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1
Inside displaced to violet means focus should be made shorter

Pressing on right hand switch of dome turning relay
moves dome to the East

Last plate report	1942-43	8939		
" "	june 1943	8948		
" "	july	9054	106	
" "	aug	9185	131	237
" "	sept	9380	195	432
" "	oct	9587	207	639
" "	Nov	9665	78	717
" "	Dec	9707	42	759
" "	Jan 1944	9779	72	831
" "	Feb	9825	46	877
" "	March	9908	83	960
" "	Apr	10012	104	1064
" "	May	10075	63	1127
" "	june	10154	79	1206
" "	july	10285	131	131
" "	Aug	10478	193	324
" "	Sept	10590	112	436
" "	Oct.	10736	146	582
" "	Nov	10816	80	662
" "	Dec 31	10856	40	702

1 3

Angle
End Dev

[illegible]

Date Friday Apr 21-22 / 44 Y Julian Day[illegible]

	MC	SC	MT	ST
Apr. 24	-01.6	-12.4	-00.6	-0.2
	reset			reset - stopped
	added 0.5 wt			

Date... Wed Apr 26-27.

Julian Day.

[illegible]

[illegible]

Date Thursday 1966 April 27-28 N Julian Day[illegible]

Focus set 23.73⁶ ±

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
40	0 55W	+06 12	1-2	7.62 Ma	1 1/2 1 1/2 1 1/2	seeing variable good
0 +	0 30W	+33 12	1-2	6.6 G5p	2 2 2 8-8 ^m	3rd comp. with flipper in. <i>helps when</i>
12	0 28W	+36 06	1	6.9 Go	1 1/2 1 1/2 1 1/2 12-12	" " <i>little st. out</i>
2	0 59W	+46 58	1	7.49 Ko	1 1/2 1 1/2 1 1/2	good
11	0 00E	+41 02	1	7.54 Ko	1 1/2 1 1/2 1 1/2	good
55	0 14W	+05 47	1-0	7.25 Ko	1 1/2 1 1/2 1 1/2 at 3	good
					7-5 " 8	Focus good
						4 plateholders loaded; aerogel box of plate
						in done.

Date Friday Apr 28-29

Y

Julian Day.

[illegible]

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
31 1	1 07W	73 18	1-2	7.2	F0	1 1/2 1 1/2 1 1/2 n f *
17 2	2 05W	64 11	1-2	7.53	K2	1 1/2 1 1/2 1 1/2
58 3	41W	47 00	1-2	7.49	K0	1 1/2 1 1/2 1 1/2
45 4	38 E	10 28	1-2	7.46	K0	1 1/2 1 1/2 1 1/2
25 1	07W	6 16	1	7.41	K0	1 1/2 1 1/2 1 1/2
04 2	47W	7 28	1-2	7.47	K5	1 1/2 1 1/2 1 1/2
						7-5

Date Saturday 1944 April 29-30 N Julian Day.

Thursday May 2-3 - 21.0 n. or the wind in afternoon. Part heat on minor.

Date Tuesday, May 2-3, 1944 H Julian Day[illegible]

Date Sunday, May 7-8, 1944 14 Julian Day

[illegible]

From set 23.58

	MC	SC	MTW	STW
May 8	+07.6	-12.5	+13.6	+0.2

Date Wednesday May 10-11

Julian Day

[illegible]

Focus 23.50

[illegible]

21

Date Tuesday, 1944 May 13-14 N Julian Day

[illegible]

Cloud and rain during day Clearing
sunset.

Focus set $23.50 \pm$ unchanged.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1	1 39 W	+46 59	0	7.49 Ko	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ seeing variable - poor
2	0 05 E	+61 45	0-1	7.05 Ko	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ fine
3	1 03 W	+49 45	1	7.60 Ko	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ seeing improving slightly. fine
4	0 47 W	+55 08	1-0	6.63 A ₃	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ 3 7-5 8 fit temp sun up at beginning of this exposure! OK
					1 better based on 2 other photos

Date Sunday, May 14-15, 1944 H Julian Day.

[illegible]

Cloudy late afternoon + evening. Clearing fairly well
around 21²⁰.

24

Focus set 23.47 *Baro temp* 64°F

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	+46 58		7.49 KO	Clouded over thick 21 ⁵⁸ just as setting was completed. Gradually clearing after 23 ⁰⁰
1 01 W	+39 00	0-1	7.26 G5 1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 1 $\frac{1}{2}$	Seeing very poor at start; improving rapidly at end.
1 08 W	+22 16	2-1-0	7.45 KO 1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 1 $\frac{1}{2}$	Clouds 0 ²² - Star lost much of time thereafter.
Temperature controlled manually.				
(WBEN) May 15 MC SC NTW STW +11.6 -17^s +15 +0.1^m				

1944

Date.

Monday May 15-16-

$$Y - N_0$$

Julian Day.

[illegible]

Clouds + rain most of day. Clearing late afternoon.

28

Temperature alt 23.48 ~ 49

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1	10W	+46 58	1-2	7.49 KO	1 1/2 1 1/2 1 1/2 Stage & light fog. OK
0	20E	+44 28	2-1-2	6.77 A5	1 1/2 1 1/2 1 1/2 Very poor lines. Outside of dome becoming wet. Inside all OK. gross
0	19W	+28 20	2	7.36 KO	1 1/2 1 1/2 1 1/2 Stage all around; fairly transparent near zenith. OK
0	50W	-46 00	2-3	7.64 K5	1 1/2 1 1/2 1 1/2 OK
1	47W	+28 31	2-1	7.45 A0	1 1/2 1 1/2-1 1/2 Fairly strong. (Fainter preceding comp't) } haze very thick during both these
3	21W	+28 31	1	6.95 A0	1 1/2-1 1/2-1 1/2 " " (brighter, following ")
1	17W	+43 29	2-1	7.67 KO	1 1/2 1 1/2-1 1/2 ground fog lifting 02 30
1	21W	+00 08	2	5.57 A0	1 1/2 1 1/2-1 1/2
0	19W	+52 20	2	6.23 KO	1 1/2-1 1/2 1 1/2

Date Thursday 1944 May 18-19 N Julian Day

[illegible]

31

Date 1944 May 20-21 Saturday N Julian Day.

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1-28 W	+46 58	0-1	7.49 Ko	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ Wings of cirrus cloud ← dome, little west - turning
0 04 E	+07 49	0-1	7.35 Ko	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ ← lost time adjusting iron arc. NEEDS FURTHER ATTENTION good
0 28 W	+01 19	1	6.02 A3	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ cirrus clouds OK
1 20 W	+02 33	0-1	7.35 Ko	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ 5 hazy patches coming across star. a little more by 7-5 8 focus extra to red

May 22 MC SC
+10.7 -22.0

MT ST
00.0 -0.0

Rest

Date May 2-25 Wednesday

Julian Day

[illegible]

May 25

W B E N

NT

ST

1035

-0.2

Rest

Date Friday May 26-27

Y

Julian Day

[illegible]

Date 1944 May 27-28, Saturday N Julian Day

[illegible]

Focus set $23.43 \pm$ (0.03 greater than)
calculated

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
31	0 26 E	+68 55	0-1	7.60 Ko	$1\frac{1}{2} \ 1\frac{1}{2} \ 1\frac{1}{2}$ Sp. shifted during exp. seeing improving towards end of exposure. weak
1	0 55 W	+49 47	1-2	7.60 Ko	$1\frac{1}{2} \ 1\frac{1}{2} \ 1\frac{1}{2}$ image unsteady little weak
57	1 49 W	+03 35	1-0	7.97 Ma	$1\frac{1}{2} \ 1\frac{1}{2} \ 1\frac{1}{2}$ had to clamp RA by hand. weak
				7-5 8	focus ok

39

Date Sun. May 28-29, 1944 - H. Julian Day

[illegible]

Focus set 23.43

ing Time Z.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
7-3	0 06E	+68 36	0	7.44 K0	1 1/2 1 1/2 1 1/2 North winds. *
03-4	1 37W	+76 51	0-1-0	7.88 K5	1 1/2 1 1/2 1 1/2 Seeing unsteady. *
5-5	1 21W	+19 07	1-2	7.39 K0	1 1/2 1 1/2 1 1/2
2-2	1 32W	+25 10	1-2	7.44 K0	1 1/2 1 1/2 1 1/2 little weak
2-3	1 09W	+11 32	1	7.21 K0	1 1/2 1 1/2 1 1/2 little weak
1-1	1 36W	+16 48	1-2=1	7.94 Ma	1 1/2 1 1/2 1 1/2 "
1-2	1 52W	+48 43	1-2	6.10 A3	2-2 Fuzzy lines CK
0	47W	+52 20	1-0	6.93 K0	1 1/2 1 1/2 1 1/2 sitting 3 } Seeing blowing up con f. City 8 5/6 } 8 } OK

* Re R.A. Champ: - cleaned lens out on table;
replaced blow frame; made temporary
wiper contact for unclamping wiper (regain
wiper lock as off). Works OK. Needs new
permanent T wiper.

Date Monday May 29-30

Y.

Julian Day

[illegible]

2 3 4

Date Tuesday, May 30-31, 1944 17 Julian Day

Wed Thunderstorm afternoon & night; 1.6 in rain fell.

Trans 23.38

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
33 1	0 12 W	+68 55	2	7.60 KO	1 1/2 1 1/2 1 1/2 Light haze at start, clearing OK
41 2	1 22 W	+50 58	3-2-1	7.9? K5	1 1/2 1 1/2 1 1/2 Seeing variable; double resolved most of time. OK
3 3	1 26 W	+28 32	2-3	7.45 A0	1 1/2 1 1/2 1 1/2 Fainter, preceding, slightly south (262°). good
5 1	2 08 W	+28 32	2-1	6.95 A0	1 1/2 1 1/2 1 1/2 Brighter, following. good
57 1	1 01 W	+67 16	2	7.28 KO	1 1/2 1 1/2 1 1/2 fine
6 2	1 16 W	+78 59	2-3	7.38 KO	1 1/2 1 1/2 1 1/2 fine
8 3	1 40 W	+69 15	2-3	7.52 KO	1 1/2 1 1/2 1 1/2 fine
8 4	2 26 W	+62 38	3	7.01 KO	1 1/2 1 1/2 1 1/2 fine
					8 5/16 } setting 2
7 1	0 29 W	+52 18	3	6.93 KO	1 1/2 1 1/2 1 1/2 " 8 Binary fine
59 3	1 43 W	+33 05	3-2	7.50 KO	1 1/2 1 1/2 1 1/2 fine
					(W/E) Diagram in dark hood.
					may 31
					MC SC MT ST
					+11.2 -31.5 +01.3 +0.0

Date Thursday 1944 June 1-2 N Julian Day.

[illegible]

23.41 ±

N brighter star
WHD 15 3597

Date Saturday 1944 Jan 2-4 N Julian Day

[illegible]

1. hollows low at
2. the state in some

Partly cloudy during day; very hazy at sunset.
 Cloudy clearing (?) towards dark. Strong E wind.

50

Focus set 23.49

ing Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 56 W	+39 01	0-1	7.26 G5	1 1/2 1 1/2 1 1/2 7 1/5 s Set on this star for half an hour - sky remained murky + star barely visible. Closed up 23 15
			6.73 F0	

June 5 - Heat on 3 P.M. D.S.T.

June 5 MC +09 s SC -41 s Y MT +05 ST -0.0

51

Date Wednesday 1944 June 7-8 N-Y Julian Day.

[illegible]

ing Time
S.T.

Date Thurs June 8-9

Y

Julian Day.

[illegible]

Focus 23.47

[illegible]

Date Saturday, June 10-11, 1944 H Julian Day

[illegible]

Hydro to be off. 2⁰⁰ - 4⁰⁰ L.D.S.T.

56

Cloudy all day, clearing before sunset. $\frac{24}{7}$ N-W wind
 Some set 23.50 ~ 51?

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
7:30	0 28 W	+59 48	2	6.36 A0	2-2-2 Poor lines. Image small but unsteady. <i>fine</i>
52	1 40 W	+03 33	2-1-0	7.97 Ma	2-2-2 <i>weak</i>
57	1 27 W	+45 28	1-2	7.31 K2	2-2-2 <i>fine</i>
1:00	1 27 E	-52 21	2	6.93 K0	2-2-2 Binary; H.K. core. <i>fine</i>
				7 ⁵ /5 ³ J	<i>centre very slightly off axis</i>
					2 plateholders loaded; 8 plates in dome.

Date Sunday June 11-12 Y-No Julian Day

[illegible]

58

Focus 23.42

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS										
50 -19	1 20 40 W	33 01	0	782 Ma	2-2-2	weak										
4				765 K5												
30		+06 09	1	6.72 F0	2-2	focus Centre to red. - focus unchanged - thick haze in this region shortly after beginning exposure. - sky <u>very</u> poor - star gone 00 30. Waited 1 hour but sky showed no signs of clearing - closed up. - plate kept for framer test										
						<table><tr><th></th><th>M.C.</th><th>S.C.</th><th>MT</th><th>ST</th></tr><tr><td>Jun. 12</td><td>+07.3</td><td>-40.0</td><td>+08.8</td><td>-0.0</td></tr></table>		M.C.	S.C.	MT	ST	Jun. 12	+07.3	-40.0	+08.8	-0.0
	M.C.	S.C.	MT	ST												
Jun. 12	+07.3	-40.0	+08.8	-0.0												

Date Monday, June 12-13, 1944 H-No Julian Day.

[illegible]

Cloudy all day; clearing late afternoon. 60
 Hazy over at sunset; thinning(?) towards dark;
 Wind - forecast fair.
 Focus not changed

ending Time
 E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 34 W	+39 00.	1	7.26 G5 6.66 A3	2-2-2 Haze. Thick haze 21 ⁰⁵ - 21 ³⁰ then lighter haze. Very hazy; cleared up 23 ¹⁵
				June 13 MC +06.5 in C. SC -52.3 -51.6 MT +11.1 sec. ST +0.0 m.
				Mirror off to clean. Cleaned iris diaphragm

Date Thursday, June 15-16, 1944 S-N-H Julian Day.

[illegible]

Date Friday 1944 June 16-17 S-H-N Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10105	NGC 5904	15 15.4	+02 19	N	E 103a0			21 53	21 55.1	
10106	5053	13 13.6	+18 01	"	"			22 03	22 17 2	13
10107	5466	14 03.1	+28 48	"	"			22 22	22 38 1	31 W
10108	6205	16 39.5	+36 34					22 43	22 45.2	
10109	5053	13 13.6	+18 01					22 54	23 08 1	2 17
10110	5466	14 03.1	+28 48					23 11	23 23 2	2 43
10111	6366	17 15.7	-05 01					23 32	23 42 1	0 10
10112	6333	17 15.7	-18 27					23 47	23 57 1	1 05
10113	6333	17 15.7	-18 27					23 59	00 07 1	
10114	5053	13 13.6	+18 01					00 12	00 25 2	24 37 W
10115	5466	14 03.1	+28 48					00 30	00 42 1	2 14 W
10116	6333	17 15.7	-18 27					00 46	00 56 2	14 W
10117	6779	19 14.2	+30 04					01 00	01 05.1	0 4 E
10118	6333	17 15.7	-18 27					01 14	01 24 2	1 W
10119	6779	19 14.2	+30 04					01 29	01 31 1	1 1 E
10120	6333	17 15.7	-18 27					01 14	01 55 2	1 02 W

Clear much of afternoon; cloudy from sunset
Heavy electrical storms all around.
Strong N-NW wind.

ing Time S.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
5:1					focused on 109 Virgin high wind
11:2	1 28 W				} developed (8 min) seeing terrible, lightning bad.
11:1	1 31 W				
03:1	3 17 W				developed
02:1	2 43 W				← focused on α Ophiuchi
02:2	0 19 E -05 01				
02:1	0 05 W				
04:1	04 27 W +18 01		bad		
05:1	05 02 W +20 48				
06:1	1 04 W				Guide star gone after 6 ^{min} cloud; faint.
06:1	0 45 E				clouded out.
07:1	1 32 W				
08:1	0 13 E				
08:1	2 02 W				cloud.
08:1					Squid in all plates

Date Saturday June 17-18, 1944 5-N-4 Julian Day

Plate No.	Object	R.A. 1900- 42	Declination 1900-	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10121	NGC 5904	15 15.4	+02 19	Newt.	E-103a-O			21 23	21 31	22E
10122	5053	13 13.6	+18 01					21 31	21 41	22W
10123	5466	14 03.1	+28 48					21 46	21 57	21W
10124	6205	16 27.5	+35 31					22 00	22 02	
10125	6218	16 44.1	-01 51					22 06	22 12	21W
10126	6254	16 53.7	-04 01					22 14	22 30	21W
10127	5053	13 13.6	+18 01					22 24	22 31	22W
10128	5466	14 03.1	+28 48					22 40	22 50	21W
10129	6779	19 14.2	+30 04					22 58	23 06	24E
10130	6366	17 24.4	-05 01					23 16	23 21	21W
10131	5053	13 13.6	+18 01					23 30	23 42	21W
10132	5466	14 03.1	+28 48					23 46	23 51	32W
10133	6333	17 15.7	-18 27					00 01	00 11	21W
10134	6402	17 34.4	-03 12					00 19 ^{26"}	00 33 ^{2"}	21W
	KA 109	17 42.1	-00 11					00 35 ^{16"}	00 49	21W
10135	6333	17 15.7	-18 27					00 52	01 02	21W

Cloudy much of day; clearing around
 sunset. Hazy

66

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	0 22 E	+02 19	Peru?		Focused on
	1 55 W				Twilight very bright. Cluster not visible.
	1 20 W				
	0 5 W				
	1 16 W				
	2 50 W				
	2 15 W				
	2 40 E				← Focus on 5 Aps.
	0 21 E				
	3 51 W				
	3 20 W				
	1 23 W				
	0 27 W				
	0 35 W				Don't stay to high
	16 44 W				Hazy

Date Lat. In. June 18 1944 5-11 A Julian Day[illegible]

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS																								
7	0 23 E																												
35	5 04 W				thick haze																								
	2 15 W				focus on σ Ophiuchi																								
7	1 45 E				Unrecorded because it did not reach exposure level																								
25	1 36 E				clouded out completely by heavy haze																								
Squaring all plates <table> <tr> <th></th><th>m.c.</th><th>s.c.</th><th>React S.W.</th><th>M.T.W. sec.</th><th>S.T.W. mm.</th></tr> <tr> <td>June 19</td><td>+3.9</td><td>-45.1</td><td>-9.4</td><td>-2.7</td><td>+0.1</td></tr> <tr> <td></td><td>m.c.</td><td>s.c.</td><td>S.W.</td><td>M.T.W. sec.</td><td>S.T.W. mm.</td></tr> <tr> <td>June 22</td><td>+2.3</td><td>-46.6</td><td>-16.4</td><td>+00.6</td><td>+0.3</td></tr> </table>							m.c.	s.c.	React S.W.	M.T.W. sec.	S.T.W. mm.	June 19	+3.9	-45.1	-9.4	-2.7	+0.1		m.c.	s.c.	S.W.	M.T.W. sec.	S.T.W. mm.	June 22	+2.3	-46.6	-16.4	+00.6	+0.3
	m.c.	s.c.	React S.W.	M.T.W. sec.	S.T.W. mm.																								
June 19	+3.9	-45.1	-9.4	-2.7	+0.1																								
	m.c.	s.c.	S.W.	M.T.W. sec.	S.T.W. mm.																								
June 22	+2.3	-46.6	-16.4	+00.6	+0.3																								
at continuous scattered faint at 2 P.M.																													

Date *Thursday, June 22-23, 1944 H-Mo* Julian Day[illegible]

Cloudy much of day. Clearing after dark. -10

From sat 23.38 ← 0.03 longer than table at

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
57.3	1 12 W	+01 50	0-1	6.66 A3	2-2-2	* haze
2.4	1 04 W	+13 57	1	7.29 G5	2-2-2	haze
18.1	0 01 E	+52 20	1	6.93 K0	2-2-2	
1.4	1 05 W	+65 27	1	6.08 A3	2-2-2	
3.9.3	1 45 W	+70 51	1-2	7.32 K2	2-2-2	haze - getting very thick 03.00 - image very poor 03.00-03.30
						* Start delayed first by clouds and then by faulty connection on focussing motor. Remade the connection, OK.

Rather high North wind 21:00 -

ding Time E.S.T.	Hour Angle End	Declination	-Seeing	Ptg. Mag.	REMARKS
					Focus set 23.44 [±] s
2	15W	+28 31	1	7.45 A ₀	2-2-2 double with 127067 W/O/E O N.P. (fainter)
1	16W	+07 57	1	7.39 K ₀	2-2-2 seeing variable ^N
1	20W	+03 41	1-2	7.21 K ₂	2-2-2 trouble with declination guiding and setting motion. Motor would run for a few moments and something would appear to be jammed, by the coarse sound of the motor. Then telescope could not be moved using the dec. guiding and setting buttons. Managed to get telescope in operation again after moving the long shaft a half way hand, as directed by Dr. Fogg.
0	47W	+16 36	1	6.87 F ₂	2-2-2

Light clouds at sunset; slowly thinning out. 76

Strong N & NW wind.

Frames set 23.45 (0.03 longer than total value)

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
2 24	0 16 W	+35 21	0-1	7.65 K5 2-2-2	Light clouds, first half of the scattered clouds, good
2 27	0 52 W	+10 31	0-1	7.47 K0 2-2-2	Light clouds strong
2 30	1 25 W	+34 19	0-1	7.32 G5 2-2-2	too strong
2 33	1 45 W	+24 56	1	7.99 K2 2-2-2	good
3 18	1 17 W	+42 46	0-1	7.33 K0 2-2-2	fine
4	1 31 W	+51 37	1	6.54 F0 2-2-2	strong

focus 23.40 ± (0.03 long - in focus value)

ding Time
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
2 00	0 40 E	+19 45	1-0	7.75 K5	2-2-2	 seeing variable weak
2 00	0 53 W	+68 38	1-2	7.47 K0	2-2-2	Little weak
2 00	0 47 W	+60 43	1-2	7.24 K0	2-2-2	fine fine
0 31	1 15 W	+57 17	1-2	7.84 K0	2-2-2	strong fine
1 39	0 36 W	+00 04	1	7.59 K2	2-2-2	seemed rather long way off in right little weak
2 00	1 24 W	+67 50	1-2	7.91 M0	2-2-2	ascension & declination - 19 26.5, +00 04 ok
3 52	1 40 W	+38 06	1-	7.32 K0	2-2-2	with strong fine

Focus a little to red. (long shot)

Focus 23.38 unchanged

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
2 00	20 E	79 01	0-1	7.38 - K0	2-2-2	strong
2 30 2	00	65 06	1	6.72 F0	2-2-2	little strong
3 19 3	1 09W	63 11	1-2	7.62 K5	2-2-2	guiding strong
0 03 4	1 05W	80 10	1-2-0	6.98 K5	2-2-2	guiding strong
0 44	1 33W	69 34	1	6.98 F8	2-2-2	too strong
1 20 2	39W	52 17	1-2	6.93 K0	2-2-2	(for 11+K exposure OK) " "
					7-5	
					m.e.	MTW. S.T.W. sc.
					July 3 -04.3	+03.1 +0.3 -48.5

Focus set at 23.36v7 (0.03 longer than table)

iding Time
E.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

2 24 3	0 00	+50 08	1-2	8.05 Ma	2-2-2	Light clouds, especially during first half.
0 02 L	1 33 W	+31 58	1	7.60 Ko	2-2-2	Increasing clouds from shortly after start. Thick.

	mc.	S.C.	m.T.W. s	S.T.W. m.
Jul. 5/44	-05.7	-47.5	+4.2	+0.3
MTW stopped - reset.			-05. ^s	0.0 ^m

Date Wednesday 1944 July 5-6 N - No Julian Day

[illegible]

Haze and wisps of cloud

84

Focus 23.37 $\pm$, unchanged. (0.03 longer than tabulated)

iding Time
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					Set on HD 153226 - clouds much less.
2 17	13 E	+52 20	2-1	6.93 Ko	2-2-2 binary: haze and some clouds good
1 02	56 W	+38 53	1	7.51 Ko	2-2-2 scattered clouds with increasing good
2 18	07 W	+36 16	1-2-1	7.33 Ko	2-2-2 haze - improving steadily 01.30 weak
3 45	40 W	+52 46	1-2	7.43 Ko	2-2-2 delayed start because of haze (very thick) - clearing somewhat 02.30 + quite frequent misty clouds during exposure.

[illegible]

Focus 23.34 or .33 (0.03 longer than tabulated)

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
2:15	0 07 E	+10° 30	1-2	7.47 K0 2-2-2	Hazy and light clouds.
3:22	1 12 W	+69° 14	1-2	7.52 K0 2-2-2	Hazy
4:11	1 19 W	+51° 52	1-2	7.12 K0 2-2-2	Light haze
5:16	1 19 W	+50° 47	1	7.35 K0 2-2-2	" "
6:11	1 50 W	+50° 44	1-2	7.15 G5 2-2-2	" "
7:08	1 11 W	+63° 30	1-2	7.10 K5 2-2-2	" "
8:55	12 W	+21° 56	1-2	7.53 M6 2-2-2	Setting 3
				8-6	" 9

Date Sunday July 9-10

Y.

Julian Day

[illegible]

ading Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
2.50	42 W	19 45	0-1-0	7.75 KS	2-2-2	Some heavy wet - became afraid of drips and closed up. mc. se. <u>tw.</u> <u>m. tw.</u> July 10/44 -09.3 -42.2 +0.4 +7.6

Date Monday July 10-11 H-Ma Julian Day.....

[illegible]

	MC	SC	MT	ST
July 12	-10.8	-38.8	+09 ³ .2	+0 ^m .4

Date 18. January 1944 July 12-13 N - No Julian Day

[illegible]

Partly cloudy day. Light breeze from the
NW. Fair.

Focus at 23.43 ±

Considerable wind from NW

Reading Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 16 E	+40 03	0	7.08 Go	2½-2½-2½	seeing variable Spoiled in dew.
0 33 W	+37 18	0-1	7.15 Ko	2½-2½-2½	Strong
0 55 W	+45 11	1-2	6.86 Go	2½-2-2	plate fogged. Too strong
1 59 W	+14 15	1	7.47 Ko	2-2-2	thick clouds 00:00-01:15 - clouds, clouds, Fine and more clouds throughout exposure - clouded out 0225
Focus good.					
M.C. S.C. M.T. S.T.					
July 13 th -22.0 +49.5 +10.5 +14.4					

Date Thursday, July 13-14, 1944 H Va Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	How Angle End
10194	HD 155500	17 06.9	+08 01	I-25	E-10320	at 108	+23.5	20 50	21 44	1
10195	154610	17 01.4	+07 53	"	"	"	23.5	21 47	22 57	2
	{ From test - actual timing } (over)									
10196	162774	17 47.6	+01 20	"	"	"	23.2	23 02	23 46	3
10197	172424	17 06.1	+52 16	"	"	"	23.2	23 58	0 46	W 4
10198	176702	19 40.9	+34 10	"	"	"	23.1	0 51	2 21	1
10199	198404	20 45.0	+05 11	"	"	"	23.2	2 27	3 02	W 2
10200	205688	21 31.9	+29 37	"	"	"	23.2	3 17	3 45	3
							* expose <u>time</u> no. of			

N-W wind

Focus unchanged.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
00	0 13 E	+07 56	0-1	7.39	K0	2-2-2	Seeing very variable; transparency good
01	0 03 W	+09 47	0-1	7.74	K5	2-2-2	
						7 ^s 5 ^s	
02	0 06 W	+01 18	0-1-2	7.33	K5	2-2-	Clouds last 2 min of exposure. Variable seeing
03	0 35 W	+52 30	1-2	6.93	K0	2-2-2	Binary - waited till stars were well inside
04	0 38 E	+52 30	1-2	6.93	K0	2-2-2	Binary - waited till stars were well inside
05	0 45 W	+34 14	0-1	6.12	Ma	2-2-2	Scattered clouds - a few more at 2 exp - clearing
06	1 25 W	+05 17	0-1-2	7.30	K0	2-2-2	} clear where working. clouds in S.E.
07	2 22 W	+29 47	2	7.47	K0	2-2	
							number not recorded in previous

Date Friday 1944 Jul 4-15 N - No Julian Day..

[illegible]

2000 10 00 L
 Focus at 23 4 1 1

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
00	0 07 E	+23 03	0-1	7.60 K ₂	2½-2½-2½ <i>little large around 2100</i> <i>seeing weak</i>
01	0 00	+33 18	0-1	7.45 K ₅	2½ 2½-2½ <i>weak</i>
02	1 05 W	+37 19	1-2	7.56 K ₀	2½-2½-2½ <i>weak</i>
04	1 17 W	+49 41	1-2	7.51 K ₀	2½-2-2 <i>fine</i>
05	1 00 W	+52 20	1-2	6.93 K ₀	2-2-2 * Binary <i>weak for H&K</i> <i>good</i>
06	1 22 W	+16 30	1	8.02 Ma	2-2-2 <i>weak</i>
07	1 35 W	+42 01	1	7.60 K ₂	2-2-2 <i>seeing variable - hazy</i> <i>good</i>
08	3 05 W	+56 10	2+	6.46 F ₀	2-2-2 <i>"</i> <i>strong</i>
					Focus ok

Date Saturday July 15-16/44 No. Julian Day

See Angle
End

Date Sunday July 16-17/44 Y Julian Day 174

[illegible]

14.5° Falso between spec. and dome temp at 100

Focus set 23.41 ±

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
5 ³	01 W	6 06	0	6.72	F0	2-2-2	image 15" diam
3 09	42 W	11 55	0	7.42	K2	2-2-2	" 10" " - 6"
13 1	57 W	7 16	0	7.36	K0	2-2-2	
108	1 23W	52 18	0	6.93	K0	2-2-2	
205	1 19W	20 55	0-1	7.26	K0	2-2-2	
						7.-5	
							M.C. -14.6 S.C. -31.1 MTW +17.2 STW +0.5
							Jul. 17

Date Monday, July 17-18, 1944 14-M₂ Julian Day.

[illegible]

Cloudy at dark, slowly thinning out. 102

From 23.42

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
3 31 -	0 10 E	+52 19	1-0	6.93 KO	2-2-2 Binary Light clouds at start - later.
38	0 10 W	+58 04	0-1	7.19 KO	2-2. Setting 2. <i>superimposed</i> 7 ³ -5 ¹ <i>set: 8</i>
11 2	0 34 W	+43 12	1-2	7.32 K2	2-2-2 clouds clearing. <i>(clouds) fine</i>
14 3	1 56 W	+69 30	2-1	7.52 KO	2-2-2 trouble in finding star. <i>(clouds) more clouds haze</i>

Date Tuesday July 18-19.

Y- Ma

Julian Day.

[illegible]

There are new batteries for flash
on desk in my office.

	Jul. 19-20		<u>thunders torms</u>		M
	M.C	S.C.	M.W	S.W	
July 20 th	-16.5	-21.2	+21.0	+0.25 ^m	

105

Date Thursday, July 20-21, 1944 H-Ma Julian Day.

[illegible]

Cloudy + rain - most of day. Clear early evening.
 Started to open up at 20^h, but clouded up very rapidly.
 Clouds + light rain first half of night.

From 23.48

ding Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
-------------------	-------------	--------	-----------	---------

19

1 50W	+52 19	0	6.93 KO	2-2-2
-------	--------	---	---------	-------

20

1 55W	+56 16	1-0	7.59 Ma	2-2-2
-------	--------	-----	---------	-------

7-5

cloudy in last half
 completely clouded in - closing up.

fine
 like w. d.
 from good

Date Friday 1944 July 21-22 N - Na Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10226	H.D. 159926	17 32.2	+28 14	I-25	E-103a0	Set 008	+21.1	20 51 44	21 59 4	007W
10227	160677	17 36.2	+31 15	"	"	"	+21.0	22 03	22 57 1	00
10228	166411	18 05.4	+30 26	"	"	"	+20.9	23 01	23 57 2	34W
10229	186021	19 36.9	+22 13	"	"	"	+20.8	00 03	00 51	00
10230	193217	20 11.0	+42 24	"	"	"	+20.8	00 57	01 43 4	110W
10231	196610	20 33.4	+11 55	"	"	"	+20.8	01 47	03 17 1	24W
10232	212150	22 17.1	+76 00	"	"	"	+20.7	03 23	04 07 2	32W
Focus took - outside the base					-1 ^s 5 ^s					

Focus set 23 47 ±

Timing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 59 4	0 07 W	+28 12	1-2	7.66 K5	2- 2-2 discovered glimmer half-way out after exposure started. Changed to setting 8. from time
2 31	1 01 W	+31 12	2	7.65 M2	2-2-2 good
3 57	1 34 W	+30 24	2	7.71 K2	2-2-2 fairly strong north wind - haze, strong
4 29	2 38 W	+22 18	2	7.57 K5	2-2-2 good
5 43	1 10 W	+42 34	2	7.52 K2	2-2-2 good
6 17	2 24 W	+18 01	1	7.62 Mc	2-2-2 optical double long
7 02	1 32 W	+76 11	1	6.56 A0	2-2-2 get strong! ok strong
					from good

Date Sept. 12, 1944 by 22-23 No Julian Day [illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						Focus set 23.40±
1:50	0 04W	+14 52	2	8.01 Mb	2-2-2	hazy at sunset good
2:00	0 54W	+43 30	1-2	7.67 K ₀	2-2-2	fine
2:10	1 37W	+23 15	1-2	7.90 K ₅	2-2-2	little wind
2:20	1 06W	+42 56	2	7.74 Ma	2-2-2	good
2:30	1 36W	+13 01	2	7.85 Ma	2-2-2	little wind
2:40	0 40W	+44 13	2+	7.12 K ₀	2-2-2	fine
2:50	0 23E	+58 12	2	6.27 A ₀	2-2-2	get strong! fine
3:00	0 31W	+03 38	2	7.50 K ₂	2-2-2	fine
3:10	0 51E	+65 49	2-3	6.70 G ₅	2-2-2	fine

Focus ok or little to Violet

Date Sunday July 23-24 Y. Julian Day

[illegible]

Date Tuesday, July 24-25, 1944 H-1 Julian Day.

[illegible]

Date Tuesday July 25-26

Y - Ma

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
10251	H D 162734	17 47.4	+15 22	I-25	E103a 0	008	+25.0	20 33	21 23	
10252	167304	18 09.5	41 08	"	"	"	25.0	21 28	22 04	
10253	164428	17 56.0	78 20	"	"	"	25.0	22 11	22 43	
10254	164780	17 57.7	75 10	"	"	"	24.9	22 47	23 21	
10255	{ 174205	18 44.3	70 41	"	"	"	24.9	23 24	00 04	
	{ Focus	outside thru base.								
10256	183611	19 25.3	62 21	"	"	"	24.9	00 10	00 50	
10257	192236	20 42.9	69 23	"	"	"	24.7	1 03	1 30	
10258	213242	22 25.0	63 34	"	"	"	24.7	1 47	2 17	
10259	2904	00 27.3	70 26	"	"	"	24.6	2 19	2 31	
10260	4295	06 40.3	68 47	"	"	"	24.7	2 39	2 51	
10261	6480	01 00.7	+4 22	"	"	"	24.7	3 10	4 14	
Wednesday July 26-27										
Rain, mist & lightning							N			

Sis Watch apparently +0.8

116

Focus 23.40

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
30 E	+15 20	1	7.54 K0	2-2-2	
11 E	41 10	2	7.36 K0	2-2-2	Bad Train Smoke!
46 W	78 20	2-3	7.56 K5	2-2-2	
21 W	75 11	2	7.44 K0	2-2-2	
17 W	70 44	2	7.63 K2	2-2-2	3
				7-5	8
131 W	62 27	2-1	7.64 K5	2-2-2	
46 W	69 32	1-2-3	7.52 K0	2-2-2	
22 E	63 47	3	7.38 K0	2-2-2	
201 E	70 40	3	6.36 A0	2-2-2	
50 E?	69 02	3-2	6.76 F2	2-2-2	
51 E	+4 40	2-3	7.98 F2	2-2-2	clouds in N.E. - scattered

July 26/44 m.c. -20.4 sc. 17.0 m.jw -14.0 s.f. +0.1
net

Date Thursday, July 27-28, 1944 H-Ma Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	How Angle End
10262	HD 161815	17 42.6	+38 56	I-25	E-1030-0	^{set} 008	25.0	20 26	21 04	1
10263	167654	18 11.1	+02 22	"	"	"	25.0	21 08		2
10262F	From test		outside through case							
10263	HD 202951	21 14.1	+10 47	"	"	"	23.8	01 40	2 15	3
10264	202945	21 23.5	7 46	"	"	"	23.7	02 25	3 25	4
10265	No 7229	23 02.0	8 52	"	"	"		3 32	3 44	1
	"	"	"	"	"	"		3 45	4 01	1

Clouds + - lower during day; clearing late
 One water-drip stain on mirror (15). 118

Focus not changed 23.40

Hour Angle E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
0	35 E	+38 56	2-1	7.51	KO	2-2-2 Heavy cloud in W, rising. Light rain for evening 20 ⁵⁰ -58
		+32 22		7.66	MB	2- Clouds 21 ¹² thick. Bro light down telescope
						7/5 ^s setting 9 clouds about 21 ²⁵ fine rain.
						Still thick 23 ⁰⁰ . cloud up. Heavy rain 23 ¹⁰ -23 ⁴⁰
						Focus 23.43 (Reset)
1	5W	10 59	2-1	7.50	1.5	2-2-2 image boiling sky clear-but ground mist.
2	05 W	7 57	2	8.01	Ma	2-2-2
3	47 W	9 06	2	6.1	Ma	4-4 setting 3 30% longer
4	03 W	"	2	"	"	4-4 setting 8 60% longer
July 29/44						m.s. 03.4 S.C. -14.2 m.T.W. -25.2 S.T.N. C.O.O.

photo. time for sun set photo

Date Friday July 28-29 Na-Ma Julian Day

[illegible]

120

cloudy early evening - thunder shower 10.30 -
11.30 - breaking all night - scattered
clouds up to 1.00 A.M.

Focus 23.41

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1	07 W	+5 46	1-2	7.56 1.5	2-2-2 ^{mist.} Delayed starting as dome quite ^{wet}
2	2 27 W	14 30	1-2	7.73 1.4	2-2-2 wet - considerably drier by 1.30 - keeping
3	0 40	+12 00	1-2	6.3 1.0	4-4 30% at low dec. setting 5
4	1 11	"	1-2	" "	4-4 60% Thick mist around dome. setting 9
				7-5	mist going somewhat.
					discarded ^{no good}
					Plate in holder no 3 may be fogged.
					as I left the door open and had the dome
					lights on while it was in the spotter.
					^{plate was fogged on all photos}
					Saturday July 29-30 - cloudy all night
					with occasional short breaks - clearing
					before dawn. No

Date Sunday July 30-31, 1944 HJulian Day 241.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10269	HD 161369	17 40.1	+44 08	I-25	E-103a ²	00 ²	24.6	20 26	21 10	1
10270	167654	18 11.1	+02 22	"	"	"	24.5	21 14	22 04	2
10271	161162	17 38.9	+57 22	"	"	"	24.6	22 08	23 00	3
10272	184102	19 27.8	+79 24	"	"	"	24.4	23 22	23 37	4
10273	65299	07 53.0	-84 21	"	"	"	24.5	23 47	0 39	1
10274	67934	08 05.2	+82 44	"	"	"	24.4	0 12	0 29	2
10275	196787	20 34.5	+81 05	"	"	"	24.4	0 36	1 05	3
10276	20450	20 58.2	+14 20	"	"	"	24.4	1 10	2 04	4
[unclear] - outside of the [unclear]										
10277	16872	22 00.6	-10 45					2 15		7 1
	"								2 21	
10278	1648	22 16	+37 15				24.3	2 31		1 2
	"								2 41	
10279	1713	22 39.3	+41 18	"	"	"	24.4	2 49 35	3 11 00	2
	"							3 12 30	3 14 30	
10280	HD 4321	22 41.5	+54 45	"	"	"	24.3	3 23	3 40	4

Light N.W. wind.

Focus 23.40

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
10 16 E	+44 08	2-1	7.64 K2	2-2-2
0 07 W	+52 23	2	7.66 Mb	2-2-2
1 45 W	+57 21	2-0-1	7.84 K0	2-2-2 About 22 ³⁰ wind shift to SE - seeing terrible. Light clouds
0 29 W	+79 30	2	6.06 A2	2-2-2 Start delayed by heavy clouds; clearing
5 23 W	+74 12*	2-1	6.31 A0	2-2-2 Not too strong. * Sub polar. † Wanted to start
0 31 W	+82 21*	2-0	6.17 A0	2-2-2 Get strong * Sub polar. † Limiting H.A. angle - have fine
0 51 W	+81 14	1-0	6.62 K0	2-2-2 Light clouds.
2 1	+14 30	1-2	7.73 Ma	2-2-2 setting 3
			7 ⁵ /-	
		1	3.8 G0	4-4 } setting 1 - 100 ^S 5 - 120 ^S 9 - 140 ^S } 4 ^S comb + 1/2 of wind, deep fog, strong
0 35 W		1		
		2	7.2 K0	4-4 } setting 2 - 5 min
0 42 W	+57 20	2		setting 7 - 10 min
0 37 W	+61 33		6.2 K0	4-4 } setting 2 - 12 min
0 51 W			11-4	
45 E	+55 20	2	6.54 A0	2-2-2

Date Sunday July 31-31, 1941 4 (cont'd) Julian Day

[illegible]

ading Time
E.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

	0 21 E	+51 17	2-1	6.24	AD	2-2-2	Get strong light haze.
							MC. SC -41.8° -27.1° M.W. S.W. -41.8° +37.1°
							Focus 23.38
33 2	0 07 W	+2 00	1	7.46	KO	2-2-2	few clouds in west & North but breaking
2 5	0 20 E	31 34	1-2	6.47	AD	2-2-2	up.
2 49	0 11 W	22 46	2	7.76	Ma	2-2-2	
3 5	0 43 W	40 37	1-2	7.12	Ma	2-2-2	Made mistake in putting no. on plate, put 10125
4 2 2	1 10 W	48 04	2-3	6.84	AS	2-2-2	
1 02	1 33 W	40 36	2-3	7.79	Ma	2-2-2	
1 2	1 20 W	41 35	2-3	7.43	KO	2-2-2	
5 1	1 45 W	52 09	3	7.27	KO	2-2-2	
2 9 2	2 02 W	55 49	3	6.78	FD	2-2-2	
3		43 16	3	6.2	FS	4-4	setting 5 21° 12 min
4 5	0 04 W	"	"	"	"	4-4	9 50° 16 min setting

Date Monday July 31-1 1944 Ma (cont'd) Julian Day.

[illegible]

ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	56 34	3	6.7 122	4-4 30% setting 3
				7-5 " 8. focused lightly to end
2 21 E	55 18	3	6.62 A2	2-2-2 } Flipper left in drawing fine
1 45 E	1 45	2-3	7.49 120	2-2-2 } sharp exposure grading fine
discard plate in holder 104 as spotting is faulty.				
<u>DISCARDED</u>				

Date Tuesday August 1-2/44 No. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10295	H.D. 161178	17 39.0	+72 31	1-25"	E-103-0	^{sub.} 1008	+27.6	20 28	21 04	1 10E
10296	175569	18 46.0	+10 52	"	"	"	+27.6	21 10	22 34	2 10W
10297	185436	19 34.0	+20 34	"	"	"	+27.6	22 38	23 20	3 10W
10298	189695	19 56.2	+08 17	"	"	"	+27.5	23 32	00 04	4 10W
10299	189942	19 ^{57.0} 59.0	+36 ⁴⁹ 56	"	"	"	+27.3	00 07	00 37	1 10W
10300	194616	20 21.5	+19 31	"	"	"	+27.5	00 42	01 41	2 10W
10301	200661	20 59.7	+02 33	"	"	"	+27.5	01 49	02 41	3 10W
10302	50 And., 7238	23 03.2	+48 45	"	"	"	+27.3	02 48		4 10W
		" "	" "	"	"	"	"		03 17	5 10W
10303	Bra 5289, 7276	23 12.1	+52 40	"	"	"	+27.3	03 17		1 10W
		" "	" "	"	"	"	"		03 37	1 10W
10303F	Focus test - outside the lens						7 ^s -5 ^s			2

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Remarks
					Focus set 23.36±
1 04	1 10 E	+72 29	1-2	6.96 K ₀	2-2-2 hazy Correction in S.T.W. - .5m. <i>fine</i>
2 31	0 10 W	+10 56	1-2	7.70 K ₂	2-2-2 " telescope on 0 Hercules and adjusted <i>good</i>
2 30	0 08 W	+20 41	2-3	7.50 K ₀	2-2-2 " clock - checked on 0 Hercules <i>good</i>
0 15	0 31 W	+08 25	2	7.15 K ₂	2-2-2 haze getting thicker <i>not</i>
0 17	1 03 N	+36 58	2-3	7.39 K ₀	2-2-2 <i>not</i>
1 11	1 45 W	+19 43	2	7.44 K ₀	2-2-2 thick haze <i>wind</i>
2 41	2 04 W	+02 45	2	7.55 K ₀	2-2-2 clearing some haze <i>(magnified 100x?)</i> <i>not</i>
		+49 00	2-3	6.1 F ₀	4-4 sitting 3 8.4 min. <i>not</i>
3 17	0 26 W	"	"	"	4-4 " 8 10.5 min. <i>(padding)</i> <i>not</i>
		+52 57		6.2 F ₃	4-4 " 3 9.0 min. <i>not</i>
3 37	0 45 W	"			4-4 " 8 11.3 " - haze in <i>not</i>
					rapidly. Set on 0 Peg. but sky filled <i>not</i>
					in completely. <i>From good</i>
					M.C. 52 M.W. 52
					-8.5 +5.7 4.1 +.4
					m.c. 50 m.T.W. 5 T.W.
					Aug 3/44 -08.6 -01.8 -07.6 +0.3

Date 25 Sunday August 5-3, 1948 H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10304	ND 163840	17 53.2	+24 01	I-25	E-103-0	set	30.1	20 23	20 57	1:12
10305	170137	18 22.8	+03 41	"	"	"	32.0	21 01	21 41	1:10
10306	185264	19 33.2	+50 01	"	"	"	32.0	21 46	22 02	2:12
10307	192094	20 13.4	+28 51	"	"	"	32.0	22 05	23 07	3:12
10308	197038	19 42.7	+32 38	"	"	"	30.0	22 39	0 21	1:10
10309	193337	21 53.2	+15 27	"	"	"	29.8	0 24	0 58	1:10
10310	197442	20 52.1	+10 05	"	"	"	30.0	1 20	1 30	1:10
	from set									
10311	179611	24 53.3	+50 21	"	"	"	28.1	1 14	1 18	1:10
10312	1778-12 Cf.	21 44.5	+67 14	"	"	"	32.0	2 03	2 29	1:10
10313	2085-11 Cf.	22 38.3	+42 05	"	"	"	32.1	2 33 30	2 42 10	1:10
				"	"	"		2 43 40	2 52 10	1:10
10314	7325-30 Cf.	23 21.0	+22 51	"	"	"	30.0	2 58 10	3 02 10	1:10
				"	"	"		3 02 40	3 07 00	1:10
10315	1927358	01 12.3	+41 53	"	"	"	31.1	3 14	3 57	1:10
10316	1901 4282	00 55.3	+19 24	"	"	"	29.0	3 52	4 17	1:10

NOTE: RETICULATION CN
 PHASES 100-160 USED
 DEVELOPMENT

East wind, 20 mph (84° in dome) light 100
 Haze at low altitude all around.
 Focus at 23.33 (2.03 + 2.30)

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
30 E	+24 00	1	6.92 G0	2-2-2 Variable vel? Light haze
15 E	+03 43	1	7.21 K2	2-2-2 Obs. at certain in phase of 1st
26 E	+50 08	1-2	7.41 G5	2-2-2
28 E	+20 60	1-2	7.32 G0	2-2-2
14 W	+22 45	1	7.25 G2	2-2-2
2 W	+28 10	1-2	7.26 G0	2-2-2
1 W	+10 16	2	7.33 K2	2-2-2 } 7 3
				7 1/2 } " 7
22 W	+50 30	2	6.49 F1	2-2-2
2 W	+20 24	2	6.9 Ma	4-4
	+43 49	1-2	5.6 K0	4-4 } 3
			"	4-4 } " 8
	+23 01	1-2	5.2 G0	4-4 } " 3
				4-4 } " 7
25 E	+47 10	2	7.41 K1	2-2-2
2 W	+12 30	2	6.7 Ma	4-4

Date Thursday August 3-4 1944 Ma Julian Day.

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10317	A 11608 M 11	17 15.0	66 49	F 25	E-163a D	"	+30.8	20 46		
10318	HD 136815	19 41.6	56 47	"	"	"	+31.2	23 59	00 21	
10319	191771	22 11.5	38 12	"	"	"	+31.2	00 45	01 09	
10320	106359-11Cyr	21 02.1	39 15	"	"	"	+31.0	01 14	01 41	
10321	" 6991-11Cyr	22 19.5	38 04	"	"	"	+31.0	02 07	02 31	
10322	" 7674-11Cyr	22 34.7	56 17	"	"	"	+31.0	02 38	03 06	
10323	213 57 Psc	00 41.3	14 56	"	"	"	+31.1	03 08	03 26	
10323-F	Focus			"	"	"	+31.2			

Date.....5th August/44.....No.....

Julian Day

[illegible]

Clear at sunset but cloudy to start. One of the phases was not full as a result of storm during late afternoon. Damage repaired by 10.15 P.M. Delayed to bed because

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						Trans. sat 23.32 ±
1-21	2 00 N	+32 48	1-2	7.25	K ₂	2-2-2 of clouds. Opened up at 11:00 PM - <i>good</i>
2-22	2 02 N	+50 32	2	6.08	F ₀	2-2-2 clouds, thick. Improving <i>fine</i>
						Continuous stream of murky clouds + haze. <i>from good</i>
3-23	1 07 N	+43 59	2	5.6	K ₂	4-4 18 min. All Mag Prog. <i>good</i>
3-24	1 12 W	'	2	"		4-4 14 min.
4-25	2 00 E	+47 09	1-2	7.41	K ₀	2-2-2 Red Vel. Prog. - very busy <i>at work</i>
						Plate dead in at lat. <i>OK</i>

Date Sunday August 6th 1944 Ma

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10329	H.D. 163840	17 53.2	24 01	T-25	E-103a	0.008	24.6	20 32	21 14	1 23W
10329	179094	19 06.1	32 16	"	"	"	24.6	21 21	22 01	2 22E
10330	186998	19 42.5	24 53	"	"	"	24.4	22 15	23 05	4 25W
10331	185264	19 34.4	50 01	"	"	"	24.5	23 12	23 56	1 25W
10332	194937	20 23.2	08 07	"	"	"	24.5	00 02	00 58	2 11E
10333	^{No} { 6673 2 peg " }	21 25.4	23 12	"	"	"	24.5	01 09	01 27	3 44E
									01 47	1 7W
10334	{ 7116 2 peg " }	22 41.7	23 02	"	"	"	24.4	02 10 ^{10?}		1 14E
10334 F	Focus									
10335	{ 7225 5 peg " }	23 20.4	22 51	"	"	"	24.4	02 46	03 01	1 14E
10336	H.D. 11037	01 43.3	3 11	"	"	"	24.4	03 23	03 27	1 14E
10337	20163	03 21.4	42 25	"	"	"	24.3	04 04	04 32	1 14E

Focus 23.41

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
2114	0 03 W	24 00	0-1	6.92	G0	2-2-2	haze. good
2114	0 22 E	52 22	1	6.93	K0	2-2-2	binary fine
2305	0 05 W	25 01	0-1-2	6.88	F0	2-2-2	few scattered clouds in South, East & West. fine
2311	1 05 W	50 08	1	7.14	G5	2-2-2	high clouds coming in from West. good
2319	1 17 W	08 17	1	7.26	K0	2-2-2	" cleared. good
121	0 44 W	23 24	1	6.0	K0	4-4	setting 3 18 min Abs. Mag. -1.4
	1 67 W					4-4	" 8 22 min " good
		23 17	1	5.1	K0	4-4	" 3 7 min 2.1, plate full 2 min fine
	0 26 W					4-4	" 5 8.4 min. re used on other plate fine
						7 ^s -5 ^s	setting T. 2 min 0.15. 100 ft fine
31	223 W	23 66	1-2	5.2	G0	4-4	" 3 7 min (1.4, 2.4 min) 1.4 fine
						4-4	" 8 2.6 min. fine
112	0 3 F	3 26	2-1	6.75	G5	2-2-2	Blew a fuse on dec clamp on 1/2 1 min
1432	54 E	42 20	1-2	6.74	G5	2-2-2	replaced it with a 15amp fuse (was 25 amp) good

Date Monday Aug 7-8/44 No.

Julian Day.

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
10338	H.D. 185622	19 34.9	+16 21	1-25"	E-103a-D	^{sub.} .008	+24.6°C	21 56	23 20
10339	188350	19 47.6	+00 21	"	"	"	+24.5	23 24	23 50
10340	194244	20 17.5	+00 45	"	"	"	+24.6	23 53	02 57
10341	191329	20 09.3	+49 57	"	"	"	+24.6	00 52	02 00
10342	{ No. 6912, β Loe	22 18.6	+51 47	"	"	"	+24.3	02 04	
		" "	" "	"	"	"	"		02 36
10343	{ M 7215, 3 stars	22 52.7	+41 30	"	"	"	+24.3	02 40	
	" " "	" "	" "	"	"	"	"		02 43
10344	{ H. 7352 λ Andromeda	23 32.7	+45 55	"	"	"	+24.2	03 18	
	" " "	" "	" "	"	"	"	"		03 19
10345	{ V. 121 Borealis	00 31.3	+43 56	"	"	"	+24.3	03 46	04 25
	{ from test - identified as same as 7-5-8								

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
							Focus unchanged (23.71 $\pm$)
23 20	0 31 W	+16 27	1	7.76	K5	2-2-2	hazy
23 50	0 47 W	+00 10	1	5.57	A0	2-2-2	"
2 00	1 19 W	+00 54	1	6.11	A0	2-2-2	" get heavy!
2 30	2 43	+50 05	1	6.58	A2	2-2-2	get heavy!
2 50	3 11 W	+51 58	1	5.6	K0	4-4	all. Mag Programme 13.8 min.
3 10	1 4 W	"	1	"	"	4-4	17.2 "
3 40	3 11 W	+49 46	1	5.9	K0	4-4	" " " 13.6 min.
4 10	1 02 W	"	1	"	"	4-4	18.2 "
4 40	3 11 W	+46 12	1-0	5.0	K0	4-4	" " " 8.0 min.
5 10	2 24 W	"	1-0	"	"	4-4	12.0 min.
5 40	2 31 W	+44 14	1	6.6	K5	4-4	" " "
							From K (center up north)
							Aug 6/84 M.C. - 5.1' +1.2' -15.2' +.1"

139

Date Tuesday August 8-9, 1944 H

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10346	HD 170137	18 22.8	+03 41	I-25	E103-0	000	+26.9	20 23	21 23	1 15
10347	184936	19 31.6	+53 57	"	"	"	+26.8	21 38	22 46	1 10
10348	184932	19 31.9	+53 12	"	"	"	+26.9	22 19	0 09	2 10
10349	193694	20 42.4	+28 50	"	"	"	+26.7	0 12	1 02	3 10
10350	193694 - 75 Cyg	21 36.2	+42 49	"	"	"	+26.8	1 05	1 55	4 10
	Star 501 - out of range			base						
10351	066756 - 6 Peg	21 37.3	+19 25	"	"	"		1 25		3 10
	"	"	"	"	"	"			1 40	3 10
10352	70181 40 Peg	22 34.1	+19 20	"	"	"	+26.7	1 50	2 16	3 10
10353	71270 M Peg	22 45.2	+24 24	"	"	"		2 19 30	2 25 30	
	"	"	"	"	"	"		2 25 30	2 31 30	
	"	"	"	"	"	"		2 32 00	2 38 00	
10354	71981 51 Peg	23 51.6	+20 14	"	"	"	+26.6	2 28	2 55	
	"	"	"	"	"	"		2 55	3 15	
10355	245319 Peg	23 47.4	+18 34	"	"	"	+26.6	2 17	2 41	

141

Date Wednesday 9th Ma

Julian Day

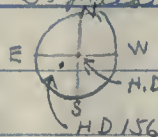
Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10356	N 1742.0 1142	17 11.6	36 55	I-25	1142.0	009	28.0	21 30 ⁰	21 37 ⁰	1142
	"							21 38 ⁰	21 48 ⁰	
	"							21 48 ⁰	22 05 ⁰	0 49W
10357	HD 179094	19 06.1	52 16	"	"	"	27.0	22 12 ¹	23 12 ²	10357
10358	180252	19 59.0	70 55	"	"	"	28.0	23 17 ²	24 57 ²	10358
10359	181730	19 47.2	37 35	"	"	"	28.1	24 03 ³	00 11 ³	10359
10360	18583 11 54	21 04.1 ^{02.4}	38 13	"	"	"	28.0	24 17	24 44	10360
10361	18533 11 51	21 39.1	40 42	"	"	"	27.0	24 55	01 17	10361
10362	1894 2271	22 18.8	10 12	"	"	"	27.0	01 25	02 25	10362
10363	1156 125	00 32 0	34 51	"	"	"	27.9	02 40	02 55	10363
	"							02 56	03 16	
10364	HD 17971	02 53.2	55 41	"	"	"	28.0	03 28	04 08	10364
	18005	20 46.0	11 49	"	"	"				

Few clouds on North-west horizon—quite a lot of haze. (haze all night.)

142

Focus 23.36

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
137	0 49 W	36 55	1	4.6 K5	4-4 Abs. Mag. Prog. setting 1 7.4 min } strong haze
			"	" "	4-4 " 5 9.2 min } " " "
	0 49 W		"	" "	4-4 " 9 17.4 min } " " "
12	0 00 E	52 22	1-2	6.93 K0	2-2-2 Binary H+K vis. - fine haze
31	0 06 E	70 14	2	7.24 G5	2-2-2 (in d) fine
31	1 15 W	37 42	2-3	7.66 M1	2-2-2 Flipped (in d) " "
31	0 32 W	35 30	2-3	6.9 K5	4-4 Abs. mag. 2.2 min } strong
	0 17 W	40 55	2-3	6.7 M1	4-4 " " " " " "
2	1 05 W	11 26	2-3	7.1 P5	4-4-4 60 min. P. must take 1 gal } good
	0 25 E	35 06	3	6.4 G5	K- " " " 3 15 min } comp. 1 gal } strong
					" 8 18 min } w. str. 1 gal } " "
1	1 55 54	3-2	7.50 K0	2-2	7.5-5 9) pressed 2 dec buttons on 1, 11, 16 & 18 } strong
					12 low 116 & 120 - replaced it } " "

ending Time EST.	H _r L	δ	seeing	Ptg. Mag.	Comp.	Remarks!	
						Figures set 23:30 ±	
1 33	1 18 W	+60 48	2	7.0	F ₀	4-4	 Ab. Mag Prog. - Hazy if fine v strong
	0 35 W	+64 25	1-2	5.3	F ₂	4-4	11.4 min. setting 2
	0 51 W	" "	1-2	"	"	4-4	hazy 15.2 min. " 8
		+72 45	1-2	4.3	F ₈	4-4	" 5.4 " { Too " 1
		" "	1-2	"	"	4-4	" 7.2 " { Too strong 5
2 33	1 13 W	" "	1-2	"	"	4-4	" 9.0 " { Too strong 9
	2 14 W	+58 29	1-2	7.7	K ₀	4-4	very hazy → thin wispy clouds v strong
	1 13 N	+60 26	1	6.9	M _a	4-4	very weak
	1 57 W	+44 46	1	6.5	K ₅	4-4	little weak
							M C S C M IV S IV Aug 11/44 -10.2° +19.1° -14.8° +0.13"

145

Date Friday Aug 11/12 Y. Julian Day

ending Time
E.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp Focus unchanged REMARKS 23.30

01 00

41 W

7 41

2-1

5.98 $\frac{A}{B}$ G

2-2-2

fine

01 15

1 01 W

6 21

11-2

6.98 K0

2-2-2

good

02 03

19 W

24 58

1-2

6.56 A0

2-2-2

fine

02 20

39 W

18 01

1-2

6.79 K2

2-2-2

fine

02 54

32 W

79 29

1-2

6.06 A2

3-3

fine

03 26

37 W

68 16

1-2

6.63 F0

3-3

clouded over.

fine

7-5

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
							Focus unchanged 23.30±
1 52	1 16W	+10 57	0	7.70	K ₂	2-2-2	hazy during early part of night, <i>several</i>
0 34	1 40W	+49 10	1-0	7.54	Mb	2-2-2	<i>good</i>
1 15	2 17W	+51 43	1	7.63	Ma	2-2-2	<i>weak</i>
1 15	1 14N	+49 44	1	5.76	A ₀	2-2-2	get strong! <i>fine</i>
2 00	1 33W	+05 34	1-2	6.08	F ₀	2-2-2	fuzzy lines! <i>fine</i>
2 24	0 56E	+06 41	1-2	5.66	A ₀	2-2-2	get strong! <i>fine</i>
3 32	1 35E	+03 26	1	6.78	G ₅	2-2-2	<i>fine</i>
							mc. sc mtw stus
Aug 17/44							117 1276 11.8 +0.2

149

Date Monday Aug 14-15/44 Ma Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10384	HD 176981	18 57.6	8 14	T-25	F-103a-0	'008	30.5	20 32	21 30	2 14
10385	129 127	19 53.4	57 59	"	"	"	30.5	22 14	22 32	2 37E
10386	190658	20 00.7	12 12	"	"	"	30.5	22 40	23 40	2 41
10387	197812	20 40.9	17 44	"	"	"	30.5	23 44	00 50	2 44W
10388	200661	20 59.7	02 33	"	"	"	30.4	00 59	02 01	2 46W
10389	12853	02 22.3	55 05	"	"	"	30.2	02 16	02 46	2 53E
10390	11224	02 29.4	65 19	"	"	"	30.4	02 55	03 10	2 56E
{ Focus Test. Outside through lens										
10391	17152	02 29.9	50 51	"	"	"	30.4	03 23	03 41	3 01E
10392	17958	02 22.1	13 55	"	"	"	30.3	03 56		

Tuesday, Aug 15-16/44 - No

Plate No.	Object	R.A. 1953	Dec. 1900	Inst.	Emulsion	Expt	Temp.	Timing min	Exposure min	Hour Angle End
10392	{ M 5261, 82 Her.	17 340	+48 39	1-25"	E-103-D	008	+30.8°C	20 14	20 41	26V
	{ " " " "	" "	" "	"	"	"	"	20 41	21 21	06W
10393	{ No. 5522, R. 158	18 190	+40 04	"	"	"	+30.9	21 25	21 41	41W
	{ " " " "	" "	" "	"	"	"	"	21 41	22 07	11W
10394	HD 184884	17 314	+10 55	"	"	"	+30.9	22 12	23 23	11W
10395	{ HD 174953	20 213	+02 36	"	"	"	+30.8	23 28	00 22	11W
	{ " " " "	" "	" "	"	"	"	"	"	"	"
10396	{ M 51, 63 Cyg	21 052	+42 15	"	"	"	+30.8	00 39	00 40	11W
	{ " " " "	" "	" "	"	"	"	"	00 40	01 01	11W
10397	{ M 59, 1 Eri	22 50	+11 32	"	"	"	+30.7	01 05	01 26	11W
	{ " " " "	" "	" "	"	"	"	"	01 26	02 05	13N
10398	{ N 1521, 1 Cas	23 204	+1 41	"	"	"	+30.7	02 12	02 30	11N
	{ " " " "	" "	" "	"	"	"	"	02 30	03 00	11N
10399	HD 7925	01 13.8	+75 43	"	"	"	+30.7	03 12	4	11N

	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
							From set $23.28 \pm$
21	0 26 W	+78 38	1-0	6.5	Ko	3-3	hazy - doubled tabulated value $\pm 25\%$ <i>l. weak fine!</i>
21	1 06 W	" "	^{v. unsettled} 1	"	"	3-3	$\frac{1}{4}$ time flipper out + $\frac{3}{4}$ in, in both cases.
21	0 41 W	+47 05	1-2	6.4	Ma	3-3	haze clearing away (tab. value + 75%) $\pm 25\%$ <i>l. weak fine!</i>
21	1 27 W	" "	1-2	"	"	3-3	$\frac{1}{3}$ time flipper out + $\frac{2}{3}$ time in, in both cases. <i>Violent weak fine!</i>
3	1 11 W	+11 04	1	6.59	A ₂	2-2-2	gets strong! - haze at this loc. <i>good</i>
3	1 17 W	+02 45	2	7.35	Ko	2-2-2	some haze <i>l. weak</i>
							M.C S.C M.W S.W Aug 16/44 -14.4° +32.5° -11.2° +0.2°
2	0 55 W	+97 27	2-	6.1	K5	3-3	(tabulated exposure + 80%) $\pm 25\%$ <i>l. weak</i>
2	1 16 W	" "	2-1	"	"	3-3	$\frac{1}{3}$ time flipper out + $\frac{2}{3}$ time in, in both cases. <i>Violent weak fine!</i>
2	0 43 W	+47 46	1-2	6.5	K5	3-3	more haze (tab. val. + 75%) $\pm 25\%$ <i>v. weak</i>
2	1 23 W	" "	1-2	"	"	3-3	$\frac{1}{3}$ time flipper out + $\frac{2}{3}$ time in, in both cases. <i>Violent weak l. weak</i>
2	0 33 W	+61 59	1	6.4	K5	3-3	(calculated in 2.1501) $\pm 25\%$ <i>l. weak</i>
2	0 53 W	" "	1	"	"	3-3	$\frac{1}{3}$ time flipper out + $\frac{2}{3}$ time in, in both cases. <i>l. weak</i>
2	1 15 W	+75 59	^{1.5} 2	6.53	A ₃	2-2-2	4th case to use N finder, found light therein but lost time trying to get at S finder. - did not get it out + 5 AM <i>l. weak</i>

Date Wednesday 1944 Aug. 16-17

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
<i>sky partly cloudy all evening. Lightning in SE</i> <i>Cloudy at last part of night half. The rain H</i>										
Thursday Aug 17-18 1944 Ma										
10400	H.D. 179094	19 06.1	52 16	I-25	F 103a-0	1008	23.4	22 12	22 42	13
10401	{ M. 6034 15 Cygn	19 40.7	37 07	"	"	"	23.3	22 49	23 05	2
	{ "	"	"	"	"	"		23 06	23 26	
10402	H.D. 194526	20 21.0	9 45	"	"	"	23.2	23 32	23 40	14
10403	{ M. 7005	22 22.8	4 12	"	"	"	23.1	00 53	01 12	
	{ 33 Psc	"	"	"	"	"		01 14	01 42	14
10404	{ 723 And	23 13.1	48 25	"	"	"	23.2	01 51	02 11	14
	{ "	"	"	"	"	"		02 12	02 40	
10405	{ 45 X Per	00 29.4	19 39	"	"	"	23.0	02 46	03 00	14
	{ "	"	"	"	"	"		03 01	03 19	14
10406	{ 213 57 Psc	00 41.3	14 56	"	"	"	23.0	03 23	04 03	14

Date Thursday May 17-18 1966 Ma (cont) Julian Day

[illegible]

Ending Time
E.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

04.50

039 E

10 40

2

7.38

K5

2-2-2

brilliant aurora, faintly coloured, ^{focus good} up to Polar

comp.

l. weak.

Aug 18/44

m.c.

-17.1

S.C.

+37.8

m.Tw.

-09.7

S.Tw.

+0.2

Date Friday 1944 Nov. 18-19 N-..... Julian Day

[illegible]

ading Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Focus	23.48 ±	REMARKS	
0 44 E	+ 52 21	0-1	6.93	Ko	2-2-2	seeing 100% fine	
1 04 W	+ 43 30	0-1	7.0	K2	2-2-2	12 ^m flapper out 30 ^m flapper in fine weak	
2 09	0 58 W	+ 33 52	0-1	6.7	Go	2-2-2	16 " " 22 " " (+20% ^{off} fine hazy)
3 05	0 51 W	+ 33 36	0-1	6.7	Ma	2-2-2	14 " " 28 " " fine weak
	+ 00 14	0-1	7.33	K2	2-	settling (wings at 21st) cloud 23 30 ^{to} weak hazy	
				7-5		nothing much after 23 ³⁰ fine hazy	
						Still cloudy at 3 ⁰⁰ D.S.T.	

Date 1-2-1944 Jan 19-20 No. 6 Julian Day 194

Julian Day

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						Focus set 23.43±
2.5	1 57W	+48 16	1-0	6.6	F ₂	2-2-2 10 ^m flipper out, 30 ^m flipper in (+120% for haze) ^{strong}
2.5	1 43 ^E	+83 26	1-2	6.22	A ₂	2-2-2 ^{strong}
2.5	0 38W	+52 19	2	6.4	K ₀	3-3 3 ^m flipper out, 9 ^m flipper in {50% for haze ^{strong}
2.5	1 08W	" "	2-0	"	"	3-3 5 ^m " 25 ^m " 15 ^m " ^{strong}
2.5	1 36W	+52 20	0-1-2	6.93	K ₀	2-2-2 haze) forced to lengthen second part of this frame ^{strong}
2.5	1 05W	+53 01	1-2	6.1	F ₅	3-3 exposure as seeing sudden by dropped to zero ^{strong}
2.5	1 32	"	1-2	"	"	3-3 7 ^m flipper out, 16 ^m flipper in 8 ^m " 18 ^m " filling in nicely ^{strong}
						clouded out at 1 AM - cleared for a few minutes at 3:30 - cloud up at 4 AM - still cloudy, +15 A/B
						M.C. S.C. Aug 21/44 -20.4° +4.0° M.W. S.W. -1.2° +0.4°

Very thick in south - clearing from North around 21^h. 162

F 2340

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
22 18	54 W	52 20	1	6.93 KO	2-2-2	
23 05	1 03 W	50 26	0-1	6.9 GO	2-2-2	$\frac{1}{3} \frac{2}{3}$
23 12	1 46 W	50 26	1	6.8 GO	2-2-2	$\frac{1}{2} \frac{1}{2}$
00 1	51 W	43 42	0-1	5.1 K5	3.3 3.3	Exposures 8 ^m 12 ^m $\frac{1}{4}, \frac{3}{4}$
00 31	39 W	58 31	1?	5.3 → Ma	3-1 3.3	" 8 ^m 12 $\frac{1}{4} \frac{3}{4}$
				4.0? GO	6 ^S	Exp 2 ^m $\frac{1}{3} \frac{2}{3}$ } so much haze exposures
			2		6 ^S	" 2 $\frac{1}{2}$ " } are a guess.
	30 W				6 ^S	" 3 " }
1 11		56 39	2-3	6.1 GO	6	
1 10	40 W	"	2-3	6.1 GO	6.	
2 5		46 07	2-3	6.1 KO	6	
2 31	27 W		3	"	6	
2 11	6 ^m W	44 11	2-3	6.6 K5	3-3	
4 1	1 08 E	64 06	2-3	7.75 K5	2-2-2	
4 3	52 E	40 22	2-3	7.18 KO	2-2-2	
					7-5	

(12 plates to develop)

Date Tuesday August 12 22:23/44 No. Julian Day [illegible]

Timing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
						Focus set 23.38±
1	23 W	+67 23	1	7.3	Ko	2-2-2 Exposure 1/3, 2/3, 25% for Page? fine
2	05 E	+02 45	1-0	7.55	Ko	2-2-2 seeing getting progressively worse! fine
3	049 W	+34 10	1-0	6.2	Ko	3-3 Exposure 14" 18" 1/3, 2/3 weak good.
4	030 W	+38 18	1-0	6.0	Ko	3-3 " 10" 16" 1/3, 2/3 weak fine
5	047 W	+44 47	1-2	6.5	Ks	3-3 " 15" 27" 1/3, 2/3 v weak, weak
6	002 E	+49 09	1-2	4.9	Fo	3-3 " 4" 6" 8" ; 1/3, 2/3 fine, fine, strong
7	058 W	+49 28	1	6.1	Ko	3-3 " 14" 20" ; 1/3, 2/3 v weak weak
8	122 E	+81 14	1	6.92	Ko	2-2-2 little weak
9	054 E	+65 27	1	6.41	Az	2-2-2 Set strong! - laying in perfectly - stars fine 20.25

Date Wednesday 1944 Aug. 23-24 N-Ma Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10437	YP 5757; 2 Lyr.	18 56.2	+32 00	1-25	E 103aC	set	+18.2	21 34	22 04 2	3W
10438	YP 6165; 144	19 59.5	+29 38	"	"	"	+18.5	22 07	23 24 3	15W
10439	YP 6460; 32 Vulp	20 50.3	+27 41	"	"	"	+18.0	23 28	00 35 4	31W
10440	7024 37, Aug	22 24.9	+35 56	"	"	"	+18.0	00 42	01 17 1	24W
10441	7230 ⁶ 52 Per	23 02.2	24 56	"	"	"	+17.9	01 23	01 54 2	1W
10442	F 0013 Lc	"	"	"	"	"	+17.9	"	" 3	"
10443	351 44 A. d	01 04.6	41 33	"	"	"	+17.7	03 22	04 08 5	3'
	"	"	"	"	"	"	"	03 46	04 19 6	"
10443	HP 21335	03 21.4	12 25	"	"	"	+17.8	04 27	04 55 5	14

ending Time
E.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

Focus 23 49[±]

REMARKS

Rain in 1st cor, gradually clearing after sunset

0	58W	+32 06	0-1	6.1	K	3-3	Exposure 18, 22, $\frac{1}{3} - \frac{2}{3}$	25.9 good + fine
1	15W	+29 47	0	6.7	Ko	2-2-2	$\frac{1}{4} - \frac{3}{4}$, 11 sec put in 22 47	broken front - 22 47
1	31W	+27 52	0-1	6.4	Ks	3-3	" 26, 38 $\frac{1}{3} - \frac{2}{3}$	good, fine light scattered clouds - light
0	42W	+4 10	1	5.9	F5	3-3	good clouds on N. horizon.	fine fine
1	41W	+25 14	1	6.0	Ko	3-3	Exp 14 ^m , 20 ^m $\frac{1}{3} - \frac{2}{3}$	25% haze, 1 min clear
						7 ^s -5 ^s ← " 13 ^m -24 ^m $\frac{1}{4} - \frac{3}{4}$	20% haze	clouds coming up
						" 18 ^m -20 ^m $\frac{1}{4} - \frac{3}{4}$		
						" 24 ^m -32 ^m $\frac{1}{4} - \frac{3}{4}$		
		+61 49	1	6.3	Ko	3-3	clouds observed start at 0159 N.W.	haze
1	00W					3-3	only got violet end in and 1 comp. farther	fine
0	25W	+17 36	1-2	6.5	A2	2-2-2	← setting 5 Breaking up slightly at 30.	1.44 fine
						"	but sky cleared	
							comparatively clear by 03 15	

Date Thursday 1944 Aug 24 25 12 - No. Julian Day

[illegible]

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
						Focus 23.51±
0 30	1 32 W	+18 07	1-0	6.5	Ma	3-3-3-3 Exposures 30, 42; $\frac{1}{4}$ and $\frac{3}{4}$ good fine seeing variable
1 45	0 45 W	+18 02	0-1	6.7	Ko	2-2-2 $\frac{1}{4}$ and $\frac{3}{4}$ " fine
2 30	0 56 W	+14 28	0-1	6.7	Ko	2-2-2 $\frac{1}{4}$ and $\frac{3}{4}$ " fine
3 15	1 34 W	+16 22	0-1	6.7	Ko	2-2-2 $\frac{1}{4}$ and $\frac{3}{4}$ " fine
4 00	1 12 W	+00 14	0-1	7.33	K2	2-2-2 limiting H.L. good
5 15	1 17 W	+44 47	1-0	6.5	K5	3-3 Exposures 30", 42"; $\frac{1}{4}$ and $\frac{3}{4}$ good fine
6 15	1 19 W	+47 28	1-0	6.1	Ko	3-3 " 20", 30"; $\frac{1}{3}$ and $\frac{2}{3}$ excellent good
7 15	2 46 W	+45 48	1	5.4	Fo	3-3 " 8", 12", 16"; $\frac{1}{3}$ and $\frac{2}{3}$ fine stars
8 15	1 16 N	+33 10	1	6.2	G5	3-3 " 24", 32"; $\frac{1}{3}$ and $\frac{2}{3}$ fine stars
9 15	3 04 E	+10 41	1-0	7.38	K5	2-2-2
						M.C. S.C. M.W. S.W. Aug 23/41 -34.3° +50.0° +2.0° +0.4° Focus good

Date Friday August 25-26 1944 Ma Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10454	^{45 Draco} YP5590	18 30.9	56 58	I-25	E-103a-D	0.08	+20.0	20 34	20 52	1 15 W
10455	"5752 0-4826	18 55.7	26 06	"	"	"	20.0	20 57	21 4	2 15 W
10456	"6110 " 5096	19 51.2	36 44	"	"	"	20.0	21 52	22 23	3 15 W
	Focus Test - outside through back -									
10457	"6319 44 ^{gamma}	20 27.2	36 36	"	"	"	20.0	22 32	23 18	4 15 W
10458	"6686 71 "	21 25.8	46 06	"	"	"	20.0	23 26	00 14	1 15 W
10459	"6927 Com 5724	22 08.4	34 07	"	"	"	20.0	00 22	01 04	1 15 W
10460	"7245 57 ^p	23 14.5	01 05	"	"	"	19.9	01 13	01 53	3 15 W
10461	"16 ^{BS} 17	00 03.5	36 04	"	"	"	19.9	02 03	03 07	1 15 W
10462	"362 X ^p inc	01 06.1	20 30	"	"	"	19.9	03 08	03 40	1 15 W
10463	HD. 19080	02 39.1	15 29	"	"	"	19.9	03 46	04 42	2 15 E

* One water drip stain on mirror ^{old} ~~100~~ New

170

Shower about one hour before sunset -
cleared up right after.

nding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	Focus 23.46	REMARKS
0 15 W	+57.02		1-2	5.6	F8 3-3	7.6 ^m ; 9.2 ^m	$\frac{1}{2}-\frac{1}{2}$ fine, strong haze 1m between exps.
0 45 W	26 10		1-2	6.3	K0 3-3	20 ^m ; 26 ^m	$\frac{1}{4}-\frac{3}{4}$ good, fine, strong haze flashed, little weak; good Scatter & clouds in NW.
0 30 W	36 54		0-1-2	6.6	45 2-2-2	32 ^m	$\frac{1}{4}-\frac{3}{4}$ Seeing variable fine
					7 ^S -5 ^S	setting	fine, strong haze
0 49 W	36 47		1-2	6.9	M0 2-2-2	46 ^m	$\frac{1}{4}-\frac{3}{4}$ fine, strong haze
0 45 W	46 19		2	6.3	K0 3-3	20 ^m ; 26 ^m	$\frac{1}{4}-\frac{3}{4}$ strong, v. strong haze clearing
0 54 W	34 22		2-3	6.4	K0 3-3	16 ^m ; 22 ^m	$\frac{1}{3}-\frac{2}{3}$ fine, strong haze 3 min extra
0 48 W	08 24		1-2	6.8	M0 2-2-2	42 ^m	$\frac{1}{4}-\frac{3}{4}$ fine, strong haze
0 58 W	36 21		2-3	6.5	F5 3-3	22 ^m ; 36 ^m	$\frac{1}{4}-\frac{3}{4}$ strong, v. strong haze
0 32 W	20 46		2-3	5.9	K0 3-3	12 ^m ; 20 ^m	$\frac{1}{4}-\frac{3}{4}$ " strong, v. strong
0 20 E	15 40		2	7.59	K0 2-2-2		" good

*

Date Saturday August 26-27/94 No Julian Day

[illegible]

[illegible]

Date Thursday August 29 30/44 No Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10474	Y.P. 5288.83 Arc.	17 38.4	+24 37	1-25"	E 103a-D	^{sch} .008	+20.6°C	19 40	20 18	3 W
10475	Y.P. 5493. 105 Arc.	18 15.1	+24 24	"	"	"	20.5	20 21	20 55	2 W
10476	Y.P. 5654, B.S. 1758	18 42.0	+26 33	"	"	"	20.5	20 58	21 32	3 W
10477	Y.P. 5835, B.S. 7280	19 07.4	+26 34	"	"	"	20.5	21 34	22 14	4 W
10478	Y.P. 6242 236 Ap	20 11.6	+27 30	"	"	"	20.4	22 16	22 30	1 W
{ For total of 7 plates base 7°-5°										

Wednesday Aug. 30 31 N

Rain, haze and clouds.

Haze, light clouds and mist at 1.00 P.M.

" mist and heavy clouds coming up at 1.30

" " " " at 2.30 no sign of

clearing, = loc. will be open up.

Date Friday, 10-1-12 N- Julian Day [illegible]

176

ding Time
E.S.T.

Observing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	C 16 E	+ 32 22	1	6.93 K0	2-2-2 Binary
	C 33 W	+ 50 40	2-1	5.8 G5	6 ; 6 Exp. 10 ^m 18 ^m $\frac{1}{4} + \frac{3}{4}$ fine, strong
	L 12 W	+ 49 50	1	7.1 G5	2-2-2 56 $\frac{1}{4} + \frac{3}{4}$ clouds rapidly coming in
				63 F5	clouds 21 54
					clouds closed up 22 00

Julian Day.

Hour Angle
End

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
3	051E	+52 22	1	693	Ko 2-2-2	Focus set 23.42± very hazy! - light scattered clouds - image very faint most of time - really not workable. Endless clouds - closed up 1A.M. - light showers 1:15 - still cloudy 2:30 - cleared up before dawn

179

Date Sunday, Sept 3-4, 1944 H

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10483	HD 179094 K. Lyn	19 06.1	+52 16	I-25	E-103w-0	008	25.5	19 28	20 12	2
10484	YP 5503	18 16.4	+36 01	"	"	"	25.5	20 15	20 32	3
10485	YP 5593; Bm 4708 From tent - outside the lens	18 31.3	+23 31	"	"	"	25.4	20 35	21 15	4
10486	YP 6113; w. eye	19 35.6	+17 47	"	"	"	25.3	21 31	21 27	1

Transit 23.39

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS										
0 20 E	+52 22	0-1	6.93 KO 2-2-2	Binary Light scattered clouds.										
0 49 W	+36 04	1	5.3 KO 3-3; 3-3	Eps 10 ^m + 6 ^m ; $\frac{3}{4} + \frac{1}{4}$ Light clouds.										
1 17 W	+23 36	1-2	6.8 KO 3-3	$\frac{3}{4} + \frac{1}{4}$ Light clouds.										
			8 ^S , 6 ^S											
35 W	+7 54	1	5.0 GO 3-3;	Exposures uncertain due to clouds & very faint stars. Eps 6 ^m + X , $\frac{2}{3} + \frac{1}{3}$ Delayed by thick cloud. Faded in thick before second exposure. at the closed up at midnight - still completely cloudy.										
<table> <tr> <td></td><td>m.c.</td><td>S.C.</td><td>m.T.W. sec.</td><td>S.T.W. m</td></tr> <tr> <td>Spt. 5</td><td>-35.0</td><td>+1 24.5</td><td>-20.1</td><td>00.0</td></tr> </table>						m.c.	S.C.	m.T.W. sec.	S.T.W. m	Spt. 5	-35.0	+1 24.5	-20.1	00.0
	m.c.	S.C.	m.T.W. sec.	S.T.W. m										
Spt. 5	-35.0	+1 24.5	-20.1	00.0										

Date Tues Sept 5-6 /44

Y.

Julian Day

[illegible]

I make sub watches +1.0^m

182

Focus 23.45

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
10	1	13 W - 6 22	1	698 K0	2-2-2-2	Discover! flippers at 750! good
3 5	1	35 W 36 24	1	7.1 K4	2-2-2	$\frac{1}{3}$ $\frac{2}{3}$, cleared slit at end of exp. fine
30	2 ^h	8 ^m W 84 12	1	639 A0	3-3	Sub. Pole. sl. strong
00	2	29 W 82 35	1	617 A0	3-3	" " fine
00	2	01 N 35 24	1	? G4	2-2-2	clouds (near min light?) 9.1' sl. weak
00		37 W 14 16	1	64 G3	3-3	sl. strong
00		58 W 11 27	1	61 F0	3-3	Exp 16-20 fine, sl. strong
00		37 W 3 11	1	7.9? N	2-2-2	fine, sl. strong & nothing in weak
03 05		26 W 23 15	1	65 F5	3-3	$\frac{1}{2}$ sl. strong
00		46 W 20 01	2	61 G9	3-3	Exp 14-18 fine, sl. strong
00		34 N 34 27	2-1	70 Mb	3-3	Ray. sl. weak
						7-5 Sept 6/44 -356 Sept 7/44 -369 mc. 30. -35.5 sc. 31.9 SW. -0.3 STW +0.3 MTW -172 MTW -186
						1944 Sep. 8-9. Partly clearing before dawn. Then filling in again, sl. / c. +1.0 1300 H Cloudy, cleared for about 10 min about 21.30 N

.183

Date... Saturday Sept 9-10

Y

Julian Day

[illegible]

[illegible]

Date Sunday Sept. 10-11, 1944 Julian Day 17

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10503	YP 5224 ^{4.22} 4510	17 46.5	+29 21	E-25	E-103-0	cut 008	+19.2	19 14	19 44	2
10504	YP 5292: 4600	17 38.8	+14 20	"	"	"	+19.3	19 46	20 10	3
10505	YP 5743 1520	18 55.1	+14 56	"	"	"	+19.4	20 14	20 38	4
10506	YP 5856	19 10.7	+20 02	"	"	"	+19.4	20 32	21 12	1
10507	YP 5941 2 V ₄ 4	19 24.5	+24 28	"	"	"	+19.4	21 17	21 48	2
10508	YP 6494 33 V ₄ 4	20 53.8	+21 56	"	"	"	+19.3	22 35	23 15	3
10509	YP 6762: 900	21 39.8	+16 53	"	"	"	+19.3	23 13	23 38	4
10510	L764 K P ₄ 6	21 40.1	+25 11	"	"	"	+19.3	23 33	23 58	1
10511	7211 P ₄ 6	22 58.9	+27 32	"	"	"	+19.3	0 04	0 35	2
10512	7214	22 52.5	+36 33	"	"	"	+19.3	0 15	0 48	3
10513	MB 19121	02 59.7	+01 30	"	"	"	+19.3	2 57	3 27	4
10514	21024	02 13.2	+53 35	"	"	"	+19.3	3 32	3 57	1
10515	21774	03 25.7	+57 35	"	"	"	+19.1	3 53	4 23	2
10516	22027	04 57.1	+51 22	"	"	"	+19.1	4 21	5 01	3

Date Julian Day

[illegible]

Ending Time
E.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

Sept. 14/44 m.e. S.C. ^{MTW}_{2.0} ^{STW.}_{3.0}
 -427 -17.4 11.6 703

189

Date Friday, Sept. 15-16, 1944 M Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10347	YP 7343 70 Py 23	241.112	13	I-25	E-103a-3	108	12.1	0 52	1 21	4
10348	YE 4155 Pa 13	317.120	53	"	"	"	12.1	1 24	1 59	1
10349	Y 215 I 50 40 40 223 13	"	"	"	"	"	12.1	2 21	3 24	2
10350	YD 2114 13 40 40 15	"	"	"	"	"	12.1	3 22	4 16	3
10351	23941 44 41 37 50 15	"	"	"	"	"	12.1	4 17	5 18	4
10352	30139 44 39 50 10 24	"	"	"	"	"	12.1	5 19	6 21	5

Date

July 16-17/49

No. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10508	Y.P. 1304, P	21 40.5	+32 23	1-25"	5-1020	21.6	22.0°C	19 31	20 41	
10509	Y.P. 1305, P	21 42.1	+32 23	"	"	"	22.0	20 44	21 54	
10510	Y.P. 1306, P	21 43.2	+32 23	"	"	"	22.0	21 46	22 56	
10511	Y.P. 1307, P	21 44.3	+32 23	"	"	"	22.0	22 49	23 59	
10512	Y.P. 1308, P	21 45.4	+32 23	"	"	"	22.0	23 52	00 02	
	3-10-13	21 46.5	+32 23	"	"	"	22.0	00 05	01 15	
10513	Y.P. 1309, P	21 47.6	+32 23	"	"	"	22.0	01 18	02 28	

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Group	REMARKS
					Group 1-3 p.	Time out 23.45 ±
1 01 N	+23 31	1-2	6.5	K ₂	3-3, 3-3	1/3, 2/3 very hazy
1 04 N	35 53	2	6.5	K ₂	3-3, 3-3	1/3, 2/3
1 07 W	47 04	1-2	6.1	M ₂	2-2-2	1/3, 2/3
1 10 W	48 21	1-2	6.2	K ₂	3-3, 3-3	1/3, 2/3
1 13 N	43 04	1-2	6.5	K ₂	2-2-2	1/3, 2/3
1 16 N	+71 42	1-2	8.18	M ₂	2-2-2	very hazy ground fog 0330 extremely faint - stars extremely faint but some stars remain

Date July 24, 1904 17-18 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Angle End
10-529	YP 5455	18 01.5	+36 27	E 25	E-183+0	SAT	+22.4	19 20	19 40	
10-530	YP 5456-1034	18 41.4	+30 37	"	"	"	+22.4	19 45	20 12	
10-531	YP 5457	19 20.8	+42 12	"	"	"	+22.4	20 26	20 55	
10-532	YP 5458-1034	19 20.8	+42 12	"	"	"	+22.4	20 55	21 24	
10-533	YP 5459-1034	19 55.0	+37 15	"	"	"	+22.4	21 22	21 58	
10-534	YP 5460-1034	20 32.8	+48 15	"	"	"	+22.4	21 42	22 16	
10-535	YP 5461	20 18.2	+44 12	"	"	"	+22.4	21 55	22 21	
10-536	YP 5462-1034	21 17.5	+49 21	"	"	"	+22.4	22 37	23 09	
10-537	YP 5463	22 32.7	+45 59	"	"	"	+22.4	23 10	23 41	
10-538	YP 5464-1524	22 47.5	+42 47	"	"	"	+22.4	23 45	24 16	
10-539	YP 5465-1034	23 04.1	+45 19	"	"	"	+22.4	24 17	24 48	
10-540	YP 5466	23 17.4	+42 42	"	"	"	+22.4	24 48	25 19	
10-541	YP 5467	23 59.1	+44 27	"	"	"	+22.4	25 19	25 50	
10-542	YP 5468	24 18.8	+46 18	"	"	"	+22.4	25 50	26 21	
10-543	YP 5469	24 44.5	+44 28	"	"	"	+22.4	26 21	26 52	

194

Cast wind; light breeze & clouds
afternoon clearing after sunset.

Focus not changed

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.					REMARKS
21 W	+30 30	1-0	6.7	55	3-3	$\frac{1}{3}, \frac{2}{3}$	Light clouds		fine
22 W	+30 31	1-0	4.7	55	6, 6	$\frac{1}{2}, \frac{1}{2}$	222, 310	50	Light clouds, good view
23 W	+30 30	1	6.3	55	3-3	$\frac{1}{2}, \frac{2}{3}$			li. u/c
24 W	+30 30	1	5.4	50	5, 6	$\frac{1}{2}, \frac{2}{3}$	11, 7	Light clouds, good view	
25 W	+30 30	1-2	7.0	55	3-7	$\frac{1}{2}, \frac{2}{3}$	(Light clouds, good view)		li. u/c
26 W	+30 30	1-2	4.1	55	6, 6, 6	$\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	2, 3, 4, 7	Light clouds, good view	
27 W	+30 30	1-2	6.6	55	3-3	$\frac{1}{2}, \frac{2}{3}$			li. u/c
28 W	+30 30	1-2	5.2	50	6, 6	$\frac{1}{2}, \frac{2}{3}$	5, 9	Light clouds, good view	
29 W	+30 30	2	6.1	50	6, 6	$\frac{1}{2}, \frac{2}{3}$	10, 10	Light clouds, good view	
30 W	+30 30	2-3	6.9	50	6, 6	$\frac{1}{2}, \frac{2}{3}$	10, 18	Light clouds, good view	
31 W	+30 30	2	6.7	50	2-3				li. u/c
32 W	+30 30	2-3	7.5	55	2-2				li. u/c
33 W	+30 30	2-3	7.5	50	2-2				li. u/c
34 W	+30 30	3	7.7	50	2-2				li. u/c
35 W	+30 30	3-4	5.7	50	2-2				li. u/c

Get Moon 4/11/11
m 2 50
-400 -34
MTW 036
ITU 002

195

Date Monday Sept. 18-19/44 No Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Angle Incl
10544	H.D. 179094	19 06.1	+52 16	1-25"	E-10350	.008	+21.7°C	19 37	22 11	
	Even Test				7 ^S -5 ^S					
					23.47					
10545	Y.P. 137,52 Pic	00 27.2	91, 45	1-25"	E-10350	.008	+25.5	00 55	01 41	
10546	Y.P. 363, T	01 06.2	+29 34	"	"	"	+20.5	01 45	02 11	
10547	H.D. 26913	04 10.1	+05 57				20.4	02 22	03 22	
	Even Test				7 ^S -6 ^S					

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS	
					Focus unchanged	
22	2 38 W	+23 23	1-2	6.93	Ko 2-2-2	Delayed start because of haze and light clouds - start getting worse throughout start getting worse throughout
						20 + 6
	21 W	+20 01	2	6.3	G ₅ 3-3,3-3 $1\frac{2}{3}$	exp. - star image faint - some
	21 W	+29 50	2	5.7	Ko 3-3,3-3 $1\frac{2}{3}$	ground fog 10 + 16
	21 W	+03 04	3	7.10	G ₅ 2-2-2	star image faint - some dropping badly - very thick - closed up

Y

Julian Day

ser Angle
End

Focus unchanged.

[illegible]

End on 2nd of March - depending on the day. H. and S. are
in daylight - the two are present - 2nd - 4th - 10th time here.

From 2350

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Remarks
		4 + 8	1-0	6.1	3 - 3 2/3
	33 W	1-0	1	45	6-6-6 1/2 1/2
2 5 1/2	33 W	47	1-0	6.1	3-3 3-3 1/2 1/2 16m 24m
3 30	25 E		1	667	F0 2-2-2
4 0	1m E	72 00	1-0	693	G5 2-2-2
5 0 3/4	30 E	77 58	1-0	668	AS 2-2-2
				5.76	A0
					clouded 5 03
					7-6
					from 0.15
					Grading of fine adjusted - 1/2 1/2 1/2 1/2

Date Friday, 8/15/77 22-23, 1970 H Julian Day[illegible]

Refracted atmospheric clouds - toward early evening
 self. Slight partly cloudy at start of afternoon.
 Looking eyes were very good.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 12 V	+24 18	0	5.6 K0.0-2-3	fine
2 25 E	+59 47	0	7.46 K0.2-2-2	fine
1 1 E	+32 14	0-1	5.76 A0.3-3	fine
0 30 E	+04 02	0	6.76 F/A.2-2-2	fine
1 12 E	+09 30	0	6.67 G.5-2-2	fine

Just above horizon, much of night
 bright yellow light 4:30-4:45
 down to 40°F; light frost on down & hard with
 mercury's fusible forming glorious clear
 double (less than $\frac{1}{2}^{\circ}$ or one degree), in down only.
 Very striking. (Conjunction on Sept 22,
 at greatest W elong on 22nd.)

Date Saturday September 23 1944 No Julian Day

[illegible]

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS				
						Sunset 23.59±			
2	1 25W	+06 34	0-1	6.5	G ₅ 3-3-3	$\frac{1}{3}, \frac{1}{3}$	$\overline{36}, \overline{32}$	seeing variable	good
2	1 19W	+16 56	1	6.5	G ₀ 3-3-3	$\frac{1}{2}, \frac{1}{2}$	28 32	" "	fine fine
2	1 14W	+05 46	1	6.4	F ₅ 3-3-3	$\frac{1}{2}, \frac{1}{2}$	24 28	" "	fine fine
3	1 27W	+22 44	1-2	6.4	K ₀ 3-3-3	$\frac{1}{3}, \frac{1}{3}$	22 22	trouble with spec. fault meter	fine fine
								failed to work	
2	2 41E	+04 43	1	7.3	G ₀ 2-2-2				strong
1	2 27E	+02 00	1	7.37	K ₀ 2-2-2				fine
2	3 06E	+00 30	1	7.61	K ₂ 2-2-2				L. weak
3	3 17W	+22 16	2	6.16	A ₀ 2-2-2			set strong!	fine

Date Sunday, Sept. 24-25, 1944 H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10569	YP 5486	18 14.3	+07 13	I-25	E-103a-D	Set 008	14.3	18 54	19 24	4
10570	{ YP 5745 = 1, 2, 3 From 6-1 - ... to 6-2	18 54.5	+13 29	"	"	"	14.3	19 27	19 47	1
10571	YP 214 = 36, 2, 06	06 49.6	+23 05	"	"	"	12.9	1 55	2 19	2
10572	HD 27386	04 14.2	+09 53	"	"	"	12.9	2 22	3 28	3
10573	HD 32040	04 55.2	+03 28	"	"	"	12.9	3 33	4 23	*
10574	{ 32039 From 6-1 - ... to 6-2	04 55.3	+03 28	"	"	"	13.0	4 24	5 32	4

Monday, Sept. 26-27.

Clouds and rain much of day

Clear at night N

Clouds + light rain at night H.

Thursday, Sept. 28-29

Clouds + rain all day; clouds occasionally
breaking up but not clearing all night. Light
show at night H.

Clear most of day, clouds, but pretty well by sunset,
 Clouds N + NW at last
 Focus set 23.55

206

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
24	1 25 W	+07 14	1	6.6 K0	3-3 $\frac{1}{3}$ $\frac{2}{3}$	Light clouds. fine
47	1 47 W	+13 33	1	5.8 F5	3-3, $\frac{1}{3}$ $\frac{2}{3}$ 8 ³ 6 ²	Increasing clouds. Little st. in red
Cloudy till about 1 pm, then gradually clearing					Focus reset to 23.57	
10	2 26 W	+23 21	1-2	6.6 K0	3-3 $\frac{1}{3}$ $\frac{2}{3}$	fine
22	2 50 E	+10 0	1-2	7.62 K2	2-2-2	Strong
31	3 1 E	+09 34	1-2	6.63 K2	2-2-2	Get strong BP following; fine
36	3 4 W	+03 34	1-2	6.95 A0	2-2-2 8 ³ 6 ²	Get strong FT, preceding fine
					Light clouds, but clearing	
					focus good both settings	

Date Friday, Sept. 29-30, 1944 H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Angle End
10 575	YP 5857	19 10.8	+14 55	I-25	E-103a.0	²⁵ 008	+15.0	18 58	19 25	1
10 576	H.D. 65299	07 53.0	+81 21	"	"	"	15.0	19 34	19 58	2
10 577	H.D. 67934	08 05.2	+82 44	"	"	"	15.1	20 01	20 27	3
10 578	YP 214.19 Vell	20 07.6	+26 31	"	"	"	15.0	20 33	21 05	4
10 579	YP 6413.52 Cyg	20 41.5	+30 21	"	"	"	15.1	21 08	21 28	1
10 580	{ YP 6654 FOCUS TEST	21 19.6	+09 44	"	"	"	15.0	21 32	21 58	2
10 581	YP 6659	21 20.1	+25 45	"	"	"	15.0	22 03	22 27	3
10 582	YP 6887.6 Peg	22 02.4	+24 51	"	"	"	15.0	22 30	22 40	1
10 583	Y 7459.0 Peg	23 47.4	+18 34	"	"	"	15.1	22 46	23 16	1
10 584	H.D. 26913	04 10.1	+05 57	"	"	"	12.8	2 24	3 54	2
10 585	39051	05 44.9	+04 24	"	"	"	12.7	3 58	4 38	3
10 586	42807	06 07.7	+10 40	"	"	"	12.7	4 42	5 35	2

Transit 23.54

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
29 W	+15 01	0-1	6.5 G5 3-3 $\frac{1}{3}$ $\frac{2}{3}$	7 ^m
29 11 W	+84 11	0-1	6.39 A0 2-2-2	Not too strong Sub-pole 7 ^m
29 30 W	+82 35	0-1	6.17 A0 2-2-2	Get strong Sub-pole l. weak
29 13 W	+26 41	1	6.9 K2 3-3 $\frac{1}{3}$ $\frac{2}{3}$	7 ^m
29 02 W	+32 35	1	5.3 K0 6; 6 $\frac{1}{2}$ $\frac{2}{3}$ 7 ^m ; 12 ^m	7 ^m 7 ^m
29 55 W	+09 57	1-2	6.8 F5 3-3 $\frac{1}{2}$ $\frac{1}{2}$	Transit: outside the (2 ^m 8 ⁵ /6 ^m) 7 ^m
29 23 W	+26 20	2	6.0 F0 6; 6 $\frac{1}{2}$ $\frac{1}{2}$ 9 ^m ; 14 ^m	Strong & strong
29 54 W	+25 07	1-2	4.4 F5 6; 6; 6 $\frac{1}{2}$ $\frac{1}{2}$ 2 ^m ; 3 ^m ; 4 ^m	7 ^m strong & strong
29 18 E	+18 52	1-2	6.5 Ma 3-3 $\frac{1}{4}$ $\frac{3}{4}$	7 ^m
Transit 23 57-58			Some very faint ground fog in valleys. Light clouds	
29 00	+16 20	2	7.72 G5 2-2-2	n. p. fainter and light clouds 7 ^m
29 51 E	+04 27	1-2	7.12 K0 2-2-2	Light clouds l. weak
29 11 E	+10 41	1-2	7.24 G5 3-3	Light clouds & light 7 ^m
The intensity of the light is very high but diff. of rays.				

Date Col Sep 30 - Oct 1

Julian Day

[illegible]

FLIPPED IN

	MC	SC	MTW ^s	STW ^m
Oct. 2	-56.3	+14.0	-29.5	+0.0
			reset - adv. 1 ^m	

Date Tuesday, October 3-4, 1944 H..... Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10 592	YP 5362	17 53.9	+45 23	I-25	E-103a-0	set 008	14.0	18 30	19 40	2 10
10 593	YP 5886 = K Cyg	19 14.8	+53 11	"	"	"	14.0	19 44	20 01	3 10
10 594	YP 5922 = 4 Vulp	19 21.1	+19 36	"	"	"	13.9	20 04	20 28	4 10
10 595	YP 6119 = γ Cyg	19 52.6	+34 49	"	"	"	13.9	20 31	20 47	1 10
10 596	YP 6238	20 11.5	+33 26	"	"	"	14.0	20 50	21 24	3 10
10 597	YP 6409 = E Cyg	20 42.2	+33 36	"	"	"		21 28	21 35	3 10
10 598	YP 6399 = 30 Vulp	20 40.5	+24 55	"	"	"	13.9	21 38	22 02	4 10
10 599	YP 6676 =	21 23.9	+31 17	"	"	"	13.8	22 04	22 34	1 10
10 600	YP 7340 = θ Pisc	23 22.9	+05 50	"	"	"	13.9	22 36	22 53	5 10
10 601	HD 29104	04 29.8	+19 41	"	"	"	12.0	1 02	1 48	1 10
	28 505	04 24.6	+10 07							

Focus set 23.55

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
19 40	2 17 W	+45 25	0-1	7.6 M6 $\frac{1}{3}$ $\frac{2}{3}$	3-3		Seeing better towards end. triple unale
20 01	17 W	+53 16	0-1	5.0 K0 $\frac{1}{3}$ $\frac{2}{3}$	6; 6	6 ^m ; 10 ^m	fine strong
20 28	28 W	+19 42	0-1	6.3 K0 $\frac{1}{3}$ $\frac{2}{3}$	3-3		fine
20 51	35 W	+35 00	0-1	5.0 K0 $\frac{1}{3}$ $\frac{2}{3}$	6; 6	6 ^m ; 10 ^m	fine triple, strong
21 24	43 W	+33 35	0-1	6.6 G5 $\frac{1}{3}$ $\frac{2}{3}$	3-3		fine
21 35	44 W		0	3.6 K0 $\frac{1}{3}$ $\frac{2}{3}$	6; 6; 6	80 ^s ; 120 ^s ; 160 ^s	in strong, strong, too strong
22 06	47 W	+25 07	0-1	6.2 K2 $\frac{1}{3}$ $\frac{2}{3}$	6		a few light clouds. fine
22 38	³⁸ 40 W	+32 03	1	6.0 F1 $\frac{1}{2}$ $\frac{1}{2}$	6; 6	12 ^m ; 16 ^m	fine fine
22 51		+06 07	1	5.2 G5 $\frac{1}{3}$ $\frac{2}{3}$	6; 6	10 ^m ; 6 ^m	Very light and thin but not fine
Focus set to 23.58							With very cloud; light clouds scattered over whole
23 10	2 10 E	+19 48	2-3	7.06 F8	2-2-2		light clouds. Star above F8 with 120/127; 122
				7.33 G5			clouds
							clouds in 6:16 and started to appear again
							at 2:14 P.M. but more clouds.

Date Wednesday Oct 4-5

Y

Julian Day

[illegible]

Date Friday Oct 6-7

Y.

Julian Day

[illegible]

Mirror fogged in early evening 216,

Focus 23 46

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2 53	26 W	39 27	2	6.0 K4	3-3 $\frac{1}{4}$ $\frac{3}{4}$	fine
22 28	36 W	56 31	2-3	7.2 M4	3-3 $\frac{1}{4}$ $\frac{3}{4}$	fine
23 3	1 37 W	66 26	2-3	7.5 G6	3-3 $\frac{1}{3}$ $\frac{2}{3}$	(V) could not guide well for fear of getting companion on slit. fine
23 41	1 03 W	61 59	2	6.8 M2	3-3 $\frac{1}{4}$ $\frac{3}{4}$	tr. weak
00 0	1 00 W	57 10	1-2	5.2? CGO	6-6 $\frac{1}{3}$ $\frac{2}{3}$	8-12 very red for CGO. too red, weak
7	47 W.	?	1	3.8? G7	6 6 6 $\frac{1}{4}$ $\frac{3}{4}$	2 4 6 clouds. ended 00 ⁴⁰ strong too ab, tr. at
5-	16 E	69 35	1-2	7.58 KO	2-2-2	9 good
2-	49 E	73 43	1-2	7.76 KO	2-2-2	clouds sharp, very weak
4 25	45 E	54 34	1	7.26 KO	2-2-2	better good
5 E	35 ^m E	53 22	1	7.38 KO	2-2	ng? cloud. very weak
					7-6.	.
						focus center to violet
2	opened 1 ³⁰ . trouble with heater current.					
4 ⁰⁰ 5-	clearing but thickish 5 ⁰⁰ O.S.T					
						Oct 12 th Sid. W hand 0.0 mean time

Date Wed Oct 11-12

Y

Julian Day.

[illegible]

$+25 \cdot 2$ $+28.4$ $+0.2^m$

reset

Oct. 12

ME
- 63.2

Ending Time
E.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp

REMARKS

502

5.56

20

13
19 W

26 38

1-6

7 47 150

2-2-2

looks v faint

L. t.

13
19 W

33 56

1-0

223 Mo

2-2-2

dayly 61

7-6.

6-5-1

Note	For some reason dec. has to be set 3' north.	[For sometime it has had to be set about 2' N.]
	Fixed trouble light -	

Put heat on RA clamp - which would not function at first

Made new glass for flash light.

Prism in guiding eye-piece is loose - tied with bit of cloth.

I put heat on mirror. take off some time

Date 1944 October 12-13, Thursday N Julian Day 244

[illegible]

Focus set 23.58 ±

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1.5	1 20 E	+10 11	0-1	7.32 G5	2-2-2 seeing variable good
2.45	1 34 E	+22 27	1	7.49 K0	2-2-2 good
3.29	0 28 E	+31 55	1-2	8.07 Ma	2-2-2 good
4.4	0 01 E	+01 16	1-2	7.56 K2	2-2-2 good
5.5		+01 09	1-2	6.92 C5	2-2-2 strong
6.4	0 35 W	+22 14	1-2	7.11 K2	2-2-2 good
5.56	0 32 W	+07 39	1	6.42 A0	2-2-2 Not too strong fine
					from UK
					full bar of stars in dome.
					Y-H - photo in as rods of shot in bridge; better can
					formation with a square of light; for
					it only getting up face.
					20

221

Date Friday, October 13-14, 1944 H

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10626	YP 5821	19 03.7	+21 32	I-25	E 103a-0	^{Set} 008	16.2	18 12	18 36	2 41 W
10627	5916	19 20.2	+11 44	"	"	"	16.2	18 39	19 07	3 59 W
10628	6174 = 7 Sge	20 00.7	+19 42	"	"	"	16.3	19 11	19 29	4 38 W
10629	6282	20 18.5	+40 48	"	"	"	16.3	19 32	20 06	1 58 W
10630	6255	20 13.4	+40 03	"	"	"	16.3	20 08	20 32	2 30 W
10631	YP 6283 = 8 Cyg	20 18.6	+39 56	"	"	"	16.3	20 34	20 40	3 22 W
10632	6652	21 14.5	+23 51	"	"	"	16.2	20 44	21 06	4 22 W
10633	6722 = 5 Peg	21 33.1	+18 52	"	"	"	16.2	21 09	21 25	1 16 W
10634	{ 6728	21 34.4	+19 49	"	"	"	16.2	21 27	21 41	2 13 W
	{ From list - outside through glass									
10635	YP 7102	22 38.3	+29 42	"	"	"	16.2	21 54	21 59	3 25 W
10636	HD 28930	04 28.4	+09 12	"	"	" ✓	15.6	0 20	1 10	4 50 E
10637	32482	04 58.4	+21 09	"	"	"	15.6	1 13	1 57	1 44 E
10638	36041	05 23.8	+39 46	"	"	"	15.5	2 00	2 44	2 44 E
10639	37138	05 31.2	+33 30	"	"	"	15.5	2 46	3 26	3 48 E

222.

dome temperature 63°F at opening.

Focus set 23.52

Match reset

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
8 36	0 41 W	+21 39	1	6.5	F2	3-3	$\frac{1}{2}$ $\frac{1}{2}$	Var. N-NW wind; seeing unsteady; transparency good. ^{little to}
9 0	0 59 W	+11 51	1	6.0	G5	3-3; 3-	$\frac{1}{3}$ $\frac{2}{3}$	12 ^m ; 15 ^m ^{at 10:00, 10:10}
9 2	0 38 W	+19 51	1-2	6.3	K0	3-3	$\frac{1}{3}$ $\frac{2}{3}$	
9 4	0 58 W	+41 00	1-2	7.2	G5	3-3	$\frac{1}{2}$ $\frac{1}{2}$	
9 5	1 28 W	+40 13	1-2	6.7	K5	3-3	$\frac{1}{3}$ $\frac{2}{3}$	
10 1	1 32 W	+24 05	1	2.9	F8	6; 6; 6	$\frac{1}{2}$ $\frac{1}{2}$	30 ^s ; 50 ^s ; 90 ^s ^{all 3 are visible}
10 4	0 57 W	+24 05	2-1	6.0	F0	3-3; 3-3	$\frac{1}{2}$ $\frac{1}{2}$	8 ^m ; 14 ^m (Possibly only 1 comp no 1st exp)
10 5	0 3 W	+19 07	2	5.7	F0	6; 6	$\frac{1}{2}$ $\frac{1}{2}$	6 ^m ; 10 ^m ^{nothing to see}
10 11	0 23 W	+20 02	2	6.1	F0	6; 6; 6	$\frac{1}{2}$ $\frac{1}{2}$	8 ^m ; 12 ^m ^{some to see}
						8 ^s /6		^{approx}
10 17	0 31 W	+29 58	2	3.7	G0	6; 6; 6	$\frac{1}{3}$ $\frac{2}{3}$	40 ^s ; 60 ^s ; 90 ^s ^{all 3 are visible}
								Focus not sharp.
10 18	0 28 E	+09 19	0-1	7.20	K0	2-2-2		V. small, at time of NW wind.
5	0 51 E	+21 15	1	7.34	K0	2-2-2		
10 21	0 30 E	+31 49	1-2	7.52	K0	2-2-2		
10 22	0 54 E	+33 35	1-2	7.43	K0	2-2-2		1.5 sec. time using stability in NW wind.

(cont'd)

Date Friday, October 13-14, 1944 H Julian Day[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
3 50	0 52 E	+01 52	1-0	6.20 A5	3-3 Not too strong. Light clouds. <i>last time</i>
4 15	0 37 E	+02 33	1-0	5.58 A0	3-3 Squath, following, fainter GET STRONG <i>work</i> Clouds increasing. (SE sky only region not completely cloudy). Star almost gone by 4 ⁰⁵ <u>thick all over.</u> (Still thick 5 ¹⁵) Everything worked fine; fresh paint on porch floor made it difficult to keep track of cloud conditions.

225

Date Sat Oct 14-15

Y.

Julian Day

[illegible]

Focus 23.65

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
							Strong N. wind.
2 27	1 16 E	30 26	0	739	K0	2-2-2	Sky good
3 26	55 E	22 38	0	754	K2	2-2-2	clear good
4 00	52 E	32 46	0	703	K2	2-2-2	but M. tip
4 57	20 E	10 56	0-1	760	K0	2-2-2	Very poor little work
5 21	11 E	8 28	1	5.90	A5	3-3	get v. strong seeing poor
5 51	6 ^m W	9 18	1	702	K0	2-2-2	Some lamp 34° Fahr. better work
						7-6	focus similar to 23.65

227

Date Sunday October 15-16, 1944 H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10648	YP 5824 = 19 Ael	19 04.1	+05 55	I-25	E-103a-0	set 008	8.6	18 27	18 42	1
10649	5925	19 21.8	+12 49	"	"	"	8.6	18 44	19 07	2
10650	6029 = 10 Vul	19 39.6	+25 32	"	"	"	8.6	19 10	19 32	3
10651	6237 = 22 Vul	20 11.2	+23 12	"	"	"	8.6	19 34	19 54	4
10652	6272	20 16.5	+66 32	"	"	"	8.6	20 00	20 18	1
	Focus test - outside thru base									
10653	6414	20 42.9	+57 13	"	"	"	8.6	20 23	20 34	2
10654	H.D. 38322	04 22.9	+01 58	"	"	"	7.8	0 33	1 3	3
10655	34332	05 11.6	+40 21	"	"	"	7.6	1 16	2 00	4
10656	39045	05 44.9	+32 06	"	"	"	7.6	2 03	3 03	1
10657	41467	06 00.3	+41 52	"	"	"	7.4	3 06	3 42	2
10658	45512	06 22.8	+10 23	"	"	"	7.4	3 50	4 26	3
10659	45633	06 23.5	+11 05	"	"	"	7.5	4 23	4 47	"
10660	56031	07 17.3	+18 17	"	"	"	7.1	4 49	5 25	3
10661	51814	06 52.7	+23 45	"	"	"	7.3	5 25	6 01	2

Focus 23.64

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
19:00	056W	+06 00	1-0	5.7	F2	3-; 6 $\frac{1}{2}$ $\frac{1}{2}$	9 ^m ; 5 ^m	
19:05	03W	+2 56	1	6.2	F5	6; 6 $\frac{1}{2}$ $\frac{1}{2}$	8 ^m ; 14 ^m	
19:10	1W	+25 42	1-2	6.2	G5	6; 6 $\frac{1}{3}$ $\frac{2}{3}$	14 ^m , 8 ^m	[Big fire in house or barn 1/2 mile E+1/1/1/1 Many cars in attendance; too busy to observe!]
19:15	52W	+22 22	1-2	6.2	G5	6, 6 $\frac{1}{3}$ $\frac{2}{3}$	12 ^m ; 7 ^m	
19:20	11	+26 43	1-2	6.7	F2	3-3 $\frac{1}{2}$ $\frac{1}{2}$		
						8 ⁵ /6 ⁵		could little to see
19:25	11W	+57 21	1-2	5.2	F0	6; 6; 6 $\frac{1}{2}$	300 ⁵ ; 200 ⁵ , 120 ⁵	
								Focus set 23.65
19:30	11E	+01 47	0-1	7.2	K0	2-2-2		
19:35	52E	+48 27	0-1-0	7.32	K0	2-2-2		Seeing poor - very little indication of light
19:40	52E	+48 27	0-1	7.76	M0	2-2-2		On lower this flat ground, light in, but if 10654?
19:45	52E	+41 54	1	7.32	K0	2-2-2		
19:50	52E	+13 22	1	7.19	K0	2-2-2		
19:55	7E	+11 05	1	6.71	F0	2-2-2		
20:00	72E	+45 17	1-0	7.32	M0	2-2-2		
20:05	27W	+13 42	1-0	7.32	K0	2-2-2		

Set out 5⁰⁰

3400

Date Monday Oct 16-17

Y

Julian Day

[illegible]

Oct. 16 MC
-67.0

SC
+31.1

$$\begin{array}{r} \text{MTW} \\ + 10.4 \\ \hline \end{array}$$

STW
+ 0.0

230

Focus 23.60

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
00 23	2 ^h 45 E	59 25	3	661 A3	3 - 3	
01 10	2 23 E	73 43	2-3	776 K0	2-2-2	
01 41	1 58 E	69 35	2-3	758 K0	2-2-2	
02 05	2 17 E	68 28	2-3	740 K0	2-2-2	
02 33	1 50 E	75 37	2-3	770 K5	2-2-2	
03 21	1 15 E	59 25	3	807 K0	2-2-2	
03 55	45 E	70 51	3	761 K0	2-2-2	Looks red
04 16	27 E	71 56	3	745 K0	2-2-2	
04 45	50 E	55 26	3	753 K0	2-2-2	
05 15	48 W	66 06	3	759 K0	2-2-2	
06 00	47 W	11 05	3	778 Ma	2-2-2	
					7-6	
						From slightly to red. two strings.
						Comparison string.
						Revised by P.H.K.
						2-2-2

Date Thursday, October 17-18, 1944 H Julian Day

[illegible]

Trans set 23.53.4 (11.22 longer than tabular)

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
12	42.1	+05 19	0-1	6.77 F2	2-2-2 Poor lines.
1.50.3	47.5	+03 33	1	7.20 K0	2-2-2
1.52.4	00.5	+03 35	1-2	6.95 A0	2-2-2 GET STRONG Pr; ft component.
2.10.1	03.5	+33 35	1-0	6.63 A0	2-2-2 GET STRONG Feb; ft "
2.52.1	05.5	+51 31	2	7.18 G5	2-2-2 Wind lifting to S. + image becoming very poor.
3.22.3	07.5	+49 02	2-3	7.22 G5	2-2-2
3.52.1	09.5	+43 20	2	7.52 K0	2-2-2
4.22.1	11.5	+41 05	2-1	7.42 K0	2-2-2
4.52.1	13.5	+37 15	2	7.24 K0	2-2-2
5.22.1	15.5	+33 57	2	7.47 K0	2-2-2
5.52.1	17.5	+31 07	2-3	7.48 K0	2-2-2 a few light bands.
6.22.1	19.5	+22 11	2-3	7.36 K5	2-2-2 light on the cloud and of faint light on the
				9 ⁵ /11	very faint, but in
					moderately bright and in most of night.
					Done temp. +52° at 11.11/11

233

Date *Thurs Oct 19 1920**Y-16*

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
10685	4D 185622	19 349	14 21	I-25	F1030-D	002	+11 2	18 05	19 35
10686	4D 32632	04 377	+43 02			008	+03.7	00 30	01 34
10687	35295	05 18.6	+34 45	"	"	"	+08 5	00 59	02 45
10688	34904	05 15.7	+40 56	"	"	"	+08 4	02 50	03 13
10689	40394	05 53.6	+47 54	"	"	"	+08.3	03 25	03 55
	{ focus out		out through lens						

Oct. 19 MC
-68.5

SC
+34.5

MTW
+22.2

STW
+0.3

234

Focus 23.62

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comb	REMARKS
9:1	34 W	+16 26	0-0	7.76 K5	2-2-2	clouds around horizon; haze.
						Focus set 23.65
10:2	32 E	+43 03	0	6.55 F2	2-2-2	clouds around horizon; haze.
10:5	30 E	+34 50	0-1	7.48 K0	2-2-2	sky very poor - haze and clouds; image very faint 1.50
11:0	24 E	+41 00	0-1	5.65 A3	2-2-2	GET STRONG " "
11:30	24 E	+47 57	1-2	5.68 A0	2-2-2	" " can barely see Ceph. 1.50
					7-5 -8	sky too hazy to continue.

Date Sat Oct 21/22

Y

Julian Day

[illegible]

Focus 23 68

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
5:15	56 E	+ 5 20	0-1	6.59	A0	2-2-2 fine
5:25	55 E	33 56	0-1	6.66	A5	2-2-2 fuzzy lines fine
5:40	57 E	33 15	0	7.30	K0	2-2-2 fine
5:55	34 E	20 32	0	6.11	A0	3-3 fine
6:10	05 E	24 41	0	6.90	F5	2-2-2 lines double fine
6:25	53 E	32 33	0-1	6.74	F0	2-2-2 fine
6:40	30 E	22 44	0-1	5.91	A0	3-3 at strong fine
6:55	21 E	23 02	0-1	7.22	G5	2-2-2 Double 4-10° 12"± fine
7:10	14 W	22 34	1	7.34	K0	2-2-2 strong

Focus not too long

NewBox plates in dome.

Plates are strong, but not too
strong for types of spectrum.

Date Sunday, October 22-23, 1944 14 Julian Day.[illegible]

Date Oct 25-26 Wed.

Y.

Julian Day

[illegible]

Focus 23 62

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
00 29	28 E	40 50	0	7.14 K2	2-2-2	good
01 16	22 E	40 12	0-1	7.18 K0	2-2-2	slightly strong
01 44	02 E	56 56	0-1	6.44 A2	2-2-2	poor lines
02 33	29 E	63 30	0-1	7.49 K0	2-2-2	slightly strong
02 57	34 E	73 46	1	6.56 F2	3-3	too strong
03 27	06 E	71 49	1-0	6.85 G5	2-2-2	good
04 05	54 E	70 54	1-0	6.83 K0	2-2-2	clouds
04 37	42 E	52 01	0-1	6.98 K2	2-2-2	good
05 05	02 E	56 40	0-1	6.90 K0	2-2-2	clouds.
						focus at

Date 1944 October 26-27, Thursday N Julian Day.

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10720	HD 34533	05 13.1	+46 52	1-25	E-103a0	.008	+07.0	1 39	2 05	1 107E
10721	42351	06 05.1	+18 09	"	"	"	+07.0	2 16	3 02	2 101E
10722	47220	06 32.4	+02 48	"	"	"	+06.9	3 08	3 (47)	3 244E
	5184	07 05.8	+05 39	"	"	"				
	focus test outside through base									
10723	HD 52554	06 56.6	+15 28	"	"	"	+06.8	5 07	5 29	4 34W
10724	52976	06 58.2	+12 44	"	"	"	+06.7	5 31	6 03	1 127W

242

Clouds all day and first half. Clear spot
around 0.30. Cloud bank in north-west!!

MC -72.0 SC +39.6 MTW -10.8 STW +0.5

Focus set 23.68 ±

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
2 05	1 07 E	+46 57	0-1	6.76	Fo A 2-2-2	seeing variable, considerable wind 7
3 12	1 01 E	+18 10	0-1	7.44	Ko 2-2-2	clouds starting around though 7
3 17	0 44 E	+02 46	0-1	7.42	Ko 2-2-2	5 star gone 3 47, sky completely clouded over. 7
					7-00 G5	
					7-5 8	
5 29	0 34 W	+15 26	1	6.89	Ko 2-2-2	clouds in NE, E, NW. 7
6 03	1 07 W	+12 43	1-0	7.35	K5 2-2-2	clouds rising rapidly from NE - over star 7 probably no cloud; star gone most of time.
						foc - 0.1
						temp in dome 35°F
						3 holders loaded 8 plates in dome

Date *3 Jan Oct 27-28 1944 H* Julian Day[illegible]

247

Date Tuesday, October 31 - November 1, 1944 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10736	H.D. 29104	04 29.8	+19 41	I-25	E-103a-0	Sat 009	+11.2	23 30	23 52	1 10
10737	34498	05 12.8	+44 19	"	"	"	+11.2	23 56	0 26	2 15
10738	37138	05 31.2	+33 30	"	"	"	+11.2	0 28	0 54	2 15
10739	37329	05 32.7	+26 34	"	"	"	+11.1	0 56	1 24	2 15
10740	37784	05 36.1	+22 37	"	"	"	+11.1	1 26	2 14	2 15
10741	37775	05 49.6	+00 57	"	"	"	+11.1	2 17	2 55	2 15
10742	45357	06 21.8	+00 54	"	"	"	+11.1	2 58	3 38	2 15
10743	47358	06 33.1	+22 07	"	"	"	+11.0	3 40	4 28	2 15
10744	53925	07 01.8	+37 36	"	"	"	+11.0	4 21	5 15	2 15
10745	61835	07 36.3	+13 44	"	"	"	+11.0	4 29	5 10	2 15
10746	65725	07 53.0	+20 05	"	"	"	+10.9	5 12	5 45	2 15
10747	71445	08 57.4	+02 41	"	"	"	+10.9	5 49	6 15	2 15

Julian Day

Hour Angle
End

250

Tried HD 33541 from 22⁵⁸. 00.00 but cloud in north.

Focus 2360

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
01 55	1 15 W	+19 46	0-1	7.06 - F8	2-2-2	haze. fine
01 5	1 14 E	31 55	1-2-3	8.07 Ma	2-2-2	clouds. worse
02 31	1 18 E	29 32	1-2	7.67 Ma	2-2-2	" good
03 42	1 19 W	+3 14	1-0	7.55 KO	2-2-2	thickish, poor worst
04 07	2 5 E	+9 15	0	5.99 A2	2-2-2	" fine
04 12	2 0 E	+23 06	1-1	6.02 A0	2-2-2	get strongy fine
04 13	1 3 E	3 29	1-2	5.80 A5	2-2-2	" Trouble getting plate holder out! strong
05 11	1 2 W	3 32	1-0	5.82 A0	2-2-2	" good
05 17	3 2 W	+13 33	1-2-1	7.25 KO	2-2-2	haze. better
05 18	7 ^m W	10 17	1-2	6.30 A0	2-2-2	" fine
				c-b		fine OK
						fine
						difficult night very variable haze.
						2nd loaded + New Box under

Date 1944 November 2-3 Sunday N Julian Day

Date Mon Nov 6-7

Y.

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
10764	HD 33541	5 05.9	73 09	1-25	E103a-0	008	+1.9	00 48	00 54	1	07 E
10765	HD 40055	5 51.4	75 35	"	"	"	+1.9	01 00	01 44	2	26 E
10766	HD 34653	5 14.0	77 53	"	"	"	+1.8	01 51	2 07	3	25 E
10767	HD 40807	5 56.3	59 24	"	"	"	+1.5	02 12	2 46	4	26 E
10768	HD 45560	6 23.1	79 40	"	"	"	+1.6	02 52	3 12	8	3 E
10769	HD 45724	6 24.0	02 43	"	"	"	+1.7	3 19	3 59	2	30 W
10770	HD 48348	6 37.9	03 08	"	"	"	+1.7	4 03	4 35	3	33 W
10771	HD 56989	7 14.2	02 54	"	"	"	+1.7	4 38	4 58	4	30 W
10772	HD 62264	7 38.0	00 26	"	"	"	+1.8	5 02	5 27	1	30 W
10773	HD 63435	7 43.8	04 34	"	"	"	+1.6	5 27	5 49	2	30 W
10774	HD 70013	8 14.6	04 15	"	"	"	+1.6	5 53	6 13	3	32 W
10775	HD 74591	8 39.7	06 03	"	"	"	+1.6	6 16	6 26	4	32 W
	Focus										

Tuesday Nov 1 - 7-8, 1944 H Cloudy - 11 until
 Friday, Nov 10-11, 1944 - H. Clouds - rain first half. Sudden
 Gust about 11⁰⁰ also at 11³⁰. Wind from 12⁰⁰ ...

Focus 2375-

[illegible]

Date Sat. Nov 11-12

Julian Day

Sour Angle
End

Focus 23.72 $\pm$

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
01 25	51 E	49 04!	0-1	7.22 GS	2-2-2	no thick - not much light last 20 ^m
02 02	34 E	14 31	0	5.73 A2	2-2-2	get strong
		11 53!	0	6.20 A5	2-2-2	clouds.
03 00	7 ^m W	22 15	0-1	7.11 K2	2-2-2	same holder
03 31	11 ^m E	8 29	0-1	5.90 A5	3-3	get strong.
04 00	10 W	15 28!	1	6.89 K0	2-2-2	
04 28	8 ^m E	24 31	1-0	6.60 F0	3-3	
05 05	24 W	19 27	1-0	7.13 K0	2-2-2	
05 41	1 00 W	3 25	1-0	7.08 GS	2-2-2	
06 00	1 14 W	13 25	1-0	7.38 K5	2-2	clouded over.
					P-6	

l weak

fine

l weak
↓

fine

fine

fine

fine

good

v weak

10 plates in dome

But ~~propane~~ & ~~plate box~~ in dome.

Focus almost the same longer

Heating relay gone noticable

257

Date Sunday, November 12-13, 1944 H

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10785	H.D. 38765	05 43.0	+51 29	I-25	E-103a-D	008	+5.0	23 34	23 48	1
10786	38645	05 42.2	+68 26	"	"	"	+5.0	23 54	0 10	2
10787	39429	05 47.5	+66 05	"	"	"	+5.0	0 12	0 32	3
10788	40055	05 51.4	+75 35	"	"	"	+5.0	0 34	1 00	4
10789	40956	05 57.1	+63 27	"	"	"	+5.0	1 02	1 32	1
10790	40827	05 56.2	+59 24	"	"	"	+5.0	1 24	1 52	2
10791	40083	05 51.6	+54 33	"	"	"	+5.1	1 58	2 18	3
10792	40486	05 54.0	+48 52	"	"	"	+5.1	2 20	2 48	4
10793	47156	06 32.1	+10 56	"	"	"	+5.0	2 48	3 20	1
10794	56031	07 10.3	+28 10	"	"	"	+5.0	3 26	3 58	2
10795	55184	07 41.8	+05 29	"	"	"	+5.1	3 58	4 12	3
10796	61630	07 35.1	+13 59	"	"	"	+5.1	4 21	4 55	4
10797	70938	07 51.2	+41 41	"	"	"	+5.1	4 57	5 23	1
10798	71095	08 01.4	+02 27	"	"	"	+5.1	5 25	5 43	2
10799	72908	08 30.3	+13 05	"	"	"	+4.9	5 48	6 21	3
10800	79215	09 07.9	+21 42	"	"	"	+4.9	6 23	6 55	4

2 little haze & scattered clouds, ^{light} breeze bank of clouds in NE at start.

258

Focus set 23.70 ~ 71

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
23 45	2 47 E	+51 33	3	7.18 S5 2-2-2	North wind, fine
0 0	2 25 E	+69 29	3	7.40 K0 2-2-2	slightly, very
0 30	2 09 E	+66 05	3	7.59 K0 2-2-2	fine
1 00	1 43 E	+75 38	3-2	7.70 K5 2-2-2	Very faint companion, slightly, at
1 30	1 28 E	+63 29	3	7.49 K0 2-2-2	slightly, at
2 00	1 12 E	+57 25	3	8.07 K0 2-2-2	slightly, at
2 30	1 02 E	+54 34	3-2	7.26 K0 2-2-2	Increasing N wind, fine
3 00	1 04 E	+48 58	2	7.24 K0 2-2-2	" "
3 30	1 11	+40 51	2-1	7.60 K0 2-2-2	fine
4 00	1 15	+08 16	2-1	7.32 M6 2-2-2	fine
4 30	1 22	+25 37	2-1	7.00 F5 2-2-2	fine
5 00	1 30 W	+13 58	2-1	7.50 K0 2-2-2	fine
5 30	1 42 W	+04 40	2	7.22 K0 2-2-2	fine
6 00	1 53 W	+02 18	2	6.91 K0 2-2-2	fine
6 30	2 01 W	+03 58	2-1	7.45 K0 2-2-2	fine
7 00	2 05 W	+21 34	-	6.01 A0 2-3	Monday - clear but 10 clouded not bright & →

Date Monday Nov 13-14

Y

Julian Day

[illegible]

(WIDEN) Nov. 13

MC
- 67.4

SC
+30.6

MTW
+29.2

STW
-0.1
reset.

260

cleared between 3 & 4

Focus 2369

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	comp	REMARKS
4 07	12 ^m W	22 42	3	5.91 A0	3 - 3	get strong (Strong) fine
4 34	50 W	12 41	3-2	735 KS	2-2-2	huge. good
5 0	41 W	13 00	3-2	750 KO	2-2-2	fine
5 40	1 07 W	3 27	3-2	7.94 Ma	2-2-2	clouds good
6 30	1 10 W	8 15	2-3	748 KO	2-2-2	clouds fine

Focus good.

Only 1 plate in dome.

Put new batteries in flash light

	MC	SC	MTW	STW
Nov. 16	-1 17.2	+28.5	-22.4	-0.1
20	-1 05.6	+26.2	-11.4	+0.1
23	-1 04.8	+24.1	-06.8	+0.3
	reset			
	net	+01.2		

261

Date 2022 11 22 10:00 AM Sunday 11 Julian Day 2457000.5[illegible]

much, but very dry and hot. Clearing 262
 closed 12.30 - 1.

Focus 23 77 ±

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
		+ 22 17	0-1	6.16 Ao	2-2-2. 5.30.21.5 fine
02.46	0 50W	+ 22 37	0-1	7.50 Ho	2-2-2. very fine
04.04	(1 23W)	+ 11 05	0-1	7.78 Ma	2-2-2. sky blazing over 3.45 ; practically gone 3.53
				6.62 Fo	
					closed 5.10

Heat on mirror and shutter opening
 & plateholders loaded 3 6 plate in box

Friday 4³⁰ pm Took 1st off mirror.

263

Date Friday, November 24-25, 1944 H Julian Day.....

[illegible]

Date Sat. Nov 25-26

Y

Julian Day

Four Angle
End

Then intermittently clearing. Tried to open shutters to shake down snow. No good with
motor or hand - about 2 ft down. Chipped fairly well ice from bottom rail, to 1/2 in off
of top. Some turning slightly wind, but fresh etc. By this time (1⁰⁰) it had clouded over
fairly thickly, and shutters were still unoperable and loaded with snow. Above temp +17° F

Date Sat. Dec 2-3

Y.

Julian Day

[illegible]

Focus set 23.85

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
01:00	34 E	10 43	0	7.24 G5	2-2-2	fine
01:05	04 E	10 23	0	7.19 K0	2-2-2	Good
01:30	18 W	00 58	0	7.23 K0	2-2-2	good
01:40	38 W	01 53	0	6.20 A5	2-2-2	fine
01:45	1 26 W	04 29!	0-1	7.12 K0	2-2-2	fine
01:50	54 W	03 41	0-1	7.02 K0	2-2-2	fine
01:55	1 16 W	13 40	0-1	7.45 Aa	2-2-2	good
02:00	02 W	10 03	0-1	6.58 A0	2-2-2	fine
					7-5	OK
						2 plates + 4 plates in dome
						Heat NOT on Mirror
						12° F in Dome.

Date Sunday, December 3-4, 1944 H Julian Day.

Wednesday Dec. 6-7, 1944 M; cloudy and mild, but about
5.30 AM E.D.T., but clear
again.

Frame set 23.80

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg: Mag.	REMARKS
25 E	+43 26	1-2	7.52 KO 1 1/2 2-2	Light haze
54 E	+41 54	2-0	7.32 KO 2-2-2	Light haze
11 E	+41 05	1-2	7.42 KO 2-2-2	Light clouds becoming general.
53 E	+47 56	1	5.68 AO 3-3	Light clouds *
38 E	+49 57	1	5.98 AO 3-3	Not too strong light clouds
34 E	+42 26	1-2	7.28 KO 2-2-2	Light clouds
40 E	+38 27	1-2	6.23 AO 3-3	Not too strong
18 E	+37 57	2	7.47 KO 2-2-2	Light clouds
21 E	+40 10	2-3	7.92 MA 2-2-2	Light clouds
32 N	+23 11	2	7.36 K5 2-2-2	Light clouds
52 N	+39 54	2-3	7.03 F5 2-2-2	Light clouds
			3-4: plate in dome	
			Done about smoothly - Heat in mirror - very, very in dome	
			* At the time of full dark in one of the mirrors in the dome	

Date 1946 Dec. 12-13 Sunday N Julian Day

Hour Angle
End

Cloudy late afternoon and evening. Clear and only about 23 hr.

	MC	SC	MTW	STW
Dec. 4	+05.8	+16.6	-29.6	-0.4
			reset	m
8	+09.2	+13.3	-21.8	-0.1
11	+08.8	+13.5	+08.1	+0.3
	10.8		reset	m

272

Ending Time
E.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

23.2±

Had trouble opening shutter - found about 1-2 hr.

Star - and sky looked very bright at

just inside (1.15 E.S.T.)

2-2-2

Clear again

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

2-2-2

	MC	SC	MTW	STW
Dec. 18	+12.7	+12.0	+04.2	-0.1

It clouded completely before I got to foreground.

Stars early evening, solid bank, followed by snow came over just before dark.

Date Tuesday December 19-20, 1944 H

Julian Day

[illegible]

Date Thursday 1964 Dec. 21-22 N Julian Day

✓ 14

focus 23-90

Ending Time
E.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

2 09 W	61 52	0-1	4.68 B _{2p}	7; 7; 7	Exposure (144 ^s)	7 min	9.5 min	long slit or flipper in 1/2 time come with flipper in!
2 30 W	460 53	0	4.46 A _{2p}	33; 33; 33	4.1	6.2	7.3	flipper in 1/2 time

focus 23-92

0 11 W	11 03	0	6.71 Fo	2-2-2	seeing bad.	trouble with RA reading may have been on slit about 20 min.
--------	-------	---	---------	-------	-------------	--

Cloudy at 1:30

Y+H tightened set screw in RA ring, and rearranged clock to time. in working at

Sat Dec 23 Dome covered with snow -
afraid to open up -

Sunday P.M. opened dome - brushed off little
snow off telescope - sun has pretty well
cleared snow - some left 2³⁰ P.M.

Set watch. M T + 3^s
S T - 0.^m2

277

Date Tuesday 1944 Dec 26-27 14

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10844	K Cass.	00 27.3	+62 23	1-25	E 10320	005	-03.6	19 37 41 45		A 3 W
10845	G Cass	00 31.4	+53 21	'	'	"	-03.6	19 55.5 58 20 01		1 34
Sunday (cont'd)					H					
10846	H.D. 33946	05 08.7	+00 26	"	"	008	-05.1	21 56	23 16	1 100
10847	45394	06 22.0	+20 34	"	"	"	-05.0	23 32	23 46	2 34
10848	48843	06 40.3	+12 47	"	"	"	-05.0	23 49	23 55	1 10
10849	46178	06 26.8	+11 15	"	"	"	-05.1	0 28	1 12	1 10
10850	52913	06 57.9	+09 17	'	'	"	-05.2	1 14	1 12	1 10
10851	51744	07 11.5	+23 09	"	"	"	-05.1	2 17	2 40	2 10
10852	63889	07 46.1	+19 35	"	"	"	-05.2	2 42	3 15	3 10

Set watch from clocks

MTW
~ +09^m

STW
~ +0^m

Clouds at first

278

Focus 23.82

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				long slit
123 W	+62 41	0	4.00 B0	3-3; 3-3; 3-3 exposures 12 2.8 3.5 ^{+m} 11. p. in $\frac{1}{2}$ line
1 34	+53 34	0-1	3.55 B3	6, 6; 6 16 2.4 3.2 ^m
				Focus re-set 23.84
0 10 W	+00 30	0	7.61 K2	2-2-2 Image very diffuse & faint.
0 34 E	+20 33	0	6.11 A0	2-2-2 at ^{at} the time of obs. case from. mirror; had apparently much from seeing
0 13 E	+12 47	0	6.71 F0	2-2-2
0 48 W	+11 44	0	7.15 K0	2-2-2 Light clouds at end.
0 48 W	+00 15	0	5.99 A2	2-2-2 Increasing clouds
				Clouds passing off. But increasing very large; seeing improving.
2 1	+23 27	1	6.02 A0	2-2-2 Got strong Increasing large
3 21	+11 23	1-2	7.13 K0	2-2-2 Image. Strong
				Still & visible stars & planets
				in upper part of field of view
				+5 ^m at end of run. That was
				HEAT ON

279

[illegible]

Clouds in early morning. Clouds still in north.
 Some snow on shutter and dome
 Could not fully open shutter.

Cleaned snow off telescope
 Checked that shutter would open
 Started and set watch, MTW $+10^s$; ST 0^m
 Developed plates

280

Focus unchanged

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
0 43	0 47W	+01 17	0	7.56 K2	2 2 2	hazy clouds
0 44	1 02W	+07 41	0	6.42 A0	2 2-2	hazy around moon; sky misty
0 45	1 06W	+02 52	0	6.34 G5	2-2-2	" " " "
0 46	1 22W	+02 31	0	6.62 F0	2-2-2	star gone 02 40
						sky too misty; uncertain to continue but on mirror.
						MC SC MTW STW Jan. 2 12 +21.7 +10.2 +08.2 -0.2 mt

Date 1945 January 2-3 H-U

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10857	α Per	22 59.8	+14 10	I-25	E-1232-0	005L		(19 08)	19 14	1 44
10858	ϵ Com	00 29.3	+52 23	"	"	"	-7.8	19 11	19 17	2 01
10859	η Aur	04 59.5	+41 06	"	"	"	-7.8	21 00	21 07	3 00
10860	1 Com	04 21.1	+33 42	"	"	"	-7.8	21 30	21 34	4 00
10861	H.D. 41179	16 00.3	+29 31	"	"	008M	-7.8	22 00	23 12	5 12

Very cold with high wind - blowing snow 282

Focus set 23.87

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Conf.	REMARKS
2	2 44 V	+11 57	0	2.6 AD	6, 6, 6	Exposures 50 ^s , 70 ^s , 96 ^s fence 46 ^s fence
2	2 01 V	+62 33	0	4.0 BD	6, 6, 6	3 ^m ; 4 ^m ; 10^m * 3 ^m fence
						* Clouded over during last exposure
2	1 25 E	+41 13	0	3.11 BD	6, 6, 6	70 ^s ; 100 ^s ; 140 ^s fence 75 ^s of cut fence
2	0 53 E	+53 50	0	5.8 BD	3-3	
11	0 20 E	+54 33	2-1	7.67 AD	2-2-2	Clouds 22 ¹⁰ -22 ²⁰ ; then light clouds fence north of tent fence Increasing clouds 22 ³⁰ fence Thick fence Temp +3°F fence
						Jan 3 - Snow on dome -
						Jan 4 - Sun melted snow fairly well - opened shutters 3 P.M.

Date _____

1943

January 4-5

Where

.....

.....2

Julian Dav

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10862	HD 42111	06 03.8	+02 31	1-25	E-0320	0000	-07.9	22 44	23 02	2
10863	45357	06 21.8	+00 54	"	"	"	-08.0	23 05	23 47	3
10864	60357	07 29.0	+03 35	"	"	"	-08.0	23 51	00 09	4
10865	62437	07 30.9	+02 39	"	"	"	-08.0	00 15	00 43	1
10866	65066	07 51.8	+08 54	"	"	"	-08.0	00 49	01 15	2
10867	76494	08 51.4	+04 27	"	"	"	-08.1	01 19	01 53	3
10868	72561	08 28.5	+05 06	"	"	"	-08.2	01 59	02 24	4
10869	{ 74873	08 41.5	+12 28	"	"	"	-08.3	02 33	02 45	5
	focus test									

Broken during early evening; clear but snowing 21.30.

Focus 23 89 ±

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
23 21	0 24 E	+02 33	0	5.58	A ₀ 2-2-2	 fainter than GET STRONG good
23 23	0 03 W	+00 54	0	6.51	A ₀ 2-2-2	" " } little weak
23 24	0 42 E	+03 32	0-1	5.82	A ₀ 2-2-2	" " } little "
23 31	0 17 E	+02 34	0	6.62	F ₀ 2-2-2	seeing variable ~ 1 1/4 fine
23 32	0 00	+03 48	0-1	6.90	G ₅ 2-2-2	fine
23 33	0 20 E	+04 27	0-1	7.14	G ₅ 2-2-2	fine
23 34	0 39 W	+03 01	0-1	7.13	K ₀ 2-2-2	much windier working west. fine
23 41	0 42 W	+12 20	0-1	5.71	A ₀ 2-2-2	(and 1.11) (double lines in eye, etc.) fine
				7-5		done temp +5° 2 min 1/2
						- Some turning W ref and several th...
						- Dec setting refused during sitting time...
						...not up... changing out...
						- 3 holders loaded; 10 plates...

Date Friday, January 5-6, 1945 H Julian Day

[illegible]

Dome Temp: 21⁰⁰ -19°F
 22⁰⁰ +10°F
 23⁰⁰ -1
 0⁰⁰ -4
 1⁰⁰ -6

Temp -20° -22°
 outside

Cloudy with snow late afternoon & early evening. 296

Trans out 23.93 to 23.94

Hour Angle End.	Declination	Seeing	Ptg. Mag.	REMARKS
0 55 E	+51 14	0	7.28 K0 2-2-2	Transparency good; seeing terrible. 150% of take ^{big} up.
0 30 E	+71 51	0	6.85 G5 2-2-2	150% of take ^{good} up.
0 12 E	+70 54	0	6.83 K0 2-2-2	150% " " ^{v. good}
	+73 44	0	6.56 F2 2-2-2	150% " "
1 3 W	+71 41	0	6.52 I70 2-2-2	Get strong, transient light ^{200%} ^{trans with RA clamp}
1 01 W	+62 59	0	6.49 A5 2-2-2	Increasing stage.
1 21 W	+63 17	0	6.54 F8 2-2-2	Light stage
0 54 W	+40 25	0	6.22 F2 3-3	" "
			8 ⁵ /1 ³	

Stayed in north despite cold because of more clouds in south; anti-mirroring down trans.

Considerable trouble with RA clamp.

Some closed very sluggishly; no slipping of gears, motor just sound and stop.

Thurs 11-12- H₂ remained cloudy all night.

		MC	SC.	MTW	STW
Jan. 8	12	+25.5	+10.2	-00.9	-0.1
11	12	+27.5	+11.0	+04.2 ^{reset}	+0.1

Date Tuesday, May 16-17, 1945 H Julian Day 145[illegible]

289

reset

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 27 W	+11 04	0	708 F5 2-2-2	Strong N wind.
34 W	+27 10	0	5.66 A2 3-3	Not too strong.
				Increasing wind; sky still clear, but fine snow starting to drift into valleys. clouds up. Ice crystals settling from above, or possibly produced by wind, as at ground level it is much more.

Date Wed. Jan 17-18 - Y Julian Day

[illegible]

Focus 23.90

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
22 08	54 E	+10 05	0	7.24 K0	2-2-2	0 Exp x 2 weak
22 48	8 ^m W	2 32	0	5.58 A0	2-2-2	0 " x 3 1/2 fine
23 40	22 ^m W	8 29	0	5.90 A5	2-2-2	0 " x 4 fine
00 08	9 ^m W	3 28	0	5.80 A5	2-2-2	0 " x 2 1/2 fine
00 37	137 W	3 31	0	5.82 A0	2-2-2	0 " x 3 fine
01 23	108 W	4 31	0	7.07 G0	2-2-2	0 " + 25% fine
01 52	42 W	5 55	0	6.06 A2	2-2-2	fine
					7-5"	
						Everything worked ok dome stuck once or twice. Seeing v. poor.
						took order 3 boxes plates to dome.
						Jan-18 12 HC +32.7 SC +13.2 MTW_s +12.3 STW_m +0.4

Date Friday January 19-20, 1945 H Julian Day

Julian Day

[illegible]

opened up at 19^h, found mirror completely covered with ice crystals. Left shutter open, put heat
radiant heater on. Took over two hours to clear mirror. 292

lost about 1 - 1 1/2 hours possible during time.

Focus set 23.86

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
23 03	0 31 E	+01 14	0	6.76 F5 2-2-2	Ap 0 +50% too strong
23 05	0 25 E	+02 47	0	7.42 K0 2-2-2	strong
23 08	0 32 W	+37 14	0-1	7.24 K0 2-2-2	strong
0 10	0 47 W	+33 48	0-1	6.57 F0 2-2-2	strong
0 11	0 57 W	+35 33	1	7.32 K0 2-2-2	strong
0 20	1 02 W	+39 05	1	7.45 K0 2-2-2	2 strong
0 55	1 30 W	+35 37	1	7.27 K0 2-2-2	good
0 2	1 12 W	+34 51	1	6.60 K0 3-3	too strong
				8"/15	Focus ok

Date Sat. Jan 21 - 22 ²⁰⁻²¹ Y. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angl End
10895	HD 50204	6 47.1	38 38	I 25	E103a)	008	-45	20 27	21 17	1 151
10896	52100	6 548	32 32	"	"	"				2
Tuesday Jan 23-24 H Cloudy; for two or three brief intervals clouds broke, but none Wednesday Jan 24-25 Hazy, early evening; clear and cold later Thursday Jan 25-26 Clear and cold - RKY suggested not observing H Friday, Jan 26-27 H Clear + very cold all day. Started over to Jan 27 about Saturday Jan 27-28 H Clear all day. Clouds at sunset. Then cloudy. Rain Sunday Jan 30-31 H - Partly cloudy all day. Clearing ^{with} early evening but filling										

Date _____

1945 Feb. 1-2

N-4

Julian Day

Hour Angle
End

ding Time
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Corr. p.	REMARKS
10:11	4 07 W	+43 00	0-1	4.23 B8	2-2-2, 2-2-2	7 ^m , 15 ^m
11:11	4 27 W	+43 42	1	4.76 Aop	2-4, 3-3	4 ^m -8 ^m windy in search
12:11	4 47 W	+59 46	1	4.90 B8	3-3, 3-3	3.5 ^m -7 ^m
13:11	1 12 E	+0 56	0-1	6.51 A0	2-2-2	28' Wrong star? - too faint.
22:11	0 57 E	+17 53	0-1	7.55 Ma	2-2-2	faint cloud - 20 52 - 21 03; 21 15
23:11	0 23 W	+32 30	1-2	6.74 F0	2-2-2	clouds wind rising wrong
24:11	1 13 W	+38 14	1-2	7.21 K0	2-2	clouds wrong
						Observed with 10" f. obj. - good app.

Date 1945 Feb 2-3 Y Friday Julian Day.

[illegible]

209

Date Sat Feb 3-4 Y. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
10905	HD 47979	6 361	53 24	I-25	E _{103a} 0	008	-6.1	7 50	8 40	3
10906	46101	263	55 26	"	"	"	-6.3	8 45	9 45	4
10907	52030	546	70 54	"	"	"	-6.5	9 54	10 44	1
10908	54070	7 024	71 59	"	"	"	-6.3	10 51	11 35	2
10909	62140	374	63 04	"	"	"	-6.3	11 40	00 00	3
10910	65448	537	63 21	"	"	"	-6.4	00 05	00 25	4
10911	71553	8 230	69 39	"	"	"	-6.4	00 30	01 06	7

Sunday, Feb. 4-5 H- Snow all day; cloudy night

Tuesday, Feb. 6-7 H- Cloudy & mild

Feb. 12+13 New upper cable installed by Sops office (150ft)

Friday Feb. 16-17 Clear all day; clouded at dark for an hour or so. It
 " " too windy to be safe to refer; and too windy to get to

Focus 2386

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
8 40	1 22 E	53 24	0	738 KU	2-2-2	fine
9 45	5 ^m E	55 26	0	753 KO	2-2-2	good
10 45	203 W	70 51	0-1	761 KO	2-2-2	good
11 30	06 W	71 57	1	745 KO	2-2-2	strong
12 30	57 W	62 58	1-2	649 AS	2-2-2	strong
13 30	1 06 W	63 16	1-2	654 F8	2-2-2	strong
14 30	17 W	69 35	1-2	744 KO	2-2-2	dec!

	MC	SC	MTW ^s	STW ^m
Feb. 5.	+45.5	+22.7	-02.5	-0.2

Monday Feb. 5. Y found clearing upper, cables broken near drum.

Tried loose ends to drums; greased bottom rail with graphite.

Feb. 7	12 ^h	+47.2	+23.0	-21.0 ^s	-0.2 ^m
	12	+50.8	+25.0	+18.8	0.0
				reset	(stopped)
				reset	stopped
	14	+52.4	+25.8	-00.6 ^s	+0.1 ^m
				reset	stopped

1/2 (1/2 length)

10. 20 clearing, but very high wind.
5. 20 1st cable left end of run.

Date. Sat ^{Feb} 17-18 / 45-

Julian Day

[illegible]

Feb. 5

MC

SC

MTW

STW

 $+53.6$ $+26.2$

402-8

-0.3

302

Focus 23 83

[illegible]

303

Date Julian Day

[illegible]

304

Ending Time
E.S.T.

305

80 63

94

126

157

	4250	measurable	well
4002 wells,	4191	measurable	little work.
	4092	measurable	good
	4005	measurable	fair strong
	4005	quite strong	strong
K strong	4531	gone	strong

Inside dropped to violet means focus should be made shorter

Passing in right hand avoid of dome turning relay

move down to East