

THIS PAGE INTENTIONALLY LEFT BLANK



3.

Hour	Angle	Decl
End		

[illegible]

VOL 1

PLATE Nos 1-757

JUNE 1935 - APRIL 1936

Date Sun. June 9-10, 1935.

YM

Julian Day... 2427963.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
1	HD 172167 α Lyrae	^h 18 ^m 33.6	[°] +38 ['] 41	1 - 25	E 40	0.001	16.5	2 29 00	2 29 38	0 45 W
2	β Sagittae	19 36.6	+17 15	1 - 25	E 40	0.001		3 08	3 45	0 57 W
3	HD 124897 α Bootis	14 11.1	+19 42	1 - 25	E 40	0.0005		20 51 $\frac{1}{2}$	20 52 $\frac{1}{2}$	0 08 E
	-	-	-	-	-	-		20 53	20 56	0 04 E
	-	-	-	-	-	-		20 58	20 58 $\frac{1}{2}$	0 02 E
	Sat. June 15-16, 1935				M			J.D. 2427969.5		

[illegible]

2013 08/10

2013 08/10

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
			1.24 Ko	no comp.	Thick haze.
			-	-	
X T_h			-	-	
2 06 W			-	-	
X T_h			-	-	
2 27 W			-	-	5
			-	-	4
					Set on α Ser. and δ Oph., clouded out each time.
					Closed up 1 30
					Retrograde R.A. setting mercury switch broke.
C 1	Inside 4^h W	outside zenith			
5	Outside 2^h E	outside zenith			
9	Outside 4^h E	outside zenith			
D	Rel. on meridian				
	Inside dec. -33°				
	Outside dec $\delta: 50^\circ$	sub pole.			

Date Mon June 17, 1935

Julian Day.

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
<i>Flexure tests:</i>									
E	1 Zenith inside outside								
	2 Zenith sub-pole - apparently error								
	two outsides put in.								
<i>Tues. June 18, 1935</i>									
<i>Adjustments changed, hunting for cause of lateral displacement.</i>									
F	Tel. at 5 ^m west								
	outside - zenith								
	Inside +52°								
<i>Sat. June 22-23, 1935 H.M.</i>									
	Set on Arcturus to collimate - clouds.							2427976.5	
								See on Vega 10 27 - clouds	

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

Opened dome 10 10⁺

clouds Closed up 12 45 - rain

Date *Mon. June 24-25, 1935*

M

Julian Day *2427978.5*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
	<i>Opened dome 20.30</i> <i>Set with visitor's eyepiece on Jupiter, Arcturus, M13, M51</i> <i>Rated clock by comparison with standard. R.A. setting jammed.</i> <i>Set on α Lyrae with clock control. Recorded drift for $2\frac{1}{2}$ hours.</i>									
	<i>Tues. June 25-26, 1935</i> <i>Y H</i> <i>2427979.5</i> <i>Very poor night - sleeting here.</i> <i>Mrs Dunlap, Professor and Mrs Chant and party saw M13 through</i>									

R.N.Y.'s

	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
Cassegrain moves with focussing not whole telescope. Closed up 3 40					
RKY's visitor's eyepiece - Definition very good.					

Date *Thurs. June 27-28, 1935* H. L. H. Julian Day *2427981.5*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
	<i>Using visitor's eyepiece, set on α Bootis. Finder, for centre of eyepiece. Re-oriented finder wires to correspond approx. to RA and decl.</i>									
	<i>Polar Axis Test.</i>									
-	<i>c Bootis</i>	15 02.9	+25 16					20 45	21 25	0 20 W
-	<i>μ Hercules</i>	17 42.5	+27 47					23 11		

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	17	vertical,	19	horizontal.	
	16.5	vertical,	18.8	horizontal	for centre of eyepiece.
2.5	0 20 W		5.31	Fo	At meridian, star was about $\frac{1}{10}$ or $\frac{1}{12}$ above centre. At 20 ^m W star was about $\frac{1}{8}$ or $\frac{1}{6}$ above centre. Set on another star in same decl. and at 20 ^m W. moved North end of the axis about $\frac{9}{16}$ revolutions of set screws to <u>west</u> . 4.26 G5 μ Herc. is a double companion 9.5, 33", 245°. The half diameter of the field of the eyepiece is about three and a half times this, i.e. about 2' : field of view = 4' at meridian, star was about $\frac{1}{16}$ to $\frac{1}{18}$ above center. Moved N end of axis $\frac{1}{6}$ revolutions to West. Set on star on meridian; raised N end of axis about $\frac{2}{3}$ of $\frac{1}{6}$ of a revolution of all four levelling screws.
					(over)

17

Date Thurs. June 27-28, 1935 (cont'd) H L H_a Julian Day 2427981.5

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
19 0 00			10	Followed to meridian.
HA Beginning 0 18 E			9	Raised N end of polar axis again by about $\frac{2}{3} \times \frac{1}{6}$ revolutions of four levelling screws.
HA Beginning 0 25 E			9	Raised N end of polar axis about $\frac{2}{6}$ rev. levelling screw. Raised N end about $\frac{3}{6}$ rev. levelling screws.
0 0 17 W				<u>Azimuth apparently OK. still</u> Raised N end about $\frac{5}{6}$ rev. (about $\frac{2}{5}$ of semi-diam. of field.)
45 0 05 E				Star lost in dawn. N end still too low.
Notes on clock:				1. If left wheel locks clock running too slow. 2. Turning top adjustment down speeds clock up (slightly).

19

Date Sat June 29-30, 1935 Y Julian Day 2427983.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
	HR 5659	15 08.3	+19 40							
7	3 <i>Serpentis</i>	15 10.2	+ 5 19	1 - 25	E 40	0.007	24.2	8 53	9 33	
8	HD 146051 8 <i>Ophiuchi</i>	16 09.1	- 3 26	1 - 25	E 40	0.007	24.0	9 55	10 09	
9	HD 156014 α <i>Herculis</i> Br *	17 10.1	+14 30	1 - 25	E 40	0.007		11 27	11 39	
10	HD 156015 α <i>Herculis</i> Ft. *	17 10.1	+14 30	1 - 25	E 40	0.007		11 43	12 23	10 W
11	102 <i>Herculis</i> HD 186791	18 04.4	+20 48	1 - 25	E 40	0.007		12 32	12 42	0 45 W
12	γ <i>Aquilae</i> HD 201092	19 41.5	+10 22	1 - 25	E 40	0.007	24.0	1 07	1 17	
13	61 <i>Cygni</i> ft *	21 02.4	+38 15	1 - 25	E 40	0.007	24.0	1 47	3 00	0 05 W

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				Focus check. Scale reading 5 on plate
				Comp. 5 ^s outside through base.
				10 ^s outside through apex Focus 23.32
				Heat put on at 7.35 E.S.T. Set 24.0 Voltage 109
				Door opened 7.48
				This star is double app. H.R. mag (6.41) seems to be combined as components are faint.
		1 v poor	6.44 Ko	Plateholder 1. Star falling behind i.e. clock too fast.
				At end of exposure lengthened pendulum.
		1	4.38 Ma	Plateholder 3. Spent some time lengthening pendulum more.
		1 ⁺	4.83 Mb	Plateholder 4
		2	6.74 Mb	Plateholder 2 Image keeps drifting N of slit
			4.15 B3	Plateholder 1
		1 ⁺	3.87 K2	Plateholder 1 Spoiled in development
			7.46 K5	Plateholder 3 This is south star

(over)

Date *Sat June 29-30, 1935 (cont'd.)* YJulian Day *2427983.5*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
	<i>Spent some time investigating buttons</i>									
	<i>1st Concave faced buttons</i>									
	<i>(a) Dec setting moves image $\nearrow$ towards apex of opening.</i>									
	<i>(b) Dec guiding works opposite way.</i>									
	<i>(c) R.A. guiding moves telescope East. R.A. setting same way.</i>									
	<i>Sun. June 30 - July 1, 1935</i>									
	<i>HD 124897</i>				<i>H</i>			<i>2427984.5</i>		
<i>14</i>	<i>α Bootis</i>	<i>14</i>	<i>11^h 1^m 19^s 42[']</i>	<i>1-25</i>	<i>E 40</i>	<i>0.008</i>		<i>21 30</i>	<i>21 31</i>	<i>1 30 W</i>
								<i>21 35</i>	<i>21 36</i>	<i>1 35 W</i>
								<i>21 40</i>	<i>21 41</i>	<i>1 40 W</i>
<i>15</i>	<i>HD 144579</i> <i>Gc. 2305</i>	<i>16</i>	<i>01.5 +39 24</i>	<i>1-25</i>	<i>E 40</i>	<i>0.008</i>		<i>22 05</i>	<i>23 35</i>	<i>45 W</i>

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						i.e. moves telescope N in declination.
						This is called direct.
31	1 30 W		poor	1.24 K0	20	Plateholder 1 plate setting 1
36	1 35 W				4	plate setting 5 - second neutral glass out.
41	1 40 W				3	plate setting 9 - second neutral glass out.
35	1 45 W	39° 25'		7.62 G5	5-5-5-5	Plate holder 2. Dec reading 39° 25' instead of 39° 18'. Drive clock worked well from 21 00 to 22 40. From then on left wheel chronically locked and clock dropped many seconds despite facts that generator voltage was not down and that weights were off springs.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
0 30 W	46° 08'		3.62 B3	12.12	Holder 4. S reads 46° 08' instead of 46° 03'.
0 12 E			0.14 A0	25	Holder 3. Plate setting 2. Guiding poor because
0 08 E				25	Plate setting 8 of difficulty in setting.
					R.A. setting motion stuck. set by spinning differential by hand.
Fresh accumulation of pulverised brake lining on rim. Drive worm hot.					
0 30 W					Azimuth evidently is practically correct. At the meridian star still passed $\frac{1}{20}$ - $\frac{1}{25}$ above the wire, indicating the polar axis requires raising. i.e. about 6" at 20° per 30" H.A.
0 00					Star about $\frac{1}{5}$ or $\frac{1}{6}$ of a semi-diameter above the wire at the meridian i.e. about 20" - 25" at equator for 1° H.A.
Pressing concave setting button moves telescope south. ∴ in swinging from East to continue to <u>raise</u> the polar axis.					

Date.

Julian Day.

[illegible]

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

on apply.

Date Mon July 1-2, 1935.

Hd

Julian Day...2427985.5

[illegible]

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						9.00 to 9.30 PM set on α Bootis, adjusted finder, focused. Set temp. 24.0 10.00 till 1.45 clouds. 1.45 set on α Ursa.
56	O 26 E		1	3.54 Ko	12-12	Transparency 1. Holder 1. Set on η Peg. and adjusted focus.
35	O 47 E		1	3.66 Go	12-12	Holder 2 clouds. Closed 3.45 - clouds. Worm of clock drive was heating considerably, also brake.
						finder cross wires with respect to the visitor's eyepiece wires. 60" or 70" off wires, when on in finder.
						Hardly perceptible change.

(over)

[illegible]

	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
eye's	eyepiece and finder.		Sec. finder setting	15.9 or 16.0	

the two bolts.

2 $\frac{13}{16}$ " ; up $\frac{7}{8}$ "

Date *Thurs. July 4-5, 1935.*

Y Hd

Julian Day 2427988.5

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
Turned bolts up about $1\frac{1}{6}$ turns.				
Hour reads 4^m too far E. Guided 25^m . Star still going south $1'' \pm$				
At the meridian about $\frac{1}{2}$ to $\frac{1}{3}$ diam. of image below wire - maybe less.				
It drifted below the wire all the way to the meridian about $3''$ arc, think you might				
adjusted with more backlash than we gave it yesterday.				
brought $\frac{1}{2}$ way back. Also dropped axis $\frac{2}{6}$ turn. Then 4.				

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
14					rate became very sensitive to bob position. Best at 11 on F end. Only 3 weights on clock
10	1 00 W (by clock)				Opened up 19 35 Set on α Boo. Set on γ dergs - too faint. Star drifted below cross wires by at least 3" at meridian. On again at 1 00 W. Loosed worm; Dropped polar axis $\frac{3}{6}$ turn. Readjusted worm.
46	0 00				Considerable time lost in re-setting as R. A. setting motion does not engage and telescope is off balance. Removed $\frac{1}{2}$ wt. from end of δ axis. Star drifted just perceptibly below cross wire. I suggest that if axis were dropped another $\frac{1}{6}$ turn it would do without further tests.

(over)

Date *Fri. July 5-6, 1935 contd.* H

Julian Day 2427989.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angl End
20	H.D. 166014	18 03.6	+ 28 45	1 - 25	E 40	0.008	26.5	23 59	0 05	0 37
21	H.D. 166180	18 04.4	+ 30 59	1 - 25	E 40			0 13	1 43	X 1 14
22	H.D. 199055	20 49.5	+ 31 15	1 - 25	E 40			1 53	3 03	0 49
- 23	<i>HD 206778</i> ε <i>Pegasi</i>	21 39.3	+ 09 25	1 - 25	E 40			3 08	3 18	0 14
<i>Thurs Wed. July 9-10, 1935</i>					Y			J.D. 2427993.5		
24	H.D. 154143	16 58.6	+ 14 14	1 - 25	E 40	0.008	25.5	9 04	10 00	0 05
25	H.D. 154228	16 59.1	+ 13 44	1 - 25	E 40	0.008		10 13	10 47	
26	H. D. 161695	17 41.5	+ 31 33	1 - 25	E 40		25.5	11 04	12 00	1 12
27	H. D. 198626	20 46.5	+ 30 32	1 - 25	E 40			12 20	13 30	0 32
28	H. D. 212186	22 17.3	+ 15 08	1 - 25	E 40			2 41	3 41	0 15

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
05	0 37 W	+28 37		3.83 A ₀	5	Holder 1, setting 5. Second neutral filter out.
43	1 14 W	+30 52		7.32 A ₀	3.3	Holder 3
03	0 49 W	+31 15		6.90 A ₅	3.3	Holder 4
16	0 14 W	+09 27		2.54 K ₀	7	Holder 2
						MT. July 6. 12 Δθ M.T.A. +1.8 Δθ S.T.A. -8.2 Δθ M.T.D. +1 01.8 Δθ S.T.D. -23.2
						MT. July 8 14 Δθ M.T.A. +2.5 Δθ S.T.A. -7.3 Δθ M.T.D. +1 02.5 Δθ S.T.D. -22.3
						Set on α Bootis. tried focus. - much better jumps some start in δ. seems to jump other way on reversing direction of motion! Note pin is oriented in δ. Suspect pin.
00	0 05 E		1+	6.45 M _a	3.3	No other stars in finder. Lost time with R.A. setting motion sticking.
47			1+	5.86 A ₀	3-3	Holder 2. North star - clouds.
00	1 12 W		1 ⁻ poor	6.23 B ₉	3-3	Holder 3 Dec. circle reads 15' farther south than should
30	0 32 E		1 fuzzy	6.81 A ₂	3-3	Holder 4
41	0 15 W			6.69 A ₀	3-3	Holder 1 Last plate not numbered.
						Lost time between 27-28 fixing setting motion. Hope it is now finally fixed.

Date July 10-11, Wed. Thurs. 1935 H₂ MeO Julian Day 2427994.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Ang End
29	H.D. 150030	16 33.3	+46 49	1-25	E 40		26.8	8 42	9 42	
30	H.D. 154160	16 58.7	+14 41	1-25	E 40		26.8	10 13	11 35	
31	H.D. 198726	20 47.2	+27 52	1-25	E 40		26.8	12 42	1 18	0 38
32	H.D. 198946	20 48.7	+28 57	1-25	E 40		26.8	1 29	3 59	2 03

Date *Thurs. - Fri. July 11-12, 1935*

H. M. D. Julian Day 2427995.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angl End
33	H.D. 150203	^R 16 ^m 34.4	+43° 46'	1 - 25	E 40	0.008	29.5	20 59	22 19	0 38
34	H.D. 151388	16 42.0	+43 24	1 - 25	E 40	-	29.5	22 25	23 25	1 37
35	H. D. 162936	17 48.5	+32 02	1 - 25	E 40	-	29.5	23 30	00 50	1 58
36	H. D. 199042	20 49.4	+30 34	1 - 25	E 40	-		00 59	03 39	
<i>Fri. - Sat. July 12-13, 1935.</i>										
					H. M. D.	J.D. 2427996.5.				
37	H. D. 149630	16 30.9	+42 39	1 - 25	E 40	0.008	27.0	08 34	08 46	0 42
38	H. D. 154278	16 39.4	+13 42	1 - 25	E 40	-	27.0	09 20	10 55	1 05
39	H. D. 166868	18 07.5	+29 39	1 - 25	E 40	-	27.0	11 16	01 17	2 10
40	H. D. 210130	22 03.1	+12 34	1 - 25	E 40	-	27.0	01 37	03 50	3 46

Date *Sat - Sun July 13-14, 1935*

H McQ Julian Day 2427997.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Ang End
	<i>Jupiter</i>	<i>July 13</i> 14 45.2	13-14, 1935 -14° 53'							
	<i>Cluster in Hercules</i>	16 39.4	+36 35							
41	H.D. 154494	17 00.7	+12 53	1-25	E 40	0.008	24.5	22 39	23 05	1 06
42	H.D. 162555	17 46.5	+29 21	1-25	E 40		24.5	23 09	00 14	1 29
43	H.D. 198820	20 47.9	+32 28	1-25	E 40		24.3	00 22	01 22	0 24
44	H.D. 198976	20 48.9	+29 17	1-25	E 40		24.3	01 25	03 15	0 29
45	H.D. 199101	20 49.8	+33 03	1-25	E 40		24.3	03 17	04 05	2 17
<i>Sun July 14-15, 1935</i> <i>Y.</i> <i>J.D. 2427998.5</i>										
46	<i>Comparison test for focus was set at 23:30</i>						<i>Temp. 19.5</i>			
		23.20	<i>Exp. 15-10 (base outside)</i>				<i>E on plate</i>			
		23.40					<i>W on plate</i>	<i>Holder 2.</i>		

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						M.T. $\Delta\theta$ M.T.A. $\Delta\theta$ S.T.A. $\Delta\theta$ watch July 13. 10 +4.3 -5.1 -24.1 R.K.Y. showed Arcturus & M13 to ~200 visitors. Set on Hercules to recollimate & focus.
05	1 06 W		1 fuzzy	4.99 A3	3-3	Holder 1
14	1 29 W		1+	6.61 K0	2-2-2	Holder 2
23	0 24 E		1+	6.23 B5	2-2-2	Holder 3
15	0 ^{X_{Tu}} 29 W		1+	7.47 K2	2-2-2	Holder 4
05	2 17 W		1+	6.7 K5	2	Holder 1
						Clock brakes and warm moderately warm.
						M.T. $\Delta\theta$ M.T.A. $\Delta\theta$ S.T.A. $\Delta\theta$ watch 12 +5.2 -4.6 -22.6

Date *Mon July 15, 1955*

..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 Ang End
Discarded	Focus Test.		23.4 ①	1-25	Il. Pan.	0.005	19.1	9 45 AM		exp.
			23.2 ②	1-25		0.005				exp.
47	Focus Test.		23.2	1-25	Il. Pan.	0.005	19.1	10 30 AM		exp.
			23.4	1-25		0.005				exp.
A8	Focus Test.	Focus	23.3 1.	1-25	Il. Pan.	0.005	20.0	9 00 PM		exp.
			? 2.	1-25	Il. Pan.	0.005				exp.
Mon-Thurs July 15-16, 1935 Hal McD J.D. 2427999.5										
49.	H.D. 177829	19 01.2	+43 43	1-25	E40		19.5	11 37	01 45	CL 54

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
exp. 30-25					outside is through the base. Holder 1.
exp. 30-25					" " " " apex.
exp. 35-40	Tilt 23.0				① on plate outside through base Holder 1.
exp. 35-40					② " " - outside through base
					Focus returned to 23.30.
					C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.O. Δθ watch
					12 +5.2 -4.0 +1 05.2 -23.2
exp. 35-40	Tilt 23.0				Position 2; outside through base. Holder 1.
exp. 35-40					Position 7 outside through base Holder 2.
45 01 54W		1	6.76 B9	3.3.3.	Holder 1. Clouds much of time. Large mercury switch of clock starting mechanism broke. Also one side of R.A. setting motion fails.
					C.T. Δθ M.T.A. Δθ S.T.A. Δθ watch
					July 16 13 +5.2 -3.1 -18.3

45

Date River Wed. July 16-17, 1935 H. M. O. Julian Day 2428000.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
50	H.D. 152153	^{h m} 16 46.6	^{s ° '} +43 36	1-25	E 40	0.008	23.5	21 30	23 30
51	H.D. 171654	18 31.0	+46 08	1-25	F 40	0.008	23.5	23 33	01 03
52	H.D. 199140	20 50.1	+28 08	1-25	F 40	0.008	23.5	01 13	02 13
53	H.D. 199102	20 49.8	+29 07	1-25	F 40	0.008	23.5	02 16	04 06
* T _v 54	Focus Test	Setting 1	Focus 23.30	1-25	H. Pan.	0.008	Exp.	20 ^s -25 ^s	
		5	23.10						
		8	23.50						

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
					Mercury starting switch replaced by hand switch. Clouds and thick haze at start.
01 58 W x 7 ₁		1 +	7.4 K0	2-2-2	Holder 2 Haze most of the time.
00 16 W		1 +	6.7 A0	2-2-2	Holder 3 Haze and clouds.
00 36 W		1 +	6.27 B3	2-2-2	Holder 4 Haze.
02 31 W			7.5 B9	2-2-2	Holder 2 Haze.
					Holder 1 outside - base of prism; inside apex. Focus set back to 23.30.
					<u>Note.</u> Drive clock is beginning to slow down; evidently heavy going (in brake drum?) It did not lose seconds, but the left hand differential had to be on almost continually. The brake drum was only moderately warm; drive weights completely suspended.
					July 17. M.T. Δ0 M.T.A. Δ0 S.T.A. Δ0 M.T.D. Δ0 watch
					12 +5.4 -3.5 +1 05.4 -17.0

47

Date *Wed. July 17-18, 1935*H. D. M. D. Julian Day *2428001.5*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
55	H. D. 171438	18 29.8	+46 01	1 - 25	E 40		24.2	10 25	12 55	01 45.0
56	H. D. 210501	22 05.7	+16 13	1 - 25	E 40		24.2	01 10	3 55	01 05.0
<i>Thurs. July 18-19, 1935</i>										
					Y.			J.D. 2428002.5		
57	H. D. 162668	17 47.1	+30 01	1 - 25	E 40		27.0	22 25	23 15	00 49.0
58	H. D. 199169	20 50.3	+27 41	1 - 25	<i>Il. Pan.</i>		27.0	00 01	00 21	01 10.0
59	H. D. 199763	20 54.1	+30 00	1 - 25	<i>Il. Pan.</i>		26.0	00 26	02 00	00 31.0
60	H. D. 201433	21 04.4	+29 48	1 - 25	E 40		27.0	02 04	02 30	00 48.0

Date *Fri. July 19-20, 1935*

H

Julian Day *2428003.5*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
61	H.D. 151732	^h 16 ^m 44.1	[°] +42 ['] 26	1-25	E 40	0.008	28.0	20 33	23 03	01 44 XT _n
62	H.D. 152107	16 46.3	+46 10	1-25	E 40	-		23 07	23 47	01 21 XT _n
63	H.D. 172187	18 33.7	+43 08	1-25	E 40	-	28.0	23 50	01 10	01 03 XT _n
64	H.D. 201078	21 02.3	+30 47	1-25	E 40	-	28.0	01 16	02 36	01 00 XT _n
<i>Sat. July 20-21, 1935</i>										
					H _a MeD			J.D. 2428004.5		
65	H.D. 174177	18 44.2	+46 12	1-25	E 40	0.008	27.5	10 30	11 30	00 15 XT _n
66	H.D. 201194	21 02.9	+30 12	1-25	E 40	-	27.5	11 40	01 23	00 10 XT _n

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						Seeing hereafter on basis of 10.
03	01 44 W XT _u		3	7.5 Mb	3-3-3	Holder 2 Haze.
47	01 27 W XT _u		4	4.9 A2p	3-3-3	Holder 4 Haze.
10	01 03 W		4	6.40 A5	3-3-3	Holder 3. Haze.
36	01 00 W			6.3 F5	3-3-3	Holder 1 Haze.
						Note: Clock drove well for several hours. During the last exposure it slowed down, and even dropped a number of seconds. Voltage OK. Brake very hot.
						M.T. Δθ M.T.A. Δθ S.T.A. Δθ watch
						July 20. 10 +6.4 -2.3 -11.1
30	00 15 W XT _u		2	6.47 A0	3,3,3	Holder 2
23	00 10 W		2	7.46 B8	3,3,3	Holder 3. - probably underexposed.
						Had to stop exposure on 66 because brake got so hot and clock ran so slow that guiding was impossible even with setting motion. Stopped clock 1 23 cooled until 1 53, still running too slow for work. Closed 2 00. Must clean out brake.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	X _{T1}					
00	00 28W		2/10	6.92 K0	2-2-2 Holder 1	Cloudy at first.
28	01 05W			6.96 A2	2-2-2 Holder 2	Sky thick.
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D Δθ watch
						July 22 12 +6.8 -1.9 +1 06.8 -7.7.
						July 23 12 +7.0 -1.6 -6.4
						July 24 12 +7.3 -1.4 +1 07.3 -6.4
						Focussed - about 40. Mirror figure good. Seeing only fair. Guiding lights too bright to find guide star. Clock running very badly so impossible to try an unguided plate. Adjusted mercury switch OK. Clouds 22 40 Closed 00 30.
						July 25 12 +7.8 -0.4 +1 07.8 -3.6

Date *Thurs July 25-26, 1935*

S. H.

Julian Day 2428009.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
-	<i>δ Ophiuchi</i>	^{h m} 16 09.1	-3° 26'	N	-					
69	NGC. 6402	17 32.4	-3 11	N	E 40			23 05	23 45	22 00 W
70	NGC. 6934	20 29.3	+7 04	N	E 40			00 44	01 29	00 50 W
71	NGC. 6934	20 29.3	+7 04	N	E 40			01 45	02 15	01 35 W
72	NGC. 6779	19 12.7	+30 00	N	E 40			02 40	02 52	

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
				4.38 Ma		Focus within 10 mms of shot of last evening. Mirror figure excellent. No evidence of zonal aberration. Dome turning relay stuck, contacts badly pitted, cleaned by Dr Young and staff.
45	02 00 W					S. guiding. Guide * bright but not bright enough for field illumination. Lost in haze 23-12. Guide star lost much of time in haze, even with light out. Started in haze but region cleared gradually.
29	00 50 W					H. guiding. Guided by intermittent illumination of wires.
15	01 35 W					S. guiding. Some hazy intervals. All guiding by flashing light on and off.
52						Shutter closed 02 45 - 02 50 to fix clock. missing clouds and haze all over sky now. Before this time a clear sky north of +35 dec., and very thick to south. Closed 3 30.
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch July 26. 12 +8.0 -1.7 +1 08.0 -1.7

Date *Aug. July 26-27* 1935

Hd

Julian Day 2428010.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
73	H.D. 172976	18 38.0	+44 10	1-25	F40	0.008	25.2	10 02	11 55	01 12 W
74	H.D. 201912	21 07.5	+29 18	1-25	F40	-	25.2	12 25	01 29	00 15 W
75	H.D. 212500	22 19.6	+15 48	1-25	F40	-	25.2	01 58	03 18	00 52 W

Time P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						Changed to Cassegrain. Wts for Cass (upper end) 1 opposite finder 2 adjacent to polar axis. Wts for Newtonian - 3 on triangle 1 on bracket just south of triangle.
55	01 12 W		2	7.46 A5	3-3-3	Holder 1. Clock trouble - adjusted.
29	00 15 W		2	6.65 B9	3-3-3	Holder 2. Clock got right out of control - going too slow even with bobs at fast extremity. Finally set anyway and by that time clock had picked up again. This lasted only few minutes - see below.
18	00 52 W		3 & 4	7.41 F2	3-3-3	Holder 3. Clock ran slower and slower and began stopping when dome turned. Guided 75 with setting motion and stopped exposure when clock was losing 1 sec in 13! Voltage 110, brake not excessively hot. Tried clock again after everything cool. Same thing. Closed 4 00.

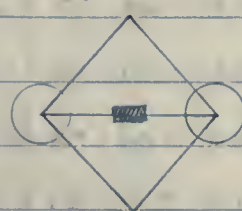
57

Date *Sat*.....*July* 27-28, 1935.

$$\frac{H}{Y+Ha}$$

Julian Day 2428011.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Ang End
76.	H.D. 172379	18 34.8	+46° 03'	1-25	F40	0.008	23.5	23 20	01 30	02 52
<i>Sun. July 28, 1935.</i> <i>Y and H. worked on clock. Landed down portion of brake ring and put</i>										

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						Y and H ₂ worked on clock. Cleaned brake drum. Eventually added graphite as lubricant & ran clock with weight down on springs. Cloudy - Showed visitors Jup. Venus Mars with Cooke telescope.
30	02 52 W		2/10	7.6 F2	3	Holder 2 Clock ran OK at first. Then began to lose vast numbers of seconds. Suddenly for no obvious reason it improved considerably. ∴ stopped clock 00.10-00.15 and changed governor bolts to 12 (from 10). Clock then controlled OK for 15 min. Then badly again. Thick - closed 02.15.
first						elastic between bolts to keep them more together. Seems satisfactory. 

Date *Sun. July 28-29, 1935* Hd *Julian Day 2428012.5*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
77	H.D. 161959	17 43.4	+28 58	1-25	E 40	0.008	24.5	08 42	10 25	00 43
78	H.D. 177931	19 01.6	+45 45	1-25	E 40	-	24.5	10 34	11 15	00 15
79	H.D. 205939	21 33.6	+44 14	1-25	E 40	-	24.3	12 38	01 23	00 09
80	H.D. 212442	22 19.2	+14 46	1-25	E 40	-	24.3	01 32	02 38	00 20
81	H.D. 221115	23 24.1	+12 13	1-25	E 40	-	24.4	02 46	03 13	00 09
82	H.D. 2942	00 27.6	+27 44	1-25	E 40	-	24.5	03 20	04 30	00 05
<i>Mon. July 29-30, 1935</i>					<i>H</i>			<i>J.D. 2428013.5</i>		
83	H.D. 161019	17 38.1	+27 40	1-25	E 40	0.008	23.5	20 43	21 18	00 50
84	H.D. 163590	17 31.8	+32 28	1-25	E 40	-	23.4	21 21	23 01	01 14
85	H.D. 161797	17 42.5	+25 47	1-25	E 40	-	23.4	23 05	23 25	01 28
86	H.D. 199837	20 54.6	+31 15	1-25	E 40	-	23.2	23 32	01 12	00 22
87	H.D. 206280	21 36.0	+43 59	1-25	E 40	-	23.4	01 17	02 27	01 07
88	H.D. 218235	23 01.3	+17 59	1-25	E 40	-	23.4	02 32	03 22	00 26
89	H.D. 218792	23 05.7	+17 03	1-25	E 40	-	23.2	03 26	04 26	01 25

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
25	00 43 W		3 var.	7.36 A ₀	3-3-3	Holder 2.
15	00 15 W		1	6.80 B ₉	3-3-3	Holder 3 Clouds. - underexposed. Closed dome 11 30 Cleared opened 12 30
23	00 09 E		1	6.19 A ₃	3-3-3	Holder 2
38	00 20 W		2	6.73 A ₀	3-3-3	Holder 3
13	00 09 E		2	5.67 K ₀	3-3-3	Holder 2
30	00 05 W		2	7.16 G ₅	3-3-3	Holder 4 Clock ran perfectly all night.
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch
						July 29 12 +9.1 -3.6 +109.1 +7.1
18	X _{Tu} 00 50 E			6.60 A ₃	3-3-3	Holder 4 - outside zone limits - 16.7.97
01	01 14 W		2	7.2 A ₀	3-3-3	Holder 3
25	01 48 W		2	4.3 G ₅	3-3-3	Holder 2
12	00 22 W		3	7.2 B ₉	3-3-3	Holder 1.
27	X _{Tu} 01 07 W		4	6.7 B ₉	3-3-3	Holder 4
22	00 26 W		3	6.5 F ₂	3-3-3	Holder 3
36	01 25 W		3	7.1 K ₅	3-3-3	Holder 1 Clock excellent.

Date Tues July 30-31, 1935 Hd Julian Day 24280.145

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Ang End
90	HD 175865	18 ^h 52.3	43 49	1-25	E 40	008	23.5	10.03	10.15	2	28
Wednesday July 31 - Aug 1											
-	β ophi	17 40.2	+4 36	Newtonian	-			20 45	-		2
91	N.G.C. 6402	17 32.4	-3 11	-	E 40			21 18	21 43		2
92	N.G.C. 6402	17 32.4	-3 11	-	-			23 01	23 16		55
Y, Hd, S, H											
93	α Cygni	Harlmann Test	Newtonian	Outside focus	89	Turn	E 40				15
94	"	"	"	Inside	"	39	"	"	"		15
95	1 a. from	"	"	Inside	"	39	"	"	"		2
96	"	"	"	Outside	"	39	"	"	"		3
S, H.											
97	N.G.C. 6779	19 12.7	+30 00	-	E 40			2 56	3 17		4
98	"	"	"	"	"			3 28	3 48		4

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	ϵ 25 ^m	43 55	4	4.0 ^{MB} 4.7	5 ₂	July 30 C.T. 13 $\Delta \theta$ M.T.A. +9.4 $\Delta \theta$ S.T.A. -3.3 $\Delta \theta$ watch +9.7. July 31 12 +6.5 -4.3 +17.7
	0 ^{2'}			4		Focus: 59.8 20 min fair.
	0 ²⁴ W	-3 08	good	17.0		Guide star lost in cloud 20% of time.
	1 ⁵⁵ W		fair			Clouds; rain. Closed: 22 ¹⁵ to 22 ⁵⁰
						Cloud. on account of rain; region clear.
	Exp 15 ^S					
	15 ^S					
	2 ¹¹					
	3 ¹					
17 43	4 ¹⁸ W		poor			Refracted or faint star. Sp. stopped because of light. could not be lowered. (Talley - extreme east - in line)

Date Thursday, August 1-2, 1935 Julian Day 24280.65

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Ang End
—	30 Oph.	16 57.5	-4 08	Newtonian				20 30			
99	NGC 6254	16 51.9	-3 57		E 40	-	-	21 00	21 15		2 40
100	NGC 6402	17 32.4	-3 11		-	-	-	21 21	21 46		2 30
101	NGC 6402	-	-		-			21 48	22 08		2 32
	(K.A. 109	17 40.0	-0 10		-			22 15	22 35		
102	NGC 6402	17 32.4	-3 11		-			22 52	23 17		2 0
103	"				-			23 20	23 45		2 39
104	"				-			23 47	00 12		1
105	"				-			00 16	00 41		3 25
106	NGC 6934	20 29.3	+7 04		-			00 56	01 21		1 05
107	NGC 6779	19 12.7	+30 00		-			01 36	02 01		3 57
108	NGC 7039	21 28.5	-01 16		-			02 11	02 21		1 11
109	NGC 6934	20 29.3	+7 04		-			02 27	02 52		2 40
110	NGC 6779	19 12.7	+30 00		-			03 01	03 26		4 32
111	"				-			03 31	03 48		5 4

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
Reel 1		Focus	5		M.T. 40 M.T.A. Δ0 S.T.A. Δ0 M.T.D. Δ0 watch Aug. 12 +3.0 -5.9 +1 03.0 +13.3
0 40 W		Fair			Sky bright; v. faint guide star
0 50 W	-3 10				
0 52 W	-	Fair or poor			} Sequence Plate N bound train 22 ⁰⁴ line break Considerable haze this exposure.
2 01 W	-3 11				
2 29 W					Refocussed on 9 ^m star in field of KA 109. Haze
2 50 W					Haze in many regions.
3 25 W					Haze. Run to end of RA slide; it faded with atyp. rate
3 25 W					Haze Thick.
1 09 W		Fair?			Refocus moved out $\frac{1}{2}$ or $\frac{3}{4}$ more.
3 05 W	+30 05				Haze
1 18 W	-01 04				
2 40 W					
4 30 W					
1 54 W					} Guide star must be faint for association. S guided all the plate.

Date Aug 2-3 1935 Julian Day 2428017.5

[illegible]

Time	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
	This plate is on dryump sack)					Aug. 2 12 +2.8 -6.8 +1 02.8 +16.4
	42 ^m W	-03° 29	2	4.38 Ma	4-4	Focus set at 23.35.
	W 18 ^m	32° 44	2 → 4	6.96 F ₅	3, 3, 3	H.A. circle reads westerly 4 ^m too far east.
	W 1 ^h 01	03° 15	4	7.27 A ₃	3, 3, 3	
		-01° 15	4	5.51 K ₀	3, 3, -	
	E 14 ^m	30° 02	5	9.40 K ₀	8	N ₁₁₅ and 116 are logged throw away the plate which wrapped separately in the current box.
	W 1 ^h 00	47° 58	5	7.41 A ₂	3, 3, 3	
	E 37 ^m	31° 13	4	5.80 A ₀	3, 3, 3	
	E 30 ^m	27° 24	3	6.60 K ₀	3, 3, 3	
						C.T. $\Delta \theta$ M.T.A. $\Delta \theta$ S.T.A. $\Delta \theta$ watch
						Aug. 3 12 +2.6 -7.7 +18.9
	Vega with .74-inch.					
	over left side thick from mid-height on closed 1 ²⁵					

Date Aug 4-5 Y. 1935 Julian Day 2428019.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Ang End
120	HA 156653	17 13.7	17 26	I-25	E40	8	27.0	8 ^h 57	9 ^h 57	1	1 ^h 11 ^m V
121	" 165908	18 03.2	30 33	"	"	"	26.6	10 01	10 41	2	1 ^h 1 ^m V
122	" 196426	20 32.2	-0 15	"	"	"	26.6	10 51	11 51	3	1 ^h 3 ^m E
123	" 199169	20 50.3	+27 41	"	"	"	26.6	11 56	12 56	4	3 ^h 5 ^m W
124	" 202314	21 09.9	+29 29	"	"	"	26.8	1 00	2 30	1	1 ^h 50 ^m V
125	" 221114	23 24.1	+15 28	"	"	"	26.5-6	2 37	4 07	2	1 ^h 12 ^m V
Aug 5-6 Hd J.D 2428020.5											
126	HD 174177	18 ^h 44.3	46° 12	I-25	E40	008	23.2	9.15	10.45	3	3 ^h 3 ^m
127	HD 196758	20 ^h 34.3	+0° 08	"	"	"	23.3	10.59	11.49	1	2 ^h 12 ^m
128	" 198070	20 ^h 42.8	+2° 57	"	"	"	23.4	11.54	1.21	2	1 ^h 11 ^m
129	" 220091	23 ^h 15.9	16° 43	"	"	"	23.1	1.29	3.09	3	2 ^h 6 ^m
130	" 2628	0 ^h 24.8	29° 12	"	"	"	23.4	3.15	3.49	4	4 ^h 4 ^m
131	" 3546	0 ^h 33.3	28° 46	"	"	"	23.2	3.53	4.20	1	3 ^h 30 ^m

me	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1	1 ^h 11 ^m W	19° 28'	1 poor	5.90 A ₀	3-3-3	Must wait on bright stars till seeing improves
2	1 6 ^m W	30 38	2	5.72 F ₀	3-3-3	
3	13 ^m E	-0 03	2	6.11 B ₀	3-3-3	Delayed 5 ^m by Dome relay sticking again!
4	35 ^m W	+27 54	2	6.42 K ₀	3-3-3	
1	1 ^h 50 ^m W	+29 43	2-3	7.25 K ₀	3-3-3	
2	1 ^h 12 ^m W	+15 44	2	7.04 A ₂	3-3-3	Plates in Black Box in N. Pier.
5	W 33 ^m	46° 20	1	6.47 A ₀	3, 3, 3	
7	E 12 ^m	+0° 21	1	6.39 A ₀	3, 3, 3	
1	W 1 ^h 11	+3° 10	1	6.35 A ₀	3, 3, 3	
9	W 26 ^m	17° 00	1	6.83 F ₀	3, 3, 3	
6	E 4 ^m	29 29	2	5.54 F ₀	3, 3, 3	Transparency poor all night.
1	W 30 ^m	29° 03	2	5.30 G ₅	3, 3, 3	
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch Aug. 6. 12 +2.0 - 11.5 +104.0? +26.3

Date.

1935

Julian Day

Hour Angle
End

Silver Mirror

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
					C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch
					Aug. 7. 12 +2.0 - 11.2 +1 02.0 +29.8
					8 12 +1.9 - 12.1 +1 01.9 +29.9
					9 12 +1.8 - 13.0 +1 01.8 +33.2
					10 12 +1.7 - 13.9 +32.1
					12 12 +1.0 - 16.0? +1 01.0 +27.2?
					13 12 +1.0 - 16.9 +1 01.0 +27.3
					14 12 +0.9 - 17.8 +1 00.9 +25.8
W 20 ^m	46° 12	2	3.62 B3.	4-5	clouds just clearing away.
W 33 ^m	45° 11	2-4 var.	7.12 F ₀	3,3,3	adjusted vernier drum & read correct dec.
W 1 ^h 11	50° 19	3	7.46 B8	3,3,3	Developed 132 + 133. 133 very much under exposed.
W 35 ^m	17° 57	3	6.99 F ₀	3,3,3	
W 45 ^m	32° 6	3	6.71 A _{0p}	3,3,3	
W 57 ^m	33° 22	3	4.27 B3	3,3,3	
W 1 ^h 17	30° 30	3	9.56 K ₂	3,3,3	
					Aug. 15 12 +0.7 - 19.0 +1 00.7 +31.5

W

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						RA dec. setting back to centre.
71	1 ⁴⁵ ^m	45 47.5	2	7.21 A0	3 3 3	the camera wouldn't go down.
2	1 58	32 23	3	7.62 A0	3 3 3	light back in soul. at 12.50.
3	2 36	27 42	2	6.95 A0	3 3 3	
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch
						Aug 16 12 +0.5 -20.3 +1 01.5 +27.4
36	0 ⁰² W	29 15	2-3	4.8 K0	3, 3, 3	{ Purpose Boston, Sidelinst, Termini + party paid visit. Reoriented finder wires. Stage
37	X ^{Tn} 2 ¹³ W	30 23	3	7.1 F5	-	
				6.6 A0	-	
	0 ²⁵ W	42 59	3	6.5 K0	3, 3, 3	Clouds twenty minutes. RA re-setting RA emergency circuit, fell out and broken. Unable to locate reserve. Stage.
37	2 ¹⁷ W	40 34	3	7.0 F5	-	Remaining plate set by hand.
38	0 ³² W	3 35	3-4	5.8 B0	-	Stage.
48	1 ⁵³ W	32 34	3	7.2 K5		" Clock ran perfectly all night. Pat. on V. intro's eyepiece; centered + focused it.

72

17-18

Miss Northcott note hr angle index
was adjusted correctly Friday. d.

Date _____

Aug 16-17

1935-¹¹ Julian Day 2428032.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Angle End
148	HD 190537	20 00.3	30 57	I 25"	E 40	.008	28.3	10 27	1 07	/	2 31
149	217477	22 55.9	30 33	-	-	-	27.9	1 21	3 41	2	2 10
✓ 150	18884	02 57.1	+03 42	.	-	-	28.1	3 59	4 29	1	1 06
	Vega				Young						
- 151	α Lyrae	18 33.6	38 41	I 25'	E 33	0.05"	29.0	8 06	8 06	1	53 ^m E
- 152	102 Herculis HD 186791	18 04.4	+20 48	I 25'	"	0.05"	29.7?	8 38	9 38	2	L C1 ^m
- 153	γ Aquilae HD 193237	19 41.5	+10 22	"	"	"	29.0	9 44	10 24	3	16 ^m W
- 154	ρ Cygni	20 14.1	+37 43	"	"	"	29.0	10 30	11 40	4	55 W

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2 31 W	31° 4'	1	6.93 A2	3 3 3	Very hazy near horizon. Seeing very poor and variable.
2 10 W	30 45	1	6.52 A0	3 3 3	obscuring clouds at 12.11 and at intervals. The night
1 00 E	3 51	1	4.17 M2	3 3 3	haze very thick.
53 ^m E	-	2	0.14 A.	40 ^s	Some opened 7 ⁰⁰ fixed upper curtain.
1 ^h 01 ^m W	20 48	1	4.15 B3	20-20	Lost time with cloud. Thick.
10 ^m W	+10 28	2-3	3.87 - K2	15-15-15	
55 W	+37 50	1-4	4.75 - Bp.	15-15-15	clouds. Car Z, 34 camping outside with leg ^{and} trip continued till 12 ¹⁰ but time from 11 ⁴⁰ was practically all clouds
Aug. July 19 M.T.A. 13 S.T.A. +0.0 M.T.D -23.3 Watch +1.01.0 +18.5					

Date Monday August 19-20, 1935 Julian Day 2422034.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Folder	Hour Angle End
							Set 27.0	Clock Time			
155	HD 155375	17 06.1	+12 35	I-25	E 40	008	26.8	20 10	22 40	1	W
156	189847	19 57.0	+30 57	-	-	-	27.2	22 46	00 46	2	2 ¹ W
157	209149	21 56.1	+32 33	-	-	-	27.3	00 50	02 50	3	2 ² W
158	2767	00 26.1	+33 02	-	-	-	27.0	22 53	04 45	1	2 ² W
Tuesday Aug - 20 - 21, 1935 M 2428035.5											
159	HD 187279	19 44.1	131 15	I-25	E 40	008	27.5	21 00		1	
Wednesday Aug 21-22 Y, H. 2428036.5											
158	F1 F-2			I-12	F 40	008		n.m.		1	
158	F2			I-12	"	"		afternoon		2	
158	F3			"	"	"				1	
158	F4			"	F 33	"				3	
158	F5			"	"	005				3	
158	F6			"	"	"		7 ³⁰ a.m.		3	

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
10 1	W	+12 33	2	6.46 A0	3, 3, 3	Very hazy. Fairly marked Aurora streamers in NE 21°
2 21	W	+31 03	3	6.66 B8	" "	Comp. may be overexposed in 155-156. Noticed in 2nd exp in 156 that spot glass had dropped. It was OK in second exposure in 155. Shifted either for last of 155 or first of 156. None in print.
2 26	W	+32 43	3	6.88 F5	" "	
5 152	W	+33 14	3	7.08 K0		
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch
						Aug 20 12 -0.2 -24.0 +0 59.8 +21.5
						" a. settings refused to operate
			2	6.15 A0	3 3 3	Replaced burned out fuse.
						Clouded up heavy just after started exposure
						closed up 22°
				10" inch	Focus	20.0 25.0 30.0 35.0 40.0
					Setting	1 3 5 7 10
					C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch	
					Aug. 21 12 -0.4 -25.2 +1 00.6 +23.8	
				5.5	Focus	23.0 24.0 25.0 26.0 27.0 Tel 23.05
				"	"	25.0 25.3 25.6 25.9 26.2 " 20.0
				Hartmann Test 12 ⁷ , 7 ³	25.7	25.9 26.1 " 20.0
				Hartmann Test 15 ³ , 10 ³		26.15 " 19.5
				15 ³ , 10		26.20 " 19.5
					Focus	26.20 26.5 26.8 27.1

77

H, Y

Date Wednesday Aug 21-22 1935 Julian Day 2428.0365

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Ang End
H { 159	HD 164136	17 54.7	+30 11	I-12	E 40	010	Set 24.0	19 52	20 12	1	0"
160	165008	17 58.8	+30 33	-	-	-	24.0	20 15	21 45	2	1"
161	187981	19 47.8	+30 53	-	-	-	23.9	21 49	22 49	5	1"
162	209469	21 58.6	+42 20	"	Em 6219	"	24.0	22 56	00 00	1	0.18 E
163	210387	22 05.0	+44 22	"	"	"	24.0	00 06	00 46	2	1.2 W
164	210405	22 05.1	+44 21	"	Em 6169	"	24.0	00 49	01 29	3	1.1 W
165	1826	00 17.6	+28 55	"	"	"	24.0	01 38	03 00	1	2.2 W
166	9224	01 25.7	+28 54	"	"	"	24.0	03 06	04 40	2	1.6 W

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2	0 ⁰³ E	+30 11	0-1	4.76 F0	3,3,3	Note - Comp. has now only 1 of the filters removed
15	1 ²⁶ W	+30 33	1	7.08 F2	4,4,4	
3	2 ⁴¹ W	+30 59	1-2	7.08 A5	4,4,4	Double Star. Comp. : 10", 15" S & N.
00	0 ¹⁰ E	+42 30	2	7.04 B9	4-6-4	
46	2 ^{1m} W	+44 31	2	6.72 A0	5-5-5	NW star } Taken to test speed of two emulators SE star } seeing about same on each.
20	1 ^h 04 ^m W	+44 31	2	6.60 B9	5-5-5	
0	1 ^{22m} W	+29 04	1	6.97 A3	5-5-5	
40	2 ^{54m} W	+29.04	1	7.83 G0	5-5-5	
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch Aug. 22 12 -0.9 -26.6 +59.1

79

Y, S. H.

Date Thursday Aug 22-23, 1935 Julian Day 428037.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder
Y { 167	Vega	³³⁶ 18 347	⁺¹⁷ +38 43	N	E40	Figure lost		made focus		38 W
Y { 168	"	"	"	N	"	"	"	outside		38 "
—	σ Oph									
169	NGC 6402	17 32.4	- 3 11	N	E40			21 11	21 26	177 W
170	"	"	"		"			21 32	21 57	208 W
171	{ NGC 6402	"	"		"			22 15	22 30	241 W
	{ K.S.A. 109	17 40	- 0 10		"			22 37	22 52	255 W
172	NGC 6402	17 32.4	- 3 11		"			22 59	23 24	275 W
173	NGC 6760	19 06.1	+ 0 52		"			23 43	00 08	285 W
174	NGC 6205	16 38.1	+ 36 39		"			00 17	00 22	287 W
175	NGC 6934	20 29.3	+ 07 04					00 32	00 52	288 W
176	{ NGC 6779	19 12.7	+ 30 00					01 02	01 17	289 W
	{ K.S.A. 64	19 58	+ 30 00					01 21	01 35	290 W
177	NGC 6934	20 29.3	+ 07 04					01 45	02 05	292 W
178	NGC 6779	19 12.7	+ 30 00					02 15	02 35	293 W
179	NGC 7089	21 28.3	- 01 16					02 48	02 54	294 W

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
38 rev					Poor seeing.
38 "					..
	Focussed + adjusted on this star. Within seeing, mirror excellent. Frame 161.				
1 ³⁷ W		Poor			
2 ⁰⁸ W		Improving			Collimation good. Plate is developed plate 169. not quite $\perp$ to axis.
2 ⁴¹ W		Poor. G. & W. wind			} Sequence Plate
2 ⁵⁵ W	- 0 11				
3 ³⁵ W		Variable			Tlescope vibrated on train for 22 ⁵ .
2 ⁴⁵ W		Fair. Inside * faint.			← Refocussed on 8 ^m star near field. Change < 0.1 mm.
5 ²⁸ W					+ unpaired in this paper.
2 ⁰⁶ W					
3 ⁴³ W					} Sequence Plate
3 ²² W					
3 ²⁰ W					Very bright rapidly due to moon.
5 ⁰⁶ W					At very end of this run.
5 ⁰⁹ W					

S. H. 1935

Date Thursday, Aug 22-23 (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.	Plate Holder	Hour Ang End
130	NGC 6934	22 29.7	+07 04	N	E 40			3 05	3 25		2 nd W
131	NGC 7078	21 25.2	+11 44	-	-			3 36	3 46		4 th W
132	M 33			-	-			4 05			4 th E
133	"			-	-				4 10		
Friday Aug 23-24, 1935 S. H.											
-	σ Oph	-	-	IV	-						
134	NGC 6274	16 51.9	-03 57	-	E 40			20 13	20 23		1 st W
135	NGC 6402	17 32.4	-03 11	-	-			20 29	20 44		8 th W
136	NGC 6402	-	-	-	-			20 46	21 01		5 th W
	S.A. 109	17 40.0	-00 10	-	-			21 04	21 19		1 st W
137	NGC 6402	17 32.4	-03 11					21 24	21 39		1 st W
138	NGC 6366	17 22.4	-04 59					21 46	22 11		2 nd W
139	NGC 6402	17 32.4	-03 11					22 16	22 31		2 nd W
140	NGC 6205	16 38.1	+36 59					22 38	22 43		3 rd W

[illegible]

Date Friday, Aug. 23-24, (cont'd) 1935 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Hokier	Hour Ang End
191	NGC 6760	19 06.1	+00 52	N	E 40			22 59	23 24		2 ⁵⁹ V
192	" 6402							23 35	23 55		4 ⁰⁹ W
193	" 6205							00 12	00 17		5 ²⁸ W
194	" 6934	20 29.3	+07 04					00 31	00 51		2 ¹⁰ W
195	" 6779	19 12.7	+30 00					00 57	01 12		3 ⁴⁷ W
196	" 6779							01 17	01 32		8 ⁰⁸ W
"	SA. 64	19 58	+30 00					01 36	01 51		7 ⁰² W
197	NGC 6934							01 57	02 12		7 ¹¹ W
198	" 7078	21 25.2	+11 44					02 17	02 25		2 ¹⁸ W
199	" 7089	21 28.3	-01 16					02 31	02 36		5 ⁵⁹ W
200	" 6934							02 42	03 02		2 ⁴² W
201	" 6779							03 10	03 30		1 ¹⁶ W
202	" 7078							03 35	03 40		2 ¹¹ W
203	α Persei	3 19.6	+49 38	N+diaphragm				04 15	04 15		1 ¹⁵ E
204	"							04 18	04 18		
205	"							04 27			
206	"							04 30			

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2 ⁰⁵ W		fine			Developed 189, 190?
4 ⁰⁹ W				H guided	
5 ²⁸ W		becoming			Developed 192, 193
2 ¹⁰ W					Refocused on 9 ^m star in field.
3 ⁴⁷ W		gradually			} sequence
4 ⁰⁸ W					
3 ⁴² W?	30 06	turning			
3 ³¹ W					
2 ⁴³ W					
2 ⁵⁵ W					
4 ²¹ W					
6 ⁰⁶ W					Bright (9 ^m ?) - motion around field of guiding of fine
4 ¹⁴ W					S guided all plates except where noted
1 ¹⁵ E		fine	1.90 vis		Inside focus 38 turns - 12 ⁵ exposure Read 23
					Outside focus 38 turns - 12 ⁵ exposure Read 95
					" " " " " " " " " "
					Inside focus 3 turns - 12 ⁵ exposure Read 23

Date last - Aug 24-25 - 1935 M Julian Day 2428039.5

[illegible]

Time Plate Exposure	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						showed visitors M 13. <i>Arrows are in north.</i>
03	1 19W	+30 33	1-0	6.88 A0	4 4 4	Aug 24 10 -1.0 -28.9 +28.1
2	1 43W 1 17E	+28 35	1	5.58 A0	4 4 4	Dec setting reads 3' low.
9	0 51W	+32 58	1	7.28 A0	4 4 4	image looks double, guided on bright companion (left one)
8	0 41 W	+30 57	2-3	6.78 B9	4 4	light clouds at 2.00. companion refused to spark, lost one missing. Replaced plates.
31	5 27 1/2 W	+28 04	3	7.31 A0	4 8	clouds at 3.30. clouds over then 4.15
						Aug 26 12 -0.5 -31.4 +59.5. Watch stopped
						Aug 27 12 -0.8 -33.0 +59.2 -0.3

Date Tues, Aug - 27-28 1935 M Julian Day 242814.5²

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Ang End
212	HD 164252	17 55.2	30 03	I-12	E-40	1010	24.1	19 57	21 59	4	37 W
213	208835	21 53.9	46 23	-	-	-	24.1	22 14	23 14	1	36 W
214	210646	22 06.7	27 14	-	-	-	23.7	23 22	0 34	2	31 W
215	216716	22 50.0	30 56	-	-	-	23.0	0 43	1 15	1	29 W 20 H
Wednesday Aug 28-29 H 1935											
215-F.1	Green hat			I-12	E 33	005	16.5	9 ³⁰ a.m.			
S, H											
216	VCC 6254	16 51.9	-03 57	IV	E 40			20 10	20 25		4 W
217	" 6402	17 32.4	-03 11	-	-			20 30	20 45		2 W
218	" 6719	19 12.7	+30 00	-	-			20 55	21 20		
219	" 6402			-	-			21 25	21 45		N
220	" 6934	20 29.3	+07 04	-	-			21 58	22 15		E
221	" 7089	21 28.3	-01 16	-	-			22 23	22 28		

89

S, H. 1935

Date Wednesday Aug 28-29 (cont'd) Julian Day 2428043.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Angle End
223	NGC 6402	17 32.4	-03 11	N	E 40						
222	" 6205	16 38.1	+36 39	-	-			22 41	22 46		
223	" 6402			-	-			22 59	23 24		
224	" 6760	19 06.1	+00 52	-	-						
S.H. Thursday Aug 29-30, 1935								2428044.5			
	σ Oph			N	-						
224	NGC 6402	17 32.4	-03 11	-	E 40			22 02	22 24 (22 20)		
225	" 6205	16 38.1	+36 39	-	-			23 43	23 48		
226	" 6779	19 12.7	+30 00	-	-			23 57	00 22		
227	" 7039	21 25.3	-01 16	-	-			00 33	00 43		
228	" 6974	20 29.3	+27 09					00 51	01 00		

Time Place Altitude	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						Clouded over before exposure was started, clouds in E, S, & SW.
4 ¹⁵	W					
4 ⁵⁹	W					Developed 221, 222 Clouded over at 23 ³⁰ . Still cloudy - 1 ¹⁵ Cloud up
						Aug. 29. 12 - 0.1 - 35.6 + 59.1 + 0.4
						Focuses on this star. About $\frac{1}{2}$ mm. in but rough clouded over. Effective exposure about 2 ^m .
5 ²¹	W					Stage to extent of 1 ^m - most of exposure. N. end of exposure. Telescope + image rotated on body.
5 ²¹						
1 ²⁵	W					
2 ³²						Clouded out. A very poor night. Guide star lost most of time.
						Aug. 30. 12 + 0.1 - 37.7 + 55.1 - 0.5

Date Fri Aug - 30-31, 1935 M Julian Day 2428048.5⁵

[illegible]

Time Date Station	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
12	1 03 W	43 39	2 - 4	7.58 A0	555	
03	25 W	15 48	2	7.70 A2	555	some clouds at 2.40 and thereafter
0 -	19 W	16 31	3	6.78 A0	555	intermittent clouds thick at 4.20
						lost on visitor's eye piece and focused down 3 min.
						Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ noted Aug. 31. 10 +0.8 -38.7 -0.2 -2.5
						Visitors - showed Vega, set on M13, clouds 9.30
						Opened 10.30, set and focused up 3 min, clouds 11.15, closed 12.05 -
						one side R.A. setting not working.

93

Date *Sunday Sept 1-2 1935 M* Julian Day *2428047.5*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Ang End
232	HD. 175785	18 51.9	30 11	J-12	E-40	1010	18.5	8 02	9 42	2	1 12
233	176938	18 57.5	29 23	-	-	-	17.5	9 54	10 56	3	2 1
234	209205	21 56.5	31 03	-	-	-	17.8	11 10	12 56	4	2 2
235	14649	02 16.8	33 15	-	-	-	17.7	1 12	4 30	2	0 36
Monday, Sept. 2-3, H 1935											
236	HD 206632	21 38.3	45 18	I 12	E 40	1010	17.2	22 27	01 27	4	2 5
237	1641	00 17.6	32 25	-	-	-	17.2	01 33	03 03	3	4
238	9616	01 29.2	32 37	-	-	-	17.1	03 10	04 10	4	17
239	16220	02 36.1	32 27	-	-	-	17.0	04 13	05 01	3	16

Time	Hour Angle	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2	12 W	30 09	1	7.31 A0	5.5.5	R.A. setting fixed.
3	21 W	29 32	1	6.64 A0	5.5.5	R.A. settings refused to work set by hand. replaced 2 burned out fuses. R.A. setting O.K. about 10.15
6	1 22 W	31 10	2	7.49 A0	5.5.5	R.A. settings off again - burned out 3 more pairs of fuses. Hg switches immediately stick - clouds in plenty.
2	0 36 W	33 20	2	7.9 B9	5.5	set by hand. a cloudy moon and then.
2	15 W		2-3	7.8 Mb	5.5.5	clouds all evening - clearing. Hazy. Clouds on Sept 2
1	14 W	32 33	2-3	7.4 F5	5.5.5	Hazy
1	08 W	32 45	3	7.1 G0	5.5.5	light haze. * Reset Dec Drum + Index
0	56 W	32 36*		6.7 F5	5.5.5	
						Adjusted Mercury switches for R.A. setting.
						Adjusted amplitude of control clock which was working very poorly. Everything runs perfectly all night.
						C.T. ΔΘ M.T.A. ΔΘ S.T.A. ΔΘ M.T.D. ΔΘ Watch Sept 3 12. +1.9 -43.6 +1.9 +12.1

95

1935

Date Wednesday, Sept 4-5 H Julian Day 2455055

[illegible]

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
					Sept. 4. 12 +2.0 - 45.4 +1.0 +15.4
1 49 W	30 25	2	7.5	Ma 4,4,4	Clouds early evening; light haze.
0 15 W ?	32 38	3	7.2	G5 4,4,4	Aurora low in N, NE.
1 35 W	27 29	3	7.4	KQ 4,4,4	Stage 2 clouds.
0 25 E	17 29	3	7.1	F0 4,4,4	
0 35 W	16 45	2	7.2	F5 4,4,4.	
1 50 W	18 10	3	7.7	F0 4,4,4	Scattered clouds
				70, 30	Setting 2 5 9 Focus 26.10 26.30 26.20
					Sept 5. 12 +3.0 - 47.3 0.0 + 13.7
					Best focus 26.25 (reference for plates)

Date Thursday Sept 5-6 1935 M Julian Day 24-8075

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder
246	HD 188651	19 51.1	29 56	I-12	E-40	1010	18.6	20 05	20 45	2
247	188170	19 48.8	28 44	-	-	-	18.5	20 48	21 58	3
248	208716	21 53.1	28 18	-	-	-	18.0	22 02	00 02	4
249	218767	23 05.5	31 57	-	-	-	18.0	00 06	00 58	2
250	10407	1 36.4	29 01	-	-	-	18.0	01 03	02 37	3
251	9100	1 24.5	17 51	-	-	-	18.0	02 40	03 04	4
252	21379	3 21.8	12 23	-	-	-	18.0	03 08	03 46	3
253	21590	3 24.0	16 25	-	-	-	18.0	03 50	04 52	2

Fri. Sept 6-7 1935 Hd

254	HD 176031	18 53.7	46 37	I-12	E-40	010	17.0	19 40	21 10	2
255	HD 197954	20 41.9	-2 52	"	"	"	16.8	21 17	22 47	3
256	212442	22 19.4 ²	14 46	"	"	"	17.3	22 52	00 02	4
257	874	00 08.0	16 22	"	"	"	17.0	00 28	02 08	2
258	4278	2 13.4	12 33	"	"	"	17.0	02 14	02 50	3

Sat. Sept 7-8 H 325

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
5 2	0 28 E	30 01	2	6.34 B9	5 5 5	a few clouds one dec setting fairly
8 3	0 47 W	28 49	2	7.17 A0	5 5 5	
2 4	0 47 W	28 28	2	7.9 A0	5 5 5	
5 2	0 30 W	32 08	2	6.87 B9	5 5 5	
7 3	0 21 E	29 10	2	7.44 A2	5 5 5	
4	0 18 W	18 02	2	6.02 A2	5 5 5	
0	0 57 E	12 20	2	6.20 A0	5 5 5	
5 2	0 07 W	16 32	2	7.02 A0	5 5 5	
						Sept. 6 12 +3.1 -48.9 +0.1 +11.3
10	W 59 ^m	46 42	2	7.14 A2	5 5 5	
0	W 47 ^m	-2 47	2	7.40 K2	5, 5, 5	
0 2	W 25 ^m	14 57	1	6.73 A0	5, 5, 5	Clouds latter part: Thick at 00.00
0 8	W 42 ^m	16 34	3	7.40 G5	5, 5, 5	l haze
50				7.90 G5	5 10	Thick 2.50 Closed 4.00

Date Wed Sept 11-12, 1935 Hd Julian Day 2428057.5

[illegible]

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
12	1 ^h 17	32 37	1	7.19 B9	5.55	clouds early, dec setting bad, clouds 9.50 closed 00.00
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.O Δθ watch
						Sept. 12. 12 + 4.7 - 58.8 + 1.7 + 14.8
						Sept. 13 14 + 5.1 - 1 02.1 + 1.1 17.6
16 ⁵⁵		27 20	1-0	7.76 K0	3-3	very cloudy all day cleared gradually 8-9 P.M. Plate in holder in dark room
35°						Sept. 14 10 + 5.8 - 1 03.4 + 1.8 + 20.3
17	1 ^h 21 ^m W	14 42	1	7.61 A2	5.55	cloudy all day, cleared suddenly 10-11
3	1 ^h 21 ^m W	17 32	2	6.68 M6	5.5	some trouble with Dec setting - High switches sticky
1	1 ^h 21 ^m W	30 08	2	7.41 A0	5.55	fairly near moon.
						3 mercury switches blown - 2 on setting 1 on guiding! Buttons not pressed together. Apparently these switches won't take it. Couldn't get star on slit closed up at 4.00.

Date Sept 16-17 Y-L 1935 Julian Day 2428062.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour End
270	H.D. 187237	19 43.9	+27 36	I 12	M. Pan	Set 010	Set 14.5	7 ^h 33	8 53	2	30
271	" 200391	20 58.1	+27 24	"	"	"	15.0	9 02		4	
271											
Sept 17-18 Hd-L 1935 2428063.5											
271	4D. 187255	19 44.0	27 26	I-12	E40	Set D10	Set 13.8	7.28	5.43	3	23
272	HD 201194	21 02.9	30 12	"	"	010	14.0	8.47	10.02	2	25
273	" 210130	22 03.1	12 34	"	"	"	14.0	10.17	00 06	3	18
274	" 1662	00 15.8	12 13	"	"	"	13.8	00 11	04 18	2	47
275	" 9312	01 26.6	16 28	"	"	"	14.0	01 24	02 25	3	2
276	" 17008	02 38.6	27 35	"	HC Astra	"	13.8 01 27	02 29	03 59	2	
277	" 22963	03 36.1	32 38	"	E40	"	14.0	03 33	04 26	3	
278	" 33336	05 04.5	13 25	"	"	"	13.9	04 32	04 28	2	

ig Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
53 2	3 ^m W	27° 42	3	7.53	G ₅	3-3-3	Sept. 16 C.T. 12 Δθ M.T.A. +7.0 Δθ S.T.A. -1 07.7 Δθ M.T.D. +3.0 Δθ watch +22.8
			3	7.70	G ₆	3-3-3	clouded after about 5 ^m , still cloudy 1 ³⁰ .
							Sept. 17 13 +7.9 -1 09.8 +3.9 +28.7
3	W 23 ^m	27 32	3	7.34	A ₀	5,5,5	Very hazy, clearing somewhat
2	W 25 ^m	30 20	4	7.46	B ₈	5,5,5	quite hazy
1	W 1.27	12 45	2	7.70	A ₅	5,5,5	cirro-stratus clouds 10.50 - 11.05
8	W 27 ^m	12 24	6	7.51	A ₃	5,5,5	
5	W 23 ^m	16 37	7	7.59	G ₅	5,5,5	
1	W 15 ^m	27 43	4 (near)	8.0	A ₂	3,3,3	Δ aster is back, Δ 276 is alone at one end of
16	W 14 ^m	32 43	5 (near)	7.17	F ₈	5,5,5	heavy ground mist, Δ is low, mirrors not misted
12	E 11 ^m	13 29	3	7.07	F ₋	5,5,5	superb seeing - image almost lost in slit.

Date Wed - Sept 18-19, 1935 M-L Julian Day 2428064.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour At End
279	4 D. 188876	19 52.2	32 48	I-12	Astra	010	22.7	7 36	7 57	3	
280	216400	22 47.5	+3 01	—	—	—	22.5	10 49	12 11	1	
281	14597	02 16.4	15 05	—	—	—	23.1	12 26	2 06	2	41
282	15114	02 21.0	12 27	—	—	—	22.8	2 13	3 35	3	
283	26380	04 5.2	15 42	—	Met. P.	—	22.8	3 39	4 23	1	
284	26171	⁰⁴ ^{03.4} ¹³ ⁰⁸ (4 34 13 08)		—	—	—	22.6	4 27	4 39	2	
285	35189	05 17.9	16 36	—	—	—	22.9	4 44	4 58	3	
286	35693	05 21.5	15 11	—	—	—	22.7	5 01	5 11	4	
Thursday Sept 19-20, 1935 Y-L											
287	HD 219395	23 02.6	32 18	I 12	Astra	010	22.5	11 00	11 26	1	
288	HD 219291	23 09.6	29 13	"	"	"	22.5	11 31	12 11	3	
289	HD 8909	01 22.7	30 02	"	"	"	23.0	12 31	1 51	4	
290	HD 13596	02 07.6	14 48	"	"	"	22.7	1 58	2 20	1	

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
0 27 E	32 53	1	7.24 A0	5 7	image very faint. Lommel mirror entirely covered by condensation with off exposure and cleared mirror with blowers.
1 0 11	3 12	2	6.86 A0	5 5 5	very hazy - clouds in west star in clouds for fair proportion of exposure.
2 0 41 E	15 13	2	7.94 A0	5 5 5	clear.
3 0 44 W	12 35	3	7.8 B9	5 5 5	auroral zone in N.
4 0 12 E	15 47	3	7.17 A0	5 5 5	
5 0 16 W	13 13	3	6.00 B9	5 3 5	
6 3 50 E	16 38	3	6.15 A2	5 5 5	fairly near moon.
7 4 4 E	15 12	2	6.19 A2	5 5 5	h h h
					C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ match Sept. 19 12 +9.0 -1 14.3 +5.0 +31.9
8 4 ^m W	32 27	1	6.03 A2	3-3-3	opened up 9 ²⁰ . had all kinds of trouble with the slow motion
9 35 ^m W	29 13	1	6.84 F5	3-3-3	also finder which did not check with big telescope
10 2 ^m W	30 13	2	7.29 F5	3-3-3	also kept clouding every few minutes while attempting to find star.
11 14 58	14 58	2	7.17 K5	3-5-2	Exp. 5 like 2 ⁴⁰ but use time of air given

Date *Sat. - Sept 21-22* 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.	Plate Holder
					50+	vertical - showed			<i>β Cygni</i> M 57	
291	H.D. 210090	22 02.8	17 32	I-12	Astra	010	18.5	10 01	12 15	3
292	13248	2 04.4	12 42	—	—	—	18.5	12 21	1 51	4
293	12929	2 01.5	22 59	—	E-33	—	18.5	1 54	2 06	2
294	17470	2 43.0	32 26	—	Astra	—	18.3	2 10	4 40	3
295	35693	5 21.5	15 11	—	—	—	18.5	4 45	5 07	4
Sunday Sept 22-23/35 Y-L ID 2428068.5										
296	HD 179280	19 06.9	+31 28	"	Astra	"	17.0	7 02	8 14	1
297	HD 195617	20 27.3	+1 47	"	"	"	16.3	8 20	9 50	2
298	HD 210334	22 04.6	+45 15	"	"	"	16.5	9 55	11 00	3
299	HD 483	00 04.2	+16 59	"	"	"	16.5	11 06	12 30	4
300	HD 2436	00 23.0	+15 54	"	"	"	16.5	12 35	2 05	1
301	HD 16187	02 30.8	+31 10	"	"	"	16.6	2 10	3 10	2
302	HD 21062	03 18.8	+28 18	"	"	"	16.7	3 14	4 04	3
303	HD 36546	04 06.8	+17 02	"	"	"	16.0	4 09	5 09	4

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
					Sept 20 12 +9.8 - 1 23.7 + 5.8 +25.8
					Sept. 21 10 +10.0 - 1 17.9 +7.0 +36.1
153	54W	17.41	0	7.78 Ma	5535 new dec. setting works very well
17	0 32E	12 52	1	7.60 B9	5555
2	14E	23 09	1	3.30 K2	5555
43	1 58 W	32 33	1	7.90 A0	5555 clouds from NW at 3.00. heavy clouds 3.20-3.50
174	33 E	15 11	0	6 19 A2	5555 light clouds
4	52 ^m W	31 31	2-1	7.42 F0	4-4-4
50	7 ^m W	+1 54	2	7.72 K2	4-4-4 another star 10" N
503	41 ^m W	45 25	2	7.30 G5	4-4-4
201	11 ^m W	17 10	2-1	7.73 G0	4-4-4 Poor Seeing
051	27 ^m W	16 04	1	7.53 K2	4-4-4
10	25 ^m W	31 17	1	7.16 K0	4-4-4
20	30 ^m W	28 23	2	6.99 A0	4-4-4
044	48 ^m W	17 06	1	7.08 G5	4-4-4 Finder left in adjustment when this x on horizon

109

H-L

Date Monday Sept 23-24 1935 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder
- 304	i Herc (HD 160762)	17 36.6	+46 04	I 12	E 40	010	Set 13.8	7.00	7.06	1
- 305	i Herc "	-	-	-	E 40	008	14.0	7.07	7.10	2
					"			7.11	7.19	2
								7.20	7.24	2
306	HD 173003	19 01.9	+29 46	-	E 40	010	14.0	7.29	9:09	3
- 307	e Peg (HD 206778)	21 39.3	+09 25	-	"	008	14.0	9.16	9.18	4
					"			9.19	9.24	4
308	HD 202478	21 11.0	+16 19	-	Astra	010	14.0	9.25	10.38	1
309	218660	23 04.7	+29 08	-	"	-	13.3	10:42	11:42	2
310	3081	00 28.9	+31 05	-	"	-	14.0	11:46	11:46	3
311	16111	02 30.2	+28 58	-	"	-	14.0	1:49	2:00	1
								2:05	2:05	1

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
W 1.18		1	3.6 B3	15	Sept 23. 12 +11.8 -1 21.8 +5.8 +41.8 Plates for Miss F.S. Patterson
W 1.22		1		15	
W 1.31		1		15	
W 1.36		1		15	
W 1.56	+29 48	1	7.8 K5	5.5.5	Brilliant Aurora
E 0 33	+09 34	2	3.5 K0	15	for Miss Patterson
E 0 27		2		15	
W 1 16	+15 27	3	7.9 K0	4,4,4	Haze (Smoke?) } Aurora } Sept Astral II } 6505D } Lat & L.H.
W 0 26	+29 13	3	7.8 K0	4,4,4	Thick haze 0 ²⁰ - 1 ²⁰ Haze after last meet of time after 2 ⁰
W 1 07	+31 16	3	8.0 F2	4,4,4	
	+29 05	3	7.0 B8	4,4,4	
					Sept 24. 12 +12.9 -1 23.7 +40.8

Date Tuesday Sept. 24-25, 1935 M-L Julian Day 2428070.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder	Hour Ex.
312	H.D. 191879	20 07.0	14 21	I-12	M ⁺ Pan	.010	18.6	7 30	9 00	4	3 4
313	209984	21 58.7	29 44	-	E-40	-	18.5	9 03	10 03	1	1 0
314	211733	22 14.1	15 45	-	-	-	18.3	10 06	11 00	2	0 3
315	218428	23 02.9	29 31	-	-	-	18.1	11 06	12 24	3	8 3
316	7871	01 13.3	32 59	-	-	-	17.5	12 45	3 05	4	1 0
317	26141	04 03.1	17 01	-	-	-	17.5	3 10	5 08	1	57 0
		Wed.	Sept 25-26	1935	Hd-L			2428071.5			
318	4D 219110	23 08.3	28 54	I-12	E 40	.010	22.5	10 37	10 55	1	

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
4 0 46 W	14 27	2	7.48 A0	444	finder out, had trouble getting star on slit. misty clouds at 8.00
2 1 0 02 E	29 52	2	6.99 B9	484	
0 2 0 37 W	15 55	2	6.91 A0	555	bright auroral zones in north. aurora are very bright at 11.00
2 3 1 15 W	29 42	3	7.23 B9	555	beautiful auroral display at 11.30, rapidly pulsating rays from N. horizon to zenith focus & 23 A, S+30°. last 20% 3 m
4 1 45 W	33 10	2	8.0 A5	555	a lot of trouble in setting on the slit.
1 0 59 W	17 07	0	7.60 A0	555	bright but very faint aurora are in N. at 3.20 rapidly pulsating auroral rays again at 3.50 not as bright as before, focused & 4 h S+30° lasted for 30 or 40 m.
					Finder left adjusted for last star on meridian.
					Sept. 25. 12 +13.9 ΔΘ M.T.A. ΔΘ S.T.A. ΔΘ M.T.O. ΔΘ actual
	29 05	2	7.34 K0	5, 10	clouds earlier, clouds 10.55 closed 12.20
					Sept. 26 13 +14.9 ΔΘ M.T.A. ΔΘ S.T.A. ΔΘ M.T.O. ΔΘ actual
					Sept. 27 12 +16.1 ΔΘ M.T.A. ΔΘ S.T.A. ΔΘ M.T.O. ΔΘ actual

Date Friday Sept 27-28, 1935 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.	Plate Holder	Hour. En
319	H.D 208174	21 49.4	27 53	I-12	E-40	010	11.5	9 04	11 04	1	20
320	7374	1 88	15 36	-	-	-	11.5	11 08	12 08	2	0.5
321	16580	2 34.4	29 21	-	-	-	11.3	12 13	3 13	3	40
322	26398	4 5.4	16 22	-	-	-	11.3	3 18	4 30	1	30
323	35909	5 22.9	13 37	-	-	-	11.3	4 33	5 19	2	00
Sat Sept 28-29, 1935 Hd											
60 visitors. Showed 3 Egg. Clouds											
Sunday Sept 29-30 Y											
324	H.D 8815	01 21.8	29 16	"	E40	010	7.5	0 14	0 50	1	

g Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
						60 amp fuse blew when turning alone. Replaced. Blew again - found bolt loose in dome motor. Set watch slow about 1 min.
1	20 W	28 01	0-0	6.77	A2 6,6,6	R.A. quick motion not working very well.
07 2	0.56 E	15 48	00	5.80	B8 6,6,6	
13 2	0 44 W	29 30	0	7.43	B9 6,6,6	This plate may have faint second impression nit. Loaded in a second time by mistake.
20 1	0 30 W	16 28	1	6.97	B8 6,6,6	
19 1	0 02 W	13 37	1	6.32	A2 6,6,6	got wrong plate holder in. Date 4.39 as beginning.
						Sept. 28 10 +17.2 -1 30.4 +13.2 +57.3
30 1		29 26		75.2	F2 6-12	cleared about 11 ³⁰ intermittent clouds.
						Sept. 30 13 +19.0 -1 36.0 +15.0 +03.2 Watch advanced 1 min.
						slit tab. off and replaced. Zero setting now 00.15 so use 01.15 in observing.

Date Tuesday Oct 1-2, 1935 M-L Julian Day

[illegible]

[illegible]

Date

Oct 3 1935 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.	Plate Holder
331 F ₂	Focus 28.28) [?] setting 2, plateholder 2	" 9	" 1	I-12	E40	.010 ⁽¹⁾				2, 1
331 T	(For exposure times only)			I-12	E40	.010 ⁽¹⁾		setting 2: 15 ^s		setting 1: 15 ^s
Fri Oct 4 - 5 1935 Hd - L										
332	HD 197139	20 36.6	43 05	I-12	E40		7.1	7 15		
332	HD 224720	23 55.1	46 23	I-12	E40	.0006	6.5	10 23	11 41	1
333	" 3847	01 22.1	31 28	"	"	.010	6.9	11 45	1 28	2
334	" 19896	03 06.8	16 07	"	"	"	6.8	1 37	2 51	1
335	" 14687	04 15.9	14 11	"	"	"		2 54	3 20	2

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
			Two filters out (one filter out)	5.4		Oct. 3 ^d 12 +21.3 -1 41.0 +17.3 +14.5 331 F ₂ (plate holder 2) indicates lower value of focus than 331 F ₁ . Difference due to plate curvature? also notice difference in plate holders 1 and 2. Left focus at 26.28 Oct. 4 12 +22.0 -1 44.4 +18.0 +15.8
41	W 17 ^m	43 13	1	7.15 K ₀ 6		Clouds, practically no exposure, stopped 7.40
28	W 38 ^m	46 35	1	7.31 H ₂ 6,6,6		closed 8.40. Opened 10.15-
51	W 16 ^m	31 35	1	7.86 K ₀ 6,6,6		Forgot to check slit at beginning of 332. checked it at end and found it reading 0.01! Set to .011
		16 15	1	7.38 H ₂ 6,6,6		333 broke in holder - no apparent reason - pieces loose in box.
				6.99 F ₀ 6,12		335 got practically nothing on account of clouds Had trouble with drive clock dropping seconds, got adjustment with turn buckle, considerable chafing of brake. Put on visitors' glass and looked down 3 min. closed 4.30

Date Saturday, Oct 5-6, 1935, 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.	Plate Holder
336	H.D. 218472	23 03.2	30 55	I-12	E 40	.010 ⁽¹⁾	5.6	10 29	12 25	1
337	21458	3 12.4	13 29	-	-	-	5.7	12 30	2 12	2
338	22280	3 30.1	29 40	-	-	-	5.7	2 15	4 15	3
339	43044	6 09.0	14 38 01	-	-	-	5.7	4 21	5 25	4
Changed camera to 25" The 12" camera before changing was										
339 FI	Plate holder setting	3		I 25	E 40	Set 011		Focus 23.2	2nd	F3.
	"	7		"	"	"		" 23.4		
Sunday Oct 6-7 Young - L. 2422047										
- 340	HD 176051 Boos 4815	18 53.3	+32 46	I 25	E 40	011	6.3	6 35	6 55	1
- 341	HD 201091 61 Cygni Br	21 02.4	+38 15	"	"	"		7 02	7 42	2
- 342	HD 201092 61 " + C	21 02.4	+38 15	"	"		6.5	7 47	9 27	3
- 343	HD 220657 v Pegase	23 20.4	+22 51	"	"	"	5.5	9 38	9 50	4
344	H.D. 221114	23 24.1	+15 28	"	"	"	5.5	9 59	11 29	1

about 60 or 70 visitors. Showed Saturn. Pretty cloudy.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
5	1 59 W	31 06	1.0	7.34 A2	777	Oct. 5 16 +23.1 - 1 36.4 + 19.1 +33.8
12	0 23 E	13 36	1	7.42 A0	777	clouds coming quite low. Star drifting
15	1 22 W	29 46	3	7.76 A0	777	rapidly to left all night.
25	1 0 07 E	14 36	3	6.80 B9	777	clouds at horizon at 3.30 H.D. 430000
						table 0.0. Set on following and brighten up.
Sunday Oct 6 th						
	Set at	hct 19.6	focus	26.28		
					10 ^s - 6 ^s	2 screens out
						Correct focus 23.37
					2 screens out.	Heat on at 5 ⁵⁰
1	42 ^m W	+32° 48'	3	5.73	G10 F9	2-2-2 15 546 +32 48
2	40 E		3	6.8	K7	2-2-2 21 03.7 +38 23
27	1 05 W	+38 23	4	7.4	K	2-2-2
50	50 ^m E	+23 02	4	5.0	F6	6
29	46 ^m W	+15 39	4	7.04	A2	2-2-

121

1935

Date Sunday Oct 6 - 7 Cont'd 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.	Plate Holder	Hour End
	HD 8890										
345	α Ursa Min	01 22.6	+88 46	I 25	E 40	011		11 54	11 56	2	58'
346	HD 8509	01 22.7	+30 02	"	"	"	5.5	12 21	2 01	3	1' 20"
347	HD 22124	03 28.8	+31 41	"	"	"	5.5	2 08	3 20	4	32"
348	HD 27483	04 15.2	+13 38	"	"	"	5.7	3 26	4 36	1	1' 12"
349	R T Aurigae	06 22.1	+30 33	"	"	"	5.5	4.42	5 0	2	
350	1 geminorum	05 58.0	+23 16	"	"	"	5.3	5.13	5 27	3	
Monday October 7-8, 1935 H. det 6.8											
351	HD 190167										
	HD 206778										
351	[ϵ Pegasi	21 39.3	+ 9 25	I 25	E 40	011	6.8	9 39	9 47	1	
	"			"	"	"		9 49	9 53	1	
352	HD 206842	21 39.7	+58 48	"	"	"	6.8	10 07	11 47	2	
353	HD 220102	23 16.0	+59 44	"	"	"		11 53	1 08	3	

Log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS	
56	58 ^m W	88° 57	3	2.6	F9 7	P.A. circle reads 1 ^h 37 ^m	
013	1 ^h 20 ^m W	30 11	4	7.3	F5 2-2-2		
20	32 ^m W	31 47	4	6.9	F0 2-2-2		
26	1 ^h 2 ^m W	13 42	3	6.5	F2 2-2-2	clouds at Beq for 15 ^m ±	
26	3 ^m E	30 32	4	5.8	F8 2-2-2		
27	16 ^m W	23 16	4	5.0	G4 2-2-2		
Oct. 17 12 + 25.2 - 1 49.6 + 21.2 + 35.4							
Clouds late afternoon, slowly clearing, after dark, from N. Set on HD 190167, but too late to get plate before wind arrived. 7 ³⁰ sent on visitors' exposures + processed Moon & Jup, in 30s, in 10s, in 10s, & for stars same Moon + Saturne. Some haze + clouds.							
27	53 W + 9 34	3	3.5	K0 6	} Plate for Miss Patterson	Large fire on side road S of obs, a bit. W of obs.	
28	58 W	3	"	"			
27	52 N + 59 00	4-5	7.3	K2 2-2-2	Telescope E of Pier. During removal one of P.A. circle light shifted from its socket (it was 2.1 in 1914 & 1915)		
28	2 38 W + 5 58	4-5	7.0	F2 2-2-2			

123

(continued)

Date Monday, October 7-8, 1935 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.	Plate Holder
354	HD 21242	03 20.5	+28 23	I 25	E 40	011	6.8	1 17	2 47	4
355	28271	04 22.5	+30 09	"	"	"		2 50	3 50	1
356	35984	05 23.4	+29 07	"	"	"	6.8	3 53	4 43	2
357	35076	05 17.0	+28 51	"	"	"	7.0	4 54	5 34	4
358	HD 37128 ε Orionis	5 31.1	-1 16	"	"	"	6.8	5 38	5 41	3
	"	"	"	"	"	"		5 42	5 47	3
358 F ₁	plate holder 3.			I 25	E 40	011	8.5	setting 1: no plates in		1
358 F ₂				"	"	"	"			1

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
0 11 W	+ 28 29	4	7.3 G5	2-2-2	Telescope W of meridian looks faint.
0 12 W	+ 30 13	4	6.7 F5	2-2-2	Double star S, p. Comparison 8 th m, 20", p.e. 35°
0 4 W	+ 29 06	4	6.7 F5	2-2-2	
2 W	+ 28 51	4	6.4 B9	2-2-2	Dec. mis-set at first. Restarted.
0 56 W	- 01 16	3	1.8 B0	6	5 32.9 - 01 14 } H.A. 1 ⁰² W about limits + 8 - 1 ¹¹ , on this side of Mer.
0 58 W			" "	6	
					Everything OK at 5 30°, meridian. shut down
					Oct. 8 12 + 26.5 - 1 51.4 + 22.5 + 38.8 filters not neutral but approximate absorption factor = 6 returned focus to 23.37 but consider better focus = 23.4 +
all p 3, 5, 7, 9: two filters in, 24⁵, 30⁵, 36⁵, 42⁵ 8⁵⁻¹⁰ setting 2, focus 23.30; setting 9, focus 23.40					

Date Tuesday Oct 8-9, 1935 M-L Julian Day

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1.31 W	14 19	1	6.72 B9	3-3-3	left focus at 23.37 (* 7 47 Tm)
1.30 W	14 53	1-3	6.56 A0	3-3-3	
1.09 W	44 01	4-2	6.63 A2	3-3-3	seeing very variable on this plate.
0.51 W	43 23	3	6.82 A0	3-3-3	
1.28 W	44 52	4	6.25 A0p	3-3-3	
0.03 W	27 48	4	7.51 A0	3-3-3	
1.19 E	14 48	5	7.27 B9	3-3-3	
0.00	15 52	3	7.16 B9	3-3-3	
4 W	-	2	1.57 B0	9	
1.13 E	-	2	2.21 K0	9	
					Oct. 9 12 +27.8 -1 53.3 +23.8 +40.7
					Oct. 10 12 +28.7 -1 55.3 +24.7 +42.7
					Oct. 11 12 +29.8 -1 57.2 +25.8 +46.8

127

Date *Friday, Oct 11-12, 1935 M-L* Julian Day *2428087.5*

[illegible]

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1	1 52 W	46 12 ⁺¹³	0	6.82 B ₉	3-3-3	cleared off about 10. Dec circle reading 13 ^{too high}
2	2 14 W	45 17	0-0	6.34 A ₀	3-3-3	heavy clouds at 2.35 from NW. R.A. clamp in poor adjustment. Since easier to turn telescope when clamp is on, used up 3.00.
						Saturday a.m. R.A. clamp fixed. (contact disc has become loosened, and is gradually driven around by opposing contacts. Permanently, latter should be held from opposite direction to prevent. O.K. for now. F.S.H.
						clouds before visitors, 100 thereof; showed Saturn, 6 eggs.
	X T _h			2.68 B ₂	6	
	W 20 ^m X T _h				6	shutters wouldn't open fully.
	W 1.10 X T _h	32 04	2	6.71 A _{0p}	2, 2, 2	clouds nearly half of time. Thick 12.30 closed 3.00.

129

1935

Date Sunday Oct 13-14 Y-L Julian Day 2428089.5

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				Secondary. ok.
8 ^m W	34° 47'	0-1-2	5.7 F5 2-2-2	Plates were developed 2 last exposure times as seeing was very bad and mirror dirty, after fig.
1 ^h 14 ^m W	46° 18'	1	6.3 A2 2-2-2	
17 ^m W	-00° 39'	1	3.7 F8 3-3	
56 ^m E		2	4.7 F4 2-2-2	
39 ^m W	44° 25'	2	5.62 A0 2-2-2	
5 ^m W	44 29	2	5.94 B8 2-2-2	
27 W	45 55	2-1	6.74 F5 2-2-2	
1 ^h 4 ^m W	46 35	1-2	6.75 G5 2-2-2	
10 ^m E	40 02	2	5.4 G1 2-2-2	Identify.
	15 19	1	5.84 A2 2-2-2	Clouded 40's looks like rain
				Found mirror fogged on closing
				Think it happened between last two plates
				Oct. 14, 13 + 32.9 - 2 p3/p + 28.9 + 0 56.0
				Plate holder 2 breaking plates. Spring taken out to see how it works

H-L

Date Monday, October 14-15, 1935 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
383	H.D. 189613	19 55.5	+31 33	I-25	E 40	011	Set 17.0	Call π $\rightarrow$ 8 10 6 45	9 40
384	210594	22 06.3	+30 04	"	"	"	17.0	8 45	10 15
385	217491	22 56.0	+44 50	"	"	"	16.6	10 18	11 48
386	HD 9270 η Pictoris	01 26.1	+14 50	"	"	"	17.6! 17.0	13 10	12 35

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 ^h 56 ^m W	+ 31 40	0	6.7 A0 2-2-2	① Had to open dome by hand. Awful! ② P. 9 setting clutch slipping 55 ⁵⁵ 30
1 ^h 21 ^m W	+ 30 14	0	6.5 A5 2-2-2	Clouds over regions 6 ²⁵ -6 ³⁵ . Clouds again 6 ⁵⁵ -7 ³⁰
2 05 W	+ 45 02	1	6.5 A2 2-2-2	Light clouds at end of the exposure. Setting clutch re-adjusted by Y+H. As by fair. Thick 11 ⁵⁰ - 11 ⁰⁵
0 21 W	+ 15 00	1	4.8 G5	1934 1 ^h 27 ^m 9 + 15° 00' For Miss Patterson. Clouds 0 ²⁰ Closed up 1 ^h 40 Still thick. Dome closed OK.
Oct. 15 12	+ 34.0	- 2	05.0	+ 30.0 + 1 01.0
16	+ 2.5	-	+ 3.5	+ 0 01.0
Mean time clocks reset; sidereal watch reset, at 16 ^h .				
Oct. 15. Changed over to I-12 camera.				
Setting on I-12 was tilt 23.0 focus 23.37.				
On I-12 set tilt 19.6 focus 26.28				
Took focus test and 26.28 seemed all right.				
P.M.M.				

Date Friday, Oct 15-16 1935 ^{M-L} Julian Day

[illegible]

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
49 4	2 02 W	32 15	0-0	7.66 B9 3-3-3	opened dome by hand. R.A. setting would not operate. Set in R.A. by hand.
57 1	0 12 W	44 53	0	6.51 A0 3-3-3	
58 2	1 08 W	47 25	0	7.03 A2 3-3-3	auroral displays visible in north. 11.20 - 11.40
59 3	1 28 W	43 48	0-0	7.25 A0p 3-3-3	
60 4	1 43 W	16 03	0	7.38 A0 3-3-3	long streaks of thin clouds from the north in view dark through telescope
61 5	2 1 W	28 17	0	5.79 B8 3-3-3	
Oct. 16 12 - 01.5 - 2 06.9 - 00.5 + 02.1					
Oct. 17 12 - 00.2 - 2 08.6 + 00.8 + 05.6					
Oct. 18 12 + 01.2 - 2 09.7 + 02.2 + 06.9					
Oct. 19 10 + 01.6 - 2 12.0 + 02.6 + 10.0					

135

Date *Saturday, Oct 19-20, 1935 - M-L* Julian Day *2428095.5*

[illegible]

137

Date Oct 20-21, 1935 Sunday Y-L Julian Day 24280165

[illegible]

Heat on 5⁰⁰

g Time M.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
22 2	1 ^m 21 ^m W		1-	7.12	G8 5-5-5	Set focus at 26.2, one diaphragm out for comp
53 3	1 18 W	29 37	1	7.25	Ko 5-5-5	Aurora.
49 +	44 ^m W	44 13	1	6.12	Fo 5-5-5	Heating Relay apparently stuck. tested batteries gave 1 volt
20 1	1 ^h 25 ^m W	44 17	0 ^{Terrible}	7.28	B8 5-5-0	each. no current. Put on 2 new? batteries
16 2	1 10 W	43 21	0	7.33	B9 5-5-5	tested 1 $\frac{1}{2}$ v 20 amps on short
1 +	45 50		1	7.19	F8 5-5-	Put heat on again when temp had fallen to 19.0
						Clouded thick at 3 ⁰⁰
						10 M.T.A. 10 S.T.A. 10 M.T.O. 10 watch Oct. 21 12 + 3.9 - 2 16.0 + 4.3 + 8.7
						Oct. 22 12 + 4.2 - 2 18.0 + 5.2 + 21.0
						16 S. Clock stopped and reset.
						Oct. 23 12 + 5.1 - 2.3 + 6.1 + 25.7
						Wt added 0.7 gm.

1935 Hd L.

Date Wednesday Oct 23-24 Julian Day

[illegible]

141

Date Thursday, October 24-25, 1935 ^{H-L} Julian Day.

[illegible]

g Time M.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					Cloudy most of day; clearing. opened dome by hand
03	1 ²² W	(+ 38 43)	1	0.1 A0	none! Exp. 20 ³ } For Miss S.F. Patterson.
05	1 ²⁴ W		1		Exp 10 ⁵ }
19 2	1 ²⁸ W		1	15	10 ⁵ }
12	1 ³¹ W		1	15	20 ⁵ }
00 4	((1 ⁰⁷ W))	+ 44 09	1	7.6 G0	5-5-5
07 3	2 ³⁴ H	+ 59 28	1	7.8 Ma	5-5-5 Telescope E of pier Very faint ^{10th?} companion 33" Nov S of H.
29 1	1 ⁵⁵ W	+ 58 13	0-2	7.1 H0	5-5-5 Telescope E. Stage.
	0" W	+ 38 29	1-2	7.3 G5	5-5-5 Telescope W. Thick haze 11 ⁴⁵ - 12 ⁰⁵
3 3	1 ⁵⁷ W	+ 31 26	1-2	7.1 F0	5-5-5 Stage - solid twice during approach.
10 1		+ 31 23	2-3	5.9 B7	5-5 Thick haze 3 ⁵⁰ - 4 ²⁰ again 4 ³⁵ . cloud 1 + v.
					Stage over considerable parts of obj from 11 ⁰⁰ - 4 ³⁰
					Arable with RA clamp not unclamping. Fixed (from by orienting & tightening contact disc.
					Oct. 25. 12 +06.0 +02.3 +07.0 +39.1

Date Friday, Oct 25-26, 1935 ^{M-L} Julian Day

[illegible]

g Time M.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
58 3	0 41W	13 40	1	7.37 B8 5-5-5	Opened by hand. High wind image jumpy. fairly hazy with a few light clouds. double - set on bright and preceding component.
58 4	0 07W	43 02	2	7.64 A0 5-5-5	
40 1	0 05E	43 23	2	7.40 A0 5-5-5	
13 2	0 39W	44 21	2	7.40 B9 5-5-5	
18 3	0 10E	31 45	2	7.7 A0 5-5-5	
29 4	0 09W	29 58	2	7.06 A0 5-5-5	
02 1	0 12W	44 55	3	6.24 A5 5-5-5	
27 2	0 00	15 13	3	6.07 A0 5-5-5	
50 3	0 37E	14 25	2	5.96 A2 5-5-5	
					Oct. 26 10 +06.2 +04.3 +07.2 +4+3
		</			

Date Sat Oct 26-27, 1935 Hd-L Julian Day

[illegible]

146

[illegible]

[illegible]

149

Date Monday, October 28-29, 1935 H-L Julian Day.

[illegible]

ing Time
S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

2 00 W

31 07

2-3

7.3

F0

5-5-5

clouds all day. Haze over region at start.
Star lost 8¹⁰ - 8⁵⁰. Haze the night. to go again 9-9³⁰

7.6

G5

5-5-

Solid from 10²⁰ on.

Closed up 11¹⁰

Monday night - Put on heat in coil around mirror

Tuesday morning - Put on heat in heaters above mirror

(mirror not in horizontal position, due to work being done on shutters.)

Oct. 29 12 +7.6 +12.5 + 8.6 -7.0

M.T. not changed
from 0.7 to 1.0.
Added 2.0 to S.T.
Clock

30 12 +7.9 +13.0 + 8.9 +1.0

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
152 ^m	17 56	0	6.99 F ₀ 5.5, 5	clouds and fog. Closed. 10.00 account of danger of fogging mirrors
				Oct. 31. 12
				CT. Δθ M.T.A. Δθ S.T.A. Δθ H.T.D. Δθ watch
				+8.0 +13.2 +9.0 +04.4

H - Stowell - L

Julian Day

[illegible]

Log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
3 35 1	2 00 W	+ 38 43	0	0.14	A0 15 ^s	Clouds and fog most of the day. Clearing in afternoon. E. Wind, fog & some haze. Outside of dome very wet.
14 32					15 ^s	<u>N.B.</u> Heat not on spectrographs. Unable to find
18 32	2 05 W				15	trouble. Started without, let start. <u>OK</u> loose plug
19 32					15	
20 32	0 24 W	+ 15 05	1	7.04	F5 5-5-4	New shipment of 1/2" 1" & 2" plates. Em. 6517D
21 32				7.52	K0 4-5-2	often lost in haze 7 ³⁵ .
22 32						Closed up. Completely fogged over, and danger of fogging.
23 32						Nov. 1 12 + 8.1 + 13.5 + 9.1 + 6.5

155

Date Nov 1-2 Fri 1935 Hd-6 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
441	HD 9709	01 30.0	46 ³⁶ 47	I-12	E40	010	10.0	9.42	10.42 3
442	"	"	"	"	Astra	"	10.0	10.43	11 15 4
443	HD 22418	03 31.3	30 48	"	"	"	10.2	12.19	1 .14 1
444	" 35238	05 18.2	31 08	"	"	"	10.1	2.20	3.00 2
445	" 44867	06 19.1	16 07	"	"	"	10.0	3.17	3.57 3
446	" 57728	07 17.4	15 33	"	"	"	10.1	4.00	4 40 4
447	" 60800	08 31.2	31 50	"	"	"	10.1	4.43	5.25 1
448	" 73080	08 31.3	28 39	"	"	"	10.1	5.28	6.09 2
448F ₁	Focus test			"	V. Pan	011	6.5"	Coll. 18 0	Focus 25 6
F ₂					"	"	"	15.0	" 26 4
F ₃					"	"	"	16 5"	26 0

Hour Angle S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
423	25 ^m E	46 47	0	7.00 B ₉	5,5,5	clearing from 9.00
57	8 ^m W	"	0 → 1	" "	2,3,2	clouds 11.20 - 12.00
14	6 ^m W	30 55	1	7.43 F ₅	2,3,2	Much cloud and haze. Thick 1.10
092	5 ^m W	31 11	1	7.37 K ₀	2,3,2	Is 443 right star?
573	2 ^m W	16 06	1	7.13 G ₅	2,3,2	
54	16 ^m W	15 28	1	7.49 G ₅	2,3,2	Developed 442 and 443 but found it
21	16 ^m W	31 45	1	7.58 B ₉	2,3,2	hard to judge subsequent exposures because of
1	2 ^m W	28 30	1	7.50 G ₅	2,3,2	varying transparency.
						Note P.A. clamp is again "inverted" i.e. is clamped
25	Holder reading of	Holder				when reading "500" on switch. Fixed Y, H.
260	"	9	1	Tilt unchanged 196		
264	"	4	3	Exp 3 ^s - 5 ^s two		Set focus back to 262 put 7 fillers in
268	"	9		fillers out		
260	"	4	4			
260	"	9				
						Nov. 2. 13
						Δθ M.T.A. Δθ S.T.A. Δθ S.T.O. Δθ watch
						+ 8.2 + 13.7 + 9.2 + 10.9

157

Date Saturday Nov 2-3, 1935 M- Julian Day 2428109.5

[illegible]

[illegible]

159

Date Monday November 4-5, 1935 Julian Day 19351104.5[illegible]

[illegible]

Date Wed Nov 6-7 ^{Ad, St, L} 1935 Julian Day

[illegible]

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS
10	16 ^m W	16 22	1	7.7	A ₀	3,2,3	
37	6 ^m W	17 56	1-2	6.9	F ₀	5-5-5	Bobs on clock chattering. Stopped & cleaned brakes.
15	14 ^m E	16 03	6	7.62	G ₅	3,2,3	clouds 9.20 —
							At 1.30 one of the differential gears (east one) connected with control clock jammed. monkey gear seized? Tried to take out monkey gear but hesitated to use too much force.
Focus	23.1		correct focus about				
"	23.6		23.5" tilt OK.				Clouds 3.00 no cloud 3.30
"	23.4			23.0			Screws from monkey gear are in centre drawer of desk.
							Clock bobs chattered once after cleaning brakes.
							Do not start clock in present condition
							Nov. 7. 12 +8.0 +14.6 +9.0 +12.8

163

H

Date Thursday, November 7-8, 1935 Julian Day

[illegible]

[illegible]

165

Date.

Tri. Nov. 8 1935

Y

Julian Day.

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS
					6	CT. Nov. 8 $\Delta \theta$ M.T.A. 12 $\Delta \theta$ S.T.A. +8.0 $\Delta \theta$ M.T.D. +14.4 $\Delta \theta$ watal +9.0 $\Delta \theta$ watal +11.4
						2 days. not 7.11.12. joined to 42 Exposure 30"
						Changed to I-12 camera
						Set tilt 19.6 to focus test
14	19.6	seeing	8	focus	26.20	exp times 12 sec and 6 sec
"	"	"	4	"	26.30	" 12 " 6
"	19.6	"	4	"	26.30	" 12 " 10
"	"	"	8	"	26.20	" 12 " 6 "
						Set focus slightly at 26.23 or 26.24
						set focus at 26.23

the tilt may
have
slide.

Date ^{Nov.} *Tuesday* 8-9 1935, M. Julian Day

[illegible]

[illegible]

169

Date Sat Nov 9-10 1935 Hd. L Julian Day 2454110.5

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Plate Holder
Sunday Morning Y.										
9 ⁴⁵ AM. Found mirror fogged put heat and blanket over										
weather very bad all week from Nov 9-16 - cleared about 5 Sund 16 th but										

5

Date ¹⁷⁻¹⁸ Nov ~~17~~ Sunday Y-L 1935 Julian Day.

[illegible]

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS
6 1	1 ^h 02 ^m W	29 57	0	4.40	K5	3-3-3	While sky was thick 8-10. clean brushes
25 2	42 ^m W	29 24	0	6.84	F5	3-2-	Thick - on clock motor, cleaned wipers on polar axis
3						10-15	adjusted R.A. Mercury relay. developed plates.
39 1	35 ^m W	31 19	2	7.16	K6	2-2-2	
06 2	45 ^m E	17 19	2	4.84	A5	3-3-3	For Nino P.
8 3		16 24	2	2.40	K8	12 ^S	
33 1		16 24	2	"	"	24 ^S	
21 2	9 ^m W	43 55	1	6.0	B9	2-2-2	
9 3	1 ^h 07 ^m W	43 53	1	7.16	B9	2-2-2	
2 1	42 ^m W	44 34	1-2	6.35	K5	2-2-2	
21 2	34 ^m W	16 19	2	6.79	A6	2-2-2	
20 1	3 ^h 1 ^m W	16 42	2	5.96	G5	2-2-2	
							Nov. 18 12 +9.9 +16.2 +10.9 -21.8
							Nov. 19 12 +10.2 +16.8 +11.2 -26.5
							Nov. 20 12 +9.8 +16.2 +10.8 -25.6

173

Date Wed Nov 20-21, 1935 Std-L Julian Day 2454110.5[illegible]

ing Time
E.S.T.

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS
00	7 ^m W	46 47	var. 0-2	7.00	B ₉	2, 2, 2	
135	34 ^m W	29 12	1	7.34	F ₆	2-2-2	
29	4 ^m E	15 13	1	6.77	F ₅	2, 2, 2	
02	30 ^m E	31 10	1	7.37	K ₀	2, 2, 1	Power off 1.10 - 2.00 no warning
77	0	15 15	2	6.47	A ₀	2, 2, 2	Increasing haze, clouds thick at 3.30 Hy switch blown in RA setting
							Nov. 21 12 +9.9 +16.3 +10.9 -23.0

Date Thursday Nov 21-22, 1935

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
481	H.D. 6210	00 58.1	+61 04	I-25	Astra II	(011) 010	Set +2.5	10 36	10 50	1
482	20 536	03 13.1	+61 38	"	"	"	+2.6	11 56	0 46	5
483	33618	05 06.4	+59 16	"	"	"	+2.2	0 51	2 11	3
484	47270	06 32.7	+44 06	"	"	"	+2.2	2 16	3 36	1
485	52708	06 57.2	+59 57	"	"	"	+0.5	3 45	5 25	2
486	76512	08 49.7	+58 36	"	"	"	+0.5	5 14	6 44	3
487	77692	08 59.0	+59 45	"	"	"	+0.5	6 17	6 57	1
Fri Nov 22, 1935 Y										
- 488	sky			I-25	Astra II	006		2 00 PM		3
- 489	"			"	Process	"		2 04 PM		1

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		0	6.4 F8 cup 2.4		clouds all day. Rain. short clear intervals with showers in early evening. High S-W + W winds; clearing. Star lost 10 ⁵⁰ closed up 11 ⁰⁰ . Solid clouds, fear of rain.
1 14 W	+61 48	1	6.6 B8	2-2-2	Clearing with W to NW winds.
0 45 W	+59 21	1	7.4 K0	2-2-2	
0 44 W	+44 06	1	7.5 K0	2-2-2	} Temp dropped to : 0° during 484. } Control re-set to : 0.5
1 41 W	+59 56	2	7.5 K0	2-2-2	
1 06 W	+58 30	1-2 var	7.0 A2	2-2-2	1935 α should be 08 ^h 52 ^m .4 ✓
1 21 W	+59 38	"	6.2 A0	2-2-2	
					Nov. 22. 12 + 11.0 + 17.4 + 12.0 + 18.0
					6 ^s Exp. 10 ^s to sky + 20 ^s with uv filter. 2 filters out.
					10 ^s Exp. 2 ^m + 2 ^m uv filter. 3 filters out

177

Date *Friday Nov 22-23 1935 M-L* Julian Day

[illegible]

ing Time
L.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
40	2 22 ^W	29 22	0-0	8.0 A0	3-2-3 Clouds started to come over from NW at 6.10. ^{Clear at 6.20. Clear at 7.05.}
072	0 55 ^E	44 29	0	7.43 B8	2-2 Snow crystals out of obj. sp. let in. Serial star since mirror seemed clear. Snow less thick. ^{Clear for mirror. Closed dome 9.15}
183	1 21 ^W	43 55	1	7.85 B9	2-2-2 opened up again 10.15
185	0 57 ^W	13 30	0	7.5 B9	2-2-2
271	0 55 ^W	29 44	0	6.50 B9	2-2-2 some cloud.
281	1 27 ^W	15 25	0	6.97 B8	2-2-2
283	2 06 ^W	16 16	0	7.13 B8	2-2-2
Nov. 23 10 + 11.1 + 17.4 + 12.1 - 10.4					

Date Sat Nov 23-24, 1935 Kel

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
497	HD 212075	22 16.6	13 ⁰ 52	I-25	Astron.	010	-4.0	5.40	6.55	1
498	221115	23 24.1	42 13	"	"	"	-4.0	6.59	7.18	2
499) incl.	HD 22418	03 31.3	30 48	"	"	"	-4.0	10.37	12.19	3
<u>500</u> !	355533	05 20.3	15 35	"	"	"	-4.0	12.23	2.04	4
501	50315	06 47.6	43 04	"	"	"	-4.0	2.13	4.10	1
502	82010	09 24.2	31 45	"	"	"	-4.2	4.18	6.02	2
503	97938	11 ^{10.8} 44.0	13 ⁰⁹ 56	"	"	"	-4.0	6.07	6.48	3
Sunday Nov 24										
504 F1	Focus 1st			I 25	E 40	011	-0.5	4 ¹⁰	Focus	

[illegible]

Date Sunday Nov 24-25/35 Y-L Julian Day

[illegible]

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
31	1	45° 02	2	1.4	4 th 8 ⁵	3 drop out changed focus to 23.7
34		"	"	"	"	
5	2	"	"	"	2 ⁵	"
7		"	"	"	2	"
37	3	1 29 W	46 55	3	7.52 K0 2-2-2	1 drop out
10		1 08 W	46 35	4	7.31 A ₂ 2-2-2	
		- Focus 23.7			10-15	" developed.
		4 22 ^m W	46 47	4	7.00 B ₉ 2-2	Sky thick too thick to see star at end.
						Found light frostings over mirror put heat
						on - and blanket - mirror open.
		Sun clear or partially				Nov. 25 12 + 12.8 + 20.1 + 13.8 + 07.1
		in - Wind high. could not				Nov. 26 12 + 13.0 + 19.3 + 14.0 + 08.3
		them the former. Decided not to work				Nov. 27 12 + 13.1 + 19.4 + 14.1 + 11.1
						Nov. 28 12 + 13.3 + 20.0 + 14.3 + 14.4
						Nov. 29 12 + 13.2 + 20.1 + 14.2 + 18.1
						Nov. 30 10 + 13.7 + 21.0 + 14.7 + 22.0

183

H-L

Date Monday, December 2-3, 1935 Julian Day _____[illegible]

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
	From 23.6	<u>OK</u>			25 ³ -18 ³	Dec. 2 12 + 14.1 + 21.9 + 15.1 + 28.9
57.2	1 43 W	+ 46 34	0	7.04	F5 2-2-2	No condensation in immersion image at start ^{Haze}
04	1.31 W	31 25	0	6.74	F0 2-2-2	Scattered clouds at 7.42 Thick at 8.00 Plates developed
						① R.A. guiding motion + ② RA setting motions dead. ① fixed by (seems) tightening contacts at magnets. ② lug on clutch had become unseparated, probably due to very heavy driving. Xeroxene app. 1 to free differential; tightening spring removed. Provisionally new lug made by he and secured directly, without slip ring, to inside of brass gear. Works but chatter.
						Dec. 3 12 + 14.7 + 23.0 + 15.7 + 31.2

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Remarks
09 3	1 04 W	43 48	0-0	7.25 Aop	2-2-2 cloudy early - cleared later with very high wind from NE some deposit of very fine snow on deck considerable snow haze near moon at 10:30, also beginnings of moon dogs
49 +	a 52 W	18 03	0-0	6.74 A0	2-2-2 Dec. clamp stuck with cold. Had to help clamp over by hand.
51	o 52 W	17 57	0-0	7.33 A0	2-2-2 Dec. clamp got worse. - spent 30 min trying to get telescope unclamped after Plate 513. Could find no more stars at this dec. Closed down by hand at 3.45. Temp in dome + 5°F. Put heat on motor
Dec. 4 12 + 15.0 + 23.0 + 16.0 + 37.4					
Dec. 5 12 + 15.9 + 24.0 + 16.9 + 40.0					

Could not even touch it by hand.

H-L

Date Thursday, December 5-6, 1935 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
514	HD 34762	5 14.7	+27 51	I-25	Astra II	011	Set :-5.5	0 25	1 45
515	38 091	5 38.1	+56 05	"	"	"	:-6.0	1 53	3 05
516	60 335	7 28.9	+43 15	"	"	"	-6.0	3 12	4 12
517	75 523	8 45.4	+45 41	"	"	"	-6.2	4 16	5 26
518	93 033	10 39.5	+46 05	"	"	"	-6.0	5 39	6 52

g Time
S.T.

	Hour Angle		Declination	Seeing	Ptg. Mag.		REMARKS
	End						
							Cloudy all day + evening. Clearing at mid night. afternoon + evening overhauled Dec. clamp. Small was with projecting screws eccentric. Replaced. Cleaned out (SAE 20) reduction gearing + lubricated with a little machine oil K Binary for Stillwell
45	1	07 W	+ 27 53	0	6.28	B9 2-2-2	Telescope E of Pier
05	2	03 W	+ 56 06	0	6.12	A2 2-2-2	" " " " Good light strong; faint
1	1	20 W	+ 43 10	0	6.58	F0 2-2-2	" " " " Home temperature +9°F
1	1	28 W	+ 45 35	0	7.08	K0 2-2-2	
0	0	50 W	+ 45 54	0-1	6.82	B8 2-2-2	
							Dec. 6 12 +16.0 +24.1 +17.0 +40.6

M-L

Friday Dec 6-7, 1935

Julian Day

[illegible]

g Time S.T.	Hour Angle End		Declination	Seeing	Ptg. Mag.		REMARKS
12		15	38	2	6.71	A5 2-2-2	Cloudy all afternoon. Began to clear at 6:00. Heavy haze, image small and stationary. Lined dome partly by hand.
59	0 32 W	61	21	2	6.27	B9 2-2-2	haze very heavy.
09	0 41 W	59	47	2	7.34	B3 2-2-2	set on upper left of two stars as seen in 74 inch with telescope. W.
28	0 13 W	62	36	2	6.44	A2 2-2-2	Clouds coming up thick from NE at 12:15. Sky thick -
							closed dome 12:50
							left all heat on telescope
							Dec. 7 10 +16.8 + 25.3 + 17.8 + 48.5
							Dec. 9 12 +17.0 + 26.1 + 18.0 -24.9 Watch stopped
							Dec. 10 12 +17.0 + 26.7 + 18.0 -25.1
							Dec. 11 12 +16.9 + 26.9 + 17.9 -27.1
							Dec. 12 12 +17.8 + 28.3 + 18.8 -24.5
							Dec. 13 12 +17.9 + 31.2 + 18.9 -19.8
							Dec. 14 10 +18.0 + 29.2 + 19.0 -19.1
							Dec. 16 12 +18.2 + 30.2 + 19.2 -3.2 Watch stopped
							Dec. 17 12 +18.3 + 30.5 + 19.3 -2.5

Date Tues Dec 17-18 1935 M-6 Julian Day

[illegible]

192

Showered Saturn with visitors' approval
at 4.30. Very poor, could hardly
distinguish Planet.

Hour Angle End	Declination	Seeing	Ptg. Mag.
2 ^m W	44 52		6.5 A ₀ 2.2

Waning at 6.10. thickened up. star faded
at 6.55

Closed up 7.30

Dec. 18	13	+18.7	+29.1	+19.7	-
Dec. 19	12	+18.8	+31.0	+19.8	-
Dec. 20	12	+18.9	+31.2	+19.9	+4.4
Dec. 21	10	+18.9	+31.4	+19.9	

0.2 added to M.T.A.

Clouds early, no visitors.
Clearing 11.30-12, opened
12.30. Clouds 12.45; closed 1.15
Clutch in Dec quick motion seems
to strike, i.e. telescope not
movable in dec by hand.
Shutters fair - opened partly by
hand

193

Date Sunday Dec 22-23 1935 Julian Day

[illegible]

194

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp	REMARKS						
						5-7			$\Delta\theta$				
							C. Time	M. T. A	S. T. A	M. T. D	Watch		
							Dec. 23	12	+19.0	+31.0	+30.0	+12.4	

1952

1935

Date Monday December 23-24 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.
524	H.D. 10086	01 33.5	+45 23	I-25	M. Astin	010	^{set} :-10.5	7 43	9 58
525	23838	08 43.1	+44 40	"	"	"	-10.7	10 03	10 53
526	34762	05 14.7	+27 51	"	"	"	-10.8	10 58	11 58
527	44033	06 14.4	+14 41	"	"	"	-11.0	12 03	1 25
528	63630	07 44.3	+46 12	"	"	"	-10.8	1 32	2 22
529	75523	08 45.4	+45 41	"	"	"	-10.8	2 42	4 04
530	99946	11 24.8	+30 32	"	"	"	* -11.0	4 11	5 41
531	100972	11 32.2	+45 17	"	"	"		5 46	6 52
532	102870	11 45.5	+02 20						

196

Hour Angle S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
		+ 45 34	0	7.44 G5 2-2-2	clouds all day; thinning out after dark. Haze. Very thick at first. mirror poor?
0 57 W	+ 44 46	1	6.35 G0 2-2-2	Seeing variable, improving.	
0 30 W	+ 27 52	1-2	6.28 B9 2-2-2	Beginning for 1st well	
0 58 W	+ 14 41	1-2	7.20 K5 2-2-2		
0 35 W	+ 46 06	2	6.61 A3 2-2-2	Haze over region 1 ⁵² 2 ⁰⁵	
1 07 W	+ 46 33	2	7.08 K0 2-2-2	Haze	
0 05 W	+ 30 17	2-0-2	7.06 F0 2-2-2	Strong NW wind; seeing blowing out; improving again	
1 13 W	+ 45 02	2	6.56 B9 2-2-	Thick haze 6 ²⁰ on (check position) 8 4'	
			4.30 F8	β Virginis	Panicon CL not
Dec 24					
Inspected mirror. Looks pretty fair much better than I feared.					
There is some trouble with R.A. guiding motor not staying in gear. expect it is cold only. do not do anything with it.					
Wiley.					

Date Tuesday, Dec 24-25 1935 M-L Julian Day

Fixed ~~the~~ R. 9. Setting motion by tightening down the whole base plate of small gear, ^(which was very loose) Further eased situation by the omnipresent kerseene. Working O.K. for now. Stays in gear. F. S. H.

ing Time
U.S.T.

the
is in
stage

1935

Hae L

Date Thurs Dec 26 - 27 Julian Day 244

[illegible]

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Combs	REMARKS
7					5-7	
35	1.04W	46.47	0	7.00	Bg 2,2.	Patches of haze. thick at 8.30 started to
						snow at 8.35. closed 12.00

Date Fri Dec 27-28 Hd L 1935 Julian Day

[illegible]

202

[illegible]

Date Saturday, Dec 28-29, 1935 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.
546	HD 34762	5 14.7	27 51	I-25	Ast-ra	D11	-15.1	7 58	10 44
547	" 47255	06 32.6	31 51	"	"	"	-16.3	11 52	1 26
548	60180	7 28.2	28 38	-	-	-	-16.8	1 33	3 17
549	94118	10 46.7	46 20	"	"	"	-17.5	3 30	4 30
550	100808	11 31.0	28 20	-	-	-	-18.0	4 35	4 57
551	97879	11 10.5	60 28	-	-	-	-17.9	5 05	5 58
552	112501	12 52.1	46 ⁰⁶ / ₄₇	-	-	-	-18.0	5 59	7 01

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
10	victor's eyepiece.				found sidereal watch going but 1 h 4.5 min no apparent means of setting it.
	looked at	B Andromeda	- no good	with spectrograph	30 visitors.
		M 76	- only fair		Slowed 2 Arctics - good
		NGC 663	- fair (30 stars in field)		Uranus - 2 moons
		M 33	- no good		
1	37°W	27 53	0	6.28 B9 2-2-2	clock going too fast - star drifting visible.
2	101°W	31 49	3	7.31 A0 2-2-2	right to left. Stopped down and took off one driving weight. Seemed to fix it.
3	157°W	28 32	2	7.7 B9 2-2-2	
4	005°E	46 07	3	7.13 A2 2-2-2	
5	025°E	28 08	3	5.90 A3 2-2-2	
6	053°W	60 16	2	6.74 A3 2-2-2	
7	018°W	43 52	3	6.95 A0 2-2-2	
					spectrograph temperature regulator seems weak. put all heat on mirror

205

1935

Date Sunday Dec 20-30 Y-L Julian Day

[illegible]

202

[illegible]

201

1935

Date

Monday, Dec 30-31 14-6

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 En
557	H.D. 217906 β Peg	22 58.9	+27 32	I-25	Astra II	(010) 011	-14.0	5 30	5 40	1	1
558	H.D. 1606	00 15.2	+30 23	"	"	"	-14.0	5 44	6 19	2	0
559	8442	01 18.5	+17 17	"	"	"	-14.1	6 25	7 55	3	0.5
560	21242	03 20.5	+28 23	"	"	"	-14.0	8 01	10 01	4	1.8
561	21242	03 20.5	+28 23	"	"	"	-14.2	10 02	10 42	1	1.3
562	34762	05 14.7	+27 51	"	"	"	-14.2	10 45	11 15	2	1.8
563	44033	06 14.4	+14 41	"	"	"	-14.3	11 13	11 58	3	1.5
564	47270	06 32.7	+44 06	"	"	"	-14.2	00 04	10 54	4	1.3
565	56200	07 11.0	+16 18	"	"	"	-14.3	00 58	1 43	1	0.54
566	60355	07 28.9	+43 15	"	"	"	-14.1	2 00	2 30	2	1.16
567	76238	08 49.8	+46 09	"	"	"	-14.1	2 23	3 42	2	1.9
568	79554	09 09.7	+15 22	"	"	"	-14.2	3 43	4 28	4	1.2
569	93354	11 13.7	+14 43	"	"	"	-14.2	4 21	5 54	1	1.1
570	15022	12 06.9	+21 06	"	"	"	-14.2	5 59	6 42	2	1.1

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
40 1	0 56 W	+27 43	1	3.96	Ma 3-3	For Miss Paterson
2 2	0 18 W	+30 35	1	5.77	B8 2-2-2	Seeing variable.
55 3	0 52 W	+17 29	1-2-3	7.09	F0 2-2-2	Improving seeing
61 4	0 55 W	+28 29	4-5	7.29	G5 2-2-2	(for emission H+K)
42 1	1 36 W	+28 29	5	7.29	G5 2-2-2	Developed 558-560
5 2	0 15 W	+27 52	5-6	6.28	B9 2-2-2	Binary for Mr. St. John.
7 3	0 11 E	+14 42	5-6	7.20	K5 2-2-2	
14 4	0 26 W	-44 03	6	7.51	K0 2-2-2	
16 5	0 54 W	+16 14	6	7.25	F5 2-2-2	
20 7	1 16 W	+43 10	6	6.58	F0 2-2-2	
21 8	1 17 W	+46 01	5-4	7.21	F0 2-2-2	Sub st. at wind; seeing becoming unstable.
22 9	1 20 W	+15 13	4-3	6.57	K0 2-2-2	Shine over horizon.
23 10	1 21 W	+14 30	3	7.21	G0 2-2-2	Shade. (Set on cap) low but fine for other two. is double or more is heavily distorted.
24 11	1 27 W	+52 52		6.74	F8 2-	Shade falling in w/ d. Discard
25 12	1 28 W	+52 52				Clouded up because boat crystals were reflecting over upper parts of tube. which changes.

ig Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
05 1	0 38 W	47 06	3	7.09 88 2-2-2	cloudy at sunset. cleared later but heavy haze near horizon. Dec. 31 12 +22.0 +31.5 +30.0 +30.7 hazed up very thick from 7:30 to 8:00. closed dome at 8:30. put all heat on mirror. Jan. 2 12 +23.0 +33.0 +02.0 +36.5

Date. Wed Jan 1-2, 1936 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.
571	HD 27561	04 15.9	14 11	I-25	Catena	011	-4.8	9.25	11 09 2
572	B0383	07 29.1	28 51	"	"	"		12 09	12 35 3
Sat Jan 4-5, 1936 Hol									

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
09-2 W 1 ^h 16	14 15	7	6.99 F ₀ 2,2,2	Haze increasing - nearly thick at 11.00
55-3 E 0 31	25 46	1	7.10 A ₃ 2,2,2	Heavy, thick at 12.30 Closed 1.30 Left all heat on mirror.
Jan. 3 12 +23.0 +33.3 +01.0 +39.3				
Cloudy. 70 visitors. Lectured and showed telescope.				
Jan. 6 12 +23.1 +34.0 +22.1 +02.2				
Jan. 7 12 +23.3 +34.7 +22.3 +04.1				
Jan. 8 12 +24.0 +35.8 +22.0 +07.1				
Jan. 9 12 +24.0 +36.1 +22.0 +08.9				
Jan. 10 12 +23.9 +36.5 +22.9 +11.2				
Jan. 11 10 +23.8 +36.7 +22.8 +12.0				
Jan. 13 12 +23.1 +37.6 +22.1 +11.6				

Added
0.3 to M.T.Watch
stopped

g Time
S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

cloudy with snowflurries all day; clearing with NW gales at sunset. opened up about
6²² clouds about 6³⁰ clouds + too much wind. completely cloudy

set from about 23 62

Jan. 14, 12 +23.0 + 38.1 +22.0 +6.7

215

Date Febr Jan 14-15, 1936 M-L

Julian Day

[illegible]

g Time
S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Com	REMARKS
07 2	00.04E	15 00	0	approx 4.3 G5	2-2	
24 4	00.12W	"	"	" "	2-2	no heat on in photograph.
3	2 21W	30 08	0-0	7.41 A0	2-2-2	Harry at 650-
1	0 05W	40 02	1	5.4 G1	2-2-2	
						Mag faintest - outside of field at 23.62 (found 0.1 K ₁)
1	0 03W	14 23	0	5.75 A0	2-2-2	Harry at 650- Harry at 650- Harry at 650-
2	0 08W	27 53	1	6.28 B9	2-2-2	Harry at 650- Harry at 650- Harry at 650-
1	1 19W	16 16	3	6.66 M6	2-1-	Harry at 650- Harry at 650- Harry at 650-
1	1 13W	13 49	3	7.14 A2	2-2	Harry at 650- Harry at 650- Harry at 650-
						Quite dark at 2.12
						Closest up 2.30
						Jan. 15 12 + 23.0 + 38.8 + 22.0 + 12.2

Date Wed Jan 15-16, 1936 Hol Julian Day _____

[illegible]

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
5	W 1 ^m	46 19	0	5.76	G ₀ 2,2,2	Clearing 12.15 → Opened 1.00-1.15.
5	W 25 ^m	1 22	0	6.34	A ₂ 2,2,2	Strong N wind. Clouds & snowflurries, closed 4.00.
						Jan. 16 12 +22.9 +39.2 +20.9? +15.2

H-524-L

Date Thursday January 16-17, 1936 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 End
583	HD 1632	00 15.5	+32 21	I-25	Astra II	010	Set -6.2	5 50	5 05	1
584	" 34762	05 14.7	27 51	"	"	"	-6.7	8 19	9 19	2
585	28271	04 22.5	+30 09	"	"	"	-6.7	9 25	10 26	4
586	48737	06 39.7	+13 00	"	"	"	-6.9	10 31	10 57	3
587	48737	"	"	"	"	"	-6.9	10 38	10 50	1
588	46031	06 25.9	+15 58	"	"	"	-7.2	10 54	11 24	5
589	34762	05 14.7	+27 51	"	"	"	-6.8	00 29	1 59	3
590	80654	09 15.9	+13 33	"	"	"	-6.7	2 06	4 16	1
591	102434	11 43.9	+00 14	"	"	"	-7.5!	4 01 ↓	5 32	1
592	102434	11 43.9	-01 26	"	"	"				

Date Sat Jan 18-19/36 140-(7)^L Julian Day

Sunday Jan 19-20

822

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 ^h 32 45	0	7.17 F ₈	2, 2, 2	Jan. 18 10 +23.0 +40.3 +22.0 +24.8
W 1 ^h 27 53	0	6.28 B ₉	2, 2, 2	Late start up. (a) snow-bound (b) cleaned
E 2 ^h 16 38	0	3.71 A ₂	3, 3,	considerable snow from upper end of tube
E 3 ^h 25 11	0	2.21 K ₀	6	(c) opened by hand (d) etc
			6	Y fixed R.A. setting, 4 visitors,
W 4 ^h 46 03	0	6.52 K ₀	2, 2, 2	showed telescope in operation,
				590 for Mr Stillwell
				clouds 10.45
				595 for Mrs Peterson
				Thickening from 12.30
				Cloud 3.30
but I did not come up. Road blocked high wind & drifting snow.				
(clear in morning)				
RKE				

Date.

Julian Day.

[illegible]

224

ing Time
S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

Jan. 20	12	+ 23.6	+ 41.2	+ 21.6	+ 30.7
Jan. 21	12	+ 23.8	+ 41.8	+ 21.8	+ 31.2
Jan. 22	12	+ 23.8	+ 42.9	+ 20.8	+ 36.6
Jan. 23	12	+ 23.9	+ 42.0	+ 21.9	+ 39.5

H-L

Julian Day

[illegible]

rate

227

Date Monday January 27-28/36 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
600	HD 34762	05 14.7	+27 51	I-25	Astrall	(011) 010	Set :-14.5	6 50	8 50	1
601	35984	05 23.4	+29 07	"	"	"	-14.7	8 52	10 52	1
602	4034	07 28.3	+28 55	"	"	"	-15.0	10 34	1 35	2
603	75771	10 58.1	-20 13	"	"	"	-15.0	1 34	3 14	2
604	H-0834	12 39.8	44 37	"	"	"	"			1

228

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				Partly cloudy most of day; clearing at sunset, but haze + fine
0 20 E	+ 27 53	0	6.28 B9	2-2-2 snow from dark till about 6 ³⁰ . Haze
1 34 W	+ 29 08	0	6.66 F5	2-2-2
2 03 W	+ 28 50	0	7.52 G5	2-2-2 light haze 11 ³⁰ - 12
0 22 W	- 00 24	1-0	6.21 A3	2-2-2 thick haze 2 ⁰² - 2 ¹⁵ to 11 ¹⁵ . Haze till 2 ³⁰ ; in 2
			6.76 F5	star clouded over during setting. Haze
				closed up 4 ³⁰

ag Time
S.T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

0 24 W

+1 57

0

6.71

B9

2-2-2

Sidereal watch refused to run for some time
made from west at 7:50 30 sec. at a ft time.

27 52

1

6.28

B9

2-2

now compute to Kijini - clouds thicker

which at 8:45⁺ remained thick

closed up at 12:00

sky cleared shortly after closing but

clouded in heavy again very soon.

	C.T.	$\Delta \theta$ M.T.A	$\Delta \theta$ S.T.A.	$+\Delta \theta$ M.T.O.	Sidereal watch	
Jan. 29	12	+26.3	+42.9	+23.3	not running.	
	15	+26.3	+42.9		+08.9	
	30	12	+26.9	+43.3	+23.9	+12.3

231

Date Thursday, January 30-31/36H

Julian Day

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
60 22	1	2.01	Bop	6	setting 2.5
-	-	-	-	6	setting 7.5
-	-	-	-	6	setting 2.5
-	-	-	-	6	setting 7.5
-	-	-	-	6	setting 2.5
-	-	-	-	8	setting 7.5
-	-	-	-	3	setting 2.5
/ 48W	-	-	-	6	setting 7.5
671 B9					sec. setting at end of run. To I want say about 2 hrs. left and morning around 6.45 about a little thing I still very busy on star map you can see it look away and from west image very far away but left side strong sound and thinking about home work.
0 50W	45 37	1	7.12	A2	2-2-2
1 17WV	15 38	1	6.49	A3	2-2-2

Date Sat Feb 1-2/36 Ad Julian Day 59

[illegible]

236

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1.5	W 150 ^{h m}				10, 10	Feb. 1
						CT. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch
						10 +27.8 +43.9 +25.8 +20.3
						Visitors coming (a foot) Put
						on eye piece Set on moon.
						About 75 visitors
						Clouds and snow - closed 9.30

237

Date Feb 2² 3³ Y-L 1936 Julian Day

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
1 ⁵⁰ W	60 22	1	2.07	Rp 4 ^s	3 ^d out
Q. 30 W	45 54	0	623	A5 2 2-2	2 d. out. - a faint star in W. of FK
	27 54	0	628	B9 2-2	Pm came out of P.A. clamp when Hazed over the sky
					C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch Feb. 3 12 +29.0 +44.2 +27.0 +30.2
					4 12 +29.1 +45.2 +27.1 +24.8
					5 12 +29.3 +45.2 +27.3 +38.0

	C.T.	Δ 0 M.T.A.	Δ 0 S.T.A.	Δ 0 M.T.D.	Δ 0 wetal
Feb. 3	12	+29.0	+44.2	+27.0	+30.2
4	12	+29.1	+45.2	+27.1	+24.8
5	12	+29.3	+45.2	+27.3	+38.0

Date Wed Feb 5-6, 1936 Ad-L Julian Day[illegible]

240

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
77	0.54 ^m W	15 14	0	6.47	A ₀ 2,2,2	at 6.30 could not open shutter for moonlight
78	W 21 ^m	28 38	0.5 → 1	6.41	A ₂ 2,2,2	at 8.00 Tried to turn dome - failed.
79	W 10 ^m	12 57	1 →	6.73	A ₀ 2,2,2	slipped both ways - apparently ice
80	E 16 ^m	48 36	3	6.72	K ₀ 2,2,2	ice wheels - finally gave way.
81	W 53 ^m	28 57	2	7.11	A ₀ 2,2,2	Turned shutter to E and tried with difficulty by hand. Wind going down but still strong. Stop work & on for 615 (apparently has been ^{since last time} on and I turned it off.) With improving seeing repositioned after 620 Very windy again 4.00 →
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch Feb. 6 12 +29.1 +44.3 +27.1 +43.8

Date Thursday, February 6-7, 1936H-L Julian Day.[illegible]

Clear much of day. Clouded over 5⁵⁵ while setting a
 first star. closed shutter 6²⁰. Thick.

P. 242

ag Time
S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

~~6.28 57~~

Closed up 12¹⁰

	R.T.	$\Delta\theta$ M.T.A.	$\Delta\theta$ S.T.A.	$\Delta\theta$ M.T.D.	$\Delta\theta$ watal
Feb 7	12	+29.8	+44.6	+27.8	+40.6

243

Date Aug 7-8, 1926 Ad L Julian Day

[illegible]

244

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
37 3	20 15	23 41	1	6.09	B ₉	2,2,2	think I have right star. Set on N.W. star of the pair - somewhat the fainter. Checked roughly with B.D. chart.
0	1.34 W	27 52	1-2	6.28	B ₉	2,2,2	For Mr. Stillwell
26	1.54 W	29 33	3	7.55	A ₅	2,2,2	clouds 12.20
13	1.54 W	12 56	3	6.73	A ₀	2,2,2	hazy and clouds
0	2.2 m	21 25	4	6.77	A ₂	2,2,2	developed 627
1	2.2 W	11 13	3	6.59	A ₀	2,2,2	
2	2.2 E	42 45		5.56	B ₈	2,2,2	
							RA setting beginning to rain again.
							Low Temp -4°F
							CT ΔΘ M.T.A. ΔΘ S.T.A. ΔΘ H.T.D. ΔΘ watch
Feb.	8	12	+30.1	+44.4	+27.1	+57.6	
Feb.	10	12	+31.5	+45.2	+29.5	-06.4	Rest
Feb.	11	12	+31.8	+45.3	+26.8	-01.3	
Feb.	12	12	+32.1	+45.4	+26.1	+01.4	

Date Wed Feb 12-13/36 Hd St 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.	
630	H D 34762	05 14.7	27 51	I 25"	Astra	.010	- ^{set} 10.5	8.03	9.48	1
631	" 60204	07 28.3	28 55	"	"	"	-10.0	10.00	12.05	2
632	" 91636	10 29.8	+9 10	"	"	"	-10.5	12.16	1.03	3
633	97938	11 10.8	13 09	"	"	"	-11.5	1.12	2.10	4
634	" H D 854	12 25.7	44 39	"	"	"				

Relay for temp. control. Tubes

	O.T.	$\Delta \theta$ M.T.A	$\Delta \theta$ S.T.A.	$\Delta \theta$ M.T.D.	$\Delta \theta$ watch (reset)
Feb. 13		+33.0	+45.8	+27.0	-28.2 had stopped
14		+33.1	+45.7	+27.1	-22.3

Date Sat Feb 15-16, 1936 Hd - L Julian Day 193

[illegible]

248

ing Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS																		
18 W 1 ^h 23	28° 53	0	6.28 B ₉	2,2,2	Late starting - trouble with control clock																		
15 W 1 22	15° 15	0	6.47 A ₀	2,2,2	2 visitors 9:00, showed telescope Arriving at 11.00 Thru at 11.15 Closed 12.00.																		
					Note. Switch on side of pendulum clock needs attention.																		
					<table> <tr> <td></td><td>C.T.</td><td>Δθ M.T.A.</td><td>Δθ S.T.A.</td><td>Δθ M.T.D.</td><td>Δθ watch</td></tr> <tr> <td>Feb. 17</td><td>12</td><td>+34.8</td><td>+46.6</td><td>+28.8</td><td>-04.2</td></tr> <tr> <td>Feb. 18</td><td>12</td><td>+34.9</td><td>+46.8</td><td>+26.9</td><td>-01.6</td></tr> </table>		C.T.	Δθ M.T.A.	Δθ S.T.A.	Δθ M.T.D.	Δθ watch	Feb. 17	12	+34.8	+46.6	+28.8	-04.2	Feb. 18	12	+34.9	+46.8	+26.9	-01.6
	C.T.	Δθ M.T.A.	Δθ S.T.A.	Δθ M.T.D.	Δθ watch																		
Feb. 17	12	+34.8	+46.6	+28.8	-04.2																		
Feb. 18	12	+34.9	+46.8	+26.9	-01.6																		

much hanging

Date _____

Julian Day

11.25
cent / re

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS												
23E	+28 10	-20	2.21 KO	3-3	Strong west wind. - Hand by hand at 11.00 34.62 - at which about 10.00 guiding - replace field. - 10.00 10.00 - looking very well (windy) but developed. - gold -												
0 07E	+28 58	57	57	2-2-2	10.00 - 10.15 - 10.30 - 10.45 - 10.55 - thick fog at 11.45 - 11.55 - began up at 12.30 to 12.50 thick fog at 12.50 control clock (5 times in last hour, probably due to cold dread up 1.00 a.m. temp in house -4° F												
					<table border="1"> <thead> <tr> <th>Feb. 19</th><th>CT.</th><th>$\Delta \theta$ M.T.A.</th><th>$\Delta \theta$ S.T.A.</th><th>$\Delta \theta$ M.T.D.</th><th>$\Delta \theta$ watch</th></tr> </thead> <tbody> <tr> <td>12</td><td></td><td>+35.2</td><td>+46.3</td><td>27.2</td><td>+04.3</td></tr> </tbody> </table>	Feb. 19	CT.	$\Delta \theta$ M.T.A.	$\Delta \theta$ S.T.A.	$\Delta \theta$ M.T.D.	$\Delta \theta$ watch	12		+35.2	+46.3	27.2	+04.3
Feb. 19	CT.	$\Delta \theta$ M.T.A.	$\Delta \theta$ S.T.A.	$\Delta \theta$ M.T.D.	$\Delta \theta$ watch												
12		+35.2	+46.3	27.2	+04.3												

251

Date Wed July 19-20/36 Hc - L Julian Day 192

[illegible]

ing Time
S.T.

	C.T.	$\Delta \theta$ M.T.A.	$\Delta \theta$ S.T.A.	$\Delta \theta$ M.T.D.	$\Delta \theta$ watch
Feb. 20	12	+36.1	+46.5	+29.1	+16.3

Date Thursday, February 20-21/36H-L Julian Day 171[illegible]

First time lower at 44 - rather

C.T.	$\Delta\theta$ M.T.A.	$\Delta\theta$ S.T.A.	$\Delta\theta$ M.T.D.	$\Delta\theta$ water
12	+37.1	+46.7	+31.1	+22.7

255

Date Fri Feb 21-22/26 Ad-L

Julian Day.

[illegible]

256

[illegible]

257

Date Lat: Feb 22-23/36 M-L Julian Day

[illegible]

ng Time
S.T.

[illegible]

Date Tuesday Feb 25-26/36M Julian Day

[illegible]

ing Time
S.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
						Could see stars all evening but too thick to open. Closed at midnight. Opened at 12 45. Looked over just as telescope was set on star. Found mirror half dulled even in spite of all heat being on. Clock on pier not running very well. Closed again slightly.
8 58		1	5.7	A0	2-	Image very faint Closed again. Finally gave right up as a bad job. Closed dome 2.10. Put all heat on mirror. Mirror practically clear when closed.

Date. Tues, Feb 28-29/36 M

Julian Day

[illegible]

262

ing Time
S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

Comp.

REMARKS

C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch

Feb. 27 12 +41.0 +48.0 +35.0 +50.7

Feb. 28 12 +41.8 +48.4 +35.8 -02.1

Advanced!

27 53

~~0 6.28 89.2~~

clouds coming up fast. hard to see. may be
clouded thick 700.

thick clouded down 9.30.

263

Date Sat 7 Feb - 29 Mar 1936 Julian Day 44

[illegible]

264

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2	W 1.33	28 15	0	6.91	A ₂ 2,2,2	
4		46 03	0	6.52	K ₀ 2,2,2	
2	E 32 ^m	8 57	0	5.7	A ₀ 2,2,2	
2	W 42	+1 20	1	6.34	A ₂ 2,2,2	Bazzy
4	W 24	-1 14	1	6.64	G ₀ 2,2,2	"
2	W 1.36	45 35	0	6.72	K ₀ 2,2,2	
2	W 57 ^m	46 23	0	6.18	F ₅ 2,2,2	
2	W 32 ^m	42 44	0	5.56	B ₈ 2,2,2	
						Temp +24 → +8 °F
						Shutter motor gave out in closing - fuse? Closed by hand.

Date Mar 1-2/36 Sunday - Y-L Julian Day 193

[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
216 20				15-10	Focus 23.7 OK
1 24W	27 54	0	6.28 A ₀	2-2-2	Condensation started 6 ⁴⁵ delayed by clock 1
		1	" "	2-2-2	opened dome 4 ¹¹ brushed off mirror
1 14W	16 42	1	6.90 G5	2-2-2	
2 06W	8 57		57 A ₀	2-2-2	clouds. closed 1 ⁴⁰
					C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Δθ watch
					March 2 12 +43.9 +49.0 +24.9 +18.0
					March 3 12 +44.1 +49.0 +25.1 +21.8
					March 4 12 +44.2 +49.1 +25.2 +25.9

	C.T.	$\Delta \theta$ M.T.A.	$\Delta \theta$ S.T.A	$\Delta \theta$ M.T.D.	$\Delta \theta$ watch
March 2	12	+43.9	+49.0	+24.9	+18.0
March 3	12	+44.1	+49.0	+25.1	+21.8
March 4	12	+44.2	+49.1	+25.2	+25.9

Date Mar 4-5 Wed /36 Hd-6 Julian Day.

[illegible]

	C.T.	$\Delta O M.T.A.$	$\Delta \theta S.T.A.$	$\Delta \theta M.T.D.$	$\Delta \theta$ watch
March 5	12	+44.9	+49.5	+25.9	+26.7

269

H-2.

Date _____

Thursday, March, 5-6, 1936

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
684	HD 63630	07 44.8	+46 12	I-25	Ektar II	010	-3.7 -4.3	9 25	
684	D 91636	10 29.8	+9 10	"	"	"	-3.7	10 55	0 15
685	100972	11 32.2	+45 17	"	"	"	-3.7	0 19	2 19
686	119313	13 51.5	+57 42	"	"	"	-4.3!	2 24	2 11
687	1343 ²³ 25	15 04.1	+13 27	"	"	"	-4.2	3 44	5 19
688	164429	17 56.0	+45 29	"	"	"	-3.9	5 20	6 10

270

Snow flurries in early evening; strong NW wind.

Hour Angle S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		+42 15	0	6.61	A3 2-	Thick haze & very strong winds 9 ⁵ hour? Close 1 ⁰⁰
5	0 22 ✓	+ 8 58	0	5.7	A0 2-2-2	for M. Light haze at times.
1	1 22 ✓	+45 03	0-1	6.56	B9 2-2-2	Light haze at times 10 ⁰⁰ to 10 ¹⁵ getting a little better.
0	39W	57 32	1	6.23	A2 2-2-2	Light clouds part 15 minutes.
0	44W?	+ 13 27	1	7.07	K0 2-2-2	
1	07E	+45 28		6.20	B9 2-2-2	
						C.T. Δθ M.T.A. Δθ S.T.A. Δθ M.T.D. Watch
						March 6 12 + 45.1 + 49.5 + 26.1 + 24.8

Date Friday Mar. 6-7, 1936 M-L Julian Day

[illegible]

[illegible]

Date Sat Mar 7-8/36 Julian Day 142

[illegible]

274

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
10 40 36 E + 5 58		2	5.7	A ₀ 2,2,2	50 Visitors, showed 1737, 5.10
11 41 32	29 55	2-1	7.46	K ₀ 2,2,2	Cirrus haze
11 42 31	8 58	1	5.7	A ₀ 2,2,2	Haze, Thick 2.15 Glored 3.10
C.T. Mar. 9 $\Delta \theta$ M.T.A. 12 $\Delta \theta$ S.T.A. + 47.1 $\Delta \theta$ M.T.D. + 50.3 $\Delta \theta$ watch + 26.1 - 14.7					

275

Date Monday March 9-10, 1936 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.	
694 F1	Kino test	"	"	I-25	astin II	010	+2.0	outside - base		1
615	HD 91636	10 39.8	+9 10	I-25	astin II	010	set +2.0	0 21	1 21	2
696	106 022	12 06.9	+29 06	"	"	"	+2.0	1 24	3 14	3
697	134 322	15 04.1	+13 37	"	"	"	+2.0	3 08	4 25	4
698	164 429	17 56.5	+15 28	"	"	"	+2.1	4 51	6 21	1

27/6

Partly cloudy all day; more clouds just before darks.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
6 ¹⁰ p.m.				15, 10	Setting 5, focus 23.7; setting 8, focus 23.5 Best focus about 23.65 [N.B. not set back yet]
1.44.11	+ 3 57	0	5.7	A0 2-2-2	Light haze form
1.44.11	+ 28 52	0-1	6.74	F2 2-2-2	
2.17.11	+ 12 26	0-2	7.07	K0 2-2-2	
2.15.11	+ 45 17	2-2	6.20	B9 2-2-2	Strong gradual mist, first of day, also beginning to form in some parts of Newtonian reflection. Minimum distance 15
					Mar. 10 12 + 48.0 + 50.9 + 26.0 809.9

M-L-MR

Date _____

[illegible]

278

ing Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
2 22	45 N	27 53	1	6.28 B9	2-2-3	slightly hazy.
2 12	52 W	14 04	2	6.46 B9	2-2-2	
2 01	29 W	44 28	2	7.46 A5	2-2-2	sun Dec. observation back started up again about 12.45. back down 1.45. Camping in back slope apparently it had up during the warm spell of the last few days.
						Mar. 11 12 +48.2 +50.9 +26.2 -05.4
						12 12 +48.8 +51.7 +26.8 -02.3
						13 12 +48.9 +51.8 +26.9 -01.8
						14 10 +48.7 +51.9 + -04.4
						16 12 +49.6 +52.4 -22 30.4 -12.6 ^{m s} stopped.

Date _____

Julian Day.

Tuesday 24-25th /36

Readjusted control clock; magnet was scraping, so raised magnet a few mils.

280

ing Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS				
						$\Delta \theta$ M.T.A.	$\Delta \theta$ S.T.A.	$\Delta \theta$ M.T.O. _{m s}	$\Delta \theta$ Watch
					Max 17 12	+ 50.0	+ 52.2	- 40 57.0	- 10.8
					18 12	+ 50.8	+ 52.6	- 64 37.2	- 08.4
					19 12	+ 51.1	+ 52.5	- 1 26 ^R 33.9 ^s	- 06.1
					20 12	+ 51.7	+ 53.3	- 1 51 46.7	- 00.2
					21 10	+ 51.8	+ 53.1	- 2 15 11.9	+ 02.6
					23 12	+ 52.5	+ 53.3	- 3 41 12.6	- 28.7
					24 12	+ 52.9	+ 53.8		- 26.6
						Put on 1 ^m		Reset	
					16	- 07.1		- 07.1	
						added wt (0.2)			
					25 12	- 07.0	+ 54.1	- 22 ^m 13.0 ^s	+ 22.9

Note: "Sidereal clock" now
replaces standard clock in the dome.

281

1936

Date Wednesday Mar 25-26 M-L Julian Day

[illegible]

282

ing Time
S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
		Play full out -		12	Mirror in perfect adjustment.
				7	outer spectrum. focus 23.60 a little long
		Play full out -		6	outer spectrum at focus 23.57 just right.
				3	
2 57 W	27 51	1	6.28 B9	3-2-2	Done turning W button, stuck in. 2 nd to switch off generator. About 6 min. lost from exposure.
	30 55	1	7.29 A2	2-2-2	beats in clock airway a lot of it out 6 - misses repeatedly.
2 12 W	27 7	2	6.45 A2	2-2-2	
2 23 E	43 52	2	5.95 A0	2-2-2	tried cleaning relay out to not much left.
2 47 W	18 58	2	5.7 A0	2-2-2	clock getting worse beats out strokes a few times each minute.
2 22 W	16 31	2	7.19 A0 F5	2-2-2	
1 41 W	25 29	2	6.90 A0	2-2-2	
2 31 W	47 20	3	6.94 A2	2-2-2	light clouds and haze coming up at 4.45
					check whether it definitely needs fixing - R A. clamp - find the clamp of it and see how it is fixed.
					closed dome 5.35
					C.T. ΔGM.T.A. ΔGS.T.A. ΔGM.T.O. ΔG.Watch
					Mar. 26 12 -06.9 +54.3 -07.9 -18.7

Cleaned up relay contacts. Clock winding O.K.
Clouds from sunset on.

ing Time U.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
46	4 29 W	+27 51	0	6.28	B9	2-2-2 (Heater left on mirror) Thick haze. Star lost 1/2 hour 7 ⁴⁶ - 8 ¹⁶ ; lost 8 ¹⁶ - 8 ²⁶ ; 9 ¹⁵ - 9 ²⁷
19 2	2 07 W	+15 09		6.57	K0	2-2-2 Stage
2 42 3	2 12 W	+8 57	0	5.7	A0	2-2-2 Thick haze. Strong wind from NE Clouded out.
						CT Δ0 MTA Δ0 STA Δ0 MTD Δ0 watch Max. 27 12 -06.8 +59.8 -07.8 -10.0

Date _____

Julian Day

[illegible]

Det. of opening because of strong west wind
opened about 5.00 pm but wind
so strong some turning cable slipping. Slight
shake. Tug in and started again
Watched for several hours.
Cable cut at 12.00 so up and again.

image still somewhat unsteady owing to wind.

Dec min. diam. roots 4' to 6'

Mar 28 10 - 06.9 + 54.7 - 07.9 - 12.3

+ 45

Clouds at 7.30. Sporadic visit.
~~But~~ Partly clear 10.00. Clouds again.
 Closed 11.15.

Date Sunday Mar 29-30 1936 Y-L Julian Day 1936

Date Sunday Mar 29-80 Y-L. Julian Day 180[illegible]

ng Time
S.T.

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
30	1 ^h 15 ^m W	30 00	0	7.68	Ko 2-2-2	Thick in early evening
		44 25		6.76	F8 2	Clouded. closed. 1 ⁰⁰
						Stopped Mar. 30 12 -06.9 +55.6 -07.9 -22.2 Added 0.2 Advanced 1^m Stopped Mar. 31 12 -06.3 -03.8 -07.3 +10.5

289

1936

Date _____

Date Friday Mar 31 - Apr 1, M-L

Julian Day.

[illegible]

290

ing Time
S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
55.1 1 43W	8 57	0-0	5.7	A0	2-2.	Cloudy in early evening then cleared up about 10:00. Some heavy rain with violent wind. It stopped and that seems impossible to wind it full.
						Cloudy at 11.55 - shot of exposure 12.05.
						Stayed thick closed up 1.35 a.m.
						Stopped
						Apr. 1 13 -06.2 -03.4 -07.2 -08.0
						Apr. 2 12 -06.2 -03.1 -07.2
						Apr. 3 12 -06.2 -02.9 -07.2

291

1936

Date

~~7~~ Friday ^{April} ~~March~~ 3-4 ~~4~~ 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 En
718	HD 84737	09 42.1	46 29	I-25	Artua	010	-3.0	8.10	8.46	2
- 719	HD 91636	10 29.8	9 10	"	"	"	-3.0	8.50	9.32	3
720	HD 99832	11 24.0	30 58	"	"	"	-2.9	9.37	11.07	4
721	" 113847	13 01.4	45 48	"	"	"	-3.0	11.14	12.02	1
722	" 116594	13 19.5	12 57	"	"	"	-3.0	12.09	1.49	2
723	" 140612	15 24.5	46 04	"	"	"	-3.0	1.54	3.08	3
724	" 142926	15 52.2	42 51	"	"	"	-3.0	3.14	3.44	4
725	" 154974	17 03.7	16 13	"	"	"	-3.0	3.48	5.02	1
- 726	HD 160762 (iiter)	17 36.6	46 04	"	"	"	-3.0	5.10	5.13	2
								5.13 1/2	5.14 2	
Moon Apr 6										
726 F	Focus test and test for comparison prism position						C?			

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS												
46 2	—	46 18	0	5.76 G ₀	2,2,2													
32 3	E 29 ^m	8 57	1	5.7 A ₀	2,2,2	for M												
57 4	O 12 W	30 44	2	7.44 F ₂	2,2,2													
02 1	E 29 ^m	45 34	4	6.72 K ₀	2,2,2													
49 2	W 1 ^h	12 43	4	7.50 K ₀	2,2,2	Few clouds.												
08 3	O	45 56	5	7.18 F ₀	2,2,2	" "												
40 1	W 23 ^m	42 42	5	5.56 B ₃	2,2,2													
02 1	W 29 ^m	16 05	5	7.17 F ₈	2,2,2													
13 2	—	—	4	3.62 B ₃	6													
42 1	W 10 ^m	—	—	—	6	Strong W wind all night Some temp 24°												
						<table><tr><td></td><td>C.T.</td><td>Δθ M.T.A.</td><td>Δθ S.T.A.</td><td>Δθ M.T.D.</td><td>Δθ watch</td></tr><tr><td>Apr. 4</td><td>10</td><td>-06.3</td><td>-03.2</td><td>-07.3</td><td>+01.8</td></tr></table>		C.T.	Δθ M.T.A.	Δθ S.T.A.	Δθ M.T.D.	Δθ watch	Apr. 4	10	-06.3	-03.2	-07.3	+01.8
	C.T.	Δθ M.T.A.	Δθ S.T.A.	Δθ M.T.D.	Δθ watch													
Apr. 4	10	-06.3	-03.2	-07.3	+01.8													
outside these bars						10.8												
						<table><tr><td>Apr. 6</td><td>12</td><td>-05.3</td><td>-03.0</td><td>-06.3</td><td></td></tr></table>	Apr. 6	12	-05.3	-03.0	-06.3							
Apr. 6	12	-05.3	-03.0	-06.3														

293

Date Monday April 6-7, 1936 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 End
727	H.D. 58 715	07 21.7	+08 29	I-25	E-40	010	(set) +2.7	7 27	7 42	1
728	"	"	"	"	"	"	"	7 42	7 57	2
729	"	"	"	"	"	"	"	7 57	8 10	3
730	"	"	"	"	"	"	+3.2	8 10	8 22	4
731	"	"	"	"	"	"	"	8 22	8 34	1
732	"	"	"	"	"	"	+3.0	8 35	8 47	2
733	"	"	"	"	"	"	+3.0	8 47	8 59	3
734	"	"	"	"	"	"	+3.0	8 59	9 11	4
735	"	"	"	"	"	"	+2.8	9 12	9 27	2
736	"	"	"	"	"	"	+2.9	9 27	9 48	3
737	"	"	"	"	"	"	+3.0	9 44	10 00	4
738	H.D. 999 46	11 24.8	+30 32	"	Astra	"	+3.0	10 03	11 33	1
739	110834	12 39.8	+44 39	"	"	"	+2.8	11 37	0 57	2
740	119213	13 36.8	+57 42	"	"	"	+2.9	1 04	2 04	3
741	138265	15 25.9	+61 01	"	"	"	+2.8	2 11	3 41	4
742	152951	16 51.5	+46 41	"	"	"	+2.9	3 46	5 10	1

294

Clouds most of day; clearing with strong NW wind
seeing very bad at start.

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
42 1	1.01 W	+8 23	0	3.09	B8	2-6-2	β Can Min. Possibly Cepheid-like variable of
57 2	1.16 W	"	0	"	"	3-3-3	periods 1.8 hours, range 0.02 mag.
10 3	1.29 W	"	0	"	"	3-3-3	Velocity suspected variable. MNRAS Jan 1936
22 4	1.41 W	"	0	"	"	4-4	Developed (727)
34 1	1.53 W	"	0	"	"	4-4	
47 2	2 06 W	"	0	"	"	4-4	
59 3	2 18 W	"	0-1	"	"	4-4	
	2 30 W	"	0-1	"	"	4-4	
27 2	2 46 W	"	0	"	"	4-4	Unsteady
42 3	3 02 W	"	0-1	"	"	4-4	Unsteady
54 4	3 20 W	"	0-1	"	"	4-4	
33 1	0 49 W	30 17	0-1	7.06	F0	2-2-2	
56 2	0 59 W	+44 25	1-2	6.76	F5	2-2-2	
04 3	1 10 W	+57 29	1-2	6.20	A2	2-2-2	
		60 51	2-3	7.26	K5	2-2-2	Ground fog; heavy deerfoot on dome; moon hid.
	1 21 W	+46 35	3-4	6.77	A2	2-2-2	Haze & clouds.

1936

Date _____

[illegible]

296

dg Time 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.	$\Delta\theta$ unach	
55 1	1 27 W	43 25	1	7.63	K ₀	2-2-2	Apr. 7	12	-05.1	-02.8	-06.1	—
									Added wto 0.2			
				5.7	40	2-	Apr. 8	12	-05.1	-02.5	-06.1	-43.5
							Scattered haze 9-9.20					
							Thick at 10 ²⁰ ... closed up. 11 <u>40</u>					
							Apr. 13	12	-05.1	-01.2	-	+13.6

297

Date Monday April 13-14, 1936 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 A End
743 F1	<i>Gamma</i>	-	-	I-25	<i>Astra II</i>	010	5.5	7 ⁰⁰ pm		3
744	H.D. 58715	07 21.7	+08 29	"	E 40	-		7 ³⁵	745	1
745	"	"	"	"	"	-		745	755	2
"	"	"	"	"	"	-		755	805	2
746	"	"	"	"	"	-	5.6	805	811	3
"	"	"	"	"	"	-		811	821	3
747	"	"	"	"	"	-	5.5	821	827	1
"	"	"	"	"	"	"		827	837	1
748	"	"	"	"	"	"	5.5	838	844	2
"	"	"	"	"	"	"		844	854	-
749	"	"	"	"	"	"	5.4	854	900	3
"	"	"	"	"	"	"		900	910	3
150	"	"	"	"	"	"	5.6	910	920	1
"	"	"	"	"	"	"		920	930	1
751	H.D. 91636	10 29.8	+09 10	"	<i>Astra II</i>	"	5.5	936	1036	4
752	99946	11 24.8	+30 32	"	"	"	5.5	1039	1200	2

298

g Time 3.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
3						12, 7	Focus 23.55+ Slackened tension on springs of ground. ^{RA setting}
45	1 35 W	+ 08 23	0	3.04	BS	6-6	Wind; image unsteady; amp. from ground ^{fine} Plateholder setting 2.5
55	1 42 W	"	0	"	"	6-6	2.5
05	1 52 W	"	0	"	"	6-6	Developed 743 F1 + 744 7.5
11	1 58 W	"	0	"	"	6-6	2.5
21	2 08 W	"	0	"	"	6-6	7.5
27	2 13 W	"	0	"	"	6-6	2.5
37	2 25 W	"	0	"	"	6-6	Image not large, but very turbulent 7.5
44	2 31 W	"	0	"	"	6-6	2.5
5	2 40 W	"	0	"	"	6-6	7.5
10	2 47 W	"	0	"	"	6-6	2.5
15	2 57 W	"	0	"	"	6-6	7.5
20	3 07 W	"	0	"	"	12	2.5
20	3 15 W	"	0	"	"	6-6	7.5
36	1 15 W + 8 56		0	5.7	A0	2-2-2	
41	1 53 W + 30 17		1	7.06	F0	2-2-2	

299

1936

Date _____

Date Monday April 13-14 Cont'd

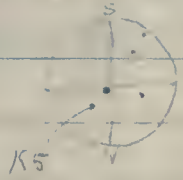
H. L.

Julian Day

[illegible]

300

ig Time
S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
44	2 01 W	46 30 *	2-3	7.22 K0	2-2-2	Re-set dec drum to read 46 33
19	1 35 W	44 44	2-3	7.28 A2	2-2-2	
0	1 15 E	-02 13	3	7.0-7.5 B8	2-2-2	Eclipsing binary? 
						April 14 13 -05.0 -00.9 -06.0 +25.8
						April 15 12 -05.1 -00.8 -06.1 +35.4
						April 16 12 -05.2 -00.6 -06.2 +44.4
						April 17 12 -05.9 -01.3 -06.9 +51.4
						April 18 12 -06.2 -01.3 -07.2 +02.4 Reset
						20 minutes. Showed Neptune & Leo Clouds 9.45. Focused 3 minutes up

301

Date Sunday April 19-20, 1936 Julian Day.

[illegible]

Time
T.

15
10

30 303

Date Julian Day

[illegible]

1935-

June	15	plates	
July	67	"	92
Aug	139	"	231
Sept	93	"	324
Oct	116	"	440
Nov	68	"	508
Dec	62		570
Jan	41		611
Feb	60		671
Mar	46		717
Apr			

3

305

Pl

Exposures on basis 8.0 mag = 100 m

$$8.0 = 100^m$$

$$7.8 = 83$$

$$7.6 = 69$$

$$7.4 = 58$$

$$7.2 = 48$$

$$7.0 = 40$$

$$6.8 = 33$$

$$6.6 = 28$$

$$6.4 = 23$$

$$6.2 = 19$$

$$6.0 = 16$$

$$5.8 = 13$$

$$5.6 = 11$$

$$5.4 = 9$$

$$5.2 = 7\frac{1}{2}$$

$$5.0 = 6$$