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3.

Hour Angle End

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				DAVID DUNLAP OBSERVATORY
				74" LOGBOOK
				VOL. 7
				PLATE NOS. 4743 - 5494
				JULY 1939 - MAR 1940

5

Date Wednesday July 26-27 1931 T 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 Ind
4743	HD 172187	18 33.7	43 08	I-12	Actinette	.010	19.9 27.8	8 45	9 45	15

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Pointer 21.0 REMARKS
51	0 51 E	43 04	2-1	640 A5	1-2-1 Binary? Trackstands q 4-0 Bellow Buzzing. Track thereafter.

Date Thursday, July 27-28, 1939, H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
4744	HD 172187	18 33.7	+43 08	I-12	Astra II	Set 010	22.8 29.4	21 44	22 34 1	1.00
4745	179094	19 06.1	+52 16	"	"	"	22.8 29.4	22 37	23 17 2	0.10W
4746	187748	19 46.5	+59 10	"	"	"	22.7 29.3	23 45	00 55 3	
4747	206155	21 35.1	+08 44	"	"	"	22.9 29.4	00 59	02 29 4	0.54W
4748	207978	21 4[illegible]	+28 20	"	"	"	22.9 29.3	02 32	03 [illegible] 1	2.22W
4749	214558	22 33.9	+44 40	"	"	"	22.8 29.3	03 23	04 [illegible] 2	5.5W

Friday, 1939 Jul, 28-29 [illegible]

Cloudy at start. Clearing at 22h, opened up. Heavy, black clouds from west 24h, closed.

Saturday, 1939 Jul, 29-30 H-B2 About 15 visitors

Cloudy all night with frequent drizzles.

4749 E1 (not usual) From top of Schmidt Corrector Y-H-L Patrick plate, 1 filter at 4°
4749 E2 From Zeiss I-12 Astra II

Clouds from dark. Slowly clearing, but hazy
Many visitors

Printer set 22.4

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 00	+43 08	1	6.40 A5	1-2-1 Binary - Gen. Prog. Hazy
0 10W	+52 19	2	6.93 K0	1-2-1 B.S.
	+59 14	2	7.22 G0	1-2-1 KSA 17 Clouded over during setting 23^{18} - 23^{44}. Hazy throughout
0 54W	+08 53	2-1	6.8-7.5 A0	1-2-1 Binary Hazy
1 32W	+28 28	2	6.04 F5	1-2-1 KSA 66 Cloud 2^{40} - 2^{50}; hazy throughout
1 55W	+44 50	3-4	6.95 F8	1-2-1 KSA 42

	MC	SC	SW	MT	ST
July 28 10	$-1^m 35^s.1$	$-1^m 45^s.0$	$+39^s.4$	$-1^m 31^s.1$	$+0^m.5$

Cloud, 10^h; Hazy + mostly cloud, 11^{30}. Thunderstorm, 12^{45}

July 29 10	-1 34.3	-1 45.9	+39.3	$-1^m 30.0$	$+0^m.5$

Cloud 14" to 2 but no others stopped

July 31 10	-1 30.4	-1 47.1	+39.1	$-12^s.7$	$+0^m.6$

Stopped; Reset.

outside the box Tilt set to 20'.5

Setting	Focus
1	26.05
6	26.25
9	26.[illegible]

cf 9^s, 18^s] 26 23 about right
Not set [illegible]

9

Date Monday July 31 - Aug 1/39 -L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4750	H.D. 172187	18 33.7	43 08	I - 12½	Astra II	Set .010	Below 27.4	20 55	21 50	3	28 E
4751	" 174881	18 47.7	28 39	"	"	"	27.4	21 55	22 55	4	23 W
4752	" 152440	19 19.6	57 33	"	"	"	27.4	23 01	00 13	1	10 W
4753	" 206155	21 35.1	08 44	"	"	"	27.4	00 19	01 39	2	10 W
4754	" 204231	21 22.1	57 39	"	"	"	27.4	01 49	03 29	3	20 W
4755	" 218565	23 03.6	44 01	"	"	"	27.4	03 34	04 41	[illegible]	30 W

Pointer set at -21.05

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp	REMARKS
0 28 E	43 08	1-2	6.40 A5	1-2-1	Haze and light clouds, hesitated to start.
0 23 W	28 43	1-2	7.43 K0	1-2-1	Surprise! cleared off shortly after start and stayed clear
1 10 W	57 38	1-2	7.57 K2	1-2-1	
0 20 W	08 52	1	6.8 – 7.5 A0	1-2-1	
2 29 W	57 47	1	7.56 F8	1-2-1	hazy, light clouds
1 37 W	44 12	1	6.36 A0	1-2-1	

	MC	SC	SW	MT	ST
Aug 1 10	-1m 36s.7	-1m 47s.8	+36s.8	-14s.5	+0m.6

Date Tuesday Aug 1-2, 1939, M Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature Below	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
4756	H.D. 165910	18 3.2	+13 03	I-12	Astra II	.010	26.7	20 35	21 47 1	0.03W
4757	180613	19 12.1	31 04	—	—	—	26.5	21 50	22 58 2	1.6W
- 4758	Pleiades	1939 20 01.8	-27 06	—	Astra IV	.060 L	26.5	23 20	— 3	
								—	23 23	
- 4759	Pleiades	—	—	—	Infra Red	—	26.6	23 30	— 4	
								—	23 37	
								23 40		
4760	H.D. 176833	20 34.8	43 58	—	Astra II	.010 L	26.6	0 10	1 10 1	
4761	188851	22 51.3	43 02	—	—	—	26.6	1 14	3 26 2	
4762	3924	0 [illegible]	33 13	—	—	—	26.6	3 31	4 11 3	

Tuesday Aug 2-3 1939 Mostly cloudy with haze
Wednesday 3-4 Aug Delayed opening shutter haze - Thick clouds 11 PM - 1:30

Pointer at 20.6

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 03W	13 02	0	6.46 A0	3-1 Lightning on south horizon.
0 06W	31 07	0	6.73 B9	1-2-
	Plate setting	Exposure		
	0	20 sec.	Filter 38A	Raised lower curtain.
	1	10		
	2	40		Position centred on disk
	3	20		
	4	10		Shots 2 m.
	5	5		
	0	240 sec	Filter 38A	
	1½	60		Set to a count 6 m.
	3	15		
	4½	120	No Filter	
	6½	40		
	7½	13		
	9	0		Comp ½ sec
0 56W	44 06	2	6.52 B5	1-2-1
0 53W	43 13	2	7.56 B5	1-2-1 Need brighter of pair
0 05E	52 23	2	6.11 B9	1-2-1

	MC	SC	SW	MT	ST
Aug 2 10	$-1^m 41^s.9$	$-1^m 48^s.4$	$+35^s.7$	$-20^s.8$	$+0^m.8$

Date Friday, 1939 August 4-5 Bs Julian Day 9480

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
4763	HD 172,187	18:33.7	-43°08	1-12	Astra I	Set .010	17.5 25.5	20:24	21 24	4
4764	" 179,094	19:06.1	+52°16		"		17.5 25.3	21.4	22:24	1
4765	" 190,323	19:59.3	+14°42	"			17.4 25.4	22:30	[illegible]	2
4766	" 207,978	21.48.0	+28°20	"	"		17.6, 25.4	01:35	[illegible]	3
4767	" 215,943	22:43.7	+36°52	"	"	dark	17.4, 25.4	02:21	03:[illegible]	4
4768	" 15,755	02:26.8	+34°06	"	"		17.5, 25.3	03 37	[illegible]	[illegible]

Pointer at 19.6

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0 37 E	+43°08	0-1	6.40 A5	1-2-1 Binary
0 10 E	+52°22	2	6.93 K0	1-2-1 BSC
2 03 W	+14°50	1-2	7.5, 9.5 / 7.36 F8p	1-2-1 . Light clouds toward end in south. Haze; image unsteady. reflected moonlight
1 02 W	+28°28	1-2	6.04 F5	1-2-1 KSA 66
1 [illegible] W	+37°04	1-2	7.00 K0	1-2-1 BSC Galvo. buzzing; stopped when switched off + on
1 38 E	+34°15	2	6.68 G5	1-2-1 BSC [Sky too poor for faint *'s suggested]

	MC	SC	SW	MT	ST
Aug 5 10	$-1^m 39^s.2$	$-1^m 50^s.3$	$+38^s.7$	$-22^s.0$	$+00^m.5$ ~~+01.3~~

Date Saturday, Aug 5-6, 1939 M-B5 Julian Day 9481

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
							Below			
4769	H.D 198480	20 45.5	42 35	I-12	Astra II	.010	25°.5	22 51	23 57 2	1.44W
4770	211474	22 12.2	29 35	—	—	—	25.6	23 54	01:34 3	[illegible]
4771	222 207	21:33.5	41° 57	"	"	"	25.5	01:39	02 [illegible]	[illegible]
4772	" 5[illegible]	00.52.2	63° 11	"	"	"	25.6	[illegible]	04:34 1	.0W

Pointer at 19.8

Hour Angle End	Declination 1939	Seeing	Ptg. Mag.	REMARKS
				about 150 Visitors. showed M-13 M-57 with 7.4", Dr. showed Mars with 4".
1 44W	42 42	3-2	7.21 B8	1-2-1
0:00	29 45	2-1	7.54 B8	1-2-1
0 [illegible]E	+42 03	1	6.77 B9	1-2-1 KSA 43
20W	+63°24	2-1	7.5 B2	1-2-1 " 8 N [illegible] S Wrong * ?

Date Sunday Aug 6-7, 1939, L. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4773	H.D. 164280	17 55.3	36 17	I - 12½	Astro II	Set .010	Below 27.0	20 30	21 04	2	.09 E
4774	" 176466	18 55.3	32 59	"	"	"	26.9	21 09	21 54	3	.9 E
4775	" 177595	19 00.3	27 10	"	"	"	26.8	21 59	23 05	4	.47 W
4776	" 190887	20 02.0	12 39	"	"	"	26.8	23 11	00 51	1	[illegible] W
4777	" 201859	21 07.2	27 09	"	"	"	26.8	00 35	02 15	2	.0 W
4778	219699	23 12.8	30 29	"	"	"	26.8	02 19	03 39	3	.9 W
4779	" 1632	00 10.5	32 21	"	"	"	26.8	03 43	04 24	4	.1 W

Pointer set at 20.7

Hour Angle End	Declination	Seeing	Ptg. Mag.	Comp.	REMARKS
0 09 E	36 16	3	6.98 K0	1-2-1	
0 19 E	33 00	3	6.91 A2	1-2-1	
0 47 W	27 13	3	7.03 B9	1-2-1	
1 11 W	12 43	3-2	7.57 F2	1-2-1	
1 50 W	27 16	3 2	7.56 A0	1-2-1	
1 09 W	30 40	3-2	7.44 F0	1-2-1	
0 51 W	32 33	3-2	7.15 K5	1-2-1	Light clouds latter part of exposure

Date Monday August 7-8, 1939 14 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
4780	HD 188074	19 48.3	+47 09	I-12	Hetu II	set 010	18.6 26.2	23 36	0 20	
4781	205924	21 33.5	+05 19	"	"	"	26.0	0 25 ↑	1 00	
								Cell max 00 35		

Tuesday, 1939 Aug 8-9 13s

Steady, rain 20h - 01h Thick 01 30 Partly clearing with strong SW wind.

Wednesday August 9-10 H-L

Changed to Schmidt. Focus of 12" at 26.23

Focus tests 7.0, 0.0, 3.0 Plates numbered 1, 2, 3 unexposed

4 Hartmann - 2.0 outside the focus, 6s, 4s

5 " 2.5

6 " 2.0 0.002 focus shift under the curved plate

7 " 1.8

Replaced I-12 Focus tests 26.24(?) Focus

Clouds afternoon & early evening. Partly clearing around 21^{00}, but falling in again. Gradually improving 23^{00} on. Still hazy at start. Clouds & lightning round horizon.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
0	1^{19} W	+47 13	1	6.52 F0	1-2-1 KSA 39. Haze. Clouds 23^{59}-0^{04} +
0	0^{14} W	+05 29	1	6.08 F0	1- BS. Clouds better part. Thick.

	MC	SC	SW	MT	ST
Aug. 8 10	-1 31.4	-1 42.2	+44.8	-29.0 s	-0.8 m
				Reset.	

02^{15}. Mostly thick again, wind unabated, 02^{45}.

Clock 8 (setting 3.0) best; focus probably between 0.0 & 3.0, much nearer 3.0

[illegible] violet (upper, rotated) only, to check focus of violet

" " " "

21

Date Wednesday 1939 Aug 9-10 Bs 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
4782	HD 176,466	18:55.3	+32°59	1 12	Astra II	.010	Below 25.2	21 33	23:04	3	
4783	" 190,405	19:59.7	+17°26	"	"	"	25.3	23 13	23:49	4	
- 4784	" 214,557	22:33.9	+45°19		"	"	25.2	00:56	01:26	1	
- 4785	" (1866)	00:19.6	+28°55		"	"	25.1	01 12	01:36	2	

Delayed opening due to clouds + high wind
Pointer at 19.6, Focus set at 26.21

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	1.05 W	+33°02	1	6.91	A2	1-2-1	KSA 63 — light clouds toward end
							M.C. S.C. SW H.T. ST
							Aug. 9 10 -1m42.2s -1m 53.0s +34.1 -31.0s -0.8m
9	1.48 W	+17°33	1+	7.27	F8	1-2-1	.88
	2.12 W	+45°32	1	7.57	F8	1-2-1	42 W. [illegible] g [illegible]?
	0.09 W	+29°06	1-2	6.97	A3	1-2	Binary, ⊙ — Brighter ✕ of 2 Stopped by heavy [illegible]
							bank of clouds spreading rapidly from northwest
							MC SC SW HT ST
							Aug. 10 10 -1 42.9 -1 53.7 +31.1 -33.0 -0.7m

23

Date Thursday August 16-11, 1939 H Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4786	HD 172187	18 33.7	+43 08	I-12.	Astr. II	set 010	16.5 24.1	20 12	20 52	3	0 47 E
4787	170200	18 23.1	+06 08	"	"	"	24.1	20 57	21 17	4	E
4788	183794	19 26.1	-02 19	"	"	"	24.1	21 21	23 01	1	W
4789	190323	19 59.3	+14 42	"	"	"	24.1	23 04	00 24	2	W
4790	206155	21 35.1	+08 44	"	"	"	24.0	0 27	1 47	3	W
4791	211460	22 12.1	+28 41	"	"	"	24.1	1 51	2 53	4	W
4792	222143	23 33.0	+45 39	"	"	"	24.0	3 01	4 01	1	W
4793	3856	00 36.1	+65 36	"	"	"	24.0	4 06	4 40	2	W

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 47 E	+43 10	1	6.40	A5	1-2-1	Binary
0 11 E	+06 08	1	5.57	B8	1-2-1	B.S.C.
0 30 W	-02 14	1	6.8v	B8	1-2-1	Binary
1 30 W	+14 48	1	7.36	F8p	1-2-1	K.S.A. 88
1 17 W	+08 53	1-2	6.8v	A0	1-2-1	Binary
1 11 W	+28 51	2-3	7.53	G5	1-2-1	KSA 66
1 24 W	+45 50	2-3	7.34	G5	1-2-1	KSA 43 Light Haze
0 59 W	+65 37	3-4	6.70	G5	1-2-1	BSC. Haze

Date Fri. August 11-12, 1939 S-H-T Julian Day

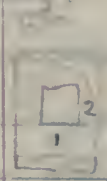
Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4794	NGC 6366	17 22.4	-04 59	Newt.	Astra II			8 47	9 14	1	
4795	" 6402	17 32.4	-03 11	"	"			9 25	9 55	2	
4796	" 6779	19 12.7	+30 00	"	"			10 10	10 30	1	
4797	" 6720	18 99.9	32 54	"	Astra VIII			11 07	11 27	1	
4798	" "	"	"	"	Infrared			0 01	0 31	2	
4799	" 6205	16 32	36 29	"	Astra II			0 50	0 [illegible]	1	
4800	" ~~6779~~ 7662	23 21.1	41 59	"	Eastman IG			1 26	[illegible] 03	[illegible]	
4801	"	"	"	"	"			[illegible] 10	[illegible]	1	
4802	IC 5217	22 44	50 25	"	"			3 55	4 20	2	

Sat - Aug 12-13/1939 M-H-T

135 visitors. Cloudy M talked on Moon
H demonstrated the 74" to Group

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
						Very Bright Aurora high in sky.
						Focused on Vega.
				Filter No 29		
				Filter 89		
				Filter 15 G		Polaroid. Strike on polaroid length ways of plate. 1
				"		" " " crossways 2
				"		

Search twice last clearing night due to very spectacular aurora; guiding difficult field often as bright as the plate and all guide stars.



Date Sunday Aug 13-14, 39 H.S.L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
4803	N.G.C. 6205	16 38.1	36 39	Newtonian	Astra II			20 37	20 42	
4804	"	"	"	"	"			20 45	21 15	
4805	" 6366	17 22.4	-04 59	"	"			21 26	21 59	
4806	" 6818	19 38.5	-14 24	"	Eastman I G			22 50	23 20	
4807	" 6402	17 32.4	-03 11	"	Astra II			23 31	00 01	
4808	" 6779	19 12.7	30 00	"	"			00 10	00 28	
4809	" 6205	16 38.1	36 39	"	"			00 36	00 41	
4810	" 6886	20 08.3	+19 42	"	I-G			01 08	01 38	
4811	" 7662	23 21.1	+41 59		"			01 54	02 29	
	"			"	"			02 33	03 08	
4812	" 508	01 28.2	+30 09		Astra II			03 24	03 59	
4813	" 7089	21 28.3	-01 16		"			04 08	04 15	

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
2							
5							
20		Filter 15G					Telescope ran off in RA at close of exp. RA. clamp cam had shifted. Readjusted cam.
25							
30		Filter 15 G					
29			Polaroid				Trouble finding nebula.
			"				Thin appearance as away from numbered end.

29

H. S. L

Date 1939 Aug. 14-15 Mon. 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
4814	N.G.C. 6254	16 51.9	-3 57	Newt	Astra II			20 36	20 41	
4815	" 6218	16 42.0	-1 46	"	"			20 44	20 49	
4816	" 6205	16 38.1	+36 39	"	"			20 57	21 02	
4817	" "	"	"	"	"			21 05	21 44	
4818	" 6366	17 22.4	-04 59	"	"			21 51	22 16	
4819	" 6402	17 32.4	-03 11	"	"			22 26	22 59	
4820	" 6779	19 12.7	+30 00	"	"			23 04	23 24	
4821	" 7662	23 21.1	+41 59	"	I G Eastman			23 50	00 30	
		"	"		"			00 35	01 15	
4822	"	"		"	"			01 18	01 49	
	"	"	"	"	"			01 53	02 23	
4823	598	01 28.2	+30 09	"	Astra II			02 39	03 46	
4824	1089	21 08.5	-01 16	"	"			03 54	04 54	
4825	"	"	"	"	"			04 05	04 10	

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
							clouds exp. off 21^20 – 21^21, 21^25 – 21^27, 21^29 – 21^30, 21^33 – 21^35
		Filter 1: G,	Polaroid crossure in plate holder.				numbered end
			Polaroid layover in plate holder. The exposure away from				
			Polaroid marker in upper right corner at 45° when facing plate holder				
			Polaroid marker in lower right corner at 45° the exposure nearest the				
							numbered end
							MC SC SW $\overline{MT_s}$ ST
							Aug. 15 10 -1 46.2 -1 56.6 +09.7 +16.2 +01 m

Date 1939, Aug. 15-16 H.S.L. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4826	NGC 6205	16 38.1	+36 39	Newtonian	Astra II			20 36	20 44	1	
4827	" 6254	16 51.9	-03 57	"	"			20 53	20 58	2	
4828	" 6218	16 42.0	-01 46	"	"			21 02	21 07	1	
4829	" 6366	17 22.4	-04 59	"	"			21 39	22 12	2	
4830	" 6779	19 12.7	+30 00	"	"			23 25	23 40	1	
			Aug 16-1939	M							
4830 F,				I-12	Infra Red					1	
4830 F.				I-12	Infra Red					2	

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
					Seeing vile! Hguid
					Hguid
					Squid
					Mostly cloudy after this exposure till -21^{35}
					Squid
					Exposure off. $21^{46}-22^{03}$, $22^{12}-$ Clouds everywhere
					Squid
					Exposure off $23^{31}-23^{34}$, $23^{35}-23^{36}$, "
					MC SC SW MT ST
					Aug 16 10 $-1^m 46^s.4$ $-1^m 56^s.8$ $+07^s.3$ $-46^s.3$ $-0^m.1$
	focus 26.24	tilt	20.17		
low outside	setting	1		20 – 15	scale 30 sec. spots (no filter) 60 sec.
		4		12 – 9	diaphragm out. strips " 150 "
	focus 26.18	tilt	19.43		
"	"	2		4 – 4	diaphragm out spots 180 sec.
		5		7 – 7	" "
					Tilt set to 20.17
					focus seems O.K. at 26.8.

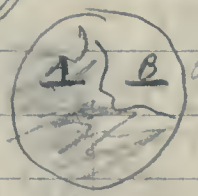
Date 1939 Aug 16-17 M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A B	Starting Time E.S.T.	Ending Time E.S.T.	
4831	HD 156891	17 15.0 (1939)	+38 55 (1939)	I-12	Astra II	.010	14 25.4	8 16	9 22	3
4832	Mars.	19 49.0	−27 21	—	Infra Red	.060		22 08	—	1
									22,22	
4833	—	—	—		—	—		22 23	22,30	2
4834	—	—	—		Astra II	—		22 31	22 36	3
4835	—	—	—		—	—		22 39	—	4
								—	22 44	
[illegible]	HD 190323	19 [illegible]3	19 42	"	Astra II	.010	17.2 25.7	23 01	0 31	[illegible]
[illegible]	206155	21 35.1	[illegible] 44				17.2 25.7	0 35	2 05	[illegible]
[illegible]	[illegible]	22 20.9	17 57				17.2 25.7	2 09	(2 4[illegible])	[illegible]

Telescope swung away north and dec near zenith.

Thermostat 19.9

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	1 26W	35 49	1	6 38	K0	1-2-1	Time last tinging single star.
	.60 sec	slit .010 for first two.		A			All settings on Mars plates run from -1 to +3.5
	60			B			
	60			A			
	60		1-0	B			10 exposures to a plate.
	60			A			
	60			B			strips 180 s.
	5			A			
	5			B			spots 300 s
	5			A			
22	5			B			scale 180 s.
30	all 15 s.			A			
				B etc			" "
3	all 4 s			A	Zilly	38A	strips 120 s, spots 60 s, scale 40 s.
	2 s			B etc			
	2 s			A	"	"	" " "
	2 s			B			
	2 s			A			
	2 s			B			
	10 s			A			
	10			B			
	10			A			
	10			B			
	10			A			
2 44	10			B			
3	1 5 W	14 47	1-0	7-36	F3p	1-2-1	R of M Star.
6	45W		1	6.8-7.5	A2	1-2-1	Light haze
2		12 47		7 40	K	1-2-1	Clouds 2 + 5 mostly clouds



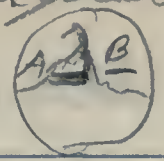
fairly near centre.

4836 F

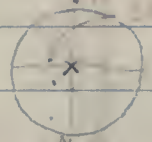
Date Thursday, Aug 17-18, 1939, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4839	HD 165398	18 00.7	27 06	I - 12	Astra IV	.010	17.9	26.0	20 10	21 30	1	6.53W
4840	Mars	(1939) 19 49.0	(1939) -27 20	—	Astra IV	.060L			22 01	22 05	1	[illegible]
4841	—	—	—	—	—	—			22 06	22 11	2	" "
4842	—	—	—	—	Infra Red	—			22 12	22 17	3	" "
4843	—	—	—	—	—	—			22 19	22 28	4	[illegible]
4844	HD. 198690	20 47.0	42 01	—	Astra II	.010	17.7	26.0	22 43	23 45	1	[illegible]
4845	205878	21 54.1	42 46	-	-	-	17.9	26.0	23 50	1 20	2	[illegible]
4846	219361	23 10.1	27 32	-	-	-	17.9	26.0	1 30	2 30	3	[illegible]
4847	17330	2 41.8	29 17	-	-	-	17.8	26.0	2 35	3 45	4	[illegible]
4848	21540	3 24.0	16 32	-	-	-	17.8	26.0	3 48	4 46	1	[illegible]

set tilt to 19.43 for Mars plates. Reset tilt to 20.17 for other plates.



Hour Angle End	Declination	Seeing	Ptg. Mag.			Pointer at 20.20 REMARKS						
								MC	SC	SW	MT s	ST m
0 53W	27 04	1	7.22	Az	1-2-1	Aug. 17	10	-147.3	-157.0	+04.6	+12.2	+0.1
all exposures	3 sec	settings -1 to +35	Filter	38A	A then B.	strips	100 sec (38A),	scale 25" r.,	spots	(no filter) 25" r		
" "	10 sec	"	"	"	"	"	"	"	"	"	"	"
" "	10 sec	"	No filter		"	"	240 r	No filter	"	240 r	"	300 r
1 Aug 0 04W	60 sec	-1 to +4	"		"	"	"	"	"	"	"	"
0 22W	42 06	2-3	7.15	B8	1-2-1							
0 32W	42 52	2-3	7.36	Bq	1-2-1							
0 44W	29 43	2	6.95	Ao	1-2-1							
1 33E	29 24	2-3	7.17	Bq	1-2-1	Some clouds						
1 14E	16 32	3-4	7.02	Ap	1-2-1	large						



Telescope badly out of balance [illegible]

Aug. 18	10	-148.8	-157.7	+05.6	+11.4	+0.5
						Last

Date Fri Aug 18-19, 1939 Hd-Bs Julian Day 9434

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.
4849	HD 160781	17 36.7	06 22	I-12	Ad I	010	17.7 26.1	7 57	8 57	2	4h 47m
4850	MWC 312 HD 180398	19 11.3	12 56	"	"	015	17.9 26.0	9 02	10 52	3	4 09
4851	HD 199665	20 53.6	10 28	"	"	010	17.9 26.0	10 59	11 37	4	4 11m
4852	HD 201616	21 05.6	09 38	"	"	"	17.8 26.0	11 40	00 3	1	
4853	" 206,540	21:37.6	+10°21	"	"	"	17.7 [illegible]	00 34	01 [illegible]	2	
4854	" 219,139	23 08.5	+10°31	"	"	"	17.7 25.9	01 24	02 [illegible]	[illegible]	
4855	" 222,602	23:36.9	+06°42	"	"	"	17.7 26.0	02 [illegible]	03 07	4	
4856	" 2913	00:27.3	+06°25	"	"	"	17.7 26.0	03 4	03 40	1	
4857	" 11,037	01:43.3	+03° 11	"	"		26.0	03 48	[illegible]		

Sat Aug 19-20 Hd-Bs about 10 minutes. Bs when cloudy all evening

Pointer at 20.2

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
57 2	W 47m	6 20	1	6.98	K0	1-2-1	B.S.C Some haze at first
52 3	W 1h 08	12 58	2-1	7.7	B(3)ne	1-1-1	Some clouds.
37 4	W 11m	10 36	2	6.61	K5	1-2-1	BSC
1	0h 52 W	9 47	1-2	6.05	A2	1-2-1	BSC Haze
2	0h 5. W	+10° 31	1-2	5.90	B8	1-2½	" " Clouds everywhere at end
	0h 47 W	+10° 43	1-2	6.94	K0	1-2-1	"
	0h 50 W	+06° 57	1-2	5.85	A0	1-2-1	"
	0h 45 W	+06° 31	1-2	5.66	A0	1-2-1	" Bright preceding (fainter one dec)
	0h 34 W	+03° 22	1-2	6.78	G5	1½-2	"

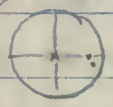
transparency, telescope
Thick at 0h, 1h, 2h, 3h

		HC	SC	SW	M.T.	S.T.
Aug. 19	10	-1 48.6	-1 58.1	+05.4	+10h 0s	+0m 5 Aut

Date 193[illegible] Sun Aug 20 21 L-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4858	HD 214557	22 33.1	+45 19	F 12	Astrau	1010	15.7	23.0	0 28	[illegible]	[illegible]	[illegible] W
4859	1826	0 17.6	+2[illegible] 55	"	"	"	15.6	23.8	2 03	3 1[illegible]	4	[illegible] W
4860	13201	2 03.9	+16 46	"	"	"	15.6	23.8	3 17	3 55	[illegible]	03 E
4861	22124	3 28.8	[illegible]1 41	"	"	"	15.6	23.8	3 59	4 51	[illegible]	02 E

Clouds earlier.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
							Thermostat - 18.6
	0 59W	45 29	2	7.57	F8	1-2-1	KSA42
	0 31W	29 05	2-1	7.00	A5	1-2-1	Binary ?Rightster?  See Aug 9-10
	0 33E	16 55	2	6.85	F5	1-2-1	KSA70
	1 02E	31 48	2	6.90	F2	1-2-	Binary

		N.P.	S.P.	S.W.	MT	S.T.
Aug. 21	10	+00.3 Rest 0.3 wt. removed	-1 59.3 + 00.7 Rest 0.2 wt. removed	+02.0	+06.2	+0.1

Date 1939 Monday, August 21-22 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
						Set	Above Below				
4862	HD 172187	18 33.7	+43 08	I-12	Astro II	810	16.3 24.2	20 07	20 47	3	18 E
4863	181119	19 14.1	+30 50	"	"	"	16.2 24.1	20 49	21 29	4	16 E
4864	174881	18 47.7	+28 39	"	"	"	16.2 24.0	21 32	22 32	1	23 W
4865	184905	19 31.5	+43 43	"	"	"	16.2 24.1	22 35	23 00	2	18 W
4865	T1	Efforamm test for He discharge tube									
	T2	"	"	"	"	"					
4866	" 5596	00 52.6	45 03	"	"	"	Below 21.6	02 19	04 19	1	5 W
4867	" 16176	02 30.7	38 18	"	"	"	21.7	04 22	04 36	3	4 W

Clouds & rain early evening. Clearing at dark

Temp. at 18.9

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 03 E	+43 09	1-2	6.40	A5	1-2-1	Binary Brilliant aurora rays.
0 06 E	+30 54	2	6.48	A0	1-2-1	Very bright arch rising below equator
1 23 W	+28 41	2-3	7.43	K0	1-2-1	
1 08 W	+43 46	3	6.58	A0p	1-2-1	Light clouds 22 48, Thick 22 55
						setting 1 3 5 7 9 / Hatch 1 2 8 4 16 / Feau 4 — Two filters out, as usual for 12" Tele. night.
Exposures 2 4 8 16 32 64 5 (th. auto						Probably could have started sooner, but did not trust
1 05 W	+45 15	1	7.25	A3	1-2-1	Supp. clouds 3.00 clearing 3.30
0 04 W	+18 26	1	6.36	F5	1-2-1	B.S.C.

		MC	SC	BW	MW.	S.W
Aug. 22	10	-00.2	-00.2	+00.5	+05.4	+0.2

Date Tues Aug 22-23, 1939 Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4868	HD 157681	17 19.6	53 31	I-12	Astra II	010	14.7 22.8	7 50	8 34	4	W58m
- 4869	MWC 307 HD 174886	18 47.7	-10 21	"	"	015 M	14.9 23.0	8 43	10 00	1	55m
4870	HD 188385	19 49.8	06 53	"	"	010	15.0 23.0	10 04	10 24	2	17m
- 4871	MWC 346 HD 195407	20 26.0	36 39	"	"	012	14.9 23.0	10 30	12 00	3	W
- 4872	M.W.C. 383 HD 209296	21 57.2	56 14	"	"	015 M	15.0 23.0	00 12	02 12	4	59 W
	M.W.C. 29. HD 13661	02 08.1	54 04	"	"	—	Focus 20 min				identical
4873	HD 9312	01 26.6	16 28	"		.010	15.0 23.0	02 42	04 01	1	W
4874	" 21769	03 25.5	58 26	"	"	"	15.0 23.0	04 05	04 52	2	5

Wed Aug 23-24 Hd-L Clouds and rain

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
54	W 58m	53 28	3	7.13	K5	1-2-1	BSC.
0 1	W 55m limit	−10 19	2	8.1	B3e	1-1-1	Took brightest star in field. — Check for op. type. — Ok.
2	W 17m	6 59	4	5.97	A0	1-2-1	BSC. Bright Auroral arch, streamers
3	1 17 W	36 45		7.7	B3e	1-2-1	and diffuse patches first
	1 59 W	56 21	3	8.1	B3e	1-1-1	noticed 9.15. — Brighter at
	to identify star from field as sketched, I could not be sure.						9.50, mostly diffuse patches + streamers, rapid motions.
	0 18 W	16 37	2-3	7.59	G5	1-2-1	At 00 45 it is an awe
	0 51 E	58 09	1-2	6.35	A2	1-2-1	Supposed double inspiring sight. great curtains
							took brighter sliding, dancing. it makes
							component. your head whirl and your
							heart thump as you watch
							it. At 1 10 curtains near
							zenith decidedly mauve in
							colour; near horizon brilliant
							green.

Date thurs. Aug 24-25, 1939. T-Bs Julian Day 9500

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
4875	HD 190323	19 59.3	14 42	F-12	Astra	.010	14.9 23.1	10 28	[illegible]	3	2[illegible] W
4876	" 1826	00 17.6	+28° 55	"	"	"	15.0 23.1	00 17	01:47	4	[illegible] E
4877	" 648	00 03.9	+17° 40	"	"	"	15.0 23.2	01:51	[illegible]	[illegible]	[illegible]
4878	" 22,124	03:28.8	+31° 41	"	"	"	23.1	[illegible]	[illegible]	[illegible]	1[illegible] E
4879	" 20,277	03.10.5	+31°49	"	"	"	15.0 23.2	03:51	[illegible]	3	[illegible] E

Clouds, rain earlier.

Thermostat 18.1

Time G.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS	MC	SC	SW	MT	S.T.
?	2h00 W	14 47	1	7.36	F8p	1-2-1	KSA 88 (for H) Aug. 23 10	-00s.3	-00s.5	-02.0	+04s.0	+0m.7
1	0h40 E	+29°05	1	7.00	A5	1-2-1	Binary (for Y) 24 10	-00.4	-01.0	-04.5	+04s.0	+0m.9
	0h00 W	+17°54	1	6.69	K0	1-2-1	KSA 68 (for H)	The overhanging shutters scrape the railings noisily as the dome is turned.				
	1h52 E	+31°50	1	6.90	F2	1-2-1	Binary (for Y)					
	0h16 E	+31°59	1	7.05	K0	1-2-1	KSA 47 (for H)	Lost in clouds 04h00 – 04h10				
							Aug. 25 10	-01.0	-01.8	-04?.9	+03s.2	+0m.6 Rest

Date Fri Aug 25–26 1939 T-Bs Julian Day 9501

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
4880	HD 160740	17 36.5	+44 04	I-12	Astra II	.010	14.6 22.5	7 48	9 24	4	2V
4881	177152	18 55.4	+44 14	"	"	"	14.5 22.7	9 27	11 27	1	4V
4882	201345	21 03.9	+33 00	"	"	"	14.5 22.7	11 11	01 31	2	4V
4883	222,207	23 33.5	+41°57	"	"	"	14.5 22.7	01 36	02 [illegible]	3	[illegible]
4884	[illegible]	01:22.3	+43°32	"	"	"	14.6 22.8	02 40	03 30	4	[illegible]
4885	17,330	02:41.8	+19° 17	"	"		14.6 22.8	03 43	04 [illegible]	1	[illegible]

Pointer 17.85

Hour Angle End	Declination	Seeing	Ptg. Mag.			for M	REMARKS
1 42 W	44 01	1	7.25	A2	1-2-1	Light haze.	
1 04 W	44 16	2-1	7.40	B9	1-2-1		
2 22 W	33 08	2-1	7.52	B0	1-2-1		Heavy dew
0 57 W	+42° 04	2-1	6.77	B9	1-2-1	KSA 43	
0 23 W	+43° 45	2-1	6.54	B9	1-2-1	KSA 21	
10 W	+29 25	2-1	7.17	B9	1-2-1	KSA 46	Started to expose at α 02:23.9 in error but soon shifted plate + telescope.

		MC	SC	SW	MT	ST
Aug. 26	10	-01.0	-02.5	-08.1	+02.6 s	+0.6 m

Date Sat. Aug 26-27, 1939, M-B 2 Julian Day 9[illegible]

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
							A B				
4886	HD 199890	20 49	47 13	I - 12	[illegible] II	10	14.0 22.0	22 31	[illegible]	2	[illegible]
[illegible]	487	00.04.3	+45°50				14.0 22.0	00 19	[illegible]	3	[illegible]
[illegible]	1826	00:17.6	+28°55				14.0 22.0	01 44	02 52	4	[illegible]
[illegible]	17,080	02:39.5	+57°19				14.0 22.0	03 06	[illegible]		[illegible]

About 150 visitors.
M showed β Cygni with 74-inch
Bx showed Mars with 4", Moon with 2"

Time G.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
							Pointed at 17.17
	1h 15 W	47 21	2-3	7.20	B8	1-2-1	to same point
	0h 25	+46° 01	2	6.98	B9	1-2-1	KSA 43 Lost in clouds 01h 12 - 01h 25; chitr
	0h 34 W	+ 29 0[illegible]	2	7.00	A5	1-2-1	Binary (for Y)
	[illegible] W	+ 57 28	2	7.35	B2	1-2 1	KSA [illegible]. Trouble locating *

Date Sun Aug 27-28, 1939 Hel-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4890	HD 161959	17 43.4	28 58	I-12	extra II	010	17.2 25.4	7.40*	9 10*	2	W1h31
4891	183262	19 27.6	17 38	"	"	"	17.4 25.5	9.14*	10 14*	3	W56m
4892	" 196216	20 30.8	43 01	"	"	"	17.2 25.5	10 18*	11 59†	4	W1h31
4893	" MWC.402 223501	23 45.0	61 39	"	"	.015	17.3 25.5	00 05†	23 50	1	W
4894	" 5638	00 53.0	46 31	"	"	.010	17.4 25.5	23 55	00 45	2	E
4895	" 1826	00 17.6	28 55	"	"	"	17.4 25.5	00 00	2 00	3	W
4896	" 22124	03 28.8	31 41	"	"	"	17.3 25.5	02 24	03 00	4	E

g Time .T.	Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
10	W1h 31	28 55	2	7.36	A0	1-2-1	Suff	Note. at 10.45 I confirmed
14	W56m	17 43	2	6.93	A2	1-2-1	"	an impression that Strongren
59	W1h 31	43 09	3-2	7.38	F2	1-2-1	"	of Olsen was losing. at that
	0 03 W	61 53	3-2	8.2	B3e	1-1-1		time found it about 12½ min
	0 10 E	46 39	3	6.75	A0	1-2-1	Suff	slow (both MT and ST) - not under-
	1 40 W	29 05	3-2	7.00	A5	1-2-1	Binary (Y)	- it was approx correct at 7.40,
	0 31 E	31 46	3-2	6.90	F2	1-2-1	" (Y)	or perhaps 2m slow.
								Later: at 19.45s correction to m.T. = + 14½m to S.T. = +15¼.
								meanwhile observed that it is only the minute hands that lost - seconds hand is O.K.
								Probably should apply corrections to times marked * by proportionate part of + 2 to + 11
								† Ed's watch correct (approx)
								L ⊕ kept time from school watch.
								MC SC SW Other watch being required
								Aug. 28 10 -00.9 -03.7 -08.7

Date Monday 1939 August 28-29 H-B.S.T. **Julian Day** 9504

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
4897	HD 172,187	18:33.7	+43°08	1-12	Astra II	50 .010	17.5, 25.5	21:18*	21:58*	1	1:30 W
4898	194,688	20:21.9	+17°01	"	"	"	17.5, 25.5	22:03*	2	2	"
4899	211,139	22:10.0	+29°04	"	"	"	17.3 25.5	23:27	23	"	13 W
4900	222143	23 33.0	+45 39	"	"	"	17.3 25.5	23 28	0 38	4	1:02 W
4901	5526	0 52.0	+45 18	"	"	"	17.3 25.5	0 42	(3 52)		

H showed α Herc, M13 to about 50 meteorologists
Bs focussed on α Lyrae. Pointer set 19.65

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
1 30 W	+43° 08	1-2	6.40	A5	1-2-1	Binary
1 07 W	+17° 07	1-2	7.17	K0	1-2-1	KSA 88
1 13 W	+19° 15	1-2	7.5	F5	1-2-1	KSA 66
1 02 W	45 51	2	7.34	G5	1-2-1	" 43
	45 29		7.24	K0	1-2-1	" 20 Clouds 1 10 - 1 30, 2 05-

* by Bs's watch 22:42:00
‡ sidereal 20:50.01 } [illegible]

		MC	SC	SW
Aug. 29	10	-01.0	-04.4	-12.2

wt. decreased from 2.0 to 1.5

Date Tuesday, Aug 29-30, 1939, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B*	Starting Time E.S.T. Sid	Starting Time E.S.T. Watch	Ending Time E.S.T.			Hour Angle End
4902	H.D. 191855	20 6.9	30 29	I-12	Astra II	.010	16.6°	24.7°	19	33	20	43	2	0 34W
4903	B.D. 56°2640	21 43.1	+56 28	—	—	.017L	16.6	24.8	20	56	23	36	3	5
4904	H.D. 5764	0 54.2	+47 29	"	"	.010	16.6	24.9	23	43	1	33	4	3
4905	" 6676	1 02.4	57 44	"	"	"	16.5	24.8	1	36	2	20	1	5W
4906	" 22860	3 35.2	+28 23	"	"	"	16.6	24.8	2	25	3	13	2	0 56

*Read second hand.

* Read sidereal watch ½ minute back, second hand not synchronized with minute hand.

Clouds after sunset – cleared later. All lights went out at 18.38 S.T. then came on again but almost immediately dimmed and flicked so delayed opening a little.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
43 2	0 34W	30 36	1	6.70	B9	1-2-1	Pointer at 19.15
16 3	1 51 W	56 37	2	9.0		3/4-3/4-3/4	
33 4	0 36 W	57 40	2	6.95	B8	1-2-1	Clouds 0h 30 – 1 30
2c	1 15 W	57 54	2-3	5.65	B8	1-2-1	Partly Cloudy
	0 2 E	28 30	2-1	6.87	B9	1-2-1	

		MC	SC	SW
Aug. 30.	10	-01°.5	-05°.5 Wt decr. to 1.0	-12°.8

Date Wed Aug 30-31, 1939 Hd - Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4907	HD 179648	19 08.3	21 23	I-12	Cut II	0 1 0	15.6 23.6	18 51	19 23	3	4/12m
4908	HD 188385	19 49.8	06 53	"	"	"	15.6 23.7	19 27	20 07	4	4/15m
4909	HD 199665	20 53.6	10 28	"	"	"	15.6 23.7	20 11	20 51	1	4/5m
4910	HD 202923	21 13.9	53 34	"	"	"	15.5	21 50	21 34	2	4/18m
				I-12 focus was 26.02 Tilt 20.17 probably changed during day					Changed		
4910F	Focus			I-24	Cut II	0 1 0	16.1 24.1				
4911	κ Cas (Exp. test)			I-25	"			22 35			
4912	"			"	"	"		22 47.5	22 53.5		
	"			"				22 54.0	23 00		
	"			"				23 00.5	23 08.5		
4913	"			"				23 12.0	23 20.0	3	
	"			"				23 20.5	23 28.5		
	"			"				23 29.5	23 37.5		
4914	"			"				23 40.0	23 48.0	1	
	"			"				23 48.5	23 56.5		
	"			"				23 57.0	00 05.0		

Cleaning after dark

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
W 12m	21 27	0	5.90	A0	1-2-	BSC Some clouds
W 15m	06 59	1	5.97	A0	1-2-1	BSC " "
E 5m	10 35	2	6.61	K0	1-2-1	
W 18m	53 45	2	5.99	A0	1-2-1	
to I	-25					
Continue	blue band				no filter 4/4 1 filter 5-5	tilt 23.15 7 vacs set 1 - 23.1, set 6 - 23.3, set 9 - 23.5 } 23.38 best
					5-5	set 1
					5-5	6
21 E					5 5	9
					5-5	1
					5-5	6
44 E					7-7	9
					7-7	1
					7-7	6
20 E					7-7	9

Date Wed Aug 30 31 1939 H.L. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature Reset	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
- 4915	K Cas.			T.25	Astro II	.010	16.0 24.0	00 11.5	00 19.5 2	
	"			"	"	"		00 20.0	00 28.0	
	"			"	"	"		00 28.5	00 36.5	15 W.
- 4916	"			"		"		00 40.0	00 49.0 5	
	"			"	"	"		00 49.5	00 57.5	
	"			"	"	"		00 53.0	01 02.0	35 W.
- 4917	"			"	"	"		01 06.0	01 16.0 1	
	"			"	"	"		01 16.5	01 24.5	
	"			"	"	"		01 26.0	01 33.0	0 W.
- 4918	"			"				01 35.0	01 40.0 1	
	"			"	"			01 40.5	01 49.5	
	"			"	"	"		01 55.0	02 [illegible]	7 W.
- 4919	"			"	"	"	16.0 24.0	02 00.0	02 10.5	
	"			"	"			02 13.5	02 21	
	"			"	"	"		02 25.0	02 30.0	1 W.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
35					7-7 Set 1	
50					7-7 " 6	Seeing varying rapidly
37	0 05 W				7-7 " 9	throughout
17					7-7 " 1	whole
12					7-7 - 6	evening.
27	0 35 W				7-7 - 9	
16					7-7 - 1	About 4-3-2
32					7-7 - 6	
33	1 05 W				7-7 - 9	
47					7-7 - 1	
17					7 7 - 6	
	1 33 W				7-7 - 9	
17					7-7 - 1	
10					7-7 - 6	
24	2 00 W				7-7 - 9	

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Date Wed. Thu. Aug 30, 31 1939 HL 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
- 4920	K Cas			I-25	Agfa II	.010		2 32 0	2 40.0 3	
	"			"		"		2 40.5	2 44.5	
	"			"		"	16.0 240	2 49 0	2 57.0	1
	Thurs Aug 31/39. HL									
	Changed to I-12									
4920F	Fomas			I-12	Agfa II	0.010	14.6 22.9		1	

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
				7-7	Set - 1
				7-7	Set - 6
2 27 W	62 35			7-7	" - 9
					MC SC SW
				Aug.	31 10 -01.4 -05.2 -24.9
Outstanding base 18/10				set 1	25.9 Tilt 20.18 / 26.18 should be OK. set it 20.
				" 6	26.0
				" 9	26.1

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Date Thurs Aug 31 Sept 1, 1939 T-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
								Sid	W.	
4921	HD 190405	19 547	+17 26	I-12	Astro	10	15.5 ~~15.9~~ 23.9	20 03	22 23	2
4922	210170	22 034	+17 04	"	"	"	15.7 23.9	22 13	23 43	3
4923	" 2888	00 271	+42 57	"	"	"	15.7 23.9	23 48	00 44	4
4924	" 8710	01 208	+43 11	"	"	"	15.7 23.9	00 48	02 08	1
4925	15814	02 275	+14 36	"	"	"	15.7 23.9	02 13	02 57	2

Clouds, showers earlier.

Hour Angle End	Declination	Seeing	Ptg. Mag.		Thermostat 18.8	REMARKS
2 01 W	17 34	2-1	7.27	F8	1-2-1	Hazy, clouds
27 W	17 15	1-2	6.98	A0	1-2-1	" " Heavy mist lying
15 W	43 09	2-3	6.43	A0	1-2-1	Haze on surrounding country.
44 W	43 22	2-3	7.27	F2	1-2-1	"
27 W	14 45	2	6.49	F5	1-2-1	Images appeared faint although seeing was good, hard to judge exposure.

		MC	SC	SW
Sep. 1	10	$-01^s.6$	$-05^s.0$	$-26^s.2$

Date [illegible] 1-2, 1939 - M-BUS Julian Day [illegible] 08

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
								Sid T.			
1926	HD 199355	20 51.6	+2 08	I 12	[illegible] II	.210	16.[illegible] 21.[illegible]	19 21	20 37	5	[illegible]
4927	210208	22 [illegible]	+2 27	—	—	—	[illegible]	20 43	[illegible]	[illegible]	[illegible]
4928	222135	23.36.5	+46° 18				14.[illegible] 14.6	23 08	[illegible]	[illegible]	[illegible]
4929	" 3264	00 307	+48° 00				[illegible]	01 12	02 14	[illegible]	W
"	Focus Test			"		"	Focus	26.19	20.18		
4930	AD 23,402	03 312	+42° 15				16.[illegible] 26.[illegible]	0[illegible]	[illegible]	3	E

Clouds and rain in early evening. Clearing later.

g Time G.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			Pointing at 19.45 REMARKS
7:	0 17 E	42 16	2-1	6.87	B9	1-2-1	
	11 W	42 38	2	7.50	B9	1-2-1	
	1 11 W	+46° 31	1	7.23	B0	1-2-1	KSA 43 Seeing gradually poorer. Haze + Clouds. Delay in identifying * (referred to zone map). Accident all, left slide closed till cloud covered *23h-23 08. Clouds again 23 25-23 36, 23 47-23 52, 00 04-00 10 Suddenly cleared
12	1 11 W	+ 38° 12	1	7.42	A0	1-2 1	KSA 20 Cloudy, [illegible]
		— Thickening clouds at end outside the base				9/12	—
20	0 02 E	+ 12° 22	1-2	6.25	B8	1-2-1	KSA 23

Date Saturday, September 2-3, 1939 H-Bs Julian Day 9509

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
						Slit	A B				
4931	HD 172187	18 33.7	+43 08	I-12	Ast. II	010	16.2 24.2	20 50	21 20	4	1h W
4932	200039	20 55.9	+75 32	"	"	"	16.1 24.2	21 34	22 18	1	1 W
4933	201469	21 07.5	+77 43	"	"		16.6 24.8	22 22	22 45		W
4934	214,558	22 23.9	+44°40	"	"	"	16.6 24.7	22 57	23 40	3	
4935	1876	00.17.6	+28°55	"	"	"	16.5 24.7	23 44	00 [illegible]	2	
4936	9800	01 30.7	+47°49	"	"	"	16.6 24.7	00 55	01 19	1	
4937	16,180	02 36.3	+47°51	"	"		16.6 24.7	02 03	02 [illegible]	2	
4938	16,176	02 [illegible]	+38°16	"	"	"	16.6 24.7	03 [illegible]	03 55		
	Focus test										

75± visitors. Showed M 13, Ring Neb and E Lyrae
Bs ". Mars, Jupiter and ♁.

Pointer set at 19.05; later galvo. needle nearly off scale, so reset at 19.40 at beginning of plate 4934. Moderately bright aurora

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
2 55 W	+43 09	3	6.40	A5	1-2-1	Binary ~~Light haze~~ Moderately bright aurora
1 22 W	+75 41	4	6.99	G5	1-2-1	KSA 7
1 38 W	+77° 52	3	5.55	B9	1-2-1	KSA 7
1 04 W	+ 44°52	2-3	6.95	F8	1-2-1	KSA 42 Heavy dew, ground mist
0 24 W	+ 29° 06	2-3	7.00	A5	1-2-1	B nov, (Y) Image faint
0 26 W	[illegible] 00	3-4	7.54	F0	1-2-1	KSA 21
0 26 W	+ 47°59	3	7.34	G5	1-2-1	KSA 22
1 [illegible] W	- [illegible] 28	3	6.36	F5	1-2-1	BSC
	Outside thru' base				9/12	

Date Sunday September 3-4, 1939 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time ~~E.S.T.~~ Sid. Time	Ending Time ~~E.S.T.~~		Hour Angle End
						S.X	A B				
4939	HD 172187	18 33.7	+43 08	I-12	Astro II	010	19.6? 27.9	18 05	18 39	4	4W
4940	167944	18 12.4	+12 02	"	"	"	27.7	18 45	20 15	1	2 10W
4941	187372	19 44.6	+47 39	"	"	"	27.8	20 19	21 27	2	10W
4942	196865	20 35.0	+47 43	"	"	"	27.8	21 32	22 42	3	5W
4943	209149	21 56.1	+32 33	"	"	"	27.8	22 45	23 55	4	6W
4944	1826	00 17.6	+28 55	"	"	"	27.8	23 30	00 30	1	W
4945	4362	00 40.9	+59 02	"	"	"	27.8	00 35	01 35	2	1W
4946	22124	03 28.8	+31 41	"	"	"	27.8	02 33	03 50	1	E

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 04 W	+43 10	1	6.40	A5	1-2-1	Binary
2 00 W	+12 03	1	7.55	F5	1-2-1	KSA 86 Some trouble identifying field.
1 40 W	+47 45	1-2	7.59	M2	1-2-1	KSA 37
2 05 W	+47 51	2	7.42	G5	1-2-1	KSA 40
1 26 W	+32 43	2	6.88	F5	1-2-1	KSA 66
0 10 W	-29 07	2	7.00	A5	1-2-1	Binary Y
2 51 W	+39 14	2	7.27	G5	1-2-1	KSA 80 Faint related nearby. Dist. 1^{35} – 2^{25}
0 12 E	+31 47	2	6.9[illegible]	F2	1-2-1	Binary Y Right close. Dist. 5^{20}

Date Monday, Sept 4-5, 1939, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
- 4947	BD 56°2640	21 43.1	+56 28	I — 12	astra II	.020 L	15.8	24.0	20 37	23 37	3	3.2 W
4948	HD. 14739	02 17.5	+17 09	"	"	.010	15.7	24.0	23 48	01 24	4	1.6 E
* ~~4949~~	" 21541	~~03 23.4~~	~~+14 39~~	"					01 30		1	
4949	{ 23477	03 40.4	+43 46	"	"	"	15.7	24.0	01 55		2	
	{ Focus Test			Outside	through	base						

Rain during first part of evening.
Cleared later.

Hour Angle End	Declination	Seeing	Ptg. Mag.			Pointer at 18.82 REMARKS
1^{52} W	56 37	2	9.0		½-½-½	Haze from W coming up shortly after start; thicker
0^{56} E	17 19	1	7.32	A2	1-2-1	at 10.03 Orange, light cloud.
	~~14 46~~	~~1~~	~~7.32~~	~~A0~~	~~1~~	Set 2.5 Strong wind images unsteady.
						* at 1.45 sky light from moon
	43 47	1	7.05	B9	1-2	Set 2.5 developed so that it was impossible
					9/12	" 7.5 to find the star on slit,
						although at beginning of exposure
						the slit was OK.
						Scattered clouds 02^{00} – 02^{30}
						thick 2^{30}-2^{40}, thick from 2^{45} on

		MC	S.C.	S.W.
Sep. 5	10	+07.4	+04.6	+28.9
		-01.3		

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Date 1939 Sept 5-6 Tuesday Bs - L Julian Day 9512

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time ~~E.S.T.~~ Sidereal	Ending Time ~~E.S.T.~~		Hour Angle End
4950	HD 172,187	18:33.7	+43°08	I-12	Astra II	Set .010	+9.3 74	18 [illegible]	18 [illegible]		[illegible] W
4951	" 175,443	18:50.1	+27°47	"	"	"	9.2 17.3	18 52	20 [illegible]		[illegible] W
4952	" 202,313	21 09.9	+30°33			"	9.2 17.4	20 16	[illegible]	3	[illegible] W
4953	" 217,899	23:17.8	+30°39	"	"	"	9.2 173	22 19	[illegible]	4	[illegible] W
4954	" 1826	00 17.6	+28 55	"	"	"	9.2 173	00 12	[illegible]	1	[illegible] W
4955	15810	02 24.7	+40 57	"	"	"	9.1 173	01 47	[illegible]	2	[illegible] W
Film no		Wed Sept 6/39		Hd	Put on Schmidt to focus						
8	Focus test			Schmi	E Superx pan	010	5.5 13.5				
9	Sky			"	"	extra long 010	"	2 sec expos.			
10	Focus test	1 thickness of paper under "bottom" edge of plate holder		"	"	010	"				
11	"	1 thickness under "top" edge		"	"	"	"				
12	Sky			"	"	"	"	1/2 sec exp.			
		Thurs	Sept 7	Hd	Changed to I-12						
4955F	Focus			I-12	Astra II	010	6.0 14.0			2	Wide th
4955 F2	"			"	"	"	"			2	

Pointer 14.08

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 13 W	+43° 10	1	6.40	A5	1-2-1	Binary (H)
1 10 W	+27°52	1	6 89	K2	1-2-1	Supp (Y) Zone 63
10 W	+30°44	1-	7.56	A0	1-2-1	" " " 65 Light clouds
0 54 W	+30°40	1	7.44	F0	1-2-1	" " " 67 Scattered clouds
1 22 W	+29 06	1	7.00	A5	1-2-1	Binary (H) Close, thickening
03 W	+46 07	1	7.11	A5	1-2-1	Supp 22 Light clouds, haze,
						Sep. 6 10 MC +07.5 SC +04.6 SW -28.0 Add 1 min.
Outside thro bar		focus 0.78			no filter He 5/5	
						lost thru film
" " "		" 0.40			"	
		" 1.20			"	
		" "			He comp 4 sec	
Outside thro bar,		focus 26.18			1 filter 10/10	
" " "		" 26.22			"	← OK

Date Thursday, September 7-8, 1939 H-P Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
						set-	A B				
4956	HD 172187	18 33.7	+43 08	I-12	Astro II	010	11.1 19.2	21 35	22 05	3	19 W
4957	186760	19 41.3	+57 46	"	"	"	11.1 19.1	22 38	23 14	4	22 W
	206492	21 37.3	+57 08	"	"	"				4	
4958a	209149	21 56.1	+32 43	"	"	"	11.0 19.0	23 50	00 13	1	
4958	5596	00:52.6	+45°03	"	"	"	11.0 19.9	01 59	03 31	2	24
4959	18155	02:49.8	+46°45	"	"	"	10.9 19.1	03 40	05 10	3	11 W
	Focus Test			"	"	"	"				

Clouds early evening; gradually thinning

Temp. at 15.25

g Time G.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	2 17 W	+43 09	2	6.40	A5	1-2-1	light haze at horizon MC SC SW Sep 7 10 +07.7 +04.7 -20.9 MT ST slide not drawn till 22 30 +08s.1 -0m.2 13
14	2 20 W	+57 50	3	6.81	F8	1-2-1	
				7.50	F5		Clouded over during setting. Is this a double star, i.e. fr. 20" apart?
		+32 42		6.88	F5	1-	
	1 24 W	+45° 16	2	7.25	A3	1-2-1 (set 3.5)	Haze; star lost 23 55 - 0 08; 00 12 sk, solid; clearing at 01 45; thick 02 05 - 02 15; 03 13 - 03 21
	0 56 W	+46° 57	2	7.13	K0	1-2-1 (set 7)	Alternately cloud, & clear. Haze toward end
	Outside Hr. base					9 - 12	
							SW MT ST
							Sep 8 10 +07.9 +04.9 -35.2 -24.8 -0m.4

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Date Friday Sept 8-9, 1939, M-Bs. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4960	H.D. 180553	19 11.9	27 17	I-12	Astra II	.010	11.8°	20.0°	19 22	20 08	4	0 15E

Pointer at 15.87

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
07	0 15E	27 21	3	6.24	B9	1-2--1	broken clouds over most of sky at 19.45 remained thick closed done at 20.45.

		MC	SC	B.W.	MT s	ST m
Sep. 9	09	-02.1	-04.7	-37.1	+14.8	0.0
					Reset	

Date Sat Sept 9-10, 1939 Hd-13s Julian Day 9516

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
4961	HD201616	21 05.6	09 38	I-12	Astra II	010	8.1 16.0	9 58	10 28 1	11m
4962	" 210502	22 05.7	11 08	"	"	"	8.0 15.9	10 32	11 24 2	11m
4963	" 214588	22 34.2	44 09	"	"	"	7.7 15.7	11 28	00 28 3	
4964	" 2739	00:25.8	+43°24	"	"	"	7.8 15.8	00 33	01 11 4	
4965	" 5638	00:53.0	+46°31	"	"	"	7.8 15.8	01 16	02 06 1	
4966	" 9312	00:26.6	+16°28	"	"	"	7.9 15.9	02 10	02 16 2	
	Focus Test			"		"		Outside		
			From Sept 11/39	Hd	Schmidt focus test after					
13	Fe arc comp.			Schmidt	Eastman X	010	7.6 15.6			
14	"			"	"					
15	"			"			"			
16	"			"	"		"			
17				"	"	"	"			

About 15 visitors Hd with 74" showed Mars (no good!), Ring Neb.
BS " 4" " Mars, Jup, Sat.

Pomona 12.9

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
28	4/10m	9 46	1	6.05 A2	1-2-1 BSC Slightly hazy.
2	4 12m	11 19	1-3+1	7.10 K5	1-2-✓ BSC. Moderately bright aurora (arch) first noted 10:40
	0.47 W	44 20	2	7.01 A0	1-2-1 Suff.
	0.19 E	+43° 36	2	6.59 B8	1½-1½-1 " Zone 20
	0.06 W	+46° 45	2	6.75 A0	1-2-1 " 20 Bright f. 11 wing
	10:1 W	+16° 38	2	7.59 G5	(Set) 1-2-1 Binary Haze. Cloud, 03.05 03.13; 03.17 [illegible]
					9/12

							MC	SC	SW	MT	S.T.
Setting	mirror to include	read 2 filters		Sep. 11	14		-02.6s	-04.8	+12.8s	-28.9s	-0.7m
		2 sec		Focus	.20		Nothing on filter		Reset 1 m. back adjustment made since rate		
				"	.40		"	"	"		
				"	.60		Very bad Focus				
				"	.80		better				
				"	1.00		still better				

Date Open. Sept 11 12, 1939 H.S.L. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
4967	N.G.C. 6779	19 12.7	+30 00	Newtonian	Astra II			19 43	20 03 2	
4968	" 6366	17 22.4	-04 59	"	"			20 11	20 36 1	
4969	" 6205	16 38.1	+36 39	"	"			20 41	20 47 2	
4970	" 6853	19 55.3	+22 27	"	"			21 01	21 51 1	
4971	" 7662	23 21.1	+41 59	"	Eastman IG			22 22	23 22 2	1½ 15
		Time Sept 12		Hd	Focus of Schmidt					
18	Fe arc comp			Schmidt	E Sensitizer	0.10	5.7 13.4			
19	"			"	"	"	"			
20	"			"	"	"	"			
21	"			"	"	"	"			
22	"			"	"	"	"			

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
03					S Bands of light cirrus clouds.
36					S
47					Unguided
51					H. Focused again before starting this exposure
	Filter 15 G		Very thick	haze 23°00' on. S.	Polaroid marker at 1.30 position looking in.
				2 filters of see	Focus .8
				"	.9 #22 is beginning to look good,
				"	1.0 at least ~~especially~~ in red.
				"	1.1
				"	1.2
					MC SC SW (MT ST)
					Sep. 12 10 -02.4 -05.3 -32.7 (-44.8s -1.0m)
					Reset: +15.2 +0.2m

Date Tues. Sept 12-13/39 H.S.L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
4972	N.G.C. 6779	19 12.7	+30 00	Newtonian	Astra II			19 50	20 15	1	
4973	" 6402	17 32.4	-03 11	"	"			20 20	20 55	2	
4974	" 6218	16 42.0	-01 46	"	"			20 59	21 05	1	
4975	" 6254	16 51.9	-03 57	"	"			21 08	21 14	2	
4976	" 6205	16 38.1	+36 39	"	"			21 19	21 25	1	
4977	" 6341	18 57.5	-00 35	"	"			21 54	[illegible]	2	
	"	"	"	"	"			21 59.5	[illegible]		
4978	" 6807	19 29.6	+05 28	"	"			[illegible] 08	[illegible] 09	1	
	"	"	"	"	"			22 09.5	22 14.5		
4979	" 6807	"	"	"	Eastman IG			22 27	[illegible] 47	2	
4980	" 7662	23 21.1	+41 59	"	"			23 05	[illegible] 47	1	

Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
				S
				S
				S
				S
				unguided
				H
				Dew has been most all evening
				H ground fog has increased since
				start.
Filter 15 G				S By this time everything damp
"				S Polaroid in 4-30 position. Clouds, shut off at 23 27
				23 27 - 2 47 Broken clouds, really thick
				MC SC SW MT, ST
				Sep. 13 10 -02.3 -05.5 +43.8 +04.3 +0m.7
				Reset

Date Wed Sept 13-14/39 H.S.L. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
4981	N.G.C. 6205	16 38.1	+36 39	Newtonian	Astra II			23 22	23 29 1	
4982	" 7662	23 21.1	+41 59	"	Eastman I G			23 45	00 35 2	
	Thurs Sept 14, Hd - B									
	Changed to I-25 (see Sept 5-6 for latest I-12 focus).									
4982F	Focus			I-25	extra II	010	12.1 20.0	Tilt 23.15		outside

Hour Angle End

Clouds and light rain early evening.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	REMARKS
20					S
35	Filte	15G			S Polaroid in 1^{30} position) [illegible] shut off at 14^{00} [illegible] of 24^{00} 00^{33} Partly cloudy with [illegible] patches.
1. 15	Outside the base Focus		2h 2	1	8H no filters 4/4 sep. 14 10 MC -03.3 SC -05.9 SW +49.8 MT -24.6 ST +0.0
			2h 4	6	2h.55 best
			2h 6	9	

Date Thurs Sept 14-15, 1939 Hd-B-Bs Julian Day 95

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
- 4983	η Lyrae HD 180163	19 10.4	38 58	I-25	Process	010	16.0 24.1	7 54	9 04	1	4h 06
- 4984	γ Equ HD 201601	21 5.5	9 44	"	"	"	15.6 24.0	9 10	11 32	2	4h 40
	ι Cass HD 15,089	02 20.8	+66° 57	"	"	"	16.2 24.2	02:58	02:58		
	θ Tau HD 28,31[illegible]	04:2[illegible]9	+15° 39	"	"	"	16.1 24.1	04:04	04:24		
- 4985	γ Cass	00:50.7	+60° 11	"	"	"		01:4[illegible]	01:[illegible]	1	
	"	"	"	"	"	"		01.4[illegible]	[illegible]		
	"	"	"	"	"	"	16.5 24.5	[illegible]	02 01		
- 4986	κ Cas HD 2905	00:27.3	+ 61° 23	"	E 33	"	16.2 24.4	02 11	[illegible]	1	
- 4987	η Aur HD 32,630	04:59.5	+ 41° 06	"	"	"		04:29	[illegible]	1	
	"	"	"	"	"	"		04 30:2	04 32:[illegible]		
		"	"	"	"	"	16.0 24.0	04.33	04:37		
- 4988	114 Tau HD 35,708	05:21.6	+21° 51	"	"		15.9 24.0	04 47	[illegible]	2	

mirror fogged, though heat on most of day. Put heat on in tube – cleared in the. Temp control not working – has to be operated by hand.

Hour Angle End	Declination	Seeing	Ptg. Mag.			Pointer 19.0 REMARKS
W 1h 06	39 01	0-2	4.29	B3	10-10	
W 1h 40	9 51	2	5.04	F0p	10-10	for B setting 5 {Clouds 10.55 – 11.20
0 49 W	+67° 02	3	4.6	A5 p	10-10	" B Guiding eyepiece " 9 ← Mostly cloud, till 01 30 Time lost finding * on slit by setting off cross wires wrong south following
0 46 E	+15° 45	3	3.90	F0	10-10	" B " image decomposed into spectrum " slit 1
	+60° 15	2	2.25	B0 p	10-10	2 min setting 1
	"		"	"	10-10	5 5
0 24 W	"		"	"	10-10	12 9
1 27 W	+62° 24	2-3	4.00	B0	5-	
		3	3.11	B3	10	1 min Setting 1
					10	2 5
1 00 E	+41° 12				5-5	4 9 Time lost searching for image of star in which fell the 2nd exposure. Lost ...
0 [illegible] E	+21° 54	3	4.66	B3 sk	5-5	Chromatic dispersion of image (cf 49 & 41)
						↳ Checked time, shutter & exposing, but hesitated to expose after exposing this plate

		MC	SC	SW	MT	ST
Sep. 15	10	-02.6	-06.2	+59.2	-44.6	-0.3
				-00.8 Reset	+15.4 Reset	-0.1

Date Fri Sept 15-16, 1939 Hd-Bs Julian Day [illegible]

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
-4989	η Cygni HD 180163	19 10.4	38 58	I-25	E 33	010	22.1 29.5	7 03	7 41	1	E12m
4990	HD 179648	19 08.3	21 23	"	Astra II	010	22.2 29.5	7 45	8 55	3	41m
-4991	γ Eqn HD 201601	21 05.5	9 44	"	E 33	010	21.2 29.0	8 59	10 19	2	41m
-4992	η Cygni HD 180163	19 10.4	38 58	"	E 33	010	20.7 28.7	10 35	11 21	3	23
-4993	κ Psc HD 220825	23 21.8	0 42	"	E 33	010	20.7 29.0	11 26	00 [illegible]	1	
4994	κ Cass HD 2905	00:27.3	+62° 23	"	"		20.5 28.8	01 [illegible]	01 [illegible]	2	
-4995	o Cass HDC 8 HD 4.85	00 39.2	+41° 44	"	"	"	20.7 28.9	01 [illegible]	[illegible]	3	
4996	HD 13.865	02:57.1	+03° 58	"	Astra II		20.6 28.8	02:41	0[illegible]		
-4997	η Aur HD 24 620	04 59.5	+41° 06	"	Process		20.3 28.5	03:[illegible]	03 [illegible]		
	o Ori HD 37,848	05 33.7	-02° 39	"			20.4 28.6	04 5[illegible]	05 [illegible]		
	Focus test	Outside	thro' base	"	"		"				
-4998	114 Tau HD 25 108	05.216	+21°51		E 33		20.6 28.8	0[illegible]	[illegible]		

Sat Sept 16 Hd

Changed to I-12 Set Tilt 20.18 focus 26.2

Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
E 12m	39 01	1-2	4.29	B3	no filters 5-5		Note: Temp control mechanism worse still — galv. no longer indicates temp. — it stays at "warm" when temp in space is falling. Trying to control temp by water & my thermometers, leaving galv. circuit open.
W 1h04	21 26	2	5.90	A0	1 filter 4-4-4	Supp.	
W 41m	9 52	3	5.04	F0p	no filters 5-5	for B	
43h28	39 03	3	4.29	B3	5-5		
0h51 W	+0° 56	2-3	5.00	A2p	5-5	for B	
0h23 W	+62° 33	3	4.00	B0	5-5		
1h15 W	+47° 56	3	4.7	B4neβ	5-5		
0h[illegible] E	+04° 08	2	5.51	B5	1 filter 4-4-4	BSC	
1h[illegible] E	+41° 08	2	3.11	B3	no filters 10-10	set 1	
4h59 E	−02° 36	2	3.54	B0	10-10	" 2	Heat control buzzing. Switched off & on twice to stop this, but afterwards no response to switch at all. Could only maintain temp. by closing electromagnetic circuit breaker with finger with switch on.
					40/40	" 9	
1h[illegible] E	+21° 56	3	4.66	B3st	5-5		

	MC	SC	SW	MT	S.T.
Sep. 16	-02.3	-06.2	+05.1	-05.0	+0m4

Date Saturday Sept 16-17-1939 M-BS Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
4998 F_1							22.0°	30.0°			

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
		base outside				12/9	at this temp focus should be shortened a trifle
							About 35 visitors.
							M showed M13, M57, β Cygni with 7¼"
							Bs " Jupiter, Saturn with 4"
							Light clouds came up at 21.30
							remained thick
							Closed dome at 22.40
							Mostly cloudy thereafter

Date Sunday Sept. 17-18 1939 B-L Julian Day 9524

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
4999	H.D. 164280	17h 55.3	36° 17	I-12	astra II	.010	10.0 17.9	19 27	21 00	3	[illegible] W
5000	H.D 177459	18 59.7	17 24	"	"	"	9.8 17.6	21 08	22 30	4	2 56 W
5001	H.D 210170	22 03.7	17 09	"	"	"	9.6 17.6	22 39	00 09	1	[illegible]
5002	H.D. 1826	00 17.6	28 55	"	"	"	9.7 17.7	00 16	01 50	2	[illegible]
5003	H.D. 16365	02 23.3	45 34	"	"	"	9.8 17.7	01 54	03 28	3	[illegible]
5004	H.D. 22124	03 28.8	31 41	"	"	"	9.6 17.6	03 35	04 43	4	[illegible]
5005	H.D. 30912	04 46.5	27 44	"	"	"	9.6 17.6	04 46	05 50	1	[illegible] E
	Focus Test				Outside through haze						

Temp. controlled by hand.

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
2 30 W	36 17	1-0	6.98	K0	1-2-1	BSC Clear
2 56 W	17 28	1	7.05	F5	1-2-1	Supp. Seeing variable
1 30 W	17 14	1-0	6.98	A0	1-2-1	Supp.
0 58 W	29 06	0	7.00	A5	1-2-1	Binary seeing bad.
0 30 W	45 45	0-1	7.55	G5	1-2-1	Supp.
0 39 W	31 49	0-1	6.90	F2	1-2-1	Binary
0 01 E	27 47	0-1	6.25	F2	1-2-1	B.S.C. Sol 2½
					9/12	" 7½

	HC	SC	B.W.	HT	ST
Sep. 18 10	-02.6	-06.7	+24.6	-46.4	-01.1
Reset				+13.6	-00.1

Screw given one complete turn.

Date Monday, Sept 18-19, 1939, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A°	Temperature B°	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
5005 F_1							7.8	16.0			1	
			1									
5006	H.D. 192684	20 11.0	32 33	I-12	Astra II	.010	7.8	16.0	19 08	20 00	2	+2 E
– 5007	B.D. 26°3896	20 21.6	27 02	—	—	.020 L	7.8	15.9	20 05	22 40	3	1 49 W
– 5010 03	HD 221700	23 29.3	07 22	—	—	.020 L	7.6	15.8	22 49	01 19	4	9 "
5011 09	" 5944	00 55.8	57 17	"	"	.010	7.6	15.8	01 37	02 37	1	"
5012 10	" 21203	03 20.2	39 54	"	"	"	7.6	15.8	02 42	03 26	2	
5013 11	" 21540	03 23.4	46 42	"	"	"	7.7	15.9	03 30	04 24	3	
5014 12	" 36484	05 26.9	32 44	"	"	"	7.7	15.9	04 40	05 29	4	

found focus at 26.18
set focus to 26.21

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
base outside					12 10	focus seems O.K. pointer at 15.25
0° 42 E	32 41	2	6.69	B9	1-2-1	
1 48 W	27 10	2	8.8		½-1-	
1 19 W	07 35	2	(9.2)		½-1-½	Locating trouble caused delay.
1 11 W	57 30	2-1	6.80	A2	1-2-1	Supp. Sidereal circle had been shifted
0 25 E	60 02	2-1	6.43	B8	1-2-1	"
0 40 W	46 50	2	6.95	B8	1-2-1	"
0 33 E	32 45	2-3	6.50	A0	1-2-1	"

		MC	SC	SW	MT	ST
Sep. 19	10	-02.3	-07.0	+32.1	-00.2 s	-0.1 m

Date Tuesday, September 19-20, 1939 H-M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
						Slit	A B			
5015	HD 172187	18 33.7	+43 08	I-12	astra II	010	10.8 18.8	18 55	19 23	1
5016	Mars	20 6.8	-24 46	—	astra II	.060 L		19 50		1
									19 54	
								19 59		
									20 02	
5017	—	—	—	—	Astra II	—		20 18		2
5018	—	—	—	—	Infra Red	—		20 28		3
5019	—	—	—	—	Infra Red	—			20(33)	4
									20 44	
5020	HD 193579	20 15.8	+17 29	—	astra II	010	10.7 18.6	20 21 14 59 ↓	21	1

Temp set 17.4

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 22 W	+43 10	1	6.40	A5	1-2-1	Binary Light clouds.
[illegible] −1	A	4 sec				
−½	B	"				
0	A	"	filter	38 A		strips 120 s scale 20 spots 20 without filter. 38 A
+½	B	"				
+1	A	"				
+1½	A					
+2½	B					
+3	A					Troubled by light clouds in S.
+3½	B					
+4	A					
−1	A	20 sec	—	—		— — —
	B					
	A					
+4	B					clouds better but some haze.
−1	A	20 sec	—	—		strips 300 sec scale 300 sec spots 360 sec
	B					
+3½	A					
−1	A	60 sec	—	—		— — — —
	B					
	A					
+4	B					
6 W	+17 36	1	7.22	K5	1-2-	Light cloud for a time. Stars 21 19 – 21 57 star usual [illegible]
						Partly clearing 22 30 but very hazy. Cloud again
						closed up 23 10
						MC SC SW HT ST
						Sep. 20 10 −02.4 −07.5 +42.3 −14.7 +0.4
						Screw given 3 complete turns towards R

Date Wed Sept 20-21, 1939 Hal-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
5019	HD 177931	19 01.6	45 45	I-12	extra I	010	9.6 17.6	6 58	7 48	2	23m
5020	HD 177599	19 00.3	15 35	"	"	"	9.6 17.7	7 54	8 44	3	1h 20
5021	HD 190338	19 59.4	16 51	"	"	"	9.7 17.6	8 47	9 41	4	1h 18
5022	HD 203015	21 14.5	17 24	"	"	"	9.6 17.6	9 44	10 38	1	1h 01
5023	HD 214946	22 36.7	44 29	"	"	"	9.6 17.6	10 43	00 3	2	23 "
5024	HD. 1279	00 11.9	47 24	"	"	"	9.5 17.6	01 17	01 57	3	23 "
5025	HD. 9312	01 26.6	16 28	"	"	"	9.5 17.6	02 07	03 05	4	

g Time G.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
49	W 23m	45 50	2	6.80	B9	1-2-1	Suff.
443	W 1h 20	15 38	1	6.84	A0	1-2-1	" (Tools fainter, blower, N preceding of family close, faint - clouds ✓
41	W 1h 18	16 56	1	6.89	A2	1-2-1	" Some clouds
38	W 1h 01	17 34	1	6.97	F2	1-2-1	"
3 2	1 03 W	44 42	1	7.26	A5	1-2-1	" Clouded up after this exposure.
37	23 W	47 36	1	5.77	B9	1-2-1	BS.C. Clearing, broken clouds.
		16 34	1	7.59	G5	1-2-1	Cirrus Passing clouds, thick at 3.05

		MC	SC	BW	HT	ST
Sep. 21	10	-02.3	-07.8	+52.9	-04.5 s	+0.2 m

Date Thurs. Sept 21-22, 1939 Hd. M-Bs. Julian Day 9528

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
5026	HD 168270	18 13.8	18 06	I-12	Astra II	010	9.6 17.5	6 55	7 25	1	4h52m
5027	HD 170878	18 26.6	16 52	"	"	"	9.7 17.7	7 28	7 50	2	4h11 1/2
5028	Mars.	20 09.6	-24 31	—	Astra IV	.060		20 30	—	1	-1A
								—	20 34		
5029	"	—	—	—	—	—		20 36	—	2	43 1/2 -1A -3/4
								—	20 44		
5030	"	—	—	—	Infra Red	—		20 46	—	3	74 B -1A
								—	20 54		
5031	"	—	—	—	—	—		20 55		4	+1/2 B -1A
									21 03		
5032	HD 203991	21 20.5	18 02	"	Astra II	010	9.6 17.7	21 18	22 58	1	34 B 1/18
5033	HD 214946	22 36.7	44 29	"	"	"	9.6 17.5	23 02	01 35	2	

Friday, Sept 22-23, 1939 M-Bs.

thin clouds and haze over most of sky

Pointer 16.10

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
W 52m	18 06	1	5.99	A0	1-2-1	B.SC
W 1h 05	16 54	2	5.67	A0	1-2-1	"
1m -1 A	5 sec	filter	38	A	10 eff	plate no filter 20s strip 38A 120s Red 120s
+3½ B	5 sec					
-1 A	20 sec					— — —
-½		filter	38	A	10 eff	
+4½						
+4 B	20 sec					exposure 5 – 8 probably best
-1 A	20 sec	no filter			10 eff	360s 300s 300s
+3½ B	20 sec					
-1 A	60 sec				6 eff	— — —
+4 B	60 sec					
W 1h 18	18 12	2	7.47	A0	1-2-1	Supp
2m W	44 42	2-1	7.26	A5	1-2-	" (clouds 3m45s – 4m8, 4m51 – 5m25; thick at end)

	MC	SC	SW	MT	ST
Sep. 22 15	-01.2	-07.3	+1 02.9	+04.3	-0.0m

from sunset on – thickening up after 22.00 hrs. Strong wind and clouds zenith gradually, about 5° (over)

Date 1939 Sept 22-23 Friday M-Bs **Julian Day** 9529
(Continued)

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
5031	HD 28,459	04.24	+32° 14	1-12	Astro II	Set .010	9.8	17.7	[illegible]	0[illegible]		[illegible]
	Focus test	Outside	thru' base	"	"	"					"	
		1939	Sept 23-24	Sat.	H-Bs				JD 9530			
5035	HD 1826	00:17.6	+28° 55'	1-12	Astro II	Set .010	6.4	14.5	01 32	03 08	4	
5036	23,728	03 42.3	+43° 39	"	"		6.2	14.1	01 14	03 54	1	
5037	22,124	03: 28.8	+31° 01	"	"	"	6.1	14.3	03 57	05 27	2	
	Focus Test	Outside	thru' base"		"	"						

Sunday Sept. 24-25 B-L Rainy - clouds all [illegible]
Monday Sept 25-26, M-L
damp, in dome, put heat on
Heavy rain and thunder storm in

Pointer 16.25

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
						~~Supp. Zone 48 Set 4.5~~
0^{13} E	+32° 18	1	6 17	B9	1-	Off due to clouds 04^{25}. Solid at 05^{15}
					9/12	Set 8.5
						Pointer 13.7
Rain earlier, then mostly cloudy						No visitors! Bright auroral arch 00^{30}
2^{40} W	+29° 04	0-	7 00	A5	1-2-1	Binary (Y) Image unsteady, Tel. "too well balanced" near end of exposure
0^{m} W	+43° 48	0	6.14	F0	1-2-1	Supp. Zone 23
1^{48} W	+31° 48	0	6 90	F2	1-2-1	Binary (Y) Set 3
					9/12	" 7
						MC SC SW MT S.T.
						Sep. 25 12 -01.9 -09.0 -25.2 Advanced +36.1 screw given 2 turns to A. +0.5
Secondary mirror about 15.30						Blower already on.
evening.						
						Sep 26 12 -01.9 -00.4 Reset -16.5 +24.8 +0.5

Date 1939 Tuesday Sept. 26-27 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
							A B				
5038	HD 172187	18 33.7	+43 08	I-12	Astro II	010	5.2 13.1	18 46	19 16	3	44W
5039	174881	18 47.7	+28 39	"	"	"	5.2 13.0	19 20	20 30	4	44
5040	181119	19 14.1	+30 50	"	"	"	5.1 13.0	20 33	21 13	1	2.19W
5041	196359	20 31.8	+44 03	"	"	"	5.1 13.0	21 17	22 27	2	50

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 44W	+43 10	0	6.40	A5	1-2-1	Binary
1 44W	+28 42	0-1	7.43	K0	1-2-1	KSA 63
2 00W	+30 55	0-1	6.48	A0	1-2-1	KSA 63
57 W	+44 12		7.51	F0	1-2-	40 Thin Clouds 21 57 steadily worse. Call mean 21 42
						Clearing twice, was tempted to open up at second time, at 3 00 sky rapidly filling in solidly from the West. +L.
						MC SC SW HT ST
						Sep. 27 12 -00.4 -00.4 -09.4 +32.2 +0.3

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Date Wed Sept 27-28, 1939 Vol. 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 Angle End
5042	HD 216756	22 50.4	36 33	I-12	extra I	0.10	3.0 11.1	10 41	11 11	3	4h26m
5043	8671	01 20.4	42 57	"	"	"	2.9 10.8	01 35	02 09	4	

Cleaning uncertainly since 9:00

...g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
11 3	W 26m	36 46	2	6.34	F_2	1-2-1	Thick at 11.05
							I think the galv. is on the blink again - Hd
							While closing dome - turning went
							dead - relays don't work. - Hd
							note - dome chained at foot of steps.
							Clearing later.
09 4		43 08	2-3	6.58	F_8	1-2-1	Supp. light clouds at 1 55 more clouds, thick
							at 2 09. clearing, clouds, more clouds.
							Checked over dome turning, weather
							OK. Cleaned contact rings on
							RA. damping motor, has been giving
							trouble, seems OK. now.
							MC SC SW HT ST
							Sep. 28 12 -01.3 -02.2 -00.1 +32.0° +0.3m

Date Thursday Sept. 28-29, 1939 H-Bs Julian Day 9535

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
						set	A B				
(5044)	HD 172187	18 33.7	+43 08	I-12	Astro II	010	6.3 14.6	18 42	19 00	1	
5044	HD 172187	"	"	"	"	"	6.2 14.1	21 32	22 18	2	54
5045	209149	21 56.1	+32 33	"	"	"	6.1 14.0	22 22	23 22	3	
5046	222407	23 35.2	+63 10	"	"	"	6.2 13.9	23 28	00 28	4	
5047	5343	00 50.2	+57° 26	"	"	"	6.5 14.6	00 33	01	1	
5048	8272	01 17.0	+57° 37	"	"	"	6.5 14.5	01 39	01	2	
5049	15,679	02 25.3	+46° 09	"	"	"	6.4 14.1	03 06	04	3	
	Focus test	Outside thro' base									

Friday - Sept 29-30, 1939 H-Bs

cloudy with strong wind.

Very moist at sunset, outside of dome wet. strong SE wind. Dome dry inside.

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Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	+43 10	1	6.40	A5	1-2-	Binary Clouds almost from start. Completely thick by 19^00
54 W	+43 10	1	6.40	A5	1-2-1	Pointment 13.8
36 W	+32 43	1-2	6.88	F5	1-2-1	KSA 66
2 W	+63 20	3	6.91	A2	1-2-1	KSA 19
0 W	+57° 35	2-3	7.50	K2	1-2-1	" 8 Galvo relay failing to shut off beat used manual switch from 01^00 on
1 W	+57 4	2	6.87	F5	1-2-1	8 P.A. Clamp Switch short
1 W	+46° 15	2	7.40	F2	1-2-	Set 5.2 " 22 Clouds spreading fast from W at end
					9/12	Set 2.8 Closed up 04^30. Found mouth of tube quite damp, so did not reopen when sky cleared.

	M.C.	S.C.	S.W.	M.T.	S.T.
Sep. 29	-02.0	-03.2	+09.6	+30.1 s	+0.3 m
Sept. 30	-01.0	-02.0	+21.0	+29.5	+0.3

Date Sat Sept 30-Oct 1, 1939 Hd-Bs 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
5050	η Lyrae	19 10.4	38 58	Schmidt	Super X	010	7.5	7.00 15s	7.20 exp.	
5051	"	"	"	"	"	"		1m thro'	clouds	
5052	"	"	"	"	"	"		1m exp.		
5053	MWC 336 HD 193009	20 12.9	32 04	"	"	"		7.29	7.49	7m
5054	HD 214946	22 36.7	44 29	I-12	Astra I	010	2.6 9.9	10 35	11 55	4
5055	κ Cas HD 2905	00 27.3	62 23	"	Astra IX	"	2.4 10	00 02		3
5056	5813	00.54.6	+57°50	"	Astra II	"	2.4 10	00 28	01	
5057	" 18	02 48.8	+47°56	"	"	"	2.5 10	02		
5058	24	03 52	+43°02	"	"	"	2.4 10	03 32	04	
5059	40 143	05.52.0	+45°37	"	"	"	2.5 10	04 50	05	
	Focus Test	Outside thro base		"	"	"	"	—	—	

mopped water out of tube
about 150 visitors, Had showed
Ring neb with 74", B5 showed moon,
Jup, moon, Sat with 4"

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
		1	4.29	B3	2 filters 5	focus of Schmidt .820
					5	
					5	
7m	32 10	1	7.0	Bone	5	
1h 35	44 41	1	7.26	A5	1 filter 1-2-1	light clouds. Pointer 10.8
5.12 W	+62°34	2	4.00	B0	3-3-3	spots 20s - no filter
W	[illegible]	1-2	7.23	A3	1-2-1	Supp. Zone 8
W	[illegible]	1-2	7.26	A2	1-2-1	22 Bright fog E [illegible]
W	[illegible]	[illegible]	7.20	A0	1-2-1	23 in setting. Fill hand clouds used S
05 W	+45°26	1	6.60	A0	1-2-1	KSA 25 Set 5 " " " "
					9/12	" 8

N

Date Sun. Oct. 1-2 1939 B-L Julian Day 9538

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
5060	H.D. 177595	19 00.3	27 10	12½	Astra I	.010	3.9 12.1	18 58	20 16	1	1.37 W
5061	H.D. 201839	21 07.2	27 09	"	"	"	3.7 12.0	20 26	21 50	2	1.09 W
5062	H.D. 214557	22 33.9	45 19	"	"	"	3.5 11.6	21 58	23 13	3	1° W
5063	H.D. 1826	00 17.6	28 55	"	"	"	3.5 11.7	23 19	00 00	1	[illegible]
5064	HD 1632	00 15.5	+32 21	"	"	"	3.6 11.7	00 03	00 33	4	[illegible]
5065	HD. 8710	01 205	+43 11	"	"	"	3.6 11.7	00 39	01 25	2	[illegible]
5066	H.D. 22124	03 288	+31 41	"	"	"	3.6 11.7	01 33	02 23	3	[illegible]
5067	H.D. 21844	03 262	+47 36	"	"	"	3.6 11.7	02 36	03 14	4	[illegible]
5068	H.D. 24417	04 241	+27 55	"	"	"	3.5 11.7	03 19	03 59	1	[illegible]
5069	H.D. 33056	05 232	+12 29	"	"	"	3.5 11.7	04 05	04 59	2	[illegible]
5070	H.D. 36162	05 247	+15 17	"	"	"	3.5 11.7	05 03	05 19	3	[illegible]

Printer 11.9

ing Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 16	1 37 W	27°13	1-2	7.03	B9	1-2-1	Supp. Dome turning event lead. Star partially
	1 04 W	27°18	2-3	7.56	A0	1-2-1	Supp. obscured for 15 min.
3 13	1 00 W	45° 30	3	7.57	F8	1-2-1	Supp.
	0 53 W	29 06	3	7.00	A5	1-2-1	Bin
3 33	0 38 W	32 34	3	7.15	K5	1-2-1	B.S.C.
	0 23 N	43 23	3	7.27	F2	1-2-1	Supp.
	0 45 E	31 48	3-2	6.90	F2	1-2-1	Binary, image a little unsteady.
03	1 19 W	47 43	3	6.97	F0	1-2-1	Supp. set on H.D. 19789 but slit was
03	0 19 E	27 59	3	7.42	C5	1-2-1	" flooded with moonlight, pos[illegible] 21.9-1
4 12	0 03 E	12 30	3-2	7.31	F8	1-2-1	"
25 9	0 15 W	15 18	3	5.84	A2	1-2-1	"

		MC	SC	SW	MT	ST
Oct. 2	13	-01.8	-05.0	+41.6	+29.8 s	+0.1 m

Date Monday, October 2-3, 1939 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
						set	A B				
5071	HD 172187	18 33.7	+43 08	I-12	Astra II	010	7.0 15.0	18 34	19 08	4	1 00 W
5072	184602	19 30.2	+45 50	"	"	"	6.9 14.8	19 12	20 42	1	57 W
5073	196359	20 31.8	+44 03	"	"	"	7.0 14.9	20 45	21 55	2	59 W
5074	206482	21 37.3	+57 08	"	"	"	6.9 14.9	22 20	23 30	3	59 W
5075	222514	23 36.2	+57 17	"	"	"	6.9 14.8	23 38	00 35	4	57 W
5076	3881	00 36.5	+59 25	"	"	"	6.8 14.9	00 40	02 03	1	02 W
5077	21794	03 25.7	+57 32	"	"	"	6.8 14.9	02 09	02 45	2	E
5078	22124	03 28.6	+31 41	"	"	"	6.8 14.9	02 50	03 40	3	W
5079	22521	03 32.2	+42 13	"	"	"	6.8 14.9	03 45	04 55	4	
5080	45504	06 22.7	+27 02	"	"	"	6.7 14.9	04 59	06 45	1	

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
1 00 W	+43 10	1	6.40	A5	1-2-1	Binary
1 37 W	+45 55	2	7.46	A2	1-2-1	KSA 39
1 48 W	+44 10	2	7.51	F0	1-2-1	KSA 40 ←*
2 18 W	+57 18	3	7.50	F5	1-2-1	KSA 18 ←* Double 20"? apart. Bright, conf.
1 27 W	+57 29	3-2	7.22	A0	1-2-1	KSA 19
1 52 W	+59 33	3-2	7.43	A3	1-2-1	KSA 8
0 16 E	+57 37	3-2	6.85	F8	1-2-1	KSA 9
0 50 W	+31 48	2	6.90	F2	1-2-1	Binary (Y)
1 43 W	+42 19	2-3	7.51	G0	1-2-1	KSA 23
0 18 E	+[illegible] 59	2-3	6.91	F5	1-2-1	KSA 50

		MC	SC	SW	MT_3	ST_m
Oct. 3	12	-01.9	-05.8	+09.0	+28.9	+0.3

←* time out to give the center a chance to rest shutter.

Date Tues Oct 3-4, 1939 Hd-H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
5081	HD 175743	18 51.7	17 59	I-12	extra II	0.10	7.6 15.6	6 30	7.20	2	4h56m
5082	HD 187235	19 43.9	38 09	"	"	"	7.6	7 24	7.50	3	4h55m
	Annual visit of RASC				H showed with 74"				WHAT???		
5083	HD 1826	00 17.6	28 55	"	"	"	7.5 15.5	11 18	00 48	4	39
- 5084	MWC 10 HD 6343	00 59.4	65 26	"	"	"	7.5 15.5	00 27	01 41	1	1
- 5085	MWC 23 HD 12302	01 55.6	59 12	"	"	M .015	7.5 15.5	01 52	[illegible]	2	4
- 5086	* MWC 29 HD 13561	02 02.1	54 04	"	"	M "	7.5 15.5	03 [illegible]	[illegible]	3	5
- 5087	MWC 79 HD 23982	03 44.3	63 11	"	"	M "	7.5 15.5	04 40	04 40	4	13

...ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
20 2	W 56m	78 00	1-2	6.79	K2	1-2-1	Clouds and haze
50 3	W 35m	38 15	1-2-1	5.67	B9	1-2-1	
							Brilliant aurora – then much reduced at 11.[illegible]
4	0 29 W	29 06	1-2	7.00	A5	1-2-1	At 11.45 aurora very bright again streamers
	1 10 W	65 38	1-2	7.1	B5eB	1-2-1	and curtains in N brilliant at lower
	1 54 W	59 21	1-2	8.2	B3e	¾-1-¾	edges with oscillating motions across
	2 34 W	54 13	2	8.6	B3(ne)	¾-1-¾	– reds and greens.
	2 [illegible] W	63 17	2-1	8.1	B3e	¾-1-¾	Haze increasing toward end of the exp.
							Oct 4 14 MC −02.0 SC −06.3 SW +61.5 MT +27.5s ST +0.3m
							* See field as sketched at the finder. It is in the envelope with other. 5086 appears to be might star – [illegible]

Date Wed. Oct 4-5, 1939 Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
5088	HD 177599	19 00.3	15 38	I-12	Extra I	010	9.5 16.5 ~~8.2 16.3~~	7 22 ~~6 31~~	8 12 ~~7 21~~	1	W1h 45m ~~W1h 39~~
5089	HD 196687	20 33.9	42 38	"	"	"	8.5 16.3	8 17	9 17	2	W1h 16
5090	MWC 383 HD 209296	21 57.2	56 14	"	"	015M	8.4 16.0	9 25	10 35	3	W1h 12
5091	HD 223386	23 44.0	59 25	"	"	010	8.2 15.9	10 41	11 21	4	W10m
5092	HD 5813	00 54.6	57 50	"	"	"	15.9	11 25	12 55	1	W
5093	" 8671	01 20.4	42 57	"	"	"		01 00	02 00	2	W 14

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
~~W1h45m~~ ~~W1h3~~	15 -37	2	6.84	A0	1-2-1	Supp. neglected to draw slide!
W1h16	42 45	3-2	7.06	A0	1-2-1	Supp.
W1h12	56 24	3	8.1	B(5)e	1-1-1	Increasing haziness
W10m	59 37	3	6.38	A0	1-2-1	
0h33m W	58 01	2-3	7.23	A3	1-2-1	Haze.
1h12m W	43 07	2-3	6.58	F8	1-2-1	Haze thickening, thick at 2h00 Sky remaining mostly clear closed at 3h10

Date Thursday October 5-6, 1939 H-B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time ~~E.S.T.~~ Sidereal Watch	Ending Time ~~E.S.T.~~		Hour Angle End
						set	A B				
5094	HD 218525	23 03.6	+44 01	I-12	Astro II	010	11.0 18.8	23 33	0 03	3	58
5095	222642	23 37.3	+44 13	"	"	"	11.1 18.8	0 06	1 25	4	5,1
5096	22124	03 28.8	+31 41	"	"	"	11.1 18.9	2 01	3 25	1	0 05 E
5097	20367	03 11.5	+30 46	"	"	"	13.3 22.9	3 34	6 00	2	40 W

Clouds early evening.
Stromgren of Olsen stopped. Used sid. watch.

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 58 W	+44 14	1	6.36	A0	1-2-1	K S A 42 Heavy lightning in SE. Some light clouds. Bright aurora in N.
1 47 W	+44 25	1	7.18	F0	1-2-1	K S A 43 Clouded out much of interval $0^{24}-0^{35}$;
0 05 E	31 50	2-1	6.90	F2	1-2-1	Rim $12^{h}5$ Aurora extended 1/3 of firm't
2 40 W	30 55	1	7.09	G0	1-2-1	Supp Started to set on 12573, but Dec motor raced and had trouble with clamp.
						Heavy clouds $2^{40}-3^{00}$ - Now light clouds
						" " $4^{10}-5^{05}$

		MC	SC	JW	MT	ST
Sep. 6	12	-02.6	-07.1	-44.8 Reset	-11.4 Reset	-0.2
Sept 7	10	-02.5	-05.7	-37.7	-12.5	-0.2

Date Friday, Oct. 6-7, 1939, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.		Hour Ang End
5098	H.D. 193637	20 16.2	+33 37	I - 12	Astra II	.020	+19.6°	+17.5°	18 52	21 02	4	26
5099	221700	23 29.3	+07 22	—	—	—	+19.6	+17.6	21 08	0 50	1	
5100	5944	00 55.8	57 17	—	—	.010	9.6	17.6	0 17	1 17	2	1 co
5101	22124	3 28.8	+31 41	—	—	—	9.6	17.6	1 23	3 30	3	

Pointer at 16.53

g Time G.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
02	26 W	33 42	2-1	8.6	A	½, 1, ½	
5		07 34	2	9.2	A2	½, 1, ½	
1	00 W	57 29	2	6.80	A2	1-2-1	
3		31 48	1	6.90	F2	1-2-1	Y Seeing poor 1.30. Thick clouds 1.50 – 2.15 Call end up 2.40 24.0 – Still thick cloud

		MC	SC	SW	MT	ST
Sep. 7	10	-02.5	-05.7	-37.7	-12.5 s	-0.2 m

Date Saturday, Oct 7-8, 1939, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.		Hour Ang End
5102	HD. 182010	19 17.6	+17 34	I-12	Astro II	.010	+6°.7	+15°.0	18 25	19 15	4	0 41
					Tried various objects with visitors'							
			M 27 - Dumb-bell -			NG		M2	fine sight			
			H VIII 75 Lacertae		—	NG		H VI 30 Cass.		fairly		
5103	222416	23 35.3	44 31	—	—	—	+6°.0	+13°.7	22 28	0 38	1	47 h
5104	6676	1 02.4	59 44		—	—	5.4	1.6	0 55	1 35	2	1

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
15 40	41 W	17 37	2	6.84	A5	1-2-1	
	zyphiac better than M13						Closed 120 visitors. Showed M2 and β Cygni with 7½ inch. T showed Jupiter, Saturn with 4-inch.
	and field at setting	α 23 53.0			δ +56 22		Pointer at 13.68
37	1 47 W	44 43	2	7.45	B9	1-2-1	& very hazy accompanied by copious dew.
	1 16 W	57 55	2	5.6	B5	1-2-1	trouble with damps.
							Heavy fog so closed & put on blower.
							Clouds 2 30 –

Date Sunday, Oct 8-9, 1939 B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
~~5105~~	H.D. 210170	22 03.4	77 04	40½	Ast II	.010	8.9 16.9	21 43		3

Monday Oct 9-10 1939 M-L

Sky very hazy after sunset.
3rd mag. stars barely visible in zenith.
Saw no Draconids from about 19.50 – 20.10. Later clouded over completely. Fog at 23.15.

Tuesday Oct. 10-11 1939 H-L

Cloudy with showers; but cleared about 21[30] for a few minutes. Not very good. Rain a few minutes later.

Wed Oct 11 1939 Hd I 12 focus was 26.1

5104F Focus I-25 astra II 010 4.6 12.6 3
5104T Test - Hartman " " " "

Clouds in early evening. Partially clear at 8^00, but with a strong wind, Dome wet!
Opened at 9:30

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
~~17 15~~	~~1~~	~~6.98~~	~~Ao~~	~~+~~		Cloudy at 10^00 Closed at 11^00
						Put blower on.
						MC SC SW MT ST
						Oct. 9 10 -02.5 -06.0 -20.0 -13.5 -0.3
						MC SC SW MT ST
						Oct. 10 12 -02.9 -05.4 -09.9 -15.2 -0.2
						Oct. 11 12 -02.3 -05.1 +00.4 -17.2 -0.2

Date Wed Oct 11-12, 1939 Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
- 5105	η Lyrae HD 180163	19 10.4	39 03	I-25	Extra II	0.0	5.8 13.6	6 18	6 30	1
							6	6 30	6 42	
								6 42	6 54	
- 5106							6.0 14.0	6 55	7 07	2
								7 07	7 19	
								7 19	7 31	
- 5107							6.0 13.8	7 32	7 44	3
								7 44	7 56	
								7 56	8 08	
- 5108	—						6.0 13.9	8 09	8 21	4
								8 21	8 33	
								8 33	8 45	
- 5109	T Cas HD 202444	21 10.8	37 37	"	Process	0.0	6.0 13.7	8 52	9 42	1
	Cas HD 15089	02 10.8	66 57	"	"	"	6.0 13.8	11 02	00 35	
	HD 18446-7	01 56.9	+02 17	"	"	"	5.7 13.8	00 45	01 25	

pointer at 13.7

...ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
30			1	4.29	B3	1 filter 7-7	set 1
42						7-7	set 6
54						7-7	" 9
07						7-7	" 1
19						7-7	" 6
[illegible]		39 02				7-7	" 9
44						7-7	" 1
[illegible]						7-7	" 6
[illegible]						7-7	" 9
21						7-7	" 1
33						7-7	" 6
[illegible]	W 2h 35		1			7-7	" 9
[illegible]	W 1h 31	37 46	2	4.10	F0	no filters 10-10	set 1
[illegible]	0h 4 E	67 06		4.6	A5p	10-10	" 6 B Can see a comp. of about 7m about 10" dist. Light is very white.
[illegible]	0h 53 W	+02 08		3.9	(+3 [illegible])	10-10	" 9 clouds at 11.35 – 12.5 clouds

(over)

Date Wed Oct 11-12 1939 (Contd) Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
- 5110	κ Cas HD 2905	00 27.3	62 23	I-25	Process	010	6.0 13.9	9 49	10 54	2
	"	"	"	"	"	"	5.7 13.8	01 34	02 10	
- 5111	κ Cas HD 5328 (?)	00 50.7	60 11	"	Process	"	5.9 13.9	10 39	10 41	3
								10 42	10 46	
								10 47	10 55	
- 5112	9 Aur. HD 32630	04 59.5	41 06	"	Process	"	5.8 13.8	02 [illegible]	02 40	4
	114 Tau. HD 35708	05 21.6	21 51	"	"	"	5.8 13.8	02 48	04 [illegible]	

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
42	00 57m	62 33	2	4.00	B0	no filter 10-10	Set 1
10	43 W	62 35	3	"	"	10-10	" 6
41		60 22	2	2.25	B0p	20	Set 1 Slide not fully drawn?
46						20	" 6
55	56m					20	" 9
	20 E	41 08	2	3.11	B3	10-10	Set 1
	14 E	21 52	2	4.66	B3 SK	10-10	" 6 Orange sky thickening and seeing mostly cloudy.

	MC	MT	ST	SC
Oct 12 ..	-2.0	-17.5	-0.2	-4.4

+ 0.5 J78

Date Thurs Oct 12-13, 1939 Hal- Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
- 5113	η Lyrae +D 180163	19 10.4	38 58	I-25	Astro II	0.10	3.0 11.0	8 39	8 55	1
								8 55	9 11	
								9 11	9 21	
- 5114	42 Com, +D 48579	12 40.5	69 41	-	-	.010	08 9.0	3 25	4 25	2
								4 25	4 41	
							06 8.9	4 44	5 07	
- 5115	"	"	"	"	"	"		5 07	5 23	3
								5 23	5 39	
								5 39	[illegible]	

Friday Oct 13-14, M
Rain all evening

Partly Clear at intervals from 7.00

set pointer 11.3

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
55			0	4.29	B3	1 better 7-7	Set 1
11		39 03	0			7-7	" 6
21	W 3 1/2 15					7-7	" 9 Clouds - spitting rain before could close.
25		67 38	2-1	4.57	B3	7-7	Set 1 Clear again 11.00 but mostly cloudy
						7-7	Set 6 11.10 to 11.40 — gave up. Hol.
	0 3.1 E					7-7	Set 9 Clouds mostly from hill 23 Pointer 9.8
			2	-	-	7-7	Set 11 had trouble with time turning switch.
						7-7	Set 6 Clouds 3.25-51, 3.53-4.20
	17 W		2-1	-	-	7-7	

	M.C.	S.C.	OW	HT_s	ST_m
Oct. 13	-02.3	-04.8	+19.7	-20.4	+0.8

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M-

Date Friday Oct. 13-14 1939 B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5116	H.D. 16855	02 37.1	43 07	25	Astro II	.010	-0.2 8.0	1 38	05	
~~5117~~	~~H.D. 22124~~	~~03 28.8~~	~~31 41~~	~~4~~	~~"~~	~~"~~	~~0.4 8.0~~	3 14	~~5 55~~	
	Sat Oct 14/39 Hd									
	Changed to I-12									
5116F	Focus			I-12	Astro II	.010	-2.2			1

Hour Ang End

Pointer at 9.1

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
1 35 W	43 15	1-3	6.72	A2	7-7	Supp. Image very variable.
~~3 32 W~~	~~31 50~~	~~2~~	~~6.90~~	~~F2~~	~~7-7~~	~~Bin~~ Cloudy from 4^h^00^m^ to 4^h^=5
						Oct. 14 10 MC −02.1 SC −04.6 SW +30.6 MT −21.8 ST +0.8
Outside Thermometer, Tilt 20.21						Set 1 Focus 26.15
						" 6 double exposure ← about 26.22 but not at best focus.
						" 9 Focus 26.25

Date Saturday, October 14-15, 1939 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.		Hour Angle End
						Set	A B				
5117	HD 172187	18 33.7	+43 08	I-12	Astro II	010	-2.2 6.0	18 15	18 47	4	1 24
5118	HD 5526	00 52.0	+45 18	"	"	"	-3.5 5.0	23 44	0 44	1	1 04 W
5119	11884	1 51.7	+46 36	"	"	"	-3.5 5.0	1 00 46	1 00	2	1 14 W
5120	22521	3 32.2	+42 13	"	"	"	-3.5 5.0	2 03	(2 3)	3	

Cloudless + light rain or snow on end. off during day. Clearing again after sunset.

Temp set 26.3 with folding out.

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g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
17	1 24 W	+43 10	2	6.40	A5	1-2-1	* Binary. Light-clouds. Thick by end.
	About 195 visitors.			Light snow Cloudy.		H showed	telescope; T showed slides; partly clear 9-10. H showed Jupiter.
44	1 04 W		2	7.24	K0	1-2-1	* K.S.A 20 Very hazy. Brilliant auroral curtains.
22	1 19 W	46 45	2-3	7.53	K0	1-2-1	*
3		42 19	2-3	7.51	G0	1-2-1	* Clouds 2:30. Still Cloudy 4:30 closed.
							* Photo figure on following page.

Date Sunday Oct 15-16 B-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.	
5121	H.D. 189377	19 54.6	41 59	12½	Cebo II	.010	-0.9 +7.5	18 49	19 10	1
5122	H.D. 199154	20 52.2	47 53	"	"	"	-0.8 +7.8	19 19	20 10	2
5123	H.D. 203313	21 09.7	30 33	"	"	"	-0.7 +7.7	20 17	21 27	1
5124	H.D. 217959	22 55.7	02 09	"	"	"	-0.7 +7.7	21 39	22 19	4
5125	H.D. 219699	23 12.8	30 29	"	"	"	-0.7 +7.7	22 21	23 25	2
5126	H.D. 12642	01 55.7	-09 35	"	"	"	-0.7 +7.5	23 39	00 54	1
5127	H.D. 13201	02 03.9	16 46	"	"	"	-0.8 +7.6	00 52	01 48	4
5128	H.D. 20193	03 09.6	32 29	"	"	"	-0.8 +7.6	02 00	02 38	2
5129	H.D. 35761	05 21.9	42 12	"	"	"	-0.7 +7.6	02 55	03 35	3
5130	H.D. 50384	06 47.9	45 57	"	"	"	-0.7 +7.6	04 01	04 51	4
5131	H.D. 61294	07 33.5	38 34	"	"	"	-0.7 +7.6	04 58	05 38	1

Monday Oct 16-17, 1939 M

Light clouds after sunset. Cleared briefly

Times Oct 17-18 Hd-L Clouding up at sunset. From 9.30 on, partly clear at times.

Pointer at 27.9

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 31 W	42 05	2-3	6.54	A2	1-2-1	Supp *
0 35 W	48 01	3	7.23	A5	1-2-1	Supp *
1 33 W	30 42	3	7.56	A0	1-2-1	Supp no comparison Turned light on with plate box open. 21 arc?
0 39 W	2 40	3	6.96	K0	1-2-1	B.S.
1 28 W	30 41	3	7.99	F0	1-2-1	Supp at 23.50
0 19 E	-04 24	2	6.93	K0	1-2-1	B.S.C. [illegible] starting to hazy [illegible] from S.W.
1 00 W	16 56	2	6.85	F5	1-2-1	Supp. Haze. [illegible] [illegible] unsteady wind.
0 42 W	32 37	2-3	6.62	F0	1-2-1	" " " " "
0 12 E	42 12	3	7.54	G5	1-2-1	" no field for this sta., check, ∴
0 42 E	45 52	3-2	7.48	K0	1-2-1	" Photo on hidden [illegible]
0 40 E	38 [illegible]	2	7.07	K5	1-2-1	B.S.C.

Pointer Errors

	MC	SC	SW	MT	ST
Oct. 16	12 -0.5	-04.2	-06.7	-21.4	+0.7
Oct 17	12 +0.4	-04.2	Adv. 1m +05.7	-25.7	+0.5
Oct. 18	12 +1.0	-04.7	+14.4	-28.5	+0.6
Oct 19	12 +1.3	-05.1		-31.2	+0.6

Quite heavy clouds came up from NW for [illegible]

Date Thursday, October 19-20, 1939 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
						S.F.	A B			
5132	HD 1826	00 17.6	+28 55	I-12	Asth. II	010	6.0 14.0	21 42	22 26	2
5133	224380	23 52.3	+47 43	"	"	"	6.0 14.0	22 35	23 45	3
5134	9800	01 30.7	+47 47	"	"	"	6.1 14.1	23 49	0 50	4
5135	1826	00 17.6	+28 55	"	"	"	6.0 14.0	1 02	1 46	1
5136	22521	03 32.2	+42 13	"	"	"	6.0 14.0	1 50	2 30	2
5137	36859	05 29.6	27 36	"	"	"	6.0 14.0	2 55	3 55	3
5138	45192	06 21.0	32 38	"	"	"	6.0 14.0	4 55	5 55	4

MIRROR RESILVERED, Wednesday, Oct. 18. Oct. 19 the six side-thrust guiding pins on mirror were adjusted. Left heat on around mirror. About 8^00 sky clearing; reversed telescope; no drips on mirror, but central 2½ft diameter was fogged. Seemed to be clearing, but closed up & put on blower for a while.

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 18E	+29 05	1-2	7.00	A5	1-2-1	Light haze front of time.
0 24W	+47 54	2	7.46	A0	1-2-1	
0 58W	+47 58	2	7.54	F0	1-2-1	
2 59W	+24 05	2-1	7.00	A5	1-2-1	
0 48W	12 18	2	7.51	G0	1-2-1	
0 04E	27 36	2	7.47	K0	1-2-1	Mostly cloudy 3^50 - 4^45
1 05W	32 34	2	7.43	K0	1-2-1	Trouble with a clamp switch. Put on blower.

		HC	SC	SW	MT	ST
Oct 20	12	+02.5	-05.3	—	-32.7	+0^h6

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Date Friday Oct 20-21, 1939 M-B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
-5139	BD 26° 3896	20 21.6	27 02	I-12	Astra II	.020 L	6.5 6.6	+14.6 14.8	18 31	21 03	1
-5140	HD 221700	23 29.3	+07 22	—	—	—	6.5	14.7	21 10	23 40	2
5141	22124	3 28.8	31 41	—	—	1010 L	6.7	15.0	23 49	0 55	3
5142	20500	3 12.8	12 [illegible]	—	—	—	6.7	15.0	1 05	[illegible]	4

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
							Lit. Pointer at 12.18 at 11:50 found pointer off scale to left. Reset to 12.38.
03	2 16W	27 08	1	8.8		½-1½-½	
4	1 45W	07 34	1	9.2	A2	½-1-½	Dome turning switch not acting very well.
5	0 59E	31 48	2	6.90	F2	1-2-1	
	2 33W	12 35	1	7.59	B8	1-2-1	Cloudy 1^25 – 2^05; 3^20 – 3^50; 4^10 —

Dist. Blown on

	MC	SC	MT	S.T.
Oct. 21 12	+03.5	-05.7	+21.8	-0.1m
			~~Oct.~~ Rt. .1m	Reset

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Date Sat Oct 21-22, 1939 Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5143	HD18090	2 45.8	47 56	I-12	Astra II	.0102	4.6 11.8	1 43 35	3 03	1
5144	29224	4 31.0	+27 43	"	"	"	4.6 11.8	3 07	4 37	2
5145	46641	6 29.4	+32 22	"	"	"	4.6 11.8	4 40	6 00	3
	Sunday Oct. 22-23 B					Cloudy with occasional gaps				

Cloudy; Shelf. Above 12 [illegible] times. H&L lettered
T showed 74'.

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Closed quickly 1 15

...ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
							Thermostat 10.0
03	1 53 W	+48 05	1	7.26	A2	1-2-1	Set on wrong star to start with.
37 2	1 46 W	27 46	1	7.38	A0	1-2-1	
N 3	1 11 W	32 19	2-1	7.29	A2	1-2-1	Scattered clouds to one side.
...ing of rain,							

	MC	SC	SW	MT	ST
Oct. 23 12	+05.0	-06.7	+06.8 Reset	+20s.2	+0m.0

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Date Monday Oct 23-24 1939 M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5146	HD 193637	20 16.2	+33 37	I - 12	Astra II	.020L		18 . 23		4

Set counter to 25.72

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
		33 42	1	8.6	A	½, 1	Trouble with done turning relays – lower one seems to stick. Y and M interval on them are not right yet. Clouds come up heavy from NE at about 19.00.
							Had a lot of trouble with the R.A. clamp.
							Set Dec slow motion back to centre.
							Remained thick – cleared up about 22.15
							Put on blower
							Mostly clear at midnight, was about to open at 12.15, but clouds were heavy in N. waited until P.C., still very unsatisfactory, partly clear at zenith but heavy banks of cloud heavy in N.

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Date Tuesday, October 24-25, 1939 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
							A B			
5147	HD 172187	18 33.7	+43 08	I-12	Actin II	010	5.4 -3.0	17 56	18 26	1
5148	184602	19 30.2	+45 50	"	"	"	5.4 -2.9	18 29	19 59	2
5149	214558	22 33.9	+44 40	"	"	"	5.2 -3.0	20 03	20 43	3
5150	217695	22 57.4	+47 24	"	"	"		20 48	22 11	4

Wed Oct 25-26/39 Hd-L Rain all night

Thursday October 26-27/39 H-T Too foggy and rain all night

Fri Oct 27-28/39 Hd-B Telescope wet - clouds all night

Temp set 25.7

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS		MC	SC	SW	MT	ST
1 34 W	+43 08	0	6.40	A5	1-2-1	Binary Oct 24	16	+06.3	-07.2	+19.9	+18.6	+0.0
2 21 W	+45 53	1	7.46	A2	1-2-1	KSA 39						
0 01 W	+44 51	1-2	6.95	F8	1-2-1	KSA 42	Light clouds a few minutes					
1 42 W	+47 37	2	7.50	A0	1-2-1	KSA 42	Clouds. Star lost much of time 20^{55} – 21^{20}					
							Clouds 21^{40}					
							Thick 22^{15}					
							Clearing near midnight, but banks of cloud rolling up shortly after, partly clear until 1.30 heavy clouds until 2.30 thick.					
						Oct 25	12	+07.3	-07.5	+29.7	+17.8	+0.0
						Oct 26	10	+07.2	-08.0	+39.3	+15.2	0.0
						Oct 27	14	+08.7	-08.5	+51.5	+13.2	0.0
						Oct 28	10	+09.5	-08.9	+58.1	+10.5	+0.1

Date Saturday - Oct 28-29 1939, M-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.

Sunday - Oct 29.

① Dec Q Motion Motor - found clamp partly on and stalled. when this was turned Dec Q M motor ok.

② R H Clamp - went ok when started by hand. Thereafter seemed to give no trouble

3 Tried out heating galvanometer - app ok

④ Tried Dome Turning went. without hitch

5 Circle lights app started - let this go for present.

Longwith. T.Y.

B.L. Sky cloudy all evening, clearing from 11.15 to midnight. Started to open up. decided to wait, sky had filled in solidly again by 12.00. still thick at 2.00

Monday October 30-31 H-L Rain & clouds most of night. Partly clearing, but hazy & wet, for half hour about 11 p.m.

Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
	Found galvanometer in heating circuit and dark room in dome very wet. Placed two heaters in room, dried it out. Cloudy most of time till 20:00 h.r. Mopped several pints of water out of about 15 pockets in centre piece.				
	About 120 vectors.				M showed Jupiter through clouds with 74"
					T " Saturn and Moon with 4".
	1. R.A. clamp didn't work at all.				
	2. Lights on in circles.				
	3. Dome turning very uncertain all evening				
	4. Dec. & M. and Clamp refused to work at end of evening. Lassoed telescope with rope and pulled it down.				
	Checked Sec. fuses. All O.K. Must be damp affecting motor. May dry out later.				
					Thick Clouds - closed dome 23:20.
	Put blower on.				Found watches.

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Date Tues Oct 31 - Nov 1, 1939 Hd - L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5151	HD 18326	00 17.6	28 55	I-12	Extra II	0.0	-1.6 +6.4	9 23	10 33	1
5152	HD 9312	01 26.6	16 28	"	"	"	-1.8 +6.0	10 39	00 09	2

Pointer at 26.8 (Bad pulling out)

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Cloudy at sunset. Clearing 8.40 – 9.00.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
331	W 35m	29 05	1	7.00	A5	1-2-1	Clouds 9.50 HC 10.15 SC SW MT ST
							Oct 30 12 +11.9 -10.0 +1 20.6 +10s.4 -0m.2
0/2	W 1h01	-16 37	1	7.59	G5	1-2-1	Clouds from 11.00 also 1m +20.6
							Oct. 31 12 +12.2 -10.4 ++ +06s.2 -0m.2
							Nov. 1 14 +14.2 -09.5 +04s.4 -0m.3

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Date Wed, Nov 1-2, 1939 M – L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
-5153	HD 193637	20h 16.2m	+33° 37'	I-12	Astro II	.020L	-1.6	+6.6	18 03	20 23	3
-5154	B.D. 63°0110	0 48.6	+63 33	—	—	—	-1.6	+6.6	20 35	23 35	4
5155	H.D. 21427	03 22.2	+59 02	—	—	.010L	-1.6	+6.6	23 51	00 21	1
5156	" 21743	03 25.3	+27 14	"	"	"	-1.6	+6.6	00 33	01 05	2
5157	" 22124	03 28.8	+31 41	"	"	"	-1.6	+6.6	01 30	02 16	3

Pointer at 27.08

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
30 W	33 43	2-3	8.6	A	½ 1 ½	thin cloud and haze at 18.45
1 08 W	63 44	3	9.1	–	½ 1 ½	clouds over most of sky at 21.45;
0 40 E	59 08	3	6.06	A0	1-2-1	no trouble with dec guide motions.
0 03 W	27 21	1	5.93	A0	1-2-1	clouds over most of exposure,
1 10 W	31 48	1-2	6.90	F2	1-2-1	Binoc more clouds, steadily thickening up to 1.00, clearing at 1.20, but clouds thick again at 2.25
						Very cloudy, so clear at 3.45, still thick at 4.30

	MC	SC	SW	MT	ST
Nov. 2,	+14.4s	−09.0s		+04.4s	−0.2m

157

Date Thurs Nov 2-3, 1939 Hd - T; Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5158	HD 216562	22 48.8	30 14	I-12	Cu Ton II	010	-4.4 +3.5	9 20	11 00	4
5159	HD 9312	01 26.6	16 28	"	"	"	-4.6 +3.6	11 05	0 15	1
5160	22766	3 34.5	+28 27	"	"	"	-4.6 +3.6	0 22	1 22	2
5161	22124	3 28.6	31 41	"	"	"	-4.7 +3.5	1 36	2 30	3
5162	37647	5 35.0	29 27	"	"	"	-4.7 3.5	2 37	4 07	4
5163	46691	6 29.4	32 22	"	"	"		4 14		

clouding at sunset. clearing 8.30 – 9.00

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Pointer at 24.5°

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
W4	W 2h 37	30 25	1	7.52	A2	1-2-1	image minimum point!
15	W 1 15	16 35	1	7.59	G5	1-2-1	Double-Tooth mouthcomb.
22	W 0 14	28 34	1	6.86	A0	1-2-1	Trouble with RA Clamp. Centered finally,
26	W 1 28	31 48	1-0	6.96	F2	1-2-1	at end of run.
34	W 1 00	29 28	1-0	7.45	A	1-2-1	
		32 18		7.24	A2	1-3	Had to clamp RA by hand. Mostly clouding 4.35
							Still mostly cloudy 6.00

		MC	SC	MT	ST
Nov. 3	12	+16.9	-09.2	+06.5	-0m.3

Date Friday, Nov 3-4, 1939, M-B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
- 5164	BD. 56° 2640	21 43.1	+56 28	I - 12	astra II	.020 M	-5°.8	+2°.6	17 59	21 01	2
5165	HD 8862	1 22.3	43 32	—	—	.010 L	-6.0	+2.5	22 23	22 55	3
5166	21541	3 23.4	14 39	—	—	—	-6.0	+2.5	23 01	23 01	4
5167	28159	4 24.2	32 14	—	—	—	-6.1	+2.5	00 13	00 32	1
5168	36404	5 26.4	42 02	—	—	—	-6.1	+2.5	00 41	01 41	2
5169	37366	5 33.0	30 50	—	—	—	-6.0	+2.5	01 07	01 10	1
- 5170	BDF 2702	6 29.3	8 54	—	—	.020 L	-6.0	+2.2	03 00	[illegible]	3

Pointer at 23.18

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0	1 44 W	+56 36	3	9.0		½-1-½	Clouds came up from N just at end of exposure. sky thick for some time. cleared again.
5.53	0 03 W	43 42	3-5	6.54	B9	1-2-1	
[illegible]	5 57 E	14 46	3-4	7.32	A0	1-2-1	
[illegible]	1 22 E	32 18	3	6.17	B9	1-2-1	R.A. clamp not working well.
[illegible]	1 53 E	92 03	3	6.25	B8	1-2-1	
[illegible]	[illegible] E	30 50	3	7.40	B5	1-2-1	
[illegible]	2 13 W	8 50	2	8.95	A	1-2-1	Had trouble setting as R.A. clamp [illegible] not clamps on. Also [illegible] cable (for guiding [illegible]). Almost continuous clouds from [illegible]

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Date Saturday, November 4-5, 1939 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5171	HD 190 323	19 59.3	+14 42	I-12	Astr. II	Set 010	-3.2 +52	17 55	19 05	1
– 5172	Z Androm.	23 28.9	+48 16	"	"	"		19 18	19 58	2
	Sunday Nov. 5-6			B-L	Cloudy					
	Monday, Nov 6-7			M	Cloudy all evening					

Clouds much of afternoon; clearing slowly from sunset on.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
05	1 40W	+14 47	2	7.36	F8p	1-2-1	KSA 88 Some light clouds during setting + first few
	2	+48 27	3-4	8-11	P	1-2-1	Mag 8.8? Light-clouds 20^{25}. Thick 20^{35}
							Clouds up 21^{45}. Heavily overcast the rest of the night.
							MC SC SW MT ST
							Nov. 6 10 +21.8 -09.6 -03.7 +09.0 -0.2
							Reset

Date Monday November 6-7, 1939 M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5173	H.D. 36104	05 242	+12 12	I - 12½	Astrau II	Set .010	A. B. -3.3 +4.8	01 25	01 45	3

Tuesday November 7-8, 1939 H-L
Cloudy and rain all evening

Points set at 25.12

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		Comp.	REMARKS
45 3			0-1	6.95	B8	1-2	Clearing some time after midnight. Openned up. Heavy bank of clouds rolling up very quickly shut star off at 1.45 Closed Sat 3.30 still thick.
							Nov. 7 12 MC +25.4 added 0.3 to pendulum SC −10.0 MT +06.4 ST −0.2
							Nov. 8 15 +24.5 −11.0 +04.8 −0.3

Date Wed Nov 8-9, 1939 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5173T										
5174	HD 179218	19 06.6	15 37	I-12	Extra VIII	020	-2.5 +54	5 50		3
~~5174~~	~~HD 232739~~	~~00 25.8~~	~~43 24~~	~~I-12~~	~~Extra II~~	~~020~~	~~———~~	~~8 36~~		~~4~~

Thursday Nov. 9-10, 1939 H-T Cloudy all evening.

" " " " " M, N + T had Jupiter's Comes at Late out.

Friday Nov 10-11, 1939 H-B

, rain all evening - Occasional clearing,

Sat Nov 11 " " - 70-90 overcast, windy 12 - 23.

Thickest Cirrus

"Squall-line" weather all day. Sudden showers.
Partly clear at sunset

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	8 photo 1m no filter		7.13	B9	2-	Thick at 8.00. Danger of showers. Closed dome.
			6.59	B8	1-	Snowing at 9.00 - closed again! Snowing heavily until 12.00
						Broken from 1200 - 12.30 clearing, started over to open, cloudy rolling up from West. Thick again at 1.00. Broken from 1.30 - 2.00 snowing at 2.30 Still thick at 3.30 gave it up.

	MC	SC	SW	ST	MT
Nov. 9, 12	+25.5	-11.5		-0.3m	+5.0°
				MT	ST
Nov 10 10	+27.8	-12.3	+09.9	+01.8s	-0m4
11 10	+28.1	-12.7	+20.8	+00.4	-0.4

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Date Sunday Nov. 12-13, 1939 B-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.
	~~H.D. 210110~~	~~22 03.7~~	~~77 04~~	~~I-12~~	~~Astro II~~	~~.010~~	~~-6.0 +2.4~~	~~19 38~~	—
5174	H.D. 16727	02 35.8	54 41	I-12	Astro II	.010	-6.5 +1.8	23 38	23 53
5175	" 20346	03 11.3	38 56	"	"	"		00 08	00 46
	~~" 26311~~	~~04 04.6~~	~~33 19~~	~~"~~	~~"~~	~~"~~	~~—~~	~~00 55~~	—

Monday, November 13-14, 1939 H-L

Cloudy & light snow early evening. Partly clearing & by 10 pm. Snow filled in again, and mostly cloudy thereafter till 11 30

Snow early part of evening

Pointer at 23.4

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	~~7 14~~	~~0~~	~~6.98~~	~~A0~~	~~1-~~	Completely cloudy by 20 10
						Cleared again at 10-, but soon
0 23	54 50	2	5.61	B8	1-2-1	started to fill in again.
C 40 W	39 05	0	5.97	A0	1-2-1	BSC
		0-1	6.91	K0	1-	BSC. Clouds delayed starting; thick 5 mins.
						after starting, snowing 10 mins later
						sky remaining mostly thick and
						snowing lightly. Closed at 3.15
						still snowing at 3.30 sky thick.

		MC	SC	ST	MT	ST
Nov. 13	10	+31.2 added wt. of 0.2	-06.6	-09.0 adv 1m	-07.8	-0.5m

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Date Monday November 13-14, 1939 H.L. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5176	H.D. 23477	03 40.4	+43 46	I - 12½	Astra II	Set. 010	A. B. -9.0 -0.7	01 55	02 15	1
5177	" 35802	05 22.2	+17 10	"	"	"	-9.0 -0.7	02 22	03 26	2
5178	" 59764	07 26.4	+12 53	"	"	"	-9.0 -0.7	03 32	04 44	3
5179	" 70843	08 19.1	+17 32	"	"	"	9.0 -0.7	04 49	06 29	4

Pointer set at 20.58

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
15	1 44 W	+43 52	0	7.05	B9	1-2-1	KSA 23 For M. with apologies to Dr. Rogg, I
26	1 14 W	+17 10	0	7.22	K5	1-2-1	KSA 73 thought it was Hillman's night.
44	0 27 W	+12 46	0-1	7.37	G5	1-2-1	KSA 75 Haze
23	1 20 W	+17 20	0	7.46	F5	1-2-1	KSA 76 Broken clouds and haze

	MC	SC	MT	ST
Nov. 14 12	+33.9	-13.0	-16.0 s	-0.6 m

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Date Tues Nov 14-15, 1939 HQ-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.	
5180	HD179218	19 06.6	15 37	I-12	Astra VIII	020	-7.7 0.0	5 37	7 37	4
- 5181	MWC 402 HD223501	23 45.0	61 39	"	Astra II	015	-6.5 0.0	7 53	9 05	1
- 5182	MWC 23 HD 12302	1 55.6	59 12	"	"	"	-8.6 -0.3	9 11	10.21	2
- 5183	MWC 29 HD 13661	2 08.1	54 04	"	"	"	-8.6 0.0	10 27	00 07	3
- 5184	MWC 76 HD 23992	03 41.3	63 11	"	"	"	-8.6 -0.1	00 18	01 18	4
- 5185	MWC 83 HD 26[illegible]	04 10.1	45 58	"	"	"	-8.7 -0.2	01 34	03 44	1
- 5186	MWC 164 HD 52721	06 57.2	-11 09	"	"	.010	-8.7 -0.2	04 01	04 27	2
- 5187	MWC 139 HD 44637	06 17.7	15 09	"	"	.015	-8.7 -0.2	04 40	05 52	3
5188	HD 68332	08 06.8	14 19	"	"	.010	-8.8 -0.2	05 55	06 29	4

Pointer at 21.0

g Time .T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
37 4	W $3^h 44$	15 40	2	7.13	B9	2,2,2	for M - gen grup.
05 1	W 33^m	61. 50	3	8.2	B3e	1,1,1	
21 2	E 22^m	59 21	3	8.2	B3e	1,1,1	R4 clamp not working at all tonight
5 2	1^{12} W	54 13	3	8.6	B(3)ne	1,1,1	Image drifting (in dec) up & down badly all night
-	0^{46} W	63 17	3	8.1	B3e	1-1-1	and thus component, N preceding.
4	2^{47} W	46 04	3	8.6	B3ne	1-1-1	Wide double, after considering set on fainter
7 2	0^{53} W	-11 14	2	6.6	B3e	1-2-1	Had trouble in locating star on slit.
3 3	2^{47} W	15 07	2-3	7.7	B3e	1-1-1	
2	1^{37} W	19 09	2-3	6.54	A5	1-2-1	KSA. 76

		M.C.	S C	M T	S T
Nov. 15	12	+34.1 added 1.2	-13.4	-20.2	$-0^m.7$

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Date Wednesday Nov 15-16, 1939 M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature b	Starting Time E.S.T.	Ending Time E.S.T.	
- 5189	H.D. 219113	23 8.3	+2 08	I-12	Astra II	.020 L	-6.1°	+2.3°	18 13	21 13	1
5190	5764	0 54.2	47 29	—	—	.010 L	-6.3	+2.3	21 21	22 05	2
5191	18876	2 57.1	62 38	—	—	—	-6.3	+2.1	22 13	23 43	3
5192	21641	3 24.5	47 31	—	—	—	-6.4	+2.0	23 47	00 29	4
5193	37366	5 33.0	30 50	"	"	"	-6.4	+2.0	00 36	01 36	1
- 5194	B.D. 8° 1402	06 29.3	108 54	"	"	.020 L	-6.4	+2.0	01 45	04 45	2
5195	HD. 67959	08 05.3	+14 56	"	"	.010 L	-6.4	+2.0	04 51	05 13	3
5196	" 72392	08 27.5	+47 28	"	"	"	-6.4	+2.0	05 19	05 55	4
5197	" 76704	08 52.7	+46 09	"	"	"	-6.4	+2.0	05 58	06 34	1

Temp (above) −6.5° when opened dome. Rose to −6.1° near beginning of exposure and remained there until 21.15. Did not put heat on.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
13	1 22 W	+2 20	2	9.0	G5	½-1-½	Clear but a little hazy near horizon.
05	0 27 W	+47 40	3	6.95	B8	1-2-1	At 21.45 set pointer to 22.77. Put heat on.
45	0 0.2 W	+62 45	2	7.37	B8	1-2-1	
19	0 21 W	+47 38	3	6.75	B9	1-2-1	
30	0 40 E	+30 50	3	7.40	B5	1-2-1	Large
45	1 34 W	+06 50	2-3	8.95	A	½-1-½	Large
3	0 25 W	+14 46	2-3	6.14	A0	1-2-1	
5	0 45 W	+47 18	3	6.62	A0	1-2-1	
74	0 33 W	+45 57	2-3	6.61	A0	1-2-1	

		MC	SC	MT	ST
Nov. 16	12	+34.3	−15.5	−23.7	−0.7m

Date Thurs Nov 16-17, 1939 Hal - T? Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5198	HD 214588	22 34.2	44 09	I-12	astra II	0.10	0.0 +8.0 +0.3 8.3	6 41	7 31	2
5199	219139	23 08.5	70 31	"	"	"	+0.3 8.5 +0.4 8.6	7 36	8 16	3
5200	3229	00 30.4	-01 04	"	"	"	+0.2 8.2	8 21	8 53	4
5201	11037	01 43.3	03 11	"	"	"	+0.3 8.1	8 57	9 31	1
5202	12573	01 58.1	-00 21	"	"	"	+0.2 8.1	9 36	9 56	2
5203	15779	02 27.1	-01 28	"	"	"	+0.1 8.0	10 00	10 32	3
5204	16400	02 32.7	-03 49	"	"	"	0.0 7.9	10 36	11 16	4
5205	21700	03 25.0	27 23	"	"	"	0.0 8.0	11 20	0 40	1
5206	22124	03 28.8	31 41	"	"	"	0.3 7.9	0 43	1 27	2
5207	34250	5 10.9	28 49	"	"	"	-0.2 8.1	1 31	2 31	3
5208	37649	5 35.0	29 27	"	"	"	-0.3 8.1	2 44	3 58	4
5209	59901	7 05.6	15 30	"	"	"	-0.3 8.0	4 01	5 11	1
5210	72778	8 29.6	42 16	"	"	"	-0.3 8.0	5 30	6 30	2

at 5.10 found mirror fogged (blower had been on since 1.30). Closed diaphragm & put heat on. mirror Clear at 6.20.

70176

ng Time .S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS Pointer at 27.8
34	V 17m	44 21	2-1	7.01	A0	1-2-1	Suff. No heat on observation on a fake
16 3	W 29m	10 43	1	6.94	K0	1-2-1	BSC
53 4	E 16m	-01 52	1	6.43	F8	1-2-1	BSC Put heat on at 8.40
31	E 51m	3 22	1	6.78	G5	1-2-1	"
56 3	E.40m	-00 12	2	5.70	A5	1-2-1	"
32	E 34m	-01 20	2	6.53	K0	1-2-1	"
10	W 5m	-03 40	1	6.84	K0	1-2-1	"
4	0 3 W	27 30	2	7.12	B9	1-2-1	Haze
22	1 20W	31 48	2	6.91	F2	1-2-1	Fo Y Seeing worse towards end.
	0 41W	25 48	0-1-3	7.17	F0	1-2-1	variable haze
51	44 W	24 26	2-3	7.45	A	1-2-1	Tried to fit WC 154 but failed to [illegible]
	55 W	1 24	2-1	7.54	F0	1-2-1	Double tooth N comp. (Same as on V.-3) - Haze [illegible]
	1 11 W	4 44	+	7.04	A2	1-2-1	Variable haze - Forgot to [illegible]

		MC	SC	SW	MT_s	ST_m
Nov. 17	15h	+36.6	-14.4	+40.6	-23.5	-0.8

Date Friday, November 17-18, 1939 H-T 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	A B			
5210	HD. 187640	19 45.9	+28 12	I-12	Astro. II	010	-2.0 +6.3	17 31	18 01	2
– 5211	Z And.	23 28.9	+48 16	"	Ast. IX	020	-2.0 +6.2	18 08	22 08	1
5212	HD 11884	01 51.7	+46 36	"	Ast. II	010	-2.1 +6.2	22 12	23 12	3
5213	17818	32 46.5	+48 09	"	"	"	-2.1 +6.2	23 15	0 01	4
5214	20277	3 10.5	+31 49	"	"	"	-2.1 +6.2	0 08	0 48	1
5215	20367	3 11.5	+30 46	"	"	"	-2.1 +6.2	0 50	1 46	2
5216	10390	9 19.4	+57 08	"	"	"	-3.9 +4.9	5 10	5 50	4
5217	81702	9 22.2	56 41	"	"	"	-4.1 +4.0	5 52	6 34	3

Saturday Nov 18-19, 1939 M

cloudy all evening

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
							Burst spectrograph note film, shifting cam to front
							Hdy smoky – smoke or fog? Transparency variable.
							Sp. to 20s, no filter; Sl. to 40s, no filter.
3	1 40 W	+28 16	1	6.24	B8	1-2-1	
1	2 05 W	+48 27	2-3-1	8.83	Pec.	2-2-2	
3	0 45 W	+46 46	1-2	7.53	K0	1-2-1	KSA 21
4	0 43 W	+48 17	2-3	7.51	K0	1-2-1	KSA 22
	1 03 W	31 56	2-1	7.05	K0	1-2-1	" 47
	59 W	30 52	1	7.09	G0	1-2-1	" " Variable transparency? Image blurred by fog, with extinction indicating haze ≈ 4m toward end of sp.
							Dome dome but fog drifting in badly. Cloud [illegible]
4	0 01 W	56 56	2-3	7.33	M0	1-2-1	Cleared about 5 Mira seen at
	0 38 W	56 32	3	7.25	F2	1-2-1	

	MC	SC	SW	MT	ST
Nov. 18	+37°	−14°.3	+49.7	−23°	−0m.9

Date Sun. Nov. 19-20, 1939 B-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.	
5218	H.D. 214557	22 33.9	45 19	12	Astro. II	.010	A B -4.2 +4.0	20 16	21 35	1
5219	H.D. 1826	00 17.6	28 55	"	"	"	-4.4 +4.0	21 41	23 00	2
5220	H.D. 15510	02 29.7	45 57	"	"	"	-4.5 +3.9	23 05	00 21	4
5221	HD. 29537	04 34.0	29 47	"	"	"	-4.5 +4.0	00 27	01 51	1
5222	HD 37574	05 34.4	32 51	"	"	"	-4.5 +4.0	01 57	03 21	3
5223	HD. 50384	06 47.9	46 57	"	"	"	-4.5 +4.0	03 26	4 46	4
5224	HD. 73596	08 34.1	32 19	"	"	"	-4.5 +4.0	04 51	05 41	1
5225	HD. 78366	09 02.7	34 18	"	"	"	-4.5 +4.0	05 44	06 34	2

Heavy clouds in early part of evening

φ 180

Pointer at 24.8

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
35.	2 35 W	45 30	1	7.57	F8	1-2-1	Seeing variable
00	2 15 W	29 05	1	7.00	A5	1-2-1	Binary
2 4	1 24 W	46 06	1	7.11	A5	1-2-1	K.S.A. 22
5	0 50 W	29 49	0	7.20	F0	1-2-1	K.S.A. 48
21 3	1 20 W	32 50	0-1	7.30	F8	1-2-1	K.S.A. 49
06	1 31 W	45 55	1	7.48	K0	1-2-1	K.S.A 26
1	0 40 W	32 08	0	6.48	F2	1-2-1	K.S.A. 52
24 2	1 05 W	34 07	0	6.45	F8	1-2-1	B.S.C.

Root

			MC	SC	SW	MT	ST
1100 20	12		+39.8	-14.0	+1 21.0	+28.5	+0.5

181

Date Monday, Nov 20-21, 1939, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
- 5226	HD 219113	23 8.3	+2 08	I-12	Astra II	.020L	-8.6	+0.1	17 46	20 58	3
5227	14739	2 17.5	17 09	—	—	.010L	-8.6	+0.0	21 04	22 25	1
5228	21541	3 23.4	14 39	—	—	—	-8.6	+0.0	22 32	00 02	1
5229	28354	04 23.2	27 15	"	"	"	-8.6	0.0	00 06	00 54	2
- 5230	BD. 8° 1402	06 29.3	+08 54	"	"	.020L	-8.6	0.0	01 02	04 02	3
5231	HD. 74292	08 38.1	32 26	"	"	.010L	-8.6	0.0	04 50	05 34	4
5232	80360	09 15.6	32 41	"	"	"	-8.6	0.0	05 43	06 42	1

Tuesday November 21-22, 1939 H-L Cloudy all night

Dr. Young abroad Rich Hill [illegible]

Zero first included to use. turned on heat in electrograph at 19h 10m
Writer at 21.35.

...ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
...59 3	27 W	+2 20	3	9.0	G5	½-1-½	fair amount of light cloud and haze over S half of sky.
...25 5	12 E	+17 18	2-3	7.32	A2	1-2-1	still haze and cloud in S.
0 16 W	14	45	2	7.32	A0	1-2-1	haze and thin cloud pretty general.
0 09 W	27	15	2	6.61	A0	1-2-1	K.S.A. 48 end of exposure
1 11 W	06	49	2	8.95	A	½-1-½	haze, light clouds, thickening toward
0 34 W	32	14	2-1	6.98	A2	1-2-1	K.S.A. 52 haze.
0 55 W	32	29	2-1	6.58	A0	1-2-1	K.S.A. 53 haze

		MC	SC	SW	MT	ST
Nov. 21	12	+41.2	-15.2	+33.9	+26.3s	-0.1m
Nov. 22	12	+42.5	-15.0	+48.3	+22.6s	-0.2m

183

Date Wednesday - Nov 22-23, 1939, M-L Julian Day
-6°6 +1°8

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
- 5233	BD 63° 0110	0 48.6	63 33	I-12	Astra II	.020L	-6°7	+1°6	18 59	22 45	2
5234	HD 20500	3 12.8	12 28	—	—	.010L	-7.0	+1.4	22 52	00 14	3
5235	29646	04 35.0	28 25	"	"	"	-7.0	+1.4	00 19	00 37	—
5236	37519	05 34.1	31 18	"	"	"	-7.0	+1.4	00 44	01 06	1
5237	42477	06 05.6	13 40	"	"	"	-7.0	+1.5	01 11	01 33	2
- 5238	BD 8° 1402	06 29.3	+08 54	"	"	.020L	-7.0	+1.5	01 30	05 18	

Pointer at 22.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
5 2	1 42 W	63 44	2	9.1		½-1-½	Cloudy at sunset, cleared later.
3	0 47 W	12 35	2-3	7.59	B8	1-2-1	K.S.A. 71
37	0 11 E	28 27	2-3	5.68	A0	1-2-1	K.S.A. 48
32	0 43 E	31 18	2-3	5.91	B8	1-2-1	K.S.A 49
27	0 47 E	13 36	2-3	5.92	A2	1-2-1	K.S.A. 74 light haze.
14	2 25 W	+08 50	2-3	8.95	A	½-1-½	haze, light clouds, thicker, mostly cloudy on latter two hours.

	MC	SC	SW	MT	ST
Nov. 23 12	+43.5	-15.6	+59.3	+22.5	-0.1 m

185

Date Thurs Nov 23-24, 1939 44-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5239	HD 9312	01 26.6	16 28	I-12	Extra II	0.10	-4.9 +3.4	10 27	11 27	4
5240	24701	03 50.5	43 02	"	"	"	-5.0 +3.1	11 32	0 30	1
5241	29224	4 31.0	27 43	"	"	"	-5.1 +3.1	0 33	1 53	2
5242	37647	5 35.0	29 27	"	"	"	-5.1 +3.1	1 56	(4 06)	3

mostly cloudy earlier. Opening
closure at 7.30 but cloudy again.
Clearing from 10.00.

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ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
7 4	W1h50	16 37	1-	7.59	G5	1-2-1	Moonlight falling on mirror.
30	0 24W	43 06	1-2	7.20	A0	1-2-1	Light clouds towards end
53 1	12W	27 47	1	7.38	A0	1-2-1	Light clouds all times, haze
6		29 25	1	7.45	A	1-2-1	Clouds 210-235 partly cloudy thereafter. — Weather

		MC	SC	SW	MT	ST
Nov. 24	12	+45.5	-15.4	+1 14.9	+18.0	3 40 -0.2

187

Date Fri Nov 24-25, 1939 Hol. 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 Em
5243	HD 1826	00 17.6	28 55	I-12	Extra II	010	-8.0 +0.4	8 08	9 08	4	W4
5244	9312	01 26.6	16 28	"	"	"	-8.2 +0.5	9 12	10 20	1	W4
5245	18040	02 ~~99.8~~ 12.8	47 56	"	"	"	-8.0 +0.2	10 29	11 39	2	W4
5246	24701	03 50.5	43 02	"	"	"	-8.2 +0.1	11 42	01 22		W1

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS Pomona 21.6
08.4	W43m	29 05	0	7.00	A5	1-2-1	
20.1	W46m	16 36	0-1	7.59	G5	1-2-1	
39.2	W43m	43 04	1	7.26	A2	1-2-1	Suff. Set on preceding longitude comp.
22	W 1.25	43 07	1	7.20	A0	1-2-1	Light clouds at 20.25 Heavy clouds at end of exposure.
							Closed at 02.00. Still cloudy at 4.00.
							MC SC SW MT ST
							Nov. 25 10 +46.1 -15.4 +124.7 +15.1 ±0.3m

189

Date Saturday, Nov. 25-26, 1939 H-T 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	A B			
5247	HD 209993	22 02.2	+44 46	I-12	Astro II	010	-7.2 +1.4	17 20	17 42	4
- 5248	Z And	23 28.9	+48 16	"	"	"	-7.2 +1.5	17 48	19 48	1
- 5249	"	"	"	"	Astro IV	020	-7.2 +1.4	19 50	20 50	4
5250	HD 9312	01 26.6	+16 28	"	Astro II	010	-7.3 +1.4	20 55	21 55	1
5251	9800	01 30.7	+47 49	"	"	"	-7.3 +1.4	22 [illegible]	23 10	2
5252	15579	02 25.3	+46 09	"	"	"	-7.3 +1.5	23 14	0 14	3
5253	21970	3 27.9	75 24	"	"	"	-7.1 +1.4	0 16	[illegible] 58	4
5254	31590	4 52.0	73 55	"	"	"	-7.1 +1.4	1 02	1 18	1
5255	31151	4 48.3	61 36	"	"	"	-7.0 +1.5	1 22	2 28	2
5256	47731	6 35.0	28 18	"	"	"	-7.1 +1.4	2 32	3 48	3
5257	60406	7 29.2	61 46	"	"	"	-7.1 +1.4	3 53	[illegible]	4
5258	81702	9 [illegible]	56 41	"	"	"	-7.1 +1.4	5 20	6 00	3
5259	80340	9 14.4	57 08	"	"	"	-7.1 +1.4	6 05	[illegible] 23	2
	Focus						[illegible]			

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
42	24 E	+44 56	2	6.14	A2	1-2-1	K.S.A.41
48	16 W	+48 28	3	9v	P	1-2-1	Filter Sporte 180s; Sonder 30; Strufe 120
53	19 W	+48 28	3	9v	P	1-2-1	(no filter) 20 20 60
55	26 W	+16 38	2-1	7.59	G5	1-2-1	for Hdl
11	36 W	+47 59	1	7.54	F0	1-2-1	KSA 21
4	46 W	+46 18	2-3	7.49	F2	1-2-1	KSA 22
4	26 W	+75 31	2-3	7.16	G5	1-2-1	
14	20 W	73 56	2-3	6.06	A2	1-2-1	
21	36 W	61 37	2	7.46	G0	1-2-1	
21	11 W	28 13	2-1	7.54	K0	1-2-1	
21	42 W	61 38	2	7.59	F5	1-2-1	
30	35 W	56 29	3	7.28	F2	1-2-1	
32		56 56	3-4	7.33	M0	1-2-1	
						10/10	

Date Sunday, Nov 26-27, 1937 B-L & FATEM. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5260	HD 200407	20 58.2	43 47	I - 12	Astra II	.010	-6.9 1.8	17 18	17 46	4
5261	HD 201114	21 02.5	47 39	I - 12	"	"	-6.5 2.0	17 59	18 51	3
5262	H.D. 218396	23 02.6	20 37	"	"	"	-6.5 2.0	18 57	19 11	2
5263	H.D. 221675	23 29.0	-01 48	"	"	"	-6.5 2.0	19 16	19 30	1
5264	H.D. 1632	00 15.5	32 21	"	"	"	-6.4 1.9	19 36	20 18	2
5265	H.D. 2888	00 27.1	42 57	"	"	"	-6.4 1.9	20 29	[illegible]	1
5266	H.D. 9312	01 26.6	16 28	"	"	"	-6.5 2.0	20 57	22 39	1
5267	H.D. 17086	02 39.5	60 09	"	"	"	-6.5 2.0	22 44	[illegible]	1
5268	H.D. 17688	02 45.2	60 43	"	"	"	-6.5 2.0	23 27	[illegible]	4
5269	H.D. 34354	05 11.9	28 41	"	"	"	-6.6 +2.0	00 44	01 40	1
5270	HD 44071	06 14.7	29 25	"	"	"	-6.6 +2.0	01 43	[illegible]	2
5271	H.D. 57009	07 14.6	29 55	"	"	"	-6.6 +2.0	02 29	03 19	3
5272	H.D. 74046	08 39.5	28 41	"	"	"	-6.6 +2.0	03 34		4

Pointer at 22.9

ng Time .S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	0 47 W	43 55	3	6.78	A2	1-2-1	Sup
	1 50 W	47 47	3	7.50	A0	1-2-1	Sup
	0 09 W	20 47	3	6.07	A5	1-3	B.S.
	0 00 W	-1 37	3	6.04	A2	2-2	B.S.
	0 04 W	22 33	3	7.15	K5	1-2-1	B.S.
	0 22 W	43 09	3	6.43	A0	1-2-1	Sup ← Plate [illegible] 52 [illegible]
	1 14 W	16 36	2	7.59	G5	1-2-1	Binary for Hd Tight focus
	0 42 W	60 18	2-3	6.82	A5	1-2-1	Sup
	1 50 W	61 12	3	7.47	A2	1-2-1	Sup Wing image wintering
	0 30 W	28 42	3	7.33	A3	1-2-1	Sup
	0 10 W	29 22	3	7.19	F0	1-2-1	Sup.
	0 06 W	29 40	3-2	7.17	A2	1-2-1	Sup.
		28 35	3-2	7.58	F2	1-	Sup Sky fell in suddenly shortly after start of exposure remained [illegible]

		MC	SC	SW	MT	ST
Nov. 27	12	+47.6	-15.8	-11.7 Reset	+14.2	-0.4 m

Date Monday, November 27-28, 1939 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
						Set	A B			
5272	HD 196133	20 30.3	+44 50	I-12	Astra II	010	-5.6 +3.0	17 18	17 46	1
5273	196865	20 35.0	+47 43	"	"	"	-5.6 +3.0	17 50	18 30	2
5274	206212	21 35.5	+45 43	"	"	"	-5.6 +2.9	18 35	19 35	3
5275	217695	22 57.4	+47 24	"	"	"	-5.7 +3.0	19 40	20 40	4
5276	9312	01 26.6	+16 28	"	"	"	-5.6 +3.0	20 45	21 41	1
5277	4362	00 40.9	+59 02	"	"	"	-5.7 +2.9	21 46	22 20	2
5278	5343	00 50.2	+57 26	"	"	"	-5.7	22 23	23 07	3
5279	17591	02 44.3	+63 00	"	"	"	-5.7 +3.0	23 09	23 [illegible]	4
5280	21794	03 25.7	+57 32	"	"	"	-5.6 +2.7	00 01	00 [illegible]	1
5281	21970	03 27.4	+75 24	"	"	"	-5.6 +2.7	00 37	01 11	2
5282	31590	04 52.0	+73 55	"	"	"	-5.6 +2.7	01 16	01 32	3
5283	33441	05 05.2	+62 59	"	"	"	-5.7 +2.7	01 35	02 13	4
~~5284~~	~~37136~~	~~05 21.2~~	~~+61 53~~	~~"~~	~~"~~	~~"~~	~~-5.6 +2.7~~	~~02 17~~		~~1~~

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
1	1 21 W	+44 57	4-3	6.62	A0	1-2-1	KSA 40
2	2 00 W	+47 48	3-2	7.42	G5	1-2-1	KSA 40
3	2 05 W	+45 52	3	7.56	B9	1-2-1	KSA 41
4	1 47 W	+47 35	3	7.50	A0	1-2-1	KSA 42
	0 19 W	+16 36	3	7.59	G5	1-2-1	Being for Hd. Mirror acting as one shifting to the [illegible]
2	1 44 W	+59 14	2	7.27	G5	1-2-1	KSA 8
3	2 22 W	+57 39	3-1	7.50	K2	1-2-1	" 8 Image very unsteady at times.
1	1 12 W	+63 07	3	7.52	G2	1-2-1	" 9
1	1 10 W	+57 38	3	6.83	F5	1-2-1	" 9
2	1 46 W	+75 33	3	7.16	G5	1-2-1	" 3
3	0 42 W	+73 36	3	6.06	A2	1-2-1	" 3
3	1 12 W	+63 00	3	7.02	F0	1-2-1	" 10
		+61 52	3	6.79	A5	1-	" 10 clouds rolling up very quickly at 2.25 at 2.28 they were very thick getting worse. Clear at 2.15 or close up.

195

Date Tues Nov 28-29, 1939 Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5284	HD 1826	00 17.6	28 55	I-12	Ortho II	010	-2.9 + 5.1	5 44	6 24	2
- 5285	MW 409 HD 225095	23 58.3	55 00	"	"	"	-2.8 5.2 -2.7 5.3 -2.9 5.2	6 32	7 38	3
5286	HD 223057	23 41.2	62 45	"	"	"	-2.9 5.0	7 42	8 52	4
5287	HD 9312	01 26.6	16 28	"	"	"	-2.9 5.0	8 58	9 48	1
- 5288	MW 29 HD 13661	02 08.1	54 04	"	"	015	-3.0 5.0	9 54	11 24	2
- 5289	MW 76 HD 23982	03 44.3	63 "	"	"	"	-3.0 5.1	11 29	00 35	3
- 5290	MWC. 114 HD. 37115	05 31.0	-05 41	" "	"	"	-3.0 5.1	00 35	02 13	4
- 5291	MWC. 159 HD. 50209	06 47.1	-00 10	"	"	"	-3.1 5.1	02 20	03 46	1
- 5292	MWC. 188 HD. 65079	07 51.9	+03 14	"	"	.010	-3.1 5.0	03 52	05 42	2
5293	HD 66602	10 22.6	45 43	"	"	"	-3.1 5.0	05 48	2 42	3

Wed, Nov 30 - Dec 1, 1939 M

Thick clouds at sunset. Stars visible later but loss of 2 mag or more in zenith + very heavy general fog. Considered unwise to open blower.

Thursday Nov. 30-Dec. 1, 1939 H-T. Clouds all night.

Delayed at opening by dec. 9. m. fuse blowing: worked at clamp (see Oct 28-29) before checking fuses.

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Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
						MC SC SW MT ST
E 1h 45	29 05	2	7.00	A5	1-2-1	Nov. 28 +48.0 -16.0 +00.3 +11.0 -0.4
E 12m	55 12	3	7.6	B1e	1-2-1	Not sure if right star ✓ OK.
W 1h 20	62 57	2-1	7.54	A0	1-2-1	K.S.A. Put last on at 7.20 pointer at 25.5
W 31m	16 36	2	7.59	G5	1-2-1	
W 1h 25	54 13	2.	8.6	B(3)ne	1-2-1	
0 00 W	63 16	2	8.1	B3e	1-1-1	hazy. hesitated, then checked carefully
0 00 W	-05 42	2-1	8.2	B5ne	1-1-1	✓ star looked a little brighter at slit,
1 00 W	-00 15	2-1	8.3	B5ne	1-1-1	✓ Dec 4 2 MC +48.5 SC -15.2 SW +98.0 MT -38.5 ST -1.3
0 00 W	+03 06	2-1	7.7	B5ne	1-2-1	✓
0 00 W	45 30	2-3	7.49	K0	1-2-1	K.S.A.
Sun. Dec. 3-4 0h		Cloudy all night				
						Nov. 29 12 MC +48.0 SC -15.0 SW +13.1 MT +07.2 ST -0.5
						Nov. 30 2 +48.0 -15.0 +29.0 -03.0 -0.7
						Dec 1 12 +49.0 -15.2 +40.8 -11.0 -0.8
						Dec 2 10 +48.0 -15.4 +53.1 -20.0 -1.0
Heavy cloud cover				Sat.	Dec 2-3	Clearing briefly at 10.30. Dome pretty wet. Hd

197

Date Monday Dec 4-5, 1939, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
5294	HD 1826	00 17.6	28 55	I-12	astra II	.010L	-7.2°	+1.2°	17 46	18 56	4
-5295	B.D. 63° 0110	00 48.6	63 33	—	—	.020L	-7.2	+1.0	19 06	(19 46)	1

Pointer fell at 22 19
then Pointer at 22.50
lately turned back off. Control
seemed erratic

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
51	50E	29 06	0	7.00	A5	1-2-1	
6	31E	63 44	1	9.0		½-1	Cloud from NW at 17.45 Remained [illegible]
							Remained thick. Closed dome at 20.50 Put on blower. Finally clear at 12° waited awhile, then started to open, sky filling in again waited until 3° sky remaining cloudy with occasional breaks.

		MC	SC	SW	MT	ST
Dec. 5	12	+49.9	-15.6	+35.4	+19.8	-0.2
					Rest	

Date Tuesday December 5-6 1939 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
						Slit	A B			
5296	HD 209993	22 02.2	+44 46	I·12	Astro II	010	-6.7 +1.8	17 15	17 35	2
5297	206212	21 35.5	+45 43	"	"	"		17 37	17 55 ↓ 18 37	3

Thurs. Dec. 7 B-T Rain with occasional showers, [illegible] wind High Wind, partly clear after 2 ", but [illegible] [illegible]

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
35	0 09 W	+44 56	1	6.14	A2	1-2-1	KSA 41 Light clouds.
5		+45 52	1-2	7.56	B9	1-2	" 41 Clouds 18'10"; star lost KS 15

	MC	SC	SW	MT	ST
Dec 7, 12	+50.2	-15.9	+0.6	+13.2	-0.3
Dec. 8 12	+51.0	-16.4	+17.5	+08.9s	-0.3m

Date Fri Dec 8-9, 1939 Hd - B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
~~5298~~	~~HD 3229~~	~~00 30.4~~	~~-01 04~~	~~I-12~~	~~Cortina II~~	~~0.10~~		~~(7.30)~~		~~4~~
5298	HD 11037	01 43.3	03 11	I-12	Cortina II	0.10	-8.5 -0.2	8 32	9 38*	4
5299	HD 29224	04 31.0	27 43	"	"	"	-9.1 -0.7	11 10	2 26	1
5300	HD 47256	06 32.6	27 53	"	"	"	-9.5 -0.7	2 31	(2 30)	2

Stormy till 7.20.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
				6.43	F8		Clouded again while setting – lost image
38*	W 44m	3 23	1	6.78	G5	1-3	* Thick wire 8.50
26	2 44 W	27 47	1	7.20	F0	1-2-1	Clouds at 11.20
38,	1 45 W)	27 51	1	7.26	A2	1-2-1	Clouds ended – grown thicker about 3.30
							Closed up at 4.30

Date Sat. Dec. 9-10 B(for Y) —T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5301	H.D. 210170	22 03A	17 04	I-12	Ortho II.	.010	-5.5 +3.0	17 23	18 15	4
5302	H.D. 219699	23 12.8	30 29	"	"	"	-5.0 +3.5	18 21	19 37	1
5303	H.D. 2054	00 19.7	52 30	"	"	"	-4.6 +3.6	19 48	20 06	4
5304	H.D. 8710	01 20.8	43 11	"	"	"	-4.5 +4.0	20 11	21 49	2
5305	H.D. 19789	03 05.9	12 40	"	"	"	-4.3 +4.1	21 56	23 56	1

Sky hazy

Pointer at 24.5. Had to reset pointer several times, as needle drifted off scale to the left. Shut off 110V circuit.

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
15	1 04 W	17 14	2	6.98	A0	1-2-1	K.S.A. 90
37	1 15 W	30 40	2	7.44	F0	1-2-1	K.S.A 67
04	1 39 W	52 42	2	5.70	B9	1-2-1	B.S. Sky caused by Rel. circle being moved.
40	1 20 W	43 20	2	7.27	F2	1-2-1	K.S.A. 21 Clouds at 20 45
5	1 43 W	1 46	2	7.22	G5	1-2-1	K.S.A. 71 Light clouds Called 23 45

Closed up partly at 23 55 - Two cloudy towards

Sky later filled in completely clouded.

		M.C.	S.C.	S.W.	MT	ST
Dec. 11	12	+52.1	-16.7	+56.4	+03.6s	-0.1m

Rest

Date Monday, December 11-12, 1939 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
						Set	A B			
5306	HD 214558	22 33.9	+44 40	I-12	Astro II.	010	-10.4 -1.6	17 17	17 57	4
5307	217695	22 57.4	+47 24	"	"	"	-10.5	18 01	19 41	1
5308	743	00 06.7	+47 36	"	"	"	-10.5 -1.6	19 44	20 38	2
5309	5596	00 52.6	+45 03	"	"	"	-10.4 -1.6	20 41	21 47	3
5310	15579	02 25.3	+46 09	"	"	"	-10.5 -1.5	21 49	22 59	4
5311	20277	03 10.5	+31 49	"	"	"	-10.5	23 03	23 53	1
5312	31151	04 48.3	+61 36	"	"	"	-10.5	23 56	00 46	2

Tues Dec 12-13, H-L Partly clear briefly at 6.00 and 7.20, otherwise thick

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
0 23 W	+44 52	0	6.95	F8	1-2-1	KSA 42
1 44 W	+47 36	0	7.50	A0	1-2-1	" 42
1 31 W	+47 48	1	7.30	K0	1-2-1	" 43
1 54 W	+45 15	1	7.25	A3	1-2-1	" 20
1 34 W	+46 18	1-2	7.40	F2	1-2-1	" 22
1 43 W	+31 58	1	7.05	K0	1-2-1	" 47
	+61 37	1-0	7.46	F0	1-2-	" 10 clouds at 00 40 sto [illegible] 46 remaining cloudy. Still thick at 04

		MR	SC	SW	MT	ST
Dec. 12	12	+52.9	-16.9	+04.4	+02.8	+0.1
				Adv 1m		
Dec. 13	12	+54.5	-16.1	+18.7	5.00.8	+0.2
[illegible]	1	+[illegible]3.5	-1[illegible]	+33.0	-0[illegible]	+0.1

Date Thurs Dec 14-15, 1939 Hol. 1 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5313	HD 214588	22 34.2	44 09	I-12	Astra II	010	-12.3 -3.5	5 23	6 43	3
5314	HD 214946	22 36.7	44 29	"	"	"	-12.4	6 45	7 45	4
5315	8671	01 =0.4	42 57	"	"	"	-12.2	7 48	8 18	1
5316	18040	02 48.8	47 56	"	"	"	-12.3	8 22	9 12	
		I-12 focus was 26.23, tilt 20.23						Changed to I-25		
5316F	Focus			I-25	Astra II	010				2
5317	42 Cam HD 48879	06 40.5	77 41	I-25	Astra II	010	-12.0 -3.5	10 40	10 54	3
								10 54	11 09	
								11 09	11 23	
5318	"	"						11 24	11 38	4
							-12.1	11 38	11 52	
								11 52	0 06	
5319								0 07	0 21	1

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
W1h 20	44 21	1	7.01	A0	1-2-1	K.S.H. Passing clouds — most of Tonight
W2h 20	44 41	1	7.26	A5	1-2-1	
W 9m	43 06	1	6.58	F8	1-2-1	
E 25m	48 05	2	7.26	A2	1-2-1	
Outside	Thin haze				no filter 4/4	Tilt 23.15 — Set / Focus: 1 — 23.3; 6 — 23.5 ← good.; 9 — 23.7
					1 filter	Set
	67 37	1-2	4.87	B3	8-3	1
		2-3			8-8	6
		2			8-8	9
		2-3			8-8	1
					8-8	6
					8-8	9
					8-8	1 — [illegible]

Date Thurs Dec 14-15/34 Hd—T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5719 cont'd	42 Com. HD 48879	06 40.5	67 41	D-25	Astra II	.010		0 21	0 35	
								0 35	0 49	3
5720							12.1-35	0 49	1 0 03	2
								0 03	0 17	
								0 17	0 31	
								0 31	0 45	
5721								0 45	1 59	3
								1 59	2 13	
								2 13	2 27	
5722							12.6	2 37	2 51	4
								2 51	3 07	
								3 07	3 25	
5723	HD 98009	9 01.9	52 00	"	E-33	.010	12.2	3 32	4 30	1
5724	49928	10 37.4	57 43	"	Astra II	.010	12.2	4 33	5 13	2
5725	110462	12 37.2	63 16	"	"	"	12.1	5 40	7 00	3

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
35			2-3	4.67	B3	8-8	6-
44						8-8	9+
02	do					8-8	1
15						8-8	6 (left shutter closed)
1						8-8	6-
45						8-8	9+
						8-8	1
7			2-3			8-8	6-
						8-8	9+
						8-8	1
7			2			8-8	6-
25	?		2			8-8	9+
	0 40 W	51 48	2	4.62	A3p	10	
	0 07 W	57 24	2	5.17	B9	4-4-4	
	0 49 E	63 01	2	5.42		4-4-4	

overlapping. only 2 exp. on plate

All exposures overlapping

Fri. Dec 15-16 H-B Cleared at 1.00 but soon filled in again. Clear several times later. Cloudy 4.15

		HC	SC	SW	HT	S.T.
Dec. 15	12	+54.7	-17.1	+47.5	-01.0	+0.0
Dec 16	16	+55.4	-16.2	+47.7	-2.7	+0.1

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Friday – Dec 15-16, 1939 M – snow in evening

Date ~~Saturday December~~ 16-17, 1939 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
	Cloudy most of day; partly clearing briefly at sunset. Part clear again 8^15 – 8^45, but hazy, and gradually filling in again								
	Tuesday – Dec 18-19, 1939 Mc Cloudy all evening								
	Tuesday, December 19-20, 1939 H-B Cloudy + rain all evening								
Wed Hd-L. cloudy	Thursday Dec 21-22 39 – Partly clear 1-2.30 then filling in with snow flurries. Still thick at 4								

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	Very mild with swirls.						

		MC	SC	SW	MT	ST
Dec. 18	12	+56.9	-16.7	-01.6	+02.4 s	+0.0 m
20	12	+58.2	-15.7	+23.4	-01.0	+0.0
21	12	+58.3	-15.1	+35.4	+03.0	-0.1 m
22	12	+59.6	-14.5	+49.7	+00.2	-0.1 m

Date Friday Dec 22-23, 1939, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
-5326	BD 63°0110	0 48.6	63 33	I-12	Ad+II	.020	-11.7	-2.9	18 15	21 37	4
5327	HD 23477	3 40.4	43 46	—	—	.010	-12.1	-3.2	21 43	22 41	1
5328	37646	5 35.0	29 26	—	—	—			22 49	23 51	-2
-5329	BD 8°1402	6 29.3	8 54	—	—	.020	-12.3	-3.4	24 06	03 40	-3

Changed over to 12-inch. 25 inch at focus 23.5, tilt 23.15.
Set 12 inch to focus 26.23 tilt 20.23.
5325 F_1 – tufnol at temp A 0 −11.8 B 0 −2.9 focus should be shorter.

Starting Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
							set focus to 26.15
37	2 32 W	63 45	2	9.1		½-1-½	Pointer set to 18.65. (R.A. Clamp not working)
4	44 W	43 53	2	7.05	B9	1-2-1	light clouds forming overhead at 21.40
51	0	27 25	2	6.75	A	1-2-1	
40	2 55 W	8 51	2	9.0	A	½-1-½	light clouds; thick 01^{25}-01^{45}, some clouds. clouding toward end of exposure. Still thick at 5^{00} closed up.

Date Sat Dec 23-24, 1939 Hd - T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5330	HD 216562	22 48.8	30 14	I-12	Extra II	010	-12.1 -3.4	17 49	17 33	4
5331	HD 24701	03 50.5	43 02	"	"	"	stopped-re-oct -13.5 -4.5	21 42	22 42	1
5332	HD 36425	05 26.5	31 48	"	"	"	-13.4	22 48	23 48	2
5333	HD 43180	06 04.2	14 52	"	"	"	-13.6 -4.8	23 52	1 20	3
5334	54901	7 05.6	15 30	"	"	"	-13.7 -4.8	1 24	3 [illegible]	1
5335	84004	9 37.0	32 44	"	"	"	-13.7 -4.8	3 06	4 [illegible]6	2
5336	102555	11 43.2	28 54	"	"	"	-13.7 -4.8	4 31	[illegible]	3
5337	116004	12 45.4	32 04	"	"	"	-13.7 -4.8	6 04	[illegible]	4

Sun Dec 24/39 T - Mostly cloudy

Clouding up at sunset, then clearing. 216

RA clamp stiff not moving.

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
33.4	W 2h 31m	30 25	0	7.52	A2	1-2-1	Some clouds throughout. Very cloudy at 19.30
42	W 39m	43 08	0	7.20	A0	1-2-1	
48	W 9m	31 48	0	7.32	A2	1-2-1	
2	1 03 W		0	7.27	B9	1-2-1	
3	1 42 W	15 26	0	7.54	F0	1-2-1	
2	0 37 W	32 31	0	7.52	F2	1-2-1	Clouds completely closed
3	0 06 W	28 44	0	7.55	F2	1-2-1	
4	0 01 E	27 48	0	5.42	A2	1-2-1	PSC - Partly cloudy 610 - 645

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Date 9 p.m. Dec 25-26, 1939 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5338	H.D. 84607	09 41.3	02 15	I-12½	Astra II	Set .010	A. B. -13.2 -4.4	03 35	04 09	1
5339	" 99607	11 22.5	45 07	"	"	"	-13.2 -4.4	04 20	06 40	3
5340	" 101620	11 36.5	41 48	"	"	"	-13.3 -4.4	05 46	07 12	4

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
							Clouds at 11.20, thicker at 11.40 quite thick from 12.00 – 1.30, breaking, clear at 2.10 with occassional clouds thereafter.
							Pointer set at 17.5
	0 24 W	02 02	0	6.03	F2	1-2-1	B.S.C. -no comparison
	0 14 W	44 52	0	7.14	F0	1-2-1	K.S.A.31 [illegible]
	1 36 W	41 33	0	7.26	F5	1-2-1	" "

Date Tuesday, Dec 26-27, 1939 M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
							-14°.3	-5°.1			
-5341	BD 63°0110	0 48.6	+63 33	I - 12	Astra II	.020 L	-14°.8	-5°.8	17 55	21 23	1
5342	HD 34021	5 09.2	+12 25	—	—	.010 L	-15.0	-5.8	21 33	23 45	2
5343	BD 8°1402	6 29.3	+8 54	—	—	.024 L	-15.3	-5.8	23 58	02 30?	3
5344	H.D. 100518	11 29.0	11 35	"	"	.010 L	-15.0	-5.8	04 15	05 27	4
5345	" 105266	12 02.1	13 33	"	"	"	-15.0	-5.7	05 35	07 05	1
	Focus Test				Outside	through	hole				

R.A. Clamp still wont work. Waste quite a bit of time on stars ~~taper~~ well E.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
23	33 W	63 43	1	9.1		½-1-½	Put on Rest in sheet by ~~rabbit~~ 19.10 Pointer at 16.40
45	36 W	12 25	1	7.5	A0	1-2-1	
3	2 01 W?	08 50	1	9.0	A	½-1-½	R.A. clamp. going again. haze, star lost in haze at 2.30. sky mostly covered with light cloud and haze until 4.00, seems to be thinning out.
2	0 01 E	11 20	0-1	6.58	A2	1-2-1	Haze, light cloud
1 5	1 04 W	13 20	0-1	6.98	B9	1-2-1 10/10	Haze,

Date Local Dec 27-28, 1939 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5346	HD 216562	22 48.8	30 14	I-72	Astra II	0.10	-20.7 -10.5	17 37	18 47	2
5347	HD 9312 MW 49	01 26.6	16 28	"	"	"	-19.7 -10.5	18 55	19 53	3
5348	HD 15472 MW 83	02 24.4	70 30	"	"	"	-19.7 -10.4	20 06	21 46	4
5349	HD 26906 M.W.C 159	04 10.1	45 58	"	"	0.15	-20.0 -10.4	21 ~~24~~ 29	00 09	1
5350	H.D. 50209	06 47.1	-00 10	"	"	"	-10.5	00 24	01 52	2
5351	H.D. 56222	07 11.1	31 53	"	"	.010	-19.7 -10.5	02 02	02 50	3
5352	" 76292	08 56.1	40 35	"	"	"	-19.6 -10.5	02 53	03 42	4
5353	" 90602	10 22.6	45 43	"	"	"	-19.6 -10.5	03 32	04 16	1
5354	" 99302	11 20.5	27 19	"	"	"	-19.6 -10.5	04 29	05 24	2
5355	" 115723	13 13.9	34 37	"	"	"	-19.6 -10.5	05 31	06 23	3
5356	" 120048	13 42.0	39 00	"	"	"	-19.6 -10.5	06 29	07 09	4

RA clamp not working.
Twice during first half star suddenly went off ⊥ by about 1½ min. clamp slipping?

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
472	W 2m 01	30 25	1-2	7.52	A2	1-2-1	
532	W 30m	16 38	2	7.57	G5	1-2-1	
46	W 1 25	70 40	2	8.0	B4m	1-2-1	Old trouble with and again
09	2 02 W	46 05	2	8.6	B(3)p8	1-1-1	set 9 look fainter (north) comp. of pair.
52	1 09 W	-00 14	2	8.3	B(3)he	1-1-1	
5	1 43 W	31 47	1	6.63	B8	1-2-1	KSA 51
22	0 36 W	40 25	1-2	6.22	F2	1-2-1	B.S.C.
6	0 02 E	45 31	2	7.49	K0	1-2-1	KSA. 30
9	0 08 W	27 03	2-1	7.21	A2	1-2-1	" 55
0	0 46 E	34 25	2	6.98	K0	1-2-1	B.S.C. guiding bad
08	1 27 E	38 48	2	7.00	K0	1-2-1	"

S
W E
N

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Date Thurs Dec 28-29 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.	
~~5357~~	HD 9312	01 26.6	16 28	I-12	Extra II	010		18 05		1
		Friday Dec 29-30		H-T		Cloudy all night				
		Sat morning Dec 30-31		H-T						
									M.	

Delayed: Guessed wrong sign for clock correction (it is now +0m.4 for Str. of Olen) p. 224
7 index badly aligned.

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
			7.59	G5	1-	Suddenly thick at 18:15 Cleared 19.20
						Sunday, Dec 31
						Set double handed watch
						M T 0.0
						Sid Hands +10s
						Sunday Dec. 31 B. Clear in early evening but high winds. Snow at 7:30.
Cloud came up just before sunset - remained thick						Sunday, Jan 1/19 HAPPY NEW YEAR
Very shaky until 2 or 3 hr						(Checked and wound watch at 17
Thick again at 21.00 hr						based on standard clocks having unfortunately following are correct
						Jan 1, 17 B.C., M.T. (Hg 1) -16s, S.T. (H 1) 0m

Date Tuesday, January 2-3, 1940 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
5357	H.D. 222642	23 37.3	+44 13	I-12	Astra II	set 010	(-19.5?)-10.3	17 35	(19 00)

Clouded over just after sunset, clearing (?) 17 30

Light clouds 17 45 – 18 05, then thick

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS						
									MC	SC	SW	MT	ST
9 00		+44 25	2	7.18	F0	1-2-	1940	Jan. 2	12	+113.6	-18.7	-23.5	-13.9s -0.3m
								Jan. 3	12	+116.7	-18.0	Reset -06.7	-13.0s -0.2m
								Jan 4	12	+118.0	-18.2	+01.0	-11.0s -0.3m
								Jan. 5	13	+119.8	-18.5	+23.6	-18.0s -0.3m
								Jan 6	12	+120	-18.2	+37.9	-20.0 -0.3m

[illegible] at 8 evening. Snowing quite hard at 22.00 hrs

Date Sat Jan 6-7, 1940, Hd -1 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
5358	HD 5638	00 53.0	46 31	I - 12	Astra II	010	-16.2	-6.6	17 32	18 12	3
5359	8671	01 20.4	42 57	"	"	"		-6.9	18 17	18 51	2
5360	18040 fainter	02 48.8	47 56	"	"	"		-7.0	18 59	20 35	1
5361	24701	03 50.5	43 02	"	"	"		-7.0	20 39	21 41	2
5362	38258	05 39.4	47 26	"	"	"		-7.1	21 45	22 55	3
5363	43537	06 11.7	28 02	"	"	"		-7.0	23 02	00 22	4
5364	58244	07 19.7	32 06	"	"	"			00 39	1 29	1
5365	72778	8 29.6	42 56	"	"	"			1 34	2 36	
5366	84004	9 37.0	32 44	"	"	"			2 40	4 30	3
5367	102555	11 43.2	28 59	"	"	"			4 35	5 57	4
5368	109979	12 33.9	45 46						6 03	7 17	

...ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
8 12	W 1m	46 42	1	6.75	A0	1-2-1	
9 5	W 12m	43 07	0	6.58	F8	1-2-1	
9 35	W 27m	48 05	0	8?	A2	1-2-1	fainter Comp.
1 4	W 32m	43 07	0	7.20	A0	1-2-1	
1 55	E 3m	47 25	0-1	7.33	B8	1-2-1	
3 22-7	W 53m	28 00	0	7.42	A0	1-2-1	
1 29			0	6.81	A0	1-2-1	Much trouble with dome turning - relays sticking (!)
2 31	W 1 48		0-1	7.04	A2	1-2-1	
4 1	W 1 31		0	7.52	F2	1-2-1	More trouble with dome turning relays.
5 22	W 1 00		0-1	7.55	F2	1-2-1	
7			0-1	7.43	F2	1-2-1	

		MC	SC	SW	MT	ST
Jan. 8	10	+1 25.0	-18.9	+1 10.3	-09s.0	-0m.3

Date Monday Jan 8-9, 1940, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
5369	BD 63°110	0 48.6	+63 33	I-12	Astra II	.024	-19.0°	-9.5°	17 52	20 32	2
5370	HD 20503	3 12.8	12 28	—	—	.010	-19.3	-9.5	20 38	22 40	3
5371	H.D. 37519	5 34.1	31 18	—	—	—	-19.2	-9.5	22 45	23 15	4
5372	BD. 8° 1402	6 29.3	8 54	—	—	.020	-19.0	-9.6	23 25	02 25	1
5373	H.D. 81995	09 24.1	45 12	"	"	.010	-19.0	9.6	02 33	03 27	2
5374	" 98547	11 15.2	17 52	"	"	"	-19.0	9.5	03 33	04 15	3
5375	" 99004	11 18.5	17 42	"	"	"	-19.0	9.5	04 20	05 12	4
5376	" 100518	11 29.0	11 35	"	"	"	-19.0	9.6	05 16	05 52	1
5377	" 140139	15 37.0	44 11	"	"	"	-19.0	9.5	06 01	07 11	2
	Focus Test			Outside through haze							

pointed at 13.00

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
32 2	33 W	63 44	1-2	9.1		½-1-½	
-03	18 W	12 34	2	7.59	B8	1-2-	considerable trouble with R.A. setting clamp sticking causing star to drift off. better after
18	31 W	31 18	1	5.91	B8	1-2-1	first lots of rain. Dec also refused to work sometimes. dome trouble
0.25	2^{46} W	8 51	2	9.0	A	½-1-½	trouble with dome turning.
37	0^{54} W	45 00	2	7.26	A5	1-2-1	K.S.A. 29
4 15	0^{08} E	17 37	2	6.87	A0	1-2-1	K.S.A. 79
5 2	0^{45} W	17 28	2-1	7.09	A2	1-2-1	" "
5 22	1^{15} W	11 20	2-1	6.52	A2	1-2-1	" "
"	1^{32} E	44 02	2-1	7.40	F0	1-2-1	K.S.A. 35 Set 2½
						10/10	Set 7½

	MC	SC	SW	MT	ST
Jan. 9 12	+1 26.9	-19.1	+1 24.4	-06.8	-0.1

Date Tuesday, January 9-10, 1940 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5378	HD 743	00 06.7	+47 36	I-12	Astra II	Set 010	-14.3 -5.3	17 53	18 47	3
5379	9800	01 30.7	+47 49	"	"	"	-5.3	18 51	20 21	4
5380	21970	03 27.4	+75 24	"	"	"	-5.3	20 35	21 10	1
5381	31151	04 48.3	+61 36	"	"	"	-5.3	21 16	22 36	2

Weds Jan 10-11 Cloudy Hd-L

Fri Jan 12-13 Hd-B. Cloudy.

Saturday - Jan 13-14 1940. - M

Stars appeared faintly through thin cloud and by 19.30. Remained thick

Monday, Jan 15-16 1940 - M

Heavy snow flurries interspersed with 15 min. fairly well after 21.00 hr but wind rising. at 22.00

Clouds + haze at sunset; gradually clearing.

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ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
47	1 34 W	+47 48	0-1	7.30	K0	1-2-1	Haze at start. Seeing + mirror both poor but improving
21	1 44 W	+48 00	2-3	7.54	F0	1-2-1	Clouds, star gone 19h31m – 19h45m; thin thick haze
	0 35 W	+75 32	3	7.16	G5	1-2-1	Clearing slowly; light haze. Thick again 21h02m
3	0 41 W	+61 37	3-2	7.46	G0	1-2-1	Haze, Star lost much of time.
							Plate probably not good.
							Thick; wind becoming south; light snow. Cloud at 23h

		MC	SC	SW	M.T.	S.T.
Jan. 10	12	+1 29.0	-19.0	-21.1	-05.8s	-0.2m
Jan 11	10	+1 30.0	-19.0	adv 2m -08.0	-08.5	0.0m
Jan. 12	12	+1 32.5	-19.0	+05.9	-011.7s	-0.3m
Jan. 13	10	+1 34.5	-19.1	+16.0	-12.2s	-0.0m
Jan 15	12	+1 37.5	-19.7	+42.9	+01.2	-0.2

		Jan 15-16 Wind until 3h wind still howling around building doors at
15 mm		clear spots after sunset. Cleared
00		considered wind too strong to risk opening. Still strong at 23.0h. to 01h.

Date Tuesday, January 16-17, 1940 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5382	HD 222642	23 37.3	+44 13	I-12	Astro II	Slit 010	-10.7	17 46	18 52	3
5383	15579	02 25.3	+46 09	"	"	"	-10.6	18 56	20 06	4
5384	17922	02 47.7	+42 11	"	"	"	-10.6	20 10	22 20	
5385	" 74057	08 36.6	+32 13	"	"	"	-14.3	01 25 *	03 40	2

Temp out 12.4

Temp left +8° at 17°
+1° at 20°

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
						Trouble with telescope drifting by light wind.
						MC SK SW MT$_s$ ST$_m$
2 36 W	+44 24	0	7.18	F0	1-2-1	Jan. 16 12 +1 38.7 -20.0 +57.8 +02.7 -0.2
1 02 W	+46 19	0	7.40	F2	1-2-1	
3 03 W	+42 20	0-1	7.43	F5	1-2-1	Light clouds 20^{15} — dark 20^{30} — 21^{15}. Star very well centered. Probably no good.
						Low. Cloud of 10^{30}.
						Lamps in dome — 7
2 26 W	+32 04	000	7.54	F8	1-2-1	Counter 9.8 seeing terrible image a bit flat. * period went off from 2^{35} - 3^{20} start off slit from 2^{35} - 3^{26}.
						Dome turning gave out 0 hours. Dr Hagg, he came up. After experimenting a while put rubber bands on keys relays to cut them. Power gave out twice closed by hand and gave it up.

Date Wed Jan 17-18, 1940 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.
5386	HD 22766 N	03 34.5	28 27	I-12	[illegible]	0.10	-13.5 B	19 57	20 37
5387	HD 29224	04 31.0	27 43	"	"	"	-13.5	20 42	22 44
5387 F1	[illegible]	[illegible]	[illegible]	Jan 18-19, 1940		H-B			
				I-25	[illegible]	0.10			

Clearing about 19.00

Pointer at 9.8

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
17	W 28m	28 34	2	[illegible]	A0	1-2-1	Some clouds MC SC SW MT ST Jan. 17 12 +1 40.1 -18.8 +1 12.9 +03.0° -0.1m
[illegible]	W 1h 41	27 47	2	7.38	A0	1-2-1	Thick most of time Snowing at 22 44 Closed

	MC	SC	SW	MT	ST
Jan. 18 10	+1 41	-17.7	+1 31.3	+05.0°	

12-inch Slide 26.17

Filt 20.25

[illegible] Filt 23.15 [illegible] Slide

1 23.3

6 23.7

9 23.5 ← good.

[illegible] 41-4, no filter

Date Thursday, January 18-19, 1940 H-T 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	B			
- 5388	HD 13161	02 03.6	+34 31	I-25	Process	010	-12.7	18 20	18 50	3
	"	"	"	"	"	"	-12.7	18 52	19 18	
- 5389	HD 15089	02 20.8	+66 57	"	"	"	-12.8	19 25	19 45	1
- 5390	" 28319	04 22.9	+15 39		"	"	-12.8	20 54	21 29	4
	28319						-12.8	21 25	22 06	
	28319						-13.0	22 06	22 32	
- 5391	56986	07 14.2	+22 10	"	"	"	-13.0	22 37	[illegible]	
	56986	"			"	"	[illegible]	23 20	[illegible] 50	
	56986	"	"		"			23 51	[illegible] 25	

Temp at 10.3

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		no filter	REMARKS
							Delay in start due to changing cameras, and to finding my finger pointing for bat.
3	0 16 W	+34 42	1?	3.22	A6	7-7-7	For B. Image very small, but on winding it was
19		"		"	"	7-7-7	almost impossible to get star on slit, that with an
45	1 52 W	+67 07	1-2	4.7	A5p	7-7-7	but windscreen or stuffed was afraid to turn it off for fear light
	0 31 W	-15 43	1-2	3.9	F0	7-7-7	for B. N.B. the star triple
	1 11 W		2	3.9	F0	7-7-7	Wind
	1 39 W		1-2	3.9	F0	7-7-7	"
	0 [illegible]	+22 03	2	3.79	F0	7-7-7	for B Increasing wind Clouds 23[00] -
	0 06 W		2	3.79	F0	7-7-7	Light clouds most of the
	0 52 W			3.79	F0	7-7-7	Clouds
							Clouds thick at 10 - high wind Clouds at [illegible]
							Still thick at 4:00

		MC	S.C.	SW	MT	ST
Jan. 19	12	+1 42.9	-18.0	-08.9 Adv.	+09.6	-0.2 Rect

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Date Friday Jan 19-20, 1940, M-B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
-5392	σ Per.	3 26.3	47 47	I-25	Astra II	.007	-14.0	19 10	19 16	2
-5393	—	—	—	—	—	—		19 17	19 23	3
5392	—	—	—	—	—	—	-14.0	19 35	19 50	2
5393	—	—	—	—	—	—		19 51	20 16	3
5393	—	—	—	—	—	—		20 06	20 46	3
5392	—	—		—	—	—		20 47	21 31	2
-5394	β Aur.	5 55.1	44 57	—	—	—		21 49	21 54	2
-5395	—	—	—	—	—	—		21 56	22 02	4
-5396	—	—	—	—	Brass	—	-14.1	22 04	22 24	1
							Light clouds in S.W. Thicker by 22.30			

Sat Jan 20-21. Hd-T. Clouds, thick haze, thin haze, more periodically
Have up at 22.35 — Hd.
Dittt-T

Cloudy after sunset then cleared.

Wind vibrated telescope so very difficult to keep image on slit

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	47 45	0	5.55	Ko	12	Pointer at 9.18 setting 2 filter out
	—	0	—	—	10	2 one in
	—	1-0	—	—	5-5	5 —
	—	1-0	—	—	5-5	5
	—	1-0	—	—	6-6	8
	—	1-0	—	—	6-6	8
	44 56	1	2.07	Aop	—	Exps 40 2, 80 2, 160 2, 40, 80, 161 settings 2, 3, 6, 25, 8
	—	1	—	—		
0 OSW	—	1-0	—	—	20	Jan. 20, 12 MC +144 SC −18.3 SW +03.7 MT +14.0 ST 0.0

Wind much stronger
Image moving all over mph.
Thought advisable to close dome.

Closed dome at 22.30

Plates 5393 and 5395 taken to Toronto for special widening.

temp. +2° F

Blower would not start
left fuses out

Date Monday, Jan 22-23, 1940 M Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
Cloudy all day - cleared about an hour after dark.											
Changed to 12" camera 25" at focus											
5396 F,				I - 12		.010	-15.0°	-6.0°			
5397	H.D 32419	4 58.0	+41 09	—	—	.020 L	-15.3	-6.0	20 51	22 17	1
Tuesday Jan 23-24, 1940 H-L											
Partially clearing at sunset, but thick haze filling in by dark, and only more than the stars went at morning.											
Wed Hd-L Same sort of thing as above but worse.											

Pointer at 15.92

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
						Jan. 22 12 MC +1 48.0 SC -18.5 SW +31.7 MT +09.0 s ST -0m1 ~~+0.2~~ Reset
26.5	tilt	23.15				
	set	12" to	focus	12 9	26.15	tilt 20.25.
						focus just right.
1 04	41 11	1	8.9	A0	½-1	light cloud over most of sky at start
						clouds continued to become
						thicker. Image gone at 22.00
						Call 21 51 end of exposure
						Cloud stone 22.30.
						Jan 23 12 +1m 50s.1 -18s.7 +45.6 +11s.0 -0m.0
						24 13 +1 52.3 -18.6 +57.4 +10.6 -0.0
						25 10 +1 54.0 -18.3 +68.7 +10.0 -0.0

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Date Thurs Jan 25-26, 1940 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.	
							A B			
5398	HD 9312	01 26.6	16°28	I-12	Astra II	0.10	-15.3 -6.3	19 02	19 30	2
		Partly clear with frequent snow till 3 30, then thick.								

Clouds + snow earlier

set pointer 15.8

ng Time .S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.		REMARKS
50	approx 2h W	16 37	0	7.59	G5 1-3	Clouds from first. Thick at 19.30
						Snow later. Closed up 22.30
						RA clamp walking again.

		MC	SC	SW	MT	ST
Jan. 26	12	+1 55.9	-18.7	+1 26.8	+13.4 s	+0.1 m

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Date Friday Jan 26-27, 1940 M-B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A B	Starting Time E.S.T.	Ending Time E.S.T.	
			Light cloud and snow after sunset. Cleared shortly							
							-20.1 -10.6	-		
5399	HD. 70566	8 17.6	32 38	I - 12	Astra B	.010 L	-20.2	23 27	1 07	1
-5400	HD. 92109 UV Leo	10 33.0	14 47	"	"	.025 L	-20.1 -10.7	1 27	5 01	2
5401	H.D. 108714	12 24.3	17 53	"	"	.010	-20	5 10	7 10	4

Pointer at 12.00

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
before 21.00 hrs and started to open but heavy bank of cloud came up from NE. Cleared again at 23.00 hrs						
0 51 W	32 28	0	7.56	A 3	1-2-1	
2 31 W	14 34	0	9.87	G 5	½-1-1h	Had trouble with R.A. slipping during exposure. Lost star for 20 min? when telescope slipped 2 min. in R.A. Moved twice.
2 40 W	17 38	0-1	7.52	A 0	1-2-1	Clouds

	RC	MDC	SW	MT	ST
Jan. 27	-18.6	+1 57.7	+1 37.9	+20.4 s	+0.2 m

Date Saturday, Jan 27-28, 1940 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5402	HD 9312	01 26.6	+16 28	I-12	Astra II	010	-12.6	18 15	20 15	4
5403	22521	03 32.2	+42 13	"	"	"	-12.6	20 20	21 30	1
5404	34255	05 11.0	+62 33	"	"	"	-12.7	21 36	22 16	2

Monday, Jan 29-30, M cloudy all evening

Clear all day; clouding at sunset, ~~gradually~~ ~~thickening~~ after dark.

Temp at 10.5

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ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	2 54 W	+16 36	3	7.59	G5	1-2-1	To Hd. Haze. Star gone 18^{50} – 19^{20} Star gone soon of time thereafter
	2 22 W	+42 20	3-2	7.51	G0	1-2-1	Haze
	1 09 W	+62 34	2	6.95	K2	1-2-1	Lightning at 21^{55} More clouds.
							Powerful lightning with some lightning, cloud of 23
							Mostly thick last half

		MC	SC	SW	MT	ST
Jan. 29.	12	+14.2 Reset Added 0.2	-18.0	+09.7 Adv 2^m	+26^s.2	+0^m.2
Jan. 30	12	+15.3	-18.1	+20.7	+27^s.0	+0^m.2

Date Tuesday, January 30-31, 1940 H-H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5405	HD 9312	01 26.6	+16 28	I-12	Astra II	Set 010	-7.0	18 02	19 12	3
5406	20367	03 11.5	+30 46	"	"	"	-7.0	19 26	20 06	4
changed 5-3-25 5406 F1	Focus			I-25	"	"		outside the lane		3
	Tel changed from HD 20367 to 42 Cam between focus plates									
5406 F2	Focus			"	"	"		"		
5407	42 Cam HD 43879	06 40.5	67 41	I-25	Astra II	010	-4.4	21 17	21 33	
								21 34	21 50	
								21 52	22 08	
5408	"	"	"	"	"	"	-5.3	22 09	22 25	3
								22 26	22 42	
								22 43	22 59	

Over

Temp set

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
12	2 03 W	+16 37	0	7.59	G5	1-2-1	for Hd
36	1 12 W	+32 52	0-1	7.09	G0	1-2- no filter	KSA 47. Dome lost became dome turning dead
		Tilt 23.15	7 vers 23.3 set		1	4/4	Dome turning dead again after first focus plate. It turned it from behind. Later it worked once but stuck on (no harm)
			23.7		6	best but not good	
			23.5		9		Had shut off heat at 20.10. at 21:20 temp was -4.4 despite open door during focusing. Must have run up between 19.40 and 20.10.
		24 43 15	2 vers 23.7 set		1	4/4 good	
			24.1		6		
			23.9		9		note anomaly in focusing
		67 37	1	4.07	B3	1 filter 10-10	set 1 } focus at 23.9
						10-10	" 6 }
						10-10	" 9 } focus at 23.7
						10-10	" 1
			2			10-10	" 6
						10-10	" 9

Date Tues Jan 30-31 Cont'd. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
- 5409	42 Com Cont'd.	"	"	I-25"	"	"	-5.3	23 00	23 16	4
								23 17	23 33	
								23 34	23 50	
5410	"	"	"	"	"	"		23 51	00 07	1
								00 08	00 24.	
5411	H.D. 142926	15 52.2	42 51	"	Process	"		03 30	06 20	2

Thursday Feb. 1-2, 1940 H-T

Cloudy with snow.

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
16		67 ·37	2	4.87	B3	10-10	Set 1	Finder came down on tele ladder with enough force to dislodge eyepieces. Replaced it and everything seems O.K. — Hd
.33						10-10	" 6	
50						10-10	" 9	
07						10-10	" 1	Can only operate dome from below
27	W 7h		2			10-10	" 6	Set dome E at 00.30 for 142926 Cata.
								Points set at 14.0
30	12 E	42 42	2	5.56	B9e	No filters 7-7-7		

		HC	SC	DW	HT	ST
Jan. 31	12	+16.8	-18.2	+35.6	+34.4 s	+0.4 m
Feb 1	10	+18.0	-19.4	+48.1	+38.0	+0.3 m

Date Wed Jan 31-Feb 1/40 Hol- Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
- 5412	γ Cas HD 5394	00 50.7	60 11	I - 25	Process	0.10	-3.7	18 07	18 23	1
								18 23	18 29	
								18 30	18 32	
- 5413	o Cas mw8 HD 4180	00 39.2	47 44	II	"	"	-3.8	18 39	20 0	2
- 5414	42 Com HD 148879	06 40.5	67 41	"	Astra II	0.10	-3.5	20 25	20 55	3
								20 55	21 29	
								21 29	22 19	
- 5415	"	"	"	"	"	"	-3.4	22 20	22 54*	4

Pointer at 18.3

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg.	Mag.		REMARKS
23			2	2.0	Bop	nobilities 10-10	set 1 Dome turning consistently,
29						10-10	" 6 Cas. focusing not working
32	W 2h02	60 21				20	" 9 consistently,
0.2	W 3h51	47 55	3	4.7	B4nep	10-10	Observed Zodiacal light - as far as Sothern at 19.00
55				4.87	B3	Hilte 10, 10	set 1 Clouds.
1 29						10, 10	" 6 "
2 7						10. 10	" 9 More "
* 57	W 33m	67 35	3			10, 10	set 1 " * Call and 22.40
							Finally, thick closed 23.15

		MC	SC	SW	MT	ST
Feb 1	10	+18.0	-19.4	+48.1	+38.0	+0.3
Feb 2	12	+28.5	-18.0	+134.5	-20.5	+0.0

Reset.

Date Friday - Feb 2-3, 1940, M - B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
	4.30 p.m.	Changed over to		12-inch.						
							A B			
5415 F_1				I-12	Astra II	.010	-21.6 -11.8			4
-5416	UV Leo. HD. 92109	10 33	14 47	I-12	Astra II	.025	-19 -9.3	2 47	6 07	1
5417	HD. 136831	15 17.7	12 56	"	"	.010	-18 -15	6 16	6 50	2
	Sat. Feb 3-4 Thick from sunset on. H-L T									
	Monday Feb 5-6 - Cloudy with fog + light drizzle. H-L									
	Tues " 6-7 Clear for a few minutes at 23.30. Otherwise Thick									
	Friday February 9-10, 1940 H-B Cloudy all evening. Light snow									

Pointer at 13.9

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	25 inch was at		focus			23.7 tilt 23.15
	set 12 inch to		focus			26.15 tilt 20.25.
	base outside				12 9	focus just about right.
						Clouded up at sunset. Remained thick.
						Put blower on telescope again.
4 04 W	1 33	1	9.87	G5	½-1-½	
05 W	12 45	1	6.20	A0	1-2-1	

		MC	SC	SW	MT	ST
Feb. 5	12	+24.9 added 0.5	-18.2	-18.0 Adv 2m	+08s.0 Reset	+0m.0
Feb. 6	12	+25.8	-17.0	-06.3	+07s.2	+0m.1
Feb. 7	12	+26.4	-17.6	+06.6	-00s.4	+0m.1
[illegible]	[illegible]	+27.0	[illegible]	+11.2	[illegible]	[illegible]
Feb. 9	12	+27.9	-17.3	+34.0	-08s.6	-0m.2

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Date Sunday Feb 11-12 1940 B-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.
5418	H.D. 19789	03 05.9	12 40	I 12½	Lantern II	.010	A -9.0 B -0.4	18 21	19 35
	~~28947~~	~~04 24.1~~	~~27 55~~	"	"	"	9.0 0.0	19 41	

Pointer 21.2

ing Time R.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
35	134 W	12 +6	1-2	7.22	G-5	1-2-1	
		~~2 2 2 2~~	~~1~~	~~7.42~~	~~G-5~~		

		MC	SC	SW	MT	ST
Feb. 10	10	+28.1	-17.5	+35.7	-10.8	-0.2

Clouds

Had to open and close shutters by hand. Motor stopped after opening shutters a foot. Overload circuit breaker o.k.; couldn't find trouble.

		MC	SC	SW	MT	ST
Feb. 12	12	+29.0	-17.9	+13.3	-16.7	-03
Feb. 13	14	+29.4	-18.2	+136.4	Reset -17.6	-0.3

Date Tuesday, February 13-14, 1940 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5419	HD 17591	02 443	+63 00	I-12	Agfa II	set 010	to -4.4	18 21	19 31	1
5420	32784	05 00.5	+62 21	"	"	"	-4.4	19 35	20 35	2
								Cal moon 19	↑ 50	
	Wed Feb 14-15/40			4d-L	First half: fairly clear from 8.00 but					

Cloudy most of day, gradually clearing end of afternoon.

Temp set 17.9

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
1 57 W	+63 08	1	7.50	G0	1-2-1	KSA 9 Light clouds.
	+62 33	1	6.88	A5	1-2-1	KSA 10 Clouds exhaust; star invisible much of time

Extremely high wind - same later. Closed up 22^40 Still thick.

		MC	SC	SW	MT	ST
Feb. 14	10	+29.5	-17.8	-24.0	-15.0	-0.5
				Adv 2^m		
Feb 15	12	+30.0	-18.0	-10.0	-15.0	-0.4

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Date Wed Feb 15-16, 1940 Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
5421	HD 9312	01 26.6	16 28	I-12	Astra II	.010	-17.0	-7.5	18 20	19 30	3
- 5422	MWC 114 HD 37115	5 31.0	-5 41	"	"	"		-7.5	19 45	21 01	4
- 5423	MWC 139 HD 44637	6 17.7	15 09	"	"	"		-7.8	21 06	22 40	1
- 5424	MWC 188 HD 65079	7 51.9	3 14	"	"	"		-7.6	22 46	0 26	2
5425	HD 78661	9 04.4	11 58	"	"	"			0 30	1 30	3
5426	91636	10 29.8	9 10	"	"	"	-17.0	-7.4	1 35	1 55	4
5427	107070	12 [illegible]	[illegible] 16	"	"	"			2 04	2 34	2 1
5428	108223	12 [illegible]	+30 51	"	"	"	-17.0		2 43	4 13	2
5429	133161	14 57.9	16 26	"	"	"	-17.0		4 20	5 36	3
5430	148311	16 22.1	11 12	"	"	"	-7.0		5 41	6 41	4

Pointer at 15.0

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
W 3h 22	16 40	1	7.59	G5	1-2-1	
W 50m	-5 43	1	8.2	B5nc	1-2-1	
W 1h 42	15 07	1	7.7	B3e	1-2-1	
N 1 55	3 05	1	7.7	B3nc	1-2-1	
N 1 47	11 48	1-0	6.79	F0	1-2-1	Image unsteady.
W 0 46	8 56	1-0	5.70	A0	1-2-1	Troublesome RA Clamp.
E 0 19		1-0	6.00	A3	1-2-1	Plate holders mixed? (exposures maybe on wrong plate)
W 1 24	30 37	1	7.52	A2	1-2-1	OK ✓
E 0 01	16 16	1	7.55	G0	1-2-1	
E 0 24	16 05	1	7.33	G0	1-2-1	Thermostat stuck during last [illegible] RA Clamp motor not working.

		MC	SC	MT	ST	SW
Feb. 16	12	+31.8	-17.5	-06.8s	-0.3m	+01.5s

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Date Friday, Feb 16-17, 1940, M-B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
5430 F1				I-12	Astra II	.010	-13.4	-4.4	17 00		4
-5431	H.D. 32419	4 58.0	+41 09	I-12	Astra II	.020	-13.6	-4.9	18 51	21 51	1
5432	51418	6 52.2	42 26	—	—	.010	-13.9	-4.7	21 56	22 56	2
5433	50658	6 49.1	46 25	—	—	—			22 59	23 29	3
-5434	92109	10 33.0	14 47	—	—	.025	-13.7	-4.6	23 36	2 50	4
5435	108714	12 24.3	17 53	—	—	.010	-14.0	-4.5	2 58	4 10	1
5436	124586	14 09.4	31 40	—	—	—	-14.0	-4.5	4 47	5 33	
5437	138406	15 26.8	62 05	—	—	—			6 05	6 45	
	Saturday Feb. 17-18, 1940 - H.										
	Changed to	25 inch			12 inch -		tilt		20.25;	slide 26.17	
5437 F1											
F2											

Pointer at 17.34

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
focus 26.12	base altitude				12/9	focus a little too short. Set focus to 26.15.
2 16 W	41 11	2-1	8.9	A0	½-1-½	
1 27 W	42 22	1	6.61	A0	1-2-1	temp. control O.K.
2 03 W	46 20	1	5.75	B8	1-2-1	wind made image very jumpy.
1 42 W	14 33	1	9.9	G5	½-1-½	
1 41 W	17 37	1	7.52	A0	1-2-1	
1 07 W	31 27	1-2	7.25	A0	1-2-1	
0 45 W	61 55	2	6.79	A0	1-2-1	
						Feb. 17 10 MC +33.0 SC -17.2 SW +15.3 MT -0.8 ST -0.2
					no filter in shutter	
2.5" Alt	23.15	Slide	23.5	1	4/4	1 outside the box
Temp -5.7			23.9	6		← focus effect, and 23.3
			23.7	9		
			23.5	0	4/4	2
			23.1	6		← NB. too short. about 23.6
			23.3	9		be about it. [illegible]

Date Saturday, February 17-18, 1940 H-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
5437F3	Focus Test				Agfa II	010	-0.6	17 50		
- 5438	HD 13161	02 03.6	+34 31	I-25	E. Process	Set 010	+1.0	18 35	18 55	1
	"	"	"	"	"			18 56	19 11	
- 5439	28319	04 22.9	+15 39	"	"		+1.2	19 17	19 42	2
	"	"	"	"	"			19 43	20 05	
	"	"	"	"	"		+1.2	20 05	20 24	
- 5440	56986	07 14.2	+22 10	"	"			20 28	20 49	3
	"	"	"	"	"			20 49	21 15	
	"	"	"	"	"			21 08	21 25	
- 5441	78209	09 01.9	+52 00	"	"		+1.1	21 31	22 21	2
	"	"	"	"	"			22 21	23 06	
	"	"	"	"	"			23 07	23 52	
- 5442	79763	09 10.8	+47 14	"	"		+1.4	23 56	1 42	3
~~5443~~	~~80222~~	~~15 29.1~~	~~+04 10~~	"	"	"	~~+1.2~~	~~4 37~~		

Hour Angle End	Declination	Seeing	Ptg. Mag.		no filter		REMARKS
23.4 9 23.8 6 23.6 9	outside the bron				4/4		23.7 about it; 23.6 not bad.
2 20 W	+34 42	1	3.22	A6	10-10	Setting 2	Image very unsteady, for B
2 36 W			"	"	10-10	" 8	
	+15 42	1	3.90	F0	10-10	" 1	F
			"	"	10-10	6	
1 28 W		1-2	"	"	10-10	10	
		2	3.79	F0	10-10	1	B
					10-10	5	
0 21 E					20	9	
1 13 E	+51 50	2	4.62	A3p	10-10	5	Light haze 22^00 — B
		3			10-10	9	Haze (too hazy to Tg 97613)
		3			10-10	1	slit not drawn. Much haze at tat
2 02 W		3→2→1	5.70	A5	10-10		[illegible] but [illegible]
			4.44	A3p	10-		[illegible]
							[illegible]

Date..... 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	Declination	Seeing	Ptg. Mag.			REMARKS
						MC S.C. BW MT ST
						Feb. 19 12 +35.4 -17.4 +42.3 -14.8s -0.4m
						20 12 +36.1 -17.4 (+56.7) -15.6s -0.4m
						-03.3 adv 1m

Date Tuesday - Feb. 20-21, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
					Focus of 12-inch			O. K.	
5443	H.D. 92278	10 34.2	47 22	I-12½	Astra II	.010	A -9.1 B -0.5	01 10	02 54 1
5444	" 99004	11 16.5	17 42	"	"	"	-9.1 -0.5	03 00	04 36 2
5445	" 136831	15 17.7	12 56	"	"	"	-9.1 -0.5	04 40	05 24 3
5446	" 144839	16 02.8	13 36	"	"	"	-9.1 -0.4	05 28	06 34 4

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
	Wiped water out of a number of pockets of the centre piece. Started to open but considered NE wind too strong. Wind increased slightly in strength to 10.00 pm. Seemed to lighten between 11.30 and 12.00 pm. Pointer set at 21.1						
2.14	2^{00} W	47 09	0	7.36	A_2	1-2-1	K.S.A. 30
4.30	2^{58} W	17 27	0	7.09	A_2	1-2-1	K.S.A. 79
6.14	0^{12} E	12 45	0-1	6.20	A_0	1-2-1	K.S.A 83
34	0^{12} W	13 28	0-1	7.52	F_2	1-2-1	K.S.A. 84

		MC	SC	SW	MT	ST
Feb. 21	12	+37.2	-16.8	+10.7	$-15^{s}.8$	$-0^{m}.4$

Date Wed Feb 21-22, 1940 Hel-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.	
5447	MWC 82 HD 264420	04 05.7	41 53	I-12	Extra II	015	-12.0 -3.0	18 43	20 13	1
wrong star 5448	MWC 142 HD 45677	06 23.7	-13 00	"	"	"	+3.1 +0.5	20 22	21 22	2
5449	MWC 189 HD 265176	07 52.4	-1 20	"	"	"	-0.2	21 29	22 59	3
5450	HD 90602	10 22.6	45 43	"	"	D10	-0.3	23 09	00 18	4
5451	" 92728	10 37.4	57 43	"	"	"	-8.8 -0.1	00 25	00 55	1
5452	" 107070	12 13.6	-00 14	"	"	"	-8.8 -0.1	01 03	01 35	2
5453	" 111604	12 45.4	38 04	"	"	"	-8.8 -0.1	01 39	02 09	3
5454	" 112846	12 54.5	-03 16	"	"	"	-8.8 -0.2	02 15	02 45	4
	* " 116568	13 19.3	-04 39	"	"	"				1
5455	" 115271	13 11.0	41 23	"	"	"	-8.9 -0.2	03 00	03 28	1
5456	" 121607	13 51.4	01 32	"	"	"	-8.9 -0.2	03 33	04 01	2
5457	" 127167	14 24.8	01 16	"	"	"	-8.8 -0.1	04 06	04 34	3
5458	" 141378	15 43.7	-03 31	"	"	"	-8.7 0.0	04 41	05 05	4
5459	" 150378	16 35.6	04 25	"	"	"	-8.9 -0.2	05 12	05 40	1
5460	" 160054	17 32.8	30 51	"	"	"	-8.7 0.0	05 45	06 15	2
		Sunday Feb 22-23, 1940				H-T				

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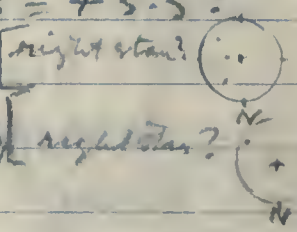
Memory very confused — 6.45 - 7.13 (probably earlier too)
- Cant seem with certainty at 7.17 00 (S.T. 5h02.5)
at which time it appeared to be on horizon.

Pointer at 19.1

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
W 1h 44m	41 56	1	7.6	B3	1-2-1	Near end of exp. Temp B = +3.5!
W 41m	-13 00	1	7.5	B2p	1-2-1	Left down of spec. open [right star?]
W 50m	-01 30	1	8.1	B5	1-2-1	When temp fell to -0.2 reset at 21.4, but relay not working properly [right star?]
0 21 E	45 30	1	7.49	K0	2-1-1	Relay OK now
0 01 W	57 30	1	5.77	B9	1-2-1	R.B.S.C.
0 54 E	-00 28	1	6.00	A3	1-2-1	R "
0 52 E	37 49	1	5.92	A2	1-2-1	R "
0 25 E	-03 29	1	5.87	A0	1-2-1	sh "
			6.10	F2		"
0 01 W	41 09	1-2	5.82	A5	1-2-1	s. "
0 06 E	01 20	1-2	6.02	A3	1-2-1	sh "
0 06 E	01 05	1-2	5.88	A3	1-2-1	v "
0 54 E	-03 40	1-2	5.69	A3	1-2-1	sh "
1 10 E	04 18	2	5.73	A0	1-2-1	sh "
1 32 E	31 47	2	5.82	A0	1-	"
This last log 8h 15m 45s						Controlled heat by hand at start of this night



Locate it in finder field!
* Miss Northcott, check this site, can't

Fri Feb 23-30. Hd-B. Thick haze & light snow at sunset. Then better, then worse. Thick at 20.00

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Date Saturday, Feb 24-25/1940, T-M Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
							A B			
5461	H.D. 102056	11 39.6	29 13	I-12	Astra II	.010	+12°.9 -3°.9	2 11	4 03	3
5462	138406	15 26.8	62 05	—	—	—	-13.0 -4.0	4 12	5 34	4
5463	180553	19 11.9	27 17							

Pointer at 18.14 Had to work best control by hand most of time

Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
							MC SC SW MT ST Feb. 22 10 +38.0 -16.7 +22.3 -14 -0.4 Feb. 23 12 +39.5 -15.6 +38.1 -19.0 -0.4 Feb. 24 12 +41.0 -14.4 +52.9 -26.1 -0.6
							Cloudy with light snow first half of night. Cleared about midnight. Found dome frozen tight. Wasted a lot of time sawing ice from under the wheels on which dome turns
2 20W	28 59	0	6.98	A0	1-2-1		R.A. clamp not working well.
0514	61 54	0-1	6.79	A0	1-2-1		
							set on star well E but R.A. clamp refused to work. Wasted so much time trying to get at it with crank that no time left to get another star
							Can't aurora are visible in N most of time in spite of bright moonlight.

Date Sunday Feb 25-26 B-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.	
5463	HD 28447	04 24.1	27 55	I-12	Astro II	.010	-15.0 -5.8	18 39	20 39	1
5464	-44071	06 14.7	29 25	"	"	"	-15.0 -5.4	20 45	22 21	-
5465	73596	08 34.1	32 19	"	"	"	-15.0 -5.4	22 29	23 19	1
5468 4	79929	09 11.8	27 51	"	"	"	-15.0 -5.4	23 28	00 48	
5467 5	101133	11 33.2	47 23	"	"	"	-14.4 -5.2	00 56	01 50	1

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
39	2 14 W.	27 59	0	7.42	G5	1-2-1	Shutter motor circuit dead. Had to open
21	2 05 W	29 22	0-1	7.19	F0	1-2-1	by hand. circuit OK, trolleys not in contact
19	0 44 W	32 07	0	6.48	F2	1-2-1	Temp. control sticking occasionally
48	1 36 W	27 37	0-1	6.95	F5	1-2-1	K.S.A. 53
50	0 17 W	47 09	0-1	6.59	F8	1-2-1	KSA. 31 light clouds, clouds. sky clouding over after this exposure closed at 4.3 still thicke.

		MC	SC	SW	MT_s	ST
Feb. 26	10	+42	-13.5	+1 21.0	-25	-0m.6

Date Monday Feb 26-27, 1940 M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A	Temperature B	Starting Time E.S.T.	Ending Time E.S.T.	
-5466	TU Mon.	7 48.3	-2 47	I-12	Astra II	.025L	-15.5°	-6.0°	19 39	22 35	2
-5467	HD. 92109	10 33.0	+14 47	—	—	.025L	-15.5	-6.0	22 42	01 30	3
		Tuesday February 27-28, 1940			H-L		Cloudy with light snow				4

Pointer set out 16.6 Controlled temperature by hand

...ng Time ...S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
25 2	0 50W	-2 54	2	9.0	B8	½-1-½	Haze coming up at 21.20
30 3		14 35	3	9.9	G5	½-1.	Haze, light clouds, star gone at 1.30 Waited for 1 hr. then stopped the clock. Closed at 3.00 sky thick

Date Wed Feb 28-29, 1940 Hd-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
							A B			
5468	HD 77190	08 55.9	28 18	I-12	Astra II	010	-10.3 -1.7	22 52	23 22	4
5469	" 85364	09 46.2	-03 46	"	"	"	-10.2 -2.0	23 28	23 54	1
5470	" 91636	10 29.8	09 10	"	"	"	-10.2 -2.0	23 58	01 10	2

Thursday, Feb. 29 - March 1 H-T

Cloudy. Light snow sometime last half.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
22	W 37m	28 06	1	6.09	A5	2-2	g135C	Haze and clouds, early evening
54	C 19 W	-03 58	1	5.70	A0	2-2	g "	
0	C 52 W	08 56	1	5.70	A0	2-2	g "	Haze, thicker, star gone at 00.20-01.00 broken clouds 01.00-01.10, stay thick clouds at 3.00 still thick.

	MC	SC	SW	MT	ST
Feb 29	+45.0°	-13.0°	+0.6°	-27°	-0.6°
Mar. 1	+47.2	-9.5	+15.3	-27.5s	-0.6m

Galvanometer of heat control removed, contacts cleaned, then replaced. Functions OK. Observer watch closely in case of future failure.

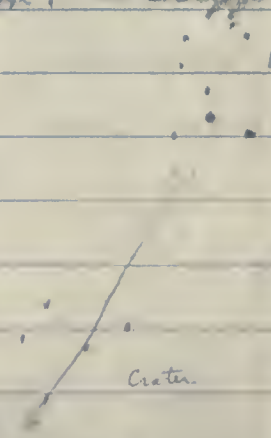
Date Friday, Mar. 1-2, 1940, M – B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
	TU Mon.			tried this star but too faint as just						
-5471	H.D. 65607	7 54.4	-7 14	I-12	Astra II	.025L	A B 3:1	19 58	22 24	3
-5472	92109	10 33.0	+14 47	—	—	—		22 31	1 31	4
	~~B.D. 47° 2134~~	~~1477.3~~	~~+47 33~~	—	—	~~.035L~~	~~11.5 – 2.5~~	~~1 59~~		

Set pointer to 19.18
Galvanometer control not working
controlled by hand

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
at med eclipse						
0 49W	-7 22	2	8.4	A3	½-1-½	temp. cont. of working better at end of the exp.
17W	+14 33	2	9.9	G5	½-1-½	
—	47 22		9	—		Clouds at 3.05 Closed at 3:30

Observed bright meteor (about 0 mag.) at 2:22 A.M. Visible for 10 seconds, reddish orange color, 2° train. Disappeared behind clouds in S.



		MC	SC	SW	MT	ST
Mar. 2	10	+48.1	-08.6	+26.9	-23.7	-0.5

Date Sat Mar 2-3, 1940 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature A B	Starting Time E.S.T.	Ending Time E.S.T.	
5473	HD 34250	05 10.9	28 49	I-12	Astra II	010	-11.0 -2.2	18 54	19 44	2
5474	MWC 174 HD 57386	07 15.9	-8 15	"	"	015	-2.2	19 53	21 33	3
5475	HD 73971	08 36.1	47 16	"	"	010	-2.2	21 39	22 39	4
	HD 76292	Set on this but image too faint								

Sunday Mar 3-4 L
Ice storm in afternoon, changing to mild rain.
continued to rain all night.

Monday March 4-5, 1940 H-L
Cloudy with rain
Thurs Mar 7-8 - Cleared about 3 for ½ hr but clouded in later.

Pointer at 19.7

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
44 2	W 55m	28 50	2	7.17	F0	1-2-1	Trouble again with dome turning (voltage 113.5)
33 3	W 40m	-8 50	2	8.1	B5ne	1-1-1	increasingly hazy.
39 7	W 25m	47 05	2	6.99	G5	1-2-1	" " only 2nd mag showing
				6.22			Closed 23.00

		MC	SC	SW	MT	ST
Mar. 4	12	+50.5	-06.6	+07.2	+09.2	+0m.1
" 5	12	+51.3	-03.7	-00.5	+08°.0	+0m.1
" 6	12	+52.0	-04.0	+12.5	+06.4	+0s.9
" 7	12	+52.0	-02.3	+25.7	-31°.0	Rest +0m.6
" 8	12	+53.7	-02.6	+40.1	-33°.0	+0m.7

Date Friday, Mar 8-9, 1940, M-B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
	This plate probably N.G.									
5476 A	H.D 92109	10 33.0	+14 47	I-12	Astra II	.025L	A — B -3.1	21 37		1
5476										
	Saturday Mar. 9-10, 1940 T-B									
	Changed to 23"									
5476 F				Tilt 23.15		Focus	23.5		9	
	Temp -14.0			4/4 no filter			23.7		6	
				Outside the focus			23.9		1	
						good				

Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
						Cloudy all day. Started to clear about 20.00. Strong wind at first which died down rapidly. Brilliant aurora in N. Zone at 20.30 – Pointer at 18.78 Pole at 21.15 –
	14 33	1-0	9.9	G5	½-1	After first setting dome turning wouldn't work in either direction. Operated by pushing in relay down stairs. Wind became very!! strong and gusty. Considered advisable to close dome at 22.15
						at 22.40 fluctuating aurora over N half of sky. Had died down considerably by 23.30
						0.45 mostly cloudy – closed up. Completely cloudy by 2.00

		MC	SC	SW	MT	ST
Mar. 9	10	+54.3	-02.3	+51.6	-32.6	+0.7

Date Sunday, Mar. 10-11, 1940 B-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.	
5476F,		Focus test		Outside Stereo base				0 23.5 6 23.64 9 23.9	0.1	
5477L	HD 13161	02 03.6	34 31	I-25	Process	.010	-15.5-6.2	19 04	19 30	4
	"	"	"	"	"	"		19 30	19 46	
	"	"	"	"	"	"		19 46	19 58	
5478T	HD 56986	07 14.2	22 10	"	"	"	-15.5-6.2	20 05	20 21	2
	"	"	"	"	"	"		20 21	20 35	
	"	"	"	"	"	"		20 35	20 47	
5479X 60 045	HD 78209	09 01.9	52 00	"	"	"	-16.0-6.4	20 57	21 48	1
	"	"	"	"	"	"		21 50	22 50	
	"	"	"	"	"	"		22 50	23 32	
5480 79	HD 97603	11 09	21 04	"	"	"	-15.5-6.0	23 38	23 48	4
								23 48	23 53	
								23 54	0 01	
5481 0	"	"	"	"	"	"	-15.5-6.2	00 10	00 19	3
								00 20	00 27	
								00 28	00 35	

Rubber strong wind.
Pointer at 15.8

Hour Angle End	Declination	Seeing	Ptg. Mag.		no filter 4/4	REMARKS
						ST set by SC corr. -0.2
		1	3.22	A6	10-10	1 Image jumpy
		2			10-10	5
7 48 W		2			10-10	9
	2 05	3-2	3.79	F0	10-10	1
		2			10-10	5 Seeing variable
0 W		2-3			10-10	9
		2	4.62	A3p	10-10	1
		2-3			10-10	5
1 25 W		3			10-10	9
	20 30	2-3	2.66	A2	10-10	1
					20	5
6 1 E					20	9
	20 50	2	"	"	20	1
					20	5
0 19 W					20	9

Date Sunday March 10-11 Cont. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
- 5482	H.D. 118022	13 29.1	+04 10	I-25	Process	.010	-15.5-6.2	00 40	01 40	3
	"	"	"	"	"	"	-15.5-6.2	01 41	03 01	
- 5483	" 137909	15 23.7	+29 27	"	"	"	-15.5-6.2	03 08	03 32	1
	"	"	"	"	"	"		03 33	04 01	
	"	"	"	"	"	"		04 02	04 36	
- 5484	"	"	"	"	"	"	-15.5-6.2	04 37	04 57	4
	"	"	"	"	"	"	"	04 59	05 38	

Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
	03 57	2	4.99	A2p	no filters 7-7-7	1	Seeing variable all night averaging
0 27 W	"	2	"	"	7-7-7	6	about 2.
	09 17	2	4.00	Fop	10-10	1	
		2	"	"	10-10	5	
0 09 W		2	"	"	10-10	9	
		2	"	"	10-10	1	
1 11 W		2	"	"	10-10	6	
							Mar. 11 16

N.T. ST
$-08^s.1$ $-0^m.2$
Comparison with clocks

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Date Monday, Mar. 11-12, 1940, M-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
							A B			
-5484	ι Cas	2 20.8	+66 57	I-25	Process	.010	-9.7	18 53	20 05	2
	"	"	"	"	"	"	-9.8	20 05	21 45	"
-5485	Boss 2443	9 01.9	+52 00	"	"	"	-19.6 -9.8	21 53	23 13	3
	"	"	"	"	"	"	-9.9	23 14	00 54	"
-5486	Boss 3506	13 29.1	+04 10	"	"	"	-9.9	01 03	03 23	4
-5487	β Cor. Bo	15 23.7	+29 27	"	"	"	-9.9	03 28	04 28	1
	"	"	"	"	"	"	-9.9	04 29	05 45	

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
								Pointer at 12.68
								Reversed telescope for first star.
25	4 41W	67 10	2	4.7	A5p	No filters 7-7-7		Setting 2h Filters out on comparison. Fairly high wind makes image vibrate.
45	6 22W	"	2-1	"	"	7-7-7		Setting 7½
2	1 10W	51 50	2	4.6	A3p	7-7-7		Reversed telescope.
54	2 51 W	"	2	"	"	7-7-7		High wind coming up at 23.20. Image very punctured
23	0 54 W	+03 56	2-1-0	4.99	A2p	7-7-7		Seeing poor.
35		+29 17	1-2	4.00	F0p	7-7-7		2½ Seeing better wind dying away.
45	1 [illegible] W	"	2	.	..	7-7-7		7½

			MC	SC	SW	MT	ST
Mar.	12	12	+59.3	-01.6	+1.28.5	-03.5	-0m.2

Date Tuesday, March 12-13, 1940 H-L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
						cut	B			
= 5488	δ Gem	07 14.2	+ 22 10	7-25	Process	010	-6.5	20 28	21 14	2
	"	"	"	"	"	"	-6.6	21 14	21 54	
	"	"	"	"	"	"	-6.6	21 54	22 40	
- 5489	δ U Mon	12 10.5	+57 35	"	"	"	-6.6	22 50	23 03	3
	"	"	"	"	"	"	-6.5	23 08	23 43	
	"	"	"	"	"	"	-6.5	23 44	00 19	
= 5490	Bos 3506	13 29.1	+04 10	"	"	"	-6.5	00 29	02 19	
	"	"	"	"	"	"	-6.5	02 20	04 36	
~~5491~~	~~H.D. 142925~~	~~15 52.2~~	~~42 51~~	"	Astra II	"		~~04 45~~		

Clouds much of afternoon; gradually clearing after dark.

Temp at 15.5

Hour Angle End	Declination	Seeing	Ptg. Mag.				REMARKS
1 03 W	+22 05	0-1	3.79	F0	no filter 7-7-7	for B	setting 1 Some light haze.
		1	"	"	7-7-7		" 5
		1-0	"	"	7-7-7		" 9 more haze.
	+57 20	2	3.44	A2	7-	for B	" 1 Haze.
			"	"	7-7-7		" 5
C 45 E				"	7-7-7		" 9
[illegible] E	+07 56	2-1	4.99	Aep	7-7-7		" 2½ Haze
[illegible] 11 W		2-1	"	"	7-7-7		" 7½ More Haze
—		2	5.56	B9e	1 filter 7	9td	Sky filling in solidly from the west, star gone at 05.00 remained stuck.

Mar. 13	12	+1 01.2	-01.1	-19.3	+0.600	
Mar. 14	10	+1 01	-00.1	-07.0	-020.01	

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Date Thurs Mar 14-15/40 Hd-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.	
	Alcor						A B			
5491	HD116842	13 21.2	+55 30	I-25	Process	.010	10.6 4.8	0 05	1 05	3
~~5492~~	~~8 UMa cj~~	~~12~~								

Opened 23.15 Delayed starting on account of clouds in W.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.			REMARKS
05		55 17	D	4.02	4.16	no filter 10 12	Set 1
							Trouble due to badly frayed dome turning cable.
							NB. ventilating open for clouds

	MC	SC	MT	ST	SW
Mar. 15	+104.3	-0.1	-03°.0	-0m.1	+05.7

Date Sat Mar 16-17, 1940 B Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.
-5492	8 U. Ma.	12 10	+57 35	I-25	Process	.010	-10 -01	23 06	23 56
		Sun.	Mar. 17-18	B					
-5493	8 U. Ma.	12 10	+57 35	I-25	E-33	.010	-7.5 +1.0	23 00	23 38
	"	"	"	"	"	"		23 38	00 08
-5494	near HD 116842	13 21.2	+55 30	"	Process	"		00 17	01 17
		Wed.	June 20-21	1940	M-L				

Heavy snow all day. Cleared slightly in late afternoon but clouded again after sunset. Stars visible through thin cloud at times. No use observing

Pointer at 19.9

Hour Angle End	Declination	Seeing	Ptg. Mag.		no filter	REMARKS
55E		2-3	3.4	A2	7-7-7	Setting 1
						Pointer at 21.6
		2	3.4	A2	7-7	1
40E		2-3	"	"	7-7	7
40E		2	4.02		7-7-7	for Hd

Mar. 18	12	+1m 07.5s	+0.1s	+44.7	-04.0s	-1.1m
Mar. 19	10	+1 07.0	+0.6	+54.6	-06.0	-0.1m
20	12	+1 08.6	+0.5	+08.1 adv 1m	-08.8	-0.1m

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

Plate No.	Object	R.A. 1900	Declination 1900	Instrument	Emulsion	Slit	Temperature	Starting Time E.S.T.	Ending Time E.S.T.

ding Time
E.S.T.

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