	1, 1, 1
1 35 1	W 3 <sup>h</sup> 00	44 14	2	7.56 F <sub>2</sub>	1, 1, 1
2 04 2	W 2 20	29 37	2-3	7.50 A <sub>0</sub>	1, 1, 1
2 03	W 1 54	44 06	2-3	6.66 B <sub>2</sub>	1, 1, 1
2 06 2	W 2 27	12 44	3	7.70 A <sub>5</sub>	1, 1, 1
	slide:		tilt:		Some haze at 9.45, partly cloudy thereafter.



Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS					
W 9 <sup>m</sup>	16 30	5 → 3	7.44 F <sub>0</sub>	1,1,1					
W 1 <sup>h</sup> 29	28 18	3 → 2	7.33 F <sub>2</sub>	1,1,1					
W 1 <sup>h</sup> 22	32 38	2	6.96 F <sub>5</sub>	1,1,1	Brilliant aurora - streamers & curtains,				
1 52 W	44 11	2	7.46 A <sub>5</sub>	1,1,1	Hazy				
2 43 W	45 12	2	7.12 F <sub>0</sub>	1-1-1	Hazy				
2 36 W	29 08	2	7.42 B <sub>1</sub>	1-1-1					
2 55 W	30 20	2-1	7.46 B <sub>0</sub>	1-1-1					
2 42 W	14 57	2-1	6.73 A <sub>0</sub>	1-1-1					
					M.P.	S.P.	S.W.	M.T.	S.T.
					Aug 2 10	-11.0	+57.3	+17.9	-05.8 +0.4

Date Tuesday Aug 2-3, 1938, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>slow below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3435	HD. 176209	18 54.1	45 43	I-12	Ret II	1010	23.7 29.8	8 27	9 27	1
3436	" 187613 N	19 45.8	44 07	—	—	—	23.8 29.8	9 30	10 42	2
3437	" 187613 S	19 45.8	44 07	—	—	—	24.0 30.0	10 42	00 00	3
3438	" 191879	20 07.0	14 21	"	"	"	24.0 30.0	00 04	01 18	4
3439	" 210090	22 02.8	17 32	"	"	"	24.0 30.0	01 23	02 13	5
3440	" 217587	22 56.7	43 39	"	"	"	24.0 30.0	02 14	03 11	6
3441	" 218472	23 03.2	50 55	"	"	"	24.0 30.0	03 16	04 10	7
	Free Test				Outside	through	base			

Reading Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS																		
1 21	1 02 E	45 47	1-2	7.21 A <sub>0</sub>	1-1-1 set points to 21.25																		
1 22	0 38 E	44 13	2	7.6 B <sub>8</sub>	1-1-1																		
1 30	0 40 W	47 14	2	7.4 B <sub>8</sub>	1-1-1																		
1 36	1 36 W	14 27	2	7.48 A <sub>0</sub>	1-1-1																		
1 38	0 35 W	17 42	2-3	7.78 M <sub>a</sub>	1-1-1																		
1 40	1 40 W	43 51	3-4	7.33 A <sub>3</sub>	1-1-1																		
1 52	1 32 W	31 06	3-4	7.34 A <sub>e</sub>	1-1-1 set 2 1/2																		
				7-10	" 7 1/2																		
					<table border="0" style="width: 100%; text-align: center;"> <tr> <td></td> <td>MC</td> <td>S.E.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T</td> </tr> <tr> <td>Aug. 3</td> <td>10</td> <td>- 15.5</td> <td>+ 54.6</td> <td>+ 12.6</td> <td>- 07.6</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+ 0.4</td> </tr> </table>		MC	S.E.	S.W.	M.T.	S.T	Aug. 3	10	- 15.5	+ 54.6	+ 12.6	- 07.6						+ 0.4
	MC	S.E.	S.W.	M.T.	S.T																		
Aug. 3	10	- 15.5	+ 54.6	+ 12.6	- 07.6																		
					+ 0.4																		







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Date Thursday - Aug 4-5, 1938 M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature		Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
							Above	Below				
3450	HD. 178568	19 40	14 17	I-12	astro II	.010	23.6	29.7	8 22	9 22	4	10 E 1
3451	190047	19 58.0	30 50	-	-	-	23.6	29.6	9 24	10 12	1	10 E 3
3452	191048	20 02.8	15 47	-	-	-	23.7	29.8	10 15	11 41	2	10 W 15
3453	202644	21 12.1	13 32	-	-	-	23.7	29.7	11 46	01 24	4	10 E 13
3454	209484	21 58.7	29 44	-	-	-	23.8	29.8	01 28	02 08	1	10 W 2
3455	211733	22 14.1	15 45	-	-	-	23.7	29.8	02 32	03 26	2	10 E 1
3456	222922	23 34.8	43 11	-	-	-	23.6	29.9	03 32	04 22	5	10 E 2

①

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS												
7:22	1 10 E	14 22	1-0	6.72	B9	1-1-1 set pointer to 21.25												
7:21	1 13 E	30 56	1-0	6.55	B8	Bright quiescent auroral arc noted in north about 10:30, later 11:30 showing appreciable ray structure. 30 rays at times in north up to 25°K.												
11:41	0 11 W	15 54	0	7.46	B9		1-1-1											
11:24	0 45 W	13 42	0-1	7.37	B8	1-1-1												
11:22	1 03 W	29 43	1-	6.79	B9	1-1-1												
11:21	1 46 W	15 56	1-2-3	6.91	A0	1-1-1												
11:20	1 16 W	43 24	2-3	6.82	A0	1-1-1												
<table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td>M.P.</td> <td>S.E.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>Aug 5</td> <td>13</td> <td>-18.3</td> <td>+55.9</td> <td>+13.3</td> <td>-11.0 +0.4<sup>mv</sup></td> </tr> </table>								M.P.	S.E.	S.W.	M.T.	S.T.	Aug 5	13	-18.3	+55.9	+13.3	-11.0 +0.4 <sup>mv</sup>
	M.P.	S.E.	S.W.	M.T.	S.T.													
Aug 5	13	-18.3	+55.9	+13.3	-11.0 +0.4 <sup>mv</sup>													





Date Saturday, Aug 6-7, 1938 M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
							above C <sub>2</sub> bar			
3458	HD 189086	19 53.2	30 30	I-12	2144	010	19.8 26.0	10 27	11 05	2
3459	198414	20 45.1	45 05	—	—	—	19.7 26.0	11 08	11 52	4
3460	199206	20 50.6	44 44	—	—	—	19.7 26.0	11 54	00 38	1
3461	207431	21 43.8	43 32	—	—	—	19.8 26.1	00 44	01 36	2
3462	209205	21 56.5	31 03	—	—	—	19.8 26.1	01 43	02 53	3
3463	215566	22 41.0	44 14	—	—	—	19.7 26.0	03 00	03 36	4
3464	218097	23 00.2	32 50	—	—	—	19.8 26.0	03 40	04 30	1
				Focus Test			outside the C <sub>2</sub> bar			

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	0 07 E	30 36	2-4	6.88 A0	1-1-1 About 200+ visitors Showed Moon and Plynni with 74", Venus, Jupiter, etc with 4" set pointer to 18.6
11 24	0 11 E	45 14	4	7.47 A0	1-1-1
12 10	0 29 W	44 51	4	7.40 B9	1-1-1
13 20	0 34 W	43 42	3	7.58 A0	1-1-1
14 35	1 34 W	31 13	3-2	7.49 A0	1-1-1
15 41	1 36 W	44 26	2-3	7.02 B9	1-1-1
16 52	1 22 W	33 02	2	7.28 A0	1-1-1 Appeared under table side (in (forgot to put up sign - 5:00 - 5:45)
	Acis 2610	Tid 14.50			

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Plates for M

Date Sunday, August 7-8, 1938 - L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3465	HD 195785	18 61.9	30 11	I-12 $\frac{1}{2}$	Astra II	set .010	above below 24.2 30.0	20 32	22 12	1
3466	" 190047	19 58.0	30 50	"	"	"	"	22 17	22 50	2
Monday, Aug 8-9, 1938 M + (T, P, N)										
3466 S <sub>1</sub>	Used two apertures on cellarside of cassegrain about 20" X 15"			I-12	Astra II	.060		11.30		1
3466 S <sub>2</sub>	Set object in front of this at 45° angle. Sky cloudy most of time. Deployed mirror to a distance of 55"			-	-	-				2
3466 S <sub>3</sub>	and we red reversed portion of end of telescope with black paper.			-	-	-		2.30		2

Set needle at 21.55

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 <sup>05</sup> W	30 13	0-1	7.31 A0 1-1-1	etc. difficult to find in haze.
0 <sup>23</sup> E	30 56	0	6.55 B8 1-1-	cam focusing gave out, focus becoming sky filled in solidly at 22.50. Cloud up at 1.30, sky thick. Checked cam focusing and it works at present.

Exposure battery

15	-15	white card	filter	strip 1202 with spots 60
30	0	"	38A	filter 38A
60	+10	"	38A	scale 15
120	+1.5	"	38A	strip 5 m with filter (lowered light)
10	-5	white card	38A	scale 75
5	0	"		
30	+5	"		
15	1.5	Earth		
5	2.0			
	2.5			
	3.0			

16	-0.5	16	4.0	Leaves	Leaves	Filter 38A
8	0.0	8	4.5	white card	white card	
32	+0.5			Earth		
16	+1.0			Leaves		strip 10 m.
8	+1.5			white card		scale 45
5	2.0			Earth		
5	2.5			Leaves		
5	3.0			white card		



Date *contd* *Aug 8-9* *M* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
3466 54				I-12	Astron D	060				2
3466 55				—	—	—				1
3466 56				—	—	—				

Hour Angle

50

40

30

20

10

0

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

190

200

210

220

230

240

250

260

270

280

290

300

310

320

330

340

350

360

370

380

390

400

410

420

430

440

450

146

Aug. 8

10<sup>h</sup>M.E.  
-22.3

S.E.

S.W.

M.T.

S.T.

-01.7  
adv. 1<sup>m</sup>

+08.1

-19.2

+0.5

Ending Time  
E.S.T.

Hour Angle

Declination

Seeing

Ptg. Mag.

REMARKS

Hour Angle	Declination	Seeing	Ptg. Mag.	REMARKS
10 2	leaves	-0.5		steps 10 m + scale 45 R.
10	paper	1.0		
30	earth	+1.5		
10	leaves	1.0		
10	paper	1.5		
30	earth	2.0		
10	leaves	2.0		
10	paper	3.0		
30	earth	3.0		
10	leaves	4.0		
10	paper	4.0		
40 2	leaves	-0.5		steps 10 m + scale 45 R.
4	paper	0		
40	earth			
40	leaves			
4	paper			
40	earth			
40	leaves			
4	paper			
40	earth			
80	leaves			
5	paper	4.5		
80	leaves	-0.5		steps 10 m + scale 45 R.
5	paper	0		
60	earth			
70	leaves			
5	paper			
60	earth			
40	leaves			
30	earth			
40	leaves			
3	paper			
30	earth	4.5		

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Date *Tuesday, Aug 8-9, 1938* M.

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Silt	Temperature <i>about focus</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3467	HD. 169247	18 18.7	14 39	I-12	Astra II	0.010	20.3 26.7	20 16	20 52	3
3468	178568	19 40	14 17	—	—	—	20.3 26.6	20 54	21 42	4
3469	188651	19 51.1	29 56	—	—	—	20.3 26.6	21 45	22 15	1
3470	190537	20 08.3	30 57	—	—	—	20.2 26.6	22 17	22 55	2
3471	194115	20 18.7	15 03	—	—	—	20.3 26.6	22 57	23 43	3
3472	207431	21 43.8	43 32	—	—	—	20.2 26.6	23 46	00 44	4
3473	208835	21 53.9	46 23	—	—	—	20.2 26.6	00 46	1 36	1
3474	209484	21 58.7	29 44	—	—	—	20.2 26.6	1 41	2 15	2
3475	210661	22 6.8	28 45	—	—	—	20.2 26.6	2 17	3 11	3
3476	217477	22 55.9	30 33	—	—	—	20.2 26.6	3 13	3 39	4
3477	224801	23 55.7	44 42	—	—	—	20.2 26.6	3 42	4 00	1
3478	3 00 00.0	44 40	—	—	—	—	20.2 26.6	4 02	4 30	2
				<i>Trans. test.</i>						

(12)

set pointer to 19.0

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.
22 30	39 E	14 41	1	6.67 B9 1-1-1
22 42 40	34 E	14 20	1-0	6.72 B9 1-1-1
22 15 10	48 E	30 03	1	6.34 B9 1-1-1
22 55 20	17 E	31 05	1-2	6.93 A2 1-1-1
23 00 00	13 W	15 10	2	7.09 A0 1-1-1
23 00 00	11 E	40 42	2-3	7.58 A0 1-1-1
1 06 10	31 W	46 35	2-3	7.39 A0 1-1-1
2 05 10	05 W	29 53	2-3	6.99 B9 1-1-1
3 00 10	53 W	28 57	3-2	7.50 A2 1-1-1
3 39 40	32 W	30 45	2	6.52 A0 1-1-1
2 00 10	53 W	44 54	2	6.25 Ap 1-1-1
2 50 10	19 W	44 53	2	6.51 A0 1-1-1

mass focusing gave trouble for while, couldn't work initially for a while

low altitude

12  
8

	M.P.	S.E.	S.W.	M.T.	ST.
Aug. 9 10	-23.5	-00.5	+05.5	-21.0	+0.5 <sup>m</sup>

Date Tuesday, Aug 9-10, 1938, M - T Julian Day

Plate No.	Object	R.A.		Declination		Instrument	Emulsion	Slit	Temperature		Starting Time		Ending Time		Hour Angle End
		1900		1900					Above	Below	E.S.T.		E.S.T.		
3479	HD 15 75 82	17	19.0	17	00	I-12	Astro II	.010	21.1	27.5	20	21	21	51	3
3480	1876135	19	45.8	44	07	—	—	—	21.2	27.3	21	54	22	56	4
3481	193349	20	14.7	14	04	—	—	—	21.2	27.4	22	59	23	41	1
3482	193707	20	16.6	14	48	—	—	—	21.2	27.3	23	43	00	13	2
3483	202644	21	12.1	13	32	—	—	—	21.2	27.3	00	16	01	40	3
3484	209833	22	01.1	25	28	—	—	—	20.6	27.2	02	07	02	31	4
3485	210646	22	06.7	27	14	—	—	—	20.7	27.2	02	36	04	02	1
<p>Wednesday Aug 10-10. Occasional rain, quite steady thunderstorms on horizon.</p>															

set pointer to 19:55

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS																					
21:57	1 24W	16 58	1	7.59	A0	1-1-1 set focus to 26.14, image faint owing to turbulence. checked later																					
22:20	0 03W	44 12	2	7.5	B8	1-1-1																					
22:41	0 19W	14 10	2	6.86	A0	1-1-1 haze pretty general at 23:15-																					
23:03	0 49W	14 55	2-1	6.56	A0	1-1-1 note - some very much 2000																					
23:23	1 21W	13 41	1	7.37	B8	1-1-1 Haze seen on part of C																					
23:41	1 24W	28 40	2-1	5.55	A	1-1-1 Thick haze prevented taking photo intended on brighter one taken. Haze cleared finally about 23:45.																					
23:52	2 49W	27 25	1-2	7.07	A0	1-1-1 checked auxiliary filter on camera with eye. blue - Field dark, not visible. Haze is thick to get another exposure																					
<table style="width: 100%; border: none;"> <thead> <tr> <th></th> <th></th> <th>M.E.</th> <th>S.E.</th> <th>SW.</th> <th>M.T.</th> <th>S.T.</th> </tr> </thead> <tbody> <tr> <td>Aug 10</td> <td>10</td> <td>-24.4</td> <td>+00.8</td> <td>+04.0</td> <td>-22.8</td> <td>+0.5</td> </tr> <tr> <td>Aug 11</td> <td>10</td> <td>-25.5</td> <td>+01.6</td> <td>+00.6</td> <td>-24.2</td> <td>+0.4</td> </tr> </tbody> </table>									M.E.	S.E.	SW.	M.T.	S.T.	Aug 10	10	-24.4	+00.8	+04.0	-22.8	+0.5	Aug 11	10	-25.5	+01.6	+00.6	-24.2	+0.4
		M.E.	S.E.	SW.	M.T.	S.T.																					
Aug 10	10	-24.4	+00.8	+04.0	-22.8	+0.5																					
Aug 11	10	-25.5	+01.6	+00.6	-24.2	+0.4																					

Date *Thurs Aug 11-12, 1938* Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
3486	4D 176798	18 56.9	43 07	2-12	Antara 2	210	17.0	10 25	11 41	2	11454
3487	176131	18 53.7	46 37	"	"	"	17.0	11 44	12 26	3	11454
3488	21430	22 03.1	12 34	-	-	-	16.9 22.8	<del>12</del> 31	01 31	4	11454
3489	212442	22 19.2	14 46	-	-	-	16.8 22.7	01 35	02 05	1	11454
3490	219110	23 05.3	28 54	-	-	-	16.7 22.7	02 10	02 46	2	11454
3491	220091	23 15.4	16 43	-	-	-	16.8 22.4	02 50	03 18	3	11454
3492	222900	23 24.6	45 44	-	-	-	16.6 22.8	03 24	04 30	4	11454
							Focus Inst. date				

Truck till 10.00 then broken.

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS												
11:45	43 10	1	7.27	A <sub>3</sub> 1,1,1 Clouds at Transit												
12:34 W	46 40	1-2	7.14	A <sub>2</sub> 1,1,1												
12:29 W	12 45	2	7.70	A <sub>5</sub> 1,1,1												
1:46 W	14 58	1-2	6.23	A <sub>0</sub> 1-1-1												
2:39 W	29 05	2-3	7.34	K <sub>0</sub> 1-1-1												
3:03 W	16 54	2	6.23	F <sub>0</sub> 1-1-1												
4:52 W	46 02	2-1	7.45	A <sub>0</sub> 1-1-1												
Tilt 19.48	26.17															
				<table border="0"> <tr> <td></td> <td>M.C.</td> <td>S.E.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T. m</td> </tr> <tr> <td>Aug 12 10</td> <td>-26.7</td> <td>+02.4</td> <td>-02.6</td> <td>-25.6</td> <td>+0.5</td> </tr> </table>		M.C.	S.E.	S.W.	M.T.	S.T. m	Aug 12 10	-26.7	+02.4	-02.6	-25.6	+0.5
	M.C.	S.E.	S.W.	M.T.	S.T. m											
Aug 12 10	-26.7	+02.4	-02.6	-25.6	+0.5											



Date Fri Aug 12-13, 1938 Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3493	HD 155092	17 04.4	28 23	2.12	antoni	010	18.4 24.4	8 05	9 25	1
3494	163966	17 53.8	45 01	"	"	"	18.4	9 29	10 13	2
3495	165170	17 59.6	44 15	"	"	"	18.4	10 <sup>19</sup> <del>16</del>	12 05	3
3496	193555	20 15.7	15 13	"	"	"	18.1	00 31	01 33	4
3497	21 0130	22 03.1	12 34	"	"	"	18.2 24.4	01 36	03 16	1
3498	1667	00 15.8	12 13	"	"	"	18.2 24.4	03 20		

Thermotat set at 17.6 on scale. 154

Ending Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
8:25	W1 <sup>h</sup> 25	28 18	4 → 2	7.33 F <sub>2</sub> 1,1,1	Quite cloudy from 8.30. Call mid exp. 8.25
10:32	W1 <sup>h</sup> 25	44 59	2	6.81 B <sub>9</sub> 1,1,1	Some clouds
12:5	W3 <sup>h</sup> 11	44 13	2	7.56 F <sub>2</sub> 1,1,1	" "
1:3	N2 <sup>x</sup> 13	15 19	3	7.37 F <sub>8</sub> 1-1-1	Clouds delayed entering clouds beginning to
2:0	N2 17	12 44	3 2	7.70 A <sub>5</sub> 1-1-1	Cloud part exp <u>not</u> mobile? half of exp done
		12 23	2	7.51 A <sub>2</sub> 1-	Thick clouds 3.30 Nanga following 3.45 to start (Put this part in file)

	MR.	S.C.	SW.	H.T.	S.T.
Aug 13 10	-27.9	+03.1	-03.9	-27.0	+0.4

Best ↑

How can it be? Are 3097  
and 3098 numbered correctly?  
Judging from comp. yes.  
JTB

Date Sat Aug 13-14, 1938 Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Time
3499	172976	18 38.0	44 10	I-12	Auto I	010	20.5 26.8	10 16	11 14	3
3500	126131	18 53.7	46 40	"	"	"	20.4	11 26	00 19	4
3501	189706	19 50.3	29 32	"	"	"	19.8	00 22	02 22	1
3502	212442	22 19.2	14 46	"	"	"	19.8 26.3	02 38	04 22	2
							Focus Test			

set thermostat pointer at 18.9

about 100 visitors showed at Hale, 156  
 Ring neb, M13, with 74". T showed  
 Venus, Jup. moon with 4".

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
1 4	W 1 <sup>h</sup> 45	44 12	2 → 3	7.46	A5 1,1,1	Gas focusing motor getting worse.
0 10	2 29	46 41	2	7.14	A2 1,1,1	Trouble with dec. setting.
0 10	V 3 45	29 38	2	7.50	A0 1,1,1	Hayes at 105, thickened water dumped at 2
0 10	V 3 12	14 57	2	6.73	A0 1-1-1	Partly done, 2 45, info on set down 3 57
	Focus 26.17, Tilt 14.48					

157

Plates for M.

Date Sunday, Aug 14-15, 1938, -L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit <sup>39</sup>	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Est	
3503	HD 156341	17 11.9	16 47	I-12 $\frac{1}{2}$	Astron II	set .010	Above Below 21.6 27.5	20 31	21 31	3	
3504	" 169169	18 18.3	14 57	"	"	"	21.5 27.5	21 36	22 36	4	
3505	" 169820	18 21.4	14 55	"	"	"	" "	22 38	23 14	1	
3506	" 188170	19 48.9	28 44	"	"	"	" "	23 21	00 41	2	
3507	" 199961	20 42.0	46 00	"	"	"	" "	00 45	01 39	3	
3508	" 208174	21 49.4	27 53	"	"	"	" "	01 43	02 43	4	
3509	" 215242	22 33.7	46 38	"	"	"	" "	02 30	03 15	1	
3510	" 218418	23 07.9	29 31	"	"	"	" "	03 30	04 30	2	
		Mon Aug 15/38				Hd					
		I-12 focus was 26.18				Tilt 19.45					
Changed to I-25											
3510F	Focus			I-25	Astron II	.010	21.2 27.2			2	
		Mon & Tues Aug 15-17				Rain		Hd L.			

⑧

Set pointer at 19.5

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
1 <sup>30</sup> W	16 42	2-3	7.5	A <sub>0</sub> 1-1-1	Delayed by Cass focussing.
1 <sup>29</sup> W	14 57	2	7.4	A <sub>2</sub> 1-1-1	
2 <sup>04</sup> W	14 56	2-1	6.43	B <sub>9</sub> 1-1-1	
2 <sup>04</sup> W	28 47	1	7.17	A <sub>0</sub> 1-1-1	from becoming poor tried unsuccessfully to reform into refuse to turn over
2 <sup>09</sup> W	46 07	1	6.63	A <sub>0</sub> 1-1-1	
2 <sup>00</sup> W	28 02	1	6.77	A <sub>2</sub> 1-1-1	after turning over by hand.
2 <sup>51</sup> W	46 50	2	6.7	B <sub>9</sub> 1-1-1	haze during 3506 was increasing
2 <sup>24</sup> W	28 41	2-3	7.23	B <sub>9</sub> 1-1-1	image unsteady haze condition greatly improved on 3521 focusing again working on haze

	M.C.	S.C.	S.W.	M.T.	S.T.
Aug 15 12	-30.6	+03.0	-07.2	-42.5	+0.5 <sup>m</sup>
Set 1	23.1				
6	23.3				
9	23.5				
Aug 16 10	-32.3	+03.4	-09.3	-44.3	+0.5 <sup>m</sup>

Inside third base no filter 3/3

	MC	SC	SW	MT	ST
Aug 17 12	-33.7	+04.0	-11.3	-46.1	+0.4 <sup>m</sup>
				23.22	

Tilt 23.15

would be best  
Aug 16 10 -32.3 +03.4 -09.3 -44.3 +0.5<sup>m</sup>









Set thermostat pointer at 18.6

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
W 7 <sup>m</sup>	+4 22	3	4.8	B50c 3,3,3	Passing clouds all the time
W 1 <sup>h</sup> 09	25 1	4	6.9	B50e 3,3,3	
W 1 <sup>h</sup> 38	18 9	4-5	6.9	B950c 3,3,3	very muddy.
W 0 <sup>h</sup> 53	36 15	5	4.5	B6e 3,3,3	
			2	Bop <sup>no filter</sup> 8,8,8	setting 1
			"	" 8,8	Setting 5
				" 9	Setting 9
3 09E		5		B50c 8,8	
0 <sup>h</sup> 24E		5	5.2	B50c 3,3,3	Trouble with dew setting again
0 20W	38 21	5	6.4	B50c 3,3,3	
0 14W	46 02	5	6.5	B50c 3,3,3	
0 03W	65 36	5-4	7.1	B50c 3,3,3	
Tilt 23.19		Focus 23.22			
Autofocus here			10/10	set 1 Focus 26.10	} TILT 19.45
				" 5 " 26.20	
-6.17 best.					



Cloudy earlier.  
Set thermostat pointer at 20.6

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS						
						MC	SC	SW	MT	ST		
1 00	W 1 <sup>h</sup> 35	43 10	0	7.27	AS	2, 1	Aug 19 <sup>d</sup> 12 <sup>h</sup>	-36.0 <sup>s</sup>	+07.8 <sup>s</sup>	-13.2 <sup>s</sup>	-51.0 <sup>s</sup>	+0.6 <sup>m</sup>
0 54	W 2 02	27 31	1	7.34	AO	1, 1, 1						
0 42	W 1 15	57 27	1-2	7.0	Bome	1, 1, 1	Light haze					
0 31	W 2 21	42 25	1-2	7.1	Bome	1, 1, 1	Haze					
0 20	W 1 08	55 19	2	7.6	Bic	1, 1, 1	Occasional haze					
0 10	W 0 23	62 59	3-4	7.5	Bssw	1, 1, 1	Clouds, delayed setting slightly. Seeing improved, good detail in last half of night					
0 00	W 0 56	16 36	4	7.59	Gas	1, 1, 1						
							Aug 20 <sup>d</sup> 10 <sup>h</sup>	-37.0 <sup>s</sup>	+07.0 <sup>s</sup>	-17.0 <sup>s</sup>	-53.0 <sup>s</sup>	+0.6 <sup>m</sup>



About 30 visitors, alternating cloudy and clear. Several Ploggi, M13, M57 with 4" Jupiter etc with 4".

Set pointer first to 20.2, temp. apparently rising as found as brought out of sight to self. 15 minutes later reset to 20.45. Left 110 with circuit off temp. and...

Ending Time  
L.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
1 47 W	15 54	3-2	7.48	A2	1-1-1 quite large near horizon image faint
2 37 W	15 51	2	6.68	B9	1-1-1 large worse, image very faint at times
1 43 W	28 01	2-3	6.77	A2	1-1-1 somewhat large at faint
2 50 W	27 25	2	7.07	A0	1-1-1 Thick at 2.20 closed partly at 2.50
1 40 W	46 00	3-2	6.82	B9	1-1-1 light haze at 2.40
1 32 W	47 24	2	7.03	A2	1-1-1 some haze at start



Cloudy earlier with occasional breaks  
 set thermostat pointer at 18.3 168

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
2 <sup>14</sup> W	27 32	1	7.34	A <sub>0</sub> 1,1-1	
1 <sup>29</sup> W	61 33	1	6.6	B <sub>0</sub> 1-1-1	(overexposed)
			5.2	B <sub>0</sub> 3	set on this star, but too many stars in field to make identity certain.
	65 37	1	5.1	B <sub>0</sub> 1-1	light clouds, thick at times They hopeless, about at 2.45

$\begin{matrix} MC & SC & SV & MT & ST \\ \hline \end{matrix}$   
 Aug 22<sup>d</sup> 10<sup>h</sup> -39.5<sup>s</sup> +07.9<sup>s</sup> -19.1<sup>s</sup> -57.0<sup>s</sup> +0.6<sup>m</sup>



Date Monday, Aug 22-23, 1938, M

Julian Day

Plate No.	Object	R.A.		Declination		Instrument	Emulsion	Slit	Temperature		Starting Time		Ending Time		Hour Angle End
		1900		1900					Above	Below	E.S.T.		E.S.T.		
3537	HD 176209	18	54.1	45	43	I-12	Astro II	10 10	21.0	27.1	19	59	21	12	2
3538	182381	19	19.3	15	49	-	-	-	20.9	27.1	21	16	22	46	3
3539	190047	19	58.0	30	50	-	-	-	20.8	27.0	22	52	23	26	4
3540	198414	20	45.1	45	05	-	-	-	20.8	27.0	23	32	0	38	1
3541	209833	22	1.1	28	28	-	-	-	20.8	27.0	0	42	0	56	2
3542	210646	22	67	27	14	-	-	-	20.7	27.0	1	00	1	48	3
3543	218097	23	0.2	32	50	-	-	-	20.7	27.0	1	52	3	12	4
3544	2019	0	19.4	30	49	-	-	-	20.7	27.0	3	15	3	59	1
3545	2411	0	22.8	17	21	-	-	-	20.7	27.0	4	03	4	49	2

set pointer 1975

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 01 W	45 46	2	7.21 A0	1-1-1 light clouds over most of sky at start <sup>image faint</sup> close to
1 10 W	15 52	2-1	7.48 A2	1-1-1 image faint, faint arc at 11 hrs 11 mins
1 11 W	30 56	1	6.23 B8	1-1-1
1 36 W	45 13	1-2	7.77 A0	1-1-1
2 38 W	28 38	2	5.58 A0	1-1-1 telescope seems to be getting still fainter balance in dec. usually at 10 north by about 2° stars greatly helping out
1 25 W	27 24	2	7.07 A0	1-1-1
1 56 W	33 02	1	(7.28) A0	1-1-1
1 23 W	31 01	1-2	6.78 B9	1-1-1
2 10 W	17 33	1	6.68 M6	1-1-1 several rays still visible behind clouds in N image faint in clouds at 4 45

finder short at low.

	MC	SC	SW	MT	ST
Aug 23 <sup>d</sup> 10 <sup>h</sup>	-41.0	+8.8	-19.2	-58.0	+0.6



set thermostat pointer at 18.2

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS												
W 44 <sup>m</sup>	13 20	1	6.10 A <sub>5</sub> 1,1,1	Thick at 11.00 Call middle 10.46												
1 31 W	38 21	0-1	6.4 B <sub>3nc</sub> 1-1-1	Cloud 11.25												
0 55 W	65 37	0-1	7.1 B <sub>sep</sub> 1-1-1	Partially cleared a couple of times. Then definitely cleared about 1.10 * 35.47, clear, more clear												
				<table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>SW</td> <td>MT</td> <td>ST</td> </tr> <tr> <td>Aug 24<sup>d</sup> 10<sup>h</sup></td> <td>-42.0</td> <td>+09.0</td> <td>-20.0</td> <td>-60.5</td> <td>+0.8</td> </tr> </table>		MC	SC	SW	MT	ST	Aug 24 <sup>d</sup> 10 <sup>h</sup>	-42.0	+09.0	-20.0	-60.5	+0.8
	MC	SC	SW	MT	ST											
Aug 24 <sup>d</sup> 10 <sup>h</sup>	-42.0	+09.0	-20.0	-60.5	+0.8											

Plates for M.

Date Wednesday Aug 24-25, 1935 L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Est.	D
3549	HD 189056	19 532	30 30	I-12 $\frac{1}{2}$	Astron II	Slit .010	14.9 203	23 08	00 23	2	
3550	204431	20 438	43 36				"	20 26	00 20	3	
	" 215562										
				<p>Thurs Aug 25 Hdd &amp; M rearranged weights for better balance in dec<sup>u</sup></p> <p>I-12 focus was 26.17, Tilt 19.45</p> <p>Changed to I-25</p>							
3550F	Focus			I-25	Astron II	.010	above 12.0			3	
3550T	sky			"	"	"	"				
3550T	sky			"	"	"	"			4	





Clearing 10.15 →

Hour Angle End	Declination	Seeing	Ptg. Mag.	Filter	Setting	REMARKS
12 45 W 22	14 20	1	6.64	F5	333+	
		2	2	Bop	16	Arc went dead except for very feeble spark. Removed and inspected resistance bulbs. Then it was O.K.!
				"	8.8	
				"	16	
12 53 E 2 40	62 34	2	4.2	Bose	9	set 2
12 32 E 2 00					9	" 7
12 11 W 1 11			5.8	B370	3, 3, 13	
12 25 W 1 25	48 19	2-3.1	5.2	Bose	3, 3, 3	Clear 1.17 - Completely the same as stopped before light from a very faint star.

Outside the base  
Focus 26.17 Tilt 19.45

Then 2 spots are particularly  
superficial - etc.

d	h	nc	sc	s10	MT	ST
Aug 26	10	-45.0	+10.1	-23.4	-04.5	+1.1



Date Friday, Aug 26-27, 1938 M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Etc	D
3556	HD 175785	18 51.9	30 11	I-12	Astrat II	.010	16.0 22.2	8 39	9 29 2	37.11	3
3557	179218	19 6.6	15 37	-	-	-	16.0 22.1	9 33	10 15 3	38.11	1
3558	191879	20 7.0	14 21	-	-	-	16.0 22.1	10 18	11 40 4	39.11	1
3559	215566	22 41.0	44 19	-	-	-	15.2 21.2	02 11	02 38 1	6.11	4
3560	218767	23 05.5	31 57	-	-	-	15.1	02 40	03 16 2	7.11	2
3561	222922	23 39.8	43 11	-	-	-	15.1	03 20	03 48 3	8.11	2
3562	9996	01 32.5	49 59	-	-	-	14.9	04 16	04 50 4	9.11	4

at center to 159

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Remarks
9:37	0 37W	30 14	2-3	7.31 A0	1-1-1 Clouds at first delayed opening. Trace at lower during opening.
10:05	1 08W	15 41	3	7.13 B9	1-1-1
11:00	1 32W	14 28	3-1	7.48 A0	1-1-1 some haze thick at 11:55 clear again 11:30 thick at 9:30, all 11:10 end of opening.
0-38	1 56W	44 25	2-3	7.02 B9	1-1-1 Thick scattered dome. Scattered patches of faint light at 1:50
1:00	2 11W	32 08	2-1	6.87 B9	1-1-1 Partly pointed 1:53
1:30	2 08W	43 24	1-2	6.72 A0	1-1-1
2:00	1 17W	45 05	2	6.34 A0	1-1-1 Clouds changed then setting. Partly cloudy during setting.

	MC	SC	SW	MT	ST
	S	S	S	S	m
Aug 27 <sup>d</sup> 10 <sup>h</sup>	-46.0	+10.1	-28.9	-06	+1.1

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Date Saturday August 27-28 1928 H-T Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3563	HD 199 837	20 54.6	+31 15	T-12	Actin II	010	<sup>above Belin</sup> 17.0 23.0	22 22	23 17	1
3564	200 877	21 01.1	+14 56	"	"	"	17.0 23.2	23 20	00 00	2
3565	203 551	21 17.8 18.0	+60 15	"	"	"	16.8	00 10	00 47	3
3566	<sup>4</sup> 203 574	21 15.0	+60 21	"	"	"	17.0	00 45	01 17	4
3567	204 839	21 26.5	+61 00	"	"	"	16.9	01 21	02 09	1
3568	206 842	21 39.7	+58 48	"	"	"	17.0	02 14	02 45	2
<del>3569</del>	<del>221 237</del>	<del>23 25.2</del>	<del>58 01</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>17.0</del>	<del>02 52</del>		
3569	221 237	23 25.2	58 01	"	"	"	17.0	03 13	03 57	4
	5408	00 50.8	59 50	"	"	"				
3570	5454	00 51.8	60 53	"	"	"	16.9	04 02	04 40	1

About 65<sup>(?)</sup> stars. H observed M13,  $\beta$  Cyg, NGC 6126  
 T observed Venus, Jupiter, Saturn  
 180

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
0	26 <sup>W</sup>	+31 25	1-2	7.15	B9	1-1-1 Pointed at 16.7. Being very small
1	32 <sup>W</sup>	+15 06	2	7.24	F5	1-1-1
1 <sup>42</sup>	21 <sup>W</sup>	+60 23	2-3	7.16	F5	1-1-1
2	03 <sup>W</sup>	+60 28	3-2	7.24	K0	1-1-1
2	47 <sup>W</sup>	+61 06	2	7.53	F5	1-1-1
2	13 <sup>W</sup>	58 57	2-3	7.28	K2	1-1-1
		58 11	2-	7.06	A0	1- Wangston
2	36 <sup>W</sup>	58 11	2-1	7.06	A0	1-1-1
1	53 <sup>W</sup>	60 01	2-	<del>7.40</del> 5.52	<del>F5</del> B9	1-1-1 <i>Along star train</i>

Date Sunday Aug 28-29 Y-C-L Julian Day           

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Holder	Hour Angle Est.
3571	HD 174621	18 46.3	43 31 57	I <sup>12</sup>	act II	"	16.3	7 33	8 19 2		
3572	HD 162880	17 48.2	44 56	"	"	"	16.4	8 23	9 33 3		
3573	HD 176626	18 56.1	43 35	"	"	"	16.4	9 36	10 12 4		
3574	HD 189013	19 52.9	46 50	"	"	"	16.3	10 15	10 45 1		
3575	HD 199169	20 50.3	27 41	"	"	"	16.4	10 49	11 09 2		
3576	HD 209469	21 58.6	42 20	"	"	"	16.4	11 12	11 52 3		
3577	HD 212186	22 17.3	15 08	"	"	"	16.4	11 55	12 25 4		
3578	HD 218395	23 02.6	32 18	"	"	"	16.4	00 29	00 47 1		
3579	HD 218338	23 37	28 39	"	"	"	16.4	30 51	01 56 2		
3580	HD 214720	23 55.1	46 23	"	"	"	16.4	02 00	02 50 3		
3581	HD 18899	01 41.6	45 44	"	"	"	16.4	02 46	03 14 4		
3582	HD 17896	12 01.6	19 45	"	"	"	16.4	03 29	03 44 1		
3583	HD 21062	03 48A	28 18	"	"	"	16.4	04 55	04 50		
	Low Test										

Outside through lens

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
8:02	E	43 39	4	7.57	G5 1-1-1	Scale 16 2
8:33	1 52 W	44 55	4	7.5	F0 1-1-1	
9:18	1 22 W	43 38	4	6.96	A2 1-1-1	}
10:45	1 W	46 55	4	6.90	A0 1-1-1	
11:02	16 <sup>m</sup> W	27 49	4	6.42	K5 1-1-1	}
11:33	1 <sup>m</sup> W	42 31	4	7.04	B9 1-1-1	
	0 15 W	15 20	4	6.69	A0 1-1-1	
	0 05 E	32 29	4	6.63	A2 1-1-1	
	1 00 W	28 50	4-3	6.52	A2 1-1-1	
	1 02 W	46 30	4-3	6.71	A2 1-1-1	
	0 10 E	47 50	4-3	6.74	F2 1-1-1	
	0 16 E	14 59	4-3	6.77	K5 1-1-1	
	1 47 E	23 25	3	6.77	A0 1-1-1	
					10/10	

These plates are too streaky  
Exposures could be cut to  
80%

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Date Monday Aug 29-30, 1938, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900		Instrument	Emulsion	Slit	Temperature		Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Decl
								Above	Below				
3584	H.D. 178947	19 <sup>55</sup> 55	30	24	I-12	Astron II	.010	17.8	24.1	20 11	21 03	3	64 W 10
3585	194115	20 18.7	15	03	-	-	-	17.8	24.0	21 07	22 05	4	62 E 15

Clouds delayed opening. Still light clouds over most of sky when exposure started.

Set pointer to 17.3

REMARKS

image gone by 20 minutes

Ending Time EAT	Hour Angle End	Declination	Seeing	Ptg. Mag.
21 03	0 14 W	30 27	2	6.66 B9 1-1-1
22 05	0 02 E	15 10	2	7.09 A0 1-2

Aug 29 10 -48.5 +10.7 -34.8 -08.8 +01.1  
 sky quite hazy, came up thick from N at 9.37  
 all the end of exposure

remained thick  
 closed down at 23.30

Aug 30 10 -48.7 +11.8 -41.0 -10.0 +01.2



Date Tuesday Aug 30-31, 1938 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Est.	D
3586	HD 159330	17 29.1	+57 57	I-12	Astra II	cut 010	upper lens 16.5 22.4	19 33	20 28	1	
3587	164429	17 56.0	+45 28	"	"	"	16.5 22.4	20 31	20 56	2	
3588	172187	18 33.7	+43 08	"	"	"	16.5 22.3	20 58	21 28	3	
3589	199492	20 52.8	+74 16	"	"	"	16.5 22.5	21 32	22 42	4	
3590	197665	20 40.1	+76 <sup>29</sup> 36	"	"	"	16.8 22.3	22 46	23 46	1	
3591	213126	22 24.2	+87 34	"	"	"	16.5 22.4	23 51	00 56	2	
	157192	18 44.4	+122 15	"	"	"				3	

Printer 16.2

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 15 W	+57 56	2	7.57 K2 1-1-1	Very hazy at times
1 15 W	+45 28	2	6.20 B9 1-1-1	Light haze
1 09 W	+43 10	2-1	6.40 A5 1-1-1	Hazy in low regions; instead of dome
0 06 W	+74 25	2-1	7.47 A3 1-1-1	Hazy
1 24 W	+76 37	2	7.41 F2 1-1-1	
0 53 W	+51 46	2	7.43 A2 1-1-1	Same during latter part, lengthened exposure
			5.56 F3	While sitting on the star sky cloud on
				cloud at 10:30 sky quite thick.

Aug. 31 12

MR.	S.C.	S.W.	M.T.	S.T.
-49.7	+12.6	-44.2	-11.8	+01.3

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Date Wed Aug 31 - Sept 1, 1938 Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
3592	HD 164506	17 56.4	28 45	I-12	Astra II	0/0	15.0 20.8	8 07	8 20	3	
	HD 172167 Vega	18 33.6	38 41				" "	8 25	8 27	11	
3593	HD 164506	17 56.4	28 45	"	"	"	14.7 20.8	9 21	10 15	4	
3594	" 181144	19 14.2	16 19	"	"	"	14.6 20.8	10 21		2	
> 3594	" 193556	20 15.7	14 16	"	"	"	14.5	11 10	56	27	
> 3595	" 194012	20 16.2	14 13	"	"	"	14.4 20.5	11 21	12 21	1	
> 3596	" 193472	20 16.3	13 14	"	"	"	14.4 20.5	11 25	12 21		
- 3597	HD 224559 MWC 407	25 53.8	45 52	"	"	"	14.4 20.6	12 49	01 27	4	
- 3598	HD 4180 6	00 51.2	47 44	"	"	"	14.5 20.6	01 18	01 26	1	
- 3599	HD 2905 7	00 27.3	62 23	"	"	"		01 29	01 37	2	
★ - 3600	HD 66343 10	00 59.4	65 26	"	"	"		01 40	02 00		
- 3601	HD 19243 51	03 00.7	60 00	"	"	"	14.6 20.2	01 28	01 36	1	
- 3602	HD 21650 52	05 24.6	41 25	"	"	"	14.7 20.7	03 03	03 30	1	

Clearing 7.54

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Set pointer at 14.8

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
7 40	W 42 <sup>m</sup>	28 43	2	7.43	A <sub>2</sub> 1, 2	at 5- (Thick: thunder-honey)
7 45	W 10 <sup>m</sup>	38 44	2	0.19	A <sub>0</sub> 3	at 9 about 10 <sup>5</sup> exposure (threatening)
10 5	W 2 <sup>h</sup> 38	28 45	3	7.43	A <sub>2</sub> 1, 1, 1	
	<del>16 22</del>			<del>7.34</del>	<del>F<sub>5</sub> 1,</del>	
6 00	W	14 23	1-3	7.12	G <sub>5</sub> 1, 1, 1	Clouds very suddenly with dash of rain. Cloud humidly - none to speak of on mirror.
2 22	W	14 21	1-3	6.64	F <sub>5</sub> 1-1-1	
4 5	W	13 22	1-3	6.0	A <sub>5</sub> 1-1-1	
0 22	E	46 04	3	6.5	B <sub>3he</sub> 1-1-1	too strong
0 58	E	47 55	3	4.7	B <sub>ancp</sub> 1 $\frac{1}{2}$ -1 $\frac{1}{2}$	} Too strong
0 35	E	63 33	3	4.2	B <sub>anc</sub> 1 $\frac{1}{2}$ -1 $\frac{1}{2}$	
0 11	E	45 57	3	7.1	B <sub>5sp</sub> 1-1-1	
1 46	E	42 08	2	6.5	B <sub>2</sub> 1-1-1	
3 5	E	41 30	2	7.2	B <sub>10</sub> 1-1	down at 3:30 which at 3:35 fills fog drops from a piston, cloud highest at 4:15 clearing rapidly.

Date Thursday, September 12, 1938 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	East Angle Ecl.
3603	HD 150203	16 33.3	+43 46	I <sup>2</sup> 12	Astra II	S.T. F10	12.8 18.6	20 01	21 01	2
3604	162936	17 48.5	+32 02	"	"	"	12.7 18.6	21 06	21 56	4
3605	164136	17 54.7	+30 11	"	"	"		21 59	22 03	1
	164136	"	"	"	"	"	12.6 18.5	22 03	22 10	
3606	168431	18 14.5	+12 09	"	"	"	12.6 18.5	22 14	22 59	2
3607	172187	18 33.7	+43 08	"	"	"	12.6 18.4	23 04	23 29	3
3608	187981	19 47.8	+30 53	"	"	"	12.6 18.5	23 33	24 25	4
3609	194102	20 49.8	+29 07	"	"	"	12.5	00 34	01 44	3
3610	194101	20 42.8	+33 03	"	"	"	12.5	04 46	05 06	4
3611	209517	21 58.9	+29 33	"	"	"	12.5 18.6	02 11	03 35	1
3612	222275	23 34.1	+61 35	"	"	"	12.5	03 10	03 48	
3613	5442	1 15.5	+17 17	"	"	"	12.6	03 55	04 41	
3614	26015	04 02.0	19 54	"	"	"	12.5 18.5	04 46	05 02	

Trouble with thermostat. Y resoldered needles 190

Needle set 13.2

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS							
						M.C.	S.C.	S.W.	M.T.	S.T.			
2	50 W	+43 42	2-1-0	7.21	A2	1-1-1	Sep. 1	10	-51.0	+13.2	-43.0	-27.0	+0.7
2	31 W	+32 01	1	7.04	A0	1-1-1						Stopped - reset.	
2	31 W	+30 10	1	4.74	F0	3	Setting B						
2	38 W					3	Setting 8						
3	07 W	+12 10	1-0	6.88	B8	1-1-1	Seeing very bad at times						
3	20 W	+43 10	1	6.40	A5	1-1-1							
3	04 W	+30 59	1-2	7.08	A5	1-1-1							
3	18 W	+24 14	1-2	7.54	B4	1-1-1							
3	39 W	+33 11	2-3	6.75	K2	1-1-1							
3	30 W	+24 43	2	7.77	B7	1-1-1	It						
2	37 W	+61 47	2-1	6.78	A2	1-1-1	It is coming up in file. Clouds at 3:40						
1	46 W	+17 28	2-1	7.09	F0	1-1-1	Soundered partly. Some high clouds at 3:40						
2	36 E	+15 00	2-3	6.22	F0	1-1-1							
							Sep. 2	12	-51.9	+14.0	-42.2	-26.8	+0.2
												(cont)	

Put in new Cassegrain focusing motor, at present sunlit as up position minus Cassegrain mirror up. toward end of tube. May

Date Friday Sept 2-3, 1938 M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
3615	HD 169169	18 18.3	14 57	I-12	Astra II	.010	12.3 18.4	19 50	20 42	1	
3616	187613N	19 45.8	44 07	—	—	—	12.3 18.3	20 45	21 55	2	
3617	193819	20 17.2	13 16	—	—	—	12.2 18.3	21 58	23 10	3	
3618	208835	21 53.7	46 23	—	—	—	12.1 18.3	23 14	23 55	4	
3619	209193	21 56.4	30 57	—	—	—	12.2 18.3	24 01	24 41	1	
3620	209205	21 56.5	31 03	—	—	—	12.1 18.3	24 42	1 25	2	
3621	215242	22 38.7	46 38	—	—	—	12.1 18.3	1 32	2 00	3	
3622	229501	23 55.7	44 42	—	—	—	12.2 18.2	2 04	2 18	4	
3623	3 00 000	44 40	—	—	—	—	12.2 18.2	2 22	2 42	1	
3624	12A3	00 11.6	13 22	—	—	—	12.2 18.2	2 46	4 24	2	
3625	11 166	01 44.9	46 38	—	—	—	12.0 18.1	4 28	4 42	3	

Sat Sept 3-4, 1938 Hel-T

about 100 visitors showed moon, ring neb  
Partly cloudy throughout. Very cloudy at 10.00  
Ran Cas focus up  $1\frac{3}{4}$  min

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS												
						nuclei at 12.9												
20	0 50 W	+14 59	2	7.40 A2	1-1-1	beginning of exposure delayed by clouds												
21	0 36 W	44 13	2	7.7 B8	1-1-1	image faint in clouds for short with noise												
22	1 20 W	13 25	3	7.37 A0	1-1-1	light clouds near limit of obj by 22.10-2040, better after 2045												
23	0 31 W	46 35	2-4	7.39 A0	1-1-1													
24	1 12 W	31 10	4	7.32 F0	1-1-1	ZorH												
25	1 59 W	31 16	4	7.49 A0	1-1-1													
26	48 W	46 52	2	6.40 B9	1-1-1	image in haze for short time												
27	51 W	44 54	3	6.25 A7	1-1-1													
28	09 W	44 53	3-2	6.51 A0	1-1-1	Seeing variable												
29	35 W	13 32	2	7.08 A2	1-1-1	Hazy at 22.55 cloud partly cleared												
30	32 W	47 06	2-4	7.09 B2	1-1-1	Seeing better now for short exposure Used star 11122 to focus Cassegrain camera eyepiece Micro with lens for 1 1/4"												
	th 70"	T showed moon, H, etc with 4"																
						<table border="0"> <tr> <td></td> <td>M.P.</td> <td>S.C.</td> <td>S.W</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>Sep. 3</td> <td>16</td> <td>-53.0</td> <td>+14.5</td> <td>-41.7</td> <td>-27.2 10.4</td> </tr> </table>		M.P.	S.C.	S.W	M.T.	S.T.	Sep. 3	16	-53.0	+14.5	-41.7	-27.2 10.4
	M.P.	S.C.	S.W	M.T.	S.T.													
Sep. 3	16	-53.0	+14.5	-41.7	-27.2 10.4													



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Date Saturday Sept 3-4 Hd -T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	SHT	Temperature <small>above below</small>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Est	D
- 3626	MWC 40 HD 224589	23 53.8	45 52	I-12	Agfa II	0.10	112 173	02 21	02 41	4	19W 4
- 3627	MWC 8 HD 4180	0 39.2	47 44	-	-	-	112 173	02 45	02 49	1	19W 4
- 3628	MWC 10 HD 6343	0 59.4	65 26	-	-	-	112 173	02 55	03 32	2	19W 6
- 3629	MW 61 HD 19245	3 0.7	62 00	-	-	-	111 173	03 30	03 50	3	19W 6
- 3630	HD 21650	3 24.6	41 25	-	-	-	112 173	04 12	04 50	4	19W 4
				Freestart						10/10	Freestart

①

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
	1 19W	46 03	3	6.5	Base	1-1-1	Started clearing about 1:20, definitely clear 3:10
	C 41W	47 56	3-2	4.7	Base	1 1/2-1 1/2	
	1 03W	65 36	2-3	7.1	Base	1-1-1	
	0 32E	62 08	2-3-4	6.5	Base	1-1-1	Seeing variable
	0 03W	41 29	2	7.2	Base	1-1-1	
	Focus 26.12		Tilt: 19.48				



Pondus at 15.7

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
8 <sup>m</sup> W	44 08	1-2	700	A <sub>2</sub> 1-1-1	] poor seeing add at 12
10 <sup>m</sup> W	43 36	1	696	A <sub>2</sub> 1-1-1	
10 <sup>m</sup> W	32 06	1	707	A <sub>0</sub> 1-1-1	
10 <sup>m</sup> 05 W	16 13	1	702	F <sub>0</sub> 1-1-1	
0 <sup>51</sup> W	15 15	1	669	A <sub>0</sub> 1-1-1	
0 <sup>48</sup> W	15 41	1	704	A <sub>2</sub> 1-1-1	
0 <sup>58</sup> W	44 17	1	702	B <sub>0</sub> 1-1-1	
0 <sup>02</sup> E	14 45	0	649	F <sub>5</sub> 1-1-1	] Supplementing list
0 <sup>01</sup> W	31 47	0	690	F <sub>0</sub> 1-1-1	

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Date Monday Sept 5-6, 1938, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	
<sup>40</sup> 3649	HD 169247	18 18.7	14 39	I-12	Acetra II	.010	10.5 16.6	19 33	20 43	2	
<sup>41</sup> 3650	191671	20 6.0	27 58	—	—	—	10.5 16.6	20 47	22 17	3	
<sup>42</sup> 3651	208174	21 49.4	27 53	—	—	—	10.5 16.6	22 20	23 10	4	
<sup>43</sup> 3652	209484	21 58.7	29 44	—	—	—	10.3 16.6	23 12	00 02	1	
<sup>44</sup> <del>3653</del>	210661	22 06.8	28 45	—	—	—	10.4 16.5	20 26	01 26	2	
<sup>45</sup> 3654	2333	06 22.2	15 29	—	—	—	*9.6 16.5	01 30	02 15	3	
<sup>46</sup> 3655	10407	01 30.4	29 01	—	—	—	9.8 16.0	02 19	03 34	4	
<sup>47</sup> 3656	20458	03 12.4	13 29	—	—	—	9.5 15.3	03 44	04 51	1	
Tues Sept 6-7 Hd-L							Rain				

pointer at 11.6

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS																				
03 W	14 41	0	667 B9 1-1-1																					
051 W	23 06	1	75 B5 1-1-1																					
0	28 04	1	677 A2 1-1-1																					
0 45 W	29 55	1	699 B9 1-1-1																					
1 54 W	28 57	1-2	750 A2 1-1-1																					
0 32 W	15 41	2	671 A5 1-1-1	* temperature read 9.6 and 15.2 at beginning of exposure and continued to fall as it reached 9.2, 15.2 but would not come on in relay. Then it returned to 9.8, 16.0																				
0 38 W	29 11	1-2	744 A2 1-1-1																					
0 29 W	13 37	1-2	742 A0 1-1-1																					
				<table border="0"> <thead> <tr> <th></th> <th>MP.</th> <th>S.C.</th> <th>S.W.</th> <th>M.T.</th> <th>S.T.</th> </tr> </thead> <tbody> <tr> <td>Sep 6</td> <td>15</td> <td>-55.3</td> <td>+15.5</td> <td>-39.3</td> <td>+31.8</td> <td>+1.3<sup>m</sup></td> </tr> <tr> <td>Sep 7</td> <td>10</td> <td>-56.0</td> <td>+15.5</td> <td>-38.0</td> <td>+30.0</td> <td>+1.4<sup>m</sup></td> </tr> </tbody> </table>		MP.	S.C.	S.W.	M.T.	S.T.	Sep 6	15	-55.3	+15.5	-39.3	+31.8	+1.3 <sup>m</sup>	Sep 7	10	-56.0	+15.5	-38.0	+30.0	+1.4 <sup>m</sup>
	MP.	S.C.	S.W.	M.T.	S.T.																			
Sep 6	15	-55.3	+15.5	-39.3	+31.8	+1.3 <sup>m</sup>																		
Sep 7	10	-56.0	+15.5	-38.0	+30.0	+1.4 <sup>m</sup>																		

Date Wednesday, Sept. 7-8, 1938 H, L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3648	HD 211432	22 11.9	27 18	I-12 $\frac{1}{2}$	Astra II	Set .010	also Beta 10.1 16.1	00 21	01 50	2
3649	" 370	00 03.3	73 41	"	"	"	10.1 16.0	01 24	02 47	3
3650	" 6210	00 58.1	61 04	"	"	"	10.2 16.2	02 49	03 14	4
3651	" 8441	01 23.0	16 34	"	"	"	10.1 16.1	03 19	04 04	5
3652	" 16111	02 30.2	28 58	"	"	"	10.0 16.1	04 14	05 09	6
<p>Thurs Sept 8-9 Hd - T</p> <p>Clouds - Partly clear 9-10 but thick haze</p> <p>" " 11-11:45 " " "</p>										

Polaris set at 11.25

Ending Time LST	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS														
					House breaking up at 23.10 - mostly clear at 23.45. started to open at 23.50.														
1 52	W 27 30	0-1	7.43	Ko 1-1-1	seeing variable														
1 20	W 73 49	0-1	7.42	AO 1-1-1															
1 03	W 61 13	0-1	6.38	Fo 1-1-1															
1 34	W 16 44	1	7.17	F5 1-1-1															
1 22	W 29 06	0-1	7.05	Bo 1-1-1															
					<table border="0" style="width: 100%;"> <tr> <td></td> <td></td> <td>MC</td> <td>SE</td> <td>SW</td> <td colspan="2" style="text-align: center;">M.T. S.T.</td> </tr> <tr> <td>Sep. 8</td> <td>15</td> <td>-56.8</td> <td>+15.8</td> <td>-12.2</td> <td>+29.0</td> <td>+1.6<sup>m</sup></td> </tr> </table>			MC	SE	SW	M.T. S.T.		Sep. 8	15	-56.8	+15.8	-12.2	+29.0	+1.6 <sup>m</sup>
		MC	SE	SW	M.T. S.T.														
Sep. 8	15	-56.8	+15.8	-12.2	+29.0	+1.6 <sup>m</sup>													





Partly clear at 12, cleared cloudy

24 points 10.2

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS														
2 12W	61 51	1.2	5.2 Bge	1-1-1 Light haze and tinnies.														
2 11W	59 21	1.2	5.2 Bge	1-1-1														
Declination correction made manually																		
<table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td></td> <td style="text-align: center;">M.P.</td> <td style="text-align: center;">S.C.</td> <td style="text-align: center;">S.W.</td> <td style="text-align: center;">M.T.<sub>3</sub></td> <td style="text-align: center;">S.T.<sub>2</sub></td> </tr> <tr> <td style="text-align: center;">Sep 9</td> <td style="text-align: center;">10</td> <td style="text-align: center;">-57.1</td> <td style="text-align: center;">+15.8</td> <td style="text-align: center;">-39.2</td> <td style="text-align: center;">+28.6</td> <td style="text-align: center;">+1.2</td> </tr> </table>							M.P.	S.C.	S.W.	M.T. <sub>3</sub>	S.T. <sub>2</sub>	Sep 9	10	-57.1	+15.8	-39.2	+28.6	+1.2
		M.P.	S.C.	S.W.	M.T. <sub>3</sub>	S.T. <sub>2</sub>												
Sep 9	10	-57.1	+15.8	-39.2	+28.6	+1.2												

Date Friday, September 9-10, 1938 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle Est	D
3655	HD 151388	16 42.0	+43 24	I-12	Aster II	010	9.7 15.7	19 15	19 55	1	
3656	165008	17 58.8	+30 33	"	"	"	9.8 15.8	19 59	21 19	2	
3657	168431	18 14.5	+12 09	"	"	"	9.8 15.7	21 23	22 23	3	
3658	199492	20 52.5	+74 16	"	"	"	9.8 15.8	22 30	23 45	4	
3659	199837	20 54.6	+31 15	"	"	"	9.9	23 50	24 20	1	
3660	203551	21 17.5	+6 24	"	"	"	9.7	00 35	01 13		
3661	207143	21 56.4	30 57	-	-	-	9.7 15.9	01 18	02 05	3	
3662	216511	22 48.4	46 01	-	-	-	9.9	02 11	02 47	4	
3663	2666	00 35.2	31 35	-	-	-	9.8 15.9	02 50	03 25	4	
	6210	00 58.1	61 04	-	-	-	9.7	03 30	04 00	1	
3664	8941	01 23.4	16 34	-	-	-	9.8 15.9	04 00	05 00		
3665	23838	03 43.1	44 40	-	-	-	9.6	05 14	05 18		
Forecast <del>unclear</del>											
Saturday, September 10, 1938 H-T											
Clouds covered 8 minutes, 19" hour											

Pointer set 11.1

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
2 <sup>09</sup> W	+43 19	2	7.14	K2 1-1-1	Thick in early evening. Still haze.
2 <sup>15</sup> W	+30 32	1	7.10	F2 1-1-1	Very haze.
3 <sup>04</sup> W	+12 10	1-2	6.98	B8 1-1-1	Light haze
1 <sup>50</sup> W	+74 23	2-3	7.47	A3 1-1-1	Some light clouds. mid-air pressure temps 10.0, 16.0
2 <sup>31</sup> W	+31 23	2-3	7.15	B9 1-1-1	
2 <sup>51</sup> W	60 24	2-3	7.16	F5 1-1-1	Some slight haze.
3 <sup>07</sup> W	31 08	2	7.32	F0 1-1-1	"
2 <sup>54</sup> W	46 12	2	6.69	B9 1-1-1	
	31 49	2-1	7.99	F5 1-	Setting 5. Haze thickens more general haze is present.
1 <sup>57</sup> W	61 14	2	6.35	F8 1-1-1	" 4' expansion for 2666 test long, changed to 6.0
2 <sup>33</sup> W	16 43	2-1	7.17	F5 1-1-1	Cleared some
02 <sup>30</sup> W	44 46	3	6.35	G0 1-1-1	

Focus 2612 till 1948

10/10

	MC	SC	SW	M.T. ST	
Sep 10	10	-57.8	+15.6	-36.4	+28.6 +1.3 <sup>m</sup>
Sep. 12	10	-58.9	+15.3	-44.7	+25.2 +1.5 <sup>m</sup>

Sep 10 10 -57.8 +15.6 -36.4 +28.6 +1.3<sup>m</sup>  
 Sep. 12 10 -58.9 +15.3 -44.7 +25.2 +1.5<sup>m</sup>

Date Monday, Sept 17, 1933 Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
- 3666	HD 224559 MWC 40X	23 536	45 52	T-12 <sub>R</sub>	*Agfa III	500	14.0 19.9	01 05	01 55	1
- 3667	" HD 225095 40X	23 585	55 00	"	"	"	14.0 19.9	01 30	02 55	2
3668	" HD 20017 65	23 074	48 19	"	"	"	14.0 19.9	03 00	03 50	3

Prism at 14.5

Hour Angle End	Declination	Seeing	Ptg. Mag.	
0 39 W	43 04	2-3	6.5	B <sub>710</sub> 1-1-1
2 07 W	55 12	2-3	7.2	B <sub>10</sub> 1-1-1
2 58 W	48 37	1-2	7.8	B <sub>10</sub> 1-1-1

REMARKS

Have looking away at 11.45  
mostly clear at 12.15 clouds to open  
at 12.35.

\*<sup>2</sup> 10 plates from top used 11.45

	M.R.	S.E.	S.W.	M.T.	S.T.
Sep. 13 10	-59.9	+14.9	-48.3	+23.2	+01.0

Date Tuesday, Sept 13-14, 1938, H-L Julian Day \_\_\_\_\_

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
3669	HD-168431	18 14.5	+12 09	I-12	Astr II	5x 010	above water 16.6 22.7	19 08	19 11	4	
	168431	"	"	"	"	"	16.6 22.7	19 30	20 15	4	
3670	169223	18 18.6	+16 38	"	"	"	16.6 22.6	20 18	20 53	1	
3671	172137	18 33.7	+43 08	"	"	"	16.6 22.6	20 57	21 23	2	
3672	181799	19 16.9	+60 46	"	"	"	16.6 22.6	21 27	22 12	3	
3673	199492	20 52.5	+74 16	"	"	"	16.7 22.7	22 17			
	199837	20 54.6	+31 15	"	"	"	16.7 22.6	23 15	01 00	4	
3674	210377	22 06.5	+30 04	"	"	"	16.5 22.7	00 45	01 11	1	
3675	2466	20 25.2	+31 38	"	"	"	16.5 22.7	01 17	02 00	2	
	...										
Wind Sept 14-15 M-L rain all night											

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
				6.88	B8	Light clouds at first. Could not get over to station.
1 10 W	+12 10		1	6.87	B8 1-1-1	Setting 2. Light haze.
1 46 W	+16 40		1	7.38	K0 1-1-1	
2 01 W	+43 10		2	6.40	A5 1-1-1	Faint stars (columns faint down to light)
2 06 W	+60 49		2-3	6.99	B9 1-1-1	
	+74 23		2-3	7.47	A3 1-	Clouded out 22 <sup>27</sup> thinning 23 <sup>05</sup> ; but started to see few to find the stars
2 57 W	+31 23		2-3	7.15	B9 1-1-1	Setting 8. Light clouds during middle of pp
2 16 W	+30 14		3	6.52	A5 1-1-1	hazy
	+31 41		3	6.44	F5 1-1-1	Light haze at 20 <sup>05</sup> which clears at 21 <sup>00</sup> sky to the stars.
						M.C. S.C. S.W. M.T. S.T. Sep. 14 -60.9 <sup>s</sup> +14.5 <sup>s</sup> -50.9 <sup>s</sup> +21.1 <sup>m</sup> +1.1 <sup>m</sup>
						Sep. 15 -61.3 <sup>s</sup> +14.5 <sup>s</sup> -53.4 <sup>s</sup> +19.7 <sup>s</sup> +1.1 <sup>m</sup>



Date Thurs Sept 15-16      Y-T      Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
3676	HD 189013	19 52.9	46 50	I-12	Ashall	010	10.5	9 23	10 33 3
3677	HD 198151	20 43.3	46 10	"	"	"	10.9	10 40	11 25 4





Set pointer 11:25

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
11:17	1 00 W	14 56	2	6.43	B9	1-1-1	some clouds after sunset - cleared later light clouds occasional. Image good at end of exposure
11:15	0 46 W	30 01	2	6.34	B9	1-1-1	image faint due to clouds, thick at 20:40, image gone. take 20:40 as end of exposure.
							remained thick
							closed dome 22:00
							Gave up when still thick at 9:00

Date Saturday, September 17-18, 1925 H-T Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
3680	HD 189847	19 57.0	+30 57	2-12	Ast. II	set 110	94 15.4	22 05	22 35	3	
3681	201939	21 07.7	+30 12	"	"	"	95 15.2	22 37	23 37	4	
3682	201196	21 02.9	+15 16	"	"	"	95 15.2	23 00	23 20	1	
3683	211432	22 18.9	+27 18	-	-	-	93	00 40	01 50	3	
3684	2666	00 25.2	+31 38	-	-	-	94 15.1	01 54	02 31	3	

Prints 10.8

Cloudy, only seeing stars around 2<sup>00</sup>

8 cultures showed up after 15 eggs

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS												
2 05 W	+31 23	2	6.66 38 1-1-1													
1 56 W	+22 22	2-3	7.52 45 1-1-1	clouds over most of sky 22 <sup>00</sup> -23 <sup>00</sup> stars but not -23 <sup>15</sup>												
3 00 W	+15 24	2-3	7.52 K5 1-1-1	clouds 0.15, more clouds, clouds still heavy												
3 06 W	+27 29	2.	7.42 K 1-1-1	clouded visibility 0 <sup>00</sup> but planets still 1.5												
2 56 W	+21 44	2-3	7.44 F5 1-1-1	clouds at 2 <sup>00</sup> partly done, then just up called up 3 30. clouds up, clouds compuser												
				<table border="0"> <tr> <td></td> <td>M.C.</td> <td>SC</td> <td>S.W.</td> <td>M.T.</td> <td>S.T. m</td> </tr> <tr> <td>Sep. 19</td> <td>10</td> <td>-68.0</td> <td>+12.2</td> <td>-59.0</td> <td>+16.0 +1.3</td> </tr> </table>		M.C.	SC	S.W.	M.T.	S.T. m	Sep. 19	10	-68.0	+12.2	-59.0	+16.0 +1.3
	M.C.	SC	S.W.	M.T.	S.T. m											
Sep. 19	10	-68.0	+12.2	-59.0	+16.0 +1.3											

Date Monday Sept 19-20, 1938 M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>For Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Time	
3685	H.D. 176209	18 54.1	45 43	I-12	Astoria	1010	9.2 +15.3	18 57	19 55	1	
3686	179218	19 6.6	15 37	—	—	—	9.2 15.3	19 58	21 10	2	
3687	194115	20 18.7	15 03	—	—	—	9.2 15.3	21 13	22 03	3	
3688	209679	22 0.1	43 52	—	—	—	9.2 15.3	22 06	22 42	4	
3689	215566	22 41.0	44 14	—	—	—	9.2 15.3	22 45	23 35	1	
3690	218428	23 2.9	29 31	—	—	—	9.3 15.4	23 38	00 45	2	
3691	1243	00 11.6	13 22	"	"	"	9.3 15.4	00 53	01 35	3	
3692	16545	02 34.1	43 40	"	"	"	9.3 15.4	02 37	03 43	4	
3693	<del>20040</del> <del>20154</del>	03 <del>53.2</del> <del>54</del>	<del>59</del> <del>44</del>	"	"	"	9.3 15.4	04 05	05 16	1	
Wed Sept 21-22, 1938 Hd-L Rain											

set pointer to 10.95

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS																			
0	36W	45 46	2-1	7.21	A0	1-1-1	Loc. quick motion from below, not apparent, narrow																		
1	37W	15 41	1	7.13	B9	1-1-1	clouds observed image 19.00-19.20 quite hazy near horizon N																		
1	19W	15 10	1	7.09	A0	1-1-1	.																		
1	17W	44 02	1-2	6.63	A2	1-1-1	...																		
1	28W	44 27	1	7.02	B9	1-1-1	.																		
1	20W	29 43	0	7.23	B9	1-1-1	*.																		
1	54W	13 35	0-1	7.58	A3	1-1-1	..																		
1	44W	43 49	0-1-2	7.25	Aop	1-1-1	..																		
1	42W	59 51	1-2	<del>7.34</del> 8.76	<del>B3</del> K0	1-1-1	Had a little trouble in identifying star, she had more trouble trying to locate it in the telescope field. clouds filling in at 15.16.																		
							finder for 3693																		
							<table border="0"> <tr> <td></td> <td>M.P.</td> <td>S.C.</td> <td>S.W.</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>Sep. 20</td> <td>10 -1.07.0</td> <td>+12.1</td> <td>-60.7</td> <td>+15.6</td> <td>+1.3</td> </tr> <tr> <td>Sep 21</td> <td>10 -1.08.3</td> <td>+12.3</td> <td>-61.7</td> <td>+14.4</td> <td>+1.3</td> </tr> </table>		M.P.	S.C.	S.W.	M.T.	S.T.	Sep. 20	10 -1.07.0	+12.1	-60.7	+15.6	+1.3	Sep 21	10 -1.08.3	+12.3	-61.7	+14.4	+1.3
	M.P.	S.C.	S.W.	M.T.	S.T.																				
Sep. 20	10 -1.07.0	+12.1	-60.7	+15.6	+1.3																				
Sep 21	10 -1.08.3	+12.3	-61.7	+14.4	+1.3																				
							* Correct star																		



Date *Thursday - Sept 22-23, 1938*, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Given</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3694	HD. 209679	22 0.1	43 52	I-12	Astra II	0.010	+5.4 +11.6	23 12	23 52	2
3695	222922	23 39.8	43 11	-	-	-	+5.6 +11.7	23 55	00 21	3
3696	1243	00 11.6	13 22	-	-	-	+5.9 +12.1	00 34	01 53	4
3697	10681	01 39.2	21 58	-	-	-	+6.6 +12.5	01 54	02 59	1
3698	16778	01 40.3	43 13	-	-	-	+6.6 +12.7	02 58	03 50	2
3699	21611	03 29.2	29 42	-	-	-	+6.6 +12.6	04 02	05 12	3
3700	28150	4 21.3	17 58	-	-	-	+6.7 +12.5	05 05	05 38	A

*Focus Test - outside through lens*

set pointer to 8.15.

Ending Time B.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
						MC      SE      SW      M.T.      S.T. Sep 22 10 -1 09.8 +12.6 -75.9 +13.0 +1.2
						Cloudy for first part of night
1	39 W	44 02	1	663	A2 1-1-1	dec p.m. fuse blew again, no apparent reason.
C	36 W	43 24	1-2	682	A0 1-1-1	reset pointer 8.25.
1	25 W	13 35	2-1	758	A3 1-1-1	Reset pointer 8.60
1	02 W	28 08	2-1	731	A0 1-1-1	Apparent large temp. change due to joining of <sup>columns</sup> <del>...</del>
2	05 W	43 23	2-1	740	A0 1-1-1	
1	25 W	29 49	2	751	A0 1-1-1	
C	59 W	18 03	2	674	A0 1-1-1	
					ME/10	MC      SE      SW      M.T.      S.T. Sep 23 13 -1 <sup>m</sup> 10.6 +12.6 -76.7 +12.0 +1.4 <sup>m</sup>

Date *Friday September 23-24, 1938* H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Sec.
3701	HD 183794	19 261	-02 19	I-12	Ast. D	310	16.0 22.1	18 56	19 46	1
3702	199112	20 49.8	+29 07	"	"	"	16.1 22.1	19 51	21 06	2
3703	200877	21 06.1	+14 56	"	"	"	16.3 22.3	21 09	21 59	4
3704	203551	21 17.8	+60 15	"	"	"	16.3 22.2	21 57	22 37	3
3705	204789	21 26.5	+61 03	"	"	"	16.2 22.3	22 01	22 41	3
3706	209017	21 59.9	-29 33	"	"	"	16.3 22.3	22 05	22 48	3
	210411	22 05.5	-19 07	"	"	"	16.2 22.2	22 05		
3707	212447	23 08.7	-11 53	"	E-90	"	16.2 22.2	22 01	22 41	1
3708	212447	23 08.7	-11 53	"	"	"	16.2 22.2	22 05	22 45	1
3709	30189	16 12.2	-21 02	"	"	"	16.5 22.1	22 17	22 49	1
3710	20035	21 46.1	-11 40	"	"	"	16.4 22.5	22 05	22 45	2
3711	20035	21 46.1	-11 40	"	"	"	16.4 22.5	22 31	23 11	2
3712	20035	21 46.1	-11 40	"	"	"	16.4 22.5	22 05	22 45	2
3713	20035	21 46.1	-11 40	"	"	"	16.4 22.5	22 31	23 11	2
3714	20035	21 46.1	-11 40	"	"	"	16.4 22.5	22 05	22 45	2

Pointer out 10.0

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 <sup>09</sup> W	-02 14	2	68-75 B8	1-1-1
0 <sup>26</sup> W	+29 15	2-3	754 B9	1-1-1
0 <sup>37</sup> W	+18 05	2-3	7.64 F5	1-1-1
1 <sup>01</sup> W	+60 21	2	7.16 F5	1-1-1 Large small but very
2 <sup>07</sup> W	+61 01	2	7.53 F5	1-1-1
2 <sup>40</sup> W	+29 45	2	7.37 B9	1-1-1
	17 18	2	7.41 F5	1-1-1 198. In danger of visible dust in 19 h.d.
2 <sup>45</sup> N	17 16	2	7.12 B5	1-1-5 Ego spot 9"
2 <sup>50</sup> W	30 35	2	6.77 F5	2-2-2
1 <sup>00</sup> E	31 05	2-3	5.41 B9	2-2-2 Wanted to try for a try in 20.36
0 <sup>00</sup> W	44 41	2-3	6.77 F5	2-2-2
1 <sup>00</sup> E	15 57	2	6.07 A5	1-1-1 Settings - some spots caused for all in 10.00
2 <sup>00</sup> E	46 25	2	6.07 A5	1-1-1 Cloud - some spots caused for all in 10.00

Sep 24 10 M.C. 3.C. S.W. M.T. S.T.  
 -1 11.5 +12.5 -107.5 +11.0 +1.4

Date Sat Sept 24-25, 1938 U-T Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above lab</i>	Starting Time E.S.T.	Ending Time E.S.T.	Star Angle End
3713	HD 180451	11.5	15 59	I-12	East II	010	11.2 17.3	6 48	7 40	1
3714	" 189706	19 56.3	29 32	"	"	"	11.2	9 52	10 56	2
3715	" 189213 MW 402	19 53.8	28 36	"	"	"	11.2	11 02	11 52	3
- 3716	HD 223501 MW 13	23 45.0	61 39	"	"	"	11.0 17.1	05 02	01 30	4
- 3717	HD 9105 MW 23	1 24.0	62 51	"	"	"	11.1 17.1	01 35	00 11	1
- 3718	HD 12202 MW 61	1 55.0	59 12	"	"	"	11.1 17.2	02 18	03 30	2
- 3719	HD 19143 MW 63	3 07.0	62 02	"	"	"	11.0 17.1	03 34	03 45	3
- 3720	HD 20617 MW 101	3 07.9	45 19	"	"	"	11.0 17.1	03 53	04 32	4
- 3721	HD 34421 HD 34921	5 15.8	37 35	"	"	"	11.1 17.1	04 41	04 21	1

About 90 visitors showed up with 74"  
 T showed it to with 4"  
 printer 12.0

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Ending Time L.S.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
7:51	W 2 <sup>h</sup> 22 <sup>m</sup>	16 02	2	7.32 F <sub>0</sub>	1, 1, 1	
8:32	W 2 <sup>h</sup> 55	29 39	2	7.50 A <sub>0</sub>	1, 1, 1	
11:03	W 3 <sup>h</sup> 53	28 42	2	7.11 A <sub>2</sub>	1, 1, 1	↓ new plates
	N 1 40	61 41	2-3	8.2 B <sub>3c</sub>	1, 1, 1	
	W 0 41	63 00	3-4	7.5 B <sub>5c</sub>	1-1-1	
	N 1 29	59 40	5-6-2	8.2 B <sub>3c</sub>	1-1-1	Seeing variable
	W 0 42	62 07	2-3-4	6.5 B <sub>2c</sub>	1-1-1	" "
	W 1 19	48 26	3	7.9 B <sub>2c</sub>	1-1-1	" "
	0 00	37 35	3-2	7.4 B <sub>2c</sub>	1-1-1	

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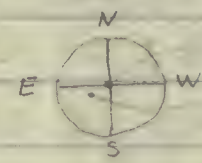
Date Sunday Sept 25-26 Y-G-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour angle End
3722	HD 176626	18 56.1	43 35	I-12	Astra II	010	+11.0	6 46	7 32	2
3723	HD 187237	19 43.9	27 36	"	"	"	+11.1	7 38	8 28	3
3724	HD 191918	20 07.2	32 00	"	"	"	+11.0	8 32	9 20	4
3725	HD 202351	21 10.1	16 04	"	"	"	11.0	9 25	10 05	1
3726	HD 210387	22 05.0	44 22	"	"	"	11.0	10 10	10 42	2
3727	HD 210405	22 05.1	44 21	"	"	"	11.0	10 44	11 20	3
3728	HD 218538	23 03.7	28 39	"	"	"	11.0	11 25	12 45	4
3729	HD 1375	00 12.8	12 13	"	"	"	11.0 17.0	12 54	01 54	1
3730	HD 13596	02 07.6	14 48	"	"	"	11.0 17.0	01 56	02 23	2
3731	HD 21062	03 18.8	28 18	"	"	"	11.0 17.0	02 25	03 15	3
3732	HD 22124	03 28.8	31 41	"	"	"	11.0 17.0	03 19	04 04	4
3733	HD 31069	04 47.7	43 54	"	"	"	11.0 17.0	04 08	04 25	1
3734	HD 29487	04 33.5	43 55	"	"	"	11.0 17.0	04 32	05 26	2

(13)

Ending Time  
L.L.

Ending Time L.L.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp
7 32	34 <sup>m</sup> W	43 36	2	6.96 A <sub>2</sub>	1-1-1
8 20	43 <sup>m</sup> W	27 42	2	7.53 G <sub>5</sub>	1-1-1
9 20	1 <sup>h</sup> 11 <sup>m</sup> W	32 05 <sup>s</sup>	2	7.07 A <sub>0</sub>	1-1-1
10 05	53 <sup>m</sup> W	16 12	3	7.02 F <sub>0</sub>	1-1-1
10 42	35 <sup>m</sup> W	44 31	3-2	6.72 A <sub>0</sub>	1-1-1
11 20	1 <sup>h</sup> 03 W	—	3-2	6.60 B <sub>9</sub>	1-1-1
12 4	1 40 W	28 48	3	7.56 A <sub>2</sub>	1-1-1
1 5	1 40 W	12 25	1-2-3	7.41 G <sub>5</sub>	1-1-1
2 20	0 11 W	14 58	1-2-3	6.17 K <sub>5</sub>	1-1-1
3 15	0 05 E	25 25	1-2-3	6.99 A <sub>0</sub>	1-1-1
4 04	0 34 W	31 48	1-2-3	6.90 F <sub>0</sub>	1-1-1
4 22	0 23 E	43 56	1-2	5.96 B <sub>9</sub>	1-1-1
5 0	0 47 W	43 57	1-2-3	7.30 B <sub>9</sub>	1-1-1



210387  
210405

*Jan Dr. Miller*

Sep. 26	12	M.P.	S.R.	S.W.	M.T.	S.T.
		-128.8	+12.7	-105.9	+09.0	+0.8

*Ado 1<sup>m</sup>*





Pointer at 12.5

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS																		
			17.40	Found mirror badly fogged. Blower not on. Put blower on, left display open, put feet on ground and in front of mirror.																		
1 31 W	31 13	2	7.49 A <sub>0</sub>	1-1-1 Mirror fogged, star shortly before 22h. Star fogged whole sky.																		
1 45 W	28 39	1	5.58 A <sub>0</sub>	1-1-1 this plate number is 5737, should be 5736																		
1 43 W	32 08	1	6.87 B <sub>9</sub>	1-1-1 haze																		
1 27 W	31 01	1	6.75 B <sub>9</sub>	1-1-1 more haze																		
0 20 E	59 24	1	7.35 A <sub>0</sub>	1-2 sky clearing, etc. took at 22h. closed at 5.15																		
				<table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td>MC</td> <td>SE</td> <td>S.W.</td> <td>M.T.</td> <td>S.T.</td> </tr> <tr> <td>Sep 27</td> <td>12</td> <td>-13.8</td> <td>+12.6</td> <td>-03.6</td> <td>+06.2</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Rest</td> <td></td> <td>+0.9<sup>m</sup></td> </tr> </table>		MC	SE	S.W.	M.T.	S.T.	Sep 27	12	-13.8	+12.6	-03.6	+06.2				Rest		+0.9 <sup>m</sup>
	MC	SE	S.W.	M.T.	S.T.																	
Sep 27	12	-13.8	+12.6	-03.6	+06.2																	
			Rest		+0.9 <sup>m</sup>																	

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Date Tuesday September 27-28, 1935 H-L Julian Day.....


Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
- 3740	HD 183794	19 26.1	-02 49	I-12	A.L.T.	set 010	above labr 12.5 18.4	18 44	20 14	4
3741	199 140	20 50.1	+28 08	"	"	"	12.5 18.5	20 18	20 48	1
	<del>216 143</del>	<del>22 50.8</del>	<del>+35 06</del>							
3742	206 240	21 36.0	+43 59	"	"	"	12.5 18.5	21 14	21 49	2
3743	209 517	21 58.7	+21 43	"	"	"	12.4 18.5	21 53	23 03	3
3744	216 594	22 06.3	+31 04	"	"	"	12.5 18.3	23 06	23 36	1
3745	211432	22 11.9	+27 18	"	"	"	12.4 18.5	23 38	00 20	1
3746	210461	22 05.6	+14 07	"	"	"	12.4 18.5	00 25	01 05	2
3747	219742	23 05.9	+17 03	"	"	"	12.4 18.5	01 09	01 39	3
3748	16220	02 31.1	+32 27	"	"	"	12.4 18.5	01 43	02 12	4
3749	17818	02 46.5	+48 01	"	"	"	12.5 18.5	02 25	03 15	1
3750	25536	03 12.1	+61 38	"	"	"	12.6 18.6	03 21	04 01	2
3751	25536	03 43.1	+44 40	"	"	"	12.5 18.5	04 06	04 31	3
3752	26703	04 02.3	+12 30	"	"	"	12.5 18.6	04 36	05 26	4

②

Areas become more brilliant 13<sup>00</sup>-20<sup>00</sup>. At 13<sup>00</sup> night red, great red, 5-11, all, 13-14, 20-21, 22-23  
 design. Saw 5 stars later within a hour of about 14<sup>00</sup> patches certainly red in 14-15-16.  
 2 stars faintly visible  
 1 star faintly visible about 13<sup>00</sup> - red about 13<sup>00</sup> - 13<sup>00</sup>

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Pointer set at 13.0

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS													
	0 53 W	-02 14	0-1	6.8-75	B8	1-1-1	Mirrors very astigmatic at first. Sight haze. Stars very faint. 1 without mirror?												
	0 04 W	+28 17	1	6.27	B3	1-1-1													
				7.5	K5		Small to beat this - looks pale at off after too high.												
	0 19 W	+44 08	1-2	6.68	B9	1-1-1													
	1 10 W	+29 43	1-2	7.37	B9	1-1-1													
	1 36 W	+30 14		6.52	A5	1-1-1													
	2 15 W	+27 30	0-1	7.43	K0	1-1-1													
	3 05 W	+19 20	0-1-2	7.4	K0	1-1-1													
	2 34 W	+17 15	0-1-2	7.12	K5	1-1-1													
	0 07 E	+32 36	0-1	6.71	F5	1-1-1													
	0 34 W	+48 18	0-1	7.51	K0	1-1-1	Supplementary list.												
	0 53 W	+61 46	1	6.60	B8	1-1-1													
	0 54 W	+44 46	1	6.35	G0	1-1-1													
	1 25 W	+12 36	1-2	7.44	K0	1-1-1	Sup list												
																			
							<table border="0"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>SW</td> <td>MT.</td> <td>S.T.</td> </tr> <tr> <td>Sep 28 12</td> <td>-1 4.8</td> <td>+12.3</td> <td>-09.1</td> <td>+05.8</td> <td>+0.9</td> </tr> </table>		MC	SC	SW	MT.	S.T.	Sep 28 12	-1 4.8	+12.3	-09.1	+05.8	+0.9
	MC	SC	SW	MT.	S.T.														
Sep 28 12	-1 4.8	+12.3	-09.1	+05.8	+0.9														



Hang cleanup after sunset  
 Pointon at 11.8

Ending Time L.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Remarks
9 17 1	W 1 <sup>h</sup> 15	16 03	2	7.32 F <sub>0</sub> 1,1,1	hang
9 40 2	W 2 <sup>h</sup> 36	16 23	3	7.34 F <sub>5</sub> 1,1,1	more "
10 47 3	W 3 <sup>h</sup> 04	28 43	3	7.11 A <sub>2</sub> 1,1,1	"
11 25 4	E 19 <sup>m</sup>	46 03	3	6.5 B <sub>2</sub> e 1,1,1	
	0 23 E	63 02	3	7.5 B <sub>5</sub> s(e) 1,1,1	
	1 34 W	59 22	3	8.2 E <sub>3</sub> e 1-1-1	wind increasing image unsteady
	0 54 W	22 07	2-3	6.5 B <sub>2</sub> e 1-1-1	
	1 55 W	41 30	3	7.2 E <sub>5</sub> he 1-1-1	set 2 <sup>h</sup>
				10/10	set 7 <sup>h</sup>

		MC	S.C.	S.W.	M.T.	S.T.
Sep 29	12	-1 27.9	+12.4	-06.8	+02.2	+1.0 <sup>m</sup>

Date Thursday, Sept 27-30 1935 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
- 3761	HD 183 794	19 261	-02 14	I-12	Astron I	cut 110	above bulb 9.7 15.8	18 42	20 11	1
3762	199 140	20 50.1	+28 08	"	"	"	9.7 15.9	20 15	21 30	2
3763	204 889	21 16.5	+61 16	"	"	"	9.6 15.7	20 46	21 41	2
3764	209 517	21 38.9	+29 33	"	"	"	9.8 15.8	21 47	22 41	21
3765	209 633	22 11.2	+32 27	"	"	"	9.7 15.8	23 00	23 35	1
3766	216 311	22 48.4	+46 01	"	"	"	9.6	23 43	00 15	2
3767	217 491	22 56.0	44 30	"	"	"	9.6 15.7	00 18	00 40	2
3768	217 534	22 57.8	31 14	"	"	"	9.7 15.7	00 44	01 14	4
3769	2526	01 50.0	45 18	"	"	"	9.5 15.7	01 17	01 53	2
3770	118 84	01 51.7	46 36	"	"	"	9.6 15.8	01 56	02 44	2
3771	181 65	02 49.8	46 45	"	"	"	9.6 15.8	02 42	03 32	3
3772	235 68	03 43.1	44 10	"	"	"	9.8 15.7	03 36	04 10	4
	<del>356/6</del>	05 17.0	20 51	"	"	"	9.6 15.6	04 27		1

Pointer set at 109

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
	0 59W	-02 14	3-1	6.84	B9	1-1-1 <i>large very irregular</i>
		+28 16	1	6.27	B3	1-1-1
	0 30W	+61 08	2-3	7.53	F5	1-1-1
	1 01W	+29 42	2	7.37	B0	1-1-1
	1 41W	+52 37	2	7.17	G0-	1-1-1
	2 14W	+46 13	2	6.68	B9	1-1-1
	2 52W	45 01	2	6.52	A2	1-1-1
	3 23W	31 26	2-3	6.74	F0	1-1-1
	4 15W	45 30	1-2-3	7.24	K0	1-1-1 <i>irregular</i> <i>Sup list</i>
	4 46W	46 47	2-3	7.53	K0	1-1-1 <i>Sup list</i>
	5 11W	46 54	2	7.13	K0	1-1-1 <i>large</i> <i>Sup list</i>
	5 41W	44 40	2	6.35	G0	1-1-1
		28 53	2	6.37	B1	1-1-1 <i>Setting of heliophase irregular</i>

Sep 30 12 M.C. S.P. S.W. M.T. S.T.  
 -1 16.3 +12.0 -03.5 +02.0 +0.7  
*Rest.*



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Date Fri Sept 30 - Oct 1, 1938 Med-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
3773	HD 180216	19 10.6	16 01	I-12	Antia II	0 10	8.0 14.1	6 40	7 30	3	18°
3774	" 181144	19 14.2	16 19	"	"	"	8.0	7 32	8 22	4	25 16
3775	" 180451	19 11.5	15 59	"	"	"	7.9	8 25	9 18	1	24 18
3776	" 184689	19 56.2	32 31	"	"	"	7.8	9 23	10 13	3	25 32
3777	MWC 383 HD 209296	21 57.2	56 14	"	"	"	8.0	10 23	12 13	4	25 50
3778	HD 1662 MWC 63	00 15.8	12 13	"	"	"	7.6 13.8	12 17	01 12	2	25 10
3779	HD 20017 MWC 68	03 07.9	48 19	"	"	"	7.6 13.7	01 20	02 50	2	25 10
3780	HD 21650	03 29.6	41 25	"	"	"	7.7 13.9	02 53	03 47	3	25 10
3781	3333	05 04.5	13 05	"	"	"	7.6 13.1	03 52	04 40	4	25 10
3782	3048	05 18.2	3 08	"	"	"	7.6 13.8	04 43	05 31	2	25 10

⑩

pointer 9.4 (near end of wire!)

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
730	W 36 <sup>m</sup>	16 05	2	7.14	A <sub>2</sub> 1,1,1	
822	W 1 <sup>h</sup> 25	16 23	2	7.34	F <sub>5</sub> 1,1,1	
7 9	W 2 <sup>h</sup> 24	16 04	2	7.32	F <sub>0</sub> 1,1,1	Auroral arch in ) at 11:30 E-W streamer extending to S = -15°
8 12	W 2 <sup>h</sup> 35	32 36	2	7.19	B <sub>9</sub> 1,1,1	
8 5	W 2 <sup>h</sup> 34	56 25	2	8.1	B(s) <sub>2</sub> 1,1,1	
8 10	W 1 14	12 26	2	7.51	A <sub>3</sub> 1-1-1	
8 15	E 0 21	48 26	2	7.9	B <sub>2</sub> 1-1-1	
8 18	W 0 40	41 30	2-3	7.2	B <sub>2</sub> 1-1-1	High haze - U. center with some aurora at 15
8 20	E 0 06	13 27	2	7.07	F <sub>2</sub> 1-1-1	High aurora
8 22		31 09	2-3	7.37	K <sub>0</sub> 1-1-1	High haze

	M.P.	S.C	SW	M.T.	S.T.
Oct. 1	-116.9	+11.8	-04.4	+02.0	+0.7

Date Saturday Oct 1-2, 1938, M-T, Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
							<i>also below</i>			
3783	HD 210661	22 68	28 45	I-12	Astra II	1010	4.2 10.4	22 52	23 54	2
3784	218095	23 01.9	32 50	-	-	-	4.0	00 03	01 21	4
3785	470 100	44 47	13	-	-	-	3.9 10.3	00 29	01 42	1
3786	11336	01 46.4	44 19	-	-	-	4.1 10.4	01 46	02 20	5
3787	16245	02 31.3	29 59	-	-	-	4.1 10.5	02 29	03 00	3
3788	16580	02 39.9	29 21	-	-	-	4.1 10.5	02 53	03 21	1
3789	16594	02 39.5	31 53	-	-	-	4.1 10.4	03 04	04 00	2
3790	20134	03 09.1	59 41	-	-	-	4.0	04 06	04 32	3
3791	26039	04 09.3	16 16	-	-	-	4.1 10.4	04 37	05 24	4

Pointer at 28.73 (second plug out)

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					About 330 visitors - showed Jupiter with 74", Moon and Saturn with small instruments.
V 2 09	28 56	2	7.50	A2 1-1-1	
V 2 42	33 03	2-1	7.28	A0 1-1-1	Noncomponent
V 1 20	47 29	4	7.03	A2 1-1-1	
V 0 50	44 29	4-3	7.43	B5 1-1-1	
W 0 40	30 08	4-3	7.41	A0 1-1-1	
N 1 08	29 28	4-3	7.43	B9 1-1-1	
N 1 47	32 02	4-3	7.56	A2 1-1-1	
N 1 44	59 49	4	7.34	B3 1-1-1	
N 1 49	16 22	2-3	7.50	B9 1-1-1	



Pointer 31.5

Ending Time L.L.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS	
2 30	1 <sup>x</sup> h 33 W	44 08	1	7.00	A2	1-1-1	very poor seeing
		32 06	1	7.07	A0	1-	Blacked out by clouds
							M.C.    S.C    S.W.    M.T.    S    S.T. <sup>s</sup> <sup>s</sup> <sup>s</sup> <sup>s</sup> <sup>m</sup> Oct 3    -77.6    +11.5    -07.6    +02.4    +11.0

Date *Monday, Oct 3-4, 1938, M-L* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above <math>P_{20}</math></i>	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Angle End
3793	HD 187613 S	19 45.8	44 07	I - 12	Astra II	.010	8.5 14.6	18 35	19 51	3
3794	191048	20 2.8	15 47	—	—	—	8.6 14.8	19 54	21 12	4
3795	208835	21 53.9	46 23	—	—	—	8.6 14.8	21 16	22 20	1
3796	218472	23 3.2	30 55	—	—	—	8.6 14.8	22 24	23 20	2
3797	217477	22 55.9	30 33	—	—	—	8.6 14.8	23 23	23 53	3
3798	7374	01 08.8	15 36	"	"	"	8.6 14.8	00 02	00 17	1
3799	9100	01 24.5	17 51	"	"	"	8.6 14.8	00 22	00 38	4
★ 3800	15402	02 29.1	44 12	"	"	"	8.6 14.8	00 43	01 39	1
3801	17891	02 47.3	46 44	"	"	"	8.7 14.8	01 43	02 17	2
3802	21379	03 21.8	12 23	"	"	"	8.7 14.9	02 22	02 44	3
3803	26398	04 05.4	16 22	"	"	"	8.7 14.9	02 45	03 32	4
3804	34054	05 09.5	14 56	"	"	"	8.6 14.8	03 36	04 30	1
3805	44738	06 18.3	14 10	"	"	"	8.6 14.8	04 35	05 31	2

pointer at 10.26

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 35 W	44 13	2	7.5 -	1-1-1 light clouds now and then.
1 39 W	15 55	2-1	7.46 B9	1-1-1 " "
0 56 W	16 35	2	7.39 A0	1-1-1 " "
0 47 W	31 07	3-2	7.34 A2	1-1-1 " "
1 <sup>21</sup> W	30 45	2	6.52 A0	1-1-1
0 <sup>22</sup> E	15 48	2-3	5.80 B8	1-1-1
0 <sup>17</sup> E	18 02	2-3	6.02 A2	1-1-1
0 <sup>21</sup> E	44 22	3	7.40 B9	1-1-1
0 <sup>01</sup> E	46 55	2	6.71 B9	1-1-1
0 <sup>02</sup> E	12 31	2-1	6.20 A0	1-1-1
0 <sup>03</sup> E	16 30	2	6.97 B4	1-1-1
0 <sup>09</sup> E	15 00	2-1	7.27 B9	1-1-1
0 <sup>17</sup> E	14 09	2-1	7.3 A0p	1-1-1

M.P. S.C. S.W. M.T. S.T.  
 Oct. 4 16 -1<sup>m</sup> 19<sup>s</sup>.0 +14<sup>s</sup>.0 -08<sup>s</sup>.9 +01.2 +01.0



Date Tuesday, October 4-5, 1938, H-L Julian Day \_\_\_\_\_

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
- 3806	HD 183794	19 26.1	-02 19	I-12	Astra II	set 010	above filter 10.0 16.5	18 30	19 50	3
- 3807	216803	22 50.8	-32 06	"	"	"	10.2 16.3	20 35	21 55	4
- 3808	216503	"	"	"	"	"	"	21 56	22 56	7
3809	206280	21 36.0	+43 59	"	"	"	10.1 16.2	22 06	23 36	2
3810	209602	22 00.2	+22 27	"	"	"	10.1 16.3	23 41	00 41	3
Wed Oct 5-6				Ad-L	Clouds					

Pointe est 114

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
0 57 W	-02 16	1-2	7.0 <sup>x</sup>	B9	1-1-1	light clouds
0 23 E	-31 48	2	7.4	K5	1-1-1	light clouds
0 49 W	-31 50	2-3	7.4	K5	1-1-1	light clouds
2 34 W	+44 09	4	6.68	B9	1-1-1	light clouds
3 15 W	+38 33	3	7.17	G5	1-1-1	light clouds

	M.C.	S.C.	S.W.	MT	ST.
Oct 5 12	-18.8	+10.8	-14.7	+00.2	+1.0
Oct 6 12	-17.8	+12.0	-16.1	-01.5	+1.1

Date Thursday, Oct 6-7, 1938, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Color</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3811	H.D. 190047	19 58.0	30 50	I-12	Astron II	1010	4.1 10.4	18 27	19 27	4
3812	191879	20 7.0	14 21	-	-	-	4.2 10.4	19 30	21 04	2
3813	207431	21 43.8	43 32	-	-	-	4.2 10.4	21 07	22 47	3
3814	215242	22 38.7	46 38	-	-	-	4.1 10.2	22 51	23 23	4
3815	218428	23 29	29 31	-	-	-	4.1 10.3	23 26	00 26	1
3816	7157	01 06.8	61 10	-	-	-	4.1 10.2	00 22	-	2
3817	10773	01 40.3	42 13	-	-	-	4.4 10.3	00 53	-	3
3818	* 10774	02 34.5	31 53	-	-	-	4.2 12.4	02 22	04 00	4
3819	31173	05 17.8	15 55	-	-	-	4.1 10.3	04 05	04 55	1
3820	35512	05 20.2	15 23	-	-	-	4.2 10.3	04 53	05 20	2
	* Using star taken, - not analyzed									

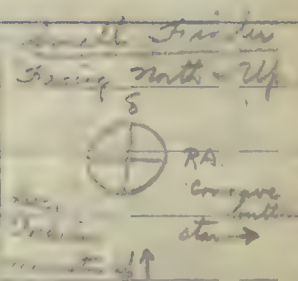


Date Friday, October 7-8, 1933 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
- 3821	HD 206155 HP 216956	21 35.1	+08 44	I-12	Ast-II	010	6.5 12.6	18 27	19 57	23
- 3822	d Pool	22 52	-30 09	"	"	"		20 13		4
	"								20 23	
- 3823	HD 216093 HD 216803	22 50.8	-32 06	"	"	"	6.5 12.7	20 34	22 44	1
3824	222857	23 35.0	+73 25	"	"	"	6.6 12.6	23 05	23 20	4
3825	224098	23 50.0	+73 51	"	"	"	6.6 12.7	23 11	00 00	1
3826	1626	01 15.2	30 23	"	"	"	6.6 12.6	00 10	00 30	2
3827	448	01 55.7	17 40	"	"	"	6.5 12.6	00 35	01 00	3
3828	5343	01 50.2	57 16	"	"	"	6.4 12.6	01 01	02 15	4
3829	16180	01 30.0	47 51	"	"	"	6.9 12.5	02 00	04 00	1
	<del>3827</del>	<del>01 24.7</del>	<del>37 55</del>				6.9 12.4	02 10		

Point set 30.5 and plug out.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
X 0 53W	+08 55	1	7.0 A0 1-1-1	} How exposures setting    exp 2            120 <sup>s</sup> 5            60 <sup>s</sup> 8            30 <sup>s</sup>
			1.3 A3	
1 45E	-29 53	2		
0 38W	-31 49	2	7.4 K5 1-1-1	Light haze soon after start. <sup>used upper camera</sup> fragmenting
0 40W	+73 38	2-3	6.86 G5 1-1-1	Huge Buller's streamers
			6.55 B9 1-1-1	
01 00W	30 35	2	5.77 B8 1-1-1	None
01 46W	17 52	2	6.51 K0 1-1-1	rather shallow, Sup. list
2 00W	57 34	2	7.02 K2 1-1-1	Huge porcellanids, Sup. list
2 00W	48 00	2	7.04 G5 1-1-1	Sup. list
	77 51			cl. ...



	M.P.	S.P.	S.W.	M.T.	S.T
Oct. 8	10	-1 19.8	+10.2	-17.0	-00.2 +0.7 <sup>m</sup>



Uncertain at sunset

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Ending Time  
2.3

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
			7.14 Az 1.	<p>Clouds.            About 20 minutes. Showed telescope.            no charge. Remained thick. Cloud 11.00            Closed about 2.30. Opened again 3.00            and before sunset. Closed 4.30            Sky still clear</p>



Date Sunday Oct 9-10 Y-G-L Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
3830	HD 179280	19 06.9	31 28	I-12	astral II	010	+6.0	6 30	7 40	2
3831	HD 187237	19 43.9	27 36	"	"	"	+6.1	7 13	8 43	3
3832	HD 202351	21 10.1	16 04	"	"	"	+6.1	8 47	9 47	4
3833	HD 212186	22 17.3	15 08	"	"	"	+6.1	9 50	11 00	2
3834	HD 219291	23 09.6	29 13	"	"	"	+6.1	11 03	12 03	5
3835	HD 10363	01 36.1	43 08	"	"	"	+6.2 12.2	12 08	1 05	1
3836	HD 21068	02 18.8	28 18	"	"	"	+6.2 12.2	01 29	02 29	2
3837	HD 31064	04 47.7	43 54	"	"	"	+6.2 12.3	02 35	03 55	5
3838	HD 33336	05 04.5	13 25	"	"	"	+6.2 12.3	03 00	03 45	4
3839	HD 36532	05 20.3	15 35	"	"	"	+6.2 12.3	03 50	05 10	1

Ending Time EST.	Hour Angle Rnd	Declination	Seeing	Ptg. Mag.		Comp	REMARKS
7:45	1 <sup>h</sup> 26 <sup>m</sup> W	31 31	1	7.4	F <sub>0</sub>	1-1-1	Reset watch sid +0.8 standard +0.1
8:00	1 52 W	27 43	1-2	7.5	G <sub>5</sub>	1-1-1	
8:15	1 <sup>h</sup> 30 W	16 13	1	7.0	F <sub>0</sub>	1-1-1	hazy.
8:30	1 35 W	15 20	1	6.69	A <sub>0</sub>	1-1-1	Thick
8:45	1 47 W	29 25	1	6.84	F <sub>5</sub>	1-1-1	cloud
9:00	0 40 W	43 16	1	7.03	A <sub>0</sub>	1-1-1	more cloud
9:15	0 04 W	23 35	1	6.99	A <sub>0</sub>	1-1-1	clearing
9:30	1 00 E	43 57	1-2	5.76	B <sub>9</sub>	1-1-1	
9:45	0 25 E	13 28	1-2	7.07	F <sub>2</sub>	1-1-1	For Dr. Beard.
10:00	0 43 W	15 37	1-2	7.48	A <sub>0</sub>	1-1-1	cloud

Date Monday, Oct 10-11, 1938 M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>None Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Dist
3840	HD. 178568	19 4.0	14 17	I-12	<i>detrol II</i>	.010	9.3 15.5	18 22	18 46	2	30 W 14
3841	193349	20 14.7	14 04	—	—	—		18 50	19 16	3	02 E 14
3842	191671	20 6.0	27 58	—	—	—	9.5 15.6	19 20	20 18	4	19 W 14
3843	202644	21 12.1	13 32	—	—	—	9.5 15.6	20 21	21 17	1	02 W 13
3844	209484	21 58.7	29 <del>44</del> 33	—	—	—	9.4 15.4	21 20	22 00	2	17 W 27
3845	208174	21 49.4	27 53	—	—	—	9.4 15.4	22 03	22 33	3	4 W 27
3846	210646	22 6.7	27 14	—	—	—	9.4 15.3	22 35	23 21	4	12 W 27
3847	224801	23 55.7	44 42	—	—	—	9.4 15.2	23 24	23 46	1	67 W 27
3848	1243	0 11.6	13 22	—	—	—	9.3 15.4	23 48	01 43	2	11 W 13
3849	11180	02 44.7	46 56	—	—	—	9.3 15.4	01 50	01 51	0	02 W 13
3850	16245	02 31.3	28 59	—	—	—	9.3 15.4	01 46	02 46	4	02 W 13
3851	21611	03 24.2	29 42	—	—	—	9.3 15.4	01 40	02 40	1	02 W 13
3852	25030	05 16.7	16 01	—	—	—	9.3 15.4	04 55	05 05	0	02 W 13

Pointer at 10.6

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS				
19 22	0 38 W	14 20	4	6.72	B9	1-1-1 haze near horizon.				
19 26	0 02 E	14 10	4	6.81	A0	1-2 Right star is F star with fainter star just below it. They are similar in fainter than bright star again. It. N. component.				
20 18 4	1 09 W	28 05	4-3	7.5	B5	1-1-1				
21 17	1 02 W	13 41	4	7.37	B8	1-1-1				
22 02	0 58 W	29 53	4-3	6.99	B9	1-1-1				
22 33	1 41 W	28 02	3	6.77	A2	1-1-1				
23 21	2 12 W	27 26	3-2	7.07	A0	1-1-1				
23 46	0 47 W	44 55	3	6.25	A0p	1-1-1				
	1 24 W	13 35	3	7.58	A3	1-1-1				
	0 57 W	47 07	3	7.09	B3	1-1-1				
	1 16 W	30 07	1-2-3	7.41	A0	1-1-1 seeing variable!				
	1 33 W	24 44	2-3	7.51	A0	1-1-1				
		16 03	3	7.33	A1	1-2 light clouds appearing at 5.00. visibility falling in. thick at 4.35				
	Plat. 3852	is left in hollow and								
	marked as top in full.									
				MC	SC	SW	HT ST			
				Oct. 11	12	-1 21.1	+09.5	-25.9	-03.6	+0.3

light clouds appearing at 5.00. visibility falling in. thick at 4.35

Date Tuesday, October 11-12, 1938 H-L Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
- 38 53	HD 183794	19 26.1	-02 19	I-12	Act. II	Soft 010	above Galv 16.2 22.5	18 18	19 24	3	5
38 54	189847	19 57.0	+30 57	"	"	"	16.4 22.3	19 28	19 58	4	
38 55	199140	20 53.1	+28 08	"	"	"	16.5 22.3	20 01	20 26	1	
38 56	209693	22 00.2	+32 27	"	"	"	16.5 22.4	22 29	23 05		
38 57	217491	22 56.0	+44 50	"	"	"	16.5 22.4	23 09	23 41	3	
38 58	221237	23 25.2	+58 41	"	"	"	16.5 22.5	23 41	24 13	4	
38 59	1506	00 15.2	+20 23	"	"	"	16.4 22.5	00 51	01 23	1	
38 60	16111	02 35.8	+45 53	"	"	"	16.4 22.5	01 53	02 37	2	
38 61	23838	03 43.1	+44 40	"	"	"	16.5 22.5	03 11	03 30	3	

Pointer set 15.8

Ending Time  
LST

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
0 <sup>58</sup> W	-02 15	4-3	6.8	B9	1-1-1 Light haze and thick smoke. Shuttle out west
1 <sup>02</sup> W	+31 04	3	6.66	B8	1-1-1 thinning out
0 <sup>06</sup> W	+29 17	3	6.27	B3	1-1-1
		RASC	Small meeting. Heard Jupiter + M57 with 74"; Mars with 4"; HD 150149 and 211		
2 <sup>05</sup> W	+32 57	2	7.17	G5	1-1-1 haze
1 <sup>00</sup> W	-45 01	2	6.52	A2	1-1-1 light clouds
2 <sup>05</sup> W	+33 12	2	7.06	A2	1-1-1 haze, light clouds
2 <sup>00</sup> W	+30 35	2	6.77	B3	1-1-1 light clouds, sky rapidly filling in
1 <sup>00</sup> W	+41 08	1-2	6.85	B3	1-1-1 clearing partially, clouds begin, sky filling in
0 <sup>00</sup> W	+44 47	2	6.35	G0	1-1-1 again breaking away, more clouds. ended at 23 <sup>32</sup>

	MC	SC	SW	M.T.	ST
Oct 12	12	-1 21.6	+09.2	-29.6	-05.8 +0.4

Date *Wed Oct 12-13, 1938* Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3862	HD 180216	19 10.6	16 01	L-12	Orton II	010	15.8 21.8	6 33	7 31	4
3863	" 181144	19 14.2	16 19	"	"	"	15.7	7 34	8 30	1
3864	" 187255	19 44.0	27 26	"	"	"	15.6	8 33	9 33	2
3865	" 201194	21 02.9	30 42	"	"	"	15.5 21.7	9 36	10 56	3
3866	" 9709	01 30.0	46 36	"	"	"	15.5 21.6	11 02	12 02	4
3867	9512	01 26.6	16 28	"	"	"	15.5 21.6	12 07	01 52	1
- 3868	MWC 82 HD 21910	01 05.7	41 53	"	"	"	15.3 21.6	02 03	03 10	2

pointer at 15.3

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS												
7:24	W1 <sup>h</sup> 25-	16 05	1 → 3	7.14 Az 1,1,1	Setting delayed by clouds blearing gradually												
8:30	W2 <sup>h</sup> 21	16 23	5 → 0	7.34 F5 1,1,1	4.0 fuzzy												
9:33	W2 <sup>h</sup> 54	27 33	1	7.34 A0 1,1,1													
	W2 <sup>h</sup> 57	30 20	1	7.46 B8 1,1,1	hazy												
	024 E	46 49	1	7.00 B9c 1,1,1													
	110 W	16 39	1	7.59 G6 1-1-1	Very light clouds most disappear												
	001 E	41 37	1	7.6 B200 1-1-1	clouds from 01 <sup>35</sup> -02 <sup>00</sup> very light sky remaining quite thick from 3 <sup>00</sup> until 3.45, so cloud up												
					<table border="0"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>SW</td> <td>MT</td> <td>ST<sub>m</sub></td> </tr> <tr> <td>Oct 13 12</td> <td>-122<sup>0</sup></td> <td>+08<sup>9</sup></td> <td>-31<sup>3</sup></td> <td>-07<sup>2</sup></td> <td>+06</td> </tr> </table>		MC	SC	SW	MT	ST <sub>m</sub>	Oct 13 12	-122 <sup>0</sup>	+08 <sup>9</sup>	-31 <sup>3</sup>	-07 <sup>2</sup>	+06
	MC	SC	SW	MT	ST <sub>m</sub>												
Oct 13 12	-122 <sup>0</sup>	+08 <sup>9</sup>	-31 <sup>3</sup>	-07 <sup>2</sup>	+06												





Clearing intermittently 9-10

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Pointer at 12.3

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS												
253	W 1 <sup>h</sup> 31	49 52	1	6.8 Ave	1,1,1 Clouds 10.25-10.50 Call middle 11.05												
254	W 0 23	16 38	11	7.59 G5	1,1,1												
	W 1 38	63 01	1-2	7.5 B590	1-1-1												
	V 0 50	44 45	1-2	7.8 K200	1-1-1												
	W 0 35	44 16	2-1-0	7.59 F5	1-1-1												
	W 0 52	16 02	0-2	7.09 G70	1-1-1												
					<table border="0"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>SW</td> <td>MT</td> <td>S.T.</td> </tr> <tr> <td>Oct. 14 12</td> <td>-1 22.6</td> <td>+08.7</td> <td>-33.3</td> <td>-09.4</td> <td>+0.6<sup>m</sup></td> </tr> </table>		MC	SC	SW	MT	S.T.	Oct. 14 12	-1 22.6	+08.7	-33.3	-09.4	+0.6 <sup>m</sup>
	MC	SC	SW	MT	S.T.												
Oct. 14 12	-1 22.6	+08.7	-33.3	-09.4	+0.6 <sup>m</sup>												



Point at 12:07

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 05 W	30 28	2	6.66 B9	1-1-1
1 58 W	44 14	2-1	7.7 B8	1-1-1 light clouds coming up from West did not interfere with observation
2 19 W	15 52	1-0	6.68 B9	1-1-1
0 49 W	30 45	2-1	6.52 A0	1-1-1 discovered slide not drawn started exposure again.
2 14 W	31 08	2-1	7.34 A2	1-1-1
1 47 W	29 11	2-1	7.44 A2	1-1-1 Haze, clouds
2 24 W	43 49	2-1	7.25 A0	1-1-1 Slide not drawn, exposure began
1 51 W	16 24	2	7.38 A0	1-1-1 Tracking down slide not drawn up

	MC	SC	SW	MT	ST
Oct 15 10	-1 23.3	+08.3	-36.7	-10.5	+10.6





1938

Date Sunday Oct 16-17 Y-E-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Dist
3885	HD 176053	18 533	31 52	I-12	astrat	010	+12.9	6 15 AM	6 55	3	23° W
3886	HD 191918	20 07.2	32 00	"	"	"	+13.0	6 59	7 39	4	23° W
3887	HD 202314	21 099	29 29	"	"	"	+13.0	7.43	8 13	1	23° W
3888	HD 209469	21 586	42 20	"	"	"	+13.0	8.17	8 47	2	23° W
3889	HD 216608	22 492	44 13	"	E 33	"	+12.9	8.50	9 14	1	15° E
3890	HD 218395	23 026	32 18	"	Astray	"	12.8	9.18	9 34	3	8° E
3891	HD 224720	23 551	46 23	"	"	"	12.9	9.38	10 22	4	15° E
3892	HD 1826	00 176	28 55	"	"	"	12.8	10.26	11 00	1	15° E
3893	HD 3291	00 309	44 06	"	"	"	12.8	11 04	11 50	2	15° E
3894	HD 10588	01 382	31 43	"	"	"	12.8 12.9	11 50	12 20	3	15° E
3895	HD 13201	02 029	16 46	"	"	"	12.8 12.8	00 33	01 29	4	15° E
3896	HD 16325	02 233	45 34	"	"	"	12.8 12.8	01 06	01 46	1	15° E
3897	HD 21251	03 157	12 17	"	"	"	12.8 12.8	01 52	02 24	2	15° E
3898	HD 22104	03 250	31 41	"	"	"	12.9 12.8	02 29	03 00	3	15° E
3899	HD 22447	04 201	27 55	"	"	"	12.8 12.8	03 05	03 51	4	15° E
★ 3900	HD 24114	06 019	32 51	"	"	"	12.8 12.8	03 44	04 41	1	15° E

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
1 <sup>h</sup> 23 <sup>m</sup> W	44 08	4	7.18	A3	1-1-1	} good seeing but clouds.
52 <sup>m</sup> W	32 06	4-3	7.07	A <sub>0</sub>	1-1-1	
25 <sup>m</sup> W	29 38	4	7.25	K0	1-1-1	
9 <sup>m</sup> W	42 31	5-	7.04	A9	1-1-1	}
15 E	44 25	5-	5.62	A <sub>0</sub>	3-3-3	
8 <sup>m</sup> E	32 29	4	6.03	A2	1-2	}
15 <sup>m</sup> E	46 36	5-	7.31	A2	1-1-1	
3 <sup>m</sup> 41	29 05	4	6.97	A3	1-1-1	}
1 <sup>h</sup> 40 W	44 16	4	7.28	B3	1-1-1	
0 <sup>h</sup> 16 W	31 52	4	7.20	B5	1-1-1	} happens in SW after beginning of exposure Sup. list
0 <sup>h</sup> 16 W	16 56	3	6.85	F5	1-1-1	
0 <sup>h</sup> 44 W	45 45	3-4	7.55	G5	1-1-1	Sup. list
0 <sup>h</sup> 25 W	12 25	4	7.00	G5	1-1-1	Sup. list
1 <sup>h</sup> 52 W	31 49	3	6.90	F <sub>0</sub>	1-1-1	
0 <sup>h</sup> 44 W	28 00	3-2	7.42	G5	1-1-1	Sup. list
1 <sup>h</sup> 28 W	32 51	2	7.33	F <sub>0</sub>	1-1-1	Sup. list





Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS		
1.01 W	45 53	2-3	7.34 G5	1-1-1	Sun set	
0.34 W	46 46	3	7.03 K0	1-1-1	Sun set setting 62	
				1/10	setting 72	
				Oct 17	12	-1 24.7 +07.6 -30.6 $\overbrace{-14.0}^{+09}$

Date Monday, Oct. 17-18, 1938, M-L Julian Day

Plate No.	Object	R.A.		Declination		Instrument	Emulsion	Slit	Temperature		Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
		1900		1800					Above	Below			
3903	HD. 188651	19	51.1	29	56	I-12	Orion II	.010	15.5	21.5	18 12	18 54	4
3904	191048	20	2.8	15	47	—	—	—	15.2	21.5	18 57	20 59	1
3905	199206	20	50.6	44	44	—	—	—	15.2	21.2	21 03	22 47	2
3906	1826	0	17.6	28	55	—	—	—	15.2	21.4	22 52	01 <sup>32</sup>	3
3907	15992	02	29.1	44	12	—	—	—	15.3	21.5	00 <sup>36</sup>	02 <sup>26</sup>	4
3908	22124	03	23.5	31	41	—	—	—	15.3	21.5	02 <sup>30</sup>	03 <sup>30</sup>	1
3909	35107	05	17.9	16	56	—	—	—	15.3	21.5	03 <sup>35</sup>	04 <sup>11</sup>	2
3910	43476	06	11.4	15	53	—	—	—	15.3	21.5	04 <sup>15</sup>	05 <sup>45</sup>	3

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
8:57	0 27 W	30 01	2-1	6.34	B9	1-1-1	Trouble with dome shutters, necessary to react softly and every time motor is turned on.
10:59	2 20 W	15 55	1	7.46	B9	1-1-1	Reset focus of spectograph from 26.14 to about 26.18 or 26.19 quite hazy - image faint.
22:42	3 21 W	44 54	1	7.40	B9	1-1-1	
	1 39 W	29 06	0	6.97	A3	1-1-1	for the young. very weak
	1 21 W	44 22	0	7.40	B9	1-1-1	
	1 20 W	31 49	0	6.90	F0	1-1-1	for the young.
	0 11 W	16 35	0	6.15	A2	1-1-1	
	0 39 W	15 52	0	7.16	B7	1-1-1	

			MC	SC	S <sub>21</sub>	MT	S.T. <sub>21</sub>
Oct. 18	12	-125.3	+07.7	-45.7	-15.6	+0.7	



Printer out 11.7

Ending Time  
EET.Hour Angle  
End

Declination

Seeing

Ptg. Mag.

REMARKS

6.8 r B9

Some fog came up just as exposure started (11.7)  
Closed shutter.

Fog thinning out 10<sup>00</sup> - 10<sup>45</sup>. Some haze  
spread up 11<sup>00</sup>. Some fog almost at sea.  
Closed up. Put on hat. (Everything dry inside dome)

		MC	SC	SW	M.T. <sub>s</sub>	ST <sub>m</sub>
Oct. 19	12	-126.1	+07.5	-47.3	-17.0	+0 <sup>m</sup> .8

Date Wed Oct 19-20, 1938. Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
5 3911	MWC 347 HD 195592	20 27.2	43 59	2-12	Antar	010	9.3 15.7	8 32	10 00	1
3912	HD 1826	00 17.6	28 55	"	"	"	9.3	10 05	10 51	2
3913	" 9312	01 26.6	76 28	"	"	"	9.3 15.2	10 56	01 00	3
3914	" 22169	05 25.8	31 41	"	"	"	9.2 15.2	01 30	02 30	4
3915	" 36533	05 20.3	15 35	"	"	"	9.2 15.3	02 34	03 55	1
3916	" 43931	06 13.8	13 29	"	"	"	9.2 15.3	04 00	05 40	3
"	Thurs Oct 20-21									
	Cloudy with rain in evening. Clearing about 11 <sup>00</sup> . Clouds clear at midnight but clouds during in NW sector with some clouds in sky filled in before sleep started.									
	Fri Oct 21-22									
	Hd-T Rain									

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Clouds and rain all day.  
 Clearing at 7.00 + again at 8.00.  
 Pointer at 10.5

Ending Time  
EST.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
W 3 <sup>h</sup> 06	44 05	1	7.2	Bise 1,1,1	Clouds and haze
W 06 <sup>m</sup>	29 05	1	6.97	A3 1,1,1	Wage for Y
1 <sup>32</sup> W	16 38	1	7.59	G5 1,1-1	thick from 11.00-12.00 during partial eclipse.
0 34 W	21 43	1-0	5.40	F0 1-1-1	for (C) Young
0 08 W	15 37	1-0	7.02	<sup>A0</sup> B9 1-1-1	
1 08 W	13 27	1-0	7.33	F5 1-1-1	Dealer, took brighter and preceding, etc.

		MC	SC	SW	MT	ST	
in visibility	Shade at 11 <sup>50</sup>	Oct 20 12	-1 <sup>m</sup> 26.7	+07.5	-50.5	-18.7	+0.9 <sup>m</sup>
		Oct 21 12	-1 27.7	+07.0	-49.0	-20.3	+0.9
		Oct 22 17	-1 28.4	+06.7	-51.1	-22.0	+0.2 <sup>m</sup> out.



Date Saturday, Oct 22-23, 1938, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3917	HR 193349	20 14.7	14 04	I-12	a.II	.010	1.4 7.6	19 07	20 08 4	37 W
3918	7374	1 8.8	15 36	-	-	-	1.2 7.6	22 47	23 51 1	
3919	17891	02 47.3	46 49	-	-	-	1.2 7.6	00 32	01 32 2	
	26171	09 03.4	13 08	-	-	-	1.2 7.8	01 33		
<p><u>Sunday, Oct 24-25, M-L</u></p> <p>cloudy. cleared partially about 8:30 pm but clouded over soon.</p>										

Pointer at 26.93 Had considerable trouble adjusting it as it seemed to make very poor contact

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
20 05 4	37 W	14 10	0	6.81	A0 1-1-1	Clouds over most of sky for some time after sunset About 120 visitors showed saturn with 74" Nebuloid Jupiter with 4"
						<i>hazy most of time.</i>
21	0 26 W	15 44	1	5.80	B8 1-1-1	very hazy - image faint
	28 W	46 54	1	6.71	B9 1-1-1	Hazy
		13 15	1	6.00	B1 1-	Very faint but distinct with 4" telescope hazy sky still visible with small

Sunday Oct 23-24

Heavy clouds & Rain during night

	ME	SE	SW	MT	ST
Oct. 24	12	-1 29.5	+06.2	-48.5	-26.2 <sup>s</sup> <sub>m</sub> +0.3
Oct. 25	12	-1 30.5	+05.7		-27.5 <sup>s</sup> <sub>m</sub> +0.3

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Date Tuesday, October 25-26, 1938 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3920	HD 172187 HD 216956	18 33.7	+43 19	I-12	Astron I	010	4.0 10.2	17 59	18 24	4
- 3921	& Per A HD 216903	22 52.1	-30 09	"	"	010	"	18 49	18 53	1
- 3922	HD 216683	22 50.8	-32 06	"	"	010M	4.1 10.3	19 33	21 32	2
3923	1826	00 17.6	+28 54	"	"	010	4.0 10.2	21 46	22 31	3
3924	9312	01 26	+16 28	"	"	"	4.0 10.3	22 35	23 30	4
3925	16111	02 31.2	+28 58	"	"	"	4.1 10.3	23 34	00 34	1
3926	22184	03 22.3	+31 41	"	"	"	4.0 10.2	00 35	01 35	2
3927	22473	03 37.7	+43 18	"	"	"	4.0 10.2	01 47	02 57	2
3928	24301	04 32.1	+46 25	"	"	"	4.1 10.3	03 02	03 56	4
3929	24695	04 35.4	+45 46	"	"	"	4.1 10.3	04 01	04 31	1
3930	42031	06 25.9	+15 58	"	"	"	4.1 10.3	04 35	05 15	2
3931	63630	07 44.5	+46 12	"	"	"	4.0 10.2	05 24	06 27	3
	Wed Oct 26			Inst-B changed to I-25				I-12 focus was 26.18		1940
3931 F	7 stars			I-25 extra		010	6.0 12.2			3

Printer = 29.1 ; plug out.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS																					
	1 46 W	+43 10	2	6.40 A5	1-1-1	Image small but very unsteady																					
			2	1.29 A3		3 eff. $\frac{2}{5}$ $\frac{1}{5}$ $\frac{40}{25}$ $\frac{18}{18}$ must trouble with 8 setting																					
	0 40 W	-31 52	2	7.4 K5	1-1-1	Limit W from scope.																					
	0 10 W	+29 06	3	6.97 A3	1-1-1	for the young																					
	0 00	+16 37	3	7.59 G5	1-1-1	for Hd																					
	0 00	+29 07	3	7.05 B8	1-1-1	Look clouds at 00 <sup>15</sup> sky rapidly thickening																					
	0 05 W	+31 41	2	6.90 F0	1-1-1	Range for 2nd young																					
	0 53 W	+43 23	2	7.30 F5	1-1-1	Image variable, image unsteady																					
	1 14 W	+76 25	2-1	6.93 F5	1-1-1																						
	1 49 W	+75 48	2-1-3	6.32 F0	1-1-1																						
	0 49 W	+15 57	2-3	6.51 A5	1-1-1																						
	0 20 W	+46 05	2-3	6.61 A3	1-1-1																						
						<table border="0"> <tr> <td></td> <td></td> <td>MC</td> <td>SC</td> <td>SW</td> <td>HT</td> <td>ST</td> </tr> <tr> <td>Oct. 26</td> <td>12</td> <td>-1 31.4</td> <td>+05.3</td> <td>-49.7</td> <td>-28.0</td> <td>10.7<sup>m</sup></td> </tr> </table>			MC	SC	SW	HT	ST	Oct. 26	12	-1 31.4	+05.3	-49.7	-28.0	10.7 <sup>m</sup>							
		MC	SC	SW	HT	ST																					
Oct. 26	12	-1 31.4	+05.3	-49.7	-28.0	10.7 <sup>m</sup>																					
						<table border="0"> <tr> <td>no filters</td> <td>Tilt 23.15</td> <td>7 occs</td> <td>23.0</td> <td>set 1</td> <td></td> <td></td> </tr> <tr> <td>4/4</td> <td></td> <td></td> <td>23.2</td> <td></td> <td>5</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>23.4</td> <td></td> <td>9</td> <td></td> </tr> </table>	no filters	Tilt 23.15	7 occs	23.0	set 1			4/4			23.2		5					23.4		9	
no filters	Tilt 23.15	7 occs	23.0	set 1																							
4/4			23.2		5																						
			23.4		9																						
						23.4 is good																					

Centrate thru base

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Date Wed Oct 26-27, 1938 H. B. L. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
- 3932	<sup>γ Cas</sup> HD 5394	00 50.7	60 "	I-25	<del>Process</del> <del>Antara II</del>	O10	7.5 13.3	8 38	8 50	1
								8 51	8 56	
								8 57	8 59	
- 3933	MWC 7 HD 2905	0 27.3	62 34	"	Antara II	"	7.5	9 07	9 17	4
								9 53	10 25	
- 3934	α Andr HD 358	0 03.2	28 32	"	Process	"	7.2	10 32	10 40	1
								10 41	10 45	
								10 46	10 48	
- 3935	HD 358 α Andr				E 33	"		10 50	10 57	2
								10 59	11 02	
								11 03	11 04	
- 3936	MWC 8 HD 4180	0 39.2	47 44	"	Antara II	"		11 14	11 30	4
								11 30	11 39	
3937	HD 9709	01 30.0	46 36	"	Antara II	"	7.2 13.3	11 48	02 00	3
- 3938	MWC 88 HD 23226	09 39.3	40 36	"	"	"	7.1 13.3	02 30	03 10	4
① 3938F	<del>used</del> <del>Thurs Oct 27</del> Process			<del>1st</del> <del>changed to</del> I-12	<del>Antara II</del>	O10	3.4	From 26.18	26.45	3

Opening 5.40 clouds 5.50 clear occasionally  
but not long enough to start

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Ending Time E.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
9:01		60 22	2	2.5 <sup>?</sup>	<sup>no filter</sup> Bop 8,8	set 1
9:16					8,8	" 5
9:29	E 1 <sup>h</sup> 52				16	" 9
9:44	E 1 <sup>h</sup> 11	62 34	2	4.2	<sup>17 filter</sup> Bop 5,4	set 2, call end 9:13 - clouds.
10:05	E 2 <sup>m</sup>				5,4	" 7 mostly cloudy
10:00		28 45	2	2.25	<sup>no filter</sup> Aop 8,8	set 1
10:04					8,8	" 5
10:08	W 45 <sup>m</sup>				8,8	" 9
10:12			2		3,3	set 1
10:16					3,3	" 5
10:24	W 1 01				6	" 9
10:30				4.7	<sup>17 filter</sup> Bop 3,3,3	set 3
10:33	W 1 00				3,3,3	" 8
10:38	W 46 48	1-2	7.00	Bop	3,3,3	close at 20 <sup>45</sup> for the day
10:42	46 40	2-3	6.1	Bop	3,3,3	mostly cloudy, solid at 20 <sup>45</sup> clearing
10:48	entire this base				10/10	solid at 20 <sup>45</sup> remains solid

for B

\* after dark use for the  
coordinates for HD 34304P  
L

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Date Thurs Oct 27-28, 1938 Hal-H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Dec
3939	HD 180216	19 10.6	16 01	I-12	Antar I	010	2.9 9.0	6.00	6.54	1	6.46
3940	HD 216083 <del>HD 216083</del>	22 50.8	-32 06	"	"	"		7.09	9.24	2	2.2
3941	HD 1826	00 17.6	28 55	"	"	"	2.7 8.9	9 35	10 29	3	1.5
3942	" 9312 MWC 49	00 26.6	16 28	"	"	"	2.6 8.9	10 33	11 45	4	2.0
3943	HD 15472	02 29.4	10 30	"	"	"	2.5 8.9	02 04	02 04	1	1.5
3944	HD 22104	03 28.5	31 41	"	"	"	2.6 8.1	02 22	02 02	2	1.5
3945	43043	06 09.0	16 04	"	"	"	2.6 8.2	02 57	03 51	3	1.5
3946	43951	06 15.8	16 29	"	"	"		04 01			
	43951			"	"	"	2.6 8.0	04 13	05 04	4	1.5
3947	43947	06 13.9	16 03	"	"	"		05 42	06 14	1	1.5

(5)

M.C. S.C.  
Oct 27 12 -1<sup>m</sup> 30.7 +04.0

M.T. ST  
-28.0 +0.9

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
6541 W 1 46	16 05	1	7.14 A2 1, 2, 1	
6542 W 37 <sup>m</sup>	-31 54	1-0	7.4 155 1, 1, 1	for and by #
6543 W 15	29 07	1	6.97 A3 1, 1, 1	for Y
6544 W 22 <sup>m</sup>	16 38	1	7.59 G5 1, 1, 1	
6545 W 1 42	20 41	1-2	8.0 PA2 1-1-1	
6546 W 1 47	31 49	1-2-3	6.90 F0 1-1-1	F Y. Significant
6547 W 1 07	10 44	2	7.51 G3 1-1-1	
6548 W 1 31	13 28	2-1	7.38 F5 1-1-1	9 changed to with peak in table
6549 W 2 06	16 02	2	7.09 G0 1-1-1	Star in table

Oct 28 12 -1 35.7 +01.4 -54.8 +31.2 +0.9



Date Friday, Oct 28-29 1938 M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Sec
3948	HD 193819	20 17.2	13 16	I-12	astrat II	010	3.0 9.1	17 <sup>18</sup> 57 <sup>18</sup>	19 54	2
3949	189086	19 53.2	30 30	—	—	—	2.9 9.1	19 58	21 08	3
3950	1826	0 17.6	28 55	—	—	—	2.8 9.1	21 12	22 16	4
3951	7157	1 6.8	61 21	—	—	—	2.9 9.1	22 24	23 04	1
3952	11336	1 46.4	44 19	—	—	—		23 08	00 16	2
3953	18473N	2 53.1	54 17	—	—	—	2.9 9.1	00 20	01 00	3
3954	20134	3 04.1	54 41	—	—	—	3.0 9.2	01 03	01 41	4
3955	22124	3 22.8	31 41	—	—	—	3.0 9.2	01 45	02 05	1
3956	35036	5 16.1	16 01	—	—	—	2.9 9.1	02 40	02 50	1
3957	43044P	6 09.1	14 38	—	—	—	3.0 9.2	02 55	03 51	1
3958	43044F	6 09.1	14 38	—	—	—	3.0 9.2	03 50	04 20	4
3959	44738	6 18.3	14 10	—	—	—	2.9 9.0	04 21	04 55	1
3960	47055	6 32.6	31 51	—	—	—	2.9 9.0	04 54	05 00	2
3961	47050	6 31.6	20 53	—	—	—	2.9 9.0	05 26	05 15	3

Pointer at 28.13

Ending Time L.M.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS			
1 45 W	13 23	1 1	7.37	A0	1-1-1	get wrong star first in twilight, reset plate to +3			
3 24 W	30 36	0-1	6.88	A0	1-1-1	quite hazy near horizon, smoke in the air.			
5 07 W	29 06	2-1	6.97	A3	1-1-1	for Y			
0 05 W	61 23	1	6.27	B9	1-1-1				
0 3 W	44 29	2	7.43	B8	1-1-1				
0 19 W	59 24	3	7.35	A0	1-1-1				
0 40 W	51 48	3	7.34	B0	1-1-1				
0 44 W	31 49	3-4	6.90	F0	1-1-1	For Y			
0 15 E	16 03	3	7.38	A0	1-1-1				
0 29 E	14 35	3-2	7.5	Pj	1-1-1	Seeing variable			
0 26 W	14 35	3-4	7.5	Aj	1-1-1	4th star in cluster, 1st star in the foreground			
0 46 W	14 07	3-4	7.3	Aup	1-1-1				
0 00 W	31 49	4-2	7.31	A0	1-1-1	Single star in cluster, 1st star in foreground			
1 5 W	30 56	1-2-3	7.24	A2	1-1-1				
					MC	SC	SW	MT.	ST.
Oct. 29 10 -1					32.7	+04.6	-51.4	+33.5	+01.0

Date Saturday, October 29-30 1938 H-T Julian Day 2429201

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Star Angle End	Do
3962	HD 162936	17 48.5	+32 02	I-12	Star II	010	44 10.5	19 59	19 55		
3963	164429	17 56.0	+45 28	"	"	"	45 11.5	19 39	19 39		
3964	172187	18 32.7	+43 58	"	"	"	45 10.5	19 42	20 00		
3965	207193	21 56.4	+30 57	"	"	"	44 10.4	22 23	23 03		
3966	2212	21 26.2	+16 28	"	Royal Duplicon	"	44 10.5	23 37	00 57		
3967	16111	22 30.2	+22 58	"	"	"	44 10.5	00 59	02 39		
3968	22129	03 28.2	31 41	"	"	"	43 10.5	02 42	03 54		
3969	47731	06 35.2	28 18	"	Star II	"	43 10.4	02 59	05 09		
3970	64030	01 49.2	46 12	"	"	"	43 10.4	05 16	06 02		

Point 29.3

Ending Time L.A.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
19 <sup>5</sup>	3 29 W	+32 03	1	7.04	A0	1-1-1	Sharp, integrated + unsteady.
19 <sup>9</sup>	3 55 W	+45 29	1	5.22	B9	1-1-1	
20 <sup>05</sup>	3 48 W	+43 11	1	5.40	A5	1-1-1	
23 <sup>13</sup>	3 57 W	+31 10	1-0	7.32	F0	1-1-1	150+ resolution. H <sub>2</sub> O line at 24" $\lambda$ = 2.2 $\mu$ m + Jupiter with 4" seeing from 23" $\lambda$ = 2.2 $\mu$ m
00 <sup>57</sup>	1 43 W	+16 37	2-1	7.59	G5	1-1-1	for 746 } spots 120"
02 <sup>31</sup>	2 22 W	+29 07	2-1	7.05	B0	1-1-1	Partly obscured by 100" clear 200" } attenuation
02 <sup>2</sup>	X 2 00 W	+21 49	1	6.90	F0	1-1-1	
09 <sup>3</sup>	0 97 W	+35 16	1-2	7.54	K0	1-1-1	See list
12 <sup>0</sup>	0 10 W	+6 00	1	6.11	A3	1-1-1	Black hole by 500" seeing, 100" seeing 746

285

Date Sunday Oct 30-31

Y-L Julian Day 2429202

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Extr Angle End	De
3971	HD 185955	19 36.6	45 43	I-12	Astra T.	010	+3.9	5 48	7 08	1	47W
3972	HD 210387	22 05.0	44 22	"	"	"	+3.9	7.14	8 14	2	11W
3973	HD 210405	22 05.1	44 21	"	"	"	+3.8	8.15	9 15	3	20W
3974	HD 1826	00 18.6	28 56	"	"	"	+3.8	9.21	10 21	4	24W
3975	HD 22124	03 28.8	31 41	"	"	"	+3.7	10.32	11 30	1	45E
3976	HD 10363	01 36.1	43 08	"	"	"	+3.8	11.35	12 45	6	11W
3977	HD 19789	03 05.9	12 40	"	"	"	+3.5 - 9.4	12 52	2 02	3	11W
3978	HD 29487	04 33.5	43 05	"	"	"	+3.7 - 9.7	2 12	3 42	1	11W
3979	HD 22124	03 28.0	31 41	"	"	"	+3.8 - 9.4	3 40	4 40	2	11W
3980	HD 43931	06 13.8	13 29	"	"	"	+3.7 - 9.9	4 53	5 13	3	11W

⑩

Nov 1 1959

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
1 47 W	45° 49'	1	7.12	G5 1-1-1	} r processing } NW slow
2 5 <sup>m</sup> W	44 33	1	6.72	A0 1-1-1	
1 26 W	" "	1	8.60	B9 1-1-1	
2 0 <sup>m</sup> W	29-07	1	6.97	A3 1-1-1	
1 44 <sup>m</sup> E	31 49	1-2	6.90	F0 1-1-1	
1 25 W	43 19	1-0	7.03	A0 1-1-1	
1 13 W	12 49	1	7.22	G5 1-1-1	Supp. list. For Dr. Millman.
1 25 W	43 58	1-2	7.30	B9 1-1-1	mechanical difficulty delayed setting
3 34 W	31 49	1-2	6.90	F0 1-1-1	
2 17 W	13 28	1-2	7.38	F5 1-1-1	For Dr. Millman.

		MC	SC	SW	MT	ST
Oct. 31	12	-133.1	+04.0	+09.5	+35.0	+1.6
				Best		

*Monday*

Date *Oct 31 - Nov 1, 1938,*

M - L

Julian Day 2429203

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3981	H.D. 194115	20 18.7	15 03	I - 12	Astra II	.010	Above 4.8 Below 11.0	17 56	19 26	4
3982	198414	20 45.1	45 05	—	—	—	4.8 11.0	19 30	21 06	1
3983	1826	0 17.6	28 55	—	—	—	4.7 11.0	21 10	22 20	2
3984	10681	1 39.2	27 58	—	—	—	4.8 11.0	22 24	02 20	3
3985	20458	03 12.4	13 29	"	—	"	4.8 11.0	00 06	02 00	4
3986	26398	04 05.4	16 28	"	Astra II	"	4.8 11.0	02 04	03 26	1
3987	45180	06 20.9	15 35	"	—	"	4.7 10.9	03 30	04 40	2
3988	63312	07 43.2	46 03	"	"	"	4.7 11.0	04 45	06 05	3

pointer at 29.73

Ending Time  
EST

Hour Angle End	Declination	Seeing	Ptg. Mag.			
1 27W	15 09	1-0	7.09	A <sub>0</sub>	1-1-1	
2 42W	45 13	1-2	7.47	A <sub>0</sub>	1-1-1	
0 22 W	29 05	2-1	6.97	A <sub>3</sub>	1-1-1	
0 41 W	28 09	2-	7.31	A <sub>0</sub>	1-1-1	
1 08 W	13 37	0-1-2	7.42	A <sub>0</sub>	1-1-1	
1 42 W	16 29	1-2	6.97	B <sub>9</sub> <sup>3</sup>	1 1/2-1-1 1/2	
0 40 W	15 34	1-2	6.69	B <sub>9</sub>	1 1/2-1-1 1/2	
0 43 W	45 55	1-2	7.12	A <sub>2</sub>	1 1/2-1-1 1/2	

for Y \* guiding from  
\* guiding very poor

sp to 80 sec.

" "

" "

\* Friction device on  
differential of R.R. being  
slipping. Longwood.

		MC	SC	SW	MT	ST
Nov. 1	12	-1 33.2	+03.6	+09.8	-25.0	+0.3
					Rest	



Date Tuesday, November 1-2, 1938 H-L Julian Day 2429204

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3989	HD 172187	18 53.7	+43 08	I-12	Aster IX	Set 010	above Belor 50 28	17 46	18 36	4
3990	219517	21 58.9	+29 33	"	"	"	49 10.8	18 40	20 42	2
3991	212670	22 20.9	+17 57	"	E. Py. P. L.	"	49 16.8	20 45 <sup>30</sup> ↓	23 05	1
	9312	01 26.6	+16 28							
3992	50247	03 10.5	+31 49	"	Plyedrome		48 10.9	00 34	01 24	3
3993	50710	04 39.9	+42 09	"	Aster IX		41 10.9	01 54	02 54	4

date 11 4, 2, 4  
 2. P. 1. 2

290

Pointe set

Ending Time M.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
2 25 W	+43 10	1-2	6.40	A5	1/2-1/2-1/2	Sp. to 80° Wind by 40° alt.
1 05 W	+29 44	2	7.37	B9	1/2-1/2-1/2	Sp. to 180° Hazy
3 17 W	+18 08	3-4	7.40	K0	1/2-1/2-1/2	" " 150° Hazy - star frequently blotted out.
			7.59	G5		
						Clearing -
1 36 W	+31 57	3-4	7.05	K0	1/2-1/2-1/2	Sup. list. Hazy, clouds - turned by 10° to green
0 34 W	+12 14	3-4	7.21	G0	1/2-1/2-1/2	" " " " Hazy, clouds Thickening up from 300 m cloud at 3.45.

Nov. 2

MC	SE	SW	MT	ST
-1 33.5	+03.2	+12.0	-29.0	+0.9

7/11/18

Date *Wed Nov 2-3, 1938 Hd-L* Julian Day *2429205*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	SHt	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3994	HD 181144	19 14.2	16 19	I-12	Ray Pol.	0 10	5.0 11.0	5 49	8 21	1
- 3995	MWC 395 HD 217543	22 56.3	38 10	"	"	"	5.0	8 26	9 18	2
- 3996	MWC 397 HD 218393	23 2.6	49 40	"	"	"	5.0	9 23	10 27	3
3997	HD 9312	01 26.6	16 28	"	"	"	5.0	10 32	11 18	4
3998	HD 16123	09 30.2	41 53	"	"	"	4.8 10.9	00 23	01 15	1
3999	HD 43043	06 09.0	16 04	"	"	"	4.8 10.9	01 52	02 45	1
★ 4000!!!!	HD 54426	07 17.4	15 33	"	"	"	4.8 10.9	03 57	05 00	3

Star not in finder field at first sid. time  
 correction wrong? 292

Pointer at 19.8

Ending Time  
EST.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
W 3 <sup>h</sup> 32	16 22	1	7.34 F5 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	clouds and haze
W 47 <sup>m</sup>	38 23	2	6.4 B8 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	
W 1 <sup>h</sup> 51	49 50	2	6.8 Ave $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	
1 <sup>h</sup> 11	16 38	1	7.59 G5 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	Apert 120 $\mu$
1 <sup>h</sup> 20	42 08	1	6.64 B8 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	Supp. det. haze thickening
0 <sup>h</sup> 10 W	16 03	1	7.51 G5 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	haze
1 <sup>h</sup> 01 W	15 29	1	7.49 G5 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	haze

MC SC SW MT ST  
 Nov 3 -1<sup>m</sup> 33<sup>s</sup>7  $\frac{5}{2}$  217 -28.9<sup>s</sup> -0.2<sup>m</sup>

Date Thursday November 3-4, 1938 H-T Julian Day 2429206

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
4001	43 172187	18 33.7	+43 08	I-12	Ray. Poly	set- 010	6.7 12.6	17 48	18 38	41
4002	199140	20 50.1	+28 08	"	"	"	6.9 12.6	18 42	19 22	1
4003	222387	23 35.0	+73 25	"	"	"	12.5	19 29	20 19	2
4004	224098	23 50.0	+73 51	"	"	"	12.8	20 05	21 15	3
4005	1826	00 17.6	+28 55	"	"	"	6.8 12.8	21 21	22 51	4
4006	9312	01 26.6	+16 28	"	"	"	6.9 12.8	22 54	23 44	1
4007	12155	07 41.8	+46 45	"	"	"	6.7 12.7	20 48	21 48	2
4008	20367	03 10.5	+30 46	"	"	"	6.8 12.7	01 51	02 51	1
4009	34255	05 11.4	+22 33	"	"	"	6.8 12.7	02 55	03 45	1
4010	25802	05 12.2	+17 10	"	"	"	11.8 12.0	03 51	05 13	2
4011	63620	07 14.8	+16 0	"	"	"	6.8 12.7	05 18	06 18	1

Position 21.3

Ending Date 287

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
	+43 09	1-2	6.40	A5	1/2-1/2-1/2
1 02 W	+28 16	1	6.27	B3	1/2-1/2-1/2
1 40 E	+73 40	1-2	6.86	G5	1/2-1/2-1/2
2 05 E	+74 03	1-2	6.55	B9	1/2-1/2-1/2
1 44 W	+29 07	2-3	6.97	A3	1/2-1/2-1/2 for Y
1 43 W	+16 38	2-3	7.59	G5	1/2-1/2-1/2 for H1
	+0 54	3-4	7.13	K0	1/2-1/2-1/2 <u>Supp list</u> heavy shadows visible
2 11 W	30 59	2-2	7.04	G0	1/2-1/2-1/2 <u>Supp list</u>
1 47 W	65 14	2-2	6.95	K5	1/2-1/2-1/2 <u>Supp list</u>
2 42 W	17 14	2	7.22	K5	1/2-1/2-1/2 <u>Supp list</u>
1 30 W	46 04	2	6.65	A5	1/2-1/2-1/2

light fog  
during transformation  
period

6/10/1964

new low  
probably  
started here

ME      SE      SW      M.T.      S.T.  
 Nov 13    -1 32.1    +04.4    +10.4    -28.0    +0.5  
hour

Date Friday Nov 4-5, 1938, M-T Julian Day 9207

Plate No.	Object	R.A.		Declination		Instrument	Emulsion	Slit	Temperature		Starting Time		Ending Time		Hour Angle End
		1900		1900					Above	Below	E.S.T.		E.S.T.		
4012	HD 194211	20	19.3	15	43	I-12	Arg. Poly	.010	7.4	13.6	17	42	19	56	1
4013	1826	0	17.6	28	55	—	—	—	7.4	13.5	20	05	21	51	2
4014	9996	1	32.5	44	54	—	—	—	7.4	13.6	21	55	23	07	3
4015	16580	2	34.4	29	21	—	—	—	7.5	13.8	23	11	02	11	4

pointer at 31.9

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Remarks												
2	12 W	15 51	2-0	6.68 B9	$1\frac{1}{2}$ - $1\frac{1}{2}$ considerable haze around especially near horizon hazy and light clouds becoming very low												
0	08 W	29 06	2	6.97 A3	$1\frac{1}{2}$ - $1\frac{1}{2}$ for Y image faint due to haze												
0	09 W	45 05	2-3	6.34 A0	$1\frac{1}{2}$ - $1\frac{1}{2}$ image faint in haze												
2	11 W	29 32	2-1	7.43 B9	$1\frac{1}{2}$ - $1\frac{1}{2}$ clouds at 95. Call ends at 0050 still checked 400 in closed												
<table border="0" style="margin-left: auto;"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>SW</td> <td>MI</td> <td>ST</td> </tr> <tr> <td>Nov. 5</td> <td>12</td> <td>-134.4</td> <td>+01.9</td> <td>+10.1</td> <td>-28.8 +0.5<sup>m</sup></td> </tr> </table>							MC	SC	SW	MI	ST	Nov. 5	12	-134.4	+01.9	+10.1	-28.8 +0.5 <sup>m</sup>
	MC	SC	SW	MI	ST												
Nov. 5	12	-134.4	+01.9	+10.1	-28.8 +0.5 <sup>m</sup>												



Date Sat Nov 5-6, 1938 Hal T Julian Day 9208

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slt	Temperature <small>above</small>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
4016	HD 179838	19 09.0	29 03	I-12	Ray Pol	010	8.1 14.5	5 39	7 05	1	
4017	HD 193556	20 17.3	<del>20 17</del> 14 16	"	"	"	8.1	7 10	8 30	2	
4018	HD 9312	01 26.6	16 28	"	"	"	8.1 14.3	8 36	10 20	3	
4019	HD 22124	03 28.8	31 41	"	"	"	7.9 14.1	10 58	00 58	4	
4020	9312	01 26.6	16 25	"	"	"	7.9 14.1	01 01	02 31	1	
4021	93093	06 09.0	16 04	"	"	"	7.8 14.2	02 35	03 49	2	
4022	95114	06 21.0	13 10	"	"	"	7.8 14.1	03 51	04 51	3	
4023	60800	07 31.2	31 50	"	"	"		04 54	05 30	4	

Set pointer 1.05 (2<sup>nd</sup> plug in)

298

Ending Time P.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
7:05	W 2 <sup>h</sup> 35	29 07	2	6.93	A0	1 1/2, 1 1/2, 1 1/2
7:30	W 2 <sup>h</sup> 53	14 24	2 → 3 → 1	7.12	G5	1 1/2, 1 1/2, 1 1/2
8:00	E 29 <sup>m</sup>	16 38	3	7.59	G5	1 1/2, 1 1/2, 1 1/2 Clouds occasionally Thick at 10.20.
8:30	W 29 <sup>m</sup>	31 49	2	6.90	F0	1 1/2, 1 1/2, 1 1/2 Light Cross
9:00	N 3 43	16 39	2-3	7.54	G5	1 1/2, 1 1/2, 1 1/2
9:30	V 0 19	16 03	3-4-2	7.51	G5	1 1/2, 1 1/2, 1 1/2 Seeing Variable
10:00	V 1 10	13 08	2	7.49	F8	1 1/2, 1 1/2, 1 1/2
10:30	V 1 28	31 45		7.58	P4	1 1/2, 3 Stopped up 5 red dust heavy ground fog







Pointer at 26.3, 2<sup>nd</sup> plug out

Ending Time EST	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
7:02	W 2 <sup>h</sup> 10	27 33	2	7.34 A0 1/2, 1 1/2	
8:17	E 1 <sup>h</sup> 44	42 25	1	7.1 B stage 1 1/2, 3	
9:24	W 01 <sup>m</sup>	29 05	2	6.97 A3 1 1/2, 1 1/2	Very bright auroral arch (narrow, green) in N
9:57	L 25 <sup>m</sup>	16 37	3	7.59 G5 1 1/2, 1 1/2	first noticed 8:55 (faint aurora up to summit at sunset)
10:49	W 12 <sup>m</sup>	42 07	3	6.67 B3 1 1/2, 1 1/2	fainter later.
11:03	O 43 N	27 31	2-3	7.12 B9 1 1/2-1 1/2	Supp. list
11:17	O 55 E	13 08	2-3	7.09 F8 1 1/2-1 1/2	Supp. list "they ride!"
11:30	W 16	17	2-3	7.11 G5 1 1/2-1 1/2	Supp. list
11:50	W 43	01	2-3	7.35 A3 1 1/2-1 1/2	Supp. list
12:10	W 38	08	2-3	6.45 F0 1 1/2-1 1/2	Supp. list

MC SC SW MT ST  
 Nov 10 1<sup>m</sup> -1 36.4 +00.6 +11.6 -34.0 10.5



394

Ending Time  
E.S.T.



305

