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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.

ne Temp...

ves

ne Temp...

ov Angle

Ind

ome Temp.....
cus.....
me Temp.....

Transparency Conditions

4

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

5

Date Sat-Sun July 28-29, 1956 Observer M₀ - M₀ Julian Day 243568.3

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	^{slit} .008	+21.4 +21.0	22 58	00 58	3
23285	3/4 Cap	20 40.2	-25 38	"	"	"	+21.2	01 07 13	01 17 13	1
	"	"	"	"	"	"		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 MWC 395	19 11.0	+27 46	"	"	"	+20.8	02 59	03 31	3
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	0.7.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, alberto. Mizar

6

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 40W	+2 48	0-1	7.52	K5	4-4-4	Sat. 2 Vis Bin Program	Gerry. One Bee fast Lucky.
0 44W		0	4.7	F8	12	" 3 OL'S	M down button fine
0 49W	-25 24	0	"	"	12	" 8	Dead. Spotter makes scraping noise good
0 51E checked		0-1	6.05	K0	6-6	" 2 Vis Bin Prog	good
2 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	good
1 47W	+37 08	0	6.5	B3	4-4-4	2 Fcl Bin Prog	fine
					15-10	8	OK
						IPH. loaded F103a-0.	

Date Sun July 29-30/56 Observer L-H v 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.
23291	ADS 9908	15 58.9	11 42	I-25	E-103Ad	Set 008	19.8	20 34	22 44	1
23292	" 12520	19 25.2	02 41	"	"	"	19.7	22 48	00 20	1
	Focus Test		0.7B			"			23 40	

Dome Temp... 65°F

Focus... 15.710

Dome Temp.....

Transparency Conditions

8

P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1	2 55W	11 03	0	8.08	K2	44-4	Set 2 Vis. Bin,	" weak
1	0105W	02 49	0	7.9	K5	44-4	" 8 " " clouds 2340	" weak
						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	

9

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.	Hour Angle End
23293	N.G.C. 5904	15 16.2	+02 15	Newt.	E103a-0		2 ^m	21 04 16	21 06 16	1	02 07
23294	" 5634	14 27.3	-05 46				12 ^m	21 11 41	21 23 41	2	03 13
23295	6402	17 35.3	-03 13				8 ^m	21 28 28	21 36 28	1	04 18
	KA. 61	17 01.2	+30 04				8 ^m	21 41 47	21 49 47	1	05 25
23296	N.G.C. 6712	18 50.6	-08 47				8 ^m	21 59 17	22 07 17	2	06 26
23297	6838	19 51.5	+18 39				3 ^m	22 11 30	22 14 30	1	17 0
23298	6093	11 44.4	-22 53				6 ^m	22 19 37	22 25 37	2	27 0
23299	6356	17 21.0	-17 46				8 ^m	22 31 40	22 39 40	1	01 30
23300	IC 1276	18 08.0	-07 14				40 ^m	22 49 11	23 09 11	2	30 0
23301	NGC 6401	17 35.8	-23 53				20 ^m	23 39 11	23 58 11	1	23 0
23302	6544	18 04.6	-25 01				14 ^m	00 07 55	00 21 55		23 0
23303	6656	18 33.6	-23 58				4 ^m	00 34 04	00 48 04	1	30 0
23304	6626	18 21.8	-24 54				6^m	00 47 37	(00 50 34)	2	24 0
23305	6717	18 52.4	-22 47				20 ^m	01 08 14	01 27 14	1	24 0
23306	6712	18 50.6	-08 47				8 ^m	01 33 07	01 41 09	2	30 0
23307	6838	19 51.5	+18 39				3 ^m	01 45 45	01 49 45	1	25 0

Dome Temp. +64°

Transparency Conditions

good.

10

Focus.....

Newtonian

Dome Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 07 W						Focussed on α Serpentes	
03 13 W							
00 18 W							
01 05 W							
0 26 E						Focussed on δ Aquilae Focus all right	
1 20 E							
2 28 W							
01 36 W						Possibility of fogging: do not dip towards L. lat.	
1 38 W						max rose 2315	No guiding.
2 39 W							
2 34 W							
2 12 W							
2 46 W						Back came off plate holder while in purse	
2 54 W						Closed shutter; it failed to reopen	
3 08 W						Focussed on β Capr	No guiding
2 15 W							

cont'd

Date Mon-Tues July 30-31, 1956 Observer S-Mo-Lo Julian Day 2435685

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Flow Angle Incl
23308	N.G.C. 6981	20 51.0	-12° 43'	Newt	E103a-0		14 ^m	01 55 21	02 09 21	2	73°
23309	6864	20 03.5	-22 05				14 ^m	02 15 15	02 29 15	1	274°
23310	7089	21 31.2	-01 02				30 ^s	02 35 17	02 35 57	2	01 23
23311	7699	21 37.8	-23 24				8 ^m	02 49 25	02 57 25	1	01 37
23312	7492	23 06.0	-15 53				16 ^m	03 04 05	03 20 05	1	031°

Dome Temp. 58° at 0300hrs

Transparency Conditions

12

Focus

Dome Temp. 57°

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2	1.36W							
5	244W							
2	01 23W							
1	01 37W							
1	031W							
							<p>Mo guiding I think this plate was numbered 23310</p> <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 +2.2 +0.3 +10.7 +26.1 -3.3.</p>	

13

Date Wed-Thurs Aug 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	N.G.C. 5724	15 16.2	+ 02 15	neut	E 103a-0		3 ^m	21 ^h 09' 42"	21 12' 42"	1	2 21 W
23314	6535	18 01.6	- 00 18				14 ^m	21 17'	21 31 30	2	0 06 E
23315	6402	17 35.3	- 03 13				14 ^m	21 41 02	21 55 02	1	45 W
	KA 61	17 01.2	+ 30 04				14 ^m	22 01 15	22 15 15	1	40 W
23316	K.A. 61	"	"				10 ^m	22 20 34	22 30 31	2	1 55 W
	N.G.C. 6712	18 50.6	- 08 47				10 ^m	22 37 42	22 47 42	2	0 22 W
23317	6838	19 51.5	+ 18 39				3 ^m	22 52 5	23 01 5	1	0 35 E
	KA 61	17 01.2	- 30 04				3 ^m	23 08 27	23 11 27	1	2 35 W
23318	KA 61	"	"				12 ^m	23 17 07	23 27 07	2	3 W
	N.G.C. 6934	20 31.9	+ 07 15				12 ^m	23 35 25	23 47 25	2	1 5 E
23319	6544	18 04.6	- 25 01				14 ^m	23 58 45	00 12 44	1	2 W
23320	IC 1276	18 18.0	- 07 14				40 ^m	00 17 16	00 56 46	2	3 14 W
23321	NGC. 6717	18 52.4	- 22 47				22 ^m	01 03 35	01 25 35	1	2 58 W
23322	6734	20 31.9	+ 07 15				12 ^m	01 33 15	01 45 15	2	3 W
23323	6712	18 50.6	- 08 47				8 ^m	01 50 11	01 58 11	1	3 W
23324	6838	19 51.5	+ 18 39				3 ^m	02 03 25	02 06 25	2	1 W

Dome Temp. 69°

Transparency Conditions clear, light clouds from south
at 0130 14

Focus

Dome Temp.

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	2 21 W						focussed on δ Serpentis quite away off.	
	0 06 E						a jet plane passed directly over Saturn; the	
	0 45 W						guide star!! 09 42 hrs	
	1 40 W						plate turned 180° between exposures.	
	1 55 W						" " " " " "	
	0 22 W						focussed on δ Aquilae - very good	
	0 25 E						plate turned 180°	
	2 35 W							
	2 53 W							
	0 14 E							
	2 33 W							
	3 14 W							
	2 58 W							
	1 39 W						focussed on δ Aquilae - o.k.	
	3 34 W						drifting in RA: gear differential sticking	
	2 40 W							

Dome Temp.....

Focus.....

Dome Temp.....

Transparency Conditions.....

16

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 07 W							
1 36 W						closed 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	NewT	103a.0		3m	21 06.00	21 09.00	1	22 20
233288	" 6254	16 54.9	-04 03	"	"		2m	21 14 40	21 16 40	2	22 40
233289	" 6218	16 44.9	-01 53	"	"		2m	21 19 15	21 21 15	1	21 03
2332930	" 6356	17 21.0	-17 46	"	"		10m	21 25 21	21 25 31	2	21 02
233301	" 6093	16 14.4	-22 53	"	"		6m	21 40 11	21 46 00	1	22 00
{ 233312	" 6402	17 35.3	-03 13	"	"		16m	21 57 19	22 13 40	1	21 07
	K.A. 61	17 01.2	+30 04	"	"		16m	22 22 31	22 25 00	2	21 07
{ 233323	K.A. 61	17 01.2	+30 04	"	"		30m	22 43 12	23 13 00	2	21 07
	I.C. 1270	18 08.0	-07 14	"	"		30m	23 26 00	23 56 00	2	18 30
233334	NGC 6838	19 51.5	+18 39	"	"		3m	00 35 54	01 05 00	1	21 07
{ 233345	" 6717	18 52.4	-22 47	"	"		20m	00 17 10	00 37 30	2	21 07
	K.A. 61	17 01.2	+34 04	"	"		20m	00 44 30	01 14 30	2	21 07
{ 233356	K.A. 61	17 01.2	+34 04	"	"		12m	01 11 57	01 23 00	2	21 07
	NGC 6934	20 31.9	+07 15	"	"		12m	01 30 55	01 42 00	2	21 07
233357	NGC 6712	18 50.6	-08 47	"	"		9m	01 49 05	01 56 00	1	21 07
233378	" 6838	19 51.5	+18 39	"	"		3m	02 02 50	02 05 00	1	21 07

Dome Temp. +70°F

Transparency Conditions *Very good.*

18

Focus.....

Dome Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 20W						<i>See on a Serpentine</i>	
00 44W							
01 03W							
00 42W							
02 00W							
01 07W						<i>Focus on Serpentine</i>	
05 07W						<i>Plate turned 180°</i>	
03 40W							
02 18W						<i>CE 31.47 / CB 2 10</i>	
00 41W						<i>Focus on Aquilae</i>	
03 10W						<i>23 52</i>	
04 32W							
04 52W							
01 39W							
03 35W							
02 44W							

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

20

Focus.....

Dome Temp. $+58^{\circ}\text{F}$

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 09W							
3 00W							
1 44W							
0 44W							
						No Ph's loaded. A perfect night for sequences Clock not driving at proper rate during most of night.	
						Aug. 2. MC SC MTW STW S SW MG -48.9 +21.8 (-74.0) -0.03 +10.9 +50.4 -8.0 +3.9	

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.
23343	HD 180316 MWC 394	19 11.0	+27 46	I-25	E103a-0	Set 0.008	23.8	22 37	22 57	1
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	
23345	MWC 352 HD 192123	20 43.5	+3 57	"	"	"	23.8	00 01 10	00 01 42	3
								00 03 09	00 04 08	
								00 05 05	00 07 05	
23346	HD 214146	22 36.7	+44 29	"	"	"	23.6	00 17	00 49	4
23347	HD 180316	19 11.0	+27 46	"	"	"	23.3	00 57	01 23	1
23348	SZ Poc HD 219113	23 08.3	+02 08	"	"	"	23.4	01 39	03 27	2
23349	HD 213534	22 27.0	+29 02	"	"	"	23.8	03 37	03 41	3
23350	HD 215407	23 02.7	+05 34	"	"	"	23.7	03 50	04 13	3
	files 7 out JPB						23.7			2

Dome Temp.

Focus ...15

Dome Temp.

Hour angle
End

0.174

2.365

1.00

1.00

1.00

1.00

1.14

Dome Temp. +67°F

Focus.....15.770

Dome Temp. +65°F

15.748

0.022

15.770

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

22

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
7:10	17W	+27 54	1	6.64	B5	4-4-4	Set 2 Sp Bin	NO CLOCK NOT DRIVING AT PROPER RATE.	good
7:20		+48 26	1 1/2	5.2	B3ne	4-4-4	2 Be: 19 Star	SPOTTER SCRAPES AS IT TURNS	fine
15:00	2 36 1/2 E					6-6	5 1/2		
15:00						12	9 1/2		
15:03		36 1.9	2	4.5	B0e	12	Set 1 Be		
15:08						12	Set 5		
15:00	0 05 E					12	Set 7		fine
15:01	1 17 E	+44 47	2	7.26	A5	4-4-4	Set 2 Sp Bin	(3) FLASH NEEDS NEW	fine
15:03	2 43 W	+27 54	2	6.64	B5	4-4-4	Set 8 " "		fine
15:00	0 52 W	+02 26	1-2	8.7	G5	4-4-4	Set 2 " "	15-20"	fine
15:01	1 54 W	+27 20	1 1/2	6.5	A5	4-8	Set 2 Ed Bin. Programme		fine
15:01	1 41 W	-45 51	1 1/2	6.4	B3	4-8	Set 5 Ec Bin		fine
						15/10	Set 8		1st star city red at night
							2 PM		

23

Date 1956 Aug 6-7 Mon-Tue Observer Mo - 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 End
23351	HD 180316 MWC 346	19 11.0	+27 46	I-75	E103a-O	Set 0-008		22 02	22 16	4	0.12 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

$$\begin{array}{r} 15.710 \\ 0.022 \\ \hline 15.732 \end{array}$$

Transparency Conditions Fair after clouds cleared.

24

Sat. Aug 4. 10 ventos - cloudy with rain.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
6	0 12 E	+27 53	2	6.64	B5	4-4-	Set 2 Sp. Bin	strong
44	0 59 E	+36 50	2½	7.7	B3e	4-4-4	Set 2 Be.	good
57	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	

Date Tues-Wed, Aug 7/8, 1956 Observer Cv - Hg Julian Day 2435.693

①135 19 15.7 - 3452.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
2 3354-	HD 180316	19 11.0	+27 46	I-25	103a-0	.008	+24.3	20 37	20 57	1
{ 2 3355	ADS 12520	19 25.2	+2 41	"	"	"	+24.2	21 10	23 40	2
{ 2 3356	ADS 12882	19 41.0	+4 00	"	"	"	+24.0	23 47	00 37	2
2 3357-	HD 214046	22 36.7	+44 29	"	"	"	+24.0	00 46	01 30	1
2 3358	¹² Lacertes HD 214993	22 37.0	+39 43	"	HI-SPEED	"		01 38:15	01 40:15	2
								01 43:45	01 47:45	
							24.1	01 49:00	01 57:00	
								01 56:40	02 12:15	
2 3359	HD 219113	^{08.3} 23 11.2	+02 08	"	103a-0	"	24.1	02 20	03 50	3
	Trans. Int. 076						24.0			

1 PH (103a-0)

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

26

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
01 24W	+44 47	0-2	7.26	A5	4-4-4	Set 8 Spec Bin.	strong
		1½	S.1	B2 π	9-9	set ②	
					9-9	set 4½	slightly hazy
		1½			9-9	set 7	fine
01 23W		1½-2			6-6-6	set 10	
1 35W	02 26	1-0-2	8.1	G5	4-8	set 2 Clouding over from north - thru 300	good
					15-10	set 8 thru broken cloud from 300	clouded slightly
						ended at 4:10	
						Striker is missing	

Dome Temp. 74° F

Focus 15.819

Dome Temp.

Transparency Conditions *Cloudy after sunset for some*

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 · Vis Bin	(1) weak
					15-10	Set 8 · Haze and light cloud, very poor transp. (Closing 03:00 E.S.T.)	O.K.
4 phs loaded (1 Hi-Spd)							
Thw-Fri Aug 9-10/56 MR-L ₀							
intermittent clouds all night.							
Aug. 10	mc	sc	miw	stw	s	sw	mc
	-3.4	+21.9	-4.6	-0.4	+8.8	-15.5	-7.1

29

These plates
spoiled and
cancelledDate Fri-Sat Aug 10-11 1936 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.
23361	HD 180316	19 ^h 11. ^m 0	+27° 46'	I-25	103a-0	^{set} .008	+24.7°	20:13	20:47	4
23362	γ Lyr	18 55.2	+32 33	"	"	"	"	20:54	—	2
	"	"	"	"	"	"	"	—	—	"
	"	"	"	"	"	"	"	—	20:56	"
23363	HD 178849	19 05.1	+34 35	"	"	"	"	21:04	21:14	3
	"	"	"	"	"	"	"	21:15	21:35	"
23364	HD 174886	18 47.7	-10 21	"	"	"	"	21:44	22:45	2
23365	HD 177648	19 00.5	+23 11	"	"	"	24.4	22:57	23:27	"
23366	HD 192445	20 09.8	+36 02	"	"	"	"	23:45	00:15	3
23367	HD 175592	20 27.2	+43 59	"	"	"	24.3	00:45	01:05	3
23368	HD 180316	19 11.0	+27 46	"	"	"	"	01:14	01:38	4
23369	HD 214993	22 37.0	+39° 43'	"	Hi-Speed.	"	"	01:51:07	01:55:07	"
	"	"	"	"	"	"	"	01:56:45	02:02:45	"
	"	"	"	"	"	"	"	02:04:35	02:12:35	"
23370	ADS 16325	22 47.5	+42 46	"	103a-0	"	"	02 25	02 55	2
23371	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
 Aug 10-11
 .745
 15.022
 15.767
 Aug 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 ^{MUC} Be 307 Field checks 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	6.64	B5	4-4-	set 8 Spec. Bin. numbered 2336 1-9	
		0-1	5.1	B2 III	9-9	set 1 12 Lac right haze.	
					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 re focused.	
0 53 W	+65 48	0-1	7.34	A2	4-4-4	set 8 vis bin	

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 ⁶¹ 72	HD 214946 Focus test	22.367 DTB	+44 29	I-25	103a-0	.008	24.2	04 02	04 38	3 3
Sat Aug 11 1956 55 visitors - lecture on Milky Way 0-Hg 0:00 cloudy with occasional showers Hg										

Dome Temp. $+69^{\circ}\text{F}$ Focus 15.792

Dome Temp.

15.770

0.022

15.792

Transparency Conditions Not bad after clouds cleared about 22^h 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
+ 15 E	01 18 E	$\frac{1}{2}$					
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 ₂ III	6-6-6	" 1 } Fair, sl. haze (β Canis Majoris star)	excellent.
		0- $\frac{1}{2}$	"	"	6-6-6	" 5 } " " " "	good.
0 17 E	+39 59	-0 $\frac{1}{2}$ 0	"	"	6-6-6	" 9 } seeing poor More haze (med.) cloud break in SW.	too weak
0-20W	+02 26	-0	8.7	C ₅	4-4-4	" 2 Cloud + haze from SW. 01:40	too weak
						" 8 .02-15 overcast.	OK
						3 Ph's loaded I-25, 1030.0	
Aug. 13						mc sc mTW STW S SW ME	
						-6.2 +21.8 +7.0 +0.5 +5.9 -21.1 -2.8	

(1872)

Date Mon-Tue 1956 Aug 13/14 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	^{h m} 19 34.9	^{° ' "} +16 21	I-25	E103-a-0	set 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	00:46	1
23371	HD 195592	20 27.2	+43 57	"	"	"	22.8	00:53	01:13	1
23372	HD 214946	22 36.7	+44° 29	"	"	"	22.8	01:22	01:52	4
23373	HD 214993	22 37.0	+39° 43	"	Hi speed.	"	22.8	02:01:45	02:05:45	1
	=1260			"	"	"	"	02:06:45	02:12:45	1
				"	"	"	"	02:14 35	02:22.3	1
23374	HD 219183	23 08.3	+02 08	"	103 a-0	"	22.7	02:39	03 57	4
23375	ADS 1B	23 57.5	+65 32	"	"	"	22.6	04.12	04:42	2
	Focus test	P.T.B.					22.8			4

Dome Temp. 68°

Focus 15758

Dome Temp.

Transparency Conditions clearing after sunset.

36

15736

22

15758

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:20 W	16 29	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 ^{may be numbered} changed in dec 15367	fine
1:47 W	+36 13	2.5	7.1	B ₂ ne	4-4-4	Set 2 Be prog. ^{MWC} 332 Lock finder field. ^{Field checks}	fine
1:57 W	-44 10	2.5	7.2	B ₁ se	4-4-4	set 8 .. 347 1/2 hr, field checker	good
6:26 W	+44 48	2	7.26	A.5	4-4-4	set 8 spec Bin	fine
		2	5.1	B ₂ III	9-9	set 1 12 Lac very light haze	fine
					6-12	5	strong
0 56 W	+10 00				6-6-6	9	strong
1 59 W	+02 26	2	8.7	G.5	4-4-4	set 2 S Z Picoles sp bin	fine
1 55 W	-65 50	2.5	7.34	A ₂	4-4-4	set 8 Vis bin	fine
					15-10	set 8	OK



2 ph of 103-a-0 t 1 under (1)

a visitor outside 2:50 to 5:15 EST

37

Date Tue-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.	Hour Angle End
23376	MWC 275 HD 164284	17 55.3	+04 22	I-25	E-103a0	Set 005	25.2	20 25 30	20 28 00	1	14E
23377	MWC 307 HD 174886	18 47.7	-10 21	"	"	"	25.2	20 40	21 50	1	15W
23378	HD 180316	19 11.0	+27 46	"	"	"	25.1	21 56	22 22	2	16W
23379	ADS 14133	20 35.3	+03 05	"	"	"	25.1	22 28	00 58	3	16W
23380	MWC 383 HD 209296	21 57.2	+56 14	"	"	"	24.8	01 13	02 03	4	17W
23381	? MWC 376 ? HD 206773	21 39.3	+57 17	"	"	"	24.7	02 12	02 30	4	16W
23382	ADS 16325	22 47.5	+42 46	"	"	"	24.6	02 43	29 13	3	17W
23383	HD 214946	22 36.7	+44 29	"	"	"	24.6	03 19	03 49	2	17W
23384	MWC 402 HD 223501	23 45.0	+61 39	"	"	"	24.6	03 58	04 42	1	17W
	Focus test - C.T.B.						24.7			1	

Dome Temp. 71°F

Focus 15.790

Dome Temp. 64°F

15.022
0.768
15.790

Transparency Conditions quite good; clouds low in N. & W. 38

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 14E	+04 22	1/2	4.8	B ₉ nc	6/6	Set 2 Be Prog	Strong
0 15W	-10 17	1-0	8.1	B ₃ e	4-4-4	Set 8 Be	fine
0 25W	+27 53	1-0	6.64	B ₃	4-4-4	Set 2 Ap Bin Prog	Strong
1 36W	+04 17	1	8.1	K ₅	4-4-4	Set 2 ^{vis} Bin small thin clouds moving in from NW	fine
1 21W	+56 32	1-0	8.1	B ₅ e	4-4-4	Set 2 Be Prog. finder field ok. ^{image} clouded	weak
1 56W	+57 22	1	7.0	B ₀ nc	4-4-4	Set 8 Be Prog. re focussed. Identity uncertain HD 206713 should be HD 206718 + 5732	weak
1 40W	+43 14	1	6.24	K ₅	4-4-4	Set 8 ^{vis} Bin light cloud at 03:54	Strong
2 27W	+44 16	1.5	7.26	A ₅	4-8	Set 8 S ₁ Sin	fine
2 10W	+61 56	1.5	8.2	B ₃ e	4-4-4	Set 2 Be Star prog	Strong
					15-10	Set 3	OK.
						2 pH of 1032-0	
						Aug 15 MC SC MTW STW S SW ME	
						-8.5 +21.7 +13.0 +0.6 13.9 -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	B35	4-4-4	set 2 Spec Bin	fine
-	34 42	0	6.4	B3I	12	set 2 MK Std. Exp 10 ^m	weak
0:10 E	"	0	"	"	6-6	set 8 " Exp 20 ^m	fine
-	32 38	0	3.18	B9III	-	set 1 MK Std 1/4 ^m	weak
-	"	"	"	"	12	5 " 1/2 ^m	good
+0:08 W	"	"	"	"	-	9 " 1 ^m	slimy
0:45 W	23 15	0	6.9	B3e	4-4-4	set 2 Be MWC 310 slldg at end	weak
22 W	18 14	"	6.9	B9.5e	4-8	set 8 Be MWC 317 (shy doubtful)	weak
14 W	27 53	0	6.64	B5	4-8	set 8 Spec Bin (cloud S.W. some clds. image gone 23:50)	2. weak
					15/10	set 5.	OK
						4. phd loaded, 1130-0	
						MC GC MTW STW S SW ME	
						Aug. 17 -11.0 +21.9 120.8 +0.8 +2.8 -28.7 -3.8	

Date Fri - Sat Aug 17-18 1956 Observer Hg -

Julian Day 2435703

☉ 144 55 27.0 ♀ 3462.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23391	ADS 12750	19 34.9	+16 21	I-25	F-103a-0	Set 0.008	26.9	20 35	22 49	4
	Focus Test	OTB					26.7			

Dome Temp.
Focus S.
Dome Temp.

Exposure
End

Dome Temp. 74°

0.795
15.022
15.817

Focus 15.817

Dome Temp.

Transparency Conditions clouds, clearing shortly after 428
sunset - some haze

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4 0 50W	+16 29	0.22 $\frac{1}{2}$	8.5	K ₅	4-44	Set 2 Vis Bin Pwy. 21:30 - very hazy 22:00 - thin light cloud, getting progressively worse	wk.
					5/10	Set 8	
						23:30 - closed up.	
						3 PH - E 10340	
						Saturday Aug 18 - 15 visitors.	
						Raining, telescope demonstrated - Ho, PK	

43

Date Sun-Mon Aug 19-20, 1956 Observer Lo - Hg Julian Day 2435.705

0146 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	19 12.0	+27 46	I-25	103 a-0	.008	22.3	20 34	20 54	1
	MWC 310									
23393	HD 127642	19 00.5	23 11	"	"	"	21.8	21 11	22 01	2
23394	MWC 308 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	00 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 03:30	02 07:30	
							21.4	02 08	02 14	
23398	HD 219113	23 01.2 ³	+02 08	"	"	"	21.1	02 22	04 42	
	Focus Test	TB					21.0			

Dome Temp.

Focus

Dome Temp.

Elev Angle
Elev

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

Transparency Conditions *poor: near full moon*

44

light clouds at start. sid. clock 50 see part 2

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
✓ check 0 43 E	+27 53	0	6.64	B ₅	5-5-5	Set 2 Sp bin set RA 19 14.0	Good
0 34 W	+23 15	0	7.5	B _{3e}	4-4-4	Set 2 Be prog RA 19 03.6 ^{through thin} cloud	Good
1 16 W	+59 57	0	6.9	B _{4e}	4-4-4	Set 8 Be prog	Good
0 36 W	+59 33	1-0	7.8	M A	4-4-4	Set 2 Vis bin clear in area ^{clo. ds: 00 00}	0
0 40 W	+44 47	0-1	7.26	A ₅	5-5-5	Set 8 Ap. Bin Prog - three light clouds	fine
	+40 00	1	5.1	A _{2 III}		Set 1 12 Lac. waited for clouds to pass	weak
		1			6/6	Set 5	sluggish
1 11 W		0				Set 9	sluggish
3 03 W	+02 27	0-	8.7	G ₅	4-4-4	Set 2 1 Z Psc - clouds over field for first 15'	fine
					15/10	Set 8	OK?

A PH- (103a-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 Tue. Wed. Aug 21/22 1953 Observer Ke - Lo Julian Day 2435707

© 148 46 261 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	ADS 12693	19 32.8	+16 14	I-25	E102-200	set 008	20.4	20 06	21 18	1	0.3E
23400	12750 MWC 409	19 34.9	+16 21	"	"	"	20.2	21 20	00 20	1	2.6W
23401	HD 225095	23 58.3	+55 00	"	"	"	20.2	00 38	01 04	2	1E
23402	HD 214946	22 36.7	+44 29	"	"	"	20.1	01 19	01 47	3	0.5W
23403	HD 1826	00 17.6	+28 55	"	"	"	20.1	02 04	02 22	4	0.3E
	Focus Test	0 TB.					20.1			4	

Dome Temp. 640

Focus 15.715

Dome Temp.

Transparency Conditions Good, clouding in at 02:00 46

15.693

22

15.715

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 28 E	16 22	10	6.4	K0	4-8	set 5 Vis. Bin Taken by mistake	too weak
2 26 W	16 28	1	8.5	K5	4-4-4	9 "	expose since by wd
1 13 E	55 18	1	7.6	B1e	4-4-4	Set 2 Be prog	fine
0 52 W	44 46	1	7.26	A5	5-5-5	set 2 Sp bin	light cloud. 0222
0 23 E	29 20	0	7.0	A5	4-8	set 4 Col bin Prog.	too weak
					15-10	Set 9	OK
						4 PH of 103a0 closed 03 00	
						Aug. 22	
						MC SC MTW STW S SW ME	
						-15.0 +21.8 -6.5 +0.3 -2.9 -38.3 -8.5	
						23 -7.5 -38.0 +0.5	
						24 -18.8 -2.8 -3.5	

L 47

Date Fri-Sat Aug 24-25/56 Observer Lo-H Julian Day 2435710

0151 39 55-6 3473.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 19.3	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Angle End
23404	^{C8-C} HD 131747	14 50.3	+15 23	I-25	103 a-0	0-0 8	18.8 halfway	19 56	20 42	4	1149 W
→23405	HD 214946	22 36.7	+44 29	"	"	"	18.8	20 52	21 22	3	122 E
23406	^{C10-D} HD 176674	18 56.3	+14 25	"	"	"	18.8	21 29	22 39	4	136 W
23407	ADS 12750	19 34.9	+16.21	"	"	"	18.8	22 52	01 52	2	04 W
23408	" 1459	01 44.0	64 22	"	"	"	18.8	02 03	04 03	"	00 W
→23409	HD 214946	22 36.7	44 29	"	"	"	18.5	04 12	04 46	"	0-13 W
	Focus Test		O.T.B								"

Dome Temp. $+62^{\circ}$ Transparency Conditions *good*

48

15.702 8

Focus *15.702**moon rose at 20:15*Dome Temp. *62.0*

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
42	03 44 ^W	+15 07	0.5	7.8	K ₀ III	4-4-4	set C-region star <i>set. clock rose fast</i>	<i>fine</i>
22	03 22E	+44 47	1	7.26	A5	4-4-4	set Sp bin <i>refocused.</i>	<i>lost</i>
39	1 36W	+14 26	1	7.89	B5	4-4-4	set C-region star <i>refocused</i>	<i>good</i>
52	04 11W	+16 28	1	8.5	K5	4-4-4	set Vis bin <i>flexure!</i>	<i>good</i>
03	00 11 W	64 38	1	8.3	K5	4-4-4	" 9 " "	<i>good</i>
0	04 03W	44 47	0.1	7.26	A6	4-4-4	" 9 Spect. Bin.	<i>fine</i>
						15/10	" 5	<i>OK</i>

1 P.H. No Heat.

Dome Temp. $+59^{\circ}F$
 Focus 15.765
 Dome Temp.....

Transparency Conditions *Good at first.*
 23:00 Light cloud - haze from NW.

50

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 30W	+16 28	2-0	8.5	K5	4-4-4	Set. 5 Vis. Lim. Prog.	fine
		2	5.1	B ₂ III	9-9	" 1 Spec. Bin. Prog. (12 Lac.)	good
		2	"	"	9-9	" 5 " sl. haze " "	fine
0 53W	+40 01	2	"	"	9-9	" 10 " " " "	sl.
0 55W	+14 43	1-2	6.59	A ₀	4-4-4	" 5 C-Region Stars	l. sl.
0 59W	+46 11	2	6.5	B ₃ ne	4-4-4	" 2 Be. Prog.	l. sl.
1 07E	+48 08	2	4.7	B ₄ ne	9-9	" 8 " " " "	fine
1 15W	+29 12	0-1	7.0	A ₅	4-4-4	" 2 Gal. Bin. Prog. <small>arc not striking properly</small>	l. sl.
1 20E	+25 31	2	6.7	F ₄	4-4-4	" 8 " " " <small>adjusted also C.R.</small>	fine
3 51W	+15 43	1-2	8.3	A ₀ p	4-4-4	" 2 C-Region Stars	weak
					15/10	" 8	OK
4 Pts. loaded, 103 a-o							

51

Date Sun-Mon, Aug. 26/27 1957 Observer RK - Hg Julian Day 24357.2

① 153 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.
23418	d Del	20 35.0	-15 34	I-75	E103-a0	^{set} 008	20.8	23 11	23 12	
								23 14	23 15	1
									23 16	23 18
23419	HD 199216	20 50.7	+49 09	"	"	"	20.6	23 30	23 50	2
23420	HD 174243	18 ^{45.0} 46.3	+49 19	"	"	"	20.8	23 57	00 39	3
23421		HD 214946	22 36.7	+44 29	"	"	"	20.9	00 39	01 31
23422	C12-E HD 217559	22 56.4	+14 20	"	"	"	20.8	01 40	02 39	4
23423	HD 214113 Focus Test	23 08.3	+02 08	"	"	"	20.8	02 40	03 08	1
				0.8				20.8		

Dome Temp. 64° F

Focus 15722

Dome Temp. 60°

Transparency Conditions

clearing about 23^hhaze and drifting cloud
all night

52

8

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			8.71	B9 V		set 2 1/2 min MK std.	weak
		0			12	5 1 min	l. sh ⁻
0 44 W	15 45					8 2 min	sh ⁻
1 02 W	49 21	0	6.8	B1 II	4-4-4	set 5 MK std.	l. wh
3 50 W	49 23	-1	7.3	F2	4-4-4	set 2 sp. bias. prog.	fine
0 56 W	44 47	0 ⁻ 1 ⁺	7.26	A5	4-4-4	set 8 sp. Bias - thin clouds	l. sh ⁻
1 39 W	+14 37	1	7.89	K0 III	4-4-4	set 2 C Region star	fine
2 01 W	+02 27	1-0	8.7	G5	4-	set 2 SZ Pac solid cloud from west	too weak
					15 10	set 8	OK
				3 P21 + 8		Aug. 27 MC 9C 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	

53

Date Mon/Tues. Aug 27/29, 1956 Observer - Gu Julian Day 2435713
 @ 154 33 40.1 3478.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
23424	HD 214946	22 ^h 36.7	+44 29	T-25	103a-0	.008	+20.0	00 58	01 20	2
23425	HD 214993	22 37.0	+39 43	"	Hi-Sp.	"		01 24.30	01 27.30	1
	"	"	"	"	"	"		01 28.00	01 34.00	"
	"	"	"	"	"	"	+20.0	01 35.30	01 47.30	1
23426	HD 218393	23 02.6	49 40	"	103a-0	"	+20.0	01 52	02 06	3
23427	HD 224559	23 53.8	45 52	"	"	"	+20.0	02 16	02 24	3
	Focus Test		O.T.B.							
	Sat. Sep. 1-2, 1956		N-Hg							
	Cloudy. Gave talk on Miras & demonstrated telescopes.									
	An odd "in visible overhead" at end. 2 Royal Astr. Soc.									
	About 80 visitors									

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
00	48W+44 46	2	7.26	A5	4-4-4	Set 2 Spec Bin. Prog.	fine
		2	5.1	B ₂ III	9-9	Set 1	l. wh
		2	"	"	9-9	" 5	fine
01	15W+39 59	2	"	"	9-9	10	l. sh
01	09W+49 59	2	6.8	Ave	4-4-4	Set 2 Be Prog. } good day	l. wh
00	35W+46 11	2	6.5	B ₃ ne	4-4-4	" 8 " clouds from W. solid at 00:30	fine
					15/10	Set 8	ok
				Aug. 29	MTW	MR	
					+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

55

Date Sept 2/3, Sun/Mon. Observer C. - Lo Julian Day 2435719
 ☉ 160 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	103a-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	"	"	"	+21.9	21 27	21 37	3
	HD 214993	22 37.0	+39 43	"	Hi-Sp	"	+21.9	21 55	22 07	2
23431	"	"	"	"	"	"		22 08	22 18	2
	"	"	"	"	"	"		22 19	22 29	2
	"	"	"	"	"	"		22 30	22 42	2
	"	"	"	"	"	"	+21.9	22 43	22 52	1
23432	"	"	"	"	"	"		22 53	23 03	4
	"	"	"	"	"	"		23 04	23 15	4
	"	"	"	"	"	"		23 16	23 25	4
	"	"	"	"	"	"	+21.9	23 26	23 31	3
23433	"	"	"	"	"	"		23 35	23 45	3
	"	"	"	"	"	"		23 46	23 56	3
	"	"	"	"	"	"	+21.8	23 57	00 06	3
	"	"	"	"	"	"		00 14	00 24	2

Dome Temp. +68°F

Focus 15.740

Dome Temp.

Transparency Conditions Good

56

PE	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
92C	23W	+49 23	0-1	7.3	F ₂	4-4-4	Set. 2 Spec. Bin. Teles.	fine
94C	52E	+37 21	0	5.7	B ₃ ne	4-4-4	Set 2 ← Bin. Teles. End set (Apv) for position to focus check.	good
70C	03E	+26 22	0+	5.9	B ₂ ne	4-4-4	Set 5 " "	fine
72Z	00-7E	+40 00	0-1+	5.2	B ₂ III	10-10	Set 1 12 ^m 12 Lac. Atmos - Good	fine
	"	"	-1+	"	"	10-10	" 4 10 " "	fine
	"	"	1	"	"	10-10	" 7 10 " "	good
	"	"	0~1	"	"	10-10	" 10 12 " "nearly 0 variable seeing"	fine
	"	"	0-1+	"	"	10-10	" 1 9 " "	fine
	"	"	-1+	"	"	10-10	" 4 10 " "	fine
	"	"	0+1	"	"	10-10	" 7 11 " "	fine
	"	"	+1-	"	"	10-10	" 10 9 " "Very bright aurora" (good)	fine
	"	"	1-2	"	"	10-10	" 1 8 " "	fine
	"	"	1-2	"	"	10-10	" 4 10 " "	fine
	"	"	0~2	"	"	10-10	" 7 10 " "	good
	"	"	0+2	"	"	10-10	" 10 9 " "non telescope 5hr west zenith"	fine
	"	"	1	"	"	10-10	" 1 10 " "bright aurora opposite"	fine

57

cont

Date Sept 2-3 56 5m-1m 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 214993	22 37.0	+39 43	E-25"	Hi-Speed	.008		00 25	00 35	2
	"	"	"	"	"	"		00 34	00 42	2
	"	"	"	"	"	"	21.9	00 43	00 51	2
23435	"	"	"	"	"	"		00 52	01 00	4
	"	"	"	"	"	"		01 01	01 11	4
	"	"	"	"	"	"		01 12	01 21	4
	"	"	"	"	"	"	21.8	01 22	01 30	4
23436	"	"	"	"	"	"		01 31	01 40	3
	"	"	"	"	"	"		01 41	01 50	3
	"	"	"	"	"	"		01 51	02 01	3
23437	"	"	"	"	"	"	21.2	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

38.3

38 W

5.6

Dome Temp. 62°

Transparency Conditions Good

58

Focus.....

Dome Temp.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	x 40 00	2	5.2	B ₂ III	10-10	set 4 8 ^m 12 LAC	fine
	"	2	"	"	10-10	" 7 8	fine
calculated. 0 43-3W	"	2	"	"	10-10	" 10 8	fine
	"	2	"	"	20	" 1 8	fine <i>This plate rather dark, also overexposed</i>
	"	1.5	"	"	10-10	" 4 10	fine
	"	2.5	"	"	10-10	" 7 9	fine <i>maybe 31500 arc.</i>
	"	2	"	"	10-10	" 10 8	fine
	"	2	"	"	10-10	set 1 9	fine <i>arc overexposed.</i>
	"	1.5	"	"	10-10	" 4 9	fine <i>drifting in SA</i>
	"	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 38.3W	"	2	"	"	10-10	" 10 8	fine
2 38W	"	2	"	"	10-10	" 10 8	fine

C W

59
 Date Sept 2-3, 1956 ^{Cont} Sun-mon Observer Lo Julian Day 24357.19
 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.
23438	HD 214993	22 37.0	439 43	F-25	H1 Spad	.008		02 47	02 57	4
	"	"	"	"	"	"		02 58	03 08	4
	"	"	"	"	"	"		03 09	03 19	4
	"	"	"	"	"	"	21.7	03 20	03 30	4
23439	MWC 29 HD 13661 Focus Tent	02 08.1	54 14	"	103 N-D	"	21.8	03 44	05 06	1
moon almost new.										

Dome Temp.....

Transparency Conditions *Good, flickering aurora.* 60

Focus.....

Dome Temp..... *62°F*

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
7.4	+40 00	2	5.2	B ₂ III	10-10	Set 1 10 ^m 12 Lac drifted off for 2 min	1 sh
8-	"	1.5	"	"	10-10	" 4 10 "	1 sh
9	"	1.5	"	"	10-10	" 7 10 "	1 sh
10	"	1.5	"	"	10-10	" 10 10 "	1 sh
6	54 18	1	8.6	B ₃ ne	4-4-4 15/10	Set 2 B ₃ star check under field. ^{O.K. Mo} Set 1	1 sh OK
NO H-speed plates loaded. Better bring another full box along. ^{and}							
1 PH of 103a-0 + 4							
Just as the alt on all plates taken this night							

Date Sept 3-4 /56 Observer Hv - Hg Julian Day 24357.20
 0161 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	E103a-O	008	23.8	19 56	20 56	2
23441	12 Lac.	22 37.0	39 43	"	H1 Spd.	"		21 15	21 25	3
	"							21 26	21 38	
	"						23.8	21 39	21 49	
	"							21 50	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 09	23 21	
	"							23 22	23 34	
23444	"							23 35	23 46	3
	"							23 47	23 59	
	"							00 00	00 12	
	"							00 19	00 30	

Dome Temp.....70.0

Focus.....15.770

Dome Temp.....

Transparency Conditions

62

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2	00 45W	49 22.5	0	7.3	F ₂	4-4-4	Set, 2 Spect. Bin.	best
3			0-1	5.2	B ₂ III	10-10	" 1 10 ^u	fine
	calculated 02 15.3 E		0			10-10	4 12	best
	0-16E	40 00	1			10-10	7 10	fine
			0			10-10	10 12	fine
			1			10-10	1 10	fine
			1			10-10	4 10	fine
	01 27E		1			10-10	7 10	fine
			1			10-10	10 10	fine
			1-2			10-10	1 9	best
			1			10-10	4 10	fine
			0			10-10	7 12	fine
			0			10-10	10 12	fine
			0-1			10-10	1 11	fine
			0			10-10	4 12	fine
	calculated 08-1W		0-1			10-10	7 12	fine
	0-20W		1			10-10	10 11 4 ⁿ W	fine

663
 Date Mon. Evng. Sept. 3-4/56 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	HD 214993	22 37.0	39 43	25"	Hi-Sp.	008	23.6	00 31	00 43	1
								00 44	00 56	
								00 57	01 08	
								01 09	01 20	
23446	"						23.7	01 20	01 53	2
								01 31	01 43	
								01 44	01 56	
								01 57	02 12	
23447	"						23.7	02 11	02 29	3
								02 24	02 36	
								02 37	02 49	
								02 50	03 03	
23448	MWC 23 HD 12302	01 55.6	59 12	"	E-103a0	"	23.7	03 21	04 43	4
23449	HD 22203	03 29.4	-21 58	"	"	"	23.4	04 54.0	04 55.0	3
								⁰⁴ 05 57.0	⁰⁴ 05 59	
								05 01	05 05	Δ
Focus Test - UT B							23.4			

Dome Temp.....

Transparency Conditions.....

Focus.....

Dome Temp... 62.0°

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	40 00	0-1	S.2	B ₂ III	10-10	Set 1 12 ^m 12 Lac	fine
		0-1			10-10 ⁺	Set 9 12	fine
		1			10-10	Set 7 11	fine
1 15W 1 16W		0-1			10-10	Set 10 10	fine
		1-0			10-10	Set 1 10	fine
		0			10-10	Set 4 12	fine
		1			10-10	Set 7 12	fine
2 06W 2 06W		1			10-10	Set 9 13	fine
		1			10-10	Set 1 12	fine
		1			10-10	Set 4 12	fine
		1-2			10-10	Set 7 12	fine
2 59W		1			10-10	Set 10 13	fine
1 19W	59 26	0-1	8.2	B _{3e}	4-4-4	Set 2 Be Program	fine
		1/2	4.2	B ₈	12	Set 2 Cel	fine
		1/2			6-6	Set 5 Bin	fine
		1/2			6-6	Set 9 Prog	fine
0 09W					15/10	Set 8	fine

*Dont see slit
in all fields taken
this night.*

SPOTTER ISNT
WORKING TOO WELL

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

May not have correct times
#1 & 2 M I SPEED
#3 & 4 103a 0

SW ME
-60.3 -7.8
OK

65

+K
+ MacAlpineDate 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 ^h 45 ^m .0	+49° 19'	I-25	10320	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	23:33:00	
								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	

Home Temp. 63°F

ocus 15.740

Home Temp.

Transparency Conditions *excellent*

66

Sep 4/5: Clouded over by 2010

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10	6 ^m 1 10 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 ^m	This plate developed
			00			6-6	set 4 " 7 ^m	
			00			6-6	set 7 " 10 ^m	(Extra 6 th comp at set 10)
	28. E	"	00	"	"	6-6	set 1 exp 7 ^m	(refuls)
	29 E	"	00	"	"	6-6	" 4 " 7 ^m	
			00			6-6	" 7 " 10 ^m	
			00			6-6	" 10 " 10 ^m	
	43 E	"	00	"	"	6-6	set 1 exp 10 ^m	Dome rotated ^{~180°} at H.A. = 50 ^m E
	44 E	"	00	"	"	6-6	" 4 " 11 ^m	
			00			6-6	" 7 " 11 ^m	
			00			6-6	" 10 " 12 ^m	
	07 W	"	00	"	"	6-6	set 1 " 11 ^m	← went 4 th west & back
	08 W	"	00	"	"	6-6	" 4 " 11 ^m	
			00			6-6	" 7 " 10 ^m	
			00			6-6	" 10 " 10 ^m	

all
12 hrs
plates
OK
reworking
from
good to
1-2 hrs.

67

cont'd

Date Thurs/Fri, Sept 6-7, 1956 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.
23455	HD 214993	22 37.0	39 43	I-25	103a-0	.008	21.3	00:37:00	00:46:00	4
	"							00:47:00	00:56:00	
								00:57:00	01:05:00	
								01:06:00	01:14:00	
23456	"	"	"	"	"	"	21.2	01:15:00	01:22:00	2
								01:23:00	01:30:00	
								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	02:20:00	02:27:00	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 ₂ III	6-6	Set 1 Exp 9 ^m	
1 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	

see
↓

ome Temp.....

Transparency Conditions

70

ocus.....

ome Temp.....

our Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+40 00	1+	5.2	B _{III}	6-6	Set. 1 Exp. 6	
		-1			6-6	" 4 " 8	
		0-1			6-6	" 7 " 8	Light cloud app. from S.W.
		-0			6-6	" 10 " 11	
	"	0+	"	"	6-6	" 1 " 8	
		0+			6-6	" 4 " 10	
+ 19W		0			6-6	" 7 " 10	
4 19W		0+			6-6	" 10 " 10	
0 47W	48 33	0	7.9	B _{qne}	4-4+	Set 6 Be. Prog.	webr
					15/10	" 10	
						4 Ph's leaded (2 with Hi-Speed 2 with 103a-0)	
						Sep. 7. MC SC NTW STW S SW ME -30.9 +24.3 +30.3 +0.9 -5.1 -4.6 +1.2	

6 171
 Date Fri Sat Sept 7-8/56 Observer L. L. 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	^{set} 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 ⁵⁰

Date Temp...
 Press 15.
 Date Temp...

Angle
 End

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	
56						6-6	" 4 8	
05						6-6	" 7 8	
14	35 E					6-6	" 10 8	
22						6-6	" 1 8	
32						6-6	" 4 8	
41						6-6	" 7 8	
50 56	59 E					6-6	" 10 8	
							First sign of clouds near end of exp.	
							3 P.H. o loaded with 103A0	
							Solid at 03.30 - L0	

73

Date Sat. Sun. 1906 Sep. 8-9Observer Gu - CaJulian Day 2435725

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	+14.7C			1
	"		"				"			
	"		"				"			
23466	HD 214993	22 ^h 37.0 ^m	+39° 43'	I-25	i.	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	01:04:00	
23469	"	"	"	"	"			01:06:00	01:10:00	

Dome Temp. 52°F

Focus 15.627

Dome Temp.

Transparency Conditions

74 15.616
.022
15.638Sat eve: 400 ± persons everyone wanting to see Mars

Cloudy at first - gave lecture, demonstrated telescope

cleared later & showed Ring neb., Saturn, D & Mars. 3 RASC pers.

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 ^u	[all 12 lac plates long slit]
					6-6	" 4 " 6	← Passing clouds during this exposure
		1			6-6	" 7 " "	west 4 ^h ; note time interval 1 ^h
		1			6-6	" 10 " 6	
	"	1+	"	"	6-6	" 1 " 6	
		2-			6-6	" 4 " 5	
		1=			6-6	" 7 " 8	some thin cloud ^{target.} over
		0-1			6-6	" 10 " 6	clearing
	"	1-2	"	"	6-6	" 1 " 5	
		1- $\frac{1}{2}$			6-6	" 4 " 4	
		-2			6-6	" 7 " 4	
		2			6-6	" 10 " 4	
		2			6-	" 1 " 4	

6 75
 Date Sat/Sun, Sept 8/9, 1956 Observer — E. Julian Day 2435.725
 ☉ 166 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	HD 214993	22 ^h 37.0	+39° 43'	I-25	103a-0	.008		01:11:00	01:15:00	2
								01:16:00	01:21:00	
								01:22:00	01:26:00	
23470	"	"	"	"	"	"	+14.2	01:27:00	01:32:00	3
								01:33:00	01:38:00	
								01:39:00	01:44:00	
								01:45:00	01:50:00	
23471	"	"	"	"	"	"	+14.2	01:51:00	01:55:00	4
								01:56:00	02:00:00	
								02:01:00	02:05:00	
								02:06:00	02:12:00	
23472	"	"	"	"	"	"		02:13:00	02:19:00	5
								02:20:00	02:40:00	
	Focus Test		O.T.B.							

Dome Temp.
 focus 15.627
 Dome Temp.

Transparency Conditions *Fair, scattered cloud*⁷⁶
in S & N.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
calculated	+40 00	2	5.2	B. III	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	
2 56 W		00			6-6	" 4 "	
					15/10	" 8	

*Cloud from N. moving in 02:25
 Light cloud over *
 cloud solid 02:40:00
 wind increasing from N.W.*

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 <small>Normal length</small>	Temp. 16.0	Starting Time E.S.T.	Ending Time E.S.T.	P.
23473	HD 174343	18 45.0	49 19	I-25	E103a-0	.008	16.0	19 45	21 03	1
23474	12 Lac,	22 37.0	39 43	"	"	long		21 26	21 33	2
	"							21 34	21 41	
	"							21 42	21 49	
	"							21 50	21 58	
23475	"							21 59	22 07	
	"							22 08	22 16	
	"							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 08	
23477	"							23 10	23 18	1
								23 20	23 29	
								23 30	23 37	
								23 38	23 46	

Dome Temp. 55°F

Focus. 15.654

Dome Temp.

Transparency Conditions Good.

78

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0113W	49 22	0	7.3	K ₂	4-4.	Sat. 5 Spect. Bin.	fine
2 07 E		0-1	5.2	B ₂ 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 Hr-L0 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.
23478	12 Lac	22 37.0	+39 43			long 500		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 04	01 10	
								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.....

Transparency Conditions *clear + good*

80

Focus.....

Dome Temp.....

Time P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
50		40 00	0-1	5-2	B ₂ II	6-6	Set. 1	
06	00 26 W		0-1			6-6	4	
4			0-1			6-6	7	jet plane flew over ⁱⁿ the ^{exp.}
27			1			6-6	10	
29			1			6-6	" 1	
36			0-1			6-6	4	
42			0			6-6	7	
53			0-1			6-6	10	focus fluctuating fast, bar: flaring
02			0			6-6	" 1	refocused.
0			1			6-6	4	
18			1			6-6	7	
25			1			6-6	10	
32			1			6-8	" 1	
38			1			6-6	4	
46			1			6-6	7	
53			1			6-6	10	

81

cont'd

Date Sept 9-10/46 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	"	"	reset. 008		02 53	03 25	1
23485	MW 49	02 24.4	70 30	"	"	"		03 48	04 30	4
23486	HD 15472 MWC 63 HD 20017	03 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.....

Focus.....

Home Temp..... 48° - cold!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	40. 00	0.1	5.2	B ₂ III	6-6	set 1	
		1(0.2)			6-6	4	
		1			6-6	7	
		1			6-6	10 refocussed	
		1.5			6-?	" 1	
		1.5			6-6	4	
		1.5			12	" 7	
03 06W	40 00	1.5			12	10	
3 47W	44 48	0.5	726	AS	5-5-5	set 2 Sp Bin	
1 00W	70 46	1	B ₄ ne	8.0	5-5-5	set 2 Be prog.	
03W	48 31	1	B ₉ ne	7.9	5-5-5	Set 8	
					15/10	set 8	
					15/10		
NT 1 5 9	From 15.632 .622 .611						
						Sept. 10	OK. Mo
						mc sc mtw stw S SW NE	
						-33.0 +26.1 -12.3 +0.3 -9.5 -9.4 -1.5	
						check field	
						Sept. 14	
						mc sc mtw stw S SW NE	
						-34.5 +26.1 -2.5 +0.5 -12.6 -11.2 +1.5	
						Sept. 17	
						-37.0 +26.1 +13.5 +0.8 -15.7 -13.8 -0.5	
						17 -39.8 +26.2 -9.8 -0.5 -20.6 -16.7 +1.5	

fine
good
good

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 ₂	Focus Test	1956	Sep. 12			.008				C
23486 F ₃	Focus Test	1956	Sep. 12							C
23486 F ₄	Focus Test.		Sept 13/56			.008	17.5			
23486 F ₅	Focus Test.		Sept 13/56			.008	17.6			

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

Transparency Conditions

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	
					10/10	Set 1 15.635	From 15.655 0.022 not added → Best focus.
						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 0.110mm from values given by the old graph - Mo.

85

Date Mon - Tue Sep. 17-18, 1952 Observer MR - Hr 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'	103a-0	^{set} .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 200428-9	20 58.3	+15 23	"	"	"	16.0	21:13	22:43	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	23:45:00	

ome Temp. 54°F
 ocus. 15.52
 ome Temp.

Transparency Conditions

Sat Sep 15 Hd. Lo. 125 visitors. RASC showed & J briefly
 between clouds, then Hd lectured + demonstrated, 74"

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24	48 W	+14° 35'	0	7.0	GP IV	4-4-4	set 2 C9-A	fine
26	16 E	+49 23	1	6.8	B1 II	4-4-4	set 8 MK std.	fine
48	12 W	+15 37	1	8.40	G5-A5	4-4-4	set 2 C11-E no sign of duplicity	l weak
09	24 E	+14 44	1	6.59	A0	6-	set 8 C12-A	fine
1001	21 W	+40 00	1	5.2	B2 III	6-6	set 1 12 lac	fine
1712	-	"	1-2	"	"	6-6	set 5 "	strong
	-	"	1	"	"	6-6	set 9 " clouds at end / expos.	strong
							0010 Rain	
							0045 Still solid Rainy off + on.	
							Hon. M. MTW ME Sept. 18 10.3 +0.7 4 P.M. MC SC MTW STW S SW ME Sept. 20 -41.5 +26.3 +9.0 -0.3 -23.5 -19.6 -1.3	
							Tues Sept. 18. Clouding over at sunset - Hg	

87

Date Wed-Thurs Sept 19-20 1956 Observer O - Lo Julian Day 2435.736
 ☉ 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	Angle hd
23492	^{52 fsc} HD 219113	23 08.3	+2 08	I-25	E103a-0	.008	+10.9	23 00	01 30	1	SW
23493	ADS 1534B	01 50.2	+36 46	I-25	"	"	+10.9	01 58	02 50	1	SW
23494	HD 214946	22 36.7	44 29	"	"	"		03 00	03 42	1	SW
	Focused + 0.7B						12.8				

Home Temp. +43°F

Transparency Conditions *Cloudy until 22^h*

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-	8.7	G-5	4-4-4	Set 2.	fine
50	36W	+37 02	0	7.4	K-2	4-4-4	Set 5: false start on 1534 at set 2	too weak.
42	42W	+44 47	0	7.26	A-5	4-4-4	Set 8 clouds low in west 03.15 15/10 set 9 clouded over 03.40	weak.
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 09.9 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 Time
23495	SZ Pac HD 219113	23 08.3	+ 2 08	I-25	E103aD	008	+ 8.1	21 22	00 22	3	
23496	MWC 10 HD 6343	00 59.4	65 26	"	"	"		00 23	00 29	7	E
	" "	"	"	"	"	"	+ 8.0	00 30	00 40	7	E
23497	MWC 13 HD 9185	01 24.6	62 51	"	"	"	8.0	01 20	02 10	1	
23498	MWC 16 HD 219116	22 30.9	44 29	"	"	"	8.0	02 24	03 10	1	
	Trans. Part OTB						8.0				

Time Temp. 41 F

Focus 15.40

Time Temp. 39 F

Transparency Conditions

Cloudy earlier

O-Gu Set. Sept 22/56.

70 visitors. Lecture on stars. Cloudy.

90

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																								
	33 W	+ 2 25	0	8.7	G5	4-4-4	Set 2. Edel Bin.	fine																								
	0 1 E	=	0	7.1	B ₅₀₀	4-	Set 2 I think PH #2 was used	-																								
	0 1 E	5 42	.	"	"	4-4-4	Set 8 Be Prog for 23495	fine																								
	2-10	3 05	0	7.5	B ₅₀₀	4-4-4	Set 3 Be Prog. Clouds coming up in NW	fine																								
	0 1 V	4 47	0	7.26	A ₅	4-8	Set 2 Ep Bin. Star gone at :230	lweak																								
						15/10		O.K.																								
							Closing at 3:15																									
							Couldn't adjust focus on last 2 exposures																									
							1 PH + 8 in fig.																									
							<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>Sept. 21</td> <td>-43.6</td> <td>+26.9</td> <td>+22.2</td> <td>-0.02</td> <td>-26.2</td> <td>-22.7</td> <td>-2.8</td> </tr> <tr> <td>24</td> <td>-3.0</td> <td>+26.8</td> <td>+39.2</td> <td>+0.2</td> <td>-30.0</td> <td>-26.2</td> <td>+0.8</td> </tr> </tbody> </table>		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	
	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 ^{(Box) MR} - 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	16 59.4	+16 10	I-25	E403m-0	^{set} .008	14.6	18 59	21 07
[23500	HD 209296	21 57.2	+56 14	I-25	E103a-0	.008	+14.5	21 24	22 24
23501	HD 200775	21 00.4	+67 47	I-25	E103a-0	.008	+14.5	22 40	23 : 60
23502	HD 214993	22 37.0	+39 43	I-25	E103a-0	.008	+14.3	23:14:00	23:15:30
	"	"	"	"	"	"	"	23:16:35	23:19:35
	"	"	"	"	"	"	"	23 24.00	23 25.00
23503	HD 1061	00 09.8	+08 16	I-25	E103a-0	.008	14.3	23.43	23 : 51
23504	ADS 1233	01 28.6	62 34	"	"	"	14.6	00 16	01 46
23505	" 1435	01 43.4	+07 11	"	"	"	14.1	02 03	04 55
23506	HD 29376	04 32.5	+07 07	"	"	"	14.0	05 00	05 20
	From Test		07B						

Home Temp. 54°F

ocus 15.51

Home Temp.

Transparency Conditions

Good

92

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:03	W	+16° 05'	1	8.75	K0 III	4-4-4	set 5 C-region	weak
1:23	W	+56 30	1	8.1	B(s)e	4-4-4	set 2 Be agrees with plot for 22584	good
1:52	W	+67 59	1	7.2	B5e	4-4-	set 8 Be	good
2:36 1/2	W	-	3	5.2	B2 II	12	set 1 12 lac	poor
3:05 1/2	W	-	3	5.2	B2 II	12	set 5	fine
3:44	W	+40° 10	3	5.2	B2 III	12	set 9	
4:23	E	-	2	6.2	A9	6-6	set 2 Ecl Bin	fine
5:13	W	62 52.5	0-1	7.59	K0	4-4-4	" 2 Vis Bin. Wrong Star I think.	too weak
5:30 1/2	W	+57 28	0-1	8.2	K0	4-4-4	" 8	weak
6:04 1/2	W	+07 14	0	6.8	B4	4-4-4	" 8 Ecl Bin.	fine
						15/10	" 5	OK.

4 P.H. in D.
Plates Needed

Dome Temp. $+51^{\circ}\text{F}$ 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
4 ^h	3 03W	05 53	0	8.5	Bsne	4-4.4	Set 2 Be prog. field ²²⁵⁸² checks	good
2	2 14W	+02 26	0	8.7	B5	4-4.4	Set 2 Eclipsing Binary	fine
3	03 30W	+07 28	0-1	8.2	K ₀	4-4.4	" 2 Vis. Bin.	good
						15/10	" 8 I.P.H. Plates Needed.	O.K.
							Sept. 26 MC SC MTW STW S SW ME 4.8 126.9 -3.6 -0.01 -32.7 -28.3 -3.2	

95

Date Wed-Thur Sep 26-27, 1956 Observer O-Hr 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	L
23513	HD 203374	21 16.7	+61 25	"	"	"	+14.9	20 08	20 24	L
23514	HD 198478	20 45.5	+45 45	"	"	"	"	20 29	20 31	L
"	"	"	"	"	"	"	"	20 31	20 35	L
23515	HD 206773	21 39.3	+57 17	"	"	"	+14.8	20 42	21 06	L
23516	HD 208682	21 52.9	+64 52	"	"	"	"	21 10	21 14	L
"	"	"	"	"	"	"	+14.9	21 15	21 23	L
23517	^{12lac.} HD 214993	22 37.0	+39 43	"	"	"	"	21 33 ^{cc}	21 35	L
"	"	"	"	"	"	"	"	21 36	21 40	L
"	"	"	"	"	"	"	+14.9	21 40	21 48	L
23518	HD 219113	23 08.3	+2 08	"	"	"	+14.8	21 55	20 25	L
23519	ADS 915	01 01.2	+52 58	"	"	"	14.8	00 35	02 45	L
23520	" 1534 B	01 50.2	+36 46	"	"	"	14.7	02 52	04 10	L
23521	" 2701	03 36.2	+32 37	"	"	"	14.5	04 16	05 16	L

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
09	04W	+2 33	0	6.8	Ac	4-4-	Set 2 Shell Stars	good
32	09W	+3 22	0	6.3	B6pe	4-4-4	" 8 " "	fine
35	35E	-2 34	0	6.3	B9e	4-4-4	" 2 Be Star MWC 350	fine
41	49E	+61 38	1	6.6	B0me	4-4-4	" 8 " " " 366	fine
51	05E		1-2	4.9	B2sek	6-6	2m " " " 353	good
55	07E		1-2	"	"	6-6	4m " " " "	fine
61	30E	+57 30	1-2	7.0	B0me	4-4-4	11 2 " " " 376	strong
			2	5.8	B3me	6-6	" 2 9m " " " 381	fine
23	25E	+65 03	"	"	"	6-6	" 8 18m " " " "	strong
35			1-2	5.2	B2III	12	" 1 12i	fine
40			"	"	"	12	" 5 4	strong
42	45E	+39 57	"	"	"	6-6	" 9 8	strong
52	16W	+2 19	0-1	8.7	G5	4-4-4	" 5 SZ Psc.	fine
55	48W	53 15	0	8.0	K0	4-4-4	" 2 Vis Bin.	fine
410	23W	37 03	0	7.4	K2	4-4-4	" 8 " " Check with field 22711 Guiding very bad	good
516	44W	32 48	0	7.21	F8	4-4-4	" 2 " " Gear in cl sticking	fine
						15/10	" "	

1 P.H. + 3

JK

Home Temp. +53° F

ocus.....1548

Home Temp.....

Transparency Conditions Clear.....

98

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04 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	B5pe	4-4-4	set 8 " "	good
5 36	77 46	1	6.7	A70	4-4-4	" 2 N Binary Very uncertain of field.	fine
0 41 W	-49° 56'	1	6.8	Ave	4-4-4	" 2 Shell star	good
4 0 E	57 52	0-1	8.0	Ape	4-4-4	" 8 " "	fine
0 05 E	63 21	0	8.1	B3E	4-4-4	" 2 Be Prog. M.wc. 76	lousy
0 08 E	-05 39.5	0	8.2	B5ne	4-4-4	" 8 " " " 114	lousy
					15/10	" 5	OK

4 P.H. + 8

Sept. 28. MC SC MTW STW S SW ME
 -6.7 +27.1 +9.8 +0.7 -35.4 -33.0 -6.5

99

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

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
23529	HD 192954	20 12.6	+15 33	I-25	E-103A ₀	set .008	15.4	19 02	19 46	1
23530	" 193182	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	3
	BD 44° 4014	22 56.2	45 07	"	"	"		21 30		2
23533	" 220300	23 17.6	+55 49	"	"	"	15.2	22 14	23 24	2
23534	12 LAC	22 37.0	+39 43	"	"	"		23 34	23 37	1
								23 38	23 44	
								23 44	23 50	
23535	ADS 1233	01 28.6	+62 24	"	"	"	15.0	00 45	01 15	1
23536	ADS 1268	01 30.5	+72 32	"	"	"	"	01 25	01 30	1

Dome Temp. 55°F

Focus 15.51

Dome Temp. 48°F

Transparency Conditions Good

Sat Sep 29 About 350 visitors. Foggy, Showed p Cyp.
3 RASC teles copies. N-Bk.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
6	0 16E	15 43	0	7.3	Ace	4-4-4	Set 2 Shell star.	good
10	0 07W	39 27	0	6.6	Ape	4-4-4	" " "	fine
24	0 09W	10 44	0	5.9	Aoe	4-4-4	" " "	fine
57	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
4	0 17W	56 06	0	7.8	Ape	4-4-4	" 8 Shell star	fine
7		39 38	0-1	5.2	A ₂ III	12	Set 1 12 LAC	fine
44						12	" 5	strong
						4-4-4	" 9	or strong
	0 4E	62 50	2	7.59	Ko	4-4-4	2 Vis: Bin; through foggy + cloud	fine
	0 8W	72 49	1	6.22	Ko	6-6	8 " All stars kept in limit zone closed.	good
							3 Pfl + 4	
							Oct. MTW +29.4 ME -3.8	

101

Date *Nov. Tues 1956 Oct 1-2* Observer *MR - HV* 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.
23537	HD 179343	19 ^h 07.1 ^m	+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	21:03	3
23540	HD 197434	20 38.6	+53 51	"	"	"	+13.7	21:29	21:41	11
23541	HD 219113	23 08.3	+02 08	"	"	"	14.0	22:48	00 ^h 10 ^m	4
									00 44	
	From Test 27B									

Dome Temp. 52°F

Transparency Conditions

162

Focus 15.50

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12	1:57W	+2° 32'	1	6.8	Ae	4-4-4	set 2 shell star "C"	l wh
06	1:02W	+3 22	1	6.3	B6pe	4-8	set 8 " " "D"	fine
	1:47W	+5 37	1	7.9	A0pe	4-4-4	set 2 " " "E"	good
4	2:26W	+54 05	1	7.9	B5pe	4-4-4	set 8 " " "I"	good
5		+02 27	00	8.7	G5	4-4-4	set 2 SZPsc	weath
	59W						increasing haze cloudy after Midnight.	
						15/10	" 8.	
							4 P.H. Plates Nooded.	
	Oct. 2nd	mc	sc	MTW	STW	SW	ME	
		-10.3	+29.4	+36.2	+0.5	-41.0	-2.5	
	" 3			+38.0			-4.5	

103

Date Tues Oct 2-3 / 56 Observer Hd - L Julian Day 2425749

☉ 189 39 41.9 3547.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
{ 23542	HD 192954	20 12.6	15 33	I-25	E10300	008	15.2	20 08	21 08
{ 23543	HD 193182	20 13.8	39 16	"	"	"	15.2	21 12	21 36
23544	HD 154528	17 00.9	77 44	"	"	"		21 49	22 13
{ 23545	HD 220300	23 17.6	55 49	"	"	"	15.0	22 49	23 59
23546	{ ADS 1233	01 28.6	62 34	"	"	"	15.1	00 07	00 57
23547	{ " 1534B	01 50.2	36 46	"	"	"	15.1	01 10	02 06
23548	HD. 15963	02 28.9	57.38	"	"	"	15.1	02 15	03 47
23549	MWC 79	03 49.3	44 38	"	"	"	15.1	03 54	05 00
	Focus Test							07 13	

Dome Temp.....

Transparency Conditions

Focus.....

clouds coming & going earlier.

Dome Temp.....

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
08	W 1 22	15 42	0.1	7.3	Ace	4-4-4	Set 2 Shell Star	fine
08	W 1 49	39 28	1	6.6	Ape	4-4-4	" 8	st. on
3	W 5 45	78 01	1	6.7	AO	4-4-4	" 2 sp. bin N	Field looks like not Astar, 23524 but why weak
09	W 1 08	56 07	2	7.8	Ape	4-4-4	" 2 Shell Star	Was dec read 4801? good
06	O 06E	62 52	1	7.59	Ko	4-4-4	" 2 Vis. Bin Prog.	fine
06	O 42W	37 04	1	7.4	K2	4-4-4	" 8	good
05	1 44W	57 50	1	8.0	Ape	4-4-4	" 8 Shell star	strong
05	32W	44 46	1	7.8	B3nc	4-4-4	" 2 Be Prog	fine
						15/10	" 8	OK.
							3 P.H.s loaded + 8	
							Oct. 4	
							Mc	Sc
							MTW	STW
							S	SW
							MC	
							-11.4	+0.6
							+40.8	+0.6
							-4.8	-22.5
							-0.1	

Dome Temp.....
 Focus..... 15.55.....
 Dome Temp.....

Transparency Conditions *Very windy, good.*

106

SL3

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	77 41	0	6.7	A0	4-4-4	could not find the star & reads 16 55!! Star jumping, strong wind	<i>too weak</i>
3 02W	45 24	0	8.8	A2	4-4-4	Shell Star	<i>weak</i>
0 15W	37 05	0	7.4	K2	4-4-4	Vix. Bin	<i>good.</i>
0 17E	41 35	0	7.2	B5ne	4-4-4	" 2 Be Prog.	<i>fine</i>
3 7W	46 06	00	8.6	Bp)ne	4-4-4	" 8 " "	<i>fine</i>
					15/10	" 8	<i>OK</i>
						3 P.H. + 3 plates.	
						Hor. M.	
					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 Se-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 ^h 42.9	+27° 48'	I-12	F103a-0	set .108	13.8°	19: 15	20 ^h 01	1
23556	HDE 235618	21 ^h 43.5	+54° 53'	I-12	F103a-0	set .016	13.5°	20: 45	23 ^h 57	1
23557	H.D. 3940	00 36.9	63 48	"	"	set .008	13.5	00 01	00 23	3
23558	" 5342	00 52.2 50.2	60 43	"	"	set .016	13.5	00 47	01 19	3
23559	NGC. 1502 28	03 58.8	62 02	"	"	set .016	13.5	02 19	04 39	3
23560	H.D. 36375	05 26.2	17 28	"	"	set .008	13.5	04 46	05 20	3

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

ocus. 12.91

ome Temp.

Transparency Conditions Fair Haze clearing at 21^h 110

Saturday Oct 6 No visitors

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1	57 W	+27° 56'	0	8.3	A ₂ Ia	1-1-1	set 2 OB star.	too weak
7	47 W	+55° 08'	0	10.34	B ₁ IV	1-1-1	set 8 OB "	fine
13	24 W	64 04	0	7.5	A ₁ Ia	2-2-2	" 2 OB "	fine
19	07 W	61 01	0	7.96	A ₀	2-2-2	" 2 K.A. 6x6 prog.	strong
23	17 W	62 12	0	10.15	B ₇	1-1-1	" 8 OB prog	fine
20	32 W	17 29	0	7.9	A ₀	2-2-2	" 8 K.A. 6x6 prog	strong

2 PHs loaded, plates needed

111

Date Mon - Tues Oct 8-9 1952 Observer MRJulian Day 2435.755 Oct. 9
2435.754 Oct. 8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Oct 8	Oct 9	Julian Day		P	
						Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.		
[23561	BD +27° 35' 12	19 ^h 42.6 ^m	+28° 00'	I-12	103a-0	.008	+15.0°C	194.35	38.0	3556.9	2
[23562	BD +27° 35' 13	19 42.9	+27 48	"	"	"	-	195.34	37.9	3558.7	W
[23563	HD 193702 HR 7784	20 ^h 16.6 ^m	+39° 05'	"	"	"	+14.6°C	194.35	38.0	3556.9	2
"	"	"	"	"	"	"	-	195.34	37.9	3558.7	W
"	"	"	"	"	"	"	-	194.35	38.0	3556.9	W
[23564	HD 206859 9 PEG.	21 ^h 39.8 ^m	+16° 53'	"	"	"	+14.6°C	194.35	38.0	3556.9	W
"	"	"	"	"	"	"	-	195.34	37.9	3558.7	W
"	"	"	"	"	"	"	-	194.35	38.0	3556.9	W

Home Temp. 54° F
 Focus 12.91
 Home Temp.

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
9	2:36 W	+28° 07'	1	8.6	07	2-2-2	set 2 OBp.76. Some passing cloud	19:15-19:29 wag at focus
22	1:50 W	+27 56	1	8.3	A2Ia	2-0	set 8 " Through cloud	focus
3	2:26 W	+39° 15'	0	6.2	A1V	6	set 2 AST 6 Robin Armstrong	listening
6	2:35 W	"	"	"	"	6	-5 " " " " <i>companion weak</i>	fine
6	2:40 W	"	"	"	"	6	-8 " " " " "	good
45	1:39 W	+17° 07'	0	5.6	G5Ib	6	Set 2 " JOHN CAMERON	listening
39	1:49 W	"	"	"	"	6	" 5 " " " " Through clouds	fine
45	1:56 W	"	"	"	"	6	" 8 " " " " " "	good

Too cloudy to continue at present

0240 Cloud coming from N. Hr.

Oct. 9	MC	SC	MTW	STW	S	SW	ME
	-14.9	+33.3	+0.9	-0.05	-13.0	+22.3	+0.8

Time Temp. 42°F

Ecus 12.1

Time Temp.

Transparency Conditions Delayed by clouds

114

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
50	2 10 W	28 43	0	91	B2V-n	1-1-1	rel 2 OB mag, p7b	fine
55	1 20 W	56 28	0	1005	B15 III	1-2	8 " 11/16 clouded out!	good
							Iron area heavy.	
							2 PH.	
						Oct. 10	MTW SW MG -0.8 +32.3 -4.3	

Date Wed-Thur Oct 10-11, 1956 Observer O - Hr Julian Day 2435756
 196 34 13.6 3560.5
 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	Set .008	+10.0	18 21	19 31	2	SW +
23568	BD+27° 3513	19 42.9	+27 48	"	"	"	+10.0	19 35	20 35	2	SW +
23569	α Del	20 35.0	+15 34	"	"	"	"	20 40	20 40	3	
	"	"	"	"	"	"	"	20 41	20 41½		
	"	"	"	"	"	"	"	20 42	20 43		
	"	"	"	"	"	"	"	20 44	20 46		SW +
23570	HD199216	20 50.7	+49 09	"	"	"	+10.0	20 54	21 02		
	"	"	"	"	"	"	"	21 02	21 18		SW +
23571	ε Peg	22 02.4	+24 51	"	"	"	"	21 37½	21 55		
"	"	"	"	"	"	"	"	21 39½	21 47½		
"	"	"	"	"	"	"	"	21 48	21 50		W +
23572	75 Cyg.	21 36.3	+42 49	"	"	"	+10.0	22 00	22 16		W +
23573	HD216711	22 50.0	+62 04	"	"	.016	"	22 24	23 24		W +
23574	BD+61° 2550	23 47.4	+61 34	"	"	"	+10.0	23 28	00 38		W +
23575	HD 4694	00 43.9	64 05	"	"	"	10.0	00 46	01 36		W +
23576	NGC 1502	03 58.6	62 03	"	"	"	"	01 51	04 07		W +

Eme Temp. +48°F

Transparency Conditions *Clear*

116

Fcus. 12.91

Eme Temp.

Time T.	Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
31	52 W	+29 04	0	8.5	B I Ib	2-2-2	Set 2: OB p 76	fine
35	50 W	+27 55	0	8.3	A2 Ia	2-2-2	" 8 " "	fine
40				3.71	B9 V		" 1 115° MK St.	
42				"	"		3 1/2 30	fine
43			0	"	"	6°	6 1/2 80	
46	09 W	+15 45		"	"		9 1/2 120	
02			0	6.8	B I II	6°	" 2 MK St.	good
11	26 W	+49 24		"	"	6°	8	Guiding Pen fine
			0	4.4	F5 V	6°	Students Obs. O. Berg, V. Degen	good
			0	"	"			fine
	42 W	+25 08	0	"	"	6°		strong
16	38 W	+43 03	0	6.9	M I III	2-2-2	Set 5 Student Obs " "	good
24	32 W	+62 22	0	9.2	B I V	1-2-1	" 2 OB p 22	fine
38	49 W	+61 53	1	9.3	B0 IV	1-1-1	" 8 OB p 24	strong
36	50 W	64 23	0	2.9	B3 Ia	1-1-1	" 2 " "	fine
07	05 W	62 10	0	10.0	L	1-1-1	" 8 " p 26 0230 A few stars	fine

Dne Temp. + 36°

Transparency Conditions Good.

118

Fus.....

Dne Temp.....

Time	Dir	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
8	SSW		+ 34 30	0	8.4	B.5 IV	2-2-2	let 2	OB. PP 26.
							8/6	" 8	strong OK.
								2 P.H.	
								Plates Needed.	
							Oct. 12	MC SC MTW STW S SW ME	
								-15.6 +34.2 -3.6 -0.01 -17.2 -6.6 +1.1	

Air Temp. 54

Transparency Conditions clear, some haze

120

Humidity.....

Sea Temp.....

Time	Star Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03	130 W	61 46	2	8.8	B2 Ib	1-1-1	Ref 2 OB mag, page 24	strong
50	12 W	62 12	2		09 V	1-1-1	8 " "	strong
01	140 W	62 13	2	10.3	B5	1-1-1	2 " " 26	strong
							4 PH + 8.	

121

Date Sun - Mon Oct 14/15 1956 Observer PK - H Julian Day 2435761

☉ 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.
2358	{ BD+27°3550	19 50.0	+28 05	I-12	E603-c-0	set 016	18.5	18 44	20 24
23582	{ HDE 269239	20 20.4	+38 "	"	"	"	18.4	20 32	21 52
23583	{ BD+53°2790	22 04.5	+54 03	"	"	"	18.2	22 02	00 02
23584	{ HD 216658	22 49.6	+61 36	"	"	"	18.9	00 25	01 45
23585	{ NGC 1502 26	03 59.3	62 04	"	"	"	18.8	02 01	05 11
	{ <u>Fans 78</u>		<u>0.7.B</u>						

Dne Temp. 62°F

Fus. 12.91

Dne Temp. 55°F

Transparency Conditions light cloud & haze

122

Time	Dir	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02	W	W	28 14	0	9.9	Ra Ia	1-1-1	Feb. 2 OR prog large 7b	fine
02	W	W	38 22	1-0	9.6	BI Tab	1-1-1	8 " " 9	fine
02	W	W	54 18	1	10.11	Oq 5p II	1-1-1	2 " " 12	strong
05	E	W	61 57	0	9.6	Bo V	1-1-1	8 " " 22 South Following	fine
02	2	4W	62 13	0	9.93	B3	1-1-1	" 2 " " 25 Haze & Mist.	strong
							4/3	" 8 I.P.H. + 8?	OK
							Oct. 15	mc sc MTW stw S SW ME -16.7 +34.6 -0.2 -0.1 -11.1 +16.2 -2.2	

123

Date Thurs Oct 16-17/56 Observer L-Hv Julian Day 2435763

O 203 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 ₀	5 ^{et} .008	+19.0	23 44	00 34
23587	N.G.C. 1502 #9	03 58.8	62 04	"	"	.016	19.0	00 50	03 30
23588	HD 35633 "four" 7 ^{et}	05 21.4	34 27	"	"	.008		03 57	04 31
			07.13						

ome Temp. 60°F

ocus 12.91

ome 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	B 3	1-1-1	" 8 " "	fine
031W		0-1	8.4	B0.5IV	2-4	" 2 " " Clock gear ^{loosely} sticking continuously	good OK
					8/6	1 circle light out.	
						3 PH. + 4	
						Oct. 17 mTW +3.1 STW -0.7 SW +33.4	

125

Date Wed-Thur Oct 17-18, 1956 Observer Dg O - 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.
23589	BD+28°3434	19 37.3	+28 55	I-12	F103a:O	^{5AT} .008	22.2C	18 19	19 45
23590	BD+44°3731	21 07.8	+45 05	"	"	.016	22.1C	19 58	21 14
23591	i and	23 33.2	+42 43	"	"	.008		22 22 30	22 22 45
	"	"	"	"	"	"		22 26 00	22 26 30
	"	"	"	"	"	"			
	"	"	"	"	"	"		22 32 00	22 32 30
<u>23591</u>	i and	23 33.2	+42 43	"	"	.008		22 39 30	22 39 45
	"							22 41 30	22 42 00
	"							22 44 30	22 45 00
	"							22 50 00	22 52 00
23592	BD+60°2615	23 39.9	+61 07	I-12	"	.016	22.2C	23 13	00 05
23593	BD+61°2509	23 39.0	61 36	"	"	"	22.0	00 13	00 58
23594	NGC 1502	28 03 58.8	62 02	"	"	"	"	01 25	03 45
	Focus lost O.T.B.								

Completely
Fogged or
dark

Home Temp. 68°F

Transparency Conditions Hazy

126

ocus 12, 91

Home Temp.

Evening Tutorial Class of Dr. MacRae Shown
Mars - Magnificent!

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
45	34 W	29 03	0	8.5	B I I _{pp} 2-2-2	Set 2	OB p 7b	
14	32 W	45 19	2	9.57	B _s III 1-1-1	Set 8	OB p. 12	
245			2	4.2	B _s V 6	Set 1	15 sec	
220			"	"	" 6	4	30 sec Prob no good. Sampson	
			"	"	" —	7	30 sec Prob Spoiled. Trimusk	
230			"	"	" 6	10	³⁰ 30 sec 3rd yr Mr P.	
445			2	4.2	B _s V 6	Set 1	15 sec	
200						6	4 30 sec	[See plate 23621]
						6	7 60 sec	
						6	10 120 sec	
05	51 W	61 24	2	9.2	B _s I b 1-1-1	Set 2	OB p. 24 Hazy	
5	45 W		0-1	8.7	B _s I b 1-1-1	" 8	" " "	
5	11 W	62 10	1	10.15	B ₇ 1-1-1	" 2	" "	
					4/3	" 8	0400 Haze + Cloud.	
							2 P.H. Plates No. 1-1.	
							Oct. 18. MTW STW SW ME	
							-2.9 -0.2 -1.2 -4.2	

127

Date Thu - Fri Oct 18-19, 1956 Observer Se - L Julian Day 2435765

☉ 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.
235⁸⁹	BD +45° 3246	20 ^h 39.1	+45° 32'	I-12	E-103-a0	set 016	17°C	19 ^h 15 ^m	21 ^h 31 ^m
235⁹⁰	HD 209481 14 Cep	21 ^h 58.7 ^m	+57° 31'	"	"	set 1008		22 ^h 13 ^m	22 ^h 14 ^m
"	"	"	"	"	"	"	16.5°C	22 ^h 20 ^m	22 ^h 22 ^m
"	"	"	"	"	"	"		22 ^h 32 ^m	22 ^h 37 ^m
235⁹¹	61 Cyg A	21 02.4	38 15	"	"	"		23 ^h 09 ^m	23 ^h 21 ^m
"	"	"	"	"	"	"	16.5°C	23 ^h 25 ^m	23 ^h 37 ^m
235⁹²	☉ Cas HD 6961	15.0	+54 37	"	"	"		00 ^h 20 ^m	00 ^h 20 ^m 30
"	"	"	"	"	"	"	16.5°C	00 ^h 25 ^m	00 ^h 29 ^m
"	"	"	"	"	"	"		00 ^h 35 ^m	00 ^h 40 ^m
235⁹³	NGC 1502 Z7	03 58.6	62 04	"	"	set 016	16.2	01 13	03 43
23⁵⁹⁴	HD 25921	05 23.0	35 18	"	"	set 008	16.2	03 50	04 02
23⁵⁹⁵	46056	06 26.0	04 54	"	"	"	16.2	04 09	04 41

ome Temp. 53° F

Transparency Conditions Clear

128

ocus

ome Temp. 38° F

Time	Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 ^m	22 ^m W	+45° 45'	0	9.84	BIVn	1-1-1	set 2 OB p.12	good
19 ^m	45 ^m W			5.3	09V		} set 2 D.A. Bird } sets K.A. m. Farquhar.	
22 ^m	53 ^m W	57° 46'						weak
37 ^m	08 ^m W		0			1-1		
2 ^m	47 ^m W	21° 04.3'	0	6.4	K5V		set 2 A. Okami	weak
7 ^m	05 ^m W	"	0	"	"	1-1	set 8 Harry Turner	weak
21 ^m	44 ^m W	54° 56'	0	4.6	A7V		set 1 Marv Shapiro	
24 ^m	5 ^m W	"	"	"	"		set 5 Mon Sexton	fine
4 ^m	07 ^m W	"	"	"	"	3"-3"	set 8 P. W. Vandenham D. Rotenberg	
47 ^m	12 W	62 12	0	10.04	B4	1-1-1	set 8 OB. prog. p.25	fine
02	08 W	35 20	0	6.6	Og.5V	2-2-2	set 2 OB " "	good
41	15 E	04 52	0	7.7	Og	2-2-2	" 8 " " 26	weak
							3 PH → loaded + 6	
							Oct. 20	
							MC BC MTW STW S SW ME	
							-19.1 +35.8 -1.1 -0.1 -26.4 +7.8 -1.1	

Time Temp. 48
 Focus.....
 Time Temp.....

Transparency Conditions None Ci clouds. 130

Temp. Control Not Set.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30	2 04	26 09	00	9.4	B9 Ia	1-1-1	Set 2. 013 p. 76. rim are heavily	strong
37	3 04	45 20	0	9.57	B5 III	1-1-1	" 8 " p. 12 a good deal of haze.	strong
24	11 m	58 20	0	7.62	F5	2-2-2	" 2 KABx6 passing clouds.	strong
15	2 40	60 44	0	7.88	F5	2-2-2	" 8 " stroke N following of main check if right. Clouds	strong
26	24 W	47 24	00	7.7	A0	2-2-2	" 2 " Cloud + Haze	strong
						8/6	" 8 2 P.H. + 4?	OK
							Hor. 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 Tue-Wed Oct 23/24, 1956. Observer Bok - Hv Julian Day 24357.70

☉ 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	12 Lac	22 37.0	+39 42	I-12	E103ma-0	cel 008	16.0	21 49	21 50
								21 52	21 53
								21 54	21 57
								21 58	22 04
23602	HDE 214068	22 43.3	+57 58	"	"	016	15.2	01 31	01 10
23603	NGC 1502 z 8	03 58.8	62 02	"	"	"	15.0	01 25	05 11
		Focus Test. O-7-B.							

Time Temp. 52

Focus 12.91

Time Temp.

Transparency Conditions *Gusty wind*

132

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

Time	Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
					5.0	B2 III	set 1	40 ^s	Star image very groupy	
				0			3 1/2	80 ^s	(MK Standard)	
							6 ^s	6	160 ^s	<i>fine</i>
	17W		40 00				9	6 ^m		
	17W		58 15	0	10.13	B0 III	1-1-1	2	OB mag p. 16	<i>fine</i>
	59W		62 12	00	10.15	B7	1-1-1	" 8	" " 26 wind dropped.	<i>fine</i>
							4/3	" 5	4 P.H. plates Needed.	
									<i>Hon. M.</i>	
							Oct. 24	MC SC MTW STW S SW ME		
								-21.7 +38.5 -1.6 -0.1 -36.2 +54.6 -2.3		

133

Date Wed-Thurs Oct 24/25, 1957 Observer (Rox) O - H v Julian Day 2435770
2435771
210 27 48.8 3587.6
211 27 36.4 3589.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23604	BD +28° 438	19 38.1	+28 46	I-12	E(03-a-0)	set 016	+10.8	18 16	19 00
23605	HDE 227704	20 02.9	+34 38	"	"	"	+11.0	19 14	20 04
23606	BD +27° 3512	19 42.6	+28 00	"	"	"	+11.0	20 07	20 53
23607	BD +55° 2771	22 30.3	+56 11	"	"	"	+10.9	21 30	00 10
23608	NGC 1502 z 10	03 58.8	62 04	"	"	"	11.0	00 20	03 14
23609	NGC 1502 z 6	03 59.3	"	"	"	"	11.0	03 19	05 37
	<i>z 6</i>	<i>z 6</i>	<i>z 6</i>						
	<i>z 6</i>								

O.P.B.

Transparency Conditions *Good*

134

Time Temp. *40*Hum. *12.91*Time Temp. *+38*

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

Time	Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10	25W	29 54	0!	8.7	B2 IV	1-1-1	cell 2 OB mag. p. 7b	<i>fine</i>
04	54W	+34 48	0-	8.8	B0 III	1-1-1	" 8 " " p 7	<i>fine</i>
53	04W	+28 08	0	8.6	07	1-1-1	" 2 " " p 7b	<i>fine</i>
10	33 W	+56 28	0	10.2?	B1 IV	1-1-1	" 8 " " p 16	<i>fine</i>
14	07W	62 13	0	10.30	B5	1-1-1	" 2 " " " 26	<i>fine</i>
19	33W	"	0	9.93	B3	1-1-1	" 8 " " " "	<i>fine</i>
						4/3	" 5 1 p.H. +12	<i>OK</i>
							H-n.M.	
						Oct. 25	MTW SW ME +0.9 +55.4 -0.8	

Dme Temp. 74.7

Fcus.....

Dme Temp. 42

Transparency Conditions.....

50 Vintners O's Extension Counsel
showed BT

Time	Sur Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
T.	End							
23	1 43	29 03	0-1	8.5	B1IV	2-2-2	Set 2 OB prog p. 76.	fine
31	2 51	28 54	1	8.7	B2IV	2-2-2	" " " "	fine
10	3 40	61 24	1	10.45	B3III	1-1-1	" " p 16	fine
3	4 34	60 05	1	9.92	B9V	1-1-1	" "	fine
2	5 28	74 01	1	7.86	K0	2-2-2	4 KA 6x6 false dot at 2	strong
2	5 55	73 53	1	7.72	K0	2-2-2	9 " " " "	strong
1	1 15	74 33	1	8.0	A0	2-2-2	2 " " " "	strong
10	1 57	16 00	1	8.0	Ma	2-2-2	8 " Coord. clock, field doc.	strong
2	2 06	44 10	1	8.0	A0	2-2-2	2 " " " "	fine
2	2 58	16 10	0	7.66	F2	2-2-2	8 " clouding over home W.	fine
1	2 15	13 33	0	7.7	A0	2-2-2	2 " " " "	strong
						8/6	8	OK
							344 +4	
							Oct. 26 MC SC MTW STW S SW ME	
							-22.5 +39.6 -18.8 -0.2 -0.2 -4.6 +0.2	

137

Date *Sat. Sun 1956 Oct 27-28*Observer *MR - 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^h 33.2^m</i>	<i>+42° 43'</i>	<i>I-12 1/2</i>	<i>103a-D</i>	<i>set .008</i>	<i>13.5</i>	<i>22:42</i>	<i>-</i>
"	"	"	"	"	"	"	"	<i>-</i>	<i>-</i>
"	"	"	"	"	"	"	"	<i>-</i>	<i>22:48</i>
23622	<i>BD +60° 2553</i>	<i>23 24.2</i>	<i>+60 45</i>	"	"	<i>set .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>				

Air Temp. +58°F

Transparency Conditions *Excellent*

138

Humidity.....

Air Temp. +46°F

At least 450 vision

Skipped β Cyg; Mars, etc in RASC telescopes

Time	Star Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
	19 W	+43° 02'	2	4.2	B8V	6	Set 2 Exp 15 ^s	To replace 23591	good
	-	"	"	"	"	6	Set 5 " 30 ^s		fine
17	-	"	"	"	"	6	Set 8 " 60 ^s		strong
20	4 01W	+61 05	"	10.53	B2V	2-2	Set 2 " OB p 18,	are heavy	fine
07	11W	62 12	"	10.26	B3	1-1-1	Set 8 " p 26	"	strong
06	00W	62 12	"	10.30	B5	1-1-1	Set 2 " "	are heavy	strong
						8/6	" 8		O.K.

4 P.H.s loaded
Plates needed.

139

Date Sun-Mon Oct 28/29, 1956 Observer BK - H v 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	BD +27°3550	19 50.0	+ 28 05	I-12	E103-a-O	^{sel} .016	13.0	18 59	20 39
23626	BD +54°2718	22 11.3	+ 54 58	"	"	"	12.6	20 48	22 18
23627	TB 5-36	22 38.6	+ 60 57	"	"	"	13.0	03 20	01 36
23628	N.G.C. 1502 78	03 58.8	62 02	"	"	"	13.0	01 43	03 39
	<i>Focus</i>	<i>1.2</i>	<i>0.71</i>						

Air Temp. 50°

Transparency Conditions Very good

140

Mois.

Delayed Start

Air Temp.

Time for Angle Start End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
30 - 58 W	28 15	0	9.9	B9 Ia	1-1-1	ped 2 - CTB mag 8, page 7b	fine	
40 W	55 16	1	10.34	B2 III	1-1-1	8 " 14	fine	
36 107 W	61 14	1	10.31	B05 IV	1-1-1	2 " 18	fine	
43 W	62 11	0	10.15	B7	1-1-1	" 8 " 26	fine	
						" 5	0505 Very Foggy Some Haze? Extin. 1/2 Mag. +. Gus Says 0330 Extin. must be 2 mag	OK
						2 P.H. + 12		
Oct 29						MC SC MTW STW S SW ME		
						-23.0 +4.4 -16.2 -0.5 -3.4 -4.9 -2.3		

Air Temp. $+52^{\circ}F$
 W.S. 12.91
 Sea Temp.

Transparency Conditions *very good - some ground fog* 142

25 Visitors of Workers' Educational Association
 Class in Boston. Showed on with 74"
 Ad.

Angle and S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10 W	$+28^{\circ} 09'$	0	8.6	07	1-1-1	Set 2 OB p. 76.	fine
30 W	$+27 58$	0-1	8.3	A2Ia	2-2-2	Set 5 " "	fine
2 W	52 36	1	9.4	07	1-1-1	set 2 " p 20	fine
5 W	54 06	1-2	10.6	B2III	1-1-1	8 " 20	fine
57 W	61 56	1-2	8.7	B05Ib	1-1-1	2 " p 24	strong
37 W	62 14	1	9.93	B3	1-1-1	" 8 " 26	strong
44 W	62 12	0-1	10.04	B4	1-1-1	" 2 " "	strong
1 W	$+04 51$	0	7.7	08	2-2-2	" 8 " 28 Some ground fog.	good
					8/6	" 5	OK
						2 P.H. + 8	
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	-14.1	-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. Tue., Nov. 5/6, 1956 Observer MR - H.V. Julian Day 2435782
 (PK) 2435783
 ☉ 222 27 43.4 3612.1
223 27 51.5 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 +28° 3495	19 44.9	+28 34	I-12	E103-a-G	set .016	16.8	18 08	19 28
23638	BD +45° 3339	20 53.2	+45 58	"	"	"	16.8	19 33	21 21
23639	BD +60° 2615	23 39.9	+61 07	"	"	"	16.6	22 26	23 30
23640	BD +61 39	00 14.8	+61 55	"	"	"	16.8	23 35	00 31
23641	HD 25213	03 55.2	74 22	"	"	.008	16.8	00 37	01 07
23642	" 25225	03 55.3	73 42	"	"	"	16.9	01 12	01 40
23643	" 30409	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	05 35
	<i>from</i>	<i>7.7</i>	<i>0.7.B.</i>						

Time Temp. 57°

Transparency Conditions Good

144

Humidity.....

Time Temp. 48

Mag Time S.T.	Rise Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20	04 W	09 41	0	9.1	B2 V	1-1-1	set 2 OB Proc. p. 7b	good
21	09 W	46 12	0	10.35	B1 V	1-1-1	" 8 " " p. 12	good
30	31 W	61 25	0-1	9.2	B0.5 I	1-1-1	set 2 " " p. 24	good
41	47 W	62 14	1	8.7	B0.5 IV	1-1-1	set 8 " " p. 24 In field see 21825	fine
07	012 E	74 29	0	7.86	K0	2-2-2	" 2 KA #3	fine
21	21 W	73 53	0	7.72	K0	2-2-2	" 8 " " 0125 Some Haze	fine
22	20 W	44 09	0	8.0	A0	2-2-2	" 2 " 24	good
25	15 W	12 53	0	7.7	A0	2-2-2	" 8 " 73	good
25	08 E	30 12	0	10.09	B9	1-1-1	" 2 KA FS. 0530 Fog obscuring sky.	good
						4/5	" 8	OK.
							1 Ptl. 74.	

Time Temp. 53°F

Transparency Conditions

146

Focus of 25" 15:47 12½' - 12.91

Time Temp.

Changed to 25" for binaries

Time	Hour Angle End	Declination	Seeing	Ftg. Mag.	Sp.	Comp.	REMARKS	Quality
10	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.	

Eme Temp. 36
 Rcus. 15.40
 Eme Temp.

Transparency Conditions

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

Time	Sur Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
End								
22	U 3 06	+ 2 27	0	8.7	G5	4-4-4	S1 2. Ecl. bin. Hd.	Weak
27	U 0 15	25 26	0	8.7	G5	4-4-	" 2 " " N. clouded out. closed at 2 o'clock - overcast. DPH.	Too weak
							Nov. 9	
							mc sc MTW STW S SW ME	
							-28.0 +45.1 -7.9 -0.5 -14.7 -12.4 -2.9	

Dew Temp. +20° F
 Hum. +15.52
 Dew Temp. +15° F

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

152

Time	Rise Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
14	57 ^m W	+02° 26'	0	8.7	G5	4-4-4	set 2 Ecl-Sp Binary (S2 Psc)	weak
50	16 ^m W	+25° 03'	1	6.34	F5	4-4-4	set 2 Vis. Bin.	weak
42	13 ^m E	+34° 40'	1	7.1	F0	4-4-4	set 8 "	weak.
10	37 E	40 43	1	6.1	Btne	4-8	set 2 Be ⁰⁰¹⁰ Passing Cloud.	too weak
5-	02 E	-00 15	00	8.3	B(s)ne	4-4-4	" 8 " " "	weak
66	51 E	19 44	0	7.25	G0	4-4-4	" 2 Praes. Cluster 35m Cloud.	weak
						16/10	" 8	→ c to red.
							1 P.H. + 12?	Focus set in- correctly.
							MC SC MTW SW S SW ME Nov. 27 -33.0 +48.1 -30.2 -0.7 -32.7 -20.9 -4.1	

Time Temp. +24°F
 Focus.....15.30.....
 Time Temp.....

Transparency Conditions

Tues Dec 4. 12 visitors - officers
 from RCAF W.ipeg.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
46	53W	02 26	0	87	G5.	4-4-4	Set 2. Eclp spec. Bin. Light cloud weak. 19.30 on	
						16/10	8	
							2 PH	
							Cloud after midnight	
						Nov. 30	mc sc MTW STW S SW ME	
							-38.0 +46.6 -36.1 -0.8 ^m -34.4 -22.5 -2.9	
						Dec. 3	-33.8 +44.8 -1.9 -0.8 ^m -38.1 -23.8 +0.1	
						7.	-32.7 +43.2 -12.1 -0.7 ^m -39.7 -26.5 -2.3	
						10	+41.0 -0.9 +0.0 ^m +7.3 -4.1	
						12	-28.3 +39.7 -12.2 +0.4 ^m -43.0 +5.2 -6.1	
						14	-30.0 +37.8 -15.9 +0.3 ^m +43.9 +4.3 -3.3	
						17	-21.8	-5.9
						18	-32.8 +34.2 -23.9 +0.3 ^m -45.9 +1.2 -6.8	

Dme Temp. +20°F

Fcus. 15.26

Dme Temp.

Transparency Conditions

Clouds early part of first exp

Time T.	Hor Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
32	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.	l weak
42	18E	"	0-1	"	"	4-4-4	" 8 " "	l weak
55	29W	44 24	0-1	7.26	A5	4-4-4	" 8 " " Clouds near end.	fine

2 PHS loaded + 4

Thurs Dec ~~19~~²⁰ - 21

Set on SZ Psc. but sky thickened with cloud & fog

	MC	SC	MTW	STW	S	SW	NE
Dec. 21.	-27.5	+31.6	-6.5	-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 during evening. landing over about 2300^h. HD.

Dec. 28	-25.5	+23.3	18.2	+0.1	-4.0	+0.3	-0.7
---------	-------	-------	------	------	------	------	------

159

Date Wed-Thurs Jan 2-3, 1957 Observer O-Julian Day ²⁴³⁵⁸⁴⁰
~~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	I-12	E103.0	2016	-9.0	17 52	18 52
23670]	BD+61°2550	23 47.4	+61 34	"	"	"	-8.7	18 56	20 36
23671	HD 21447	3 22.4	+55 06	"	"	008		20 49	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 51
	"	"	"	"	"	"		21 55	21 58
	"	"	"	"	"	"		21 58	22 04
	"	"	"	"	"	"	-8.8	22 11	22 15

Dae Temp. ~~12.9~~ +16°F

Transparency Conditions *Clear*

160

Fous.....12.90.....

Dae Temp.....+12°F

Time	Star Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																																										
52	42 W	+61 57	0-1	8.7	Ba5	1-1-1	Sitz OB p. 24	strong																																										
53	17 W	+61 54	0	9.3	B0	1-1-1	" 8 OB p. 24	strong																																										
50			0	5.11	A1V	-	" 1 1/2 MK.	fine																																										
52				"	"	-	4 2																																											
51				"	"	6 ^s	7 4																																											
50	09 W	+55 19	0	"	"	-	10 4	v. strong																																										
22			0	5.9	B3III	6 ^s	" 2 MK	fine																																										
51	53 W	+30 13	0	"	"	6 ^s	" 8	strong																																										
			0	5.4	B1V	-	" 1 1/2 MK.	fine																																										
				"	"	-	4 3	strong																																										
	47 W			"	"	-	7 6	strong																																										
55		+34 14	0	"	"	6 ^s	10 12 Clouding Over.	fine																																										
							<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>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> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>-19.7</td> <td>+7.5</td> <td>+6.1</td> <td>+0.7</td> <td>-7.2</td> <td>+9.1</td> </tr> <tr> <td>9</td> <td>-18.0</td> <td>+4.0</td> <td>+4.2</td> <td>-0.1</td> <td>-6.9</td> <td>+9.3</td> </tr> <tr> <td>11</td> <td>-16.4</td> <td>+0.4</td> <td>-4.2</td> <td>-0.1</td> <td>-7.1</td> <td>+7.7</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								7	-19.7	+7.5	+6.1	+0.7	-7.2	+9.1	9	-18.0	+4.0	+4.2	-0.1	-6.9	+9.3	11	-16.4	+0.4	-4.2	-0.1	-7.1	+7.7	
MC	Sc	MTW	STW	S	SW	ME																																												
Jan 4	-21.4	+12.5	+9.7	+0.1	-6.2	+9.9																																												
7	-19.7	+7.5	+6.1	+0.7	-7.2	+9.1																																												
9	-18.0	+4.0	+4.2	-0.1	-6.9	+9.3																																												
11	-16.4	+0.4	-4.2	-0.1	-7.1	+7.7																																												
							1 PH +8																																											

Note Temp. -40F

Transparency Conditions

Some cloud after sunset
good later

162

WIS.....

Note Temp.....

Angle Ind	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																					
0 05W	54 35	0?	89	B0III	1-1-1	Feb 20 UTB mag. p 20 cloudy! 4PH+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>-11.9</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>-9.1</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	-11.9	-0.2	-6.6	+4.3	+1.2	16	-12.0	-8.5	-9.1	-0.2	-7.1	+5.1	
MC	SC	MTW	STW	S	SW	ME																						
-14.0	-4.8	-11.9	-0.2	-6.6	+4.3	+1.2																						
16	-12.0	-8.5	-9.1	-0.2	-7.1	+5.1																						

e Temp. $+2^{\circ}\text{F}$
 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 <i>Praxispe</i>	<i>fine</i>
15 E	"	0	"	"	2-2-2	" 5 <i>Seeing Terrible</i>	<i>strong</i>
5 W	"	00	"	"	2-2-2	" 9	<i>fine</i>
						3 P.H. +4	
						Trouble with Shutter	
Jan. 18						mc sc mTW sTW S SW ME -10.4 -12.7 -9.9 -0.1 ^m -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	8 Per	3 ^h 35.8 ^m	+47° 28'	I-12	103a-0	set .008	-10.5°C	18:40	1:11
	"	"	"	"	"	"	"	-	-
	"	"	"	"	"	"	"	-	-
	"	"	"	"	"	"	"	-	18.45
23677	BD+60° 2615	23 39.9	+61 07	"	"	.008	-10.5°C	19:07	20:35
23678	18 Tau	3 39.2	+24 32	"	"	"	-10.7°C	20:49	-
	"	"	"	"	"	"	"	-	-
	"	"	"	"	"	"	"	-	20.55
	"	"	"	"	"	"	"	20.59	21:07
23679	HD 35921	5 23.0	+35 18	"	"	"	-11.0°C	23:31	23:49

ne Temp. +10°
 us. 12.90
 ne Temp.

Transparency Conditions *quite clear at start*

168

Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-	-	-	3	2.89	B5 III	-	set 1 3 ^s MKStd	
-	-	-	-	-	-	-	4 6 ^s	<i>fine</i>
-	-	-	-	-	-	6 ^s	7 12 ^s	
10:20 E	+47°39'	-	-	-	-	-	10 24 ^s	
10:28 W	+61 25	+61 25	3	9.2	B0.5 IV	2-2-2	set 2 OB p. 24	<i>fine</i>
-	-	+24 43	2	5.5	B8 IV	-	set 1 1 ^m MKStd	<i>trouble with Sec clamp fine</i>
-	-	"	"	"	"	-	4 2	
-	-	"	"	"	"	6	7 4	
10:59 W	-	"	"	"	"	-	10 8	<i>clouds at end</i>
11:05 W	+35 21	+35 21	1	6.6	B9.5 III	2-4	set 8 OB p. 26 star gone at 23.43 - <i>weak solid (?)</i>	

4 P.H.

169

Date 1957 Jan 19-20 Sat-Sun Observer S.-

 Julian Day 2435857
 $298 \quad 33 \quad 39.2 \quad 3663.0$
 $239 \quad 34 \quad 42.2 \quad 3662.6$

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23680	0 Persei	3 ^h 38.0	+31 58	I-12	103 a 0	Set 008	-6.50	18 ^h 40 ^m	—
	"	"	"	"	"	"	"	—	—
	"	"	"	"	"	"	"	—	—
	"	"	"	"	"	"	"	18 ^h 49 ^m	—
23681	16 Tau	3 ^h 38.9	+23 58	"	"	"	-6.8	19 ^h 12 ^m	—
	"	"	"	"	"	"	"	+	—
	"	"	"	"	"	"	"	—	—
	"	"	"	"	"	"	"	—	19 47 ^m
23682	18 Tau	3 ^h 39.2	+24 32	I-12	"	"	-6.80	20 ^h 13 ^m	—
	"	"	"	"	"	"	"	—	—
	"	"	"	"	"	"	"	—	—
	"	"	"	"	"	"	"	—	(-0 28)

Air Temp. $+20^{\circ}$ F
 Humidity 12.90
 Barometric Temp.

Transparency Conditions *Hazy at first - clearing later.*

170

Star Name	Right Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		$+32^{\circ} 08$	2	3.88	B1 IV		Set 1 MK Standard	too strong
		"	"	"	"		4	
		"	"	"	"		7	
13^m E		"	"	"	"	3-3	10	
		$+24^{\circ} 09$	2	5.3	B7 IV		Set 1 MK	from 13 6 10
		"	"	"	"		4	no strong
		"	"	"	"		7	strong
16^m E		"	"	"	"	3-3	10	$1\frac{1}{2}$ 3 6 12
		$+24^{\circ} 42$	1	5.5	B58 V		Set 1 MK	strong
		"	"	"	"		4	too strong
		"	"	"	"		7	strong
		"	"	"	"	3-3	10	

2 PH + 3

173

Date Thurs Jan 31 - Feb 1 / 57 Observer Hd - Julian Day 2435870
 ☉ 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	47 Tau	3 39.6	23 48	I 12	E103a0	008		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 45	20 20 30
								20 21 00	20 22 00
								20 22 45	20 24 45
23686	46 Tau	4 08.2	7 28	"	"	"	-4.6	20 41 15	20 43 15
								20 44 00	20 48 00
								21 09	20 57
23687	19 Aur	5 13.4	33 52				-4.3	21 02 30	21 07 30
								21 07 45	21 10 15
								21 10 30	21 10 45
23688	HD 35833	05 22.4	16 23	"	"	"	-4.4	21 20	21 50
23689	HD 36375	05 26.2	17 28	"	"	"	-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.

Mag Time	Star Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
S.T.	End							
0430			0	3.7	B6 ^{III}		Set 1 MK Sid.	fine
0600							3 1/2	
0700							6 1/2	
1120	55 ^m 101					6	9	
1130			0	3.7	B8 ^{III}		Set 1/2 MK Sid.	fine
1130							" 3	
1130							" 6	
1105						6	" 9	
1130		7 38	0	5.8	F3 ^V		" 1 MK Sid.	fine
1140							" 5	
1140						6	" 9	
1140		33 55		5.30	A5 ^{II}	6	" 1	l. clearing
1140							" 5	
1140	20 ^m						" 9	
1140	51 ^m	16 25	0	7.68	G0	2-2-2	" 2 KA 6x6	fine
1145	145	17 30	0	7.9	A0	2-2-2	" 8 " clouds not 1/2 tonic	neat

	MC	SC	MTW	STW	S	SW	ME
Feb. 1.	-1.3	-30.2	-9.1	+0.7	-3.7	-4.9	-1.6
4.	10.7	-31.1	-16.1	-0.1	-2.7	-2.2	+8.9

175

Date Mon - Tues Feb 4-5 1957 Observer MR - H v Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23690	HD 35921	05 23.0	+35 18	I-12	103a0.	^{set} 1008	-0.7°C	22:59	23:09
	"	"	"	"	"	"	"	23:11	23:31
28691	BD +8°1402	06 29.3	+8 54	"	"	1016	"	23:40	01 00
23692	BD +29°1907	09 24.6	29 33	"	"	"	-1.0	01 18	03 20
23693	HD 114059	13 02.9	29 57	"	"	"	-0.8	03 34	05 48
	From Test		0.7 B						

Temp.....

Transparency Conditions *passing clear earlier*

176

Humidity.....

Temp.....

Very Bright: Aurora after Midnight

Mag Time or Angle S.T. End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 2:26 W	+35° 21'	0	6.6	09.5 III	2-2-1	set 2 OB p 26 Exp 10 ^m	good
31 2:46 W	"	0	"	"	2-2-2	" 8 " Exp 20 ^m	fine
00 11 W	+8 51	00	9.0	A0	1-1-1	" 5 Ecl. Bin	fine
22 26 W	29 18	0	9.89	F5	1-1-1	" 2 KA FS KA-53	fine
1 26 W	29 40	0	10.06	G8	1-1-1	" 8 " " 57	good.
					4/3	" 5 <u>0455</u> Hazy from SW.	OK

I.P.H.

Feb. 6-7/57 ⁰¹³⁰ Mostly clear at midn.

Transparency log after 0130

Feb. 8	MC	Sc	MTW	STW	S	SW	ME
	+3.6	-34.7	-21.2	-0.1	-2.4	-12.2	+6.1

Dne Temp $+27^{\circ}\text{F}$

Feus 12.90

Dne Temp.....

Transparency Conditions *haze light cloud, 178*

Time B.T.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality														
43	45 E	17 30	0	7.9	A ₀	2-2-2	Set 2 KA. 6x6 sky filling in after this exposure closed at 9.00 P.M. 4 PHs loaded + 8	fine														
						Feb. 11	<table border="0"> <tr> <td>MC</td> <td>SC</td> <td>MTW</td> <td>STW</td> <td>S</td> <td>SW</td> <td>ME</td> </tr> <tr> <td>+5.6</td> <td>-36.5</td> <td>-26.2</td> <td>-0.2</td> <td>-1.2</td> <td>-14.2</td> <td>-1.1</td> </tr> </table>	MC	SC	MTW	STW	S	SW	ME	+5.6	-36.5	-26.2	-0.2	-1.2	-14.2	-1.1	
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, 1958 (PK) Observer MR Julian Day 2435.881

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 1/2	E103-20	set .008	-4.0	20 37	20 37
								20 38	20 39
								20 39	20 40
23696	v Ori	05 27.1	-07 23	"	"	"	"	20 47	20 48
								20 48	20 49
								20 50	20 52
								20 53	20 53
23697	v Ori	05 30.5	-05 59	"	"	"	"	21 02	21 03
								21 04	21 04
								21 05	21 05
								21 06	21 07
23698	v CMa	07 51.7						21 17	21 17
								21 18	21 19
								21 20	21 21
								21 23	21 25

Air Temp.....
 Wind Dir.....
 Sea Temp.....

Transparency Conditions *good* Seeing *too poor to start at*
 18:30
Considerable improvement
 by 20:00 180

Time S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
			1	3.88	B1 III		alt 1 MK std. 15 ^s		
						6	5	30 ^s	<i>fine</i>
	084	22 10					9	1 ^m	
			1	4.32	B0 V		alt 1 wave	<i>good</i>	
							8 1/2	1 ^m	<i>fine</i>
						6	6	2 ^m	<i>str</i>
	374	-07 21					9	4 ^m	<i>v. str.</i>
				2.49	B2 I		1	5 ^s	
							3 1/2	10 ^s	<i>fine</i>
						6	6	20 ^s	
	20	-05 57					9	40 ^s	
							1	20 ^s etc	
				4.29	B3 II		3 1/2	40	
						6	6	60	<i>fine</i>
050	20E	-17 00					9	1 (v) sec	

181

Date

wnt

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	L124	E103-A0	.008		21 31	21 31
								21 32	21 32
								21 33	21 34
								21 35	21 37
23700	HD 57682	07 17.2	-08 48	"	"	"		21 43	21 43
								21 46	21 51
								21 52	22 02
23701	HD 25291	03 56.1	+58 53	"	"	"		22 14	22 15
								22 16	22 18
								22 18	22 22
23702	BD+8°1402	6 29.3	+8 54	"	"	.016	-4.0°C	23 16	00 46
23703	HD 82570	09 27.7	+29 19	"	"	"		00 59	01 53
	Ferris	J.K.		0.2B.					

Boie Temp. 14°F

Transparency Conditions Good.

182

MS.....

Boie Temp.....

Time of Day	Angle Ind	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			1	40	B-B-I		net 1 1 + 15 sec	
							3/2 30° E	fine
						6	6 1m	
	14E	-15 24					9 2m	
			1	5.9	00-V		1 2 1/2 m	
						6	5	fine
	08E	-02 54					9 10m	
				54	FD II		1 1m	
						6	5 2m	fine
	20W	59 00	1:				9 4m	
	24W	+08 51	0	8.9	AD	1-1-1	net 5 RW Mon spec Ben	fine
	32W	29 04	0	10.02	G8	1-2	" 2 KAFS KA-53	good
						4/3	" 8 0147 Chud fine SE !!	OK
							3 PH + 0	
						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-12½	E-103A ₀	Set 016.	-1.1	18 50	20 20
23705	BD +9° 1358	06 36.8	09 38	"	"	"		20 27	
23705	BD +10° 1216	06 35.2	10 03	"	"	"		21 20	

185

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

☉ 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.
23705	BD+29° 1908 " " HD 114071 Flou's Test O.A.B.	9 ^h . 25.2	+29° 44'	12 in.	103a0	0.016	-3.7°C.	^{23^h} 04 ^m	00 26
23705		"	"	"	"	-0.16		00 42	03 02
23706		13 03.0	29 59	"	"	"	-4.0	04 01	06 17

Air Temp. 19°F

Transparency Conditions Int. scattered cloud: bright areas!

186

Humidity

Air Temp. 17°F

Time S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26	31W	+29° 30'	0	9.98	G8	1-1-	set 5 KAS3 Wong Star - Set. 09 ^h 38.8	
27	32W	29 28	0	"	"	1-1-1	" 9 " Mouse on desk.	good.
7	238W	29 42	0	10.08	F8	1-1-1	" 2 " 57 waiting for clouds to pass.	fine
						4/3	" 8	OK
							3 PH + 8	
							Hum. M.	

187

Changed to I-25 while waiting
for sky to clear.

Date Thurs Feb 21-22/57 Observer Hd. Julian Day 2435.891

☉ 333 06 35.3 3624.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Angle Dist
23707	HD 21483	3 22.7	30 02	I-25	E103aD	008	+1.1	19 45	20 25	2 48
	"	"	"	"	"	"	+1.1	20 25	20 45	3 08
23708	36 Per	3 25.5	45 43	"	"	"		20 49	21 01	5
								21 01	21 09	
23709	5 Per	3 35.8	47 28	I-25	"	"	+1.1	21 09	21 13	333
				"	"	"		21 20	21 20 20	4
								21 21 00	21 21 40	
								21 22	21 23	
								21 24	21 26	334
23710	HD 72779 VL 133	8 29.6	19 56	I-25	E103aD	008	+1.0	21 48	23 00	1 50
								23 00	23 32	2 20

Time Temp.....
 cus.....
 Time Temp.....

Transparency Conditions

188

I 12 focus was 12.900 Tilt 20.25
 Changed to I 12 ref focus 15.33 Tilt 23.12 - Ad.

Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
25 N 2 48	30 15	0	6.9	B3 III	4-4-4	Sitz Microtel Mirror on floor	good
5 W 3 08	"	0			4-4-4	" 8	fine
01	45 57	1/2	5.8	F4 III	12	" 11 " "	
09		2				" 5	
L13 J 3 33		1	2.8	B5 III		" 9	fine
2020		1	2.89	B5 III		" 1	
2100		1				" 3 1/2	
2200		1				" 6	
2300		1			12	" 9	
2126 J 3 34							
2200 V 16m	19 44	1	7.25	G0	4-4-4	" 2 Pracepe Elevator (0)	fine
2300 W 49m					4-8	" 8 Truck at 23 32	Guiding weak
Feb. 22 MTW ME -11.4 -7.8 MC SC MTW STW S SW ME +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							

Clouds fine

189

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

338	02	12.9	3616.7
339	02	36.6	3613.0

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	F103A0	<i>50</i> 008	-3.8	¹⁸ 6 50	¹⁸ 8 51 1/2
	"	"	"	I-25	"	"	"	6 52	8 55
	"	"	"	"	"	"	"	6 56	¹⁹ 7 02
23712	16 Per.	2 44.3	+37 54	"	"	"	"	¹⁹ 7 10	7 11 1/2
	"	"	"	"	"	"	"	7 13	7 16
	"	"	"	"	"	"	"	7 16	7 22
23713	<i>v Ori</i>	⁵ 27.1	-7 23	"	"	"	"	7 29	7 31
	"	"	"	"	"	"	"	7 32	7 36
	"	"	"	"	"	"	"	19 37	¹⁹ 7 45
23714	<i>i Ori</i>	⁵ 30.5	-5 59	"	"	"	"	¹⁹ 7 50	
	"	"	"	"	"	"	"		
	"	"	"	"	"	"	"		
	"	"	"	"	"	"	"		¹⁷ 7 57
23715	HD 21447	3 22.4	+55 06	"	"	"	"	²⁰ 8 05 1/2	²⁰ 8 09 1/2
	"	"	"	"	"	"	"	²⁰ 8 09 1/2	²⁰ 8 17 1/2


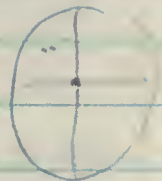
Dme Temp. +23°F

Hum. 15.26

Dme Temp.

Transparency Conditions *Clear*

190

Time	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12		+9 56	0	4.56	F ₀ IV		Set 1 1 1/2"	MK standard
5		"	"	"	"		5 3"	
2	39.5	"	"	"	"	12	9 6"	<i>fine</i>
14		+38 08	"	4.56	F ₂ III		Set 1 1 1/2"	..
6		"	"	"	"		5 3"	
47.0		"	"	"	"	12	9 6"	<i>fine</i>
31		-7 20	"	4.32	B ₀ V		Set 1 2"	..
30		"	"	"	"		4 4"	<i>fine</i>
45	28.0	"	"	"	"	12	8 8"	
		-5 56	1	2.49	O ₉ III		" 1 20 ^s	..
		"	1	"	"		4 20 ^s	 <i>etc</i>
		"	1	"	"		7 40 ^s	 <i>fine</i>
57	35.5	"	1	"	"		10 80	
11.1		+55 19	"	5.11	A ₁ IV		" 1 4	..
17.3	04.5	"	"	"	"	12	8 8	<i>fine</i>

191

Cont'd

Date Wed. Thru Feb 27-28/57 Observer D - Dg Julian Day

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	E103e0	.008	-3.6	²⁰ 8 24	
	"	"	"	"	"	"	"		
	"	"	"	"	"	"	"		8 30
23717	18 Tau	3 39.2	+24 32	"	"	"	"	8 36 1/2	8 41 1/2
	"	"	"	"	"	"	"	8 41 1/2	8 51 1/2
23718	i C Ma	6. 51.7	-16 55	"	"	"	"	2 9 02	2 9 01 1/2
	"	"	"	"	"	"	"	9 02	9 04
	"	"	"	"	"	"	"	9 04	9 10
23719	γ C Ma	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	-8 48	"	"	"	"	9 41	9 57
23721	HD 25291	8 56.1	+58 53	"	"	"	"	10 ²² 09	10 ²² 12
	"	"	"	"	"	"	"	10 12	10 18
	"	"	"	"	"	"	"	10 18	10 30

Dme Temp. +20° F

Hum. 15.26

Dme Temp.

Transparency Conditions *clear*

192

Time	Dir	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			+ 23 58	1	3.7	B ₆ III	Set 1	40° mic std.	
			"	"	"	"	5	80	<i>fine</i>
01W			"	"	"	"	12	9 160°	
			+ 24 42	"	5.5	B ₈ V	" 1"	5	
22SW			"	"	"	"	12	8 10	<i>quadrant fine</i>
			- 17 00	"	4.29	B ₃ II	1	1 1/2	
			"	"	"	"	5	3	<i>good</i>
29SW			"	"	"	"	12	9 6	<i>strong</i>
			- 15 33	"	4.00	B ₈ II	Set 1	1	<i>RA damp</i>
			"	"	"	"	4	2	<i>not working well</i>
			"	"	"	"	7	4	<i>fine</i>
48.0W			"	"	"	"	10	8	
51.0W			- 8 54	"	5.9	O ₉ V	12	1 16 ^m	<i>fine</i>
			+ 59 03	"	5.4	F ₀ II	2	3	<i>R.A. 10.7</i>
			"	"	"	"	5 1/2	16	
			"	"	"	"	12	9 12	<i>fine</i>

193

Cont'd

Date ^{Wed} ~~Thu~~ Feb 27-28/57Observer ^{DB} 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	E103aD	.008	-3.6	22 10 58	23 11 14
	"	"	"	"	"	"	"	23 11 14	23 46
23723	8250 B	11 33.5	+45 40	"	"	.016	"	23 59	01 59
23724	8235 B	12 55.7	+18 55	"	"	"	-4.0	02 09	06 09
	Focus Test	O.T.B.				.008			
<p>Fri Mar 1-2 1957</p> <p>20.30. Opened & set, but cloudy again.</p>									

Dne Temp. $+19^{\circ}F$

Transparency Conditions Clear

194

Hum. 15.26

Dne Temp. $+12^{\circ}$

g Time S.T.	Mer Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		+18 33	1	6.05	M _{1/2} Ib	12	Set 115 ^m	
46	30 W	"	"	"	"		32 ^m	good.
50	36 W	+45 22	"	9.4	K 2	2-2-2	Set 2	fine
52	25 W	18 39	0	9.9	F 7	2-2-2	5 1/2	too weak
						16/10	9	OK
							2 P 4 + ?	
						1957	MC SC MTW STW S SW ME	
						Mar. 1	+16.0 -50.3 -21.8 -0.3 +0.9 -19.8 -5.2	

195

Date Sun-Mon Mar 3-4 1957 Observer MP-Julian 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 ^h 38. ^m 0	+31° 58'	T-25	103a-10	^{set} .008	-4.0	19:07	-
"	"	"	"	"	"	"	"	-	-
"	"	"	"	"	"	"	"	-	19:14
23726	16 Jan	3 38.9	+23 58	"	"	"	"	19:34:30	-
"	"	"	"	"	"	"	"	-	-
"	"	"	"	"	"	"	"	-	19:50
23727	27 Jan	3 43.2	+23 45	"	"	"	"	20:02	-
"	"	"	"	"	"	"	"	-	20:07

Dne Temp. +19°F

Transparency Conditions

196

us. 15.26

Dne Temp.

g Time S.T.	er Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-	-	+32° 10'	1	3.88	B1 III	-	exp 4 1/2" out 2 MR std.	
-	-	"	"	"	"	12 ^S ±	1" 5	
4	=00 W	"	"	"	"	-	2" 8	fine
-	-	+24 09	1	5.3	B7 IV	-	2 2 " "	
-	-	"	"	"	"	10 ^S	4 5	
50	=36 W	"	"	"	"	-	8 9	fine
-	-	23 54	1	3.7	B8 II	-	20 ^S 1 " "	
-	-	"	"	"	"	10 ^S ±	40 ^S 5	
51	=49 W	"	"	"	"	-	90 ^S 9	olds at end fine

Mar. 4

MC	SC	MTW	STW	S	SW	ME
+12.7	+54.1	-27.1	-0.4	+1.8	-21.6	-6.3

Made a stand at 1630
 light snow more cloud
 closed at 2.00 o'clock.
 3 PHs loaded

Dome Temp. $+19^{\circ}\text{F}$
 Focus 15.28
 Dome Temp. 417°F

Transparency Conditions *Good*

198

Time I.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
35	39 W	-15 25	0	8.7	G5V	4-4-4	Set 2 High velocity star	weak ⁽¹⁾
45	16 W	25 21	0-1	7.9	G8V	4-4-4	" " " "	fine
							2 P.H. loaded	
Mar. 6							MC SC MTW STW S SW ME	
							+12.8 -56.3 +7.1 -0.05 +1.9 -23.0 -5.1	
							8 +12.8 -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	β Tau	5 20.0	+28 31	I-25	10300	^{set} .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	"	"	"	"	22:18	23:10
23735	ADS 8470 B	12 09.1	+33 20	"	"	"	+1.0 ^v	23:22	02 22
23736	ADS 10715 B	17 37.0	+24 34	"	"	.016	"	02 52	05 32
	Focus Test	O.T.B.				.008			

One Temp. +28°F

Hum. 15.33

One Temp. +24°F

Transparency Conditions *clear but very windy.*

200

Bright aurora after midnight.

ing Time L.S.T.	hr Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
-	-	+28 36	1	1.51	BT III	-	Set 1 ^s Exp. 3 ^s MKSH	
-	-	"	"	"	"	10	5 6 ^s	
49	17 W	"	"	"	"	-	9 12 ^s	fin (1)
34	09 W	+23 16	1	7.0	B9 II	4-4-4	Set 2	weak
46	56 W	+3 59	1	5.89	B0 III	-	5 Exp 8 ^m	
03	214 W	"	"	"	"	4-8	9 " 15 ^m	fin "
12	-	+29 31	1	7.7	G8 V	4-4-4	Set 2 H/Vel	weak
10	57 W	-14 58	1	7.9	G2 V	4-4-4	" 8	weak
22	03 W	+33 01	1-2	9.3	G0	4-4-4	" 2 ^{Vio} spec Ben Supp. 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25	fin
52	14 E	24 34	1	9.8	F6	2-2-2	5 1/2 " ^a increases cloud + wind.	fin
						16/10	9	OK
							2 PH +8	

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	I-25	E-103A ₀	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	19 Aur	05 13.4	33 52	"	"	"	-0.6	20 09	
								20 12	20 17
								20 17	20 27
23740	ρ Aur.	05 14.7	41 43	"	"	"	-0.6	20 36	
								20 38	20 41
								20 41	20 47
23741	H.D. 71881 Fronsberg	08 24.6	50 57	"	"	"	-0.6	20 55	22 05
					OTB				

Air Temp. 28°F

Date 15, 31

Air Temp.

Transparency Conditions

202

Time	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9:20		34 15	0.5.4	B.IV		12s	Let V, 2 ^m 30 ^s M.R. std 50	
9:30							" 5	
9:45		07 37	0	5.8	F3V	12s	" 1, 3 ^m 30 ^s	good
9:59							" 9	fine
10:17		33 55	0	5.3	A5II	12s	" 1 2 ^m 30 ^s	
10:27							" 5	
10:41							" 9	fine
10:47							" 1 1 ^m 30 ^s	
10:55	32W	50 46	0	8.0	G.IV	4-44 16/10	" 2 High Velocity Prog. range toward end. sky thickening	fine good OK
							1 PH load. + 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 ₀	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	02 20
	Focus Test	O.T.B.							

Air Temp. + 40°F
 Obs. 15.38
 Air Temp.

Transparency Conditions Good

203

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
36	05W 06 48	0	7.5	G4V	4-4-4	Set 2 High Velocity	good
11	44W -14 57	0	7.9	G2V	4-4-4	" 8	(weak
37	27W 20 30	0	8.7	F8V	4-4-4	" 2	good
10	34W 49 00	0	7.0	G1V	4-4-4	" 8 Haze - light cloud	good
41	46W 39 00	0	6.5	G0V	4-4-4	" 2	fine
43	47E 20 25	0	7.4	G5V	4-4-4	" 8	good
42	33E 1 55	0	5.6	F8V	4-4-4	" 2	" weak
40	58W 10 23	0	7.6	F6V	4-4-4	" 8	l weak
39	67 30	0	5.6	F8V		1/2	good
38	52W				12	5	too much cloud, closed
					16/10	8 1/2	fine OK
						4 FH + 4	
						Mar. 22 MC SC MTW STW S SW ME	
						+27.1 -12.3 +4.8 -0.7 +0.1 -27.6 -3.9	

Air Temp. $+39.0^{\circ}\text{F}$
 Humidity 15.40
 Barometric Temp.

Transparency Conditions *hazy*

208

Hour Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
—	$17^{\circ}00'$	1	3.6	A0Ib	—	set 1 MKStd	Exp 20 ^s weak
—	"	"	"	"	12 ^s	set 4 " Exp 40 ^s	weak
—	"	"	"	"	—	set 7 " Exp 40 ^s	weak
02 5	05 E	"	"	"	—	set 10 " Exp 90 ^s	fine
03 6	46 W $+26^{\circ}04'$	0	9.0	F7	4-4-4	set 1 1/2 Vis. bin supp. cloud around <u>03 20</u>	good-
						2 PH + 4	

Time Temp. +41°F

Transparency Conditions Clear

210

Fcus. 15.43

Time Temp. +28°F

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30	2 07 W	+6 48	-1	7.5	G4V	4-4-4	Sd 2. In Vel.	good
	26 W	+47 18	0	6.2	G0V	4-4-4	" 8	fine
29	47 W	+50 47	0	8.0	G1V	4-4-4	" 2	fine
04	1 26 W	+49 00	0	7.0	G1V	4-4-4	" 8	fine
	0 10 W	+20 30	0	8.7	F8V	4-4-4	" 2	fine
40	0 03 E	-12 06	0	6.7	F6V	4-4-4	" 8	good
5	26 W	+33 29	0	8.3	G0	4-4-4	" 2 Vis. time supp.	good
						16/10	" 8	OK
							2 PH. + 12	

Dme Temp. +30°F
 Focus 15.34
 Dme Temp. +22°F

Transparency Conditions *clear*

212

Bright aurora

Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
44	3 44W	30 45	0-1	8.9	G2VI	4-4-4	Set 2 High Velocity	→ No fine
43	1 56W	32 08	0	6.1	G4V	4-4-4	" " "	→ No fine
46	3 37W	18 37	0	9.9	F7	2-2-2	Vis Bril Supp.	P used
						16/10	" 8	OK
							4 PH 18	
						Mar. 25	MC SC MTW STW S SW ME	
							+29.5 -15.4 -1.1 -0.2 +0.3 -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	

Dme Temp. 32°F

Hum. 15.37

Dme Temp. 28°F

Transparency Conditions Good

214

Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03	05W	40 54	var	9.3	G0	2-2-2	set 2 Vis. Bin. sup	weak
04	2 32E	16 22	1	8.8	FG	2-2-2	5 1/2 -11-	weak
						16/10	9	
							3PH + 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 ^h 55.3	+32° 26'	I-25	F103-AB	Set .008	+6.7	20 ^h :35	20 ^h 50 ^m
	84937	9 43.5	+14 14	"	"	"	"	21^h:25^m	
23771 } 23772 }	HD 91889	10 ^h 31.6	-11 42"	"	"	"	+6.7	21 ^h :43 ^m	22 ^h 13
	HD 106116	12 ^h 7.5	-02 32	"	"	"	+6.5	22 ^h :15 ^m	

Dne Temp. + 38°F

Feus. 15.40

Dne Temp.

Transparency Conditions Stationary cloudy patches at start

216

Mag. Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
50 ^m	35 ^m W	+38° 09	00	6.1	G4V	2-2-2	set 2 H.V.	good
			0	8.6	F2V		set 8 - Gray star	
13	5 ^m 09 ^m 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 Sc MTW STW S ^m 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.	Angle Incl.
23773	H.D. 87998	10 03.6	-19 15	I-25	E-103A ₀	^{5x} 008	+4.0	19 53	21 53	4
23774	" 106116	12 07.5	-02 32	"	"	"	+4.0	22 00	00 20	37 W
23775	" 106210	12 08.1	+11 24	"	"	"	+3.8	00 27	02 27	44 W
	<i>Fou. to A.</i>			<i>07B</i>						

Dme Temp. $+30^{\circ}\text{F}$

F:us. 15.36

Dme Temp.

Transparency Conditions Good.

218

ing Time R.S.T.	Dir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality						
83	014W	-19 30	0	7.9	G ₂ V	4-4-4	Set 2 High Velocity	(1) weak						
20	037W	-02 51	0	8.2	G ₄ V	4-4-4	" 8 " "	(2) weak						
27	244W	11 05	0	8.5	G ₃ V	4-4-4	" 2 Se - HV. ⁹¹⁰⁰ some Haze.	(1) weak						
						15/10	" 8 Haze + Thin Clouds.							
							3 P.H. + 4?							
							Apr. 3							
							mc	sc	MTW	STW	S	SW	MG	
							+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							Hd - Dg. 50 visitors. Cloudy. lectured Comets & showed 7 1/2"							
Thurs Apr 11							6 visitors (5 yr m e P) - showed Telescope - Hd.							

Air Temp. 120°F

Hum. 15.34

Air Temp. 126°F

Transparency Conditions poor

220

Ring Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
56	40 ^m E	+39° 30	0	6.5	G0V	4-4-4	Se-HV set 2	fine
:30	09 ^m W	+9° 46	0	6.7	K1V	4-4-4	O-HV set 2	poor
16	49 ^m W	+5° 28	0	7.5	G5V	4-4-4	O-HV set 8 cloudy for last 2 hrs closed at 1 a.m. 1 PM, plates in bot wet, drying in dark room.	weak

223

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

-BK

② 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 mem	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	⊙ Oph	17 19 20	-24 57.5	"	"	"		02 36	02 42
							2.9	42.5	48.5
								49.	55
								55.5	03 01.5
23786	⊙ ⊙ ph							03 02.5	03 08.5
								09.0	15.0
								15.5	21.5
								22.0	28.0
23787	⊙ ⊙ ph.							29.0	35
								03 35.5	41.5
								42.5	48.5
								44.5	55.5

Air Temp. 36 F
 Humidity 15.35
 Barometric Temp.

Transparency Conditions Good.

224

Ending Time E.S.T.	or Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:32	1415	8 54	0	8.9	A ₀	2-2-2	Set 2 Hd. ECL. Bin. * pretty faint	too weak
1:45	1320	32 36	1	6.9	G4V	4-4-4	Set 2 Se-HV	fine
1:58	W 110	20 22	1	7.67	G7IV	4-4-4	" 2 O-HV	fine
2:13	217W	11 05	1	8.5	G3V	4-4-4	" 8 Se-HV	fine
2:24	222W	14 00	0-1	8.17	G ^{III-II} 8	4-4-4	" 8 O-HV	good
2:42	22E		0-1	3.07	B3	12	" 0.5	watery
2:50		-24 56	1			12	3.5	"
3:05						12	6.5	"
3:15						12	9.5	"
3:25						12	0.5	"
3:35						12	3.5	"
3:45						12	6.5	"
3:55						12	9.5	"
4:05						12	0.5	"
4:15			0-1			12	3.5 Seeing Variable	"
4:25						12	6.5	"
4:35						12	9.5	"

225

Date Apr. 14-15/57. Observer HFBK 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 ^m 20 ^s	-24 57.5	I-25	103a-0	.008		03 58	04 04
								04 04.5	04 10.5
								11.0	17.0
								+3.0	17.5
23789	⊖ Oph.							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
404				3.07	B3	12	Set. 0.5 Focussing Motor Work	writing
410						12	3.5	"
17						12	6.5	"
22.5			0-2			12	9.5	"
31			4			12	0.5	"
37.5	33W		0			12	3.5	"
						12	6.5	"
50						12	9.5	"
							1 P.H. + 7	
							MC SC MTW STW S SW ME	
Apr. 15							+1.0 -0.5 -25.2 -0.7 +4.5 +13.7 -2.5	
17							+2.7 -3.4 -25.1 -0.8 +5.2 +11.9 -5.1	

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

Transparency Conditions *Very hazy near horizon* 228

→ April 20 57 100 visitors Shown Jupiter.
Partially cloudy

Ending Time P.S.T.	ur 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"																							
						Apr. 22	<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>-0.1</td> <td>+8.2</td> <td>+6.0</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	-0.1	+8.2	+6.0	-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	-0.1	+8.2	+6.0	-4.1																							
26	+8.8	-12.4	-1.8	-0.08	+9.8	+4.1 -3.1																							

Air Temp. +63° F

Transparency Conditions *Hazy*

230

Humidity.....

Air Temp.....

Time E.S.T.	Star 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	"	Haze very thick. Lightning.	

231

SPECTROPHOTOMETER

Date April 28-29 1957 Observer Se, O Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. C/F	Starting Time E.S.T. End ST.	Ending Time E.S.T.
8-3 ✓	HD 103287	11. 48.6	+54 15	5200	-3500	10	5/3	11 ^h 36	21 36
9-3 ✓	HD 102647	" 44.0	+15 08	5600	-3500	10	5/3	12 02	21 53
10-3 ✓	HD 106591	12 10.5	+57 35	"	"	"	5/5	12 22	22 18
11-3 ✓	HD 103287	" 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	+47 49	"	"	"	5/2	14 05	23 55
✓ 14-3	HD 103287	" 48.6	+54 15	"	"	"	5/3	14 43	20 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	" 48.6	+54 15	"	"	"	5/3	16 09	1 59
✓ 18-3	HD 147394	16 16.7	+46 33	"	"	"	5/6	16 32	2 22
✓ 19-3	HD 103287	" 48.6	+54 15	"	"	"	5/3	16 56	2 46
20-3	HD 139006	15 30.5	+27 03	"	"	"	5/3	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

Time Temp. 154°F

Transparency Conditions *Clear, Few clouds*

232

Humidity

Time Temp. 50°F

Reading Time EST.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21 36	14 E	+53 57	-1	2.44	A0 IV	20"	4 A/sec 2" prominent short 920 volts	✓
21 53	17 W	+14 49	-1	2.21	A3 V	20"	"	✓
22 11	15 E	+57 14	-1	3.35	A3 V	20"	"	✓
22 40	0 V	+53 56	"	2.44	A0 IV	"	" traced spud X.S.	?
23 11	24 W	+48 12	"	3.30	A7 V	"	" Traced 3 times	bad.
23 51	21 W	+49 30	"	1.66	B3 V	"	" Traced 3 times	one good.
0 33	52 W	+53 57	"	2.44	A0 V	"	" + Sky.	✓
1 12	12 W		"	2.21	A0 V	"	"	wt added To Counton Balance
1 36	01 W	+2 04		3.74	A0 V	"	"	of 74" ✓
1 51	18 W		"	2.44	A0 IV	"	"	✓
2 22	14 W	+46 24	0	3.74	B5 V	"	Apr. 20 MC SC MTD STD S SW ME +9.7 -16.5 -10.9 -0.3 +10.7 +4.4 -0.2	✓
2 46	05 W			2.44	A0 V	"	"	✓
3 10	48 W	+26 51		2.21	A0 V	"	"	✓
3 33	51 E	+38 43	0	0.03	A0 V	"	"	✓
5 55	34 W	+26 53	0	2.21	A0 V	"	"	✓

Dme Temp. 62°F

Hum. 15.5-8

Dme Temp.

Transparency Conditions *clear*

234

about 30 visitors saw comet with 2"

Starting Time E.S.T.	Dir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10	33 W	+55° 21'	-	-	-	none	set 1 no jaws	nothing
11	40 W	"	-	-	-	none	set 9	
12:20						finding hole		
1:45	16 W	"	-	-	-	large hole	4A/sec 2"/min 920 rolls - 2x + sky	
2:27	55 W	+48 13	0	3 30	A7E	large hole	numerous tracks.	
							C.B.C. news.	

235 SPECTROPHOTOMETER

Hd. - L. for commit

Date Tues. - Wed. Apr 30 - May 1 / 57 Observer O - Se Julian Day 2435.959

⊙ 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	^{- Roland} Comet Arend	^{h m} 353.8	¹⁹⁵⁵ 56 47	I-25	E103A0	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 87901	10 03.0	+12 27	5200	"	"	5/1	13 29	23 11
'30-5	HD 103287	11 48.6	+54 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 51.8	+15 59	"	"	"	5/7	14 34	00 16
'33-5	α Boo	14 13.8 ^(14 01)	+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 161868	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
 Humidity 15.54
 Time Temp. +51°F

Transparency Conditions *Clear*

236

Ending Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	N 75° E	^{at end} 56 51	0?	?	?	No Comp.	Set 1 no Voveralit.	
05	16 W	+12 10	0	1.21	B7V	20"	4A/acc 2" per min chart 930-v	
45	01 E	+49 32	0	1.66	B3V	"	" [perhaps system 12:45, ST 22:27]	
48	52 W	+57 15	0	3.35	A3V	"	"	
11	22 W	+12 11	0	1.21	B7V	"	"	
3 32	58 W	+53 57	0	2.44	A0V	"	"	
3 55	31 E	+2 05	0	3.74	A0V	"	"	
16	20 E	+15 50		4.4	F6V	"	" See HV	
0 11	45 W	+19 23		1.17	K2 III _p	"	"	
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 01	55 E	+24 54	0	3.22	A3V	"	"	
2 23	05 E	+02 44	0	3.75	A0V	"	"	
2 46	18 W	+49 32	0	1.66	B3V	"	"	

Transparency Conditions *Clin*

About 30 visitors saw comet with 2".

Starting Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
08	10E	+38 44	0	0.03	A0I	20"		
37	54E	+08 45	0	0.98	A7IV	20	RA Clamp working	
40	33W	+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 -6.1	

239

Date Wed. May 1 & 2 / 57 Observer L-H ✓ Julian Day 24359.60

☉ 41 13 30.3 3492.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23792	H.D. 106210	12 08.1	11 24	I-25	E-103A ^{set}	.008	16.3	20 15	23 15
23793	" 135101	15 08.3	19 40	"	"	"	16.3	23 24	00 48
23794	" 139457	15 33.2	+10 35	"	"	"	15.8	00 54	02 24
23795	" 148816	16 25.6	+04 26	"	"	"	15.8	02 29	04 07
	Dours Test		07B.						

Air Temp. 55°F

Humidity 15.52

Air Temp.

Transparency Conditions... Light cloud...

240

About 30 visitors saw
Comet with 2".

Starting Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
8 15	25 W	11 05	0	8.5	G3V	4-4-4	Set 2 Se Hi Vel	weak
10 42	0 01 E	19 25	00	7.4	G5V	4-4-4	" 8 " " " brighter of pair	good
12 24	110 W	10 24	00	7.6	F6V	4-4-4	" 2 " " "	weak
4 07	01 W	+04 18	00	7.8	F9V	4-4-4	" 8 " " "	weak
						15/10	" 5	
							2 PH + 2	
							Horn M.	

241

Date Thurs May 2-3/57 Observer Hol. - H ^{-BK} 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.	Angle End	
23796	HD 106116	12 07.5	-02 32	I-25	E103aD	008	10.0	20 32	22 32	148°	
	0 tried ft. star with spectrophotometer								23		
23797	HD 114174	13 03.8	+5 46	"	"	008	10.0	23 11	00 01	130°	
23798	AD 111028	12 41.3	+10 06	"	"	"	"	00 06	00 36	130°	
23799	⊙ O ₄ h.	17 13.9	-24 54	"	"	"	"	01 09 ⁰⁰	01 13 ⁰⁰		
	"							01 14	01 18		
	"							01 19	01 23	135°	
	"							01 24	01 28		
23800	"							29 ³⁰	33 ³⁰		
	"							01 35	01 39		
	"							01 39 ⁴⁵	01 41 ¹⁵		
	"							01 44 ³⁰	48 ³⁰		
23801	"							49 ³⁰	53 ³⁰		
	"							01 54 ⁰⁰	58 ⁰⁰		
	"							52 ¹⁵	02 02 ¹⁵		
	"							02 03	07 ⁰⁰		

Found Telescope
unclamped
in R.A.

Transparency Conditions.....

242

Air Temp.....

Hum. 15.52 then 15.44.

Air Temp.....

About 40 visitors to see
comet with 2"

ing Time E.S.T.	er Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
32	148 ^m	-2 52	0	8.2	G4V	4-4-4	Set 2. SE HV (forgot to reset focus - left at 15.52 for this exp) Ret focus 15.44	lweak
01	20W	5 25	0	7.47	G5IV	4-4-4	Set 2 0 - HV.	weak
36	18W	+09 48	0	6.66	K1V	4-4-4	" 8 0 - HV	good
37				3.07	B3	12	" .5	fine
						12	3.5	"
23	30 E		00			12	6.5	"
26						12	9.5	"
33						"	.5	fine
37						"	3.5	"
40						"	6.5	"
44						"	9.5	"
53						"	.5	fine
57						"	3.5	"
20						H1	6.5	"
07						"	9.5	good

243

Date May 2-3/57 Contd. Observer BK+Hv 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	103a-0	.008		02 09	02 12
								02 12 ³⁰	16 ³⁰
								17 ⁰⁰	21
								21 ³⁰	25 ³⁰
23803								02 26 ³⁰	02 30 ³⁰
								31 ³⁰	35 ³⁰
								02 36	02 40
								40 ³⁰	44 ³⁰
23804	⊙ Cph							02 45 ³⁰	41 ³⁰
								02 50	02 54
								+10.0 02 54 ³⁰	58 ³⁰
								02 59 ¹⁵	03 03 ¹⁵
23805	⊙ Cph							03 04 ¹⁵	08 ¹⁵
								03 08 ⁴⁵	03 12 ⁴⁵
								13 ¹⁵	17 ¹⁵
								17 ⁴⁵	21 ⁴⁵

Temp. +34° at 3.00 EST

Transparency Conditions

244

Time	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12				3.07	B3	12	Set. .5	fin
16						"	3.5	"
21						"	6.5	"
25						"	9.5	"
30						"	.5	"
35						"	3.5	"
4						"	6.5	"
11	09E					"	9.5	"
1						"	0.5	"
5			0			"	3.5	"
10		-24 56				"	6.5	"
15						"	9.5	"
20						"	0.5	"
25						"	3.5	"
30						"	6.5	"
35						"	9.5	"

me Temp.....
 CS.....
 me Temp.....

Transparency Conditions

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26			3.07	B3	12	set. 0.5	fair
31		0			12	3.5	"
35					"	6.5	"
340 047W					"	9.5	"
						2 P.H. + 4.	
						May 3 MTW ME	
						-22.8 -0.9	

ne Temp. 44°F
 us 1544
 ne Temp. 40°

Transparency Conditions Good

Showered @ 4 in 74-inch, R.A.S.C. telescopes for
 N, Bk, Hd, O, L About 3:00 visitors in dome in
 two showings. [Possibly 400 altogether]

Ending Time LST	r Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 03	32W	26 05	1	9.0	F7	2-2-2	ret 2 Bk - UBF	fine
04 00	54E	16 28	0	9.6	48	2-2-2	5 1/2 "	fine
					"	15/10	9	OK
							1 PH + 4	

SPECTRO PHOTO METER
249

Date Sun Mon May 5/6 Observer MR - H_v Julian Day 2435964
D.H. Lee © 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	Moon							240 min	
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	+54 15	"	"	"	5/3	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 ¹⁹⁶⁰	-10 57	"	"	"	4/6	14:10	23:33
49-6	HD 120315	13 43.6	+49 49	"	"	"	5/2	14:35	23:58
23809	HD 162756	17 47.6	-07 53	I-25	E1039-0	.008	+11.0	00 31	03 41
	Focus Inst.		0.7.13						

Time Temp. $+44^{\circ}\text{F}$

Humidity 15.46

Time Temp.

Transparency Conditions Good

250

Time	Dir Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:13	2:44	+12 12		1.21	B7V	20"	4A/sec	
2:41	1:33	+53 55		2.44	A0V	"	"	
3:02	1:32	+57 15		3.35	A3V	"	"	
3:33	1:47	-10 55		0.91	B1V	"	"	
3:51	1:49	+49 31		1.66	B3V	"	"	
3:41	2:29W	-07 54	00	8.3	G0V	4-4-4	Set. 2 SE-HV.	Lowest
						15/10	" 8	OK.
							1 P.H + 3	
							H ₂ He	
							May 6. nc sc MTW STW S SW ME	
							+11.3 -24.2 -23.8 -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>End LST</i>	Ending Time E.S.T.
50-7	HD 91130	10 26.2	+32 54	HB,	4450-3600	10	6/7		
51-7	HD 111469	12 44.4	+28 06	HB,	4500-3600	"	6/6		22 33
52-7	"	"	"	4559 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		

Time Temp. +56°F

Transparency Conditions *Some haze*

252

Focus

Time Temp.

Starting 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	A3 A4	"	"	
			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. V. Julian Day 2435966
 0 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
	7 c.w.	1. T	(S) B						

Air Temp. 68°F

Transparency Conditions *Stage*

254

Humidity.....

Air Temp.....

Starting Time E.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 56	23W	+01 30	0	7.55	G0V	4-4-4	" 2 " "	good
						15/10	" 8	OK
							1 P.H. Plt N-t-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, 1957Observer L - HgJulian 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.	Angle Incl.
[23815	HD 193761	15 57.2	+33 36	I-25	E 103a D	set 0.003	12.0	00 04	00 34	1 29 E
[23816	HD 152722	16 50.4	+43 00	T 11	"	"	12.0	00 39	02 09	1 34 W
[23817	HD 184499	17 29.7	+32 59	"	"	"	11.9	02 36	03 54	2 2 E
	Focus test	DTB					11.9			

Dme Temp... 44°F

Ecus... 15.47

Dme Temp... 38°

Transparency Conditions

256

Sat May 11 cloudy. 100 visitors
lectured comets + showed 74" Hd-L.

ing Time E.S.T.	Dir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3-	09 E	33 26	-1	6.02	G ₂ V	4-4.4	Set 2 Se HV	good
0-	34 W	43 55	-1/2	7.46	G ₂ V	4-4.4	Set 8 " Se HV	Weak
-4	2 E	33 05	-1	7.19	G ₂ V	4-4.4	Set 2 Se HV I set on HD 179955 but only bright star was double	fair
						15/10	Set 8	OK
							3PH + 8	

257

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

ok

☉ 55 43 18.0 3468.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. <i>Sid time</i>	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	
23818	HD 173010	18 38.1	-09 26	I-12 1/2	E-1000	.016		00 46	03 46
	<i>From 1/2</i>	<i>1/2</i>	<i>07 15</i>						

Dme Temp. 44°F

Transparency Conditions

258

Focus.....

Dme Temp.....

Changed to
 May 16 12¹/₂ Camera 25" Was Focus 15.47 12¹/₂ Focus 12.91
 Jilt 23.15 Jilt 20.35

Time	Dir Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26 W	+ 53 57		1	2.44	A0 W	20"	4 A/sec.	
45 W	+ "		1	"	"	"	" ← experimenting with apertures	
49 W	+ 49 30		1	1.66	B3 V	30"	" also patterns at 1 A/sec	
0 26 W	-09 21		00	10.0	B0 Ia 1-1	lt. 2	OB	Weak.
						4/3	" 8	OK.
							2 PH + 8	
May 17	mc	sc	MTW	STW	S	SW	ME	
	+14.7	-37.2	-31.1	-0.5		+18.1	+2.6	-1.1
<p>Saturday May 18: 125 visitors. Showed 7 in 74". Partially cloudy - Hd. Mar. BR RASC telescope on lawn</p>								

Dome Temp. 48° F
 Humidity 12-91
 Dome Temp.

Transparency Conditions clear

260

Starting Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 01	L5W	33 03	1.0	9.3	402	2-2-2	MR 2 . MR - VBF	fin
3 44	H2W	24 32	0-1	9.8	F6	2-2-2	8 -1-	fin
						8/6	ret 5	OK.
							3PH + 6	
						May 21	mc sc mtw stw s sw me +15.3 -41.3 +5.2 +0.5 ^m +18.7 +4.1 +0.7 -0.1 -0.81 +4.7	

Bole Temp. 60°F

Transparency Conditions clear

262

Saturday May 25 S-BK-Mai Totally cloudy + showers.

200 miles. 9:15-10:15 Telescope demonstration + moon talk
10:15-11:15 Moon talk + Telescope demonstration

Ending Time E.S.T.	Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9:55	00	+49 31	00	1.66	B3V	20"	4 A/sec	
10:20	00W	+57 16	0	3.35	A3V	"	" " (S:UMa)	
	07E	+02 04	0	3.74	A0V	"	" "	
	35E	+27 54	0	2.21	A0V	"	" "	
	18W	+67 30	0	5.64	F8V	"	" (Se HV)	
	09W	+49 31	0	1.66	B3V	"	"	
	31W	+52 34	0	5.16	F9V	"	" (Se HV)	
	55N	+33 26	0	6.02	G2V	"	" (Se HV)	
	30W	+49 31	0	1.66	B3V	"	"	counter cable snapped on Angstrom meter
	19W	+46 24	0	3.74	B5V	"	"	
	52W	+24 54	0	3.22	A3V	"	"	
	39N	+49 31	0	1.66	B3V	"	"	
	32W	+32 31	0	6.01	G2V	"	" (Se HV)	
	343W	+27 53	0	2.21	A0V	"	"	

Bole Temp. 60°

Transparency Conditions Clear

264

Bole Temp.

for 1 hr!

Right Ascension E.S.T.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
09W		+49 37	0	1.66	B3V	20"	4 A/sec	
112W		+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 - Se² 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	ρ 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 147394	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	γ Cyg	20 20.8 (1960)	+40 05 (1960)	"	"	"	5/3	19 15	

ole Temp. 55°F

48° 10' clock

Transparency Conditions

266

oks.....

ole Temp.....

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

Time E.S.T.	Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:50 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 ^{II}	"	1A/sec	counter cable snapped again!
5:29 W	+53	57	1	2.44	A0 ^V	"	1A/sec	
7:05 W	+49	31	1	1.66	B3V	"	4A/sec; also 1A/sec Hβ; Hγ-Hδ	
8:25 E	+46	23	1	3.74	B5 ^{IV}	"	4A/sec, also 1A/sec	need new chart paper
9:26 W	+49	31	1	1.66	B3V	"	4A/sec	
10:45 W	+28	19	1	5.8	F8Ia	"	"	
11:50 W	+24	53	1	3.22	A3 ^{IV}	"	"	
12:11 E	+38	44	1	0.03	A0 ^V	"	"	
1:02 W	+49	32	1	1.66	B3V	"	"	
1:05 E	+40	06	1	2.22	F8Ib	"	" and at 5/4	Some stratus SE. mist

left at 13500

	Sc	S	SW	ME
May 29	+9.0	+20.0	+5.2	+1.1
31	mc	sc	MTW	STW S
	+18.4	+6.9	-9.1	-0.7 +19.9
			SW	ME
			+5.1	-2.9

ne Temp. 55°F
 us 12.91
 ne Temp.

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

Transparency Conditions

Cloudy .
 When clear - I could not find image in guiding
 eyepiece. Probably slit not correct.

Ending Time E.S.T.	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. <i>ranges</i>	Emulsion	Slit	Temp. <i>Same</i>	^{Center} Starting Time E.S.T. <i>Sid Time</i>	Ending Time E.S.T.
86-12	HD 120315	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	
23821	HD 115539	13 12.7	+14 18	I 12 $\frac{1}{2}$	EI03-a0	.008	21.0	22 15	23 31
23822	HD 133965	15 02.2	+29 35	"	"	.016	21.1	23 40	1 44
89-12	HD 193237	20 14.1	+37 43				5/6	18 49	
90-12	HD 193793	20 17.1	+43 32						

June 3 - 0 100 5 cat cloud - Hg
 Time Temp. +70° F 3-4 - passing clouds all evening - 11 R/02
 Hcus. 12.91
 Time Temp. /

Transparency Conditions

Clear Some cloud in SW

270

Time EAT.	Rur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. <i>Aperture</i>	REMARKS	Quality
		49 31		1.66	B3V	30"	4A/see + 2" in min 905 r. 11	
	42 W + 57 16			3.35	A3E	"	"	
	23 E + 2 04			3.74	A0V	"	Large current leakage in all base Replaced Silicon Gel	
31	51 W + 14 01	01	0	8.17	G8 III	2 ^s , 2 ^s , 2 ^s	Set 7	Nothing
44	15 W + 29 22	22	0	9.42	F6	1 ^s , 1 ^s , 1 ^s	" 3 Clouds after 1:30	Nothing.
							P Cygni Cloudy	
							6v lamps do not work. RA clamp still sticks as it has for weeks and months	
							June 5	
							SA S SW MB	
							+1.8 +20.0 +1.1 +1.6	

271

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

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion range	Slit	Temp.	Starting Time E.S.T. sid time	Ending Time E.S.T.	P.	Angle End
91-13	HD 120315	13 43.6	+49 49	5200	3500	10"	5/2	14:27			41W
92-13	HD 139006	15 30.5	+27 03	"	"	"	5/3	14:49			44E
93-13	HD 141527	15 44.5	+28 28	"	"	"	6/6	15 20			52E
94-13	HD 139006	15 30.5	+27 03	"	"	"	5/3	16 10			36W
95-13	HD 147394	16 16.7	+46 33	"	"	"	5/6	17 04			45W
96-13	HD 120315	13 43.6	+49 49	"	"	"	5/2	17 28			42W
97-13	HD 172167	12 33.6	+38 41	"	"	"	4/3	17 52			43E
98-13	HD 139006	15 30.5	+27 03	"	"	"	5/3	18 13			39W
99-13	HD 161868	17 42.9	+02 45	"	"	"	5/6	18 40			55W
100-13	γ Cyg	¹⁹⁶⁰ 20 20.8	¹⁹⁶⁰ +40 08	"	"	"	5/4	19 01			20E
101-13	HD 139006	15 30.5	+27 03	"	"	"	5/3	19 23			51W
102-13	HD 187642	19 45.9	+08 36	"	"	"	4/5	19 45			03E
103-13	HD 197345	20 38.0	+44 55	"	"	"	5/2	20 06			34E

ome Temp. + 54° F

ocus 12.91

ome Temp. + 48° F

Transparency Conditions

here + there
night.

Small cirro-stratus clouds
throughout the early part of the

272

og Time S.T.	our Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	0:41W	+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	F8Tap	"	" Set H taken twice	telescope does not seem firmly clamped in R.A. experienced difficulty keeping stars in field
	0:36W	+26 52	00	2.21	A0V	"	"	
	0:45W	+46 25	00	3.74	B5IV	"	" CLOUD. for 40 min. Star continually drifting in R.A.	
	3:42W	+49 31	00	1.66	B3V	"	"	
	0:43 E	+38 44	0	0.03	A0V	"	"	
	2:39 W	+26 52	0	2.21	A0V	"	"	
	0:55W	+2 44	0	3.75	A0V	"	"	
	1:20 E	+40 07	0	2.22	F8Ib	"	" Set H	
	3:51 W	+26 52	0	2.21	A0V	"	"	
	0:03 E	+08 46	0	0.98	A7IV	"	"	
	0:34 E	+45 07	0	1.35	A2Id	"	"	

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>Centre</i> Starting Time E.S.T.	<i>Centre</i> Ending Time E.S.T.
104-14	HD 139008	15 30.5	+27 03	5100	-3500	110	5/4		15 ^h 49.25 ^m
105-14	HD 147394	16 16.7	+46 33	"	"	"	5/7		16 ^h 10.5 ^m
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

Home Temp. +59° F

Transparency Conditions *Clear*

274

Home Temp. +52° F

250 visitors shown Jupiter

Time P.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
49.5	16 W	+26 57	1/4	2.21	A0V	30"	4A/sec 2" per min	
10.5	08 E	+46 25		3.74	B5V	"	"	
33	03 E	+38 44		0.03	A0V	"	"	RA CLAMP NOT WORKING WELL
57	24 W	+26 52		2.21	A0V	"	"	
1.5	06 W	+24 55		3.22	A3V	"	"	
2	04 E	+02 43		3.75	A0V	"	"	
0.5	30 W	+26 52		2.21	A0V	"	"	
22	13 E	+38 45		0.03	A0V	"	"	
40.5	08 W	+26 53		2.21	A0V	"	"	
03.5	49 E	+00 10		5.57	A0	"	"	
22	28 E	+00 57		Var	VAR	"	" η Aql	
4.5	11 E	+00 11		5.57	A0	"	"	
0.02	11 W	+00 55		VAR	VAR	"	" η Aql	

New Chart is in Dome.
Must be put in immediately.

me Temp. 64°F

Transparency Conditions Good, some cirri

276

cus.....

me Temp.....

9.7

Ending Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11:00	246W	18 39	11	9.9	7	2-4	set 2 in Box - VBF - 1 overcast by 22:30 2PH +4 in refrigerator Found bridge connected mc sc msw stw S sw me June 10 +19.2 -6.1 +15.6 +0.2 +19.6 -4.8 -0.9	to work.

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	1.66	B3V	30"	4A/sec. and 1A/sec. for pin to entrance																									
						<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																								
						For Sat 14/15 Started to open but closed at 10.00 Hg																									

279

Ma.

Date Sat-Sun June 15/16 Observer Se² - Hg Julian Day 2436.005

☉ 84 28 34.3 3436.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. <i>Std. Time</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	
23822	ND 165401	18 00.7	+9 39	I-12	E-10360	Set 205	26.0	00 39	01 55
23823	ADS 12693 B	19 32.8	+16 14	"	"	"	25.9	02 00	03 06
	From East	OTB					25.9		

Time Temp. 73°

Transparency Conditions Here, fine cumulus

280

Focus.....

Time Temp.....

z Visitas, sham, Jupiter.

ing Time P.S.T.	Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	35W	+26 52	0	2.21	A0V	20"	4A/sec. 21 21 21	
	44W	+28 21	"	5.8	F8b			
55	11 W	+04 39	1	8.42	G ₂ V	2-2-2	So. H. Vel. Check Field. Set 2	
	50W	+16 22	0-1	8.5	F ₆	2-2-2	BK VBF Three clouds Set 20 Set 2	
						8/5	minutes. Set 2	
							4 PH + 0	
							SC MW STW S W ME June 17 -14.6 -50.2 -0.7 +17.3 -17.9 +12.2	

Eme Temp. 79°F

Transparency Conditions Hazy

282

F.us.....

Eme Temp. 75°F

Ending Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 05	: 37 W	+33 29	0	8.3	G0	2-2-2 set 2	Bk-VBF Tried to get a spectrophotometer tracing of τ Her at 1Å/sec, but gave up upon the discovery that the Brown was adjusted to a very slow speed. — ok	
	: 155	+16 24	"	8.8	F6	2-2-2 set 6 8/6		
							Fog then clouds at 03 25	
							3PH + 0	

283

Date Wed - Thurs, June 19-20 Observer Se² Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. <i>Side time</i>	Ending Time E.S.T.
120-17	^{HD} 139006	15 30.5	+27 03	5200	3500	10"	5/3	15 59	
121-17	HD 141527	15 44.5	+28 28	"	"	"	6/6	16 29	
122-17	"	"	"	"	"	"	"	16 49	
123-17	HD 139006	15 30.5	+27 03	"	"	"	5/4	17 11	
124-17	HD 156164	17 10.9	+24 57	"	"	"	5/5	17 33	
125-17	HD 158214	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	γ Cyg	⁽¹⁹⁶⁰⁾ 20 20.8	⁽¹⁹⁶⁰⁾ +40 08	"	"	"	5/4	19 02	
129-17	HD 188350	19 49.6	+00 01	"	"	"	6/5	19 37	
130-17	HD 187929	19 49.4	+00 45	"	"	"	6/4	20 01	
131-17	1 Del	20 25.5	+10 34	"	"	"	6/6	20 26	
132-17	HD 196867	20 35.0	+15 34	"	"	"	5/6	20 46	

Dne Temp. 66

Transparency Conditions *clear*

284

cus.....

Dne Temp.....

Ending Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality														
	26W	+26 51.	00	2.21	A0V	20"																
	42W	+28 16	"	5.8	F8Ib	"																
	03W	"	"	"	"	"	June 20 <table style="display: inline-table; vertical-align: middle;"> <tr> <td>mc</td> <td>sc</td> <td>mtw</td> <td>stw</td> <td>s</td> <td>sw</td> <td>me</td> </tr> <tr> <td>+17.1</td> <td>-17.5</td> <td>+0.3</td> <td>+0.3</td> <td>+15.7</td> <td>-23.2</td> <td>-6.5</td> </tr> </table>	mc	sc	mtw	stw	s	sw	me	+17.1	-17.5	+0.3	+0.3	+15.7	-23.2	-6.5	
mc	sc	mtw	stw	s	sw	me																
+17.1	-17.5	+0.3	+0.3	+15.7	-23.2	-6.5																
	40W	+26 52	"	2.21	A0V	"																
	31W	+24 53	"	3.22	A3IV	"																
	35W	+32 31	"	6.01	G2V	"																
	55W	"	"	"	"	"																
	06W	+26 52	"	2.21	A0V	"																
	17E	+40 07	"	2.22	F8Ib	"																
	14E	+00 09	"	5.5	A0	"																
	11W	+00 53	"	Var	Var	"																
	01E	+10 46	"	5.9	A0e	"																
	09W	+15 46	"	3.71	B95	"																

287

Date Tues. Wed. June 25-26, 1957 Observer S. BK-Hg-L Julian Day 6015¹ June 25¹ G.M.T.

Plate No.	Object	R.A. 1900 1955	Declination 1900 1955	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23826	NGC 6205	16 40.1	+36 32	Newt	E 103.0	.601	2 ^m	21 25 40	21 27 40
23827	6229	16 45.7	+47 36			.606	2 ^m	21 33 20	21 35 20
23828	6229	16 45.7	+47 36			.612	12 ^m	21 34 45	21 43 45
23829	5634	14 27.3	-05 46			.625 ¹	14 ^m	21 55 23	22 03 23
23830	5897	15 14.9	-20 50			.634	12 ^m	22 14 05	22 26 05
23831	6218	16 44.9	-01 53			.651	4 ^m	22 36 40	22 40 40
23832	6251	16 54.5	-04 03			.657	4 ^m	22 45 15	22 47 15
23833	6366	17 25.4	-05 02			.665 ¹	14 ^m	22 52 15	23 05 15
23834	6426	17 42.2	+03 12			.691	10 ^m	23 17 00	23 27 00
23835	6356	17 21.0	-17 46			.713	14 ^m	23 55 00	00 09 00
23836	6093	16 14.4	-22 53			.720	8 ^m	00 13 30	00 21 30
23837	6712	18 50.6	-08 47			.729	10 ^m	00 26 27	00 36 27
23838	6838	19 51.5	+18 39			.738	4 ^m	00 42 30	00 44 30
23839	6342	17 13.5	-19 32			.758	24 ^m	00 57 00	01 11 00
23840	6535	18 11.6	-00 18			.774	16 ^m	01 27 30	01 43 30
23841	6712	18 50.6	-08 47			.786	12 ^m	01 46 00	01 58 00

Dne Temp.....

Correction to S: -4 Transparency Conditions

288

Fus.....

Dne Temp.....

Ending Time E.S.T.	Hour End	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21 22								Focused on δ Serp.	
21 32		2 E							
21 44		39 E						seeing poor	
21 55		42 W							
22 06		10 W						Thin glass	
22 18		06 E						Focused on β Ceti	
22 30		02 E							
22 42		21 E							
22 54		17 E						can't see clearly; averse 30° from zenith	
00 06		46 W						" past zenith	
00 18		05 W							
00 30		16 E							
00 42		07 E							
00 54		01 W						Focused on θ Serp.	
01 06		40 W							
01 18		07 W							

ome Temp.....

Transparency Conditions

ocus.....

ome Temp.....

ding Time E.S.T.	our Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality														
06-45	4 W																					
	8 E						2:20 completely clouded out. Very poor night. Bittern haze, aurora a civilization light not many stars left															
<p>June 28</p> <table border="1"> <tr> <td>mc</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>							mc	sc	mtw	stw	s	sw	me	+12.3	-22.8	-3.8	-0.1	+9.7	-40.8	-2.6		
mc	sc	mtw	stw	s	sw	me																
+12.3	-22.8	-3.8	-0.1	+9.7	-40.8	-2.6																
<p>Cassegrain re-aluminized</p>																						

291

Date Sat June 29-30/57 Observer H. Mai - 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	+25 16	I-25	E103a0	016		²³ 1/ 32 19	33 14
		1950 05.1	1950 25 04					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	"	008	19.2	02 25	
	219113 SZ Pac?	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 stars N, L showed 5 Her
 with 74. RASC showed 6, 4.

Timing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
33 14			0	5.03	F5-V		set 1 Std. beam. (Hd)	
36 35							set 2	
39 17							set 4	
43 04							set 6	
47 46	57° W	25 04				12	Set 9	fine
50 53	3 27E	44 46	0	7.26	A5	4-4-4	Set 5 N Binary	fine
52 04	2 22W	44 58	0	7.8	F5	2-2-2	" 5 Ecl. Binary Wrong Star	fine upst. from
		02 28	0	8.7	G5	4-	" 2 Ecl. Spectro. Binary	
53 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 ^{3432.6}

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 ⁿ 26 ^m	
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	
23248	V5660ph	17 51.9	+5 00	F-25	E103a-O	.016	+18.0	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	

295 ✓

Date July 5-6 Observer MR + RV Julian Day 2436025

☉ 103 33 14.5 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	η UMa	13 ^h 46. ^m 0	49° 31'			10"	5/3	15 49	
146-19	γ Her	16 ^h 18. ^m 6	46° 24'				5/7	16 25	
147-19	ι Her	17 38.3	46 02				5/6	17 09	
238489	V 566 Oph	17 51.9	+5 00	I-25	EI0300.016		19.7	23 10	00 44
148-19	α Lyrae	18 35.6	+38 45			10"	4/4	19 49	
149-19	α 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	21 ¹⁹⁶⁰ 50.8	+55 37				6/5	21 45	

Dme Temp... 64° F

Transparency Conditions Clear

296

Ecus.....

Dme Temp.....

Time E.S.T.	Dir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
h	02.5W	49° 32'		1.67	B3V	30"	1/A sec 2" per min Volt 915	H/S/HI-HG
h	06W	46° 24'		3.73	B3TV			"
h	30E	46° 02'		3.68	B3V			"
h	27W	5 00	0	7.86 8.1	F5	2 ^s 22 ^s	set 5 spec. Bin	fine
h	12W	38 45		0.04	AOV	30		"
h	14E	45 08		1.35	A2Ia	"		"
h	32E	45 58		5.22	B3Ia	"		"
h	06E	55 37		5.5	B6	"	5 typed by cld. 1 photoholder loaded	H/S only

Dome Temp. 46.7°F Transparency Conditions *excellent*Focus 15.62 Dome Temp. $+64^{\circ}\text{F}$ 300 vis down in dome + (100+) who didn't wait
showed π Bow in 74"

Hour Angle End	Declination	Seeing	Ftg. Mag.	Sp.	Comp.	REMARKS	Quality
1:30 53W	$+5^{\circ}00'$	1	7.8-8.1	F5	2-2-2	set 5 spec Bin	4 line
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°

Feus 15.65

Dme Temp.

Transparency Conditions Good; some cirri

300

ing Time L.S.T.	Rise Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
158	33 W	13 40	0	74	G9	4-4-4	set 5 OLS	break
3 00	08 E	4 58	10	78-81	F5	2-2-2	5 Hd Ell. Bic. through cloud 1 PH. clouded out.	fine
							Variable clds after 1 AM. Hr.	
							MC SC mTW STW S SW ME July 8 +7.2 -29.1 -12.6 -0.5 ^m +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(T Her)	16 16.7	+46 33			10"	5/7-5/6	16 ^h 09 ^m	
153-20	i Her	17 ¹⁹⁶⁰ 38.3	+46 ¹⁹⁶⁰ 02			"	5/6-5/5	16 ^h 44 ^m	
154-20	67 Oph	17 ¹⁹⁶⁰ 58.6	+02 ¹⁹⁶⁰ 56			"	5/7-5/6	17 ^h 21 ^m	
155-20	ξ Dra.	17 ¹⁹⁶⁰ 08.7	+65 ¹⁹⁶⁰ 46			"	5/5	17 ^h 44 ^m	
156-20	α Lyr	18 33.6	+38 41			"	4/9-4/3	18 ^h 34	
157-20	ADS 12093A	19 ¹⁹⁶⁰ 07.3	+34 41			"	6/7	19 ^h 00	

Dme Temp. 63°F

Transparency Conditions Clear

302

Fcus.....

Dme Temp.....

Dir Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 E middle	+46 24	0	3.73	B5 IV	30"	1 A/sec 2"/min volt 915	H _B , H ₀ , H _S
55 E	+46 01	"	3.68	B3 V	"	" "	H _B , H ₀ , H _S
38 E	+02 58	"	4.00(?)	B5 IV	"	" "	"
44 W	+65 46	"	3.08	B6 III	"	" "	H ₀ taken 2x
02 E	+38 44	"	0.03	A0 V	"	" "	H _B , H ₀ , H _S
08 E	+34 41	"	6.6(?)	B3 V	"	" " clouds	H ₀

July 10

mc	sc	mtw	stw	s	me	sw
+9.7	-30.5	-34.8	-0.7	17.2	+0.2	-10.0

Air Temp.....

Wind.....15.69.....

Bar Temp.....

Transparency Conditions

Solid cloud until 3:00, cleared off well,

Time E.S.T.	Hor Angle Elev	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
101	9W	44 49	0	7.26	A ₅	4-4-4	Set 2 N Spec Bin	
						15/10	Set 8	
							I Had difficulty with the Wheatstone bridge 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 ⁵⁵	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 ⁵⁶	HD 145958	16 08.6	13 48	"	E103a0	008	23.5	22 09	23 39
23861 ⁵⁷	HD 168009	18 12.7	45 10	"	"	008	23.3	23 30	00 14
23861 ⁵⁸	MWC 332			"	"	"	23.3	00 20	00 50
23861 ⁵⁹	HD 192445	20 09.8	36 02	"	"	"	23.4	01 37	01 07
23861 ⁶⁰	MWC 336			"	"	"	23.4	02 12	03 44
23861 ⁶⁰	HD 193009	20 12.9	32 09	"	"	"	23.4	02 12	03 44
23861 ⁶⁰	HD 201891	21 07.4	17 20	"	"	"	23.4	02 12	03 44
	Focus Test	OTB					23.2		

Date Temp. 66F
 Date 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. Luvon (Hd)	fin
						set 2	clouds much of time
						set 4	
						" 6	
138	25 02	1			6	" 9 2 stars are barely resolved	
229	13 38	1	7.4	G9	4-4-4	" 2 [OLS] Tried to guide on N(?) star like this (chain of 4s passing across obj)	fin
W	45 13	1	6.7	G0	4-4-4	" 3	fin
E	30 11	0-1	7.1	B2ne	4-4-4	" 2	fin
W	32 15	1-2	7.0	Bone	4-4-4	" 8 See on S2 Pic: was at min.	fin.
W	17 33	0	7.87	F9V	4-4-4	" 2 Se H.V.P. Seeing very poor latter part of exposure.	fin
					15/10	" 8	OK.

CLOSED SHUTTERS BY HAND

4 PH + 8

July 12	me	sc	mtw	stw	s	sw	me
	+5.9	-31.3	-46.9	-0.9	+6.9	-13.0	+1.2
15	+4.1	-31.8	-44.1	+0.1	+5.6	-19.7	+3.8

307

TEST OF 1957 EXPOSURE METER

Date July 15-16, Mon-Tues/5 Observer O. R. W. Julian Day 2436.035

☉ 113 05 11.4 3433.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23861	HD 143761	15 57.2	+33 36	L 25	E103a-0	0.08		21 38	21 58
"	"	"	"	"			+23.2	21 59	22 13
"	"	"	"	"				22 13	22 23
"	"	"	"	"	"	"		22 23	22 29
23862	γ Set	18 51.7	-5 58	"	"	"		22 38	22 58
"	"	"	"	"	"	"		22 58	23 10
23863	HD 191026	20 02.6	+35 42	"	"	"	23.2	23 23	23 47
"	"	"	"	"	"	"		23 47	23 59
158-21	HD 188 350	19 49.6	00 01	5300	3500	10	6/5	19 35	00 17
159-21	HD 187929	19 47.4	00 45	"	"	"	6/2	19 58	00 40
160-21	"	"	"	"	"	"	6/3	20 17	00 59
161-21	HD 188 350	19 49.6	+00 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 213 306	22 25.5	+57 54	"	"	"	6/3a4	21 27	02 09
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

Air Temp. +62° Sat July 13/14 MR-Ru-Mai Transparency Conditions Sun. Mon July 14-15
 Precip. 15.62 300 visitors. Showed TT Box in 74" clouds threatening early evening; 9/10 cloudy
 Air Temp. Set on 57Pse at 1:30 but old again at 22115. Hg at 308

Time	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:58	15W	+33 26	0	6.02	G2V		sat. 04 20 ^m 5/5 Se + HV	very
2:13	30W			"	"		2 14 ^m "	very
2:23						12 ^s	5 10 ^m "	fine
2:29							8 6 "	good
2:58	40E	-5 54		5.8	K2	12 ^s	" 2 " 0-L5.	fine
3:08	28E			"			8 "	good
3:47	01E	+35 51		6.18	K0IV	6 ^s 6 ^s	" 2 5/5 0-H.V.	fine
3:59	49E	"		"	"		" 8 "	good
6:17	19E	+9 08	0	5.57	A0	30"	4A/sec.	
6:00	06W	+0 54		Var	Var	"	"	
6:59	27W	"		"	"	"	"	
7:01	45W	+0 08	good	5.57	A0	"	"	
7:01	109E	+56 50	"	4.51	F0	"	"	
7:02	101E	+58 10	"	Var	Var	"	"	
7:02		"	"	"	"	"	"	
7:03	14W	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.	M10045 Starting Time E.S.T. sid time	Ending Time E.S.T.
167-22	η UMa.	13 43.6	+49 49			10"	5/3-5/2	16 ^h 53 ^m	
168-22	T Her	16 16.7	+46 33			"	5/7-5/6	17 ^h 31 ^m	
169-22	9 Cep	¹⁹⁶⁰ 21 37.1	¹⁹⁶⁰ +61 54			"	6/4	19 ^h 56 ^m	
170-22	HD 205022	¹⁹⁶⁰ 21 28.5	¹⁹⁶⁰ +66 56			"	6/7	20 ^h 14 ^m	
171-22	ADS 15032A	¹⁹⁶⁰ 21 28.2	¹⁹⁶⁰ +70 20			"	5/5	20 ^h 32 ^m	
172-22	ADS 15032B	"	"				6/7	20 ^h 42 ^m	

Date Wed-Thurs. July 17-18/52 Observer O. R. U. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Mid Starting Time E.S.T. L.S.T.	Mid Ending Time E.S.T.
173-23	HD 125161	14 12.6	+51 50	H3	4500-3980	10	6/4/63	-16 15 <i>auto-H₂O trace</i>	
174-23	H.D 141003	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.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+51 34	0	4.9	A5	30"	1A/see 2" pin point 920v.	
58 W	+15 33		3.0	A2	"	"	
13 W	+12 47	1	5.0	A3	"	"	
10 E	+2 55	1	5.0	B5	"	"	
35 E	+38 15		7.44	WR	"	4A/see	
19 E	+0 10	2-3"	5.57	A0	"	" Clouds!	
11 W		"	"	"	"	"	
26 W	+0 54	"	Var	Var	"	" 4Agl.	
50 W	"	"	"	"	"	" 2	
02 E	+56 50	"	4.51	F0	"	" (21:15 LST = 1:49 EST)	
51 E	+58 10	"	Var	Var	"	" 8Cup Clouds in NE	
31 E	"	"	"	"	"	" Clouds coming fast.	

315

Date Thurs July 18-19/57 Observer Hd & Man - mbi 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.	Angle hd
23864	β^n Sco.	15 59.6	-19 32	I-25	E103a-0	008		20 50	20 52	
	" "	"	"	"	"	"		20 53	20 57	
	" "	"	"	"	"	"		20 58	21 06	32"
{ 23865	HD 189890	16 32.6	31 09	"	"	008	27.4	21 50	22 26	120
{ 23866	HD 152792	16 50.4	43 00	"	"	"	27.3	22 37	23 07	144
23867	V 566 ophi	17 51.9	+5 00	"	"	008		23 30	0 30	105
{ 23868	192 044	20 07.8	26 11	"	"	008	28.4	0 50	0 57	118
{ 23869	192 445	20 09.8	36 02	"	"	"	"	1 10	1 38	156
23870	SZ Pismium	23 08.2	02 08	"	"	"	"	2 00	4 10	129

Time Temp. +74°F

Hum. 15.70


Time Temp. +68°F

Transparency Conditions Fair - haze & clouds later

316

Time	Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
56						-	Self 0 X MK	quitting on
57						-	" 5	fainter component
06	32 ^m					-	" 9	chain of focusing came off. Refocused
26	1 ^h 20	31 02	1-2	7.66	F8V	0-8-4	" 2 Se HV using Exp meter	good
7	11 44	42 54	1	7.46	G01V	4-4-4	" 8; " " " "	fine
30	2 05	4 59	1-3	7.8	F5	4-4-4	" 2 Ech Pin - Hd	noticed that exp mtr needs longer when star lower on alt
57	0 18	26 22	1	5.9	B8nc	4-4-4	" 2	strong
38	0 56	36 13	1	7.1	B2nc	4-4-4	" 8	strong
4 10	0 29	2 26	0	8.7	G5	4-4-4	" 2 chazy	good

10/7 focus test

 Bulb indicating that heat is on the mirror not functioning

3 PH + 0

317

Date Fri-Sat July 19-20 ¹⁹⁵⁷ Observer Se OK Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. ^{sid} middle	Ending Time E.S.T.
185-24	2 Cr B	15 30.5	+27 03	5200	-3500	10"	5/3	16 ^h 08 ^m	
186-24	R Cor Bor	15 44.5	+28 08	"	"	"	45-6/7	16 ^h 39 ^m	
187-24	L Cr B	15 30.5	+27 03	"	"	"	5/3	17 ^h 07 ^m	
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.	¹⁹⁶⁰ 20 20.8	¹⁹⁶⁰ +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	¹⁹⁶⁰ 20 20.8	¹⁹⁶⁰ +40 08	"	"	"	5/4	22 57	
198-24	HD217050	22 52.7	+48:09	"	"	"	6/5	23 24	

Dme Temp. 81°F

Transparency Conditions hazy

318

Focus.....

Dme Temp. 72°F


Time E.S.T.	Air Angle Ecliptic	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
6:35 W	+26 52.5		1	2.21	AOV	30"	4 Å/sec.; 2"/min; 920v Counter Cable Snapped!	
6:51 W	+28 17		"	5.8	F8Ib	"	" " "	
7:34 W	+26 52		"	2.21	AOV	"	" " "	
7:42 W	+28 17		"	5.8	F8Ib	"	" " "	
8:02.5 W	+28 17		"	5.8	F8Ib	"	" " "	
8:42 W	+26 52		"	2.21	AOV	"	" " "	
8:40 W	+32 32		0	6.01	G2V	"	" " " Se HV. Clouds!	
8:02 W	+32 32		"	6.01	G2V	"	" " " " "	
8:20 E	+10 46		D	5.9	AOe	"	" " " Se Shell "	
8:00	"		00	"	"	"	" " " " Clouded out,	
8:51 W	+40 07		0	2.22	F8Ib	"	" " " taken 1/2 times	
8:55 W	+45 08		1	1.35	A2Ia	"	" " " " "	
8:35 W	+40 06		"	2.22	F8Ib	"	" " " " "	
8:28 W	+48 28		"	5.2	B3ne	"	" " " Se Shell taken 1 1/2 times	

Dine Temp. $90^{\circ}F$
 Focus 15.76
 Dine Temp. 75

Transparency Conditions Good

320

Sat night 20/21 Se - Hg - Mei
 300 viruses shown in Box. Rough $74''$
 Included on satellite.

Angle E.S.T.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality														
10	36W	+49 46	1	7.2	G4V	4-4-4	set 2 : vis binary, star closed b apex 															
5	17W	+49 46	1			4-4-4	Set 8 " set Fainter (?)															
4	20W	+02 28	$\frac{1}{2}$	8.7	G5	4-4-4	Set 2 Thermostat going continually, shut it off at end of 23872; reset at 2:50 and works well.															
						15/10	Set 5															
							1 ϕ H + 0															
							<table border="1"> <tr> <td>mc</td> <td>sc</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 +9.9</td> </tr> </table>	mc	sc	mtw	stw	s	sw	me	July 22	+2.6	-34.8	-6.2	+0.3	+3.5	-45.4 +9.9	
mc	sc	mtw	stw	s	sw	me																
July 22	+2.6	-34.8	-6.2	+0.3	+3.5	-45.4 +9.9																

321

arr. 5 - 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 103a0	.611	4 ^m	21 38 15	21 42 15
23875	6712	18 50.6	-08 47			.695'	5 ^m	23 37 00	23 45 00
23876	6838	19 51.5	+18 39			.702	4 ^m	23 49 35	23 53 35
23877	6535	18 01.6	-00 18			.735'	24 ^m	00 27 50	00 51 50
23878	6760	19 08.8	+00 58			.760	30 ^m	00 55 45	01 25 45
23879	6717	18 52.4	-22 47			.777	(22 ^m) 16 ^m	01 31 55	01 47 40
23880	6838	19 51.5	+18 39			.791	4 ^m	01 58 45	02 2 45
23881	7189	21 31.2	-01 02			.796	30 ^S	02 07 17	02 7 47
23882	6854	20 03.5	-22 03			.805'	6 ^m	02 12 00	02 28 00
23883	6981	20 51.0	-12 43			.820	20 ^m	02 31 20	02 51 20
23884	6838	19 51.5	+18 39			.831	4 ^m	02 56 00	03 00
23885	7192	23 06.0	-15 53			.845'	22 ^m	03 07 15	03 29 15

Barometric Temp. 70

Transparency Conditions

322

W.D.S.

Barometric Temp.

Timing Time for Angle E.S.T. End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12:31 W						Focussed on α Herc.	
12:39 W						Focussed on α Aquil. Some aura	
12:45 E							
12:53 SW						12:05 Clouded up again for the 11 th time	
12:58 W						This is certainly getting plain the hard way - Set on 6544 before 23:17: clouds	
1:05 W						Exposure stopped by clouds	
1:15 W						Focussed on ϵ Pegasi: Focus OK.	
1:21 W							
1:27 W						Finally settled down to clear night	
1:35 W						with clouds only in SW -	
1:53 W							
2:08 W							

323

Date Tues. - Wed. July 23 - 24 Observer S - H₂ - P_u - D_g 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	16 54.8	-04 03	Newton	E10300	'595'	3 ^m	21 15:10	21 18:10
23887	5897	15 14.9	-20 50			'602	10 ^m	21 23:07	21 33:07
23888	6356	17 21.0	-17 46			'613	8 ^m	21 40:25	21 48:25
23889	6093	16 14.4	-22 53			'620	6 ^m	21 50:45	21 56:45
23890	IC 1276	18 08.0	-07 14			'637	30 ^m	22 03:43	22 33:43
23891	6712	18 50.6	-08 47			'656	8 ^m	22 41:20	22 49:30
23892	6838	19 51.5	+18 39			'662	4 ^m	22 52:50	22 56:50
23893	6287	17 02.3	-22 40			'671	10 ^m	23 02:10	23 12:10
23894	6401	17 35.8	-23 53			'688	13 ^m	23 24:35	23 37:35
	{ Kaptan 61	17 01.2	+30 04			'704	13 ^m	23 47:50	00 00:35
23895	{ KA 61	17 01.2	+30 04			'715'	10 ^m	00 05:40	00 16:40
	{ NGC 6934	20 31.9	+07 15			'728	10 ^m	00 24:15	00 34:15
23896	6544	18 04.6	-25 01			'744	14 ^m	00 45:00	00 59:00
23897	6638	18 28.2	-25 32			'756	10 ^m	01 05:15	01 15:15
23898	IC 1276	18 08.0	-07 14			'773	24 ^m	01 22:30	01 46:30
23899	6712	18 50.6	-08 47			'787	8 ^m	01 50:00	01 58:00

...e Temp.....

Transparency Conditions

...S.....

...e Temp. 63 °F

Ending Time E.S.T.	Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11:18							Focussed on α Ser	
11:33								
11:48								
1:56	30° W							
2:33	14° W							
4:40	10° W						Focussed on γ Ser	
2:56	06° E							
3:21	58° E							
3:55	52° W							
0:00	43° W							
0:00	04° W							
0:00	08° E							
0:00	43° W							
0:00	36° W							
1:45	27° W							
1:51	56° W							

Transparency Conditions

ie Temp.....
 ks.....
 ie Temp.....

ading Time E.S.T.	Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 21	6W						Focused on θ Aquilae	
02 26	3W							
02 33	0W							
02 53	1W							
02 27	5W						High back on south + not horizon - otherwise not a cloud all night	
							mc sc mTw STw s SW mE July 24 +0.3 -33.1 -3.9 +0.3 +2.9 +9.2 +2.7	

327

Date Wed-Thurs July 24-25 Observer S. Hg - DL 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	Newtonian	E103a0	.606	3 ^m	21 32:20	21 35:20	33.5
23906	6356	17 21.0	-17 46			.616	8 ^m	21 44:30	21 52:30	23.5
23907	6093	16 14.4	-22 53			.624	6 ^m	21 56:40	22 02:40	17.5
23908	IC 1276	18 08.0	-07 14			.639	28 ^m	22 07:25	22 35:25	4.5
23909	NGC 6402	17 35.3	-03 13			.657	14 ^m	22 40:00	22 54:00	1.5
23910	6712	18 50.6	-08 47			.667	8 ^m	22 57:35	23 05:35	27.5
23911	6838	19 51.5	+18 39			.674	4 ^m	23 09:10	23 13:10	60E
23912	6934	20 31.9	+07 15			.682	12 ^m	23 17:00	23 29:00	E
23913	6402	17 35.3	-03 13			.693	14 ^m	23 32:50	23 46:50	14.5
23914	6712	18 50.6	-08 47			.712	8 ^m	00 02:15	00 10:15	23.5
23915	6626	18 21.8	-24 54			.720	8 ^m	00 14:45	00 22:15	14.5
23916	6656	18 33.6	-23 58			.728	6 ^m	00 26:30	00 32:00	32.5
23917	6760	19 08.8	+00 58			.745	30 ^m	00 38:30	01 09:30	33.5
23918	6838	19 51.5	+18 39			.759	4 ^m	01 12:15	01 16:15	15.5
23919	6934	20 31.9	+07 15			.768	14 ^m	01 20:15	01 34:15	55.5
23920	7089	21 31.2	-01 02			.778	30 ^{sec}	01 40:50	01 41:20	10.5

One Temp. 70°F

Transparency Conditions

328

ous

One Temp.

Ending Time EST.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
35.1	3.3W						Focussed on α Sei Dr. Mackay	
1.2	2.3W						fixed crosswire light on sighting apparatus	
2.0	4.0W							
2.5	1.9W							
2.8	1.1W						Focussed on β Ophiuridii excellent	
3.5	0.7W							
3.1	5.0E							
3.3	1.1E							
3.4	0.4W							
3.0	1.2W							
3.2	5.4W							
3.3	5.2W							
3.4	5.2W							
3.5	1.7W							
3.6	5.5W							
3.7	0.2W							

Dne Temp.....

Ecus.....

Dne Temp.....

Transparency Conditions.....

330

Sat July 27

110 visitors. Rain Hd, Bl, Inai
Centered on Earth satellite.

ading Time E.S.T.	er Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 22	49E							
2 30	34W							
2 51	13W							
3 08							Focused on α Aquilae seeing poor poor night - heavy haze bank in SW swept over whole sky	
							July 26	
							mc sc mtw stw s sw ne	
							-1.7 -33.7 +5.1 +0.2 +2.7 +1.0 +0.4	
							29 -2.9 -34.5 +8.9 +0.1 +2.5 -15.0 +4.8	

331

Date Mon-Tues July 29-30 Observer Hd-Max, HV Julian Day 2436049
 ☉ 126 27 27.6 3445.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23925	V566 Oph	17 51.9	+5 00	J25	E103a0	⁰⁰⁸ 016	28.3	20 27	21 27
23926	MWC 278	17 55.3	+4 22	"	"	008		21 40 $\frac{1}{2}$	21 43 $\frac{1}{2}$
								21 46 $\frac{35}{10}$	21 47 $\frac{35}{10}$
							+28.2	21 48 $\frac{1}{3}$	21 50 $\frac{1}{3}$
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 11	"	"	008	28.3	00 13	00 49
23930	HD 219113	23 08.3	+02 08	"	"	"		01 42	02 52
	Flare Test. 09.13.					15/10			

Dne Temp. 80.0

Hum. 15-70

Dne Temp.

Transparency Conditions

Hazy

332

Starting Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
27	15 ^m	+4 59	0.1	7.8 8.1	F5	4-44	Hd. Ed. vein. Set 2	fine
43				4.8	B5ne	12	Be star set 5	L strong L weak
47						12		
155	4 ^m	+4 20	1			12	clouds at end	fine
246	38 ^m	25 02	1	6.9	B5e	6-6	Set 2 Be clouds most of line set on another * but cloudy.	strong but unevenly guided
56	1 ^h 10 ^m	59 55	1	6.9	B4e	6-6	set 2 Be	fine - straight unevenly guided
049	9 W	23 15	1-2	7.5	B3e	6-6	set 2 Be brighter component	Strong
22	1 E	+02 26	1	8.7	G5	6-	" 5 SZ Pisc. 0115 Clouds, 0230 Solid.	L weak cont. 2
						" 9		
							3 P.H. Loaded!	

Air Temp. 77°F

Humidity 15.71

Air Temp.

Transparency Conditions *Cloud and haze*

334

Time E.S.T.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:50	25° E	33 06	0	7.2	G0 V	4-8	set 2. Se-IV	
	"	"	"	"	"	4-	set 8 CLOUDED OUT	
						July 31	MTW STW +19.5 +0.3	

335

Date Wed July 31 - Aug 1 Observer Hd - Mai Julian Day 24360.50① 123 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	I 24	E103a0	008	26.6	20 40	21 24
23934	V566 Oph	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	SZ Pisium	23.08.3	+02 08	I-25	"	"	26.6	00 56	04 10
	Focus Test	O.T.B.							

Ice Temp. 71 F

Transparency Conditions Clear, later cloudy intermittently

336

Time for Angle EST. 3rd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24 1 37	+6 31	0	7.00	K ₂₁₀	4-4-4	O-MV set 2	fine
24 1 20	+4 59	0	7.8	F5	4-4-4	HD Ed. Bin " 2	fine
24 1 28	+13 03	0	7.7	B(s) ₂₀	4-4-4	BC " 2	fine
24 1 20	+02 27	1-0	8.7	G5	4-4-4	Ed. Spect. Bin " 2 Intermittent Cloud	fine
					15/10	8	
						2 P.H + 0	
					Aug. 1	mc SC mTW STW S SW ME	
						-4.8 -36.3 +16.4 +1.8 -28.2 -0.2	

337

Date Thursday Aug. 1-2, 1957 Observer Hg. Hcl - Dg Julian Day 2436052

129 17 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 148816	16 25.6	+04 26	I-25	E-10300	Set 008	27.0	20 39	21 40
23938	US66 Oph	17 51.9	+5 00	"	"	"	26.9	21 52	23 10
23939	MWC 346 HD 195407	20 26.0	36 39	"	"	"	"	23 17	23 33
{ 23940	S2 Puc	23 08.3	+02 08	"	"	Set 016	26.9	23 53	02 06
{ 23941	HD 217543	22 56.3	+38° 10	"	"	Set 008	"	02 31	03 11
23942	HD 225239	23 59.6	+34 07	"	"	"	27.0	03 40	04 20

Dne Temp. 76°F

Fous. 15.69

Dne Temp. 67°F

Transparency Conditions

338

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4	45W	+04 17	1-0	7.82	F ₉ V	4-4-4	Set 2 Se MV	good
2	39W	+04 59	0	7.8 → 8.1	F ₅	4-4-4	Set 2 Hd Eclip Bin. More narrow slit, with slit 0.16 aperture.	fine
		36 50	1/2	7.7	B _{3e}	4-(8)	Set 2 Hd Be off at 23.38. Get SZ Pac	too bright
	12 E	-02 27	1-0	8.3	G5	2-4	Set 5 Eclip Spect Bin. Thought SZ Pac in telepic, but it wasn't.	fairly strong
	6 W	+33 28	0	6.4	B _{3ne}	4-4-4	Set 8 Hd Be	too strong
	E	+34 26	0	6.74	G _{2Z}	4-4-4	set 5 Se HV	fine - strong
						10/7	focus Test set 9	centre a little blurred
							2 P+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 2436.013

☉ 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 ^h 54 ^m	22^h 10^m 02
23944	"	"	"	"	"	"	"	22 ^h 03	22^h 15^m
23945	HD 179343	19 07.1	+02 27	"	"	"	27.9	22 ^h 30	23 ^h 00 ^m
23946	HD 183656	19 25.5	+03 14	"	"	"	"	23 ^h 20	23 ^h 40
23947	HD 187923	19 47.4	+11 23	"	"	"	27.5	23 ^h 50	00 ^h 10
23948	HD 201891	21 07.4	+17 20	"	"	"	"	00 ^h 22	1 ^h 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

Date Temp. 79°F

Foss. 15:70

Date Temp.

Transparency Conditions Hazy, then clear

340

ing Time E.S.T.	Hour End	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
0	02	:11.5 W	+32 30	1	6.01	G2V	4-4-4	Set 2	Se HV little bit	fin
0	15	:24.5 W	"	2	"	"	4-4-4	Set 8	" + OK	fin
0	00	:20 W	+02 32	2	6.8	Ae	4-4-4	Set 2	Se Sh } good	good
0	40	:40 W	+03 20	0	6.3	B6pc	4-4-4	set 8	Se Sh	good
0	10	:48 W	+11 30	0	6.30	G2V	4-4-4	Set 2	Se HV needs longer	good "
0	50	:11 W	+17 32	0	7.09	F9V	4-4-4	set 8	"	fin
2	10	:15 E	+48 27	1	5.2	B3nc	6-6	Set 2	Se Sh longer exp	good
2	18	:8.5 E	"	1	"	"	6-6	set 8	" best	fin
3	02	:32 E	+24 25	0	6.74	G2V	4-4-4	set 2	Se HV little bit	fin
3	30	:01 E	+26 52	0	6.41	G3V	4-4-4	set 8	"	fin
4	02	:33 E	+54 43	0	5.91	G5V	6-6	set 2	" little bit	storm

3 PH + 0

Air Temp. 74°F
 Focus 15.69
 Air Temp. 65°F

Transparency Conditions Clouds thin clear
 with scattered cloud later

342

Exposure Time EST.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
55	42 ^m	+42 43	0	8.15	KT IV	4 ^s , 4 ^s	Set 2 O-HV	nothing
20	51 ^m	+16 19	"	7.27	68 IV	4 ^s , 4 ^s , 4 ^s	Clouds! set on H D 2589 But clouded out.	nothing
							2 Plate Holders + 0	

air Temp. 53°F

rh. 15.61

soil Temp.

Transparency Conditions Clear - then cloud!

344

No Signal from spectrophotometer.

Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
15	32 W + 1 28	0	7.55	GOV	4-4-4	set 2 ^{much too weak} Se HV [nothing on set 8]	too weak
17	29 W + 33 0 6	0	7.19	GOV	4-4-4	set 8 ^{much too weak} Se HV [set 2 wags star.]	cloud for weak 5-8 min during exposure
						Clouded out!	
						4 P.H + 0	

Air Temp. 64°
 Ws. 15 57
 Air Temp.

Transparency Conditions *Drifting clouds*

346

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26E	34 55	0	85	A2	4-U-4	set 2 BK-VBF clouded out by 22:15 stopped 22:39	fine
						3PH - Plates needed	
						August 6	
						Mc sc mtw stw S SW ME -8.6 -37.8 +17.9 +0.2 +2.1 +16.1 -2.1	

Air Temp. 66°
 Humidity 15.60
 Sea Temp.

Transparency Conditions Excellent
 Throughout

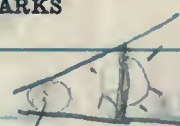
348

Ending Time L.S.T.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 11	38W	13 11	0	7.6	G5	4-4-4	set 2, BK-UB	good
01 12	27W	24 32	0	7.6	K0	4-4-4	8 "	good
01 13	56W	36 18	0	8.2	K0	4-4-4	2 "	good
01 14	59W	32 20	0	8.0	K0	4-4-4	8 " Seeing seems to	good
03 22	10W	39 19	0-1	8.0	K2	4-4-4	set 2 " fluctuate between	Good
04 23	10W	32 41	0	7.6	G5	4-4-4	set 8 a full 1 and 0	good

4^3 PH + 8

Dne Temp. 71°F
 Fus. 15.67
 Dne Temp.

Transparency Conditions Very Poor (wispy clouds) 350

Ending Time E.S.T.	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
13 ^h 30		50W 49 46	000	7.22	G4 Y	4-4-4	set 2 SeHV  this component taken out companion Seeing became progressively worse during exposure	clouded to weak
							Bulb in desk lamp burnt out	
							Aug. 3 mc sc mtw stw s sw ME -8.6 -38.9 +27.9 +0.4 +1.9 +12.7 +5.1	

Time Temp. +75° F.

Transparency Conditions Clear + some clouds. 354

Humidity.....

22^h - Quite cloudy.

Time Temp.....

Starting Time E.S.T.	Air Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality																
				3.22	A3	30	4A/nc	Test only. 905 v.																
							Comet Markes observed. RA 10 ^h Dec +40°. Magnitude 1 - Nice Tail. Bright nucleus.																	
							 																	
							<table border="0"> <tr> <td>Aug 24 12</td> <td>mc</td> <td>sc</td> <td>mtw</td> <td>stw</td> <td>s</td> <td>sw</td> <td>mg</td> </tr> <tr> <td></td> <td>-12.3</td> <td>-39.7</td> <td>+25.9</td> <td>+0.6</td> <td>+1.8</td> <td>+7.0</td> <td>-0.1</td> </tr> </table>	Aug 24 12	mc	sc	mtw	stw	s	sw	mg		-12.3	-39.7	+25.9	+0.6	+1.8	+7.0	-0.1	
Aug 24 12	mc	sc	mtw	stw	s	sw	mg																	
	-12.3	-39.7	+25.9	+0.6	+1.8	+7.0	-0.1																	

355

Date Mon. Tues. Aug 12-13, 1957 Observer O. Hr Julian Day 2436063

① 139 52 06.7 3656.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
201-27	HD 155328	17 05.8	+50 57	5000-4700 4520-4000		10	6/6 6/5	20 20	20 55
202-27	HD 165358	18 00.5	+48 28	"		"	6/5	21 00	21 34
203-27	HD 174585	18 46.1	+32 42	"		"	6/4	21 40	22 10
204-27	HD 188350	19 49.6	+00 01	5200-2600		"	6/4	22 16	22 40
205-27	HD 187929	19 47.4	+00 45	"		"	6/1	22 45	23 05
206-27	"	"	"	5200-3350		"	"	23 05	23 22
207-27	HD 188350	19 49.6	+00 01	"		"	6/4	23 26	23 43
208-27	HD 211336	22 11.4	+56 33	"		"	6/1	23 54	00 11
209-27	HD 213306	22 25.4	+57 54	"		"	6/2	00 16	00 31
210-27	HD 213306	22 25.4	+52 54	"		"	"	00 32	00 48
211-27	HD 211336	22 11.4	+56 33	"		"	6/1	00 53	01 10
23966	" 221585	23 28.2	+62 36	I-25	E _{103a} -0	008	+18.0 +18.2	01 44	03 00
23967	" 5916	00 55.6	44 55	"	"	"	18.0	03 10	04 00
			0713						

Dne Temp. 64°F

Transparency Conditions *Clear*

356

Eus. 15.55

Dne Temp.

Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 55		+50 55	8"	6.5	B9	30"	1 A/m 2" per min 905 n.	
1 34	40 W	+48 57	"	6.3	A0	"	"	
2 10	29 W	+32 44	6"	6.0	B2	"	"	
2 40	05 E	+0 09	"	5.57	A0	"	4 A/m	
3 05	22 W	+0 54	"	Var	Var	"	" 4 Agl.	
3 22	"	"	"	"	"	"	"	
3 43	38 W	+0 08	"	5.57	A0	"	"	
0 11	55 E	+56 52	"	4.51	F0	"	"	
0 31	49 E	+58 11	"	Var	Var	"	" 8 Cup	
0 40	32 E	"	"	"	"	"	"	
1 10	04 W	+56 50	"	4.51	F0	"	"	
3 00	37 W	+62 55	1-2	8.16	G8 IV	4-4-4	Set 2 0-HV	
4 00	10 W	45 12	1-2	7.74	G ⁸ III-IV	4-4-4	" 8 "	
						15/10	" 5 "	
							mc Sc mTw STW S W 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	F103a-0	Set 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
		Focus Test		0913					

Dme Temp. 74°

Transparency Conditions

Clear

358

Fus.....

Dme Temp.....

Ending Time E.S.T.	Dir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 18	26 W	+20 47	6"	5.5	B3	30	1 A/see 2" per min. 900 ~	all going Trouble
1 55	"	+00 10	"	5.57	AU	"	4 A/see "	Cured.
2 18	18 E	+00 54	"	Van	Van	"	"	4 Agl.
2 30	00	"	"	"	"	"	"	"
2 56	19 W	+00 10	4"	5.57	AU	"	"	"
3 20	36 E	+56 49	"	4.51	FO	"	"	"
3 40	28 E	+58 10	"	Van	Van	"	"	8 Exp
00 03	09 E	"	"	"	"	"	"	"
00 25	33 E	+56 49	"	4.51	FO	"	"	"
02 10	34 W	42 43	1	8.15	KI IV	4-4-4	Set. 2 O-HV	See field } for 23954 Sits bad.
3 00	14 W	16 18	0-1	7.27	G8 IV	4-4-4	" 8	"
4 30	09 W	+02 54	0-1	7.93	G2 V	4-4-4	" 2 Se-HV	0345 a few bits of cloud.
						15/10	" 8	
							3 P.H. in frig.	
						Aug. 16	mc sc mtw stw s sw me	
							-14.4 -40.0 -21.8 -0.3 +1.6 +1.1 -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.	Hour End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4 30	07	52 13	1	118	a8	1-1-1	set 2 BK-UBF 8/6 Set 8 2 P.H. in ⁺⁰ frig.	1 weak out of focus, reason not clear.

363

Date Sun. Mon Aug 18-19/57 Observer O - Day Julian Day 2436.63

☉ 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

Temp. 69°F

Secs. 15.58

Temp.

Transparency Conditions *Clouds at start.* 384

Time of Day	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
			8"	7.0	B9	30	1A/see 2" per min	Fatter natural in at 35	
22 05	20 E	+00 08	6	5.57	A.0	30	4A/see "	return no filter	
22 24		+00 54	5	Var	Var	30	" "	x 14 Agl. Clouds done Thick Clouds	
22 56	6 E	+30 11	0-	8.79	G2 II	2- 8/6	Set 2 Set 6	0-HV Focus Test O.P.H.	Cloud too weak OK

Temp. 70°

CS

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°

Time E.S.T.	Angle d	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		19 13	1	10.4	K1	1-	prob 2 BK-VBF clouded out	weal
200	6W	19 36	1	10.0	K2	1-1-1	5 -"-	for 10 miles fine
421	5W	36 35	0-1	10.1	K3	1-1-1	" 2 "	fine
						4/3	" 8	OK.
2 P.H.								

367

Date Wed-Thurs Aug 21-22, 1957 Observer Hg-O, - Mai Julian Day 2436072

☉ 148 31 26.0 3470.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23977	HD 170737	18 25.9	+26 36	I-12	E 10320	10	23.5	20 09	21 29
224-30	HD 188350	19 49.6	+00 01	S200-3350		10	6/4	21 37	21 56
225-30	HD 187929	19 47.4	+00 45	"	"	"	6/2	21 58	22 17
226-30	HD 187929	19 47.4	+00 49	"	"	"	6/2	22 17	22 34
227-30	HD 188350	19 49.6	+00 01	"	"	"	6/4	22 38	22 56
23978	HD 191615	20 05.7	+25 15	I-12	E 10320	008	23.0	23 05	00 35
23979	ADS 15268 B	21 39.3	+9 25	I-12	"	"	22.8	01 00	03 00
23980	HD 4744	0 44.4	+29 54	I-12	"	"	23.0	03 19	04 44
	Focus Test	0 70							

Line Temp. 68°
 cus
 Line Temp. 59°

Transparency Conditions Clear
 L + 11 Naval Reserve officers.

Ending Time E.S.T.	Dir. Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 29	44 W	+26 36	1/2	8.90	G ₈ V	2-2-2	Set 2 O-HV Programme.	fine
1 56	13 E	+00 09	6 ^s	5.57	A0	20"	4A/sec 2"/min 900 v.	
2 17	10 W	+00 54	"	Var	Var	"	"	
2 34	27 W	"	"	"	"	"	"	
2 56	47 W	+00 09	9	5.57	A0	"	"	
3 35	11 W	+25 25		8.74	G ₈ V	2-2-2	Set 8 O-HV Programme 6/5	fine
3 51	03 W	+9 42	1/20	9.2	F8	2-2:2	Set 2 BK	strong
4 41	42 W	+30 11	1-1	8.69	G ₈ V	2-2	Set 2 O-HV	strong
							8/6 Set 8 / Checked from setting after 23980 at 15.55 etc videt	

3P.H+0

Mag

Aug. 22	MC	SC	MTW	STW	S	SW	ME
	-10.2	-41.6	-4.7	+1.8	+1.3	-12.5	-0.1

369

Date Thurs. Fri Aug 22-23 / 57 Observer O - Hr Julian Day 2436073
 ☉ 149 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	^{PR Lyr} HD 182989	19 22 3	+42 36	5200	43350	20	6/7	20 40	20 56
229-31	HD 164875	19 31 4	+42 12	"	"	"	6/2	21 01	21 19
230-31	HD 188350	19 49.6	+00 01	"	"	10	6/4	21 24	21 42
231-31	^{M Arg} 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	^{SCp} HD 213306	22 25.4	+57 54	"	"	"	6/3	23 15	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
23981	" 22 1170	23 34.6	+29 53	I-12½	E103a-0	.008	18.3	00 49	02 49
23982	" 4744	00 44.4	29 54	"	"	"	18.0	02 55	04 25
		09.13							
Sat. Sun Aug - 24-25, 1957				Rain.	About a dozen visitors stopped in.				
				Rev. showed telescope.	N. Bu. Me.				

373

Date Aug. 27-28 Observer Ru+O-H Julian Day 2436078
 ☉ 154 18 51.4 3679.6

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 ^h 25. ^m 9	+26° 36'	12"	E103-a-0.008		19.0	19 55	21 09
238-32	HD. 188350	19 ^h 52.4 ⁵⁵	+00° 09' ⁵⁵	5200	3350	10	6/4	21 20	21 39
239-32	HD 187929 Ag1	19 ^h 47.4 ¹⁹⁰⁰	+00° 45' ¹⁹⁰⁰	"	"	"	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 ^h 52.4 ⁵⁵	00° 09' ⁵⁵	"	"	"	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 Sep	22 25.5	+57 54	"	"	"	6/2	23 24	23 41
244-32	HD 213 306	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"	E1030-0 .008		18.8	00 54	03 58
Focus Test - O 9B									

Dne Temp. 61°F

Transparency Conditions

HAZY AT START
CLEAR LATER

374

Feus.....

Dne Temp.....

3679.4

Time	Dir	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality						
09	51 W		+26° 38'	0	8.90	GP II-IV	2 ^s -2 ^s -2 ^s	set 5	0-HV	fine					
39	05 E		+00 09	8"	5.57	AO	.30"	4 A/sec 2" / min							
2 00	17 W		00 53	6"	Var	Var	"	"	Searchlights tethering?						
2 19	36 W		"	"	"	"	"	"							
2 40	55 W	+00	09	"	5.57	AO	"	"							
3 19	50 E	+56	49	4	4.51	FO	"	"							
3 41	40 E	+58	10		Var	Var	"	"							
3 58	18 E	+58	10		Var	Var	"	"							
4 22	11 E	+56	49		"	"	"	"							
3 58	42 W	33	52	0-1	9.24	K ₀ III-IV	2-3-1	Set. 2	0-HV.	Seems faint. field checks 0330 Thin Cloud	out of focus plate loaded incorrectly.				
							8/6	" 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°

Hum.

Dne Temp.

Transparency Conditions Variable, drifting clouds 376

Saturday Aug 31 0-BK-Mai. About 200 visitors
Shown B eggs with 7", G and H with 4", poor night.

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:10	00W	33 36	2	9.6	K3	1-1-1	rel 2 BK-UBF	
2:5	16 W	32 21	2	9.5	F3	1-1-1	7 -11- clouded out	
							1 Pt.	
						Sept. 4	mc sc MTW STW S SW NE -24.0 -45.4 +16.9 +1.4 ^m -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	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
23988	MW 383 HD 209296	21 57.2	56 14	I-12	E10390	008	16.3	00 12	00 58
23989	HD 219113 MWC 29	23 08.3	+02 08	"	"	"	16.2	01 05	02 49
23990	HD 13661	02 08.1	54 04	"	"	"	16.2	03 09	04 33
	Focus Test	OTB		"	"	"	16.2		

Dme Temp. +55 F

Fus. 12.955

Dme Temp. 53

Transparency Conditions *clearing after 2³⁰, very good*

378

aurora all night.

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
05:58	37W	56 30	0	8.1	B(3)e	2-2-2	Be Prog Set 2 <i>Aurora streamers from Pegasus to east horizon; South to about 50° N of Zenith</i>	Strong
02:49	17W	+02 26	0-	8.7	G ₅	2-2-2	SZ Proc Set 2	Fine
01:28	00W	54 20	1/2	8.6	B ₃ re	2-2-2	Be Prog Set 6	Strong
						8/6	Set 5 Some difficulty in getting a continuous arc.	OK.
							3 PH + 0	

379

Date Thurs Fri Sept 5/6 Observer RU - Hr 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 ^h 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 ^{4A+L}	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 ^h 20.4	+33 34	I-12"	EI0300	0.008	18.5	22 40	00 50
	Flow Test 0.7-13.								

Dme Temp. 65° F

Transparency Conditions Clear

Eus.....

Dme Temp.....

ing Time E.S.T.	Bar Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 20	3° E	+25 25'	0	8.74	08 V	2', 2', 2'	Set 5 O-HV: plate marked X	
0 42		00 08	6"	5.57	A0	30	4 #/sec 2"/min std for 7 Ayl	
1 04 C	04 E	00 52	"	Var	Var	30	" 7 Ayl	
1 22 J	14 W	00 52	"	"	"	"	" 7 Ayl	
1 40	34 W	00 08		5.57	A0	"	std for 7 Ayl.	
							Set on 5 Ceph clouded over More clouds coming	
0 50	52 E	+33 56	1/2	9.24	Ko II-IV	2', 2'-2 8/6	set 2 O-HV " 8 Clouds after 0100' Worse at 0200 1 P.H.	
							MTW ME STW Sept. 6 +8.3 -1.5 +0.1	

Dne Temp. 56

Transparency Conditions clearing well about 22^h

Humid.

Dne Temp. 51

Long Time E.S.T.	Rise Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30	08W	S4 14	0-	12.05	B ₀ V ₁	1-1-1	Set 2 OB Programme	v strong
06	22W	29 20	0-	9.49	K ₀ IV-V	2-2-2	Set 2 0 MV Proj. Field did not detect	fine
						8/6	Set 8	c E. red.
3 PH + 4								
A planet-like balloon about 10°								
above the eastern horizon, visible								
to unaided eye until after 6 ^h 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 4520-4600		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	^{7 Aug} 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	^{8 Ep} HD 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
23995	HD 213014	22 23.4	+16 46	12"	E-103aD	^{cut} 0.16	16.1	00 24	00 44
{ 23996	HD 2126	0 20.4	+33 34	"	"	^{cut} 0.02	"	00 55	01 45
{ 23997	HD 10015	01 32.7	+29 04	"	"	"	16.0	01 52	03 20

Date Temp. $+64^{\circ}F$

Transparency Conditions *Clear*

Perhaps slight haze.

Mois.

Date Temp.

Time	Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 10		+4 03	3"	5.7	B5	30	1 A/m 2"/min	
0 32	26 E	+0 08	4	5.57	A0	"	4 A/m "	
0 55	01 E	+0 54	"	Var	Var	"	" "	
1 13	17 W	"	"	"	"	"	" "	
1 34	36 W	+0 09	"	5.57	A0	"	" " + SKY 6/6	
2 10	09 E	+56 50	"	4.51	F0	"	" "	
2 35	01 E	+58 11	"	Var	Var	"	" "	
2 55	40 E	"	"	"	"	"	" "	
23 10	04 E	+56 50	"	4.51	F0	"	" "	
23 30	08 W	+46 18	3	4.7	B5	"	1 A/m "	
23 45		"	"	"	"	"	" "	
23 55		"	"	"	"	"	" "	
00 44	2 W	+17 02	2	8.5	G8	1-1-1	set 1 Standard vel. program	lweak.
01 45	15 W	+33 56	"	9.24	Ko III	2-2-2	set 2 OHV	too weak
03 20	15 E	+29 20	2	9.49	Ko IV	2-2-2	" 5	good

Bole Temp.....

Transparency Conditions..... Clear

386

ocs.....

Bole Temp..... 54°F

Angle nd	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
06W	+23 15	1	8.88	F6D-2-2-2	set 8 8/6 set 10	Fomstert 3 P.H.	good ctored.
						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.T.W. S S.W. M.E. -27.0 -46.7 -1.327 +43.1 -1.3 21.6 1.2	
						SEPT 12 M.C. S.C. M.T.W. S.T.W. S S.W. M.E. -27.2 -47.5 -2.10.5 466.6 -1.5 20.5 1.2	

Dme Temp. +62°F

Focus 12.955

Dme 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.	
							M.C. S.C. M.T.W. S.W. N.E.	
							-29.5 -18.2 -1.118.1 1.24.4 -11 35.1 +2.5	

389

Date Mon-Tues Sept 16-17, 1957 Observer D₈ - H_v Julian Day 2436.98
 ☉ 173 43 30.6 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
	HD 2126	0 20.4	+33 39	I-12	E103a0	.008			
24000	ADS 486 B	00 29.8	36 17	I-12	E103a0	.016	20.0	00 34	02 44
24001	" 3093 B	04 10.8	-07 49	"	"	.008	20.0	02 59	04 59
	<i>71 07B</i>								
24001 F	Focus Test			I-25	E103a0	.008	19	Focus	15.60 15.50 15.56

Dme Temp. +65° F.

Transparency Conditions

Clean - occasional clouds.

Fus.

390

Dme Temp.

Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
017	10 E	+00 09	8"	5.57	AD	30"	4 A/Sec 2"/min	
-			6"	Var	Var	"	" "	
			4"	8.7	G5	"	" "	
2 30	52 E	+61° 59'	0	8.2	B3e2-		set 2 Be program	
2 51	05W	+56 50	6-8	4.51	F0	30		
3 15	13 W	+58 11	8	Var	Var	30		
3 34	32 W	"	"	"	"	"		
3 57	10 W	+56 50	"	4.51	F0	"		
				9.24 K800				
2 41	37W	36 36	0-1	10.1	K3	1-1-1	Set 2 BK-VBF	
4 59	13 W	-07 43	0	9.4	A2	2-2-2	" 8 "	
						8/6	" 5	1 P.H. loaded in frig.
	OTB.					8/6	" 1	Hot on M.
						8/6	" 6	} all centres to read
						8/6	" 9	

Dme Temp. 64F
 Focus 15.37
 Dme 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

Time	Air Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						8/6	Set 1 focus 15.40 Best focus ~ 15.37	
							" 6 " 15.30	
							" 9 " 15.20	
26		37 20	1	5.7	B32E	4-4-4	" 1 Be Prag.	fine
						12	" 5	
36	116					12	" 9	
35	2 ^h 40 ^m	44 48	1	A5	7.26	"-4-4	" 2 N's Binary	fine
36	2 ^h 14 ^m					4-4-4	" 8	
39		41 37	1	K0	6.05	6-6	" 2 Bk's Prag.	fine
33	2 ^h 00		1			6-6	" 8	
32	41W	+2 26	1	G5	8.7	4-4-4	" 5 Hd Ecl Bin	fine
31	46W	+20 22	1-2	7.67	K0	4-4-4	" 2 BK-VB.	fine
39	10W	70 45	1	8.0	Byne	4-4-4	" 2 Hd-VBc.	stun
42	1W	48 30	1	7.9	Byne	4-4-4	" 8 " "	stun
39	12W	41 36	1-2	7.2	Bsnc	4-8	" 2 " "	fine
						15/10	" 8 I.P.H. HanM.	cent

OTB } developed

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

cent
 26 117.0

393

Date Wed-Thurs Sept 18/19 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-45	E103-a-9	^{slit} '008	+21.0	19 20	19 50
24011	ADS 10633	17 29.8	+13 14	"	"	"	+20.7	19 56	20 56
- 24012	HD 188326	19 49.5	+38 30	"	"	"	+20.5	21 04	22 58
- 24013	HD 174369	18 45.1	+24 56	"	"	"		23 02	23 48
- 24014	HD 218804	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

Date Temp. 62°F

Transparency Conditions Good

394

Eus. 15.41

Dne Temp. 57°F

Star	Right Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 53	35W	+25 00	0!	6.56	AZn	4-4-4	set 2 sp. bin M.C. S.C. M.T.W S.T.W. S S.W. M.E.	weak
0 56	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
2 53	40W	+38 39	1	8.34	G8IV	4-4-4	0-HV set 2 including ft. stars in 74"	weak
2 58	34W	+25 00	1	6.56	H2n	4-4-4	set 8 sp. bin	fine
0 09	36W	+43 17	1	6.39	F5IV	4-4-4	set 8 0-HV.	fine
0 39	54W	+23 40	1	6.62	KoIII-IV	4-4-4	set 2 0-HV	fine
1 27	58W	+16 19	1	7.27	G8IV	4-4-4	set 8 0-HV	good
2 02	26W	+10 49	1	6.80	Ko	4-4-4	set 8 Bk-VB	good
2 53	22W	+1 45	0	7.31	KoIV	4-4-4	set 2 0-HV	good
3 38	03W	+31 47	0	6.65	F5IV	4-4-4	set 8 0-HV getting foggy	fine
4 10	18W	+9 59	0	6.95	F5V	4-4-4	set 2 Se-HV No arc	strong
6 05	25W	+61 33	0	7.22	G4V	4-4-4	set 8 Se-HV	strong
5 18	37E	+40 03	0	5.38	60V	6-6	set 5 Se-HV. arc weak	strong

4 P.H + 0

Dme Temp. 50°F
 Pcus. 15.32
 Dme Temp.

Transparency Conditions

396

abnosee

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

Time	Hr Angle E.S.T. 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 -18.7 -3.269 2.22.8 -1.6 374 +2.0	
2:41	35W	39 19	0	9.7	A5	2-2-2	Set 2 Vis. Bin. Proj. Spectacular Aurora	good
4:15	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	
							-29.9 -49.8 -2.1 -0.3 +13.2 +27.8 +0.8	

Eme Temp. 44 F

Transparency Conditions

Good

400

Fus. 15.30

Eme Temp. 40°

Trouble with guiding eyepiece delayed start.
L fixed.

ing Time E.S.T.	Dir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
39	12 ^h 16 ^m	18 12	0	6.9	B9.5ed	4-4-4	Set 2. Be prog.	good
42	2 38W	+ 2 25	0	8.7	G-5	4-4-4	" 5 Hal Ecl Ben.	fine.
43	25W	46 07	0	8.6	B3ne	4-4-4	2 Be prog. much scattered cloud	Strong
						15/10	8	center al to violet
							3 PH in the dome	
							Plates needed	
							Sept. 27	
							MTW ME	
							+4.1 -4.1	

401

Date Fri-Sat Sep 27/28-57 Observer Se - Dg Julian Day 2436109
 ☉ 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.
262 269-35	HD 156164	17 10.9	+24° 57'	5200	.3350		5/6	19 ^h 35	
24030	SZ Piscium	23 ^h 18.3	+02 08	I-25	E103a0	set 108	+9° 5'	21 ^h 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

Dne Temp. 43°

Hum. 15.26

Dne Temp.

Transparency Conditions Phobos/kic

402

Time	Sur Angle	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
17	W	+26° 52'	0	6.41	G3V	4-4-4	set 1	good
18	W	+18° 26'	0	7.58	G3V	4-4-4	5	good
15		+0° 43'	0	7.42	F8V	4-4-4	9	weak
22	W	-0° 47'	0	7.53	G2V	4-4-4	set 1	-
25	W	-1° 27'	0	6.17	F9V	4-4-4	5	-
26	W	+9° 59'	0	6.95	F5V	4-4-4	9	-
30	W	+61° 33'	0	7.22	G4V	4-4-4	set 1	weak
4	W	-3° 23'	0	7.23	F9V	4-4-4	5	weak
45	W	+74° 04'	0	7.70	F8V	4-4-4	9	good
10		+42° 00'	0	7.90	G2V	4-4-4	set 2	good.
						10/7	8 focus test	
							2 PH. in the dome	
							8 plates in spotting room	

Nothing but spots

air Temp. 51°F
 Humidity 15.18
 bar Temp.

Transparency Conditions *Good*

404

2500 units. MR + BK showed Ring nebula with 74"

Start Time E.S.T.	Star Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 19	20W	73 05	0-1	8.6	A6	2-2-2	Set 2 Vis. Bin Prog.	<i>very</i>
2 16	28W	01 08	1	10.1	G8	2-2-2	" " "	<i>good</i>
3 57	21W	63 19	1	8.1	B3e	4-4-4	Set 2 Be Prog	<i>fine</i>
5 28	48W	44 48	1	7.8	B3e	4-4-4	" " had trouble finding star, incorrectly processed. 4PHs loaded + 4	<i>fine</i>

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 188 350	19 49.6	+00 01	5200	3300	10	6/4	18 48	19 06
271-36	^{M Agl} 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	^{58p} 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 16.9	+46 02	"	"	10	6/1	22 43	23 17
280-36	HD 222439	23 35.5	+43 47	"	"	10	6/1/5	23 21	23 55
24045	HD 16141	02 30.3	-03 59	I-25	103 a0	008	^{13.6} 13.5	00 26	01 12
24046	" 20559	03 13.3	-01 18	"	"	"	13.2	01 18	01 33
24047	" 22879	03 35.3	-03 32	"	"	"	13.2	01 54	02 3
24048	" 29507	04 31.5	41 57	"	"	"	13.2	02 46	04 08
		+	0/B						

Temp. +57°F

Transparency Conditions *Clear*

406

ocs. 15.31

Temp.

Time of day E.S.T.	Angle and	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9:06	30 E	+00 10	8"	5.57	A0	30	4A/sec 2"/min	
9:29	06 E	+00 54	6	Var	Var	30	"	
9:45	12 W	+00 54	6	"	"	30	"	
10:07	31 W	+00 09	5	5.57	A0	30	" Slight clouds in S	
10:30	18 E	+56 50	6	4.51	F0	30	"	
11:02	05 E	+58 11	7	Var	Var	30	"	
11:28	46 E	+58 11	7	"	"	"	"	
11:57	09 E	+56 50	6	4.51	F0	"	"	
		+62 06	4	5.4	09	"	1A/sec 2"/min	
12:17	15 W	+46 19	4	4.7	B5	"	"	
12:50	34 W	+44 05	4	4.4	A0	"	"	
1:12	23 E	-03 44	0-1	7.48	G5 IV	4-4-4	Lat. 2 0-HV	MC SC MW STW Sep. 30 -36.0 -48.2 +43.9 +6.6
1:30	5 E	-01 05	0-1	6.41	K1 IV	4-4-4	" 8 "	S SW ME +15.4 +18.1 +1.4
2:23	41 E	-03 22	0-1	7.23	F9 V	4-4-4	" 2 Se-HV.	Var / Wet outside
	2 E	42 02	0	7.91	G2 V	4-4-4	" 2 "	Flac M, Fug E, l
					1 1/10	" 5	2PH	slowing up.

from weak " weak strong OK

ne Temp. 57°F

us. 15.34

ne Temp.

Transparency Conditions

408

542.9

Ending Time E.S.T.	ir Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
22 16	40W 49	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 MTW STW S JW ME Oct 2 -50.2 +55.1 +0.6 +15.0 +15.4 +0.1	

409

70

Date Wed Oct 2-3/57 Observer Ad - Dg Julian Day 2436.14

☉ 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	E10320	008	+13.0	19 05	19 37
24051	ADS 11271	18 15.9	+3 20	"	"	"		19 54	20 06
							13.0	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	+12.7	22 19	00 55
24055	MWC 10/HD 6343	0 59.4	+65° 26'	"	"	set .008	+12.8	01 10	01 45
24056	MWC 13/HD 9105	1 24.6	+62° 51'	"	"	"	+12.9	01 50	02 35
24057	MWC 13/HD 12302	1 55.6	+59° 12'	"	"	"	+12.9	02 41	04 20
24058	MWC 88/HD 29866	4 37.3	+40° 36'	"	"	"	+12.8	04 30	04 40
24059	MWC 93/HD 31293	4 49.4	+30° 24'	"	"	"	+12.9	04 51	05 35

Delayed by trouble with drive opening

410

Home Temp.
 Focus 15.48
 Home Temp. 40°F

Transparency Conditions

← not satisfied with last few focus plates, so 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		15/10	Focus. set 1	
1 17	24 59	0	6.56	A2n	4-4-4	Set 5 N's binary	center to red.
2 10		0	5.8	G5	6-6	" 1 Bk-VB.	Fine
2 21	+3 21	0			6-6	" 5 "	good
2 31		0			6-6	" 9 "	allow
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 other spectra
2 13	+ 2° 26'	0	9.0?	G5	2-2-2	" 5 Hd Ech Bin Being Observed by Bk	fine
11W	+65° 44'	0	7.1	B5eβ	4-4-4	set 2 Hd Be Program	} Plate holder not unloaded from previous use.
36W	+68° 05'	0	7.5	cB(s)e	4-4-4	8 "	
50W	+59° 27'	0	8.2	B3e	4-4-4	set 2 "	fine
29W	+40° 42'	0	6.1	B4ne	4-4-4	8 "	fine
13 W	+30° 27'	0	7.5	Aoep	4-4-4	set 2 "	fine
					10/7	8 focus test	center to red
2 P.H loaded							
Shutter drive <u>not</u> functioning - closed by hand.							

plate numbered 24055-6 should be called 24050 + cover labelled accordingly

411

Date Phws - Fri Oct 3-4 Observer Se - H.V. 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 ^h 34.3	+9 44	I-25	ED3aO	Set .008	+12.0	19 ^h 49 ^m	20 ^h 01
24061	HD 203344	21 16.6	+23 26	"	"	"	+12°	20 ^h 20 ^m	20 ^h 44
24062	HD 208776	21 53.4	+3 18	"	"	"	+12°	20 ^h 52 ^m	21 59
24063	HD 217050	22 52.7	+48 09	"	"	"	+12°	22 16	22 18
24064	MWC 394	"	"	"	"	"	"	22 19	22 23
24065	"	"	"	"	"	"	"	22 25	22 31
24066	HD 217543	22 56.3	+38 10	"	"	"	+12°	22 43	22 51
24067	MWC 395	"	"	"	"	"	"	22 52	23 05
24072	HD 3628	0 ^h 34	+2 34	"	"	"	+12.0	23 16	00 46
24069	" 13043	02 02.5	-01 05	"	"	"	+11.9	00 55	01 55
24070	" 22879	03 35.3	-03 32	"	"	"	"	02 02	03 02
24071	" 30455	04 42.8	18 33	"	"	"	11.8	03 11	04 11
24072	30649	04 44.4	45 41	"	"	"	12.0	04 18	05 20
			7.7						0713

Time Temp. $+50^{\circ}C$
 Focus 15.47 (as table without corr.)
 Time Temp.

Transparency Conditions

V.G.

412

ing Time E.S.T.	Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01	4 ^m WE	+09° 55'	00	5.76	G5V	4-4-4	set 2 O-IV	fine
02	2 ^m E	+23 39	0	6.62	K0V	4-4-4	set 8 O-IV	fine
03	36 ^m W	+3 34	0	7.54	G0V	4-4-4	set 2 Se-IV	fine
04		+48 26	1	5.2	B3he	6-6	set 1 Be 2 min	good
05		"	1	"	"	6-6	set 5 4 min	fine
06	9 ^m W	"	1	"	"	4-4-4	set 9 6 min	too strong
07		+38 27	0	6.4	B3he	4-4-4	set 2 Be 8 min	fine
08	39 W	"	4	"	"	4-4-4	set 8 12 min	fine
09	12 W	+2 54	0	7.93	G2V	4-4-4	set 8 Se-IV Numbered ^{By M. H. H.} 24060	fine
10	23 W	-00 50	0	7.53	G-2	4-4-4	" 2 " "	fine
11	03 E	-03 22	0	7.23	F9V	4-4-4	" 8 " "	fine
12	01 E	+18 37	0	7.58	G2V	4-4-4	" 2 " "	fine
13	15 W	45 46	0	7.57	G1V	4-4-4	" 8 " "	fine
						15/10	" 5	fine
							IP H.	
							0.54	
							mc sc mtw stw c .sw me	
							-37.6 -48.3 +9.7 -0.4 +15.6 +10.5 +2.9	

Note that no.
 on 24060 and
 comparison.

as to 24060

413

Fri Oct 4 - Soviet Artificial Satellite announced.

Date Mon Oct 7-8/56 Observer Ho - H

Julian Day 2436.119

© 194 20 18.2 3554.2

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	L-25	E10320	008	18.0	19 56	20 30
24074	^{HD 195592} MWC 347	20 27.2	43 59	"	"	"	18.1	20 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 24
	" " <i>Flora</i>	9.12	0713						

Time Temp.....

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

Time Temp.....

Transparency Conditions Haze then clouds.

414

Sat Oct 5-6 Se. Og 400 people shown 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

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
30	2 30	25 00	0	6.56	A2n	4-4-4	Set 2 Nibinary ^{Delayed phone by uncalibrated} guiding eyepiece (visitors?)	fine	
07	1 1 26	44 10	0	7.2	B.52	4-4-4	set 2 Be/prog	good	
00	25 W	42 26	0	8.7	G5	4-4-4	" 5 Hd Ecl bin,	fine	
00	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	" 8		
							1 P.H. + 0		
							H on M.		

415

Date Tues. Wed. Oct 8-9, 1957 Observer O - H V Julian Day 2436120

☉ 195 19 32.5 3556.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Angle hd
281-37	HD 188350	19 49.6	+00 01	5200	-3400	10	6/4	18 33	18 51	41E
282-37	HD 187929 ^{m Age}	19 47.4	+00 45	"	"	"	6/1	18 55	19 12	41W
283-37	HD 187929	19 47.4	+00 45	"	"	"	6/1	19 14	19 31	33W
284-37	HD 188350	19 49.6	+00 01	"	"	"	6/4	19 35	19 53	53W
285-37	HD 211336	22 11.4	+56 33	"	"	"	6/1	20 08	20 26	55E
286-37	HD 213306 ^{Sep}	22 25.4	+57 54	"	"	"	6/2	20 31	20 49	46E
287-37	HD 213306	22 25.4	+57 54	"	"	"	6/2	20 50	21 08	47E
288-37	HD 211336	22 11.4	+56 33	"	"	"	6/1	21 12	21 31	49W
289-37	HD 206267	21 35.9	+57 02	"	"	"	6/4	21 40	22 21	46W
290-37	HD 216916	22 51.9	+41 04	"	"	"	6/4-3	21 27	23 11	49W
291-37	HD 4180	0 39.2	+47 44	"	"	"	6/1	23 16	23 53	41W
24077	HD 16141	02 30.3	-03 59	I-25	E103a-0	.008	17.8 16.4	00 27	01 27	35E
	<i>from file</i>		<i>09/13</i>							

Home Temp... +65° F

Humidity... 15-46

Home Temp.....

Transparency Conditions

Slight haze
Bits of cloud.

416

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
51	09 E	+00 08	4-6"	5.57	A0	30"	4A/arc 2"/min	
12	14 W	+00 53	6"	Var	Var	30	" "	
31	33 W	"	"	"	"	"	" "	
53	53 W	+00 09	"	5.57	A0	"	" "	
24	55 E	+56 51	5	4.51	F0	"	" "	
47	46 E	+58 11	4	Var	Var	"	" "	
1 08	27 E	"	"	"	"	"	" "	Clear.
1 31	09 W	+56 50	"	4.51	F0	"	" "	
2 21	36 W	+57 17	"	5.9	O6	20	1A/arc " Triple System .0° 15"	
3 1	09 W	+41 17	3	5.7	B3	30	" "	
3 5	04 W	+48 02	"	4.9	B4	"	" "	
1 27	13 E	-03 44	0-1	7.48	G5 IV	4-4-4	Set. 2 0-HV. HAZY	good.
						15/10	" 8 Hopeless by 2:10	
							194 SC MTLW 2 PH. +10. STW S SW ME -39.4 -47.7 +21.8 -0.2 +15.8 +3.2 -4.2	

ome Temp. 44 F
 ocus 15.44 15.41
 ome Temp.

Transparency Conditions.....

418

Wed Oct 9 - art 16 class - 35 students

Hour Start	Hour End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
56	W 2 13	25 00	0	6.56	A2n	4-4.4	Set. 5 7's Bin.	good
43	W 1 22	36 40	0	7.7	B3c	4-4.4	" 2 Be Proj clouds at 2030	too weak
58	W 1 42	42 31	0	7.1	B3.5k	4-4.4	" 2 " "	good
211	W 1 57	57 33		7.0	B3one	4.4.4	" 8 " " Cloudy again	fine
53	W 12 W	18 37	00	7.58	G2V	4-4.4	" 2 Se-Hv.	good.
						13/10	" 8	OK
							2 P.H. + 6	

419

Date Sat-Sun Oct 12-13 / 1957 Observer O. - Pak

BK

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 had
292-38	HD 211336	22 11.4	+56 33	5200	3300	10	6/1	20 56	21 14		29W
293-38	HD ⁵⁰⁸ 213306	22 25.4	+57 54	"	"	"	6/1	21 18	21 36		6W
294-38	HD 213306	22 25.4	+57 54	"	"	"	6/1	21 37	21 51		25W
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		5W+
297-38	HD 3366	0 31.5	+72 21	"	"	"	6/6	23 15	23 57		W+
24083	HD 225095 MWC 409	23 58.3	+55 00	I-25	E103-20	sel 008	+8.8	00 28	00 58		50W
24084	HD 4180 MWC 8	00 39.2	+47 44	"	"	"	"	01 09	01 11		2W
24085	HD 19243 MWC 61	03 00.7	+62 06	"	"	"	"	02 10	02 20		4W
24086	HD 37115 MWC 114	05 31.0	-05 41	"	"	"	"	02 50	04 00		2E
24087	HD 44637 MWC 139	06 17.7	+15 09	"	"	"	"	04 08	04 40		2E
	Focus test	0	T.B								

Time Temp. +46°F

Focus 15.43

Time Temp. +42°F

Transparency Conditions

Clear

420

100 visitors shown

Some low fog at 23h and on. Fairly bright aurora

ring Nebula

Hour	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
14	09 W	+56 50	3"	4.51	F0	30	4 A/sec 2"/min	
13	16 W	+58 11	"	Var	Var	30	" "	
12	35 W	"	"	"	"	"	" "	
11	11 W	+56 49	"	4.51	F0	"	" "	
10	25 W	+70 29	2	6.9	A2	"	1 A/sec	
9	30 W	+72 40	2	7.1	B3	"	" "	
8	05 W	55 18	1	7.6	B1e	4-4-4	net 2 Be prog.	fine
7	43 W	48 00	1	4.7	B4neb	12	8 " Waiting for clouds to clear	strong
6	24 W	62 13	1	6.5	B2e	6-6	2 " Guiding bad	fine
5	02 E	-5 41	0	8.2	B5ne	4-4-4	8 " could not find HD 26470	strong
4	02 E	15 07	1	7.7	B3e	4-4- 15/10	2 " "	good. et red light

1 PH + 4

Time Temp. +54° F

Focus 15.49

Time Temp.

Transparency Conditions Haze and some cloud.

422

7.3

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
05	11° E	+49° 58	2	6.8	Ave	A-4-4	at 2: Be	fm
2:30	14 E	+46° 11	2	6.5	B ₃ ne	4-4-4	set 8 ; Be	strong
06	20° W	+76 47	1	7.05	KoN	4-4-4	set 2 OHV	strong
013	20 W	+31 44	1	6.65	F5N	4-4-4	set 8 OHV Annual (Crown)	strong
3	41 W	-00 50	1+	7.53	G2V	4-4-4	" 2 Se H.V.	too weak
5	47 W	-03 22	1	7.23	F9-V	4-8	" 8 " 40m??	weak
4:05	30 W	45 46	2	7.57	G1VI	4-4-4	" 2	strong
5	32 E	39 39	1	7.30	F8V	4-4-4	" 8	good
						15/10	" 5 I.P.H. + 12	
							Saw Sputnik's 2nd stage WOW!	c. to red. / mightly.

Line Temp.....
 Focus..... 1.5.51
 Line Temp.....

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

Mag Times S.T.	Sur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
43	W 316	24 30	1	^{no} 7.6 7.26	K0	4-4-4	Set 2 Bk Prog, Differential gear sliding badly.	(1) weak
46	W 227	5 55	1	^{no} 6.6 7.6	K0	4-8	" 8 " "	too weak
55			1	7.2	B5e	4-8	" 2 B- prog	Guiding bad fine
45	E 1 41	61 40	1	6.6	B07e	6-6	" 8 "	" fine
14	E 1 59	63 06	1	7.5	cB(s)	4-8	" 2 "	Guiding bad good
4	E 1 03	65 43	1	7.1	B5e/3	6-6	" 8 "	" fine
2	5W	66 40	1	8.34	G5V	4-4-4	" 2 S< 4V Haze	good
21	0 23E	61 31	0-1	7.22	G4V	4-4-4	" 8 "	fine
	0 18W	79 02	0-1	7.70	F8V	4-4-4	" 2 "	Guiding bad strong
4	0 3W	42 38	0-2	8.66	G2V	4-8	" 8 "	good.
						15/10	" 5 "	ct red.

2 P.H. + 6
 9/15 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

Da

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 ² 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	6763	01 3.2	+5 07	"	"	"	"	00 55	01 05
{ 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	03 35.3	-3 32	"	"	"	"	02 22	02 55
{ 24112	34411	05 12.1	+40 01	"	"	"	"	03 10	03 18
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	45915	06 25.6	+11 19	"	"	"	"	05 00	05 10
24116	50083	06 46.5	+5 13	"	"	"	"	05 24	05 54

Temp. 42°F
 W.S. 15.51
 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 spectra
					6	60 sec. set 5	
39W	+2° 53'	0	7.93	G2V	4-4-4	set 2 Se HV	weak
32W	+5° 31'	0	5.85	F2V	4-4-4	set 8 "	Not in system
55W	+1° 35'	0	6.17	F9V	4-4-4	set 2 "	too weak
26W	+9° 59'	0	6.95	F5V	4-4-4	set 8 "	weak
36W	-3° 22'	0	7.23	F9V	4-4-4	set 2 "	too weak
32E	+40° 02'	0	5.38	G0V	6-6	set 8 "	weak
47E	+58° 10'	0	6.82	K0IV	4-4-4	set 5 O HV	weak
35W	+14° 55'	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
43W	+05° 7'	0	6.8	B2e	4-4-4	Set 2 " "	weak
					15/10	Four star	cit. red.
						3PH + 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	✓	✓
1-1									
2-1									
3-1									
4-1									

↑ Tracing of one night, 1, 2, 3... etc.
 ↑ night number, 1, 2, 3... etc.
 ↑ Running serial numbers.

For Comp. int aperture.

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429

430