

If the Focus Test is Centre to Violet, Shorten the Focus, i.e. Increase Micrometer Reading

This is when the test is made O.T.B., i.e. Outside spectrum Through Base of prism

The lines shift 0.04 half-millimetres for a change of 0.40 mm. in the focus setting with the  
25 in. camera

Reading

2

1

3.

me Temp.....

was.....

me Temp.....

ow Angle

had

ome Temp.....

Transparency Conditions.....

cus.....

me Temp.....

ur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
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David Dunlap Observatory  
 74" Logbook  
 Vol 26  
 Plate Nos 23284-24116  
 July 1956- Oct 1957

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Date Sat-Sun July 28-29, 1956 Observer M<sub>0</sub> - M<sub>0</sub> Julian Day 2435683

0125 44 45.7 3441.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23284	ADS 12520	19 25.2	+2 41	J-25	E103a-0	st 0.008	+21.4 +21.0	22 58	00 58	3
23285	1/4 Cap	20 40.2	-25 38	"	"	"	+21.2	01 07 13	01 17 13	4
	"	"	"	"	"	"		01 17 30	01 22 30	4
23286	ADS 16227	22 39.6	+41 17	"	"	"		01 35	01 43	1
	"	"	"	"	"	"	+21.1	01 43	01 55	1
23287	HD 214946	22 36.7	+44 29	"	"	"	+21.0	02 10	02 50	3
23288	HD 180316	19 11.0	+27 46	"	"	"	+20.8	02 59	03 31	3
	MWC 395									
23289	HD 217543	22 56.3	+38 10	"	Hi Speed	"	+20.8	03 35	03 53	2
23290	HD 214652	22 34.6	+36 51	"	E103a-0	"	+20.9	03 58	04 14	4
	Focus Test	O.T.B		"	"	"				

Dome Temp. +61°F

Focus 15.732

Dome Temp. +55°F

Transparency Conditions

Clear

Sat.

300 visitors shown Ring Nebula.

RASC telescopes - Jupiter, Saturn, albertis. Mizar

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Remarks	Quality
1 40W	+2 48	0-1	7.52	K5	4-4-4	Set 2 Vis Bin Program	Gerry One Dec fast liveok.
0 44W		0	4.7	F8	12	" 2 HOLDS	McDon Cotton fine
0 49W	-25 24	0	"	"	12	" 8	Dead. Spotter makes scraping noise good
0 49E							
<del>0 51E</del> checked		0-1	6.05	K0	6-6	" 2 Vis Bin Prog	good
0 37E	+41 35	1	"	"	4-4-4	" " "	fine
0 21W	+44 45	0	7.26	A5	4-4-4	" 5 Sp. Bin	fine
4 28W	+27 52½	0	6.64	B5	4-4-4	9 Sp. Bin.	fine
1 04W	+38 29	0	6.4	B3nc	6-6-6	5 Be Prog	liveok good
1 47W	+37 08	0	6.5	B3	4-4-4	2 Fcl. Bin Prog	fine
					15-10	8	OK

I.P.H. loaded E103a-0.

Date Sun. July 29-30/56 Observer L-Hv Julian Day 2435684  
 ©126 42 07.6 3443.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How long ind
23291	ADS 9908	15 58.9	11 42	I-25	E-103A0	Set 008	19.8	20 34	22 44	1	2 55
23292	" 12520	19 25.2	02 41	"	"	"	19.7	22 48	00 20	1	0 65
	<i>From Test</i>		<i>O-7B</i>						<i>23 40</i> <i>effective</i>		

Dome Temp. 65°F

Focus 15.710

Dome Temp.

Transparency Conditions

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Date July 30-81 Observer Julian Day 2428

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1	2 55W	11 03	0	8.08	K2	444	Site 2 Vis. Bin.	OK
1	0105W	02 49	0	7.9	K5	444	" 8 " " clouds 2340	OK
						15/10	" 5 0030 Solid	OK
							4. P. H.	
							H m. M.	
							July 30	
							MC SC MTW STW S SW ME	
							-45.0 +21.0 -38.0 +0.5 +11.2 +115.3 -5.3	



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5 Mon-Tues (Hg)  
 Date July 30-31 1956 Observer S-Mo-Lo Julian Day 2435685

Plate No.	Object	R.A. 1900 1955	Declination 1900 1955	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How Angled Incl.
23293	N.G.C. 5904	15 16.2	+02 15	Newt.	E103a-0		2 <sup>m</sup>	21 04 16	21 06 16	1	02 07
23294	" 5634	14 27.3	-05 46				12 <sup>m</sup>	21 11 41	21 23 41	2	03 13
[ 23295	6402	17 35.3	-03 13				8 <sup>m</sup>	21 28 28	21 36 28	1	00 18
[	KA. 61	17 01.2	+30 04				8 <sup>m</sup>	21 41 47	21 49 47	1	01 05
23296	N.G.C. 6712	18 50.6	-08 47				8 <sup>m</sup>	21 59 17	22 07 17	2	0 26
23297	6838	19 51.5	+18 39				3 <sup>m</sup>	22 11 30	22 14 30	1	1 20
23298	6093	11 44.4	-22 53				6 <sup>m</sup>	22 19 37	22 25 37	2	2 28
23299	6356	17 21.0	-17 46				8 <sup>m</sup>	22 31 48	22 39 48	1	01 36
23300	IC 1276	18 08.0	-07 14				40 <sup>m</sup>	22 49 11	23 29 11	2	1 30
23301	NGC 6401	17 35.8	-23 53				20 <sup>m</sup>	23 38 11	23 58 11	1	2 39
23302	6544	18 04.6	-25 01				14 <sup>m</sup>	00 07 55	00 21 55	2	2 34
23303	6656	18 33.6	-23 58				4 <sup>m</sup>	00 34 04	00 38 04	1	3 12
23304	6626	18 21.8	-24 54				<del>6<sup>m</sup></del>	00 47 34 (00 50 34)		2	2 46
23305	6717	18 52.4	-22 47				20 <sup>m</sup>	01 08 14	01 28 14	1	2 44
23306	6712	18 50.6	-08 47				8 <sup>m</sup>	01 33 09	01 41 09	2	3 08
23307	6838	19 51.5	+18 39				3 <sup>m</sup>	01 45 45	01 48 45	1	2 15

Dome Temp. +64°

Transparency Conditions

good.

Focus.....

Newtonian

Dome Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 07W						Focussed on $\alpha$ Serpentis	
03 13W							
00 18W							
01 05W							
0 26E						Focussed on $\delta$ Aquilae. Focus all right	
1 20E							
2 28W							
01 36W						Possibility of fogging: plate holder dip towards L. on socket.	
1 38W						mass rose 2315	No guiding.
2 39W							
2 34W							
2 12W							
2 46W						Back came off plate holder while in purse	
2 54W						Closed shutter; it failed to reopen	
3 08W						Focussed on $\beta$ Capr.	No guiding
2 15W							



Dome Temp. 58° at 03:00 hrs

Transparency Conditions

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Focus

Dome Temp. 57°

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
7.36W							
244W							
01 23W							
01 37W						<p>Mo guiding I think this plate was numbered 23310</p>	
031W						<p>Mars was a wonderful sight in the 74 in, although it was almost too bright to look at.</p> <p>Aug 1.56. NC SC NW SW S SW ME -47.0 +21.4 -42.2 +0.3 +10.7 +26.1 -3.3.</p>	

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Date Wed - Thurs 1-2, 1956 Observer S-L-Lo Julian Day 2435687

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
23313	NGC 514	15 16.2	+ 02 15	n=0J	E 103a-0		3 <sup>m</sup>	21 <sup>h</sup> 09' 42"	21 12 42	1	2 21 W
23314	6535	18 01.6	- 00 18				14 <sup>m</sup>	21 17	21 31 30	2	0 6 E
23315	6402	17 35.3	- 03 13				14 <sup>m</sup>	21 41 02	21 55 02	1	45 W
	KA 61	17 01.2	+ 30 04				14 <sup>m</sup>	22 01 15	22 15 15	1	40 W
23316	K.H. 61	"	"				10 <sup>m</sup>	22 20 34	22 37 11	2	1 55 W
	NG.C. 6712	18 50.6	- 08 47				10 <sup>m</sup>	22 37 40	22 47 40	2	0 50 W
23317	6838	19 51.5	+ 18 39				3 <sup>m</sup>	22 57 57	23 01 57	1	1 15 E
	KA 61	17 01.2	+ 30 04				3 <sup>m</sup>	23 08 27	23 11 27	1	2 15 W
23318	KA 61	"	"				12 <sup>m</sup>	23 17 04	23 29 04	2	1 30 W
	N.G.C. 6934	20 31.9	+ 07 15				12 <sup>m</sup>	23 35 25	23 47 35	2	0 50 W
23319	6544	18 04.6	- 25 01				14 <sup>m</sup>	23 58 45	00 12 45	1	0 50 W
23320	IC 1276	18 51.0	- 07 14				40 <sup>m</sup>	00 17 16	00 56 40	2	3 14 W
23321	NGC. 6717	18 52.4	- 22 47				22 <sup>m</sup>	01 02 25	01 25 35	1	2 50 W
23322	6734	20 31.9	+ 17 15				12 <sup>m</sup>	01 33 15	01 45 15	2	0 50 W
23323	6712	18 50.6	- 08 47				8 <sup>m</sup>	01 50 11	01 58 11	1	0 50 W
23324	6838	19 51.5	+ 18 39				3 <sup>m</sup>	02 03 25	02 06 25	2	0 50 W

Dome Temp. 69°

Transparency Conditions

clear 1/2 hr. from sunset  
at 10 14

Focus.....

Dome Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 21 W						focused on $\delta$ Serpentis quite away to	
0 06 E						a jet plane passed directly over $\delta$ Aquilae; the	
0 45 W						guide star!! on 42 hr	
1 40 W						plate turned 180° between exposures.	
1 55 W						" " " " "	
0 22 W						focused on $\delta$ Aquilae - very good	
0 25 E						plate turned 180°	
2 35 W							
2 58 W							
2 12 E							
2 33 W							
3 14 W							
2 58 W						focused on $\delta$ Aquilae - ok.	
1 39 W						defocus in 1/2: poor 2 1/2" total defocus	
2 30 W							
2 00 W							

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Date *Wed. Thurs. could* Aug 1-2, 1956 Observer *S-L-L<sub>o</sub>* Julian Day 24356.87

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
233 245	MGC 7089	21 31.2	-01 02				30 <sup>s</sup>	02 11 40	02 12 10	1
233 246	7099	21 37.8	-23 24				14 <sup>m</sup>	2 35 01	02 49 01	2
	"									1

Dome Temp

Focus

Dome Temp

Hour Angle  
End

107

36

Dome Temp.....

Focus.....

Dome Temp.....

Transparency Conditions.....

16

P.H.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 07 W							
1 36 W						cloud 0305 haze Heavy haze over southern sky  1 P.H. loaded in refrigerator Exposed plates in dark room cupboard marked plates. first seven developed.	



Date Thurs-Fri Aug 2-3 Observer S-Hr-Gu Julian Day 2435688

Plate No.	Object	R.A. 1900 1955	Declination 1900 1955	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
233287	NGC 5904	15 16.2	+02 15	Hawt	103a0		3m	21 06.00	21 08.00	1	
233288	" 6254	16 54.9	-04 03	"	"		2m	21 14 40	21 16 40	2	
233289	" 6218	16 40.9	-01 53	"	"		2m	21 19 13	21 15 13	1	
233290	" 6356	17 21.0	-17 46	"	"		10m	21 25 21	21 25 21	2	
233301	" 6093	16 00.4	-22 53	"	"		6m	21 4 11	21 06 01	1	
233342	" 6402	17 35.2	-03 13	"	"		16m	21 51 17	22 15 17	2	
	K.R. 61	17 01.2	+30 04	"	"		16m	22 23 31	22 31 31	2	
233343	K.R. 61	17 01.2	+30 04	"	"		30m	22 43 12	23 14 12	2	
	I.C. 1276	18 08.0	-07 14	"	"		30m	23 25 00	23 25 00	2	
233344	NGC 5828	18 31.5	+14 37	"	"		5m	00 28 37	00 28 37	1	
233345	" 6217	18 53.4	-22 47	"	"		20m	00 17 10	00 31 36	2	
	K.R. 61	17 01.2	+34 28	"	"		30m	00 40 30	01 22 30	2	
233346	K.R. 61	17 01.2	+34 00	"	"		25m	01 11 57	01 23 57	2	
	NGC 5934	20 31.7	+07 15	"	"		12m	01 28 55	01 42 55	2	
233347	NGC 6312	17 38.6	-08 47	"	"		7m	01 48 05	01 56 05	1	
233348	" 6231	19 51.5	+18 30	"	"		3m	02 02 54	02 05 54	1	

Dome Temp. +70°F

Transparency Conditions *Very good.*

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Focus.....

Dome Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 20W						<i>Set on x. Sighting</i>	
00 44W							
01 03W							
00 42W							
02 05W							
01 07W						<i>Focus x. Sighting</i>	
00 57W						<i>Plate turned 180°</i>	
02 18W							
00 44W						<i>Focus on x. Sighting</i>	
02 10W							
04 33W							
03 57W							
01 39W							
03 35W							
02 44W							

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Date Thurs-Fri, Aug 2-3 Observer S-Ho-Pau Julian Day 2435688

Plate No.	Object	R.A. 1900 1955	Declination 1900 1955	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How Angle Est
233389	NGC 7529	21 312	-01 52	Newt	430-0		30°	02 11'14	02 11'14	1	19°
23339 <sup>40</sup>	" 6860	20 03.5	-22 03	"	"		16m	02 17 54	02 33 54	1	300W
233401	" 7099	21 578	-23 24	"	"		12m	02 05 48	02 52 48	1	20
233402	" 7492	23 06.0	-15 53	"	"		18m	03 03 57	03 21 57	1	100

Dome Temp

Focus

Dome Temp

How Angle  
Est

Dome Temp.  $+70^{\circ}\text{F}$ Transparency Conditions *Good*

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Focus

Dome Temp.  $+50^{\circ}\text{F}$ 

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 09W							
3 00W							
1 44W							
0 44W							
<p>No Ph's located.  A perfect night for sequences  Clock not driving at present rate during  most of night.</p>							
Aug. 2.	MC	SC	MTW	STW	S	SW	MB
	-48.9	+21.8	( <del>70.0</del> ) +3.9	-0.03	+10.9	+50.4	-8.0

Date 1956 Aug 3-4 Fri-Sat Observer Mo-Hg Julian Day 2435689

0131 29 14.1 3448.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 23.9	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How long Exp.
23343	HD 180316 MWC 394	19 11.0	+27 46	I-25	F103a-U	Sat 0.008	23.8	22 37	22 57	1	10 W
23344	HD 217050	22 52.7	+48 09	"	"	"	"	23 32	23 38	2	
	"							23 40 15	23 43 15		
	"							23 44 30	23 46 00		2 3/4 E
23345	MWC 152 HD 192102	22 42.5	+34 51	"	"	"	23.8	00 01 10	00 01 42	3	
								00 03 08	00 04 08		
								00 05 05	00 07 05		
23346	HD 210146	22 36.7	+40 27	"	"	"	23.8	00 17	00 49	4	
23347	HD 180316	19 11.0	+27 46	"	"	"	23.8	00 57	01 23	1	
23348	SZ P <sub>20</sub> HD 217113	22 52.3	+07 08	"	"	"	23.4	01 39	03 09	2	
23349	HD 213534	22 27.0	+21 02	"	"	"	23.8	03 37	03 47	3	
23350	HD 210447	22 02.7	+25 13	"	"	"	23.7	03 56	04 13	3	
	Exp. P <sub>100</sub> 0.18						23.7			2	

Dome Temp.

Focus... 15

Dome Temp.

How long  
Exp.

Dome Temp. +67°F

Focus 15.770

Dome Temp. +65°F

15.748  
0.022

15.770

Transparency Conditions. Cloudy at dusk - some cirrus over  
after I opened up Excellent transparency  
between clouds

22

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0	17W	+27 54	1	6.64	B5	4-4-4	Set 2 Sp Bin	good
		+48 26	1 1/2	5.2	B3ne	4-4-4	2 B2 Star	fine
						6-6	5 1/2	
2	36 1/2 E					12	9 1/2	
		36 1/2	2	4.5	B2e	12	Set 1	
						12	Set 5	
6	65 E					12	Set 7	fine
1	17 E	+44 47	2	7.26	25	4-4-4	Set 2 Sp Bin	fine
2	43 W	+27 54	2	6.64	B5	4-4-4	Set 2	fine
0	52 W	+02 26	1.2-1	8.7	G5	4-4-4	Set 2	fine
1	54 W	+27 20	1 1/2	6.5	A5	4-8	Set 2 Ed Bin Programme	fine
1	41 W	-45 51	1 1/2	6.4	B5	4-8	Set 5	fine
						15/10	Set 8	fine
							2 1/2	

23

Date 1956 Aug 6-7 Mon-Tue Observer Me -

Julian Day 2435692

0134 21 43-7 3452.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 21.5	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Angle East
23351	HD 180316 MWC 346	19 11.0	+27 46	I-75	E103a-O	Set 0.008		22 02	22 16	4	0 2 E
23352	HD 195407	20 26.0	+36 39	"	"	"	+21.6	22 22	22 44	4	0 59 E
23353	HD 154528	17 00.9	+77 48	"	"	"	+21.6	22 57	23 07	4	2 54 W
	Focus test	O.T.B.									

Dome Temp.

Focus 15

Dome Temp.

Dome Temp... +68°F

Focus... 15.732

Dome Temp... +68°F

15.710

0.022

15.732

Transparency Conditions Fair... after... clouds... cleared

24

Sat. Aug 4. 10 visitors - cloudy with rain

Time Y.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 12 E	+27 53	2	6.64	B5	4-4	Set 2	Sp. Bin	Strong
0 59 E	+36 50	2½	7.7	B3e	4-4-4	Set 2	Be.	good
2 54 W	+79 44	2	6.7	A0	4-8	" 8	Sp. Bin. Whole sky covered by thin cloud.	too weak
					15-10	" 5		OK
							4 P.H. loaded.	
							Spotter scrapes as it turns.	
							Flashlight needs batteries	
							Aug 7. MC sc mtw STW S SW ME	
							MC -52.1 +21.7 -16.1 -0.01 +12.3 +52.0 -5.2.	





Dome Temp.  $+72^{\circ}\text{F}$ Focus  $15.776$ Dome Temp.  $+67^{\circ}$ Transparency Conditions *Considerable haze**Lightning in west*

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8

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 32E	+27 53	0-1	6.64	B5	4-4-4	Set 2 Spec. Bin Prog.	good
01 01W	+02 50	0-2	8.0	K5	4-4-4	Set 2 Vis Bin Prog.	good
01 42W	+04 08	0-1	7.50	G0	4-4-4	Set 8 " " "	fine
00 24W	+44 47	0-2	7.26	A5	4-4-4	Set 8 Spec Bin.	strong
		1 1/2	S.1	B2E	5-9	Set 2	
					9-9	Set 4 1/2	slightly hazy
		1 1/2			9-9	Set 7	fine
0 32W		1-2			6-6-6	Set 10	
1 35W	02 26	1-2	8.10	G5	4-8	Set 2 Cloudy over from north then light	good
					15-10	Set 8 then broken cloud from SW	cloud slightly
						ended at 4:10	
						Striker is missing	



Dome Temp. 74°F

Focus 15.819

Dome Temp. ....

Transparency Conditions

Cloudy after sunset for some  
time  
clouds 11:45-12:10, haze, extensive.

28

8

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 01W	+3 18	0	8.1	K0	4-4-4	Set 2 Via Bin	(1) weak
					15-10	Set 8 Haze and light clouds, very poor transp. Low mag E.S.T.	O.K.
						4 phs loaded (1 Hi-Std)	
						Thu-Fri Aug 9-10/56 MR-L0	
						intermittent clouds all night.	
					Aug. 10	mc sc mFW STW S SW MC -3.4 +21.9 -4.6 -0.4 +8.8 -15.5 -7.1	

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Wass plates  
spotted and  
exposed

Date Fri-Sat Aug 10-11 1946 Observer MR - Lo Julian Day 2435.696  
 0 138 11 57.3 3455.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
<del>2336T</del>	HD 180316	19 <sup>h</sup> 11.0	+27° 46'	I-25	103a-0	set .008	+24.7°	20:13	20:47	4
<del>2336E</del>	γ Lyr	18 55.2	+32 33	"	"	"	"	20:54	—	2
	"	"	"	"	"	"	"	—	—	"
	"	"	"	"	"	"	"	—	20:56	"
<del>2336S</del>	HD 178849	19 05.1	+34 35	"	"	"	"	21:04	21:14	3
	"	"	"	"	"	"	"	21:15	21:35	"
<del>2336Y</del>	HD 174286	18 47.7	-10 21	"	"	"	"	21:44	22:45	2
<del>2336V</del>	HD 177648	19 00.5	+23 11	"	"	"	24.4	22:57	23:27	4
<del>2336G</del>	HD 192445	20 09.8	+36 02	"	"	"	"	23:45	24:15	3
<del>2336T</del>	HD 115592	20 27.2	+43 59	"	"	"	24.3	20:45	21:05	3
<del>23368</del>	HD 120316	19 11.0	+27 46	"	"	"	"	01:14	01:38	4
<del>23364</del>	HD 214943	22 37.0	+39° 43'	"	Hi-Speed	"	"	01:51:07	01:55:07	1
	"	"	"	"	"	"	"	01:56:45	02:02:45	1
	"	"	"	"	"	"	"	02:04:35	02:12:35	1
<del>23370</del>	ADS 16325	22 47.5	+42 46	"	103a-0	"	"	02 25	02 55	2
<del>23371</del>	ADS 1B	23 57.5	+65 32	"	"	"	"	03 12	03 52	2

Dome Temp. 72°F  
 Focus 15.782  
 Dome Temp. 62°F

Transparency Conditions fair

.022  
 15.760  
 15.782  
 Avg 10-11

.745  
 15.022  
 15.767  
 Avg 9-10  
 30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:27 E	+27° 53'	0	6.64	B5	4-4-4	set 2 Spec Bin	ALL PLATES ON THIS PAGE RUINED - WASHED IN HOT WATER
-	+32 38	0	3.18	B9 III	-	1 1/2 MK Std.	
-	"	"	"	"	12	5	
1:01 E	"	"	"	"	-	9	
-	+34 41	0	6.4	B3 V	12	set 2 MK Std	
0:32 E	"	"	"	"	6-6	" 8	
-	-10° 16'	"	8.1	B3e	4-4-4	" 2 <sup>MVC</sup> Be 307 Field checked with 22674	
1:25 W	+23 16	"	6.9	B3e	12	" 8 " 310	
1:04 W	+36 13	"	7.1	B2ne	4-8	" 2 " 332	
1:37 W	+44 11	1	7.2	B1.5e	4-4-4	" 8 " 347	
3:25 W	+27 54	0-1	6.4	B5	4-4-	set 8 Spec. Bin. rechecked 22674 1-9	
		0-1	5.1	B2 III	9-9	set 1 12 Lac	
					6-6	set 5	
0:34 W	+40 00				6-6	set 9	
1:06 W	+43 06	0-1	6.24	K5	4-4-4	set 2 Vis bin rechecked	
0:53 W	+65 48	0-1	7.34	A2	4-4-4	set 8 Vis bin	

31

Date Fri. Sat Aug 10-11, 1956 cont Observer Lo Julian Day 2435.696

0 138 11 57.3 3455.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
233 <sup>61</sup> <del>72</del>	HD 214946	22 36.7	+44 29	T-25	103a-0	.008	24.2	04 02	04 38	3
	Fujita test	6-8								3
Sat Aug 11 1956 55 visitors - lecture on Milky Way O-Hg										
0:00 cloudy with occasional showers Hg										







Dome Temp. 469°F

Focus 15.792

Dome Temp. ....

15.770

0.022

15.792

Transparency Conditions Not bad after clouds cleared about 22<sup>h</sup> EST

34

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 50W	+27 53	$\frac{1}{2}$	6.64	B5	4-4-4	Set 2 Sp Bin Thin cloud over star for 3 min of exposure	fine
	-16 18	0	3.2	A6m	18	" 1 Ecl. Bin Prog Through holes in clouds	too weak
		0			12	" 5 " " " "	too weak
check!					12	" 9 " " " "	fine
<del>1 15 E</del>	<del>+18 E</del>	$\frac{1}{2}$					fine
1 15 E	+48 01	2	6.0	B3	4-4-4	" 5 Ecl. Bin Prog	fine
1 01 E	+44 48	1-0	7.26	A5	4-4-4	" 8 Sp. Bin. Some haze and cloud	fine
		$\frac{1}{2}$ - $\frac{1}{2}$	5.1	B <sub>2</sub> III	6-6-6	" 1 ) Fair, sl. haze (B. Canis Majoris star)	good
		0- $\frac{1}{2}$	"	"	6-6-6	" 5 ) " " " "	good
0 17 E	+34 59	0- $\frac{1}{2}$ 0	"	"	6-6-6	" 9 ) More haze (and.) cloud band in SW.	too weak
0-2 0W	+02 26	-0	8.7	G5	4-4-4	" 2 Cloud band in SW. at 10 <sup>h</sup> 10 <sup>m</sup>	too weak
						" 8 C 2-15 current.	OK

Aug. 12

mc

sc

mTW

STW

S

SW

NE

-6.2

+21.8

+7.0

+0.5

+6.9

-21.1

-2.8

(BK)

Date Nov - Dec 1956 Aug 13/4 Observer MR - Lo Julian Day 2435699  
 0141 04 46.9 3458.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23368	ADS 12750	19 21.0	+16 21	I-25	E102-0	net 008	+23.2	20:55	23:45	2
23369	HD 180316	19 11.0	+27 46	"	"	"	+23.0	23:50	00:10	4
23370	HD 197445	20 09.8	+36 02	"	"	"	22.9	00:26	01:46	1
23371	HD 195992	20 27.2	+45 09	"	"	"	22.8	00:53	01:13	1
23372	HD 214846	22 36.7	+74°29	"	"	"	22.8	01:22	01:52	4
23373	HD 214727	22 37.0	-39°43	"	Hi speed.	"	22.8	02:01:45	02:05:45	1
	=126cc			"	"	"	"	12:06:45	12:45	1
				"	"	"	"	02:14:35	02:22:15	1
23374	HD 219183	23 18.3	+62 08	"	E102-0	"	22.7	02:39	03:57	4
23375	HD 1B	23 59.5	+65 32	"	"	"	22.6	04:12	05:42	2
	Freeze test	F.T.P.					22.8			4

Dome Temp. 68°

Transparency Conditions clearing after sunset

Focus 5-59

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:20 W	16 09	1	8.5	K5	4-4-4	set 2 Vis Bin.	fine
2:09 W	27 54	1-3	6.64	B5	4-4-4	set 2 spec bin	fine
1:27 W	23 6 13	2.5	7.1	B <sub>2</sub> e	4-4-4	set 2 spec bin <sup>M.C.</sup> 332 dark field. <sup>Field checks</sup>	fine
1:57 W	44 10	2.5	7.2	B <sub>1</sub> e	4-4-4	set 8 " 347 dark field checker	good
6:26 W	48	2	7.25	A5	4-4-4	set 8 spec bin	fine
		2	5.1	B <sub>2</sub> III	4-4-4	set 1 12 Lac very light haze	fine
					5-12	5	ok
0 56 W	+02 26				6-6-6	1	strong
1 59 W	+02 26	2	7.7	G-5	4-4-4	set 2 S Z Piccol of bin	fine
1 55 W	55 50	2-5	7.74	A <sub>2</sub>	4-4-4	set 8 Vis bin	fine
					15-10	set 8	OK
						2 pk of 10300 + 1 unit	
						a visitor outside 250% 5:15 PM	



Date Tues-Wed Aug 14-15 1956 Observer Hg - Lo Julian Day 2435.700

① 142 02 25.4 3459.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23376	MWC 278 HD 164284 MWC 327	17 55.3	+04 22	525	L12340	Set 008	25.2	20 25 30	20 28 00	1
23377	HD 174886	18 47.7	-10 21	"	"	"	25.2	20 40	21 50	1
23378	HD 180310	19 11.0	+27 46	"	"	"	25.1	21 56	22 22	2
23379	ADS 14133	20 25.8	+03 02	"	"	"	25.1	22 28	00 54	3
23380	MWC 323 HD 209276	21 57.2	+56 14	"	"	"	24.8	01 13	02 03	4
23381	? <del>MWC 376 ?</del> <del>HD 206773</del>	<del>21 34.3</del>	<del>+57 17</del>	"	"	"	24.7	02 12	02 30	4
23382	ADS 16335	22 47.5	+42 46	"	"	"	24.6	02 43	03 13	3
23383	HD 214946	22 36.7	+44 29	"	"	"	24.6	03 19	03 49	2
23384	MWC 402 HD 223501	23 45.0	+61 37	"	"	"	24.6	03 52	04 42	1
	Focuser Test -						24.7			1

Dome Temp.

Focus 13

Dome Temp.

Hour Angle  
Ecl

Dome Temp. 71.0°F

Focus 15790

Dome Temp. 50°F

15.022

0.768

15790

Transparency Conditions

quite good; clouds low in NW 38 8

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
14E	+0422	1/2	4.3	B <sub>9</sub> c	6/6	Set 2 Be Prog	ok
015W	-1017	1-0	8.1	B <sub>3</sub> e	4-4-4	Set 8 Be	fine
025W	+2753	1-0	6.64	K <sub>5</sub>	4-4-4	Set 2 Sp Bin Prog	ok
136W	+0417	1	8.1	K <sub>5</sub>	4-4-4	Set 2 Bin mag, thin clouds moving in from NW	fine
121W	+5632	1-0	8.1	B <sub>5</sub> e	4-4-4	Set 2 Be Prog funder fine	ok
156W	+5722	1	7.0	B <sub>0</sub> c	4-4-4	Set 8 Be Prog not focused	Identity uncertain HD 206713 should be HD 206713 + 5732
157W	+5704	1	6.24	K <sub>5</sub>	4-4-4	Set 8 Bin light cloud at 1330	ok
227W	+4446	1.5	7.76	A <sub>5</sub>	4-8	Set 8	fine
210W	+6156	1.5	8.2	B <sub>5</sub> e	4-4-4	Set 2 Be Stand. prog	ok
					15-10	Set 2	OK
						2 pit 0-1230-0	
						Aug 15 MC SC MTW STW S SW ME	
						-8.5 +21.7 +13.0 +0.6 12.9 -26.0 -5.1	



Dome Temp. 68°F

Focus 15783

Dome Temp. ....

Transparency Conditions

02:00 completely overcast.

15.761 40

.022  
15.783

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0-53 E	+27° 53'	0	6.64	B5	4-4-4	set 2 Spec Bin	fine
-	34 42	0	6.4	B3 I	12	set 2 MK Std. Exp 10 <sup>m</sup>	weak
0:10 E	"	0	"	"	6-6	set 8 " Exp 20 <sup>m</sup>	fine
-	32 38	0	3.18	B9 III	-	set 1 MK Std 1/4 <sup>m</sup>	weak
-	"	"	"	"	12	5 " 1/2 <sup>m</sup>	good
40:02 W	"	"	"	"	-	9 " 1 <sup>m</sup>	strong
0:45 W	23 15	0	6.9	B3 e	4-4-4	set 2 Be MNC 310 sl. elong. and	weak
22 W	18 14	"	6.9	B9.5 ex	4-8	set 8 Be MNC 317 (very doubtful)	weak
14 W	27 53	0	6.64	B5	4-8	set 8 Spec Bin (some side)	2 weak
					15/10	set 5	OK
						4 ph. bands on 2	
						MC GC MTW STW S SW ME	
						Aug. 17 -11.0 +21.9 +20.8 +0.8 +2.8 -28.7 -3.8	





Dome Temp. 74°

Focus 15.817

Dome Temp. ....

0.775  
15.022  
15.817

Transparency Conditions

clouds clearing shortly after 428  
some some haze

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 50W	+16 29	0.22	8.5	K <sub>5</sub>	4.44	Set 2 Vis Bin Prog. Set 8	21:30 - 22:00 22:00 - 22:30 22:30 - 23:00 23:00 - 23:30 23:30 - 24:00
					5/10	Set 8	
						23:30 - closed up	
						3 PH - E 10340	
						Saturday Aug 18 - 15 visitors.	
						Rainy, telescope dismantled - No, BK	

43

Date Sun - Mon Aug 19-20, 1956 Observer Lo - Hg Julian Day 2435.705  
 @ 146 50 54.0 3465.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23392	HD 120316 MKC 310	17 12.0	+27 46	I-25	103 a-0	"	22.3	20 34	20 54	1
23393	HD 177642	19 00.5	23 "	"	"	"	21.8	21 11	22 01	2
23394	MKC 302 HD 175863	18 52.3	+59 53	I-25	"	"	21.7	22 09	22 33	2
23395	ADS 14992	21 24.6	59 "	"	"	"	21.6	22 44	23 26	3
23396	HD 214946	22 36.7	+44 29	"	"	"	21.6	00 39	01 43	1
23397	HD 214993	22 37.0	+39 43	"	"	"		02 01	02 03	4
								02 08.0	02 07.5	
							21.4	02 05	02 14	
23398	HD 219113	23 8.3	+02 03	"	"	"	21.1	02 22	04 42	2
	Incus Test	000					21.0			0

Dome Temp. 64°  
 Focus 15 745  
 Dome Temp. 54°

Transparency Conditions *poorish/fair moon*

44

*light clouds at start sid. view so on foot!*

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
✓ check 2 43 E	+27 53	0	6.7	B <sub>5</sub>	5-5-5	Set 2 Sp bin at RA 19 14.0	Good
3 34 W	+23 15	0	7.5	B <sub>3e</sub>	4-4-4	Set 2 Be prog RA 17 00.0	Good
4 16 W	+59 57	0	6.9	B <sub>4-e</sub>	4-4-4	Set 8 Be prog	Good
5 36 W	+58 33	1-0	7.8	M <sub>A</sub>	4-4-4	Set 2 Vis bin 11 00 00 in med	Good
6 40 W	+44 47	0-1	7.26	G <sub>5</sub>	5-5-5	Set 8 Sp Bin Prog - thru light clouds	fine
	+40 00	1	5.1	B <sub>2</sub>		Set 1 12 Lac - waited for clouds to pass	weak
		1			6/6	Set 5	slip
7 14 W		0				Set 9	slip
8 13 W	+02 27	0-	8.7	G <sub>5</sub>	4-4-4	Set 2 A Z Pac - clouds over field for faint	fine
					15/12	Set B	BC!

A PH- (1032-0)  
 Aug. 20 MC SC MTW STW S SW ME  
 -14.0 +21.7 -11.8 +0.5 -0.3 -34.8 -8.1

45

Date June 11th, Aug 1/20 1958 Observer K-L Julian Day 2435707

© 148 46 26.1 3468.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.	Hour Angle Est
23399	+15 12692	19 32.8	+16 14	I-25	E102-D	008	20.4	20 06	21 18	1	0.5
23400	12750 MWC 409	19 34.9	+16 21	"	"	"	20.2	21 20	00 20	1	2.3 W
23401	HD 225095	23 58.3	+55 00	"	"	"	20.2	00 38	01 04	2	1.6
23402	HD 214946	22 36.7	+44 29	"	"	"	20.1	01 19	01 47	3	1.1
23403	" 1226	00 17.6	+28 55	"	"	"	20.1	02 04	02 22	4	0.8
	Test	T.B.					20.1			4	

Dome Temp. 600

Focus 15.715

Dome Temp. ....

Transparency Conditions Good, clouding at 12:00 46

15.72

2

15.715

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0	38E	16 22	0	6.4	K0	4-8	set 5 Vis. Bin Taken by microscope	fine
2	26W	16 28	1	8E	K5	4-4-4	9 "	fine
4	13E	55 18	1	7.6	Bie	4-4-4	Set 2 Be prog	fine
7	52W	44 46	1	7.26	A5	5-5-5	set 2 Sp bin	fine
2	0 23E	29 20	0	7.0	A5	4-8	set 4 Col bin Prog. light cloud 0222	too weak
						15-10	Set 9	OK
							4 1/2 H 1130L cloud 0300	
Aug. 22	MC	SC	MTW	STW	S	SW	NE	
	-15.0	+21.8	-6.5	+0.3	-2.9	-38.2	-8.5	
23			-7.5			-38.0	+0.5	
24	-18.8		-2.8				-3.5	

L 47

Date Fri - Sat Aug 24-25/51 Observer Lo-H Julian Day 2435710

0151 39 55-6 3473.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 193	Starting Time E.S.T.	Ending Time E.S.T.	P
23404	<sup>2-C</sup> HD 131747	14 50.3	+15 23	I-25	1D3 a-D	0-8	18.8 19.3	19 56	20 42	4
23405	HD 214946	22 36.7	+44 29	"	"	"	18.8	20 52	21 22	3
23406	<sup>C10-D</sup> HD 176674	18 56.3	+14 25	"	"	"	18.8	21 29	22 39	4
23407	105 12750	19 34.9	+16.21	"	"	"	18.8	22 52	01 52	2
23408	" 1459	01 44.0	64 22	"	"	"	18.8	02 03	04 03	"
23409	11P 214946	22 36.7	44 29	"	"	"	18.5	04 12	04 46	"
<i>George Felt</i>										

Dome Temp.

Focus 15

Dome Temp.

Hour Angle  
Ecl

Dome Temp.  $+62^{\circ}$ 

Transparency Conditions

good

48

15.7028

Focus 15.702

moon rose at 20.15

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03 44 <sup>W</sup>	+15 07	0.5	7.8	K <sub>0</sub> III	4-4-4	sets C-region star	set. clock rose <sup>last</sup>	fine
03 22E	+44 47	1	7.26	A5	4-4-4	sets Sp bin	refocused	best
1 36W	+14 26	1	7.89	B5	4-4-4	sets C-region star	refocused	good
04 11W	+16 28	1	8.5	K5	4-4-4	sets Vis bin	flexure!	good
00 11W	64 32	1	8.3	K5	4-4-4	" 9 " "		good
04 03W	44 47	0.1	7.26	A6	4-4-4	" 9 Spot. Bin.		fine
					15/10	" 5		OK
						1 P.H.	No. H.F.	





Dome Temp. +59°F

Focus 15.705

Dome Temp. ....

Transparency Conditions *Good, etc. limit.*  
23.00 Light started at 2030 from end

50 8

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 30W	+16 28	2-0	8.5	K5	4-4-4	Sct. E <i>Thin Line Prop.</i>	<i>fine</i>
		2	5.1	B <sub>2</sub> III	9-9	" 1 <i>Sp. Prop. Prop. (12 lines)</i>	<i>l. sh</i>
		2	"	"	9-9	" 5 <i>ll. line</i>	<i>fine</i>
0 53W	+40 51	2	"	"	9-9	" 10	<i>sl</i>
0 55W	+14 43	1-2	6.59	A0	4-4-4	" 5 <i>C. Region Stars</i>	<i>l. sh</i>
1 19W	+11 11	2	6.5	E <sub>2</sub> no	4-4-4	" 2 <i>Sp. Prop.</i>	<i>l. sh</i>
1 18E	+47 08	2	4.7	B <sub>2</sub> no	9-9	" 8 <i>are not starting properly</i>	<i>fine</i>
1 11W	+28 12	0-1	7.0	A5	4-4-4	" 2 <i>Vel. Line Prop.</i>	<i>l. sh</i>
0 21E	+55 31	2	6.7	F4	4-4-4	" 8 <i>Estimated size</i>	<i>fine</i>
3 51W	+15 23	1-2	8.3	Acp	4-4-4	" 2 <i>C. Region Stars</i>	<i>weak</i>
					15/10	" 8	<i>OK</i>

*l. sh. estimated, same*

51

Date Swiss-Mex. No. 26/27 1957 Observer RK - Vg Julian Day 2435712

© 153 35 43.5 3476.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
23412	d. Del	20 35.0	+15 24	L. 1T	E103ad	act 078	20.8	22 11	22 19	
								23 14	23 15	1
								22 16	22 18	
23419	HD 199216	20 50.7	+49 09	"	"	"	20.6	22 50	23 50	2
23420	HD 174343	18 <del>45.0</del> 45.0	+49 19	"	"	"	20.8	22 57	00 28	2
23421		HD 214940	22 36.7	+44 29	"	"	"	20.9	00 39	01 31
23422	212-E HD 217559	22 56.4	+44 20	"	"	"	20.8	01 40	02 39	4
23423	HD 21913	23 09.3	+02 08	"	"	"	20.8	02 40	03 40	1

Dome Temp. 64° F

Focus 15722

Dome Temp. 60°

Transparency Conditions

clearing about 23<sup>h</sup>

haze and drifting cloud

all night

52

8

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			3.71	B9 V		set 2 1/2 min MK Sid.	ok
		0			12	5 1 min	ok
0 44 W	15 45					5 2 min	ok
1 02 W	49 21	0	6.8	B1 II	4-4-4	set 5 MK Sid.	ok
3 50 W	49 23	-1	7.3	F2	4-4-4	set 2 } these plates are by Bin - then ends } to min and 21.22	fine
0 56 W	44 47	0-1+	7.26	A5	4-4-4	set 8	ok
1 39 W	+14 37	1	7.89	K <sub>0</sub> III	4-4-4	set 2 C. Region 4hr	fine
2 01 W	+02 27	1-0	8.7	G5	4-	set 2 SZ Pac solid cloud from west	ok
					15 10	set 8	ok

3 PH + 8

Aug. 27	MC	SC	MTW	STW	S	SW	ME
	-21.0	+22.3	+5.0	-0.1	-10.5	-35.2	-4.5
" 28	-22.5	+22.1	+10.8	+0.6	-12.2	-49.4	+0.3



Dome Temp. +68°F

Focus 15.710

Dome Temp. ....

Transparency Conditions

Fair, some haze. 54 8

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-------------------	-------------	--------	--------------	-----	-------	---------	---------

11 48W+44 46	2	7.26	A <sub>5</sub>	4-4-4	Set 2	Spec Bin. Prog.	fine
	2	5.1	B <sub>2</sub> III	9-9	Set 1	" " "	ok
	2	"	"	9-9	" 5	" " "	fine
11 15W+39 59	2	"	"	9-9	10	" " "	ok
11 08W+49 59	2	6.8	Ave	4-4-4	Set 2	Bin Prog. quantity	ok
11 00 35W+46 11	2	6.5	B <sub>2</sub> III	4-4-4	" 8	" " "	fine
				15/10	Set 2	" " "	ok

Aug. Eq

MTW

ME

+17.4 -1.5

30

MC

SC

MTW

STW

S

SW

ME

-24.5 +24.0 +22.7 +0.8 -15.1 -52.8 -3.8

31

-24.7

+22.1

+28.8

+0.9

-16.3

-53.9

-3.5

Date Sept 2/3 Sun/Mon. Observer Gu - Lo Julian Day 2435719

0160 21 59.8 3489.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.
23428	HD 174343	18 450	+49 19	T-25	03a-0	Set .008	+22.0	19 59	20 39	2
23429	HD 194335	20 20.0	+37 10	"	"	"	+22.0	20 54	20 59	4
23430	HD 192044	20 07.8	+26 11	"	"	"	+21.7	21 27	21 37	3
	HD 214993	22 37.0	+39 43	"	HI-SP	"	+21.7	21 55	22 07	2
23431	"	"	"	"	"	"	"	22 08	22 19	2
	"	"	"	"	"	"	"	22 19	22 24	2
	"	"	"	"	"	"	"	22 30	22 42	2
	"	"	"	"	"	"	+21.9	22 43	22 52	4
23432	"	"	"	"	"	"	"	22 53	23 05	4
	"	"	"	"	"	"	"	23 04	23 15	4
	"	"	"	"	"	"	"	23 16	23 25	4
	"	"	"	"	"	"	+21.9	23 26	23 34	3
23433	"	"	"	"	"	"	"	23 35	23 45	3
	"	"	"	"	"	"	"	23 46	23 56	3
	"	"	"	"	"	"	+21.9	23 57	00 06	3
	"	"	"	"	"	"	"	00 14	00 24	2

Dome Temp. +68°F

Focus 15.740

Dome Temp. ....

Transparency Conditions *Good*

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23 W	+49 23	0-1	7.3	F2	4-4-4	Set. 2 <i>2.5" bin. spec.</i>	<i>fine</i>
52 E	+37 21	0	5.7	B <sub>3</sub> ne	4-4-4	Set 2 <i>2.5" bin. spec.</i> <small>End section 1 for addition to focus check.</small>	<i>good</i>
03 E	+26 22	0+	5.9	B <sub>2</sub> ne	4-4-4	Set 5 " "	<i>fine</i>
00-7E	+40 50	0-1+	5.2	B <sub>2</sub> III	10-10	Set 1 <i>11" 12" Lac. Astro - Good</i>	<i>fine</i>
"	"	-1+	"	"	10-10	" 4 10 " "	<i>fine</i>
"	"	1	"	"	10-10	" 7 10 " "	<i>good</i>
"	"	0-1	"	"	10-10	" 10 12 " <i>variable seeing</i>	<i>fine</i>
"	"	0-1+	"	"	10-10	" 1 9 " "	<i>fine</i>
"	"	-1+	"	"	10-10	" 4 10 " "	<i>fine</i>
"	"	0+1	"	"	10-10	" 7 11 " "	<i>fine</i>
"	"	+1-	"	"	10-10	" 10 9 " <i>very bright</i>	<i>fine (good)</i>
"	"	1-2	"	"	10-10	" 1 9 " "	<i>fine</i>
"	"	1-2	"	"	10-10	" 4 10 " "	<i>fine</i>
"	"	0-2	"	"	10-10	" 7 10 " "	<i>fine</i>
"	"	0-2	"	"	10-10	" 10 9 " <i>non-telescope file</i>	<i>fine</i>
"	"	1	"	"	10-10	" 1 10 " <i>light wave parallel</i>	<i>fine</i>



57

Date Sept 23 56 <sup>cont</sup> Observer Lo Julian Day 2435719

0160 21 59.8 3489.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23434	HD 214023	22 37.0	+39 43	E-25	Hi-Sp. 100	008	21.9	00 25	00 33	2
								00 34	00 42	2
								00 53	00 57	2
23435	"	"	"	"	"	"	21.8	00 52	01 00	4
								01 01	01 11	4
								01 12	01 21	4
								01 22	01 20	4
23436	"	"	"	"	"	"	21.7	01 21	01 20	3
								01 41	01 50	3
								01 51	02 01	3
23437	"	"	"	"	"	"	21.8	02 02	02 10	3
								02 11	02 19	2
								02 20	02 28	2
								02 29	02 37	2
							21.8	02 38	02 46	2

Dome Te

Focus

Dome Te

Hour Angl  
End

calculated

0 43.3

2 38.3

Dome Temp.  $52^{\circ}$ Transparency Conditions Good

58

Focus.....

Dome Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS			Quality	
	$\alpha = 20^{\circ} 20'$	2	5.2	$3\frac{1}{2}$	14-10	set 4	8	12	LTC	fine
	"	2	"	"	10-10	" 7	8			fine
calculated. 0 43-3W	"	2	"	"	10-10	" 10	8			fine
	"	2	"	"	20	" 1	8			fine
	"	1.5	"	"	10-10	" 4	10			fine
	"	1.5	"	"	10-10	" 7	9			fine
	"	2	"	"	10-10	" 10	8			fine
	"	2	"	"	10-10	set 1	9			fine
	"	1.5	"	"	10-10	" 4	9			fine
	"	1.5	"	"	10-10	" 7	10			fine
	"	2	"	"	10-10	" 10	8			fine
	"	2	"	"	10-10	" 1	8			fine
	"	2	"	"	10-10	" 4	8			fine
	"	2	"	"	10-10	" 7	8			fine
	"	2	"	"	10-10	" 10	8			fine
2 38.3W 2 39W	"	2	"	"	10-10	" 10	8			fine

*the plot with  
double exposure*

*night 3-10 av.*

*overexposed.*

*diff. in 1A*

59

Date *cont* 2-3, 1956 *con* *con-mon* Observer *Lo* Julian Day *cont* 2435.719  
 0160 21 59.8 3489.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23038	HD 214903	22 37.0	139 43	F-25	H. Speed	008		02 47	03 57	4
	"	"	"	"	"	"		02 52	03 18	4
	"	"	"	"	"	"		03 09	03 19	
	"	"	"	"	"	"	21.7	03 22	03 30	
23039	MWC 29 HD 13661 <i>comet</i>	12 02.1	54 14	"	113 A-2	"	21.2	03 04	05 16	1
	<i>OTR</i>									
<i>moon almost new.</i>										

Dome Temp.....

Transparency Conditions

Good, flicking around. 60

Focus.....

Dome Temp..... 53°F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+41 50	2	5.2	B <sub>2</sub> M	10-10	Set 1 10 12 Lenses	ok
		1.5	"	"	11-10	" 4 10 "	ok
		1.5	"	"	1-10	" 3 10 "	ok
		1.5	"	"	10-10	" 2 10 "	ok
3 22.3W							
22 12		1.5	"	"	10-10	" 2 10 "	ok
1 27 W	54 18	1	8.6	B <sub>3</sub> me	4-4.4 15/10	Set 2 Be stars check for field. Set 2	ok
						NO H- $\alpha$ plates loaded. Better buy another full box also.	
						1 PK of 1030-0 + 4	
						Just the set on all plates taken this night	

61

Date Sept 3-4 /56 Observer Hv - Hg Julian Day 2435.720  
 @ 161 20 09.7 3491.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 23.9	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23440	HD 174343	18 45.0	49 19	I-25	E <sub>1032</sub> -D	008	23.8	19 56	20 56	2
23441	12 Lac.	22 37.0	39 43	"	H <sub>1</sub> Spd.	"		21 15	21 25	3
	"							21 26	21 38	
	"						23.8	21 39	21 47	
	"							21 53	22 02	
23442	"							22 03	22 13	1
	"							22 14	22 24	
	"							22 25	22 35	
	"							22 36	22 46	
23443	"							22 47	22 56	2
	"							22 57	23 07	
	"						23.8	23 07	23 21	
	"							23 22	23 34	
23444	"							23 35	23 46	3
	"							23 47	23 57	
	"							00 00	00 12	

Done Temp  
 Focus  
 Done Temp  
 Exposure  
 End  
 Calculated  
 02 53 E  
 Calculated  
 08-1W

Dome Temp. 70.0

Transparency Conditions .....

Focus 15.770

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 45 W	49 22.5	0	7.3	F <sub>2</sub>	4-4-4	Set 2 Spect. Bin.	ok
		0-1	5.2	B <sub>2</sub> III	10-10	" 1 10"	fine
calculated 02 15.3 E		0			10-10	4 12	ok
02 15 E	40 00	1			10-10	7 10	fine
		2			10-10	10 12	fine
		1			10-10	1 10	fine
		1			10-10	4 10	fine
03 35		1			10-10	7 10	fine
		1			10-10	10 10	fine
		1-2			10-10	1 9	ok
		1			10-10	4 10	fine
		0			10-10	7 12	fine
		0			10-10	10 12	fine
		0-1			10-10	1 10	fine
		0			10-10	4 12	fine
calculated 08.1 W		0-1			10-10	7 12	fine
08.1 W		1			10-10	10 small 4" W	fine

663

Date Mon. Jan. 1-3-4 1956 Observer -Hg Julian Day 2435720

0161 20 09.7 3491.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.
23445	NG 210593	22 37.0	39 43	25	K. Sp	23	23.5	00 31	00 43	1
								00 44	00 56	
								00 57	01 08	
								01 09	01 21	
23446	"						23.7	01 20	01 31	2
								01 31	01 43	
								01 44	01 56	
								01 57	02 10	
23447	"						23.7	02 11	02 23	3
								02 24	02 36	
								02 37	02 49	
								02 50	03 03	
23448	MWC 23 NG 12302	01 55.6	59 12	"	E-103a	"	23.7	03 21	04 43	4
23449	HD 22203	03 29.4	-21 58	"	"	"	23.4	04 54.0	05 17.0	5
								04 57.0	05 52	
								05 01	06 02	
- Focus Test - OTB							23.4			

Dome Temp.....

Transparency Conditions.....

Focus.....

Dome Temp... 62.0°

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	45 00	0-1	S.2	B. III	10-10	Set 1 12 <sup>m</sup> 12 Lac	fine
		0-1			10-10 <sup>+</sup>	Set 9 12	fine
					10-10	Set 7 11	fine
1 15W					10-10	Set 10 10	fine
1 16W		0-1			10-10	Set 1 10	fine
		1-0			10-10	Set 1 10	fine
		0			10-10	Set 4 12	fine
					10-10	Set 7 12	fine
2 06W					10-10	Set 2 13	fine
					10-10	Set 1 12	fine
					10-10	Set 4 12	fine
		1-2			10-10	Set 7 12	fine
2 58W					10-10	Set 10 13	fine
1 19W	59 26	0-1	B.2	B.2	4-4.4	Set 2 Be Prog	fine
		1/2	4.2	B.3	12	Set 2 <sup>el</sup> M	fine
		1/2			6-6	Set 5 Bm	fine
0 09W		1/2			6-6	Set 3 Prog	fine

Dust on slit  
will peak follow  
the light

SPOTTER 15MT  
-SPOTTER TO WALL

Sept. 4 mTW ME  
+16.9 -0.3  
Sept. 5 MC SC MTW STW  
-29.2 124.5 +20.8 +0.8  
S SW ME  
-1.7 -60.3 -7.8

+1 + 2	HISPEED
= 3 + 4	10.3 = 0



65

+K  
+ Mac AlpineDate Thurs-Fri Sep 6-7 1956 Observer MR - Gu Julian Day 24357.23  
0 164 14 49.8 3496.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
23450	HD 174343	18 45.0 <sup>h</sup>	+49° 19'	I-25	103c 0	008	+22.0	20:02	21:10	5
23451	HD 214993	22 37.0	+39 43	"	"	"	+21.7	21:43:00	21:48:00	4
								21:51:00	21:58:00	
								21:59:00	22:09:00	
23452	HD 214993	"	"	"	"	"	+21.8	22:17:00	22:24:00	3
								22:25:00	22:32:00	
								22:34:00	22:44:00	
								22:47:00	22:57:00	
23453	HD 214993	"	"	"	"	"	+21.6	22:59:00	23:09:00	4
								23:10:00	23:21:00	
								23:22:00	23:31:00	
								23:34:00	23:46:00	
23454	HD 214993	"	"	"	"	"		23:48:00	23:59:00	3
								00:03:00	00:14:00	
								00:15:00	00:25:00	
								00:26:00	00:36:00	

Dome Temp. 63°F

Docus 5.740

Dome Temp. ....

Transparency Conditions excellent

66

Sep 4/5: Clouded over by 2:15

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
6 <sup>m</sup> 1:00 W	49° 22'	00	7.3	F2	4-4-4	set 2 spec. Bin	good
04. E							
05 E	40 00	00	5.2	B2 III	6-6	set 1 exp 5 <sup>m</sup> This plate developed	
		00			6-6	set 4 " 7 <sup>m</sup>	
		00			6-6	set 7 " 10 <sup>m</sup> (extra 6 <sup>m</sup> exp at set 10)	
28 E	"	00	"	"	6-6	set 1 exp 7 <sup>m</sup> (2 plates)	
29 E		00			6-6	" 4 " 7 <sup>m</sup>	
		00			6-6	" 7 " 10 <sup>m</sup>	
		00			6-6	" 10 " 10 <sup>m</sup>	
43 E	"	00	"	"	6-6	set 1 exp 10 <sup>m</sup> Fine detail at HA = 50 <sup>m</sup> E	
44 E		00			6-6	" 4 " 11 <sup>m</sup>	
		00			6-6	" 7 " 11 <sup>m</sup>	
		00			6-6	" 10 " 12 <sup>m</sup>	
07 W	"	00	"	"	6-6	set 1 " 11 <sup>m</sup> → set 4 <sup>m</sup> and 5 <sup>m</sup>	
08 W		00			6-6	" 4 " 11 <sup>m</sup>	
		00			6-6	" 7 " 10 <sup>m</sup>	
		00			6-6	" 10 " 10 <sup>m</sup>	

all  
12  
plates  
OK  
reusing  
from  
good to  
create

6 67

cont'd

Date Thurs/Fri, Sept 6-7, 1946 Observer - E. A. Julian Day 2435.723

0164 14 49.8 3496.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
23455	HD 214993	22 37.0	39 43	I-25	1030-0	.008	21.3	00:37:40	00:45:00	4
	"							00:47:00	00:55:00	
								00:57:00	01:05:00	
								01:06:00	01:14:00	
23456	"	"	"	"	"	"	21.2	01:15:00	01:22:00	
								01:23:00	01:32:00	
								01:31:00	01:39:00	
								01:40:00	01:47:00	
23457	"	"	"	"	"	"	21.1	01:48:00	01:56:00	3
								01:57:00	02:04:00	
								02:05:00	02:11:00	
								02:12:00	02:19:00	
23458	"	"	"	"	"	"	21.0	02:26:00	02:34:00	4
								02:28:00	02:35:00	
								02:36:00	02:43:00	
								02:44:00	02:52:00	

Dome Temp.....

Transparency Conditions.....

Focus 15 740

Dome Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
Calculated	40 00	0+	5.2	B <sub>0</sub> T	6-6	Set 1 Exp 9 <sup>m</sup>	
04.1 W		0			6-6	" 4 " 9	
		0+			6-6	" 7 " 8	
		0+			6-6	" 10 " 8	
"		0-1	"	"	6-6	" 1 " 7	
		0-1			6-6	" 4 " 7	
		0			6-6	" 7 " 8	
		0+			6-6	" 10 " 7	
"		0-1	"	"	6-6	" 1 " 8	
		0+			6-6	" 4 " 7	
		0-1			6-6	" 7 " 6	
		0+			6-6	" 10 " 7	
"		0-1	"	"	6-6	" 1 " 7	
		0-1			6-6	" 4 " 7	
		-1			6-6	" 7 " 7	
		0+			6-6	" 10 " 8	

all  
✓

6 69  
 cont'd  
 Date Thurs/Fri, Sept 6-7, 1946 Observer - Gu Julian Day 2435.723  
 0164 14 49.8 3496.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
23459	HD 210993	22 37.0	39 43	T-25	T03a-0	.008	21.0	02:53:00	02:59:00	2
								03:00:00	03:08:00	
								03:18:00	03:24:00	
								03:28:00	03:34:00	
23460	"	"	"	"	"	"	21.0	03:30:00	03:38:00	2
								03:39:00	03:47:00	
								03:50:00	04:00:00	
								04:01:00	04:11:00	
23461	MWC 63	3 07.9	48 19	"	"	"	21.2	04 34	05 10	2
	Focus Test		A.T	S.						

Home Temp.....

Transparency Conditions.....

70

Focus.....

Home Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4 19 W	48 00	1+	3.2	B III	6-6	Set 1 Euphorbia	
		1			6-6	" 1 " 8	
		0-1			6-6	" 7 " 8	
		0			6-6	" 10 " 11	
		0+	"	"	6-6	" 1 " 8	
		0+			6-6	" 4 " 10	
		0			6-6	" 7 " 10	
4 19 W		0+			6-6	" 10 " 10	
4 19 W	48 33	0	7.9	Byne	4-4+ 15/10	Set 6 Be. Prog.	weak
						4 plates loaded (3 with H&I, 1 with 103a-a)	
						Sept 7. MC SC NTW STW S SW ME -30.9 +24.3 +30.3 +0.9 -5.1 -4.6 +1.2	

6171

Date Fri Sat Sept 7-8/56 Observer L - Lo Julian Day 2435724  
 ☉ 165 13 06.4 3498.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23462	H.D. 154 160	16 58.7	14 41	I-25	E-103A0	<sup>set</sup> 008	17.0	19 48	20 24
23463	" 214993	22 37.0	34 43	"	"	"	16.9	21 39	21 47
								21 48	21 56
								21 57	22 05
								22 06	22 14
23464	" 214993						16.9	22 15	22 23
								22 24	22 32
								22 33	22 41
								22 42	22 50 <sup>50</sup>

Base Temp.  
 Press 15.  
 Base Temp.  
 Angle  
 ind  
 13W  
 35E  
 39E

Home Temp. +58°F

ocus 15.667

Home Temp. ....

Transparency Conditions Good

72

Time out to make adjustments to telescope

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24	2 13 W	14 35	0	7.0	G8 IV	4-4-4	Set 2 C. region prog. ←	good
47		40 00	0	5.2	B2 III	6-6	Set 1 12 Lacertae exp 8	
50						6-6	" 4 8	
55						6-6	" 7 8	
58	35 E					6-6	" 10 8	
59						6-6	" 1 8	
59						6-6	" 4 8	
59						6-6	" 7 8	
59	59 E					6-6	" 10 8	
							First sign of clouds near end of exp.	
							3 P.H. o loader with 10300	
							Solid at 03 30 - 20	



6  
73

Date Sat. Sun. 1913 Sep 8-9 Observer Gu - Ca Julian Day 2435.725  
 0166 11 24.6 3499.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
23465	Focus Test		0 T. B	I-25	103u-0	set 008	+14.7 C			1
	"		"	"	"	"	"			
23466	HD 214993	22 <sup>h</sup> 37.0	+39° 43'	I-25	"	set 008	+14.6	22:42:00	22:48:00	3
								22:49:00	22:59:00	
							+14.5	23:59:00	00:05:00	
								00:06:00	00:12:00	
23467	"	"	"	"	"			00:14:00	00:20:00	4
							+14.3	00:21:00	00:26:00	
								00:27:00	00:35:00	
								00:36:00	00:42:00	
23468	"	"	"	"	"			00:44:00	00:49:00	
							+14.2	00:50:00	00:54:00	
								00:55:00	00:59:00	
								01:00:00	01:00:00	
23469	"	"	"	"	"			01:06:00	01:10:50	

Dome Temp. 52°F

Focus 15.627

Dome Temp. ....

Transparency Conditions .....

74 15.616  
.022  
15.638

Sat eve: 400 ± persons everyone wanting to see Mars  
 Cloudy at first - gave lecture, demonstrated the scope  
 cleared later & showed Ringed, Saturn, J & Mars. 3 RASC from  
 (Horton + 2 from R. Hill) Quality

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					15/10	set 2 Focus 15.638 2.9, This plate	
					" "	6 " 15.638 developed	
					" "	10 " 15.627 slightly better	
56 E 57 E	40° 00'	1	5.2	B2 III	6-6	set 1 exp 6 <sup>u</sup> [all 12 lac plates long slit]	
					6-6	" 4 " 6 ← Passing clouds during this exposure	
		1			6-6	" 7 " west 4 <sup>h</sup> ; note time interval 1 <sup>h</sup>	
		1			6-6	" 10 " 6	
		1+	"	"	6-6	" 1 " 6	
		2-			6-6	" 4 " 5	
		1-			6-6	" 7 " 8 - one thin cloud over target.	
		0-1			6-6	" 10 " 6 clearing	
		1-2	"	"	6-6	" 1 " 5	
		1-½			6-6	" 4 " 4	
		2			6-6	" 7 " 4	
		2			6-6	" 10 " 4	
		2			6-	" 1 " 4	

6 75  
 Date Sat. Aug. Sept 9/9, 1956. Observer — Julian Day 2435.725

0166 11 24.6 3499-8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
23469	NGC 214795	22 <sup>h</sup> 37.0	+39° 43'	I-25	103a-0	.008		01:11:00	01:15:00	2
								01:18:00	01:21:00	
								01:22:00	01:26:00	
23470	"	"	"	"	"	"	+14.2	01:27:00	01:32:00	3
								01:33:00	01:35:00	
								01:38:00	01:44:00	
								01:45:00	01:50:00	
23471	"	"	"	"	"	"	+14.2	01:51:00	01:55:00	1
								01:58:00	02:00:00	
								02:01:00	02:05:00	
								02:06:00	02:07:00	
23472	"	"	"	"	"	"		02:13:00	02:19:00	2
								02:20:00	02:22:00	
	Focus Test		O.T.B.							

Dome Temp.....  
 Focus 15.627  
 Dome Temp.....

Transparency Conditions

Fair, scattered cloud <sup>76</sup>  
 in S & N.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
calculated	+40 00	2	5.2	B. TL 6-6	Set 4 Exp. 4		
37.0 W		1-2	"	"	6-6	" 7 " 5	
		2			6-6	" 10 " 4	
"		1-2	"	"	6-6	" 1 " 5	
		1-2			6-6	" 4 " 5	
		1-2			6-6	" 7 " 5	
		1-2			6-6	" 10 " 5	
"		2	"	"	6-6	" 1 " 4	
		2			6-6	" 4 " 4	
		2			6-6	" 7 " 4	
		1+			6-6	" 10 " 4	
"		1+	"	"	6-6	" 1 " 6	
5.6 W		00			6-6	" 4 "	
					15/10	" 8	

Light cloud over  
 cloud solid 22:40  
 wind increases from SW

77

Date Sept. 9-10/56 Observer Hr - Julian Day 243572.6  
 0167 09 44.4 3501.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
23473	HD 174343	18 45.0	49 19	I-25	E102.00	0.002	16.0	19 45	21 03	1
23474	12 Lac,	22 37.0	39 43	"	"	"		21 26	21 33	2
	"							21 37	21 41	
	"							21 42	21 47	
	"							21 50	21 52	
23475	"							21 59	22 07	
	"							22 02	22 10	
	"							22 17	22 24	
	"							22 25	22 32	
23476	"							22 33	22 40	
	"							22 44	22 51	
	"						16.0	22 52	22 59	
	"							23 00	23 02	
23477	"							23 10	23 18	
	"							23 20	23 29	
	"							23 30	23 37	
	"							23 38	23 46	

Dome Temp. 55°F

Transparency Conditions Good.

78

Focus 15.657

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0113W	49 22	0	7.3	K <sub>2</sub>	4-4	Sat. 5 Spect. Bin	fine
2 07E		0-1	5.2	B <sub>2</sub> III	6-6	" 1	
					6-6	" 4	
		0-1			6-6	" 7	
					6-6	" 10	
		0			6-6	" 1	
		0			6-6	" 4	
		0-1			6-6	" 7	
		0-1			6-6	" 10	
		0-1			6-6	" 1	
		0-1			6-6	" 4	
	40 00	0-1			6-6	" 7	
		0			6-6	" 10	
		0			6-6	" 1	
		0			6-6	" 4	
		0-1			6-6	" 7	
		0			6-6	" 10	

79

cont'd

Date

Sept 9-10/56

Observer

H-L

Julian Day 243572.6

①67 09 44.4 3501.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
23478	12 Lac	22 37.0	+39 43					23 51	23 58	2
	"							23 59	00 06	
	"							00 07	00 14	
	"							00 15	00 27	
								00 22	00 28	3
								00 29	00 36	
23479							15.7	00 37	00 45	
								00 46	00 53	
								00 54	01 02	
23480								01 07	01 15	
								01 11	01 18	
								01 19	01 25	
							15.8	01 26	01 32	
23481								01 33	01 39	
								01 40	01 46	
								01 47	01 53	

Dome Temp.....

Focus.....

Dome Temp.....

Transparency Conditions *clear + good*

80

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		40 00	0-1	5-2	B <sub>2</sub> <del>II</del>	6-6	Set. 1	
	00 26 W		0-1			6-6	4	
			0-1			6-6	7	<i>jet, plane flares in exp.</i>
			1			6-6	10	
			1			6-6	" 1	
			0-1			6-	4	
			0			6-6	7	
			0-1			6-6	10	<i>focus fluctuating fast, bar: 1/2 in</i>
			0			6-6	" 1	
			1			6-6	4	<i>refocused.</i>
			1			6-6	7	
			1			6-6	10	
			1			6-8	1	
			1			6-6	4	
			1			6-6	7	
			1			6-6	10	



81

cont'd

Date Sept 9-10-16 Sun-Mon Observer Lo Julian Day 2435726

①167 09 44.4 3501.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
23482	12 Lac	22 57.0	39 43	I-25	103 aD	long 50 S		01 54	02 01	2
				"	"	"	15.7	02 02	02 08	
				"	"	"	"	02 09	02 15	
				"	"	"	"	02 16	02 22	
23483				"	"	"		02 23	02 28	3
				"	"	"	02 29	02 34		
				"	"	"	02 35	02 40		
				"	"	"	02 41	02 46		
23484	HD 214946	22 36.7	+44 29	"	"	new 50 S		02 53	03 25	1
23485	MW 49 HD 15472	02 24.4	70 30	"	"	"		03 48	04 30	4
23486	MW 63 HD 20017	3 07.9	48 19	"	"	"	15.8	4 35	05 15	
Sept 11	Focus test	O.T.B.								
23486 F1	Focus test	O.T.B.					16.0			

Home Temp.....

Transparency Conditions.....

ocus.....

Home Temp. 48° - cold!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																																
	40. 50	0.1	5.2	B <sub>2</sub> III	6-6	set 1																																	
		1(0-2)			6-6	4																																	
		1			6-6	7																																	
		1			6-6	10	refocused																																
		1.5			6-6	1																																	
		1.5			6-6	4																																	
		1.5			12	7																																	
03 06W	42 00	1.5			12	10																																	
3 47W	44 42	0.5	7.4	A <sub>5</sub>	5-5-5	set 2	Sp Dir																																
1 00W	70 46	1	B <sub>9</sub> IV	8.0	5-5-5	set 2	B e prog.																																
03W	48 31	1	B <sub>9</sub> IV	7.9	5-5-5	set 8	" check field																																
					15/10	set 3	OK. Mo																																
					15/10																																		
set 1	from 15.632																																						
5	.622																																						
9	.611																																						
<table border="1"> <thead> <tr> <th>Sept. 10</th> <th>mc</th> <th>sc</th> <th>MTW</th> <th>STW</th> <th>S</th> <th>SW</th> <th>NE</th> </tr> </thead> <tbody> <tr> <td></td> <td>-33.0</td> <td>+26.1</td> <td>-12.3</td> <td>+0.3</td> <td>-9.5</td> <td>-9.4</td> <td>-1.5</td> </tr> </tbody> </table>							Sept. 10	mc	sc	MTW	STW	S	SW	NE		-33.0	+26.1	-12.3	+0.3	-9.5	-9.4	-1.5																	
Sept. 10	mc	sc	MTW	STW	S	SW	NE																																
	-33.0	+26.1	-12.3	+0.3	-9.5	-9.4	-1.5																																
<table border="1"> <thead> <tr> <th>Sept. 14</th> <th>mc</th> <th>sc</th> <th>MTW</th> <th>STW</th> <th>S</th> <th>SW</th> <th>NE</th> </tr> </thead> <tbody> <tr> <td></td> <td>-34.5</td> <td>+26.1</td> <td>-2.5</td> <td>+0.5</td> <td>-12.6</td> <td>-11.2</td> <td>+1.5</td> </tr> <tr> <td></td> <td>-37.0</td> <td>+26.1</td> <td>+13.5</td> <td>+0.3</td> <td>-15.7</td> <td>-13.8</td> <td>-0.5</td> </tr> <tr> <td>17</td> <td>-39.8</td> <td>+26.2</td> <td>-9.8</td> <td>-0.5</td> <td>-20.6</td> <td>-16.7</td> <td>+1.5</td> </tr> </tbody> </table>							Sept. 14	mc	sc	MTW	STW	S	SW	NE		-34.5	+26.1	-2.5	+0.5	-12.6	-11.2	+1.5		-37.0	+26.1	+13.5	+0.3	-15.7	-13.8	-0.5	17	-39.8	+26.2	-9.8	-0.5	-20.6	-16.7	+1.5	
Sept. 14	mc	sc	MTW	STW	S	SW	NE																																
	-34.5	+26.1	-2.5	+0.5	-12.6	-11.2	+1.5																																
	-37.0	+26.1	+13.5	+0.3	-15.7	-13.8	-0.5																																
17	-39.8	+26.2	-9.8	-0.5	-20.6	-16.7	+1.5																																

6 83

Date..... Observer..... Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
23486 F <sub>2</sub>	Jovius Vest	1956	Sep. 12			008				
23486 F <sub>3</sub>	Jovius Vest	1956	Sep. 12							
23486 F <sub>4</sub>	Jovius Vest.		Sep 13/56			008	17.5			
23486 F <sub>5</sub>	Jovius Vest		Sep 13/56			008	17.6			

Home Temp.....  
 Focus.....  
 Home Temp.....

Transparency Conditions .....

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							Set 1 reading 15.635	
							" 4 " 15.625	Tab. 15.655
							" 7 " 15.615	
							" 10 " 15.605	
							Set 1 reading 15.500	
							" 5 " 15.600	
							" 9 " 15.700	
						15/10	Set 1 15.455	
							" 5 15.655	
							" 9 15.855	
						10/15	Set 1 15.635	Focus by table 15.635 corr not added
							" 4 15.605	
							" 7 15.575	
							" 10 15.545	

On Sep. 14 1956 a new focus table was prepared for the 25" camera by subtracting the constant 0.110 mm from values given by the old graph - Mo.

→ Best focus.

85

Date Mon - Tue Sep. 17-18, 1952 Observer MR - HC Julian Day 2435734

© 174 57 20.2 3514.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
{ 23487	HD 154160	16 58.7	+14 41	I-25'	103c-0	<sup>set</sup> .038	16.4C	19:34	20:24	3
{ 23488	HD 199216	20 50.7	+49 09	"	"	"	16.3	20:32	21:06	3
{ 23489	HD 210428-9	20 52.3	+15 23	"	"	"	16.0	21:13	22:45	1
{ 23490	HD 218155	23 00.6	+14 25	"	"	"	16.0	22:49	23:09	1
23491	HD 214993	22 37.0	+39 43	"	"	"	16.2	23:28:30	23:31:00	2
	"	"	"	"	"	"	"	23:32:30	23:37:30	
	"	"	"	"	"	"	"	23:38:00	23:41:00	



87

Date Wed-Thurs Sept 19-20 1956 Observer O - Lo Julian Day 2435736  
 ☉ 176 54 31.4 3518.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
23492	<sup>52 mic</sup> HD 219113	23 08.3	+2 08	I-25	E103a-O	.008	+10.9	23 00	01 30	1
23493	ADS 15345	01 50.2	+36 46	I-25	"	"	+10.9	01 58	02 50	1
23494	HD 214945	22 36.7	44 29	"	"	"		03 00	03 42	1
	Forecast 973						12.8			1

Home Temp. +43°F

Transparency Conditions *Cloudy until 22<sup>h</sup>*

88

Humidity *15.46*

Home Temp. = 37°F

P.5

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30	57W	+2 26	0 <sup>-</sup>	8.7	G5	4-4-4	Set 2.	fine
33	36W	+37 02	0	7.4	K.2	4-4-4	Set 5: false spot on 1534 at set 2	too weak.
42	42W	+44 47	0	7.26	A5	4-4-4	Set 7 clouds low in west 23 15 clouds 23 40	weak.
						15/10	set 9	
2 PH. loaded, in fog								
MTW Sept. 20 +19.8								



89

Date Thurs Sep 20-21/56 Observer Ad - Hg Julian Day 2435737

© 177 53 03.9 3520.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Exposure hr
23495	SZ Proc HD 21913	23 08.3	+2 08	I-25	E107aD	008	+8.1	21 22	01 27	3	
23496	MW 10 HD 2343	00 54.4	69 26	"	"	"	"	00 23	00 29	7	
	" "	"	"	"	"	"	8.0	00 30	01 00	5	
23497	MW 13 HD 2185	01 24.6	52 51	"	"	"	8.0	01 20	02 10	4	
23498	HD 2185	01 24.6	52 51	"	"	"	8.0	02 24	02 56	1	
	Trapp Field	0 30					8.0				

Time Temp... 41°F  
 Focus... 15.40  
 Time Temp... 39.8

Transparency Conditions  
 Clouds, earlier  
 0 - Gu. Set. Sept 22/56.

70 visitors. Lecture on Mars Cloudy.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3:30		+ 2 25	0	8.7	G5	4-4-4	Set 2. Edel Bin.	fine
3:50			0	7.1	B <sub>500</sub>	4-	Set 3. 1.5" x 1.5" B <sub>2</sub> bin	-
4:10		25 42		"	"	4-4-4	Set B. Ed. Bin. for 23495	fine
4:20		23 15	0	7.5	B <sub>500</sub>	4-4-4	Set 3. Ed. Bin. Cloudy on p. NW	fine
4:30		22 47	0	7.24	G5	4-8	Set 2. Ed. Bin. Very fine at 2:30	lweak
						15/10		O.K.
							Cloudy at 7:30	
							1.5" x 1.5" B <sub>2</sub> bin	
							1.5" x 1.5" B <sub>2</sub> bin	

	MC	SC	MTW	STW	S	SW	ME
Sept. 21	-43.6	+26.9	+22.2	-0.02	-26.2	-22.7	-2.8
24	-3.0	+26.8	+39.2	+0.2	-30.0	-26.2	+0.8

91

Date Mon-Tue Sep 24/25, 1956 Observer Se <sup>(box) MR</sup> - H Julian Day 2435.741

© 181 48 04.5 3529.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23499	HD 154277	12 59.4	+16 10	I-25	E10320	<sup>set</sup> .008	14.6	18 59	21 07
[ 23500	HD 209296	21 57.2	+36 14	I-25	E10300	.008	+14.5	21 24	22 24
23501	HD 200775	21 00.4	+67 47	I-25	E10300	.008	+14.5	21 40	22 10
23502	HD 214992	22 37.0	+29 42	I-25	E10300	.008	+14.3	23 14	23 15:20
	"	"	"	"	"	"	"	23 16:35	23 17:35
	"	"	"	"	"	"	"	23 24 0	23 25:0
23503	HD 1061	01 09.8	+08 16	I-25	E10300	.008	14.3	23 42	23 51
23504	ADS 1233	01 22.6	+62 34	"	"	"	14.6	00 16	01 46
23505	" 1435	01 43.4	+07 11	"	"	"	14.1	02 03	04 35
23506	HD 29376	01 32.5	+07 07	"	"	"	14.0	05 03	05 20
	<i>From Inst 070</i>								

Home Temp. 54.2

ocus 15.51

Home Temp.

Transparency Conditions

Good

92

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:03 W	+16° 05'	1	8.75	Cr III	4-4-4	set 1 0-regular	weak
2:23 W	+56 30	1	8.1	B5Ie	4-4-4	set 2 Be aqueduct plot for 22584	Guiding very poor } good
1:53 W	+67 59	1	7.2	B5e	4-4-	set 8 Be	good
0:36 1/2 W	-	3	5.2	B2E	12	set 1 12 lac	
0:59 1/2 W	-	3	5.7	B2E	12	set 5	fine
1:44 W	+110° 10'	3	5.2	B2E	12	set 9	
-23E	-	2	6.2	A9	6-6	set 2 Ecl Bin	fine
0:13 W	62 52.5	0.1	7.59	K0	4-4-4	" 2 Vis Bin. W. Star 2 check	too weak
0:30 W	67 28	0.1	8.0	K0	4-4-4	" "	weak
0:43 W	67 14	0	6.8	B4	4-4-4	" 8 Ecl Bin.	fine
					15/10	" 5	OK.
						4 PH in D.	
						Notes Under	



Dome Temp. +51°F

Focus 15.48

Dome Temp. ....

Transparency Conditions

Rain haze

94

Start delayed by clouds after sunset

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
45	3 03W	05 153	0	8.5	Bsne	4-4-4	Set 2 Be prog. field checks <sup>22582</sup>	good
22	2 14W	+02 26	0	8.7	B5	4-4-4	Set 2 Eclipsing Binary	fair
1	3 30W	+07 28	0-1	8.2	K0	4-4-4	" 2 Vis. Bin.	good
						15/10	" 8 I.P.H. P.L.S. H. ....	OK
							Sept . 26    MC    SC    MTW    STW    S    SW    ME 4.8   426.9   -3.6   -0.81   -32.7   -28.3   -3.2	

95

Date Wed-Thur Sep 26-27, 1956 Observer O-H Julian Day JD 2435742

JD 2435742  
 182 46 53.6 3531.4  
 183 45 45.0 3533.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
23510	HD 179343	19 07.1	+2 27	I-25	E103a-O	Set 008	+14.9	18 39	19 09	L
23511	HD 183656	19 25.5	+3 14	"	"	"	+14.9	19 12	19 32	L
23512	HD 196712	20 34.0	-2 46	"	"	"	+14.9	19 36	19 56	S
23513	HD 203374	21 16.7	+61 25	"	"	"	+14.9	20 08	20 24	PE
23514	HD 198478	20 45.5	+45 45	"	"	"	"	20 29	20 31	2
"	"	"	"	"	"	"	"	20 31	20 35	F
23515	HD 206773	21 39.3	+57 17	"	"	"	+14.8	20 42	21 06	3
23516	HD 208682	21 52.9	+64 52	"	"	"	"	21 10	21 14	3
"	"	"	"	"	"	"	+14.9	21 15	21 23	S
23517	<sup>1216c</sup> HD 214993	22 37.0	+39 43	"	"	"	"	21 33 <sup>cc</sup>	21 35	SE
"	"	"	"	"	"	"	"	21 36	21 40	SE
"	"	"	"	"	"	"	+14.9	21 40	21 48	SE
23518	HD 219113	23 08.3	+2 08	"	"	"	+14.8	21 55	00 05	12
23519	ADS 915	01 01.2	+52 52	"	"	"	14.8	00 35	00 45	53
23520	" 1534 B	01 50.2	+36 16	"	"	"	14.7	02 52	04 10	0
23521	" 2701	01 36.2	+3 37	"	"	"	14.5	04 16	05 16	2

Dome Temp... +34°F  
 Focus... 15.51  
 Dome Temp...

Transparency Conditions *Clear*

Clock diff. gear sticking almost continuously for last 2 hrs.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01	04W	+2 33	0	6.8	Ac	4-4-	Set 2 Shell Stars	good
02	09W	+3 22	0	6.3	B6pe	4-4-4	" 8	fine
03	35E	-2 34	0	6.3	B9e	4-4-4	" 2 Be Star MWC 350	fine
04	49E	+61 38	1	6.6	Bome	4-4-4	" 8 " " " 366	fine
05	05E		1-2	4.9	B2sek	6-6	2m " " " 353	good
06	07E		1-2	"	"	6-6	4m " " " "	fine
07	30E	+57 30	1-2	7.0	Bome	4-4-4	" 2 " " " 376	fine
08			2	5.8	B3me	6-6	" 2 4m " " " 381	fine
09	25E	+65 03	"	"	"	6-6	" 8 18m " " " "	fine
10			2	5.2	B2III	12	" 1 12"	fine
11			"	"	"	12	" 5 4	fine
12	45E	+39 57	"	"	"	6-6	" 9 8	fine
13	16W	+2 19	0-1	8.7	G5	4-4-4	" 5 SZ Psc.	fine
14	42W	53 15	"	8.0	K0	4-4-4	" 2 Vis 13m	fine
15	23W	37 03	0	7.4	K2	4-4-4	" 8 " " " "	good
16	44W	32 41	"	7.21	F8	4-4-4	" 2 " " " "	fine

1 P.H. + 3

Check with E.D. 23-711  
 Guiding very good  
 G. in clear sky





Home Temp. +53° F

Transparency Conditions Clear.....

98

ocus 15 48

Home Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24 39 W	+5° 37'	0	7.9	Aope	4-4-4	set 2 Shell Star	too weak
1 22 W	+54° 04'	1	7.9	B5pc	4-4-4	set 8	good
10 5 36	77 46	1	6.7	Hc	4-4-4	2 N Binary very uncertain of field.	fine
10 41 W	49° 36'	1	6.8	Ave	4-4-4	" 2 Shell star	good
10 40 E	57 52	0-1	8.0	Ape	4-4-4	" 8	fine
10 35 E	63 21	0	8.1	B3e	4-4-4	" 2 Be P. Mag. M.W.C. 76	lousy
10 08 E	-05 39.5	0	8.2	Bane	4-4-4	" 8 " " " 114	lousy
					15/10	" 5	OK.
						4 P.H. + 8	
						Sept. 18. MC SC MTW STW S SW ME	
						-6.7 +27.1 +9.8 +0.7 -33.4 -33.0 -6.5	

99  
 Date Fri Sept 28-29/56 Observer L. L. L. Julian Day 2435745  
 ☉ 185 43 34.8 3538.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Shit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
23529	HD 192954	20 12.6	+15 33	I-25	E-103A0	Set .008	15.4	19 02	19 46	1
23530	" 193152	20 13.8	+39 16	"	"	"	15.3	19 50	20 10	1
23531	" 195325	20 25.5	+10 34	"	"	"	15.2	20 14	20 24	2
23532	" 154528	17 00.9	+77 48	"	"	"	15.2	20 35	20 57	2
	BD 41° 4014	22 56.2	45 07	"	"	"		21 30		2
23533	" 220300	23 17.6	+55 49	"	"	"	15.2	22 17	23 24	2
23534	12 LAC	22 37.0	+39 43	"	"	"		23 34	23 37	2
								23 58	23 44	
								23 44	23 51	
23535	A05 1232	01 28.6	+62 24	"	"	"	15.2	00 05	01 15	1
23536	A05 1232	01 28.5	+72 32	"	"	"	15.2	01 25	01 39	1

Dome Temp. 55°F  
 Focus 15.51  
 Dome Temp. 41°F

Transparency Conditions

Good.  
 Sat Sep 29 About 350 visitors. Foggy. Showed p Cyg.  
 3 RASC telescopes. N-Bk.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
6	0 16E	15 43	0	7.3	Aac	4-4-4	Set 2 Shell star.	good
0	0 07W	39 27	0	6.6	Ape	4-4-4	" " "	fine
4	0 09W	10 44	0	5.9	Aoe	4-4-4	" " "	fine
7	4 12W	77 45	0	6.7	Ao	4-4-4	" 2 Eclip. Bin.	fine
			0-1	8.8	Ae	4-	" 8 Shell star Clouds	poorly guided
	0 17W	56 06	0	7.8	Ape	4-4-4	" 8 Shell star	fine
		39 38	0-1	5.2	A <sub>2</sub> M	12	Set 1 12 LAC	fine
						12	" 5	strong
	20W					4-4-4	" 9	strong
	0 04E	42 50	2	7.50	K0	4-4-4	2 No bin; through foggy + cloud	fine
	0 12W	72 45	1	6.02	K0	6-6	8 " 10. This image is very good	good
							Shell.	
							3 RA = 4	
							Oct. 1. MTW +29.4 ME -3.8	

Date Mon. Tues. 1956 Oct 1-2 Observer MR - H Julian Day 2435.748

© 188 40 36.8 3545.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.L.
23537	HD 179343	19 <sup>h</sup> 07. <sup>m</sup> 1	+2° 27'	I-25	103a.0	cut .008	+14.2°	19:12	19:42	2
23538	HD 183656	19 25.5	+3 14	"	"	"	-	19:46	20:06	1
23539	HD 190073	19 58.1	+5 28	"	"	"	+14.0	20:11	21:23	3
23540	HD 197434	20 38.6	+53 51	"	"	"	+13.7	21:29	21:41	11
23541	HD 219113	23 08.3	+02 09	"	"	"	14.0	22:48	0 <sup>h</sup> 10 <sup>m</sup> 00 44	4
<p><i>Trunk 27.5!</i></p>										

Dome Temp. 52°F

Transparency Conditions

102

Focus 15.50

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12	157W	+2° 32'	1	6.8	Ae	4-4-4	set 2 shell star "C"	like
1	1502W	+3 22	1	6.3	B6pe	4-8	set 8 " " "D"	fine
1	1547W	+5 37	1	7.9	A0pe	4-4-4	set 2 " " "E"	good
1	1526W	+54 05	1	7.9	B5pe	4-4-4	set 8 " " "I"	good
1	159W	+32 27	00	8.7	G5	4-4-4	set 2 SZPee	weath
							necessary log	
							cloudy after 11:30	
						15/10	" 8	
							4 P.H. plan. N. 1/2	
							Oct. End	
							MC SC MTW STW SW ME	
							-10.3 129.4 +36.2 +0.5 -41.0 -2.5	
							" 3 +38.0 -4.5	



Dome Temp.....

Transparency Conditions

Focus.....

clouds coming & going earlier

Dome Temp.....

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	N 1 22	15 42	0.1	7.3	Ace	4-4-4	Set 2 Shell star	fine
	N 1 49	39 28	1	6.6	Ape	4-4-4	" 8	fine
	W 5 45	78 01	1	6.7	AO	4-4-4	" 2 sp. bin N	fine
	W 1 08	58 07	2	7.8	Ape	4-4-4	" 2 Shell star	good
	O 06E	62 52	1	7.59	Ko	4-4-4	" 2 Vis. Bin Prog.	fine
	O 42W	37 04	1	7.4	K2	4-4-4	" 8	good
	O 44W	57 50	1	8.0	Ape	4-4-4	" 8 Shell star	strong
	O 32W	44 46	1	7.8	B3ne	4-4-4	" 2 Be Prog	fine
						15/10	" 8	OK

Field notes like not Astary  
23524 but not  
Mars red 731

3 P.H.s loaded + 8

Oct. 4	Mc	Sc	MTW	STW	S	SW	MG
	-11.4	+0.6	+40.8	+0.6	-4.8	-22.5	-0.1





Dome Temp.....

Focus..... 15:55

Dome Temp.....

Transparency Conditions *Very wind, good*

106

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	77 41	0	6.7	A0	4-4-4	ref 5 could not find the line & limit 16:55!! Star jumping, strong wind	through
3 00 W	45 04	0	8.8	A2	4-4-4	ref 2 Shield star	mark
0 15 W	37 05	0	7.4	K2	4-4-4	ref 2 Vix star	good
0 17 E	41 35	0	7.2	B5 ne	4-4-4	" 2 Be. Pige.	fine
0 37 W	46 06	00	8.6	Bp) ne	4-4-4	" 8 "	fine
					15/10	" 8	OK
						3 P.H. +3	
						17	
						Oct. 5	
						MC SC MTW STW S SW ME	
						-12.4 +31.7 +0.9 - -5.3 -12.9 -1.9	





109

Date Fri-Sat Oct 5/6 Observer Sc-L Julian Day 2435.752  
 ☉ 192 37 09.7 3553.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
23555	BD +27° 3513	19 <sup>h</sup> 42.9	+27° 48'	I-12	F103a-0	set .108	13.8°	19: 15	20 <sup>h</sup> 01	1
23556	HDE 235618	21 <sup>h</sup> 43.5	+54° 53'	I-12	F103a-0	set .016	13.5°	20: 45	23 <sup>h</sup> 57	
23557	HD. 3940	00 36.9	63 48	"	"	set .008	13.5	00 01	00 23	
23558	" 5342	00 <del>37.2</del> 50.2	60 43	"	"	"	13.5	00 47	01 19	
23559	NGC. 1502 28	03 58.8	62 02	"	"	set .016	13.5	02 19	04 39	
23560	HD. 36375	06 26.2	17 28	"	"	set .008	13.5	04 46	05 20	

Room Temp.  $+56^{\circ}F$

Focus  $12.91$

Room Temp. ....

Transparency Conditions  $Fair\ Haze\ clarity\ at\ 110$

Saturday Oct 6: No visitors

Hour	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1	57 W	$+27^{\circ} 56'$	0	8.3	A <sub>2</sub> Ia	1-1-1	set 2 OB star.	Too weak
1	47 W	$+55^{\circ} 08'$	0	10.34	B <sub>1</sub> V	1-1-1	set 8 OB "	fine
3	24 W	54 04	0	7.5	A <sub>1</sub> Ia	2-2-2	" 2 OB "	fine
9	07 W	61 01	0	7.06	A <sub>0</sub>	2-2-2	" 2 K.A. 6x6 prog.	strong
9	17 W	62 12	0	10.15	B <sub>7</sub>	1-1-1	" 8 OB prog	fine
10	32 W	17 29	0	7.3	A <sub>0</sub>	2-2-2	" 8 K.A. 6x6 prog	strong
2 PHs loaded, plates needed								

Date Mon. Tues Oct 8-9 1952 Observer MRJulian Day 24357.55 Oct. 9  
24357.54 Oct. 8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Oct 8	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
						Slit	195	34	38.0	
23561	BD +27° 35' 12"	19 <sup>h</sup> 42. <sup>m</sup> 6	+28° 00'	I-12	103a-0	set .008	+15.0°C	18:29	19:29	2
23562	BD +27° 35' 13"	19 42.9	+27 48	"	"	"	-	19:32	20:42	2
23563	HD 193702 HR 7181	20 <sup>h</sup> 16. <sup>m</sup> 6	+39° 05'	"	"	"	+14.6°C	21:43	21:53	2
"	"	"	"	"	"	"	-	21:51	21:56	2
"	"	"	"	"	"	"	-	22:04	22:06	2
23564	HD 206859 9 PEG	21 <sup>h</sup> 39. <sup>m</sup> 8	+16° 53'	"	"	"	+14.6°C	22:22	22:28	2
"	"	"	"	"	"	"	-	22:36	22:39	2
"	"	"	"	"	"	"	-	22:43	22:45	2

Dome Temp. 57.0° F

ocus 12.91

Dome Temp. 57.0° F

Transparency Conditions *sl. haze, & some clouds in N*

112

*Plate holder was not inserted properly*

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10:36	W	+28° 07'	1	8.6	07	2-2-2	set 2 OBP.76 Some farsung cloud	19:25-19:27
1:50	W	+27 56	1	8.3	A2 Ia	2-0	set 8 " Through clouds	
2:26	W	+39° 15'	0	6.2	A1 V	6	set 2 AST 6 Robin Armstrong	
2:35	W	"	"	"	"	6	5 " " " " companion weak	
2:40	W	"	"	"	"	6	8 " " " " " "	
1:39	W	+17° 07'	0	5.6	G5 Ib	6	Set 2 " JOHN CAMERON	
1:49	W	"	"	"	"	6	" 5 " " " " Through clouds	
1:56	W	"	"	"	"	6	" 8 " " " " " " "	

*Too cloudy to continue at present*

0240 Cloud coming from N. H.

Oct. 9	MC	SC	MTW	BTW	S	SW	ME
	-14.3	+33.3	+0.9	-0.05	-13.0	+22.3	+0.8





Time Temp. 42.0 F

Hum. 100

Time Temp. ....

Transparency Conditions DeCal. by clouds

114

Time	Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10:10		28 43	0	91	B27-n	1-1-1	1212 2K mag, p7b	fair
12:10		56 27	0	1005	B15-II	1-2	8 " 14/16 clouded out!	good
							sun was heavy	
							LPH.	
						Oct. 10	MTW SW MG -0.8 +32.3 -4.9	

Date Wed-Thurs Oct 10-11, 1956 Observer O - H r Julian Day 2435756

① 196 34 13.6 3560.5

② 197 33 34.1 3562.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Angle hd
23567	BD+28° 3434	19 37.3	+28 55	I-12	E103a-0	Slit .008	+10.0	18 21	19 31	2	S.W. +
23568	BD +27° 3513	19 42.9	+27 48	"	"	"	+10.0	19 35	20 35-	2	2.W. +
23569	α Del	20 35.0	+15 34	"	"	"		20 40	20 40	3	
	"	"	"	"	"	"		20 41	20 41 1/2		
	"	"	"	"	"	"		20 42	20 43		
	"	"	"	"	"	"		20 44	20 46		2.W. +
23570	HD 199 216	20 50.7	+49 09	"	"	"	+10.0	20 54	21 02		
	"	"	"	"	"	"		21 02	21 10		2.W. +
23571	ε Peg	22 02.4	+24 51					21 31 1/2	21 50		
	"	"	"					21 34 1/2	21 47 1/2		
	"	"	"					21 40	21 50		
23572	75 Cyg.	21 36.3	+42 49	"	"	"	+10.0	22 00	22 16		
23573	HD 216715	22 50.0	+62 04	"	"	.016		22 24	23 24		
23574	BD+61° 2550	23 47.4	+61 34	"	"	"	+10.0	23 28	00 38		
23575	HD 4674	00 43.9	64 05	"	"	"	10.0	00 46	01 36		
23576	NGC 1502	03 58.6	62 03	"	"	"	"	01 51	04 07		

Ime Temp. +48°F

Transparency Conditions *Clear*

116

Focus 12.91

Ime Temp.

Time	Bur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01	52 W	+29 04	0	8.5	B I $\beta$	2-2-2	Set 2 OB p 76	fine
03	50 W	+27 55	0	8.3	A2 Ia	2-2-2	" 8 " "	fine
04				3.71	B9 V		" 1 155 MK St.	
05				"	"		3 1/2 3'	fine
06			0	"	"	6'	6 1/2 8'	
07	09 W	+15 45		"	"		9 1/2 12'	
08			0	6.8	B I $\beta$	6'	" 2 MK St.	good
09	26 W	+49 24		"	"	6'	8	fine
10			0	4.4	F1 V	6'	Students Obs. C. Berg, V. Degen	good
11			0	"	"			fine
12	43 W	+25 08	0	"	"	6'		strong
13	38 W	+43 03	0	6.9	M I $\beta$	2-2-2	Set 5 Student Obs	good
14	32 W	+62 22	0	9.2	B I $\gamma$	1-2-1	" 2 OB p 22	fine
15	049 W	+61 53	1	9.3	B0 $\beta$	1-1-1	" 8 OB p 24	strong
16	050 W	64 23	0	2.7	B2 Ia	1-1-1	" 2	fine
17	050 W	62 10	0	10.24	B0	1-1-1	" 8 126 0220 & 0200 obs.	fine



One Temp.  $+36^{\circ}$

Transparency Conditions Good.

118

Plus.....

One Temp.....

Time	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	SSW	+34 30	0	8.4	B.5 IV	2-2-2	OB. PP 26.	OK
						P/6	" 18	
							2 P.H.	
							Photos Needed.	
						Oct. 12	MC SC MTW STW S SW ME	
							-15.6 +34.2 -3.6 -0.01 -17.2 -6.6 +1.1	



Bar Temp. 57

Transparency Conditions *Clear, some haze*

120

W. Wind.....

Bar Temp.....

Time S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1200	61 46	2	88	B2 I <sup>+</sup>	1-1-1	out 2	CR $\frac{1}{2}$ mag, size 24	<i>Strong</i>
1214	62 12	2		09 I <sup>-</sup>	1-1-1	8	" "	<i>Strong</i>
1222	62 13	2	103	B5	1-1-1	2	" - 25	<i>Strong</i>
							4 P41 - 8.	



121

Date July - Nov. 1915 Observer BK - H Julian Day 245761

☉ 201 31 13.9 3569.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23581	RL 12112370	19 50.0	+28 05	I-12	E 03-00	616	18.5	18 44	20 24
23582	HDE 141074	20 00.4	+38 "	"	"	"	18.4	20 32	21 52
23583	RL 12112370	19 04.5	+54 02	"	"	"	18.2	22 02	00 02
23584	HD 141625	02 49.6	+61 26	"	"	"	18.7	00 25	01 45
23585	NGC 1502 26	03 57.3	62 04	"	"	"	18.8	02 01	03 11
	<i>Zone 26</i>		<i>0.70</i>						

Dne Temp... 19.5 F

Fus... 12.91

Dne Temp... 55.5 F

Transparency Conditions... 100% cloud + haze

122

Time	Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
14:21	34	W	29 11	0	9.9	B1 Ia	1-1-1	22 2 CR mag June 70	fine
14:45	34	SW	38 22	1-0	9.6	B1 Ia	1-1-1	8 "	fine
15:12	34	W	54 18	1	10.1	B1 Ia	1-1-1	2 "	strong
15:21	34	W	61 07	0	9.5	B0 V	1-1-1	2 " South 5110	fine
15:22	34	W	62 13	0	9.93	B3	1-1-1	" 2 " Haze + Mist.	strong
							4/3	" 8 I.P.M. + B1	OK
							Oct. 15	MG SC MTW STW S SW ME	
								-16.7 +34.6 -0.2 -0.7 -11.1 +16.2 -2.2	

123

Date *Tues Oct 16-17/56* Observer *L-H* Julian Day *2435763*

O 205 30 147 3573.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23586	H.D. 14302	02 13.6	55 52	I-12 $\frac{1}{2}$	E-103A <sub>0</sub>	<i>Set</i> .008	+19.0	23 44	00 34
23587	H.G.C. 1502 79	03 58.0	62 29	"	"	.016	19.0	00 50	03 30
23588	HD 35633 <i>From 27</i>	05 21.1	34 25	"	"	.003		03 57	04 31
			<i>0723</i>						

Home Temp. 60°F  
 Focus 12.91  
 Home Temp.

Transparency Conditions

124

R.A.S.C. showed Mars with 74"  
 (about 175).

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
019E	56 07	1	8.5	B.II-III	2-2-2	Set 2 O.B. prog.	fine
052W	62 12	0-1	10.26	B3	1-1-1	" 2 " "	fine
031W		0-1	8.4	B.II-III	2-4 3/0	" 2 Clock going steadily Continuously	good OK
						1 circle light out	
						3 PA + 4	
						Oct. 17 mTW +3.1 stW -0.7 SW +33.4	





127

Date Thu-Fri Oct 18-19, 1956 Observer Se - L Julian Day 2435.765

☉ 205 29 22.9 3577.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
235 <sup>89</sup> <del>88</del>	BD +45° 3246	20 <sup>h</sup> 39.1	+45° 32'	I-D	E 103-a0	Set 016	17°C	19 <sup>h</sup> 15 <sup>m</sup>	21 <sup>h</sup> 32
235 <sup>90</sup> <del>89</del>	HD 209481 14 Cep	21 <sup>h</sup> 58.7 <sup>m</sup>	+57° 31'	"	"	Set 008		22 <sup>h</sup> 13 <sup>m</sup>	22 <sup>h</sup> 14 <sup>m</sup>
"	"	"	"	"	"	"	16.5°C	22 <sup>h</sup> 20 <sup>m</sup>	22 <sup>h</sup> 22 <sup>m</sup>
"	"	"	"	"	"	"		22 <sup>h</sup> 32 <sup>m</sup>	22 <sup>h</sup> 37 <sup>m</sup>
235 <sup>91</sup> <del>90</del>	61 Cyg A	21 02.4	38 15	"	"	"		23 <sup>h</sup> 09 <sup>m</sup>	23 <sup>h</sup> 21 <sup>m</sup>
"	"	"	"	"	"	"	16.5°C	23 <sup>h</sup> 25 <sup>m</sup>	23 <sup>h</sup> 37 <sup>m</sup>
235 <sup>92</sup> <del>91</del>	HD 6061	1 <sup>h</sup> 5.0	+54° 37'	"	"	"		00 <sup>h</sup> 27 <sup>m</sup>	00 <sup>h</sup> 20 <sup>m</sup>
"	"	"	"	"	"	"	16.5°C	00 <sup>h</sup> 28 <sup>m</sup>	00 <sup>h</sup> 29 <sup>m</sup>
"	"	"	"	"	"	"		00 <sup>h</sup> 33 <sup>m</sup>	00 <sup>h</sup> 40 <sup>m</sup>
235 <sup>93</sup> <del>92</del>	NGC 1502 Z7	03 58.6	62 04	"	"	Set 016	16.2	01 13	01 43
235 <sup>94</sup> <del>93</del>	HD 25321	05 23.0	35 18	"	"	Set 008	16.2	03 50	04 02
235 <sup>95</sup> <del>94</del>	46056	06 26.0	04 54	"	"	"	16.2	04 03	04 41

Home Temp. 53° F

Transparency Conditions Clear

128

ocus

Home Temp. 38° F

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21 <sup>h</sup>	22 <sup>m</sup> W	+45° 45'	0	9.84	BiVn	1-1-1	set 2 OB p.12	good
22 <sup>h</sup>	45 <sup>m</sup> W			5.3	09 V		} set 2 D.A. Bird set 5 K.A. M. Targular	
22 <sup>h</sup>	53 <sup>m</sup> W	57° 46'						weak
23 <sup>h</sup>	08 <sup>m</sup> W		0			1-1	set 8	
23 <sup>h</sup>	47 <sup>m</sup> W	21° 04' 31"	0	6.4	K5V		set 2 Alhadin	weak
23 <sup>h</sup>	05 <sup>m</sup> W	"	0	"	"	1-1	set 8 Clancy Turner	weak
23 <sup>h</sup>	44 <sup>m</sup> W	-54° 50'	0	4.6	7V		set 1 Alan Shapiro	
23 <sup>h</sup>	57 <sup>m</sup> W	"	"	"	"		set 5 Alon Suptin	fine
23 <sup>h</sup>	25 <sup>m</sup> W	"	"	"	"	3-1	set 8 P. W. Greenman D. Rotenberg	
23 <sup>h</sup>	12 W	62 12	0	10.04	B4	1-1-1	set 8 OB p. 25	fine
23 <sup>h</sup>	08 W	35 20	0	6.6	Og. 5V	2-2-2	set 2 OB " "	good
23 <sup>h</sup>	15 E	04 52	0	7.7	Og	2-2-2	" 8 " " 26	weak
							3 PH = load 1 + 6	
							Oct. 20 MC SC NW SW S SW ME	
							-19.1 +35.8 -1.1 -0.1 -26.4 +7.8 -1.1	



129

Date Fri Oct 19-20/56 Observer Hd - Hv Julian Day 2435.766

© 206 28 59.9 3579.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23596	BD +25°40 <sup>3</sup>	19 59.8	+26 00	T-12	E10300	016	+12.0	18 18	20 30
23597	BD +40°37 <sup>31</sup>	21 07.8	45 05	"	"	016	11.7	20 37	22 37
23598	HD 7284	01 08.0	58 17	"	"	008	+11.5	22 44	23 24
23599	HD 7331	01 09.4	60 24	"	"	008	+11.6	23 27	00 15
23600	" 16604	02 34.6	47 08	"	"	"	11.0	00 42	01 26
	<i>from</i>	<i>book</i>	<i>J. H. B.</i>						

Time Temp... 48

Transparency Conditions None Ci clouds.

130

Recus.....

Temp. Control Not Set.

Time Temp.....

Time T.	Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
204	26 09	00	9.4	B9 Ia	1-1-1	Set 2.	013 p. 76. <span style="color:red">None more humming</span>	strong
304	45 20	0	9.57	B5 III	1-1-1	" 8	" p12 a good deal of haze.	strong
11m	58 20	0	7.62	F5	2-2-2	" 2	KABx6 panning clouds.	strong
200	60 44	0	7.88	F5	2-2-2	" 8	" " took N following of main check of night. Clouds	strong
24W	47 24	00	7.7	A0	2-2-2	" 2	" " Cloud + Haze	strong
					3/6	" 5	2 P.H. + 4?	OK

Am. M

Oct. 22.

MC	SC	MTW	STW	S	SW	ME
-20.6	+37.0	-3.1	-0.2	-31.2	+36.3	-2.1

131

Date Thu. Wed. Oct 23/24, 1953 Observer Box - Ho Julian Day 24357.720

☉ 210 27 48.8 3587.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23601	1912c	22 37 0	+29 42	I-12	E-13-0-3	CEL 008	160	21 49	21 50
								21 52	21 53
								21 54	21 57
								21 58	22 04
23602	HDE 240768	02 42.3	+57 59	"	"	016	152	22 31	01 10
23603	NGC 1503 z 8	03 55.8	62 02	"	"	"	15.0	01 25	05 11

Time Temp. 52

Focus 18.91

Time Temp.

Transparency Conditions

Busty wind

132

Astronomy 1a class shown 3 Egg and Ring Nebula  
40 students

Time	Sur Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				5.0	$\epsilon 2111$		alt 1 40°	Star image very sharp
			0				3 1/2 80°	(MK Standard)
						65	6 110°	
17W	40 00						9 60°	
17W	58 15		0	10.13	$\epsilon 2111$	1-1-1	2 OB lens p 16	fine
59W	62 12		0.0	10.15	B7	1-1-1	" 8 " 26 wind dropped.	fine
						4/3	" 5 4P.H. plates needed.	
							from M.	
							Oct. 24 MC SC MTW STW S SW ME	
							-21.7 +38.5 -1.6 -0.1 -34.2 +54.6 -2.3	



Time Temp. ....

Humidity 12.91 .....

Time Temp. +35 .....

12

Transparency Conditions *Good*

134

*Astronomy 2 b class under Mrs Hogg shown ring Nebula about 10 people.*

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10	25W	22 34	0!	9.7	B2 IV	1-1-1	red 2 " " p 7b	fine
51	54W	+34 48	0-	8.8	B0 III	1-1-1	" 8 " " p 7	fine
53	04W	+28 08	0	8.6	07	1-1-1	" 2 " " p 7b	fine
58	33 W	+56 28	0	10.2?	B1 IV	1-1-1	" 8 " " p 16	fine
59	07W	62 13	0	10.30	B5	1-1-1	" 2 " " 26	fine
9	33W	"	0	9.93	B3	1-1-1	" 8 " " "	fine
						4/3	" 5 1 P.H. +12 Van M.	OK
						Oct. 25	MTW SW ME +0.9 +55.4 -0.8	



Time Temp. 74.7

Hum. ....

Time Temp. 42

Transparency Conditions .....

50 Vectors O's Extension Counsel  
showed BT

Time	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23	1 43	29 03	0-1	8.5	B <sub>1</sub> IV	2-2-2	Set 2 OB frag p. 76.	fine
31	2 51	28 54	1	8.7	B <sub>2</sub> IV	2-2-2	" " " "	fine
38	3 40	61 24	1	10.45	B <sub>3</sub> IV	1-1-1	" " p 16	fine
44	4 34	60 05	1	9.92	B <sub>9</sub> V	1-1-1	" "	fine
51	5 21	74 01	1	7.26	K0	2-2-2	EA 6x6 (frag out of 2)	stray
58	6 55	72 53	1	7.72	K0	2-2-2	"	stray
65	7 15	74 23	1	8.0	A0	2-2-2	"	stray
72	8 57	16 00	1	8.0	Ma	2-2-2	" good block, old frag.	stray
79	9 16	44 10	1	8.0	A0	2-2-2	"	fine
86	10 58	16 10	0	7.66	F2	2-2-2	" cloudy over horizon	fine
93	12 15	13 22	2	7.7	A0	2-2-2	"	stray
						2/6		OK

Oct 26

MC	SC	NTW	STW	S	SW	ME
-22.5	+33.6	-18.8	-0.3	-0.2	-4.6	+0.2



137

Date *Sat. Sun 1956 Oct 27-28*

Observer

*MR - L*  
*L - L*Julian Day *2435774*☉ *214 27 12.9 3596.6*

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23621	<i>L And</i>	<i>23<sup>A</sup> 33.2</i>	<i>+42° 43'</i>	<i>I-12<sup>1/2</sup></i>	<i>103cD</i>	<i>ret .008</i>	<i>13.5</i>	<i>22:42</i>	<i>-</i>
"	"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"	<i>22 48</i>
23622	<i>BD +60° 2553</i>	<i>23 24.2</i>	<i>+60 45</i>	"	"	<i>ret .016</i>	<i>13.0</i>	<i>23:10</i>	<i>01 20</i>
23623	<i>NGC 150229</i>	<i>03 58.8</i>	<i>62 04</i>	"	"	"	<i>13.0</i>	<i>01 27</i>	<i>03 07</i>
23624	<i>" 1502210</i>	<i>03 58.8</i>	<i>62 04</i>	"	"	"	<i>13.0</i>	<i>03 11</i>	<i>04 56</i>
	<i>Focus Test</i>				<i>O.T. B.008</i>				

ne Temp. +58°F

Transparency Conditions *Excellent*

138

us

ne Temp. +46°F

At least 450 vis. low

Showered 3 Cys; Mars, etc in RASC telescope

Time	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	19W	+43° 02'	2	4.2	B2V	6	Set 2 Exp 15 <sup>s</sup> To replace 23591	good
	-	"	"	"	"	6	Set 5 " 30 <sup>s</sup>	fine
	-	"	"	"	"	6	Set 8 " 60 <sup>s</sup>	strong
20	4:01W	+61 05	"	10.53	B2V	2-2	Set 2 " OB p18,	some
57	11W	62 12	"	10.26	B3	1-1-1	Set 8 " p.26	strong
	00W	62 12	"	10.30	B5	1-1-1	Set 2 " "	very strong
						8/6	" 8	OK

4 P.H.s loaded  
Plates needed.

139

Date Sun-Mon. Oct 29/30, 1956 Observer BK - H ✓ Julian Day 215 27 09.5  
2435775  
3598.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23625	BI + 273570	19 50.0	+ 28 05	I-12	E103-n-0	<sup>set</sup> 016	13.0	78 59	20 39
23626	BD - 5274712	20 11.3	+ 54 58	"	"	"	12.0	20 48	23 18
23627	TR 5-16	19 38.6	+ 43 51	"	"	"	13.0	27 26	01 36
23628	N.C. 1502 28	03 58.9	62 02	"	"	"	13.0	01 43	03 18

Air Temp..... 20°

Transparency Conditions *Very good*

140

Obs.....

*Delayed Start*

Air Temp.....

Time	Star	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10:10	58 15	0	99	B9 Ia	1-1-1	pe 22	170 mag	mag 75	fin
10:41	55 16	1	1034	B2 II	1-1-1	" 8	"	14	fin
11:07	51 14	1	1031	B4 III	1-1-1	" 12	"	15	fin
11:42	53 11	0	1015	B7	1-1-1	" 8	"	26	fin
						" 5		1305 Very Fussy	015
								Estim. 1/2 mag. for 90	
								1330 Error in the string	
								2 PH + 12	
								Oct 29	
								MC SC MTW STW S SW ME	
								-23.0 +41.4 -16.2 -0.5 -3.4 -4.9 -2.3	

141

Date *Mon - Tue Oct 29-30 1956* Observer *MR - H v* Julian Day *2435775*  
*215 27 05.5 3598.8*  
*216 27 08.3 3601.0*

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
{ 23629	BD +27° 35' 12"	19 <sup>h</sup> 42.6 <sup>m</sup>	+28° 00'	I-12 <sup>v</sup>	103a-0	<i>cut</i> .016	+13.00	18:00	18:40
{ 23630	BD +27° 35' 13"	19 42.9	+27 48	"	"	<i>cut</i> .008	"	18:42	20:00
{ 23631	HDE 235673	21 54.0	+57 20	"	"	<i>cut</i> .016	12.6	20:05	21:00
{ 23632	RD +52° 45' 07"	52 11.0	+52 48	"	"	"	"	21:48	23:40
23633	{ BD +61° 25' 09"	02 39.0	+61 26	"	"	"	13.0	23:55	00:23
23634	{ NGC 1502 26	03 59.3	62 07	"	"	"	13.0	00:35	02:25
23635	{ " 27	03 58.6	62 03	"	"	"	13.0	02:31	04:31
23636	{ HD 46056	06 24.0	+04 54	"	"	.008	"	04:42	05:30

Temp. +52°F  
 12.91  
 Temp.

Transparency Conditions *very good - some ground fog* 142

25 Visitors of Workers' Educational Association  
 Class in Boston. Showed on with 70"  
 Mt.

Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 W	+28° 09'	0	8.6	07	1-1-1	Set 2 OR p. 76.	fine
30 W	+27 58	0-1	8.3	A2 Ia	2-2-2	Set 5 " "	fine
45 W	52 38	1	9.4	07	1-1-1	set 2 " p 20	fine
55 W	54 58	1-2	10.6	B2 III	1-1-1	" " 20	fine
57 W	61 56	1-2	8.7	B2 II	1-1-1	" " p 34	strong
3 W	62 14	1	9.93	B3	1-1-1	" 8 " 26	strong
4 W	62 12	0-1	10.7	B4	1-1-1	" 2 " "	strong
1 W	+04 51	0	7.7	03	2-2-2	" 8 " "	good
					76	4.5	OK
						1771 + 17	
						Oct. 31	MC SC MTW STW S SW ME
							-23.3 +41.5 -14.9 -0.5 -5.4 -5.2 -2.4
						Nov. 2	-25.5 +42.6 -4.1 -0.5 -7.7 -5.7 -4.1
						.. 5	-26.3 +43.8 -9.2 -0.5 -10.1 -8.6 -7.4

143

Date Mon. Eve. Nov 5/6, 1976 Observer MQ - HV (Pole) 10 - HV Julian Day 2435782.  
 2435783.  
 222 27 43.4 3612.1  
 223 27 55.5 3613.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23637	BD +58° 2485	10 44.9	+58 24	E-12	E103a-b	.016	16.8	18 08	19 28
23638	BD +45° 3239	00 52.2	+45 58	"	"	"	16.8	20 32	21 21
23639	BD +60° 2615	23 39.9	+61 07	"	"	"	16.6	22 26	23 30
23640	BD +61 39	00 14.9	+61 55	"	"	"	16.8	23 35	00 01
23641	HD 25213	03 53.2	74 22	"	"	.008	16.8	00 37	01 07
23642	" 25225	03 53.3	73 42	"	"	"	16.9	01 12	01 40
23643	" 30407	04 42.3	44 03	"	"	"	17.0	01 52	02 22
23644	" 35818	05 22.3	12 50	"	"	"	16.7	02 30	02 56
23645	" 82011	09 24.2	30 28	"	"	.016	16.8	03 15	03 35
			076						

Time Temp. 57°

Transparency Conditions

Good

144

cus

Time Temp. 43°

Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04W	52 41	0	9.1	B1 $\bar{W}$	1-1-1	set 2 OK time 2:71	good
09W	40 42	0	10.35	B1 $\bar{W}$	1-1-1	" 2 " " p. 12	good
31W	61 25	0-1	9.2	B0.5 I $\bar{W}$	1-1-1	set 2 " " p. 24	good
47W	62 14	1	8.7	B0.5 IV	1-1-1	set 8 " " p. 24 In field see 21 & 25	fine
012E	74 29	0	7.86	K <sub>0</sub>	2-2-2	" 2 K <sub>2</sub> 23	fine
21W	73 53	3	7.72	K <sub>0</sub>	2-2-2	" 2 " " 23 24	fine
20W	44 09	0	8.0	A <sub>0</sub>	2-2-2	" 2 " " 24	good
15W	12 53	0	7.7	A <sub>0</sub>	2-2-2	" 2 " " 73	good
02E	30 12	0	10.09	B <sub>9</sub>	1-1-1	" 2 KA FS. 0530 fly also	good
					4/3	" 8	OK
						1 P.H. 74.	





Time Temp. 53°F

Transparency Conditions .....

146

Focus of 25" 15.47 12½" - 12.91

Time Temp. ....

Charged to 25" for binaries

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0	43 E	44 47	0	7.26	A5	4-4-4	Set 2 Spect. Bin.	good
01	55 W	77 45	0	6.7	A0	4-4-4	" 3 " " Skyride!	fine
							Clouds after this exposure changed back to 12½" camera	
							4 P.H.s loaded plates needed.	



Time Temp. 36  
 Focus 15.40  
 Time Temp.

Transparency Conditions

Nov. 7 Changed to 25" Camera was { 12 1/2" Focus 12.91  
 25" Focus 15.47  
 Silt 20.35 Silt 23.15

Time	Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00	N 3 06	+ 2 27	0	8.7	G5	4-4-4	2. Ecl. bin. Hd.	Weak
01	N 0 15	25 26	0	8.7	G5	4-4-	" 2 " " N clouded out. closed at 2 o'clock - overcast.	Weak
							Nov. 9	
							MC SC MTW STW S SW ME	
							-28.0 +45.1 -7.9 -0.5 -14.7 -12.4 -2.9	

149

Date Sat Nov 10-11-56 Observer Dg-L- Julian Day 24357<sup>88</sup>  
 ☉ 228 29 19.4 3621.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23650	HD 219113	23 083.02	08	I-25	E103A0	Set 008	+1.6	18 43	20 40
<p>Nov 17/18 Total eclipse of Moon          Shown with lens 6" to 14 inches          Making remarks. — se, hr, BK.</p> <p>Nov 25 — 55 members of the Shell Oil Co. Recreation Club          cloudy. Lecture given &amp; telescope demonstrated. Hd-BK</p>									

Time Temp.  $+33^{\circ}\text{F}$ Humidity  $15.33$ 

Time Temp. ....

Transparency Conditions .....

Time Start	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	32W	02 25	0	8.7	G5	4-4-4	Set 2 Cel. Binary hazy and cloud 19 50 on star gone at 20 40 1 P.H. loaded  +4	weak
							NOV. 12.	
							NE SE MTW STW S SW NE	
							-31.1 +47.0 -9.9 -0.5 -18.6 -13.3 -3.9	
							14 -30.9 +47.5 -15.1 -0.6 -20.3 -14.0 -7.2	
							16 -31.5 +48.5 -24.7 -0.7 -22.4 -15.9 -7.2	
							17 -32.6 +49.7 -26.0 -0.8 -24.9 -17.4 -1.5	



Air Temp. +20° F  
 Hum. 15.52  
 Bar. Temp. +15° F

Transparency Conditions Clear after 4:30  
 Start delayed by stratus clouds

152

Time	Star Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
14	57 <sup>m</sup> W	+02° 26'	0	8.7	G5	4-4-4	set 2 Ecl-Sp Binary (S2 Psc)	weak
2	16 <sup>m</sup> W	+25° 03'	1	6.34	F5	4-4-4	set 2 Vis. Bin.	weak
	13 <sup>m</sup> E	+34° 40'	1	7.1	F0	4-4-4	set 8 "	weak.
	3 <sup>m</sup> E	40 43	1	6.1	Betel	4-8	set 2 Be <sup>0010</sup> Passing Cloud.	too weak
	02 E	-00 15	00	2.3	B, S, ne	4-4-4	" 8 " " "	weak
	51 E	19 44	0	7.25	G0	4-4-4	" 2 Prop. Cluster 35 <sup>m</sup> Cloud	weak
						14/10	" 8	→ c to red.
							1 P. H. + 12 30	Focus set im- correctly.
							MC SC MTW STW S SW ME Nov. 27 -33.0 +48.1 -30.2 -0.7 -32.7 -20.9 -4.1	









Time Temp. +20°F

Pus. 15.26

Time Temp. ....

Transparency Conditions .....

Clouds early part of first exp

Time	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21	53W	02 26	0	8.7	G5	4-2-2	Set 2 Eclp. Spect. Bin ←	good
17	43E	19 48	0	7.06	F8	4-4-4	" 2 Spect. Bin.	Good
14	18E	"	0-1	"	"	4-4-4	" "	1 week
3	29W	44 24	0-1	7.26	A5	4-4-4	" " Clouds near end	fine

2 PHS loaded + 4

Thurs Dec ~~19~~<sup>20</sup> - 21

Set on SZ Proc. but sky thickened with clouds + fog

	MC	SC	MTW	ETW	S	SW	NE
Dec. 21.	-27.5	+31.6	-5.5	-0.2	-2.8	-2.8	-1.9
26	-25.7	+26.0	+9.8	+0.2	-3.8	+2.6	-0.1

Dec. 25/26 Clear long periods, cloudy

over about 2300<sup>h</sup> Hr.

Dec. 28	-25.5	+23.8	18.2	+0.7	-4.0	+0.3	-0.7
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157

Date *Sulphur* Dec 29-30 1956 Observer *MR - BK*

Julian Day 2435837.5

☉ 278 11 00.4 3670.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23662	ADS 1904	<sup>h m</sup> 2 24.8	+24 48	I-25	103a0	<sup>act</sup> .008	-6.0	19:00	19:53
23663	ADS 2754	3 43.8	+34 31	"	"	"	-7.0	20:39	21:39
23664	HD 29124	4 29.8	+19 41	"	"	"	-8.0	21:46	22:46
23665	HD 36484	5 26.9	+32 44	"	"	"	-8.0	22:51	23:36
23666	Prinap. VL103	8 29.6	+19 56	"	"	"	-8.0	23:48	01:48
23667	$\epsilon$ Orion	06 39.7	+13 00				-8.0	01 56	01 57
								01 58	02 00
								02 01	02 06
23668	HD 15314	06 21.0	+19 57				-8.0	02 16	02 21
	Gamma Tau	07.0							



159

Date Wed-Thu Jan 2-3 1957 Observer OJulian Day <sup>2435840</sup>  
2435841  
281.14 32.0 3670.6  
282.15 42.6 3670.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23669]	BD+61°2509	23 39.0	+61 36	112	EP300	016	-9.0	17 52	18 52
23670]	BD+61°2550	23 47.4	+61 34	"	"	"	-8.7	18 56	20 56
23671	HD 21447	3 22.4	+55 06	"	"	008		20 41	20 50
	"	"	"	"	"	"		20 50	20 52
	"	"	"	"	"	"		20 52	20 56
	"	"	"	"	"	"	-8.8	20 56	21 04
23672	HD 21483	3 22.7	+30 02	"	"	"		21 11	21 23
	"	"	"	"	"	"	-8.7	21 23	21 47
23673	HD 24131	3 45.5	+34 03	"	"	"		21 53	21 54
	"	"	"	"	"	"		21 55	21 58
	"	"	"	"	"	"		21 58	22 04
	"	"	"	"	"	"	-8.8	22 41	22 45

Air Temp. ~~127~~ +16°F

Transparency Conditions *Clear*

160

Hum. 1290

Air Temp. +12°F

Time	Star Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																																								
5-	42W	+61 57	0-1	8.7	Ba5	1-1-1	Satz OB p. 24	strong																																								
	17W	+61 54	0	9.3	B0	1-1-1	" 8 OB p. 24	strong																																								
			0	5.11	A1V	-	" 1 1/2 MK.	fine																																								
				"	"	-	4 2																																									
				"	"	6 <sup>s</sup>	7 4																																									
	09 W	+55 19	0	"	"	-	10 6	v strong																																								
			0	6.9	B3III	6 <sup>s</sup>	" 2 MK	fine																																								
	253 W	+30 13	0	"	"	6 <sup>s</sup>	" 8	strong																																								
			0	5.4	B1V	-	" 1 1/2 MK.	fine																																								
				"	"	-	4 3	strong																																								
	47W			"	"	-	7 6	strong																																								
	+34 14		0	"	"	6 <sup>s</sup>	<del>10 12</del> <i>Clouding Over.</i>	fine																																								
							<table border="1"> <thead> <tr> <th></th> <th>MC</th> <th>Sc</th> <th>MTW</th> <th>STW</th> <th>S</th> <th>SW</th> <th>ME</th> </tr> </thead> <tbody> <tr> <td>Jan 4</td> <td>-21.4</td> <td>+12.5</td> <td>+9.7</td> <td>+0.1</td> <td>-6.2</td> <td>+9.9</td> <td>-4.3</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		MC	Sc	MTW	STW	S	SW	ME	Jan 4	-21.4	+12.5	+9.7	+0.1	-6.2	+9.9	-4.3																									
	MC	Sc	MTW	STW	S	SW	ME																																									
Jan 4	-21.4	+12.5	+9.7	+0.1	-6.2	+9.9	-4.3																																									
							1 PH +8																																									
							7 -19.7 +7.5 +6.1 +0.1 -7.2 +9.1 +1.1																																									
							9 -19.0 +4.0 +4.2 -0.1 -6.9 +9.3 +1.3																																									
							11 -16.4 +0.4 -4.2 -0.1 -7.1 +7.7 +3.3																																									





Temp. -40F

Transparency Conditions

Some clouds after sunset  
good later

162

Humidity  
Temp.

Angle and S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																					
05W	54 35	0.2	29	B0M	1-1-1	alt 2000 OK mag 20 cloudy +4																						
					Jan. 14	<table border="1"> <thead> <tr> <th>MC</th> <th>SC</th> <th>MTW</th> <th>STW</th> <th>S</th> <th>SW</th> <th>ME</th> </tr> </thead> <tbody> <tr> <td>-14.0</td> <td>-4.8</td> <td>-11.2</td> <td>-0.2</td> <td>-6.6</td> <td>+4.3</td> <td>+1.2</td> </tr> <tr> <td>16</td> <td>-12.0</td> <td>-8.5</td> <td>-2.1</td> <td>-0.2</td> <td>-7.1</td> <td>+5.1</td> </tr> </tbody> </table>	MC	SC	MTW	STW	S	SW	ME	-14.0	-4.8	-11.2	-0.2	-6.6	+4.3	+1.2	16	-12.0	-8.5	-2.1	-0.2	-7.1	+5.1	
MC	SC	MTW	STW	S	SW	ME																						
-14.0	-4.8	-11.2	-0.2	-6.6	+4.3	+1.2																						
16	-12.0	-8.5	-2.1	-0.2	-7.1	+5.1																						



e Temp. +2°F

s. 12.90

e Temp.

Transparency Conditions *Cloudy, snow earlier* 164

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
37 E	+19 45	-1	7.25	G0	2-2-2	st 1. Prase	fine
1 E	"	0	"	"	2-2-2	5 " <del>Saint-Ferme</del>	strong
25 W	"	00	"	"	2-2-2	" 9	fine
						3 P.H. +4	
						Table with stations	
						Jan. 18	
						nc sc mtw stw s sw me	
						-10.4 -12.7 -9.9 -0.1 -6.7 +8.6 +0.1	





167

Date 1957 Jan 18-19 Fri Sat Observer MR - H ✓ Julian Day 2435.856

☉ 297 32 35.8 3663.4  
 298 33 39.2 3663.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23676	S Per	3 <sup>h</sup> 35.8 <sup>m</sup>	+47° 28'	I-12	103a-0	set 00E	-10.5°C	18:40	18:45
	"	"	"	"	"	"	"	-	-
	"	"	"	"	"	"	"	-	-
	"	"	"	"	"	"	"	-	18:45
23677	BD+60°2615	23 39.9	+61 07	"	"	00E	-10.5°C	19:07	20:35
23678	18 Tau	3 39.2	+24 32	"	"	"	-10.7°C	20:49	-
	"	"	"	"	"	"	"	-	-
	"	"	"	"	"	"	"	-	20:59
	"	"	"	"	"	"	"	20:59	21:07
23679	HD 35921	5 23.0	+35 18	"	"	"	-11.0°C	23:31	23:49

ne Temp. +10°  
 us 12.40  
 ne Temp. ....

Transparency Conditions *quite clear at start*

168

dir Angle E.S.T. End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-	-	3	2.89	135 BT	-	set 1 35 MKS 11	
-	-	-	-	-	-	4 65	<i>fine</i>
-	-	-	-	-	65	7 125	
20 E	+47°39'	-	-	-	-	10 245	
28 W	+61 25	3	9.2	BOS II	2-2-2	set 2 00 p. 24	<i>fine</i>
-	+24 43	2	5.5	BOS II	-	set 1 1m MKS 11	<i>trouble with Sec class fine</i>
-	"	-	"	"	-	4 2	
-	-	-	"	"	6	7 4	
59 W	"	"	"	"	-	10 8	<i>at end</i>
57 W	+85 21	1	6.6	095 II	2-4	set 8 015 p. 26 star gone at 23.43 -	<i>weak</i>

4 PM.





Air Temp. +20° F  
 Humidity 12-90  
 Barometric Temp.

Transparency Conditions Hazy at first - clearing later.

170

Star Name	Right Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		+32° 08	2	3.88	B1 IV		Set 1 MK Standard	too strong
		"	"	"	"		4	strong
		"	"	"	"		7	
	13° E	"	"	"	"	3-3	10	
		+24° 09	2	5.3	B7 IV		Set 1 MK	too strong
		"	"	"	"		4	too strong
		"	"	"	"		7	too strong
	16° E	"	"	"	"	3-3	10	too strong
		+24° 42	1	5.5	B58 V		Set 1 MK	too strong
		"	"	"	"		4	too strong
		"	"	"	"		7	too strong
		"	"	"	"	3-3	10	

2 PH - 3



Transparency Conditions

air Temp.....

Humid.....

Water Temp.....

Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality			
			5.30	AS II		set 1 1/K				
						4	Tremble with declination			
						7	increase in box			
						0				
			Jan. 22.	nc	sc	MTW	STW	S	SW	ME
				-8.2	-19.2	-26.4	-0.3	-5.8	+5.6	-0.1
			25	-5.0	-22.3	-1.2	+0.1	-5.4	+1.4	+4.1
			28	-3.5	-25.4	-4.7	+0.1	-4.2	-0.6	+3.4
			30	-2.0	-27.8	-5.8	+0.1	-4.7	-2.3	-0.2

173

Date Thurs Jan 31 - Feb 1 / 57 Observer Hd - Julian Day 24358.70

☉ 311 46 37.1 3654.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23684	77 Tau	3 39.6	23 48	"	E103a0	058		20 04 15	20 04 30
								20 05 30	20 06 00
								20 07 00	20 09 00
								20 10 20	20 11 20
23685	27 Tau	3 43.2	23 45	"	"	"		20 19 15	20 19 30
								20 20 30	20 20 30
								20 21 00	20 22 00
								20 22 45	20 24 45
23686	46 Tau	4 08.2	7 25	"	"	"	-4.6	20 44 5	20 43 15
								20 44 00	20 48 00
								21 09	21 59
23687	19 Aur	5 13.4	33 52	"	"	"	-4.3	21 02 30	21 07 30
								21 07 45	21 12 15
								21 10 50	21 11 45
23688	HD 35833	05 22.4	16 23	"	"	"	-4.4	21 20	21 50
23689	HD 36375	05 26.2	17 08	"	"	"	-4.5	21 54	22 48

Air Temp... +20 F

Transparency Conditions

174

Humidity.....

Air Temp.....

Clearing at summit,  
Had to chop ice for 1/2 hr from sill of  
dark-room door.

Star Time S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			0	3.7	B <sub>6</sub> IV		Set 1 MK Sid.	fine
							3 1/2	
							6 1/2	
	55m <del>1:01</del>					6	9	
			0	3.7	B <sub>8</sub> III		Set 1/2 MK Sid.	fine
							" 3	
							" 6	
	1:05					6	" 9	
	7 38	0		5.8	F <sub>3</sub> IV		" 1 MK Sid.	fine
							" 5	
						6	" 9	
	33 55			5.30	A <sub>5</sub> II	6	" 1 "	ok
							" 5	
	1:20 <sup>m</sup>						" 9	
	1:25 <sup>m</sup>	16 25	0	7.68	G <sub>0</sub> 2-2-2		" 2 KA 6x6	fine
	1:45	17 30	0	7.9	A <sub>0</sub> 2-2-2		" 8 " clouds not 2/3 time	medium

	MC	SC	MTW	STW	S	SW	ME
Feb. 1.	-1.3	-30.2	-9.1	+0.7	-3.7	-4.9	-1.6
2.	10.7	-31.1	-16.1	-0.7	-2.7	-2.2	+8.9



Temperature.....

Transparency Conditions *passing clouds earlier*

176

Humidity.....

Temperature.....

*Very Bright (Aurora after Midnight)*

Right Ascension	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26 W	+35° 21'	0	6.6	09.5	2-2-1	set 2 OB p 26 Exp 10 <sup>min</sup>	good
46 W	"	0	"	"	2-2-2	" 8 " Exp 20 <sup>min</sup>	fine
11 W	+8 51	00	9.0	A0	1-1-1	" 5 Ecl. Bin	fine
36 W	29 18	0	9.89	F5	1-1-1	" 2 KAFS KA-53	fine
20 W	29 40	0	10.06	G 9	1-1-1	" 8 " 57	good
					4/3	" 5 <u>0455</u> Hazy from SW	OK

1 P.H.

*Feb. 6-1/8<sup>22</sup> 11<sup>00</sup> mag. 2nd star in  
3rd mag. deep after 2100*

Feb. 8	MC	SC	MTW	STW	S	SW	ME
	+3.6	-24.7	-21.2	-0.1	-2.4	-12.2	+6.1





One Temp  $+27^{\circ}\text{F}$   
 Barus  $12.90$   
 One Temp.....

Transparency Conditions *Haye light cloud.* 178

Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
45 E	17 30	0	7.9	A <sub>0</sub>	2-2-2	Set 2 KA. 6x6 sky filling <i>in after this exposure closed at 9.00 P.M.</i> 4 PHs loaded + 8	<i>fin</i>
					Feb. 11	MC SC MTW STW S SW ME +5.6 -36.5 -26.2 -0.2 -1.2 -14.2 -1.1	

179

Date Mon-Tue Feb 11-12, 1952 Observer MR <sup>(MR)</sup> — Julian Day 243588.1

① 322 55 17.2 3638.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23695	o Per	03 38.0	+31 58	I-10 $\frac{1}{2}$	E103-200	20 <sup>+</sup> 0.02	-10 C	20 27	20 27
								20 31	20 39
								20 36	20 40
23696	o Dra	05 29.1	-07 22	"	"	"	"	20 42	20 48
								20 46	20 49
								20 50	20 52
23697	o Dra	05 26.5	-05 59	"	"	"	"	20 53	20 55
								21 03	21 04
								21 05	21 05
23698	o Dra	05 51.7						21 07	21 17
								21 18	21 19
								21 21	21 21
								21 23	21 25

Air Temp.....  
 Bar.....  
 Sea Temp.....

Transparency Conditions *good* *Very* *low* *for* *6* *slat* *at* *18:30*  
*Considerable* *improvement*  
*by* *20:00* *180*

Time	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			1	328	B11V	6	acc 1 10 R sid 15°	
						5		<i>fine</i>
23W	32 10					9		
			1	432	20 V	6	acc 1 20 W	<i>good</i>
						8		<i>fine</i>
						6		<i>str</i>
27W	-17 21					9	4 W	<i>v. sh.</i>
				242	20 V	1	5°	
						2	10°	<i>fine</i>
						6	20°	
42W	-41 53					9		
						1	20°	
				404	20 V	6	40°	
						4	10°	<i>fine</i>
24E	-17 10					4	10°	

181

Date

1914

Observer

- H ✓

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23699	γ CMa	06 59.2	-15 29	I-125	E107A5	.002		21 31	21 31
								21 32	21 32
								21 33	21 33
								21 35	21 37
23700	HD 57652	07 17.2	-08 48	"	"	"		21 39	21 40
								21 40	21 41
								21 50	21 52
23701	HD 57651	07 56.1	+58 52	"	"	"		22 14	22 15
								22 18	22 18
								22 19	22 20
23702	BD+8°1402	6 29.3	+8 54	"	"	.016	6400	23 16	00 46
23703	HD 82570	09 27.7	-29 19	"	"	"		00 59	01 53

Air Temp. 14°F

Transparency Conditions Good

182

Wind.....

Sea Temp.....

Time of Day	Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			1	4.0	BB-I		net 1.5 to 1.5 sec	
						6	3/2 30 sec	fine
	145	-15 34				6	1"	
			1	5.0	BB-I		1 1/2 sec	
						6	5"	fine
	095	-15 34				6	10"	
				5.4	BB-II		1"	
						6	5"	fine
	24W	54 40	1:			6	9"	
	24W	108 31	0	8.9	HO	1-1-1	etc RW near the Bin	fine
	24W	24 04	0	10.02	G-8	1-2	" 2 KAFS KA-53	good
						4/3	" 8 0140 Cloud from SE!	OK
							3 PH 10	
							Feb. 15	
							MC SC MTW STW S SW ME	
							+0.9 -40.2 -3.6 +0.7 -0.8 -17.5 -6.8	
							18 +9.4 -43.1 -9.8 -0.7 -0.2 -18.1 -5.7	

183

Date Tues., Feb. 19-20/57 Observer L- Julian Day 2435899

© 330 59 40.8 3626.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23704	BD. +9° 1328	06 34.6	09° 24	I-R $\frac{1}{2}$	E-103A <sub>0</sub>	Set 016	-1.1	18 50	20 20
<del>23705</del>	<del>BD +9° 1358</del>	<del>06 36.8</del>	<del>09 38</del>	<del>"</del>	<del>"</del>	<del>"</del>		<del>20 27</del>	
<del>23705</del>	<del>BD +10° 1216</del>	<del>06 35.2</del>	<del>10 03</del>	<del>"</del>	<del>"</del>	<del>"</del>		<del>21 20</del>	

Air Temp. +25°F

Transparency Conditions *Fair*

184

Humidity.....

Air Temp.....

6.9

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20	37E	09 20	0	9.54	R5 II	1-1-1	Set 2 - N.G.C. 2264 Prog. light clouds at 20.10 Star gone at 20.20	Weak.
				<del>10.88</del>	<del>R5 II</del>	<del>1-</del>		
	10 00	0	10.17	G5 II	L		Set 8 - N.G.C. 2264 Clouding over again at 10.00 o'clock.	
							2PHs loaded + 12	
Feb. 20							MC SC MRW STW S SW ME	
							110.0 -44.3 -10.1 -0.2 -0.1 -18.7 -4.8	



185

Date Wednesday Feb 20-21 Observer Se. Jg - H Julian Day 2435890

① 332 00 07.7 3625.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
<del>23705</del>	BD +99° 1908 " " HD 114071 From Test 0.78	9h. 25.2	+29° 44'	12 in.	103a0	0.016	-3.7°C.	<sup>23</sup> 04 <sup>m</sup>	00 26
23705		"	"	"	"	-0.16		00 42	03 02
23706		13 03 10	29 39	"	"	"	-4.0	01 01	06 17

Air Temp. 19°F

Transparency Conditions Int. smoke cloud: bright area!

186

Humidity

Air Temp. 17°F

Time S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12:31.1		+29° 30'	0	9.92	G8	1-1-	set 5 KA53 W. Star Set. 09'38.8	
12:32.4		29 28	0	"	"	1-1-1	" 9 " Mouse on deck.	good.
12:33.4		29 42	0	10.05	F2	1-1-1	" 2 " 57. Waiting for clouds to pass	fine
						4/3	" 2	OK
							3 PH + 8	
							film 19.	

187

Changed to I-25 white markings  
for sky to clear.

Date Thurs Feb 21-22/57 Observer Hd. Julian Day 24358.91

☉ 333 06 38.3 3624.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23707	HD 21483	3 22.7	30 02	I-25	E10340	008	+1.1	19 45	20 25
	"	"	"	"	"	"	+1.1	20 25	20 45
23708	36 Per	3 25.5	45 43	"	"	"		20 49	21 01
								21 01	21 09
23709	5 Per	3 35.8	47 28	<del>I-25</del>	"	"	+1.1	21 09	21 13
				"	"	"		21 20	21 20.2
								21 21.5	21 21.4
								21 22	21 23
								21 24	21 26
23710	HD 72779 VL 133	8 29.6	19 56	I-25	E10340	008	+1.0	21 45	23 00
								23 00	23 32

Transparency Conditions

I<sub>12</sub> focus was 12.900 tilt 20.25  
 changed to I<sub>12</sub> ref focus 15.33 tilt 23.12 - 42

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 48	30 15	0	6.9	B <sub>3</sub> III	4-4-4	Sat 2 1709.61 Moon on floor.	good
3 08		0			0-4-4	" 8	fine
	45 57	0.1	5.8	F <sub>4</sub> III	12	" 11 " "	
		2				" 5	
3 33		1	2.8	B <sub>5</sub> III		" 9	fine
		1	2.5	B <sub>5</sub> III		" 1	
						" 2	
						" 6	
		1			12	" 9	fine
3 34							
4 16m	17 44	1	7.25	G <sub>0</sub>	4-4-4	" 2 Procyon cluster (0)	fine
4 47m					4-8	" 8 back at 23 32	quadrant weak

Handwritten note: "Hand" with a bracket pointing to the rows with seeing values 2, 1, 1, 1.

Feb. 22

MTW	ME	MC	SC	MTW	STW	S	SW	ME
-11.4	-7.8							
+13.8	-46.8	-15.4	-0.2	+1.3	-18.6	-3.4		
+44.6	-48.5	-18.2	-0.3	+0.8	-19.8	-2.1		

189

Date *Wed Thru Feb 27-28, 1957* Observer *Dg*Julian Day *2435896*

338	02	12.3	3616.7
339	02	36.6	3616.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23711	<i>M Ct</i>	2 39.5	+9 42	I-25	E10320	<i>51</i> 008	-3.3	<i>18</i> 6 50	<i>18</i> 6 51 1/2
	"	"	"	I-25	"	"	"	6 52	<del>6 55</del>
	"	"	"	"	"	"	"	6 56	<del>7 02</del>
23712	<i>16 Pa</i>	2 44.3	+37 54	"	"	"	"	7 10	7 11 1/2
	"	"	"	"	"	"	"	7 13	7 16
	"	"	"	"	"	"	"	7 16	7 22
23713	<i>v Ori</i>	<del>5</del> 27.1	-7 23	"	"	"	"	7 29	7 31
	"	"	"	"	"	"	"	7 32	7 36
	"	"	"	"	"	"	"	7 37	<del>19</del> 7 45
23714	<i>i Ori</i>	<del>5</del> 30.5	-5 59	"	"	"	"	7 50	
	"	"	"	"	"	"	"		
	"	"	"	"	"	"	"		
	"	"	"	"	"	"	"		
23715	<i>HD 21447</i>	2 22.4	+55 00	"	"	"	"	<del>18</del> 8 05 1/2	<del>16</del> 8 09 1/2
	"	"	"	"	"	"	"	<del>18</del> 8 09 1/2	<del>16</del> 8 11 1/2



Air Temp. +23°F

Transparency Conditions *Clear*

190

Humidity 15.26

Air Temp.

Time	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
		-9 56	0	4.56	F <sub>0</sub> III		Set 1 1 1/2"	MK standard	
		"	"	"	"		5 3"		
32.5		"	"	"	"	12	9 6"	<i>fine</i>	
		+38 08	"	4.56	F <sub>2</sub> III		Set 1 1 1/2"	..	
		"	"	"	"		5 3"		
47.0		"	"	"	"	12	9 6"	<i>fine</i>	
		-7 20	"	4.32	B <sub>0</sub> V		Set 1 2"	..	
		"	"	"	"		4 4"	<i>fine</i>	
28.0		"	"	"	"	12	9 8"		
		-5 56	1	2.49	O <sub>9</sub> III		" 1 20 <sup>s</sup>	..  	<i>fine</i>
		"	1	"	"		4 20 <sup>s</sup>		
		"	1	"	"		7 40 <sup>s</sup>		
35.5		"	1	"	"		10 30 <sup>s</sup>		
		+55 19	"	5.11	A IV		" 1 4"	..	
2 04.5		"	"	"	"	12	8 7"	<i>fine</i>	

191

Cont'd

Date Wed. 7<sup>th</sup> Mar. Feb 27 28 1957 Observer D - Dg Julian Day 1957000

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23716	17 Tau	3 39.0	+23 48	I-25	E103a0	.008	-3.6	<sup>20</sup> 8 24	
	"	"	"	"	"	"	"		
	"	"	"	"	"	"	"		8 30
23717	18 Tau	3 39.2	+24 32	"	"	"	"	8 35 1/2	8 41 1/2
	"	"	"	"	"	"	"	8 41 1/2	8 51 1/2
23718	i CMa	6. 51.7	-16 55	"	"	"	"	8 00	8 01 1/2
	"	"	"	"	"	"	"	9 02	9 04
	"	"	"	"	"	"	"	9 04	9 10
23719	γ CMa	6 59.2	-15 29	"	"	"	"	9 17	9 18
	"	"	"	"	"	"	"	9 18 1/2	9 20 1/2
	"	"	"	"	"	"	"	9 21	9 25
	"	"	"	"	"	"	"	9 25	9 35
23720	HD 57682	7 17.2	-5 48	"	"	"	"	9 41	9 57
23721	HD 25291	3 56.1	+38 33	"	"	"	"	<sup>22</sup> <del>10</del> 09	<sup>22</sup> 10 12
	"	"	"	"	"	"	"	10 12	10 18
	"	"	"	"	"	"	"	10 18	10 30

Time Temp. +20° F

Hum. 15.26

Time Temp.

Transparency Conditions *clear*

192

Time	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		+23 58	11	3.7	B <sub>6</sub> III		Ed 1 40 <sup>s</sup> mic std.	
		"	"	"	"		5 20	fine
01W		"	"	"	"	12	9 110 <sup>s</sup>	
		+24 42	"	5.5	B <sub>8</sub> V		" 1 <sup>s</sup> 5	
22W		"	"	"	"	12	8 10	quadrant fine
		-17 00	"	4.29	B <sub>3</sub> II		1 1 <sup>s</sup> 2	
		"	"	"	"		5 3	good
29W		"	"	"	"	12	9 6	disturb
		-15 33	"	4.00	B <sub>8</sub> II		Ed 1 1	RA clamp not working well
		"	"	"	"		7 2	
		"	"	"	"		7 4	fine
48.0W		"	"	"	"		10 8	
51.0W		-8 54	"	5.9	O <sub>9</sub> V	12	1 16 <sup>m</sup>	fine
		+59 03	"	5.4	F <sub>0</sub> II		2 8	RA clamp 4 <sup>s</sup>
		"	"	"	"		5 1/2 16	
		"	"	"	"	12	9 12	fine



193

Cont'd

Date Wed. Th. Feb 27-28/57 Observer O - BK Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23722	119 Tau	5 26.3	+18 31	F-25	F103aD	.008	-3.6	<del>22</del> 23 53	<del>23</del> 23 14
"	"	"	"	"	"	"	"	<del>23</del> 23 10	23 46
23723	8250 B	11 33.5	+45 40	"	"	.016	"	23 59	01 59
23724	8735 B	12 55.7	+18 55	"	"	"	-4.0	02 09	06 00
	Focus Test	O.T.B.				.008			
<p>Fri - Mar 1-2 1957, 20.30. Opened &amp; set, but cloudy again.</p>									



195

Date Sun-Mon Mar 3-4 <sup>1957</sup> Observer MRJulian Day 2435901

☉ 343 03 25.3 3607.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23725	0 Per	3 <sup>h</sup> 38. <sup>m</sup> 0	+31° 58'	I-25	103a-0	<sup>pat</sup> .008	-4.0	19:07	-
	"	"	"	"	"	"	"	-	-
	"	"	"	"	"	"	"	-	19:14
23726	16 Jan	3 38.9	+23 58	"	"	"	"	19:34.30	-
	"	"	"	"	"	"	"	-	-
	"	"	"	"	"	"	"	-	19:50
			+23 45	"	"	"	"	20:02	-
23727	27 Jan	3 49.2	"	"	"	"	"	-	-
"	"	"	"	"	"	"	"	-	20:07

Air Temp. +19°F

Transparency Conditions

196

Humidity 15.26

Air Temp.

Star	Right Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-		+32° 10'	1	3.88	B7IV	-	exp 4 <sup>u</sup> at 2 MK std.	
-		"	"	4	"	12 <sup>S</sup> ±	1 <sup>u</sup> 5	
4	=00 W	"	"	"	"	-	2 <sup>u</sup> 8	fine
-		+24 09	1	5.3	B7IV	-	2 2 " "	
-		"	"	9	"	10 <sup>S</sup>	4 5	
10	=36 W	"	"	"	"	-	8 9	fine
-		23 54	1	3.7	B8I	-	20 <sup>S</sup> 1 " "	
-		"	"	4	"	10 <sup>S</sup> ±	40 <sup>S</sup> 5	
10	=49 W	"	"	1	"	-	90 <sup>S</sup> 9	olds at end fine

Apr. 4

MC	SC	MTW	STW	S	SW	ME
+12.7	+54.1	-27.1	-0.4	+1.9	-21.6	-6.3

Made a start at 1:30  
 light snow more cloud  
 closed at 8:00 clock  
 3 PHs loaded



Air Temp.  $+19^{\circ}\text{F}$   
 Hum.  $15.28$   
 Bar. Temp.  $+17^{\circ}\text{F}$

Transparency Conditions *Good*

198

Time	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																								
75	39 W	-15 25	0	8.7	G5V	4-4-4	Set 2 High velocity star	weak <sup>(1)</sup>																								
75	16 W	25 21	0-1	7.9	G8V	4-4-4	" " "	fine																								
							2 P.H. loaded																									
							<table border="1"> <thead> <tr> <th>Mar. 6</th> <th>MC</th> <th>SC</th> <th>MTW</th> <th>STW</th> <th>S</th> <th>SW</th> <th>ME</th> </tr> </thead> <tbody> <tr> <td>+18.8</td> <td>-56.3</td> <td>+7.1</td> <td>-0.05</td> <td>+1.9</td> <td>-23.0</td> <td>-5.1</td> <td></td> </tr> <tr> <td>+13.8</td> <td>-57.6</td> <td>+6.9</td> <td>-0.06</td> <td>+2.7</td> <td>-24.5</td> <td>-1.1</td> <td></td> </tr> </tbody> </table>	Mar. 6	MC	SC	MTW	STW	S	SW	ME	+18.8	-56.3	+7.1	-0.05	+1.9	-23.0	-5.1		+13.8	-57.6	+6.9	-0.06	+2.7	-24.5	-1.1		
Mar. 6	MC	SC	MTW	STW	S	SW	ME																									
+18.8	-56.3	+7.1	-0.05	+1.9	-23.0	-5.1																										
+13.8	-57.6	+6.9	-0.06	+2.7	-24.5	-1.1																										

199

Date Sat-Sun Mar 9-10 1957 Observer MR - Fox Julian Day 2435907

☉ 349 03 40.6 3594.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23730	B. Tau	5 20.0	+28 31	I-25	10300	.008	+1.0	19:45	-
"	"	"	"	"	"	"	"	-	-
"	"	"	"	"	"	"	"	-	19:49
23731	HD 43836	6 13.3	+23 19	"	"	"	"	19:58	20:34
23732	HD 48434	6 38.3	+4 02	"	"	"	"	20:38	20:46
"	"	"	"	"	"	"	"	20:47	21:03
23733	HD 65583	7 54.3	+29 31	"	"	"	"	21:10	22:12
23734	HD 78558	9 3.8	-14 44	"	"	"	"	22:15	23:10
23735	ADS 2470 B	12 09.1	+33 20	"	"	"	+1.0 <sup>v</sup>	23:22	05:22
23736	ADS 10715 B	17 27.0	+24 24	"	"	.016	"	04:52	05:32
	Focus 12" O.T.B.					.018			

Air Temp. +28°F  
 Hum. 15.33  
 Bar. Temp. +24°F

Transparency Conditions *clear but very windy*

200

*Bright sun after midnight*

Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-	+28 36	1	1.57	B7II	-	Set 1 <sup>st</sup> Exp. 3 <sup>s</sup> MKSII	
-	"	"	"	"	10	5 6 <sup>s</sup>	
49 17W	"	"	"	"	-	9 12 <sup>s</sup>	fine
09W	+23 16	1	7.0	B9II	4-4H	Set 2	weak
256W	+3 59	1	5.89	B0II	-	5 Exp 8 <sup>m</sup>	
214W	"	"	"	"	4-8	9 " 15 <sup>m</sup>	fine
-	+29 31	1	7.7	G8II	4-4H	Set 2 H. 1/2	weak
257W	-14 58	1	7.9	G2II	4-4H	" 8	weak
03W	+33 01	1-2	9.3	G0	4-4H	" 2 <sup>Vis</sup> Ben Suff	fine
14E	24 24	1	9.8	F6	2-2-2	5 1/2 " <sup>1<sup>st</sup></sup> <del>exp</del>	fine
					16/10	9	OK
						L 24 +9	



201

Date Sun. Mar. 10-11/57 Observer L- Julian Day 2435.208

☉ 350 03 35.4 3592.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23737	H.D. 24131	03 45.5	34 03	T25	E-103A <sub>0</sub>	set .008	-0.5	19 12	
								19 15	19 20
								19 20	19 30
23738	46 Tau	04 08.2	07 28	"	"	"	-0.5	19 34	
								19 38	19 45
								19 45	19 59
23739	10 Aur	05 13.4	33 52	"	"	"	-0.6	20 09	
								20 12	20 17
								20 17	20 27
23740	p Aur.	05 14.7	41 43	"	"	"	-0.6	20 36	
								20 38	20 41
								20 41	20 47
23741	H.D. 71881	08 24.6	50 57	"	"	"	-0.6	20 55	22 05
	Transfused				OTB				

Temp. 28°F

15, 31

Transparency Conditions .....

202

Temp. ....

Time	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9:20		34 15	0.54	B <sub>4</sub> V		12s	Set V, 2 <sup>m</sup> 30 <sup>s</sup> M.K. star.	
9:30						" 5	" "	good.
9:45		07 37	0	F <sub>3</sub> V		12s	" 1, 2 <sup>m</sup> 30 <sup>s</sup>	fine
9:55						" 9	" "	fine
10:15		33 55	0	A <sub>5</sub> II		12s	" 1 2 <sup>m</sup> 30 <sup>s</sup>	fine
10:25						" 5	" "	fine
10:41				5.0	B <sub>5</sub> V	12s	" 1 1 <sup>m</sup> 30 <sup>s</sup>	fine
10:47						" 9	" "	fine
10:55	32W	50 46	0	80	G <sub>1</sub> V	4-44 16/10	" 2 High Velocity Prog. large toward end. sky thickening	good OK
							1 PH bands + 4.	

203

Date Tues Mar 12-13/57 Observer L- BK Julian Day 2435910

☉ 352 03 18.4 3588.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23742	HD 24131	03 45.5	34 03	I-25	E-103A <sub>0</sub>	Set 008	+6.7	19 37	19 40
								19 40	19 46
								19 46	19 58
23743	" 43836	06 13.3	23 19	"	"	"	+6.7	20 03	20 15
								20 15	20 43
								20 43	21 43
23744	" 84937	09 43.5	14 14	"	"	"	+6.5	21 53	23 49
23745	106516	12 10.0	-09 43	"	"	"	"	00 02	00 22
23746	ADS 8489B	12 11.1	+41 13	"	"	"	"	00 40	00 20
	ADS 8489B	O.T.							





Air Temp. + 40°F

Obs. 15.38

Air Temp. ....

Transparency Conditions

Good

206

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
36	05W 06 48	0	7.6	G4V	4-4-4	Set 2 High Velocity	good
11	44W -14 57	0	7.9	G2V	4-4-4	" 8	( <sup>c</sup> ) weak
37	27W 20 30	0	8.7	F8V	4-4-4	" 2	good
2	34W 49 00	0	7.0	G1V	4-4-4	" 8 Haze - light cloud	good
2	43W 20 00	0	6.5	G0V	4-4-4	" 2	fine
2	41E 20 25	0	7.4	G5V	4-4-4	" 8	good
2	33E 1 55	0	5.6	F8V	4-4-4	" 2	" weak
5	5W 10 23	0	7.6	F6V	4-4-4	" 8	l weak
	47 20		5.6	F8V		1/2	good
	52W				12	5	too near good band
					16/10	1/2	fine OK
						424 + 4	
						Mar. 22 MC SC ATW STW S SW ME	
						+27.1 -12.3 +4.8 -0.7 +0.1 -27.6 -3.9	



ne Temp. 4390F

us 15-40

ne Temp.

Transparency Conditions *hazy*

208

ur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-	17° 00'	1	3.6	A0J6	-	set 1 MKStd	Exp 20 <sup>s</sup> <i>weal</i>
-	"	"	"	"	12 <sup>s</sup>	set 4	Exp 40 <sup>s</sup> <i>weal</i>
-	"	"	"	"	-	set 7	Exp 40 <sup>s</sup> <i>weal</i>
05 E	"	"	"	"	-	set 10	Exp 90 <sup>s</sup> <i>fine</i>
46 W + 26' 04'		0	90	F7	4-4-4	set 1 1/2 U.C. Bin Supp. cloud around 53 20	<i>good-</i>
						2 PH + 4	





Time Temp.  $+41^{\circ}\text{F}$

Transparency Conditions *Clear*

210

Focus *15.43*

Time Temp.  $+28^{\circ}\text{F}$

Time E.S.T.	Mur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30	2 07W	+6 48	-1	7.5	G4V	4-4-4	Sd 2 In Vel.	good
	26W	+47 18	0	6.2	G6V	4-4-4	" 8	fine
20	47 W	+50 47	0	8.0	G1V	4-4-4	" 2	fine
24	26 W	+49 00	0	7.0	G1V	4-4-4	" 8	fine
	10W	+20 30	0	8.7	F8V	4-4-4	" 2	fine
	03 E	-12 06	0	6.7	F6V	4-4-4	" 8	good
	26W	+32 29	0	8.3	G0	4-4-4	" 2 His fine Supp	good
						16/10	" 8	OK
							2 PH + 12	



Time Temp. +30°F  
 Hum. 15.34  
 Time Temp. +22°F

Transparency Conditions clear

212

Flight duration

Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4	3 44W	30 45	0-1	8.9	G2 VI	4-4-4	Set 2 High Velocity → No	fine
5	1 56W	32 02	0	6.1	G4 V	4-4-4	" 8 " " → No	fine
6	3 37W	18 37	0	9.9	F7	2-2-2	1 2 Vis Poor Supp.	Good
						16/10	1 8	OK
							4 for 35	
						Mar. 25	MC SC MTW STW S SW ME	
							+29.5 -15.4 -1.1 -0.2 +0.2 -30.4 -1.9	
							+30.6 -16.8 -5.2 -0.3 +0.9 -31.6 -2.3	
							+32.6 -19.8 -9.2 -0.4 +0.3 -31.7 -3.9	



Time Temp. 29°F

Transparency Conditions Good

214

Hum. 1537

Time Temp. 28°F

Star Name E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	05W	40 54	1.5	93	GO	2-2-2	Alt 2 Vis 3 in sup	weak
47	22E	16 22	1.1	88	FG	2-2-2	5 1/2	weak
						16/10	9	
							3041-8	

215

Date Sun - Mon. March 31 - April 1 Observer Se - Julian Day 2435929

☉ 10 54 11.0 3552.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23770 } 23771 }	HD 86728	9 <sup>h</sup> 55.3	+32° 26'	I-25	F103-40	Set .008	+6.7	20 <sup>h</sup> : 35	20 <sup>h</sup> 50 <sup>m</sup>
	<del>84937</del>	<del>9 43.5</del>	<del>+14 14</del>	"	"	"	"	21 <sup>h</sup> : 25 <sup>m</sup>	
23771 } 23772 }	HD 91889	10 <sup>h</sup> 31.6	-11 42	"	"	"	+6.7	21 <sup>h</sup> : 43 <sup>m</sup>	22 <sup>h</sup> 13
	HD 106116	12 <sup>h</sup> 7.5	-02 32	"	"	"	+6.5	22 <sup>h</sup> : 15 <sup>m</sup>	

Dme Temp. + 38°F

Fous 15.40

Dme Temp. ....

Transparency Conditions Stationary cloudy patches at start

216

Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0	35 <sup>m</sup> W	+38° 59'	00	6.1	G4V	2-2-2	set 2 H.V.	good
			0	8.6	F2V		set 8 - wrong star.	
1.	09 <sup>m</sup> W	-12° 00'	0	6.2	F&V	3-3	set 2 H.V./Clouds!	too weak
		-02° 51'		8.2	G4V	2-	set 8 H.V. Clouds!	too weak
							Apr. 1	
							ME Se MTW STW S' SW ME	
							+35.5 -23.6 -10.7 -0.4 +0.9 -33.9 -5.2	



217

Date Tues. April 2-3/57 Observer L-H Julian Day 243593.1

☉ 12 52 33.5 3547.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23773	HD. 87998	10 03.6	-19 15	I-25	E-103A <sub>0</sub>	set COB	+4.0	19 53	21 53
23774	" 106116	12 07.5	-02 32	"	"	"	+4.0	22 00	00 20
23775	" 106210	12 08.1	+11 24	"	"	"	+3.8	00 27	02 27
	<i>from A</i>			<i>07B</i>					

Dme Temp. +30°F

Focus 15.36

Dme Temp. ....

Transparency Conditions Good.

218

ing Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
88	014W	-19 30	0	7.9	G <sub>2</sub> V	4-4-4	Set 2 High Velocity	(1) weak
20	037W	-02 51	0	8.2	G <sub>4</sub> V	4-4-4	" 8 " "	(1) weak
21	0244W	11 05	0	8.5	G <sub>3</sub> V	4-4-4	" 2 Se - HV Haze + Thin Clouds.	(1) weak
						15/10		
							3 P.H. + 4?	
						Apr. 3	mc sc mT <sub>2</sub> sT <sub>2</sub> S SW MB	
							+36.5 -26.0 -9. -0.4 +0.1 -39.4 -6.1	
						8	+39.7 -32.1 -12.5 -0.5 +2.2 +17.3 +0.2	
						10	-15.9 +16.5 -2.1	
						12	+42.6 -37.1 -20.2 -0.6 +3.2 +13.5 -6.1	
							Sat Apr 6-7	
							14d - Dq. 50 visitors. Cloudy. LECTURED COMETS & SHOWED 7 1/2"	
							Thurs Apr 11	
							6 visitors (2 yr m e P) - Showed Telescope - 14d.	



ne Temp. 120°F

us 15.34

ne Temp. 126°F

Transparency Conditions *poor*

220

Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
5	40 <sup>m</sup> E	+39° 30	0	6.5	G0V	4-4-4	Se-HV set 2.	<i>fine</i>
17	29 <sup>m</sup> W	+9° 46	0	6.7	K1V	4-4-4	O-HV set 2	<i>weak</i>
26	4 <sup>m</sup> W	+5° 28	0	7.5	G5V	4-4-4	O-HV set 8 cloudy, closed filter closed at 1 a.m. 184, plate in wet wet, junk in dark room.	<i>weak</i>





223

-BK

Date Sun Apr 14-15/57 Observer Hd - Hr Julian Day 2435963

☉ 24 39 38.9 3521.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23780	RW Mon	6 29.3	+8 54	I-25	E103.0	016	+2.8	19 49	21 33
→ 23781	HD 68017	8 55	32 47	"	"	008	+2.7	21 45	22 15
→ 23782	HD 97561	11 08.4	20 41	"	"	008	+2.9	22 22	23 08
→ 23783	HD 106210	12 08.1	+11 24	"	"	008	+2.9	23 13	01 13
23784	" 115539	13 12.7	14 18	"	"	"	2.9	01 22	02 22
23785	⊙ Opt	17 19 20	-24 57.5	"	"	"		02 36	02 42
							2.9	42.5	48.5
								49	55
								55.5	03 01.5
23786	⊙ Opt							03 01.5	03 01.5
								07.0	15.0
								15.5	21.5
								22.0	28.0
23787	⊙ Opt							29.0	30
								03 35.5	41.5
								42.5	48.5
								44.5	50.5

Temp. 36 F

Humidity 15.35

Temp. ....

Transparency Conditions ..... Cool

224

Right Ascension E.S.T.	Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
14 15	8 54	0	0	8.9	A <sub>0</sub>	2-2-2	Set 2 Hd. ECL. Bin, * pretty faint	rough
13 20	32 36	1	1	6.9	G4V	4-4-4	Set 2 Se-HV	fine
11 10	20 22	1	1	7.67	G7IV	4-4-4	" 2 O-HV	fine
11 17W	11 05	1	1	8.5	G3V	4-4-4	" 8 Se-HV	fine
11 22W	14 00	0-1	0-1	8.17	G2	4-4-4	" 8 O-HV	good
11 22E			0-1	3.07	B3	12	" 0.5	strong
	-24 56	1				12	3.5	"
						12	6.5	"
						12	9.5	"
						12	0.5	"
						12	3.5	"
						12	6.5	"
						12	9.5	"
						12	0.5	"
			0-1			12	3.5 being thick	"
						12	6.5	"
						12	9.5	"



225

Date Apr 14-15/57 Observer HF BK Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.		
23788	⊖ OPH	17	19°20'	-24	57.5	I-25	103a-0	008	03 58	04 04	
									04 04.5	04 10.5	
									11.0	17.0	
23789	⊖ OPH	17	19°20'	-24	57.5	I-25	103a-0	008	3.0	17.5	23.5
									04 25	31	
									31.5	37.5	
									04 38	04 44	
								04 44.5	04 50.5		

e Temp.....

Transparency Conditions .....

226

s.....

e Temp. 28°

ding Time E.S.T.	Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				3.07	B3	12	lit. 0.5 Focusing Motor Work	very
						12	13.5	"
						12	6.5	"
			0-2			12	9.5	"
			*			12	0.5	"
33W		0				12	3.5	"
						12	6.5	"
						12	9.5	"
							1 P.H. + 7	
							MC SC MTD STW S SW ME	
Apr. 15							+1.0 -0.5 -25.2 -0.7 +6.5 +13.7 -2.5	
17							+2.7 -3.4 -25.1 -0.8 +5.2 +11.9 -5.1	

## SPECTROPHOTOMETER

227

Date April 17-18 1957 Observer O Julian Day

Plate No.	Object	R.A. 1900 60	Declination 1000 60	Counter Inst. — Emulsion	Slit	Gain Temp. C-F	Starting Time E.S.T.	Ending Time E.S.T.
1-1	ε UMa A	8 56.5	+48 12	5200 - 3500	10	5-6	19 45	-
2-1	Test to see if light is striking photomultiplier properly by covering							
3-1	ε UMa A	8 56.5	+48 12	4400 - 3500	50	-?		
4-1	Measures of dark current and noise levels.							

me Temp.....  
us.....  
ne Temp.....

Transparency Conditions *Very hazy near horizon*

→ *April 20/57 100 visitors Shown Jupiter*  
*Partially cloudy*

Ending Time P.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Aperture Comp.	REMARKS	Quality																					
				3.31	A7V	20"	Traced both ways - Voltage 920 v. various portions of telescope objective																						
				3.31	A7V	20"	<table border="1"> <thead> <tr> <th>MC</th> <th>SC</th> <th>MTW</th> <th>STW</th> <th>S</th> <th>SW</th> <th>ME</th> </tr> </thead> <tbody> <tr> <td>+6.3</td> <td>-8.5</td> <td>-1.9</td> <td>-0.7</td> <td>+8.2</td> <td>+8.0</td> <td>-4.1</td> </tr> <tr> <td>26</td> <td>+8.8</td> <td>-12.4</td> <td>-1.8</td> <td>-0.08</td> <td>+9.8</td> <td>+4.1 -3.1</td> </tr> </tbody> </table>	MC	SC	MTW	STW	S	SW	ME	+6.3	-8.5	-1.9	-0.7	+8.2	+8.0	-4.1	26	+8.8	-12.4	-1.8	-0.08	+9.8	+4.1 -3.1	
MC	SC	MTW	STW	S	SW	ME																							
+6.3	-8.5	-1.9	-0.7	+8.2	+8.0	-4.1																							
26	+8.8	-12.4	-1.8	-0.08	+9.8	+4.1 -3.1																							



Time Temp. +63° F

Transparency Conditions Hazy

230

cus

Time Temp.

Time	Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20	W	+27 47	-1	6.0	A0	20"	Both ways + sky. 2" minimum	
49	02 E	+18 37	-1	3.28	G0 IV	"	One way.	
	W	+1 45	-1	4.0	A2	"	Hazy very thick Lightning	

231

## SPECTROPHOTOMETER

Date April 27-29 1957 Observer Se. O Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. C/F	Starting Time	Ending Time
								E.S.T.	E.S.T.
8-3	HD 103287	11 48.6	+54 15	5200	-3500	10	5/3	11 36	21 36
9-3	HD 102647	11 44.0	+15 08	5600	-3500	11	5/3	12 02	21 53
10-3	HD 106591	12 10.5	+57 35	"	"	11	5/5	11 21	22 18
11-3	HD 102787	11 48.6	+54 15	"	"	"	5/3	12 50	22 40
12-3	HD 76644	8 52.4	+48 26	5400	-3500	"	5/5	13 29	23 19
13-3	HD 120315	13 43.6	+11 49	"	"	11	5/2	14 05	23 55
14-3	HD 103287	11 48.6	+54 15	"	"	11	5/3	14 43	00 33
15-3	HD 139006	15 30.5	+27 03	"	"	"	5/3		
16-3	HD 130109	14 41.2	+02 19	"	"	"	5/6	15 44	1 36
17-3	HD 103287	11 48.6	+54 15	"	"	"	5/2	16 09	1 59
18-3	HD 147374	16 16.7	+46 33	"	"	"	5/6	16 32	2 22
19-3	HD 103287	11 48.6	+54 15	"	"	"	5/3	16 56	2 46
20-3	HD 139006	15 30.5	+27 03	"	"	"	5/2	17 20	3 10
21-3	HD 172167	18 33.6	+38 41	"	"	"	4/3	17 44	3 33
22-3	HD 139006	15 30.5	+27 03	"	"	"	5/3	18 06	3 55

Air Temp. 15.4° F

Transparency Conditions *Clear, Few clouds*

232

Bar. Temp. 50° F

Reading Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
136	14 F	+53 57	-1	2.14	A0 V	20"	4 A/see 2" in min. dist 920 volts	✓
150	17 W	+14 49	-1	2.21	A3 V	20"	" "	✓
	15 (⊙)	+57 14	-1	3.35	A2 V	20"	" "	✓
22	0 V	+53 56	"	2.14	A0 V	"	" <del>sky</del> spul. YR	?
	24 W	+48 12	"	3.30	A7 V	"	" Traced 3 times	bad.
	28 W	+49 30	"	1.65	B3 V	"	" Traced 3 times	one good.
	52 W	+53 57	"	2.44	A0 V	"	" + Sky.	✓
	12 W		"	2.21	A0 V	"	" <u>wt added To Counten Balance</u>	✓
136	01 W	+2 04		3.74	A0 V	"	" of 74"	✓
19	12 W		"	2.44	A0 V	"	" Apr. 20 MC SC MTD STD S SW MB	✓
	14 W	+46 24	0	3.74	B0 V	"	" +9.7 -16.5 -10.9 -0.3 +10.7 +44 -0.2	✓
246	05 W			2.44	A0 V	"	"	✓
30	48 W	+26 51		2.21	A0 V	"	"	✓
30	51 E	+38 43	0	0.03	A0 V	"	"	✓
352	34 W	+26 53	0	2.21	A0 V	"	"	✓





Time Temp. 62°F  
 Bus. 15.58  
 Time Temp.

Transparency Conditions clear

234

about 30 minutes saw comet with 2"

Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	33 W	+55° 21'	-	-	-	none	set 1 no jaws	nothing
	40 W	"	-	-	-	none	set 9	
	16 W	"	-	-	-	fine long hole	4A/sec 2"/min 920 vlls-	2x+sky
	55 W	+48 13	0	330	A7V	large hole	numerous triangles.  C.B.C. news.	

235 SPECTROPHOTOMETER

HD-L. for comet

Date Tues. Wed. Apr. 30-May 1 / 57. Observer O-S Julian Day 2435957

☉ 40 15 16.2 3494.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23791	<sup>-P. Roland</sup> Comet <del>Orion</del>	<sup>h m</sup> 353.8	56 47	I-25	E10300	016	16.8	20 32	
								end LST	
26-5	HD 87901	10 03.0	+12 27	5400	-3500	10	5/1	12 22	22 05
27-5	HD 120315	13 43.6	+49 49	"	"	10	5/2	12 27	22 45
28-5	HD 106591	12 10.5	+57 35	"	"	"	5/5	13 06	22 48
29-5	HD 87701	10 03.0	+12 27	5200	"	"	5/1	13 29	23 11
30-5	HD 103287	11 42.6	+34 15	"	"	"	5/3	13 50	23 32
31-5	HD 130109	14 41.2	+02 09	"	"	"	5/6	14 13	23 55
32-5	HD 142860	15 51.2	+15 59	"	"	"	5/7	14 34	00 16
33-5	$\alpha$ Boo	14 13.8	+19 23	5600	"	"	4/5	14 59	00 41
34-5	HD 139006	15 30.5	+27 03	5200	"	"	5/3	15 14	00 56
35-5	HD 147394	16 16.7	+46 33	"	"	"	5/6	15 35	01 17
36-5	HD 120315	13 43.6	+49 49	"	"	"	5/2	15 58	01 40
37-5	HD 156164	17 10.9	+24 57	"	"	"	5/5	16 19	02 01
38-5	HD 161368	17 42.9	+02 45	"	"	"	5/6	16 41	02 23
39-5	HD 120315	13 43.6	+49 49	"	"	"	5/2	17 04	02 46

Time Temp... 57°F  
 ... 15.54  
 Time Temp... +51°F

Transparency Conditions *Clear*

236

Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
N 75° 4'		<sup>at end</sup> 56 51	0?			no comp	Set 1 no Voveralit.	
05	16 W	+12 10	0	1.21	B7V	20"	4A/see 2" per min chart 930 v	
45	01 E	+49 32	0	1.66	B3V	"	" [ perhaps sid time 12.45, ST 22:27 ]	
47	52 W	+57 15	0	3.35	A3V	"	"	
1	22 W	+12 11	0	1.21	B7V	"	"	
3 32	58 W	+53 57	0	2.44	A0V	"	"	
5 55	31 E	+2 05	0	3.74	A1V	"	"	
	21 E	+15 50		4.4	F6V	"	"	See HV
0 41	45 W	+19 23		1.17	K2 IIIp	"	"	
0 50	19 E	+26 53	0	2.21	A0V	"	"	
1 17	44 E	+46 25	0	3.74	B5V	"	"	
1 40	12 W	+49 32	0	1.66	B3V	"	"	
2 0	55 E	+24 54	0	3.22	A3V	"	"	
2 5	05 E	+02 44	0	3.75	A0V	"	"	
2 40	18 W	+49 32	0	1.66	B3V	"	"	



Time Temp.....

Transparency Conditions *Clin*

Humidity.....

About 30 visitors saw comet  
with 2".

Time Temp.....

Ending Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 08	10 E	+38 44	0	0.03	A0I	20"		
3 37	54 E	+08 45	0	0.98	A7IV	20	RA Clamp working	
4 10	33 W	+49 30	0	1.66	B3V	"	+ Sky (down) Very Poorly.	
							May 1. MC SC MTW STW S SW ME +10.0 -17.4 -21.9 -0.5 +10.4 -7.1 -4.1	







241

Date Thurs May 23/57 Observer Hol. - H.V. Julian Day 2435.961

-BK

☉ 42 11 42.5 3490.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23796	HD 106116	12 07.5	-02 32	I-25	E103A0	008	10.0	20 32	22 32
	0 tried ft star with spectrophotometer								<del>23</del> +
23797	HD 114174	13 03.8	+5 46	"	"	008	10.0	23 11	00 01
23798	AD 11028	12 41.3	+10 06	"	"	"	"	00 06	00 36
23799	☉ Oph.	17 15.9	-24 54	"	"	"	"	01 09 <sup>00</sup>	01 13 <sup>00</sup>
	"							01 17	01 17
	"							01 19	01 23
	"							01 24	01 28
23800	"							29 <sup>30</sup>	33 <sup>30</sup>
	"							01 35	01 39
	"							01 37 <sup>45</sup>	01 41 <sup>45</sup>
	"							01 44 <sup>00</sup>	4 <sup>00</sup>
23801	"							49 <sup>00</sup>	53 <sup>30</sup>
	"							51 <sup>40</sup>	53 <sup>00</sup>
	"							52 <sup>00</sup>	02 02 <sup>15</sup>
	"							02 04 <sup>00</sup>	07 <sup>00</sup>



243

Date May 23/57 Observer BK-H Julian Day 2435961

☉ 42 11 42.5 3490.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23802	⊖ oph.	17 15.9	-2454	I-25	100a-0	.008		02 09	02 12
								02 12 <sup>30</sup>	16 <sup>30</sup>
								17 <sup>00</sup>	21
								21 <sup>30</sup>	25 <sup>30</sup>
23803								02 26 <sup>30</sup>	02 30 <sup>30</sup>
								31 <sup>30</sup>	35 <sup>30</sup>
								02 36	02 40
								40 <sup>30</sup>	44 <sup>30</sup>
23804	⊖ oph.							02 45 <sup>30</sup>	41 <sup>30</sup>
								02 50	02 54
								+10.0 02 57 <sup>30</sup>	52 <sup>30</sup>
								02 57 <sup>30</sup>	03 03 <sup>15</sup>
23805	⊖ oph.							03 04 <sup>15</sup>	02 <sup>15</sup>
								03 08 <sup>15</sup>	03 12 <sup>15</sup>
								13 <sup>15</sup>	17 <sup>15</sup>
								17 <sup>45</sup>	21 <sup>45</sup>

Air Temp. +34.0 at 3:00 EST

Transparency Conditions .....

244

Humidity .....

Water Temp. ....

Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			3.07	B <sub>3</sub>	12	Set. .5	f
					"	3.5	"
					"	6.5	"
					"	9.5	"
					"	.5	"
					"	3.5	"
					"	6.5	"
09E					"	9.5	"
					"	0.5	"
		0			"	3.5	"
	-24 56				"	6.5	"
					"	9.5	"
					"	0.5	"
					"	3.5	"
					"	6.5	"
					"	9.5	"



ie Temp.....  
 S.....  
 ie Temp.....

Transparency Conditions .....

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			3.07	B3	12	set. 0.5'	fm
		0			12	3.5'	"
					11	6.5'	"
340-47W					11	9.5'	"
						2 P.H. + 4.	
						May 3    MTW    ME	
						-22.8    -0.9	



ue Temp. 44°F

us 1544

ne Temp. 40°

Transparency Conditions Good

248

Showing C, 4 in 74-inch, R.A.S.C. telescopes for 2

N, Bk, Hd, O, L

About 300 visitors in alone in two showings. [Possibly 400 altogether.]

Ending Time EST	r Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	3 32W	26 05	1	90	F7	2-2-2	2012 PK-UBF	fine
	5 54E	16 28	0	96	F8	2-2-2	5 1/2 "	fine
						15/10	9	OK
							1 2H +4	



## SPECTRO PHOTO METER

249

Date Sun-Mon May 5/6 Observer MR - H<sub>v</sub> Julian Day 2435964

D. 14 sec

☉ 45 06. 07. 7 3484

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
43-6	Mars								
44-6	Jupiter								
45-6	HD 87901	10 03.0	+12 27	5200	-3500	10	5/1	12:50	22:13
46-6	HD 103287	11 48.6	+84 15	"	"	"	5/2	13:24	22:47
47-6	HD 106581	12 10.5	+57 35	"	"	"	5/5	13:46	23:08
48-6	α Vir (Spica)	13 23.1 <sup>1960</sup>	-10 57	"	"	"	4/6	14:10	23:33
49-6	HD 120315	13 43.6	+49 49	"	"	"	5/2	14:35	23:54
23809	{ HD 162756 Fomalhaut	17 47.6	-07 53	I-25	F1030-O	.003	+11.0	00 31	03 41
			007.13						

Air Temp. +44°F

Humidity 15 46

Barometric Pressure

Transparency Conditions

Good

250

Time	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:44		+12 12		1.21	B7V	20"	4A/sec	
3:33		+3 55		2.44	A0V	"	"	
4:32		+57 15		3.35	A3V	"	"	
7:47		-10 55		0.91	B5V	"	"	
7:49		+49 31		1.66	B3V	"	"	
10:29W		-07 54	00	8.3	G0V	4-4-4 13/10	Set. 2 SE-HV. Need watch/paper	Sewal OK
							1 P.H + 3	
							May 6.	
							MC SC MTW STW S SW ME	
							+11.3 -24.2 -23.9 -0.6 +14.0 +0.8 +5.2	

## SPECTROPHOTOMETER

251

Date ~~Mon-Tues~~ May 6-7 Observer O, S Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. <i>Est LST</i>	Ending Time E.S.T.
50-7	HD 91130	10 26.2	+32 54	HA, 4450	-3600	10	6/7		
51-7	HD 111469	12 44.4	+28 08	HB, 4500	-3600	"	6/6		22 33
52-7	"	"	"	4450 HY	4250	"	6/7		
53-7	HD 122408	13 56.6	+2 02	4450 HY	4250	"	6/4		
54-7	HD 141527	15 44.5	+28 28	5200	-3500	"	6/7		

Air Temp. +56°F

Transparency Conditions *Some haze*

252

Humidity.....

Air Temp.....

Ending Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			2	6.0	A5	20"	2 A/sec.	
2:33	27W			6.0	<del>A5</del> A3	"	"	
			1	"	"	"	1/2 A/sec.	
			1	4.0	A2	20	1 A/sec.	
							4 " RCB.	

253

Date *Tues May 7-8, 1957* Observer *L-H* Julian Day *2435966*

① 47 02 14.7 3480.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23810	H.D. 106516	12 10.1	-09 43	I-25	E-103A0	set 008	22.8	20 30	21 10
23811	" 114174	13 03.8	+05 44	"	"	"	22.7	21 15	22 15
23812	" 139457	15 33.2	+10 35	"	"	"	22.6	22 21	23 35
23813	" 142267	15 48.5	13 31	"	"	"	22.5	23 40	00 20
23814	" 157089	17 16.1	+01 32	"	"	"	22.0	00 26	02 56
	<i>Transit</i>	<i>20.8</i>	<i>5.15</i>						

Air Temp. 68°F

Transparency Conditions

Haye

254

Humidity  
Air Temp.

Ending Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 10	19E	-10 04	0	6.57	F6V	4-4-4	Set 2 Se 9th Vel.	good
2 15	07E	05 27	0	7.47	G5IV	4-4-4	" 8 " " "	good
3 35	16E	10 24	0	7.60	F6V	4-4-4	" 2 " " "	fine
4 20	45E	13 22	0	6.70	G2V	4-4-4	" 8 " " "	fine
5 10	23W	+01 30	0	7.55	G0V	4-4-4	" 2 " "	good
						15/10	" 8	OK
							1 P.H. <del>PLH</del> N + L + 12	
							May 8. MC SC MTW STW S SW ME	
							+12.5 -26.0 -25.6 -0.6 +14.3 +0.6 -2.3	
							10. +12.3 -29.0 -26.9 -0.6 +14.7 +0.1 +3.2	
							13 +14.0 -31.9 -1.5 -0.06 +16.3 +0.6 +1.1	
							15 +14.0 -34.2 -15.8 -0.2 +17.0 +0.9 -2.4	

255

Date May 15-16, 1957 Observer L. H. J. Julian Day 2435974☉ 54 45 30.4 3467.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
[ 23815	HD 143701	15 57.2	+33 36	I-25	E1000	S-T 0.008	12.0	00 04	00 34
[ 23816	HD 142722	16 50.4	+33 00	"	"	"	12.0	00 39	02 09
[ 23817	HD 142497	17 29.2	+32 47	"	"	"	11.9	00 36	03 54
L	Film 4008	0.73					11.9		

Dme Temp. 44°F  
 Fus. 15.47  
 Dme Temp. 38

Transparency Conditions

Sat May 11 cloudy. 100 minutes  
 detected comets + showed 74" Hd-L.

ing Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	09 E	33 26	-1	6.02	G <sub>2</sub> V	4-4.4	Sat 2 Se HV	good
	34 W	43 35	-1/2	7.4	G <sub>2</sub> I	4-4.4	Sat 3 Se HV	lweak
	2 E	33 05	-1	7.19	G <sub>2</sub> I	4-4.4	Sat 2 Se HV <small>I sat 2 + 3 179° 30' but only          sat 2 sat 3 was visible</small>	fine
						15/10	Sat 3	OK
							3PH + 8	



257

Date Thurs. Fri. May 16-17 Observer MR - HJ Julian Day 2435275

☉ 55 43 18.0 3468.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
55-8	HD 103287	11 48.6	+54 15	5200	3500	10	5/3	12 17	
56-8	HD 103287	"	"	"	"	10	5/4	12 36	
57-8	HD 120315	13 43.6	+49 49	"	"	10	5/2	14 34	
23218	HD 173010	18 38.1	-57 2.6	I-125	Emulsion	.016		00 46	03 46
	7-7	7-7	57 B						

Time Temp. 44°F

Transparency Conditions .....

258

Focus .....

Time Temp. ....

Changed to  
 May 16 12<sup>1</sup>/<sub>2</sub> Camera 25" Was Focus 15.47 12<sup>1</sup>/<sub>2</sub> Focus 12.91  
 Tilt 23.15 Tilt 20.35

Star Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26 W + 53 57		1	244	A0 V	20"	4 A/sec.	
45 W + "		1	"	"	"	" ← experimenting with apertures	
49 W + 49 30		1	1.66	B3 V	30"	" also fatures at 1A/sec	
0 26 W - 09 21		00	10.0	B <sub>0</sub> I <sub>2</sub>	1-1	Lt. 2 OB	Weak.
					4/3	"	OK.
						2 FH + 2	
May 17	mc	sc	MTW	STW	S	SW	ME
	+16.7	-37.2	-31.1	-0.3	+18.1	+2.6	-1.1
<p>Saturday May 18: 245 no sun.                  Showed 74 in 74". Part all cloudy - thin. 1000. 1/2                  RASC 1000. 1/2</p>							



Air Temp. 46° E  
 Hum. 12-91  
 Sea Temp. ....

Transparency Conditions Clear

260

Time	Star Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00	25 W	33 03	0	93	202-2-2	2-2	PK - VBF	fin
01	42 W	27 32	0-1	98	F6	2-2-2	"8 - - -	fin
					1/6	net 5		OK.
							3rd + 5	
					May 21	MC SC MTLW CTW S SW ME		
						+12.3 -41.3 +5.2 +0.5 <sup>m</sup> +18.7 +4.1 +0.7		
						-0.1 -0.81 +4.7		

261

Date Friday - Sat. May 24/25 Observer Se Julian Day  
Ok

Plate No.	Object	R.A.		Declination		Inst.	Emulsion	Slit	Temp.	Starting Time		Ending Time	
		1900		1900						E.S.T.	Sid Time	E.S.T.	
58-9	HD 120315	13	43.6	+49	49	5200	3500	10	5/2	13	45	9	53
59-9	HD 106581 <sup>9?</sup>	12	10.5	+57	35	"	"	"	5/5	14	13	10	21
60-9	HD 130109	14	41.2	+02	19	"	"	"	5/6	14	36		
61-9	HD 139006	15	30.5	+27	03	"	"	"	5/3	14	58		
62-9	HD 136064	15	13.5	+67	44	"	"	"	6/5	15	32		
63-9	HD 120315	13	43.6	+49	49	"	"	"	5/2	15	55		
64-9	HD 142373	15	49.2	+42	44	"	"	"	6/4	16	22		
65-9	HD 143761	15	57.2	+33	36	"	"	"	6/5	16	54		
66-9	HD 120315	13	43.6	+49	49	"	"	"	5/2	17	16		
67-9	HD 147394	16	16.7	+46	33	"	"	"	5/6	17	38		
68-9	HD 156164	17	10.9	+24	57	"	"	"	5/5	18	01		
69-9	HD 120315	13	43.6	+49	49	"	"	"	5/2	18	25		
70-9	HD 157214	17	16.9	+32	36	"	"	"	6/5	18	51		
71-9	HD 139006	15	30.5	+27	03	"	"	"	5/3	19	16		

Air Temp. 60°F

Transparency Conditions clear

262

Wind.....

Saturday May 25 S-BK-Mai Totally cloudy, showers

Bar Temp.....

7:00 - 9:15 - 10:15 Telescope down, star in moon light  
10:15 - 11:15 Moon high + Telescope down, star in moon light

Ending Time E.S.T.	Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9:30	00	+49 31	00	1.66	B3V	20"	4 A/sec	
10:00	00W	+57 16	0	3.35	A3V	"	" (S UMa)	
10:07	E	+02 04	0	3.74	A0V	"	"	
10:35	E	+27 54	0	2.21	A0V	"	"	
10:18	W	+67 30	0	5.64	F8V	"	" (Se HV)	
10:09	N	+49 31	0	1.66	B3V	"	"	
10:31	W	+52 34	0	5.16	F9V	"	" (Se HV)	
10:55	N	+33 26	0	6.02	G2V	"	" (Se HV)	
11:30	W	+49 31	0	1.66	B3V	"	"	counter cable snapped on Angstrom meter
11:19	W	+46 24	0	3.74	B3V	"	"	
10:52	W	+24 54	0	3.22	A3V	"	"	
11:31	N	+49 31	0	1.66	B3V	"	"	
11:32	W	+32 31	0	6.01	G2V	"	" (Se HV)	
12:43	W	+27 53	0	2.21	A0V	"	"	



Temp. 60°

Transparency Conditions Clear

264

for 1 hr!

Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
29W	+49 37	0	1.66	B3V	20"	4 A/sec	
12W	+24 54	0	3.22	A3IV	"	"	
	+40 06		2.22	F8Ib	"	"	CLOUDS!
						May 27    SC    S    SW    NE -48.1    +20.2    +5.5    +2.9	



265

Date Tues-Wed May 28/29 Observer MR - Se<sup>2</sup> Julian Day Ob

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time L.E.S.T.	Ending Time E.S.T.
75-11	HD 87901	10 03.0	+12 27	5200	3500	10	5/2	12 56	
76-11	$\rho$ Leo	10 27.5	+09 45	"	"	"	5/7	13 50	
77-11	HD 103287	11 48.6	+54 15	"	"	"	5/5	14 21	
78-11	HD 120315	13 43.6	+49 49	"	"	"	5/2	14 52	
79-11	HD 147374	16 16.7	+46 33	"	"	"	5/6	15 54	
80-11 -	HD 120315	13 43.6	+49 49	"	"	"	5/2	17 11	
81-11	HD 141527	15 44.5	+28 28	"	"	"	6/6	17 33	
82-11 -	HD 156164	17 10.9	+24 57	"	"	"	5/5	18 03	
83-11 -	HD 172167	18 33.6	+38 41	"	"	"	4/3	18 24	
84-11 -	HD 120315	13 43.6	+49 49	"	"	"	5/2	18 48	
85-11	$\gamma$ Cyg	20 20.8 (1900)	+40 03 (1900)	"	"	"	5/3	19 15	

Die Temp. 55°F

48° 10' clock

Transparency Conditions

266

MS

Die Temp.

(λ-corer) is now 12 smaller than before  
Please get new flash light battery for small flash

Time E.S.T.	Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:50 W	+12	11	1	1.21	B7Y	20"	4A/sec; also 1A/sec Hβ; Hγ-Hδ	
3:19 W	+9	28	1	3.71	B1 <sup>II</sup>	"	1A/sec	counter cable snapped again!
3:21 W	+53	57	1	2.44	A0 <sup>V</sup>	"	1A/sec	
6:05 W	+49	31	1	1.66	B3 <sup>V</sup>	"	4A/sec; also 1A/sec Hβ; Hγ-Hδ	
6:25 E	+46	23	1	3.74	B5 <sup>IV</sup>	"	4A/sec, also 1A/sec	need new chart paper
8:26 W	+49	31	1	1.66	B3 <sup>V</sup>	"	4A/sec	
1:45 W	+28	19	1	5.8	F8Ia	"	"	
6:50 W	+24	53	1	3.22	A3 <sup>IV</sup>	"	"	
6:11 E	+38	44	1	0.03	A0 <sup>V</sup>	"	"	
5:02 W	+49	32	1	1.66	B3 <sup>V</sup>	"	"	
1:05 E	+40	06	1	2.22	F8Ib	"	" and at 5/4	

Some stars SE.  
Anist

left at 13500

	Sc	S	SW	ME
May 29	+9.0	+20.0	+5.2	+1.1
31	nc	sc	MTW	STW S
	+18.4	+6.9	-9.1	-0.7
			SW	ME
			+5.1	-2.9



Air Temp. 55°F

Hum. 12.91

Air Temp. ....

Set June 1 - MR, Mai, Dp  
 60 vision; cldy; 4RASC.  
 Slurred telescope & lectured

Transparency Conditions .....

Cloudy .

When clear I could not find images of primary  
 species. Probably, slit not correct.

Ending Time  
E.S.T.Air Angle  
End

Declination

Seeing

Ptg.  
Mag.

Sp.

Comp.

REMARKS

Quality

Closed at 3:20 E.S.T

June 3 SC S SW NE

+3.1 +19.9 +3.4 -3.4

June 7 SC MTW STW S SW NE

-1.3 -9.0 +0.7 +20.1 -1.1 +1.2

269

Date Tues Wed June 4-5/57 Observer O. Ru Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Angle Incl
86-12	HD 420315	13 43.6	+49 49	5060	3500	10	5/2	13 30		
87-12	HD 106591	12 10.5	+57 35	"	"	"	5/6	13 55.5		
88-12	HD 130109	14 41.2	+02 19	"	"	"	5/6	14 21		
<del>23821</del>	HD 115539	13 12.7	+14 18	I 12k	EI03-00	.008	21.0	22 15	23 31	SW+
<del>23822</del>	HD 133965	15 02.2	+29 35	"	"	.016	21.1	23 40	1 44	SW+
89-12	HD 193237	20 14.1	+37 43				5/6	18 49		
90-12	HD 193793	20 17.1	+43 32							

June 3 - 6:15 - 10:00

Time Temp. +70° Fm 3:41 - 4:00 - 4:15 - 4:30 - 4:45 - 5:00 - 5:15 - 5:30 - 5:45 - 6:00

Transparency Conditions Clear - Some clouds in SW

270

Time Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. Aperture	REMARKS	Quality								
	49 31		1.66	B3V	31"	4A/μsec - 2" μmin - 90S W. 100									
42 W	+57 16		3.35	A3V	"	"									
23 E	+2 04		3.74	A0V		Large current leakage in all base Replaced Selenium Bulb									
31 W	+14 01	0	8.17	G8III	2 <sup>s</sup> , 2 <sup>s</sup> , 2 <sup>s</sup>	Σ 7	Nothing								
4 W	+29 22	0	9.42	F6	1 <sup>s</sup> , 1 <sup>s</sup> , 1 <sup>s</sup>	" 3	Nothing								
<p>P Cygni</p> <p>Cloudy.</p> <p>6v lamps do not work</p> <p>B.A. clamp still sticks as it has for weeks and months</p>															
<p>June 5</p> <table style="display: inline-table; vertical-align: middle;"> <tr> <td>5c</td> <td>s</td> <td>5W</td> <td>MB</td> </tr> <tr> <td>+1.8</td> <td>+20.0</td> <td>+1.1</td> <td>+1.6</td> </tr> </table>								5c	s	5W	MB	+1.8	+20.0	+1.1	+1.6
5c	s	5W	MB												
+1.8	+20.0	+1.1	+1.6												

271

Date Fri-Sat June 7-8 Observer Se/ok Julian Day           

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion Range	Slit	Temp.	Starting Time E.S.T. Std Time	Ending Time E.S.T.	P.
91-13	HD 120315	13 43.6	+49 49	5200	3500	10"	5/2	14:27		
92-13	HD 139006	15 30.5	+27 03	"	"	"	5/3	14:49		
93-13	HD 141527	15 44.5	+28 28	"	"	"	6/6	15 20		
94-13	HD 139006	15 30.5	+27 03	"	"	"	5/3	16 10		
95-13	HD 147394	16 16.7	+46 33	"	"	"	5/6	17 04		
96-13	HD 120215	13 43.6	+49 49	"	"	"	5/2	17 28		
97-13	HD 172167	12 33.6	+38 41	"	"	"	4/3	17 52		
98-13	HD 139006	15 30.5	+27 03	"	"	"	5/3	18 13		
99-13	HD 161262	17 42.9	+02 45	"	"	"	5/6	18 40		
100-13	$\gamma$ Cyg	<sup>962</sup> 20 20.8	<sup>1912</sup> +40 08	"	"	"	5/4	19 01		
101-13	HD 139006	15 30.5	+27 03	"	"	"	5/3	19 23		
102-13	HD 187642	19 45.9	+08 36	"	"	"	4/5	19 45		
103-13	HD 197345	20 38.0	+44 55	"	"	"	5/2	20 06		

Home Temp. +54°F

ocus 12.91

Home Temp. +8°F

Transparency Conditions. Small cirro-stratus clouds here + there throughout the early part of the night.

272

Hour Mins S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0	41 W	+49 31	00	1.66	B3V	20"	4A/sec	
0	44 E	+26 52	00	2.21	A0V	"	"	
0	27 E	+28 17	00	5.8V	F8Iap	"	" Set H taken twice	telescope does not seem firmly clamped in R.A. experienced difficulty keeping stars in field
0	36 W	+26 52	00	2.21	A0V	"	"	
0	45 W	+46 25	00	3.74	B5IV	"	" CLOUD for 40 mins. Star continually drifting in R.A.	
3	42 M	+49 31	00	1.66	B3V	"	"	
0	43 E	+38 44	0	2.03	A0V	"	"	
2	39 W	+26 52	0	2.21	A0V	"	"	
0	55 W	+2 49	0	3.76	A0V	"	"	
1	20 E	+40 07	0	2.22	F8Ib	"	" Set H	
3	51 W	+26 52	0	2.21	A0V	"	"	
0	03 E	+03 46	0	0.98	A7IV	"	"	
0	34 E	+45 07	0	1.35	A2I	"	"	



273

Date Sat Sun June 8-9, 1957. Observer O. Ru., Mai Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst. <i>Range</i>	Emulsion	Slit	Temp.	<i>Conto</i> Starting Time E.S.T.	<i>Conto</i> Ending Time E.S.T.
104-14	HD 139008	15 30.5	+27 03	5100	-3500	10	5/4		15 <sup>h</sup> 49.25 <sup>m</sup>
105-14	HD 147394	16 16.7	+46 38	"	"	"	5/7		16 <sup>h</sup> 10.5 <sup>m</sup>
106-14	HD 172167	18 33.6	+38 41	"	"	"	4/4		16 33
107-14	HD 139006	15 30.5	+27 03	"	"	"	5/4		16 57
108-14	HD 156164	17 10.9	+24 57	"	"	"	6/1		17 19.5
109-14	HD 161868	17 42.9	+02 45	"	"	"	6/2		17 42
110-14	HD 139006	15 30.5	+27 03	"	"	"	5/4		18 02.5
111-14	HD 172167	18 33.6	+38 41	"	"	"	4/4		18 22
112-14	HD 139006	15 30.5	+27 03	"	"	"	5/4		18 40.5
113-14	HD 188350	19 49.6	+00 01	"	"	"	6/5	2:12	19 03.5
114-14	HD 187929	19 49.4	+00 45	"	"	"	6/2	2:30	19 22
115-14	HD 188350	19 49.6	+00 01	"	"	"	6/6	2:49.5	19 41.5
116-14	HD 187929	19 49.4	+00 45	"	"	"	6/3	3:10	20 02

Dome Temp. +59° F

Transparency Conditions *Clear*

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Focus

250 visitors shown Jupiter

Dome Temp. +52° F

Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19:50	16 W	+26 57	1/4	2.21	A0V	30"	1A/sec 2" per min	
19:55	08 E	+46 25		3.74	B5V	"	"	
20:03	03 E	+38 44		0.03	A0V	"	"	RA CLAMP NOT WORKING WELL.
20:07	24 W	+26 52		2.21	A0V	"	"	
20:15	06 W	+24 55		3.22	A3V	"	"	
20:22	04 E	+02 43		3.75	A0V	"	"	
20:28	50 W	+26 52		2.21	A0V	"	"	
20:32	13 E	+38 45		0.03	A0V	"	"	
20:40	08 W	+26 53		2.21	A0V	"	"	
20:50	49 E	+00 10		5.57	A0	"	"	
20:52	28 E	+00 57		Var	VAR	"	" $\eta$ Aql	
20:55	11 E	+00 11		5.57	A0	"	"	
21:02	11 W	+00 55		Var	VAR	"	" $\eta$ Aql	
New Chart is in Dome.								
Must be set in immediately.								



Time Temp. 64°F

Transparency Conditions Good, some cir

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cus

Time Temp.

Ending Time  
E.S.T.

Hour Angle  
End

Declination

Seeing

Ptg.  
Mag.

Sp.

Comp.

REMARKS

Quality

2.40

2 46 W

18 39

1

9.9

#7

2-4

alt 12.0 Pk - VBF +1

to work.

overcast by 22.20

2 PH +4 in refrigerator

Found bridge connected

MC SC MTC STW S SW ME

June 10 +19.2 -6.1 +15.6 +0.2 +19.6 -4.8 -0.9



Home Temp. 63°F

Transparency Conditions Hazy

278

Focus.....

Home Temp.....

Hour Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																								
0:59 W	49° 31	00	1.26	B3V	30"	4A/sec, and 1A/sec. for position																									
						<table border="0"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>MTW</td> <td>JTW</td> <td>S</td> <td>SW</td> <td>ME</td> </tr> <tr> <td>June 12</td> <td>+18.8</td> <td>-8.7</td> <td>-18.4</td> <td>-0.1</td> <td>+18.6</td> <td>-9.4</td> <td>-5.2</td> </tr> <tr> <td>14</td> <td>+19.6</td> <td>-11.2</td> <td>-0.1</td> <td>+0.1</td> <td>+18.3</td> <td>-12.0</td> <td>-1.6</td> </tr> </table>		MC	SC	MTW	JTW	S	SW	ME	June 12	+18.8	-8.7	-18.4	-0.1	+18.6	-9.4	-5.2	14	+19.6	-11.2	-0.1	+0.1	+18.3	-12.0	-1.6	
	MC	SC	MTW	JTW	S	SW	ME																								
June 12	+18.8	-8.7	-18.4	-0.1	+18.6	-9.4	-5.2																								
14	+19.6	-11.2	-0.1	+0.1	+18.3	-12.0	-1.6																								
						Fin Set 4/15 Started to open but																									
						closed at 10:00 Hg																									

279

Date Sat-Sun June 15/16 Observer Se<sup>2</sup> - Hg Julian Day 2436.005

© 84 28 24.3 3436.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. <i>Sub. Name</i>	Ending Time E.S.T.
118-16	HD 139006	15 30.5	+27 03	5200	3500	10"	5/3	17:07	
119-16	HD 141527	15 44.5	+28 28	"	"	"	6/6	17:30	
23522	HD 165111	18 00.7	+9 39	I-12	S-1025	2/5	25.2	00 39	01 55
23523	ABD 22323	17 30.8	+11 14	"	"	"	25.2	02 00	03 55
	Trans. Part	202					25.2		

Time Temp. 73°

Transparency Conditions Here, fine cumulus

280

Humidity.....

Time Temp.....

z Visits, show Jupiter.

Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
35W	+26 52	0	2.21	A0V	20"	4A/Sec. 500 500 2 8-1000	
44W	+28 21	"	5.8	F8B		" " " " " " " " " "	
11 W	+04 39	1	4.42	G2J	2-2-2	S <sub>2</sub> 2 vel Check Field Set 2	
22 W	+16 22	0.5	3.3	F <sub>0</sub>	2-2-2	BK 4 BF Thin cloud Set 2	
					8/5	more Set 5	
						4 PH + 0	
						Sc    mW    oW    S    W    ME	
						June 17 -14.6    -50.2    -0.7    +17.3    -17.9    +12.2	





Time Temp. 79°F

Transparency Conditions Hazy

282

Focus

Time Temp. 75°F

Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 29	+33 29	0	8.3	G0	2-2-2	842 BK-VEF Tried to get a spectrophotometer tracing of $\gamma$ Her at 1Å/sec, but gave up upon the discovery that the Brown was adjusted to a very slow speed. ok	
W 24	+16 24	"	8.8	F6	2-2-2	216 8/6	
						Exposure 1/100 at 25 95	
						3PH + 0.11	

283

Date Wed - Thurs, June 19-20 Observer Se<sup>2</sup> Julian Day           

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. <i>See time</i>	Ending Time E.S.T.
120-17	<sup>HD</sup> 139006	15 30.5	+27 03	5200	3500	10"	5/3	15 59	
121-17	HD 141527	15 44.5	+28 27	"	"	"	6/6	16 29	
122-17	"	"	"	"	"	"	"	16 49	
123-17	HD 139006	15 30.5	+27 03	"	"	"	5/4	17 11	
124-17	HD 156167	17 10.9	+24 57	"	"	"	5/5	17 33	
125-17	HD 154214	17 16.9	+32 36	"	"	"	6/5	17 54	
126-17	"	"	"	"	"	"	6/6	18 14	
127-17	HD 139006	15 30.5	+27 03	"	"	"	5/4	18 38	
128-17	$\gamma$ Cyg	20 20.8 <small>(1900)</small>	+40 05 <small>(1900)</small>	"	"	"	5/4	19 02	
129-17	HD 123350	19 49.4	+10 01	"	"	"	6/6	19 37	
130-17	HD 17929	19 49.4	+00 45	"	"	"	6/4	20 01	
131-17	1 Del	20 28.5	+10 34	"	"	"	6/6	20 26	
132-17	HD 196867	20 35.0	+15 34	"	"	"	5/6	20 46	

Air Temp. 66

Transparency Conditions clear

284

Humidity

Water Temp.

Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26	W	+26 51.	00	2.21	A0V	20"		
42	W	+28 16	"	5.8	F8Ib	"		
03	W	"	"	"	"	"	June 20    MC    SC    MW    STW    S    SW    MG +17.1   -17.5   +0.3   +0.3   +10.7   -23.2   -6.5	
40	W	+26 52	"	2.21	A0V	"		
01	W	+24 53	"	3.22	A3IV	"		
37	W	+32 31	"	6.01	G2V	"		
55	W	"	"	"	"	"		
11	W	+26 52	"	2.21	A0V	"		
17	E	+40 07	"	2.22	F8Ib	"		
14	E	+00 09	"	3.57	A0	"		
11	W	+00 53	"	Var	Var	"		
01	E	+10 46	"	5.9	A0e	"		
09	W	+15 46	"	3.71	B9.5	"		





287

Date June 25 1957 Observer S. R. H. L. Julian Day 6015 June 25 G.M.T.

Plate No.	Object	R.A. 1900 1957	Declination 1900 1957	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23016	NGC 6223	16 42.1	+36 33	W.C.C.	E 103.0	.601	2 <sup>m</sup>	21 25 40	21 27 40
23027	6225	16 45.7	+47 30			.606	2 <sup>m</sup>	21 33 20	21 35 20
23028	6227	16 45.7	+47 35			.612	12 <sup>m</sup>	21 36 40	21 47 40
23037	5634	14 27.3	-05 46			.625	14 <sup>m</sup>	21 59 33	22 03 30
23038	5617	15 19.0	-20 50			.634	12 <sup>m</sup>	22 14 00	22 20 00
23031	6218	16 44.9	-01 53			.651	4 <sup>m</sup>	22 36 40	22 40 40
23032	6224	16 44.0	-04 23			.657	4 <sup>m</sup>	22 41 10	22 45 10
23033	6346	17 25.4	-03 02			.665	14 <sup>m</sup>	22 52 10	23 06 10
23034	6426	17 42.9	+23 12			.691	10 <sup>m</sup>	23 17 10	23 27 00
23035	6356	17 31.0	-17 46			.713	14 <sup>m</sup>	23 55 00	00 09 00
23036	6093	16 14.4	-22 07			.720	5 <sup>m</sup>	00 13 30	00 21 30
23037	6712	18 50.2	-08 47			.729	10 <sup>m</sup>	00 26 30	00 36 30
23038	6038	17 51.5	+15 37			.738	4 <sup>m</sup>	00 42 30	01 41 30
23039	6342	17 13.0	-19 32			.758	24 <sup>m</sup>	00 51 30	01 21 30
23040	6035	18 51.0	-02 13			.774	16 <sup>m</sup>	01 21 30	01 42 30
23041	6712	18 50.6	-08 47			.786	12 <sup>m</sup>	01 46 30	01 58 30

Time Temp.....

Correction to S: -4

Transparency Conditions .....

288

us.....

Time Temp.....

Ending Time EST	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							Found on d. Scrp.	
	12 E							
	59 E						Seeing poor	
	42 W							
	10 W						Thick cloud	
	06 E						Found on B. Scrp.	
	07 E							
	21 E							
	17 E						Thick cloud; more to the south	
	46 W						" not visible	
	05 W							
	16 E							
	07 E							
	01 W						Found on G Scrp.	
	10 W							
	07 W							





Home Temp. ....

Transparency Conditions .....

Focus .....

Home Temp. ....

Starting Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality														
0645	14 W																					
	18 E						2:20 completely clouded out. Very poor night. Between haze, aurora & civilization. Light not many stars left															
							<p>June 28</p> <table border="1"> <tr> <td>nc</td> <td>sc</td> <td>mtw</td> <td>stw</td> <td>s</td> <td>sw</td> <td>me</td> </tr> <tr> <td>+12.3</td> <td>-22.8</td> <td>-3.8</td> <td>-0.1</td> <td>+9.7</td> <td>-40.8</td> <td>-2.6</td> </tr> </table>	nc	sc	mtw	stw	s	sw	me	+12.3	-22.8	-3.8	-0.1	+9.7	-40.8	-2.6	
nc	sc	mtw	stw	s	sw	me																
+12.3	-22.8	-3.8	-0.1	+9.7	-40.8	-2.6																
							<p>Barrel again re-aluminized</p>															

291

Date Sat June 29-30/57 Observer H. M. - L. Julian Day 2436019

☉ 97 50 00.4 3433.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23844	45 Boo	15 02.9 1950 05.1	+25 16 1950 25 04	I-25	E103a0	016		<sup>23</sup> 1/ 32 19	33 14
								35 05	36 35
								37 17	39 17
								40 04	43 04
							19.0	43 46	47 46
23845	214946	22 36.7	44 29	I-25	E103a0	008	19.2	00 15	00 59
23846	V566 Oph	17 52.4	45 00	"	"	016	19.2	01 14	02 04
23847	219113	23 08.3	+02 08	I-25	"	016	19.2	02 25	03 15
	219113 SZ Pup?	23 08.3	+02 08	"	"	016	19.0	02 35	03 53

Home Temp.....  
 Focus...15.5.5.....  
 Home Temp.....

Transparency Conditions **GOOD**

292

about 60 Vintors N, L showed 5 Her  
 with 70 RASC showed R, 4.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0	5.03	F5V		Set 1 - Std. room (Hd)	
						Set 2	
						Set 4	
						Set 6	
07 W	25 04				12	Set 9	fine
08 27E	44 46	0	7.26	A5	4-4-4	Set 5 N Binary	fine
09 22W	44 58	0	7.8	F5	2-2-2	" 5 Ed. Binary Wrong Star	weak
	02 28	0	8.7	G5	4-	" 2 Ed. Spectro Binary	fine
04E	02 28	0	8.7	G-5	2-2-2	" 8 " "	l. weak

same  
no.

293

Date Mon.-Tues July Observer O Julian Day 2436021  
1-2 Ok  $\odot$  99 44 26.5 <sup>34821.6</sup>

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. LST	Ending Time E.S.T.
133-18	120315	13 43.6	+49 49	5200	3500	10"	5/1	15 <sup>h</sup> 26 <sup>m</sup>	
134-18	139006	15 30.5	+27 03	"	"	"	5/3	15 47	
135-18	150680	16 37.5	+31 47	"	"	"	5/5	16 08	
136-18	120315	13 43.6	+49 49	"	"	"	5/2	16 29	
137-18	139006	15 30.5	+27 03	"	"	"	5/3	16 49	
138-18	172167	18 33.6	+38 41	"	"	"	4/3	17 17	
23848	V5660ph	17 51.9	+5 00	F-25	E103a0	.016	+180	23 54	00 54
139-18	172167	18 33.6	+38 41	5200	3500	10"	4/3	19 46	
140-18	m Aql	19 47.4	+00 45	"	"	"	6/2	20 06	
141-18	188350	19 49.6	+00 01	"	"	"	6/5	20 31	
142-18	n Aql	19 47.4	+00 45	"	"	"	6/3	20 50	
143-18	δ Cephei	22 25.4	+57 54	"	"	"	5/6	21 25	
144-18	211336	22 11.4	+56 33	"	"	"	5/7	21 46	

Room Temp. 62°F

Focus 15.55

Room Temp. 56°F

Transparency Conditions Clear

294

Time EST.	Sur Angle Elev	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	39 W	+49 31	0	1.66	B3 V	30"	4A/sec 2" per min Volt 910v	
	13 W	+26 51	"	2.21	A0 V	"	"	
	33 E	+31 42	"	3.46	G0 V	"	" O-LS	
	43 W	+49 31	"	1.66	B3 V	"	" 2" / min	
	15 W	+26 51	"	2.21	A0 V	"	"	
	19 E	+38 44	"	0.03	A0 V	"	"	
54	21 W	+5 00	0	78.81	F5	2-2-2	Set 5	
	10 W	+38 44	0	0.03	A0 V	30"	4A/sec	
	15 W	+00 55	"	var	var	"	2 in/min   Focus not working	
	38 W	+00 09	"	5.57	A0	"	"	
	00 W	+00 55	"	var	var	"	"	
	04 E	+58 11	"	var	var	"	"	
	28 E	+56 49	"	4.51	F0	"	"	
							July 3	
							mc SC MTW STW S SW ME	
							-26.0 +0.1 +0.7 +9.2 -45.4 +3.1	
							+9.8	

Trolleys short-circuited while moving dome. Wired trolley out of contact with runner after conferring with Jerry.

295 ✓

Date July 5-6

Observer MR + RJ

Julian Day 2436025

☉ 103 33 14.3 3431.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
145-19	$\gamma$ UMa	<sup>h</sup> 13 <sup>m</sup> 46.0	49° 31'			10"	5/3	15 49	
146-19	$\gamma$ Her	<sup>h</sup> 16 <sup>m</sup> 18.6	46° 24'				5/7	16 25	
147-19	$\epsilon$ Her	17 38.3	46 02				5/6	17 09	
238489	V 566 Oph	17 51.9	+5 00	I-25	EI030-0.016		19.7	23 10	00 44
148-19	$\alpha$ Lyrae	18 35.6	+38 45			10"	4/4	19 49	
149-19	$\alpha$ Cyg	20 40.1	+45 08			"	5/2	20 27	
150-19	55 Cyg	20 47.5	+45 58				6/5	21 21	
151-19	ADS 15405 A	<sup>1960</sup> 21 50.8	+55 37				6/5	21 45	

Time Temp. 64° F

Transparency Conditions Clear

296

Humidity

Time Temp.

Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
h	02 SW	49° 32'		1.67	B3V	30"	1/A sec 2" per min Volt 915	H/A/H8-HC
h	06 W	46° 24'		3.73	B3V		"	"
h	30 E	46° 02'		3.68	B3V		"	"
h	27 W	5 00	0	<del>7.86</del> 8.1	F5	2 <sup>s</sup> 22 <sup>s</sup>	set 5 spec. Bin	fine
h	12 W	38 45		0.04	A0V	30	"	"
h	14 E	45 08		1.35	A2Ia	"	"	"
h	32 E	45 58		5.22	B3Ia	"	"	"
h	06 E	55 37		5.5	B6	"	5 typed by clds. 1 photo held	H8 only





Time Temp...  $46.7^{\circ}\text{F}$ 

Transparency Conditions

excellent

Focus... 15.62

Time Temp...  $46.4^{\circ}\text{F}$ 300 vis. low. in dome + (400+) who didn't wait  
showed  $\pi$  flow in 74"

Sur Angle End	Declination	Seeing	Ftg. Mag.	Sp.	Comp.	REMARKS	Quality
53W	$+5^{\circ} 00'$	1	7.8-8.1	F5	2-2-2	set 5 spec Bin	fine
44E	$+02^{\circ} 27'$	1	8.7	G5	2-2-2	set 5	focus test on top of star spectrum
					10/7	set 9	
						3 P.H. loaded.	



Dme Temp. 70°

Pous 15.65

Dme Temp. ....

Transparency Conditions Good; some cirri

300

ing Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
13:1	23W	13 40	0	7.4	Gg	4-4-4	set 5 OLS	break
13:1	08E	4 58	0	7.8-8.1	F5	2-2-2	5 Hd Ell. Bic. through cloud 1 PM. clouded out.	fine
							Normal stars after 1 PM hr.	
							MC    SC    MTW    STW    S    SW    ME July 8    +7.2    -29.1    -19.6    -0.5 <sup>m</sup> +8.1    +0.7    -0.8	

301

Date Tues-Wed July 9/10 Observer MR  
'57 OK

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Middle Starting Time E.S.T. sid. time	Ending Time E.S.T.
152-20	147394 (i Her)	16 16.7	+46 33			10"	5/7-5/6	16 <sup>h</sup> 09 <sup>m</sup>	
153-20	i Her	17 <sup>1960</sup> 38.3	+46 <sup>1960</sup> 02			"	5/6-5/5	16 <sup>h</sup> 44 <sup>m</sup>	
154-20	67 Oph	17 <sup>1960</sup> 58.6	+02 <sup>1960</sup> 56			"	5/7-5/6	17 <sup>h</sup> 21 <sup>m</sup>	
155-20	ξ Dra.	17 <sup>1960</sup> 08.7	+65 <sup>1960</sup> 46			"	5/5	17 <sup>h</sup> 44 <sup>m</sup>	
156-20	α Lyr	18 33.6	+38 41			"	4/9-4/3	18 <sup>h</sup> 34	
157-20	ADS 12093A	19 <sup>1960</sup> 07.3	+34 41			"	6/7	19 <sup>h</sup> 00	

Dome Temp. 63°F

Transparency Conditions Clear

302

Humidity.....

Dome Temp.....

Star Angle East	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
middle							
0 E	+46 24	0	3.73	B5 II	30"	1A/sec 2"/min volt 915	H <sub>B</sub> , H <sub>G</sub> , H <sub>S</sub>
55 E	+46 01	"	3.68	B3 V	"	" "	H <sub>B</sub> , H <sub>G</sub> , H <sub>S</sub>
38 E	+02 58	"	4.00(?)	B5 II	"	" "	"
44 W	+65 46	"	3.08	B6 III	"	" "	H <sub>B</sub> taken 2x
32 E	+38 44	"	0.03	A0 V	"	" "	H <sub>B</sub> , H <sub>G</sub> , H <sub>S</sub>
308 E	+34 41	"	6.6(?)	B3 V	"	" " clouds	H <sub>B</sub>

July 10

mc	sc	MTW	STW	3	ME	SW
+9.7	-20.5	-34.8	-0.7	17.2	+0.2	-10.0



Air Temp.....

Wind 15.69.....

Bar Temp.....

Transparency Conditions.....

Solid cloud until 3:30, cleared off until

Time E.S.T.	Angle Elev	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	9W	A4 49	0	7.26	A5	4-4-4	Set 2	
						15/10	Set 8	
							Had difficulty with the Wheatstone Printer and did not use it.	
							<u>O</u> PH loaded.	



305

21

Date Thurs-Fri July 11-12 Observer Hd-Main, Mag Julian Day 2436.031

☉ 109 16 22.5 3431.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23840 <sup>55</sup>	45 Boo	15 02.9	+25 16	I-25	E103a0	016		21 16 07	21 18 07
								21 18 44	21 22 44
								21 23 15	21 29 15
								21 30 02	21 40 02
							23.5	21 40 45	21 42 45
23861 <sup>56</sup>	HD 145958	16 08.6	13 48	U	E103a000B	008	23.5	22 09	23 39
23862 <sup>57</sup>	HD 168009	18 12.7	45 10	"	"	008	23.3	23 50	00 14
23863 <sup>58</sup>	MWC 352 HD 192445	20 09.8	36 02	"	"	"	23.3	00 20	01 50
23864 <sup>59</sup>	MWC 353 HD 173009	20 12.9	32 09	"	"	"	23.4	01 37	02 07
23865 <sup>60</sup>	MWC 354 HD 201531	21 07.4	17 20	"	"	"	23.4	02 12	03 44
	Faint Trail	57.3					23.2		

Date Temp. 66F

hrs. 15.62

Date Temp. 59

Transparency Conditions.....

306

Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
		1	5.03			set 0 Std. Luron (Hd)	clouds much 1/2 hr	fine
						set 2		
						set 4		
						" 6		
138	25 02	1			6	" 9 2 stars are much resolved		
229	13 38	1	7.4	G9	4-4-4	" 2 [OLS] Tried to guide on N(?) star like this (chain of impressions same as)		fine
11N	45 13	1	6.7	G0	4-4-4	" 3		fine
1E	36 "	0-1	7.1	B2ne	4-4-4	" 2		fine
4W	32 15	1-0	7.0	B.2	4-4-4	" 5	See on 52 the same at min.	fine
1W	17 33	0	7.5	F90	4-4-4	" 2	See H. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.	fine
					15/10	" 3		OK.

CLOSED SHUTTERS. (PH MAND)

4 PH + 8

July 12	me	sc	ntw	stw	s	sw	ne
	+5.9	-31.3	-46.9	-0.9	+6.9	-13.0	+1.2
15	+4.1	-31.8	-41	+0.1	+5.6	-19.7	+3.8

307

## TEST OF 1957 EXPOSURE METER

Hd.

Date July 15-16 Mon-Tues/5 Observer O. Ru Julian Day 2436.035

© 113 05 11.4 3423.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23861	HD143761	15 57.2	+33 36	L-25	E103a-0	008		21 38	21 58
	"	"	"	"			+23.2	21 59	22 13
	"	"	"	"				22 13	22 23
	"	"	"	"	"	"		22 23	22 29
23862	$\gamma$ Set	18 51.7	-5 58	"	"	"		22 38	22 58
	"	"	"	"	"	"		22 58	23 10
23863	H.D. 191026	20 02.6	+35 42	"	"	"	23.2	23 23	23 47
	"	"	"	"	"	"		23 47	23 59
158-21	HD187350	19 49.6	00 01	5300	3500	10	6/5	19 35	00 17
159-21	HD187929	19 47.4	00 45	"	"	"	6/2	19 58	00 40
160-21	"	"	"	"	"	"	6/3	20 17	00 59
161-21	HD 188350	19 49.6	100 01	"	"	"	6/5	20 38	01 20
162-21	HD 211336	22 11.3	+56 33	"	"	"	6/3	21 05	01 47
163-21	HD 213306	22 25.5	+57 54	"	"	"	6/3 <sup>nd</sup>	21 27	02 04
164-21	"	"	"	"	"	"	6/4	{ 21 54 22 06	{ 02 35 02 47
165-21	HD 211336	22 11.3	+56 33	"	"	"	6/3	22 29	03 11

me Temp.  $+62^{\circ}$  Sat July 13/14 MK-Ru-Mai  
 us. 15.62 300 writers. Showed  $\pi$  Bee in 74" clouds this evening  
 me Temp. Set in S71se at 1:30 but did again

Sun Mon July 13-14  
 Drifting about in  
 early evening, No  
 at 22.15. Hg

308

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
15 W	+33 26	0	6.02	G2V		sat 0 20" 5/5 <u>910N?</u> Se-HV	very
30 W			"	"		2 14" "	very
					12 <sup>s</sup>	5 10" "	fine
						8 6" "	good
40 E	-5 54		5.8	K2	12 <sup>s</sup>	" 2 " 0-L5.	fine
28 E			"			8 " "	good
01 E	+35 51		6.18	K0IV	6 <sup>s</sup> 6 <sup>s</sup>	" 2 5/5 0-H.V.	fine
49 E	"		"	"		" 8 " "	good
19 E	+9 08	0	5.57	A0	30"	4A/see.	
06 W	+0 54		Var	Var	"	" "	
27 W	"		"	"	"	" "	
45 W	+0 08	good	5.57	A0	"	" "	
09 E	+56 50	"	4.51	F0	"	" "	
01 E	+58 10	"	Var	Var	"	" "	
	"	"	"	"	"	" "	
14 W	56 49	"	4.51	F0	"	" "	





311

Date July 16-17 Tues. Wed. Observer MR Julian Day  
ok

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	MIDDLE Starting Time E.S.T. sid time	Ending Time E.S.T.
167-22	$\eta$ UMa.	13 43.6	+49 49			10"	5/3-5/2	16 <sup>h</sup> 53 <sup>m</sup>	
168-22	$\tau$ Her	16 16.7	+46 33			"	5/7-5/6	17 <sup>h</sup> 31 <sup>m</sup>	
169-22	$\theta$ Cep	<sup>1960</sup> 21 37.1	<sup>1960</sup> +61 54			"	6/4	19 <sup>h</sup> 56 <sup>m</sup>	
170-22	HD 205022	<sup>1960</sup> 21 28.5	<sup>1960</sup> +66 56			"	6/7	20 <sup>h</sup> 14 <sup>m</sup>	
171-22	ADS 15032A	<sup>1960</sup> 21 28.2	<sup>1960</sup> +70 20			"	5/5	20 <sup>h</sup> 32 <sup>m</sup>	
172-22	ADS 15032B	"	"			"	6/7	20 <sup>h</sup> 42 <sup>m</sup>	

Time Temp. 67°F

Transparency Conditions Cirro-Stratus Clouds here + 312  
there

Humidity

Time Temp.

Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
06 W		+49 32	1	1.66	B3V	30"	1 Å/sec 2"/min volt 915 HB, Hγ, Hδ	
12 W		+46 24	1	3.74	B5 IV	"	" " " " " " Clouded out!	
13 W		+62 54	1	5.02	B2 Ib	"	" " " " " " Hγ Clouded out!	
15 E		+66 53	1	6.90	A2	"	" " " " " " Hγ	
157 E		+70 23	1	3.3	B1	"	" " " " " " Hγ	
147 E		+70 23	1	7.6	A2	"	" " " " " " " " Clouded out!	

July 17  
 me SC mTω STω S SW ME  
 +3.3 -32.2 +2.2 +0.75 +4.5 -24.0 -0.8



313

Date *Wat. Thoms. July 17-18/52* Observer *O. R. M.* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	<sup>Mid</sup> Starting Time E.S.T. <i>LST</i> <i>center of H.C. Zone</i>	<sup>Mid</sup> Ending Time E.S.T.
173-23	HD 125161	14 12.6	+51 50	113	4500-3980	10	6/4 6/3	16 15	
174-23	H.D 14 1003	15 41.6	+15 44	"	"	"	6/2 6/1	16 43	
175-23	HD 154494	17 00.7	+12 53	"	"	"	6/4 6/3	17 17	
176-23	H.D 164353	17 55.6	+2 56	"	"	"	6/4	17 50	
177-23	H.D 192163	20 08.5	+38 03	5000	-	"	6/7	18 36.5	
178-23	H.D 188350	19 49.6	+60 01	5200	3500	"	6/5	19 34	
179-23	"	"	"	"	"	"	"	20 04	
180-23	HD 187929	19 47.4	+00 45	"	"	"	6/4	20 23	
181-23	"	"	"	"	"	"	"	20 41	
182-23	HD 211336	22 11.3	+56 33	"	"	"	6/2	21 12	
183-23	HD 213306	22 25.5	+57 54	"	"	"	6/1	21 38	2 12
184-23	"	"	"	"	"	"	"	21 58	2 32

Time Temp. +75°F

Transparency Conditions .....

314

Humidity .....

Time Temp. ....

Timing Time  
E.S.T.

Dir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+51 34	0	4.9	A5	30"	1A/sec 2" diam 920v	
58W	+15 33		3.0	A2	"	"	
13W	+12 47	1	5.0	A3	"	"	
10E	+2 55	1	5.0	B5	"	"	
35E	+38 15		7.44	WR	"	4 Apr	
19E	+0 10	2-3"	5.57	H0	"	"	Clouds!
11W		"	"	"	"	"	
26W	+0 54	"	Var	Var	"	" 4 Agl.	
50W	"	"	"	"	"	" 2	
02E	+56 50	"	4.51	F0	"	"	(21:15 LST = 1:49 EST)
51E	+58 10	"	Var	Var	"	" 8 Cep	Clouds on NE
31E	"	"	"	"	"	"	Clouds coming fast.

315

Date Thurs July 18-19/57 Observer H. L. Man <sup>1957</sup> Julian Day 2436038  
 C 115 56 53.6 3435.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23864	$\beta$ Sco.	15 58.2	-19 32	I-25	E1035-0	008		20 50	20 52
	"	"	"	"	"	"		20 53	20 57
	"	"	"	"	"	"		20 59	21 06
{ 23865	HD 149892	16 32.6	31 09	"	"	008	27.4	21 50	22 26
{ 23866	HD 152792	16 50.4	43 00	"	"	"	27.3	22 37	23 07
23867	V 5660 Ph	17 51.9	+5 00	"	"	008		23 30	0 30
{ 23868	192 044	20 07.8	26 11	"	"	008	28.4	0 50	0 57
{ 23869	192 445	20 09.8	26 02	"	"	"	"	1 10	1 38
23870	S2 Pismium	23 08.2	02 08	"	"	"	"	2 00	4 10


Time Temp. -74°F

Humidity 15.70

Time Temp. 68°F

Transparency Conditions Fair - haze & clouds later

316

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						-	Set 0 X MK	
						-	" 5	quitting on fainter component
	32 <sup>m</sup>					-	" 9 chain of focusing came off. Replaced	fine
11	20	31 02	1-2	7.66	F8V	0-8-4	" 2 Se HV wave sep meter	good
11	44	42 54	1	7.46	G0IV	4-4-4	" 8 " " "	fine
12	05	4 59	1-3	7.8	F5	4-4-4	" 2 Set Pan - Hd noted that sep meter needs work when star seen on old	late
12	18	26 22	1	5.9	B3ne	4-4-4	" 2	fine
12	56	36 13	1	7.1	B3nc	4-4-4	" 8	fine
1	0 29	2 26	0	7.7	G5	4-4-4	" 2 chassy	good
						10/7	focus test	
							 Bulb indicating that heat is on the mirror not functioning -	not
							3PH + 0	

317

Date Fri-Sat July 19-20 Observer Se OK Julian Day 157

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. <i>mid</i>	Ending Time E.S.T.
185-24	2 Cr B	15 30.5	+27 03	5200	-3500	10"	5/3	16 <sup>h</sup> 08 <sup>m</sup>	
186-24	R Cor Bar	15 44.5	+28 08	"	"	"	4/5-6/7	16 <sup>h</sup> 39 <sup>m</sup>	
187-24	2 Cr B	15 30.5	+27 03	"	"	"	5/3	17 <sup>h</sup> 07 <sup>m</sup>	
188-24	R Cr B	15 44.5	+28 08	"	"	"	6/6	17 30	
189-24	R Cr B	15 44.5	+28 08	"	"	"	6/6	17 50	
190-24	2 Cr B	15 30.5	+27 03	"	"	"	5/3	18 15	
191-24	157214	17 16.9	+32 36	"	"	"	6/6	19 00	
192-24	157214	17 16.9	+32 36	"	"	"	6/6	19 22	
193-24	1 Del	20 25.5	+10 34	"	"	"	6/6	20 09	
194-24	"	"	"	"	"	"	"	20 29	
195-24	8 Cyg.	<sup>1960</sup> 20 20.8	<sup>1960</sup> +40 08	"	"	"	5/4	22 13	
196-24	2 Cyg	20 38.0	+44 55	"	"	"	5/2-5/1	22 36	
197-24	8 Cyg	<sup>1960</sup> 20 20.8	<sup>1960</sup> +40 08	"	"	"	5/4	22 57	
198-24	HD217050	22 52.7	+48:09	"	"	"	6/5	23 24	

Dime Temp. 81°F

Transparency Conditions hazy

318

Focus.....

Dime Temp. 72°F

Time EST.	Air Angle Azimuth	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	middle							
1:35 W	+26 52.5	1	2.21	AOV	30"	4 Å/sec.; 2"/min;	920v Counter Cable	Snapped!
1:51 W	+28 17	"	5.8	F8Ib	"	"	"	"
1:34 W	+26 52	"	2.21	AOV	"	"	"	"
1:42 W	+28 17	"	5.8	F8Ib	"	"	"	"
1:02.5 W	+28 17	"	5.8	F8Ib	"	"	"	"
1:42 W	+26 52	"	2.21	AOV	"	"	"	"
1:40 W	+32 32	0	6.01	G2V	"	"	"	Se HV. Clouds!
1:02 W	+32 32	"	6.01	G2V	"	"	"	"
1:20 E	+10 46	D	5.9	AOe	"	"	"	Se Shell "
1:00	"	00	"	"	"	"	"	Clouded out.
1:51 W	+40 07	0	2.22	F8Ib	"	"	"	taken 1/2 times
1:55 W	+45 08	1	1.35	A2Ia	"	"	"	"
1:35 W	+40 06	"	2.22	F8Ib	"	"	"	"
1:28 W	+48 28	"	5.2	B3ne	"	"	"	Se Shell taken 1 1/2 times

319

Date Sat - Sun July 20-21 Observer Se - Hg Julian Day 2436040  
 ☉ 117 51 25.3 3437.1


Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23871	HD 1799587	19 09.5	+49 39	I-25	10360	slit	131°	23 <sup>h</sup> 30	00 10
23872	HD 1799587	19 09.5	+49 39	"	"	"	+33.9	00 11	00 51
23873	HD 1799587	19 09.5	+49 39	"	"	"	+33.0	01 40	02 54
	Focus Test	CTR					30.9		

Dine Temp. 90° F  
 Seas 15-76  
 Dine Temp. 75

Transparency Conditions *Good*

320

Sat night 20/21 Se - Mg - Mei  
 300 vials shown to Boo. Rough 74"  
 included in satellite.

Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality														
10	36W	+49 46	1	7.2	G4V	4-4-4	set 2 : via binary, star doublet open 															
	17W	+49 46	1			4-4-4	Set 3 " <del>set</del> Filter (2)															
	20W	+02 28	1/2	8.7	Gs	4-4-4	Set 2 Thermistor going continuously, shut it off at end of 23872 : reset at 2:50 and 15/10 Set 5 within hour.															
							1 PH + 0															
							<table border="1"> <tr> <td>me</td> <td>SE</td> <td>MTW</td> <td>STW</td> <td>S</td> <td>SW</td> <td>ME</td> </tr> <tr> <td>July 22</td> <td>+2.6</td> <td>-34.8</td> <td>-6.2</td> <td>+0.3</td> <td>+3.5</td> <td>-45.4 +3.9.</td> </tr> </table>	me	SE	MTW	STW	S	SW	ME	July 22	+2.6	-34.8	-6.2	+0.3	+3.5	-45.4 +3.9.	
me	SE	MTW	STW	S	SW	ME																
July 22	+2.6	-34.8	-6.2	+0.3	+3.5	-45.4 +3.9.																



321

Corr. 0 -2

Date Mon-Tues July 22-23 1957 Observer S-L-Hg Julian Day 6042

Plate No.	Object	R.A. 1900 1955	Declination 1900 1955	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23874	NGC 6254	16 54.8	-04 03	Newt	E 10300	.611	4 <sup>m</sup>	21 38 15	21 42 15
23875	6712	18 50.6	-08 47			.695'	5 <sup>m</sup>	23 37 00	23 45 00
23876	6833	19 51.5	+18 39			.702	4 <sup>m</sup>	23 49 35	23 53 35
23877	6835	18 01.5	-00 18			.735'	24 <sup>m</sup>	00 27 50	00 51 50
23878	E766	19 08.3	+00 48			.760	30 <sup>m</sup>	00 55 40	01 25 45
23879	6717	19 52.4	-22 47			.777	16 <sup>m</sup>	01 31 55	01 47 40
23880	6835	19 51.5	+18 39			.791	4 <sup>m</sup>	01 58 45	02 02 45
23881	7127	21 31.2	-11 02			.796	30 <sup>S</sup>	02 07 17	02 11 47
23882	6835	20 03.8	-22 03			.805'	6 <sup>m</sup>	02 12 00	02 28 00
23883	6731	20 51.0	-12 43			.820	20 <sup>m</sup>	02 31 20	02 51 20
23884	6835	19 51.5	+18 39			.831	4 <sup>m</sup>	02 56 00	03 00 00
23885	7127	23 06.0	-15 53			.845'	2 <sup>m</sup>	03 17 15	03 29 15

Barometric Temp. 70

Barometric Press. ....

Room Temp. ....

Time E.S.T.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30	31 W						Focused on $\alpha$ Herc.	
31	32 W						Focused on $\alpha$ Aquil. Some aura	
32	4 E							
33	5 W						12:05 Clouded up again for the 7 <sup>th</sup> time	
34	6 W						This is extremely foggy plates are hard to see	
35	7 W						Set on 6544 before 23:17. clear	
36	8 W						Exposure stopped by clouds	
37	9 W						Focused on $\epsilon$ Lyrae focus OK.	
38	10 W							
39	11 W						Finally, started clear to the night	
40	12 W						with clouds only in south	
41	13 W							
42	14 W							
43	15 W							
44	16 W							
45	17 W							
46	18 W							
47	19 W							
48	20 W							
49	21 W							
50	22 W							
51	23 W							
52	24 W							
53	25 W							
54	26 W							
55	27 W							
56	28 W							
57	29 W							
58	30 W							

323

Date Tues. Wed. July 23-24 Observer S-Hz - Ru - Dg Julian Day 6043

Plate No.	Object	R.A. 1900 1955	Declination 1900 1955	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23886	NGC 6254	15 54.8	-04 03	Nest	F1050	'595'	3 <sup>m</sup>	21 15:10	21 18:10
23887	5897	15 14.9	-20 50			'602	10 <sup>m</sup>	21 23:07	21 33:07
23888	6356	17 21.0	-17 46			'613	8 <sup>m</sup>	21 40:25	21 48:25
23889	6093	16 14.4	-22 53			'620	6 <sup>m</sup>	21 50:45	21 56:45
23890	IC 1276	18 08.0	-07 14			'637	30 <sup>m</sup>	22 03:43	22 33:43
23891	6712	18 50.6	-08 47			'656	8 <sup>m</sup>	22 41:20	22 49:30
23892	6838	19 51.5	+18 39			'662	4 <sup>m</sup>	22 52:50	22 56:50
23893	6287	17 02.3	-22 40			'671	10 <sup>m</sup>	23 02:10	23 12:10
23894	6401	17 35.8	-23 53			'688	13 <sup>m</sup>	23 24:35	23 37:35
	{ Kappa 61	17 01.2	+30 04			'704	13 <sup>m</sup>	23 47:50	00 00:35
23895	{ KA 61	17 01.2	+30 04			'715'	10 <sup>m</sup>	00 06:40	00 16:40
	{ NGC 6934	20 31.9	+07 15			'728	10 <sup>m</sup>	00 24:15	00 34:15
23896	6544	18 04.6	-25 01			'744	14 <sup>m</sup>	00 45:00	00 55:00
23897	6638	18 28.2	-25 32			'756	10 <sup>m</sup>	01 05:15	01 15:15
23898	IC 1276	18 08.0	-07 14			'773	24 <sup>m</sup>	01 22:30	01 46:30
23899	6712	18 50.6	-08 47			'787	8 <sup>m</sup>	01 52:00	01 58:00

Transparency Conditions .....

Temp. ....

.....

Temp. 63°F

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Focussed on $\alpha$ Ser	
30° W							
14° W							
10° W						Focussed on $\gamma$ Ser	
06° E							
58° E							
52° W							
43° W							
04° W							
08° E							
24° W							
36° W							
27° W							
56° W							



Transparency Conditions.....

ie Temp.....  
 S.....  
 ie Temp.....

nding Time E.S.T.	Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11:00	6W						Focused on $\theta$ Aquilae	
11:05	3W							
11:10	5W							
11:15	1W							
11:20	5.5						Range band on track + just begin - distance not a dark all night	
							me    sc    mtw    stw    s    sw    me July 24    +0.3    -38.1    -3.9    +0.3    +2.9    +9.2    +2.7	

327

Date Wed-Thurs July 24-25 Observer S. Hg. D. Julian Day 6044

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Angle Incl.
23905	NGC 6254	16 54.8	-04 03	Newton	E103a0	.606	3 <sup>m</sup>	21 32:20	21 35:20	135
23906	6356	17 21.0	-17 46			.616	8 <sup>m</sup>	21 44:30	21 52:30	135
23907	6093	16 14.4	-22 53			.624	6 <sup>m</sup>	21 56:40	22 02:40	135
23908	IC 1276	18 08.0	-07 14			.639	28 <sup>m</sup>	22 07:25	22 35:25	135
23909	NGC 6402	17 35.3	-03 13			.657	14 <sup>m</sup>	22 40:00	22 54:00	135
23910	6712	18 50.6	-08 47			.667	8 <sup>m</sup>	22 57:05	23 05:35	135
23911	6838	19 51.5	+18 39			.674	4 <sup>m</sup>	23 09:10	23 13:10	135
23912	6934	20 31.9	+07 15			.682	12 <sup>m</sup>	23 17:00	23 29:00	135
23913	6402	17 35.3	-03 13			.693	14 <sup>m</sup>	23 32:50	23 46:50	135
23914	6712	18 50.6	-08 47			.712	8 <sup>m</sup>	00 02:15	00 10:15	135
23915	6626	18 21.8	-24 54			.720	8 <sup>m</sup>	00 14:45	00 22:15	135
23916	6086	18 33.6	-23 58			.728	6 <sup>m</sup>	00 26:30	00 33:30	135
23917	6760	19 08.8	+00 58			.745	30 <sup>m</sup>	00 38:30	01 08:30	135
23918	6838	19 51.5	+18 39			.759	4 <sup>m</sup>	01 12:15	01 16:15	135
23919	6734	20 31.9	+07 15			.768	14 <sup>m</sup>	01 20:15	01 34:15	135
23920	7089	21 31.2	-01 02			.778	30 <sup>m</sup>	01 40:50	01 40:20	135

Air Temp. 70°F

Transparency Conditions .....

328

Humidity .....

Air Temp. ....

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
35.0	33W						Focused on $\alpha$ <i>Sci. Dr. Macrae</i>	
1.0	23W						<i>fixed crosshairs plates</i>	
2.0	40W						<i>Smoking apparatus</i>	
3.0	19W							
4.0	11W						Focused on $\beta$ <i>Ophiuchus</i> excellent	
5.0	07W							
6.0	50E							
7.0	11E							
8.0	04W							
9.0	12W							
10.0	54W							
11.0	52W							
12.0	52W							
13.0	17W							
14.0	55W							
15.0	02W							





Dine Temp.....  
 Focus.....  
 One Temp.....

Transparency Conditions

330

Sat July 27. 110 visitors. Rain Hd, Bk, Dnai  
 Lectured on Earth satellite

Ending Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:12	49E							
2:52	34W							
3:51	13W							
							Focused on $\alpha$ Aquilae	seeing poor
							poor night - heavy haze bank	
							in SW swept over the sky	
July 20							MC SC MTW STW S SW ME	
							-1.7 -33.7 +5.1 +0.2 +2.7 +1.0 +0.4	
29							-2.9 -34.5 +8.9 +0.1 +2.3 -15.0 +4.8	

331

Date Mon-Tues July 29-30 Observer Hd-Mai, HV Julian Day 2426049  
 ☉ 126 27 27.6 3443.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23925	V566 <i>opt</i>	17 51.9	+5 00	T25	E103a0	<sup>008</sup> <del>016</del>	28.3	20 27	21 27
23926	MWC 278	17 55.3	+4 22	"	"	008		21 40 <sup>1</sup> / <sub>2</sub>	21 43 <sup>1</sup> / <sub>2</sub>
								21 46 <sup>3</sup> / <sub>5</sub>	21 47 <sup>3</sup> / <sub>5</sub>
							+292	21 49 <sup>3</sup> / <sub>5</sub>	21 50 <sup>3</sup> / <sub>5</sub>
23927	MWC 292	18 17.3	+25 01	"	"	008	28.2	22 04	22 46
23928	MWC 308	18 52.3	59 53	"	"	008	28.2	23 22	23 52
23929	MWC 310	19 00.8	23 "	"	"	008	28.3	00 13	00 49
23930	HD 219113	23 08.3	+02 08	"	"	"		01 42	02 52
	From <i>7-11</i>		0913.		15/10				

Dne Temp. 80.0

Hum. 15-70

Dne Temp. ....

Transparency Conditions

Hazy

332

Star	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
27	15 <sup>m</sup>	+4 59	0.5	7.8 8.1	F5	4-44	Hd Ed bin. Set 2	fine
				4.8	B5ne	12	Be star set 5	later
						12		weak
	4 <sup>m</sup>	+4 20	1			12	clouds at end	fine
	38 <sup>m</sup>	25 02	1	6.9	B5e	6-6	Set 2 Be clouds, not in line set on another * but cloudy.	strong but uncertainly guided
	10 <sup>m</sup>	59 55	1	6.9	B4e	6-6	set 2 Be	fine - strong uncertainly guided
	9 <sup>m</sup> W	23 15	1-2	7.5	B3e	6-6	set 2 Be brighter component	strong
	10 <sup>m</sup> E	+02 26	1	8.7	G5	6-	" 5 SZ Pisc. 0115 Clouds, 0230 Solid	weak
						" 9		center
							3 P.H. Good!	



Air Temp. 77°F

Hum. 15.71

Air Temp. ....

Transparency Conditions *Cloud and haze*

334

Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
25	E	33 06	0	7.2	60V	4-8	set 2. Se-MV	
"	"	"	"	"	"	4-	set 8 CLOUDED OUT	
						July 31	MTW STW +19.1 +0.2	

335

Date Wed July 31 - Aug 1 Observer Hd - Mai Julian Day 24360.50① 128 24 51.4 ~~344.4~~  
22 15.8 ~~245.0~~

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23933	HD 145148	16 09.3	+6 41	F 24	E103aD	008	26.6	20 40	21 24
23934	V566 Sph	17 51.9	+5 00	"	"	"	26.6	21 34	22 54
23935	MWC 312	19 11.3	+12 56	"	"	"	26.6	23 01	00 21
23936	SE Pisium	23.08.3	+02 08	F-25	"	"	26.6	00 56	04 10
	Focus Tag	0.7.13							





337

Date Thurs. Aug. 1-2, 1957 Observer Hg. Hol - Dg. Julian Day 2436052

129 19 40.8 3445.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23937	HD 148310	18 25.6	-109 26	J-25	E-10300	S- 203	27.0	20 39	21 45
23938	V 560 C/4 MMS 346	17 51.9	+5 00	"	"	"	26.9	21 52	23 10
23939	HD 195407	20 26.0	26 39	"	"	"	"	23 37	25 37
(23940)	SE PNC	23 09.3	+24 58	"	"	S- 215	26.9	23 53	02 00
(23941)	HD 217545	22 50.3	+31 11	"	"	S- 223	"	02 31	03 11
23942	HD 225239	23 59.6	+34 07	"	"	"	27.0	03 40	04 20

Dne Temp. 76 F  
 Fus. 15.69  
 Dne Temp. 27 F

Transparency Conditions

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11	45 W	+04 17	1-0	7.82	F <sub>0</sub> V	4-4.4	Set 2 Se HV	good
12	37 W	+04 59	0	7.82	F <sub>0</sub>	4-4.4	Set 2 Hd Eclp Bin. MIP 100000 lit, with cut off eyepiece.	fine
		35 50	1/2	7.7	G <sub>0</sub>	4-8.5	Set 2 Hd 3e off at 23.35 & get SZ. Pae the 1752 line in	usable
		+13 27	1-0	8.3	G5	2-4	Set 5 Eclp Spot Bin. 1752 line in eclp, but it when it.	fairly good
	6 W	+33 28	0	6.74	Bene	4-4.4	Set 8 Hd 3e	fairly good
		+34 26	0	6.74	G2 B	4-4.4	set 5 Se HV	fine - the center is quite bright
						1/2	for 1st set 9	
							2 F.H. 1.0	
							Aug. 2 Sc MTW STW S SW ME -36.7 +15.6 +0.7 +1.5 -31.0 -5.1	

339

Date Fri-Sat Aug 2/3 '57 Observer Se  
OK

Julian Day 2436.053

© 130 17 06.4 3446.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23943	HD 157214	17 16.9	+32 36	I25	E103a0	set .008	28.0	21 <sup>h</sup> 54 <sup>m</sup>	<del>22<sup>h</sup> 02</del>
23944	"	"	"	"	"	"	"	22 <sup>h</sup> 03	<del>22<sup>h</sup> 15<sup>m</sup></del>
23945	HD 179343	19 07.1	+02 27	"	"	"	27.9	22 <sup>h</sup> 30	23 <sup>h</sup> 05 <sup>m</sup>
23946	HD 183656	19 25.5	+03 14	"	"	"	"	23 <sup>h</sup> 20	23 <sup>h</sup> 40
23947	HD 187923	19 47.4	+11 23	"	"	"	27.5	23 <sup>h</sup> 50	00 <sup>h</sup> 10
23948	HD 201891	21 07.4	+17 20	"	"	"	"	00 <sup>h</sup> 22	1 <sup>h</sup> 52
23949	HD 217050	22 52.7	+48 09	"	"	"	26.9	2 08	2 12
23950	"	"	"	"	"	"	"	2 12.5	2 18.5
23951	HD 225239	23 59.6	+34 07	"	"	"	27.8	2 32	3 02
23952	Roman 570	23 57.0	+26 32	"	"	"	"	3 10	3 30
23953	HD 6582	1 01.6	+54 26	"	"	"	27.9	3 50.5	4 02.5

Max Temp. 79°F

Time 15:70

Max Temp.

Transparency Conditions Hazy, then clear

340

Time	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Remarks	Quality	
02	11.5 W	+32 30	1	6.01	G2 V	4-4-4	Set 2	Se HV	fine
05	24.5 W	"	2	"	"	4-4-4	Set 8	"	fine
08	20 W	+02 32	2	6.8	A e	4-4-4	Set 2	Se Sh	good
11	40 W	+03 20	0	6.3	B6 pc	4-4-4	set 8	Se Sh	good
14	48 W	+11 30	0	6.30	G2 V	4-4-4	Set 2	Se HV	good
17	11 W	+17 32	0	7.4	F9 V	4-4-4	set 8	"	fine
20	15 E	+48 27	1	5.2	B3 nc	6-6	Set 2	Se Sh	good
23	8 SE	"	1	"	"	6-6	set 8	"	fine
26	32 E	+24 25	0	6.74	G2 V	4-4-4	set 2	Se HV	fine
29	01 E	+26 52	0	6.41	G3 V	4-4-4	set 8	"	fine
32	33 E	+54 43	0	5.91	G5 V	6-6	set 2	"	strong

3 PH + 0



Air Temp. 74°F  
 Hum. 15.69  
 Bar. Temp. 65.0 F

Transparency Conditions Clouds the clear. 342  
 with scattered cloud later

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
55 42 <sup>m</sup>	+42 43	0	8.15	KT IV	4 <sup>s</sup> , 4 <sup>s</sup>	Set 2 0-HV	nothing
50 51 <sup>m</sup>	+16 19	"	7.27	68 IV	4 <sup>s</sup> , 4 <sup>s</sup> , 4 <sup>s</sup>	Clouds! set on H 0 2589 But clouded out.	nothing
						2 Plate Holders + 0	



Air Temp. 53°F

Hum. 15.61

Air Temp. ....

Transparency Conditions Clear - then cloud!

344

No Signal from spectrophotometer.

Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
32 W + 1 28		0	7.55	GOV	4-4-4	set 2 <sup>much</sup> <sub>too weak</sub> Se HV [ nothing a set 8 ]	too weak
29 W + 33 06		0	7.19	GOV	4-4-4	set 8 <sup>much</sup> <sub>too weak</sub> Se HV [ set 2 wrong star. ]	cloud for weak exposure
4 P.H. + 0							Clouded out!





ie Temp. 1640

as 15 57

ie Temp.

Transparency Conditions *Drifting clouds*

346

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
CGE	34 55	0	85	A2	4-4-4	sol 2 BK-VBF clouded out by 22:15 stopped 22:29	fine
						3PH - plates needed	
						August 6	
						nc sc mtw stw z sw me	
						-8.6 -37.8 +17.9 +0.2 +2.1 +16.1 -2.1	



Air Temp. 66°  
 Hum. 15.60  
 Sea Temp. ....

Transparency Conditions Excellent  
Throughout

348


Ending Time EST.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 00	32 W	12 11	0	7.6	G5	4-4-4	set 2 PK-03	good
01 10	37 W	24 22	0	7.6	K0	4-4-4	8 "	good
01 13	56 W	30 12	0	8.2	K0	4-4-4	2 "	good
01 18	59 W	32 20	0	8.0	K0	4-4-4	8 " Seeing seems to	good
03 32	10 W	39 19	0-1	8.0	K2	4-4-4	set 2 " fluctuate between	good
04 53	10 W	32 41	0	7.6	G5	4-4-4	set 8 a full 1 and 0	good

~~4~~<sup>3</sup> PH + 8



Dne Temp. 71°F  
 Pous. 15.67  
 Dne Temp. ....

Transparency Conditions Very Poor (wispy clouds) 350

Ending Time E.S.T.	Rise Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
13 <sup>h</sup> 30	50W	49 46	000	7.22	G4Y	4-4-4	set 2 SeHV  this component taken out companion Seeing became progressively worse during exposure	clouded out too weak
							Bulb in desk lamp burnt out	
							Aug. 9	
							mc sc mtw stw s sw ME	
							-8.8 -38.9 +27.9 +0.4 +1.9 +12.7 +5.1	



Dme Temp.....

250 videntas shown

Transparency Conditions

hazy

352

Fcus.....

B Cys.

Dme Temp.....

ing Time  
E.S.T.

Sir Angle  
End

Declination

Seeing

Ptg.  
Mag.

Sp.

Comp..

REMARKS

Quality

+ 38 45

0

003

A0 V

30"

4 A/sec

2" in min

905 N.





Dme Temp. +75° F

Transparency Conditions Clear + some clouds 354

Humidity.....

22<sup>h</sup> - Quite cloudy.

Dme Temp.....

Observing Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				322	A3	30	4A/see Test only. 905 v.  Comet Markos observed RA 10 <sup>h</sup> Dec +40° Magnitude 1 New Tail. Bright nucleus.	
Aug 12							mc    sc    mtw    stw    s    sw    mg -12.3   -33.7   +25.2   +0.6   1.8   17.0   -0.1	



One Temp. 64°F

Transparency Conditions

Clear

356

Plus 15.55

One Temp.

Ending Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 55		+50 55	8"	6.5	B9	30"	1A/m 2" per min 905 v.	
1 37	40W	+48 57	"	6.3	A0	"	"	
2 10	29 W	+32 44	6"	6.0	B2	"	"	
2 40	05 E	+0 09	"	5.57	A0	"	4A/m "	
3 15	22 W	+0 54	"	Var	Var	"	" 4 Agl.	
3 22	"	"	"	"	"	"	"	
3 43	58 W	+0 08	"	5.57	A0	"	"	
4 11	55 E	+56 52	"	4.51	F0	"	"	
4 37	49 E	+58 11	"	Var	Var	"	" 8 Cup	
4 48	32 E	"	"	"	"	"	"	
5 12	04 W	+56 50	"	4.51	F0	"	"	
5 37	37 W	+62 55	1-2	8.16	G8 IV	4-4-4	Set 2 0-HV	
5 48	10 W	45 12	1-2	7.74	G <sup>8</sup> III-IV	4-4-4	" 8 "	
						15/16	" "	
							mc Sc mTw STW S SW M6	
							Aug 14 -12.9 -10.4 -22.8 -0.2 +1.7 +4.2 -8.5	

fine  
fine

357

Date Wed-Thurs Aug 14-15, 1957 Observer O - H Julian Day 243626.5

O 141 47 20.3 3458.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
212-28	HD 166182	18 04.4	+20 48	5000-4700 4520-4000		10	6/1	20 43	21 18
213-28	HD 188350	19 49.6	+00 01	5200-3350		"	6/4	21 37	21 55
214-28	HD 187929	19 47.4	+00 45	"		"	6/2	22 00	22 18
215-28	HD 187929	19 47.4	+00 45	"		"	"	22 19	22 35
216-28	HD 188350	19 49.6	+00 01	"		"	6/4	22 39	22 56
217-28	HD 211336	22 11.4	+56 33	"		"	6/1	23 04	23 23
218-28	HD 213306	22 25.4	+57 54	"		"	6/1	23 27	23 44
219-28	HD 213306	22 25.4	+57 54	"		"	6/1	23 45	00 03
220-28	HD 211336	22 11.4	+56 33	"		"	6/1	00 07	00 25
23968	" 199580	20 53.1	42 30	I-25	E103a-0	<sup>set</sup> 008	24.0	00 54	02 14
23969	" 218101	23 00.2	+16 02	"	"	"	24.0	02 21	03 01
23970	" 3628	00 34.0	+02 34	"	"	"	23.9	03 10	04 30
	<i>From Tent</i>		<i>0913</i>						

Dme Temp. 74°

Transparency Conditions

Clear

358

Fcus.....

Dme Temp.....

Ending Time E.S.T.	Dir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 15	26 W	+20 47	6"	5.5	B3	30	1 A/see 2" w/ min	all quartz 900 v Tronite
1 55	"	+00 10	"	5.57	A0	"	4 A/see "	Cured
2 15	18 E	+00 54	"	Var	Var	"	"	4 Agl.
2 35	00	"	"	"	"	"	"	"
2 55	19 W	+00 10	4"	5.57	A0	"	"	"
2 55	36 E	+56 49	"	4.51	F0	"	"	"
3 15	28 E	+58 10	"	Var	Var	"	"	8 Exp
3 55	09 E	"	"	"	"	"	"	"
4 00	33 E	+56 49	"	4.51	F0	"	"	"
4 25	31 W	42 43	1	8.15	KI IV	4-4-4	Set. 2 O-HV	See field for 23954
3 55	14 W	16 18	0-1	7.27	G2 IV	4-4-4	" 8	pts bad.
4 00	09 W	+02 54	0-1	7.93	G2 IV	4-4-4	" 2 Se-HV	0345 a few bits of glass
						15/10	" 8	
							3 P.H. on fringe.	
Aug. 16	mc	sc	mtw	stw	s	sw	me	
	-14.4	-40.0	-21.8	-0.2	+1.6	+3.1	-8.9	

fine  
fine  
fine



Dne Temp. 62°

Fcus 12.91

Dne Temp. 58°

Transparency Conditions Good

360

Changed to 12 inch Camera.

I-25 was Focus? Tilt 23.15

I-12 set Focus 12.91 Tilt 20.35

ing Time E.S.T.	ur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
43	07	52 13	1	118	18	1-1-1	set 2 BL-VBF 8/6 Set 8 2 P.H <sup>+</sup> in fig.	1 weak out of focus, reason not clear.







363

Date Sun. Mon Aug 18-19/52 Observer O - Day Julian Day 2436.69

① 145 38 05.2 3465.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
221-29	HD 171948	18 32.4	+22 01	5000	4700	10	6/7	20 41	—
222-29	HD 188350	19 49.6	+00 01	5200	3350	10	6/4	21 43	22 01
223-29	HD 187929	19 47.4	+00 45	"	"	"	6/2	22 06	22 24
23973	HD 221170	23 24.6	+29 53	I-12	E10320	008	20.3	01 45	02 32

Air Temp. 69°F

Obs. 15.58

Sea Temp.

Transparency Conditions *clouds at start* 384

Angle E.S.T.	Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-	-		8"	7.0	B9	30	1A/see 2" per min	
22 05	20 E	+00 08	6	5.57	A0	30	4A/see "	Fatter natural in at 35 return one filter
22 2-		+00 54	5	Var	Var	30	" "	x 14 Agl; Clouds close Thick Clouds
	6 E	+20 11	0-	8.79	G2II	2-	Set 2	0-HV Cloud too weak
						8/6	Set 6	Folms Test OPH. OK

365

Date Mon-Tue Aug 19/20, 1957 Observer BK - Hr Julian Day 24360.70  
 ☉ 146 35 50.5 3466 9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23974	ADS 10022 B	16 17.5	+19 23	I-12	E103a-D	CEL 016		20 28	
23975	14999 B	21 17.5	+19 23	"	"	"	+246	23 12	0200
23976	" 486 B	00 29.8	36 17	"	"	"	240	02 09	04 21
	7000 7000		09 B.						

Temp... 70°

Temp... 61°

Transparency Conditions *Some cloud after sunset*

366

2350 Very bright fireball in North from 45° above

horizon almost to horizon East to West at 45°

Angle d	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	19 13	1	104	K1	1-	Ref 2 BK-URF clouded out	weak
6W	19 36	1	100	K2	1-1-1	5 -"-	fine
5W	36 35	0-1	10-1	K3	1-1-1	" 2 "	fine
					4/3	" 3 "	OK.
2 P.H.							







369

Date Thurs. Fri. Aug 22-23 / 57 Observer O - Hr Julian Day 2436.073  
 ☉ 14.9 29 16.3 3471.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
228-31	<sup>FPL</sup> HD 182989	19 22 3	+42 36	5200	3350	20	6/7	20 40	20 56
229-31	HD 181875	19 31 4	+42 12	"	"	"	6/2	21 01	21 19
230-31	HD 182350	19 49.6	+00 01	"	"	10	6/4	21 24	21 42
231-31	<sup>4 Agl</sup> HD 187929	19 47.4	+00 45	"	"	"	6/3	21 45	22 03
232-31	HD 187929	19 47.4	+00 45	"	"	"	"	22 04	22 21
233-31	HD 188350	19 49.6	+00 01	"	"	"	6/4	22 24	22 50
234-31	HD 211336	22 11 4	+56 33	"	"	"	6/1	22 56	23 14
235-31	<sup>5 Gg</sup> HD 213306	22 25.4	+57 54	"	"	"	6/3	23 11	23 36
236-31	HD 213306	22 25.4	+57 54	"	"	"	6/3	23 37	23 56
237-31	HD 211336	22 11 4	+56 33	"	"	"	6/1	0 00	00 17
23701	" 221170	23 24.6	+29 53	I-12½	E1030-0	0.002	18.3	00 49	02 49
23702	" 4744	00 44.4	29 54	"	"	"	18.0	02 55	04 25
		078							
See same Aug. 24-25, 1957				Rain. Also taken with visitors stopped in. Ran Island telescope. N. R. Hill					

Dme Temp... +66° F

Transparency Conditions *a few clouds at start*

370

Focus.....

Dme Temp.....

Ending Time EST.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality						
056		+42 42	8"	Var	Var	30"	4 Apr 2'/min							
119	27E	+42 18	8	529	A2	"	" "							
142	23E	+00 09	8	557	A0	"	" "							
258	00E	+00 54	6	Var	Var	"	" "							
275	18W	"	"	"	"	"	" "							
528	45W	+00 09	"	557	M0	20-30	" " Changed to 30" diameter spec. at half							
311	12E	+56 50	"	451	F0	30"	" "							
531	04E	+58 11	"	Var	Var	"	" "							
535	"	"	"	"	"	"	" "							
610	09E	+56 49	"	451	F0	"	" " correct part - Diff. procedure							
2-10	10W	30 11	00	2.79	G <sub>2</sub> IV	2-2-2	set on	strong						
2-12	26W	30 11	0	2.69	G <sub>2</sub> IV	2-2-2	" 8	strong						
						2/6	" 5							
							2 PH in fig.							
							Apr 23							
							MTW	STW	SW	ME				
							+15.6	-0.05	-11.7	-3.2				
							26	MC	SC	MTW	STW	S	SW	ME
							-19.7	-42.5	-2.8	-0.7	-0.1	-21.1	+1.2	





373

Date Aug 27-28 Observer Ruto-H Julian Day 2436.78  
 ☉ 154 18 51.4 3079.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23984	HD 170 737	18 <sup>h</sup> 25. <sup>m</sup> 9	+26° 36'	12"	E103-a-0	0.008	19.0	19 55	21 09
238-32	HD 188350	19 <sup>h</sup> 52.4 <sup>55</sup>	+00° 09' <sup>55</sup>	5200	3350	10	6/4	21 20	21 39
239-32	HD 187929 Ag1	19 <sup>h</sup> 47.4 <sup>1950</sup>	+00° 45' <sup>1950</sup>	"	"	"	6/2	21 42	22 00
240-32	HD 187929	19 47.4	+00 45	"	"	"	6/2	22 01	22 19
241-32	HD 188350	19 <sup>h</sup> 52.4 <sup>55</sup>	00° 09' <sup>55</sup>	"	"	"	6/4	22 22	22 40
242-32	HD 211336	22 11.4	+56 33	"	"	"	6/1	22 57	23 19
243-32	HD 213306	22 25.5	+57 54	"	"	"	6/2	23 24	23 41
244-32	HD 213306	22 25.5	+57 54	"	"	"	6/2	23 42	23 58
245-32	HD 211336	22 11.4	+56 33	"	"	"	6/1	00 04	00 20
23985	HD 2126	00 20.4	33 34	12"	E103a-0	0.008	18.8	00 57	03 58
From Tot 07B									

Dne Temp. 61°F

Transparency Conditions

HAZY AT START  
CLEAR LATER

374

Fus.....

Dne Temp.....

ing Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality		
09	51 W	+26° 38'	0	8.90	6P II-IV	2 <sup>s</sup> -2 <sup>s</sup> -2 <sup>s</sup>	set 5	0-HV	fine	
39	05 E	+00 09	8"	5.57	A0	30"	4A/sec 2" /min			
2 00	17 W	00 53	6"	Var	Var	"	"	Searchlights tothering?		
2 48	36 W	"	"	"	"	"	"			
2 58	55 W	+00 09	"	5.52	A0	"	"			
3 01	50 E	+56 49	4	4.51	F0	"	"			
3 41	40 E	+58 10		Var	Var	"	"			
3 58	18 E	+58 10		Var	Var	"	"			
4 00	11 E	+56 49		"	"	"	"			
4 51	42 W	33 52	0-1	9.24	K0 III-IV	2-3-1	Set. 2	0-HV.	Seems faint. Faint 0330 Thin Cloud	cut of focus plate load incorrectly
						2/6	" 8			
							2 P.H.			
							Aug. 29	MTW STW SW ME		
								-24.4 +0.2 +27.3 -2.1		
							30	MC SC MTW STW S SW ME		
								-21.4 -43.6 -7.2 +0.4 +0.4 +27.2 -0.7		



Dne Temp. 72°

Humid. ....

Dne Temp. ....

Transparency Conditions Variable, drifting, cloudy 376

Saturday Aug 31 C-BK-Kai. About 200 visitors  
Showing Regog under 30", cloud to with 4" glass night.

Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0000	33 30	2	96	K3	1-1-1	rel 2 BK-UBF	
16 W	32 21	2	95	F3	1-1-1	7 -1-1 clouded out	
						1 1/4	
					Sept. 4	mc    sc    mTW    sTW    S    SW    ME -24.0   -45.4   +16.9   +1.4   -0.6   +29.5   +1.8	



377

Date Wed. Thurs. Sep 4-5/57 Observer Hd - Hg Julian Day 2436086.  
 © 162 03 24.5 3490.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	SLT	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23988-	MWC 383 HD 209296	21 57.2	56 14	I-12	E10390	008	16.3	00 12	00 53
23989	HD 219113 MWC 29	23 08.3	+02 08	"	"	"	16.2	01 05	02 49
23990-	HD 13661	22 09.1	54 04	"	"	"	16.2	03 03	04 33
	Focus Test		OTIS	"	"	"	16.2		

Dme Temp. +55 F  
 Focus 12.955  
 Dme Temp. 53

Transparency Conditions

378

Starting Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	37W	S 6 30	0	8.1	B(3)	2-2-	Re Prog. Set 2 <i>Amount of ... is about 50 ...</i>	Strong
	17W	+02 26	0-	8.7	G <sub>5</sub>	2-2-2	SZ Proc Set 2	Fine
	12W	-4 20	1/2	8.6	B <sub>3</sub>	2-2-2	Re Prog Set 8	Strong
						5/6	Set 5 Some difficulty in getting at coordinates arc.	OK.
							3 PH + 0	

379

Date Thurs Fri Sept 5/6 Observer RU - H Julian Day 2436087  
 ☉ 163 01 35.0 2492.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23991	HD 191615	20 <sup>h</sup> 05.7	+25° 15'	I-12"	EI0300	0.008	18.5	19 32	20 20
246-33	HD 188350	19 49.6	+00 01	5200	3350	10	6/4	20 25	20 42
247-33	HD 187929	19 47.4	+00 45	"	"	"	6/2	20 46	21 04
248-33	HD 187929	19 47.4	+00 45	"	"	"	6/2	21 05	21 22
249-33	HD 188350	19 49.6	+00 01	"	"	"	6/4	21 25	21 44
23992	H.D. 2126	0 <sup>h</sup> 20.4	+33 34	I-12"	EI0300	0.008	18.5	22 40	00 50
			O.75						

Dme Temp. 65° F

Transparency Conditions

Clear

380

Fous.....

Dme Temp.....

ing Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 20	3° E	+25 25'	0	8.74	08 V	2, 2, 2 <sup>s</sup>	Set 5 O-HV plate model X	
0 40		00 08	6"	5.57	A0	30	4 A/sec 2"/min std for η Aql	
1 00	04 E	00 52	"	Var	Var	30	" η Aql	
1 20	14 W	00 52	"	"	"	"	" η Aql	
1 40	34 W	00 08		5.57	A0	"	" std for η Aql.	
							Set on δ Cephei clouded over More clouds coming	
0 50	5 15	+33 56	1/2	9.24	K0 II-IV	2 <sup>s</sup> , 2-2 8/6	set 2 O-HV " 8 Clouds after 2100 Worse at 2200 1 P.H.	
							MTW ME STW Sept. 6 +8.8 -1.5 +0.1	



Dne Temp. 56°

Transparency Conditions *clearing with about 22°*

Rus. ....

Dne Temp. 21°

Time E.S.T.	Alt. Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20 30		S4 14	0-	1205	B.V.	1-1-1	Set 2 OB Programme	very strong
22 20		29 20	0-	1205	B.V.	2-2-2	Set 2 0.41 Proj. Field of view	fine
						3/6	Set 3	ex. red.
							3 PH + 4	
							A planet-like balloon about 10° above the eastern horizon, visible to unaided eye until after 6 <sup>h</sup> E.S.T.	

383

Date Sun Mon Sept 8-9, 1957 Observer O - Dg Julian Day 2426090  
 ☉ 165 56 16.7 3497.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
250-34	HD 170580	18 25.1	+4 00	5000-4700 4520-4000		10	6/6	19 32	20 10
251-34	HD 188350	19 49.6	+00 01	5200-3350		"	6/4	20 15	20 32
252-34	HD 187929	19 47.4	+00 45	"		"	6/2	20 37	20 55
253-34	HD 187929	19 47.4	+00 45	"		"	6/2	20 55	21 13
254-34	HD 188350	19 49.6	+00 01	"		"	6/4	21 16	21 34
255-34	HD 211336	22 11.4	+56 33	"		"	6/1	21 52	22 10
256-34	HD <sup>8&amp;p</sup> 213306	22 25.4	+57 54	"		"	6/2	22 15	22 33
257-34	HD 213306	22 25.4	+57 54	"		"	6/2	22 36	22 53
258-34	HD 211336	22 11.4	+56 33	"		"	6/1	22 58	23 16
259-34	HD 212120	22 16.9	+46 02	5000-4700		10	6/2	23 22	23 33
260-34	"	"	"	"		20	5/6	23 35	23 44
261-34	"	"	"	"		40	5/4	23 46	23 58
21995	HD 213014	22 23.4	+16 46	12"	E-10300	cut 016	16.1	00 24	00 44
21996	HD 2126	0 20.4	+33 34	"	"	cut 002	"	00 55	01 15
21997	HD 10015	01 32.7	+29 24	"	"	"	16.0	01 52	03 20

Date Temp... +64°F

Transparency Conditions

Clear  
Perhaps slight haze

2018

Date Temp.

Time	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 10		+4 03	3"	5.7	B5	30	1 A/sec 2"/min	
0 32	26 E	+0 08	4	5.57	A0	"	4 A/sec "	
0 50	01 E	+0 54	"	Var	Var	"	" "	
1 13	17 W	"	"	"	"	"	" "	
1 32	36 W	+0 09	"	5.57	A0	"	" " + SKY 6/6	
2 11	09 E	+56 50	"	4.51	F0	"	" "	
2 31	01 E	+53 11	"	Var	Var	"	" "	
2 50	40 E	"	"	"	"	"	" "	
3 20	04 E	+56 50	"	4.51	F0	"	" "	
3 33	03 W	+46 18	3	4.7	B5	"	1 A/sec "	
3 43		"	"	"	"	"	" "	
3 58		"	"	"	"	"	" "	
0 44	25	+17 02	2	8.5	G8	1-1-1	ST 1 Started at. program	lweak.
0 51	15 W	+33 56	"	4.24	K0E	IR-2-2	ST 2 DH!	too weak
1 30	15	+29 20	2	1.49	K0E	IR-2-2	" 5	good





Bar Temp.....

Transparency Conditions

Clear

386

WCS.....

Wet Temp... 54°F

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
065	+23 15	1	8.88	F63-2-2	set 8		good.
					8/6	set 10	ctored.
						Fouling 3 P.H.	
					Sept. 9	M.C. S.C. S S.W. M.E.	
						-25.4 -46.7 +1.0 -18.4 +0.2	
					Sept. 11	M.C. S.C. M.T.W. S.W. S S.W. M.E.	
						-57.0 -48.9 -133.3 +43.1 -1.9 21.6 -1.2	
					Sept 13	M.C. S.C. M.T.W. S.W. S S.W. M.E.	
						-22.8 -47.5 -210.5 +66.6 -1.5 30.2 11.3	



Time Temp. +62°F

Humidity 12.955

Time Temp. ....

Transparency Conditions

388

248 visitors N-L showed Ring Nebula

Ending Time  
E.S.T.

Air Angle  
End

Declination

Seeing

Ptg.  
Mag.

Sp.

Comp.

REMARKS

Quality

Just nicely set on star when  
first clouds came over.  
sky completely thick  
at 11.10.

Sept. 16.

MC.	SC.	MTW	SW	S	SW	NE
-215	-182	-1200	1200	-11	351	225

389

Date Mon-Tues Sept 16-17/57 Observer D<sub>8</sub> - H<sub>v</sub> Julian Day 2436.98

☉ 173 43 20.6 3513.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
262-35	HD 188350	19 49.6	+00 01	5200	3400	10	6/4	19 59	20 17
263-35	HD 187929	19 47.4	+00 45	"	"	"	6/1	20 42	—
264-35	SZ Psc.	23 08.3	+02 08	"	"	20	6/7	21 12	
23999	HD 223501	23 45.0	+61°39'	I-12	E103a0	.008	19.9	21 54	22 30
265-35	HD 211336	22 11.4	+56 33	5200	3400	10	6/1	22 36	22 53
266-35	HD 213306	22 25.4	+57 54	"	"	10	6/2	22 58	23 15
267-35	HD 213306	22 25.4	+57 54	"	"	"	6/2	23 16	23 34
268-35	HD 211336	22 11.4	+56 33	"	"	"	6/1	23 39	23 57
	<del>HD 2126</del>	<del>0 20.9</del>	<del>+35 39</del>	<del>I-12</del>	<del>E103a0</del>	<del>.008</del>			
24000	ADS 486 B	00 29.8	36 17	I-12	E103a0	.016	20.0	00 34	02 44
24001	" 3013 B	04 10.2	-07 49	"	"	.008	20.0	02 59	04 59
24001 F	Focuser			I-25	E103a0	.008	19	15.60	15.50
								15.56	

Time Temp... +65° F.

Transparency Conditions

*Clear - occasional clouds*

Focus.....

390

Time Temp.....

Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
017	10 E	+00 09	8	5.57	A0	30"	4 A/uc 2"/min	
			6"	Var	Var	"	" "	
			4"	8.7	G5	"	" "	
15	52 E	+61° 59'	0	8.2	B3e2-		set 2 Be program	
18	05 W	+56 50	6-8	4.51	F0	30		
31	13 W	+58 11	8	Var	Var	30		
32	32 W	"	"	"	"	"		
33	10 W	+56 50	"	4.51	F0	"		
				<del>9.24 K500</del>				
37	37 W	36 36	0-1	10.1	K3	1-1-1	set 2 BK-VBF	
15	13 W	-07 43	0	9.4	A2	2-2-2	" 8 "	
						5/6	" 5 I.P.H. limit - fig	
OTB						8/6	" 1 Had on 10th.	
						8/6	" 6	} all centres to read
						8/6	" 9	



Time Temp. 64F  
 Focus 15.37  
 Time Temp.

Transparency Conditions

Good

392

Sep 17 changed to I-25  
 I12 was focus 12.955 Tilt 20.35  
 I25 set 15.56 Tilt 23.15

Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
OTB					8/6	Set 1 focus 15.40 Best focus ~ 15.37		
						" 6 " 15.30		
						" 9 " 15.20		
26	37 20	1	5.7	B3ae	4-4-4	" 1 Be Prag	fine	
					12	" 5		
26	116				12	" 9		
3	2 <sup>h</sup> 45 <sup>m</sup>	44 48	1	A5	7.26	" 2 N's Binary	fine	
	2 <sup>h</sup> 14 <sup>m</sup>				4-4-4	" 8		
	41 37	1	K0	6.05	6-6	" 2 Bk's Prag.	fine	
	2 <sup>h</sup> 00				6-6	" 8		
2	41 W	+2 26	1	G5	8.7	4-4-4	" 5 Hd Ecl Bin	fine
2	46 W	+20 22	1-2	7.67	K0	4-4-4	" 2 Bk-VB.	fine
2	50 W	70 45	1	8.0	B <sub>ync</sub>	4-4-4	" 2 Hd-Bc.	star
2	51 N	48 30	1	7.9	B <sub>ync</sub>	4-4-4	" 8 " "	star
2	52 W	41 30	1-2	7.2	B <sub>sync</sub>	4-8	" 2 " "	star
					15/10	" 2 I.P.H. Horn M.	star	

Notes for L  
 1. We are in our last box of last plates  
 2. Plate holder #2 has a loose back spring.



393

Date Wed - Thurs Sept 12/19, 1957 Observer MR - RU Julian Day 2436.00

☉ 175 40 40.3 3518.2

Plate No.	Object	R. A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
24010	HD 174369	18 45.1	+24 56	I-15	E103-20	set '002	+21.0	19 20	19 50
24011	ADS 10623	17 20.8	+13 14	"	"	"	+20.7	19 56	20 56
24012	HD 128326	19 49.5	+38 30	"	"	"	+20.5	21 04	22 53
24013	HD 174369	18 45.1	+24 56	"	"	"	"	23 02	23 48
24014	HD 219804	23 05.8	+43 00	"	"	"	"	23 53	00 09
24015	H.D. 203344	21 16.6	+23 26	"	"	"	20.5	00 19	00 39
24016	H.D. 218101	23 00.2	+16 02	"	"	"	20.5	00 47	01 27
24017	ADS 16603	23 08.5	+10 31	"	"	"	"	01 35	02 02
24018	H.D. 6734	1 02.9	+1 28	"	"	"	"	02 13	02 53
24019	H.D. 6680	1 02.4	+31 29	"	"	"	"	03 10	03 35
24020	H.D. 15228	2 22.1	+9 45	"	"	"	"	03 40	04 10
24021	H.D. 18757	2 55.7	+61 21	"	"	"	"	04 20	05 02
24022	H.D. 34411	5 12.1	+40 01	"	"	"	20.5	05 11	05 18

Dine Temp. 62°F

Transparency Conditions Good

394

Hum. 15.41

Dine Temp. 57°F

Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
35W	+25 00	0!	6.56	A2n	4-4-4	set 2	sp. bin M.C. S.C. M.T.W. S.T.W. S S.W. M.E.	weak
57W	+13 10	0	7.6	G5	4-4-4	set 2	Bk-VB -29.0 -18.2 +2.27.7 -1.7 +38.0 -2.5	weak
50W	+38 39	1	8.34	G8IV	4-4-4	0-HV set 2	Including 9 ft. stars in 74"	weak
34W	+25 00	1	6.56	H2n	4-4-4	set 8	sp. bin	fine
36W	+43 17	1	6.39	F5V	4-4-4	set 8	0-HV	fine
54W	+23 40	1	6.62	KoIII-IV	4-4-4	set 2	0-HV	fine
58W	+16 19	1	7.27	G8IV	4-4-4	set 8	0-HV	good
26W	+10 49	1	6.80	Ko	4-4-4	set 8	Bk-VB	good
22W	+1 45	0	7.31	KoIV	4-4-4	set 2	0-HV	good
03W	+31 47	0	6.65	F5IV	4-4-4	set 8	0-HV	fine
18W	+9 59	0	6.95	F5V	4-4-4	set 2	Se-HV	strong
25W	+81 33	0	7.22	G4V	4-4-4	set 8	Se-HV	strong
37E	+40 03	0	5.38	G0V	6-6	set 5	Se-HV.	strong

4 P.H + 0



Dme Temp. 50°F  
 Pcus 15.32  
 Dme Temp.

Transparency Conditions

396

Sat Sept 21/57 60 Visitors Cloudy  
 Showed tel. & lectured on  $\odot$  &  $\oplus$  relations  
 Htd - 13k

absence

Star	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							M.C. S.C. M.T.W. S.T.W. S. S.W. M.E.	
							-30.0 -1.87 -3.259 2.278 -1.6 3.1 12.0	
Clouds at first then clear							MR + L demonstrated	
							Telescope for I.R.E. visitors (100)	
35W	39 19	0	9.7	A5	2-2-2	Set 2	Vis. Bin. Proj. Spectacular Aurora	good
21W	55 42	0	8.4	A2	2-2-2	Set 8	" " " "	fine
							Clouds.	
Sept. 24							M.C. S.C. M.T.W. S.T.W. S. S.W. M.E.	
							-29.2 -49.8 -2.1 -0.3 +13.2 +27.8 +0.8	



Time Temp. 54°F

Transparency Conditions Hazy

398

Focus 15.32

Time Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2355	+18 27	0	7.58	G3I	4-4-4	set 2 Se HV	weal
		"	7.42	F8I		set 5 clouds forming	Nothing



Dme Temp. 44 F

Focus 15.30

Dme Temp. 40

Transparency Conditions

Good

400

Trouble with guiding as price delayed start.  
L paired.

ing Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
5	2 <sup>h</sup> 15 <sup>m</sup>	18 12	0	6.9	B9500	4-4-4	Set 2 Be prog.	good
14	38W	+ 2 25	0	8.7	G5	4-4-4	" 5 Hd Ed Ben.	fine
17	25W	46 07	0	8.6	B37E	4-4-4	2 Be prog. much on level div	Strong
						15/10	8	after 2 to model
							3 PH in the dome	
							Notes needed	
							MTW ME	
							Sept. 27 +4.1 -4.1	



401

Date Fri-Sat Sep 27/28-57 Observer Se - Jg Julian Day 2436.09  
 ☉ 184 29 38.7 3530.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
<del>2402</del> 269-35	HD 156164	17 10.9	+24° 57'	5200	3350		5/6	19 <sup>h</sup> 35	
24030	SZ Piscium	23 <sup>h</sup> 68.3	+02 08	I-25	E103a0	set 100	+9.5	21 <sup>h</sup> 04	00 20
24031	Roman 570	23 57.0	+26 32	"	"	"	+9.4	00 28	00 37
24032	HD 8262	1 16.9	+18 10	"	"	"	9.4	00 43	01 13
24033	9670	1 29.7	+ 0 26	"	"	"	9.3	01 20	01 45
24034	13043	2 2.5	- 1 05	"	"	"	9.3	01 54	02 22
24035	14214	2 12.8	+ 1 17	"	"	"	"	02 28	02 35
24036	15228	2 22.1	+ 9 45	"	"	"	"	02 40	02 56
24037	18757	2 55.7	+61 21	"	"	"	9.4	03 16	03 36
24038	22879	3 35.3	- 3 32	"	"	"	9.3	03 45	04 05
24039	25173	3 55.0	+74 54	"	"	"	9.3	04 20	04 55
24040	29587	4 34.5	+41 57	"	"	"	9.4	05 05	05 40

One Temp. 43°

Time 15:26

One Temp.

Transparency Conditions *Photometric*

402

Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			3.22	A3IV		4 A/sec - unable to get any reproducible tracings.	
13 W	+02° 26'	0	8.7	G5	4-4-4	set 2	fine
47 W	+26° 52'	0	6.41	G3II	4-4-4	set 1	good
	-18° 26'	0	7.58	G3II	4-4-4	5	good
	+0° 43'	0	7.42	F8II	4-4-4	9	weak
31 W	-0° 47'	0	7.53	G2II	4-4-4	set 1	-
2° W	-1° 27'	0	6.17	F9II	4-4-4	5	-
41 W	+4° 59'	0	6.95	F5II	4-4-4	9	-
35 W	+61° 33'	0	7.22	G4I	4-4-4	set 1	weak
37 W	-5° 23'	0	7.23	F9II	4-4-4	5	weak
04 W	+74° 04'	0	7.70	F8II	4-4-4	9	good
	+42° 00'	0	7.40	G2II	4-4-4	set 2	good
					10/7	8	four test
							2 PH. in the time
							Epilobium spotting on

Nothing  
but 4-5



Air Temp. 51°F  
 Hum. 15.18  
 Bar. Temp. ....

Transparency Conditions

Good

404

250Vuitons. mR + Bk showed Ring nebula with 74"

Star	Right Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
38	20W	73 05	0-1	8.6	A6	2-2-2	Set 2 Vis. Bin Prog.	satisfactory good fine poor
24	28W	01 03	1	10.1	G8	2-2-2	" " "	
35	21W	63 19	1	8.1	Bse	4-4-4	Set 2 Be Prog	
02	48W	44 48	1	7.8	Bsne	4-4-4	" " had trouble finding star, incorrectly processed. 4PHs loaded + 4	

405

Date Sun. Mon. Sept 29-30/57 Observer O-Hv Julian Day 2436.111

☉ 186 27 32.3 3539.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
270-36	HD 188350	19 49.6	+00 01	5200	3300	10	6/4	18 48	19 06
271-36	<sup>M Agl</sup> HD 187929	19 47.4	+00 45	"	"	"	6/3	19 10	19 28
272-36	HD 187929	19 47.4	+00 45	"	"	"	6/3	19 29	19 45
273-36	HD 188350	19 49.6	+00 01	"	"	"	6/4	19 49	20 07
274-36	HD 211336	22 11.4	+56 33	"	"	"	6/1	20 21	20 39
275-36	<sup>Sep</sup> HD 213306	22 25.4	+57 54	"	"	"	6/2.3	20 44	21 06
276-36	HD 213306	22 25.4	+57 54	"	"	"	6/3	21 06	21 25
277-36	HD 211336	22 11.4	+56 33	"	"	"	6/1	21 29	21 47
278-36	HD 209975	22 02.1	+61 48	5000	3950	10	44-3	21 52	
279-36	HD 212120	22 16.7	+46 02	"	"	10	6/1	22 43	23 17
280-36	HD 212439	23 35.5	+43 47	"	"	10	6/1.95	23 21	23 55
24045	HD 16141	02 30.3	-02 59	I-25	103 a0	008	<sup>12.6</sup> 13.5	00 26	01 12
24046	" 20259	03 13.3	-01 18	"	"	"	13.2	01 18	01 33
24047	" 22379	03 15.3	-03 32	"	"	"	13.2	01 54	02 3
24048	" 29517	04 37.5	41 57	"	"	"	13.2	02 46	01 26

Air Temp... +57°F

Transparency Conditions *Clear*

406

Obs... 15.31

Air Temp...

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30 E	+00 10	5"	5.57	A0	30	4A/sec 2"/mm	
06 E	+00 54	6	Var	Var	30	"	
12 W	+00 54	6	"	"	30	"	
31 W	+00 09	5	5.57	A0	30	"	Slight clouds in S
18 E	+56 50	6	4.51	F0	30	"	
05 E	+58 11	7	Var	Var	30	"	
46 E	+58 11	7	"	"	"	"	
09 E	+56 50	6	4.51	F0	30	"	
	+62 06	4	5.4	09	"	1A/sec 2"/mm	
15 W	+46 17	4	4.7	B5	"	"	
34 W	+44 05	4	4.4	A0	"	"	
03 E	-03 44	0-1	7.44	G5 IV	4-4-4	Int. 2 0-11V	ME SC MW STW Sep. 30 -36.0 -48.2 +43.9 +6.6
05 E	-01 05	0-1	6.44	G7 IV	4-4-4	" "	S SW ME +15.4 +15.1 +1.4
04 E	-03 22	0-1	7.21	G9 II	4-4-4	" 2 Scattered	Very clear
02 E	+42 02	0	7.91	G2 V	4-4-4	" "	More Mist Fog End
						5 JPH	OK



me Temp... 57°F

us... 15.34

me Temp...

Transparency Conditions .....

408

542.9

Ending Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
22:13	40W49	59	0	10.2	K7	22-2	Set 2 Vis Bin Prog, clouds at 22.00 star gone at 22.16 1 PH loaded.	
							Sc    mW    stw    S    JW    mE Oct 2   -50.2   +55.1   +0.6   +15.0   +12.4   +0.1	



409

3

Date Wed Oct 22/57 Observer Hd - Dg Julian Day 243614

☉ 189 24 35.8 354.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
	Focus Test.								
24050	HD 174569	18 45.1	+24 56	I-25	E10300	008	+13.0	19 05	19 37
24051	ADS 11271	18 15.9	+3 20	"	"	"	13.0	19 54	20 06
								20 07	20 15
								20 15	20 21
24052	ADS 11477	18 30.7	+4 51	"	"	"		20 27	21 01
24053	HD 174569	18 45.4	+24 56	"	"	"	+12.7	21 06	21 50
24054	SZ Proc	23 08.3	+2 08	"	"	016	+11.7	22 19	20 55
24055	MWC 10 HD 6343	0 59.4	+65° 26'	"	"	Set .008	+11.8	01 10	01 45
24056	MWC 13 HD 9105	1 24.6	+62° 51'	"	"	"	+12.9	01 50	02 15
24057	MWC 21 HD 12302	1 55.6	+59° 12'	"	"	"	+12.9	02 41	04 20
24058	MWC 22 HD 24866	4 37.3	+40° 36'	"	"	"	+12.8	04 00	04 40
24059	MWC 93 HD 31293	4 49.4	+30° 24'	"	"	"	+12.9	04 51	05 35

Delayed by trouble with dome opening

410

Time Temp. 15.48  
Time Temp. 40°F

Transparency Conditions

← not introduced with last few focus plates as set according to table without correction. next observer check tonight is focus tests.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			OTB		15/0	Focus. set 1	
1 17	24 59	0	6.56	A2n	4-4-4	Set 5 N's binary	Fine
2 10		0	5.8	G5	6-6	" 1 Bk-VB.	good
2 21	+3 21	0			6-6	" 5 "	
2 31		0			6-6	" 9 "	
2 56	+4 55	0	6.5	A0	4-4-4	" 2 Bk-VB.	fine
3 32	25 00	0	6.56	A2n	4-4-4	" 9 N's binary	Covered by main spectrum
2 3	+ 2° 26'	0	9.0?	G5	2-2-2	" 5 H <sub>2</sub> Sol. Bin	fine
11 W	+65° 44'	0	7.1	B5eB	4-4-4	set 2 H <sub>2</sub> Be Program	} Plate holder not introduced from previous use
3 W	+61° 00'	0	7.5	eB(e)e	4-4-4	8 "	
5 W	+51° 27'	0	6.2	B3e	4-4-4	set 2 "	fine
29 W	+45° 02'	0	6.1	B4ac	4-4-4	8 "	fine
15 W	+35° 27'	0	7.5	A0ep	4-4-4	set 2 "	fine
					1 1/2	8 faintest	re. to red

Plate numbered 24055-6 should be called 24050 + given labelled accordingly

2 P.H. covered  
Shutter does not function - closed by hand

411

Date Thurs - Fri Oct 3-4 Observer Se - H Julian Day 2436.115  
 ☉ 190 23 40.6 3546.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
24060	HD 196755	20 <sup>h</sup> 34.3	+9 44	I-28	E103a0	Set 008	+12.0	19 <sup>h</sup> 49 <sup>m</sup>	20 <sup>h</sup> 01
24061	HD 203344	21 16.6	+23 26	"	"	"	+12°	20 <sup>h</sup> 20 <sup>m</sup>	20 <sup>h</sup> 44
24062	HD 208776	21 53.4	+3 18	"	"	"	+12°	20 <sup>h</sup> 52 <sup>m</sup>	21 59
24063	HD 217020	22 52.7	+48 09	"	"	"	+12°	22 16	23 18
24064	MWC 311	"	"	"	"	"	"	22 19	23 23
24065	"	"	"	"	"	"	"	22 25	23 31
24066	HD 217542	22 56.3	+38 10	"	"	"	+12°	22 43	23 51
24067	MWC 395	"	"	"	"	"	"	22 52	23 55
24070	HD 3228	0 <sup>h</sup> 34	+2 34	"	"	"	+12.0	23 16	24 40
24069	" 13043	02 02.5	-01 05	"	"	"	+11.9	00 55	01 55
24070	" 22877	03 35.3	-03 32	"	"	"	"	02 02	03 02
24071	" 30455	04 42.9	18 33	"	"	"	11.8	03 11	04 11
24072	30649	04 44.1	45 41	"	"	"	12.0	04 12	05 20
			078						



413

Fri Oct 4 Soviet Artificial Satellite announced.

Date Mon Oct 7-8/56 Observer Ho - H<sub>v</sub> Julian Day 2436.119

© 194 20 18.2 3554.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
24073	HD 174369	18 45.1	+24 56	2-25	E10300	008	18.0	19 56	20 30
24074	HD 195592 MWC 347	20 27.2	43 59	"	"	"	18.1	21 35	21 07
24075	SZ Pnc	23 08.3	+2 08	"	"	"	18.0	21 16	00 46
24076	HD 5916	00 55.6	+44 55	"	"	"	"	00 54	02 27
	From 7/10		07m.						

Time Temp.....

Focus.....15.55.....

Time Temp.....

Transparency Conditions

.....

419

Sat Oct 5-6 Se-Dg 1100 people share Ring Nebula - Double star.

Oct. 7 MC SC MTW STW S SW ME  
-39.4 -47.2 +6.1 -0.1 +15.8 +5.6 +4.1

Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
2 30	25 00	0	6.56	A22	4-4-4	Set 2 Nibining <sup>Delayed phone by maintenance</sup> & grinding eyepieces (mistakes?)	fine	
1 1 26	44 10	0	7.2	B152	4-4-4	set 2 Beproy	good	
25 W	42 26	0	8.7	G5	4-4-4	" 5 Hd Eel bin,	fine	
15 W	45 13	0-1	7.74	G8 III-IV	4-4-4	" 2 O-HV.	0135 Clouds from NE 0155 clear 0230 clouds	fine
					15/10	" 2		
						IP.H + O		
						H-M.		



Time Temp... +65° F

Acus... 15.46

Time Temp...

Transparency Conditions

Slight haze  
Bits of cloud

416

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
51 09 E	+00 08	4-6"	5.57	A0	30"	4A/sec 2"/min	
12 14 W	+00 53	6"	Var	Var	30	" "	
21 33 W	"	"	"	"	"	" "	
53 53 W	+00 09	"	5.57	A0	"	" "	
2 55 E	+56 51	5	4.51	F0	"	" "	
2 46 E	+58 "	4	Var	Var	"	" "	
1 27 E	"	"	"	"	"	" "	Clear
1 09 W	+56 50	"	4.51	F0	"	" "	
2 36 W	+57 17	"	5.7	O6	20	1A/sec " Triple System .0' 15"	
09 W	+41 17	3	5.7	B3	30	" "	
04 W	+48 02	"	4.9	B4	"	" "	
13 E	-03 44	0-1	7.48	G5 IV	4-4-4	Set. 2 0-HV. HAZY 15/10 " 8 Hopeless by 2:10	pod.
						me sc mtlw 2 PH. +10 -39.4 -47.7 +21.8 -0.2 +16.8 +3.2 -4.2	





ome Temp. 44 F  
 ocus 15.44 15.41  
 ome Temp.

Transparency Conditions

Wed Oct 9 - art 16 class - 35 students

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 2 13	25 00	0	6.56	A2m	4-4-4	Set 5 7's Bin.	good.
W 1 22	36 40	0	7.7	B3c	4-4-4	" 2 Be Proj clouds at 2030	Too weak
W 1 42	42 31	0	7.1	B3.5c	4-4-4	" 2 " "	good
W 1 57	57 33		7.0	B3.2c	4-4-4	" 8 " " Cloudy again	fine
W 12 W	18 37	00	7.58	G2 V	4-4-4	" 2 Se-Hv.	good.
					12/10	" 2	OK
						2 PH TG	

419

Date Sat Sun Oct 12-13 / 1957 Observer BK D. - Bok Julian Day 2436124  
 © 199 16 50.7 3565.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Angle Dist
292-38	HD 211336	22 11.4	+56 33	5200	3300	10	6/1	20 56	21 14		W
293-38	HD 213306	22 25.4	+57 54	"	"	"	6/1	21 18	21 36		W
294-38	HD 213306	22 25.4	+57 54	"	"	"	6/1	21 37	21 59		W
295-38	HD 211336	22 11.4	+56 33	"	"	"	6/1	21 59	22 16		W
296-38	HD 220841	23 22.0	+70 08	5000	3950		6/6	22 24	23 02		W
297-38	HD 3366	0 31.5	+72 21	"	"	"	6/6	23 15	23 57		W
24083	HD 255095 MWC 409	23 58.3	+55 00	I-25	E103-20	sel 008	+8.8	00 28	00 52		
24084	HD 4180 MWC 8	00 29.2	+47 44	"	"	"	"	01 09	01 11		
24085	HD 19243 MWC 61	03 00.7	+62 06	"	"	"	"	02 10	02 20		
24086	HD 27115 MWC 114	05 21.0	-05 41	"	"	"	"	02 50	04 00		
24087	HD 44637 MWC 129	06 17.7	+15 09	"	"	"	"	04 08	04 40		
	Focus test E.T-B										

W L

Time Temp. +46°F

Focus 1542

Time Temp. +42°F

Transparency Conditions

Clear

420

100 nebulas shown

Some low fog at 23h and

many Nebulae.

some. Fairly bright aurora

Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
09W	+56 50	3"	451	F0	30	4A/sec 2"/min	
16W	+58 11	"	Var	Var	30	" "	
35W	"	"	"	"	"	" "	
11W	+56 49	"	451	F0	"	" "	
45W	+70 29	2	6.9	A2	"	1A/sec	
50W	+72 40	2	7.1	B3	"	" "	
05W	55 18	1	7.6	B1e	4-4-4	red 2 Be mag	fine
13W	48 00	1	4.7	B4neb	12	8 " nothing but clouds to clear	strong
24W	62 13	1	6.5	B2e	6-6	2 " Guiding bad	fine
10E	-5 41	0	8.2	B5e	4-4-4	8 " could not find HD 25670	strong
2E	5 07	1	7.7	B3e	4-4-	2 " "	good
					15/10	4	end light
						1 F4 + 4	



Time Temp.  $+54^{\circ} F$

Hum. 15.49

Time Temp. ....

Transparency Conditions *Hazy and some cloud.*

422

7.3

Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11° E	$+49^{\circ} 58'$	2	6.8	Ave	4-4-4	at 2: Be	fm
14° E	$+46^{\circ} 11'$	2	6.5	B <sub>2</sub> ne	4-4-4	set 8 : Be	strong
20° W	$+76^{\circ} 47'$	1	7.05	KoN	4-4-4	set 2 OHV	strong
20° W	$+31^{\circ} 48'$	1	6.65	F5N	4-4-4	set 8 OHV	strong
17° W	$+00^{\circ} 50'$	1+	7.53	G2V	4-4-4	" 2 Se H.V.	too weak
17° W	$+03^{\circ} 02'$	1	7.23	F9V	4-8	" 8 " 400??	weak
15° W	$+15^{\circ} 46'$	2	7.57	G1V	4-4-4	" 2	strong
15° E	$+39^{\circ} 39'$	1	7.30	F9V	4-4-4	" 8	good
					15/10	" 5 1PH + 12	ctored.
						See Sp. 10's 3rd stage WOW!	slightly



Time Temp. ....  
 Focus 15.51  
 Time Temp. ....

Transparency Conditions  
 Tues Oct 15 175 RASC Visitors - clear sky.  
 Thurs " 17 30 visitors Astronomy + class - Cloudy.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 3 16	24 30	1	7.26	K0	4-4	Sat 2 Blk Proj. <i>difficult to see</i>	(1) weak
W 2 27	5 55	1	7.6	K0	4-8	" 8 " "	too weak
		1	7.2	B02e	4-8	" 2 R. spec	Guiding bad
W 1 41	61 40	1	6.6	B02e	6-6	" 8 "	fin
E 1 59	63 06	1	7.5	cB(s)	4-8	" 2 " "	Guiding bad
E 1 03	65 43	1	7.1	B02e	6-6	" 8 " "	fin
SW	66 40	1	8.0	G5V	4-4	" 2 Sc HV Haze	good
SE	61 31	0.7	7.22	G4V	4-4	" 8 " "	fin
SE	73 32	0.4	7.70	F4V	4-4	" 3 " "	Guiding bad
SW	42 33	0.8	6.66	G2V	4-8	" 8 " "	good
					15/10	" 5 " "	ct red.

Oct 15  
 AC SC MTW STW S SW ME  
 -40.8 -47.7 +2.8 -1.7 +16.4 -9.1 -4.1  
 -47.7 +9.2 -1.5 +16.9 -13.2 +0.2



425

1957

Date Sat. Sun Oct. 19/20

Observer

KM

Dg

Julian Day 2436131

☉ 206 13 34.4 3581.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
{ 24106	w <sup>2</sup> Aqr	23 37.5	-15 06	I-25	E103A0	.008	+7.8	22 47	
{ 24107	HD 3628	00 34.0	+2 34	I-25	"	"	+7.8	23 10	00 40
{ 24108	6743	01 32	+5 07	"	"	"	"	00 55	01 25
{ 24109	14214	02 12.8	+1 17	"	"	"	"	01 19	01 34
{ 24110	15228	02 22.1	+9 45	"	"	"	+7.8	01 40	02 15
{ 24111	22879	02 35.3	-3 32	"	"	"	"	02 22	02 55
{ 24112	34411	05 12.1	+40 01	"	"	"	"	03 10	03 40
{ 24113	45410	06 22.1	+58 14	"	"	"	+7.9	03 33	04 03
{ 24114	45314	06 21.6	+14 57	"	"	"	+7.8	03 15	03 55
{ 24115	45945	06 25.6	+11 18	"	"	"	"	05 00	05 10
{ 24116	50083	06 46.5	+5 13	"	"	"	"	05 24	05 54

Day Temp. 42°F  
 Hum. 15.51  
 Night Temp.

Transparency Conditions

Clear

426

Sat Oct 19

Hd - Dg.

250 Visitors, showed M15.

Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0	4.6	A0V	6	30 sec. set 2	no other spectrum
					6	60 sec. set 5	
09W	+2° 53'	0	7.93	G2V	4-4-4	set 2 Se HV	weak
32W	+5° 31'	0	5.25	F2V	4-4-4	set 8	Not in spectrum
50W	-1° 35'	0	6.17	F9V	4-4-4	set 2	too weak
66W	+9° 59'	0	6.95	F5V	4-4-4	set 8	weak
36W	-3° 22'	0	7.23	F9Z	4-4-4	set 2	too weak
32E	+40° 02'	0	5.78	G0V	6-6	set 8	weak
47E	+78° 10'	0	6.82	K0IV	4-4-4	set 5 O HD	weak
05W	+14° 53'	0	7.1	B2neH	4-4-4	set 2 Hd Be	weak
19W	+10° 16'	0	5.8	B2ne	4-4-4	set 8	weak
43E	+05° 7'	0	6.8	B2e	4-4-4	set 2 " "	weak
					15/10	Found that	etc. red.
						IPH + 10	

427 Page Sample for Spectrophotometer observing

Date..... Observer..... Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Counter numbers		Scanning Slit	Gain Temp. C-F	Starting Time E.S.T.	Ending Time E.S.T.
				Inst. Start	Emulsion Stop.				
1-1	HD no.	"	"	5100	3450	10	4-5	✓	✓
<del>2-1</del> 2-2									
3-1 3-3									
4-1 4-4									
<p>Tracing of one night, 1, 2, 3... etc.</p> <p>night number, 1, 2, 3... etc.</p> <p>Running serial number.</p>						For Comp. part aperture.			

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