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1

Inside displaced to violet means focus should be made shorter.

Pressing in right hand switch of dome turning relay
moves dome to the east.

3

our Angle
End

our Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				David Dunlap Observatory 74" Logbook Vol. 15 Plate Nos. 11732 - 12620 Dec 1945 - Sept. 1946

Dec. 17

MC

- 54.2

SC

- 24.8

MTW

+ 23.2

STW

+ 0.4

6

Focus set at 23.87

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 28W	44 52	0	6.57 G0	3-3-3
0 50W	30 16	0	6.68 F5	3-3-3
				Strong wind, image unsteady Dome turning starts refused to work, made all changes manually, raising up and down stairs while turning dome

7

Date Tues. Dec 18-19, 1945 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.	PH	Hour End
11734	224 801	23 55.7	44 42	I-25	E10300	set 008	-8.1	17 45	18 11	4	E15
11735	3264	00 30.7	48 00	"	"	"	-8.1	18 17	19 07	1	W00
11736	8862	01 22.3	43 32	"	"	"	-8.1	19 16	19 50	2	E00
11737	9709	01 30.0	46 36	"	"	"	-8.1	19 55	20 45	3	W04
11738	16855	02 37.1	43 07	"	"	"	-8.1	20 49	21 29	1	W02
11739	23438	03 43.1	44 40	"	"	"	-8.1	21 32	21 54	1	E02
11740	26015	04 02.0	14 54	"	"	"	-8.2	22 03	22 25	2	E00
11741	27483	04 15.2	13 38	"	"	"	-8.2	22 30	23 00	1	W01
	Focus test.										
11742	29104	04 29.8	19 41	"	"	"	-8.1	23 08	23 45	1	W04
11743	35522	05 20.2	15 23	"	"	"	-8.1	23 53	00 43	1	W15

Left focus unchanged

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
17	E 15 ^m	45 00	0	6.25 Ap 3,3,3	Dome not turning either way all night
17	W 0 06	48 17	0	7.14 B ₂ 3,3,3	
50	E 0 03	43 48	0	6.54 B ₉ 3,3,3	Blew focus in dec setting fixed
45	W 0 44	46 21	0	7.00 B _{8n} 3,3,3	Total caliper of S
29	W 0 21	43 19	0-1	6.72 A ₂ 3,3,3	
54	E 0 20	44 50	1	6.57 G ₂ 3,3,3	
25	E 0 07	15 02	0	6.28 F ₂ 3,3,3	
02	W 0 15	13 17	0	6.56 F ₄ 3,3,3	
	Outside Ther base			10/7	
25	W 0 48	19 49	1-2	7.06 F ₈ 3,3,3	
43	W 0 53	15 26	1	7.02 B ₈ 3,3,3	Light clouds. Dome temp +8.

	MC	SC	MTW	STW
Dec. 21	-51.8	-31.5	-21.8	-0.3 ^m
			Adv 1 min	

Date Sat Dec 22-23, 1945 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 Am End
11744	HD 2019	00 19.4	30 49	F-25	E10320	008	-10.0	17 57	18 47	2
11745	HD 3264	00 30.7	48 00	"	"	"	-10.0	18 51	19 45	3
11746	HD 5638	00 53.0	46 31	"	"	"	-10.0	19 48	20 18	4
11747	HD 9109	01 30.0	46 36	"	"	"	-10.0	20 21	21 21	1
11748	HD 15138	02 21.2	50 07	"	"	"	-10.0	21 25	21 59	2
11749	HD 18473 N	02 53.1	59 17	"	"	"	-10.0	22 04	23 04	3
11750	HD 29104	04 29.8	19 41	"	"	"	-10.0	23 10	00 00	1
	Focus Test.									
11751	HD 35189	05 17.9	16 36	"	"	"	-10.0	00 08	00 32	1

Set focus 23.89

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Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
7	W 0 11	31 05	0	6.78 B9 3,3,3	good
45	W 0 59	48 18	0	7.14 B2 3,3,3	weak
18 4	W 1 10	46 47	0	6.47 B2 3,3,3	good
21 1	W 1 36	46 53	0	7.00 B8m 3,3,3	good
34	W 1 22	50 23	0	6.61 F2 3,3,3	fine
04	W 1 55	59 23	0	7.35 A0 3,3,3	l. weak
12	W 1 15	19 49	0	7.06 F8 3,3,3	fine
	outside thru (none)			10/7	
32	W 1 00	16 40	0	6.15 A15 3,3,3	Had D on shorter slit earlier? Dome Temp +1°F. Everything working fine.

Date Sunday, Dec. 23-24, 1945 H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour At End
11752	HD 209813	22 01.0	+46 45	I-25	E 1030-0	^{set} 008	-12.8	17 24	18 24	2
11753	213389	22 25.9	+48 51	"	"	"	-12.8	18 26	19 26	3
11754	2453	00 23.2	+31 53	"	"	"	-12.9	19 30	20 32	4
11755	2767	00 26.1	+33 02	"	"	"	-12.9	20 04	21 06	1
11756	14688	02 17.1	+16 25	"	"	"	-12.9	20 49	21 27	2
11757	15814	02 27.5	+14 36	"	"	"	-12.9	21 25*	22 15	5
11758	23626	03 41.5	+31 54	"	"	"	-12.9	22 17	22 47	19
11759	27483	04 15.2	+13 38	"	"	"	-13.0	22 54	23 28	1
11760	34053	05 09.5	+22 10	"	"	"	-13.0	23 22	23 48	2
11761	35228	05 18.2	+31 08	"	"	"	-13.1	23 51	0 01	3
	From list	-	- o. t. b.							

W to N wind. Clear all day. Cold.

12

Trans set 23.93 [Pointer at 9.7, 1.5 from end of bridge]

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS	
24	2 12 W	+47 01	0	7.52 K0	3-3-3	
	2 49 W	+49 07	0-1	7.55 K1	3-3-3	Fairly bright - good axial light - 19 ⁰⁰ - 19 ³⁰
	1 27 W	+32 11	0-1	6.71 A0	3-3-3	
	2 01 W	+32 19	0	7.08 K0	3-3-3	
	1 01 W	+16 40	0-1-0	6.78 A10	3-3-3	
5	1 27 W	+14 50	0	6.57 B8	3-3-3	*PA guiding gave out; slipping on shaft; try later + t.
	0 54 W	+32 05	0-1	6.65 F6	3-3-3	
	0 53 W	+13 46	1	6.56 F4	3-3-3	
	0 27 W	+22 16	0-1	6.22 A2	3-3-3	Slide possibly not fully drawn.
	1 12 W	+31 13	1	7.37 K0	3-3-3	Variable F, SW wind making guiding erratic.
						10 ³ /7 ⁵
						12+8 plates in done
						all fine
						MC SC HTW STW
						Dec. 27 (WBEN) -45 -42 +15.6 +0.3

Clouds in zenith delayed start 14
 Set focus 23.88
 Low voltage very weak at first.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	W 1 22	48 17	0	7.14 B ₂ 3,3,3	3rd. light vis. to merid. at 1835 ^{very good}
17	W 0 24	50 21	1	6.61 F ₂ 3,3,3	Windy ^{two times}
33	W 1 02	59 29	1	7.35 A ₀ 3,3,3	* RA setting failed. Tightened set screws. ^{fine}
25	W 0 34	13 46	1	6.56 F ₄ 3,3,3	Hazy ^{with stars}
	O.T.B			10/7	clouds coming & going ^{only slightly}
09	W 0 15	16 41	0	6.09 A ₁₅ 3,3,3	" " " ^{little strong}
	W 0 51	32 47	1	6.56 A ₂ 3,3,3	" " " ^{two strong}
17	W 1 00	+1 51	0	6.20 A ₅ 3,3,3	" " " ^{three strong}
	W 0 45	28 20	1	5.30 B ₇ 3,3,3	more RA trouble ^{fine}

	MC	SC	MTW	STW
Jan. 4	-36.6	-56.2	-30.4	-0.4

Transit 23.64

Cloudy + very mild all day

16

Clears around 19 hrs; temp in dome +52°;

left shutter open a while to dry things up.

mirror + mirror, telescope OK; pairs + floor wet.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

0 41W

-03 10

0

4 1/2 m M
var. 6 1/2 / 7

4-4

strong S-W wind. Light clouds ^{are to} suddenly 20° 05'

Date *Thursday Jan 10-11/46* 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 An End
11771	HD 14688	02 17.1	16 25	I-25	E-103a-O	set 008	+1.0	20 45	21 13	1
11772	HD. 28271	04 22.5	30 09	"	"	"	+1.0	21 19	21 41	2
11773	" 29104	04 29.8	19 41	"	"	"	+1.0	21 45	22 21	3
11774	" 35238	05 18.2	31 08	"	"	"	+1.0	22 26	23 06	4
	<i>Focus check</i>				<i>Outside through base</i>					
<i>Set Jan 12-13 Sunday Jan 13-14</i>		<i>First cleaning at 2000 but becoming solid periodically after H cloudy</i>								

Focus set at 23.755?

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS										
					Cloudy early evening, clearing quickly sometime between 19.05 - 19.30 heavy bank in N.W. waited until 20.00 before starting to open.										
31	1.55 W	16 40	1	6.78 Ais	3-3-3										
41	0 17 W	30 15	1	6.68 F5	3-3-3										
41	0 50 W	19 48	1	7.06 F8	3-3-3 Light clouds										
06	0 47 W	31 13	1	7.38 K0	3-3-3 Clouds toward end of exposure 7-10 sky filling in solid, partly clearing later, then closing in.										
					<table border="1"> <thead> <tr> <th></th> <th>MC</th> <th>SC</th> <th>MTW</th> <th>STW</th> </tr> </thead> <tbody> <tr> <td>Dec. 11</td> <td>-21.0</td> <td>-56.6</td> <td>-20.0</td> <td>+0.1</td> </tr> </tbody> </table>		MC	SC	MTW	STW	Dec. 11	-21.0	-56.6	-20.0	+0.1
	MC	SC	MTW	STW											
Dec. 11	-21.0	-56.6	-20.0	+0.1											
					after that, Very high wind.										

Date Tuesday Jan 15-16/45 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 Am End
11775	H.D. 14688	02 17.1	16 25	I-25	E 103.0	set .008	-8.9	18 09	19 01	1 003
11776	" 16855	02 37.1	43 07	"	"	"	-8.9	19 08	19 54	2 037
11777	" 18473N	02 53.1	59 17	"	"	"	-9.0	20 01	21 25	3 00
11778	" 23838	03 43.1	44 40	"	"	"	-9.0	21 29	21 57	4 074
11778F	35522	05 29.2	15 23	"	"	"	-9.0	22 30		1
	Focus Check				Outside	Through	Base			

Focus set at 23.875?

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
01	003W	16 39	O!!	6.78 A1s	3-3-3 Lost 10 mins trying to focus, seeing ^{good} poor
04	037W	43 20	O	6.72 A2	3-3-3 Seeing improving ^{fine}
08	150W	59 29	O	7.35 A0	3-3-3 ^{dark}
09	134W	44 51	O	6.57 G0	3-3-3 Broken clouds, suddenly at end of exp.
		13 26	O	7.02 B8	3- 10-7 Waited for sky to clear. Clouds coming over quickly at 22.42 starting to snow lightly, close up.
					^{focus good}

clearing some time after 19:00.

22

Set focus 23.90.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
19	J 227 ^h	16 40	1	6.78 A15	3,3,3 Seeing fair but image seems faint.
20	W 1 00	13 45	2	6.56 F4	3,3,3
21	W 1 14	16 40	2-1	6.15 A15	3,3,3
22	V 0 21	32 46	3-4	6.56 A2	3,3,3
23	W 0 56	30 53	3-1	7.27 S3	3,3,3
24	W 1 24	27 30	1-2	6.70 B8	3,3,3 Took brighter & southern of pair.
25	W 0 48	24 40	3-4	6.98 F5	3,3,3
26	N 0 38	7 15	3	5.98 A2	3,3,3
27	W 1 29	15 27	3	7.60 F2	3,3,3 clouds in middle of exposure. Done at end 10/7. approx 10/7.
	G.T.B.				
					Note for L: only 1 heater working in the scope tube.
					Some trouble clearing dome. Had to take several runs at it.

Jan. 18 MC -24.0 SC -57.4

MTW -11.8 ST.W. -0.2 (adv. 1 min.) 24

on first opening & setting seeing was so bad that I didn't start exposure. There was a little (but not much) improvement within 15 mins or so. left focus. Reads about 23.91

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
9. 2	W 1 45	31 58	0!!	7.20 G5 3,3,3	Seeing is terrible. <i>l. weak.</i> While re-setting the clamp went u/s. Had to put tel. over to 4 1/2 W to reach it. While there, RPA clamping went u/s. At 2015 decided to give up in view of bad seeing, low temp (-35) and increasing cirrus haze.

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Date *Mon. Jan. 21-22 1946* 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 Min Sec
11789	HD. 45194	06 21.0	13 10	I-25	E-103a-0	set .008	-5.5	23 00	00 10 3	23 00 3
11790	" 68461	08 07.4	16 49	"	"	"	-5.5	00 15	01 15 4	00 15 4
	Focus check									
				Outside through Base						

Focus set at 23.835"

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					Cloudy early evening, breaking and partly clearing Sat 19.30, waited until 21.00 when sky looked respectable. On opening found mirror coated with ice
10 3	133W	1309	0	7.09 F8	3-3-3 crystals, waited until coating
5 4	052W	1643	0	6.90 G6	3-3-3 used evaporated having left shutters 10-7 ok open. Seeing very poor.

MT.W. S.T.W.

-11s -0.1m Reset.L.

(W = wheelans)

Date Tues, Jan 22-23, 1946 H.W. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	PA
11791	HD 14688	02 17.1	+16 25	I-25	E103aD	008	-8.1	19 25	20 09	1
11792	HD 26015	04 02.0	+14 54	"	"	"	-8.4	20 26	21 00	1
11793	35189	05 17.9	+16 30	"	"	"	-8.4	21 11	21 37	3
11794	35522	05 21.2	+15 33	"	"	"	-8.2	21 40	22 40	1
	Frame Test							21 47	22 07	

Cloudy earlier.

28

Set focus 23.86

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMP.	REMARKS
9.1	01 39W	+16 40	0	6.78 A15	3,3,3	ok
0.1	01 42W	+15 03	0	6.56 F4	3,3,3	fine
0.1	01 26W	+14 30	0	6.15 A15	5-5	ok, strong
0.1	1 07W	-15 25	0	7.02 B9	3,3,3	becoming hazy
	0 713				10/7	stay nearly track, ok

Some Temp +7 F

Jan. 23	MC	SC	MTW	STW
	-18.7	-58.0	+07.3	+0.0

Focus set at 23.85?

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
45	0 19W	16 39	1	6.78 A ₁₅	3-3-3 Slight haze * Dome temperature rising!
52	0 36W	43 20	1	6.72 A ₂	3-3-3
07	0 54W	60 29	1-2	7.26 A ₁₅	3-3-3
41	0 02W	19 48	2	7.06 F ₈	3-3-3 Reset focus to 23.84
59	0 20E	22 15	2	6.22 A ₂	3-3-3
13	0 45W	31 13	2-1	7.37 K ₀	3-3-3 Haze, clouds,

Temp - 8.3. Set focus 23.86 +

32

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
3	W1 ² 01	14 50	0!	6.57 F8	3,3,3
	W1 16	4 43	0!	6.97 F8	3,3,3
	W1 23	19 49	0!	7.06 F8	3,3,3
L				6.20 A5	3, Clouds right at start, - Think
	0 T 13.		set 9	10/7.	
					Some Temp +3.

Spect. Temp -11.0 Focus set 23.91

39

Strong West wind.

Time
T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

14

0 07 W

-03 09

0

var Md 8-3-3

Thick clouds rising rapidly in west soon after
sunset. Star disappearing 18^h 18^m 18^s gone.

Date Sunday, February 3-4, 1946

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 and End
11807	0 <i>Ceti</i>	2 14.3	-03 26	I-25	E-1030-0	²⁴ 003	-12.1	18 06	18 33	1
11808	D 158 14	2 27.5	+14 36	"	"	"	-11.9	18 27	19 17	2
11809	23626	3 41.5	+31 34	"	"	"	-11.9	19 20	20 00	3
11810	23838	03 43.1	+44 40	"	"	"	-12.0	20 03	20 32	4
11811	29104	04 29.5	+19 41	"	"	"	-12.0	20 41	21 30	5
11812	35189	05 17.9	+16 36	"	"	"	-12.0	21 33	22 12	6
11813	35233	05 18.2	+31 08	"	"	"	-12.0	22 03	22 53	3
11814	52913	06 57.9	+09 17	"	"	"	-12.0	22 57	23 19	4
11815	68461	08 07.4	+16 49	"	"	"	-12.0	23 ²⁶ 25	0 16	1

Transit 23.91

+10° F

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS	
37	0 53 W	-03 13	0	var Md	3-3-3	Put flippers in 18 ²¹	+5° F
38	1 24 W	+14 50	0	6.57 F8	3-3-3		+3° F
39	0 53 W	+32 05	0	6.65 F6	3-3-3		+2
40	1 28 W	+44 51	0	6.57 F8	3-3-3		
41	1 39 W	+19 48	0	7.06 F8	3-3-3		
42	1 17 W	+16 40	0-1	6.15 A15	3-3-3		+1
43	2 07 W	-31 13	0-1	7.37 K0	3-3-3		0
44		+39 14	0-1	5.99 A2	3-3-3		0
45	0 43 W	+16 43	0-1	6.90 G6	3-3-3	Started on wrong star	-1

	MC	SC	MTW	STW
Feb. 6	-01.5	-56.8	-02.3	-0.6

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Date *Thurs. Feb. 7-8, 1946 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 Ang End
11816	HD. 45194	06 21.0	13 10	I-25	E-103a-0	set .008	-5.0	21 30	22 40 2	09
11817	" 54901	07 05.6	15 30	"	"	"	-5.0	22 44	00 24 3	209
11818	" 72208	08 26.5	10 09	"	"	"	-5.0	00 28	01 12 4	136
	Focus check								Outside through base	

Focus set at 23.83?

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					Weather unsettled in early evening. clouds, light snow, finally settling down. A dazzling auroral display all evening. Brilliant rose colours, and pale greens.
22	1 09W	13 08	0	7.09 F8	3-3-3
23	2 09W	15 27	0	7.60 F2	3-3-3
24	1 36W	10 00	0	6.58 A0	3-3-3
					10-7

Transit 23.81

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
4	1 46 W	+50 22	0	6.61 F ₂ 3-3-3	
3	1 01 W	+44 52	0	6.57 G ₀ 3-3-3	Very dense smoke from granulars over field.
2	1 07 W	+13 48	0	6.56 F ₄ 3-3-3	Good
3	1 38 W	+19 49	0-1	7.06 F ₈ 3-3-3	Good
	1 54 W	+31 13	0-1	7.37 K ₀ 3-3-3	fine
	-E	+39 52	0-1	6.90 F₂ 3-3-3	wrong star HD 82741
	1 03 W	+40 13	0-1	6.90 F ₂ 3-3-3	
	0 05 E	+42 03	0-1	7.26 A ₅ 3-3-3	Some turning not working.

Feb. 13 MC SC MTW STW
 +09.0 -55.6 +23.0 -0^h2

(Two plates with meter corner; 5 min star trail on T Co. Box.)

Date Thursday February 14-15 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
11830	HD. 47415	06 33.4	24 41	T-25	E-10300	Set 008	-2.0	20 57	22 07.1	0 52
11831	" 61295	07 33.5	32 14	"	"	"	-2.0	22 12	22 40.2	0 24
Sat Feb 16-17 Hd. mirror frosted - attempts to clear unavailing mostly cloudy anyway. Some temp rising.										
Sun day, Feb 17-18 H Clear most of day & fair forecast. Cloudy with snow at night. Then										

Set focus 23.85?

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					Start delayed by several minor grievances
243	1 35W	30 17	○	6.68 F5 3-3-3	Seeing disgusting!
014	1 14W	13 08	○	7.09 F8 3-3-3	" " idiosyncrasy
121	0 39W	16 43	○	6.90 G6 3-3-3	
332	0 49W	51 52	○	6.93 G6 3-3-3	Dec. Clamps stuck Sky hazy 10-7 over. Got thick to take direct photograph of T cor. bar.
					Set alarm, quite thick at 4.00, - 5.00

Date Thurs. Jan. 21-22, 1946 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 And End
11836	HD. 34053	05 02.5	22 10	I-25	E-103 ⁺ 0	Set 008	-7.6	18 45	19 19 3	0 05
11837	" 37366	05 33.0	30 50	"	"	"	-7.8	19 24	20 40 4	0 55
11838	" 54901	07 05.6	15 30	"	"	"	-7.8	20 44	21 24 1	1 05
11839	" 72359	08 27.3	10 26	"	"	"	-7.8	22 30	23 00 2	1 15
	" 81995	09 24.1	45 12	"	"	"				3

Wed Feb 27-28 Hd. Clearing 2230-2300. Tried to open about 2345 but couldn't get shutters open (snow on rails?) With field glasses searched carefully for nova TC₂B. without finding it. Believe it is fainter than 8^m.

P.S. Thurs AM: TC₂B ^{must be} appreciably fainter than HD 143808 vis mag 8.3.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
23	0 05 E	22 14	0	6.22 A ₂	3-3-3
24	0 52 W	30 54	0	7.27 B ₃	3-3-3
241	1 05 W	15 26	0	7.60 F ₂	3-3-3
22	0 19 W	10 16	0	6.30 A ₀	3-3-3
				7.26 A ₅	
					MTW STW
				Feb. 25	+08 ^s 0.0 ^m
				HC, SC	
				27	+2.9 -55.4
					00 +0.1
					reset

Hazy, light clouds, star gone at 23.00

Cloudy earlier.
Focus set 33.71

g Time M.T. P/L	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
10 3	W 124.	16 43.	0	6.90 G6	3,3,3
50 4	W 145	10 01	0	6.58 A0	3,3,3 Some relay's failing repeatedly.
51 1	Σ 0 13	47 00	1-2	7.49 K0	3,3,3 Pretty high wind.
	outside the base.				10/7.
					guiding <u>poor</u>

Mercury brilliant night.
Good golden light 20⁰⁰

Clear all day; clouded over after
sunset. Slowly clearing after dark.
SW wind, blowing up front.
Focus set 23.73

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1	41W	+72 45	0-1	6.56 A2	3-3-3 light haze
2	35W	+13 09	1	7.00 FS	3-3-3
3	5W	+32 10	1-0	6.48 F2	3-3-3
4	57W	-16 43	1	6.90 G6	3-3-3 light scattered clouds Increasing clouds over most of sky
				6.57 A0	
	37E	-47 00	1-2	7.49 K0	3-3-3
Mar. 4. Spotter repaired G.L.					
Mar. 6					
				MC	SC
				+40.1	-54.9
				MTW	STW
				+00.2	-0.2

Note. Finder at top of spectrograph has been adjusted. ^{now} star is on slit when



Clearing about 2145
Set focus 23.80.

66

g Time S.T. P _h	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS										
57.2	W 14 19	+ 10 01	0	6.58 A0 3,3,3	some clouds + snow flurries.										
44.3	W 1 03	40 15	0-1	6.90 F2 3,3,3	checked field carefully.										
48.7	W 0 12	47 01	1	7.49 K0 3,3,3	Focus Test OTB 10/7										
25.1	E 0.03	42.52	1	6.32 F2 3,3,3	W guiding										
Fairly brilliant aurora. Low arch with short streamers at 0145.															
<table border="0" style="width: 100%;"> <tr> <td></td> <td style="text-align: center;">MC</td> <td style="text-align: center;">SC</td> <td style="text-align: center;">MTW</td> <td style="text-align: center;">STW</td> </tr> <tr> <td>Mar. 11</td> <td style="text-align: center;">+50.9</td> <td style="text-align: center;">-54.2</td> <td style="text-align: center;">+02.5</td> <td style="text-align: center;">+00.0</td> </tr> </table>							MC	SC	MTW	STW	Mar. 11	+50.9	-54.2	+02.5	+00.0
	MC	SC	MTW	STW											
Mar. 11	+50.9	-54.2	+02.5	+00.0											

Focus set at 23.77

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 27W	16 08	0-1	7.15 G7	3-3-3 Light haze. a good
0 02E	10 18	0-1	6.30 A0	3-3-3 More haze l. weak
0 19W	27 41	1	6.95 F5	3-3-3 Haze light clouds. strong
0 31W	27 40	1	6.59 A0	3-3-3 Sky thickening too strong
			10-7	
			MC	3C
			mar. 13 +50.5	-53.7
			15 +52	-54
				MTW +04.7
				TW +0.3
				00 +0.2
				reset

Focus left as is. I read it 23.65

66

Time T. RA	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS												
30 1	0 52 W	N 1.52	0	6.20 A5	3,3,3												
38 2	1. 36 W	N.30.01	0	7.06 A0	3,3,3 W guiding - Hazy												
47 3	1. 46 W.	9 15	1	5.99 A2	3,3,3 W changed Wafotted ph # 4												
04	1. 30 W. h	10.03	1	6.58 A0	3,3,3 " " " " #1 - getting worse.												
	outside thro	base		10/7	Focus test by W.												
					<table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>MTW</td> <td>STW</td> <td>SW</td> </tr> <tr> <td>Mar. 18</td> <td>+55.2</td> <td>-52.7</td> <td>+08.2</td> <td>+0.3</td> <td>-07.0</td> </tr> </table>		MC	SC	MTW	STW	SW	Mar. 18	+55.2	-52.7	+08.2	+0.3	-07.0
	MC	SC	MTW	STW	SW												
Mar. 18	+55.2	-52.7	+08.2	+0.3	-07.0												

Focus set at 23.655?

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
11	1 44W	15 47	0-1	7.63 F8	3-3-3
12	0 33E	40 15	1	6.90 F2	3-3-3
13	0 28W	51 51	1	6.93 G0	3-3-3
14	1 21W	45 02	1-2	7.26 A5	3-3-3
15	0 25W	27 06	1-2	7.21 A2	3-3-3
					10-7

Haze

Haze

Haze

f. ok

Focus set at 23.62

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
26 2	W 1 45	28.56	1	6.37 B9 3,3,3	W opened, set + guided.
40 3	W 1 02	11.18	1-2	7.60 F2 3,3,3	Set on h. Beautiful! (about 1/8 of field)
42 4	W 1.00	13 15	1	7.48 K0 3,3,3	
21 1	W 0.30	51 51	2	6.93 G0 3,3,3	
2 8	W 1 01	45 02	2	7.26 A5 3,3,3	
40 1	W 0.29	46 06	2-1	7.13 A1 3,3,3	
30 -	W 0.37	27 05	1	7.21 A2 3,3,3	
28 1	W 0.08	42.53	1	6.32 F2N 3,3,3	
	outside thro base			10/7	W doing all changing + guiding. Focus center slightly, + V. 11
					SW
				MC SC	
				MTW STW	
				Nov. 20 +59.8 -51.6 +15.2 +0.5	-047

guiding
(East side of field)
"short" in light
"left" in light
"right" in light
"west" in light
"east" in light

71

Date *Wednesday, April 20-21, 1946* 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
11884	HD. 63887	07 46.1	71 57	I-25	E-103i0	^{set} 008	+13.0	19 50	21 26 3	09
11885	" 65299	07 53.0	84 21	"	"	"	+13.1	21 31	21 55 4	125
11886	" 82780	09 29.1	40 24	"	"	"	+13.0	22 30	23 02 1	'04
11887	" 99267	11 20.3	30 32	"	"	"	+13.0	23 07	23 47 2	'1
11888	" 106926	12 12.7	15 42	"	"	"	+13.0	23 53	00 45 5	'03
11889	" 112734	12 53.8	28 52	"	"	"	+13.0	00 48	01 16 4	'05 E
	<i>Focus check</i>				<i>Outside through base</i>					

Focus set at 23.6

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
03	109 W	71 53	0	7.52 A ₀	3-3-3
04	125 W	84 17	1	6.39 A ₀	3-3-3 Set on Saturn, superb!!!
1	104 W	40 14	1-2	6.90 F ₂	3-3-3
01	001 E	30 19	1-2	7.16 A ₈	3-3-3
05	003 W	15 29	1-2	7.53 K ₀	3-3-3
05	005 E	28 38	1-2	6.75 A ₅	3-3-3
					10-7

Time
T.Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

001

0 50W

46 06

0

6.67A5

3-3-3

Haze sky thickening
showed Saturn to ESH HSA and
Miss Underhill through the haze.
Later sky remaining murky with
just bright stars showing.

Focus set at 23.675?

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
022	2 02 W	44 05	0	7.51 K ₀	3-3-3 seeing poor. good.
032	0 14 W	40 14	0	6.90 F ₂	3-3-3 fine
042	0 49 W	27 42	0	6.95 F ₅	3-3-3 Ring with image unsteady. good
051	0 58 W	27 05	0	7.21 A ₂	3-3-3 fine
				10-7	good c. slightly to violet

W opened

78

focus set at 23.67

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
17 ²	0.33	9.14	0!	5.99A2 3,3,3	Hd guiding good
53	10.45	32 10	0	6.42F2 3,3,3	W " without advice fine
10	27	10 16	0	6.30 A0 3,3,3	W " with some advice. good
10	29	46 15	0	6.90 F2 3,3,3	W " " " " fine
25	10.22	46.07	0	7.13 A1 5,3,3	W on his own - guiding & clearing fine
3	EO.19	42.53	0-1	6.32 F2N 3,3,3	" " " " " " DRIFT ↓ FAST. strong
4	NO.03.	46.21	1	7.20 G 8 3,3,3	" " " " " " " ↑↓

focus

Spectacular aurora - notes by Hd elsewhere.

MC SC MTW STW
1/24 25 +66 5 -51 1 +02.3 +0.1

230557

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
27	113 W	15 28	1-2	760	F ₂	3-3-3
28	103 W	13 14	1-2	748	K ₀	3-3-3
29	014 W	40 14	2	600	F ₂	3-3-3
30	000	60 30	3	747	A ₀	3-3-3
31	029 W	47 30	2	749	K ₀	3-3-3

Overexposing!

	MC	SC	MTW	STW
Mar. 27	+67.5	-50.5	+28 ^s	+10.1 ^m

focus set at 23.59

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
2	W 0.39	9 15	0	5.99 A2	3.3.3	Rd guiding <i>not numbered</i> good
5	W 1.49	15 29	0	7.60 F2	3.3.3	W " alone <u>much too weak</u>
5	W 1.50	13 14	1	7.48 K0	3.3.3	" " good
07	W 1.05	40 15	1	6.90 F2	3.3.3	" " "
2	W 0.33	46 07	1	7.13 A1	3.3.3	rise in temp. ^{f"} ₂ fair (uneven)
	W 0.45	48 16	1	7.17 K0 7.16 G5	3.3.3	* not on program. Set in error for HD 99967
	W 1.41	47 00		7.49 K0	3.3.3	fair
	Outside thro' base				10/7	good

Focus set at 23.49

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
21 1	0 46W	71 53	1.2	7.52 A ₀	3-3-3	good
22 2	0 58W	84 16	2	6.39 A ₀	3-3-3	(guiding) fine
23 3	0 43W	58 27	2	6.96 A ₂₅	3-3-3	strong
24 4	0 37W	40 14	2	6.90 F ₂	3-3-3	fine
25 5	0 17W	60 25	2	7.47 A ₈	3-3-3	strong
26 6	0 19W	47 00	2	7.49 K ₀	3-3-3	fine
27 7	01.01 W	30 20	2	7.16 A ₈	3, 3, 3	fine
28 8	01.22 W	15 28	2	7.53 K ₀	3, 3, 3	Some refused to turn about weak
29 9	01.05 W	12 45	2	7.50 G ₇	3, 3, 3	00.20, Turned dome with ^{very} weak ^{assistance} outside through base 1/4 of L when necessary focus OK

Date Sat Mar 30-31, 1946 Hd - W. 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
11923	HD 47415	06 53.4	24 41	I-25	E103aD	008	+8.9	19 23	20 23	2
11924	HD 81995	09 24.1	45 12	"	"	"	+8.9	21 04	22 24	3
11925	HD 94118	10 46.7	46 20	"	"	"	+8.9	22 42	23 52	4
11926	" 107904	12 8.9	43 05	"	"	"	+8.9	00 03	00 38	1
	Focus Test									

Tues Apr 2-3 Mostly clear but extremely high wind.
about 20 students of Astronomy to - Showed telescope / tel.
26

Fri Apr 5 Clear late afternoon, heavy bank of clouds in NW
at sunset, opened up, clouds rolling up and
sky filled in by 7.30, waited, then gradually
closed up. Still hopeless at 10.30 'closed'. L

Focus set 23.65.

g Time I.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
23 2	2.01W	24 40	0	6.98 F8	3,3,3. about 20 visitors of teachers' course. Showed
23 3	1.12W	45 02	0	7.26 A5	3,3,3. ♀ (not good) and ♂ (very good).
52 4	1.18W	46 06	0	7.13 A1	3,3,3. 16.1.1964
51	0.29W	42 52	0	6.32 F2H	3,3,3. <u>Very poor seeing all night!</u>
	O.T. T3				10/7.

Some turning gave trouble, all evening.
Some trouble with dec ^{start} guiding motion
- it fails at times on convex declination.

	MC	SC	MTW	STW
Apr. 1	+73.7	-50.0	-20.0	0.0
			Adv. 1 mi	
3	+75.8	-50.0	+26.8	+0.1

stayed 11.15

Apr. 5 MC DC
+73.5 -47.9

MTW DTW
-00.3 -0.0

Some clouds around at opening time ^{reset}

Focus set 2370

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
W 0 46	10 01	0	6.58 A ₀ 3, 3, 3	some clouds some fading } 10 visitors good
W 0 51	40 14	0	6.90 F ₂ 3, 3, 3	" " Drive very erratic } -explained work. good
W 0 39	46 06	0-1	7.13 A ₁ 3, 3, 3	light clouds } fine
W 1 14	30 19	0	7.16 A ₈ 3, 3, 3	" " } good
W 1 15	26 14	0	6.75 A ₂ 3, 3, 3	} fine
	O.T.B.		10/7.	OK

Note: As suggested by H, the trouble with the drive is in the differential gears. The one next to the east one "drags" quite frequently.

Clear all day; light clouds at sunset

90

Focus not changed (23.70)

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0	42 W	+10 03	1	6.58 A0 3-3-3	Clouds slowly thinning. * Hoze.
5	1 W	+10 17	1	6.30 A0 3-3-3	
1	18 W	+40 14	1	6.90 F2 3-3-3	Clouds much of time. Thick

Still thick 11³⁰

	MC	SC	MTW	STW
Apr. 8	+71.5	-49.4	+10.7	+0.2

* Clock barely driving. Delay in starting which differential was cleaned & lubricated. Trouble apparently in a bearing at west end, by clutch. Seizing. To read + r/d. N.B. Motion now is almost too lively.

Focus set at 23.72

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 19W	27 42	0	6.95 F ₅	3-3-3 Fresh wind image unsteady.
0 40W	27 41	0-1	6.59 A ₀	3-3-3 clouds suddenly at 21 07, thick at 21.15 Thick at 2300 closed up.

Apr. 10	MC	SC	MTW	STW
	+69.8	-49.4	+20.0	+0.2

Date Wednesday April 10 11/46 L^{w.} 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
11937	H.D. 68776	0808.8	13 22	I-25	E-103a0	set 008	+2.8	19 50	21 10	1
11938	" 99362	11 20.5	27 19	"	"	"	+2.8	21 15	22 15	2
11939	" 99967	11 25.0	47 12	"	"	"	+2.8	22 20	23 30	3
11940	" 82780	09 29.1	40 ²⁴ / ₇₂	"	"	"	+2.8	23 25	00 03	336
11941	" 112754	12 56.8	28 52	"	"	"	+2.8	00 15	00 48	1
11942	" 121648	13 01.6	26 25	"	"	"	+2.8	2 10	2 48	2
11943	" 131495	1448.8	33 06	"	"	"	+2.8	3 55	3 42	3
11944	" 137854	1523.3	12 12	"	"	"	+2.8	3 52	4 42	4
								<i>Faint test</i>		
								<i>G.T.B.</i>		

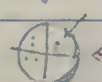
Form set at 23.73

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 56 W	13 16	0	7.48 K ₀	3-3-3 Fresh wind!
0 10 E	27 06	0	7.21 A ₂	3-3-3
0 50 W	47 01	1	7.45 K ₀	3-3-3 Image unstable
3 35 W	40 13	1-0	6.90 F ₂	3-3-3 " "
0 52 W	28 39	1-0	6.75 A ₅	3-3-3 " "
1 55 W	6 14	1-0	6.97 F ₀	3 3 3 ^{Sup hit} HAD DIFFICULTY WITH PRESSIONING
1 53 W.	28 56	1-0	7.28 F ₂	3 3 3 ^{Sup hit}
2 15 W	12 04	0	7.54 F ₀ 7.55 K ₀	3 3 3 ^{Li. P/N. Sup hit} DOME REFUSED TO TURN NEAR END OF EXPOSURE SO COULDN'T GET NEXT PLATE AS INTENDED. DOME TURNING AGAIN AFTER PUNCHING CONTACTS DOWNSTAIRS IN ORDER TO CLOSE UP. W.

Date *Thursday April 11 12/46* L-W 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
11945	HD. 99967	11 25.0	47 12	I-25	E-10350	<i>set</i> .008	+6.2	22 50	00 00	1
11946	" 116594	13 19.5	12 57	"	"	"	+6.2	00 58	01 18	2
11947	" 128296	14 31.0	11 30	"	"	"	+6.2	01 34	02 42	3
11948	" 137854	15 23.3	12 12	"	"	"	+6.1	02 47	03 37	4
11949	156696	17 14.0	29 01				+6.1	03 44	04 44	5
				<i>Focus Test</i>					<i>C.T.B.</i>	

Transit at 23.69

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1.34 W	47 00	0	7.49 K ₀	3-3-3 Sky clearing at sunset, partly clear
1.00 W	12 45	0	7.50 G ₁	3, 3, 3 At times, good at 22.30
1.12 W	11 19	0	7.52 A ₃	3, 3, 3 Sup. list
1.14 W	12 04	0-1	7.74 F ₀	3, 3, 3  ← Signal + identify field
0.37 W	28 55	0-1	7.58 F ₀	3, 3, 3. ^{WRONG STAR} Some clouds in N & W. 03.55 No clouds visible in N, heavy cloud bank in N.E. 04.37. Done stars did not entirely close

10/4

Apr. 12 MC SC MTW STW
 +63.2 -49.2 -26.8 +0.7
 adv. 1 min.

Date Friday April 12-13/46 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.
11950	HD 72359	08 27.3	10 26	I-25	Eastman	set 808	+8.1.	19 43.	20 19 2
11951	HD 82780	09 29.1	40 24	"	"	"	+8.2.	20 22	21 22 3
11952	HD 99967	11 25.0	47 12	"	"	"	+8.3.	21 26	22 36.4
11953	HD 94118	10 46.7	46 20	"	"	"	+8.1	22 41	22 53.1
11954	HD 112570	12 52.6	46 44	"	"	"	+8.2.	22 58.	23 48.2
	Focus test								set 9
<p>Sat Apr 13-14/46 Hd. (497h) about 30 visitors. Cloudy at first, then partly clear. Showed by with 74", (4.5" with 4". Sky dirty at 2200, worse at 2300 - closed.</p>									

Focus set 23.67

g Time I.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS								
192	W 0 ⁵³ 33	10 16	0	6.30 A0 3.3, 3	} plate joggled, night before in } spotting box.								
172	W 0 55	40 14	0	6.90 F2 3.3, 3									
36	W 0 13	47 00	0-1	7.49 K0 3.3, 3									
52	W 2 09	46 05	0	7.13 A1 3.3, 3	EST start OK, End EST prob 23 53 <u>T₄</u> 1986								
48	W 0 57	46 30	1	7.20 G8 3.3, 3	Start prob 23.53, End prob 00 48 <u>T₄</u>								
	OTB.			10/7.	SLT 74" on C. not very good with present eyepiece.								
	1			Apr. 15	<table> <tr> <td>MC</td> <td>SC</td> <td>MTW</td> <td>BTW</td> </tr> <tr> <td>+66.2</td> <td>-48.8</td> <td>+22.6</td> <td>+0.1</td> </tr> </table>	MC	SC	MTW	BTW	+66.2	-48.8	+22.6	+0.1
MC	SC	MTW	BTW										
+66.2	-48.8	+22.6	+0.1										

Set focus 23.70

Had trouble locating star between prisms. Prism
at end of guiding periscope had got turned.

g Time I.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
39 3	W 1 31	27 39	0	6.59 A ₀	3,3,3 about 30 meters, 1st year astronomy + friends, showed ^{fine} by
40 4	W 2 20	40 13	0	6.90 F ₂	3,3,3
04 1	W 0 05	42 52	1	6.32 F ₂₂	3,3,3
49 2	W 0 16	46 30	1	7.20 G ₈	3,3,3
51 1	W 1 03	12 44	0	7.50 G ₇	3,3,3
					10/7

10

Date *Thurs April 18-19/46 L.W.* 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
11960	H.D. 99967	11 25.0	47 12	I-25	E-103 ⁰ -0	Set .008	+10.0	20 50	21 50	1
11961	" 106926	12 12.7	15 42	"	"	"	+10.0	21 56	23 00	2
11962	" 112734	12.53.8	28 52	"	"	"	+10.0	23 06	23 36	3
11963	" 128168	14 30.3	11 30	"	"	"	+10.0	23 45	00 35	4
11964	" 135679	15 11.3	26 01	"	"	"	+10.0	00 42	01 14	1
11965	" 155454	16 54.6	17 21	"	"	"	+10.0	02 00	03 14	2
11966	" 137294	15 25.1	11 20	"	"	"	+09.0	03 22	04 22	3
	<i>Focus Test</i>			<i>Set 9</i>			<i>O.T.B</i>	<i>10/7</i>		4

Focus set at 23.64

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 08E	47 00	0-1	7.49 K ₀	3-3-3 Showed. Zovity and pupils, ^{fine} Saturn
0 15W	15 29	0-1	7.53 K ₀	3-3-3 Strong winds, too windy to ^{good}
0 10W	28 38	0-1	6.75 A ₅	3-3-3 work in West. ^{fine}
0 30E	13 21	0-1	7.52 ^{7.20} A ₃	3-3-3. Sup. list ^{good}
0 26E	25 54	0-1	6.67 A ₀	3, 3, 3. Sup. list ^{little work}
0 14E	17 48	0	7.26 A ₀	3, 3, 3 ^{slide not drawn} plate not kept.
2 30W	11 12	0	7.34 F ₂	3, 3, 3 ^{slide not drawn} Star image did not make any ^{of} impression on plate holder. Forget to pull slide. ^{fine OK}


Trans at 23.69

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
	06 W	+30 18	0	7.16 A8	3-3-3	
	16 W	+15 30	0-1	7.53 K0	3-3-3	fine little weak
						Light clouds after clearing off; becoming fairly general by 0 30.
						About 125 visitors.
						Showered Saturn & 5 Leonis with 74-inch seeing poor. Howard showed Jupiter & Perseus with 4-inch.

Date Monday April 22 23/46 L. W. 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
11970	H.D. 82780	09 29.1	40 24	I-25	E-103a-0	set .008	16.1	22 48	23 16 3	3
11971	" 106926	12 12.7	15 42	"	"	"	16.2	23 23	23 57 4	26
11972	" 114988	13 09.1	33 34 33 04	"	"	"	+16.5	00 03	00 43 1	31 11
11973	" 126246 ^{np}	14 19.3	11 42	"	"	"	+16.2	00 50	01 34 2	38
11974	" 137854	15 23.3	12 12	"	"	"	+16.2	01 40	02 30 3	39
11975	" 143762	15 57.2	13 45	"	"	"	+16.2	02 36	03 02 "	39
11946	" 143936	15 58.1	18 23	"	"	"	16.2	03 58	04 32 1	40
		Focus Test					Set at 9			
<p>Have glass painted; no observing Wed. Apr. 24, Thu. 25. Fri. April 26, partly clear at sunset, passed up sky thickening, Shepley's later, closed up.</p>										

Focus set at 23.56

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
					Sky thickish at sunset clearing with banks of clouds low down at 9.00, better later
33	3 23W	40 15	2	6.90 F ₂	3-3-3 guiding weak
34	1 26W	15 29	3-2	7.53 K ₀	3-3-3 seeing unsteady very weak
35	1 16W	32 55	0-1-20	7.31 G ₀	3 3 3 ^{Sup. list. ✓} seeing very unsteady good
36	0 58W	11 32	0-1	(7.12) F ₅	3 3 3 ^{sup. list} too weak "  STARS OF EQUAL MAG. TOOK STAR CLOSER TO CROSSWIRE BOTH S IN EXP. PIECE.
37	0 50W	12 06	10	7.24 F ₀	3 3 3 ^{sup. list} good
38	1 31W	13 38	0	7.56 A ₅	3 3 3 ^{sup. list} good
39	1 10W	18. 30 ⁵	0	7.40 A ₀	3 3 ^{sup. list} good <i>Cloudy at half exposure.</i>
		2. 7. 23		10/7	
					MC SC MTW STW Apr. 24 +59.8 -48.5 -10.0 +0.4 26 +58.0 -48.3 -04.3 +0.6

about 100 vectors. showed by with 74" 110
 1st wood showed by, 4, J with 4" + Zais.

set focus 23.70.

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
55	W 3 27	40 14	0	6.90 F ₂	3,3,3 Strong wind - hand guiding
51 2	W 1 30	26 12	0	6.75 A ₂	3,3,3 " " clouds forming.
49	OTTS.				10/7.
					MC SC Apr. 29 +55.7 -48.3 MTW STW +04.5 -0.0 next

Focus set at 23.61

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 45W	60 26	1-0	7.47 A _B	3-3-3 Clouds delayed start, clouds 21:00-21:20
0 36W	26 13	2	6.75 A ₂	3-3-3 more clouds, Light passing clouds
0 41W	28 37	2-1	6.75 A ₅	3-3-3
5.05W	40 14	2-1	6.90 F ₂	3, 3, 3 Very faint, visible
1.36W	26 51	0	7.46 A ₂	3, 3, 3 Many passing clouds 1:10, 1:39. Thickening at 1:39. Thick decided to close up
Set 9	O.T.B.	10/7		

Apr. 30

MC
+55.2SC
-48.2MTW
+06.0STW
+0.1

Focus set at 23.57

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 02 4	1 45 W	40 12	0	6.90 F ₂	3-3-3
2 1	0 29 E	42 52	0	6.32 F _{2n}	3-3-3
3 3	3 12 W	40 13	0-1	6.90 F ₂	3-3-3
2 13 3	0 54 W	46 30	0-1	7.20 G8	3-3-3
1 1	1.46 W.	12 43	0-1	7.50 G7	3-3,3
2 03 W.	26 51	0-1	7.46 A ₂	3,3,3	Super. list. both with
2 07 W	26 35	0-1	7.55 K ₀	3,3,3	" " very good
2 12 W	41 47	0	7.56 A ₃	3 3 3	plate not numbered fine
	OTB	10/7			

sky very dirty earlier.

116

Set focus 23.56

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS								
30.1	W 1 22	47 00	0	7.49 K0	3,3,3								
25.2	N 0 50	28 38	0	6.75 A5	3,3,3								
50.2	W 1 49	12 43	0	7.50 G7	3,3,3								
25.4	N 0 57	44 43	0	7.57 A1	3,3,3								
	OTB			10/7									
				May 2	<table border="0"> <tr> <td>MC</td> <td>SC</td> <td>MTW</td> <td>STW</td> </tr> <tr> <td>+52.3</td> <td>-49.4</td> <td>+12.3</td> <td>+0.2</td> </tr> </table>	MC	SC	MTW	STW	+52.3	-49.4	+12.3	+0.2
MC	SC	MTW	STW										
+52.3	-49.4	+12.3	+0.2										

117

L-W.

Date *Thursday May 2-3 1946* 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 An End
11996	HD. 82780	09 29.1	40 24	I-25	E-103 ^{set} ₀₀₈		+13.3	20 56	21 52 1	2.44
11997	" 99967	11 25.0	47 12	"	"	"	+13.1	21 57	23 07 2	2.04
11998	" 112570	12 52.6	46 44	"	"	"	+13.0	23 10	00 14 3	1.44
11999	" 135517	15 10.4	43 26	"	"	"	+13.0	00 20	00 54 7	0.72
12000	" 148543	16 23.7	48 11	"	"	"	+13.1	01 00	02 12 1	1.8
12001	" 157702	17 19.7	18 56	"	"	"	+13.0	02 20	03 30 2	1.33
12002	" 175132	18 48.9	41 16	"	"	"	+13.0	03 42	04 52 3 + 02	1.23
	<i>Focus Test</i>							<i>Set 9</i>		

Focus set at 23.58

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS										
					Some time spent in lining up the crosswires in new carrier.										
521	2 44W	40 14	0	6.90 F ₂	3-3-3 fine										
072	2 04W	47 00	0	7.49 K ₆	3-3-3 fine										
3	1.44 W	46 30	0	7.20 G ₈	3-3-3 little strong										
	0.07W	43 15	0	6.69 A ₅	3, 3, 3 Sup. list good										
	0 12W	48 07	0	7.52 K ₆	3, 3, 3 " " little strong										
	0.33W	18 56	0	7.48 A ₀	3 3 3 " " fine										
	0.23E	+1 19	0	6.18 B ₉	3 3 3 DOME REFUSED TO TURN AFTER CHANGING TO THIS PLATE fine										
	O.T.B.				WATCH STOPPED AT 3 ^h 48 ^m 46 ^s . USED OWN WATCH WHICH IS RUNNING FAST, ABOUT 3 MIN. SET IT TO APPROXIMATE TIME. CHECKED WATCH 1/2 MIN. FAST.										
					<table border="0"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>MTW</td> <td>STW</td> </tr> <tr> <td>May 3</td> <td>+52.8</td> <td>-47.9</td> <td>+12.6</td> <td>+0.2</td> </tr> </table>		MC	SC	MTW	STW	May 3	+52.8	-47.9	+12.6	+0.2
	MC	SC	MTW	STW											
May 3	+52.8	-47.9	+12.6	+0.2											

119

L-W.

Date Friday May 3-4 1946 Julian Day _____

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12003	H.D. 99302	11 20.5	27 19	I-25	E-103 ₀₀	set .008	+9.0	20 40	22 20 2
12004	" 106926	12 12.7	15 42	"	"	"	+8.9	22 24	23 44 3
12005	" 127740	14 28.0	14 31	"	"	"	+8.8	23 55	01 21 4
12006	" 143597	15 56.3	13 34	"	"	"	+8.9	01 25	02 45 1
12007	" 157294	17 17.3	11 47	"	"	"	+8.9	02 48	03 48 2
		<i>Focus Test</i>							<i>Set 9</i>
		<i>Saturday May 4-5</i>							<i>1946</i>
							<i>H-N-W</i>		

Focus set at 23.65

ig Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
20	1 25W	27 04	0	7.21 A ₂	3-3-3 Seeing very poor!
44	1 57W	15 29	0	7.53 K ₀	3-3-3
21	1.20 W	14 19	0	7.46 F ₅	3.3.3 Supp. list.
48	1.16 W	13 28	0	7.44 F ₅	3.3.3 " "
48	0.58W	11 44	0	7.08 A ₀	3.3.3 " " " "
		O.T.B.			10/7

about 50 visitors. Rain. Showed lecture slides and telescope.

	MC	SC	MTW	STW
May 6	+50.6	-48.2	-00.2	+0.0
			rust	

1125.

Date Thurs May 9-10, 1946 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 At End
12012	HD 82780	09 29.1	40 24	I-25	E103.0	008	10.8.	20 40	21 20	3
12013	HD 106926	12 12.7	15 42	..	..	..	10.7	21 24	22 34	4
12014	HD 112734	12 53.8	28 52	..	..	..	10.8.	22 37	23 07	1
12015	HD 116594	13 19.5	12 57	..	..	..	10.7.	23 10	00 24	2
12016	HD 120874	13 47.1	59 02	..	..	..	10.6	00 29	01 01	3

Focus Test.

Friday May 10-11 Cloudy all evening. L

Saturday May 11-12, 1946 Hd Ho N About 150 Vectors.
 - Partly cloudy. Showed moon with 74". N, Ho showed
 - 4 ♀ ♂ with 4", 3½", 3". Thick by 2220 cloud.

Focus unchanged at 23.625

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
20 3	W 2 40	40 14	1-0	6.90 F2	3,3,3 Delayed start to get this at time required.
34 4	W 1 10	15 27	0-1	7.53 K0	3,3,3 some curious haze.
07 1	W 1 02	28 38	1	6.75 A5	3,3,3
24 2	W 1 55	12 45	0-1	7.50 G7	3,3,3 haze.
01 3	W 2 05	58 49	0	6.36 A0	3,3,3 "
	OTB				10/7

127

Date Sunday May 12-13, 1946 H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12017	HD 52191	09 25.4	+27 50	I-25	E-103a-0	slit 008	12.5	20 44	21 14 4
12018	99267	11 20.3	+30 32	"	"	"	12.6	21 16	22 12 1
12019	106926	12 12.7	+15 42	"	"	"	12.6	22 13.	23 17 3
12020	112734	12 53.8	+28 52	"	"	"	12.4	23 19	0 21
	Procyon	07 06	17 7						

Set on M84 with visitor's eyepiece. Base of field

Set on M3 - set on edge of field

Monday May 13-14

Set on moon and Jupiter through the haze to reacquaint the visitors eye piece and set the crosshair. Losing a magnitude in best parts of sky due to haze. Sky thickening, quite thick at mid night.

129

Date Sun May 19-20/46 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 As End
12021	HD 112486	12 51.9	54 39	L.25	E10820	Set 508	+16.1	22 26	22 58 4	
Saturday May 18-19, 1946 H-N										

130
cloudy after sunset. clearing about 2130.

Set focus 23.56

ig Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
584	W 135	54 25	^{that had} ^{been} 0 on	5.90 A2	3.6	sky practically thick thro out.
<p>Saturday, May 18 - Cloudy with rain and fog about 60 visitors H showed telescope, N showed lantern slide</p>						

131

Date Tuesday May 21-22/46 L-D-Ta-W Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	H
12022	HD 82780	09 29.1	+40 24	J-25	E-163a-0	52.8	+14.5	22 05	23 11	1
12023	HD 99967	11 250	+47 12	"	"	"	+14.3	23 18	00 32	2
12024	HD 141930	15 46.6	+44 49	"	"	"	+14.5	00 49	01 56	3
12025	HD 152951	16 51.5	+46 41	"	"	"	+14.4	02 00	02 28	4
12026	HD 164898	17 58.3	+45 21	"	"	"	+14.4	02 36	03 30	5
12027	HD 186133	20 30.3	+49 50	"	"	"	+14.3	03 36	04 02	6
	Focus Test					Sitg				

lit focus 23.58

Hour Angle End	Declination	Seeing	Ptg. Mag.	Coup	REMARKS
25 ^h 19 ^m W	+40 16	0-	6.90 F ₂	3-3-3	Clouds early evening
24 ^h 45 ^m W	+46 57	0-1	7.49 K ₀	3-3-3	image very unsteady! Windy!
21 ^h 32 ^m W	+44 43	0-1	7.57 A ₁	3-3-3	Seeing deteriorating a little!
21 ^h 16 ^m W	+46 39	1-2	6.77 A ₂	3-3-3	Refocused, seeing better
21 ^h 11 ^m W	+45 22	1-2	7.44 A ₀	3-3-3	
21 ^h 11 ^m E	+45 00	1-2	6.68 A ₂	3, 3, 3	
OTB				10/7	

Focus Set 23 53

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
11.1	0 33 W	+42 53	0	6.32 Az	3, 3, 3	sky dirty strong
45.2	0 34 W	+54 23	0	590 Az	3, 3, 3	too strong weak
000	02 23 W	+12 43	0	7.50 97	3-3, 3	Some turning failed. Relay stuck while operating manually.
	01 16 W	+25 53	1	6.67 A0	3-3-3	Some turning failed after changing. Velocity good
	00 38 W	+46 37	1-0	6.77 Az	3-3-3	increasing clouds and haze. Star completely lost by 01.45. Clouds fine
	071				10.7 sec	prisms not moved for focus test

May 27 MC SC MTW STW
 +31.3 -53.7 +00.3 +0.0
 rest

135

Date Tuesday May 28-29 1946 S-H-Sh Julian Day

Plate No.	Object	R.A. 1900 1950	Declination 1900 1950	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12033	NGC 5272	13 39.9	+28 38	Newtonian	E 103a 0	-	-	21.53	21.51
12034	5053	13 13.9	+17 57	"	E 103a 0	-	-	22.02	22.12
12035	5053	13 13.9	+17 57	"	E 103a 0	-	-	22.13	22.24
12036	5634	14 27.0	-05 45	"	E 103a 0	-	-	22.27	22.47
12037	5053	13 13.9	+17 57	"	E 103a 0	-	-	23.14	23.14
12038	5053	13 13.9	+17 57	"	E 103a 0	-	-	23.25	23.35
12039	5904	15 16.0	+02 16	"	E 103a 0	-	-	2	
12039	5466	14 03.2	+28 46	"	E 103a 0			23.41	23.51
12040	5053	13 13.9	+17 57	"	E 103a 0			23.56	00.04
12041	5053	13 13.9	+17 57	"	E 103a 0			00.05	00.15
12042	6205	16 39.9	+36 33	"	E 103a 0			00.23	00.25
12043	5904	15 16.0	+02 16	"	E 103a 0			00.20	00.24
12044	5466	14 03.2	+28 46	"	E 103a 0			00.39	00.43
12045	6402	17 35.0	-03 13	"	E 103a 0			00.55	01.09
	Wright 2219	17 42.5	-00 11	"	E 103a 0			01.12	01.26
12046	6333	17 16.2	-18 28	"	E 103a 0			01.34	01.42

1.36

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
00 24 W				
01 04 W				
01 15 W				
01 27 W				Reddlimated.
02 16 W				
?				
?				
02 57 W				
03 05 W				
03 01 E				
03 21 W				
03 52 W				There may be lens exposures on this plate! || ✓ (120 43-4)
04 14 E				
04 11 E				Foucault or B. Opluche
04 31 W				

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS										
00 35W														
01 20W														
01 21W														
01 11W														
01 09W														
01 11E														
01 07E														
01 05E														
				<p>Seeing all to here Unguided. Started until this got high enough to read photometer.</p>										
				<table border="0"> <thead> <tr> <th></th> <th>MC</th> <th>SC</th> <th>MTW</th> <th>STW</th> </tr> </thead> <tbody> <tr> <td>May 29</td> <td>+29.4</td> <td>-55.0</td> <td>+03.6</td> <td>+0.0^m</td> </tr> </tbody> </table>		MC	SC	MTW	STW	May 29	+29.4	-55.0	+03.6	+0.0 ^m
	MC	SC	MTW	STW										
May 29	+29.4	-55.0	+03.6	+0.0 ^m										

139.

Date Ned May 29-30 Ja-L-S-H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12055	NGC 5272	13 39.9	+28 38	Newt	E103 ⁰			21 23	21 26 1
12056	" 5053	13 13.9	+17 57	"	"			21 34	21 44 E 04
12057	" "	"	"	"	"			21 46	21 56 1 05
12058	" 6229	16 45.6	47 37	"	"			22 10	22 30 E 10
12059	" 6205	16 39.9	36 33	"	"			22 34	22 36 1 15
12060	" 5053	13 13.9	+17 57	"	"			22 46	22 56 2 13
12061	" "	"	"	"	"			22 58	23 08 15
12062	" 5634	14 27.0	-05 45	"	"			23 12	23 32 E 16
12063	" 5904	15 16.0	+02 16	"	"			23 36	23 39 17
12064	" 5053	13 13.9	+17 57	"	"			23 57	24 09 2 18
12065	" 5466	14 03.2	+28 46	"	"			00 06	00 16 2 19
12066	" 5053	13 13.9	+17 57	"	"			00 19	00 29 2 20
12067	" 5634	14 27.0	-5 45	"	"			00 34	00 54 2 21
12068	" 6171	16 29.7	-12 57	"	"			01 01	01 13 2 22
12069	" 6333	17 16.2	-18 28	"	"			01 17	01 27 2 23
12070	" 6402	17 35.0	-03 13	"	"			01 30	01 36 ⁴⁵ 2 24

ing Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1 26	0 ^h 04 ^m E	28 36	Poor		
1 44	0 41 W		Poor		
1 56	0 53 W				
2 08	2 05 E				
2 30	1 53 E				
2 52	1 53 W				
3 08	2 05 W				
3 22	1 16 W				
3 38	0 32 W				
3 59	2 49 W				H guided this
4 14	2 23 W				
4 29	3 26 W				
4 54	2 37 W				
5 13	0 54 W				
5 27	0 21 W				
5 36	0 13 W				

plate not unloaded - reexposed for no. 1207 (over)
 Sequence plate with rest

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
4 ¹⁵ 2	0 15 W				
2 10	1 41 W				
2 14	4 27 W				
2 23	1 49 W				
2 29	1 46 W				
2 40	1 41 W				
2 56	0 08 W				
3 10	1 10 E				
3 18	2 02 E				unguided - can't reach it Squidney all except where indicated
					NB. Plates of these two nights show halation about brightest star images due to deterioration of mount secondary.

143

Date Thurs May 30-31 Ta-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.	
	Set on HD 114762		at focus Cass Secondary (5th hel*)							
12079	HD 112570	12 52.6	+46 29			008	23.3	21 41	22 11	
12080	HD 121247	13 49.2	+42 41			"	23.0	22 19	22 39	
12081	HD 123691	14 04.1	+48 41				23.1	22 43	23 07	
12082	HD 138406	15 26.8	+62 05				23.4	23 11	23 33	
12083	HD 141930	15 46.6	+44 41				23.0	23 41	00 51	
12084	HD 152951	16 51.5	+46 41				23.0	00 55	01 55	
12085	HD 158013	17 21.7	+57 05				23.1	01 31	02 11	
	Focus Test.		CTB							
12086	HD 169898	17 57.3	+45 21				23.0	02 22	03 09	
	HD 180316	19 11.0	+27 51							
	Saturday June 2-3 1946		HD-SL-W							
	at sl 12 v. 12 (L)		12 v. 12 (L)							
	at sl 12 v. 12 (L)		12 v. 12 (L)							

Focus Set 23.45

Clouds clearing at dome

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
					Trouble starting dome
1 ^h 31 ^m W	+46 30	1?	7.20 G8	3-3-3	Binary
1 ^h 02 ^m W	+42 30	1-2	6.69 A ₀	3-3-3	Velix Declination slow motion giving trouble had to reset
1 ^h 15 ^m W	+48 29	1-2	7.11 F ₂	3-3-3	Velix Dec O.K. seeing variable
0 ^h 21 ^m W	+61 57	1	6.85 A ₂	3-3-3	Binary Haze coming in
1 ^h 18 ^m W	+44 41	0-1	7.57 A ₁	3-3-3	Binary Faced to clouds in dec. Haze heavy, few clouds
0 ^h 50 ^m W	+46 40	0	6.77 A ₂	3-3-3	Binary More clouds
1 ^h 09 ^m W	+47 06	0-1	6.61 A ₂	3-3-3	" Still more clouds
				10-7	
1 ^h 17 ^m W	+45 21	1+	7.44 A ₀	3-3-3	" Clearer
			6.51 B ₅		NO. Cloudy again closing up
					Last plate probably spoiled by not resetting properly after focus test.
					4+8 plates in dome mirror heat off.

Clear at dawn, clouds to W. Faint until stopped 5 h. started to clear (connection + 30(MT) ... 71)

146

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
	01 18 W	+26 13	0-1	6.75. A2	3-3-3	Binary Light clouds. Seams variable not
	14 W	+28 38	1	6.75 A5	3-3-3	Binary. Continued light clouds not
	01 29 N	+10 44	1-2	7.50 97	3-3-3	Binary. Light haze. Plate holder's foot on cone ^{no} N not Photometer seem not but alt's not
	02 17 W.	+30 25	0	7.55 A2	3-3-3.	Volcanic not Clouding in from S clouds! fixed Star not lost by 2310 Plate which unclear
					10-7 Clouds _w	on all sides. closed up 4 + 0 plates in dome.
						MTW MC SC SW June 3 +0.2 ^s +22.6 ^s -58.6 ^s -01 ^m

147

Date Monday June 3-4 1946 Ta-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.
12091	HD 116594	13 19.5	+12 57	I 25	E1039-2	.008	17.3	21.19	21.59
12092	HD 120874	13 47.1	+59 02				18.2?	22 05	22 19
12093	HD 117815	13 27.7	+47 46				18.4	22 24	22 46
12094	HD 122080	13 54.5	+26 18				18.3	22 52	23 18
12095	HD 138406	15 20.6	+62 05				18.2	23 23	23 41
12096	HD 141930	15 46.6	+44 19				18.1	23 47	00 29
12097	HD 152951	16 51.5	+46 41				18.2	00 33	00 47
12098	HD 158013	17 21.5	+57 05				18.2	00 56	01 10
12099	HD 159330	17 29.1	+57 57				18.2	01 13	01 43
12100	HD 164898	17 58.6	+65 21				18.2	01 47	02 19
	Focus test		CTR						
12101	HD 176053	18 57.3	+31 52				18.3	02 28	02 59
12102	HD 180316	19 40	+27 46				18.2	03 02	03 14
12103	HD 181194	19 42	+16 19				18.2	03 18	03 46

Clouds at dusk, set on Jupiter to announce
2 friends of Dr Chant. 198

Focus reset to 23.55.

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
19	1 ^h 07 ^m W	+12 45	0	7.50 G7	3-3-3	Binary - wind, seeing variable
20	1 ^h 00 ^m W	+58 51	1	6.36 A0	3-3-3	" Temp Control!
24	1 ^h 46 ^m W	+47 34	1-2	7.04 A5	3-3-3	Vely*
318	1 ^h 51 ^m W	+26 07	1+	7.45 A5	3-3-3	" Bright* of double.
14	0 ^h 49 ^m W	+61 58	2-	6.85 A2	3-3-3	Binary
11	1 ^h 11 ^m W	+44 41	2-	7.57 A1	3-3-3	"
105	0 ^h 21 ^m W	+46 39	2	6.77 A2	3-3-3	"
100	0 ^h 28 ^m W	+57 06	2-	6.61 A2	3-3-3	"
100	0 ^h 43 ^m W	+57 57	2	7.57 K2	3-3-3	"
100	0 ^h 51 ^m W	+05 23	2-	7.44 A0	3-3-3	"
					10-7	
100	0 ^h 39 ^m W	+31 57	1+	7.20 A3	3-3-3	"
100	0 ^h 33 ^m W	+27 54	2	6.51 B5	3-3-3	"
3-1		+16 25	1+	234 F7	3-3-	"
						3+0 planets in plane

149

Date Tuesday June 4-5 S-H-L-D Julian Day

Plate No.	Object	R.A. 1900 50	Declination 1900 50	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour An End
12104	NGC 5272	13 39.9	28 38	Newt	E-103100			21 20	21 23 1	
12105	" 5053	13 13.9	17 57	"	"			21 27	21 37 2	0 56
12106	" 4147	12 07.6	18 49	"	"			21 40	21 46 1	2 13
12107	" 5966	14 03.2	28 46	"	"			21 49	21 59 2	0 30
12108	" 5053	13 13.9	17 57	"	"			22 02	22 10 1	1 2
12109	" 5909	15 16 0	02 16	"	"			22 15	22 19 3	1 7
12110	" 6229	16 45 6	47 37	"	"			22 23	22 41 1	1 9
12111	" 6205	16 39.9	36 35	"	"			22 47	22 49 2	1 9
12112	" 5053	13 13.9	17 57	"	"			22 50	23 05 1	2 16
12113	" 5634	14 27.0	-05 45	"	"			23 13	23 31 2	3 8
12114	" 5053	13 13.9	17 57	"	"			23 30	23 46 1	3 10
12115	" 5966	14 03.2	28 46	"	"			23 49	23 57 2	3 19
12116	" 6171	16 29.9	-12 57	"	"			00 17	00 27 1	12 W
12117	" 6218	16 44.6	-15 2	"	"			00 29	00 33 2	12 W
12118	" 6254	16 54.5	-4 02	"	"			00 35	00 39 1	9 W
12119	" 6333	17 16.2	-18 28	"	"			00 43	00 51 2	12 W

Hour	Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
23					
137	0 52 W	17 57			Some scattered light clouds.
50	2 13 W	18 49			Near region of moon
52	0 30 W	28 45			
201	1 30 W	17 56			Bright guide*
201	2 13 W				
201	1 30 E	—			
201	1 19 E				
201	2 26 W	17 57			
201	1 38 W	-05 45			
201	3 07 W	17 56			
201	2 29 W				
201	0 32 W	-12 56			
201	0 23 W				
201	0 19 W				
201	0 09 W				

	MTW	MC	SC	SW
JUNE 4	+03.8°	+22.8°	+13.9°	-0.1 ^m

Sidereal clock stopped - reset

153

Date Wednesday June 5-6 S.H.L-Ta Julian Day

Plate No.	Object	R.A.	Declination	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour An End
		1900 1950	1900 1950							
12129	NGC 5272	13 39.9	+28 38	NEW T	E-103aU			21 04	21 07 1	0 05W
12130	" 4147	12 07.6	+18° 44	"	"			21 14	21 20 2	1 51W
12131	" 5053	13 13.9	+17 57	"	"			21 23	21 33 1	0 56W
12132	" 6229	16 45.6	+47 37	"	"			21 43	21 59 2	2 8E
12133	" 5634	14 27.0	-5 45	"	"			22 03	22 19 1	0 30W
12134	" 5053	13 13.9	+17 57	"	"			22 22	22 30 2	1 1W
12135	" 6205	16 39.9	+36 33	"	"			22 30	22 38 1	0 0E
12136	" 6229	16 45.6	+47 37	"	"			22 40	22 58 2	1 1E
12137	" 5634	14 27.0	-5 45	"	"			23 04	23 20 1	3 1W
12138	" 5904	15 16.0	+2 16	"	"			23 24	23 28 2	0 4W
12139	" 5053	13 13.9	+17 57	"	"			23 31	23 41 1	0 11W
12140	" 6171	16 29.7	-12 57	"	"			23 47	23 57 2	0 0W
12141	" 5897	15 14.6	-20 49	"	"			00 00	00 10 1	0 3W
12142	" 6093	16 14.1	-22 42	"	"			00 14	00 20 1	0 4W
12143	" 6402	17 35.0	-3 13	"	"			00 25 ⁵⁰	00 39 ⁵⁰	1 00W
	{ Kaptzys 109	17 42.5	-0 11	"	"			00 42 ²²	00 56 ²²	1 00W

Hour Angle S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
	0 05W				Focus changed 2 ^{mm} from last night.
	1 51W				
	0 56W				
	2 08E				
	0 30W				
	1 54W				
	24 E				
	1 11 E				
	31W				Prepared
	49W				
	05W				
	06W				
	33W				
	44W				
	20W				
	11W				

Not Guiding ^{This is as far south as can}
Sequence plate

Cloudy until 22:45

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Focus at 23:49

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS												
2 ^h 36 ^m W	+44 07	1+	7.2 M ₉	3-3-3	flippers in $\frac{2}{3}$ haze												
1 ^h 05 ^m W	+43 58	2	7.3 K ₁	3-3-3	"												
1 ^h 07 ^m W	+49 02	2-	6.9 M ₂	3-3-3	" light clouds!												
1 ^h 07 ^m W	+40 51	1+	6.5 K ₃	4-4-4	" 2 exp, 10, 14m. filling in from west												
			6.2 F₈		" closing up.												
					<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>MC</th> <th>SC</th> <th>SW</th> <th>MTW</th> <th>STW</th> </tr> </thead> <tbody> <tr> <td>Jun. 7</td> <td>+18.5</td> <td>+00.5</td> <td>+03.8</td> <td>+11.5</td> <td>+0.1</td> </tr> </tbody> </table>		MC	SC	SW	MTW	STW	Jun. 7	+18.5	+00.5	+03.8	+11.5	+0.1
	MC	SC	SW	MTW	STW												
Jun. 7	+18.5	+00.5	+03.8	+11.5	+0.1												

About 200 visitors, showed 7 and π Boq with
74-inch, C, ♀ with 2-inch and 4-inch resp.

Focus set 23.46 ±

160

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
225W	+43 16	0-1	6.69 A5 3-3-3	Sup. list. (Bridge reset after 12:52)
21-05W	+16 35	0	7.55 K ₀ 3, 3, 3	Sup list RA. clamp switch fell off. Clamped by hand.
21 03W	15 17	0	7.57 A ₃ 3, 3, 3	Sup list. windy, seeing getting worse
21 44W	57 06	0	6.61 A ₇ 3, 3, 3	Binary
21-05W	45 22	0	7.44 A ₀ 3, 3, 3	"
20 40W	18 03	0	6.80 K ₂ 3, 3, 3	"
20 48W	27 53	0	6.51 B ₅ 3, 3, 3	Dec. fast motion sticking
20 48W	15 22	0	8.00 M ₁ 3, 3, 3	"
0 T B			10/7	constant motion

11/10/10

Ta fixed

Ta fixed R.A. clamp switch

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Hour Angle E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPONENTS	REMARKS	Focus set 23.58± 0002
01 21W	+47 30	2-3	7.4	Mb	3-3-3	Flapper in $\frac{2}{3}$	not measurable fine
01 24	+37 20	2-3	7.7	Ma	3-3-3	Flapper in $\frac{2}{3}$	very good
01 04W	+49 43	2-3	6.7	Ma	3-3-3	Flapper in $\frac{2}{3}$	fine
01 59V	+43 38	1-2	6.81	A2	3-3-3	Velocity * Seeing variable.	fine
01 17W	+43 16	1-2	6.88	A2	3-3-3	Velocity * Slight haze.	strong
01 07W	+10 46	0	7.19	A0	3-3-3	Velocity * Haze!	very good
0 48W	+11 10	0	7.34	F2	3-3-3	Velocity *	NO EXPOSURE
01 31W	+11 55	1	7.27	F2	3-3-3	Velocity * Seems variable 0-2 ⁺	very good
01 16W	+28 59	1-2	7.58	F0	3-3-3	Velocity * Intermittent light clouds	good
01 41W	+28 06	1-2	7.02	A0	3-3-3	Velocity * Continued light clouds	fine
01 12W	+16 24	1-2	7.34	F7	3-3-3	Binary.	very good
01 37W	+13 48	1	7.23	F2	3-3-3	Velocity *	with
01 18W	+27 54	1	6.51	B5	3-3-3	Binary	good

Sub to through Base

that no P on Mimos. 12 + 2 plates in dome.

Twelve, 5 - 11-12 1 on clouds. Sh

Center of field L. 11-12

MC SC SW MTW STW
+12.0 +07.1 zero +25.0 +0.25

163

Date Thursday June 13-14 1946 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.
12173	YP 3746	12 20.3	+57 20	I-25	E 10720	008	18.8	21 00	21 30
12174	HB 99767	11 25.0	+47 12				18.6	21 39	22 09
12175	YP 4104	13 36.4	+51 01				18.3	22 13	22 33
12176	YP 4107	13 36.7	+55 11				18.3	22 19	23 07
12177	YP 4458	14 56.0	+66 20				18.3	23 14	23 32
12178	{ YP 4542	15 13.5	+67 49				18.3	23 36	23 42
	{ " " " "							23 42	23 50
12179	YP 4879	16 15.6	+60 00				18.1	23 59	00 21
12180	YP 4979	16 36.0	+56 13				18.1	00 33	00 47
12181	{ 4999	16 40.2	+69 47				18.1	00 52	01 00
	{ " " " "							01 00	01 11
12182	YP 5243	17 29.9	+41 19				18.0	01 24	01 42
	Focus Lens		OTB						
12183	YP 5302	17 53.9	+45 23				18.1	01 52	02 30
12184	{ YP 5706	18 49.7	+59 19				17.9	02 46	02 52
	{ " " " "							02 52	02 00

1946 Jun 11, Tue. Heat on moon.
 1946 Jun 12 Wed. Heavy clouds from sunset to 22:30 cleared, thickened
 Heavy clouds continuing, clearing around sunrise W. 169

Hour Angle E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS	Focus at 23.58 ±
130	2 ^h 18 ^m W	+57 09	0	7.8 M ₃	3-3-3	flipper in 2/3	l. weak
209	3 ^h 57 ^m W	+46 58	0-1	7.99 K ₀	3-3-3	Binary - didn't see paper on Meritt's desk - went back for it after setting on YP 374C	l. weak
253	2 ^h 02 ^m W	+50 50	1	6.8 F ₉	3-3-3	flipper in 2/3	also, not on wrong side at first fine
307	2 ^h 38 ^m W	+55 01	1+	6.6 M ₂	3-3-3	"	|| Contact for 4" finder light - broken Forced to use upper finder fine
352	1 ^h 45 ^m W	+66 12	1+	6.7 M ₅	3-3-3	"	l. strong
402		+67 35	1+	5.7 F ₉	4-4	flipper in 1/2 setting 3	fine
455	1 ^h 41 ^m W			5.7 F ₉	4-4	"	8 good l. strong
502	1 ^h 23 ^m W	+59 54	1+	7.4 M ₄	3-3-3	" 2/3	fine
557	1 ^h 20 ^m W	+56 08	2-	6.5 K ₀	3-3-3	" "	fine
607		+64 42	1-2	6.3 K ₂	4-4	" setting 2	fine
657	1 ^h 44 ^m W			6.3 K ₂	4-4	"	8 l. strong
707	1 ^h 30 ^m W	+91 18	1-2	7.0 K ₁	3-3-3	flipper in 2/3	Trouble turning down fine
757	1 ^h 55 ^m W	+45 22	2	8.0 M ₆	3-3-3	10-7	good
807		+59 19	2	5.7 G ₅	4-4	"	fine
857	1 ^h 30 ^m W				4-4	"	l. strong

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1946

Date JUN 14⁻¹⁵ Fri L. T. W. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Star Angl End
12187	Y.P. 3932	13 01.5	+23 09	I - 25	E103a0	008	+19.5	21 02	21 50	00
12188	Y.P. 4244	14 10.2	+69 54	"	"	"	+19.0	22 03	22 35	32
12189	Y.P. 4894	16 18.6	+34 02	"	"	"	+19.0	22 45	23 17	02
12190	Y.P. 4895	16 18.7	+33 56	"	"	"	+19.0	23 22	00 04	14
12191	Y.P. 5080	16 56.7	+22 47	"	"	"	+19.0	00 01	00 34	50
12192	Y.P. 5178	17 17.6	+28 51	"	"	"	+19.0	00 42	01 10	00
12193	{ Y.P. 5429	18 03.2	+30 33	"	"	"	+19.0	01 14	01 21	01
	{ " "	"	"	"	"	"		01 21	01 31	01
12194	Y.P. 5462	18 08.1	+31 23	"	"	"	+19	01 38	01 56	14
12195	Y.P. 5614	18 34.7	+05 10	"	"	"	+19.0	02 02	02 22	02
12196	{ Y.P. 5442	18 04.6	+3 59	"	"	"	+18.9	02 30	02 36	02
	{ " "	"	"	"	"	"		02 36	02 46	02
12197	{ Y.P. 5989	18 31.7	+51 01	"	"	"	+18.7	02 51	02 51	02
	{ " "	"	"	"	"	"		02 59	03 11	02
12198	{ Y.P. 6417	20 43.3	+61 27	"	"	"	+18.9	03 18	03 20	03
	{ " "	"	"	"	"	"		03 20	03 24	03
	{ " "	"	"	"	"	"		03 24	03 30	03

Set Focus at 23.5

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS	
01 50	02 00W	+22 56	1-2	7.7 M ₆	3-3-3	Flipper in 2/3 fine
01 55	01 32W	+69 43	1-2	7.2 M ₂	3-3-3	" " " poorly guided
02 00	00 10 ^W E	+33 58	1-2	7.2 M ₂	3-3-3	" " " stop
02 05	0 14W	+33 52	2-1-0	6.9 K ₅	3-3-3	" " " Seeing blowing up fine
02 10	0 50W	+22 46	1	7.1 K ₃	3-3-3	" " " expand through glass
02 15	1 05W	28 49	1-0	6.9 F ₈	3-3-3	" " 1/2 last star
02 20	0	30 35	1-0	5.6 F ₅	3-3	Flipper out (in error) Don't refuse to turn too slow
02 25	0 40W				3-3	Flipper in 1/2 3rd comparison over the expanded the stars
02 30	1 01W	31 25	1-2	6.8 M ₃	3-3-3	Flipper in 2/3 Seeing variable (flippers not fine this evening)
02 35	1 00W	05 14	1-2	6.9 F-8	3-3	" " 1/2 poorly guided fine
02 40		+04 00	0-1-2	6.0 A _{7n}	3-3	" " 1/2 good
02 45	1 53W	+51 08			3-3	" " 1/2 poorly guided good
02 50			1-2	6.1 F ₆	3-3	Flipper out (in error)
02 55	1 ^X 52W	+51 02			3-3	Flipper in 1/2 guiding } follow back to star
03 00			2-1	4.3 E ₁₇	3-3	Flipper in 1/2 (narrow class) } continued on 23.5
03 05	0 09	+61 29			3-3	" " "
03 10					3-3	" " "

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
343	52W	+67 30	2	4.2 K0	3 5. Flipping in 1/2
346					3 3. " "
350					3 3. " "

} all much to strong
 one exposure shows effect of
 flexure on bearings.
 2 + 8 plates in dome.

Change drier for dome contacts.

about 250 visitors. Hd + Sh showed
 TT Boo and M5 (good!) with 74" focus 23.5
 Ta showed ♀, H.C. with 4" + 2"

1.72

diag Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
3	0.15E	+43.42	0	7.21 A22	3,3,3 Binocular
1.41	1.06W	18 17	0	7.40 A0	3,3,3 Suppl.
0.3	0.05W 0.11E?	17 25	0	5.96 A2	3,3,3 Bin.
1.50	1.10W	17 54	0	7.58 F0	3,3,3 Suppl. Hagen
1.48	1.28W	15 30	0	7.44 F0s	3,3,3 Bin. Wrong star: B.D. 15° 31' 90" ^{too weak} 1855: 17° 21' 2", +15° 32' 4" mag. 8.3 1900: (17 23.2 +15 30)
1.48	1.48W	39 15	1	7.73 K0	3,3,3 Bin.
1.48	2 8 21	28 21	1	6.20 B0s	3,3,3 Bin.
					Die fast motion button refused to move star past a point north of crosswires. fix next two star settings. Needed to clean up after trying to mount in window daylight. Switch on circuit panel not operating. New box of plates made midone

focus 23.5

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Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS																		
1.0 ^W	+6 58	C	6.9(A) 3, 3, 3,	Cloudy all forenoon, ^{per guiding} good clearing then overcast warms times from 23.00 clearing about 01.30.																		
Set 9			10/7	Had some trouble on starting as previous, but was able to reproduce difficulty after a little time																		
				<table border="0"> <tr> <td>June 17</td> <td>MC</td> <td>SC</td> <td>SW</td> <td>MTW</td> <td>STW</td> </tr> <tr> <td></td> <td>+5^s</td> <td>-1.7^s</td> <td>-6^s</td> <td>+4^s</td> <td>+3^m</td> </tr> <tr> <td>18</td> <td>+4^s</td> <td>+1.3^s</td> <td>-6^s</td> <td>+40^s</td> <td>+13^m (all 1^s)</td> </tr> </table>	June 17	MC	SC	SW	MTW	STW		+5 ^s	-1.7 ^s	-6 ^s	+4 ^s	+3 ^m	18	+4 ^s	+1.3 ^s	-6 ^s	+40 ^s	+13 ^m (all 1 ^s)
June 17	MC	SC	SW	MTW	STW																	
	+5 ^s	-1.7 ^s	-6 ^s	+4 ^s	+3 ^m																	
18	+4 ^s	+1.3 ^s	-6 ^s	+40 ^s	+13 ^m (all 1 ^s)																	
				Mon-Thurs June 17-18 1946 Clouds, thundershowers D																		

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Date Tuesday June 16-19, 1946

Sh 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
12208	YP 3990, Com 1712	13 11.9	+17 33	E-25	E10300	.008	+18.7	21.21	22.07	3
12209	YP 4146 6 Boetis	13 45 0	+21 46	E-25	E 10300	008	+18.7	22.12	22.22	4
	"	"	"	"	"	"	+18.7	22.22	22.28	"
12210	YP 4683, ψ 521	15 39 0	+02 50	"	"	"	+18.7	22.34	22.50	1
12211	HD 137294	15 20 1	+11 20	"	"	"	+18.6	22.55	23.27	2
12212	HD 137854	15 23.3	+12 12	"	"	"	+18.6	23.32	00.04	3
12213	HD 153454	16 54.6	+17 51	"	"	"	+18.6	00.10	00.54	4
12214	HD 181444	19 14.2	+16 19	"	"	"	+18.6	01.02	01.30	1
12215	HD 168498	18 14.9	+11 50	"	"	"	+18.6	01.35	02.07	2
12216	HD 170542	18 24.9	+13 47	"	"	"	+18.6	02.11	02.39	3
12217	HD 170562	18 25.0	+17 55	"	"	"	+18.5	02.41	02.55	4
	Four Test									
12218	HD 193349	20 14.7	+14 04	"	"	"	+18.5	03.05	03.25	1
12219	HD 199140	20 50.1	+28 08	"	"	"	+18.5	03.29	03.41	2

Clouds all day, clearing slowly from N towards dusk (opened up at 21:00)

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ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
						Focus Set. 23-52
01	02 22W	+17 22	0-1 ⁺	7.6 K0	3-3-3	Flapper in $\frac{2}{3}$ Image very unsteady
02	02 05W	+21 33	1-2.	6.1 K0	4-4	Flapper in $\frac{2}{3}$ Settings "3"
03	02 11W	"	"	"	4-4	Flapper in $\frac{2}{3}$ Settings "8"
04	00 37W	+02 44	1	6.6 G5	3-3-3	Flapper in $\frac{1}{2}$ Finder held  Right Star?
05	01 35W	+11 14	0-1	7.34 F2	3-3-3	Velocity * Seeing Variable.
06	02 09W	+12 04	0	7.24 F0	3-3-3	Velocity * Light haze cloud moving in Seems bright for 7.0 vs Mag
07	01 27W	+17 48	0	7.56 A0	3-3-3	Velocity *
08	00 16E	+16 24	0-1	7.34 F7	3-3-3	Binary
09	01 20 W	+11 51	0-1	7.34 A0	3-3-3	Velocity *
10	01 42W	+13 50	0 ⁺	7.23 F2	3-3-3	Velocity *
11	01 58W	+17 59	0-1	6.51 B9	3-3-3	Velocity * Setting 3
		Out of Thru Pass			10-7	Setting 8
12	00 37W	+14 13	0-1	6.81 A05	3-3-3	Binary Finder held 
13	00 19W	+28 21	0	6.20 B25	3-3-3	Binary
						12 + 2 plates, in dome Head <u>not</u> on mirror.

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Date Wed June 19-20 Hd Wh (Tc) 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 An End
12220	Alcor HD 116842	13 21.2	55 30	T-25	spots 23 m E Process	.008	19.2	21 05. ^{11/6}	21 27 2	13
<p>Thursday June 20-21</p> <p>- cloudy, heavy mist during evening, rain at midnight, broken clouds till morning D</p> <p>Friday June 21-22 Heavy clouds all night.</p>										

about 60-65 visitors; Hahnards & Crothers and M3 with
74 inch, N+ Sbs about ♀ ♂ ♂ ♀ with 2" + 4"

focus 23.5

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Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
15 W	43 42	1	7.21 AzN	3 3 3, Binary
40 W	74 00	1	6.82 Az	3 3 3, fogged (Secondary) Dec. Circle refusing to stop
35 W	17 25	1	5.96 Az	3 3 3, Did not pull plate holder 23+6 - 23 54 " "
27 W	39 17	2	7.73 K σ	3 3 3, Dec. Circle would not move South
14 W	27 52	2	6.56 FBp 6.51 B σ	3 3 3, Tried setting on various stars
4	15 52	1	7.42 AzN	3 3 3, Wrong star - HD 180583 Janner assisting short time - using button on west side of plate
31 W	14 19	1.5	6.81 Az	3 3 3, WRONG STAR
0 59 W		2	6.30 B σ	3 3 3
27 N	30 46	2	7.56 A σ	3 3 3, Wrong star
	CTB			10/11 1+4

Clouds clearing after 2200. Opened up 22:35 (Ta)

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
						Consistently set 2-4 min high in dec.
	01 08W	+44 46	0-1.	7.56 A3	3-3-3	Velvety x. Haze. Focus set 23:42 Clock not running properly Star has prominent tendency to blur off at F end of slit. (later, dampen x PA = 1/2)
42	01 14W	+32 44	0	6.83 A0	3-3-3	20.50 Hap. unbearing. Sky very misty Tend to moving S in Dec due to poor contact lens at bottom of W zone
12	01 20W	+33 15	0	6.99 B8	3-3	Haze thickening. Star disappears at 01 12 No improvement by 02 hrs C 21.6 V 10+4 plates in done
		073			10-7	

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Date Tuesday June 25-26, 1946

Star Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
12240	Alcor, HD 116842	13 21 2	+ 55 30	C-25	F10300 Proso	Sat .008	+27.6	20 54	21.12	3
	"	"	"	"	"	"	+27.6	21.12	21.40	3
	"	"	"	"	"	"	+27.5	21.40	22.06	3
12241	"	"	"	"	"	"	+27.5	22.06	22.30	4
	"	"	"	"	"	"	+27.4	22.30	23.07	4
	"	"	"	"	"	"	+27.4	23.02	23.32	4
12242	"	"	"	"	"	"	+27.4	23.32	00.00	3
12243	YP 4587, μ Boles	15 20 7	+ 37 44	"	^{Normal} F1030-0	"	+27.3	00 04	00.10	1
				"			"	00 10	00.14	1
				"			"	00.14	00.17	1
12244	YP 4790	16 00 0	+ 58 50	"	"	"	+27.3	00.21	00.26	1
				"	"	"	"	00.26	00.31	1
				"	"	"	"	00.31	00.33	1
12245	YP 4916	16 22.6	+61 44	"	"	"	+27.3	00.38	00.39	1
							"	00.39	00.41	1
							"	00.42	00.44	1

** Found 3 pronounced vertical streaks on mirror (primary)
- looks like pigeon residue!

Process plates spotted 33 min each.

2 of 4 plates in box stuck together, was able to separate them only by rotatory action.

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
01 46W	+ 55 18	2	4.6 A5	FILTER OUT 8-8	Setting 1. Light haze. No trace of Miror seen in guiding eyepiece
02 13W	"	0.7-3	"	FILTER OUT 8-8	Setting 5. Heavy haze. Seeing highly variable
02 39W	"	1.2-3	"	FILTER OUT 8-8	Setting 9. Haze diminishing. Seeing variable, deteriorating after 21.50
03 03W	"	1	"	FILTER OUT 8-8	Setting 1. Seems settling down light haze
03 35W	"	0-1	"	FILTER OUT 8-8	Setting 5. Light haze. Notice several meteors.
04 06W	"	0-1	"	FILT ⁹ OUT 8-8	Setting 9. Light haze
04 34W	"	0-1	"	FILTER OUT 8-8	Setting 1. Light haze
—	+37 30	1	4.8 F0	FILT ¹² IN 4-4	Setting 2. Flipper in 1/2
—	"	1	"	4-4	Setting 5
02 57W	"	1	"	4-4	Setting 8
—	23	1-2	4.7 F8	4-4	Setting 2 5mm
—	"	0-1	"	4-4	Setting 5 4 " Vary light haze
02 28W	2-	0-1	"	4-4	Setting 8 2.3 " Vary light haze
—	x	1	3.9 Gc	8	2 1 min
—	"	1	"	4-4	5 1.5 "
x	"	1	"	4-4	8 2.5 "

x - No
OBSERVATION

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Date Tuesday, June 25-0 continued Sh-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.
12246	YP 5016	16 43.4	+ 56 58	I-25	F 1000	.008	+27.6	01.01	01 06
	"	"	"	"	"	"	"	01 06	01 10
	"	"	"	"	"	"	"	01 10	01 12
12247	YP 5111	17 03.3	+ 54 36	"	"	"	"	01 21	01 29
	"	"	"	"	"	"	+27.7	01 29	04 34
12248	HD 196133	17 10.4	+ 38 58	"	E 1030 P 20155	.008	+27.5	01 39	01 51
12249	YP 5989	19 31.7	+ 51 01	"	E 1030-0 Ordinary	"	+27.5	01 58	02 06
	"	"	"	"	"	"	"	02 06	02 11
12250	YP 5996	19 32.6	+ 69 29	"	"	"	+27.4	02 28	02 36
	"	"	"	"	"	"	"	02 36	02 40
12251	HD 196133	20 30.3	+ 44 50	"	"	"	+27.3	02 46	02 56
12252	HD 193347	20 14.7	+ 14 04	"	"	"	+27.3	03 01	03 14
12253	HD 208174	21 41.4	+ 27 53	"	"	"	+27.3	03 19	03 35
	From Tail	cutting	head						

Observing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
						In setting, sec. clamp stuck (not fully put on) - fixed (clamps)
		+56 56	2-	5.2 F0	4-4	Setting 3 flipper in 1/2
		"	"	"	4-4	Setting 36
	2 25 W	"	"	"	4-4	Setting 9
		+54 36	1	5.5 F5	4-4	Setting 3
	2 26 W.	"	1-2	"	4-4	8 " seeing variable
	0 - W	+39 04	1-2.	4.29 B3	FILTER OUT 5-8	Trouble with sec. fast motion, found it necessary to press buttons very hard
		+51 08	3-	6.0 F8	FILTER IN 4-4	Setting 3 flipper in 1/2 No mac f. 1/2, 1/2, 1/2
	0 35 W	"	2-3	"	4-4	" 8 "
		+69 34	2-3	5.8 G8	4-4	Setting 3, Aberration in " } light haze
	01 05 W	"	2-3	"	4-4	Setting 8
	00 22 W	+45 00	3	6.68 A2	3-3-3	Binary - light haze
	00 55 W	+14 14	3-	6.81 A05	3-3-3	Binary " June 26 MC SC MTW STW -9 ^s -5 ^s +1 ^s +0.1 ^m
	00 11 E	+28 08	2-3	6.85 A5	3-3-3	Binary "
					10-7	
						8 + 1 ordinary plates end one, no primary plate

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Date 1946 June Thurs 27-28

S-H-L-Ta

Julian Day

Plate No.	Object	R.A. 1900 1950	Declination 1900 1950	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12254	M.C.C. G205	16 39.9	36 33	I Newt	E-103 _a -0			21 13	21 15 1
12255	" G229	16 45.6	47 37	"	"			21 26	21 42 2
12256	" G205	16 39.9	36 33	"	E-103-E			22 04 ⁰⁵	22 09 ⁰⁵
12257	" "	"	"	"	"			22 10 ⁵⁷	22 20 ⁵⁷ 2
12258	" "	"	"	"	"			22 23 ³²	22 43 ³² 1
12259	" G402	17 35.0	-3-13	"	"			22 51 ⁰⁵	23 21 ⁰⁵ 2
12260	" "	"	"	"	E-103 _a -0			23 25	23 41 1
	" G171	16 29.7	-12 57	"	"			23 51	00 01 2
12261	" G171	16 29.7	-12 57	"	"			00 03	00 17 2
12262	" G333	17 16.2	-18 28	"	"			00 20	00 32 1
12263	" G426	17 42.4	+3 12	"	"			00 40	01 04 2
12264	" G779	19 14.6	+30 05	"	"			01 08	01 16
12265	" G760	19 08.6	+0 57 (50 27)	"	"			01 23	01 53
12266	" G366	17 25.1	-5 02	"	"			01 57	02 09
12267	" G981	20 50.7	-12 44	"	"			02 14	02 30 2

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Approximate

STW MTW

+0.5ms nearest minute

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1.15				sky mucky
1.45				
2.09 ⁰⁵				2mm deep in focus for red.
2.25 ⁵⁰				
2.35 ³⁰				
3.2 ³⁰				
3.2 ³⁰				
3.4				→ focused on β Oph. this plate double exposed accidentally two exposures accidentally on one plate
3.51				
3.57				
4.32				
5.0				
5.10				
5.50		Good seeing		Guide Star hopeless
6.0				
6.20				
6.25				

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Date Frid or June 28-29 1946 S-H-L-Sh Julian Day

Plate No.	Object	R.A. 1900 1950	Declination 1900 1950	Instrument	Emulsion	Slit.	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12271	NGC. 6229	16 45.6	47 37	I-Newt.	E-103a-O			21 03	21 14
12272	" "	" "	" "	"	"			21 15	21 25
12273	" "	" "	" "	"	"			21 26	21 46
12274	" 6205	16 39.9	36 33	"	"			21 49	21 52
12275	" 6779	19 14.6	+30 05	"	"			21 59	22 07
12276	" 5904	15 16.0	+02 16	"	"			22 14	22 20
12277	" 5272	13 39.9	+28 38	"	"			22 25	22 33
12278	" 6218	16 44.6	-01 52	"	"			22 44	22 52
12279	" 6093	16 14.1	-22 52	"	"			22 56	23 10
12280	" 6171	16 29.7	-12 57	"	"			23 23	23 43
12281	" 6333	17 16.2	-18 28	"	"			23 46	00 00
12282	" 6254	16 54.5	-04 02	"	"			00 05	00 11
12283	" 6366	17 25.1	-05 02	"	"			00 16	00 30
12284	" 6333	17 16.2	-18 28	"	"			00 33	00 47
12285	" 6779	19 14.6	30 05	"	"			00 51	01 05
12286	" 6656	18 30.3	-24 09	"	"			01 15	01 19

Clouds all evening, opened up 20.50 despite 80% clouds

194

Timing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
21 17	1 23E				Focused on 109 Very Very heavy haze
21 25					
21 46					
21 57					
22 07					Checked Focus Not Guided.
22 20					Haze not quite so bad
22 52					Centred Dec. Fast Motion Screw
23 02					
23 10					Trouble with dome turning
23 43					
23 50					
23 53					
23 54					
23 57					
23 58					
23 59					
24 00					Minor trouble with R.A. clamp. Focused on δ Aquilae. Could not read clock in finder, so could S. to horizon. Newtonian Bridge 24 00 00

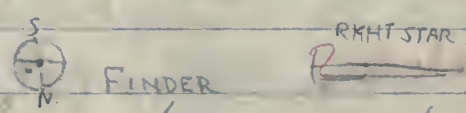
197

Date Saturday June 29-30, 1946 H.D. S.W. Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12293	HD 150203	16 34.4	43 06	I-25	E10340	Set 809	29.0	23 13	23 51
12294	HD 161832	17 42.7	39 22	"	"	"	28.9	00 01	00 49
12295	HD 180398	19 11.3	12 56	"	"	"	28.9	00 57	01 57
12296	HD 193319	20 14.7	+14 04	"	"	"	28.9	02 05	02 31
12297	H.D. 210170	22 03.4	+17 04	"	"	"	28.9	03 12	03 42
		Focus Test			O.T.B.			Set 9	

About 50 visitors Hd + St. about 1000. Tried to get in, but 3 Trouble with decl. motion, also
 Missing focusing. Motor ran Star out of field very quickly H. I don't see that motion by 5 any more
 All slow motion D showed Jupiter about 4 and Venus with 2 inch

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ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
1:35	1:28 W.	43 39	0	7.21 Azr 3,3,3	Bin. Dec. slow motion jumpy, little
0:22	1:17 W.	39 21	0	7.66 K3 3,3,3	Bin. more difficult to set on slit.
1:57	0:56 W.	13 02	0	7.7 BONE 3 3 3	Be programme
2:24	0:27 W.	14 15	0	6.81 A.s 3 3 3	Bin. 
2:30	0:12 E.	17 31	0	6.98 A.s 3 3 3	Bin. Dec. slow motion giving trouble. It ^{10/7} Could not get star to move North to slit. checked slow motion then set on the star OK. 3 hrs loaded new box needed.
					MPW MC SC SPW Sunday June 30 (WBEN) (200P) -19.8 ^s -20.6 ^s +86 ^s +0.1 ^m

199

Date Sunday June 30 - Subs 1, 1946

Sh Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	(1/2) sec	Hour Min Sec
12298	HD 121247	13 49.2	+42 41	[- 25	E 103a-0	.008.	+30.2	20.58	21.58	3	02.2
12299	HD 127663	14 27.5	+43 49	"	"	"	+30.1	22.01	22.35	4	02.2
12300	HD 139992	15 36.2	+56 13	"	"	"	+29.9	22.40	23.26	1	02.05
12301	HD 146946	16 13.8	+32 02	"	"	"	+29.8	23.30	00.16	2	02.17
12302	HD 156696	17 14.0	+29 01	"	"	"	+29.8	00.19	01.03	3	02.0
12303	HD 165241	17 59.9	+26 39	"	"	"	+29.7	01.11	01.47	4	
12304	HD 179367	19 07.2	+44 22	"	"	"	+29.6	01.54	02.18	1	
12305	(HD 179394	19 07.3	+42 26	"	"	"	+29.6	02.21	02.41	2	
	Flow. 1-5						Outred.				
12306	HD 179483	19 07.7	+48 16	"	"	"	+29.6	02.50	00.54	3	
	HD 196133										
	Flow. 1-5						Outred.	H - 1 B - 5			

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MC SC SW NW STW
 July 1 -17.3^S -8.8^S -28^S -158^S -0.0^m To

Date Monday July 1-2, 1946 D = 51 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
12307.	Alcor, HD 116842	13 21.2	+ 55 30	F-25	SPOTS 331 E 1030 O PROCESS	Slit .005	+24.1	21.04	21.25	4	22
	"	"	"	"	"	"	+24.1	21.28	21.52	4	24
	"	"	"	"	"	"	+24.1	21.52	22.12	4	30
12308	"	"	"	"	"	"	+24.2	22.12	22.30	1	32
	"	"	"	"	"	"	+24.2	22.30	22.50	1	34
	"	"	"	"	"	"	+24.1	22.50	23.07	1	36
12309	"	"	"	"	"	"	+24.1	23.08	23.26	1	38
	"	"	"	"	"	"	+24.1	23.26	23.44	4	40
	"	"	"	"	"	"	+24.0	23.44	00.04	4	50
12310	YP 5155, P	17 13.9	+ 10 58	"	Outgoing E 1030 -0	"	+24.0	00.10	00.30	1	52
12311	YP 5199, O	17 21.6	+ 04 14	"	"	"	+23.9	00.39	00.45	2	54
	"	"	"	"	"	"		00.45	00.55	2	56
12312	YC 5290, B	17 38.5	+ 04 37	"	"	"	+23.9	00.55	01.00	3	58
	"	"	"	"	"	"	"	01.00	01.03	3	60
	"	"	"	"	"	"	"	01.03	01.08	3	62
12313	YP 5331, B	17 48.4	+06 07	"	"	"	+23.8	01.10	01.22	1	64
	"	"	"	"	"	"	"	01.22	01.38	1	66

Focus set 23.44

2.02

Clouds during afternoon, clearing towards sunset

Sh + Pa checked clock and R.A. clamp - could find nothing wrong. When PA unclamped, clamp contacts drift past old position but when RA clamped contacts exactly at old position.

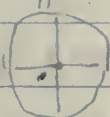
Set on Cor Bor (1 hr E at +26) to test clock with telescope E. found clock still ran sporadically slow. At the worst image 1/2" out of focus & diameter of Vesta's image field in 5 min. No signs of clock slipping in clock.

Hour Angle End	Declination	Seeing	Ptg. Mag.	COM. A	Hung Chron on Dec. axis	REMARKS	Strong Wind
02 25W	+55 17	1	4 16 A5	FILTER OUT 8-8	Light haze	clock not too troublesome, image would be here for a while, then move over whole slit length in 10 seconds. Clock drifts outwards seems O.K. and all ok. Guided continuously.	Setting 2
02 49W	"	1	"	FILTER OUT 8-8	Light haze	"	" 5
03 09W	"	1-2	"	FILTER OUT 8-8	Very light haze	"	" 8
03 27W	"	1+	"	FILTER OUT 8-8	No haze	Spectacular setting of Venus (-Westerly to " on horizon)	Setting 2 (image very unsteady)
03 47W	"	1+	"	FILTER OUT 8-8	"	"	" 5 (seeing V. weak)
04 05W	"	1-2	"	FILTER OUT 8-8	"	Strong wind causing telescope tube to sway slightly	" 8
04 23W	"	1-2	"	FILTER OUT 8-8	"	Swaying more about mid the thickness of clock in guiding	Setting 2.
04 42W	"	1-2	"	FILTER OUT 8-8	"	"	Setting 5
05 01W	"	1-2	"	FILTER OUT 8-8	"	"	Setting 8
01 40W	+10 36	0-1	6.9 K5.	FILTER IN 3-3-3	Flapper in $\frac{2}{3}$	clock still troublesome, all photo. of clock cont.	
-	"	0-1	5.6 K4	4-4	Flapper in $\frac{2}{3}$	"	Setting 3
01 ^h 51W	"	0-1	"	4-4	"	"	Setting 5
-	+09 37	0-1	4.1 K1	8	"	"	" 2
-	"	0-1	"	4-4	"	"	" 5
01 ^h 47 ^m W	"	0-1	"	4-4	"	"	" 8
-	+06 08	0-1	6.2 F4	4-4	Flapper in $\frac{1}{2}$	"	Setting 3
02 01W	"	"	"	4-4	"	"	" 3

203:

Date Monday, July 1-2, 1946 Continued 17.56 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
12314	YP 5321 87 Hrc	17 44 8	+ 25 39	E-25	E103a n	.008	+ 23.8	01 41	01 59	2
12315	YP 5341 89 Hrc	17 51 4	+ 26 04	E-25	E 103a n	"	+ 23.8	02 02	02 10	3
	"	"	"	"	"	"	"	02 10	02 22	3
12316	h Lyrae HD 180163	19 10 4	+ 38 58	"	^{SPR 325} E 103a n Process	"	+ 23.8	02 26	02 46	2
12317	HD 196133	20 30 3	+ 44 50	"	E 103a n Ordinary	"	+ 23.8	02 49	03 09	1
	Focus Test									1
12318	HD 193349	20 14 7	+ 14 04	"			+ 23.7	03 13	03 35	<
	YP 7133 167	22 46 1	+ 65 40	"	"	"	+			L
	"	"	"	"	"	"				L

Hour Angle S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
02 33 W	+ 25 41	0-1	6.5 k1	FILTER IN 3-3-3	Flower in $\frac{2}{3}$	
-	+ 26 06	1	5.9 cF5	4-4	" $\frac{1}{2}$	Setting 3
02 50 W	"	1-2	"	4-4	" $\frac{1}{2}$	Clock giving more trouble. Setting 8 AM plates still being ejected continuously
01 56 W	+ 39 05	1-2	4.29 B3	FILTER OUT 8-8		
01 00 W	+ 45 02	1-2	6.68 A2	FILTER IN 3-3-3	Binary	Setting 3
	Outside the house. Bass			10-7	"	Setting 8
1 31 W	+ 14 14	1-	6.81 A05	3-3-3	Binary	Finder hole  W. wind getting stronger ^{10:30}
			4.7 K0		Flower in $\frac{2}{3}$	} Started to set on the star. Setting 2 but could not reach it in time for exposure. Setting 5
			"		"	
						Setting 8
						2 plates in dome. 8 plates in ground box in Myra's
						Flashlight battery nearly exhausted
						Hangars clear and clear
						Clock throughout balanced as best
						Seemed to have little effect
						right beam especially. All plate marked but no explanation found for clock's behavior

205

Date Tue. Jan. 2 - 1946S-H-L-N-Sh

Julian Day

Plate No.	Object	1950 R.A. 1900	1950 Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Min Sec
12319	NGC 6205	16 39.9	+36 33	T Newton	Ammonium E 103E	—	—	21.25	21.45	1
12320	"	"	"	"	E 103-O	—	—	21.48	21.50	2
12321	NGC 6229	16 45.6	+47 37	"	"	—	—	21.54	22.10	1
12322	NGC 5053	13 13.9	+17 57	"	"	—	—	22.18	22.30	2
12323	NGC 5904	15 16.0	+02 16	"	"	—	—	22.33	22.37	1
12324	NGC 5153	13 13.9	+17 57	"	"	—	—	22.39	22.51	2
12325	NGC 6093	16 14.1	-22 52	"	"	—	—	22.58	23.08	1
12326	NGC 6171	16 29.7	-12 57	"	"	—	—	23.11	23.23	2
12327	NGC 6333	17 16.2	-18 28	"	"	—	—	23.26	23.34	1
12328	NGC 6342	17 18.2	-19 32	"	"	—	—	23.37	23.51	2
12329	NGC 6353	17 16.2	-18 28	"	"	—	—	00.05	00.13	1
12330	NGC 6539	18 02.1	-07 35	"	"	—	—	00.17	00.41	2
12331	NGC 6656	18 33.3	-23 58	"	"	—	—	00.44	00.48	3
12332	NGC 6779	19 14.6	+30 05	"	"	—	—	00.56	01.02	2
12333	NGC 6760	19 08.6	+00 57	"	"	—	—	01.05	01.35	1
12334	NGC 6934	20 21.7	+07 14	"	"	—	—	01.38	01.52	2

Focused on α Cor Bor

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
00 30 E	+36 31	Very Poor		
09 25 E	"			
00 11 E	+47 46			Focused on β Hor, low chng. in mag. light
03 41 W	+17 56			
01 45 W	+02 12			
04 02 W	+17 54			
01 18 W	-22 55			Not guided Yes, guided
01 17 W	-13 03			
00 41 W	-18 33			
01 07 W	-19 36			
01 21 W	-18 31			
01 04 W	-07 39			
00 39 W	-23 58			Uncentered + longidial (unintentional reasons, Focused on δ Aquila, focus $\frac{1}{2}$ mm out. (PT. #650)
00 12 W	+30 01			
00 51 W	+00 52			
00 15 E	+07 09			

209

Date *Wednesday, July 3-1, 1946 S.H.T.* Julian Day

Plate No.	Object	R.A.		Declination		Instrument	Emulsion	Slit	Temperature	Starting Time		Ending Time	
		1900	1950	1900	1950					E.S.T.	E.S.T.	E.S.T.	E.S.T.
12339	NG.C. G205	16	39.9	36	33	I-Newt	ammoniated E-103-E			21	14	22	24
12340	" "	"	"	"	"	"	E-103a-O			22	28	22	35
12341	" 5053	13	13.9	+17	57	"	"			22	39	22	51
12342	" "	"	"	"	"	"	"			22	51	23	05
12343	" 6093	16	14.1	-22	52	"	"			23	10	23	24
12344	" 6333	17	16.2	-18	28	"	"			23	29	23	39
12345	" 6402	17	35.0	-3	13	"	"			23	41 ²⁰	23	57 ²⁰
	{ Kaptzke area 109	17	42.5	-0	11	"	"			00	01 ²⁵	00	14 ²⁵
12346	NGC 6356	17	20.7	-17	46	"	"			00	22	00	36
12347	" 6656	18	33.3	-23	58	"	"			00	39	00	43
12348	" 6333	17	16.2	-18	28	"	"			00	46	00	54
12349	" 6402	17	35.0	-3	13	"	"			00	57	01	11
12350	" 6779	19	14.6	+30	05	"	"			01	15	01	21
12351	" 6934	20	31.7	+7	14	"	"			01	27	01	41
12352	" 6481	20	50.7	-12	44	"	"			01	45	02	01

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 13W	36 29			
0 24W	"			
4 05W	17 52			
4 19W	"			
1 35W				Seeing excellent. Exposure interrupted 1/2 minute
0 51W				by clock trouble. Refocused 50ph.
0 53W				
1 05W				
1 45W				
0 38W				Unguided
2 07W				
2 04W				
0 35W				
0 22E				Refocused on Altair
0 21E				Amazing seeing

213

Date Thurs July 4-5, 1946, S-H-L-D Julian Day

Plate No.	Object	R.A. 1900 1950	Declination 1900 1950	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour And End
12356	NGC 5272	13 31.9	+28 58	I-Newt				21 09	21 12	1
12357	" 5904	15 16.0	+ 2 16	"				21 16	21 20	2
12358	" 6229	16 45.6	+47 37	"				21 29	21 43	1
12359	" 6205	16 39.9	+36 33	"				21 46	21 48	2
12360	" 5053	13 13.9	+17 57	"				21 54	22 04	1
12361	" 6402	17 35.0	- 3 13	"				22 09	22 33	2
12362	" 6093	16 14.1	-22 52	"				22 26	22 30	1
12363	" 5053	13 13.9	+17 57	"				22 40	22 50	4
12364	" 6402	17 35.0	- 3 13	"				23 01	23 15	3
12365	" 6333	17 16.2	-18 28	"				23 18	23 26	4
12366	" 6356	17 20.7	-17 46	"				23 29	23 43	1
12367	" "	" "	" "	"				23 45 ⁰⁰	23 55 ⁵⁰	18
	Kepheus 133	17 15.4	-15 02					00 02 ²⁵	00 13 ¹⁹	14
12368	" " "	" "	" "					00 14 ²²	00 22 ²⁰	39
	6333	17 16.2	-18 28					00 25 ¹⁵	00 33 ¹⁵	30
12369	6656	18 33.3	-23 58					00 35	00 39	18

Focussed on α Serpentis

214

Timing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 2	2 04W				
0 10	0 37W	+ 2 12	(4' low)		
0 43	0 31E	+47 33			Good seeing
0 48	0 18E	+36 29			Breeze in dome
0 24	3 23W	+17 53			
0 20	0 40W	- 3 17			
0 22	0 55W	-22 55			
0 23	4 09W	+ 17 52			Focussed on κ α Serpentis
0 26	0 13W	- 03 18			Seeing blowing up.
0 28	0 42W	-18 33			
0 32	0 50W	-17 50			
0 35	1 08W	-17 50			
0 40	1 30W				
0 42	1 39W				
0 45	1 50W	-18 31			
0 49	0 08W	-24 02			magnified

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
10:55	1 54W	-3 17			
11:06	2 24W	+29 59			Seeing deteriorating Focussed on altair; focus OK,
11:28	3 30E	+ 7 07			Seeing better
11:46	4 30E	-12 50			
12:07	5 37W	-15 07			
12:26	1 00W	-22 08			
12:49	2 50W	+ 7 08			Seeing not so good
1:17	5 00	- 1 10			Spreading all stars indicated

Spots for first process plate 30 min each (very short of time), all other process plates spotted 33 min each.

218

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS -	REMARKS
2 41 W	+55 18	1-2	4.16 A5	FILTER OUT 8-8	less haze unable to find blue filter } 1. weak Setting 2
3 14 W	" "	1-2	"	FILTER OUT 8-8	guided Setting 5
3 55 W	55 18	1	"	FILTER OUT 8-8	Setting 8
4 03 W	"	1	"	FILTER OUT 8-8	HAZE too strong 2
4 15 W	"	2-3	"	FILTER OUT 8-8	COULD NOT FINISH EXPOSURE, TELESCOPE TOUCHING NORTH PIER, STOPPED CLOCK, PROCEEDED ON NEXT STAR
4 16 W	27 54	0	6.51 B5	FILTER IN 3 3 3	sl. strong
4 21 W	15 52	0	7.42 A0N	3 3 3	good
4 41 W	14 23	0	6.81 Acs.	3 3 3	weak
4 42	30 47	0	7.56 A0	3 3 3	sl. strong
				10/17	c. slightly to violet
<p>P/N. All these plates must be numbered incorrectly. Plate # 17174 shows July 4. 5/4, does not follow in sequence, and apparently this error has followed through. W. (not noticed until last plate 1/2 exp)</p>					

219

Date 1946 July 6-7 H.S. 56.91 - W Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12383	H.D. 163540	1753.2	21 01	E 25	5103AD	008	27.5	22.40	23 10
12384	H.D. 164898	1752.3	45 21	"	"	"	27.5	23 12	00 05
12385	H.D. 174269	1845.1	24 56	"	"	"	27.3	00 14	00 40
12386	H.D. 180316	1911.0	27 46	"	"	"	27.3	00 43	01 03
12387	H.D. 189013	1952.9	46 50	"	"	"	27.3	01 14	01 44
12388	H.D. 190653	2000.9	15 13	"	"	"	27.3	01 49	02 49
12389	H.D. 205011	2107.4	49 30	"	"	"	27.2	02 57	03 07
12390	H.D. 208114	2149.4	27 53	"	"	"	27.2	03 13	03 23
								0 7 15	

about 100 meters. 11 above S Bortin = M13 with 74 in.

Tu Sh showed Stricki Venus Moon with 4" and 2"

focus 23.39

220

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 05 E	24 02	0-1	6.92 G0	3,3,3
0 50 W	45 23	0	7.44 A0	3,3,3
0 34 W	25 02	0	6.62 Azn	3,3,3 Some children wandering in.
0 31 W	37 54	0	6.51 B5	3,3,3
0 30 W	46 59	0	6.90 A4	3,3,3 Some families & palm trees just wanted red in af to killing their trees. Nothing on star
0 32 W	15 53	0-1	8.00 M1	3,3,3
	49 47	1	5.76 A0N	3,6
0 36 W	28 07	0-10	6.85 A5	3,3,3 2 banded, low in sky.

MC SC MTW STW

Jul 7 -29.0^S -06.8^S +068^S +0.3^m

Under P/plan on 50-60 visitors showed 74" telescope.

202

Agner found programme in H office

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS	Focus
	02 20 E	+43 14	0-1	6.40 A5	3-3-3	Binary. Intermittent light clouds	25.79 (52 Stron)
	?	+45 24	0-1	7.44 A0	3-3-3	Binary. Cloud 21.55-22.00	
						Forced to curtain exposure or take some would have been all done platform.	
						B plates in some	
						+ plate in open box in refrigerator	

223

Date Monday July 8-9 1946 D Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
12393	HD 172187	18 33.7	+43 08	I-25	E-103a-0	slit 1.008"	+26.3	22 34	22 54	2 53
12394	YP 5182	17 17.4	+40 04				+26.1	22 58	23 16	3 42
12395	YP 5336	17 00.0	+40 02				+26.1	23 18	23 36	4 18
12396	YP 5522	18 19.0	+49 04				+26.0	23 39	00 09	1 13
12397	YP 5734	18 52.3	+43 49				+26.0	00 14	00 30	2 10
							+26.0	00 30	00 50	2 40
12398	HD 181144	19 14.2	+16 19				+26.0	00 55	01 25	3 10
	Focus Test	OTB								
12399	YP 6111	19 51.5	+16 22				+25.9	01 40	01 56	3 46
								01 56	02 20	4 20
12400	HD 196133	20 30.3	+44 50				+26.0	02 24	02 42	5 10
12401	HD 172187	18 33.7	+43 08				+25.9	02 47	03 01	6 00
12402	YP 6843	21 53.8	+63 09				+25.9	03 08	03 32	7 00
								03 32	03 48	8 00

Clouds at dusk

Focus set 23.41

229

tidereal watch stopped at 16 52 sid time
used other sidereal watch rather
than tamper with first.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
0 ^h 53 ^m E	+43 14	1-2	6.40 A ₅	3-3-3	Binary, seeing variable
0 ^h 45 ^m W	+40 04	1-2	6.2 F ₈	3-3-3	flipper in 1/2
0 ^h 07 ^m W	+40 04	1-2	6.3 K ₁	3-3-3	" 2/3
0 ^h 38 ^m W	+49 07	1+	6.9 M ₂	3-3-3	" 2/3
0 ^h 25 ^m W	+43 55	1-2	5.8 → 6.4 M ₅	3-3-3	" 2/3 setting 3 Est. vis. mag 4.5
0 ^h 45 ^m W	"	2	"	3-3-3	" 2/3 7 → Ph. mag 6.3
1 ^h 07 ^m W	+16 26	1+	7.34 F ₇	3-3-3	Binary
				10-7	
0 ^h 51 ^m W	+16 33	1+	5.8 → 6.8 G ₁	3-3-3	flipper in 1/2 setting 3 Est. Ph. mag. 6.4 to 6.5
1 ^h 15 ^m W	"	1+		3-3-3	" 1/2 " 7
1 ^h 00 ^m W	+45 02	2	6.68 A ₂	3-3-3	Binary
3 ^h 14 ^m W	+43 14	2	6.40 A ₅	3-3-3	" Dome dipping a little
0 ^h 25 ^m W	+63 24	2+	6.7 → 7.5 M _{2c}	3-3-3	flipper in 1/2 setting 3
0 ^h 41 ^m W	+63 24	2	"	3-3-3	" 7 Dome dipping more heavily

3+6 plates, in dome
Heat in ~~room~~ off.

225

July 9 (WBEN : 20.00) ^{MC} ^{SC} ^{1-JTW} ^{STW}
 -34.6^s -17.4^s +13.2^s 40.1^m (Sh)

Date Tuesday July 9-10, 1946

Sh

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	nd	Hour And End
12403	HD 116842, Alcor	13 21.2	+55 30	I -25	E 103a0 PROCESS	Set .008	+26.4	20.40	21.08	3	23
"	"	"	"	"	"	"	+26.3	21.08	21.28	3	25
"	"	"	"	"	"	"	+26.2	21.28	21.52	3	28
12404	HD 116842 Alcor	13 21.2	+55 30	"	"	"	+26.2	21.52	22.18	4	34
"	"	"	"	"	"	"	+26.2	22.18	22.44	4	36
"	"	"	"	"	"	"	+26.2	22.44	23.12	4	39
12405	HD 116842 Alcor	13 21.2	+55 30	"	"	"	+26.2	23.12	23.40	3	39
12406	HD 164898	17 58.3	+45 21	"	ORDINARY E 103a0	"	+26.1	23.49	00.31	4	39
12407	HD 172187	18 33.7	+43 08	"	"	"	+26.0	00.35	00.53	1	41
12408	HD 173383	18 39.9	+39 13	"	"	"	+26.0	01.02	01.54	2	42
	HD 176053	18 53.3	+31 53	"	"	"		01.59	02.05	3	43
								02.17			
12409	HD 176053	18 53.3	+31.53	"	"	"	+26.0	02.17	02.53	3	44

All program dates spotted 33 min each

206

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS	Focus Unchanged
02 36W	+ 55 19	1-2	4.16 A5	FILTER OUT 8-8	Seeing improving	Setting 2
02 56W	"	2-3	"	FILTER OUT 8-8	Seeing jumping	Setting 5
03 20W	"	2-3	"	FILTER OUT 8-8		Setting 8
03 46W	"	2-3	"	FILTER OUT 8-8	Image very wobbly, telescope swaying?	Setting 2
04 12W	"	2-3	"	FILTER OUT 8-8		Setting 5
04 41W	"	2-3	"	FILTER OUT 8-8		Setting 8
05 09W	"	2	"	FILTER OUT 8-8	Seeing deteriorating Exposure slightly critical - limiting hour angle at close	
01 25W	+ 45 23	1-2	7.44 A0	FILTER IN 3-3-3 + FILTER IN HENCE FORTH	Binary R.A clamp stuck. Unclamped by hand. No further trouble	
01 11W	+ 43 13	2	6.40 A5	3-3-3	Binary Set Staring W etc. Clamps to W	
02 05W	+ 39 17	1	7.73 K5	3-3-3	Binary Could not move S. with Dec Motion th apparently on middle of screen N. the last Motion running fine. Moved telescope S for control of W	
	+ 32 07		7.20 A3	3-	Binary Seeing variable 0-2. clouds moving on Dec Motion OK Unsettled star identification. Ends of W	
					Setting 5 Wrong star. Stopped clock and reset. Finally found right star. Max & double with Dec last motion. Setting 8 Star identification still rather uncertain. Star The star is in RA 18 54.4. Coord * is at 18 55.0. No other star in field. No time to check up in HD catalogue Star seems also next magnitude	
					P.T.O	



ing Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
24	01 45W	+ 45 01	0-1	6.68 Az	3-3-3. 10-7.	Binary light clouds Setting 3 Setting 8
51	01 52W	+ 28 21	0-1	6.20 B25	3-3-3	Binary light clouds 3 + 0 photos in Dome. Heat NOT on Mirror.
						Wed Jul 10 MC SC MTW STW -37.3 ^s -6.7 ^s +17.5 ^s 0.0 ^m

Set from 23-41

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS	Finder	
0150	08W +56 07	0-	7.20 B ₉	3-3-3	High light clouds to SW, general haze	weak ⊕	
0227	025W +58 34	0	680 A ₃	3-3-3		low	
0305	020W +58 39	0-1	7.55 F ₅	3-3-3	Light clouds closing in from 23 07 - 23 20	weak	
				10-7		centre to violet	
0400	09W +46 25	0-1	7 46 F ₀	3-3-3	No cloud in zenith, but heavy haze	good	
0431	018W +48 23	0	7.24 A ₂	3-3-3	" : " & getting heavier.	low	
0506	031W +45 01	1	668 A ₂	3-3-3	Bin	lots of difficulty in persuading arc to strike	good
0527	051W +63 12	1-2-1	7.40 A ₅	3-3-3	" Light wind. Less haze	low	
0552	003W +60 28	2-	7.3 M ₁	3-3	Flipper in 3/4	Light cloud shows in early light	good
						guiding slightly asymmetric	
						3+4 plates in dome	several plates

231

Date Thurs July 11-12, 1946 D Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Ang End
12420	YP 5155	17 13.7	+101 58	I-25	E-1030	008	+26.5	22 29	23 25	
12421	5363	17 53.9	+29 16				+26.1	23 27	23 35	
								23 35	23 49	
12422	5366	17 54.7	+30 12				+26.1	23 51	23 58	
								23 58	00 11	
12423	5524	18 19.4	+21 43				+26.0	00 14	00 30	
								00 30	00 44	
12424	5924	19 01.4	+10 08				+25.9	00 47	00 57	
								00 57	01 01	
12425	6075	19 47.4	+00 45				+25.9	01 12	01 15	
								01 15	01 21	
								01 21	01 30	
12426	HD 192399	20 14.7	+14 04				+26.0	01 34	02 24	
	Focus Test		OTB							
12427	HD 196133	20 03	+14 40				+26.0	02 29	02 35	
12428	HD 201032	21 02.0	+12 39				+25.9	03 00	03 40	

Focus set 23.40

232

Clouds at dusk after thunder storm
still pouring.

Hour Angle E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
	1 ^h 03 ^m W	+10 59	1	6.9 K ₀	3-3-3	flipper in ² / ₃ light cloud in South
	1 ^h 39 ^m W	+29 18	1	4.8 G ₇	4-4	" sellings 3
	1 ^h 53 ^m W		1		3-3-3	7 "
	1 ^h 01 ^m W	+30 15	1+	4.9 F ₁	3-3-3	" ¹ / ₂ 3 "
	1 ^h 14 ^m W		1		3-3-3	7
	1 ^h 07 ^m W	+21 47	1-2	5.2 K ₂	3-3-3	" ² / ₃ 3 heavy cloud at 00 17
	1 ^h 27 ^m W		1-2		3-3-3	7
	1 ^h 33 ^m W	+00 15	1+	5.3 cF ₅	3-3-3	" ¹ / ₂ 3 more cloud, at 00 15 by from west.
	1 ^h 45 ^m W				3-3-3	7
	1 ^h 00 55		1-2	4.2-4.9 F ₆	4-4	" ¹ / ₂ 2
			1-2		4-4	" 5
	1 ^h 01 ^m W				4-4	" 8
	1 ^h 05 ^m W	+14 15	1+	6.81 A ₀₅	3-3-3	Primary July 12 heavy cloud weak 01-59 5 00 15
					10-7	MC SC SSW MTW STW ^m -39.6 ^s -5.4 ^s -67 ^s +27.4 ^s -.2
	1 ^h 19 ^m W	+05 02	1+	6.68 A ₂	3-3-3	Primary 4+6 plate window
	1 ^h 27 ^m W	+03 15	2	4.40 A ₋	3-3-3	"

233

Date 1946 Fri July 12-13 Ta

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12429	HD 172187	18 33.7	+43 08	I-25	E 103	.008	24.1	20.50	21.14
12430	HD 135501	15 10.3	+56 26	"	"	"	24.1	21.21	22.21
12431	HD 139992	15 36.2	+56 13	"	"	"	24.1	22.24	23 12
12432	HD 161019	17 38.1	+27 40	"	"	"	24.0	23 19	23 44
12433	HD 161130	17 38.7	+29 28	"	"	"	24.0	23 48	00 13
12434	HD 161464	17 40.6	+33 17	"	"	"	24.0	00 16	00 50
12435	HD 165241	17 59.9	+26 39	"	"	"	23.9	00 54	01 30
12436	HD 196133	20 30.3	+44 50	"	"	"	23.9	01 43	02 13
12437	HD 193349	20 14.7	+14 04	"	"	"	23.9	02 17	02 50
12438	HD 172187	18 33.7	+43 08	"	"	"	23.9	02 58	03 20
12439	{ HD 208174	21 49.4	+27 53				23.8	03 25	03 52
	{ Jones test	OT3							

234

Set down 23.40

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
014	2 22E	+43 14	0+	6.40 A ₅	3-3-3	Bin. good Clear, NW breeze
22	2 13W	+56 18	0-1	7.46 A ₂	3-3-3	good
32	2 38W	+56 07	0-1	7.20 B ₉	3-3-3	fine guiding
34	1 09W	+27 43	1	6.60 A ₃	3-3-3	good
0013	1 37W	+29 28	1	6.69 A ₅	3-3-3	fine
0050	2 12W	+33 17	1-	6.99 B ₈	3-3-3	fine
1	2 39W	+26 41	1-0	7.34 F ₂	3-3-3	good
023	0 46W	+45 01	0-1	6.68 A ₂	3-3-3	Bin. fine
0251	1 38W	+14 14	1-0	6.81 A ₅	3-3-3	Bin. l. wind
220	3 50W	+03 14	1-	6.40 A ₅	3-3-3	Bin. l. wind
0352	1 06W	+28 07	0	6.85 A ₅	3-3-3	Bin. High light cloud forming, ^{guiding} but, that 3.35
					10-7	compression little wind
						3+8 plates done

235

Date Saturday, July 13-14, 1946 H-N-Sh-W. 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 An End	
12440	HD 172187	18 33.7	+43 08	E-25	E 103 ^{set} 20	.008	25.8	22 15	22 29	2 : 58	
12441	HD 164898	17 58.3	+45 21	"	"	"	"	22 38	22 46	1	
	"	"	"	"	"	"	"	22 51	23 27	1 : 35	
12442	HD 173383	18 39.9	+39 13	"	"	"	"	23 32	00 10	2 : 37	
12443	HD 175743	18 51.7	+17 59	"	"	"	"	00 15	00 33	2 : 47	
12444	HD 176053	18 53.3	+31 52	"	"	"	"	00 37	01 11	2 : 55	
12445	HD 190658 ^{190152?}	19 58.5 20 00.9	+15 11 +15 13	"	"	"	"	01 20	02 24	3 : 24	
12446	HD 201032	21 02.0	+63 10	"	"	"	"	02 34	03 02	3 : 44	
12447	HD 208174	21 49.4	+27 53	"	"	"	"	03 08	03 28	3 : 54	
12448	HD 172187	18 33.7	+43 08	"	"	"	25.6	03 48	04 04	4 : 04	
				Focus Test		Set 9					
Mr. Langmuir - The slit cap fell down. In the process of repair. As a result it does not fit snugly over the slit.											

150 Vision. H + Sh showed 3 Bootis, Messier 13
 with "74"
 N showed Switzer, Moon with 4", 2",

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Hour Angle End	Declination	Seeing	Ptg. Mag.	COMP	REMARKS
0. 58 E	43 14	2	6.40 A5	3 3 3	Known Get strong
	45 32	2	7.44 A0	3	Found telescope top wrong star, Mist dot, Mr. RA Sat 5
0. 35 W	45. 23	2	'	3 3 3	Sat 9
0. 37 W	39 18	2+	7.73 K5	3 3 3	
0. 47 W	18 04	2	6.80 K2	3 3 3	⊕ PINDER
1. 25 W	31 59	1-	7.20 A3	3 3 3	
1. 32 W	15 21	1	10.0 Ma 8.00 M.	3 3 3	⊕ BRASS star continually running WEST along slit. would this be the fault of the clock? ^{top} _{prob wrong}
1. 08 W	63 12	2	7.40 A5	3 3 3	star drifting rapidly to WEST
0. 45 W	28 09	1+	6.85 A5	3 3 ?	" " " "
4. 40 W	43 14	2-10	6.40 A5	3 3 3	Top piece of iron are felt cut upon striking last are on previous plate.
	O.T.B.			10/7	cut exposure short; afraid of fogging plate. Lost 15 minutes or more ^{important} _{experience} time in fixing iron are, before setting on Mr. Sharp's star. W.
					2 holders loaded. New line needed.

and was sprung out of
 head.

239

Date Monday July 15-16 1946 D Julian Day 017

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12449	HD 172187	18 33.7	+43 08	L-25	E-1030	set 008	+21.1	20 43	21 09
12450	YP 4684	15 39.3	+06 44	.			+21.1	21 12	21 13
								21 13	21 16
								21 16	21 20
12451	YP 4841	16 09.1	-03 26				+	21 25	21 25
								21 28	21 33
12452	YP 4810	16 03.6	+08 41				+20.9	21 36	22 30
12453	YP 4887	16 17.5	+19 23					22 39	22 40
								22 41	22 42
								22 42	22 42
12454	YP 4935	16 26.2	+20 42				+20.9	22 50	22 53
								22 58	23 10
12455	YP 5044	16 49.2	+31 52				+20.9	23 14	23 25
								23 20	23 25
12456	YP 5142	17 11.6	+36 55				+20.9	23 34	23 38
								23 38	23 46

Focuser set 23.48

MTB set screws in guiding eyepiece

loose!

290

(Clock) = clock running slow in starts

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
2:50	17 ^h E	+43 14	1	6.40 A ₅	3-3-3	Binary
2:54	18 ^h W	+06 40	1	4.1 K ₂	8	Settings 2 flipping in 2 ^h
					4-4	5
					4-4	8
2:57				4.7 M ₂	8	Setting 3 (telescope would hit N ₂ end)
3:00	18 ^h W	-03 30	1		4-4	7 flipping in 2 ^h (Clock!)
3:01	18 ^h W	+08 44	1+	7.7 M ₃	3-3-3	
				4.1 F ₀	4-4	" 2 " 1/2
					4-4	" 5 "
	18 ^h W	+19 20	2-		4-4	" 8 "
		+20 40	2-	6.2 G ₄	3-3-3	" 3 "
	18 ^h W		2		3-3-3	" 7 " (Clock!)
		+31 50	2-	5.7 F ₀	4-4	" 3 "
	18 ^h W				3-3-3	" 7 " (Clock!)
		+36 56	1-2	5.0 K ₅	8	" 3 "
	50 W				4-4	" 7 "

241

Date Monday July 15-16 1946 D Julian Day

Cont'd

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12457	YP 5295	17 39.3	+ 24 22				+20.9	23 49	00 15
12458	YP 5370	17 55.6	+ 16 45				+20.9	00 17	00 53
								00 23	00 33
12459	YP 5492	18 02.5	+ 08 43				+20.9	00 37	00 47
								00 43	00 53
12460	YP 5598	18 31.7	+ 9 03				+20.8	00 57	01 03
								01 03	01 15
12461	YP 5739	18 53.8	+17 19				+20.8	01 19	01 27
								01 27	01 41
12462	HD 196133	20 30.3	+44 50				+20.8	01 46	02 00
	Focus Test	OTB		R					
12463	HD 172187	18 33.7	+43 08				+20.8	02 14	02 30
12464	HD 209813	22 01.0	+46 45				+20.8	02 41	03 12
12465	HD 213389	22 25.9	+48 51				+20.8	03 18	03 58

NE net screws in lower rotating part
of guiding eyepiece is loose!
won't grip when tightened 242

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
17 ^h W	+24 24	1-2	6.7 G6	3-3-3	flipper in 1/2
	+16 48	1+	5.7 G8	4-4	2/3
18 ^h W				4-4	2/3
	+08 47	1+	5.7 G8	4-4	2/3
19 ^h W				4-4	2/3
	+09 07	1-2	5.8 F2	4-4	1/2
20 ^h W		2		4-4	1/2
	+17 20	2-	5.7-6.6 F8	4-4	1/2
21 ^h W				4-4	1/2
22 ^h W	+45 02	1-2	6.68 A2	3-3-3	Binary from ht. of 3 or 4 ft Replaced tightly, found it worked again but parts are loose.
				10-7	
23 ^h W	+73 14	2	6.40 A5	3-3-3	" (clock)
24 ^h W	+17 50	2	7.52 K0	3-3-3	" ← Here I crossed the meridian
25 ^h W	+49 07	2-	7.55 K1	3-3-3	" 5 min after opp began light scattered in clouds 3+6 plates in dome
				(clock)	

Slide not fully drawn on last exp.

June 16 (WBEP: 1930) ^{MC} -49.3^S ^{SC} -75^S ^{MTW} +49.9^S ^{STW} +06^m

243

Date Tuesday, July 16-17, 1946

SL Julian Day 243.2018

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour End
12465	HD 128168	14 30.3	+13 32	E-25	E 103a-0	Set .008	+22.7	20.45	21.35	2
12466	HD 143597	15 56.3	+13 34	E-25	E 103a-0	.008	+22.6	21.43	22.25	3
12467	HD 143762	15 57.2	+13 45	E-25	E 103a-0	.008	+22.5	22.27	23.11	4
12468	HD 148832	16 25.7	+15 19	E-25	E 103a-0	.008	+22.5	23.13	23.49	1
12469	HD 213389	22 25.9	+48 51	E-25	E 103a-0	.008	+22.5	00.04	00.54	3
<p>Clouds thickening and Maxima in last by 00.50. Shut off clock at 00.55 and waited and</p> <p>90% cloud by 01.15 - loss of least 2 magnitudes. No chance of getting HA 1811+4 Clouding</p> <p>4 loaded plateholders in dome.</p> <p>11 plates in opened box on bottom shelf of refrigerator</p> <p>Heat N&T on Minor</p> <p>Plates may be fogged. When returning to office building found that rack in plate box had come loose, needs immediate attention or loss will disintegrate</p>										

0 = Clock dragging in "junks".

244

Light clouds 2000.

Hour Angle E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	comp	REMARKS	Fows Set 23 47 ± 00 02
02 22W	+13 22	1	7.20	A3	3-3-3	Velocity * 0 Clock dragging. Seeing variable	light haze <i>too weak</i>
01 46W	+13 28	1	7.44	F5	3-3-3	Velocity * 0 "	light cloud 22 <i>much too weak</i>
02 32W	+13 39	2 ⁺	7.56	A5	3-3-3	Velocity * 0 "	intermittent light clouds <i>much too weak</i>
02 42W	+15 17	2-3	7.57	A3	3-3-3	Velocity * 0	<i>much too weak</i>
02 12 E	+49 08	2-3	7.55	K1	3-3-3	Binary 0	intermittent light clouds <i>weak</i>

July 17

MC

SC

MTW

STW

-49.9^s

-4.8^s

+53.5^s

+0.9^m


245

Date 1946 Wed July ~~16-17~~ ¹⁷⁻¹⁸

To 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 An End
12470	YP 5155	17 13.9	+10 58	I-25	E 103	.008	+25.6	20 45	21 25	27
12471	HD 146946	16 13.8	+32 02	"	"	"	25.6	21.31	22.31	28
12472	HD 157255	17 17.1	+32 47	"	"	"	25.4	22.34	23.20	29
12473	HD 165241	17 59.9	+26 39	"	"	"	25.4	23.24	00 00	30
12474	HD 179367	19 07.2	+44 22	"	"	"	25.5	00 05	00 45	31
12475	HD 179394	19 07.3	+42 26	"	"	"	25.4	00 50	01 30	32
12476	HD 179483	19 07.7	+48 16	"	"	"	25.4	01 34		33
12477	HD 196133	20 30.3	+44 50	"	"	"	25.4	02 07	02 27	34
12478	YP 7133	22 46.3	+65 40	"	"	"	25.4	02 37	02 40	35
	"	"	"					02 42	02 46	
	"	"	"					02 48	02 53	
12479	HD 213389	22 55.9	+48 51	"	"	"	25.4	03 04	03 30	36
	" Focus test							0 T B		
12480	YP 6145	22 11.4	+56 33	"	"	"	25.4	03 44	03 46	37
	"	"	"					03 47	03 50	
	"	"	"					03 51	03 55	

246

Fender
 Set dec +3 or 4'

Set from 23 42

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
01:25	0 27 E	+10 59	0-1-2	6.9 K ₅	3-3-3	Light clouds on horizon to west. Probably some haze Dropper in 2/3 Seeing very variable. Star was in slit frequently <i>little less off</i>
02:23	1 39 W	+32 00	0-1	7.49 G ₀	3-3-3	No haze visible at 2200 <i>very good</i>
03:22	1 26 W	+32 46	0-1	6.83 A₀	3-3-3	Light cloud coming from west at 22:20 Light cloud coming from west at 22:20 Light cloud on Altistar. Clear again 22:55. Plate broke in 3 pieces decomposed. ?? Or previous broken? <i>good</i>
04:00	1 23 W	+26 40	1-2	7.34 F ₂	3-3-3	
04:48	1 02 W	+44 30	1-2	7.31 A ₅	3-3-3	Stars now staying put. <i>good</i>
05:31	1 46 W	+42 33	1-2	7.33 B ₈	3-3-3	Hazy? <i>good</i>
	2 20 W	+48 24	2	7.24 A ₂	3-3-3	Hazy <i>good</i>
02:27	1 20 W	+45 01	2+	6.68 A ₂	3-3-3	<i>fine</i>
02:40	0 43 E	+65 43	2+	4.9 K ₁	3-3-3	27 Dropper in 2/3 <i>all stars</i>
02:46					3-3-3	5 "
02:53	0 30 E				3-3-3	8 "
02:30	0 31 W	+49 07	2+	7.55 K ₁	3-3-3	<i>good</i>
					10	
03:00				4.5 F ₆	3-3-3	2 Dropper in 1/2 just 1 plate in dome
03:50					3-3-3	5 "
03:55	1 08 W	+56 48			3-3-3	7 " <i>good</i>

247

18-19

Date 1946 Thurs July 18-18

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.	A	Hour An End
12481	YP 4298	14 21.8	+52 19			lit 608	+29.0	20 43	20 46	4	1 51
								20 46	20 52		1 57
								20 52	21 07		2 04
12482	YP 4790	16 00.0	+58 43				+29.0	21 06	21 10	1	
								21 10	21 16		
								21 17	21 27		2 04
12483	YP 5071	16 55.5	+65 17				+28.9	21 30	21 38	2	
								21 38	21 52		2 04
12484	YP 5182	17 18.4	+40 04				+28.7	21 56	22 15	3	2 04
12485	YP 5232	17 28.2	+52 23				+28.8	22 22	22 23	4	2 04
								22 23	22 26		
								22 26	22 30		2 04
12486	YP 5260	17 34.0	+61 57				+28.18	22 34	22 46	1	
								22 46	23 02		2 04
12487	YP 5375	17 51.8	+56 53				+28.7	23 06	23 12	2	
								23 12	23 24		2 04

Free clouds in west at dusk. *Murphy*
248

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	Focus at 2336	REMARKS
1 51	+52 09	1-2	9.6 F ₀	4-4		Settings 20.5. <i>Murphy</i> in 1/2 (Clock)
1 57				4-4	5	1/2
2 ^h 07 ^m W				4-4	8	
	+58 45	1+	4.6 F ₇	4-4	2	1/2
				4-4	5	
0 ^h 54 ^m W				4-4	8	
	+65 15	1-2	6.3 F ₆	4-4	2	1/2
0 ^h 24 ^m W				4-4	7	
0 ^h 26 ^m W	+90 05	1-2	6.2 F ₈	3-3-3		" 2/3
	+52 23	1-2	3.8 cG ₂	8	2	1/2
				4-4	5	
0 ^h 27 ^m W				4-4	8	
	+61 58	1+	5.9 G ₁	4-4	3	1/2 (Clock) air growing more misty
0 ^h 56 ^m W				4-4	7	
	+58 56	1+	5.0 K ₃	4-4		1/2
1 ^h 00 ^m W				4-4		

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Date Thurs July 18-19, 1946 Julian Day D*cont'd*

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	How An End
12488	YP 5365	17 55.3	+51 30				+28.7	23 27	23 29	
								23 29	23 33	
								23 34	23 40	
12489	YP 5868	19 12.5	+67 29				+28.7	23 45	23 47	
								23 47	23 51	
								23 52	23 58	
12490	YP 5548	18 22.9	^{+72 +1} +71 42				+28.7	00 03	00 05	
								00 05	00 09	
								00 10	00 16	
12491	YP 6003	19 33.8	+49 59				+29.7	00 21	00 27	
								00 28	00 35	
12492	YP 6035	19 40.8	+29 01				+28.6	00 42	01 36	
12493	HD 196133 Four Tent	20 30.3	+44 50				+28.6	01 40	02 00	
12494	YP 6798	21 45.4	+16 49				+28.6	02 09	02 17	
								02 17	02 29	

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
3:29		+51 32	1+	4.0 K ₅	8	Setting 12 flip pin 1/3
					4-4	5 } - strong
	1 ^h 13 ^m W				4-4	8
3:47		+67 37	1+	4.2 G ₈	8	2 1/2 fine
					4-4	5 strong
3:58	0 ^h 14 ^m W				4-4	8 fine strong
4:15		+72 44	1+	4.1 F ₅	8	2 1/2 fine
					4-4	5 fine
4:24	1 ^h 22 ^m W				4-4	8 F ₁
4:30		+50 07	2	5.0 F ₂	4-4	2 1/2 Big mist halo on Moon
4:32	2 ^h 31 ^m W				4-4	7
4:36	1 ^h 22 ^m W	+29 11	2	6.7 → F ₂	3-3-3	5.0 mag 7.1 1/2 Haze lessening light wind (clock)
4:41	1 ^h 59 ^m W	+45 02	2	6.4 A ₅	3-3-3	7.0 mag 7.1 1/2
4:42	2 ^h 00 ^m W	+17 04	1-2	5.6 F ₂	4-4	Setting 5 1/2 Does anyone smell a skunk?
4:43	0 ^h 11 ^m W				4-4	7

Hour Angle End	Declination	Seeing	Ptg. Mag.	Coup	REMARKS										
$0^h 18^m W$	+49 07	1-2	7.53 K ₁	3-3-3	little weak 2 plates in dome 4 in opened box in fridge										
	Saturday Jul. 20-21	Hd D	Clouds. 40 ves, tons.	Shaded slides, telescope											
	Sunday Jul. 21-22	Sh.	Solid clouds till at least 0.00												
					<table border="0"> <tr> <td></td> <td>MC</td> <td>SC</td> <td>MTW</td> <td>STW</td> </tr> <tr> <td>Feb. 22</td> <td>-70.2</td> <td>-28.8^s</td> <td>+24.8^s</td> <td>-0.6^{hw}</td> </tr> </table>		MC	SC	MTW	STW	Feb. 22	-70.2	-28.8 ^s	+24.8 ^s	-0.6 ^{hw}
	MC	SC	MTW	STW											
Feb. 22	-70.2	-28.8 ^s	+24.8 ^s	-0.6 ^{hw}											

Cumulous clouds in afternoon, clearing at sunset. W. wind.

25.6

all, rather much too weak

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS	Focus Set 23-37 100-01
02 12W	+ 11 13	0-1	7.34 F2	3-3-3	Velocity *	Haze. Light clouds 21-15 21-30
02 56W	+ 12 06	1	7.24 F0	3-3-3	Velocity *	Haze cleared. Light clouds 22-05-22-15
03 10W	+ 13 29	1	7.44 F5	3-3-3	Velocity *	Thud tray 5 to 22-55
03 38W	+ 15 16	1-2	7.57 A3	3-3-3	Velocity *	{ Image very unsteady Had to unlamp in R.A. by hand, no further trouble
04 00W	+ 17 48	1-2	7.56 A0	3-3-3	Velocity *	{ Star running E in park as in previous exposure } (N.B. ①)
03 17W	+ 11 54	1-2	6.76 A0	3-3-3	Velocity *	{ Took 5 min to get * on track exposure crosswires. When star R.A. fast motion is used, star runs on $\frac{1}{2}$ - $\frac{1}{3}$ brass eyepiece field diameter in direction of fast motion when motor is stopped. Used slow motion for guiding. NB ② Image stays flat & clear on slit
03 37W	+ 11 54	2	6.97 B8	3-3-3	Velocity *	{ Ago had to unlamp in R.A. by hand. R.A. fast motion still had after effect observed during last exposure.
00 34W	+ 47 02	2	7.52 K0	3-3-3	Binary.	Delayed start of slit & exposure mechanism. Star "stays put"
02 31W	+ 45 01	1-2	6.68 A2	3-3-3	Binary	Setting? light clouds 03-1
				10-7		Setting 8
02 59W	+ 63 13	1+	7.40 A5	3-3-3	Binary.	Intermittent light clouds. Some good detail was other 03-4. Exposed a stray as usual. Star about 04-04-04-14
						NB ① Star continually running E along slit. Fast reduced in this exposure. Could the clock be running, just?? Getting worse with 20.00. Star 1 min on $\frac{1}{2}$ min. Clamps keep p. ready on. X

Strategically placed clouds delayed opening.
Fresh NW wind.

258

Set for 23-40

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS										
3 20	0 01 E	+27 52	0	6.51 B _s	4-4-4	Star swims faint for 6.7m. Rtd cloud 22.25										
	1 00 W	+45 08	0-1	7.20 B _g	5-10 10-7	Strong wind agitates image. Clouds again 23.50. Star gone at 23.58. Stopped clock 00.00 New shield at 22.40 nearly clear by 23.20										
						At 01.10 still no useful break in clouds, NW horizon solid, light gusty wind. Closed up. 4+6 plates in dome										
						Thurs July 24 <table style="margin-left: auto; margin-right: auto;"> <tr> <td>NE</td> <td>SE</td> <td>STW</td> <td>STW</td> <td></td> </tr> <tr> <td>-63°</td> <td>+3.7°</td> <td>+32.7°</td> <td>-0.3^m</td> <td>D</td> </tr> </table>	NE	SE	STW	STW		-63°	+3.7°	+32.7°	-0.3 ^m	D
NE	SE	STW	STW													
-63°	+3.7°	+32.7°	-0.3 ^m	D												

259

Date 1946 ~~Thurs~~ July 25-26 D Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour End
- 12510	HD 180316	19 11.0	+27 46	I-25	E109C	1/2" .008"	+21.9	20 39	21 18	1 59"
- 12511	HD 152031	16 45.9	+41 47				+21.9	21 25	22 51	2 59"
12512	HD 158013	17 21.7	+57 05				+21.7	22 54	23 28	3 01"
12513	HD 171550	18 30.4	+29 40				+21.8	23 32	00 36	1 00"
12514	HD 187462	19 45.0	+27 29				+21.5	00 40	01 40	1 58"
12515	HD 180316	19 11.0	+27 46				+21.5	01 49	02 24	1 02"
- 12516	HD 1916133	20 30.3	+44 50				+21.4	02 42	03 12	1 57"
	Focus Test		OTB							
- 12517	HD 218356	23 02.2	+24 56				+21.4	03 20	03 40	2 33"

cloudy in afternoon, clearing at sunset,
W wind, splendid evening

260

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Comp	Focus let 23.48	REMARKS
1 8	1 ^h 59 ^m E	+27 57	0-1	6.51 B ₅	3-3-3	Binary	good
1 51	1 ^h 59 ^m W	+41 58	1-2	7.56 A ₂	3-3-3	Vely *	L. haze in East (Fog)
3 2	2 ^h 01 ^m W	+57 07	2 ⁻	6.61 A ₂	3-3-3	Binary	CG
2 30	2 ^h 08 ^m W	+29 44	2 → 1	7.23 K ₀	3-3-3	Vely * (New Program)	Prefogged Plate
1 40	1 ^h 50 ^m W	+27 39	1 ⁺	7.28 G ₀	3-3-3	Vely *	" " Prefogged Plate fine
2 24	3 ^h 08 ^m W	+27 55	1-2	6.51 B ₅	3-3-3	Binary	Key Monkey. Telescope vibrating fine
3 12	2 ^h 37 ^m W	+45 03	2 ⁻	6.68 A ₂	3-3-3	"	R.A. clamp giving trouble; OK after plugging in heating cord fine
					10-7		
3 40	2 ^h 33 ^m W	+25 14	2 ⁻	6.16 K ₀	3-3-3	Vely *	strong
							4 plates loaded.
							3 prefogged but NOT spotted plates in small cardboard box in spotting room.

St Jones 23.47

217

262

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS	21.05
2 03	2 05W	+13 29 ^{at}	1+	7.44 F ₅	4-4-4	Very bright Haze begins to develop 20:45, clear 21:00	Arch of aurora 120° long 20° above horizon, 8° wide green; pretty bright, can be seen on Antarctic, passing Spitzbergen
2 35	1 52W	+11 20	2 ⁻ 2 ⁺ 3	7.30 F ₂	4-4-4	Slide not drawn until 22:39. ^{1.23}	21:30 15° above hor., narrow. Streamers from zenith to most parts of sky
01 00	2 32W	+20 50	3	7.59 G ₈	4-4-4	Numbered with nail or stylus. ? ^{1.23}	21:40 Band just below horizon of streamers from zenith (10° or 20° south. Pink color shows in western position. 21:41 very rapid changes, strong violet colors to W.S. 21:55!!!
01 35	1 03W	+45 01	3 ⁻ 3 ⁺	6.67 A ₂	4-4-4	Distancing in view at times. ^{1.23}	22:20 phase call, about aurora a week
02 14	1 18W	+30 14	3 ⁺	7.19 K ₀	4-4-4	New Proj. for fagel plate	to be examined had nothing to do with
02 47	0 35W	+25 43	3 ⁻	6.98 G ₅	3-3-3	" " Stars sitting nicely	a bomb! 22:30 still ray from zenith, no color, not so bright. 23:00 disjunct heads to S, low streamers N horizon, faint
03 16	1 39E	+46 48	3 ⁻	6.47 B ₂	3-3-3	Bin, "	23:49 - as at 21:15 again.
04 10	2 08W	+47 01	3 ⁻ 3 ⁺	7.52 K ₀	4-4-4 10-7	" "	00:00 zenith fan, very bright, rapid pulsation ("upsc"). Little a Cygnus
							03:05 Southern streamers in violet agitation, moving & flickering.
							03:40 Southern streamers patches flickering.
							04:00 Aurora report up to band N aurora. 01:50 - ... again 24:05 and 25:00 but bands remains to W

263

Date Saturday July 27-28, 1946Hd-Sh-WJulian Day 2432029

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12526	H D 164078	17 54.4	+24 01	I-25	E103-0	008	+24.0	21 59	22 59
12527	H D 172187	18 33.7	+43 08	I-25	E103-0	008	+23.9	23 02	00 22
	H D 213389	22 25.9	48 51	"	"	"			
	Film Test			Put side through Base					

About 150 visitors Hld showed f Boots with 74"

Sh showed 2 ♀ with 4", 2"

MTW

STW

+07.8

-0.5

reset - stopped

264

set Focus 23.44

ing Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
5	01.06 W.	+32 42.	2	6.96 F52	3, 3, 3	Haze. setting 5
22	01 51 W	+43 15	2 - 1	6.40 A5	3, 3, 3	worse. haze very bad, haze getting hopeless by 00.10. Decide to close up for good.
				7.55 K1		5
					10-7	Setting 9
						Heat NOT on Mirror.
						4 plates in dome
						Opened box in Refrigerator (5 plates).

Sunday Afternoon. Sh, W, M, W. Over 150 visitors. Showed 74" telescope and sunspots (magnificent!)

light clouds rolling in toward sunset. Very murky at 21:00, clearing thereafter. Open up 21:50 despite continued haze

266

Hour Angle: End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
01 42W	+25 36	2 ⁻	7.44 K0	3-3-3	Velour, star (new programme). light haze at first, gone by 22:40
02 51W	+39 18	2 [•]	7.73 K5	3-3-3	Binary. Clock running slightly slow - makes guiding very simple!
02 06W	+46 59	2	6.90 A4	3-6	Binary (Thick clouds moving in from N 01:50. Star gone 01:54. Set Settings.
			6.68 A2		Binary Settings
				10-7	center to mirror Setting 9
		Solid clouds. Close up 02:10			Heat NOT on Mirror
					3 plates in dome
					2 plates in opened box in refrigerator
					July 29 MC SC MTW STW D
					+46.2° +17.8° +16.2° +10.7"

Max David Kempster died on Wednesday July 31 1946

269

Date Wed July 31 - Aug 1 1946 Ta Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
12531	HD 145457 (M 13) for S. School visitors)	16 06.0	+27 01	I-25	E 103	.008	24.0	20.20	21.36
12532	HD 167135	18 08.8	+11 51	I-25	E 103	.008	24.0	22.00	22.54
12533	HD 179394	19 07.3	+42 26	"	"	"	24.0	22.58	00 08
12534	(YP 6154 IT)	19 57.8	+24 39	"	"	"	23.9	00 12	00 24
							2	00 25	00 43
- 12535	HD 196133	20 30.3	+44 50	"	"	"	24.0	00 47	01 17
12536	HD 201032	21 02.0	+62 59	"	"	"	23.9	01 22	02 32
12537	HD 224801	23 55.7	+44 42				24.0	02 37	03 33
12538	(M 1523) Jovan test	00 53.0	+46 31				23.9	03 10	03 50
12539	YP 220	00 43.0	+57 17					04 02	04 05
								04 06	04 10
								04 11	04 10

water corr. = .3"

272.

Set from 23.47

Clean, but all horizontal cloudy, E wind light.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
2 19 W	+56 06	1-2	7.20 B ₉	4-4-4	Flipped in in error Glebe Mail called back about prospects for annual dis.
1 10 W	+56 10	2	7.14 A ₃	4-4-4	Fine
0 55 E	-12 39	2	4.55 XG ₅	6-6	3 2/3 8 (Flipped in one comp.) Spectrum about 6 or 7 lines with faint in center; set or idet 1 strong
0 44 E				6-6	
1 07 W	+29 25	2-3	7.49 K ₀	4-4-4	Now prof 1 Weak
0 51 W	+14 15	3 [±]	6.81 A ₁₅	4-4-4	2 in Good
1 18 W	+45 05	3	6.65 A ₂₄	4-4-4	2 in 2. slow motion at end of run? - trouble set, 5 Strong
1 43 W	+63 11	3	7.40 A ₅	4-4-4	1 in no further trouble. Fine
1 10 W	+27 45	3	7.77 G ₂	4-4-4	N.P. Good
0 24 E	+46 49	3	6.47 B ₂	4-4-4	3 2/3 8 Seems faint! Setup checked; no haze? entire slightly to violet Fine Guiding!
				10-7	3 photos done & up

about 200 visitors. showed § Broo,
 M13 with 74" Ta showed B, H
 with 4" 274
 Set focus 23.44

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 44	2.20W	31 59	0	7.20 A3 3, 33	HAZE GETTING HOPELESS. Good FOG 'PIKING' IN. WATER DRIPPING OFF DOME VERY FAST. EVERYTHING INSIDE DOME BECOMING VERY DAMP. DECIDED TO CLOSE! 4 PLATES IN DOME 6 " " REFRIG. WBEN Sun Aug 4 18 hrs EST. MC SC SW MTW STW -86 ^s +19 ^s -4 ^s +39 ^s +0.1 ^m ↓ OK 1st with Aug 4 Tues Aug 6 -91.5 ^s +18.2 ^s -044 ^s +44.7 ^s +0.2 ^m (BL: 1200)

30-40 visitors pm.
 Cloudy & showers, but nearly
 all ~~out~~ ^{out} ~~comports~~.
 Several men in radio broadcast.

Spoken at times gives unwanted
 buzzing sound. Can't see what causes it.
 Performs OK

276

Set focus 23.46

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
0 44	0 50W	+20 39 ⁽⁺³⁾	2 ⁻	6.2 G ₄	6-6 3	Flipper in 1/2 Good
1 21	1 28W		2 ⁺		6-6 8	Flipper in 1/2 Fine
2 21	1 15W	+14 22	2 ⁻	6.6 F ₅	4-4-4	Flipper in 1/2 Light cloud at 21 30, 21 36 shift haze. 21 44 clear Good
3 00	0 57W	+03 24	2	5.8 G ₅	6-6 3	Flipper in 1/2 Good
3 06	1 23W		2		6-6 8	Flipper in 1/2 Good
3 50	0 07E	+45 02	2 ⁺	668 A ₂	4-4-4	Jim Stars
4 04	0 40W	+24 42	2 ⁺	5.6 F ₀	6-6 55	WRONG STAR - should be m ₁ . took sp. stars? Stars
4 20	0 56W	#			6-6 9	Flipper in 1/2 but not close to given coords. Stars 1 Week
4 15	1 33W	+14 16	2 ⁻	681 A ₀₃	4-4-4	Bin. Possibly wrong star again. Looks yellowish or slit Haze? Light in SW
4 07	0 40W	+47 02	3	752 K ₀	4-4-4	Aurink transit. Clouds NW Clear overhead Stars
4 41	1 39E	+46 49	3-2	649 B ₂	4-4-4 10-7	Part, this done close, in 0230. Star nearly gone 0241 Not too late perturbation. Close up. Stars Faint

4 dome 10 refing (the plate on)

Clouds in AM, clearing after noon. ~~big~~ Clouds on N. and W. horizons at 20.00.

Process plates spotted 36 min

278

Focus set 23.41 ± 00.02

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISON	REMARKS
01 46W	+17 49	2	7.56 A0	FILTER IN 3-3-3	Velocity * - Seeing suddenly dropped to 0 21.45-21.50 Too Weak then back to 1" 2.
02 23W	+18 08	2	6.90 B9	FILTER IN 3-3-3	Velocity * Too Weak
02 32W	+11 54	2	6.97 B8	FILTER IN 3-3-3	Velocity * Train smudge! Hoze? Weak
00 25E	+44 59	2	6.25 A0p	FILTER OUT 6-5-6	Binary FINE
00 47E	+46 48	2-3	6.47 B2	FILTER IN 3-3-3 FILTER IN 10-7 ^s	Binary Settings 3 Fine Settings 8 Focus S.L. Violet
00 23E	+46 53	2-3	7.00 B8h	FILTER IN 3-3-3	Binary Good

ME SC (MTW) STK
Wed Aug 7 -93^s +18.1^s +97.4^s +10.3^{min}

1 plate in dome 8 in opened box in Refrigerator.
2 cut process plates in ~~Refrigerator~~ Refrigerator, 1 of them spotted. (separate box.)
Host NOT on Mirror.

Smoke all evening, presumably from forest fires in Spawan Lake Region.

280

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
					Focus Set 23.39 L 00.02
02 20 W	+16 44	1-2	7.24	A0 3-3-3	Haze at first?, better after 21.00. 1 Weak Velocity *
02 49 W	+29 29	1-2	6.69	A5 3-3-3	Smearing! Velocity * Weak
04 53 W	+45 97	1-2 → 0	7.20	B9 3-3-3	Intermittent light clouds 00.00-01.10 Velocity * Fine
				10-7	More light clouds, haze, or smoke 01.40; becoming progressively worse. Seeing down to zero 01.45. Clouds or haze gone by 02.10 - transparency looks quite good but smoke odour continues. More clouds moving in 02.35. Had to unlamp RA. by hand.
			5.56	B9h	Start delayed because of light clouds. By 03.15 zenith pretty well clear but solid clouds rolling in rapidly from NW. Continued smoke. Decide to close up.
					2 plates in dome. 4 in opened box in refrigerator.
					Heat NOT on Mirror.
					Fri Aug 9 1946 <u>MC</u> <u>SC</u> <u>SSW</u> <u>MTW</u> <u>STW</u> -97.7 ^s +18.6 ^s +0.1 ^s +53.1 ^s +0.3 ^m

285

Date Tuesday August 13-14, 1946 Sh Julian Day 2432046

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour End
12568	HD 153809	16 56.5	+16 45	[-25	{ E 103-0 H 320879 }	Sat .008	+21.8	20.02	21.52	3
12569	HD 156377	17 121	+18 08	[-25	{ E 103-0 H 320879 }	.008	+21.6	21.57	23.27	4
12570	HD 180316	19 11.0	+27 46	[-25	{ E 103-0 H 320879 }	.008	+21.5	23.31	00.31	1
12571	YP 6154, 16V ₁₆	19 57.8	+24 39	[-25	{ E 103-0 H 320879 }	.008	+21.4	00.35	01.01	2
	"	"	"	"	"	JJ	+21.4	01.01	01.15	2
12572	HD 3264	00 30.7	+48 00	[-25	{ E 103-0 H 320879 }	.008	+21.4	01.24	02.20	3
12573	HD 5638	00 53.0	+46 31	[-25	{ E 103-0 H 320879 }	.008	+21.4	02.24	02.56	4
	Focus Test	Outside	rough Ba							4
12574	HD 9709	01 30.0	+46 36	[-25	{ E 103-0 H 320879 }	.008	+21.4	03.01	04.03	1
12575	YP 250, Boss 189	00 47.1	+60 35	[-25	{ E 103-0 H 320879 }	.008	+21.3	04.04	04.25	2
	"	"	"	"	"	"	"	04.25	04.31	2
	"	"	"	"	"	"	"	04.31	04.41	2

* These plates will test the theory that for E-103-0 plates the "exposure factor" (ie m by which tabulated time ^{should be} multiplied) is a function of apparent magnitude as well as spectral type.

Clouds all day, clearing in evening. Clouds on W. horizon, W. wind.
Felt on inside of finder cap is beginning to come loose.

286

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS	Focus Unchanged (Temp)
02 03W.	+ 16 43	2-3	7.24 A0	3-3-3	Velocity * Seeing Varies Variable 1-3" At times the best I have ever seen Haze at first, clearing (?) after 21:00	
					← Focus Reset 23.48 ± 00.01	
03 25W	+18 08	2"	6.90 B9	3-3-3	Velocity * Transparency seems very good	
02 29W	+27 54	2"	6.51 B5	3-3-3	Binary	
02 12W	+24 50	2"	5.6 F0	4-4	Flipper in 1/2 } rd star of pair.	Setting 3
02 26W	+24 50	2"	5.6 F0	4-4	Flipper in 1/2 } *	Setting 8
01 02 E	+48 19	3	7.14 B2	3-3-3	Binary. Dome moved to N. Misnumbered 12573	Splendid seeing
00 47E	+46 48	3	6.47 B2	3-3-3	Binary Dome N	Setting 3
				10-7	{ Focus plate may show signs of 1/2 sec comparison put in dome with pressure N. and plunger fully drawn }	Setting 8
00 21E	+ 46 53	3 → 4"	7.00 B8n	3-3-3	Binary. Superb seeing Dome N. moved to W. 03:30	Set Strong
00 48W	+ 60 53	3 +	5.5 F8	4-4	Flipper in 1/2 } * Superb seeing	Setting 3
00 54W	"	"	"	4-4	Flipper in 1/2 } "	Setting 5
01 04W	"	"	"	4-4	Flipper in 1/2 } "	Setting 5
					Ved Aug 14 MC SC MTW STW -2.3° +14.9° +69.5° +0.65" m	Spectrometry had on almost constant for last hour
					Heat NOT on Mirror	
					1 plate in dome 4 plates in opened box in Refractor	

287

Date Wed Aug 14-15 194676 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
12576	HD 164898	1758.3	+45 21	I 25	103.0	.008	22.8	22 06	00 36	3 35
	173316	19 11 0	55 1 46			Trans test				

Thursday Aug. 15-16, 1946.

Cloudy nearly all day, clearing around 4.30. Cloudy all night &.

Fri Aug 16. Heat on mirror at 0130 hrs,

weather humid, mirror possibly misted

Heat off 1930

291

Date ~~th~~ ^{Ta: Sh} ~~S~~-W ^W Saturday August 17-18 1946 H. ~~S~~-W Julian Day 2432050

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour End
12575	HD 183143	19 23.0	+ 18 05	E-25	(E 103-0 H 320879)	Sat .008		22 18	22 34	2
12578	HD 198183	20 43.5	+ 36 07	.	E 103 0	.	+ 23.8	22 39	23.09	3
12579	HD.193319	20 14.7	+ 14 04	.	"	.	+ 23.9	23 21	23.38	4
		<i>focus test</i>								

ex 50 visit

Clouds clearing somewhat 20:30. H + Sh ^{Irish} ~~shaded~~
 To Showed Mizar + Alcor. 50 visitors.

6 Lyrae (not resolved), showed α Her, M 13.

focus 23:45

292

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COMP.	Hoze.	REMARKS
3-2				6.9 B9 Sed	3	MWC 317	long at least 2 magnitudes - need 12 hours to complete exposure
3.09 3	10 W	+ 36 21	0-1-	4.5 B6e	3 3.3	MWC 352	Fine Strong Much too weak
3.28	49 W	+ 14 16	0	6.81 A05	3 3 3	Wind in east. thickening considerably	
		0 T B			10/7		clouds drifting in 23:30. Black in east 23:33. Will continue exp. as long as possible. Star gone 23:38 Overcast completely. 1 plate in holder, some 3 in spotting box. 8 in opened box in frig.

Sunday PM. 50 visitors ~~show~~ (6+5+30+10). Showed 74" telescope and Sunspots (good! appearance & very late July?)

Clouds all day, many breaks in afternoon, worse in early evening clearing after 20:20. Opened up 20:50. Transparency ^{is} ~~is~~
 zenith seeing good but clouds and/or haze at lower dec's

299

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
22 6W	+ 4 18	0-1	6.86 A0? 7.4	3-3-3	Focus Sat 23 46 ± 00 02 Seeing so bad that I cannot tell what of double is ^{real} real N. Component of double, some brighter of pair (Venus-like) light haze after 22 45. Clouds moving in 22 50. * going 23:00-23:25, gone 23:29. much ^{low} low <u>bad at 21</u>
		Outside through Base	10-7.		Clouds all around. Close up temporarily 23:40.
		Plate Worthless. In putting on focus test had found that focus test plunger had not been fully returned to normal position after last night's focus test. Plunger about 1/4 way out			
					3 plates in dome (loaded), (OK?) 8 in opened box in rchey. Heat NOT in Murr Mon Aug 19/46 <u>MC SC SW MTW STW</u> -7.7 ^s +20.9 ^s -16 ^s +82.9 ^s +0.9 ^m

Heavy cumulus clouds blown by a strong
 south westerly wind all day clearing considerably
 around 19.00 hrs. Heavy ebird bank on west, north
 and east. west wind still blowing. Doubtful
 focus 23.45
 296

Hour Angle
 End

Declination

Seeing

Ptg. Mag.

REMARKS

Temporarily closed up. Strong wind with some rain
 till 0100. Partly cloudy all night - W.

Aug 20: (WREN: 15.30) Watch post MTW STW
 -33° -05^m

297

Date Tuesday August 20-21 1946

Sl Julian Day 2432053

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
12581	HD 3264	00 30.7	+48 00	E-25	{E-103-0 #32879}	sl .008	+19.4	21.43	22.51	
	HD 213389	22 25.9	+48 51	E-25						
	Sky almost completely clear by 23:30. Temp. 23.40. Try again.									
12582	HD 3264	00 30.7	+48 00	E-25	{E 103-0 #32879}	.008	+18.7	23.49	01.11	2
12583	HD 213389	22 25.9	+48 51	E-25	{E 103-0 #32879}	.008	+18.7	01.18	01.30	1.5
	Low Test							01.44		1.9
12584	HD 213389	23 02.6	+49 40	E-25	{E 103-0 #32879}	sl .008	+18.8	02.25	03.01	2
12585	HD 3264	00 30.7	+48 00	E-25	{E 103-0 #32879}	.008	+18.8	03.06	04.10	3
12586	HD 5638	00 53.0	+46 31	E-25	{E 103-0 #32879}	.008	+18.8	04.14	04.42	4
	Wed Aug 21-22 Thunderstorms early evening, broken clouds + drizzle to 22:00 5/10 cloud 0000, misty.									

Clouds all low, clear to W at sunset, looks hopeless by 20.30, clear patch in zenith
 21.30 Opened up with utmost despatch. Transparency excellent.

298

Hour Angle End	Declination	Seeing	Ptg. Mag.	CAM MARKS	REMARKS
04 06 E.	+ 48 18	2-1ch	7.14 B2	3-3-3	Weak, guiding Benary, Clouds on all sides, moving in 22.15 (moving out from) * gone 22.20-22.35. Clear patch 22.35-22.40 * gone 22.40 * gone 22.50 (1st + 4th)
			7.55 K1		Benary Sky solid except W horizon which is clear. Close up transparency. W. Wens 23.00
					Focus Reset 23 52
01 45 E	+ 48 18	2	7.14 B2	3-3-3	Benary Fine
01 30 W	+ 49 08	3	7.55 K1	3-3-3	Benary Fine (Had to wait till * Neudson) The plate may have been misnumbered 12584 No. Focus slightly to violet
				10-7	
01 34 W	+ 49 56	3	6.8 A12	3-3-3	Be * (111). MWC 397 Fine
01 14 W	+ 48 18	3	7.14 B2	3-3-3	Benary / Dime d-plate lightly 03.15, Fine
01 24 W	+ 46 48	3	6.47 B2	3-3-3	Benary. Some blooming just west Fine

1946 Aug 21

MC SC SW MTW STW

-9.4^s +21.0^s -15^s -32.2^s -0.5^m

Watch stopped, next
 Aug 22 (VIBEN: 1230)

NW STW
 -00.4^s -1.0^m

Sidereal band next +0.0^m

1 checked OK
 (spoken)

Hour NOT on Mirror

2 blank plates, 1 done

3 d-plate plates, 1 specially marked box in Margate

Cumulus clouds nearly all day. At 19.30, opening up heavy cloud bank in north-west extending around to north and east. seems to be slowly moving. Fin. light clouds overhead. light NW wind. Scattered clouds 300

ing Time
S.T.

Hour Angle
End

Declination

Seeing

Ptg. Mag.

REMARKS

filled in completely by 0030

21 Aug 23 (minute head of MTW assumed 30^s slow)

MC	SC	SW	MTW	STW
-12 ^s	+21 ^s	+40 ^s	-57 ^s	-0.4 ^m

Set from 23.55

Clouded till opening. Transparency looks good.
This is first night of week for which weather forecast is "cloudy"

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
1 24 W	+45 25	2-3	7.44 A ₀	4-3-4	Waited transit. Seeing variable. Bin. fine
0 55 W	+27° 54	2-3	6.51 B ₅	4-4-4	Bin "
0 20 W	+26 22	3-	5.9 B _{8nc}	4-4-4	MWC 331 "
0 26 W	+37 22	3-	5.7 B _{3nc}	4-4-4	" 343 perhaps mostly contrast with preceding bright star
1 22 W	+44 11	3	7.2 B _{1se}	4-4-4	" 347. Star looks yellowish? ⊕ Setting double checked.
1 11 W	+46 00	3	7.9 B _{2sex}	6-6	3 } " 353 Tried for a bracket {
1 20 W	+46 00	3	7.9 B _{2sex}	6-6	
1 08 W	+47 03	3	7.52 K ₀	4-4-4	Bin Messed up numbering of plate. }
0 25 W				6-6	3 } MWC 394 }
0 35 W	+48 25	3	5.2 B _{3nc}	6-6	
0 56 W	+38 28	3	6.4 B _{3nc}	4-4-4	5) " 395 Clouding up rapidly. Down 1/2" at 0200. Nearly gone 0204.
				10-7	9) Solid cloud, abandoned exposure. Why doesn't always cloud up after opening pky plates?
					NB 4 plates in holders, 3 in Spottin, box, all in cupboard

303

H-Sh

Date Saturday August 24-25, 1946

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 An End
	Cleared considerably around 2300 E.D ST. some cloud north east, moving slowly in with NE wind - 33									
	Sunday August 25-26, 1946									
	Sunday PM. 50-60 visitors To showed 74" telescope, sun spots									
	Fine all morning and early PM Heavy showers 15:00-19:00. Clouds clearing about 22:30 but persistent heavy haze. By 00:00 EST clouds gone but thick cloud haze - losing 1-2 magnitudes. Everything very wet. little prospect of improvement - goes up. Sh.									
	Globe and Mail called 23:00 re strange flickering fixed light to N.E. visible from Wright Building, colour changing continuously. Thick haze here and nothing unusual to be seen. Probably a 'flare' here or other terrestrial phenomenon.									

About 150 visitors. Skewed M13 with 74 inch until it clouded
(about 1/4 saw it).

β Cygni briefly, and then Jupiter (near horizon)
with 4 inch. 304

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
23 30.				in south & west, very heavy cloud bank in cloud - Cloud bank overhead at 00.00 - Hopeless W.
				<p>Mon Aug 26</p> <p>MC SC SW MTW STW</p> <p>-14^s +21^s +32^s -38^s -0.2^m</p> <p style="text-align: right;">minute hand slow</p>

305

Date

Monday August 26, 1927
W.
27
+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 End
12596	HD 173383	1839.9	39 13	I-25	103-0	.008	21.0	20 58	22 42	2.02
12597	HD 196712	20 34	-02 46	"	"	"	20.9	22 51	23 22	2.47
12598	HD 172187	1833.7	+43 08	"	"	"	20.9	23 35	00 47	4.14
12599	HD 214946	22 36.7	+44 29	"	"	"	20.8	00 56	02 08	3.11
⁶⁰⁰ 12550	HD 213389	22 25.9	+48 51	"	"	"	20.8	02 13	03 15	2.49
⁶⁰¹ 12551	HD 8862	01 22.3	+43 32	"	"	"	20.8	03 22	03 58	3.00
	HD 15814							04 06		
⁶⁰² 12552	HD 10588	01 38.2	31 43	"	"	"	20.8	04 16	05 02	2.30
	Focus Test							O.T.B.		

Overcast in evening with some rain.
 Light clouds on opening up, and haze.

FOCUS 23.48

306

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	COM PARI SENS	REMARKS	
2.42	2.02W	+39 18	2-3	7.73 K5	4.4.4	BINARY light clouds & haze	weak
3.22	0.47W	-02 33	2-3	6.3 B9c	4.4.4	MWC 350	weak
4.47	4 14W	+43 14	2-3	6.40 A5	4.4.4	BINARY	good
5.08	1.31W	40 47	2-3	7.18 A2	4.4.4		very good
6.15	2.49W	49 07	3	7.55 K1	4.4.4		good
7.21	0 35W	43 49	3	6.54 B9	4.4.4		fine
						SETS	
8.50	1.23W	31 59	3	7.20 G5	4.4.4	SET 9	Very difficult to strike at
					10/7	SET 3	at all times. This should be remedied. + plateholders loaded. Opened box of 12 in frig.

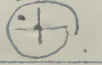
309

Date Thursday August 27 30 1946W.
Julian Day 2432062

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
12604	HD 172187	15 33.7	+ 43 08	E-25	E 13 E 327469	52 .008	+17.2	19:35	20:09	
	Found that under light had not been examined as recommended on Tuesday Aug 27-28. After consultation with H ₂ W.									
12605	HD 164898	17 58.3	+45 21	E-25	E 1030-0 E 327469	.008		20:24	21 04	3
	Form Test HD 120346				Outside the y Bar					
12606	HD 205314	21 29.4	49 30	E-25	E 1030-0 327469	.008	17.0	23 39	00 10	56
12607	HD 214946	22 38.7	+4 29	"	E 1030	"	17.0	00 17	02 35	2 10W
12608	HD 5638	00 53.0	46 31	"	E 1030	"	17.0	02 43	03 23	3 41W
12609	HD 10588	01 38.2	31 43	"	"	"	17.0	03 29	04 15	4 41W
	Focus Test									
					FRI AUG 30	MC SC SW	MTW STW			
						-18 ^s +21.5 ^s -17 ^s	-19.5 ^s +0.2 ^m			

Clouds most of day, starting to clear about 14^h 15. Clear by 18^h 15. Sky excellent by 19^h 15, no sign of W, opened up.
 Heavy clouds clearly visible from House on Rich. Hill, clearing in, forecast cloudy all night.

310

Hour Angle End	Declination	Seeing	Ptg. Mag.	COMPARISONS	REMARKS
00 12 E	+ 43 15	2-3	6.40 A5	3-3-3	Clouds to NW, may be rising in. In tent light clouds 1940. Dec. seems abnormally light but the ... apparently the night * these also. * gone 20.03. Okopen 20.06. PRIMARY
01 17 W	+ 45 25	1-2	7.44 A0	3-3-3	(broke the plate after in camera only after crossing the ...). Finder  . Could this be among Xi (41) Clouds after 2030. Long or moon bud(?). Transparency fair alt. 20.55 Fine cloud 21.00. * gone 21.03. Close plate will be much too weak. Started to close up 21.07
05 6	49 45	1-0	5.76 A00	3, 2	21.15 Imminent threat of rain. (Used shutter before ...) crossup. (Ran tube behind dome, closed shutter). light rain 21.20
2 10 W	44 46	0	7.18 A2	4 4 4	By 21.30 sky quite clear again so close up time
4 15	31 57	0+0	7.20 G0	3, 3 3	ON OPENING UP AFTER SETTING ON STAR, FINDER LIGHT WOULD NOT GO ON, SPENT TIME IN FOCUS 23.54 CUTTING CASING BACK ON LIGHT WIRE, CONNECTING TO COPPER WIRE ON LEFT SIDE OF FINDER LIGHT, NOW WORKING QUITE WELL. RESET ON ANOTHER STAR. W. 01.00
	O.T.B.			10/7.	* SEEING GETTING VERY BAD. CLOUDS & HAZE MOVING IN HEAVY CLOUDS IN N. & W. LOSING ABOUT 3 MAGS. CLOUDS & HAZE ALL NIGHT BUT SEEING IMPROVING AT ... HEAVIER CLOUDS MOVING IN FROM NW 0405 OVERCAST AT END OF EXPOSURE. UNLOADED 4 HOLDERS 103.0, 8103.0 IN OPENED IN
					2 103-0 plates in box in frig. for Use with bright stars.

H-Ta-St-W

313

Date Saturday Aug 31 - Sept 1, 1946 Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
12612	HD 180316	19 11.0	27 46	I-25	103a-0	.008		21 36		
	HD 180316	19 11.0	27 46	I-25	E103a-0	.008	20.4	²¹ 21 48	22 22	
12613	¹⁹³³¹⁵ HD 193349	^{20 14.5} 20 14.7	^{14 04} 14 04	"	"	"	20.4	22 27	23 19	
12614	HD 205314	21 29.4	49 30	"	E103a0	"	20.3	23 27	00 04	
12615	HD 215566	22 41.0	44 14	"	E103a0	"	20.3	00 26	01 06	
12616	(HD 222035) AG 14190	23 33.8	25 40	"	"	"	20.3	01 16	02 40	
12617	HD 5638	00 53.0	46 31	"	"	"	20.3	02 48	03 12	
12618	HD 8862	01 22.3	43 32	"	"	"	20.2	03 18	03 36	
12619	HD 10588	01 38.2	31 43	"	"	"	20.2	03 42	04 14	
12620	HD 15138	02 21.2	50 07	"	"	"	20.2	04 21	04 45	
	<i>Leaves Test</i>								<i>O.T.B.</i>	

50 v. don H showed M13 with 74, Pa Moon with 4" both interrupted by clouds

Fans Set- 23 47 500-02

314

Log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				3.	Sh set on wrong x. (19 11.0, +37 46) Seeing 5
2 27	1 29 W	27 52	1 + 2	6.51 B5	3-3 3 <i>see strong</i> Seeing 8
3 19	1 24 W	14 14	1-0	7.85 G5 6.81 A05	3 3 3 FLASH BULB HAS NOW FALLEN OUT OF SOCKET. THE FOLLOWING UEC. READING WILL BE THOSE TAKEN AFTER SETTING. <i>local</i>
3 57	0 54 W	49 46	1	5.76 A0N	3 3 3 SEEING GETTING WORSE. TEMP TAKEN BETWEEN EXPOSURES. <i>wrong star</i> <i>remendous star</i>
4 16	0 45 W	44 31	1-2	7.02 B8	3 3 3 FOUND ANOTHER BULB. FLASH STILL BAD. <i>fine</i>
4 40	1 25 W	25 43	1	8.63 K0	3 3 3 DARK SPOT IN CENTER OF BEAM. <i>local, weak</i>
3 12	0 39 W	46 48	2	6.47 B2	3 3 3 <i>poor, faint</i> <i>strong</i>
3 3	3 3 W	43 47	3	6.54 B9	3 3 3 <i>poorly guided</i> <i>strong</i>
4 14	0 55 W	31 58	3	7.20 G5	3 3 3 <i>fine</i>
4 46	4 4 W		2	6.61 F2	3 3 3 <i>plastic lens 1 1/2" loaded to 103 a. O.</i> <i>full box in refrigerator. cl. under</i> <i>are these out?</i>

316

Ending Time
E.S.T.

317

