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3

Four Angle
End

[illegible]

Date April 21-22, 1936 M-L Julian Day 1936051

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2	2 19 W	+14 27	0	5.96	A ₂ 2-2-2	Apr. 21 C.T. 12 Δθ M.T.A. -06.5 Δθ S.T.A. -01.1 Δθ M.T.D. -07.5 Δθ WATCH +32.6
	2 14 W	+46 09	1	7.13	A ₂ 2-2-2	seeing very variable if any stars
	3 23 W	+8 59	1	5.7	A ₀ 2-2-2	clouds coming up from the north and west at 2:30.
	0 27 E	+42 45	1	5.56	B ₈ 2-2-2	clouds over most of sky at 3:15.
	2 01 W	+28 31	1	6.90	A ₀ 2-2-1	single star at 3:17
						clouds up. 3:35
						Observed and at 7:50-11.
						Strong aurora this evening at about 100° longitude at 1000 with very strong intensity to north and pinkish lake at bottom of horizon.
						Some aurora through lake and defined in light.

Date Wed April 22-23/36 Hd-L Julian Day.

[illegible]

Wed. April 22 : Removed old clock work. Installed & synchronous motor drive

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS					
	0 44 W	46 20	0	5.76	G ₀ 2,2,2	Apr. 22	C.T. 12	Δθ M.T.A. -06.8	Δθ S.T.A. -01.3	Δθ M.T.D. -07.8	Δθ WATCH +31.7
	1 10 W	30 48	0-1	7.44	F ₂ 2,2,2	without control clock					
	0 18 W	29 59	0-1	7.11	A₀ 2,2,2						
	0 48 E	42 46	0-1	5.6	B ₉ 2,2,2						
2 15	0 22 W	12 58	1-4 var.	7.04	A ₃ 2,2,2	with " "					
	2 15 W	42 46	3	5.76	B ₉ 4,4,4						
	2 46 W	"	5	"	" 2,2,2						
						Guiding slightly more satisfactory with control. - Drifts too slowly without it.					
						Advanced 1 min.					
						Apr. 23	12	-06.9	-01.0	-07.9	-07.0

Date Thursday April 23-24, 1936 H-L Julian Day

[illegible]

[illegible]

Date Friday - April 24-25, 1938 M-L Julian Day

[illegible]

1936

Date _____

[illegible]

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
10 1	1 36 W	30 04	0-1	7.65 K ₀	2-2-2
1 2	1 20 W	15 55	1-2	7.51 K ₀	2-2-2
1 3	4 ^m W	29 29	1	7.53 F ₅	2-2-2
2 20 4	28 ^m W	42 46	1	5.6 B ₈	4-4-4
3 46 1	1 18 W	36 40	1-2	6.94 F ₀	2-2-2
4 35 3	1 10 W	+2 48	1-3	6.15 G _{0p}	2-2-2
Last 2 plates are in holder in drawer					
Watch					
April 27 12 -05.8 +00.5 -06.8 +07.5					
April 28 12 -05.8 +01.1 -06.8 +17.1					
April 29 12 -05.9 +01.5 -06.9 +26.0					
April 30 12 -06.0 +02.1 -07.0 +34.3					
May 1 12 -06.0 +03.9 -07.0 +43.4					

Hour Angle
had

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
					13 8	Something wrong with Dec. motions, trouble as up above, probably magnets, not strong enough. Sometimes bit loose and so the times not so regular about it
2 00 W	9 00	0	5.7	A0	2-2-2-2	Dec setting and guiding light clouds at 8.30, crossrail also R.E. setting and much. haze all guiding crossrail. evening, evening, ft.
						Clouds coming up and haze much thicker at 10.15 so no stars visible
						Closed up 10.45.
						Plate in plate holder on barrier
						May 2 10 -06.1 +03.5 -07.1 +48.7

Date Sat May 2-3, 1936 Hd - L Julian Day

[illegible]

35 visitors - showed telescope 18

Ending Time
E.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

105

E 22m

4247

0

5.6

B₈

2,2,2

many clouds. Thick at 1.00, danger
of rain. Closed.

Dec. Setting motion doesn't work at
all at high decs. Managed to
set only by L holding clutch in.

Didn't find black box. 785 in holder #1 in
drawer.

Advanced 1^m.

May 4

13

-06.1

+05.3

-07.1

+05.8

Date Monday, May 4-5, 1936 ^{H-L} Julian Day

[illegible]

Ending Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
9: 2	2 47 W	+ 15 15		6.57	Ko 2-2	Clouds + haze. Star gone 8 ⁵⁵
				5.7	Ho	Thick.
						Closed up 2 ¹⁰
						May 5 12 -06.7 +05.5 -07.7 +15.3

Date Tuesday May 5-6, 1936 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.	How Angle End
786 F ₁	HD 100808	11 31.0	28 20	F-25	Astra	.011	14.4	8.00		3
787	HD 100808	11 31.0	28 20	F-25	-	-	14.4	8.00	8.50	4
788	96528	11 02.3	23 52	-	-	-	14.1	8.56	10.06	1
787	133909	15 01.9	59 55	-	-	-	13.5	10.16	12.36	0.11 W
788	142926	15 52.2	42 51	-	-	-	13.5	12.42	1 22	0.7 W
789	169753	18 21.1	-9 15	-	-	.016	13.5	1.34	4 04	0.20 W
May 7, noon. M.										
789 F ₁					Astra	.011	13.0	set plate holder (P.H. 1)		7.5
789 F ₂					-	-	-	set plate holder (P.H. 3)		7.5

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	Focus	at 23.53			14 8	Test showed perfect focus at 4880 and 4000 but too long at 4400
5.55	0 06 E	28 10	2	5.90 A3	2-2-2	Set focus to 23.50
10.06	1 39 W	23 41	3	6.45 A2	2-2-2	accident to print two plates in developing
12.36	0 11 W	59 48	2	7.32 A2	2-2-2	Some light cloud 9.35-10.00
1.02	0 7 W	42 48	2	5.6 B8	2-2-2	breaking up at 11.25
4.17	0 20 W	-9 12	2	7.47 B2	2-2-2	" " " 11.00 - getting quite heavy by 11.15
						Light haze and clouds at times.
						quite hazy at dawn.
	2.44.7	+61°	3 1 E	6 sec		May 6 12 -06.8 +05.8 -07.8 +24.0
	"	+61°	3 1 W	8 "		comp. positions normal position
	"	+61°	3 1 W	6 "		" " " "
	"	+61°	3 1 E	6 "		" " inside
	"	+61°	3 1 E	6 "		" " normal position
	"	+61°	0 -	6 "		" " " "
	"	+61°	0 -	6 "		" " inside
	"	+61°	3 1 W	6 "		" " " "
						normal position

* See notes at back of book on these three tests.

Date Thursday, May 7-8, 1936 H-1 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
789 F3	<i>Trum</i>			I-25	<i>astron II</i>	010	24.0	7 45 pm		4 <i>Trum 13</i>
(790)	H.D. 98354	11 13.7	+14 49	"	"	"				
790	H.D. 79554	09 09.7	+15 22	"	"	"	24.3	8 14	9 29	2
790 F1	<i>Trum</i>									1 <i>Tr 23</i>
791	106 022	12 06.9	+29 06	"	"	"	24.2	9 37	11 57	3 2:10 12
792	142 926	15 52.2	+42 51	"	"	"	24.2	0 06	1 36	1 0 11 W.
793	183 794	19 26.1	-02 19	"	"	"	24.0	1 43	4 13	4 0 11 E.
				<i>Friday</i>	<i>morning M</i>					
* 793 F1				I 25	<i>astron</i>	011	20.5	<i>plate setting</i> 7.5		1 0-
				-	-	-	-	" 2.5		0-
* 793 F2				-	-	-	-	<i>plate setting</i> 7.5		0
				-	-	-	-	" 2.5		0-
* 793 F3				-	-	-	-	" 7.5		4 2 E
				-	-	-	-	" 2.5		2 E
				-	-	-	20.5	" 0.5		16 E

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
4	Focus 23.50				15.9	Stage.
				721 G0		Minor figure <u>very very</u> bad. ^(double) Star not resolvable.
9.4		15 14	1	6.57 K0	2-2-2	Stage.
1	Focus 23.45				15-10	Developed 790. Very weak. Focus still, long slit 23°
11.5	2 33W	28 55	1-2	6.74 F2	2-2-2	Developed 791
13	0 28W	42 46	1-2-3	5.56 B8	2-2-2	Stage.
4.13	0 28E	- 2 13	3-	6.8 B8	2-2-2	
						Sec. setting bad; magnets too weak to hold in against spring + gravity. disconnected one end of spring from plate 791 on. In position of magnets was no further trouble. Apparently clutch shaft will eventually need to be counterpoised.
7.5	0 -	+ 50°	comp. outside		6	
		+ 70°	" inside		6	
25	0 -	+ 65°	" inside		6	
		+ 65°	" outside		6	
3	0 -	+ 45°	" outside		6	
		+ 65°	" inside		6	
2.5	0 -	+ 75°	" inside		6	
		+ 55°	" outside		6	
7.5	2 1/2 E	+ 60°	" outside		6	
	2 1/2 W		" inside		6	
25	1 1/2 W	+ 60°	" inside		6	
	30 m E		" outside		6	
0.5	30 m W	+ 60°	" inside		6	
						May 8 12 -07.3 +08.5 -08.3 38.2
						Min. hand M.T.A. advances one sec. later than before.

Date Tri. May 8-9, 1936 Ad L Julian Day

[illegible]

[illegible]

Date Sunday, May 10-11, 1936. Y-h Julian Day 2454982.5

[illegible]

Ending Time
E.S.T.

[illegible]

Date Wed. May 13-14 Ad-L Julian Day

[illegible]

1

[illegible]

Date Thursday May 14-15, 1936 H-L Julian Day

[illegible]

Ending Time
R.S.T.

[illegible]

[illegible]

[illegible]

Date ¹⁹³⁶ Sat May 16-17 (cont'd) (see previous page) Julian Day

[illegible]

1936

Date Tuesday, May 19-20 S. H. L. Julian Day

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
			Poor			Focus 62.5 mm on scale.
12 35	0 52 W		}			
0 57	1 01 E					
1 03	0 30 E					
2 11	0 51 W					
3 04	0 57 E					
3 18	1 17 W					
						Haze & clouds
						" Guide star lost 90% of time.
						Zor track, 5 guiding all plates
						Main figure poor; larger zone also weak showing.
		</				

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Date Wednesday, May 20-21, 1936 S. 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
825	NGC 5272	13 37.6	+ 23 53	Newtonian	E 40			9 00	9 10	0 51 E
826	5904	15 13.5	+ 02 27							
826	6205	16 38.1	+ 36 39					9 27	9 30	1 33 E
827	5024	13 08.0	+ 18 42					9 47	10 07	0 34 W
828	5904	15 13.5	+ R 27					10 25	10 35	1 04 E
829	"	"	"					10 39	10 49	0 50 E
830	"	"	"					10 52	11 02	0 37 E
831	"	"	"					11 04	11 12	0 26 E
832	6205	16 38.1	+ 36 39					11 50	12 0	1 13 W
833	6341	17 14.1	+ 43 15					12 09	12 19	1 01 E
834	"	"	"					12 22	12 32	1 07 E
835	6254	16 51.9	- 03 57					12 42	12 52	
836	6402	17 32.4	- 03 11					1 08	1 23	29 E
837	"	"	"					1 31	1 46	0 12 E
838	5904	15 13.5	+ 02 27					1 54	2 04	2 26 W

Ending Time
L.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

From 62.75

0 53 E

Poor

Minor figure better than previous night.
Platicholder cannot be reached at $2^{\circ} E$, $5+2^{\circ}$.

3 33 E

Fair

Uncomfortably far East. Not guided.

0 34 W

S

Developed 825, 826 South of good guide star.

1 04 E

0 50 E

0 37 E

0 26 E

Exposure stopped because of erratic RA motion.

From 62.57 Drive gear appears to have been worn too much. ^{Vaseline} applied to gear.

1 03 W

Poor guide star.

1 20 E

good guide star

1 07 E

Star ran off again badly.

0 29 E

Developed 5 plates (828-32?)

0 12 E

2 26 W

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Date Wednesday, May 20-21 (cont'd) 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
839	NGC 6779	19 12.7	+ 30 00	Newtonian	E 40			2 14	2 34	1 03
840	6402	17 32.4	- 3 11					2 45	3 05	1 21
841	6934	20 29.3	+ 07 04					3 14	3 27	1 25
Thursday, May 21-22, 1936										
							M-HA.			
							Y-M-changed			
841 F.				I-12	Astria	010	9.0	setting	9 5 1	4

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2.1	1 03 E					
2.5	1 12 W					
3.1	1 25 W					
						May 21 12 -10.8 +13.6 -10.8 +19.9
						Look off Newtonian wts for Newtonian 3 on triangle, 1 south of triangle wts for Cassegrain, 2 next polar axis, 1 opposite finder
	12-inch camera		focus on 25-inch	-	23.33	
			tilt on 25-inch	-	23.00	
	set 12-inch camera to tilt			19.6		
			focus	26.23		
	base of prism outside	slit length	L	12	sec	
	top " middle	" "	"	8	"	
	whole prism	slit	" M	6	"	
	" "	" "	S	6	"	
						comparisons come through for
	all slit lengths	-	focus	O.K.		

Date _____

1936

M-L

Julian Day

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
5 4	Prism base outside				6	
	" top inside				6	
	whole prism	24.47			10	focus a little long
	lens base outside				8	set focus 26.20
	" top inside				6	
9 16.3	2 ^h 25 ^m W	9 01	2-3	5.7 A0	2-4-2	
9 21	2 34 E	42 48	4	5.6 B8	2-2-2	
9 27	2 15 E	42 48	3	5.6 B8	2-2-2	
	2 38 W	47 24	3	9.0 -	2-2-2	5 sec with tube & stone
	0 09 W	-09 11	3	7.47 B2	2-2-2	5 sec with tube & stone
	0 03 E	-2 13	3	6.8 B8	2-2-2	
	1 42 W	+28 47	2	3.83 A0	2-4-2	20 sec with tube & stone
						May 22 12 -10.3 +13.9 -10.3 +27.7

Date Fri May 22-23 ¹⁹³⁶ Ad-L Julian [Day]

[illegible]

Date Saturday May 23-24, H.L., 1936 Julian Day

[illegible]

Date Monday May 25-26 14-4, 1936 Julian Day.

[illegible]

Ending Time
LST.

Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
Focus	26.20				14, 9	outside thro base. Too long.
2 01 W	14 11	2	7.21	G0	2-2-2	Double stars; moderately resolved. 26.14 Focus test.
1 26 W	46 35	3-2	7.22	K0	2-2-2	Seeing very variable
X 1 03 E	42 48	3-4-2	5.6	B8	2-2-2	" " "
36 E	36 38	2	6.76	K5	2-2-2	Developed 864, 865, 866 ✓
1 46 W	44 46	2-3	7.28	A2	2-2-2	
1 47 E	-02 11	2-1	6.8	B8	2-2-2	Considerable large ...
0 18 W	+51 22	2-1	7.32	K2	2-2-2	
3 11 W	42 48	2-3	5.6	B8	2-2-2	
	-02 11		6.8	B9	2-	clouds at 3.20
						cloud 3 ⁴⁵
						Advanced ⁷
						May 26 13 -09.3 +15.3 -09.3 -04.2
					14, 10.	outside thro base.
						May 27 12 -09.7 +15.2 -09.7 +03.0

Date *Thursday, May 28-29, 1-1-1936* Julian Day

[illegible]

Ending Time
L.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
				15, 10	(due to temperature) Set from out from 26.15 to 26.20 A. OK at 26.20. {outside base}
2 22 W	+23 42	1	6.45	A2 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	
2 27 W	+44 30	1	6.76	F5 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	Intermittent light clouds 9 ³⁵ on. Very thick 10 ⁰⁵ - 10 ³
0 12 E	+42 48	1	5.6	B8 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	
0 17 W	+30 41	1-2	6.94	F0 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	
0 16 W	+40 06	1-2	6.22	F8 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	
0 29 E	-02 12	2	6.8	B8 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	Stage 145, 155 + thereafter. Trouble with dec. guiding - clutch slipping (not end of run). O.K.
1 49 W	+51 21	2	7.32	K2 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	Clouds intermittently
					C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch May 29 12 -09.8 +15.2 -08.8 +19.4 May 30 10 -09.8 +16.1 -08.8 +18.7

Fri - M's business.

Date Saturday - May 30-31 M

Julian Day

[illegible]

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
					59 visitors (60 reservations; who didn't come?)
					reversed telescope and showed the moon
					Intermittent clouds during whole period
					Set on H.D. 142926 but too thick to
					start exposure at 10.30
					Remained thick
					Closed 12.30
					Left Astra plate loaded in
					photograph.
					June 1 12 - 10.1 + 16.5 - 09.1 + 34.5
					2 12 - 10.7 + 16.4 - 09.7 + 43.5

Date Wednesday June 3-4 ¹⁹³⁶ M-E Julian Day.

[illegible]

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS				
						C.T.	$\Delta\theta$ M.T.A.	$\Delta\theta$ S.T.A.	$\Delta\theta$ M.T.D. $\Delta\theta$ watch
	<i>base outside</i>			10 7	June 3	13	-11.1	+16.6	-10.1 +41.8
63	3 16W	9 02	1	5.7	A0	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$			
10 2	3 27W	23 43	1	6.45	A2	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$			
11 5	0 57E	42 48	1	5.6	B8	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$			
1 22	0 04E	36 38	1-0	6.86	K5	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$			
1 48	0 11E	-9 11	1	7.47	B2	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	6 sec with tube sensitometer		
2 4	0 33E	-14 41	1	6.45	A2	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	6 sec with tube sensitometer.		
3 11	0 53W	-2 11	1	6.8	B8	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$			

1936

Date Thursday June 4-5-42 Julian Day

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
9 13	W 244	23 43	2	6.45	A ₂ 1½ 1½ 1½	ontricle: base (Focus as on June 3-4)
					15.8	
10 58	E 15 ^m	44 45	2-4	7.57	A ₀ 1½ 1½ 1½	
11 24	E 119	40 05	3-4	6.22	F ₈ 1½ 1½ 1½	
12 24	W 5 ^m	29 17	4	7.33	F ₂ 1½ 1½ 1½	
1 2 24	W 143	42 49	3	5.6	B ₈ 1½ 1½ 1½	
2 00 3	W 16 ^m	51 20	3-4	7.32	K ₂ 1½ 1½ 1½	Mistake in R.A.? Circles read 18 ^h 19.6. Check
2 11	W 47 ^m	-2 01	4	6.44	K ₀ 1½ 1½ 1½	
2 31	W 39 ^m	-2 11	3	6.8	B ₈ 1½ 1½ 1½	
3 53	W 28 ^m	32 05	5	5.45	B ₀ 1½ 1½ 1½	
						Telescope focus changing during night.
						Advanced 1 minutes
						June 6 12 -10.4 +15.1 -09.4 +04.1

Date *Friday, June 5-6, 1936, M-L* Julian Day

Cloudy. 200+ visitors.

[illegible]

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1936

Date Monday June 8 - 9 Y. MR-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
Set on	HD 96528-	Too faint to hope to get at + 2 ^h west at start								
906 F1	Focus Test HD 124897				ashen	0.10	Focus set 26.13			2
- 907	α Bootis	14 11.1	+19 42	I 12	E 40	"	23.5	9.11	20 ⁵ E 40	1
- 908	HD 145849	16 08.1	36 41	"	Astra	"	23.4	9.25	10 45	3
909	HD 153472	16 54.7	42 39	"	"	"	23.7	10 54	12 24	4
910	HD 142926	15 52.2	42 51	"	"	"	23.5	12 30	1 20	2
911	HD 183794	19 26.1	-02 19	"	"	"	23.8	1.27	2 57	1
912	HD 185955	19 36.6	+45 43	"	"	"	23.8	3.03	3 45	-
Tuesday June 9-10										
912 F ₁				I	I-12	E 40	0.10	20.0		1
" F ₂				—	—	—	—			2
" F ₃				—	—	—	—			3
" F ₄				—	—	—	—			4

Ending Time
L.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
10 ^m E	19 34	2 ^{thick}	1.24	K0	4	
33 ^m E	56 58	1	6.86	K5	1 1/2 1 1/2 1 1/2	
	42 39	2	7.45	K2	1 1/2 1 1/2 1 1/2	
2 18 W	42 47	2	5.6	B8	1 1/2 1 1/2 1 1/2	Set focus at Beg of this star at 26.20
21 ^m W	42 12	2	6.8	B8	1 1/2 1 1/2 1 1/2	
1 ⁰⁰ W	45 51	2	7.12	G5	1 1/2 1 1/2	adjusted cross-wires of finder on this star
						I think the secondary could be cleaned to advantage. <u>Rky</u>
	outside base				15 8 15 8 15 8 15 8	June 9 15 - 13.2 + 19.1 - 20.2 - 22.9 M.T.D. not running correctly - seconds lag.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		base outside		— 15 10		focus about right 4200 - 4500. little long outside this range.
9 43	3 31 W	23 42	1	6.45 Ar	1 1/2 1 1/2	quite hazy.
10 11	0 47 E	42 48	2	5.6 B8	1 1/2 1 1/2	
1 24	0 10 W	36 38	2	6.86 R5	1 1/2 1 1/2	
2 18	0 51 W	-9 11	2	7.47 B2	1 1/2 1 1/2	hazy much thicker
3 42	1.00 W	+13 43	2	5.8 B3	5-1 1/2 5	
Approximate corrections:						
	C.T.	Δθ M.T. watch	Δθ S.T.A.	Δθ M.T.D.		
June 10	14	≈ -19.8	+ 18.2	-21.0		
		Δθ S.T. watch				
		-19.6				
June 11.	10 00 A.M.	Seconds wheel of master clock oiled.				
	C.T.	Δθ M.T.A.	Δθ S.T.A.	Δθ M.T.D.	Δθ watch	
	12	+28.9	+21.7	-20.1	+10.1	

Date Thursday June 11-12 1936 H-L Julian Day.....

[illegible]

Reading Time
L.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp

REMARKS

Clouds all day. New finder installed. Cone wit added to
upper end for balance. approx right. Needs further
work.

counters

-base

15, 9

Focus 26.20 ; n.g. too long

"

"

15, 10

26.16 with holder 3.

+ 42 52

0-1

5.6 B8

 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$ Focus test on plate, 26.18 Clouds most of time after 1⁴⁰

6.86 K5

" " " " "

Region cloudy at start. Solid

check on holder 4, focus

clouds up 1⁴⁵

C.T. $\Delta\theta$ M.T.A $\Delta\theta$ S.T.A $\Delta\theta$ M.T.D. $\Delta\theta$ watch

June 12 12 +28.9 +20.2 -20.1 +05.0

Date _____

M-L

Julian Day

[illegible]

Reading Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.
		base outside			$\frac{12}{8}$
9 57 4	4 00W	23 43	1	6.45	A2 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$
1 16 3	0 14W	36 38	1	6.86	K5 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$
2 24 1	0 49W	-9 10	1	7.47	B2 1, 1, 1
3 28 3	0 47W	-14 42	1-0	6.45	A2 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$

REMARKS

focus good!

driving poorly, jumpy off. Marked drive gear with red pencil.
a lot of trouble guiding 1.30 - 2.00
take end exposures at 3.13.

6 sec take scans at - 921, 922.

a lot more trouble guiding on first plate ⁽⁹²²⁾ seems to occur when telescope south of equator and west of meridian. Runs off first inch or west by amount equivalent to 4 or 5 sec with R.A. setting motion. Roughly periodic with period of 1 minute times 3 vibrations. Impossible to keep

32 Visitors - Showed E Bio, 193.

76

Rating Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						CT. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch
						June 13 12 +28.9 +20.5 -19.1 +01.7
		base outside			$\frac{12}{7}$	Focus 26.17
11 25 2	0 26W	12 59	1	7.04	A ₃ $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	
3		base outside			$\frac{12}{7}$	
12 10 4	0 02W	40 04	1-2	6.22	F8 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	Focus O.K. on P.H. #3, Poor on #1. sec. #3-4.
12 20 3	0 13W	12 22	3	7.32	K ₂ $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	Circle check (see June 4-5)
02 20 4	1 45W	45 02	1-3	6.81	B9 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	When first set on this star it drifted back and forth
12 20 4	1 21W	14 50	3	6.64	A ₃ $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	across slit at the rate of the whole width of guiding telescope field in one second. Note: telescope W of meridian and at +45
						Same thing with 927 - managed to guide by holding against spectrograph to take up / base.
						June 15 12 +28.8 +21.6 -16.4 +11.8

Date June 15 Y. Monday Julian Day 1936

[illegible]

Second funder is now adjusted

[illegible]

1936

Date Tuesday June 16-17 M Julian Day[illegible]

[illegible]

1936

Date Thursday June 18-19, Y-MR-L (Hd) Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	1900 1940	Hour Angle End
933 F5	Focus Test			T-12	E-40	Set 010	Set 21.8	8.45		1	
- 934	H.D. 145849	16 08.1	36 41	"	Astra	"	22.5	8 56	9.56	2	0.13 E
- 935	H.D. 157482	17 18.4	40 05	"	Astra	"	22.2	10 01	10.35	3	1.5 E
936	H.D. 164509 ⁰⁵	17 54.3	45 53	"	Astra	"	21.8	10 46	12.01	4	0.23 E
- 937	H.D. 169028	18 17.6	51.18	"	Astra	"	22.2	12 10	1.30	2	0.77 E
- 938	H.D. 210855 1st nova	22 08.2	56 21	"	Astrq	"		3 23	3.33	3	
- 939	2nd nova			"	Astrq	"		3 34	3.38	4	
- 940	Nova Gephel(?)			"	Astra	"	22.2	3.44 37	3.48 37	2	
Note (1985) T _n - (Later called Nova Lac)								3.48 50	3.51 50		
			1936 22 13.2								
			1936 55 20.					3.52 40	3.54 20		
- 941				"	Astra	"	22.2	3.55 05	3.56 25	3	
		RA. Observed		"		"		3.57	4 02		0.36 E
- 942			22 13.1	"	E 40	"		4.03	4.0	4	

Ending Time E.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
		<i>base outside</i>				15.8	Focus 26.15 O.K.
9.56	0 43 E	36 38	2	6.86	K5	$1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	very brilliant aurora! 10.05 P.M.
10.35	1 15 E	40 104	"	6.22	F8	$1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	Dr. Young left about 10.05.
12.01	0 23 E	45 54	"	7.2	F5	$1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	mirror fogged up; dried, and then dusted and
1.36	0 ^x 17 E	51 22	"	7.3	K ₀	$1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	cleaned it with cotton-wood and sponge, before
		56 33		5.92	F8	$4\frac{1}{2}$	opening
		"				$4\frac{1}{2}$	
3.17		55 20				$4\frac{1}{2}$	received collect telegram about 1.35 by telephone:
3.5	Hour Angle	"				$4\frac{1}{2}$	"Cambridge, Mass. Peltier reports third magnitude
3.5	at 4.06	"				$4\frac{1}{2}$	nova 2° south preceding delta Cephei". Moved telescope
12.5	was	"				$4\frac{1}{2}$	in that region but were unable to locate it. Summoned
4.3	0.36 E	"				$4\frac{1}{2}$	Dr. Heard by telephone. Finally found a likely looking
4.4		"				8	object & took these plates.
							Estimated mag $\approx$ 3.3 H. M.
							aurora very brilliant all night

Date Friday 1936 June 19

Julian Day.

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1	1	"	"	"	14-8	Focus 26.15 tilt changed from 19.61 to 18.6
2					12-8	" " "
1					12-7	" 18.0
3					12-7	" 19.0
						June 19 12 Δ M.T.A. Δ S.T.A. Δ M.T. watch Δ S.T. watch - 2 04.2 + 23.5 - 23.2 - 23.3 Retarded 2^m - 04.2 Advanced 1^m
						Focus 26.20 tilt 19.0 at setting 3 on slide 10-6 outside thru base
						" 26.15 " 19.2 " " 6 " " 10-6 " " "

1936

Date Friday June 19-20 - M-Hd-L Julian Day

Plate No.	Object	R.A. 1900 1436	Declination 1900 1436	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Flt 1/615	Hour Angle End
- 943	Jura Cr.	22 132	155 20	I 12	astral	.005		10 12	Exp 12s	1	
- 944	"			-	astral	.005		10 13	Exp 20s	2	
- 945	"			-	Met P.	.005		10 18	Exp 10s	3	
- 946	"			-	Met P.	.005	23.8	10 19	Exp 20s	4	
- 947	"			-	Process	.005		11 06	11 08	1	
- 948	"			-	Process	.005		11 11	11 15	2	
- 949	"			-	Process	.005		11 17	11 37	3	
- 950	"			-	Met P.	.008		11 42	Exp 40s	1	
- 951	"			-	Met P.	.008	24.0	11 43	11 45	2	
- 952	"			-	Process	.008		11 50	12 05	4	
- 953	"			-	Met P.	.008		12 15	Exp 40s	1	
	"			-				12 16	Exp 40s	"	
	"			-				12 19	Exp 80s	"	
- 954	"			-	Met P.	.008		12 20	Exp 60s	2	
- 955	"			-	Met P.	.008		12 28	Exp 20s	1	
	"			-				12 30	Exp 30s		

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
Exp 2-1	55 20	1		8	shots 30 ^s strips 1 ^m two wks.
Exp 2-2	Hour Angle	"		8	" " " " two wks.
Exp 2-3	At 10.22	"		5	" " " " two wks.
Exp 2-4	Was 6.16 E	"		5	" " " " two wks.
Exp 2-5	"	"		15	" " " " Lurks
Exp 2-6	"	"		20	" " " " Lurks
Exp 2-7	Hour Angle	"		10-10 filter out	shots 7 ¹ / ₂ ^m strips 5 ^m GT L
Exp 2-8	At 11.53	"		6	" 20 ^s " 1 ^m S S
Exp 2-9	Was 4.45 E	"		8	" 20 ^s " 1 ^m S S
Exp 2-10	"	"		10-10 filter out	shots 7 ¹ / ₂ ^m strips VS
Exp 2-11	"	"		8 (filter out)	Setting 3 S
Exp 2-12	"	"		4	Setting 7
Exp 2-13	"	"		8	" 10
Exp 2-14	Hour Angle	"		8	Setting 10 after 20 sec stripe 15 S
Exp 2-15	At 12.24	"		9	Setting 9 3 shot 20 sec G
Exp 2-16	Was 4.15 E	"		8	Setting 7 G

1936

Date Friday June 19-20 M.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
955F,	Nova Cephei			I-25	Astra	.008	23.9	1 15		
- 956	"			—	Astra	.008		1 27	Exp 2m	1
	"			—				1.31	Exp 4m	
- 957	"			—	Astra	.008		1.36	Exp 2m	2
- 958	"			—	E-33	.008		1.42	1.47	3
	"							1.50	2.00	
- 959	"			—	Process	.008	24.0	2.06	2.26	4
	"			—	"	"	"	2.26	2.36	
- 960	"			—	Astra	"		2.39	Exp 1m	1
	"			—	"	"		2.40	Exp 1 1/2m	
- 961	"			—	M Pan	"		2.43	Exp 1m	2
	"			—	"	"		2.46	Exp 2m	
	"			—	"	"		2.49	Exp 4m	
- 962	"			—	Process	.011	24.0	2.58	3.28	1
- 963	"				Astra	.008		3.30	Exp 30s	2
								3.34	" 30s	

I-12 focus was 26 15 88
 tilt 19 2

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	Base outside			$\frac{25}{17}$	Changed to I-25 set focus 23.35
				15	setting 3 spots 30 s tilt 23.00 S
				15	setting 7
				15	setting 10 spots 30 s strip 30 s S
				15-15	setting 3 spots 90 s S
				15-15	setting 7
				55, 5 8, 8	setting 3 spots 7 1/2 m S
				" 7	
				12	setting 3 spots 30 s G ✓
				12	" 7 G ✓
				12	setting 0 spots 20 s G
				12	setting 5
				12	" 10
Hour Angle At 3.04 Was 1.30E					Long slit no companion spots 7 1/2 m W
				12	setting 3 spots 30 s
				12	setting 7

Date _____

Julian Day

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
				12	Setting 3
				12	Setting 7
					June 20 14
					Δθ M.T.A. Δθ S.T.A. Δθ M.T. watch Δθ S.T. watch
					-04.2 +24.1 -23.2 -13.9

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1936

Date

Sept. June 20-21 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.	
- 965	Novae Cephei			I-25	E-40	.008		11-11-08	Exp. 1 min	1
	"			"		.008		11-13-50	" 2 min	
	"			"		.008	24.1	11-18-15	" 4 min	
- 966	"	obs		"	E-40	.008		11-24-57	Exp 3 min	2
- 967	"	16-13.2		"	process	.008		11-49-0	Exp 5 min	3
	"			"		.008	24.1	11-59-0	" 10 min	
- 968	"	obs 55-20		"	E 40	.008		12-25-30	8 min	1
	"			"		.008		12-35-00	16 min	
- 969	"			"	Astra	.008		12-52-45	Exp 2 m	2
	"			"		.008		12-55-35	" 4 m	
	"			"		.008	24.2	1-00-40	" 8 m	
- 970	"			"	Process	.008		1-11-00	1.41.00	4
- 971	"			"	E-33	.008		1-41-30	1.58.30	1
- 972	"			"	Astra	.008	24.0	1-58-30	2.02.30	2

Hour Angle
End

at 11-50.0

5-04.5
E

100 visitors

92

Shroud M3 - 74 mch

nova, galathea small, antrom?

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
Cap. 1 min	at 11-30.0		0		24 ^{Sec}	setting 1 1/2 splts 1 min
2 min	5-04.5 E				24	setting 5
3 min					20	setting 8 1/2
4 min					20	setting 10.4 splts 1 min stripes 40 s
5 min					15	setting 3
6 min					15	setting 7
7 min					12, 12	sitting 3 splts 90 s
8 min					12, 12	sitting 7
9 min					15	setting 1 1/2 splts 30 s
10 min					7, 7	setting 5
11 min					7, 7	sitting 8 1/2
12 min					5, 5, 5	setting 3 one dupl out
13 min					20, 20	sitting 5 splts 160 s
14 min					7, 7	setting 10.4 splts 20 s stripes 15 s

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1936

Date

Sat. June 20-21

M-MP

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
- 973	Novae Cephei			I-12	Met. Pan.	.008		2-51-03	1/2 min	1	Lat
	"			"	"	.008		2-52-35	1 1/2 min		3.01,
	"			"	"	.008	24.0	2-55-05	3 min		1-32 1/2 E
- 974	"			"	"	.008		2-59-20	1 min	2	
- 975	"			"	defnd infra-red	.008		3-01-55	1 min	3	
	"			"	"	.008		3-03-45	3 min		
	"			"	"	.008		3-07-25	9 min		
- 970	"			"	process	.008		3-17-15	5 min	4	
	see page before as well			"	"	.008	23.8	3-23-15	10 min		
- 976	"			"	I-R	.008		3-33-30	2 min	1	
- 977	"			"	E-33	.008		3-36-00	1 min	2	
	"			"	"	.008		3-41-00	3 1/2 min		

put power I-12
told

26.15

19.2

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Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
3 1/2 min	H. Lat				8	setting 1 1/2 slots 30 s.
5 1/2 min	3.01,				8	setting 5
5 3 min	1-32 1/2 E				8	setting 8 1/2
1 min 2					8	setting 10 slots 30 s. strip 15 s
5 1 min 3					10	setting 1.5 slots 20 s
3 min					10	setting 5
1 min					10	setting 8 1/2
5 min					7 7	setting 6 1/2
1 min					7 7	setting 10
2 min 1					10	setting 10
1 min 2					10	setting 3 went off 5
3 min						setting 7

1936

Date Sunday June 21-22 Y-L-Hd Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
977F	FOCUS TEST			I-12	E-40	Set 010	Set AL 17.4			1	0
978	H.D. 143849	16 08.1	36 41	I-12	Astra	"	17.6	8 57	10 17	3	013 E 3
- 978	" 154732	17 02.1	48 57	"	"	"	17.5	10 20	11 40	4	20 W
- 979	Nova Cephei	¹⁹³⁵ 22 13.2	¹⁹³⁶ 55 20	"	"	008	17.5	11 53	Exp 45s	1	over
	"	"	"	"	"	"		11 56	Exp 90s		1206
	"	"	"	"	"	"		11 58	Exp 3m		485 E
- 980	"	"	"	"	E-33	"		12 08	12 28	3	
	"	"	"	"	"	"		12 31	12 39		
- 981	"	"	"	"	Astra IX	"	17.5	12 50	Exp 30s	1	
- 982	"	"	"	"	"	"		12 55	Exp 1m	2	
- 983	"	"	"	"	"	"		1 00	Exp 2m	4	
- 984	"	"	"	"	"	"		1 04	Exp 15s	3	11
984F1	Focus			I-25	Astra II	008				1	
- 985	Nova Cephei	"	"	"	E-33	"		1 53	2 18	4	
	"							2 19	2 27		

Reading Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	Outside Base				15.8	Focus 26.15 hlt 19.2
0 1 3	013 E	36-38	0	6.86	K5 1/2-1 1/2	Slide?
11 4	20 ^m W	48.56	1	7.32	K0 1/2 1/2 1/2	
Exp 15	Hour Angle		1		6	setting 1 spots 30 ^s
Exp 15	At 12.06		1		6	setting 5
Exp 3m	Nas 425 E		1		6	setting 9
1 1/2			1		15-15	setting 3 spots 3 ^m 3x length slit
1 3/4			1		10-10	setting 7
Exp 5			1		4	" 10 1/2 spots 30 ships 15 ^s ok print
Exp 1m 2			1		4	" 10 1/2 " " (OK)
Exp 1m 4			1		4	" 10 1/2 " " (too strong)
Exp 1 3/4	Hour Angle		1		4	" 10 1/2 " "
1 1/2	At		1	5/3	3 filters out	Focus 23.35 hlt 23.0
2 8	Nas		1		4 - 2 3 filters out	setting 2 3 filters out 2x length slit spots 3 ^m
2 27					3-3	" 8 " " (OK) " " "

1936 (cont a)

Date Sun June 21-22 Y-L-Hd Julian Day

[illegible]

Ending Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2:47	on Angle		1		^{2 filters out} 3-3	setting 1 spots 3 ^m
2:51	AA 2.44				3-3	setting 5
2:53	AA 1.46E				3-3	setting 9
Exp. K					^{2 filters out} 6	setting 0 put other filter in spots 30 ^s
3:00					6	setting 5 (OK)
3:05					6	setting 10
3:11					6	setting 2 Long slit spots 30 ^s
3:14					6	setting 8 " (OK)
June 22 12						40M.T.A. 40S.T.A. S.T. watch M.T. watch -04.4 +25.6 -21.4 +00.1

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1936

Date Monday June 22-23

Y - 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
988 F1	Focus test			I 25	Astru II	Set. 010	Set. 20.0			1
989	HD 142926	15 52.4	42 51	"	"	"	20.5	9 15	9 51	2
- 990	HD 145849	16 08.1	36 41	"	"	"	20.0	9 57	10 47	3
- 991	HD 165645	18 01.9	41 56	"	"	"	19.9	10 53	11 38	4
- 992	Nova Cephei	22 13.2	55 20	"	"	008	20.2	11-58-25	1 min	1
	"	(1936)		"	"	"		12-00-47	12-02-47	
	"			"	"	"		12-04-23	12-0-24	
- 993	"			"	lantern	"	20.3	12 17	12 47	3
- 994	"			"	Astra II	"	20.2	12-53-10	1-13-10	2
994 F1	Focus			I 12	M. Pan	"	20.2			
- 995	Nova Cephei			"	Astra II	"	20.3	2-11-00	2 min	1
- 996	"			"	"	"	20.2	2-18-20	2-22-20	3
- 997 a	"			"	"	"		2-39	2 49	1
b								2-51	3-11	1
- 998	"			"	E 33	"		3-15-40	3 31	4

Estimated May at 10 P.M. EST as 3.0
 But later 2 am looked nearer 3.6 or 4.0

100

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
1		Outside thru base				5/3	3 filters out, focus set 23.30 but not changed.
51 3	17 ^m E		3-5	5.6	B8	2-2-2	
2 3	24 ^m W		5	6.86	K5	2-2-2	
1 8 2		41 57		6.70	F0	2-2-2	
5 min 1		55 20				8	setting 3 } spots 30 ^s
7 12-02-7						8	setting 6 }
3 2-0-24						8	setting 9 }
2-3	at 12-56					7, 7	setting 3 spots 30 ^s
0 1-3-12	was 3-30 E					8	setting 6 7 1/2 ^m
	Outside thru base					10/6	
2 min 1						4	Setting 10 1/2 strips 10 ^s spots 30 ^s
2-0-03						4	setting 10 1/2 " 10 ^s " 30
2 49 1						4	long slit spots .30 ^s setting 6 }
3-1						4	setting 3 }
3 31						16	setting 6 1/2
							C.T. 48 M.T.A. 48 S.T.A. H.T. 48 48 June 23 12 -04.8 +25.9 -19.8 +09.4

1936

Date Tuesday June 23-24 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
998 F.				I-12	Met. P.	1008	+20.4	11.11 1912		1	
- 999	Nova Cephei	22 13.2	+55 20	-	Astron IX	1008		8.59	Exp 50s	1	
	"			-		"		9.05	Exp 12m		
	"			-		"		9.09	9.13		
*-1000!!!!!!	"			-	Astron IX	"		9.17	9.25	2	
-1001	"			-	Astron IX	"		9.36	9.40	3	
-1002	"			-	Astron IX	"		10.23	10.29	4	
	"			-		"		10.30	10.42		
-1003	"			-	Astron IX	"		10.45	10.47	1	Hour Angle
-1004	"			-	Astron IX	"		10.57	70s	2	115
	"			-		"		10.59	11.02		Was 5.0E
	"			-		"	+20.5°	11.03	11.13		
-1005	"			I-25	Astron IX	"		1.17	1.22	1	
	"			"		"		1.23	1.53		
1005 F.	Focus Test				Astron IX	"				2	
-1006	Nova Cephei			"	E-33	"		1.45	3.15	3	

very difficult to estimate
exposures owing to clouds.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
7:12			10 7			- O.K.
7:51			0-0	spots	6	settling 1 1/2 seeing poor
8:00				202	6	" 5 differential focusing. Made run-
9:13					6	" 8 1/2 remainder of R.C. motions by hand
9:25				spots 102	6	" 10 clouds and haze. Star about
9:40				spots 202	6	" 10 blamped out
10:00			1	spots 202	6	" 2 1/2 clear
10:02			1		3-3	" 7 1/2
10:07	Hour Angle			spots 82	6	" 10
10:18	11 15			spots 202	6	" 1 1/2 intermittent clouds
10:26	105 5.07E				6	" 5
10:33					6	" 8 1/2 Thick
10:46				spots 202	8-8	" 1 1/2 fiducial differential
10:53					8-8	" 5
3:15	base outside		22 14			- set I-25 focus 23.3
			2	3. out spots 1302	4-4	- 5 long exp. Tilt 23.0

(Continued) 1936

Julian Day.....

[illegible]

Ending Time
E.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

2

J. ^{3rd} sitting 10.4 apt 300 str 5 sec

	C.T.	10 M.T.A.	10 S.T.A.	10 M.T. Watch	10 S.T. Watch
June 24	12	-04.9	+26.4	-18.1	+15.5

105

1936

Date Wed June 24-25 Adl. 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
1007 F.	Focus.			I-25	Astra	010	20.7	9 11		1	base
1008 (a)	HD 142926	15 52.2	42 51	"	"	010	20.6	9 11	10.01	2	42 ^m
(b)	"	"	"	"	"	"	"	10 06	11 34		43 ^m
1008 F	Focus			I-25		010	20.6	4 35		3	44 ^m
- 1009	HD 170474	18 24.5	-2 03	"	"	010	20.6	11 46	12 46	4	W 5 ^m
- 1010	n. Cep.	¹⁹³⁶ 22 13.2	¹⁹³⁶ 55 20		Astra	008		mid 1 03	2 min	1	
								mid 1 08	4 min		1
								mid 1 15	8 min		2 31
- 1011	n Cep.			1	E33	008		1.31	1.55	2	2 46
								1.58	2 08		
- 1012	n Cep.			1	Astra	008		mid 2.8	3 min	1	
								mid 2.36	6 min		
- 1013	γ Cas HD 5394	00 50.7	60 11	I-25	Lantern	008	20.9	3 00	3 30	4	3 25

REMARKS

thickening up fast, set on Kova
Sacerted but couldn't see star in
finder.
remained Chock.

full length slit.

		C.T.	ΔO M.T.A.	ΔO S.T.A.	ΔO M.T. water	ΔO S.T. water
June	27	12	- 05.2	+ 27.8	- 17.7	+ 36.0

1936

Sat

June 26-27

27 - 28

Hel-MR.

Julian Day

[illegible]

1936

Date Sunday June 28-29 Y-T Julian Day

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
9 40 3	21 ^m E	42 47	1	5.6	B8 2-2-2	Nova estimated mag 4.7
10 44 2	45 ^m W	36 38	1	6.86	K5 2-2-2	
11 02 4	5 02 W	55 20	1		8 ^s	Setting 1 } spots 30 ^s
11 12	4 52 W		1		4-4	" 5 }
11 30	4 34 E		1		4-4	" 9 }
11 43			1		10-10	
11 51		Outside thru base.			10/6	Focus 2.6 15 let 19 2
12 21 1			0		6 ^s	Setting 1 } spots 20 ^s
12 37	3 26 W		0		3-3	" 5 }
12 50			0		3-3	" 9 }
1 00 1	1 02 W	27 43	0	7.53	G5 1 1/2-1 1/2-1 1/2	Plate holders 2 and 4 are in dark
1 00 55	0 55 W	44 58		6.59	K0 1 1/2-1 1/2-1 1/2	room with the plate box.
1 04 4		Focus 2.6 15 let 19.2			10/7	Dec Clutch failed on last
1 04 4		" "			10/7	star. Motor runs but the
						clutch evidently does not engage
						Pushed tube down by hand.

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

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
June 1	Tilt 19.2	Focus	26.10	outside base	10/7	June 29 12 $\Delta \theta M.T.A.$ +10.0 $\Delta \theta S.T.A.$ +25.7 $\Delta \theta M.T.$ ^{water} -21.0 $\Delta \theta S.T.$ ^{water} +44.7
5	"		26.15	"	"	30 12 +10.2 +29.3 -17.8 -04.7
9	"		26.20	"	"	Focus bad; Twisted plate barrel slightly.
June 1	"		26.00	"	"	
5	"		26.30	"	"	
11	set 19.4	Focus	26.27	outside base	14/8	
11	" 19.6	"	26.27	"	14/10	set tilt to 19.5

Date Tuesday, June 30 - July 1 M Julian Day

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
11:19	0 52 E	40 02	0	6.22	F8 1 1/2, 2, 1 1/2	
11:27		28 44	0	3.83	A0 6	settling 2 202 spots
11:31		—	0	—	— 6	" 5
11:35	1 13 E	—	0	—	3-3	" 8
11:40	0 03 W	41 57	0	6.70	F0 2-2-2	
11:41		55 20	1	(5.5)	— 4	settling 2 202 spots
11:47		—	—	—	4-4	settling 5
11:50	3 00 E	—	—	—	4-4	settling 8
12:05	1 30 E	—	—	—	8-8-8	3 m spots
12:34	0 07 E	29 54	1-0	6.99	B9 2-2-2	302 spots

[illegible]

[illegible]

1936

Date _____

[illegible]

7 Fri. 1936
Date July 3-4

Julian Day

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		onstad base.			10/7	Focus 26.35 Tilt 19.5
934 L	E 8m	36 36	2	6.86	K ₅ 1 1/2 1 1/2 1 1/2	
1024 L	E 25m	40 02	2-0-2	6.22	F ₈ 1 1/2 1 1/2 1 1/2	
1201	W 2 37	42 46	ave 3	5.6	B ₈ 8, 10, 8	spots 3 min.
1235	3 08	55 18	1	(5.9)	3, 4	setting 3. spots 205
125	E 2 18	"	1		3, 4	setting 7
304	W 1m	"	3		8, 10, 8	1 1/2 x length slit spots 3m
note temperature control bad.						
G.M.T.A. July 4 D.S.T.A. +08.1 D.M.T. watch -15.4 D.S.T. watch +26.7						
Think Temp control is now O.K.						
(watch) Rkep.						

nova distinctly
red in colour now.

Date Sat. July 4-5, 1936 M-MR Julian Day.....

[illegible]

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about 225 visitors.
 Sawed & Ber, with 274-inch, ^{and noon} ~~just after~~ with 4-inch.

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		base outcreek.			$\frac{1}{2}$	tilt 19.5 from 26.34 (took clamp out)
12 00	0 52 W	-9 13	1	7.47	B2 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$	temp 11.15 = 21.5 11.50 = 21.9 12.20 = 21.6 spots 30 r
1 12	2 26 E	+55 18	1		$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$	settling 3 spots 20 r.
2 12	1 26 E	-	1		$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$	settling 7
3 02	0 04 W	-	1.2		3, 3, 3	temp at 2.56 = 19.9 at 3.20 = 20.9 at 3.30 = 22.1 spots 90 r. 3.40 22.3
temp in dome 58° F.						
ΔOMTA ΔOMT watch ΔObsid.T.A ΔObsid.T watch						
July 6 +7.5 -15.0 -28.0 +5.5						

H

Date Sunday July 5-6 ¹⁹³⁶ Y-L Julian Day.

[illegible]

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Date Monday July 6-7, 1936 M Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Angle End
1055 F ₁				I-12	Met P.	.010 _L	26.0	-		1
1056	H.D. 153286	16 53.4	147 32	-	Astria II	-	25.9	9.06	10 20	1
1057	H.D. 166014	18 3.6	128 45	-	E-33	-	25.7	10 32	10 25	2
	-	-	-	-	-	-	-	10 38	10 56	
- 1058	H.D. 187949	19 47.5	-14 51	-	Astria II	-	25.5	11 07	12 17	2
1059	H.D. 178947	9 5.5	30 24	-	-	-	25.8	12 22	1 03	1
- 1060	H.D. 193637	20 16.2	33 37	-	-	.020 _M	25.7	1 09	3 09	1
- 1061	Para Lac	22 13.2	55 20	-	Astria II	.010 _L	25.5	3 16	3 48	4
1061 F ₁	Focus			I-25	M Pan	010	24.5			
1061 F ₂	"			"	"	"	"			

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	1222		12			Focus 26.34 tilt 19.5 plate O.K.
	47 29	2	6.94	App	1 1/2	light clouds low and thin, covered up high
	28 45	2	3.83	A0	2 1/2 2 1/2	clouding the heart of it, large faint clouds to
	-	2	-	-	10, 10	photo 3m
	0 50 E	-14 45	1	6.42	A2	1 1/2 1 1/2 1 1/2 photo 30 R
	130 28	3	6.66	B9	1 1/2 1 1/2 1 1/2	
1 9	1 34 W	33 45	2	8.6	A	1 1/2 1 1/2 1 1/2 photo 30 R
3 48	55 19	2-1			1 1/2 1 1/2	photo 20 R

Date Tues. July 7-8 Hol.

Julian Day

[illegible]

B1

1936

Date

Wed July 8-9 M

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
1065 F ₂				I-12	Ref. Pan	070	27.8	about 300 p		
1065 F ₃				—	—	—	33.5	set	1	
				—	—	—	—		5	
				—	—	—	—		9	
							set temp. about 32.0			
1066	HD 161569	17 41.2	45 05	—	Astria II	1010 _L	33.8	9 18	9 56	3
- 1067	169753	18 21.1	-9 15	—	—	1015 _L	33.5	10 03	12 03	4
- 1068	BD 26° 3896	20 21.6	+27 02	—	—	1020 _m	32.1	12 11	2 11	2
- 1069	Novae Lac.	22 13.2	+55 20	—	Astria II	1010 _L	31.8	2 31	3 17	1
- 1070	Lac. Lac.	—	—	—	Astria II	1010 _L	31.8	3 17	3 47	3
1070 F ₁	Four			I-25	M Pan	010	31.3			4

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		base outside.			$\frac{12}{8}$	set focus 26.35 tilt 19.5
		base outside			$\frac{12}{8}$	focus 25.35 "
					$\frac{40}{20}$	26.25 " 26.25 just right
					$\frac{20}{12}$	26.15 "
						set focus to 26.25, tilt 19.5
5:00	57 E	45 04	2	6.59	B1 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	
5:00	30 W	-9 13	2	7.47	B2 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	spot - 30.2
5:00	58 4	27 10	2	8.8	- $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	- 30.2
5:00	06 E	55 19	2	-	- $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	
5:00	24 W	55 19	2	-	$\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	
						ΔO.M.T.A. ΔO.M.T. ΔO.S.T.A. ΔO.S.T. watch watch July 9 12 +6.8 -15.8 +38.3 +60.3
		base outside			no focus $\frac{4}{3}$	Tilt 23.25 - Setting 12 focus 23.4
						" $\frac{5}{2}$ 23.2
						" 9 23.0
						best: Tilt 23.25 Setting 23.4

Ending Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2 7 1	17 ^m W	42 45	5-3	5.6	B ₈ 3,3,3	
2 56 4	54 ^m E	31 33		6.2	B ₉ 3,3,3	
2 4 1	29 ^m E	14 17	2-3	6.4	A ₂ 3,3,3	Put out 4 1/4" to see comet, etc.
2 5 1	44 ^m W	44 07		7.1	F ₅ 3,3,3	
1 12 4	03 ^m E	32 07	2-3	7.1	A ₀ 3,3,3	While revolving dome at 12 35
2 37 3	54 ^m W	43 15		7.1	K ₀ 3,3,3	heard a crunching noise. Inspection
3 4 1	20 ^m E	30 58		7.1	F ₂ 3,3,3	showed one collecting trolley all buckled. One copper cable has evidently become loosened causing trolley to jump. Dec relays cutting up. Dec seems to be OK now.
						July 10^d 12^h Don't. A. Don't. Watch +6.6 sec Don't. A. Don't. Watch -17.9 sec Don't. A. Don't. Watch +39.3 Don't. A. Don't. Watch +65.1

Date ¹⁹³⁶ July 10-11 Friday H Julian Day

[illegible]

Reading Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		outside - base			25/15	26.25 Filt 19.5
0 12	1 54 W	+13 29	4-3	7.07	K0	1 1/2 - 1 1/2 - 1 1/2
0 24	0 46 E	-02 14	2-1	6.9	B8	1 1/2 - 1 1/2 - 1 1/2 Cloudy at start. Light haze
0 36	1 00 W	+30 05	1-2	7.11	G0	1 1/2 - 1 1/2 - 1 1/2 Haze
0 48	0 25 E	+8 54	2-	6.8	A0	1 1/2 - 1 1/2 - 1 1/2 "
0 59	0 17 E	+55 18	2-3			1 1/2 - 1 1/2 - 1 1/2 setting 3
1 10	0 06 E	"	2-3			1 1/2 - 1 1/2 - 1 1/2 " 7 Haze
1 21	0 24 W		2-3			1 1/2 - 1 1/2 - 1 1/2 clouds
1 32	0 40 W		3			" Plates 1078 + 1079 probably ruined by not closing plate-box
						July 11 ^d 10 ^h $\Delta\alpha$ MTA $\Delta\delta$ M.T. Watch $\Delta\alpha$ S.T.A. $\Delta\delta$ S.T.W
						+6.5 -17.8 +41.3 +10.0
						+70 2

Two tests. During first Hartman
diaphragm dropped during exposure.
2nd OK. Diaphragm tightened by Y.

Take
sensitometer

30"
each
plate.

137

1936

Date Saturday July 11-12 Hd - MR Julian Day

[illegible]

about 50 sections Delayed by 2300 volt - lens piece 1138
 being blown. Finally showed M13 with 74"
 with 4 1/4" showed Jupiter, M13, Comet P., doubles.

Reading Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
- 4	-	-	-	-	no filter 3/2	Tilt 19.5 Focus 26.27
12 4 1	0.00	16 05	2	7.14	A2 1 1/2, 1 1/2, 1 1/2	
1 09 2	W 10 ^m	28 21	2	6.77	B9 1 1/2, 1 1/2, 1 1/2	
2 12 3	W 57 ^m	15 20	3	7.37	F8 1 1/2, 1 1/2, 1 1/2	
3 27 4	W 13 ^m	55 19	2		1 1/2, 1 1/2, 1 1/2	setting 3
3 40	W 29 ^m		3		1 1/2	setting 7
4 1		60 22	4	2.01	B _{op} 7 sec no filter	setting 1
2 min						" 5
4 min	E 1 ^h 55					" 9

shots 305 Hazy

shots 5^m

Date ¹⁹³⁶ Sunday July 12-13 H Julian Day

[illegible]

Date Monday July 13-14 ¹⁹³⁶ Y Julian Day _____

[illegible]

Date ¹⁹³⁶ Tues July 14-15 Hd Julian Day

[illegible]

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Date Tuesday, July 15-16 S-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
1107	NGC 5904	15 13.5	+02 27	N	E 40	-	(74°F)	9 27	9 37	37 W
1108	6254	16 51.9	-03 57		"			9 43	9 53	0 1. W
1109	6402	17 32.4	-03 11		"			9 58	10 22	0 4 W
1110	6402	"	"		Astron II			10 28	10 48	0 30 W
1111	6779	19 12.7	+30 00		"			11 05	11 30	0 27 E
1112	6402	17 32.4	-03 11		E 40			11 38	12 02	1 45 W
1113	"	"	"		Astron II			12 04	12 24	2 07 W
1114	6760	19 6.1	+0 52		"			12 35	1 05	1 14 W
1115	6402	17 32.4	-03 11		E 40			1 08.5	1 33.5	3 17 W
1116	6205	16 38	36 39		"			1 43	1 48	
1117	6934	20 29.3	+7 4		"			1 54	2 19	1 05 W
1118	7089	21 28.3	-1 16		"			2 26	2 34	2 21 E
1119	6779	19 12.7	30 0					2 43	3 03	3 06 E
1120	6934	20 29.3	+7 4				(68°F)	3 08	3 30	2 16 W

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Date Thursday July 16-17 S-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
1121	NGC 6341	17 14.1	+43 15	N	E 40	-	(74°F)	9 08	9 23	0.31E
1122	5904	15 13.5	+02 27		"			9 29	9 39	1.45W
1123	6402	17 32.4	-03 11		"			9 45	10 20	2.06W
1124	6402	"	"		Astria II			10 22	10 57	2.43W
1125	6254	16 51.9	-03 57		E 40			11 01	11 11	3.3W
1126	6779	19 12.7	+30 00		E 40			11 20	11 30	6.13E
1127	6402	17 32.4	-03 11		"			0 02	0 42	2.28W
1128	6760	19 06.1	+0 52		"			0 47	1 32	1.46W
1129	6205	16 38.1	+36 39		"			1 39	1 49	4.3W
1130	6934	20 29.3	+07 04		Astria II			2 00	2 25	1.15W
1131	7089	21 23.3	-01 16		"			2 28	2 38	0.29W
1132	6934	20 29.3	+07 04		E 40			2 44	3 09	1.59W
1133	6934	"	"		Astria II		(67°F)	3 10	3 30	2.20W

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS																		
9 31	0 31 E		Fair to Poor			Clouds 2 ^m after start. Guide star intermittently visible																		
9 41	1 45 W					Clouds } Short off 3 ^m .																		
9 53	0 06 W					Clouds } lengthened 10 ^m due to haze																		
10 57	0 43 W		Poor			Clouds }																		
11 11	1 38 W					Haze																		
11 27	0 13 E					Thick clouds over most of sky at end.																		
11 42	2 28 W		better			Smoke & clouds.																		
11 52	1 46 W																							
12 14	2 31 W					Refuses																		
12 37	1 15 W																							
12 53	0 29 W																							
3 01	1 59 W																							
3 23	2 20 W																							
Smoke loads at low altitudes latter half of night.																								
<table><tr><td>d</td><td>h</td><td>Δ M.T.A.</td><td>Δ M.T. Watch</td><td>Δ S.T.A.</td><td>Δ S.T. Watch</td></tr><tr><td>July 17</td><td>12</td><td>+2.2</td><td>-25.3</td><td>+44.2</td><td>+53.0</td></tr><tr><td>July 18</td><td>10^d h</td><td>+1.8</td><td>-25.7</td><td>+44.6</td><td>+57.6</td></tr></table>							d	h	Δ M.T.A.	Δ M.T. Watch	Δ S.T.A.	Δ S.T. Watch	July 17	12	+2.2	-25.3	+44.2	+53.0	July 18	10 ^d h	+1.8	-25.7	+44.6	+57.6
d	h	Δ M.T.A.	Δ M.T. Watch	Δ S.T.A.	Δ S.T. Watch																			
July 17	12	+2.2	-25.3	+44.2	+53.0																			
July 18	10 ^d h	+1.8	-25.7	+44.6	+57.6																			

1936

Date _____

[illegible]

1936

Y

Julian Day.

[illegible]

1936

Date _____

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	bare outside				no filters 3/2	Focus 26.27 Tilt 19.5.
9:16	W 1 ^h 03	36 35	var. ave 1	6.86	K5 1 ¹ / ₂ , 1 ¹ / ₂ , 1 ¹ / ₂	
9:44	W 1 ^h 11	15 38	1	6.23	B9 1 ¹ / ₂ , 1 ¹ / ₂ , 1 ¹ / ₂	Clouds 9:55 on. Thick 10:45; mid exp. 10:00
10:19	W 1 ^h 17 ^m	32 06	1 → 3	7.07	A0 1 ¹ / ₂ , 1 ¹ / ₂ , 1 ¹ / ₂	for 7.S.P.
10:42	E 31 ^m	55 18	6 → 3		1 ¹ / ₂ , 1 ¹ / ₂	setting 5
2:11	E 12 ^m		4		1 ¹ / ₂ , 1 ¹ / ₂ , 1 ¹ / ₂	" 9
3:16	E 34 ^m	61 37	3	6.44	B8 1 ¹ / ₂ , 1 ¹ / ₂ , 1 ¹ / ₂	} 2 photos 30 s
3:41	E 1 ^h 44 ^m	46 46	2	7.00	B9 1 ¹ / ₂ , 1 ¹ / ₂ , 1 ¹ / ₂	
						Comet Peltier visible to naked eye.
						Δ M.T.A. Δ S.T.A. Δ M.T. until Δ S. Watch July 21 '13 +00.3 +41.3 -26.5 +15.5

936

Date Tuesday July 21-22 H Julian Day 2454542.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Exposure Time	Hour Angle End
1148	Focus test			I-12	Astr II	010	Set 22.0	7 45		1	Focus
	HD 151388	16 42.0	+43 24	"	"	"	22.0	8 30	9 20	1	1.8W
1149	152951	16 51.5	+46 41	"	"	"	21.9	9 23	10 13	2	1.5W
1150	152153	16 46.6	+43 36	"	"	"	22.0	10 16	11 26	3	1.5W
- 1151	Comet Peltier	23 04	+54.0	"	"	020	22.0	11 48	03 48	4	1.2E
	λ And	23 34.3	+46 06	"	"	"	21.8	3 51	3 52	1 ^s	
								3 53	3 57	4 ^m	
								3 57	3 57	5 ^m	1.5W

Ending Time
EST.Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

base - outside

18/12

Focus 26.27 Tilt 19.5

0 18 W +43 19 seeing 5-1 7.14 K2 1 1/2 - 1 1/2 - 1 1/2

1 01 W +46 38 3-4 6.77 A2 1 1/2 1 1/2 1 1/2

2 19 W +43 32 3 7.37 K0 1 1/2 1 1/2 1 1/2

3 32 E ^{Initial} +54 05 2-20 28 W ^{Final} +53 50 (off) Condensed nucleus about 5" in diameter.

+46 06 4.00 K0

no comp
works

Image trailed with RA guiding

0 05 W

at 3³⁷ comet crossed a fairly bright star (mag 7.8)

Very confusing; star not one with one star of

End plate 40³ tube sensitive

C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.Ward Δθ S.Ward

July 22 12 +00.0 +41.8 -26.8 +20.8

Removed 0.2

157

Date

1936
July 24 - 25

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		East Angle In
- 1152	70000			I-12	Astron	010	21.0			1	100m
	HD 145849	16 08.1	36 41	"	"	"	21.0	8.32	9.25		107 3
- 1153	" 157482	17 18.4	40 05	"	"	"	21.1	9.28	10.00	2	133m
1154	" 172976	18 38.0	44 10	"	"	"	21.1	10.04	11.32	3	145m
1155	" 193556	20 15.7	14 16	"	"	"	21.0	11.36	12.38	4	14m
1156	" 194012	20 18.2	14 13	"	"	"	20.9	12.40	1.26	1	110m
- 1157	Novae Lac	22 13.2	55 20	"	"	"	21.1	1.32	3.06	2	146m
							20.8	3.06	3.26		110m
1158	HD 219634	23 12.2	61 25	"	"	"	20.9	3.32	4.08	3	149m

159

1936

Saturday

Date.

July 25-26

H-MR

Julian Day 2428375-6

[illegible]

161

1936

Date Sunday July 26-27 H Julian Day.....

[illegible]

Ending Time
E.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

Outside Base

18-12

1 12 W

+36 36

2

6.86

15 12

Regions cloudy till start; scattered cloud thereafter. Totally cloudy 9²⁴

July 27 12 -00.7 +42.8 -28.2 -05.5

163

1936

Date Monday July 27-28 Y Julian Day

[illegible]

Date *Tues July 28-29* ¹⁹³⁶ *Had* 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
-1168	Focus			I-12	Astrat	010	25.0	mid 9.10	4	0
	HD 157482	17 18.4	40 05	"	"	"	25.0	8.25	9.31	19 ^m
	"	"	"	"	"	"	25.1	9.31	10 01	50 ^m
1169	HD 164078	17 54.4	32 41	"	"	"	25.1	10 06	10 58	11
1170	" 179838	18 09.0	29 03	"	"	"	24.8	11 01	12 01	59 ^m
1172	" 199478 199479	20 52.4	43 59 47 02	"	"	"	25.0	12 06	12 56	11 ^m
1173	" 199511	20 52.6	43 02	"	"	"	25.1	1 00	1 50	15
- 1174	Nova Lac	22 13.2	55 20	"	"	"	25.1	1 55	3 25	20
	"	"	"	"	"	"	24.9	3 25	3 45	41
1175	HD 219634	23 12.2	61 25	"	"	"	25.0	3 50	4 22	17

1166

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
4		outside base			no filter 1/2	Focus 26.27 Tilt 19.5
93	W 19 ^m		3	6.22	F ₈ 1 1/2, 1 1/2, 1 1/2	Thick clouds - Exposure very uncertain. Clearing at
10	W 50 ^m	40 02	2	"	" 1 1/2, 1 1/2, 1 1/2	9.30. " repeated.
11	W 1 ^h 11	32 39	1	6.96	F ₅ 1 1/2, 1 1/2, 1 1/2	
12	W 59 ^m	29 06	1	6.93	A ₀ 1 1/2, 1 1/2, 1 1/2	
13	W 11 ^m	47 10	2	6.71 6.66	B₈ B ₈ 1 1/2, 1 1/2, 1 1/2	mistaken identity, discovered Jan 5/39
14	W 1 ^h 05	43 10	1	6.74	B ₈ 1 1/2, 1 1/2, 1 1/2	
15	W 1 ^h 20	55 18	2		1 1/2, 1 1/2, 1 1/2	setting 3. spots 403
16	W 1 ^h 41	"	2		1 1/2, 1 1/2, 1 1/2	" 7
17	W 1 ^h 17	61 37	2	6.44	B ₈ 1 1/2, 1 1/2, 1 1/2	
						July 29. 12 -01.1 -00.5 -29.6 +07.8 Stopped & reset

Date ¹⁹³⁶ July 29-30 Wednesday Y-MR Julian Day.

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
8 56 1	0 09 W	+43 54	2	6.36	A ₀ 1½-1½-1½	
10 29 2	0 52 W	+44 55	2	7.8	F ₀ 1½-1½-1½	guided on lower star in guiding field
11 27 3	0 42 W	+43 38	2	7.0	A ₂ 1½-1½-1½	
12 55 4	1 22 W	+27 42	2	7.5	G ₅ 1½-1½-1½	clouds over most of sky except extreme
3 4 1	1 10 W	+45 26	2	7.3	G ₅ 1½-1½-1½	northern portion 1.00 to 1.50
4 20 2	0 13 W	+29 05	2	7.0	A ₃ 1½-1½-1½ no filters 3/2	setting 8 setting 3 Focus: 26.27 Tst: 19.51
						bulb fell out of circle light. Remains in drawer
						July 30 12 -01.1 +00.1 -29.3 +13.3 Δ04 watch Δ05 watch

169

1936

Date _____

July 30-31

Thursday

H

Julian Day.

[illegible]

171

1936

Date July 31 - Aug 1. Friday Y

Julian Day.

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
1190	HD 164059	17 54.3	45 53	I-12	Astra II	Set 010	Set 23.0	watch 4 th 8 20	9 20	1 5 ^m E
- 1191	HD 169028	18 17.6	51 18	"	"	"	22.8	9 26	10 16	2 17 ^m W
1192	HD 176003	18 53.0	44 05	"	"	"	23.0	10 22	11 02	3 28 ^m W
<i>gals</i> <i>avg.</i> 1193	HD 190227	19 58.9	31 40	"	"	"	23.1	11 08	12 04	4 24 ^m W
1194	HD 197139	20 36.6	43 05	"	"	"	23.0	12 12	12 52	1 30 ^m W
- 1195	HD 206155	21 35.1	+8 44	"	"	"	23.0	12 59	1 45	2 1 ^m W
1196	HD 210334	22 04.6	+45 15	"	"	"	22.8	1 51	2 31	3 6 ^m W
1197	HD 219291	23 09.6	+29 13	"	"	"	22.7	2 36	3 16	4 26 ^m W
1198	HD 3291	00 30.9	+44 06	"	"	"	22.7	3 23	4 23	1 1 ^m W
	focus.			Outside thru base						

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
9:21	15 ^m E	+45 52	3	7.2	F5	1/2-1/2-1/2 Mean time watch run down
9:22	17 ^m W	51 18	3	7.3	K2	1/2-1/2-1/2 used my own watch Δθ = -1 ^m
9:23	28 ^m W	44 08	3	7.0	A2	1/2-1/2-1/2
9:24	24 ^m W	31 45	3	7.5	K0	1/2-1/2-1/2
9:25	35 ^m W	43 13	4	7.2	K0	1/2-1/2-1/2
9:26	29 ^m W	+8 52	3	6.8	A0	1/2-1/2-1/2
9:27	45 ^m W	45 26	2	7.3	G5	1/2-1/2-1/2
9:28	26 ^m W	29 24	2	6.8	F5	1/2-1/2-1/2
9:29	11 ^m W	44 16	3	7.3	B8	1/2-1/2-1/2
					12/8	
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T. watch watch Aug. 1 12 -00.9 -00.2 -07.4 +25.3

Date *Aug. 1-2* 1936

Aug 1-2 Hol

Julian Day.

[illegible]

1936

Date _____

Tues Aug

August 4-5

H-L

Julian Day

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		Outside - Grade			no filter $\frac{3}{2}$	2 exposures - (first had wide slit)
-	0 49 H	-R 14	1	6.8	B8 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	Very bad smoke. Some clouds Developed; very weak.
3		+31 39		6.69	A0 $\frac{1}{2}$	Tor Thick,
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T. watch watch
						Aug. 5 12 -01.2 00.0 -11.0 -05.5
						6 12 -01.3 +00.1 -10.5 +03.1

177

1936

Date *Thursday August 6-7*

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
- 1205	<i>Focus test</i>			<i>T-12</i>	<i>Artin II</i>	010	⁵⁰⁺ 23.5	7 35		1
	HD 145849	16 09.1	+36 41	"	"	"		8 16	8 56	
1206	176 377	18 54.9	+30 02	"	"	"	23.5	8 59	9 59	2
1207	183 794	19 26.1	-02 19	"	"	"	23.5	10 03	11 23	4
- 1208	206 155	21 35.1	+08 44	"	"	"	23.6	11 26	12 26	1
1209	210 334	22 04.6	+45 15	"	"	"	23.7	12 32	1 42	2
1210	<i>New Lunar</i>	¹⁹³⁶ 22 13.2	+55 20	"	"	"	23.5	1 46	2 46	3
	"			"	"	"	23.5	2 46	3 46	3
1211	H.D. 222275	23 34.1	+61 35	"	"	"	23.8	3 04	3 54	4
1212	6210	00 58.1	+61 04	"	"	"		3 57	4 29	
Fri 2 PM: Aug 7 Hd-MR										
1212F	Focus			<i>T-35 m Pan</i>		010	20.8			4

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1936

Date Friday August 7-8 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.	Exposure Time	Angle
- 1213	HD 145849	16 08.1	36 41	I-25	Astra II	0.10	set 25.0	8.22	10 23	1	3 W 3
1214	" 186340	19 38.7	60 16	"	"	"	25.0	10.31	12 05	2	1 W 6
1215	" 210334	22 04.6	45 15	"	"	"	25.1	12 10	2 20	3	2 W 4
- 1216	HD 5394	00 50.7	60 43	"	"	0.10	25.1	at 2.30	30 s	1	
	8 can							at 2.32	1 m		
								at 2.36	2 m		
- 1217					"			at 2.39	30 s	2	3 W
								at 2.41	1 m		4 W
								at 2.45	2 m		5 W
- 1218					Process			2 49	2 55	4	
								2 57	3 09		
								3 11	3 30		
1219	HD 1439	00 13.4	30 58	I-25	Astra II	0.10	25.1	3 35	4 30	3	1 W 3

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS					
	3 00 W	36 36	2-3	6.86	K ₅	3-5-3	Aug 7 12	M.T.A. -01.4	S.T.A. +00.2	M.T. watch -09.7	S.T. watch +33.2
	1 ^h 14 ^m W	60 21	5	6.27	A ₂	3-5-3	Laying up at 9.45 Developed 1213				
	1 ^h 02 W	45 25	5	7.30	G ₅	4,4,4	spots 405 " 1214				
		60 22	4	2.01	R _{0p}	12	cut 1	spots 405			
						12	" 5				
						12	" 9				
	at 3.07					12	cut 1	spots 405 broke in plate holder.			
	hr L =		4			12	" 5				
	57 ^m E.					12	" 9.				
			6			no filters 12, 12	cut 1	spots 5-24			
						12, 12	" 5				
						12, 12	" 9 (2x length slit).				
	1 ^h 03 W	31 09	6	5.80	A ₀	4,4,4	certain amount of haze and/or smoke all night.				

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Date

1936
Saturday August 8-9 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
1219 F1	Focus test			I-12	E 40		21.5	10 30 AM	2	15
- 1220	Focus test			I-12	Astria II	010	Set 25.7	10 00 7	1	120
	HD 145849	16 08.1	+36 41	"	"	"	25.5	10 07	11 17	1 4 00 W
1221	18 76 43	19 45.7	+44 07	"	"	"	"	11 27	"	2
- 1221	206155	21 35.1	+08 44	"	"	"	25.5	11 54	1 14	3 30 W
1222	206842	21 39.7	+58 48	"	"	"	25.5	1 18	2 19	1 31
1223	222275	23 34.1	+61 35	"	"	"	"	2 22	3 32	0 48 W
1224	6475	01 00.7	+59 20	"	"	"	25.5	3 34	4 31	3 20 W

Keating Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
Outside - base				with 4/3	Tilt 195 Setting 1 — Time 26.20 } Best 26.16? 5 — 26.30 7 1/2 — 26.27
					DBMTA DBST.A. DBMT.Watch DBST.Watch
					Aug 8 ^d 10 ^h -01.4 +05.2 -09.7 +21.7
					about 80 visitors, showed K Schmidt's and Ring Model
Outside - base				with 4/3	with 74"; Jupiter + M13 with 4"
4 00 W	+36 35	2	6.86	K5 1 1/2, 1 1/2, 1 1/2	
	+44 12		6.77	B8 1 1/2;	double star; N brighten of pair; too faint for condition
0 30 W	+08 52	2	6.80	A0 1 1/2, 1 1/2, 1 1/2	
1 31 W	+59 58	3-4	7.28	K2 1 1/2, 1 1/2, 1 1/2	
0 48 W	+61 45	4	6.78	A2 1 1/2, 1 1/2, 1 1/2	
0 23 W	+59 30	4	6.78	A0 1 1/2, 1 1/2	Stage
					Thick smoke early evening.

Date Monday, Aug 10-11 S-M

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
	<i>5 oph</i>	<i>Arcturus</i>		<i>Newton</i>			<i>70°F</i>			<i>North</i>
1225	NGC 6254	16 51.9	-03 57	"	E 40			8 34	8 44	0 50 W
1226	6402	17 32.4	-03 11	"	"			8 53	9 23	0 49 W
1227	6402	"	"					9 25	9 50	5 W
1228	6760	19 06.1	+00 52					10 02	10 47	0 39 W
1229	6402	17 32.4	-03 11		Astr II			10 57	11 27	1 5
1230	6402				"			11 28	11 57	3 7
1231	6205	16 38.1	+36 39		"			12 08	12 13	1 3 W
1232	6934	20 29.3	+07 04		"			12 24	12 49	1 1 W
1233	6341	17 14.1	+43 15					0 57	1 27	1 2
1234	6779	19 12.7	+30 00					1 12	1 37	1 12
1235	6934	20 29.3	+07 04					<i>max 2:55</i> 1 53 ↓	2 28	1 7
1236	7089	21 28.3	-01 16					2 31	2 46	1 4
1237	6934	20 29.3	+07 04					3 19	3 44	1 3
1238	7078	21 25.2	+11 44					3 48	4 03	1 31

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Date Tuesday Aug 11-12 S-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
	<i>5 oph</i>				<i>Form & re-illuminated, Refocused,</i>					
1239	NGC 6779	19 12.7	+30 00		Aster II			8 48	9 03	112
1240	6402	17 32.4	-03 11					9 09	9 39	118
1241	6402							9 40	10 05	125
1242	6254	16 51.9	-03 57					10 09	10 19	124
1243	6760	19 6.1	+0 52					10 36	11 09	135W
1244	6402	17 32.4	-3 11					11 19	11 54	142
1245	6981	20 48.0	-12 55					12 01	12 26	147
1246	6205	16 38.1	+36 39				62°F	12 34	12 42	151
1247	6341	17 14.1	+43 15					12 46	12 56	154
1248	6934	20 29.3	+07 04					1 04	1 29	158W
1249	6779	19 12.7	+30 00					1 37	1 57	167
1250	6341	17 14.1	+43 15					2 05	2 15	165W
1251	6934	20 29.3	+07 04					2 23	2 45	172W
1252	Saturn				E. Prinos			2 58		
1253	..				E 33				3 03	177W

(continued)

Date Tuesday, August 11-12 5-14-6 Julian Day 175[illegible]

Date Wednesday, Aug. 12-13 S-H Julian Day 173

[illegible]

[illegible]

Date Saturday Aug 15-16 1936 M-MB Julian Day

Hour	Angle	End
13	W	2
13	W	2
103	W	4
030	W	4

About 30 visitors

superior as usual
in 4 1/2"

Ending Time E.S.T.	Hour Angle End.	Declination	Seeing	Ptg. Mag.	Comp.
12 - 4	1 35 W	28 47	0	7.17	A0 1/2, 1/2, 1/2
2 01 1	1 13 W	27 24	0	7.07	A0 1/2, 1/2, 1/2
3 35 2	1 03 W	45 59	1	6.82	B9 1/2, 1/2, 1/2
4	0 20 W	45 03	1	6.34	A0 1/2, 1/2, 1/2

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1936

Date Sunday Aug 16-17 M-L Julian Day 2454110.5

[illegible]

Ending Time
L.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

base outside

13

8

0 03W 14 39 1 6.67 B9 1 1/2, 1 1/2, 1 1/2

0 50W 14 55 1 6.43 B9 1 1/2, 1 1/2, 1 1/2

2 20W 15 39 1 7.13 B9 1 1/2, 3

0 49W 44 02 0 6.65 A2 1 1/2-1 1/2-1 1/2

6.25 App

some haze in region 10.15 thicker 10.30 smoke and haze 10.45
 heavy clouds star repeatedly disappearing.
 filled in completely at 1.30

Aug 17^d 12^h ΔGMTA ΔG.S.T.A. ΔG.M.T. Watch ΔG.S.T. Watch
 -3.3 -5.4 -7.3 +1.8

195

1936

Date Monday August 17-18, 1936 S-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
	σ oph	¹⁹³⁶ 17 23.2	+ 4 12	Newtonian	Trans. Gel			7 50		
1266	NGC 6779	¹⁹³⁰ 19 12.7	+ 30 00	"	E 40		67°F	8 21	8 36	1 12E
1267	6402	17 32.4	- 03 11	"	Astro II			8 46	9 16	0 14W
1268	"	"	"	"	"			9 18	9 48	1 41W
1269	6264	16 51.9	- 03 57		E 40			9 51	10 01	2 34W
1270	6205	16 38.1	+ 36 39		E 40			10 07	10 12	2 03W
1271	6402	17 32.4	- 03 11		Astro II			10 23	10 49	1 41W
1272	6402	"	"		E 40			10 53	11 23	2 06W
1273	6931	20 48.0	- 12 55		Astro II			11 41	12 06	2 42W
1274	6934	20 29.3	+ 7 04		"			12 14	12 39	1 35W
1275	6779	19 12.7	30 00		"			12 45	1 05	2 03W
	KA 64	20 59	+ 30 10					1 18	1 38	2 03W
1276	6341	17 14.1	+ 43 15		E 40			1 44	1 54	2 03W
1277	6205	16 38.1	+ 36 39		"			1 58	2 08	2 03W
1278	6934	20 29.3	+ 07 04		"			2 13	2 38	2 03W
1279	6779	19 12.7	+ 30 00		"			2 45	3 10	2 03W

196

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
			Poor			Seeing evidently poor, misses somewhat systematic.
8:10	1 12E		Very poor			Seeing blowing up
9:10	1 09W					Refused on 5 apts before this plate. Exp. shut off wire for auto lights
9:30	1 40W					Developed 1266 + 1267 (2 plate)
10:00	2 34W					
10:30	3 00W					Couldn't reach guiding eyepiece
11:00	2 41W					Refused on 5 apts. Exposure stopped because eyepiece _{poor}
11:30	3 26W					
12:00	0 43W					Guiding sitting down. Mirror opening in platform rust. Developed 1268 - 1271 (4 plate)
12:30	1 35W					
1:00	3 20W	+30 01				Refused on 5 apts. near 67341
1:30	3 07W	+30 00				
2:00	6 06W					
2:30	6 56W					
3:00	3 35W					Developed 5 plate.
3:30	5 24W					

198

[illegible]

1936

Date Tuesday, August 18-19, 5-H-L Julian Day 2444182

200

cloudy all afternoon; clearing. Partly cloudy at
start.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						Thick around horizon
7 22	1 12 E	+ 30 02	Poor			Forecast on 5 Aph.
9 11	1 07 W					
9 24	3 40 W					
9 29	2 14 W					
10 23	2 20 W		Improving			Refocused on 5 Aph. before this exposure.
10 33	0 07 E		Thin			
	4 00 W					
	3 55 W					Thickening. Very thick in south west
	0 20 W		Good			thick in south
	2 00 W					
11 15	6 06 W					Guide star lost in clouds.
11 17	3 48 W					Guide star lost half the time
						DBMTA DBST.A. DBMT. Watch DBST. Watch Aug 19 ^d 12 ^h -03.5 +06.1 -07.0 +24.9

201

1936

Date Wednesday, August 19-20, 14-MR Julian Day.

[illegible]

1936

Date Thursday, August 20, 21 H-L Julian Day

[illegible]

Date *1936 Saturday Aug 22-23 M-MR* Julian Day

[illegible]

207

1936

Date Sunday, August, 23-24 H-L Julian Day.

[illegible]

Date Monday Aug 24-25, 1936 M+L Julian Day 171

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
9 22 1	0 22 W	45 47	2	7.21 A0	$1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$	some cloud during exposure.
2				6.77 B8	$1\frac{1}{2}$	exposure delayed because of clouds. took N and apparently blue star. clouds thick just after exposure started.
						closed dome at 10:15 for heavy rain. remained thick with plenty of lightning.
						shut up at 12:00.
						Aug 25 δ h D.M.T.A. D.S.T.A. D.M.T.W. D.S.T.W.
						13 -04.2 +44.6 -07.7 +54.6
						Aug 26 δ h D.M.T.A. D.S.T.A. D.M.T.W. D.S.T.W.
						12 -04.4 +44.4 -07.7 +57.9

211

Date ¹⁹³⁶ *Wednesday - Aug 26-27 M-MR* Julian Day

[illegible]

Ending Time
L.S.T.

 Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

0 55 W

-2 14

1

6.8-7.1

B8 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$

Cloudy all day - cleared after sunset.

1 05 W

+56 38

2

9.0

- $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$ image wandered badly at 11.50.
spectrophot. shifting? Heard faint click.

spot 30 sec.

0 06 W

+43 25

2

6.82

A0 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$

1.45: image gone. clouds over all northern sky.

3.00: completely clouded up; closed.

Base Outside

no filter
+1.3seeing $8\frac{1}{2}$.
 Δ L Δ M.T.A. Δ S.T.A. Δ M.T.W Δ S.T.W

Aug 27 12 -04.5 +44.2 -5.0 +64.4

Set. - +04.4

213

1936

Date Thursday Aug. 27-28 H-L

Julian Day.

[illegible]

216.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1	5 ^m E	44 09	2	7.00	A ₂	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$
2	1 ^h 00 W	31 56	2	7.18	A ₃	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$
3	7 ^m E	46 02	2	7.09	A ₂	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$
4	45 ^m W	16 13	2-1	7.02	F ₀	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$ clouds at end
5	0 12 W	30 58	2-1	7.12	F ₂	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$ Salt-y 8
					3/2	No Fillers Focus as left Salt-y 3.
6	0 00	29 06	2-1	7.0	A ₃	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$
7	0 05 W	31 53	2-1	7.2	G ₅	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$
8	0 07 E	46 36	2-1	6.75	G ₅	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$
9	0 53 E	13 44	2	6.48	F ₂	$\frac{1}{2}-\frac{1}{2}-\frac{1}{2}$
						Sept. 1 12 -05.0 +47.7 +25.3 +15.4
						Sept. 2 12 -04.9 +47.5 +20.5 +28.3
						Sept. 3 13 -04.9 +47.0 +32.3 +22.8

270.

[illegible]

221

Date _____

Date Saturday - Sept 5-6, ¹⁹³⁶ M-MR - Julian Day.

Julian Day

[illegible]

Date Tuesday Sept 8-9 ¹⁹³⁶ M-L Julian Day

Minor silvered on Wednesday Sept 9th

Date Thursday Sept 10-11, '36 M-L Julian Day 174

Hour Angle
End

0 53W -

14

lyrac

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
9 18.1	0 53W	-2 15	1	7.0	B8 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$	light clouds in south and east at beginning of exposure.
10 55.2		+44 13	1	(7.5)	B8 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$	thick haze coming up 10.39 image north component gone at 10.40 while sky thick at 11.00. call 10.33 end of exposure

Sept 11 12 -05.3 +49.7 +12.2 -07.3
12 10 -05.3 +56.2 +14.7 -00.6

show ϵ^1 Lyrae. Clouds rest of night.

Date Sunday, Sept. 13-14, 1936 Julian Day 15-16

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1 13	1 52 W	+58 43'	2-1	6.58	A2	1 1/2 1 1/2 1 1/2
1 14	0 54 E	+08 54	1-2	6.8-7.5	A0	1 1/2 1 1/2 1 1/2 <i>could = wind. Image visible</i>
1 15	1 40 W	+76 38	1-2	7.41	F2	1 1/2 1 1/2 1 1/2
1 16	2 14 W	+60 30	1-2	7.24	A0	1 1/2 1 1/2 1 1/2 ✓
1 21	0 30 W	+74 56	2	6.10	A2	1 1/2 1 1/2 1 1/2
1 22	1 19 W	+73 38	2-1	6.96	G5	1 1/2 1 1/2 1 1/2
1 23	1 53 W	+74 03	1	6.55	B9	1 1/2 1 1/2 1 1/2
1 24	1 48 W	+59 32	1	6.78	A0	1 1/2 1 1/2 1 1/2
1 25	1 24 W	+60 23	1	7.26	A0	1 1/2 1 1/2 1 1/2 <i>nothing 3</i>
						<i>no filter 3 1/2 " 7</i>
						<i>attempted to take HD 18473; no photograph</i>
						Δ M.T.A. Δ S.T.A. Δ M.Watel Δ S.Watel
						Sept 14 12 -05.1 +1 16.2 +18.1 +08.5
						Sept 15 12 -05.0 +1 42.9 +20.2 +12.1

Date ¹⁹³⁶ Tuesday Sept 15-16, 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.
1367	H.D. 187613N	19 45.8	44 07	I-12	Astra II	.010	24.3	7 50	9 22
1368	194211	20 19.3	15 43	—	—	—	24.5	9 27	10 17
- 1369	221700	23 29.3	07 22	—	—	.025 _m	24.3	10 50	1 20
1370	7374	01 08.8	15 36	"	"	.010	23.5	1 39	2 14
1371	17891	02 47.3	46 44	"	"	"	23.4	2 20	—

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
9 22 2	0 57W	44 15	2	(7.5)	B8 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	Late starting as Dec & quick motion refused to work. Found relay sticking.
9 23	1 18W	45 51	2	6.68	B9 $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	Relay still sticking. Clouds obscured image as about to start this exposure. Clouds general for 30 min.
+	1 12 W	7 35	2-3	9.2	A2 1, 1.1	shots 30.2. clouds 11 to 11.15, generally cloudy.
2 +	0 26 W	15 49	1	5.80	B8 $\frac{1}{2} - \frac{1}{2} - \frac{1}{2}$	wind increasing, seeing becoming unsettled.
	46 55	1-2	6.71	B9 $\frac{1}{2}$		general sky much improved at 1.35. sky clouding over again at 2.30 Closed up at 2.45
						$\Delta \theta M.T.A.$ $\Delta \theta S.T.A.$ $\Delta \theta M.Water$ $\Delta \theta S.Water$ Sept 16 12 - 05.0 + 1 44.4 + 22.0 + 34.6

Date Wed Sept 16-17 Std-L Julian Day

[illegible]

Ending Time Z.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
12.4	W 12 ^m	16 55	0	6.83	F ₀ 1½ 1½ 1½	
12.21		60 22	0	2.25	B ₀ 6, 6 ^{no pillars} setting 1	
					6, 6 " 5	5/10 to 5 ^m
12.46	E 1 ⁰⁰				6, 6 " 9	
12.49	E 7 ^m	29 23	0	5.54	F ₀ 1½ 1½ 1½	
1.5	0 06 W	28 58	0	5.30	G ₅ 1½ 1½ 1½	
1.10	0 02 W	16 23	0	7.54	F ₀ 1½ 1½ 1½	
1.40	0 38 E	43 46	0	6.14	F ₀ 1½ 1½ 1½	
1.25	1 15 E	61 47	0	5.99	A ₀ 1½ 1½ 1½	
1.55	0 42 E	60 12	0	6.85	A ₀ 1½ 1½ 1½	
						Δ M.T.A. Δ θ S.T.A. Δ θ M. watch Δ θ S. watch
					Sept 17. 12	- 04.8 + 4 40.6 + 23.7 + 51.8

1936

Date Thursday Sept 17-18, M-L Julian Day 174

[illegible]

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
9 21	1 09 W	44 14	1-0	(7.5)	B8. $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{2}$	soft component. clouds general at low altitudes
11 42	1 45 W	46 31	1	7.28	B9 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	
11 53	0 36 W	46 52	1	6.40	B9 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	
12 00	1 02 E	33 03	1	7.56	A2 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	
12 07	0 25 E	16 22	1	7.50	B9 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	
12 10	1 20 E	17 02	1	6.80	B9 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	+21.0 878
Sept. 18 12 -04.2 +3 39.0 +25.0 +21.0						
outside base					no filter	Setting 1 Focus 23.2
					$\frac{6}{4}$	Setting 6 23.4
					$\frac{6}{4}$	" 9 23.6
						best Focus 23.35

Date Fri Sept 18-19 ¹⁹³⁶ 64-1 Julian Day

[illegible]

236

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
W 2 ^h 17	31 55	1	7.18	A ₃ 3,3,3	shots 40 s. for F.S.P.
W 1 ^h 53	45 27	2	7.30	G ₀ 3,3,3	" " " " 75 P
	60 22	3	2.01	B ₀ 12,12	setting 1
				12,12	setting 5
E 9 ^m				12	setting 9
1 17 W	46 48	2	7.00	B ₉ 3,3,3	shots 40 s
0 06 W	13 43	2	6.48	F ₂ 3,3,3	" " " " For F.S.P
					$\Delta \Theta M.T.A.$ $\Delta \Theta S.T.A.$ $\Delta \Theta M.$ watch $\Delta \Theta S.$ watch Sept 19 10 -04.1 +5 14.8 +26.4 +02.3 Advanced 1^m

Date Saturday Sept. 19-20, 1936. H-MTR Julian Day

Hour	Angle	End
		End
042	W	
	✓	
	✓	
057	W	
060		
050	W	
07	W	

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	setting	Trans	REMARKS
outside through bars				no filter 5/3	2 6 8	26.20 26.30 26.10	Tilt 19.5 But 26.27 approx not numbered, marked Sept 19 F.
							Mon, Jupiter, Saturn ^{etc} with 4"
							about 60 visitors. Shared E Lyne, NGC 6838 with 74"
0 42 W	+08 55	3-4	6.8-7.5	A0	1 1/2, 1 1/2, 1 1/2		Looks rather faint?
1 14 W	+14 20	3	7.41	K0	1 1/2, 1 1/2, 1 1/2		
1 15 W	+59 42	3-2	7.41	F0	1 1/2, 1 1/2, 1 1/2		some haze
0 57 W	+61 05	2	7.40	G5	1 1/2, 1 1/2, 1 1/2		seeing going.
1 46 W	+45 35	2-1	7.44	G5	1 1/2, 1 1/2, 1 1/2		Some streaks - evidently poor contact in relays. OK.
0 50 W	+61 46	2	6.60	B8	1 1/2, 1 1/2, 1 1/2		
0 30 W	+76 30	2	6.93	F5	1 1/2, 1 1/2, 1 1/2		light - under

Date Monday, Sept 21-22, 1936 H-16 Julian Day 2444110

[illegible]

Date Tuesday Sept 22-23, 1936 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.
1408 F ₁				I-12	Astra II	.010	23.0		
1409	HD 169491	18 19.8	15 36	—	—	—	23.4	6 59	8 19
- 1410	193637	20 16.2	33 37	—	—	.020 _M	23.4	8 25	10 05
- 1411	221700	23 29.3	7 22	—	—	—	22.5	10 11	1 11
1412	20134	03 09.1	59 41	"	"	.010	23.0	2 40	4 30
1413	28150	04 21.3	17 58	"	"	"	23.0	4 39	5 25

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	Base outcal				$\frac{15}{9}$	focus O.K.
8 19 2	1 47 W	15 37	2-3	7.38	B9 $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	
0 05 5	1 37 W	33 45	3	8.7	A $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	light clouds occasionally covering img, at 8.00, spots 30x.
1 11 4	1 30 W	7 35	3	9.3	A2 $1\frac{1}{2}$ $\frac{1}{2}$ $1\frac{1}{2}$	spots 30x. haze appearing in North and East, light clouds obscuring image occasionally.
8 0 1	1 10 W	59 48	1-2	7.34	B5 $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	Tried to get 15473 but was not sure of star; map
0 55 2	0 53 W	18 04	2	6.74	A0 $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	is confusing. Blew a fuse on dec setting and guiding motion; some time elapsed before getting under way once more.
						sky hazy image faint on 1412, seeing not so good.
						Spt. 23 .12 -03.9 + 5 32.3 +36.1 -11.5

Date ¹⁹³⁶ Wednesday Sept 23-24 Ad MR Julian Day

[illegible]

Ending Time
EST.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
W 130 ^h	01 38	2.	(8)	$1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	(spots 40 ^s) 1 ^h 30 is almost limit W.
	base outside			10/7	
W 44 ^m	55 20	1	(8)	$1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	setting 3 spots 40 ^s .
W 114 ^h		1		$1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	" 8
1 31 W	46 03	1	7.48	A ₀ $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	Companion about 9 th mag 5" distant?
0 56 W	46 48	1	7.00	B ₉ $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	spots 40 ^s .
0 20 E	13 26	1-2	7.48	A ₅ $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	
0 04 E	44 17	1-2	7.59	F ₅ $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	Hazy up at 450 image faint.
					Sept. 26. 10 -03.8 +05 35.4 +41.7 -01.4 Sept. 28 12 -03.3 +05 33.6 +08.7 -21.8
					N watch S watch
					Stopped + reset.
					about 20 visitors
					- clouds.
					Did not show Moon
					M 3
					M 21

249

Date *Monday, Sept 28-29, 1936* H-L Julian Day

[illegible]

Date Tuesday Sept 29-30, 1936 M-L Julian Day

[illegible]

[illegible]

Hour	Angle	End
1	13W	2
	15W	6
	5W	
	W	
	4F	

1936

Date Sat Oct 3-4 Hel MR Julian Day

1936

Date Sat Oct 3-4 Hel MR Julian Day

[illegible]

2 or 3 $\times 10^2$ visitors. Showed Ring neb. 258
and Saturn with 74"
with 4" showed moon, Saturn, & Persei

Ending Time
L.S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

255

W 1^h 10

12 26

2

7.51

A₃

1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 1 $\frac{1}{2}$

M.T. watch stopped med. MR's

Correction = + 45^s re M.T. clock.

blonds for nearly half of 1454

closed 3.30

M.T. Watch S.T. Watch

Oct. 5.

12

-02.0

+ 21.3

-05.0

+57.7

Advanced 5^m Rest.

Date Monday, October 5-6, 1936 H-L Julian Day.

[illegible]

240

[illegible]

261

1936

Date Wednesday Oct 7-8 H-L Julian Day.

[illegible]

Date Thursday Oct 8-9, M-L Julian Day

Hour Angle
End

Date Oct 11-12 Sunday Y-L Julian Day

[illegible]

Ending Time
L.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

+01 37

[8] A

no filter
4/3

outside the base

Partly cloudy all day. Mostly clear 6⁰⁰.

Closed up solid right at start.

Developed. (Slide not fully drawn?) Focus a bit short. Set to: 26.31

Closed up 10⁰⁰. Still solid.

Oct. 13. 12 - 01.0 + 28.4 + 25.0 + 50.8

Date Tuesday, Oct 13-14 1936 M-L Julian Day

[illegible]

269

1936

Date.

Thursday, October 15-16 H-L

Julian Day

[illegible]

Clouds most of day; clearing slowly but heavy haze
left. Piers + area mostly badly out. telescope apparently
OK (heat in around mirror)

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
4 23	1 09 W	+44 09	1-2	6.68	B9 $1\frac{1}{2}$ - $1\frac{1}{2}$ - $1\frac{1}{2}$	Haze.
5 11	0 50 W	+46 14	2	6.68	B9 $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	Haze much thinner.
6 03	1 28 W	+59 56	3-4	7.00	F2 $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	Light haze. 2nd set, distant star in field.
7 04	1 12 W	+61 28	3	7.43	K2 $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	" "
8 06	0 21 W	+60 25	3	7.26	A0 $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	Note! checked slit at beginning of this exposure it read .018! set back to .010
	+61 47	3	6.60	B8 $1\frac{1}{2}$		Star appeared to be gradually getting fainter on 1482, examined mirror and found the same to be fogged. Swung tube down and shield off mirror with blower then closed diaphragm and applied the heat. Closed up at 3.30.
						Extremely heavy fog in low lying sections of surrounding country.
						H. Watch S. Watch
	Oct. 16	12	+00.2	+28.9	+33.7	+11.9
	17	10	+00.2	+28.8	+36.8	+18.9

1936

Date _____

[illegible]

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
0 30 W	+32 38	1	6.71	F5 $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	Oct. 19 12 +0.2 +28.4 -02.8 +31.9
1 01 W	+61 47	1	6.60	B8 $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	Temperature had run up. Reset at +12.0
0 11 W	+60 60	1	6.54	F5 $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	and tried to get temperature to drop by opening door. Although heat was shut off it continued to rise. Air in dome is apparently warmer than inside of spectrograph.
					Sky filling in at 3.00 hopeless at 3.30
					M Watch S Watch
					Oct. 20 12 +00.2 +28.3 +00.7 +38.3

Date Tuesday - Oct. 20-21, 1936 Julian Day 11

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
1485	HD. 11336	1 46.4	44 19	I-12	Astra II	.010	16° 0	11 28	12 48

Ending Time
L.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
						Cloudy at sunset. Intermittent clouds for first part of evening. Showed R.A. & C.
						first β Cygni second. δ Aurum.
12 48 10	40 W	44 31	1	7.43	88 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$	fairly high wind, image shows a lot of motion. closed up as Hydro expected to turn power off at 1.10.
						M Watch S Watch
						Oct. 21 12 +00.3 +28.5 +03.7 +45.9
						Oct. 22 12 +00.5 +28.4 +06.5 -06.4
						Oct. 23 12 +00.6 +28.3 +10.5 Advanced 1 m. 4
						Oct. 24 10 +00.8 +28.4 +09.5 +08.6

Date ¹⁹³⁶ Sat Oct 24-25 Hol 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	D
1486	HD 9709	01 30.0	46 36	I 12	Antares	010	8.0	10 40	11 42	2	00 W 16
1487	HD 15227	02 22.1	16 12	"	"	"	7.5	11 51	1 43	1	15 W 1
1488	" 26911	04 10.1	15 09	"	"	"	8.3	1 47	2 43	3	28 W 1
1489	" 33266	05 03.9	61 44	"	"	"	7.6	2 50	3 16	4	05 W 6
+ 1490	" 43947	06 13.9	16 03	"	"	"	7.0	3 21	4 17	3	03 E
+ 1491	" 45506	06 22.7	16 19	"	"	"	6.6	4 20	4 58	4	30 W
	7 stars total			"	"	"					

100 + visitors ; new and 74" and showed 276
moon. Saturn with $4\frac{1}{4}$ ".

Reading Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1142	0 06 W	46 48	3	7.00	B ₉ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	Spots 40 S.
143	1 15 W	16 22	3	7.54	F ₀ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	Clouds.
243	28 W	15 15	4	6.77	F ₅ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	"
3	05 W	61 47	4	5.99	A ₀ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	"
47	03 E	16 03	4	7.09	G ₀ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$	"
458	30 W	16 18	—	7.11	G ₅ $1\frac{1}{2}$ 3	Practically thick from 4.15 Closed 5.00
		outside this base.			12/8.	setting 1 (setting 10 spoiled)
						Focus 26.33 Tilt 19.5
						Oct. 26 12 +01.2 +27.9 M. anal S. anal +15.6 +23.2

277

Date Monday October 26-27 H-L Julian Day

[illegible]

278

				M. Watch	S. Watch
Oct. 27	12	+01.8	+28.2	+12.0	+33.0

279

1936

Date Tuesday Oct 27-28 M-L Julian Day

[illegible]

281

1936

Date *Thursday Oct. 29-30 M-L* Julian Day

[illegible]

Ending Time
L.S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

cloud and rain at sunset. cleared very rapidly shortly after 6.00. Clouded in again from NW before exposure could be started.

closed dome but left heat on in spectrograph

Rain squalls blowing up at 10.00

closed up - left heat on around mirror.

Began to clear again at midnight
opened up at 12.30

140 0 14W 43 54 1 7.05 B9 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$

Huge bank of clouds rising suddenly from NW: star gone at 1.40 Closed shutters started to rain very lightly. Waited till 3.00 and closed up.

				N Watch	S Watch
Oct. 30	12	+02.9	+27.4	-19.1	+00.2
				Rest.	

283

1936

Date. Friday Oct 30-31

Hd - L

Julian Day

[illegible]

Date *Thursday, November 5-6* ^{H-L} 1936 Julian Day.

[illegible]

Clouds late afternoon. Clearing at sunset.

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
7:57	(5 22W)	+36 37	1	6.86	K5 1 1/2 1 1/2	2 Bird screws cutting off corner; unable to get it high enough to clear.
8:02	1 38W	+60 26	1	7.16	F5 1 1/2 1 1/2	Temp rose up to 12.5 during last half of 1512. Relay magnet very weak.
8:20	0 45W	+59 56	1	7.00	F2 1 1/2 1 1/2	
10:34	1 20W	+61 47	1	6.78	A2 1 1/2 1 1/2	
11:50	1 45W	+61 05	1-2	7.40	G5 1 1/2 1 1/2	Clouds passing over region 10 ³⁰ -10 ⁵⁰ ; 11 ²⁰ -11 ³⁵
12:31	1 17W	+60 46		6.22	F2 1 1/2 1 1/2	Star passing up. Star gone at 12:33 clouds up at 1:30 no sign of clearing
						Nov. 6 12 +05.2 +25.0 -01.3 +42.2
						Unable to locate trouble in relay circuit. Trouble occasionally there.
						Spots 30 ³ on all plates
						Friday Nov 6 - Therm. OK. H-L.

Date Friday Nov 6-7 ¹⁹³⁶ Ad 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
1518 +	HD 205939	21 33.6	44 14	I-12	Astra II	010	5.5	6 19	6 57	4
1519 -	" 212442	22 19.2	14 46	"	"	"	5.8	7 01	7 55	3
1520	" 220091	23 15.9	16 43	"	"	"	5.5	7 59	8 43	1
1521 +	" 221115	23 24.1	12 ¹³ 24	"	"	"	5.5	8 49	9 03	2
- 1522	YC HD 5394	00 50.7	60 11	"	Process	"		9 12	9.13	5
								9.15 1/2	9.17	
								9 20	9.25	
1523	HD 9709	01 30.0	46 36	"	Astra IX	"	5.8	9 38	10 42	4
1524	" 14688	02 17.1	16 25	"	Astra II	"	5.8	10 47	11 37	1
1525	" 22418	03 31.3	30 48	"	"	"	5.8	11 47 11 41	12 50	2
1526	" 23728	03 42.3	43 39	"	"	"	5.8	1 32	2 52	4

morning at sunset. — Improving

286

Reading Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
6.50	8 ^m W	44 27	3	6.19	A ₃ 1 1/2 1 1/2 1 1/2	photo 30s
7.55	20 ^m W	14 58	2	6.73	A ₀ 1 1/2 1 1/2 1 1/2	"
8.43	12 ^m W	16 56	3	6.83	F ₀ 1 1/2 1 1/2 1 1/2	"
9.28	25 ^m W	12 25	4	5.67	K ₀ 1 1/2 1 1/2 1 1/2	"
9.57			4	2.014	B ₉ no filter set 1	photo 5 min
10.27					6.6	" 5
10.57	E 42 ^m				6.6	" 9
11.42	E 4 ^m	46 48	4	7.00	B ₉ 1 1/2 1 1/2 1 1/2	photo 20s
11.51	W 5 ^m	16 35	4	6.78	A ₀ 1 1/2 1 1/2 1 1/2	photo 30s
12.04	0.04 W		4	7.43	F ₅ 1 1/2 1 1/2 1 1/2	" " sky hazy up. star gone at 12.50
12.11	1.35 W	43 47	3	6.14	F ₀ 1 1/2 1 1/2 1 1/2	" " clearing at 1.25. hazy up again.
						closed up at 3.30
						M Watch S Watch
						Nov. 7 10 +05.9 +25.0 +04.9 -06.1
						Advanced 1 ^m
						Transparency from all mag. 7.

Date Saturday, Nov 7-8, 1936 M-L Julian Day.....

[illegible]

Ending Time
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
7 21	2 51 W	15 54	1	7.48	A2 $1\frac{1}{2}, 1\frac{1}{2}, 1\frac{1}{2}$	clouds low in south quite hazy. hazed right up at end of P. 1525 cleared off later though still hazy.
10 12	0 40 W	31 02	0	6.78	B9 $1\frac{1}{2}$	filled in again thick at 10.00 plate probably useless. Humidity high.
						Gave night up as bad job and closed dome.
						Put heat on around mirror?
						Nov. 9 12 +06.8 +23.4 +15.0 +05.2 Stopped - reset
						Nov. 10 12 +07.0 +23.6 +18.5 +03.0

Date Tuesday Nov-10-11/36 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
1529	H.D.-209833	22 01.1	28 28	I-12½	Astra II	0.10	-0.8	5.55	7.00	3
- 1530	" 208816	21 53.8	63 09	"	Astra IX	"	-0.9	7.10	7.50	4
- 1531	" "	"	"	"	"	"	-0.8	7.50	9.20	1
- 1532	BD-63°0110	00 48.6	63 33	"	Astra II	0.25 ^M	-0.9	9.33	12 13	2
1533	H.D. ² 26398	4 5.4	16 22	"	"	0.10	-0.7	12.22	1.45	3
1534	35036	5 16.7	16 01	"	"	"	-0.7	1.48	3.52	4
1535	63312	7 43.2	46 03	"	"	"	-0.9	3.57	5.13	1
1536	71555	8 23.0	14 33	"	"	"	-1.0	5.16	6.02	2
Focus Test.							-0.9			
Wed Nov 11 - Hd.										
Removed I-12		This focus		was		26.33	Tilt		19.45	
Put on I-25		Focus		23.4	Tilt		23.25			
1536 F. Focus I-25 0.10 +2.0										

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
7:00	0.00	28 40	0	5.58	A0 $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	spots 30x. seeing terrible
7:50	0.58 W	63 20	0	6.70	M $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	spots 20x. seeing improving
9:20	2.28 W	"	0	"	$1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	spots 20x.
10:00	2.28 W	63 45	0-1	9.60	- $\frac{3}{4}-\frac{3}{4}-\frac{3}{4}$	spots 30x
11:00	41 W	16 31	0-2	6.97	B8 $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	spots 30x. bright aurora gone in north at 1:30 seeing variable.
3:50	1 37 W	16 05	2-0	7.38	A0 $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	spots 30x. guiding very poor - guiding terrible.
5:00	0 31 W	45 59	2	7.12	A2 $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	spots 30x. getting quite hazy during the course.
1:00	0 42 W	14 27	2	5.96	A2 $1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}$	Clouded right up just at dawn.
	base outside.				$1\frac{3}{7}$	Humidity high.
						Put heat on around
						M. Watch S. Watch
						Nov. 11 12 +07.7 +22.8 +24.2 +06.1

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Nov. 1936
~~Oct~~ 11-12 142 - 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
- 1537	(4D) 206 155 Focus	21 35.1	08.44	I-25	Astrat	010	+3.4 went to 4.5 4.5	5 53	7.20	3
1538	4D 5394	60 50.7	60 11	"	Parvac	"	4.0	9 57	10 01	4
								10.03	10.11	
							4.0	10.14	10.16	
1539	4D 27483	04 15.2	13 38	"	Astrat	010	3.7	11 02	12 30	1
- 1540	" 34364	05 11.8	33 39	"	"	"	3.6	12 33	1 53	2
1541	" 35189	05 17.9	16 36	"	"	"	3.6	1 58	3 23	3
Thursday p.m. Mirror removed and reclosed Friday Nov. 13th Mon Nov 16 H-12 Plot on I-12										
1541F	Focus			I-12	Astrat	010	-3.5			4
	Tilt 19.5			Setting 1:	Focus	26.30				
				" 5	"	26.40				

294.

Ending Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
7:20	N 50 ^m	8.54	2	6.8	A ₀ 3, 6 no filter 4/2	Thickening from start - nothing from 6:30 on. (better focus would be 23.55)
19.4					no filter 2.8	Set 1
0.1					2.8	" 5 5 min. lots
8.0	N 24 ^m	60 23	2	2.9	B ₀ 3.8	" 9 clouds again.
2.1	E 45 ^m	13 45	1	6.48	F ₂ 3, 3, 3	spoke 30 sec for Miss Patterson
10.5	O 14 E	55 42	1	6.09	B ₉ 3, 3, 3	" " " " "
3.3	1 11 W	16 39	2	6.15	A ₂ 3, 3, 3	" " " " " clouds again.
						thick at 3.23
	Very good cont. mirror - solutions about 48-50°F.					cloudy: no observing last
						M Watch S. Watch
						Nov. 12 12 +08.4 +22.3 +30.4 +32.3
						Nov. 13 12 +08.8 +21.4 +33.8 +25.4
	bare outside				10/8	Nov. 14 10 +09.0 +20.6 +36.0 +30.2
						Nov. 16 12 +09.6 +18.6 -06.4 -19.2
						Reset - stopped.

295

1936

Date Monday, Nov 16-17 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.	
1542	HD 218235	23 01.3	+17 59	I-12	Astria II	010	set -5.0	7 28	8 03	1
1543	218792	23 05.7	+17 03	"	"	"	-5.0	8 06	8 56	2
1544	8944	01 23.0	+16 34	"	"	"	-5.1	9 00		3
Changed to <u>I-25</u> Wed Nov 18-19 Ad 1543F focus										
							-6.1			1

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
Clouds in afternoon + early evening					Set focus about 26.27 or 28 clouds last four minutes
0 26 W	+18 10	0	6.48	F2 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	Seeing very bad. That had lens on around mirror, but
1 14 W	+17 15	1	7.12	K5 $1\frac{1}{2} 1\frac{1}{2} 1\frac{1}{2}$	some prominent stars of steady seeing, figure seems good.
	+16 45		7.17	F5 $1\frac{1}{2}$	Clouds 9 ⁰⁸ . Clouded shutters.
					Cloud up 11 ¹⁰
					M Watch S. Watch
Nov. 17 12					+10.2 +18.4 -0.2 -10.3
Nov. 18 12					+10.8 +17.9 +0.30 -03.8
None outside					no filters 4/3. setting 1. Tilt 23.25- Focus 23.55
					in focus 1734 F.
					better focus 23.70 set at that.

297

Date ¹⁹³⁶ Wed Nov 18-19 ~~62~~ - L Julian Day

[illegible]

Ending Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
753	W 1 ^h 20	45 26	1	7.30	G _r	3 3 3	spots 30 ^s — for 7.S.P.
	base outside					no filter 3 1/2	Tilt 23.25 Focus 23.70
809				2.01	B ₂ P	8 8	ut 1
						8 8	ut 5
812	46 ^m 1 15	60 22	2			8 8	ut 9 — wide slit
102	W 1 ^h 13	46 45	2	7.00	B ₉	3 3 3	spots 30 s.
107	0 34 W	16 29	1	6.97	B ₈	3 3 3	spots 30 s. — for R.N.
251	0 5 W	16 07	1	7.13	G ₅	3, 3, 3	spots 30 s
434	1 53 W	16 04	1	7.09	G ₀	3, 3, 3	" "
434	1 49 W	46 06	1	6.61	A ₃	3, 3 3	sky filling in towards end of exposure
							Put heat on around mirror as weather forecast calls for warmer weather.
							M. Watch S. Watch Nov. 19 12 +11.7 +17.4 +09.3 +05.0

1936

Date *Thursday, Nov 26-27* 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
1550 F1	<i>Tricus test</i>		<u>HD-H</u>	I-12½	Astria II	010	-6.5	5 15		3	
1551	HD 209193	21 56.4	+30 57	"	"	010	-6.5	5 35	6 10	1	
<i>Clearing off again 8³⁰, but snowing continuously from</i>											
1551	HD 16220	02 31.2	+32 27	I-12½	Astria II	010	-7.0	10 37	11 27	2	
1552	21242	03 20.5	+28 23	"	"	"	-6.8	11 31	1 06	11	
1553	34762	05 14.7	+27 51	"	"	"	-6.9	1 15	2 06	1	

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
12 ^h , 7 ^m	detach the base, From 26.28	OK			Nov. 20 12 +12.0 +16.4 +13.0 +09.6 M. Watch S Watch
Thick from 5 ⁴⁵ on.		7.32	F0	1 $\frac{1}{2}$	Nov. 21 10 +12.3 +15.7 +07.8 +13.9
From 6 ¹⁵					Nov. 23 12 +13.5 +13.7 -06.0 -16.3
2.00 ⁽²⁾ by.					Reset - stopped.
					Nov. 24 12 +14.0 +12.5 -01.0 -07.8
00 W +32 37	0	6.71	F5	1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 1 $\frac{1}{2}$	Nov. 25 12 +14.5 +11.9 +03.5 -01.7
1 44 W +28 30	0	7.29	G5	1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 1 $\frac{1}{2}$	Nov. 26 12 +15.0 +14.1 +08.4 +04.1
0 55 W -27 53	0	6.28	B9	1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 1 $\frac{1}{2}$	Light clouds 11 ⁵⁵ - 12 ³⁵ Light clouds sky hazy up image practically gone at 2.05. Sky remained cloudy with no substantial clearing until 3.15.
					Nov. 27 12 +13.7 +10.5 +14.6 +05.2
					Added 0.5 to M.T.

Date Julian Day

[illegible]

302.

ExposuresEnding Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Mag	3	2	1	REMARKS	0
				7.4	58	87	116	145	174
				7.2	48	72	96	120	144
				7.0	40	60	80	100	120
				6.8	33	50	66	82	100
				6.6	28	42	56	75	84
				6.4	23	34	46	58	68
				6.2	19	29	38	47	58
				6.0	16	24	32	40	48
				5.8	13	19	26	32	38
				5.6	11	16	22	27	32
				5.4	9	14	18	22	28
				5.2	7½	10	15	19	22
				5.0	6	9	12	15	18
				4.8	5	7	10	12	14
				4.6	4	6	8	10	12
				4.4	3	4½	6	7½	9

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	1936 Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
2951	H D 96528	11 02.3	+23 52	^m 040 40	A ₂ 6.45	50km	Mar. 25. May 8, 15	28 June 3, 4, 5, 9, 12, 16	
4129	" 145849	16 08.1	36 41	095 36	K5 6.86	26 "	" 8, 9, 25 "	3, 5, 8, 9, 12, 16, 18	22 July, 26
4217	" 149420	16 29.6	30 43	310 39	Fo 6.94	95	Apr 26 May 15, 25	Orbit already determined	
4351	154732	17 02.1	48 57	031 54	Ko 7.32	17 "	May 23	June 21	
X 4411	157482	17 18.4	40 05	19.7 03	F8 6.22	22 "	May 8, 15	29 June 4, 5, 13, 18, 26	July 3, 12, 26
4437	158837	17 26.4	02 48	28.3 46	Gop 6.15	22 "	Apr 26	June 5	
	165645	18 01.9	41 56	03.1 56	Fo 6.70	40	May 25	June 5, 22	July 5, 7, 13
X 4647	169028	18 17.6	51 18	18.5 19	K2 7.32	42	May 25, 29	June 4, 13, 18, July 18, 31	
4678	170474	18 24.5	-2 03	26.4 02	KO 6.44	70	June 4	24	

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Time Ending Time
E.S.T.

3, 4, 5, 9, 2, 6

3, 5, 9, 12, 10, 13

5, 11, 14, 17, 20, 23, 26, 29, 31

1, 5, 12, 15, 18, 21, 24, 27, 30

22 July 5, 10

1, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 31

22 July 1, 3, 5, 14, 20, 24, 25, 26, 27, 30, Aug 6, 7, 8.

July 3 7, 24, 27, 28.

31

305

April	66	783
May	98	881
June	145	1026
July	167	1193
Aug	131	1324
Sept	112	1436
Oct.	76	1511

(one number repeated for 2 plates, 1454)

approx. 1935 position of M 13

& Here

16

39.4

36 35

17

11.7

14 27

306

1st +
2nd R
(very small)
3rd
4th
5th
6th
7th
8th
9th
10th
11th
12th
13th
14th
15th
16th
17th
18th
19th
20th
21st
22nd
23rd
24th
25th
26th
27th
28th
29th
30th
31st
32nd
33rd
34th
35th
36th
37th
38th
39th
40th
41st
42nd
43rd
44th
45th
46th
47th
48th
49th
50th
51st
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