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1.

1

3.

your Angle
End

Decl

4. 6.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				M.W. 22.0
				David Dunlap Observatory
				74" logbook
				VOL 4
				Plate No.s 2302 - 3100
				Aug 1937 - May 1938
				S.T. +0.1
				et

Date Monday August 16-17, 1937 H-L Julian Day.....

How: Angle
End

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
11:15	0° 02E	+29 21	3-2	6.61	K0 1, 1, 1	Aug 16. 10 $\Delta\theta S.E.A.$ $\Delta\theta S.W.$ $\Delta\theta M.W.$ $\overset{R}{+}4^{\circ}00^m 48.8^s$ $-.06^s$ $-22^s.0$
11:25	0 36 W	+30 24	2	7.08	F5 1, 1, 1	
11:40	1 12 W	+16 39	2-1	7.38	K0 1, 1, 1	Light clouds.
11:55	1 13 W	+44 12	2	7.59	G0 1, 1, 1	Clouds last 10 minutes.
12:10	1 10 W	+31 23	2-1	7.04	A5 1, 1, 1	
12:25	1.34 W	+30 56	2-1	6.28	F5 1, 1, 1	Clear; filling in rapidly at 1.00
		+61 47	2	6.78	A2 1, 1,	Breaking about 2.15. Very cloudy during exposure filling in solid by 3.30 so closed up.
						Watch H.T.A. S.T.A. S.W. M.T. S.T. Aug 17 14 $-42^s.2$ $-17^s.4$ $-02^s.4$ -39.9^s $+0^m.1$ Reset Reset

Date Tuesday Aug 17-18/37 Y-L Julian Day.

Wed Aug 18 H₂O Temp = 23.00
 Changed to I-25 set tilt 23.25 focus 23.30
 (I-12 focus was: tilt 19.5 focus 26.15)

9

Date Wed Aug 18-19/37 Ad-MR Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
2313	HD 142926	15 52.2	42 51	I-25	Astron II	010	25.5	8 11	9 15	3	—
2314	HD 174177	18 44.2	46 12	"	"	"	25.5	9.24	10 34	4	W 1° 3'
2315	HD 199311	20 51.3	45 51	"	"	"	25.4	10 40	12 26	1	W 1° 04'
2316	8 can HD 5394	00 50.7	60 11	"	Process	"	25.5	12 45	12 51	1	
2316								12 53	12 59	1	
								1 01	1 09	1	E 2° 13'
2317	HD 219634	23 12.2	61 25	"	Astron II	010	25.5	1 26	2 36	2	W 0° 53'

Thurs Aug 19/37 Ad

Changed to I-12 set tilt 19.5 focus 26.15

2317F	Focus			I-12	Astron I	010	22.0			3	E 2° 13'
-------	-------	--	--	------	----------	-----	------	--	--	---	----------

Thursday - Aug 19-20, M, MR

Severe thunder showers in afternoon and early evening
 Clouds covered most of sky during entire night

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
9 5 3	42 45	0	5.6	B ₈ 3,3,3	Convex disc setting button failing - losing
10 34 4	W 1 ^h 18 ^m	1	6.47	A ₀ 3,3,3	Time on changes.
12 26 1	W 1 ^h 04	1	6.66	A ₀ 3,3,3	occasional clouds, thick at end.
2 27 1				no filter 88	ret 1
2 54 1				88	" 5- } clouds.
1 47 1	E 2 ^h 13	1	2.0	B _{0p} 88	" 9
2 36 2	W 0 ^h 53 ^m	1	6.44	B ₈ 3,3,3	cloudy at end thick at 3.00 so closed up
					M.T.A. S.T.A. S.W. M.T. S.T. Aug 19 10 -43.0 -17.8 +07.0 +18.0 +0.8 Watch Reset
12 3	Outside there gone			10/7	
					Aug 20 10 -43.6 -16.0 +12.0 +16.8 +0.9

Date Julian Day

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

Ending Time
E.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

too low)

Date Sunday August 22-23, 1937 17-L Julian Day.

[illegible]

[illegible]

Date Monday Aug 23 ¹⁹³⁷ R-G-L Julian Day 193

[illegible]

Date Tuesday - Aug 24-25 1937 M-L Julian Day

[illegible]

Date Wed Aug 25-26, 1937 Hd-L Julian Day.....

[illegible]

Date Thursday Aug 26-27, 1937 M-MR Julian Day

[illegible]

Date Yrs Aug 27-28, 1937 Ad-MR Julian Day

[illegible]

Date Saturday, August 28-29, 1937 14-MR Julian Day.

Hour Angle
End

H showed E Lyne + M13 with 74" 26
 MR showed Jupiter, Mars, Saturn
 RSN lectured.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	Outside the base			40/20	Slide 26.20, tilt Changed focus to 26.22
1 19 W	+31 39	1	6.69	A0 1, 1, 1	Somewhat hazy. Thick at low altitude
	Outside through base			10/7	
0 54 W	+33 11	1	6.75	K0 1, 1, 1	
1 44 W	+15 24	1-2	7.52	K0 1, 1, 1	23° - 25° a few exceptionally sharp ones.
0 16 E	+58 12	2-3	7.72	B3 1, 1, 1	Taken by mistake for HD 221237
0 45 W	+58 12	3	7.06	A0 1, 1, 1	
1 20 W	+31 49	2-3	7.99	F5 1, 1, 1	
1 06 W	+45 35	2-3	7.44	G5 1, 1, 1	
0 43 W	+32 37	2	6.71	F5 1, 1, 1	
					Watch: M.T.A. S.T.A. S.W. Aug 30 10 - 45.5 - 15.0 + 54.2 M.T. S.T. +10.1 0.0.
					Sunday Thick

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Date ¹⁹³⁷ Monday Aug 30-31 4-12 Julian Day

[illegible]

Date Times Aug 31-Sept 1, 1937 Hd-L Julian Day

[illegible]

				Watch	
				M.T.A.	S.T.A.
				S.W.	
Sept 1	10	-46.0	-15.9	-03.3	+07.1
					+0.0 ^m

Date Madagascar Sept 1-2, 1937 H-L Julian Day

[illegible]

[illegible]

Date Friday Sept 3-4, 1937, M-MR Julian Day.

Hour Angle
End

Ending Time
E.S.T.

[illegible]

Date Saturday, Sept 4-5 1937, M-MR Julian Day.

[illegible]

About 50 visitors.
 Showed Ring Nebula and β Cygni with 74-inch
 Jupiter etc with 4-inch

Ending Time
 E.S.T.

Hour Angle
 End

Declination

Seeing

Ptg. Mag.

REMARKS

Clouded up toward end of visiting hours.
 Refocused camera on Vega between clouds.
 Right Dec setting button refused to work all evening.
 Clouds the rest of the night

Date Sun. Sept 5-6, 1937 4d-L Julian Day

Hour Angle
End

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
9.403	W 1 ^h 26	32 40	0	6.96 F ₅	$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$
4	outside the base				$1\frac{1}{2}/8$ nothing 1
9.3	W 1 ^h 07	29 08	1	6.93 A ₀	$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$ " 6
10.11	W 4 ^m	28 00	1	van 6 F _{8p}	$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$
10.173	E 9 ^m	29 59	1	4.40 K ₀	$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$
11.21	E 16 ^m	14 03	1	7.02 A ₃	$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$
11.41	1 04 W	15 56	1	7.41 F ₂	$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$
--	0 03 E	27 56	1	7.16 G ₅	1-1-1
11.41	0 19 E	32 13	1	6.86 A ₃	1-1-1
				7.34 F ₀	
While setting on this star the cable of the hand control switch caught in observing ladder tearing loose the connections inside. Finished repairs at 5.30					
Longworth					

1937

Date Monday Sept 6-7 Y.B.-L Julian Day

[illegible]

Ending Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
210 3	59 ^m W	14 17	1	6.36	A ₂	1-1-1	Had to fix. RA slow motion. dog loose in wheel & dragging
243 2	34 ^m W	46 56	1-2	6.90	A ₂	1-1-1	
077 1	26 ^m W	46 01	3	7.09	A ₂	1-1-1	
111 0	1 ^h 05 ^m W	44 56	3	6.59	K ₀	1-1-1	
215 2	0 44 W	44 32	2-3	6.60	B ₉	1-1-1	
12 2	1 34 W	44 34	2	6.72	A ₀	1-1-1	
120 1	1 09 W	46 36	2	7.31	A ₂	1-1-1	R.A. setting gave out, set by hand.
377 2	0 55 W	30 15	2	7.29	F ₅	1-1-1	
5 2	1 05 W	43 22	2	7.53	B ₉	1-1-1	
							Watch
							M.T.A. S.T.A. S.W. M.T. S.T.
							^s ^m ^s ^s ^m
							Sept. 7 .A -47.0 +14 44.6 +44.2 -047-00

Date Tuesday Sept 7-8 ¹⁹³⁷ Y.C. - L Julian Day

[illegible]

Ending Time E.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
7 14 4	30 ^m W	32 14	4	6.92	K ₀	1-1-1	]
8 5 2	38 ^m W	31 31	2	7.42	F ₀	1-1-1	
10 50 1	49 ^m W	31 46	2	7.53	K ₀	1-1-1	]
10 55 2	23 ^m W	27 48	2	6.42	K ₅	1-1-1	
11 1 3	19 ^m E	15 21	2	6.69	A ₀	1-1-1	)
11 4 4	0 06 W	44 15	2	7.51	K ₀	1-1-1	
11 47 1	0 49 W	44 12	2	6.12	F ₀	1-1-1	
11 51 2	1 12 W	15 40	2-1	7.04	A ₂	1-1-1	
11 54 3	0 34 W	29 27	2-1	7.52	F ₂	1-1-1	
11 57 4	0 17 E	46 35	2-1	6.75	G ₅	1-1-1	
12 5 5	0 13 E	31 50	2-1	6.90	F ₀	1-1-1	
12 8 6	0 23 W	29 01	2-1	6.77	A ₅	1-1-1	
							Watch
							M.T.A. S.T.A. S.W. M.T. S.T.
							Sept. 8 10 -47.3 +14 ^m 18.2 +40.2 -06.7 ^m -0.1

Date Wednesday Sept 8-9 1937 M-MR Julian Day

Hour	Angle	End
		with
0	23 E	
1	00 W	
	43 W	
	X	
1	20	
0	06 W	
0	08 W	
0	40	

Ending Time
E.S.T.Hour Angle
End

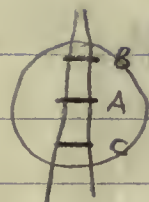
Declination

Seeing

Ptg. Mag.

REMARKS

with filter 38A.



Pl. setting

G.P.

Planned setting

-1.5
-1.0
-0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0

5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0

A
A
A
B
B
B
C
C

shots 25 2
strips 120 2
scale 15 2

7 45

8 44

0 23E +30 56 1-0 6.55 B8 1-1-1

10 25 1

1 00W +13 23 1 7.37 A0 1-1-1

11 42

0 43W +17 42 1 7.78 Ma 1-1-1

1 20 3

1 ^X 20W +33 03 1-2 7.28 A0 1-1-1

2 2 1

0 06W +61 23 1-2 6.27 B9 1-1-1

3 2 1

0 08W +30 09 2-3 7.41 A0 1-1-1

5 2 2

0 40W +29 50 2-3 7.51 A0 1-1-1

M.J.A.

S.T.A.

S.W.

Watch

M.T.

S.T.

Sept. 9 10 -47.1 +15.11.8 +42.8 -07.6 -0.2

Date Thurs Sept 9-10, 1937 HD-MR Julian Day 2454982.5

[illegible]

Cleaning after sunset.

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
9 43 3	W 40 ^m	28 20	3	6.77	B ₉ 1½, 1½, 1½	
9 49 4	E 24 ^m	29 59	3	4.40	K ₀ 2, 2	
11 23 1	W 16 ^m	12 46	3	7.70	A ₅ 1½, 1½, 1½	
0 16 2	W 55 ^m	14 04	2	7.02	A ₃ 1½, 1½, 1½	
1 29 3	W 17 ^m	16 35	2-3	7.40	G ₁₅ 1½, 1½, 1½	comparison are switch acting up.
15 hrs 4	-	-	-	2.68	B ₂ 4	
30 hrs -	-	-	-	-	- 4	
60 hrs -	W 24 ^m	-	-	-	- 4	
2 52 1	W 21 ^m	16 38	3	7.59	G ₅ 1½, 1½, 1½	
4 00 2	W 17 ^m	29 12	3	7.34	F ₀ 1½, 1½, 1½	star is a double. Took  brighter comp.
5 03 3	W 27	30 54	3	7.43	F ₅ 1½, 1½, 1½	
						Watch M.T. S.T. -08.8 -0.2
						Sept 10. 10 -46.9 +15 57.6
- Hydro on and off all evening						About 10 visitors. showed moon, Jupiter with small telescope, demonstrated 74".

Date Sunday Sept. 12-13, 1937 1-1 Julian Day.....

[illegible]

Date Wednesday - Sept 15-16, 1937 M-MR Julian Day.

[illegible]

50

Clouds at sunset and early evening. Partly
clearing later.

Reading Time R.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS					
							M.T.A.	S.T.A.	S.W.	Watch M.T.	S.T.	
9 10 2	0. 25 W	+28 06	1.0	7.5	B5	1-2	Sept. 14 10 -47.8	+25 55.4	+03.3	+43.6	+0.8	intermittent clouds heavy from 8.55 on like 8.55 end of exposure
							15 10 -47.8	+26 55.6	+1 09.2	+45.1	+0.8	
							cleared at 10.15 but clouded over again before could complete the setting.					
							R.A. setting motion <u>very bad</u>					
1 9 3	2 23 W	+28 56	1	7.5	A2	1-1-1	Cleared again at 11.00					
2 50 T	0 31 W	+28 09	1	7.31	A0	1-1-1	clouds at 2 50 closed at 3 40 ; rain.					
							Watch					
							Sept. 16 10 -48.0	+26 53.8	+0 11.5	-28.2	-0.6	
								Adv 1 m.		Advanced 1 m		

Bracket which
holds gear in
place seems
to be fractured

Date Thursday Sept 16-17, 1937 M-MR Julian Day.

[illegible]

[illegible]

53.

1937

Date Friday Sept. 17-18 Y-G - MR.

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
2464	HD 166095	18 04.0	14 16	I-12	astra II	.010	12.0	7 00	7 24	1	16 ^m W
2465	HD 174621	18 46.3	43 37	"	"	"	12.0	7 30	8 20	2	1 ^m W
2466	HD 192715	20 11.2	15 00	"	"	"	12.0	8 25	9 05	3	: ^m W
2467	HD 199986	20 55.5	45 52	"	"	"	12.0	9 "10	9 50	4	2 ^m W
2468	HD 215664	22 41.7	44 01	"	"	"	11.7	9 55	10 15	1	b E
2469	HD 217731	22 57.6	44 02	"	"	"	11.7	10 .17	11 06	2	22 ^m E
2470	HD 224720	23 55.1	46 23	"	"	"	12.0	11.09	12 19	.3	0 ^m E
2471	HD 2436	00 23.0	15 54	"	"	"	11.7	00 24	01 22	4	26 ^m W
2472	HD 10588	01 38.2	31 43	"	"	"	11.7	01 25	02 25	1	14 ^m W
2473	HD 13596	02 07.6	14 48	"	"	"	11.8	02 30	02 46	2	05 ^m W
2474	HD 23139	03 37.7	45 48	"	"	"	11.5	02 50	03 34	3	37 ^m E
(11)											
	Saturday Sept. 18-19, 1937			H-MR	Cloudy						
					no visitors.						

[illegible]

Date Monday Sept 20 - 21 ¹⁹³⁷, Hd - L Julian Day

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
751 1	W 1 ^h 12	51 19	2	7.32	π_2 1, 1, 1	Sept. 20 10 M.C. S.C. S.W. <i>watch</i> -48.0 -09.8 -05.3 H.T. S.T. Adv. 27 ^m Rest Rest.
835 2	E 38 ^m	46 00	3	6.66	A ₀ 1, 1, 1	
947 3	W 30 ^m	44 46	4	7.57	G ₅ 1, 1, 1	Clouds. Ball middle 9.00
4				7.40	G ₅ 1,	Clouds from 11 ³⁵ - 11 ⁵⁵ partially clearing filled in solid at 12 ⁰⁵ . closed at 1.30 quite solid at 2.00
						Sept. 21 10 -48.0 -10.5 -02.2 -21.2 +0.1

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Date ¹⁹³⁷ Tues. Sept 21-22

Y-G - L

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
2478	HD 187 237 Focus	19 43.9	27 36	I-12	astron II	010	14.0	8.00	8 46	1
2479		20 42.0	46 00	"	"	"	14.0	8.49	9 13	2
2480	HD 197139	20 36.6	43 05	"	"	"	14.0	9.16	9 36	3
2481	HD 199986	20 55.5	45 52	"	"	"	13.9	9.39	10 09	4
2482	HD 209813	22 01.0	46 45	"	"	"	13.9	10.12	10 42	1
2483	HD 210405	22 05.1	44 21	"	"	"	13.6	10.45	11 09	2
2484	HD 210387	22 05.0	44 22	"	"	"	13.6	11.11	11 35	3
2485	HD 1375	00 12.8	12 13	"	"	"	13.6	11.39	12 09	4
2486	HD 2436	00 25.0	15 54	"	"	"	13.5	12 13	12 43	1
2487	HD 8909	01 22.7	30 02	"	"	"	13.8	12 46	01 20	2
2488	HD 10363	01 36.1	43 08	"	"	"	13.5	01 23	02 00	3
2489	HD 17316	02 41.7	43 13	"	"	"	13.7	02 03	03 13	4
2490	HD 21062	03 18.8	28 18	"	"	"	13.5	03 16	03 54	1
2491	HD 26546	04 06.8	17 02	"	"	"	13.6	03 57	04 27	2
(15) 2492	HD 21349	04 13.9	31 47	"	"	"	13.7	04 30	05 20	3

Ending Time I.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
8 46 1	44 ^m W	27 43	2-3 ⁺	7.53	G5	1-1-1	
						8-6	Focus lost with focus as used before.
8 53 2	14 ^m W	46 07	5	6.63	A0	1-1-1	] Taken by Mistake for 197139.
9 14 3	42 ^m W	43 14	5	7.15	K0	1-1-1	
10 29 4	51 ^m W	46 02	5	7.09	A2	1-1-1	
10 42 1	24 ^m W	46 57	6	7.52	K0	1-1-1	] S.E. star
11 02 7	47 W	44 32	6	6.60	B9	1-1-1	
11 15 3	108 W ^X	"	6	6.72	A0	1-1-1	
12 04 4	0 21 E	12 25	5	7.41	G5	1-1-1	
1 11 1	0 03 W	16 06	5-6	7.53	K ₂	1-1-1	
2 2 2	0 20 E	30 14	5-6	7.29	F5	1-1-1	
3 11 1	0 07 W	43 20	5-3	7.03	A0	1-1-1	Seeing changing rapidly
4 7 7	0 14 W	43 22	3	7.53	B ₄	1-1-1	
5 2 2	0 18 W	24 25	3	6.99	A0	1-1-1	
6 7 7	0 04 W	17 07	3	7.08	G5	1-1-1	
7 5 5	0 41 W	31 49	3	7.53	K5	1-1-1	

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Date Wed Sept 22-23/37 Ad - MR. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
2493	HD 174504	18 45.7	45 09	I-12	Guthrie II	010	17.0	6.57	7.37	1	W 38 4
2494	175865	18 52.3	43 49	"	"	"	17.7	7.40	7.48	2	W 39 4
2495	177829	19 01.2	43 43	"	"	"	17.5	7.46	8.30	3	W 41 16
2496	199511	20 52.6	43 02	"	"	"	17.1	8.34	9.18	4	W 42 4
2497	200102	20 56.3	44 36	"	"	"	17.2	9.20	10.30	1	W 44 4
2498	208394	21 50.9	47 44	"	"	"	17.0	10.34	11.34	2	W 46 20
2499	222900	23 39.6	45 49	"	"	"	16.9	11.37	12.37	3	W 48 2
2500	2453	00 23.2	31 53	"	"	"	17.0	12 40	01 10	4	W 50 33 3
2501	3369	00 31.5	33 10	"	"	"	17.0	{ 01 14 01 18	01 16 01 22	1	W 50 31 3
2502	3627	00 34.0	30 19	"	"	"	17.2	{ 01 29 01 33	01 31 01 37	2	W 50 37 3 W 50 44 3 W 50 50 3
2503	8126	01 15.6	28 13	"	"	"	17.0	01 42	02 02	3	W 50 33 2
2504	17007	02 38.6	29 03	"	"	"	17.2	02 05	03 25	4	W 50 33 2
2505	22418	03 31.3	30 48	"	"	"	16.8	03 29	04 19	1	W 50 35 2
2506	27579	04 16.1	13 21	"	"	"	17.1	04 25	05 30	2	W 50 13 2
F	FOCUS	-	-	"	"	"	16.9	-	-		OUTSIDE

(14)

Changed Focus from 26.23 to 26.28.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
7.37 1	W 3 8 ^m	45 11	1	7.12 F ₀ 1, 1, 1
7.43 2	W 3 7 ^m	43 51	1	var 4 M ₆ 3
8.03 3	W 1 16	43 47	0	6.76 B ₉ 1, 1, 1
9.04 4	W 12 ^m	43 12	2	6.74 B ₈ 1, 2
10.01 1	W 1 21	44 45	1	7.57 G ₅ 1, 1, 1
11.02 2	W 1 30	47 55	3	7.41 A ₂ 1, 1, 1
12.37 3	W 0 44 ^m	46 02	3	7.48 A ₀ 1, 1, 1
0.00 4	W 0 33 ^m	32 06	3	6.71 A _{0p} 1, 1, 1
0.00 5	W 0 31	33 22	3	4.27 B ₃ 3
0.00 6	W 0 37	30 31	3	4.56 K ₂ 3
0.00 7	W 0 44			
0.00 8	W 0 50			
0.02 3	W 0 33	28 24	3	6.60 K ₀ 1, 1, 1
0.03 25	W 0 33	29 10	3	(7.34) F ₀ 1, 1, 1
0.04 1	W 0 35	30 56	3	7.43 F ₅ 1, 1, 1
0.05 30	W 1 01	13 26	3	7.48 A ₅ 1, 1, 1
-	OUTSIDE THROUGH BASE	-	-	10/6
Focus = 26.28 Tilt = 19.59 Sept 23 10 -47.8 -12.9 +04.8 -22.6 +0.1				

Watch

M.W. S.W.
-21.0 -0.1

Water dripping out of cell.

setting 3
" 6
" 3
" 6

setting 5

setting 9

61

Date Thursday, Sept. 23-24/37 H-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Exposure End
2507	HD 154494	17 00.7	+12 53	I-12	Astra II	set 010	+21.4	18 50	18 55	1	
	"							18 56	19 01		
2508	H.D. 163590	17 51.8	+32 28	"	"	"	+21.7	19 06	19 11	2	
- 2509	183794	19 26.1	-02 19	"	"	"	+21.6	19 49	20 17	3	
2510	171654	18 31.0	+46 08	"	"	"	+21.7	20 23	20 48	4	
2511	172187	18 33.7	+43 08	"	"	"	+21.6	20 51	21 01		
2512	187981	19 47.8	+30 53	"	"	"	+21.5	21 15	21 55		
2513	199102	20 49.8	+29 07	"	"	"	+21.4	22 00	23 15		
	from T			"	"	"	+21.4	21 58			
- 2514	HD 206155	21 35.1	+08 44	"	"	"	+21.3	23 19	0 09	4	
2515	221671	23 29.0	+59 29	"	"	"	+21.3	00 14	01 24		
2516	1606	00 15.2	+30 23	"	"	"	+21.2	01 29	01 54	2	
2517	8941	01 23.0	+16 34	"	"	"	+20.8	01 57	02 57	3	
2518	16933	02 37.8	+46 26	"	"	"	+21.0	03 01	04 04		
2519	32356	04 57.5	+61 02	"	"	"	+20.8	04 11	04 46	1	
(14) 2520	33618	05 06.4	+59 16	"	"	"	+21.2	04 50	05 30	2	

Partially opened mirror 2° from the horizontal; found it heavily fogged. Part as before.
 Mirror clear of fog at sunset, and pretty bright; still under a misty sky.

62

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
	+12 49	4	4.99	A3	-3-	
1 50 W						Effective exposure 3 ^m
1 45 W	+32 27	4	7.20	A0	1-1-1	Mirror fogging becoming worse.
0 42 W	-02 15	5-6	7.2	B8	1-1-1	
2 08 W	+46 11	5	6.66	A0	1-1-1	
2 27 W	+43 10	4	6.40	A5	1-1-1	
1 58 W	+31 00	3	7.08	A5	1-1-1	
2 16 W	+29 15	3-2-1	7.54	B9	1-1-1	Cool NE wind. Setting 8
Outside the house					10/6	Light 19.6; slide 26.28 Setting 2
2 24 W	+08 53	1-2	68.75	A0	1-1-1	
1 46 W	+59 41	2	7.41	A0	1-1-1	
1 30 W	+30 35	1-0	5.77	B8	1-1-1	
1 25 W	+16 46	1	7.17	F5	1-1-1	
1 17 W	+46 34	2	7.40	F5	1-1-1	
0 22 E	+61 03	2	7.27	K0	1-1-1	
0 14 W	+59 18	2	7.36	K0	1-1-1	blower on

Date Friday, Sept 24-25, 1937 M-MR Julian Day.

Hour	Angle	End
1	-1 W	-
2	+3 W	-
3	30 W	-
4	40 W	-
5	50 E	+
6	02 W	-
7	12 W	-
8	04 E	+
9	OUTSIDE	

Date Saturday, September 25-26 M-MR Julian Day

②

Reading Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
05 15	0 59 E	+14 24	0	5.98	A ₀ 1-1-1	setting 5
05 21	OUTSIDE	THROUGH	BASE	-	- 12-8	FOCUS = 26.28 TILT = 19.59 setting 9
05 21 2	01 52 E	+16 39	0	3.71	A ₂ 3	FOR Hd setting 2
05 23	01 45 E	-	-	-	3	setting 4
05 32	01 41 E	-	-	-	3	setting 6
05 37	01 36 E	-	-	-	3	setting 8
see previous page.						
Power off from 2 to 4 20						
Clean about 4						
R.A. setting motion broken again						
Burnished Mirror Sunday P.M. (it might do with a little more)						
Made a temporary fix on R.A. motion. Could not find						
Suntale spring so used an elastic for time being.						

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1937

Date Sunday Sept 26-27

Y-G-T_h

Julian Day

[illegible]

Clearing at Sunset

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Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
7 59	51 ^m W	27° 48	1	6.56	F8p	1-1-1	] Image 15-20" in diam. very diffuse
9 04	23 ^m W	46 17	1	6.32	A2	1-1-1	
9 38	36 ^m W	29 55	1	5.57	A0	1-1-1	] Temp relay failed ^{up to 16°} prob this photo N.B.
10 0	1 06 W	"	1	5.57	A0	1-1-1	
1 19	48 ^m W	32 29	1	6.03	A2	1-1-1	New Batteries put on. reset at 16.5° at 10 45°
12 1	0 00	44 30	1	5.94	B8	1-1-1	
24 1	0 46 W	"	1	"	"	1-1-1	
2	1 04 E	14 58	1	6.17	K5	1-1-1	
3.1	0 52 W	31 20	1	7.16	K0	1-1-1	
3.1	1 02 W	29 00	1	6.77	A5	1-1-1	
5.1	1 45 W	45 53	1	6.23	A5	1-1-1	
							M.C. S.C. S.W. Watch M.T. S.T.
							Sept. 27 12 -47.3 -34.7 +23.3 -25.8 +0.8^m

Date Monday, Sept 27-28, 1937, M-L Julian Day.

[illegible]

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
					Cloudy at sunset - partially cleared later but still light clouds cutting down by 2 or 3 mags.	
21 20 1	+45. 12	2 -	7.47	A ₀	1-1	Better at 20 ^h though still considerable haze in zenith. Heavy clouds all around horizon. Haze thickens, star gone at 20 ^h 30 Haze clearing. Thick. Cut exposure at 21.20.
						Closed dome at 22.30
						Clearing slightly. Closed again at 23.15.
0 30 W	+44 55	2	6.25	A ₀	1-1-1	haze still present.
0 34 W	+47 25	2-3	7.03	A ₂	1-1-1	
0 22 W	+47 07	2-3	7.09	B ₈	1-1-1	
0 51 W	+44 20	2-3	7.40	B ₉	1-1-1	
0 30 W	+12 30	2-3	6.20	A ₀	1-1-1	
1 25 W	+16 21	2-3	7.50	B ₉	1-1-1	Broken clouds.
						Watch
						M.E. S.C. B.W. H.W. S.W.
						Sept. 28 12 -46 ^s .8 -15 ^s .4 +29 ^s .2 -26 ^s .2 +0 ^m .0

Date Tuesday Sept. 28-29, 1937, 14-L Julian Day.

②

Rising Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
2	109 W	+59 36	1-2	7.54	A3 1-1-1	Sel. E of pier; 50 lb wt off end of other axis. Light Cloud
2 2	0 56 W	+76 38	1-2	7.41	F2 1-1-1	Light clouds.
2 5	7 11 W	+60 27	1-2	7.16	F5 1-1-1	Clouds. Thick 22 ⁰⁵⁻
	Anteaid thru base				10-7	Slide 26.28, till 19.58.
				9.43 A2		Closed up 23 ⁰⁰ . Completely cloudy 22 ^{'5}
						Light rain 23 ³⁰
						Water
						M.P. S.C. S.W. M.W. S.W. Sept. 29 12 -46.6 -16.0 +34.3 -27.0 0.0
						$\Delta L = +7^{\circ}$

Date Wed Sept 29-30, 1937 HA-MR Julian Day

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
7:24	W 1 ^h 02	45 11	1	7.12	Fo 1, 1, 1	
7:40	W 1 ^h 01	43 51	1	var 4	M6 3	
8:33	W 1 ^h 54	46 42	1	7.14	A ₂ 1, 1, 1	
10:06	W 2 ^h 14	29 10	1	7.42	B ₉ 1, 1, 1	Hazy
10:14	W 2 ^h 43	32 02	1	5.45	B ₀ 1, 1, 1	
11:47	W 2 ^h 1 ^m	46 01	2	7.48	A ₀ 1, 1, 1	
12:50	W 56 ^m	16 35	2-3	7.40	G ₅ 1, 1, 1	
12:39	W 1 ^h 27 ^m	16 38	2-1	7.59	G ₅ 1, 1, 1	
1:03	W 2 ^h 11 ^m	28 24	2-1	6.60	K ₀ 1, 1, 1	
1:05	W 1 06	13 26	2-1	7.48	A ₅ 1, 1, 1	
1:05	W 2 06	43 45	1	6.14	F ₀ 1, 1, 1	
-	OUTSIDE	THROUGH	BASE	-	-	12-8 FOCUS = 26.28; TILT = 19.58.
						setting 4 9
						Watch
						H.T. S.T.
						Sept. 30 12 M.P. S.P. S.W. -46.5 -17.1 -21.5 -27.8 -2.1 ^m
						Oct. 1 12 -46.0 -17.5 -17.5 -29.1 0.0 ^m
						Oct. 4 12 -44.8 -19.4 -16.6 -02.8 -0.5 ^m
						Reset

1. Egg to about 100 minutes. Think at 10.00.

Date Monday Oct 4-5, 1937 M-L Julian Day 1937.265

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Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
9 18 1	0 01 W	30 01	1	6.34 B9	1-1-1
21 05 2	1 22 W	13 23	1	7.37 A0	1-1-1
22 17 3	0 10 W	44 26	2-0	7.02 B9	1-1-1
23 23 4	0 22 E	31 01	1	6.78 B9	1-1-1
00 43 1	0 23 E	43 23	2-3	7.40 A0	1-1-1
02 22 2	0 50 W	44 30	2-3	7.43 B8	1-1-1
03 3 3	1 25 W	29 30	2-3	7.43 B9	1-1-1
					platform of dome.
					Haze - moisture condensing on shutters and
					Haze - sky falling in.
					I chick at 3.25
					Oct. 5 12 -44.5 M.C. S.W. H.T. S.F. Watch
					+07.1 -03.6 -0.2
all day	Put on blower + heat around main mirror Sunday a.m. Everything was wet.				
5 30	humidity 98%, Temp 64°, too much water dripping to be able to open. Looked at Cass				
01	Put heater on platform to warm it. Clouded in thick by 11 ⁰⁰ .				
					Oct 6 12 -44.5 -12.2 +01.2 -05.2 -0.6 ^m
					Reset

Date Wed. Oct 6-7/37 Hd-L Julian Day 173

[illegible]

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		M.C.		S.C.	M.W.	WATCH	
		M.C. _s	S.C. _s		M.W. _s	M.T. _s	S.T. _m
Oct. 7	12	-44.1	-12.7	+01.5	-05.6	-0.4	

Date Thurs Oct 7-8, 1937 Ad-MR Julian Day

④

[illegible]

Date Friday, Oct. 8-9, 1937 M-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2577	HD 198414	20 45.1	45 05	I-12	Astra II	1010	+6.4	19 30	22 06	3
2578	222922	23 39.8	43 ¹¹ 22	—	—	—	+6.6	22 09	23 15	4
2579	7157	1 68	61 10	—	—	—	+6.5	23 21	0 01	1
2580	18473	02 53.1	59 17	—	—	—	+6.7	0 09	01 51	2
2581	21611	03 24.2	29 42	—	—	—	+6.3	01 56	05 21	3
2582	47395	06 33.3	28 21	—	—	—	+06.5	05 25	05 45	1
	FOCUS	—	—	—	—	—	+06.6	05 50	—	—

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
						H.R.^s S.C.^s S.W.^s M.T.W.^s S.T.W.^m
22 03	2 11 W	+45 13	1-2	7.47	A0 1-1-1	Oct. 8 12 -44.0 -13.4 -11.4 -02.0 +0.1 Cloudy in afternoon and for sometime after sunset. double - image gone at 20.35 faintly visible 21.20
23 54	0 25 W	+43 23	1	6.82	A0 1-1-1	
0 01	0 16 E	61 22	1-2	6.27	B9 1-1-1	
01 51	20 13 E	59 24	1-2	7.35	A0 1, 1, 1	N component
05 21	32 47 W	29 40	1	7.51	A0 1, 1, 1	occ. clouds. image gone from 3.00 until 4.15
05 45	10 02 W	28 17	1	5.79	B8 1, 1, 1	SETTING 5
-	OUTSIDE	THROUGH	BASE	-	- 15-10	FOCUS = 26.30 TILT = 19.58 " 9
						Oct. 9 10 -41.9 -12.0 -17.0 -06.8 00.2^m

③

Date Saturday, October 9-10, 1937 H-MR Julian Day

[illegible]

Rain & clouds early evening. No visitors.

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[illegible]

Date 1937 Sunday Oct 10-11 Y-L Julian Day 2454910.5

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[illegible]

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Date Monday Oct 11-12, 1937 M-L Julian Day

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS									
2 23 20	1 16 W	32 08.	3	6.87	B9	1-1-1	Rain in afternoon and early evening. Clearing later, clouds still in south. - hazy - intermittent clouds over ridge.							
5 23 54	0 12 W	47 25	2	7.03	A2	1-1	Haze thicker star hidden at first. First star on slit at 23.52. Very thick - closed dome at 24.00.							
								MC	SC	SW	NITW	STW.		
								^d	^k	^s	^s	^s	^m	
								Oct 12	12	-42.5	-14.4	-24.2	-06.2	-0.2

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Date Tuesday, October 12-13, 1937 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2599	H.D. 171654	18 31.0	+46 08	I-12	Astr II	Set 010	Set 9.5	18 16	19 30	1
2600	198820	20 47.9	+32 28	"	"	"	9.3	19 33	20 03	2
	From test			"	"		9.3	20 05		
Wed Oct 13/37 Hd. Temp 4.5 I-12 focus was 26.28 tilt 19.45 Changed to I-25 Set tilt 23.25										
2600 F	Focus			I-25	Astr II	010	5.0			5

a1

Date Wed Oct 13-14, 1937 Hd - L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2601	HD 192715	20 11.2	15 00	I-25	Antara II	010	+5.1	6.52	8.52	1
2602	210334	22 04.6	45 15	"	"	"	5.4	8.58	10.28	2
2603	2453	00 23.2	53	"	"	"	5.5	10.34	10.54	3
2604	γ Can HD 5394	00 50.7	60 11	"	Parsons	"	5.5	12.06	12.06	1
								12.09	12.13	
								12.14	12.22	
2605	8126	01 15.6	28 13	"	Antara II	010	5.3	12.28	1.28	2
2606	22136	03 28.9	46 46	"	"	"	5.0	1.32	2.52	3
2607	35607	05 20.9	60 11	"	"	"	5.2	2.59	4.24	4
2608	45506	06 22.7	16 19	"	"	"	5.3	4.30	5.50	1
Thurs Oct 14/37 Hd										
Changed to I-12 Set focus 26.28 Tilt 19.45										
2608F	Focus Test			I-12	Antara II	010	+2.6			1

(8)

Date Thurs Oct 14-15, 1937 Hd-MR Julian Day

⑦

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A hand-drawn diagram of a cell. It consists of a large circle representing the cell membrane. Inside this circle is a smaller circle representing the nucleus. Inside the nucleus are several small dots representing nucleoli. A horizontal line extends from the left side of the nucleus. To the right of the cell diagram is a large red checkmark.

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Date Saturday, Oct 16-17, 1937, M-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2616	HD 193349	20 14.7	14 04	I-12	Astro II	1010	+7.2	18 29	19 29	1 20 36 W
2617	1358	00 ^{22.3} 24.1	15 29	—	—	—	+7.1	22 23	23 25	2 24 W
2618	7374	01 08.8	15 36	—	—	—	+7.0	23 27	23 55	3 08 W
2619	9100	01 24.5	17 51	—	—	—	+07.2	23 57	00 32	4 00 29 W
2620	16245	02 31.3	29 59	—	—	—	+07.2	00 37	02 17	1 07 W
2621	35035	05 16.7	28 22	—	—	—	+06.8	02 20	04 00	2 00 05 W
2622	44250	06 15.7	30 01	—	—	—	+07.3	04 03	05 13	3 09 W
2623	44904	06 19.3	17 03	—	—	—	+07.2	05 16	06 03	4 01 06 W
	FOCUS	—	—	—	—	—	+07.2	06 10	—	4 07 50 E

(8)

Monday Oct 18-19, M-A
 Tuesday, Oct 19-20 - mostly cloudy; rain all evening. 10⁰⁰ - 10⁰⁰

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
19 29	00 36 W	+14 10	2-3	6.81 A ₀	1-1-1	star looks red - took E star of bright pair, seems to about 110 visitors showed moon and Saturn with 74". Jupiter and Saturn in 4".
23 25	00 24 W	+15 40	2-1	6.71 A ₅	1-1-1	hazy and cloud near the horizon - general (Sat)
23 55	00 08 W	+15 49	2	5.80 B ₈	1-1-1	
00 32	00 29 W	+18 01	2	6.02 A ₂	1-1-1	
02 17	1 07 W	+30 08	2	7.41 A ₀	1-1-1	
04 00	00 05 W	+28 23	2	7.44 A ₃	1-1-1	guiding poorly, improved by stopping control clock.
05 13	00 19 W	+29 28	2	7.06 A ₀	1-1-1	
06 03	01 06 W	+17 02	2	6.80 B ₉	1-1-1	setting 4
-	OUTSIDE	THROUGH	BASE	-	15-10	setting 8 SLIDE = 26.29 TILT = 19.58
						M.C. S.C. S.W. MTW ST.W.
Wed Oct 20-21 - cloudy.						Oct. 18 12 -69.6 -20.0 +03.0 -01.6 -0.1
						19 12 -68.4 -18.0 +07.8 -02.9 -0.1

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Date Thursday - Oct 21-22, 1937 M-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2624	HD 17891	2 47.3	46 44	I-12	Astra II	1010	+7.3	00 35	01 55	1
2625	HD 26171	4 03.4	13 00	I-12	Astra II	.010	-	02 02	*	2
	FOCUS	-	-	I-12	Astra II	.010	+07.2	02 50	-	-
Friday - October 22-23, 1937 - H, MR, - Clouds & rain Sat - Oct 23-24 10 visitors (complimentary) MR showed telescope. Cloudy 22 more visitors (uncomplimentary) Sunday - Cloudy -										

cloudy all day and first half of night. Partially cleared at 11.30, cloudy again.

Ending Time L.T.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS						
01 55	0 48 W	46 55	0-0	6.71	B9	1, 1, 1	Oct 20 ^d 12 ^h	MC ^s -70.4	SC ^s -18.9	SW ^s +09.3	MTW ^s -04.6	STW ^m -0.1
1 2	-	13 13	1	6.00	B9	1, 2	21 12	-68.1	-19.3	+15.1	-05.8 ^s	-0.2 ^m
-	OUTSIDE	THROUGH	BASE	-	-	14-10	SLIDE=26.28, TILT 19.58.					
							* clouded up soon after start. Like ending as 02 ^h 08 ^m					
							MC	SC	SW	MTW	STW	
							Oct 22 ^d 12 ^h	-67.5 ^s	-19.9 ^s	+21.1 ^s	-06.2 ^s	-0.2 ^m
							Oct. 25 12	-66.1	-21.1	-21.5 ^s	+02.8 ^s	-00.0 ^m
							Adv. 1 ^m Reset (stopped)					

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Date Monday - Oct 25-26, 1937 M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
2626	H.D. 193707	20 16.6	14 48	I-12	Astron II	.070	+5.1	18 10	18 48	1	0 28 W
2627	194211	20 19.3	15 43	-	-	-	5.2	18 49	19 27	3	1 04 W
2628	210646	22 6.7	27 14	-	-	-	5.2	19 30	20 16	4	0 11 W
2629	218097	23 0.2	32 50	-	-	-	5.2	20 20	21 24	1	0 20 W
2630	16594	2 34.5	31 53	-	-	-	5.1	23 47		2	3 00 W

Reading Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
13 48	0 28 VV	14 55	5	6.56	A0	1-1-1 Clouds till sunset - cleared later. Still light clouds around sun at 1830. haze and clouds gen.
19 27	1 05 W	15 51	5-2	6.68	B9	1-1-1 still hazy. seeing variable.
20 16	5 06 W	27 26	4	7.07	A0	1-1-1
21 24	10 20 W	33 03	3	(7.28)	A0	1-1-1 took N component. thick over whole sky at 21.15
						generally thick till after 23.30
						then clearing in zenith. Still heavy clouds around horizon.
		32 - 03	2	7.56	A2	1- Thickening again at 12.00. Solid by 12.10. cleared at 1.00
						Oct 26 12 ^m ^s ^{13.1} +02.9 -18.8 -13.3 +02.9 -0.1

Date Tuesday October 26-27, 1937 H-L Julian Day 2454811.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
2630	HD 206963	21 40.6	+46 24	I-12	Astra II	S ^t 010	S ^t <u>+7.5</u>	20 05	20 55
2631	— 220102 —	23 16.0	+59 44	" "	" "	" "	+7.6	20 59	4
Wed Oct 27-28 Hd Cloudy.									

Clouds all day; slowly clearing in early evening

102

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
21 3	1 15W	+46 35	1-2	7.04	F5 1-1-1	Light clouds during first part.
4		+59 55	2	7.00	F2 1-	Clouds; stars lost most of time 21 ⁰² -
						completely cloudy 21 ¹⁵ - 22 ⁰⁰ closed up.
						M.C. Oct. 27 12 -1^m 05.2 S.C. -21.6 S.W. -30.6 Watch B.T. S.T. +02.0 +0.1
						28 12 -1 04.4 -21.8 -23.6 +00.8 +0.1

Date Thurs. ~~Sept~~ Oct 28-29, 1937 H.M.R. Julian Day

8

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		38°F	REMARKS
1 03	W 40 ^m	33 22	0	4.27	B ₃ 3		
1 17	W 54 ^m	28 57	0	5.30	G ₅ 1, 1, 1		2nd run, clear
1 30	W 1 05	30 30	0	4.56	K ₂ 3		← Some refined both ways. Found relay sticking.
1 44	W 1 54	46 48	1	7.00	B ₉ 1, 1, 1		
2 02	W 1 02	32 45	1-2	7.17	F ₈ 1, 1, 1		
2 03	W 0 34	31 09	1	7.37	K ₀ 1, 1, 1		
2 04	W 0 24	46 30	2	6.73	B ₈ 1, 1, 1		
2 05	W 0 36	28 46	2	7.10	A ₃ 1, 1, 1		
-	OUTSIDE THROUGH BASE		-	-	14, 10	SHIDE = 26.29 TILT = 19.57	slight haze occasional clouds setting 4 setting 8 Watch M.T. S.T. m s s Oct. 29 13 - 1 04.1 - 22.3 - 17.1 + 0.6 + 0.1



105

Date Friday Oct 29 - 30, 1937, M-MR. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2639	Jupiter Mars			I-12	Astra II	060				4
							(std 7.8)			
2639	HD 1243	00 11.6	13 22	I-12 1/2	Astra II	010	+8.0	22 14	24 29	1
2640	26171	04 03.4	13 08	"	"	"	8.5	00 47	01 22	2
2641	34547	05 13.2	13 29	"	"	"	8.7	01 28	03 13	3
2642	44738	06 18.3	14 10	"	"	"	9.2	03 17	04 37	1
2643	68903	08 09.4	16 23	"	"	"	9.3	04 46	05 28	2
2644	{ 70338	08 ^{6.3} 18.2	13 57	"	"	"	9.3	05 32	06 12	1
	FOCUS	-	-	*	"	"	9.4	06 15	-	"

(6)

clearing at sunset. reversed telescope.

Ending Time R.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		50°F	REMARKS
							Set on Jupiter - filling in rapidly at 18.15. remained there. about 120 visitors from Hamilton. Demonstrated telescope ^{clearing} at 21.45.
29 29	W 02 30	13 33	1	7.58 A3	1-1-1		still quite hazy; numbered 2641 by mistake, renumbered 2639;
01 22	E 0 29	13 15	0	6.00 B9	1-1-1		blew dec. fuses; very hazy at start, clear later;
03 13	N 0 13	13 30	2	7.5 B5	1-1-1		plate holder 4 broken again; high wind;
04 37	N 0 32	14 07	2	7.3 Aop	1-1-1		
05 28	E 0 28	16 16	3	7.13 B8	1-1-1		too windy to work west.
06 12	N 0 09	13 47	3+	7.14 A2	1-1-1		selling 4
-	OUTSIDE	THROUGH	BASE	-	-	14-10	SLIDE = 26.29 TILT = 19.59 selling 8
							Watch M.T. S.T. Oct. 30 10 -1 03.4 -22.4 -13.6 +02.0 +0.1

107

P


 Date Saturday, October 30-31, 1937 H-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
2645	HD 172 187	18 33.7	+43 08	I -12	Astr II	Set 010	Set +10.5	17 45	18 38	2	2 11 W
2646	19 8820	20 47.9	+32 ²⁸ 38	"	"	"	+10.8	18 39	19 14	3	2 31 -
2647	20 1196	21 02.9	+15 16	"	"	"	+10.6	19 18	20 18	1	1 24 -
2648	HD 1641	00 15.6	+32 25	"	"	"	+10.6	22 30	23 46	2	1 11 -
2649	10086	02 33.5	+45 23	"	"	"	+10.5	0 10	01 10	3	1 30 W
2650	16111	02 30.2	+28 58	"	"	"	+10.5	01 15	02 15	1	2 02 W
2651	20536	03 13.1	+61 38	"	"	"	+10.5	02 30	03 10	2	2 3 W +6
2652	44033	06 14.4	+14 41	"	"	"	+10.3	03 18	04 06	3	3 09 W
2653	47270	06 32.7	+44 06	"	"	"	+10.3	04 12	05 30	1	14 W +4
2654	{ 77692	08 59.0	+59 45	"	"	"	+10.2	05 38	06 10	2	3 32 E +5
	{ FOCUS	-	-	"	"	"	+10.4	06 15	-	"	OUTSIDE

(10)

Ending Time R.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+38°F	REMARKS
19 W	+43 10	0	6.40	A5	1, 1, 1	Very strong wind; ^{hindscreen up} hard to keep star on slit.	
43 W	+32 36	1	6.23	B5	1, 1, 1		
31 W	+15 24	1	7.52	K0	1, 1, 1		
About 75 visitors. Showed 61 Cygni and Ring nebulae. P showed Mars, Jupiter, Pleiades. Some trouble with clouds.							
47 W	+32 36	1	7.40	F5	1, 1, 1	Thick clouds at start. Closed because of light rain from clear.	
53 W	+45 34	1	7.44	G5	1, 1, 1	big fire (barn?) in south	
02 51	02 W	+29 07	2	7.05	B8	1, 1, 1	
03 10	13 W	+61 46	2-	6.60	B8	1, 1, 1	Blas defocuses again
04 03	09 W	+14 09	2-	7.20	K5	1, 1, 1	* closed 506 to 522
05 30	14 W	+44 03	2	7.51	K0	1, 1, 1	occasional clouds, rain again, as above.
06 10	32 E	+59 33	2	6.19	A7	1, 1, 1	" " setting 4
OUTSIDE	THROUGH	BASE	-	-	14-10	SLIDE = 26.29 TILT = 19.58	" 8

1937

Y-L

Julian Day

[illegible]

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Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
6 58	37 ^m W	46 18'	1	6.32	A2	1-1-1 Rubbed Mirror a little. Watch stopped (reset) 1 hr slow by mistake.
7 57	42 ^m W	29 48	1	5.57	A0	1-1-1 } setting 6 This has been corrected in readings recorded. minutes are watch time
8 52	1 ⁿ 104 ^m W	"	1	5.57	A0	1-1-1 } setting 2
9 26	47 ^m W	30 58	1	7.12	F2	1-1-1
10 20	1 ⁿ 41 ^m W	29 25'	1-2	6.84	F5	1-1-1
11 45	27 ^m W	31 52	1-2	7.20	G5	1-1-1
12 35	10 ^m W	46 34	1-2	6.75	G5	1-1-1
12 42	52 ^m W	31 48	1-2	6.90	F0	1-1-1 Clouds at 1.10 - 1.30 intermittent clouds.
	45 50	1-2	7.14	F8	1-	Filled in suddenly at 2.10. Still stuck. So closed at 3.00.
						Watch
						N.E. S.E. S.W.
						Nov. 14 m s -1.02.4 -24.0 -09.8 +1 ^m 01.2 +1 ^m .3
						Reset to: at 14.05 +01.2 +0.6
						at 17 +1 ^m .0

Date Monday Nov 1-2, 1937, M-L Julian Day

[illegible]

Spots 25 on 2664 with bright light.
 " 25 on 2663 " ft. light from trouble
 " 45 on all other " " " "

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Setting on Planet	Exp. Plate Setting	REMARKS
					A	20 2 -1.5	Spots 15 sec
					A	40 0	Spots 25 sec
					A	80 +1.5	Spots 130 sec
					B	20 1.0	(60 with 38A)
					B	40 1.5	(70 without)
					C	20 2.0	
					C	40 2.5	
					C	80 3.0	
					C	160 3.5	
					C	60 4.0	
18 03							
20 53	2 20 W	+15 10	1	7.09	A0	1-1-1	Heat didn't seem to be on in spectrograph. Dome temp 41°F Turned off heat for a while. Damage seemed ft. & eye. after 10 min 19.20, improving slightly later.
22 12	1 40 W	+29 43	1	7.23	B9	1-1-1	Zoomed great difficulty in guiding. Uncovered that screw in R.A. setting motion was loose thus catching occasionally and stopping differential. Tightened screw in place as well as probably lost a lot of time on this star.
23 53	0 47 W	29 10	2	7.44	A2	1-1-1	Tightened R.A. setting again.
4 16	1 34 W	32 02	2	7.56	A2	1-1-1	Hazy, light clouds. electrical storm in N.W. sky filling in at 1.40
							MC S.C. S.W. Watch M.T. S.T.
							Nov. 2 16 -1.00.4 -23.0 -05.0 +01.6 -0.4
							Reset
							Nov. 3 12 -0.59.6 -23.3 -01.1 -01.0 -0.1

Date Thurs Nov 4-5, 1937 Hd-MR Julian Day

4

Clouding at sunset. Opened 6.30 Cloudy again.
Partly clearing 9.00.

114

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS						
							+35°F					
10 11 2	W1 ^h 34	61 36	1	6.44	B8	1, 1, 1	Nov 4	12	M.P. -58.7	S.C. -23.5	S.W. +06.5	watch M.T. +0.2 S.T. -0.2
10 57 3	W2 ^h 21	"	1	"	"	1, 1, 1	Spotten not available Put new batteries on heater relay. Thick at 11.25 Call that end.					
39 1	W3 ^h 04	"	1	"	"	1, 1, 1						
02 5:2	W0 ^h 36	13 26	2	7.48	A5	1, 2						
-	OUTSIDE	THROUGH	BASE	-	-	14, 10	Cleared temporarily at 12.30 and again at 1.30 becoming hazy after 2.10. Thick at 3. (S5) SHIDE = 26.29 TILT = 19.59 (S8)					
							M.P. S.P. S.W. M.T. S.T.					
							Nov. 5	12	-57.9	-23.7	+09.1	-0.6 -0.2

Date Friday, 1937 November 5-6 H-MR Julian Day.

②

116

		H.C.	S.C.	S.W.	H.T.	S.T.
Nov 6	10	-57.3	-23.9	+16.5	-0.7	-0.2

117

Date Saturday, Nov 6-7, 1937, M-MR Julian DayDectograph was at $+3^\circ$ when opened at 16:30. Set to $+4^\circ$ as warned at $+5^\circ$.

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
2674	HD 198915	20 48.5	46 21	I-12	Astra II	010	$+5.0$	17 55	18 57	1
2675	208835	21 53.9	46 23	-	-	-	$+4.7$	18 59	21 29	2
2676	4701	00 44.0	47 13	-	-	-	$+5.0$	21 32	22 46	3
2677	35173	05 17.8	15 55	-	-	-	$+5.3, +5.3$	00 55	01 47	1
2678	43496	06 11.4	15 53	-	-	-	$+5.2, +4.8$	01 51	03 01	2
2679	47050	06 31.6	30 58	-	-	-	$+5.0, +4.9$	03 04	04 14	3
2680	47255	06 32.6	31 51	-	-	-	$+4.7,$	04 16	04 30	1
	FOCUS	-	-	-	-	-		05 30	-	-

(7)

all plates Spots 452 with ft. light. 118

closed at
10° 45' 00" 1/2

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+38°F	REMARKS
18 7 1	0 53 W	46 30	3	7.28 B9	1-1-1		A few light clouds when started.
21 28 2	2 20 W	46 33	3	7.39 A0	1-1-1		R.A. setting, tilted, stopping differential. Found whole slat set top far to left, loosened and moved slat and mounting to right. Lost 20 to 25 minutes on plate 2675 O.K. now.
22 4 3		47 25	2	7.03 A2	1-1		Considerable haze from 19.45 on last image, repeatedly. Clear at start - thick again after about 10 min. remained thick. Callend 21.44.
01 47 1	0 46 E	15 57	2-3	6.89 B0	1-1-1	dr. east comp.)	Closed down at 23.45. Opened up again at 00 40
03 1 2	0 26 E	15 50	2-3	7.16 B9	1-1-1		
04 1 3	0 26 W	30 55	3	7.29 A2	1-1-1		
04 1 4	0 42 W	31 48	3:	7.31 A0	1-2		haze soon after start. Only few stars visible at 5 20
04 1 5	OUTSIDE	THROUGH	BASE	-	-	14-11	SLIDE = 26.28 TILT = 19.59

Date Sunday Nov 7-8 ¹⁹³⁷ Y-L Julian Day

[illegible]

[illegible]

122

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
1	52 W	+31 23	1	7.04 A5	1-1-1	Finder light not on; replaced bulb (borrowed from 1st finder)
1	12 W	+30 14	1	6.52 A5	1-1-1	
1	08 W	+59 55	2	7.00 F2	1-1-1	
2	02 W	+58 12	3	7.06 A0	1-1-1	Clouds - star lost 10 min.
2	08 W	+61 06	3	7.40 G5	1-1-1	Clouds - star frequently lost. Call means $23^{\circ}4'$
1	30 W	+29 08	3	7.05 B8	1-1-1	
0	44 W	+44 46	2	6.35 G0	1-1-1	
0	51 W	+14 59	2	6.22 F0	1-1-1	
0	18 W	+27 53	2	6.28 B9	1-1-1	sky filling in at end of exp.
0	44 W	+44 03	2	7.51 K0	1-1-1	clearing again later.
0	44 E	+45 32	2	7.08 K0	1-1-1	
0	02 W	+13 22	2	7.00 F5	1-1-1	hazy towards dawn.
						H.C. S.C. S.W. Watch
						M.T. S.T.
						Nov. 10 12 -53.8 -25.4 +39.6 +04 ^m .8 -0.0 ^m

123

Date Wed Nov 10-11, 1937 Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2694	HD 219634	23 12.2	61 25	I-12	Antia II	010	+4.7	5 45	6 27	3
2695	"	"	"	"	"	"	4.9	6 27	7 07	1
2696	208394	21 50.9	47 44	"	"	"	4.6	7 12	8 32	2
2697	219634	23 12.2	61 25	"	"	"	4.9	8 37	9 21	3
2698	"	"	"	"	"	"	5.0	9 21	10 01	8
2699	886	00 08.1	14 38	"	"	"	4.7	10 07	10 07 ⁴⁰	2
								10 09	10 10	
								10 11	10 13	
2700	1439	00 13.4	30 58	"	"	"	5.0	10 17	10 37	3
2701	219634	23 12.2	61 25	"	"	"	4.8	10 42	11 22	1
2702	"	"	"	"	"	"	4.9	11 22	12	2
2703	46016	06 25.8	46 34	"	"	"	4.9	12 24	1 24	1
2704	50315	06 47.6	43 04	"	"	"	4.8	1 28	2 38	2
2705	45721	06 24.0	28 17	"	"	"	4.6	2 42	3 32	3
2706	43043	06 09.0	16 04	"	"	"	4.6	3 35	4 39	1
2707	57728	07 17.4	15 33	"	"	"	4.8	4 42	5 42	2

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS	
6 27 3	E 145	61 36	2	6.44 B ₈	1, 1, 1	Clutch working perfectly.
7 07 1	E 1 ^h 05	"	2	" "	1, 1, 1	
8 32 2	W 1 ^h 42	47 55	1	7.41 A ₂	1, 1, 1	
9 1 3	W 1 ^h 10	61 37	1	6.44 B ₈	1, 1, 1	
10 01	W 1 ^h 49	"	1	" "	1, 1, 1	
10 07 2			1	2.68 B ₂	3	set 1
10 11			1	"	3	" 5"
10 3	W 1 ^h 05	14 50	1	"	3	" 9"
10 37 3	W 1 ^h 20	31 10	1	5.80 A ₀	1, 1, 1	Wind dropping.
11 21 1	W 1 ^h 3 10	61 38	2	6.44 B ₈	1, 1, 1	
11 22 2	3.54 W	"	2	" "	1, 1, 1	Clutch "squealed" twice.
11 31 1	2.02 E	46 36	2-1	6.73 B ₈	1-1-1	
11 41 1	1.10 E	43 00	2-1	7.35 A ₃	1-1-1	Ac Comp
11 53 3	0 08 W	28 15	2	6.91 A ₂	1-1-1	"
12 29 1	1 30 W	16 03	2-1	7.51 G ₅	1-1-1	"
12 41 2	1 26 W	15 28	2-1	7.49 G ₅	1-1-1	"

Date ¹⁹³⁷ Wed. Mar. 10-11 9th-L Julian Day

[illegible]

No comp on last plate.

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Date Thursday Nov 11-12, 37 M - M R. 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
2708 F.				Test for comparison spectrum.						3	
2709	H.D. 199206	20 50.6	44 44	I-12	Astra II	.010	+2.6	17 50	19 56	1	2 10 W +
2710	224166	23 50.6	45 48	-	-	-	+2.5	20 01	21 21	2	3 5 W
2711	10773	1 40.3	43 13	-	-	-	+2.9	21 23	23 13	3	3 7 W
2712	15992	2 29.1	44 12	-	-	-	+2.9	23 15	01 00	1	3 5 W
2713	43044 P	06 09.0	14 38	-	-	-	+3.0, +2.9	01 09	02 50	2	4 5 E
2714	43044 F	"	"	-	-	-	+3.0, +3.0	02 51	04 31	3	2 7 W
2715	47255	06 32.6	31 51	-	-	-	+3.0, +2.5	04 35	05 55	1	2 7 W
2716	80064	09 12.5	11 55	-	-	-	+2.7, +2.8	05 59	06 33	2	2 5 W
	FOCUS	-	-	-	-	-	+2.9	06 37	-	-	5 2 E
Friday Nov. 12 - Removed slit, and changed and adjusted mechanism. H.											
2716 F.	Focus test			I-12	E 40	.010		10 30			

(8)

Date Fri. Nov 12-13, 1937 4d-MR Julian Day

Hour Angle
End

Ending Time
L.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

7321

E 32^m

61 36

2.

6.44 B₈ 1,1,1Thinning in zenith at 6.30. Thick again 7.30
Closed 9.00

clouds and heavy rain

Nov. 13	10	- 50.9	- 25.7	+ 55.5	+ 07.5	+ 0.0
					^s	^m

Nov. 15	12	- 49.4	- 26.1	+ 65.7	+ 03.8	+ 0.0
					^s	^m

Nov. 16	12	- 48.7	- 26.5	+ 10.3	+ 02.2	+ 0.0
				^{Adv. 1 m}		

Nov. 17	12	- 47.8	- 26.7	+ 15.7	+ 00.6	- 0.1
					^m	

Nov. 18	12	- 46.0	- 26.9	+ 28.3	- 07.0	- 0.2
					^s	^m

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Date. Wed Nov 17-18, 1937 Hd-L

..Julian Day

[illegible]

Clear at 10.45

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
1138.2	E 2 00	61 45	1	5.99	A ₀ 1, 1, 1	
-	-	60 12		6.85	A ₀ 1, 1, 1	Thickening from 12.00 on. Solid at 12.20. Waited until 12.45 no sign of clearing so closed slide.
						Closed up at 2.30 still thick.
						MC S.E. S.W. HT. S.T.
had clouds.						Nov. 19 12 -46.8 -26.8 -20.8 -05.8^s -0.2^m
						S S S S m Nov. 20 10 -45.2 -27.1 +34.3 -05.2 -0.2

Date Saturday, Nov 20-21, 1937, M-MR Julian Day

⑦

Cloudy at sunset, snow. Cleared later.

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+28°	REMARKS
19 10	19 W	46 50	3	6.40	B9	1-1-1	
20 31 2	13 W	43 51	3	7.33	A3	1-1-1	
21 14 3	40 E	45 05	3-7	6.34	A0	1-1-1	slight haze
22 9 10	42 W	44 30	3	7.43	B8	1-1-1	light clouds gathering
23 4 20	33 W	46 55	3	6.71	B9	1-1-1	clearing again
0 35 30	03 E	28 24	3	7.44	A3	1-1-1	hazing up. 0 45; clear again 1 15
02 30 10	01 W	14 35	4	(6.80)	B9	1-2	(double) freq. comp. (left) occ. clouds
-	OUTSIDE	THROUGH	BASE	-	-	14-12	mostly cloudy after 2 30. solid at 2 50. closed 4 00
SLIDE = 26.29 TILT = 19.59							

Sunday opened up - just found
first star 5¹⁵ when it cleared.

135

1937

Date Sunday Nov. 21-22

Y-L

Julian Day

[illegible]

137

Date Monday Nov 22-23, 1937, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle Est
2734	HD 10681	1 39.2	27 58	I-12	Astra II	010	-3.3	21 52	22 42	2	2 24 2
2735	16588	2 34.4	29 21	—	—	—	-3.4	22 44	00 04	3	1 12
2736	35173	5 17.8	15 55	"	"	"	-3.0	00 10	00 55	1	1 12
2737	43496	06 11.4	15 53	"	"	"	-3.5	03 11	04 05	2	1 12
2738	44250	06 15.7	30 01	"	"	"	-3.2	04 10	05 05	3	1 12
Tuesday Nov 23-24, 1937 Cloudy H											
Wed Nov 24-25, 1937 Cloudy H											
Thurs Nov 25. H changed to I-25.											
I-12 focus was 26.28 tilt 19.5											
2738F	Focus Test			I-25	Astra II	010	3.2				12

(5)

138

cloudy for first part of evening.
cleared gradually - still some haze
at 22 h.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
22-22	0 50 W	28 08	6	7.31 A0	1-1-1
23-23	1 16 W	29 30	4-3	7.43 B9	1-1-1 clouds and haze coming up at 22.50 mostly clear at 23.20
00-00	0 30 E	15 59	3-4	6.89 B8	1-1-1 Power off from 1.00 to 3.00
01-01	1 41 W	15 52	3-2	7.16 B9	1-1-1
02-02	2 37 W	29 59	3-2	7.06 A0	1-1-1 clouds and haze at 4.50 Closed at 5.30.
Watch S.E. S.W. M.T. S.T. Nov. 23 12 ^m -127.2 -07.9 -08.8 -0.3 Add 2^m Nov. 24 12 ^m -40.2 -127.0 -09.6 -0.2 Nov. 25 12 ^m -40.2 -128.0 -48.6 -11.0 -0.3					
have outside				4/3	Focus 23.4 Tilt 23.25 Focus 23.3 would be better. Set it so.

Date Thurs Nov 25-26, 1937 141-MR Julian Day

Hour	Angle	End	
31	^m		
46	^m		
56	^m		
5.55		26	
		26.	
		26	
		26	

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
6:52	W 31 ^m	14 58	4 → 2	6.73 A ₀	3, 3, 3	7 ^{wires} in ^{badly} out of adjustment. long time to find star.
8:02	W 56 ^m	29 05	3	7.34 K ₀	3, 3, 3	Clouds 7.46-7.54
8:51		60 22	3	2 Bop	^{in position} 8, 8	Set 1 8 has same mag as d and p has.
9:01	E 6 ^m	"	3		8, 8	" 5 3 spots 7 ^m call end 8.20 *
						9 Thick at 8.20 closed 9.45.
						rain and heavy mist
						H.C. S.C. Nov. 26 12 -38.0 -27.5 S.W. Watch -38.5 -12.0 -0.3
TE: A	SLIDE =	26.40	SETTING 2		14-12	Slide 26.30 lost; left it there.
"	"	26.20	" 4		14-12	
"	"	26.10	" 6		14-12	
"	"	26.30	" 9		14-12	

Date Friday, November 26-27 H-MR Julian Day

9

clouds all day; thinning end of afternoon.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+40°F	REMARKS
8-03	1 07 W	+08 53	6-	6.8-7.5	A0 1-1-1		Scattered clouds; star frequently lost. Solid 18 ³⁵
				7.43	K0 -		
				5.77	B8 -		Clouds right at start. Closed up 20 ^h .
01 10 2	1 13 W	+73 23	5	7.30	F5 1-1-1		see. haze.
02 03 1	0 51 W	+27 52	3	6.28	B9 1-1-1		
02 03 3	1 26 W	+28 51	3	6.37	B9 1-1-1		
03 03 2	1 48 W	+31 05	3	5.91	B9 1-1-1		
04 04 3	0 56 W	+16 15	3	7.25	F5 1-1-1		
04 40 1	1 14 W	+43 09	3	6.58	F0 1-1-1		
05 4 2	1 32 W	+46 05	3	6.61	A3 1-1-1		
05 6 3	0 19 W	+15 11	3	7.18	K0 1-2		haze at start; thick 5 25; heavy mist
-	OUTSIDE	THROUGH	BASE	-	-	14-13	SLIDE = 26.30 TILT = 19.6
							Put heat on mirror as well as blower.
							Watch
							H.S. S.E.S S.W. H.T. S.T.
							Nov. 27 12 - 37.0 - 1 27.2 - 32.0 - 12.0 - 0.3

143

Date Monday Nov 29-30, 1937 M-L Julian Day.

[illegible]

1937

Date Tuesday November 30-December 1 Julian Day 14[illegible]

146

	M.C.	S.C.	B.W.	Watch H.W.	S.W.
Dec. 1 12	-26 ^s .9	-1 ^m 27 ^s .4	-08 ^s .4	-19.0	-0 ^m .4

Date Wed. Dec 1-2, 1937 Hd - L Julian Day

[illegible]

Clouds earlier

Ending Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
8 23 3	W 2 ^h 28	14 02	4 → 2	7.02	A ₃ 1, 1, 1.	Clouds nearly all the time Thick 820 →
10 09 1	W 4 ^h 2 ^m	32 12	3 → 5	6.86	A ₃ 1, 1, 1	
11 13 4	W 29 ^m	16 16	5	7.38	A ₂ 1, 1, 1	
12 03	W 09 ^m	13 26	-	7.48	A ₅ 1, 1½	sky filling in from 11.45 on, star gone at 12.03. Stayed cloudy so closed up at 2.30.
						MC SC SW MT. S.T.
						Dec. 2 12 - 31.6 - 1 ^m 27.3 + 0.4 - 19.1 - 04 ^m

149

Date Thursday, Dec 2-3, 1937, M-MR Julian Day

[illegible]

11

$+24^{\circ}\text{F}$

151

Date Friday December 3-4, 1937 1-1-MR Julian Day.

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS	
2	1 38 W	+15 24	4	7.52 K0	1-1-1	Light clouds
3	1 28 W	+14 18	4	7.41 K0	1-1-1	
0	4 N	+74 56	3	6.10 A2	1-1	Thick haze. Star gone ²⁰ 19 - ³⁰ 20
1	19 W	+74 56	3	6.12 A2	1-1-1	
1	56 W	+73 39	3	6.86 G5	1-1-1	Some haze. Plasma
1	38 W	+17 29	3	7.09 F0	1-1-	Thick haze. Star sometimes gone,
				7.44 G5		
						Closed up ³⁰ 0
						clouds and snow.
						MC SE SW MT ST
						Dec. 4 12 -29.1 -1^m 27.1 -19.1 -15.8^s -0.4^m
						Dec. 6 12 -27.1 -1 27.5 -28.5^{Adg/m} -19.1^s -0.5^m
						Dec. 7 12 -26.3 -1 27.8 -18.2 -21.1 -0.5
						Dec. 8 12 -25.4 -1 28.0 -10.0 -22.0 -0.5

153

Date Wed Dec 8-9, 1937 Hd - MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2788	HD 212506	22 19.6	15 48	I-12	Astria II	010	-4.5			2
2788	HD 22136	03 28.9	46 46	I-12	Astria II	010	-4.2	9.58	10 36	2
2789	HD 106926	12 12.7	+15 42	I-12 1/2	Astria II	010	-07.7	5 45	7 03	3
	FOCUS	-	-	-	-	-	-08.0	7 05	-	-
Thurs, Dec 9-10, 1937 Hd - MR cloudy.										

②

Delayed by trouble with dome opening and closing. 154
 dec. quick motion. Both seem OK now.
Later: Both giving trouble again.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+11° F	REMARKS
2	4^m E	46 54	1	7.41	F₂	6.74	B₉ 1, 2 Clouds,
1030.2	4 ^m E	46 54	1	6.74	B ₉ 1, 2		- Practically no light sky unworkable, wind dangerously high, no cloud up 11.05-
1033	0 ^h 18 ^m E	+15 29	2	7.53	K ₀ 1-1-1		opened 3.30: clouds.
-	OUTSIDE	THROUGH	BASE	-	-	14-13	Uncertain later, thin clouds most of time SLIDE = 26.30 TILT = 19.6
							found it impossible to move thermostat indicator from its position at -07.7°C, so left it there.
							M.C._s S.C._m S.W. M.T._s S.T._m
							Dec. 9 12 -24.3 -1.28.1 -02.9 -19.8 -0.4
							Dec. 10 12 -23.7 -1.28.4 +04.3 -26.0 -0.6

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1937

Date Friday, December 10-11, M-L. Julian Day

[illegible]

		HE	SE	SW	Watch HT ST	
Dec. 11	12	- 22.3	- 1 28.2	+ 14.3	- 27.0	- 01.0

157

Date Saturday, December 11-12, 1937, H-MK 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
2792	HD 206330	21 36.3	+42 49	I-12	Aster II	set 010	-7.2	17 25	18 00	3 1 25W
2793	222386	23 35.0	+74 43	"	"	"	-7.2	18 06	18 34	1 1 30
2794	370	00 03.3	+73 41	"	"	"	-7.0	18 37	19 52	2 1 50
2795	224098	23 50.0	+73 ⁵¹ 42	"	"	"	-7.3	19 57	20 27	3 39
2796	10086	01 33.5	+45 23	"	"	"	-7.5	20 32	21 17	1 1 40
2797	16111	02 30.2	+28 58	"	"	"	-7.0	21 21	22 11	2 1 21
2798	19536	03 03.5	+60 15	"	"	"	-7.2	22 15	23 25	3 22
2799	25473	03 57.7	+73 18	"	"	"	-7.3	23 29	0 19	1 2 10
2800	31662	04 52.6	+60 56	"	"	"	-7.3	0 27	0 52	2 1 25W
2801	35076	05 17.0	+28 51	"	"	"	-7.5	0 59	1 34	1 1 30
2802	47050	06 31.6	+30 58	"	"	"	-7.5	1 38	2 58	3 28W-3
2803	73190	08 32.0	+73 31	"	"	"	-7.2	3 06	4 20	1 0 49W+7
	FOCUS	-	-	"	"	"	-7.5	4 45	-	- 1 1 30E
2804	79554	09 09.7	+15 22	"	"	"	-7.3	5 16	5 48	2 1 11
2805	98354	11 13.7	+14 49	"	"	"	-7.6	5 56	7 06	1 55W

(14)

clouds and snow flurries most of day
and almost till dark.

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+13°F	REMARKS
18 2	1 25 W	+42 59	3	6.53	K5	1-1-1	clouds almost from start.
19 14	0 00	+74 56	2	6.10	A2	1-1-1	light clouds.
19 5	0 53 W	+73 51	3-4	7.42	A0	1-1-1	light clouds.
20 15	1 39 W	+74 04	3-4	6.55	B9	1-1-1	
21 5	0 45 W	+415 34	3-4	7.44	G5	1-1-1	
22 1	0 42 W	+29 08	4	7.05	B8	1-1-1	
23 15	1 22 W	+60 23	3	7.26	A0	1-1-1	
24 10	1 21 W	+73 23	3-4	7.30	F5	1-1-1	← Trouble: (a) Differential in control clock mechanism has become jammed. Shut off control clock.
0 52	1 00 W	+60 59	3	6.54	F5	1-1-1	(b) Dec quick motion, when it does work, appears to be having a hard time, is very slow.
1 4	1 19 W	+28 51	2	6.37	B9	1-1-1	
2 53	1 28 W	+30 56	2	7.29	A2	1-1-1	sky full dust and exposure.
3 20	0 49 W	+73 22	2-1	6.93	A0	1-1-1	SLIDE = 26.27 TILT = 19.6
	OUTSIDE THROUGH GLASS					15-15	
5 02	1 41 W	+15 11	3	7.18	K0	1-1-1	clearing again about 5.05
6 10	0 55 W	+14 55	3	7.21	G0	1-1-1	seems to be double; took small comp. A

Date Monday Dec 13-14, 1937, M-L Julian Day.

3)

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
18 36 1	0 40 W	32 09	2	6.87 B9	1-1-1 Temp went to -7.2 set to -9.5 done temp +14°F.
19 24 2	0 34 W	44 53	2-3	6.51 A0	1-1-1 Dec damp sticking a little.
20 19 3	1 09 W	31 02	2	6.78 B9	1-1-1
21 32 4	0 51 W	47 07	3	7.09 B8	1-1-1 set temp to about -8.8
23 12 5	0 52 W	29 49	3-2	7.51 A0	1-1-1
24 4 3	0 44 W	13 29	2	7.5 B9	1-1-1
25 00 4	0 51 W	14 37	2	6.80 B9	1-1-1 Double. took following component, (right.)
26 13 5	2 56 W	30 56	3	7.29 A2	1-1-1 Light clouds at 1.30 - quite thick at 1.50 clearing again from 2.30 on. falling in again toward end of exp.
					MC. SC SW. H.T. S.T. Dec. 14 12 -18.6 -1 28.9 +36.6 -19.0 -0.4

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Date Tuesday, December 14-15, 1937 H-L Julian Day _____

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2818	HD 213126	22 24.2	+87 34	I-12	Astra II	^{set} 010	^{set} -5.0	17 26	18 58	3
2819	370	00 03.3	+73 41	"	"	"	-4.0	19 03	20 53	1
2820	5914	00 55.6	+88 29	"	"	"	^{set} -4.5	20 58	21 48	2
	23838	03 43.1	+44 40							
2821	29678	04 35.4	+75 46	"	"	"	-4.8	22 53	23 27	3
	25473	03 57.7	+73 18	"	"	"				
Thu., 1937 Dec 16-17, Hd-MR, cloudy. Fri., 1937 Dec 17-18, H-MR, cloudy. Sat., 1937 Dec 18-19, M-MR, cloudy.										

(4)

Set focus to 26.30

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
8 77.3	2 00W	+87 48	2	7.43	A2 1-1-1	Telescope E of pier. Light clouds
8 77.1	2 03W	+73 53	2	7.42	A0 1-1-1	Filling in slowly; star gone 19 ³⁰ -19 ⁵⁰ . Stage then 1/1.
21 4.2	1 ^x 51W	+88 43	2	6.54	A2 1-1-1	Thick haze. Clouds last part.
				6.35	G0	Cloudy
7 27.3	0 02W	+75 51	3	6.32	F0 1-1-1	Stage. Clouds
				7.30	F5	Hopelessly thick when it closed up at 2.00.
						MC SC SW M.T. S.T.
						Dec. 15 12 -15.0 -1 29.3 +43.5 -15.8 -0.3
						Dec. 16 12 -15.1 -1 29.8 +49.4 -17.4 -0.4
						Dec. 17 12 -15.1 -1 30.0 +56.2 -19.0 -0.5
						Dec. 18 12 -14.3 -1 30.2 +64.0 -21.4 -0.6
						Dec. 20 12 -14.6 -1 30.1 +17.9 -22.2 -0.3
						Ado 1m Best
						Dec. 21 12 -11.5 -1 30.4 -34.6 -23.9 -0.4

Date Monday - Dec 20-21, 1937 M-L Julian Day.



cleared about 23.30

[illegible]

Date Wed Dec 22-23, 1937 HD- Julian Day

[illegible]

See previous page.

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Moon practically dry at 9.00

Ending Time
L.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

W 25^m

46 53

2

6.74 B9 1,1,1

- Very high wind

44 17

1

7.59 75 1,1,

clouds from 11.10 remained

cloudy closed slide at 12.15

closed up at 1.15 still thick

wind increasing slight precipitation

ME. S.E. S.W. Watch H.T. ST.

Dec. 23 12 +00.1 -1^m 20.6 -11.4 -26.6 -0.5^s

Date Thursday Dec 23-24, 1937, M Julian Day.

2

Cloudy at sunset, cleared about 19.^h₀₀ though
still cloud near horizon especially in south.

long with snow.

171

1937

Y-L

Date Sunday Dec 26-27

Julian Day.

[illegible]

(6)

Did not open at first account of strong wind. 172

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		comp.	REMARKS <u>watches stopped</u>
7 12 3	28 ^m E	31 54	1	7.20	G5	1-2	Sid watch 0 ^m 8 fast clouded. cleared around 9 ⁰⁰
11 00 1	57 ^m W	17 08	1	7.08	G5	1-1-1	Sid watch reads 5 03.0 when mean watch 9 59.0
2 20 2		14 04	1	6.46	B9	1-1-1	Mix
1 17 3	0 05 E	15 14	1	6.07	A0	1-1-1	Mix
3 5 1	0 35 W	28 29	1	7.50	G5	1-1-1	Hd. x
5 4 2	2 18 W	31 36	1	7.55	B8	1-1-1	Hd. x large light clouds at end. S5
						15-11	S9½
							Watch
							mc. S.C. S.W. M.T. S.T.
							Dec 27 12 -05 ^s 8 -1 ^m 30 ^s 5 -15 ^s 0 -02 ^s 6 -0 ^m 8 (reset)

Date Monday, Dec 27-28, 1937 M-L Julian Day

Electrograph - 3.5 at 16.30.

Hour Angle
End

C 04 V

174

Dome temp $+29^{\circ}\text{F}$ at 16:30, 28°F at 17:30Ending Time
E.S.T.

18 2 3

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

0 04 W

+15 40

2

6.71

A5

1-1-1

light clouds at sunset clear later with break in wind
 very difficult to turn dome W. Wind shifted E. haze grew
 difficult to set on star lost it in haze several times
 light on spider across wire floor.

61 22

1

6.27

B9

1-1

Image lost during most of time
 absolutely thick at 19 h.

Closed dome at 19:40.

Put heat on around mirror

and blower on

plate box in dome.

watch

M.C.

S.C.

S.W.

M.T.

S.T.

Dec 28 12 -04.6 -1^m30.4 -09.1 -04.6 -0^m.8

175

Date Tuesday December 28-29, 1937 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2835	HD 222386	23 35.0	+74 43	I-12	Astra II	Slit 010	+1.0	17 26	18 00	2
2836	222387	23 35.0	+73 36	"	"	"	+0.8	15 02		3
	224098	23 50.0	+73 51	"	"	"				
2837	25473	03 57.7	+73 18	"	"	"	+2.7	20 18	21 43	1
2838	29329	04 32.1	+76 25	"	"	"	+0.9	23 28	1 15	2
2839	73797	08 35.1	+73 39	"	"	"	+1.0	2 16	3 56	3
2840	213126	22 24.2	+87 34	"	"	"	+1.0	4 14	6 04	1
2841	107192	12 17.4	+88 15	"	"	"	+1.2	6 09	7 04	2
Wednesday December 29-30 H-L Cloudy all night Thursday 1937 December 30-31, Y-MR Cloudy Friday - Dec 31, 1937 - Jan 1, 1938 M, MR Blizzard all week and all night										

Telescope 三

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
1 11 2	0 34 W	+74 59	1	6.10	A2 1-1-1	High wind. Some clouds.
"		+73 42	1-0	6.86	G5 1-1	Light clouds. Thick 18 ¹⁵
				6.55	B9	Cloud better 18 ⁵⁰
"	0 08 E	+73 26	1	7.30	F5 1-1-1	Clearing; some clouds. Clouds 21-2 ^{20 45}
2 49 W	+76 33	0-1	6.93	F5 1-1-1	Clouds 23 ⁴⁵ 00 ³⁵ clouds 1 ¹⁵	
3 37	1 28 W	+73 33	0-1	7.46	A2 1-1-1	
6 4	X 210° 02 E 2 02 W	+87 45	0	7.43	A2 1-1-1	
4 04 2	0 59 W	+88 04	0	6.56	F0 1-1-1	
ME. S.E. S.W. M.T. S.T. Dec. 29 12 -03.3^s -1^m 30.5^s -02.9^s -02.2^s -0.7^m Dec. 30 14 -01.0 -1 27.3 +07.9 -04.3 -0.7^m						
all day and all morning						

Date 1938 JAN. 1-2, Saturday, H-MR Julian Day.

Red
Ch
I
~~It~~

①

179

Date 1938 Jan 4⁵⁻⁶ Wed ~~Fri~~ Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2842 F	Focus			I-25	Astra II	0/0	-7.0 -7.0			2
- 2843	HD 5394	00 50.7	60 "	"	Procces	"	-6.4	5.40	5.44	3
								5.45	5.53	
								5.54	6 10	
2844	" 2942	00 27.6	27 44	"	Astra II	" M	-6.5	6.16	8 00	1
2845	" 22136	03 28.9	46 46	"	"	" M	-6.5	8 06	9 22	2
2846	" 45194	06 21.0	13 10	"	"	" M	-8.0	11 21		
2846	" 73080	08 31.3	+28 39	"	"	" M	-8.0	1.18	3.48	4
2847	" 99832	11 24.0	+30 58	"	"	" M	-8.2	3.53	6.23	1
				Thurs Jan 5 ⁶						
				Changed to I-12	Set focus 26.36	Tilt 19.45				
2847 F	Focus test			I-12	Astra II	0/0	-10.4			1
1938 Jan 6-7 Thursday Hd-met cloudy all night										

(5)

Date 1938 January 7-8, Friday 14-MR Julian Day.

[illegible]

Ending Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+16° F	REMARKS
	Outside the base				10/10	setting 2 26.35 setting 6 26.30	
18 2	1 28W	+73 41	1	6.86	G5	1-1-1	
19 3	1 58W	+74 07	1-2	6.55	B9	1-1-1	
20 4	3 25W	+73 55	1-2	7.42	A0	1-1-1	
21 5	0 31E	+75 52	1-0	6.32	F0	1-1-1	
22	0 41W	+44 48	1	6.35	G0	1-1-1	Brilliant aurora
23	2 25W	+43 55	1	7.05	B9	1-1-1	Light clouds. 22 ¹⁰ - 22 ⁴⁰ . Lighthouse 23 ⁰⁰ . N's *.
							Thick haze with only bright stars until about 3, when it definitely faded in; Closed 5 ⁰⁰ ; ...
							M.C. S.C. SW M.T. S.T.
							Jan 8 12 +07.1 -1 31.0 +09.4 -04.7 -0.8

Date 1938 Saturday, Jan 8-9, M-MR. Julian Day.

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2854	HD 7374	1 8.8	15 36	I-12	Astra II	.010	-8.6	19 27	20 11	1 50 W
2855	35909	5 22.9	13 37	-	-	-	-8.2	20 36	22 20	2 10 E
2856	43683	6 12.4	14 25	-	-	-	-8.3	22 25	23 25	3 45 W
2857	47395	6 33.3	28 21	-	-	-	-8.5	23 28	00 18	1 37 W
2858	49949	6 45.8	44 58	-	-	-	-7.6	00 24	01 31	2 37 W
2859	70338	8 16.3	13 57	-	-	-	-8.0	01 36	04 06	3 43 W
2860	97889	11 10.5	60 28	-	-	-	-7.8	04 37	05 30	4 13 W
	FOCUS	-	-	-	-	-	-8.0	05 50	-	

7

Cloudy at sunset

Partially clear with heavy haze at 6.30 p.m.

Clear at 6.45. Started to look at 7.00 but heavy bank of clouds came up from N before set on star. Cleared later

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+10°F	REMARKS
20 11	1 50 W	15 46	0-0	5.80	B8	1-1-1	intermittent clouds all during exposure seeing very poor, thick at 20.09 cleared later
22 20 2	0 10 E	13 35	0-0	6.32	A2	1-1-1	clouds thick again at 21.50 cloudy at 21.50 cleared at 21.25
23 25 4	0 05 W	14 23	0-0	5.98	A0	1-1-1	clear
0 13 1	0 37 W	28 17	0-0	5.79	B8	1-1-1	
0 13 2	1 37 W	44 53	0	6.24	A5	1-1-1	
0 13 3	2 43 W	13 47	0-1	7.14	A2	1-1-1	began to haze, 3.15. Sky very uncertain thereafter
0 13 4	1 13 W	60 15	2	6.74	A3	1-1-1	still uncertain; seeing improved. mostly cloudy
	OUTSIDE	THROUGH	BASE	-	-	12-15	clouds clouds clear clouds clouds clear clouds clouds closed up 5.45
	LIDE = 26.30	TILT = 19.5					
							central clock out of order: clamp which stops one of differentials has become gummy & will not disengage.

Date Monday, Jan 10-11, 1938, M-L Julian Day.

5

186

Set focus to 26.32

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS								
18 45	0 38 W	61 22	0	6.27	B9	1-1-1	Jan. 10	12	M.C. +09.7	S.C. -1 30.9	SW +14.3	M.T. +0.6	S.T. +0.4 ^m
20 47	0 50 W	59 24	1-2	7.35	A0	1-1-1	Reset						
22 53	0 37 W	14 58	2	7.27	B9	1-1-1							
24 11	1 51 W	15 23	1	7.02	B9	1-1-1							
		29 43	1	6.50	B9	1-1	Light cu:ci clouds shortly after start, solid out 00.35.						
							* This plate in box and numbered 2765 but I hardly think it is useable.						
							Closed at 2.30, still thick at 3.00						
							Jan. 11 12 +09.0 -130.9 +29.6 ^s +04.0 ^m +0.5						
							Jan 12 12 +12.3 -130.8 +27.2 +02.6 +0.5 ^m						
							Jan 13 12 +12.0 -131.0 +32.8 ^s +00.4 +0.5 ^m						
							Jan. 14 12 +14.2; -130.9; +38.5; -01.5 ^m +0.4						

Date 1938, January 14-15, Friday. H-MR Julian Day.

③

185

Cloudy with snow much of day & early evening
 breaking up 9⁴⁵⁰⁰ - 10⁰⁰. Delayed setting a bit till
 snow blew off shutters on opening.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+08° F	REMARKS
22 26	1 28 W	+31 04	0	5.91	B5	1-1-1	Very windy.
24 33	1 23 W	+15 56	0	6.51	A5	1-1-1	light snow from clear sky - or from ground?
02 39	2 10 W	+46 04	0	6.61	A3	1-1-1	new moon (moon shining thro hole of main mirror)
-	OUTSIDE THROUGH	BASE	-	-	-	12-15	thin clouds from West at start; image goes 125 → 200 off axis.
	SLIDE = 26.32	TILT = 19.5					clouding up at end. mostly cloudy for rest of night closed up 5:30. clearing off 6:30!
							generator pilot light not working
							Jan 15 12 +14.4 -130.9 +44.1 ^s -01.0 ^m +0.5
							Jan. 17 12 +17.8 -131.3 +52.9 ^s -03.9 ^m +0.4

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

6

190

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
19:27	1 30W	18 01	0	6.02	A2 1-1-1	light clouds over whole sky, difficult to see image. Image faint and in clouds during most of exposure
(20:27)	0 11W	13 12	0	6.00	B9 1-1-1	light clouds over most of sky. Clouds fairly heavy by 20:15 remained thick after 20:15. Take 20:19 as end of this.
						Remained thick.
						Clouds done at 21:35.
						Cleared again about 23:00
						Tried to take HD 55283N seeing too bad to see double
19:40	1 37W	16 14	0-0	6.66	Mb 1-1-1	great difficulty setting lens.
19:45	0 06W	46 06	0	7.13	A2 1-1-1	light clouds from 1.45 - image, hard
19:50	2 01W	60 15	0	6.74	A3 1-1-1	to see! quite clear again at 4.30
19:55	0 24E	28 29	0	6.90	A0 1-1-1	
						M.E. S.E. S.W. H.T. S.T.
						Jan. 18 12 +19.0 -131.5 +62.5 -02.4 +0.4 ^m

Date. *Tuesday January 18-19, 1938* H-L Julian Day.

①

192

Ending Time
L.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

+3° at 18⁰⁰

REMARKS

21 15 3

3 45W

+13 33

1-0

7.58

A3

1-1-1

for M. Stage 18³⁰ Stage 18⁴⁵ 10¹⁰ 10¹⁰ 10¹⁰
 Think again.
 closed up 21 45

M.E.

S.C.

S.W.

M.T.

S.T.

Jan. 19 12

+20.1

-1.314

+05.1

-01.0

+0.4

Adv 1^m

Date Wed Jan 19-20, 1938 Hl- Julian Day.

8584

[illegible]

Date Thurs Jan 20-21, 1938 ~~142-115~~ Julian Day.

196

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+23° F ± 2.00	REMARKS						
8 02 1	W 11 ^m	46 53	2	6.74	B ₉ 1, 1, 1		clouds latterly.						
11 04 2	W 1 ^h 06	16 04	3	7.13	G ₅ 1, 1, 1		← Note temp. Effect of moderating weather?						
2 20 3	W 0 55	15 15	3	6.47	A ₀ 1, 1, 1								
3 00 4	W 1 02	16 37	3	3.71	A ₂ 3		setty 1½						
1 00 5	W 1 04	-	-	-	- 3		" 4						
2 00 6	W 1 07	-	-	-	- 3		" 7						
0 00 7	F 0 04	62 10	4	6.00	F ₀ 1, 1, 1		suff. list { thin heavy mist						
0 00 8	W 0 18	59 15	4	6.36	F ₀ 1, 1, 1		suff. list { clouds rolling around						
0 00 9	W 0 45	31 34	4	7.55	B ₈ 1, 1, 1		{ in sky						
-	OUTSIDE	THROUGH	BASE	-	- 13-16		sky filling in from south, west & north at end of exposure.						
	SLIDE = 26.33	TILT = 19.5					closed up 6.20 gen. pilot light not working						
						M.C.	S.C.	SW.	M.T.	S.T.			
						Jan. 21	12	+22.8	-1 31.0	+21.5	+02.8	0.0	Reset
						Jan. 22	12	+24.1	-1 31.3	+30.7	+00.6	-0.3	Reset

1938

Y-h

2

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Ending Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
7 45 L	1 ^h 11 ^m E	45 49	2-1	7.19	F8	1-1-1
0 7 48 1	23 ^m E	43 56	1	5.96	B9	1-1
						shut off by Fog.
						Jan 24 13 +24.1 -1 33.3 +34.5 -01.4 ^s +0.4 ^m
						8 ³⁰ - 9 ³⁰ . Still very hazy. The snow - clouds 9 ³⁰ —
						Jan 25 12 +26.8 -1 31.5 +41.5 -03.7 +0.4
						26 12 +27.4 -1 31.7 +48.8 -05.8 +0.4

201

Date Thursday January 27-28, 1938 H-MR Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2888	H.D. 1606	00 15.2	+30 23	I-12	Astra II	0.50	^{sat} -13.0	18 03	18 28	4
2889	6475	01 00.7	+61 10 +59 20	"	"	"	-13.4	18 38	19 38	1
2890	16111	02 30.2	+28 58	"	"	"	-13.5	19 42	21 02	2
2891	23838	03 43.1	+44 40	"	"	"	-13.4	21 07	21 57	3
2892	35239	05 18.2	+31 03	"	"	"	-13.7	22 03	22 28	4
2893	34762	05 14.7	+27 51	"	"	"	-13.7	22 33	23 08	1
2894	73797	08 35.1	+73 39	"	"	"	-13.9	23 20	01 10	2
2895	213126	22 24.2	+87 34	"	"	"	-13.9	01 44	03 24	3
2896	96870	11 04.2	+88 11	"	"	"	-13.9	03 31	05 11	4
2897	107192	12 14.4	+88 15	"	"	"	-13.8	05 19	06 03	1
2898	93875	10 45.1	+59 51	"	"	"	-14.0	06 13	07 00	2
	FOCUS	-	-	"	"	"	-14.0	07 15	-	-
				1938 January 28-29, Friday, M-MR, cloudy						
				1938 January 29-30, Saturday, Hd-MR, cloudy, snow and sleet.						

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		-4° F at 6.30 A.M.	REMARKS
2	2 20 W	+30 35	0-1	5.77 B8	1-1-1	Setting 3	
37	2 44 W	+59 32	1	6.78 A0	1-1-1	Trouble with dew clouds. Light scattered clouds	
72	2 39 W	+29 07	1	7.05 B8	1-1-1	Light clouds. Star seemed very faint (?)	
8	2 20 W	+44 47	1	6.35 G0	1-1-1	Filled in almost completely $21^{20} - 21^{45}$. Star still $\frac{1}{2}$ off.	
1	1 17 W	+31 04	1	5.91 B9	1-1-1	Very thick at start.	
1	2 00 W	+27 53	1-2	6.28 B9	1-1-1	Stage.	
01 10 3	0 40 W	+73 31	2-1	7.46 A2	1-1-1	Telescope E of pier. Stage $23^{20} - 2^{30}$ Star gone	
23 24 5	10 40 E	+92 15	2-1	7.43 A2	1-1-1	Trouble with dew. Q.M.; end green? also started exposure on	
05 11 4	2 05 W	+88 00	1-2	7.39 B8	1-1-1		wrong star
06 01	1 55 W	+88 00	1-2	6.56 F0	1-1-1		
07 11 2	4 23 W	+59 40	1-2	6.66 K0	1-1-1	supp. list	
-	UTSIDE	THROUGH	BASE	-	-	12-15	SLIDE = 26.32 TILT = 19.5
							general pilot light is out
							spgph. heat indicator very hard to move; left it at +20°C
							Jan. 28 12 +30.2 -131.6 +59.6 +03.0 +0.5 ^m

Date Monday Jan 31 - Feb 1, 1938, M-L Julian Day.

6

204

Small local snow flurries after.
 sunset delayed opening. Wind
 fairly strong.

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
21 31 3	1 52 W	16 22	0	7.50 B9	1-1-1	light haze Jan 29. 10. MC +31.5 SC -1 31.4 SW +1 06.1 MT +01.4 ST +0.5
22 51 4	1 00 W	29 44	0	6.50 B9	1-1-1	Jan 31 12 +34.3 -1 31.4 +1 26.4 -028 +0.4
0 40 1	1 42 W	15 26	0	6.97 B8	1-1-1	+ 26.4 Reset - adv 1 m
2 02 2	1 08 W	15 37	0	6.49 A0	1-1-1	
4 3 7	2 15 W	44 28	0	7.46 A5	1-1-1	
4		59 45	0	7.32 A2	1-1 1/2	sky clouding over at 4.50, slight precipitation. closed at 5.30.
						Feb. 1 12 +35.8 -1 31.3 +3 24.7 -01.3 +0.5

205

Date Tuesday February 1-2, 1938 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2905	HD 9270	01 26.1	+14 50	I-12	Actin II	set 010	-9.0	18 06	18 13	1
	"	"	"	"	"	"		18 14	18 18	
— 2906	HD 25639sf	03 59.1	+62 04	"	"	"	-9.0	18 24	20 44	2
1. Feb 2-3 Wed Hd-L cloudy 1938 Feb. 3-4, Thursday, H-MR; cloudy.										

(2)

Thermostat very hard to set.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
1 3 1 8 1 4	1 14W	+15 01	1	4.50	G5 2-2	Setting 3 Light haze [*] full just the day after the shut of H. first exposure
2 2	1 10W	+62 10	2-4	7.09	B 1-1-1	Heavy haze soon after start. Star lost most of time 18 ⁴⁵ - 19 ⁴⁵ Thick again. Closed up 23 ¹⁵ Synchronous drive <u>very</u> bad; control good.
						Feb. 2 12 +37.4 -131.0 +30.0 +00.2 ^s +0.5 ^m
						Feb. 3 12 +38.8 -130.9 +37.1 -01.6 +0.5
						Feb. 4 12 +40.1 -130.6 +43.0 -03.4 +0.4

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
9 41	1	50W +16 35	1	6.78	A0 1-1-1	quite hazy.
21 57 31	1	14W +28 25	1	7.44	A3 1-1-1	E wind haze much thicker during last half of exposure finally image lost at end, became steadily thicker
						closed dome at 23.40
						put on all heaters
						clouds the rest of the night
						ET MC SC SW M.T. S.T.
						Feb. 5 10 +41.2 -130.8 +43.4 -01.8 +0.4^m
						Feb. 7 12 +43.6 -130.8 +53.2 -04.6^s +0.4^m

209

Date Feb 7-8, 1938, Monday, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Set -10 Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Exposure in
2909	HD 20458	3 12.4	13 29	I-12	Astron II	010	0°	18 22	20 36	4
2910	3.8817	5 43.4	43 59	-	-	-	-0.7	20 41	22 49	1
2911	55283	7 7.2	15 21	-	-	-	-0.9	22 54	00 54	2
2912	97889	11 10.5	60 28	"	"	"	-0.8	01 03	02 23	3
2913	112501	12 52.1	44 06	"	"	"	-0.6	02 29	03 20	4
2914	126269	14 19.4	16 44	"	"	"	-0.6	04 30	05 54	1
2915	153286	16 53.4	47 32	"	"	"	-0.6	06 00	06 50	2
Tuesday February 8-9 14 Cloudy.										
Wed " 9-10 14d "										
Thurs Feb 10	MR changed to I-25. I-12 focus was 26.35 Tilt 19.45									
2915F	7 focus			I-25	Astron II	010	-5.5			2

(7)

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
2-11	2 14 W	13 37	1-0	7.42 A0	1-1-1 moon shining through hole in large mirror
2-11	1 56 W	43 59	1	7.51 A2	1-1-1 light clouds coming up from at 22.00
2-11	2 38 W	15 15	1	7.39 A0	1-1-1 light clouds over most of sky. Only one image seen.
2-11	0 03 W	60 15	1	6.74 A3	1-1-1 trouble with clock, had to extend exp.
2-11	0 40 E	43 52	1	6.95 A0	1-1-1 sky filling in at 3.10 star gone at 3.20.
2-11	0 ^{XW?} 26 E	16 32	1	7.19 A0	1-1-1 clearing again.
2-11	1 10 E	47 27	1	6.94 A2P	1-1-1
Feb. 8 12 +44.8 -1 30.7 +58.0 ³-04.0 ^m+0.4 Blower left m. Tuesday p.m. - put on heaters above + around mirror. Feb. 9 12 +46.2 -1 30.2 +03.4 ³-05.3 ^m+0.4 Feb. 10 12 +47.4 -1 29.8 ^{adv. 1 m}+17.2 -06.5 +0.4 7 runs Base outside 12/8 Sat 1 23.3 Telt 23.25- 6 23.4 9 23.5 7 runs 23.2 would be better					

211

Date Thurs Feb 10-11 / 38 Hd-MR Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
29 16	HD 5394	00 50.7	60 "	i-25	Procur	010	-5.4	6.31	7 11	2
29 17	" 43947	06 13.9	16 02	"	Antar II	010		7.11	7 27	
								7.27	7 35	
								7.46		
2917	" 43947	06 13.9	16 ⁰³ 02	"	Antar II	010	-5.5	7.46	10 14	3
2918	" 56537	07 12.3	16 43	"	"	"	-5.5	10 17	10.25	4
2919	" 68776	08 08.8	13 22	"	"	010 ^M	-5.5	10.23	12 28	1
2920	" 91130	10 26.2	32 54	"	"	"	-5.2	00 34	01 44	2
29 21	{ " 105388	12 03.0	31 37	"	"	"	-5.4	01 49	02 25	3
	{ FOCUS	-	-	"	"	010	-9.5!	08 10	-	-
Sat Feb 12 Hd-MR										
2921 F	Form			i-25	Antar II	010	-9.0			4
1938 Feb 12-13, Saturday, Hd-MR, heavy mist and rain										

(6)

[illegible]

213

Date Monday Feb 14-15, 1938, M-MR Julian Day 77

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
2922	HD. 84107	9 37.7	30 27	I-25	Astra II	1010	-7.2	23 01	24 41	1
- 2923	91636	10 29.8	+09 10	"	"	"	-7.2	00 48	02 18	2
- 2924	"	"	"	"	"	"	-7.2	02 18	03 38	3
2925	133388	14 59.1	+60 36	"	"	"	-6.9	03 47	04 57	4
2926	161569	17 41.2	+45 05	"	"	"	-7.0	05 04	06 44	1
	FOCUS	-	-	"	"	"	-7.2	06 50	-	-
Tuesday Feb 15-16, 1938 H-L										
2926 F	F. m			I-25		010	-11.5	11 15		1

(5)

Clear'd just before sunset but delayed opening because of very strong N. wind and light snow flurries, blowing across from NW. later sky cleared occasionally. 214

Hour Angle End	Declination	Seeing	Ptg. Mag.	+07°F
-------------------	-------------	--------	-----------	-------

REMARKS
Cleared fairly well at 2.40. Found some door
lock frozen. Thawed out by beating brass
with mallet in waste basket. Seeing terrible
suppl. list.

$0^h 22^m W$	30	13	0-0-0	5.79	A2	2-2-2
--------------	----	----	-------	------	----	-------

107W	+08	56	0	5.7	AD	2-2-2
------	-----	----	---	-----	----	-------

2 30 W	"	0	"	"	2-2-2
--------	---	---	---	---	-------

0 42 E	+60	26	1-2	5.95	A2	2-2-2
--------	-----	----	-----	------	----	-------

1	36	F	+45	02	1	6.59	B9	2-2-2
---	----	---	-----	----	---	------	----	-------

OUTSIDE	THROUGH	BASE	-	-	12-12
---------	---------	------	---	---	-------

SLIDE = 23.6, TILT = 23.1³. "~~no film~~"

	slide	tilt	no filter
setting 2	23.60	23.15	12-10
6	23.70	23.15	

23.60 ~ 23.62 feet

tilt OK

Feb. 15 12 +53.8 -1 27.6 +47.8 +01.8 +0.5

215

Date Tuesday February 15-16, 1938 H-L Julian Day.

[illegible]

Date *Wed Feb 16-17, 1938* *Hd - L* Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
- 2930	S Tauri HD 37202	5 31.7	21 05	J-25	Process	010	-5.0	10.45	11 21	3
- 2931	"	"	"	"	Citra II	010	-4.8	11 34	11 35	4
2932	HD 75486	0844.2	62 20	"	"	"	-4.9	11 48	12 40	1
		1938 February 17-18	Thursday	HD-MR	heavy mist & rain					
		1938 February 18-19	Friday	H-MR	cloudy					
		1938 February 19	Saturday	HA H	see also next page					
2932F	Focus test			I-12	E-40	010	-3.0			1

Date 1938 February 19²⁰, Saturday, M-MR Julian Day.

2

slowly clearing from midnight, with strong east wind.
Completely clear about 2. Opened up.

220

set focus at 26.20

Ending Time
E.S.T.

Hour Angle
End

Declination

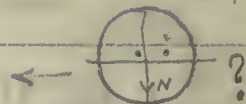
Seeing

Ptg. Mag.

+21° F at 5^h

REMARKS

right



04 17²

1 04 E +59. 46 2 7.32 A2 1-1-1

windy.

06 35

1 04 E +16 57 2-1 7.59 A0 1-1-1

" . Difficulty with upper curtain, chains of pulleys. O.K. now

OUTSIDE THROUGH BASE - - 2 feet 12-15

who has the flashlight?

55

SLIDE = 26.20, TILT = 19.45.

58

East chain of upper curtain broke as curtain was being
put back in place.

Date 1938 Feb 20-21 Sunday

Y-L

Julian Day

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp	REMARKS
7:00 4	8 ^m E	43 57	4	5.96	B ₉	1-1-1	
7:51	1 ^h 18 ^m W	15 37	3-2	7.48	A ₀	1-1-1	For Dr Heard.
10:43 2	56 ^m W	28 45	1-2	7.10	A ₃	1-1-1	" Dr Heard. Two other stars in field, w 
2:03	30 ^m W	27 39	1-2	6.95	F ₅	1-1-1	
2:04	0 34 W	27 49	1-2	6.99	A ₂	1-1-1	
2:51	1 13 W	30 18	1	7.16	F ₀	1-1-1	
2:52	0 12 W	42 51	1	7.18	F ₀	1-1-1	
2:53	0 33 W	30 17	1	7.18	F ₂	1-1-1	
2:54	0 15 W	47 40	1	6.58	A ₀	1-1-1	
							MC SC SW MT ST Feb. 21 12 +61.8 -1 24.9 +20.1 -01.6 +05^m Ado 1^m

223

Date *Monday, Feb 21-22, 1938* M-L Julian Day

[illegible]

Date Wed Feb 23-24, 1938 Hd-

Julian Day

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
						Opening at 7.00 found mirror badly frosted (no heat) Put on a.c. heat. at 9.00 no improvement. But Directed radiant heater onto mirror which then cleared by 10.00.
	OUTSIDE	THROUGH	BASE	-	-	2 fillers Clouds at 10.00
	TILT = 19.45	SLIDE = 26.20	SETTING	2	12-16	HC SC SW H.T. S.T.
		26.30		5	12-15	Feb. 24 10 +65.5 -1 23.8 +38.8 -02.0 +0.4
		26.25		8	12-15	

3

Date Thursday, February 24-25, 1938 14-MP Julian Day[illegible]

228

Some turning W only with great difficulty.

		M.R.	S.C.	S.W.	MT	S.T.
Feb. 25	12	+68. ³ 9	-121. ⁵ 4	+44. ³ 6	+00. ³ 4	+0. ^m 3

Ending Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		416° Fat 3 ^h	REMARKS
20 +	1 29W	13 29	1	7.5	B9	1-1-1	
22 25 2	2 18W	14 36	1	(6.80)	B9	1-1-1	double-tooth peaking component. ^{seeing} variable
24 12 3	2 05W	16 15	1	7.13	B5	1-1-1	light clouds in SW.
00 49	0 49E	28 05	2	5.90	A3	1-1-1	
0 38	0 11E	13 20	3, haze	6.58	B9	1-1-1	sky generally hazy at start. Image gone at 1 ^h 48 ^m in.
-	OUTSIDE	THROUGH	BASE	-	-	2 fiducial 12-15	SLIDE = 26.30, TILT = 19.45, SET. 8. Snow Put all the heat on.
							MC SC SW M.T. S.T.
							Feb. 26 10 +67.8 -1^m 23.2 +48.6 +03.7 +0.5^m
							Feb. 28 12 +1^m 10.2 -1 23.2 +63.0 +00.3 +0.5

231

Date Mon Feb 28 - Mar 1, 1938 44- Julian Day

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
7 52.2	3 ^h 26 ^m 29 ^s 14	1	7.34	F ₀ 1,1,1	Comps. involved. - Clouds all end 7.44
3			6.73	B ₈ 1	Take star marked with arrow on map. Please check.
					↑ please check anyway.
					Remained thick, Cloud 11.40
					M.C. S.E. S.W. M.T. S.T.
					Mar. 1 12 +1^m 11.6 -1^m 23.1 +09.9^s +02.3^s +0.4^m
					Mar. 2 12 +1 12.9 -1 23.0 +16.2 +00.7^s +0.5^m
					Mar. 3 12 +1 14.2 -1 22.9 +22.1 -01.0 +0.5

a terrific N.W. wind, was

233

Date *Thursday 771 arch 3-4, 1938 HMR* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Star Angle End
2960	HD 22195	03 39.4	+31 21	I-12	Astria II	^{5T} 010	-14.8	18 50	20 40	4
2961	35239	05 18.2	+31 03	"	"	"	-15.0	20 44	21 12	1
2962	46031	06 25.9	+15 58	"	"	"	-14.2	21 24	22 24	2
2963	63630	07 44.8	+46 12	"	"	"	-14.6	22 29	23 29	3
2964	76238	08 49.8	+46 09	"	"	"	-14.6	23 33	24 25	4
	FOCUS	-	-	"	"	"	-14.5	01 00	-	-
Friday, 1938 March 4-5, Hd-MR, blizzard.										
Saturday, 1938 March 5-6, M-MR, cloudy, with high wind.										

Date Sunday Mar 6-7 Y- L Julian Day

(5)

computed

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
7 40 1	1 ^h 28 ^m W	43 58	2	5.9 ⁶ 8	B9	1-1-1
9 15 2	25 ^m W	28 51	2	7.5 ² X	G5	1-1-1 For D. Heard clouds 9 ¹⁵ clear again 10 ⁴⁵
12 20 3	1 25 W	30 24	2	6.82	A5	1-1-1
1 29 4	0 56 W	30 21	2	7.16	F0	1-1-1
1	-	42 52	2	7.18	F0	1-2 light clouds 2 ¹⁰ - which at 2 ²⁰ closed at 4.00 thick. blower left on!
at 8.45	snow at	10.00.				
						Mar. 7 12 +06.2 -1 22.4 +35.9 ^s +01.8 ^m +0.4
						Mar. 8 12 +07.6 -1 22.2 ^s +03.0 ^m +00.5 +0.4 Reset

237

Date *Tuesday March 8-9, 1938 H-L* Julian Day.

[illegible]

L ^s lower left on /		mc	sc	sw	M.T. ST.	
March 9	12	+09.4	-1 ^m 21.7 ^s	-0.2	+0.2 ^s	+0.4 ^m
		0.5 added				

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Date Wed Mar 9-10, 1938 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
2976	HD 26911	04 10.1	15 09	I-12	Antua II	010	-3.8 -3.8	6 52	7 42	4
2977	" 27561	04 15.9	14 11	"	"	"	-3.8 -3.4	7 45	8 59	1
2978	" 35238	05 18.2	31 ⁰⁸ ₁₂	"	"	"	-3.4 -3.7	9 03	10 03	2
2979	" 45721	06 24.0	28 17	"	"	"	-3.7 -3.5	10 16	11 30	3
2980	" 97938	11 10.8	13 09	"	"	"	-3.4 -4.0	11 37	01 07	4
2981	" 105388	12 03.0	31 37	"	"	"	-4.0, -3.5	* 02 05	03 45	1
2982	" 121626	13 51.5	29 10	"	"	"	-3.7, -4.0	03 48	05 18	2
2983	" 157741	17 20.0	15 43	"	"	"	-3.7, -3.5	05 24	06 09	1
* Dec gave out completely, an hour's struggle put it in running										

Date Thurs Mar 10-11, 1938 HA-MR Julian Day.

③

Thick haze till about 9.00

242

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	+24° Fat 5 AM	REMARKS
10 56 3	W 4 ^h 20 ^m	44 15	2	7.59 F ₅	1, 1, 1.	Sec clamping not working.
12 30 4	W 4 57	46 32	2	6.73 B ₈	1, 1, 1.	Some clouds.
0 10 1	W 0 11	15 30	3	7.53 K ₀	1, 1, 1.	clouds 01 30. image same. ss
-	OUTSIDE	THROUGH	BASE	-	12-16	SLIDE = 26.30 TILT = 19.45 ss
						closed up 5 00
						M.C. S.C. S.W. M.T. S.T.
					Mar. 11 13	+13.1 -1 21.1 +11.9 +03.2 +0.5 ^w
						added 0.5 to H.C. find.
						again about 5 A.M.
					Mar. 12 12	+10.8 -1 21.0 +16.8 +01.4 ^s +0.4 ^m

Date Sunday, March 13-14 Y-L Julian Day[illegible]

Date Monday, Mar 14-15, 1938, M-L Julian Day.

7

246

Aurora in north fairly bright

(note added later)

Ending Time Z.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
20 30 2	2 42 W	16 04	1-2	7.38	A0	1-1-1	light clouds in south
23 15 3	3 15 W	15 18	2-1	7.39	A0	1-1-1	Dec setting and guiding motions all dead. Found both fuses for motor gone. Replaced.
0 9 4	0 ¹² W	14 44	1	6.43	A5	1-1-1	Sup. S. I.T.
01 40 1	0 ¹² W	46 14	1	7.00	A2	1-1-1	Sup. S. I.T.
02 22 2	1 27 E	60 27	1	5.95	A2	1-1-1	Sup. S. I.T.
03 42 3	0 01 E	28 30	1	6.90	A0	1-1-1	
04 52 4	0 47 E	30 24	1	7.54	A3	1-1-1	

	MC	S.E.	SW	M.T.	S.T.
		^m ^s	^s	^s	^m
Mar. 15	12	+10.8	-1 20.2	+33.3	-01.8 +0.4

247

Date Tuesday March 15-16, 1938 H-L Julian Day.

[illegible]

Ending Time
L.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
19 ⁴⁷ 2 ³⁶ W	+30 14	2-3	6.68 F5 1-1-1	Light clouds.
20 ³⁸ 2 ⁵⁷ W	+60 59	2-3	6.54 F5 1-1-1	Very thick much of time
21 ¹³ 2 ⁵⁹ W	+15 59	3-1	6.51 A5 1-1-1	Filling in soon after start. Shinner 21 ³⁰ -
22 ²⁷ 2 ⁵⁰ W	+58 27	3	6.96 A2 1-1-1	Thickens 22 ³⁵ Clear again 23 ⁰⁰ - 0 ⁰⁰
				Closed at 2.00, solid.
				B lower left on.
				ME SC MW MT ST
				Mar. 16 12 +10.9 -1 ^m 19.9 +41.9 -00.7 ^s +27 ^m +0.5
				Mar. 17 12 +10.3 -1 20.0 +47.4 -02.6 ^s +0.4 ^m
				Mar. 18 12 +10.0 -1 20.8 +47.0 -03.4 ^s +0.3 ^m

d. clouds near dawn.

249

Date Sunday March 20-21 Y-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3002	HD 102589	11 43.5	29 21	I 12	Astron	010	+7.4	12 22	01 52	1 42 W 2
3003	HD 121626	13 51.5	29 10	"	"	"	+7.5, +7.7	01 57	05 27	1 09 W 2
3004	HD 152877	16 51.0	28 17	"	"	"	+7.9, +7.2	05 32	05 02	1 15 E 2
3005	HD 161695	17 41.9	31 33	"	"	"	+7.5, 7.4	05 05	05 45	1 23 E 3
Moon Mar 21				Had My R.						
				I-12 focus was 26.32 Tilt 19.45						
				Changed to I-25						
23.15 F 23.6 3005	Focus.	I-25		I-25	Astron	010	+9.2			3 Astron

3

251

Date Monday March 21-22, 1938 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	D
- 3006	HD 58715	07 21.7	+08 29	I-25	E-33	set 010	set 42.5	19 06	19 10	3	0 31 E + 0
	"	"	"	"	"	"	12.7	19 10	19 26		0 28 E
	"	"	"	"	"	"	13.7	19 26	19 42		0 44 E
- 3007	HD 58715	"	"	"	"	"	13.8	19 43	19 59	4	0 13 V
	"	"	"	"	"	"	13.5	19 59	20 15		0 29 W
	"	"	"	"	"	"	13.3	20 15	20 31		0 45 W
- 3008	HD 58715	"	"	"	"	"	13.0	20 32	20 48	3	1 02 W
	"	"	"	"	"	"	13.0	20 48	21 04		1 18 W
	"	"	"	"	"	"	13.1	21 04	21 20		1 35 W
- 3009	HD 58715	"	"	"	"	"	12.8	21 21	21 39	4	1 53 W
	"	"	"	"	"	"	13.0	21 39	21 57		2 11 W
	"	"	"	"	"	"	13.0	21 58	22 23		2 37 W
- 3010	HD 58715	"	"	"	"	"	13.2	22 24	22 46	3	2 54 W
	"	"	"	"	"	"	12.8	22 46	23 06		3 21 W
	"	"	"	"	"	"	13.0	23 06	23 12		3 27 W
3011	HD 98854	11 13.7	+14 49	"	Astra II	010	12.5-12.7	23 16	01 46	1	3 39 W - 14

Room temp 52°F at start

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS	
9 ¹⁰ } 3	0 36 E	+08 25	1	3.04	B8	20 ³	Setting 1	Spots 100 ⁵
10 ²⁰ }	0 20 E		1-2			10-10	6	
11 ⁴² }	0 04 E					10-10	9	moving saw up along wire before shutting off.
11 ⁵⁷ }	0 13 W		2	3.04	B8	10-10	Setting 1	shut off thermostat, left door open.
12 ⁵ }	0 29 W					10-10	6	
1 ¹¹ }	0 45 W					10-10	9	
2 ⁵ }	1 02 W		2-1	3.04	B8	10-10	Setting 1	manual control to 130
2 ¹⁷ }	1 18 W					10-10	6	
3 ⁴ }	1 35 W					10-10	9	
3 ¹³ }	1 53 W		2-1	3.04	B8	10-10	Setting 1	
3 ¹⁷ }	2 11 W					10-10	6	
3 ²³ }	2 37 W		1-0			10-10	9	
3 ²⁸ }	3 00 W		0	3.04	B8	10-10	Setting 1	Sky filling in from the north from 1.15 on.
3 ³⁰ }	3 21 W		0			10-10	6	
3 ³² }	3 27 W		00			20	9	
4 ⁰⁴ }	2 09 W	+14 37	0	7.21	G0	3-3-3		Sp. 415 ⁵

Date Monday, March 21-22, 1938 ^{H-L} Julian Day

Hour Angle End	D
0 31 E	4
0 17 E	2
0 50 E	1
0 42 E	
0 40 E	1
36 E	

but load

254

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
04 ⁴²	0 31 E	+46 38	0	6.77	A _e 3-3-3	Clearing again. light clouds
06	0 17 E	+12 48	0	4.99	A ₅ 3-3-3	
05 ¹⁴	0 50 E	+27 45	0	4.26	G ₅ 4½-4½	Setting 2½
05 ²²	0 42 E	"	0	"	" 4½-4½	" 7½
06 ¹¹	0 46 E	+29 15	0	4.82	K ₀ 4½-4½	Setting 2½
07 ¹¹	0 36 E	"	0	"	" 4½-4½	" 7½
Mar. 22 12 NC +09.0 SC -1 19.3 SW +10.2 adv. 1m MT_s ST_m -09.2 +0.3						
9	Outside the base			10/8	Tilt 19.45	Set. Focus 1 26.20 6 26.30 9 26.40 Best focus seems to be at 26.27

256

Put on additional heat in mirror cell about
18.30. Still bad condensation.

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.
0 ⁵¹ W	29 00	1	6.98 A0 1-1-1

REMARKS

Mirror cleared about 22.20 but delayed opening
because of heavy fog. Set camera to 26.27
Difficult to read after temp. seemed to have risen somewhat
and wet wire again. Fog still pretty bad, especially near ground.
sky thickening up to 00.15 from when on
star just faintly visible on slit. Shuck at
00.50.

CT MC SC SW MT ST

Mar. 23 14 +08.6 -1 19.5 +11.7 -11.0^s +0.2^m

Mar 24 12 +08.2 -1 19.4 +17.6 -12.0 +0.2

(It was out of its "way")

Outside the base =

10/8

Reading Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	+36°F at 5 AM
21 13	2 41 W	17 02	1-0	6.80	B9	1-1-1	Used manual temp control Clouds coming up from SW at 20.00. Image very faint. clearer at 21.00 clouded again at 21.10.
24 33	0 42 W	17 39	1	6.87	A0	1-1-1	^{Sup light} partly clear. image occasionally faint. thick again at 22.30
00 30	0 17 W	13 18	1	6.98	B9	1-2	^{Sup light} clouds in west. Image gone 00 30. Thick. S5
0 -	OUTSIDE	THROUGH	BASE	-	-	^{2 filters} 12-16	SLIDE = 26.25 TILT = 19.45 S8
0 51	0 32 E	16 44	1-2	7.5	A0	1-1-1	clearing about 2 40. some haze.
0 51	0 51 E	14 56	1-2	6.43	B9	1-1-1	thin clouds at dawn
							MC SC SW H.T. S.T.
Mar. 25 12 +08.3 -1 19.1 +24.9							^s-10.2 ^m+0.2

259

Date Saturday, March 26-27, 1938 H.M.P. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Dist
3022	HD 35239	05 18.2	+31 03	I-12	Astria II	set 010	+0.6 +0.5	19 10	19 50	3	21W +3
3023	35076	05 17.0	+28 51	"	"	"	"	19 54	"	4	"
3023	HD 76216	08 49.7	+58 36	"	"	"	+4.0 +3.5	21 33	23 03	1	20SW -5
3024	106677	12 11.0	+73 07	"	"	"	+4.0	23 09	24 29	2	04W -7
3025	106022	12 06.9	+29 06	"	"	"	+3.5 +3.4	00 36	01 36	3	25W +2
3026	112570	12 52.6	+46 44	"	"	"	+3.3 +3.0	01 42	02 42	4	46W +4
3027	132445	14 54.1	+44 52	"	"	"	+3.3 +2.7	02 46	04 02	1	05W +4
3028	159330	17 29.1	+57 57	"	"	"	+3.3 +2.9	04 08	05 38	2	007W +5
	FOCUS	-	-	"	"	"	+3.0	05 45	-	-	INSIDE TW

(7)

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cloudy all day; clearing with very high
wind.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		+ 32°F at 4.30 A.M.	REMARKS
23 ⁵³	2 26 W	+31 05	0	5.91 B9	1-1-1		clouding very bad due to wind. Light clouds
4	2 26 W	+28 51		6.37 B9	1-1-1		clouded some after start.
23 ¹²	2 08 W	+58 28	1-2	6.96 A2	1-1-1		
24 ²⁹	0 14 W	+72 53	2	7.55 K0	1-1-1		
01 ³⁰	1 25 W	+28 52	1-2	6.74 F2	1-1-1		
02 ⁴²	1 46 W	+46 30	2	7.22 K0	1-1-1		
04 ¹²	1 05 W	+44 42	2-3	7.28 A2	1-1-1		
05 ³²	0 07 W	+57 54	3	7.57 K2	1-1-1		clouds 4 35 6 5 10. S5
5	OUTSIDE	THROUGH	YBARS	-	-	^{2 full} 12-16	SLIDE = 26.25, TILT = 19.45. S8

Date Sunday March 27-28 Y-L Julian Day.

①

Date Tuesday, March 29-30, 1938 H-L Julian Day

266
20-21

		MC.	SC	SW	N.T.	ST.
Mar. 30	12	+07.0 ^s	-1 ^m 18.6 ^s	+49.6 ^s	-06.9 ^s	+0.3 ^m

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Date Wed Mar 30-31 Hd - L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3046	HD 57049	^{14.5} 07.4	²¹ 15.35	I-12	Antia II	010	+8.5 8.5	8 40	9.20	3
3047	" 116594	13 19.5	12 57	"	"	"	7.8	12 10	01 05	4
Thurs Mar 31 Hd I-12 focus was 26.32 till 19.45 - Changed to I-25										
3047F	Focus			I- ²⁵ 12	Antia II	010	9.0			1

Date Thurs. Mar 31 - April 1, 1938 HD-MR Julian Day

[illegible]

Reading Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
44.1		60 25-	1	2	Pop	no filter, Set 1
7.53	W 7 ^h 16		1		8 8	Set 8
0.52	W 3 ^h 16	15 16	1	6.47	A ₀	Just about limit W - couldn't guide much longer.
- 1	OUTSIDE	THROUGH	BASE	-	-	Clouds most of time
					24-32	FOCUS = 23.20, TILT = 23.15
						uncertain 12-30 to 100, but clear over soon after. very high wind all night. heat on: plug in south pier & also below.
						Apr. 1 12
						M.C. S.C. S.W. M.T. S.T.
						+05.0 -118.6 +57.2 -06.4 +0.2
						setting slide tilt
						1 26.20 } 19.45.
						4 26.40 }
						9 26.30 }
						Best probably 26.27
						Apr. 2 10
						M.C. S.C. S.W. M.T. S.T.
						+05.8 -118.4 +03.1 -07.6 +0.2
						Adv 1 ^m

(These exposures give a good 25" focus plate; for 1 filter day 9-12)

outside through base

15, 12

Best probably 26.27

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Date Saturday Apr. 2-3, 1938, ~~1937~~, M-MA Julian Day above Below

[illegible]

Date Tuesday, Apr. 5-6, 1938 M-L Julian Day.....

[illegible]

		M.C.	S.C.	S.W.	M.T. S.T.	
Apr. 6	12	+05.2	-17.6	+17.0	-03.5	+0.3

Date Wed Apr 6-7, 1938 Hd-L Julian Day 174

[illegible]

[illegible]

Date Thursday Apr. 7-8, 1938, M-MR Julian Day.

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>Above Below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
3059	HD 44250	6 15.7	30 01	I-12	Astra II	.010	-1.0 +3.3	19 32	22 24	X 51W 3
Friday, 1938 Apr 8-9, blizzard all day, heavy clouds at night										

Date Sat., April 9-10, 1938. HO-MR Julian Day.

5

280

[illegible]

281

Date Sun April 10-11

Y-L

Julian Day.

[illegible]

Clear all day. clouded over at sunset - then cleared.

[illegible]

284

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
20 26 22	54 W	31 48	1	7.31 A0 1-1	light clouds over most of sky. getting thicker, image faint at 19.55 - image gone at 20.25
					still thick at 21.00 closed dome
					MC SC SW HT ST
					Apr. 12 12 +04.0 -1 16.5 +48.5 -08.0 ^s +0.3 ^m

Date. *Tuesday April 12-13, 1938* H-L Julian Day.

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
55	20 W	+73 32	1	7.46	A2 1-1-1	Telucoppe E of piv. 50 lbs off Dec axis. Light clouds
45		(+92 16)	1	7.43	A2 1-1-1	Clouds 22 ⁴⁰ - 23 ³⁰ (star gone). Telucoppe large sky
54	38 W	+76 18	1	6.98	A3 1-1-1	thickening, very thick at 00.45. clearing off again later and remaining partially clear.
						M.P. S.C. S.W. M.T. S.T.
						Apr. 13 12 +04.0 -1.16.1 +51.9 -09.0 +0.2 ^m

Date Wed April 13-14, 1938 44-6 Julian Day.

[illegible]

Date Friday, Apr 15-16, 1938, M-MR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature <i>above below</i>	Starting Time E.S.T.	Ending Time E.S.T.	Star Angle End	Doc
3080	H.D. 102056	11 39.6	29 13	I-12	Astrath	.010	+8.8 +12.7	22 ^h 44 ^m	24 ^h 44 ^m	1	219 2
3081	124586	14 09.4	31 40	"	"	"	+08.7 +12.7	00 51	02 51	2	157 3
3082	16848	18 14.8	15 47	"	"	"	+08.4 +12.4	03 04	04 40	3	30 15
	FOCUS	-	-	"	"	"	+08.2 +12.0	04 50	-	-	INSIDE T
Saturday, 1938 April 16-17 H-MR clear all day. Uncertain clouds from dark till midnight, when it cleared for about half an hour. Clouds & rain later											
Sunday April 17-18, showers at 11.15 on, sky partly clear later but thick again at 1.00											
Monday April 18-19. Mostly cloudy with showers. Fairly clear for a short time around midnight. Clouds & showers later											

Date Wed April 20-21, 1938 Ad - L Julian Day _____

2
 1251
 34^m
 22 W 18
 12 W
 53
 used
 a little
 same for

Reading Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
9 26 4	W 2 ^h 51	13 15	0	7.48	K ₀ 1,1,1		
9 32 1	W 3 ^h 4 ^m	31 22	0	7.24	A ₀ 1,1,1		
9 40 -	R 2 ^h 22 W	15 28	0	7.53	K ₀ 1,1,1		
9 45 +	O 1 ^h 2 W	12 56	0	7.04	A ₃ 1-1-1		
10 20 3	O 5 ^h 3 W	16 28	0	7.44	F ₀ 1-1-1		
						C.T.	M.C. S.C. S.W. M.T. S.T.
						Apr. 21	12 +00.5 -1 17.5 -41.7 -05.2 -0.4
						Apr. 22	12 +00.2 -1 18.6 ³ -41.1 -07.6 -0.5
						Apr. 23	10 -00.1 -1 17.5 -37.7 -09.4 -0.5

unset. Stars later visible through haze, 2 to 3 mag. loss.

a little clearer at 10.00 but heavy clouds came up from W shortly after
same thing again at 12.00, continued cloudy. 4.00: put telescope down & blow in.
min C. K.

Date Monday, Apr 25-26, 1938, 11-4 Julian Day.....

[illegible]

295

Date Tuesday, April 26-27, 1958 H-L Julian Day 195[illegible]

297

Date Wed April 27-28, 1938 Hol-L Julian Day.

[illegible]

Sky partly clear at intervals from 9.20.

298

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
12.30	1 13 W	12 43	1	7.50	K0 11, 1	hazy, clouds at 11.45 - sky remaining thick
3.00	1 24 W	45 57	1	7.18	F0 1-1-1	until 1.15 then clearing. (overexposed)
4.25	1 35 W	16 04	1	7.11	F8 1-1-1	setting 2 1/2 after exposing discovered slide
					6-8	setting 7 1/2 was not drawn, result nil.
						Focus poor.
	Outside thru base			6-6	Set 1 26.3	} about 26.27
					Set 6 26.2	
					Set 9 26.1	
	outside thru base			6/6	Settings 3 and 7	Focus 26.27
	" " "			6/6	" 1	" 26.27
	No Hartmann diaphragm			6/6	5 short → long 7 long → short 9 short → long	" 26.27
	outside thru base			6/6	Settings 3 and 7	Focus 26.27
	" " "			6/6	" 3 " 7	" 26.27

Focus OK
and substituted
the same for
all
of last table.

Date Thursday Aug 28-29 1938 M-MR Julian Day.....

[illegible]

300

[illegible]

Date. Sat April 30-May 1, 1938 Hd-MR Julian Day..

Lat	Angle	Ded.
	End	
h^2		
124	-10	
SIDE	Tan	
DE s	262	

303

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

[illegible]

304

Time Ending Time
E.S.T.

Analysis of Types of stars on Program Dec 26/37

B-Bs IIII

B₈₋₉ NI NI NI NI NI NI NI NI

A NI NI NI NI NI NI NI NI NI NI

F NI NI NI NI NI NI NI NI

G NI NI NI NI

K NI NI NI

M I

306