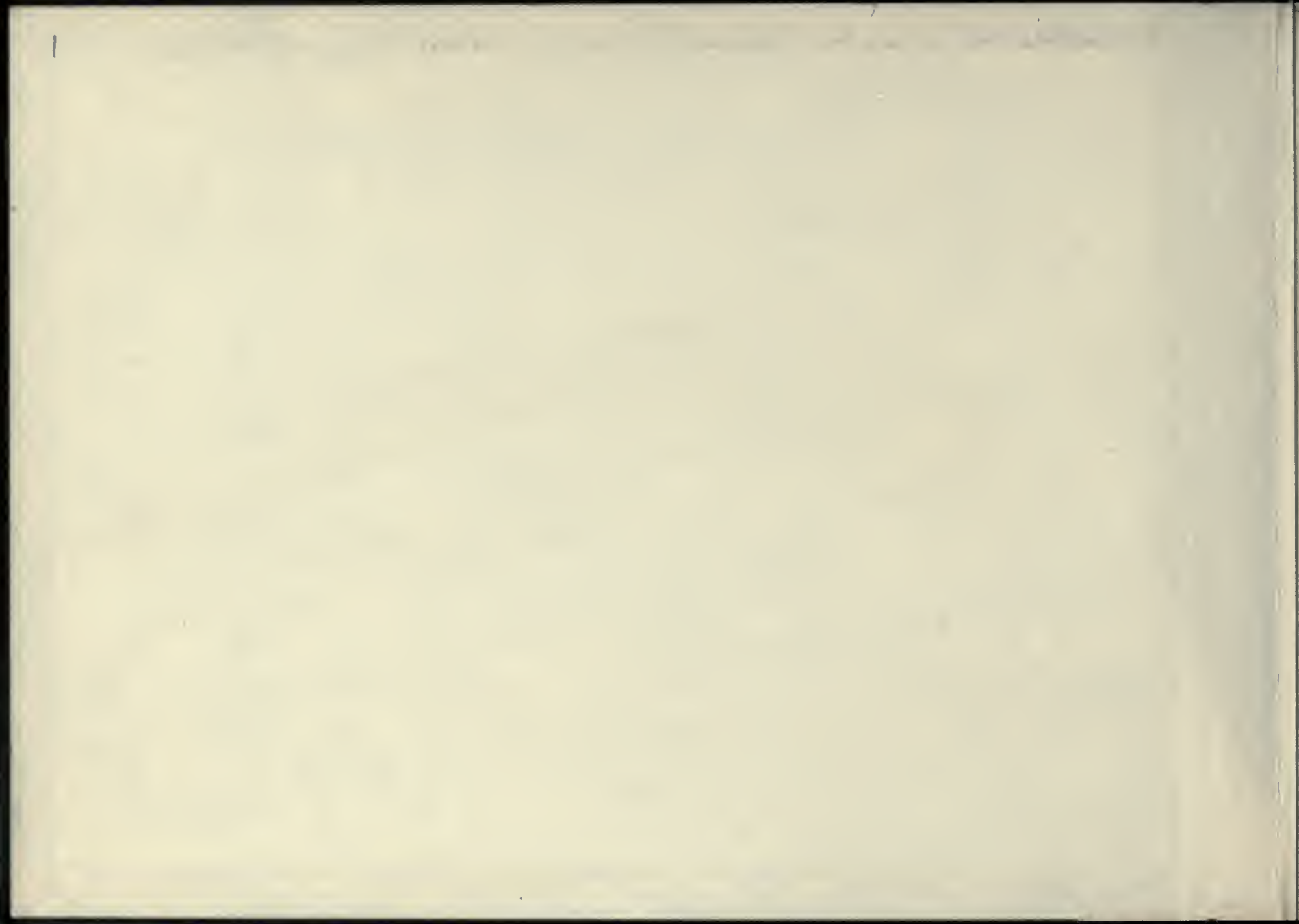


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If centre to violet, increase the micrometer setting.

Home Temp.

ocus

Home Temp.

Hour Angle
End

ome Temp.

Transparency Conditions

ocus

ome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						David Dunlap Observatory 74" Logbook Vol 33 Plate Nos 27358 - 27849 Jan 1964 - Oct 1964	

Handwritten notes on the right margin of the table.

Date Jan 15/16, 1962 Wed/Thu Observer Lo, Sm - (P. W) Julian Day 2438410.

① 294 53 17.1 3667.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
311 - 2220	12, 235	01 ^h 58.2	+02° 56'		5/1/33	28		18 ⁴⁰	a, b, c	
2835	13, 043	02 05.8	-00° 46'		7/5/33	"		19 ²⁰	a, b, c	
2836	16, 141	02 33.6	+05° 42'		7/5/33	"		19 ⁴⁵	a, b, c	
2837	15, 318 [L ⁺]	02 46.3	+08° 18'		8/5/33	14		20 ⁰⁵	a, b, c	
2838	17, 220	02 55.0	+09° 12'		7/5/33	28		20 ²⁵	a, b, c	
2839	21, 103 [L ⁺]	03 04.4	+18° 00'		7/2/33	"		21 ⁰⁰	a, b, c	
2840	18, 227	03 44.7	+01° 15'		7/5/33			21 ⁵⁰	a, b, c	
2841	43, 142	04 12.1	-23° 31'		7/5/33			22 ⁰⁰	a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z	
			13.0				-6.7	23° 11'		

Dome Temp. $21^{\circ}E$ 17³⁰ EST: voltage: 700v

Focus ~~16.2~~ 15.54 CO₂ L

Transparency Conditions good

Dome Temp.

corrected 23.764

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00²⁰W							
00 ¹⁸ W		3"	5.87	dG1			
00 ⁴² W		3"	6.92	G2E			
00 ⁴⁵ W		4"	6.82	G2IV			
01 ² W		4"	4.27	B9III			
00 ²⁹ E, 00 ¹² E		2"	6.97 6.48	G2E FSM		21 ⁰⁰ : excellent, still low in air, possibly some haze	
00 ⁰ E, 00 ⁰ W		4"	5.64 6.64	G4V		21 ⁴⁵ : still very excellent but to be seen	
00 ⁰⁶ E, 00 ⁰⁴ W		5"	5.94	104		22 ⁰⁰ : fair & in building up	
00 ⁰ W, 00 ¹⁴ W, 00 ²⁰ W		4"	6.37	G5		22 ³⁰ : good, southern portion section improved considerably 404 ⁰⁰ is diffed much.	
			8.87 +59.14)	F6 III +A5V		YYCMI Abhyan ke set 5 § 504 Sika OTB Focus lost	404 ⁰⁰ is quite bright comp. of cont. for to red!
						Clouded over 01 ¹⁰ am	
						Close up.	
						Be careful in setting + recording focus!	

Dome Temp. +39°F

Focus 15.16 st

Dome Temp.

Transparency Conditions Clear

A few clouds before dawn.

10

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 ^h 20 W	+67° 56'	0	7.7	F2 II	6-6-6	set 5 vdB S.B. trouble with exp. meter. sens. 8	8540 8568 fine
1 ^h 40 W	+11° 04'	0	5.98 7.59	KST II	6-6-6	set 5 vdB S.B. sens. 7	8570 8586 fine Comp. wk
3 ^h 39 W	+2° 04'	0	8.5 to 9.4	F0 II +A5+	3-3-3	set 2 YXCM: F. d. B. Akhyala sens. 8	8588 8612 fine guid in comp wk v10
1 ^h 00 W	+38.00'	1	7.3	G5	6-6	set 5 STD VELOCITY sens. 7	8615 8631 strong comp wk
0 15 E	45 28	1	7.64	F3	6-6-6	set 5 sp. binary (KAFS) sens. 8	8633 8663 fine guid in v10 OK sl c to rd
					20/16	119	
						1 P.H. LOADED	
						all good plates!	

Dome Temp.

Focus

Dome Temp.

V 700 }
CO₂ in } 17:45

Transparency Conditions

very fine full moon
2300 cloudbank low in SW
2335 clouded out

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:00 + 1:10 W		5"	3.45	50V		A+B	
1:50 W + 2:00 W		5"	6.53	56V			
1:10 + 1:20 W		5"	6.17	dg4			
2:30 + 2:40 W		3"	5.87	dg1			
2:05 W + 2:15 W			6.60	54V			
2:00 + 2:10 W			6.48	90			
1:30 + 1:40 W		5"	6.97	52V			
1:45 + 1:55 W + 2:05 W		5"	5.64	54V		A+B	
1:35 + 1:45 W			4.41	50V			
						Echo II sighted Jan 27, 1964	
						zenith 18:25	
						disappeared in N at 18:45	
						polar orbit mag ~ 0	
						Fe, 1H	

Dome Temp. $+18^{\circ}\text{F}$ CO_2 , voltage 700v. 17⁵⁰Transparency Conditions *Very good*

14

Focus

Dome Temp.

full moon

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		5"	6.92	K0		star drifted out	
01 ⁵ W. 01 ²⁶ W		5"	6.17	164			
01 ¹⁴ W		7"	4.27	B9 III		19 ⁰⁰ : excellent sky; only bright moon	
01 ⁰³ W. 01 ¹⁴ W		4"	6.60	G4 V		H0 18,757 drifted appreciably in trace a & b	
01 ⁴⁰ W. 01 ⁰⁰ W. 02 ⁰⁰ W		13"	2.91	F5		20 ³⁵ : some clouds very low in W	
02 ⁰⁰ W, 00 ⁰⁰ E, 00 ⁰⁰ E		4"	6.59	d60		21 ⁰⁰ : still very good all around	
02 ⁰⁵ E. 02 ⁰⁰ W		4"	6.33	F5		22 ³⁵ : against strong light tiny ones d. 9.45 v. ← fine sky, still some clouds one isolated cloud in SW about 15° up noticed	
						22 ³⁵ : long streaming cloud, from N over to W - SW - out O.A.	
Echo II	6:15 ^{~1h} east of meridian					22 ⁵⁰ : heavy streamers all across W, S to now	
	8:45 west					Cloud 23:25	
						Note: 1. sidereal drive kept running too slow by about 1" in 30"	
						2. Please supply a flashlight	
						0130 Much cirrus. Her	

15

Date Thu - Fri, Jan 30-31, 1964

Observer

L VW
VW mce | VW
Sm Re

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
314- 2858	13,043	02 05.8	-00° 46'		7/5/33	28		17 ⁵⁵ 18 ²⁰	a	
2859	15,318 STANDARD STAR	02 26.3	+08° 18'		6/4/33	28		19 ²⁰	a	
2860	23, ⁰⁸⁷ 09 ²	03 42.5	+63° 15'		6/5/33	28		19 ³⁵	a, b	
2861	33,021	05 05.7	+09° 26'	?	7/5/33	28		20 ⁴⁰	a, b, sky	
2862	34,411 X A ₁₁ RESOLUTION TESTS	05 15.6	+40° 04'		6/5/33	28		20 ⁵⁵	a, b, sky	
2863	" "	"	"		6/5/33	24; 20; 16; 12		21 ²⁷	a, b, c, d	
"	" "	"	"		6/5/33	8; 4; 32; 40;			e, f, g, h, i	
2864	64,096 9P ₁₀ AB	07 50.1	-13° 48'		6/5/33	40		22 ⁵⁰	a, b, sky	
27364	H.D. 91948	10 ^h 31.9	16° 38'	I-25	II A0	0.08	-1 C°	00 ^h 53	01 ^h 50	2
"	"	"	"	"	"	"	"	01 ^h 55	03 ^h 05 ^m	h

Dome Temp. 29°F Focus 15.19 Dome Temp. 25°F voltage: 700V 17^W EST
CO₂ inTransparency Conditions *very good*bright moon rising in E about 20⁰⁰ EST

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 ⁰⁷ W							
20 ⁰³ W		3"	6.92	G2V		ran out of paper, had to start again, broken, cords.	
7 ²⁰ W		7"	4.27	B9III		clear mag a pairs whole trainings; - put more in - O.K. now	
0 ⁰⁷ W, 00 ²⁷ W		8"	4.79	F5		9 ²⁵ : now the amplifier is mad. the dark current keeps dropping	
0 ⁰³ E, 00 ⁰⁰ E		4"	6.16	dG2		from level 12 & let down to 6 $\frac{1}{2}$ and then back up again! ^{to 0.3 up at}	
00 ⁰⁹ W, 00 ²² W		7"	4.71	G0V		settled down again - in 40 min. on 30	
0 ⁰³ W, 00 ⁰⁶ W, 00 ⁰⁰ W, 01 ⁰⁰ W		"	"	"		20 ⁰⁵ : amplifier not trouble some anymore; 20: sky good	
01 ⁰⁷ W, 01 ¹⁹ W, 01 ²⁷ W, 01 ⁴⁴ W		"	"	"		22 ⁵⁰ : sky bright due to moon, long hair tel used - was SW 18° up	
00 ⁰³ E, 01 ⁰¹ W		6"	5.70	G1V		23 ³⁵ : night starting to be foggy & misty - covers circ bands in SW & W 18° up	
00 ⁴² W	+60°19'	1.2	7.37	F8	66	23 ⁴⁵ : right side of plate is now misty up!	
00 ⁴⁸ W	+60°19'	2.3	"	"	66	set 3: light haze } Exp. Net does not work set 8 } may be the slit is 0000.	Nothing on plate

Clouds from South close up 04⁰⁰

Date Sun/Mon, Feb 2/3, 1964 Observer Sm mel - H ✓ Julian Day 2438.428
 @ 313 11 16.2 3651.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.	Hour End
315-2865	9,540	01 ^h 31. ^m 6	-24° 21'		7/5/33	28		18 ³⁰	2 a		
2866	13,043	02 05.8	-00° 46'		7/5/33	28		19 ⁵⁵	a, b, sky		
2867	16,141	02 33.6	-03° 42'								
27364	HD 37171	5 ^h 31. ^m 5	+10° 58'	I-25	IIa0B	.008	-2°C	22 ^h 22 ^m	00 32	1	0330
27365	" 89363	10 13.6	+18 13	"	"	"	-2.2	00 53	03 41	2	0157
27366	" 107053	12 13.5	+32 18	"	"	"	-2.2	03 54	05 36	3	0153
		Focus Test 07B									
new emulsion batch used. Feb 2 → IIa0B					2AD C1 L3						
					49 45						

Dome Temp. 22 °F


Focus 15.18

Dome Temp.

no CO₂
voltage 700v 10²⁰ EST

Transparency Conditions very good

0520 Clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		14	6.92	KO		HD 9,540 extremely hot to manipulate - keep in ^{diagonal} reversed the telescope; star kept jumping out	
02 ⁵¹ W, 0 ⁰² W		5→R	6.92	G2V		seeing variable and extremely poor! 	
			6.82	G5V		stars keep jumping out again after jumping to 21 ⁰⁵ : fair wind, but clear, still	
						Wipes, ble to reach HD 16,141 with reversed telescope	
0330 W	+11° 03'	0	7.59	K5 III	8-8-8	set 5 vdB SB	Sens 7 { 8729 8741 } fine! luk
0157 W	+17 56	000	6.62	A0	6-6-6	" 5 KA 8X8	# 7 { 8743 8755 } fine up luk
0153 W	+32 58	00	6.82	A5	6-12	" 5 " "	# 7 { 8756 8763 } up, good
					20/15	" 9	fine, good temp. 10.0 OK, bl.
3 P.H. Loaded + 8							

Date *Feb 3/4 Monday 1964* Observer *VB -* Julian Day *2438429.*

0314 12 07.5 3650.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End
316-2867	ζ^2 Cet	02 26.2	+08 18			6/4/33	28	18:20		00 38W
316-2868	HD 23083/90	03 42.5	+63 15'			6/4/33	28	19:00		00 05
316-2869	104 Tau A+B	05 04.4	+18 36' 0			6/5/33	28	19:28		00 55+00
316-2870	HD 38858	05 46.8	-04 06'			6/6/33	28	20:00	absent	01 06E
316-2871	HD 13043	02 05.8	-00 46			5/7/33	28	20:27	absent	03 02W
27367 } } <i>Focus Test</i>	HD 37171	05 31.5	+10 58	I-25	<i>Do not</i>	008	-6°	21:01	22:24	01 30W

Dome Temp. $23^{\circ} F$

Focus

Dome Temp.

Corin } 16:30
750V

Transparency Conditions Fine
windy, image motion

ECHO II 7:28 EST ²⁰
30° above W
align

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 38W + 055W		3"	4.27	13911		ext. ST Dr. Sped out	
00 05 E + 0005W			4.74	F5			
00 55 + 02 56			5.64	S4V			
01 06 E + 56 E			5.46	d64			
03 02 + 03 12 W			6.43	S2V		Clouded out!	
01 30W + 11 01		1	7.59	K556-6		ret's (VB) SB CLOUDS #8 8774 20/10	good. guiding pos. comput OK

closed up
22:30
20th 18.

Date Feb (4/5) Wed 1964

Observer

mcl
Lg
Sm

-H5

Julian Day 2438431.

316 13 47.4 3648.6

Plate No.	Object H.D.	R.A. 1900 64	Declination 1900 69	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
317-2272	16, 141	02 ^h 33.6	-03° 42'		6/6/33	28			1/2 a, sky	
2873	15, 318 { Oct	02 26.2	+08° 18'		5/6/33	28	voltage: 700v	18 ⁵⁵	a	
2874	30, 649	04 ^h 49.3	+45° 49'		6/6/33	28	" 750v	19 ²⁰	a, b, sky	
2875	38, 858	05 46.8	-04° 00'		6/6/33	28	" 700v	20 ⁰⁰	a, b, sky	
2876	16, 141	02 33.6	-03° 42'		7/5/33	28	" "		a, b, sky	
2877	50, 692 37 Gem	06 53.1	+25° 25'		6/5/33	28	" 750v	21 ³⁰	a, b	
2878	51, 424 25 8	06 55.2	-08° 08'		6/6/33	28	" 700v	22 ⁰⁰	a, b, sky	
2879	65, 228	07 55.4	-22° 48'		6/5/33	28	" "	22 ³⁸	a, b	
2880	69, 830	08 16.7	-12° 31'		6/6/33	28	" "	23 ²⁰	a, b, sky	
						.008	+3.0			
273 68	HD 91948	10 31.9	60 38	I-25	IIaOb	"	"	0041	0133	3
273 69	" 98154 Focus Test	11 12.4	+26 01	"	"	"	"	0146	0250	4

Dome Temp. 38°F
 Focus 15.24
 Dome Temp.

CO₂ m
 voltage 700 v } 17³⁰ EST

Transparency Conditions excellent
 even down low
0130 v. Thin Cirrus
0245 Solid Clouds.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		6"	6.82	G5 IV		focused star, also changed voltage to 750V here	
01 ²¹ W		8"	4.27	89 III			
00 ²⁶ E, 00 ¹⁶ E		3"	6.97	G12-V			
00 ⁴⁰ E, 00 ³⁵ E		5"	5.96	α64			
03 ⁰⁷ W, 03 ¹¹ W		6"	6.82	G5 IV			
00 ²⁷ E, 00 ¹⁶ E		7"	5.74	α60		21 ⁴³ : a cloud front moving slowly up in S; v. good	
00 ⁰² W, 00 ¹⁴ W		4"	6.33	F5 12		← ☺ 22 ³⁰ : surface cloud. hardly moved, still good sky	
00 ³⁰ E, 00 ⁰² E		7"	4.20	37.670			
00 ⁰² E, 00 ⁰⁸ W		4"	6.00	G8 V		23 ⁴⁵ : still v. good night for surface clouds in W-S wind building up	
0018E	60 20	1	7.37	F8	7-7-7	Set 5 N-Spect. Bin. #8 8813	fine
0019 W	+25 42	0-1	7.36	A2	7-14	" 5 KA 8X8 #8 8845	good in vis
					20/15	" 9 #8 8847	good
						#8 8862	OK
							best in out jaws
						4.P.H. + 4	

Dome Temp. 16

Focus 15.12

Dome Temp.

13
11
12

Transparency Conditions

24

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 ^h 12 ^m W	148° 0'0"	0"	8.5	K	5-4-5	(tried slit .008) Ed. Bin (F) set 5 set 9	# 878881 8889 comp. & note. good - luk st c to red
<p>Clouds starting in at 2100 closed up V 2130.</p>							

Dome Temp. 15°F

Focus 15.10

Dome Temp. 13°F

V=750 } 1745
CO₂ in

Transparency Conditions No moon

OK but Ci Low in N and S. 26

21:30 Fine

02:00 Fine

03:00 Clouds moving in from north.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0125W		8"	4.3	B9 III		EXT-SJ	
0040E + 0030E		8"	6.97	S1 IV-VI			
0110E + 0100E		6"	4.41	S0 IV			
0104E + 0°54E		6"	6.87	S4 V			
0040E + 0030E		5"	6.42	S6 V			
0015E + 0005E		5"	5.70	d90			
0020E + 0010E		6"	5.23	S0 V			
0005E + 0005W		6"	5.74	d90			
0010W + 0020W		6"	5.92	d92			
0015E + 0005E		8"	5.70	S1 V			
0010W + 0020W		6"	4.20	d92?			
0050W + 0100W		5"	7.00	S8 V			
00 ^h 17 ^m W + 60°19'		1	7.37	F8	6-6-6	Set 5 N-spect. Binary	#8 { 8900 8935 fine
01 ^h 38 ^m W	"	0-1	"	"	6-6-6	" 5 "	#8 { 8937 8972 strong
					²⁰ / ₁₆	Set 9 Clouded over	03:15 OK-weak
						1 P.H + 4	

Date Feb 11/12 Tues/Wed, 1964 Observer ^{H₂} Sm - H₂ ^{v13} Julian Day 2438437.
 0 322 18 23.4 3641.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
319- ²⁸⁹³ 2892	42,618	06 ^h 10. ^m 1	+06° 50'		715/33	28		19 ⁴⁵	a, b, sky	
2894	42,807	06 ^h 11. ^m 2	+10° 39'		714/33	28		20 ¹⁵	a, b, sky	
2895	43,587	06 ^h 15. ^m 4	+05° 07'		616/33	28		20 ⁵⁰	a, b	
2896	47,105 8 Gem	06 ^h 35. ^m 7	+16° 26'		614/33	28		21 ¹⁶	a	
2897	52,711	07 ^h 01. ^m 2	+29° 24'		616/33	28		21 ³⁶	a, b	
2898	60803	07 34.7	+05 57		616/33	28		22 ¹²	a, b	
2899	66242	08 00.8	-06 14		616/33	28		22 ³⁰	a, b, sky	
2900	70,110	08 16.4	-00° 48'		616/33	28	-4.1°	23 ⁰⁰	a, b, sky	
27373	HD 91948	10 31.9	60 38	I-25	II _a 06	008	4.0	0010	0112	H
27374	"	"	"	"	"	"	"	0113	0303	
	Floures Test		0713							

Dome Temp. 25°F
 Focus 15.15
 Dome Temp.

CO₂ in voltage 700 } 19⁰⁰ EST

Transparency Conditions 18⁰⁰: clear but faint wisps here and there
 19²⁵: O.K., but not excellent S' looks milky = 30" up

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 ¹² E. 01 ⁰⁰ E		3"	6.87	G4V			
00 ³⁵ E. 00 ²⁵ E		4"	6.42	G6V			
00 ⁰⁷ E		5"	5.70	d60			
00 ²¹ E		8"	1.95	A0IV		21 ²⁰ : clear	
00 ⁰⁶ E. 00 ⁰³ W		5"	5.92	d62			
01 ¹² E. 00 ³³ E		4"	5.90	F8			
00 ¹³ E. 00 ⁰⁴ E		5"	6.32	G0			
00 ⁰² E. 00 ⁰⁸ W		5"	6.17	G0			
00 17 E	6020	0-1	7.37	F8	7-7-7	Set 2 N-Spect. Bin. #8 8996 9027	fine
01 35 W		0	"	"	7-7-7 20/15	" 6 " " " #8 9018 9062	fine detected
						4 P.H. + 12!	

Date Feb 16-17 Sun - Wed Observer Mt - H v Julian Day 2438442.
 0327 21 38.8 3634.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27374	HD 37171	5 ^h 31.5 ^m	+10° 58'	I-25	IIaob	set .008	-2°C	18:55	21:20	1
27375	HD 67110	8 ^h 1.45 ^m	2° 13'	I-25	IIaob	set .016	"	21:35	0:05	2
27376	" 91948	10 31.9	60 38	"	"	.008	-2.0	0123	0225	3
"	"	"	"	"	"	"	"	0226	0332	"
27377	" 131861	1450.9	45 43	"	"	"	"	0406	0626	4
	Focus TEST		OTB							

Dome Temp. 21°F Transparency Conditions *excellent*Focus 15.18

Delay at midnight while Hr's car removed from snowbank.

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12 ^m W	+11° 02'	2	7.59	K5 III	9-9	set 5 WB high vel. S.B.	#8 { 9071 9085 } good-look
026 ^m W	+2° 02'	1	9	FG III R5 V	6-6	set 5 Allyanbar ecl. Prim.	meter n of counting #9 { } waste guid poor
0117 W	60 20	0	7.37	F8	7-7-7	" 2 N-Spect. Bin. :	#8 9093 9126 fine
0223 W	"	"	"	"	7-7-7	" 8 "	#8 9127 9157 fine
calculated ? 01 01 W	45 27	0	7.64	F3	7-7-7	" 5 Spect. Bin. (KAFs)	#8 9161 9176 good
					20/15	" 9	OK ad c to red

Dome Temp. 15°F

Focus

Dome Temp.

CO₂ : 1940 EST Transparency Conditions 20° : night of doubtful photon. quality

voltage 700v

first quarter full moon much haze in N and up around 25° all across sky.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20°E 20°W		7"	6.87	G4V		20° : see a bit haze in E 20° up. Some clouds in E.	
		12"	1.95	A0V		tracing though in scale straight on an angle, went for 3000	
00°W		"	"	"		21° : O.K., low haze	
20°W , 00°W		4"	5.90	F8(10)			
20°E , 03°E , 00°E		6"	3.38	d:8		22° : night improved; less haze more steady	
18°E , 00°E		4"	5.35	G2V			
10°E		3"	5.40	B-V=0.60		22° : surface clouds in S, rest all right	
						23° : light cumuli from N moved quickly over W, S patches of cirri show up too in E	
						Clouds from W-E, 2350, variable clouds	

Dome Temp. 23
 Focus 15.15
 Dome Temp. 15

CO₂ in
 valley 700v : 21⁰⁰ EST Transparency Conditions

Good - ~ 1900.

photometrically O.K. - night + steady
 bright moon

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 ^h 30 ^m W	+48° 04'	0	6.7	G5 III	6-6-6	set 5 α Persei	#7 { 9317 9333 } strong
1 ^h 57 ^m W	+11° 01'	0	7.59	K5 III	8-8-8	set 5 vdB SB	#7 { 9335 9351 } fine
00 ^h 00 ^m W. 00 ^h 37 ^m W		6"	4.20	8-V-0.72			
00 ^h 00 ^m W		4"	6.17	G0			
00 ^h 00 ^m W. 00 ^h 37 ^m W		4"	5.98	d63			
00 ^h 00 ^m W. 00 ^h 00 ^m W		4"	4.95	G0 V		00:00 still good - clear	comp strong
1 ^h 13 ^m W	+60° 19'	0+	7.37	F8	7-7-7	Set 2 N-SB.	#8 { 9370 9403 } fine - 1st
2 ^h 29 ^m W	"	1	"	"	7-7-7	Set 5 "	#8 { 9404 9437 } fine - 1st
2 ^h 31 ^m W	+16° 20'	1-2	7.76	F2	7-7-7	set 5 KA 8x8	#8 { 9441 9466 } fine match
					20/16	Set 9 Clouded over	sl. c. to red

Date Mon-Tues. Feb. 24/25 1964 Observer CrJulian Day 2438450.

① 335 25 21.3 3619.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour End
27384	BD 47° 782	03 06.1	+47° 52'	Z-25	Daob	.008	-6°C	19:02	20:28	3	0316
27385	x Stem A	07 28.2	+32 06	I-11	Daob	.008	"	20:53		4	
20:55											
20:57											
27386	HD 18346	07 20.1	+22 43	I-25	Daob	.008	21 16	22:10	1	003 004	
	Focus Test										
27387	HD 89363	10^h 13.6	+18 13	I-25	Daob	.008		23:13		2	
27386 F	focus test	12"	camera	Feb 27 '64	focus = 12.66			ITA weak OTB strong		OK	

Dome Temp. 20°F

Focus 12.66

Dome Temp.

Transparency Conditions

Foggy

Focus 15.13

F 12.66

Must Feb 27 changed to 12¹/₂, 25 was tilt 23.15 12¹/₂ T 20.35

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 39W	48 04	0	6.7	G5 III	3-3-3	Persei Cluster 7 { 9600 9608	very strong comp strong
						Clouds then clearing	
3 ^h 0 ^m W	44 23	0-1	9.72	G8	2-1-2	KAFS Cleanup 10 { 9610 9684	partial plate strong
				ITA no OTB "		Thin clouds from S-W D160. Increasing cloudiness. Covered over. Plate under exposed. hardly "	partial Focus- comp very strong
						loaded P.H. #1, 2, 3.	

Dome Temp. 25°F

Focus 12.66

Dome Temp. 22°

CO₂ in 19:15

V=900

Transparency Conditions partly cloudy

01:30 good

04:10 - large fire on SW horizon

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		6"	5.74	dgo		Clouded out	
4 ^h 42 ^m W	+59° 06'	0-1	10.08	G5	2-1-2	Set 5 KAFS #9 { 9707 9751	strong OK
					1/8	set 9 Set 1	

Feb 29 / March 1
 Date ~~29 Feb - 29 Feb~~ ~~1964~~ 1964 Observer ~~MT~~ ^{mm} - ~~9mel~~ Julian Day 2438455.

0 340 26 40.5 3610.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.11	Hour Ang End
322-2912	13,243	02 ^h 05 ^m 8	00° 46'		7/4/33	28	0°C	19 ⁰⁰	a, b, sky		
" 2913	50,092 27013	06 53.1	+25° 25'		6/5/33	"		19 ³⁰	a, b,		
" 2914	48,682 36 km	06 44.1	+43° 37'		6/5/33	"		20 ⁰⁰			
" 2914	76,151	08 50.5	-05° 18'		6/6/33	"		20 ³⁵	a, b, sky		
" 2915	81,209	09 26.0	-05° 55'		6/5/33	"		21 ²⁰	a, b, sky		
" 2916	21,858	09 26.6	+09° 13'		7/4/33	"	not 700	21 ⁵⁵	a, b, sky		
" 2917	22,885 11LM	09 33.6	+35° 59'		7/3/33	"	750	22 ³⁰	a, b, c, sky		
" 2918	27,901 ^{STANDARD} a, b	09 25.5	+12° 09'		5/4/33	"	100	23 ⁰⁴	a		
" 2919	86,728 20LM	09 58.9	+32° 06'		7/4/33	"	750	23 ²⁷	a, b, sky		
^{OK} 27390	BD + 45° 1859	10 ^h 38 ^m 3	+45° 12'	I-12 ^{1/2}	II A0B	.016	1.5°	00 ^h 32 ^m	02:00	2	1:37

Dome Temp. 34°F Focus 12.66 Dome Temp. 32°F no CO₂
voltage 750 : 18⁴⁵ EST

Transparency Conditions

clear strong wind from ⁴⁴ N
hazy over city around horizon
00:00 EST. hazy, not so windy
07:45 haze very thick.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23 ²⁷ W			6.92	G2V		ink stopped flowing, star bouncing about in exit light beam	
0 ⁴⁵ E, 00 ⁴⁵ E			5.74	d60		"	
		9"	5.23	60V		SB star kept jumping right out of light beam	
0 ⁴⁵ E, 01 ³² E		5"	5.98	d63		20 ⁴⁵ : heavy spots in E, wind 25-40 mph!	
0 ³⁰ E, 01 ²¹ E		5"	5.35	G2V			
0 ⁵⁷ E, 00 ⁴⁷ E		6"	5.40	?-V: 360			
0 ⁴⁴ E, 00 ¹⁸ E		5"	5.41	G5IV-E		star in light beam right out	
00 ⁴⁴ E		13"	1.33	87V		2 ¹⁵ : sky clear of any clouds, moon up in E	noise
00 ⁰⁰ E, 00 ³⁹ W		4"	5.35	G4V			
1h 37 ^m W	+44° 53'	0	9.59	F4	2-3	Set 2 KAE! Clouded Out 10 ^h { 9772 9770	1 week

~~Do Not use P#2 on
Set 2 or Set 5~~

developed-
OK

Dome Temp. +31°F

Focus 12.66

Dome Temp.

Transparency Conditions *Excellent*

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
17 ^m W	+29°37'	2	9.8	G5	3-1-2	KAFS. set 3 Exp Not slow... 9.1e 1/4 counts → sens 9 { 9810 9828	spots are good
17 ^m W	+29°21'	2+	9.4	F6	2-1-2	KAFS set 5 sens { 9839 9850	l wke
					11/8	3:30 EST wind was coming from W	sl c to violet
						3:45 All cloudy. Close UP	OTB weak
						IPH located in North Pier	

Date Sat-Sun Mar 7-8 1964 Observer ^{KD}Ch - kg Julian Day 2438462
 @ 347 27 22.4 3599.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.II
2739 ³ B	BD +49 782	03 06.1	+47 52	I-12	Ilao B	0.008	+5°	19:20	19:42	1
323-2920	42,622 36 Aur	06 44.1	+43° 37'		6/5/33	28	750v	20 ³⁰	a, b, c	
2921	60,803	07 34.7	+05° 57'		6/5/33 6: 6/4/33, 226 700			21 ⁰⁰	a, b	
323-2922	42,613	07 50.3	+60° 22'		7/4/33	28	750	21 ³⁰	0, b	
2739 ⁴ B	BD +44° 1904	09 41.0	+44 42	I-12	Ilao B	.008		22:30	00 51	2
> 27394 ₂ F ₂	Focus test									2
2739 [#] F	Focus test	O.T.B.		I-12	Ilao B	.008	0°			1

7 Mon Mar 9/64

Dome Temp. *CO₂ in*
 Focus ... *12.66* ... *voltage on* : 20⁰⁵
 Dome Temp.

Transparency Conditions ... *Excellent*
22" l. cloud in S.

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1	03 16 W	148 04	1	6.7	6571	3-3	set 5 2 Pen	7 9874 9878 (2) fine
	20 ³⁴ W, 00 ⁴⁴ W, 00 ⁵⁴ W		7"	5.23	60V		wide binary, but only one star in spectroplot in: diap.	
	0 ²² W.		4"	5.90	F8		20 ⁰¹ : one band of clouds moving up from S, not good	
	0 ⁴⁴ W, 00 ⁵⁴ W			6.54	dG8		21 ²⁰ : needle not writing again. exchanged me with other Brown records. 21 ⁰⁰ : saw circ. high.	
							22 ⁰⁴ : wide sky air ruled - just - records	
	01 57	144 24	0	9.39	A5	3-2	set 5 KAFS	10 9885 9924 (2) out of focus
							Small clouds from S-W. 0050	
2	set 0 1/2	12.66				10/7	Cloud over	0120
	" 4	12.68				"		0200
	" 6 1/2	12.70				"	LOADED P.H. # 1, 2, 3, 4.	
	" 9	12.72				"		
						10-7	Frank: Please replace brown records: needle! centre for to violet	

Dome Temp.

Transparency Conditions

Focus

Dome Temp.

All note

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 set 0 $\frac{1}{2}$	^{from} 12.73				10-7		
" 4	12.74					12.74 seemed to be best	
" 6 $\frac{1}{2}$	12.75					so camera was set	
" 9	12.76					at <u>12.74</u> .	

Dome Temp.
 Focus 12.74
 Dome Temp.

Transparency Conditions Slight patches of clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00:27 E 00:28 E	28° 08'	1	2.21	K III	3-3-3	Yoss ^{pl} set 3 N.G. set 9 set 6 Etp. Met. 4 NO FE.	strong well string guided very strong exposed streak across plate
					10-7	set 5	centre tired
1:28 E			6.22	G III	6	Yoss _{pl} Set 1	maybe poor due to patchy clouds. 1 count
1:13 E					6	" Set 5	2 counts. string in
00:45 E						Set 9	{ 99 59 63 99 67 99 82
03:37 W <i>calculated</i>	11° 07'		8.7	A 3	2-	rel. Prim ary Set 5	difficult to find - very faint. 40) Luk guid an vio Comp 4, strong
						Yoss prog. plates spotted twice!!	
						P.H. 4 loaded in North Pier.	
						clouded out. 0:30	

Date Th/Fr Mar 12-13 '64 Observer vdB - xo/Re Julian Day 2438467.

D 352 27 03.1 3590.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
324-2923	γ Gem	06 ^m 35. ^m 6	+16°26'		5/4/33	28		1916	2x	
324-2924	χ ' Ori	0552.2	+2016		6/4/33	28		1928	1x	
324-2925	HD62613	0750.3	+8022		7/4/33	28		1958	2x + sky	
324-2926	HD66242	0800.8	-0614		7/4/33	28		2032	2x + sky	
324-2927	HD65583	0758.3	+2920		7/4/33	28		2102	2x + sky	
324-2928	HD74874	0844.9	+0633		6/4/33	28		2128	2x	
324-2929	HD81858	0926.6	+0913		6/5/33	28		2151	2x	
324-2930	11 LNi	0933.5	+3554		6/5/33	28		2217	2x	
324-2931	HD84737	0946.3	+4611		6/5/33	28		2240	2x	
324-2932	20 LNi	0958.9	+3206		6/5/33	28		2304	2x + sky	
27397 F	OTB									
27398	BD+45°1859	10 ^m 38. ^m 3	+45°12'	I12"	IIa06	.012	+2°C	00 ^m 12	02 ^m 05	
27399	BD+45°2344	15 ^m 48.6	+45°00'	I12"	IIa06	.012	17°C	02 ^m 12	04 ^m 55"	
27399 F	Focus test		Hd.				+1°C			1
<u>Focus 12.66 is best again!</u>								left at 12.66		

Dome Temp. $+28^{\circ}\text{F}$
 Focus 12.74
 Dome Temp. \checkmark See below

CO_2 in } 1850
 $v = 750$

Transparency Conditions Cloud near Horizon, Zenith OK,
 2030 OK NOT AOK

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0006E			1.95	A0IV		EXT. ST.	
0055W		7"	4.41	S0V			
0050E + 0040E		3"	6.54	d158			
0018E + 008E		3"	6.32	S0			
0015W + 0025W		3"	7.00	S8V			
0000 + 0010W		-	3.38	d1F8			
0020E + 0010E		5"	5.40	?			
0005E + 0005W		7"	5.41	S8IV	\checkmark		
005W + 005W		7"	5.07	S3V			
0015W + 0025W		5"	5.35	S4V			
0255W	$+44^{\circ}54'$	2-	9.6	F4	2-2-2	cent. to rd abtly; in focus both ends. KAFS (given $\frac{1}{2}$ counts) sub 5 sens 9 {0000 (40) {0028 (40)	centre to red exp. fine focus
0008W	$+44^{\circ}49'$	2-3	9.67	F3	2-	KAFSCHINS (dot) sens 9 {0033 (40) {02 (40)	exp. fine guide in vis. exp. not safe on plate
net 1	Focus	12.70			8/6	decide to be centre to red - focus = 4400	this plate in back room as example
" 5		12.62			10/7	centre to vis	
" 7 1/2		12.66			10/7	Close MV 5.00	

Date Sun/Mon Mar. 15-16/64 Observer Ho, Cr - Ko Hv Sm Julian Day 2438470.
 @ 355 26 29.4 3584.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
<u>27399 F₂</u>	<u>O.T.B</u>					<u>.008</u>				
<u>325-2933</u>	<u>HD 62,613</u>	<u>07^h 50.3</u>	<u>+80° 22'</u>	<u>7/4/38</u>	<u>28</u>		<u>750v</u>	<u>19³⁵</u>	<u>0.6 mag</u>	
<u>2934</u>	<u>HD 72,905 II' Ume</u>	<u>08 36.2</u>	<u>+65° 09'</u>	<u>7/4/38</u>	<u>"</u>		<u>700v</u>	<u>20¹⁰</u>	<u>ab</u>	
<u>2935</u>	<u>HD 84,737 19 Leo</u>	<u>09 46.3</u>	<u>+46° 11'</u>	<u>6/5/38</u>	<u>"</u>		<u>750v</u>	<u>20⁴⁰</u>	<u>ab</u>	
<u>2936</u>	<u>HD 74,874</u>	<u>08 44.9</u>	<u>+06° 33'</u>				<u>700v</u>	<u>21³⁰</u>	<u>ab</u>	
<u>27400</u>				<u>F-12</u>		<u>.008</u>	<u>+5</u>			
<u>27400</u>	<u>BD +45° 1859</u>	<u>10 38.3</u>	<u>+45 12</u>	<u>F-12</u>	<u>DaB</u>	<u>.012</u>	<u>+5</u>	<u>22:50</u>	<u>?</u>	<u>1</u>
<u>27400</u>	<u>HD 92588</u>	<u>10 36.3</u>	<u>-01 13</u>	<u>F-12</u>	<u>DaB</u>	<u>.008</u>		<u>23:17</u>	<u>00 17</u>	<u>1</u>

Dome Temp. 38°
 Focus (12.66)
 Dome Temp. 38

voltage 700V 19° EST
 CO₂ in
 cell outlet

Transparency Conditions

19^{30} : good photometrically
 cumuli in S - SW
 20^{30} : good, wind building up significantly

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						in focus.	OK
$00^{50} E. 00^{38} E$		6"	6.34	dG8		19^{15} : dec focus blur	
$00^{52} E. 00^{48} E$		5"	5.64	G0V		focused 11' UMa	
$01^{00} E. 01^{06} E$		7"	5.07	G3V		21^{25} : cirrus 25° up in E, rest good, clear, fair wind	
$00^{10} W. 00^{11} N$		8"	3.38	dF8		21^{55} : many wisps come out all over E, SE - great	
		0	9.59	F4	2-	set 8 KAS ^{TOO FAINT} ^{TOO WINDY}	#10 0096 (20) too weak
0055W	-01 32	0	7.4	K1	3-3-3	set 2 Std Vel	#B 0109 0126 (20) very strong
						Plate # 2 is loaded.	
						<u>0215 Partly Cloudy</u> <u>Too WINDY!!</u>	

Dome Temp. 34° Focus 12.66

Dome Temp.

Transparency Conditions

Clouded out 20° 115

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						set 5	OK
						4RH loaded.	
						PH #3 spotted twice	
						used 2 InObaked plates to test D76 and Acufine	

Date Mar 18-19 1954 Observer Ko - Ko
lg - H_v Julian Day 2438.473
 @ 358 25 36.7 3577.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27401	OTB			I-12						
27401	BD 45° 1859	10 33.1	+45° 22'	I-12	IIaDB					
27401	HD 84059	09 37.4	+45 11	Z-12	IIaDBK	.012	16?	22 ^h 50	23 47	1
27402	HD 114762	13. 07.5	+18.02	I-12	IIaDB	.016	-4.6	00 ^h 52	01 20	
	"			"	"	.008	-4.6	01 23	01 53	2
27403	HD 131861	14 50.7	+45 45	J-12	IIaDB	.008				

Dome Temp. 20°CFocus 12.66

Dome Temp.

Transparency Conditions ~~fair~~ poor

PRISMS found incorrectly set.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						set 3 clear & very light snow till - 2/40 set 7 too faint	OK - tend to be confused to vis
01 ^h 35 W	44° 51'	2	9.59	F4	3-1-2	set 7 KAKS	20208 (6) fine 20214 (6) & strong
00 20 E.		0	8.2	F7	2-1-2	set 5 STD VEL.	20221 (10) & strong 20231 (10)
00.13 W	17° 42'				3-3-3	set 9 EX. MTR. CHECK	20232 (5) fine 20237 (5) good in vis.
			7.64	F3		set 5	
						P.H. #3 Loaded SPOTTED TWICE	
						" #4 Loaded	
						<u>2.00 - 3.30</u> MORE flurries although sky apparently clear.	

MAR

Date ~~Thurs~~ Fri 19-20/64 Observer ~~Ko, K~~ Sm - ~~19~~ ^{Ko} Julian Day 2438.474.
 0 359 25 14.6 3575.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27402 F	OTB			I-12		.008	-3°			4
326-2937	72,905 π UMa	08 ^h 36.2	+65° 09'		6/6/33	28	700v	20 ¹⁵	a, b, c	
" 2938	84,117	09 ^h 40.6	-23° 45'		6/5/33	28	750v	21 ¹⁰	a	
" 2939	90,508 ^A	10 25.7	+48° 59'		6/6/33	28	750v	21 ³⁰	a, b, sky, c	
" 2940	87,901 α Leo	10 06.4	+12° 09'		5/4/33	28	700v	22 ¹⁵	a	
" 2941	95,128 47 UMa	10 57.5	+40° 37'		6/5/33	28	700v	22 ⁴⁵	a, b	
" 2942	97,334 ^{97,331}	11 10.6	+36° 01'		7/5/33	28	700v	23 ¹⁰	a, b, sky	
" 2943	98,030 ^H UMa	11 16.3	+31° 44'		5/6/33	28	750v	23 ⁴⁰	a, b	
27403	HD 131861	14 50.9	+45 ³³ 22	I-12	HD 131861	.008	-4°	01 37	02 41	3
27404	HD 133965	15 02.2	+29 35	I-12	HD 133965	.012	-4°	03 05	05 05	1

Dome Temp. 25°

Focus 12.6 G

Dome Temp. 21.33

CO₂ in
voltage 700V } 1945 EST

Transparency Conditions excellent; fairly windy

Who the hell took the arc strike?

New Moon in W

Hour Angle - End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					10-7	1) This language is to be deplored. 2) Who did? set 5. - MR.	OK starts faded
00 ⁴⁰ E, 00 ²¹ E, 00 ⁰⁶ E		4" - 8"	5.64	G0V		seeing disk changed wildly from 4" to 8", star jumped all across	
00 ⁴⁵ E		10"	4.9	G0V		seeing terrible!	
01 ¹⁰ E, 01 ⁰⁰ E, 00 ⁴³ E		4"	12.5	G1V		21 ³³ : sky v. good still everywhere	
00 ⁰⁰		10"	1.33	G1V	HD	90,508 jumps to 10" disk well	
00 ²² E, 00 ¹⁸ E		3"	5.04	G0V		22 ³⁰ : wind calmed down, sky unchanged, seeing ^{much} better	
00 ¹⁶ E, 00 ⁰⁵ E		3"	6.32	G2	HD	97,334 in printing + change red = blue component	
00 ¹² W, 00 ²⁰ W		4"	4.29	G0V		included both stars of binary system	
						12 ⁰⁰ : haze developing around horizon, circles low in W	
00 50 E +4 ³ 29		2	7.64	F3	3-3-3	SETS KAFS cloud forming from West, seeing	{ 8263 8278 } fine
01 ^h 34 W +29 20		2	9.42	F6	3-2-2	SETS KAFS wind from N.W. 00 ³⁰	{ 0277 0306 } fine
						bH #4 loaded	anyone undeveloped curve ①

63

see note in "Instructions" for NEW exposure counts
as of MARCH 20, 1964. (Fri)

Date Mar 22/23 Sunday 1964 Observer KO - Julian Day 2438.477

0 02 23 54.4 3568.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Ang End
27404F	OTB					.008					
27405	HD 62509 p Mem	7 ^h 39 ^m .2	+28° 16'	I-12	IIA0B	.008	+3°C	19:50	1956	1	0° 3' E
27406	i UMa	8 ^h 52.4	+48° 26'	J-12	IIA0B	.008	+3°C	2055	2100	3	0° 12' E
27407	HD 82885 II L mi	9 ^h 29 ^m .7	+36 16	I-12	IIA0B	.008	+3°C	21:08 21:11 21:18	21:10 21:17 21:28	2	0° 45' E 0° 32' E 0° 20' E
27408	v UMa	9 ^h 43.9	+59 31	I-12	IIA0B	.008	+3°C	2137	2142	1	0° 22' E
27409	η LEO	10 ^h 01.9	+17° 15'	I-12	IIA0B	.008	+3°C	2151	2155	2	0° 26' E

Dome Temp. 32

Focus 12.66

Dome Temp.

non photometric!

Transparency Conditions clouds in NW

64.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					10.7	set 5.	sl centre to red
0 ^h 3 ^m E	+23° 07'	0	2.21	KOTT	3-6	YOSS spotted twice set 2	1/4 good guid.
					3-6	set 5	1/2 strong not
					3-6	set 8	1 strong good
0 ^h 12 ^m E	+48° 11'	0	3.3	A7V	6-3	set 2 MK standard (look!)	1/8 low. weak guid center poor
					6-3	set 5	1/4 strong guid poor
					6-3	set 8	1/2 strong
0 ^h 40 ^m E	+36° 00'	0-1	6.22	G8IV-V	6-3	set 2 YOSS spotted twice	1/2 good guid. poor
0 ^h 32 ^m E					6-3	set 5 " numbered 27428	1 fine
0 ^h 20 ^m E					6-3	set 8 "	2 strong
0 ^h 22 E	+59° 14'	0-1	4.3	F2IV	6-3	set 2 MK Standard "	1/8 low. weak guid. poor
					6-3	set 5	1/4 fine plate
					6-3	set 8	1/2 strong good
0 ^h 26 ^m E	+16° 59'	0-1	3.6	ADIV	6-3	set 2 MK Standard "	1/8 weak
					6-3	set 5	1/4 good
					6-3	set 8 Companions strong dust on slit	1/2 fine strong

Date Mar 22/23 cont'd Observer HW - K^o Julian Day K^o

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27410	α Leo	10 ^h 03.0	+12 27	I-12	IIaOB	.008	+3	2202	2206	3'
27411	β LEO	10 ^h 11.1	+23° 55'	I-12	IIaOB	.008	+3	2214	2219	1
27412	40 LEO	10 ^h 14.3	+19 50	I-12	IIaOB	.008	+3	2225 2227 2230	2227 2230 2240	2
27413	BD+45° 1859	10 ^h 38.3	+45 12	I-12	IIaOB	.012	+3	2310	02 26	4
27414	HD 131861	10 ^h 50.9	+45 43	I-12	IIaOB	.012	+3	0302	0326	1
27415	HD 142592	15 ^h 50.3	+45 15	I-12	IIaOB	.012	+3	0333	0443	2

Dome Temp.

Transparency Conditions

Fair

Focus 12.66

Dome Temp. 26°

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 0 ^h 15 ^m E	+17° 08'	0-1	1.21	B7E	6-3	set 2 MK Standard	1/4 fine - good in vis. plate stopped because comparison
					3-6	set 5	1/2 strong on spot
					6-3	set 8	1 strong marked
1 0 ^h 12 ^m E	+23° 35'	0-1	3.82	F0III	6-3	set 2	1/4 good good poor
					6-3	set 5	1/2 fine
					6-3	set 8	1 strong good
2 0 ^h 06 ^m E	+19° 42'	0-1	5.27	F6IV	6-3	set 2	1/2 good good
0 ^h 02 ^m E		0-1			6-3	set 5	1 strong
0 ^h 08 ^m W		0-1			3-3-3	set 8	2 strong
4 3 30 W	+44° 53'	0-1	9.59	F4	3-1-2	set 5 KAFS. (scouts) #9	{ 0370 (1) fine - strong comp. etc.
							{ 0398
2 0 19 W	+45 28	0-1	7.64	F3	2-2-2	set 5 KAFS	{ 0394 exp. fine
							{ 0399 guiding po.
2 0 36 W	+45 04	0-1	9.25	A22	2-2-2	set 5 KAFS	{ 0400 exp. strong
							{ 0420 good
							20

PH #1,2,3 loaded. The last 3 plates seem foggy but must be same emulsion!

is there a box of plates left in dome too?

Dome Temp. 34°

Focus 12.66

Dome Temp.

Transparency Conditions *Faint Cirrus clouds three-out
skies* 68

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					10-7	Set 5	sl center to red
			3.76 K4 III				
03 25 W?	$+44^{\circ} 24'$	R	9.72	G8	R-	Set 5 Set 7 KAFS {9470 (0501) (50)	fine example

always record end of exposure!!

light comes from southern sky
clouded over by thin cloud band
0745

PH. #3 is loaded.

Please check plate clamp on camera
It doesn't hold!!!

Dome Temp.

CO₂ in } 1830

Focus

750V }

Dome Temp.

Transparency Conditions part cloudy

Fine polar Air

2255 clouds appear

00:30 still cloudy.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 ^h 24 ^m W			1.95	A0IV		EXT ST	
0030 + 0020 E		8" 5.35	5.35	5.35			
0040 + 0030 E		5" 5.35	5.35	5.35			
0025 + 0015 E		4.95	5.05	5.05			
0017 + 0007 E		8" 5.35	5.4V	5.4V			
0020 + 0010 E		8" 6.45	5.1V	5.1V			
0026 + 0016 E		7" 5.04	5.0V	5.0V			
0017 + 0007 E		7" 6.32	5.2	5.2		TH. 12 a 5 Star! +	
0015 + 0029 W		4.29	5.0V	5.0V		Double! clouded out ~	
		4.75					
						4PH loaded. + 12	

OK
 OTS faded out
 in Vio.
 PA along

73
 Date Mar 31 April Tue-Wed/64 Observer Do St Koo - Hg. Kuo Julian Day 2438486

$\odot 11^{\circ} 17' 55.0$ 3550.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27416F ₂	Focus Test		OTB							1
27417	HD 59612	7 ^h 25.6	-22° 49' 12"	I-12	DAOB	.008	-2°	19:26	19:29.5	2
								19:27.5	19:41	
								19 ^h 42		
27418	BMC	8 ^h 11.1 ^m	+9° 30'					20:23	20:24	3
								20:25	20:28	
								20:28.5	20:34.5	
329-2958	74,274	08 ^h 44.9	+06° 33'		5/6/33	28	700v	20 ⁵⁰	21	
2959	84,117	09 40.6	-23° 45'		6/6/33	28	700v	21 ²⁵	21	
2960	97,561	11 11.8	+20° 20'		7/5/33	28	700v	21 ⁵⁰	21	
2961	87,901 _g L _g	10 06.5	+10° 09'		4/6/33	28	700v	22 ³³	22	
2962	93,070 FU	11 16.3	+31° 44'		5/6/33	28	750v	23 ⁰⁰	23	
2963	101,501 FU	11 39.1 _g	+34° 24'		4/6/33	28	700v	23 ⁰²	23	
27419	HD 136244	15 14.5	-16° 29'	I-12	DAOBK	.008	-2°	01:47	02:10	4
27420	HD 136244	15 14.5	-16° 29'	I-12	DAOBK	.012	-2°	03:39	04:49	4

Dome Temp. +28°F
 Focus
 Dome Temp.

voltage 7dov
 CO₂ in : 20⁴⁰ EST

Transparency Conditions Clear

O.K. - around horizon a bit hazy

Check window behind view arc!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					10-7		center to violet
00:20 W	-22° 56'	1	4.9	AS16	3-6	MK Standard set 3 last	weak
00:25 W		1	"	"	3-6	set 5 (act)	good guid.
01:01 W		1	"	"	3-3-3	set 7 (B) 50576	strong
00:30 W	+9° 16'	1	3.8	K4	9	MK Standard set 3 1/2	exp. good guiding poor
00:32 W	<u>BE CAREFUL</u>				4-5	5 1)	fine guid in vis
00:38 W					4-5	7 2)	strong guid poor
00:17 W, 00:00 W				df8	3.38		dust on slit
00:14 W, 00:25 W				G0V	4.95		
00:43 E, 00:00 E				G7V	6.92		
01:22 W				87V	1.33	22 ³⁵ : good higher up - hazy low in sky	
00:21 W, 00:32 W				G0V	4.29 4.75	21 ⁰⁰ : " " "	
00:17 W, 00:27 W				G8V	5.33		
00:12 E	+60 14'	2	9.68	K3	3-3-3	set 5 KH + 5	exp. fine guid, var
01:58 W	+59° 39'	2	7.85	F5	2-1-2	set 5	fine guid in vis
						PH #1, 2, 3 loaded + 8	Check window

Dome Temp. 31°

Focus 12.66

Dome Temp.

Transparency Conditions

Good.

Clouds at 21:15

Clear at about 22:00.

include spectral
type etc.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:25 W		1-26.3		B9	9	Set 9 B8-B9 Jan 6 / count	Strong guid seems to be center to violet
					99	Set 5 ^{not set 5!!}	
1:37 W		6.3			9	Finer field	1 count
1:49 W		6.3			9	same o.k.	1 1/2 count
1:06 W		1 6.1		B8	9	Set 9 B8 B9 comes wrong with	1 count fine guid
1:14 W						" 5 night star!	1 count strong
1:31 W						Set 1 see finer field book: ^{corrected!}	1 1/2 count strong
1:41 W		1 7.4		K1	4-5	Set 5 Standard Vel.	{ 684 689 } strong
1:26 E		6.1		B9	9	Set 9 B8-B9 AD	1 count fine
1:21 E					9	Set 5 ✓	1 1/2 strong guid
1:15 E					9	Set 1	1 1/2 1. str
3:19 E		5.1		B8m	9	Set 7 } Sp. Binary	1 1/2 strong + dit very short
3:13					9	Set 3 }	1
						PH #2 IS LOADED	
						who left plates in obs. case ??	
						Echo II at 21:45 overhead.	

Date Apr 3-4 Fr/Sat '64 Observer vdB / Re Julian Day 2438489.
 014 15 19.9 3544.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
330-2964	HD 81858	09 26.6	+09 13		6/5/33	28		19:50		
330-2965	HD 84737	09 46.3	+46° 11							
330-2965	♂ Leo	10 06.4	+12 09		4/6/33	28		20:15		
330-2966	47 UMa	10 57.4	+40 37		6/5/33	28		20:43		
330-2967	HD 97334	11 10.6	+36 01		7/4/33	28		21:07		
330-2968	HD 97561	11 11.8	+20 20		7/5/33	28		21:37		
330-2969	61 UMa	11 39.2	+34 24		6/6/33	28		22:03		
330-2970	HD 103035	11 50.8	+38 00		7/4/33	28		22:28		
330-2971	HD 104304	11 58.9	+10 14		7/4/33	28		22:54		
330-2972	HD 109345	12 32.0	+33 35		7/4/5/33	28		23:20		
330-2973	β CVn	12 32.0	+41 33		6/5/33	28		23:43		
27425 F	OTB HD 133865	12/8		schal	12.66			01^h05^m		
27426	BD 45° 2344	15 ^h 07.2	+29° 35'	I 12"	IIaOb 0.012	-2°C		01 ^h 05 ^m	02 ^h 45 ^m	2
27427	BL 45° 2344	15 ^h 18.6	+45° 00'	I 12"	IIaOb 0.012	-2°C		03 ^h 00 ^m	05 ^h 35 ^m	1

Dome Temp. 20°F
 Focus 12.66
 Dome Temp. +120°F

Corin 1830

Transparency Conditions Fine
 Very windy!

750 V

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ^h 59 ^m E		6"	5.40	-			
			5.07	53E			
1 ^h 12 ^m E			1.33	B 7V		2 AT. ST.	
1 ^h 35 E + 1 ^h 25 G		5"	5.04	50E			
0128E - 0118E			6.32	52			
0100 + 0050E		4"	6.92	57IV			
0100 + 0050E			5.33	58E			
0050 + 0040E		5"	6.45	58VI			
0029 + 003E		8"	5.54	497			
0035 + 0025E		8"	6.22	558			
0015 + 005E		10"	4.29	50E			
0012W + 20° 18'		2	9.4	F6	2-2-2	OK KAFS See 29; set 5 plates	at center to weak
0015W + 20° 18'		1	9.7	F3	2-4	OK KAFS See 29; set 5 plates	fine
0015W + 20° 18'						5 ^h 20 ^m 200 V	fine spot

Dome Temp. 24°F

Transparency Conditions

Focus

209 visitors; showed Uremus; CL, HU, FL, KO, MR, SM.

Dome Temp.

12:00 sky very hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Declination controls don't work. Had to pull telescope down by hand. - hard work you ought to try it sometimes!!!	OK
						sky almost completely clouded over 01:30	

April 9/64 Both clocks, 74" dome, correct to within 1". SH

Date Apr 9-10/64 Thurs-Fri Observer Ko Julian Day 2438495
 @ 20 09 21.6 3534.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27428	HTD 92124	10 ^h 33.1	+45° 22	I-12	IIA ₀ B	.016	+5	19 ^h 49	20 47	1
27429	B0 45 1869	10 38.3	45 12	"	"	"	+4.8	21 40	23 26	2
27428	Focus test	OK								
27428										
	Ko - record focus test even when on same plate									
	- number <u>all</u> plates									

Dome Temp. 40
 Focus 12.66
 Dome Temp.

CO₂ in 23^h
 Voltage 700 ✓

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 54E	45 04	0.1	9.76	K5	1 1/2 - 1 1/2 - 1 1/2	1X AFS Clean up	10 { 0778 (50) up good 0808 (50) good in v.a. alt. star d.
01. 43W	44 50	2	9.59	F4	1 1/2 - 1 1/2 - 1 1/2	" " "	10 { 0837 (25) weak 0872
						Cloudy after Midnight	
						Clouded at dawn	

Dome Temp. +35°C

Focus 12.68

Dome Temp.

COZIM }
V = 750V }

1900

Transparency Conditions

C: low in west, OK NOT XUY
2200 sky "Light!"

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0100+0050E			6.50	dkk		A	
0050E+0040E		8"	5.54	dgz		drifted out at end	
0010E+0000		5"	6.45	g8VI			
0027G+0017E		8"	4.29	g0V			
0015E+005E		4"	5.94	g0Z			
0005W+005W		3"	6.31	-			

sl. cent. to violet. set at 12.68

center to violet

Slow motion controls
fell out of box twice!

10.0 F5

0130W

+29°40'

1+ to 3+

10.0

F5

2-2

KAFS (with faint!!) sens @ slit 2 { 0.96
9.16

Sub B

an expos. on slit 5 might be seen in plate, was set in many

weak
guid. poor

2430: Seeing fluctuates from 1+ to 3+ with a period of ~ 5 sec

3430: Seeing 3+ steadily. Amazing! D=1"

Close Up

4 45

1 PH in Dia

Dome Temp. 38°

Focus 12.68

Dome Temp.

Transparency Conditions 23:00 slight haze.

00:00 haze thickening

01:00 haze very thick.

02:00 much better.

03:30 clouds moving north.

sky getting hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 ^h 22 ^m W	+44° 52'	0	9.59	F4	2-3	Set 2 KAFS #9 { 0920 0925	weak
						00:45 ^{EST} haze too thick - can no longer see star.	
	+36° 47'	0	5.1	BBn	3-6	Set 2 Speed. Binay. (Ab) #5 { 0935 0937	strong comp. strong
0 ^h 45 ^m E	"	"	"	"	9	Set 5 #5 { 0938 0939	1 strong "quad"
1 ^h 07 ^m W	+29° 43'	2	9.99	F5	2-3	Set 5 KAFS #10 { 0944 0965	40 luck - good "set"
					7-5	set 7	OK
						03:50 clouds overhead moving south	
						04:00 sky completely clouded over	
						PH #1,3 Loaded	
						One visitor bumped its head on the dome - left by way of the open shutter.	

Tue-Wed

Date April 14/15, 1964

Observer

Sr

Dg

Ko

= Hr
= KoJulian Day 2438500.5

0 25 03 32.0 3523.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27434	BD 45° 1959	10 ^h 38.3	+45° 10	I-12	DaO-B	.016	+16	19 ^h 55	21 ^h 35	1
27434	OTR		Focus test							
27435	HD 92124	10 ^h 33.1	+45° 22	I-12	DaO-B	.016	+16	21 ^h 40	23 ^h 14	2
27436	BD +44° 3012	11 ^h 33.2	+44° 39	I-12	DaO-B	.016	+15	23 ^h 24	01 24	3
27437	HD 144579	16 01.5	+39 24	"	"	"	15.3	02 12	02 20	4
EX. MTR. TEST	"							02 21	02 39	"
	"							02 39	03 23	
27438	HD 168322	18 ^h 14.0	+40° 54	I-12	DaO-B	.016	+15.3	03 57	04 09	2
								04 10	04 16	
								04 17	04 19	
27439	HD 176411	18 ^h 55.1	+4° 56					04 34	04 43	3
								04 44	04 48	
								04 49	04 52	

Dome Temp. $+58^{\circ}\text{F}$ Transparency Conditions ClearFocus 12.668

24.00 Exposure meter removed.

Dome Temp. $+50^{\circ}\text{F}$

EX. MTR. 1 NEW TUBE (6UBA) 1 re-soldered conn.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ⁰⁰ <i>connect to within 2 min!</i>	44° 53	2	9.59	F4	1 $\frac{1}{2}$ -1 $\frac{1}{2}$ -1 $\frac{1}{2}$	set 3 KAFS EXPOSURE METER DOESN'T WORK	no comp! no OTB!
1 ⁵⁴ W	45° 03	2	9.76	K5	1 $\frac{1}{2}$ -2-2	set 5 KAFS	Another focus test should have been taken!
0303W	44° 17	2	9.65	F7	2-2-2	set 5 KAFS	date has been much handled!
0028E		1	7.2	G8	—	" 2 STD VEL 2 COUNTS #7	1039 1041 fine
0009E	39 14	1			3-3	" 5 " " 4 " "	1042 1046.2 strong
0036W					—	" 9 " " 8 " "	1047 1055 too strong
0034W	40° 55	1	7.1	K0 III	3-2	" 2 + Yoss - spotted twice #7	1060 1069 (1) strong
0037W					3-2	" 5 Yoss - " " #7	1065 1067 fine
0040W					3-2	" 9 Yoss - " " #7	(1) fine
00403E	15° 03	1	5.2	K2	2-2	" 2 Yoss " " #5	(1) out
0058E					3-2	" 5 " " "	(1) of
0054E					3-2	" 9 " " "	(1) of
why use 016 slit on Yoss stars?						PH #1, 2, 3, 4 loaded +8	loaded to handle

ECHO II 7:45
91

Before using loaded plate holders, check that they
are properly loaded. Last plate April 14/15 loaded back on ds.

Date April 15-16 / 1950 / Thurs / Observer Ch. Ko 7 KO Julian Day 2438501.5
026 02 15.9 3521.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27440	BD +45° 1859	10 ^h 35.3 ^m	+45° 12'	I-12	IIaO-B	.016	7.5	21:48	21:42	1
27441	HD 92124	10 ^h 33.1 ^m	+45° 22'	I-12	IIaO-B	.016	7.5	21:51	23:35	2
27441	Focus Test	073/11A				.008				2
27442	HD 139892 § CBA	15 35.6	+36 58	I-12	IIaO-B	^{long} .868		23.59	0:04	3
332-2980	130,948	14 ^h 42.7	+24° 04'		7/4/33	28	700V	00 ²⁵	a	
" 2981	135,101 A	15 11.2	+19° 25'		7/5/33	28	700V	01 ⁰⁰	a, b	
" 2981	135,101 B	15 11.2	+19° 25'		7/5/33 7/5/33	28	700V 750V	01 ³⁰	2 sky	
2982	139,006 α 6 B	15 33.1	+26° 50'		5/5/33	28	700V	02 ⁰³	a	
2982	139,006 α 6 B	15 33.1	+26° 50'		5/5/33	28	700V	02⁵⁵	a	
27443	BD 29° 2751	15 ^h 57.6	+29° 42'	I-12	IIaO-B	.016		03 ^h 23	04 ^h 15	4
27442 F	OTB					.008				
	OTB					.008				
	OTB					.008				

Dome Temp. 42°F
 Focus 12.68
 Dome Temp. 32°F

Transparency Conditions Good
 12⁰⁰: good (photometrically too)
 AH # 1, loaded + 6

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 18W	+44° 53	1	9.59	F4	2-1-2	Window behind Iron arc is broken! Seven 1/2 normal counts (+ 1 1/2 hrs)	10 1114 1149 (20) fine
02 17W	+45 03	1	9.76	K5	2+-	Set 5 KAFS gumb 1 3/4 hrs → 55 counts / 100	10 1153 1208 (20) l strong quad poor etc to violet
02 10E	+36° 45	1	5.1	B8n	9	set 5 Ab S.B.	5 1213 1215 (2) strong well guided
00 ⁴⁵ E, 00 ³⁴ E		7"	5.75	d62			
00 ¹⁷ E, 00 ²⁷ E		4"	6.68	G6			
00 ¹⁶ E, 00 ⁰⁰		2"	7	d67			
		14"		AD E			
		14"	7.23	AD E			
						02 ³⁰ : Wasted half hr. with the not working 02 ⁵² : pen plainly refuses to work 03 ⁰⁰ : pen, but no adequate tracing	
						Frank, Please look into the needle trouble	
			9.99	F5	12	set 2 KAFS too faint	{ 1227 1262 (35) too weak
00 18W	North					set 5	
11	normal			11-8		set B	prisms not changed during test
11	south			11-8		set 8	prisms south of L. OTB
	North			11-8		set 10	prisms not fully south for 1TA



Date Thurs April 16-17/64 Observer L - H ✓
K₀ - K₀ Julian Day 2438502.5
0 27 00 57.6 3519.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27444	BD-45° 1959	10 ^h 38.3	+45° 12	I-12	II-OB	.016	+8.0	19 ^h 58	22 08	1
	F) Focus test		OTB							
27445	BD-45 2134	13 ^h 46.8	44 52	"	"	"	+7.9	22 50	0132	2
27446	HD 142592	15 ^h 50.3	45 15	"	"	"	+8	0145	03 ^h 11	3
27447	HD 168322	18 ^h 11.0	+40° 54	"	"	.008	+8	0343	04 09	
	"							0409 ³⁰	0419 ³⁰	
	"							0420	0424	
27447 F1	Fri April 17		centre to red			focus	12.69			
F2	"		sl centre to red				12.67			
60cc developer + 60cc water added to increase developer volume										
Next observer please change focus setting back to 12.66										

Dome Temp. 44°F

Focus 12.69

Dome Temp. 40°F

Transparency Conditions *fair*

Occasional clouds after 0100

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
051W	+44°53	1	9.59	F4	1 1/2 - 1 1/2 set 3	K.A.F.S. plate broken	sun 9. { 1306 1331 } (S) fine
					5-4 set 6		centre + violet
0107W	44 34	0-1	9.90	F9	1 1/2 - 1 1/2 - 1 1/2 set 5	K.A.F.S.	set 9 { 1337 1352 } (S) fine with grid on vid
0043W	45 05	0	9.25	A2	1 1/2 - 3 " 5	"	#9 { 1364 1389 } (S) fine
0042E	40 57.5	0-1	7.1	KOIII	3-3-3 set 2	Yoss - spotted trace	#7 { 1417 1421 } (S) strong
0032E					4-5 " 5	"	#7 1422 (S) fine grid
0027E					9 " 9	"	#7 { 1425 1426 } (S) Link poor

1 P.H. loaded + 11

Dome Temp. 6.7° Focus 12.66 C

Dome Temp.

Transparency Conditions *partly cloudy*

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
$01^{\text{h}} 20^{\text{m}} \text{W}$	$+44^{\circ} 53'$	$1 \rightarrow 0$	2.59	F4	2+1+2	KAFS 1430 - 70 HUSBIn, windy! full counts! clouded out 35 counts, lightning 2pH loaded	fine good best night
<p>Sat Apr 18 \checkmarkB Cw, CK, Dm 140 visitors showed Moon</p> <p>Dome rotates too slowly, please fix \checkmarkB</p>							

Dome Temp.

CO₂ in } 1900
V=750 }

Transparency Conditions Fine, Sunsets bit red

Focus

2115 isolated clouds

Dome Temp.

Hour Angle
End

Declination

Seeing

Pig.
Mag.

Sp.

Comp.

REMARKS

Quality

0^h12^mW

-1.33

B7V

EXT. ST.

1^h45^m + 1^h55^m

8" density

5.93 dko

northern component of wide pair

0^h15^m E + 0^h05^m E

8" density

6.50 dko

bright component of close pair [clouded out]

195 visitors showed Uranus Hd, Mt, Cr, Ko, im.
 Echo II in W 20:45 below Venus.

Date Apr 25/26 Sat-Sun Observer Ab - Sm Ko - Ko Julian Day 2438511.5
 @ 35 47 34.0 3500.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
27448 ⁹	BD+45° 1859	10 ^h 38.3	+45° 12'	I-12	IIA0B	.016	+11.°	23:16	00 ^h 48	R	04:05
	F Focus Test		OTB								
334-2985	142,267 395er	15 ^h 51.6	+13° 20'		8/3/33	28	700v	01 ¹⁵ 02 ⁰⁰	a, b, c, sky		07:00
2926	157,347	17 20.9	-02° 21'		8/3/33	28	700v	02 ³⁵	a, b, sky		07:00
2987	163,340	17 37.5	+03° 34.4'		8/3/33	28	750v	03 ¹⁰	a, b, sky		07:00
2988	172,167 α Lyr	18 35.6	+38° 45'		6/2/33	14	700v	03 ⁴⁷	a		07:00

Dome Temp. 46°

Focus $+2.66$

Dome Temp. *full moon*

CO_2 m: 22° 00° 00° EST
valley 7000, 00⁵⁰

Transparency Conditions *good at 22⁰⁰*

Who changed the width of the prisms? ? ?
ring around full moon 01⁰⁰ EST
03¹⁵ good!

see below

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
$04^h .05W$	$44^{\circ} 53'$	1	9.59	F4	$1\frac{1}{2} \times 1\frac{1}{2}$	<p><i>set telescope drifted badly in RA when far West! KAFS</i></p> <p><i>set 9</i></p> <p><i>CALL L when something obviously wrong!!</i></p>	<p><i>sp. fine but spectrum displaced</i></p>
$00^{\circ} 07' N . 00^{\circ} 31' W$			6.10	G2E		<p>1. must move star to left of center in visitor's eyepiece to come into spectrophoto meter eyepiece</p>	
$00^{\circ} 34' E . 00^{\circ} 23' E$			6.28	G5-		<p>2. amplifier horrible - sometimes deflects to left for star light</p>	
$00^{\circ} 13' E . 00^{\circ} 02' E$			6.22	AK3		<p>great noise for dark current</p>	
$00^{\circ} 28' E$			0.03	AOE		<p>the amplification 8/3 is the only thing that gave a reasonable tracing for 39 dex</p> <p>- the same story still for HD 157,347</p>	
<p>Unable to find star in slit. Ab + Ko tried for an hour. Star showed up as a long slit N-South instead of a spot of light. No slit visible.</p>							

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ECHO II 35° up in W 20:23 EST

Date Apr 26/27 1964 Sun-Mon Observer ^{CN} ~~KO~~ - ^{HV} ~~KO~~ Julian Day 2438512.5
036.45 54.5 3498.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
⁵⁰ 27449	B9 +45° 1859	10 38.3	+45 12	I-12 ^{1/2}	IIA0B	^{set} .016	14°C	20:09	21:25	3
	FOCUS TEST		OTB			^{set} 1008				
⁵¹ 27450	HD 110501	12 37.5	+34 14	I-12	IIA0B	^{set} 1008		21:51	22:09	4
⁵² 27451	HD 110743	12 39.1	+34 58 ³	I-12	IIA0B	^{set} .016	14.2	22:15	0031	1
⁵³ 27452	HD 142592	15 ^h 50.3	+45 15	I-12	IIA0B	.016	14.0	00:44	0230	3
⁵⁴ 27453	BD +29° 2751	15 57.6	+29 42	"	"	"	"	0242	0432	4
	FOCUS TEST		OTB			"				
100 cc of replenisher added to developer to bring volume up to normal										

Dome Temp. 56°
 Focus 12.66
 Dome Temp. 52°

20:30 cloud worse, seeing better
 22^h l. better

Transparency Conditions

poor - high cirrus cloud
 very hazy
 very bright moon (full)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 ^h 56W	+44 53	1	9.59	ZH	2-1-2	set 2 KAFS #10 1607 1647	spectrum displaced quibing poor exp. frame ? inside comp. split
00 ^h 29E	+33 54	1	7.7	KOT13	3-3	set 5 MR Hi Vel. Gants #8 1651 1661	strong exp short slit displaced strong exp
01 52W	+34 33	2	9.8	G871	2-1-2	set 5 MR H. Vel. HS. #10 1663 1713	short slit displaced exp frame
00 42N	+45 04	2	9.25	A2	2-1-2	set 5 KAFS #9 1714 1735	short slit displaced
02 07W	29 11	1	9.99	F5	2-1-2	" 5 KAFS #10 1738 1755	short slit displaced spectrum
					6/4	" 9	ITA - ?? split!
<p>PH #1 loaded used for deinterometer experiment #27454.5</p> <p>*S by much worse during last exposure</p>							
<p>Note slit appears to be very long. Gary: Please check slit (pos. of pressure)</p>							

Set up the Cooke 4 1/2" up on the lawn - showed Venus -
showed Uranus on the 74" FL, MCL, CC

Date May 2-3 1964 Sat-Sun Observer Re Ko Julian Day _____

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27455	Focus Test OTS			I-25	IIA0B	.008	+13.5			
1	M UMA	13 ^h 43.6	+49° 49'	I-25	IIA0B	.008	+13.5	0045	0055	
	"									
27456	S OP14	16 ^h 31.7	-10° 22'	I-25	IIA0B	.008	+13.5	02:02.5	02:03	3
								02:04	02:05	3
								02:06	02:08	3
27457	HD 184467	19 ^h 29.5	+58° 24'	I-25	IIA0B	.008	+13.5	02:41	04:11	4

Dome Temp. 54°
 Focus $15.49 - 11 = 15.38$
 Dome Temp. 48°

Transparency Conditions

Who took the ARC-STRIKER?

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					20/16	set 2	discarded set #5.
0 ^h 20 ^m W	+49° 29'	1	1.91	B3V	9-9	set #7 MK st	normal counts #4 ② good fine
					9-9	set #10	" 1/2 counts #4 ① weak
00.55 ^m E	+10° 29'	1	2.70	09.5V	9-9	set 2	" #4 ① line
00.57 ^m E			2.70	09.5V	9-9	set 5	" #4 ② fine
00 ⁰⁰			2.70	09.5V	9-9	set 8	" #4 ③ fine
0 ^h 51 ^m E	+58° 29'	1	7.5	KS	6-6-6	set 5 st.v.1.	#7 (1830) ④ fine
						also OTB locus test 20/16	focus at
						420 close up	
						1PH (#1) loaded in N.Pis.	
						spotted once	

1964

Date MAY 3-4 Sun-Mon Observer FL, Ko - Hr, Ko Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Ab End
✓ 27458	γ UMa	11 ^h 48 ^m .6	+54° 15'	I-25	IIa0-b	.008	+15.5	20:44	20:52	/	0:29
	"			"	"	"	"	20:54	20:57	/	0:34
	"							20:59	21:01	/	0:21
	Focus OTB			"	"	"	"			/	
' 27459	HD 109379	12 29.1	-22 51	"	"	"	"	21:34	22:11	2	0:10
' 27460	HD 122080sp	13 54.5	+26 18	"	"	.012	15.5	22:43	04:29		0:33
	Focus Test OTB					"					

Dome Temp. 59°F
 Focus 15.51 - .11 = 15.40
 Dome Temp. 52°F
 49°F

Transparency Conditions 20:15 Haze over entire sky + cirrus. ~2-3 mag extinction. 108

21:00 Haze gone - but light cirrus filaments.

FINDER LIGHT FIXED

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0:29 E	+53 55	0	243	AoV	-	Set 0 MR-EW counts: 6 ¹⁸⁶⁷ Sens 6	
0:24 E		1			-	" 1 Taken because heavy haze obscured ftr 3 "	fine
0:21 E		1			18	" 3 stars. 1 1/2 "	
					20/16	Set 9 Done before above star.	good
0:10 W	-22 51 ¹⁹⁰⁰ ?	0	2.8	G4	6-6-6	Set 5 No finder field drawn since Very bright [Std. Vel.] counts 8 ¹⁸⁹⁰ Sens 6	1 strong
0503 W	+260	1	8:	A:	6-6-3	Set 5 KA8X8 ¹⁸⁹⁵ position angle and separati. seem 0.1. 1921 Sens 8	good
					15/12	at 23:20 RA. slow button came out - stopped exposure until FRANK fixed it. 0.08	OK
						↖ Set 9	
						3 P.H. Loaded.	

Dome Temp. 62°
 Focus 15.46
 Dome Temp. 56°

Transparency Conditions Hazy 20"

Sky condition fooling the whole night - turning perfectly clear to hazy in, only to brood up cirrus patches across the sky, to clear again after one had given up, to only veil over again etc etc driving the patient mad.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					20/6 set 1	CK left slide closed	
03 ^h 30 ^m W	+17° 54'	0	6.62	A0	6-6-6 set 5	KA 8x8	#7 {1936 (12) fine
00 ^h 20 ^m E	+36° 46'	0	5.1	B8n	6-6-6 set 2	Ab Binary	#7 {1951 (12) fine
00 35 W		0			6-6-6 set 5	Twice NORMAL counts	#7 {1966 (24) fine
01 04 E	-11 01	1-0.5.2	6.7		6-6-6 set 5	Std Vel.	#7 {1967 (16) fine
00 52 E	+58 31	1	7.5	K5	6-6-6 set 2	Std Vel.	#7 {1995 (16) fine
					20/16 set 8		#7 {2011 (16) fine
							#7 {2013 (16) fine
							#7 {2029 (16) fine
							OK

3 PH in 03^h loaded fridge

Dome moves very slowly when in W half of sky.

EST

Date MAY 7-8/1964 Thurs-FriObserver L
Ab
KoJulian Day 2438523.5

① 47 25 53.0 3482.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.
2746 ⁵⁴	Focus Test		OTB				24'			
√2746 ⁴⁴	HD. 103 095	11 47.2	38 26	I-25	IIA0B	.008		20 30	21 36	3
√2746 ⁶⁵	" 127663	14 27.5	43 49	"	"	"		22 40	23 06	4
√2746 ⁶	HD 139 892	15 35.6	+36° 58'	"	"	(Long) .008		23 15	23 41	1
	(BCrB A)	"	"	"	"	"		23 45	23 49?	"

Dome Temp. 74° Focus 15.53

Dome Temp.

Transparency Conditions

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					20/6	SET 2.	part of OTB missing!
0 31W	38 00	0-1	7.3	G5	6-6-6	Set 7 Standard Vel. Set 7 {2096 2112}	fine
0 38E	43 32	0-1	6.8	A2	6-6-6	" 5 KA 8x8 " 7 {2113 2127}	1 strong
1 11E	36 47	0-1	5.1	B8n	9+9	Set 2 Ab-spec. binary " 5 {2131 2138}	1 strong
1 19E?	"	0-1	"	"	6+-	Set 7 60 " {2139 2140}	weak
clouded up. Stopped							Exposure.
closed up.							
3 P.H. loaded. 1:35 E.S.T.							

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SAT May 9-10 Cloudy, v. windy showed 180 visitors Unaware, Sun. Co, Hw, Dm (F-0)

Date MAY 10-11, Sun-Mon Observer Fl, Ab, Ka-Sp Julian Day 2438526.5
 (1964) ⁴² _{Ro} 0501955.0 3447.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27468 ⁴	HD 109379	12 29.1	-22° 51'	I-25	IIaD-B	0.008	16	21:10	21:39	2
)	Focus Test	OTB								
27468 ⁸	S Cor Bar A	15 ^m 35.6	+36° 58'	"	"	0.008 slit lengthened		21:54	22:39	4
))							22:47	23:07	4-
27470 ⁶⁹	S Cor Bar B	"	"	"	"	"		23:10	00:06	1
335-2989	144,253	16 03.5	-20° 20.9		7/6/33	28	700v	00 ³⁰	a, b, sky	
" 2990	144,585	16 05.1	-13° 58'		7/5/33	28	"	01 ⁰³	a, b, sky	
" 2991	146,233 1850	16 13.7	-02° 17		7/4/33	28	750	01 ³⁵	a, b, sky	
" 2992	149,661	16 34.4	-02° 15.0		7/4/33	28	750	02 ⁰⁰	a, b	
" 2993	153,631	16 59.1	-13° 35.2		7/5/33	28	750	02 ²⁴	a, b, sky	
" 2994	157,089	17 19.4	+01° 29'		7/5/33	28	750	02 ⁵⁵	a, b	
" 2995	170,657	18 29.2	-18° 55.9		7/5/33	28	750	03 ¹⁶	a, b	
Continued next page										
Had some trouble with R.A. stamp.										

Dome Temp. 61°F

CO₂ in voltage 700V : 2340

Transparency Conditions Good.

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Focus 15.52 - 0.1 = 15.41

Auroral arch in north. all 1st half.

00⁰⁰: good except for broad aurora in N stretching from NW into E, sometimes up to zenith

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
0 ^h 05 ^m W	-23° 10'	0	2.8	GA	6-6-6	Set 5 Stand Vel. No faint field since bright star	Sens. 6 { 2158 } { 2166 }	too strong
					20/16	Set 9		red to violet
2 ^h 01 ^m E	+36° 46'	0	5.1	BBn	6-6-6	Set 2 Ab Bin.	Sens 6 { 2160 } { 2179 }	11 strong
1 ^m 33 E	"	0	"	"	9-9	Set 7 Dec. q.c. motion fuse blew.	" { 2181 } { 2187 }	6 fine
0 ^h 31 ^m E	"	0	6	B5	6-6-6	Set 5 Taken for comparison	" { 2188 } { 2198 }	10 looking complete
						3 P.H. Loaded		
0 ²³ 00 ¹² E			7.40	dk2	6"	00 ⁵⁰ : aurora still here the same in longitudinal stretch, but quieted down to a max. of 15° in latitude		
0 ²⁴ W 00 ¹⁷ W			6.31	G0	6"			
0 ²⁵ W 00 ³⁶ W			5.49	d61	9"			
0 ²⁶ W 00 ⁴⁷ W			5.74	dk0	8"	02 ¹⁵ : sky muller; northern aurora now a feeble		
0 ²⁷ W 00 ⁴² W			7.12	G3	5"			
0 ²⁸ W 00 ⁵ W			6.95	G05	6"			
0 ²⁹ E 00 ⁰⁴ W			6.88	dk0	6"			

TIME: 21:04⁴ -

(Fletcher's Folly)

observed very bright (-4^m) satellite pass across shutter - flashing quite rapidly - blue white disappeared before we could get to catwalks - definitely not air plane - looked again about 30 sec or so - noticed could not see it

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Wed. May 13 Both clocks correct within 2^s Lv

Thu-Fri May 14/15

L MR, Cm, 1.4cm

Date ~~Wed May 13/14, 1964~~ Observer ~~Ko Sm - Sm~~ RM MCL Ko Julian Day 2438530.5
54 11 36.4 3471.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
336-2997	HD 75,732 p'cnc	8 ^h 50.5	+28° 28.1		7/6/33	28	700	20 ²⁵	a, b	
2998	99,492 83leo	11 24.9	+03° 12.1			28	700	21 ⁰⁰	a, b, sky	
27470	HD 107328	12 15.3	+03 53	I-25	DA0B	.008	+14°	21 58	23:06	2
336-2999	125,184	14 16.1	-07° 23'		7/5/33	28	700	23 ¹⁰	a, b, sky	
336-3000	126,053	14 21.4	+01° 25'		7/5/33	28	700	23 ⁴¹	sub sky	
3001	131,511	14 51.4	+19° 19'		7/4/33	28	750	00 ¹⁰	a, b, sky	
3002	144,253	16 03.6	-20° 20'9		7/6/33	28	700	00 ⁴⁰	a, b, sky	
3003	144,579	16 03.7	+39° 15'		7/5/33	28	750	01 ¹⁰	a, b, sky	
3004	145,675	16 09.3	+43° 54'7		7/5/33	28	750	01 ⁴⁴	a, b, sky	
3005	153,631	16 59.1	-13° 30'2							
3005	157,039	17 19.4	+01° 29'		7/5/33	28	750	02 ¹⁴	a, b, sky	
3006	158,614	17 28.5	-01° 02'							
3006	160,346	17 37.5	+03° 34.4		7/5/33	28	750	02 ⁴⁵	a, b, sky	
3007	172,051	18 36.7	-21° 05'		7/5/33	28	700	03 ¹⁵	a	
3008	STANDARD 172,157 Vega	18 35.7	+38° 45'		5/4/33	14	700	03 ³³	a	

Dome Temp. 54° 20:00 CO_2 in
 Focus 15.39 $V = 700$

Transparency Conditions 20° : very good
 low W. no clouds

Dome Temp.

00:00 - Aurora Borealis
 E. + - West - stationary
 Alt - 8°

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03 ⁰⁰ W 03 ¹⁹ W			5.93	dK0			
00 ⁵⁹ W, 01 ¹⁰ W			7.60	dK5			
01 W	03 32	0	6.1	K1	6-6-6	set 5 seeing & guiding demonstration for Dutton #9	22 31 23 71 (150) Fine. Comparison strong
01 ¹⁹ W 00 ²⁹ W		5"	6.47	G0		23 ⁰⁰ : v. good	observed this as 1999
00 ⁴² W 00 ⁵³ W		7"	6.27	dG3			
00 ⁴⁴ W, 00 ⁵⁴ W		6"	6.02	K1 V			
00 ⁴⁹ W 00 ¹⁹ W		5"	7.40	dK2			
00 ³⁵ W 00 ⁴⁴ W		10"	6.67	dG8		01 ²⁵ : sky excellent! except for aurora in N stretching right from W to E, aurora a little higher broader & stronger now than before	
00 ⁵⁷ W, 01 ⁰² W		8"	6.66	dK1			
			7.12	G3			
00 ¹⁸ W 00 ²⁸ W		7"	6.95	G0 V		02 ²⁵ : sky excellent, aurora gone wholly too few clouds moving up very low in S over city	
			5.98	G2 IV-V			
00 ⁰² W, 00 ⁴³ W		8"	6.22	dK3			
00 ⁰⁶ W		8"	5.69	dG4			
00 ²⁵ W		13"	0.03	A0 V			

Dome Temp. 54° Transparency Conditions *good*

120

Focus *15.40*Dome Temp. 50°

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3	0:00	$+36^{\circ}46'$	0	5.1	B8 _M	6-6-6 set 2	EXPOSURE METER DOESN'T WORK - #5 { 2424 } 2430	Strong mottled
06 3	00 ⁵⁰ W	$+36^{\circ}46'$	1-2	"	"	6-6-6 set 7	Focus test set 70	OTB Strong
0	0:15W	$+01^{\circ}55'$	0	5.6	G0	6-6-6 set 5	Std. Velocity	fine Cover fogged
9 1	0:40E	$+58^{\circ}30'$	1	7.5	K5	6-6-6 set 5	Std. Velocity Focus test set 11	l. wk Focus OK intra comp set
							Closed up.	
							3 RH - Loaded	

Date Sun/Mon May 17/18, 1964 Observer Ko, Sm - Ko, Sh Julian Day 2438533.5
 57 05 07.9 3466.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
337-3009	75,732 p' lnc	08 ^h 50 ^m	+28° 28.1	7/4/33	28		4: 700V 6: 750V	20 ³⁵	a, b, sky	
3010	114,710 p' lnc	13 13.2	+28° 03'		28			21 ⁰⁵		
3011	120,490	12 49.4	-24° 13'	7/5/33	28		700	22 ³⁰	a, b, sky	
3012	124,553	14 13.4	-05° 47'	7/5/33	28		700	22 ⁵⁵	a, b, sky	
3013	126,053	14 21.4	+01° 25'	7/5/33	28		750	23 ³⁰	a, b, sky	
3014	144,585	16 ^h 05.1	-13° 58'	7/5/33	28		750	20 ⁰⁰	a, b, sky	
3015	146,233 1250	16 13.7	-08° 17'	7/5/33	28		750	00 ³⁰	a, b	
3016	149,661	16 34.5	-02° 15'	7/4/33	28		700	00 ⁵²	a, b, c	
3017	152,391	16 51.2	+00° 03'	7/4/33	28		750	01 ²⁶	a, b, sky	
3018	153,631	16 59.1	-13° 30.2	7/5/33	28		700	01 ⁵⁷	a, b, sky	
3019	158,633	17 24.7	+67° 21'	7/4/33	28		700	02 ²⁸	a, b, sky	
3020	164,922	18 03.9	+26° 19'	7/5/33	28		700	02 ⁵⁷	a, b, sky	
3020	172,167 Vega	18 35.6	+38° 45'	5/31/38	14		700	03 ²⁷	a	

Dome Temp.

Focus

Dome Temp. 60°

CO₂ in: 17⁴⁵ EST
voltage 700v:

Transparency Conditions

20²⁰: 2 in, big, isolated
cumulus clouds only

New Moon

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
17 ^W , 3 ²⁸ W			5.93	dKO		E cloudy, W very good except for new moon	
			4.28	GOV		21 ⁰⁰ : visitor's eyepiece shutter stuck! had to cell jump, lost 1 ^h .	
00 ⁰ W 00 ¹⁹ W		5"	6.45	dG5			
00 ²⁴ W, 00 ³⁶ W		5"	6.35	2V-060		21 ³⁰ : all clouds have drifted below horizon	
00 ⁵ W, 00 ⁵⁴ W		5"	6.27	dG3		23:00 trouble with needle. Vision + in. 6 then 23:16 distilled needles with 19" on	
00 ³⁰ E 00 ³¹ E		5"	6.31	GO		23 ³⁵ : sky very good	
00 ¹ E 00 ⁰² E		7"	5.49	dG1			
00 ⁰⁹ E 00 ⁰⁰ W		7"	5.74	dKO			
00 ¹³ W, 00 ³¹ W		6"	6.64	GGV			
00 ³³ W, 00 ⁴³ W		5"	7.12	G3			
00 ⁴² W, 00 ⁵² W		5"	6.43	K3		02 ⁵⁰ : sky very good everywhere; none	
00 ³² W, 00 ⁴³ W		5"	7.0	G8F			
00 ³² W		12"	0.03	POV			

Dome Temp. 67°F

Focus 15.54

Dome Temp.

Transparency Conditions Clear Quite Windy

126

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02:20E	+36°45'	0+1)	5.1	B8n	6-6-6	set 1 Ab. S.B. 5 G.B.A sens. 5 {2565/2575	10 strong
01:45E	+36°45'		5.1	B8n	6-12	set 5 // sens. 5 {2576/2582	l. strong
					20/17	set 7 1/2	stopped due to clouds ok
clouds at 22:20							
closed up 00:00							
<u>Extra set of comp. lines</u>							
<u>observe top 1/2 of focus test</u>							
Lv							
Clocks correct within 2 ^s , both domes							

Date ^{max} Wed-Thur 20-21, 1964 Observer ^{Cn, Ck} K₀, S_m - K₀, S_m Julian Day 24385365
59 57 181 3461.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
338-3021	HD 114,710 p'ln	13 ^h 10.2	+28° 02'		7/2/33	28	750	20 ³⁰	a, b, c	
3022	75,732 p'ln	08 ^h 50.5	+28° 28.1		7/4/33	28	700	21 ⁰⁵	a	
27475	HD 139892 Focus Test	15 ^h 35.6 ^m OTB/ITA	+36° 38 ^m	I25	IIa Ob	5x, long 0.008	15°C	21:54	22:36	3 3
	HD 139892	15 ^h 35.6 ^m	+36° 38 ^m	I25	IIa Ob	5x long 0.008	15°C	22:50	23:54	3
338-3023	152,391	16 51.2	+00° 03'	7/4/33	28		750	00 ²⁵	a, b, sky	
3024	157,347	17 20.9	-02° 21'	7/4/33	28		700	00 ⁵⁰	a, b, sky	
3025	161,797 p'ln	17 45.0	+27° 44'	6/4/33	28		700	01 ¹⁸	a	
3026	164,922	18 00.9	+26° 19'	7/4/33	28		750	01 ³¹	a, b, sky	
3027	165,401	18 04.0	+04° 40'	7/4/33	28		750	02 ⁰⁰	a, sky	
3028	170,657	18 29.2	-18° 56'	7/5/33	29		700	02 ¹⁸	a, X, sky	

Dome Temp. 4.8° Voltage 700 20²⁰ 00⁰⁰ Transparency Conditions 20¹⁵: excellent everywhere
 Focus 1.5.51-.11=15.40 CO₂ m : 22:15 l cloud over sky except low in IT where
 Dome Temp. Moon Up thick cloud moved in from N.W. stratus are drawing up

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ⁵⁷ E		16"	4.28	G0V		very poor seeing!	
			5.93	dKO		21 ¹³ : sky completely covered with cirri very quickly - quit (sky was good that all the way of 3021)	
01 24E	36°45'	0-	5.1	B8m	6-6-6	Set 2, Ab Sp B. 20/16 net 5	Sens 5 2631 2641 (10) strong <u>cto violet</u>
						22:30 CLOUDS	
00 07E	36°45'	0-	5.1	B8m	6-6-6	Set 8 Ab Sp B	Sens 5 2642 2657 (15) V strong
						4 PA loaded.	
00 ⁴⁰ E 00 ³⁴ E		7'	6.64	66V		00 ²⁰ : sky has cleared off by now - only very sky milky though - steady & uniform - 11	
00 ⁴⁵ E 00 ³⁵ E		8"	6.28	65			
00 ⁴⁰ E		10"	3.42	65TV			
00 ⁴⁴ E 00 ³⁴ E		5"	7.0	68V		01 ⁴⁰ : sky good every where but in SW where bands are drawing up to 15°, also a block in W to NW 8° up	
00 ¹⁴ E		4"	6.79	62V		02 ⁰⁰ : cirrus patches in SW & W 20° up now	
00 ²⁵ E		5"	6.82	dKO		02 ¹⁰ : cirri up 50° W 40° in S.W. - quit again 10° up	
						03 ³⁰ : sky covered almost everywhere - quit again	

Date Fr/Sat May 22/23 '64 Observer vB-HV Julian Day 2438.5385
 61 53 38.9 3458.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
339-3029	W Vir	11 33	+841		5/6/33	28		2035		
339-3030	36 Com	12 54	+1757		5/6/33	28		2055		
339-3031	2 Boo	13 44	+1618		5/5/33	26		2117		
339-3032	B5 5299	14 03	+4420		5/6/33	28		2135	2x	
339-3033	83 UMa	13 37	+5511		5/6/33	28		2205	2x	
339-3034	17 E4 Ser	15 31	+1526		6/5/33	28		2245	2x + 15m	
339-3035	10 Her	16 07	+2345		6/4/33	28		2337		
				I-25		008	+24.0			

Dome Temp.

Focus 15.53

Dome Temp.

CO₂ in 21:15
V = 3000

Transparency Conditions

Circus!

NOT PTM

130

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ^h 50 ^m W		8"	5.47	M4 III		Experimental!	
		7	4.96	M1 III		"	
0040E		6	4.78	K5 III		"	
0035E+45		5	5.44	M4 III		"	
0015W		6	4.73	M2 III		"	
		7	6.5	M5 II-III		" Composite?!	
0045E		6	5.96	M4 III			

0130 Sky Very Poor.

Dome ROTAR too slow!

Please Get new Red lamp and
repair 2d
Flask light on Monday!

Dr. B

Dome Temp. 72° (23:30)

Focus 15.57

Transparency Conditions POOR

Bright & me haze

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23:1	00 ³⁵ W	36° 46'	0.2	5.1	B8m	6-6-6	set 2 Ab. 2X series 5 { 2705 2715	⑩ fine
55:1	02 ⁰⁶ W	36° 46'	1	5.1	B8m	6-6-	set 5 Ab. 3X series 5 { 2715 2734	⑪ strong slightly to violet.
						20/27 set 9		
3:2	60 ⁴⁰ W	-11° 00'	.00	5.28	67.	6-6-6	std. Vol. St. set 5 series { 2732 2740	⑫

Close up 3:30

2 PH loaded in jidj

Date Mon-Tues MAY 25-26/69 Observer MR Ka H6 ^{Mch} - HV Julian Day 2438541.5
 0 63 46 29.6 3454.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27478	HD 151861	14 ^h 50.9	+45° 43'	I-25	IaOb-	.016	+18.6	21:27	0041	3
	Seeing	TEST	TRACINGS					0050	0140	
	Focus	TEST	OTIB			008				

Dome Temp. 63°
 Focus 15.44
 Dome Temp. 56

Transparency Conditions quite a few clouds

134

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11 3	0146W	45° 28'	0	7.64	F3	3-3-3	set 3 KAFS June 34 21:50 - thin cirrus	fine
						20/16	" 9	displ. to videt.
							Suspect Spect. heat control may not have been on during exposure.	
							Clouds after midnight	

Al
Hw
Sm
Ko

F1
v/d

Date Wed-Thurs. May 27-28/64 Observer Julian Day 2438543.5

66 41 37.2 3452.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
340-3036	75,732	8 ^h 50.4 ^m	+28° 28'		7/4/33	28	700V	20:40	a	
3037	99,491 83 Leo	11 24.9	+03° 12' 5"		7/4/33	28	750	21 ⁰⁵	0, b, c, sky	
3038	115,617 81 Leo	11 46.5	+2° 06'		6/5/33	28	750	21 ⁴³	0, b	
3039	120,690	13 49.3	-24° 13'		7/4/33	28	750	22 ¹³	0, b, sky	
27479	139892 focus test	15 35.6	+36° 58'	I-25	Da0-b	008	16	2245	2330	4
340-3040	70 Vir	13 26.7	+13 55		6/4/33	28		2340	absny	
340-3041	44i Boo	15 02.6	+47 48		6/4/33	28		00 00	ab	
340-3042	η CrB	15 21.7	+30 25		6/4/33	28		00 25	ab	
340-3043	λ Ser	15 44.7	+7° 28'		6/4/33	28		00 45	(a) b f sky	
340-3044	ρ CrB	15 59.8	+33 25		6/5/33	28		01 20	absny	
340-3045	γ Her	16 40.3	+31 40		5/5/33	28		01 46	ab	
340-3046	72 HU	17 19.3	+32 31		6/5/33	28		02 10	absny	
340-3047	26 Dra	17 34.6	+61 54		6/5/33	28		02 36	absny	
340-3048	2 Lyr	18 35.6	+38 45		4/4/33	28		03 02		

Dome Temp. 57

Focus 15.41

Dome Temp.

22:20

V = 700
CO₂ in

Transparency Conditions

20⁰⁰: Very good
0130 " "

Full Moon

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	04 ¹⁰ W		5"	5.93	dKO			
	21 ⁵⁴ W 02 ⁰⁴ W 02 ¹⁴ W		8"	6.50	dKO		83 Leo kept dropping out	
	10 ⁴⁰ W 00 ⁵⁰ W		9"	4.7	60V		plan stopping periodically again!	
	00 ³ W 00 ¹¹ W			6.4	d65		22 ¹⁵ : very good, moon in low in E	
4	0 ⁴ 03 ^m E	+36°45'	0"	5.1	B8n G	set 2	sp. binary	Strong Comp. Wk
						set 8		OK
	10 ² 35 ^W 02 ² 25 ^W		10"	4.98	95V			
	0110+0120W		8"	5.26	d51			
	0110+0120W		8"	{5.63 5.52	{92V 92V			
	0110+0120W +130		7"	4.43	90V			
	0115+0125W			5.40	92V			
	↓			2.82	90V + 40V			
	0100+0110W		8"	5.39	92V			
	0110+0120W		6"	5.31	90V			
	0040W		—	0.0	A0V	EXT. Standard		

refleximeter
added

Dome Temp.

Focus 15.3 38

Dome Temp. 46.°F

725V }
CO₂in } 1930

Transparency Conditions Some cloud in west
a few thin clouds overhead 20:50

12:15 clouds drifting in from south.
01:15 clouds getting thicker

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			10"	4.28	S00		Clouds! Tracing discarded	
30 P4	W 1h 50	+45°28'	0	7.64	F3	6+6+6	KAFS SB 30→42 (12) non anch. may not be very good due to particles between rods	Fine 7
2	W 1h 36	+36°46'	0	5.1	B8B	6+6+6	Set 5 Sens 6 Spec B. mag. (5)	Strong
4 3	W 2h 37	+33°05'?	0	5.34	B9	6+6+6	Set 5 Sens 7 B8 B9 (12)	Strong
30 4	W 1h 40	+52°28'	00	6.11	B9	6+6	Set 5 Sens 7 B8 B9 (12)	Fine
3 1	W 0 25	+38°12'	00	5.70	B8	6+6+6	Set 5 Sens 7 B8 B9 (12)	Strong
00 2	W 0 31	+13°14'	000	6.07	B8	6+6+6	Set 5 Sens 7 B8 B9 (12)	Fine
						20/16.	Set 9.	OK
							Dirt on slit! (Shows on all plates)	
							Please leave instructions for observers in observing box!	

180 visitors showed M3 seeing & focus poor! Hd, Cr, Mt, Dm

Date Sat. Sun May 30-31/64 Observer Cn, Ka Julian Day 2438546.5
69 34 10.7 3449.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27486	139892	15 35.6	+36°58'	I-25	IIA08	^{very long} .008	+15	23:07	23:29	3
	139892	15 ^h 35.6	+36°58'	I-25	IIa06	.008	+15	23:30	23:50	3
	Focus TEST		OTB							
27487	H.D. 152031	16 ^h 45.9	+91°49'	I-25	IIa06	.008	+15	23:59	01:24	4
	Focus Test	OTB								

Date Nov 14 June 1/2 Observer vdB Re Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
341-3049	β Com	13 ^h 10 ^m 2	+28° 03'		6/4 133	28		21 00	2x	
341-3050	10 CVn	12 ^h 43 ^m 3	+39° 28'		6/5 133	28		21 23	2x	
341-3051	83 Leo A	11 ^h 24 ^m 9	+03° 12'		6/6 133	28		21 48	2x + sky	
341-3052	HD 114174	13 ^h 07 ^m 0	+05° 25'		6/6 133	28		22 17	2x + sky	
341-3053	ϵ Vir	13 ^h 15 ^m 0	+09° 37'		6/5 133	28		22 43	2x + sky	
341-3054	HD 111395	12 ^h 47 ^m 1	+25° 02'		6/6 133	28		23 10	2x + sky	
341-3055	31 Com	12 ^h 50 ^m 0	+27° 44'		6/5 133	28		23 43	2x	
341-3056	HD 115043	13 ^h 12 ^m 1	+56° 53'		6/6 133	28		00 08	2x + sky	
341-3057	HD 131511	14 ^h 51 ^m 4	+19° 19'		6/5 133	28		00 38	2x + sky	
341-3058	ξ Boo A	14 ^h 49 ^m 8	+19° 16'		6/6 133	28		01 15	a	
341-3059	γ Ser	15 ^h 54 ^m 7	+15° 48'		6/4 133	28		01 28	ab	
341-3060	HD 170657	18 ^h 29 ^m 2	-18° 56'		7/5 133	28		01 58	ab sky	
341-3061	χ Her	15 ^h 51 ^m 5	+47° 33'		6/4 133	28		02 26	ab	
341-3062	ρ Her	18 05 7	+30 33		6/4 133	28		02 47	ab	
341-3063	α Lyr	18 35 6	+38 45		4/4 133	28		03 14		

Dome Temp.
 Focus
 Dome Temp.

CO₂ } 20:30 E.S.J.
 V=750

Transparency Conditions Fine, a few clouds low in W
 arctic air
 very fine dark sky
 Dup 01:00

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
017+027W		8"	4.28	SOV			
0108+0118W		7	5.94	SOV			
0250+0300W		7	6.50	dko			
0137+0147W		7	6.60	SS			
0158+0208W		5"	5.22	SOV			
0250+0300W		8"	6.31	-			
0320+0330W		10"	4.93	-			
0325+0335W		8"	6.74	SI		obs. arc of largest component with double	
0215+0225W		7"	6.02	KI			
0255W		8"	4.6	dkS		obs. A+B sep 27" A 2-3 mag. br. B.	
0205+0215W		10"	3.9	dfS			
0005E+0005W		8"	6.88	dko			
0300+0310W		7"	4.6	df7			
0110+0120W		7"	5.2	dfS			
01:12W		0.0		AOV		ext. ST.	

Date Thu/Fri June 4/5, 1964 Observer L HB - mcl Julian Day Emm ck Sm

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. Voltage	Starting Time E.S.T.	Ending Time E.S.T.	P.11
342-3064	HD 111,812 31Com	12 50.0	+27°44'		6/5/33 6/4/33	28	700V 750V	20 ⁴⁰	a, b,	
342-3065	HD 115,617 61Vn	13 16.5	-18°06'		6/5/33	28	700V	21 ⁰⁶	a, b	
342-3067	^{=5066 missing?} HD 125,690	13 49.4	-24°13'		7/5/33	28	700V	21 ²⁸	a, sky	
342-3068	HD 124,553	14 12.4	-05°47'		7/4/33	28	750V	21 ⁴⁶	a, b	
342-3069	HD 125,184	14 16.1	-07°23'		7/4/33	28	750	22 ¹⁵	a, b, sky	
342-3070	HD 117,176 70Vn	13 26.7	+13°59'		6/5/33	28	750	22 ³⁸	a, b,	
342-3071	HD 122,742	14 01.8	+10°58'		6/6/33	28	750	23 ⁰⁴	a, sky	
342-3072	HD 144,253	16 03.6	-20°21'		7/4/33	28	750	23 ²⁷	a, b, sky	
342-3073	HD 146,233 185Vn	16 13.7	-08°17'		6/6/33	28	700	00 ⁰⁴	a, b, sky	
342-3074	HD 144,579	16 03.7	+39°15'		6/6/33	28	750	00 ³⁸	a, b, sky	
342-3075	HD 157,089	17 19.4	+01°29'		6/6/33	28	750	01 ⁰⁵	a, b,	
342-3076	HD 145,675	16 09.3	+43°54.7'		6/6/33	28	750	01 ³⁶	a, b, sky	
342-3077	HD 158,633	17 24.7	+67°21'		6/6/33	28	750	02 ⁰⁶	a, sky	
342-3078	HD 160,346	17 22.5	+03°24'		6/6/33	28	750	02 ²⁶	a, b, c, sky	
342-3079	α Lyn	16 35.6	+31°45'		4/5/33	28	700	03 ¹³	a	

Dome Temp.

Focus

Dome Temp.


voltage 700V

CO₂ in:29³⁰ ESTCO₂ in again: 01¹⁵ EST

Transparency Conditions

excellent (20²⁰ EST) everywhere, except in SW below $\approx 4^\circ$ alt.

144

Hour Angle End	Declination	Secing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10 ³³ W, 00 ⁴⁵ W		8"	4.93	G0III		seems bad	
10 ³⁵ W, 00 ⁴⁴ W		5"	4.75	G6V		seems much improved	
10 ²⁶ W		3"	6.45	dG5			
10 ²⁴ W, 00 ⁴³ W		3"	6.35	^{S-V} =060			
10 ⁴² W		3"	6.47	G0		had to stop tracking δ :: too close to N pier	
01 ⁵⁸ W, 02 ⁰⁸ W		6"	4.98	G5V		22 ⁵⁰ : very good everywhere still	
11 ⁵³ W		5"	6.36	G8V			
10 ²⁸ W, 00 ²⁸ W		3"	7.40	dK2			
10 ²⁷ W, 00 ⁴ W		4"	5.49	dG1		00 ⁰⁰ :  strange things begin to happen, decl. out	
10 ²⁷ W, 01 ² W		5"	6.67	dG8		00 ⁰⁰ : view field in spectrophot has displaced	
10 ²⁵ W, 00 ¹ W		4"	6.95	G0V		displaced for 5 minutes, then returns to old place, but	
10 ¹⁰ W, 02 ²⁶ W		3"	6.66	dK1		no hot or shock occurred	
10 ⁰⁹ W		4"	6.43	K0		01 ⁰⁰ : still very good sky	
10 ⁰⁷ W		4"	6.22	dK3		moon rising in E; 02 ⁵⁵ : spectrophot. view field again	
10 ⁰⁶ W		10"	0.0	P0V		shifted around without being focused	
						focused 1/2 a sec	

Dome Temp.

V=723 } 2000 GST

Transparency Conditions

Focus 15.41

CO₂ in }

21:00 partly cloudy Cirrus

Dome Temp.

2300 1^m absorpⁿ Cirrus

0030 CLOUDS

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						4.12 907	
02 30 W	+26° 44'	0+	7.46	A2	3+3+3	KA 8x8 10/8 Set 9 21PH Loaded.	3062 - 3074 (9 COUNTS) #7 1 wk Streak of light on plate Does not affect spectrum.

replace light in counter
of exposure meter
8/23

Dome Temp. 60°

Transparency Conditions

Focus 15 45

Dome Temp.

Very Hazy. Thin clouds all night.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 2 V 3h 7	-33° 03'	0	5.34	B9	6-6-6	Set 5 Series 8 ^{wt d+e} B8 B9 (30) 3094	l strong
11 3 24m E	+10° 21'	1	5.8	F8	6-6-6	Set 5 Series 8 ^{val} Std Slan (30) 3126	fine
37 4 W 4m	+62° 08'	1	5.59	B9	6-6-6	Set 5 Series 8 ^{wt d+e} B8 B9 (17) 3159	fine
					20/16 set 9		OK
					last plate clouded out	03:35	
					3 PH loaded.		

149
 Date Mo/Tu June 8/9 1964 Observer veib HB RM Julian Day 2438554.5

77 13 45.5 3443.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
343-3080	β Com	1310.2	+2803	a	6/4/33	28	21:13	ab	11	
343-3081	111812	1250.0	+2744	b	6/4/24 6/5/24	28	21:36	ab		
343-3082	131156	14 59.8	+1916		6/5/24	28	22:00	abc	+200	
343-3083	142860	15 54.7	+1548		6/4/24	28	22:33	ab		
343-3084	142373	15 51.5	+4233		6/5/24	28	22:54	ab		
343-3085	144574	16 03.7	+3015		7/5/38	28	23:17	abc		
27492	S _r Cr B A	15 35.6	+3658	I-25'	IIaOb	208	21.0	23:55	01:13	1
27493	HD 190658 Procyon Tail	20 00.8	-15° 13'	"	"	"	21.0°C	01:23	03:31	2
<p><u>Replenichev Added</u> <u>June 10</u></p>										

Dome Temp.
 Focus 15.98
 Dome Temp. (Should be +8)

CO₂ } 20:30
 V=750

Transparency Conditions
 Typical tropical Air, marginally O.K.
 2300 Hazy 2330 ci. or Alto cum

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
0100+0110	W	8"	4.28		50V			
0145+0155	W	8"	4.93		50III			
0010+0020	+0030W	7"	4.6		58V	A+B		
0075+0015	E	7"	3.9		F6V			
0000	10010W	5"	4.6		dF7			
0010+0020	W	5"	6.67	dG8		clouded out		
21-27m	W +36°45'	0	5.1	B _{8m}	6+6+6	Sens 5 SB. A by a star	3206 3211 3212 3225	l strong
0 21m	W +15°25'	0	8.0	gM	9+9-9	Set 5 Sens 8 Spec Binary	(13) 3225	v wk c to red
						20/16 Set 9.		
						Scratched: Wire handle broke during development		
						1 PH loaded.		
						Low fog all night getting very thick towards dawn		

Date Tu./Wed June 9/10, 1964 Observer ^{A6} DA- Julian Day 2438555.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27494	HD 139872	15 ^h 35.6	+36° 58'	I-25	IIa06	^{set} .008	+26.1C	21 ^h 02	21 ^h 28	3
	"	"	"	"	"	"	"	21 ^h 32	21 ^h 52	"
27495	HD 136202	15 ^h 14.2	+02° 09'	"	"	"	"	22 ^h 16	22 ^h 35	4
Foc: Test on 27494: OK Set 9?										

Dome Temp. +79°F

Focus 15.56

Dome Temp.

Transparency Conditions

Hazy and Windy (from south west)

152.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
8 3	1 ^h 14 E	+36° 47'	2-1	5.1	B8m.	6-6-6	set 2 S.B.-Abhyankar S GBA sens. 5 { 3248 3259}	Strong
2 "	0 ^h 49 E	"	2	"	"	6-6-6	set 5 " " sens. 5 { 3261 3271}	Strong
5 4	0 ^h 15 W	+1° 53'	1-0	5.6	G0	6-	set 2 Standard Vel. sens. 5 { 3274 3276}	Good
							Stopped on account of clouds	
							One strap of the secondary mirror cover is broken.	
							2 Plate holders loaded	

Date Wed Thur Jan 10/11, 1964 Observer MCL, Sam - H. Gm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
344-3086	115,383 59VL	13 ^h 15.00	+09° 37'		6/5/24	22	750	21 ⁰⁵	a, b	
344-3087	125,184	14 16.1	-07° 23'		7/4/24	28	750	21 ³⁵	a, b, sky	
344-3088	97,561 8	11 11.8	+20° 20'		7/5/24	28	700	22 ⁰⁵	a, b, sky	
344-3089	115,043	13 12.1	+56° 53'		7/4/24	21	750	22 ⁴⁰	a, b, sky	
344-3090	114,174	13 07.0	+05° 25'		7/4/24	28	750	23 ²⁰	a, b, sky	
344-3091	122,742	14 01.8	+10° 58'		7/4/24	21	750	23 ⁵⁰	a, sky	
344-3092	149,661	16 34.4	-02° 15'		7/5/24	28	700	00 ⁰⁰	a, b	
344-3093	153,631	16 39.1	-13° 30'		7/5/24	28	700	00 ³⁵	a, b, sky	
344-3094	157,347	17 20.9	-02° 10' ^{21' converted} _{25° 64'}		7/4/24	28	750	01 ⁰⁰	a, sky	
344-3095	135,101	15 11.2	+19° 25'		7/4/24	28	750	01 ²⁰	a, sky	
344-3096	174,257	12 29.2	-17° 5.9'		7/5/24	28	750	01 ²⁵	a, b, sky	
344-3097	145,675	16 09.2	+43° 54.7'		7/4/24	28	750	01 ⁴⁵	a, b, sky	

Dome Temp.

CO₂: 16¹⁵, 20³⁰ EST, 22¹⁵


Transparency Conditions

20⁴⁵: clear & good
polar Air AOK

Focus

voltage on 700: 16¹⁵

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 ⁰⁶ W, 01 ¹⁶ W		8"	5.22	G0V		← focussed star	
00 ³⁰ W, 00 ⁴⁰ W		6"	6.47	G0		"	
04 ⁰⁹ W, 04¹⁹ W		6"-9"	6.92	G7IV		22 ¹⁴ : difficulty in clamping telescope; seeing variable	
01 ¹¹ W, 02 ⁵¹ W		6"	6.74	G1V			finder field for 3089
03 ²² W, 02 ³² W		9"	6.80	G5IV		23 ²² : sky clear everywhere	
02 ⁵⁹ W		8"	6.36	G8V		20 ⁴⁵ : very good everywhere, wave quite low	
00 ⁴⁶ W, 00 ⁵⁴ W		9"	5.74	DK0		1 hour in N ends out strong red-green-blue light	
00 ⁴⁴ W, 00 ⁵⁹ W		6"	7.12	G3		(no aurora visible)	
01 ⁵⁰ W		5"	6.28	G5			
02 ²⁴ W		7"	6.68	G6			
00 ³³ W, 00 ⁴³ W		7"	6.88	DK0		02 ⁰⁶ : very good everywhere	
03 ¹¹ W, 00 ⁴¹ W		8"	6.66	DK1		03 ⁰⁰ : v. bright - beginning already	

Dome Temp. 67°

Focus 15.54

Dome Temp.

Transparency Conditions Some light clouds

156

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4 ^h 30 ^m W	+45° 28'	0	7.64	F3	6-6	(counting slowly; had to cut it off) set 5 Sp. Binary (KAFS) sense 8	3285 3294 good
0 20 ^m W	+10 19	0-1	5.8	F8	6-6	set 5 St. Vel. sense 6	3296 3301 strong
0 30 ^m E	-20 59	0	5.59	K2	6-6	set 5 St. Vel. sense 5	3303 3304 ✓ wk?

Focus Test

set 9 OTB

OK

2 PH loaded

Date *Sun./Mon., June 14-15* Observer *Mt* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27499	HINS 355 HD 131861	14^h 50^m 9	+45° 43'	F 25	II 906	set 1008	23°C	21^h 10^m	21:30	4
<p>Developer vol. low, sludgy in 1 bottle. Filtered; 15 cc replen, 15 cc water added 1 bottle changed.</p>										

Dome Temp. 68°

Focus 15.51

Dome Temp.

Transparency Conditions *Some cloud*

158

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	$+45^{\circ} 27'$	0	7.6	F3	6-12	set 5 <i>2p bin</i>	53310 sens 81 no spectrum visible
						Clouded over Closed up 21:30 1 PH loaded (didn't bother with focus test)	

159

last night June 20 160 visitors showed Moon, universe
Cn, MCL, Dm.

Date Fr/Sat June 19/20 Observer JdB Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
Sat. / Sun June 20-21/64										
Spent all 2nd half re-collimating Primary Mirror										
Was out 17 ^m in Dec.										
Correction now is approx -2 ^m .										
AV										

Dome Temp.

Transparency Conditions

Focus

Dome Temp.

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

Primary Aluminized, (today)
Secondary not yet

17mm or dropping wet
did not observe

Date June 22/64 Observer CK, Hd, MR — HV Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27499	H125 355 HD 131861	14 ^h 50.9	+45° 43'	I-25	TI aob	2008 resol. 008	26°C	20:59	23:57	1
	Focus TEST		OTB	"	"	008				
<p>Developer volume 700 CC Added 200 CC water, switched to curve (5)</p> <p>new developer June 24</p>										

Dome Temp. $+67^{\circ}\text{F}$

Focus 15.58

Dome Temp.

Transparency Conditions

9 haze

164

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23	3 30W	$45^{\circ}25'$	0.1	9.64	F3	G-6-G	K.A.F.S. Clouds from 2300 set 7 { 3912 3921 Star gone 4 P.H. 2 loaded in Frig. No Focus Test	Good

Dome Temp. 78° Focus 15.58 Dome Temp. 69° Transparency Conditions *Some cloud*00:00 - 00:15 *Cloud covering star.*01:00 - *Hazy.*02:15 - *more clouds!*REMARKS 0300 - *about 50% clouds.* Quality
0330 - *clear*

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
5	2 ^h 05 ^m W	+45° 27'	1+	7.64	F3	6-6	set 5 (ap. bin, KA FS) sens 7 { 3929 3937	ok, comp ok
2	1 ^h 00 ^m W	-25° 28'	0-	6.7	B8	6-6-6	set 5 B8-B8 ppm sens 6 { 3938 3942	Good
3	0 ^h 21 ^m E	+10° 19'	1	5.8	F8	6-66	set 5 St Gel sens 6 { 3944 3948	Strong
4	1 ^h 57 ^m E	-6° 35'	0+	6.3	gK4	6-6	set 5 " " sens 6 { 3950 3953 1/2	good

Focus Test

C al. to V

4 P.H. loaded in frig.

Dome Temp. 65°F

Transparency Conditions

Focus 1.5 5.3

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
34 1	0h 50 E	+52° 05'	0	6.41	B9	6-6-6	Set 5. B8 B9 prog. Sens 8 { 3960 3990	30 strong
34 2	0h 22 E	+15° 22'	0	8.0	gn2	9-9-9	Set 5 Hi Vel. Spec Bi Sens 8 { 3995 4035	40 fine
58 3	2h 57 W	+18° 29'	0	7.26	A2	6-6-6	Set 5 KA 8x8 Sens 8 { 4040 4072	32 ?
23 4	1h 08 W	+62° 07'	0	5.59	B9	6-6-6	Set 5. B8 B9. Sens 8 { 4082 4112	30 strong
						20/16	Set 9.	c at track

02:00 Small scintel in wheatstone bridge was making poor contact — this rise in temp of spec graph to 26°

03:00 Spec heater is not working properly. !!!
Now in fridge-HR

Box marked with x after. 1 Box of plates was left in dome Friday night will they be all right?
It a d b

Date Sun - Mon June 28-29/64 Observer HW-Hb-HV Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27509.	HD 139160	15 31.5	-25 57	I-25	Ilcob	.008	24°	2112	2226	1
27510	HD 165814	18.02.7	-25 24	I-25	Ilcob	.008	24°	2240	0034	2
	Focus TEST		OTB	"	"	"	22.5°			
	Focus Rept. To		15.53	fm	F.T.					
15 cc Replenisher added										

Dome Temp. 68°F
 Focus $15.53 \rightarrow (15.50)$
 Dome Temp.

Transparency Conditions

Cleared off at 2100

170

0010 GALV. IN HEAT CONTROL NOT WORKING. HEAT SHUT OFF.
 0045. TEMP + 22°C. FOCUS CHANGED TO 15.50

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 03 W	-26 40	0-1	6.0	B9	6-6-6	set 5 " 88-89 prog. : (3 1/2) sens 6 { 4127 4130	Strong
00 40 W	-25 28	1	6.7	B8	6-6-6	set 5 " 75 " " " " sens 6 { 4132 4137	Strong
					20/15	" 9	C. to wider
						2 P.H. Loaded	
						Heat Control Malfunction!	
						EX. MTR. " !	
						SKY " !	

Dome Temp. 82°F Focus 15.59 Dome Temp. 75°F Transparency Conditions $h. haze$

0 1:30 Getting very windy.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 55 W.	$+45^{\circ} 26'$	2	7.64	F3	5-9	Set 5 Sp. Bin KAFS Sens 8 { 4203 4238	fine
1 02 W	$-24^{\circ} 20'$	0	7.0	B8	5-4-5	Set 5 B8-B9 (to max LHA) Sen 8 { 4241 4270	l strong
3:47 W	$+56^{\circ} 00'$	1	7.20	B9	6-6-6	Set 5 KA 8x8 Set 8 { 4281 4311	l strong good
4 15 W	$+11^{\circ} 25'$	1	8.6	A	6-6	Set 5 KA 8x8 Sens 9 { 4314 4338 (120)	Good
					20/16	Set 9	e at 5 vid
						4 PH loaded.	

Frank

03.20 Exp meter was acting up again.

(Confederation Day)

Date Tue. Wed. June 30 - July 1, 1944 Observer Ab Dg - Mt Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27515	HD 139892	15 ^h 35.6	+ 36° 58'	I-25	IIa 06	^{NET} .008	+31°C	21 ^h 00	21 ^h 14	1
"	"	"	"	"	"	{Long "}	"	21 ^h 16	21 ^h 26	1
27516	HD 131861	14 ^h 50.9	+ 45° 43'	"	"	{.008 Normal}	"	21 ^h 40	00:47	2
27517	E Ceph	22^h 13.7	+ 56° 52'	"	"	.008	"			3
27517	E Ceph	(1964) 22 ^h 13.7	(1964) + 56° 52'	"	"	.008	31°C	01:03	01:10	3
"	"	"	"	"	"	"	"	01:10	01:18	"
27518	HD 196755	20 ^h 34.3	+ 09 44	"	"	"	"	01:28	01:31	4
"	"	"	"	"	"	"	"	01:34	01:38	4
"	"	"	"	"	"	"	"	01:41	01:50	4
27519	HD 197913	20 ^h 41.6	+ 15 33	"	"	"	"	02:12	02:40	1
"	"	"	"	"	"	"	"	02:42	03:40	1

Exp. Meter not going back to

Dome Temp. 83°F
 Focus 15.65 set
 Dome Temp. 77°

Transparency Conditions Hazy

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1	0 ^h 06' E	+30° 45'	1	5.1	B8m	6-6-6	set 2 S G B A, Spect. Bin. Abhyankar	4859 4869 strong
6	0 ^h 06' W	"	"	"	"	6-6-6	set 5	4872 4882 "
7	4 ^h 12' W	+45° 26'	0	7.64	F3	6-6-6	set 5 KAFS - Spect. Bin.	4885 good
3				4.2	F0		At the end of the count the needle of the exposure meter gives a strong kick-back and then it does not return to zero.	
0	2 ^h 44 ^m E	+56° 53'	1	4.2	F0	18	set 2 For FL	4955 4960 fine
8	2 ^h 35 ^m E	"	1	"	"	"	set 5	4960 4970 strong
61		-9° 56'	2	6.0	G5 II	6-12	set 2 YOSS Lum Std.	4972 4973+1/2 wh
88		-9° 56'	2	"	"	6-12	set 5	4974 4977 wh
0	0 25 E	+9° 56'	1	"	"	6-12	set 8	4978 4984 strong
1		+15 46	1	8.0	dG9	6-6-6	set 2 YOSS	4987 4991 wh
0	1:15 W	"	0-1			6-	set 5 (Star binary. Tool) (brighter component)	good

Zero after count.

Date Wed/Thurs July 1/2, 1964 Observer Ab
FL Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27520	HD 139892	15 ^h 35. ^m 6	+36° 58'	I-25	D10 b	{ set .008 } long	28.6	21 ^h 44 ^m	21 ^h 59 ^m	2
	"	"	"	"	"	"	"	22 ^h 03 ^m	22 ^h 21 ^m	"
27521	HD 171391	18 ^h 29. ^m 5	-11° 03'	"	"	.008 normal	"	22 ^h 33	23 25	3
FOCUS TEST										
<p>Thurs July 2: Sid. Electric clocks in both domes + shock slow ~ 45^s; reset Standard clocks O.K. ???</p>										

Dome Temp. 73° F
 Focus $15.71 - 0.11 = 15.60$
 Dome Temp.

Transparency Conditions *Hazy + light cirrus*
slowing things down.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 0 ^h 44 ^m W	+36° 46'	0-1	5	B8	6-6-6	set 3 SLR BA sp. binary	Set 5 { 5032 5042 } strong
1 ^h 05 ^m W	"	"	"	"	"	set 7 "	" { 5045 5055 } strong
3 0 46 E	-11° 00'	"	5	G7	6-R	set 5 Standard vel	Had trouble with coll's { 5072 5074 } fine
						Clouded Out. 23:25.	
				20/16		SET 9	cdl to vial
						2 loaded plate holders in fridge.	
Same trouble with EXMTR as the previous nights.							

Date Fr/Sat Jul 3/4 1964 Observer vB/Re Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
345-3098	α CrB	1533.0	+2651		4/4/33	20		2125		
345-3099	10 Her	1609.5	+2335		5/5/33	28		2145		
345-3100	α Ser	1546.5	+1815		5/4/33	28		2203		
345-3101	α' Her	1712.5	+1425		3/5/33	28		2218		
345-3102	HD156860	17 ^h 17 ^m	+0209		6/4/33	28		2236	1 ^h 2 + 54	
345-3103	30 α Her	1828	+4158		5/4/33	28		2312		
345-3104	α Lyr	1835.6	+3845		3/4/33	28		2325		
27522	HD176318	18 ^h 54.6 ^m	+3807	I25"	IIaOb	.008	24°C	0003	0035	1
27523	HD186547	19 ^h 40.0	+1303	I25"	IIaOb	.008	24°C	0115	0143	4
27524	HD198387	20 ^h 44.9	+5203	I25"	IIaOb	.008	24°C	0147	0305	2
27525	HD202109	21 ^h 08.7	+2949'	I25"	IIaOb	.008	24°C	0309	0320	3
27525 F	OTB Focus Test				20/14					

BOTH Primary AND Secondary now REALIGNISED 178

Dome Temp. 72°F

V=300

Transparency Conditions 2200 altocum. dr. Strg South, N. clear

Focus 15.53 (24°C)

NO CO₂

2130 Fine

Dome Temp. 66°F

2220

Small isolated clouds

2400

Perfect, clear but windy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ^h 33W			2.73	A0V		EXT. ST.	
0013		8"	5.96	M4II			
0053W		8"	4.28	M1II			
0013C		8"	3.1	M5:16-II		A+B → blue	
0005		8"	6.91	M5 III		clouds	
0115W			4.4	M6 III			
0035C			0.0	A0V		EXT ST.	
1 00 ^h 10 ^m W +38°13'		1	5.7	B8	6-6-6	B8-B9 set 5 sens 7 { 4208 (12) 4220 (12) set 8 Focus OTB 20/10 c to m increased setting to 15.56	
4 00 ^h 32 ^m W +13°12'		1	6.1	B9	6-6-6	B8-B9 set 5 sens 7 { 6225 (12) 6237 (12)	strong
2 00 ^h 50 ^m W +52°11'		2+	7.1	K0V	6-6-6	YOSS' set 1 25% set 9 100% sens 7 (16)=100% set 5 50%	at 100%
3 00 ^h 38W +30°03'		2	4.4	G8II		YOSS' Binary? secondary ≈ 12 ^m blue at 20" 150" line good set 1 25% set 5 50% sens 7 (16)=100% set 9 100%	
have a look at R and close up 03 ^h 38 ^m							
Bad seeing & clouds							
							OK to visit

Dome Temp. $+63^{\circ}\text{F}$ Transparency Conditions $V. \text{GOOD}$

180

Focus 15.47

Dome Temp.

Time I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
31	0052E	+58 30	0-1	7.5	K5	6-6-6	SET 5' STD. VEL. #7 6317 6336	l strong
192	0010E	+15 22	0-1	8.0	gM2	6-12-9	" 5' H.V! Spect. Bin. #8 6337 6377	good
153	00	+15 46	0	8.0	dG9	6-6-6	" 1 Yoss PROG. SOUTH Comp. of Binary #8 6380 6404	fine
2						20/15	" 9	OK
							1 P.H. Loaded.	

Date Sun-Mon July 5/6, 1944 Observer HW - Cn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Ang Ecl					
27529	H.D. 131861	14 ^h 50 ^m .9	+45° 43'	I-25	IIa0B	.008	23°	2108	2220	4	2 ^h 6 ^m					
27530	H.D. 139892	15 ^h 35 ^m .6	+36° 58'	I-25	IIa0B	.008	23°	2231	2242	1	1 ^h 44 ^m					
"	"	"	"	"	"	.008 (long)	"	2244	2252	"	1 ^h 54 ^m					
27531	HD 165814	18 ^h 02.7	-25° 29'	I-25	IIc0B	.008 normal	"	2317	00 27	2	0 ^h 39 ^m					
27532	HD 176411	18 55.1	+14 56	I-25	IIa0B	.008		00 34	00 36	3	0 17 ^m					
00 37								00 41								
00 42								00 48		0 30 ^m						
27533	HD 185958	19 36.6	+17 15	I-25	IIa0B	.008		54	00 56	4	0 04 ^m					
59								00 01								
01 02								01 10		0 10 ^m						
27534	HD 190658	20 00.8	+15 13	I-25	IIa0B	.008	23°	01 15	02 05	1	00 41 ^m					
27535	HD 203638	21 18.4	-21 16	I-25	IIa0B	.008		02 11	03 03	2	50 21 ^m					
27536	HD 187691	19 46.2	+10 10	I-25	IIa0B	.008		03 12	03 24	3	02 15 ^m					
27537	HD 212496	22 19.6	+51 44	I-25	IIa0B	.008		03 33	03 35		00 08					
													03 34	03 39		
													03 39	03 45		00 03 ^m

Date Mon July 6-7 /64 Observer S₂L₂Fl, Cc Julian Day

<u>15cc</u> <u>reprints</u> , Plate No.	<u>Extra quartz filter</u> Object	R.A. 1900 1960	Declination 1900 1960	<u>Newt</u> Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27538	NGC 6838	19 ^h 51.7	+18° 39'		IIa-O			22:30	22:34	1
27539	6779	19 ^h 15.0	+30° 06'		"			23:00	23:08	2
27540	6838	19 51.7	18 39		"			23 15	23 19	1
27541	6171	16 30.3	-12 58		"			00 10	00 22	2
27542	6649	18 31.2	-10 30		"			00 29	00 39	1
27543	6356	17 21.3	-17 47		"			00 44	00 52	2

Developed in D₁₉ fixer, curve ①

Dome Temp.

Transparency Conditions

POOR!

186

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
25 1	32W					clouds in early eve - began to break 9:30 focused on	Focus unchanged from last night
20 0	35W						
44 0	27W						
50 0	25W					clouded out ²² 10:40 invisible + invisible sd on 6366 + 6535 unsuccessfully ~23 ^h , 6838 too! 12:00 thick clouds everywhere	absorption 5 mag

Wed - Thurs
Date July 8/9 /64

Observer S-L

Julian Day

Plate No.	Object	R.A. 1960	Declination 1960	NEWT Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Ang End
	NGC										
27548	6838	19 51.7	18 39		IIA0			00 24	00 28	X	033E
27549	6934	20 32.2	7 16		"			00 34	00 44	2	
27550	7089	21 31.4	-01.00		"			00 53 ³⁰	00 54	1	
<p>Jul 8 Sid locks reset by +5^s. Have probably been fast by this amt since July 2</p>											

Dome Temp.

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 33E		very good				<p>Heavy clouds in early eve - Breaking 11:00 focused on γ Serpens</p> <p>Heavy cloud bank in SW, so have to work N of equator</p> <p>1:00 Whole sky has now filled in again - so we quit.</p>	

F1

Date *Thurs Fri July 9/10, 1964* Observer *S, CC, Hr, Ca* Julian Day *2438586.5*

Plate No.	Object :	R.A. 1960	Declination 1960	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How Ang End
27551	NGC 5904	15 16.6	+02 14	NEWT	103aO			21 ^h 26 ^m 34 ^s <i>(unguided)</i>	21 27 34	1	01 05
27552	6218	16 45.1	-01 53	"	"			21 ^h 34 ^m 20 ^s	21 37 20	2	00 14
27553	6254	16 55.0	-04 03	"	"			21 ^h 40 ^m 20 ^s	21 43 20	1	00 17E
27554	6838	19 51.7	+18 39	"	"			23 58 ³⁰	00 02 ³⁰	2	00 55E
27555	6712	18 50.8	-8 46	"	"			00 08	00 16	1	00 20W
27556	6934	20 32.2	+7 16	"	"			00 25 ¹⁰	00 35	2	0 12E
27557	6838	19 51.7	+18 39	"	"			00 40 ⁰⁵	00 44 ⁰⁵		0 13E
Developed in D-19 Curve B											

Dome Temp.

Transparency Conditions *OK, though light cloud*

Focus

Focused on α Sca. 4 haze

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
34	1 05 W	21° 20'					<i>Half-circus lights are terrible!</i>	
20	2 00 14 E	21° 34'					<i>cloud over big dipper & also in zenith & in N</i>	
20	3 00 17 E	21° 45'					<i>broken cloud over whole sky.</i>	
2 30	2 00 55 E						<i>set on 6426 ^{invis} unsuccessfully, also 6402. virtually invisible thru haze & cloud</i>	
6	1 00 20 W						<i>11:30 There has been no let up in clouds. They are now heavier than ever over whole sky.</i>	
2	0 01 02 E						<i>still hopeless Heavy film of haze over sky</i>	
5	0 01 30 E						<i>looked at 6402 at 11^h 55^m - still hopeless Heavy film of haze over sky</i>	
							<i>12:30 clouds piling over sky again - 12:45</i>	
							<i>quitting - night too poor to continue</i>	

Date FRI-SAT July 10-11/64 Observer vdB Av-S Julian Day 2438587.5

Plate No.	Object	R.A. 1900 1960	Declination 1900 1960	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27558	⁶³⁴¹ M 92	17 15.9	43 11	NEWT	103a0			21 50	22 20	2
27559	6402	17 35.5	-03 13	"	"			23 25	23 37	1
27560	6093	16 14.7	-22 54	"	"			23 43	23 49	2
27561	6171	16 30.3	-12 58					23 54	00 06	1
27562	6356	17 21.3	-17 47					00 17	00 25	2
27563	6838	19 51.7	+18 39					00 50	00 54	1
27564	6934	20 32.2	+7 16					01 00 ³⁰	01 10 ³⁰	2
27565	6656	18 33.9	-23 58					01 17 ⁵⁰	01 21 ⁵⁰	1
27566	6626	18 22.1	-24 54					01 30	01 36	2
27567	6544	18 04.9	-25 01					01 45 ³⁰	01 55 ³⁰	1
27568	6535	18 01.8	-00 18					02 09 ³⁰	02 21 ³⁰	2
27569	6712	18 50.8	-08 46					02 27	02 35	1
27570	6838	19 51.7	+18 39					02 41 ⁰⁰	02 45	2
27571	6934	20 32.2	+07 16					02 50 ²⁰	03 00 ²⁰	1
27572	6981	20 51.3	-12 42					03 05 ³⁰	03 19 ³⁰	1
27573	7089	21 31.4	-01 00					03 25 ²⁵	03 25 ⁵⁵	1

Dome Temp. +74°F

Transparency Conditions

V. Good.

192

Focus

See Correction used +9'

Dome Temp.

Hour Angle End	Declination	Seeing	Pts Mag	Sp	EX. TIME Comp.	REMARKS	Quality
00 03 W?	App. 8" X 10" approx.				30 ^m	No Film	Plate Developed.
01 00 W?	Dia. REMOVED				12 ^m	Focus on η Ser. 5 began cluster program	
02 33 W?					6 ^m		
02 35 W					12 ^m		
02 03 W					8 ^m	00 15 Dome cable giving trouble. Neg. trolley ^{repaired} wire loose	
00 00					4 ^m	Seeing not very good.	
03 23 E					10 ^m		
01 47 W					4 ^m		
02 13 W					6 ^m		
02 50 W					10 ^m		
03 19 W					12 ^m	Focus on β Agr. focus not changed	
02 44 W					8 ^m		
01 52 W					4 ^m		
01 27 W					10 ^m		
01 28 W					4 ^m 12^m		
01 54 W					30 ^s	This was much the best night of the whole New Year run	

10 195

Date Wed-Thurs July 15/16 - 1964 Observer HW - ^{AB} RM Julian Day 2438592.5
 ☉ 13 29 11.8 ☽ 3434.3

Plate No. <i>15 cc reflex</i>	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	
27574	HD139892	15 ^h 35.6	+36° 58'	I-25	IIaob	long .008	23	20:55	21:17	1
"	"	"	"	"	"	"	"	21:31	21:42	1
27575	HD168322	18 ^h 14.0	+40° 54'	I-25	IIaob	normal .008	"	21:53	21:58	2
"	"	"	"	"	"	"	"	21:58½	22:06½	2
"	"	"	"	"	"	Reset .008 normal	"	22:08	22:23	"
27576	HD166621	18 ^h 06.4	+18° 28'	"	"	"	"	22:40	23:13	3
27577	HD171461	18 ^h 29.9	+52° 01'	"	"	"	"	23:26	23:39	4
27578	HD175132	18 ^h 48.9	+41° 16'	"	"	"	"	23:51	00:02	1
27579	HD 177410	18 59.5	+69° 23'	"	"	"	23°C	00:16	00:26	2
27580	HD 183143	19 23.0	+18° 05'	"	"	"	23°C	00:41	01:40	3
27581	HD 198387	20 44.9	+52° 03'	"	"	"	23°C	01:56	02:34	4
"	"	"	"	"	"	"	"	02:39	02:49	"
"	"	"	"	"	"	"	"	02:49	02:56	"
27582	19 Cep	22 02.1	+61° 48'	"	"	"	23°C	03:08	03:16	1
								03:18	03:23	"
								03:25	03:29	"

Dome Temp. 72

Focus 15.51

Dome Temp. 67

Transparency Conditions Fair

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g Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
7	0h 57W	+36° 45'	0	5.1	B8n	6-6-6	Set 2 SCRB A Set 5 { 65 95 66 05	strong
42	1h 23W	"	1-2	"	"	6-6-6	set 7 " set 5 { 66 09 66 19	"
58	0h 59 ^m E	+40° 57'	2	7.1	KDIII	6-6-6	Set 2 { Yoss Programme } Set 7 { 66 21 66 25	
062	0h 51 ^m E	"	2	"	"	6-6-6	set 5 { Check if right star } " { 66 26 66 34	
23	0h 35 ^m E	"	3	"	"	6-6-6	Set 8 " { 66 36 66 52	
3	0h 23 ^m W	+18° 28'	2	7.26	A2	6-6-6	Set 5 KA 8 x 8 " { 66 54 66 64	fine
9	0h 26 ^m W	+52° 06'	2-1	6.41	B9	6-6-6	set 5 B8-B9 set 6 { 66 68 66 74	strong
02	0h 30W	+14° 20' P	1	6.18	B9	6-6-6	Set 5 B8-139 Set 6 { 66 76 66 82 66 83	strong
26	0h 46W	+69° 26'	1	6.38	B9	6-6-6	Set 5 B8-B9, Sens 6 { 66 81 66 93	fine
40	1h 33W	+18° 12'	1	6.7	B7 Ia	6-6-6	Set 5 M.K. STD. Sens 6 { 66 99 67 02	fine
34	1h 7W	+52° 17'	1	7.1	dK0	6-6-6	Set 2 Yoss Lum. Std. Sens 8 { 67 42 67 42	100% fine
49	1h 22W	"	1	"	"	6-6-6	Set 5 " " { 67 42 67 62	50% good, guid
56	1h 28W	"	1	"	"	6-6-6	Set 8 " " { 67 62 67 72	25% back
61	0h 31W	+62° 06'	2	5.17	09. STD	6-6-6	Set 1 M.K. STD S. Sens 6 { 67 81 67 94 67 98	(2x) } superior
23	0h 37W	"	2	"	"	6-6-6	Set 4 " " { 68 03 68 06	(1x)
29	0h 43W	"	2	"	"	9-9	Set 7 " " { 68 06 68 08 1/2	(1/2x) fine guid

Dome Temp.

Transparency Conditions

Focus

Dome Temp.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
46.2	0.68 E	<u>60</u> ° 05' ?	1	5.85	B9	6-6.6	Set 5 BP B9. Sens 7 { 6813 6825	strong
						20/16	Set 9	OK
							4 PH loaded.	

Date Thurs - Fri 16/17 July 64 Observer L-Hb-ck - HV Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27584	HD 128296	14 31.0	+11 30	I-25	IIaO:b	.008	26°C	20 ^h 54 ^m	23 ^h 27 ^m	1
27585	HD 178244	19 04.7	-00 36	I-25	IIaO:b	.008	"	23 ^h 38 ^m	00 20	2
27586	HD 182308	19 19.0	+64 13	"	"	"	"	00 37	00 59	3
27587	" 184467	19 29.5	+58 24	"	"	"	"	01 08	02 30	4
	Focus		TEST		OTB					

15 cc replen

Dome Temp. 76°F

Focus 15.56

Dome Temp.

0130 a few clouds.

0150 More "

0230 " "

Transparency Conditions Fair, haze

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0011 W	+11° 13'	1	7.52	A3	6-6	set 5 KA 8x8 platform Sens 7 6840	fine
0035 W	-00 30	1-2	6.34	B8	6-6	set 5 B8-B9 Sens 7 E 6855	strong
0102 W	+64 18	0-1	6.31	B9	6-6	" 5 B8-B9 #7 6869	strong
0223 W	58 29	0-1	7.5	K5	6-6	" 5 STD VEL #8 6883	strong
					20/15	" 9	
4 P.H. Loaded in fridge							

Dome Temp. 80°F

Focus 15.59

Dome Temp. 73°F

V = 400

NO CO₂

Transparency Conditions

clear, clouds in NW

Very red setting sun

Tropical Air Mass

01:00 - Good.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ^h 50 ^m W		4"	2.23	AOV		ext. ST.	
0 ^h 53 ^m + 0 ^h 03 ^m W		5"	4.28	M1H			
0 ^h 55 ^m W - 0 ^h 05 ^m W		4"	5.96	M4III			
0 ^h 05 ^m W + 0 ^h 15 ^m W		5"	4.44	M6III			
00 50 + 01 00 W		4"	3.1	M5: Ib-II		A+B	
01 10 + 01 20 W		4"	6.91	M5III		close to pin	
00 20 ^m W + 00 40 ^m W		-	0.0	AOV		ext ST Haze?	
0 ^h 17 ^m E - 21° 00'		1	5.5	gK2	6-6-6	Set 5 STD. VEL	# 6 { 6932 6939 } live
0 ^h 45 ^m W + 9° 58'		1	6.0	G5IV	6-6-6	Set 2 VOSS	# 7 { 6942 6946 } 25% live
0 ^h 58 ^m W	"	1	"	"	6-6-6	Set 5 "	# 7 { 6947 6955 } 50% good
1 ^h 18 ^m W	"	0+	"	"	6-6-6	Set 8 "	# 7 { 6956 6972 } 100% live
3 ^h 52 ^m W + 58° 30'		1+	7.5	K5	6-6-6	set 5 STD. VEL	# 7 { 6976 6992 } live
					20/16		0 live
						1 PH Loaded in Frig.	
						Penals are needed in the dome!	

203 160 visitors; showed 1) & Her AB
2) M 13

Miss Northcott,
2m, Mel, Sm.

Date July 18, 19 (Sat. Sun) Observer - Mt Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27591	HD 171461	18 ^h 29.9	+52 01	I-25	II aob	^{net} 1008	29°C	23:05	0:30	4
27592	HD 203638	21 18.4	-21 16	"	"	"	"	1:44	2:44	1
27593	34 Peg	22 21.5	+03 53	"	"	"	"	2:52	3:50	2
	HD 21195	22 22.8	+04 12							
Focus Test OTB										
Taken by mistake										

Dome Temp. 78° Transparency Conditions *hazy*
*occasional light cloud*Focus *set 15.62*

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:30 W	+52 05	1	6.41	B9	6-6-6 set 5	B8 - B9 sens 6 { 6991 7003	fine
2:5 W?	-21 00	0	5.5	9K2	6-6-6 set 5	(held up by clouds!) standard velocity sens 6 { 7003 7006	ok
2:52 W	+04 (14)	1		G0	6-6-6 set 5	————— sens 6 { 7007 7011	fine
							OK
						2 P.H. loaded in fridge	

Date *Sun/Mon July 19/20 1964* Observer ^{CK}*HW - HV* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit (<i>long</i>) <i>set</i>	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27594	HD 139892	15 ^h 35.6	+36° 58	I-25	IIaob	.008	30°	2107	2128	3
"	"	"	"	"	"	"	"	2130	2149	"
27595	HD 168322	18 ^h 14.0	+40° 54	I-25	IIaob	<i>normal</i> .008	"	2210	2220	4
"	"	"	"	"	"	"	"	2222	2240	"
"	"	"	"	"	"	"	"	2241	2329	"
27596	HD 176411	18 ^h 55.1	+14° 56	I-25	IIaob	.008	"	2339	2343	1
"	"	"	"	"	"	"	"	2343	2350	"
"	"	"	"	"	"	"	"	2350	00 28	"

Dome Temp. 83°F

Transparency Conditions

Focus 15.630001 CLOUDS

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
18 3	^h 24 ^m W	+36°45'	0	5.1	B8n	6-6-	set 3 9 CrBA SB	sets { 7028 7038	strong
19 "	^h 45 ^m W	"	0	"	"	6-6-6	set 7 "	set 5 { 7039 7049	"
0 4	^h 25 ^m E	+40°55'	0	7.1	Ko III	6-	set 2 Yoss.	set 7 { 7053 7057	good
0 10	^h 2 ^m E	"	0-1	"	"	6-6-6	set 5 "	set 7 { 7059 7067	good
29 1	^h 47 ^m W	"	0-1	"	"	6-6-6	set 8 "	set 7 { 7068 7084	fine
33 1	^h 19 ^m W	+15°00'	0	5.2	K2	6-12	set 2 Yoss	set 5 { 7089 7091	good
50	^h 26 ^m W	"	0	"	"	6-6-6	set 5 "	set 5 { 7092 7096	fine
8	01 05 W	"	0	"	"	6-6-6	set 8 "	set 5 { 7097 7105	strong

no focus test
Didn't want to waste a plate.

Date Mon/Tues July 20/21 Observer Hd-Hb Julian Day 7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27597	HD 139892	15 ^h 35 ^m .6	+36 58	I-21	D40-b	.008	28°C	21 02	21 46	1
"	"	"	"	"	"	"	"	21 47	22 36	"
27598	HD 185958	19 36.6	+17 15	"	"	"	28°C	22 44	23 18	2
	Focus test.									
	15CC replem.									
	Developing time may have been short 1 ^m ; i.e. 5.1 ^m instead of 6.1									

Dome Temp. 76°F

Focus 15.60

Dome Temp.

Transparency Conditions light patches of A

1: Clouds becoming steadily worse

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 1 ^h 45	+36° 45'	0.1	5.1	B8 _v	6-6-6 set 2	Ab specimen brighter comp. sens { 7111	
W 2 ^h 35	+36 46	1	"	"	6-6-6 " 6	" " " " { 7121	
E 42 ^m	+17 23	1	5.4	G 8	6-6-6 set 2	Yours Lum. Stand sens { 7131	
	O.T.B				20/16 " 6	Very cloudy, lightning in W. sens { 7134	
					2 load plate holders in 'frig.		

Date Tue - Wed July 21/22, 1964 Observer R_n D₂ - HV Julian Day _____

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27599	HD 139892	15 ^h 35.6	+36° 58'	I-25	IIa06	^{set} .008	29.2°	21 ^h 10	21 ^h 36	3
"	"	"	"	"	"	"	"	21 ^h 38	21 ^h 58	"
27600	HD 177410	18 ^h 59.5	+69° 23'	"	"	"	"	22 ^h 12	22 ^h 58	4
27601	HD 171391	18 ^h 29.5	-11° 03'	"	"	"	"	23 ^h 10	23 ^h 30	1
27602	HD 184467	19 ^h 29.5	+58° 24'	"	"	"	"	23 ^h 44	00 18	2
27603	" 190658	20 00.8	+15 13	"	"	"	29.1°	00 30	01 50	3
27604	" 212496	22 19.6	51 44	"	"	"	"	02 17	02 19	4
	"	"	"	"	"	"	"	02 20	02 28	"
	"	"	"	"	"	"	29.0°	02 28	02 34	"
	Focus Test OTB									3

Dome Temp. +82°F

Focus 15.6.1 set

Dome Temp.

Transparency Conditions Some clouds and haze

0200 few clouds, lightning in West

22:40 Echo II from the SW to NW
through 4 mi.

0240 More clouds

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
6 3	1 ^h 40 W	+36° 45'	0-1	5.1	B8n	6-6-6	set 3 SGB. A Ab. S.B. sens. 5 7155 7165	strong
8 4	2 ^h 02 W	" " "	1-2	"	"	6-6-6	set 7 " " sens. 5 7168 7178	"
8 4	0 ^h 15 E	+69° 27'	1	6.38	B9	6-6-6	set 8 B8-B9 sens. 7 7183 7195	2 exposures strong
0 0	0 ^h 40 W	-11° 01'	1	5.2	gG7	6-6-6	set 5 STX Vd. Stars sens. 6 7197 7202	fine
8 2	0 30 W	+58 29	1	7.5	K5	6-6-6	set 5 " " " sens. 7 7205 7221	fine
3 0	01 29 W	+15 24	0-1	8.0	gM2	9-9-9	" 5 vdB Spect. Bin. #8 7223 7263	good
9 4			0-1	5.6	G9 III	18	" 1 Yoss. 25% #5 7274 7276	
3 0			"	"	"	18	5 " 50% " 7279 7283	long
4 0	0005 E	+52 03	"	"	"	18	9 " 100% " 7284 7292	strong
3 0						20/15	Set 9	OK
							3 P.H. loaded	

211

BELL TER. IS GOVING OUT DU-5 100 BERTIN:607 OBJECT
 Echo due west, altitude about 50° at $22^h 14^m$ E.S.T.

Date *Wed. - Thurs. July 22/23, 1964* Observer *MT - Hr* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
27605	S Cr. B. A HD 139892	$15^h 35.6$	$+38^\circ 58'$	I-25	IIaOb	²⁴ .008	30.5°C	$20^h 38^m$	$20^h 58^m$	1
"	"	"	"	"	"	"	"	$20^h 59^m$	$21^h 19^m$	1
27606	HD 144579	16 01.5	$+39^\circ 24'$	"	"	"	"	$21^h 29^m$	00:20	6
27607	HD 203374	21 16.7	$+61^\circ 25'$	I25	IIaOb	.008	30.5°C	$00^h 27^m$	01:31	3
27608	HD 205060	21 27.7	$+42^\circ 16'$	I25	IIaOb	.008	30.0°C	$01^h 40^m$	02:13	4
<u>15CC replen</u>										

Dome Temp. 82°F

Focus set 15.63

Dome Temp. 72°F

Transparency Conditions Excellent at first
light cloud begins
isolated clouds by 0100

212

Time I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
58	1 ^h 05 W	+36° 45'	0	5.1	B8n	6-6-6	set 3 Ob Sp. Binary sens 5 { 7296 7306	strong
9	1 ^h 27 W	"	1	"	"	6-6-6	set 7 " " { 7307 7317	strong
0	4 ^h 05 W	+39° 15'	1	7.2	G8	6-6-6	set 5 Standard Velocity sens 7 { 7319 7333	strong
1	0 ^h 01 E	+61° 40'	2	6.6	B0	6-6-6	set 5 Be " sens 7 { 7336 7348	fine?
3	0 ^h 30 W	+42° 31'	1	7.1	B5	6-12	set 5 Be (broken clouds 0200 (Postdrift in RA) sens 8 { 7349 (cloud 0 ^h 30!) 7353	Nothing
							0215 CLOUDS & haze	
							set 9 OTB 20/15	Cal to ind
							close up 0220	

Dome Temp. 82° Focus $15.73 - 0.11 = 15.62$ Dome Temp. 73°

Transparency Conditions High Cirrus most of the time.

214

Clouds 21.00 - 22.30

00:30 Cleared again - still High Cirrus

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
34 3	$1^h 06^m W$	$36^{\circ} 45' N$	0-1	5.1	B8n	6-6-6	Set 2 SCrBA sp. bin set 5 { 7380	strong
							7390	
05 3	$1^h 17^m W$	"	"	"	"	6-6-6	Set 8 " " { 7392	"
							7400	
46 1	$1^h 16^m W$	$25^{\circ} 01' N$	0-1	6.9	B5e	6-6-6	Set 5 Be programme " 7 { 7410	fine
							7422	
20 2	$0^h 0^m$	$+26^{\circ} 22'$	1	5.9	B8ne	6-6-6	Set 5 Be " " 7 { 7426	l. strong
							7438	
24 2	$1^h 2^m W$	$+36^{\circ} 13'$	0-1	7.1	B2ne	6-6-6	Set 5 " " " 7 { 7439	fine
							7451	
45 4	$0^h 49^m E$	$+04^{\circ} 30'$	1+	5.9	Ko	6-6-6	Set 5 STD. VEL " 7 { 7453	l. strong
							7469	
28 1	$0^h 37^m W$	$+57^{\circ} 33'$	1-2	7.0	B0ne	6-6-6	Set 5 Be Programme " 7 { 7471	"
							7483	
33 2	$0^h 24^m E$	$+62^{\circ} 00'$	1-2	8.2	B3e	6-6-6	Set 5 " " 8 { 7486	fine
							7516	
53 2	$0^h 39^m W$	$+48^{\circ} 27'$	2	5.2	B3ne	6-6-6	Set 5 " " 5 { 7518	strong
							7523	
							20/16	
							C. sl. to violet	
							3 P.H. loaded in freq.	

Dome Temp. $77^{\circ}F$ Focus *set* 15.59

Dome Temp.

Transparency Conditions *very thick haze**+ some dew on Dome.*

Time C.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
6 ^m 4	1 ^h 41 ^m W	+36° 46'	1 to 0	5.1	B8	6-6	set 3 Sp. Binary. sens 5 { 7540 7550	strong
5 ^m "	2 ^h 20 ^m W	"	0	"	"	6-6	set 8 " " { 7551 7559	"
3 1	1 ^h 35 ^m E	+37° 20'	1	5.7	B3	6-6	set 5 Be Programme sens 5 { 7560 7566	"
9 2	0 ^h 12 ^m E	+32° 16'	0	7.0	B0	6-12	set 5 " sens 7 { 7567 7572	l with OK
						20/16	set 9	
							Heavy dew Closed up 00:15	
							1 P.H. loaded in fudge	

Dome Temp. 78°FFocus 15.59

Dome Temp.

Echo I
0300 Echo II W→E through U.Min.
0330 Occasional Clouds

Transparency Conditions Good

220

Time	PL	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
9	3	1 ^h 13 ^m W	+36° 45'	0-1	5.1	B8n	6-6-6	set 3 S Cor Bor A	sets { 7574 7584	Strong
01	"	1 ^h 25 ^m W	"	"	"	"	6-6-6	set 7 "	sets { 7585 7595	"
3	4	02 59 W	+11° 26'	0	8.6	A	6-6-6	set 5 KA 8x8	set 8 { 7599 7629	fine
5	1	00 42 W	+32 16	0-1	7.0	Bone	6-6-6	" 5 Hd Be.	#7 7631 7643	Strong
9	2	01 37 W	36 51	0	7.7	B3e	6-6-6	" 5 " "	#7 7644 7656	"
9	3	02 02 W	56 33	0	8.1	B5e	6-6-6	" 5 " "	#8 7657 7687	Strong
							20/15	" 9		Calibration
								4 P.H. Loaded.		

221
switched Aperturev7 = van't Foort
Lv log = Levy

Date Mon July 27-28/64 Observer Hd. - R.M. Julian Day 2438604.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27625	3 Cr B A	15 35.6	3° 6' 58"	I-25	IIa 06	long 008	29.1	21 23	21 49	1
							29.1	21 50	22 24	1
	Focus test									
27626	HD 164284	17 55.3	+4 22	"	"	medium 008		22 44	22 54	2
27627	HD 175863	18 52.3	+59 53	"	"	008	29.0	23 03	23 55	3
27628	HD 198183	20 43.5	+36° 07'	"	"	"	29.0	00:15	00:23	4
27629	HD 198478	20 45.5	+45 45	"	"	"	29.0	00:37	00:42	1
27630	HD 200310	20 57.6	+45 46	"	"	"	29.0	00:51	01:02	2
27631	HD 200775	21 00.4	+67 47	"	"	"	29.0	01:16	01:47	3
27632	HD 208682	21 52.9	+64° 52'	"	"	"	28.9	02:14	02:20	9
27633	HD 217543	22 51.3	+38° 10'	"	"	"	28.9	02:30	02:42	1
27634	HD 3546	00 33.3	+28 46	"	"	"	28.9	03:03	03:07	2
								03:09	03:11	"
								03:12	03:16	"
27635	HD 3038	0 28.6	+66 12	Focus test		"	28.9	03:40	03:58	

Dome Temp. 77°F

Focus 15.61

Dome Temp. 77°F

Transparency Conditions Quite cloudy

03:20 clouds closing in

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
49	W 2 ^h 17	36:46	3-1	5.1	B8m	6-6-6	Set 2 Ab bin; long slit sens 5 7690	strawing
24	W 2 ^h 51					6-6-6	" 5 clouds worse, " 7701	" guid
						20/15	" 8+ " 7711	OK-
54	W 1 ^h 03	+4 22	2	4.8	B5m	6-6-6	" 5 Be prog. sens 5 { 7713	fine
55	W 1 ^h 08	+59 58	1	6.9	B42	6-6-6	" 5 " " sens 7 { 7718	"
23	Oh 23	+36 22	1	4.5	B6e	6-6-6	" 5 Be Prog. Sens 6 { 7719	strawing
42	Oh 0m	+46 00	1	4.9	B2500	6-6-6	" 5 " " Sens 6 { 7731	"
02	Oh 4m	+46 00	1	5.2	B3me	6-6-6	" 5 " " Sens 6 { 7738	strawing
47	Oh 53	+68 00	1	7.2	Bse	6-6-6	" " " 9 { 7744	"
							" " " 9 { 7759	fine guid
							" " " 9 { 7765	strawing
							" " " 9 { 7768	strawing
							" " " 9 { 7780	strawing
							" " " 9 { 7789	strawing
							" " " 9 { 7819	fine guid
							" " " 9 { 7830	fine
							" " " 9 { 7835	fine
							" " " 9 { 7839	strawing
43	Oh 11	+38 30	1	6.4	B3m	6-6-6	Set 5 " Sens 7 { 7851	strawing
07	1h 24	+29 07	2	5.3	G8III p	6-112	Set 5 Yoro Linn Std. Sens 6 { 7857	50% strawing
11	1h 20					9-9	Set 1 " " { 7861	25% fine guid
16	1h 15					6-6-6	Set 9 " " { 7866	10% strawing
58	Oh 28	'66 32'	0	6.40	B9	6-6-6	Set 5 B8-B9 7 { 7871	fine
							" " " 7 { 7879	DK
							" " " 7 { 7892	DK
							" " " 7 { 7909	DK

Dome Temp. $80^{\circ} F$ Focus $15.76 - 0.11 = 15.65$

Dome Temp.

Transparency Conditions FAIR - HAZE MORE APPARENT AFTER Moonrise.100% Cloud cover at beginning of night, until ~ 22:00.
2400: light alternates from NW. Thickening (0100)

Time L.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
39 2	00 20 W	$44^{\circ} 12'$	0^+	7.2	B1.5c	6-6-6	Set 5 Be Program DELAY DUE TO CLOUDS Sens 8 { 7913 7948	fine
							Closed up 01:45 EST	C sl to vi
							3PH loaded in 'juig	

DS Echo I due w. 21:22 EST.

Date Wed-Thurs July 29-30/64 Observer Ch - mcl Julian Day _____

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27637	SCBA HD 139892	15 ^h 35 ^m .6	+36° 58'	I-25	IlaoB	Long .008	25.5°	20:37	20:49	2
	"	"	"	"	"	"	"	20:49	20:59	2
27638	HD 158704	17 ^h 25 ^m .6	-26° 11'	"	"	.008 normal	"	21:05	21:53	3
27639	HD 171957	18 ^h 32 ^m .4	-14° 06'	"	"	"	"	22:10	23:06	4
27640	HD 208392	21 50.9	+62° 8'	"	"	"	"	23:31	00:13 ²	1
	"	"	"	"	"	"	24.7	00:17	00:57 ²⁰	1
	"	"	"	"	"	"	"	00:58	01:36 ⁰	1
27641	"	"	"	"	"	"	"	01:37	02:15	2
	"	"	"	"	"	"	24.4	02:16	03:08	2
	"	"	"	"	"	"	"	03:09	03:53 ²	2
27642	"	"	"	"	"	"	"	03:54	04:20	3
	Focus Test		OTB							

15 cc replen

Dome Temp. $70^{\circ} F$ Focus $15.66 - .11 = 15.55$ Dome Temp. 61° Transparency Conditions *Excellent*

226

02:30 - very windy - blowing star out of field

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9	20 ^h 25 ^m W	+36° 46'	0	5.1	B8 α	6-6-6	Set 2 Ab. Sp. Bin. Set 5 { 7975 7985 (10) strongy	
9	21 35 W	"	0	"	"	6-6-6	set 5 Ab. Sp. Bin. sets { 7986 (7) " ^{fold} like	
9	30 37 W	-26° 14'	0	5.9	B9	6-6-6	Set 5 B8-B9 set 7 { 7995 (12) fine	
6	40 44 W	-14° 02'	0	6.43	B9	6-6-6	set 5 B8-B9 set 7 { 8007 8008 (12) "	
13	1 ^h 26 ^m E	+62° 26'	0	7	B2	6-6-6	set 2 Ab. Tel. Bin. set 7 { 8022 (12) "	
7	0 ^h 42 ^m E	"	0	"	"	6-6-6	set 5 " " " " { 8034 8035 (12) "	
6	10 ^h 03 ^m E	"	0	"	"	6-6-6	set 8 " " " " { 8047 8048 (12) "	
5	20 ^h 32 ^m W	"	0	"	"	6-6-6	Set 2 " " " " { 8062 (12) "	
8	21 ^h 29 ^m W	"	0+	"	"	6-6-6	set 5 " " " " { 8074 8075 (12) "	
3	22 ^h 15 ^m W	"	1	"	"	6-6-6	set 8 " " " " { 8087 8088 (12) "	
20	3 ^h 41 ^m W	"	0-1	"	"	6-6-	Set 5 " " " " 7 { 8100 8101 8110 "	
						20/16	Set 9	C to violet

Date Thurs July 30.3/64 Observer L-Lv-RM Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	
27643	HD 139892	15 35.6	36 58	I-25	^B IAO	L set .008		20 48	21 03	4
	"	"	"	"	"	"		21 04	21 23	
27644	HD 171957	18 32.4	-14 06	"	"	M .008	21.6	21 28	22 29	1
27645	HD 177863	19 01.3	-18 54	"	"	"	21.8	22 42	23 21	2
27646	HD 196712	20 34.0	-02 46	"	"	"	21.6	23 48	00:10	3
27647	HD 200340	20 57.8	-01 19	"	"	"	21.3	00:20	00:56	4
27648	HD 208392	21 50.9	+62° 8'	"	"	"	21.3	01:14	01:42	1
"	"	"	"	"	"	"	21.3	01:43	02:07	1
"	"	"	"	"	"	"	21.3	02:08	02:28	1
27649	"	"	"	"	"	"	21.0	02:31	02:56	2
"	"	"	"	"	"	"	21.0	02:57	03:26	2
"	"	"	"	"	"	"	21.0	03:24	04:01	2
27650	"	"	"	"	"	"	21.0	04:02		3
	Foam Test									
	15cc replen									

Dome Temp. $+65^{\circ}\text{F}$

Focus 15.50

Dome Temp.

Transparency Conditions

Good

228

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03	01 42W	36 46	0-1	5.1	B _{8n}	6-6-6	Set 2 1/2 Cn BA	Arns 5 { 8123 8133 } strong
23	02 02W	"	"	"	"	6-6-6	" 7 1/2	" { 8133 8143 } "
29	00 10W	-14 00	0-1	6.43	B ₉	6-6-6	" 5 Be B ₉ Proj	Sens 7 { 8144 8160 } "
1	00 34W	-18 44	0-1	6.32	B ₈	6-6-6	" 5 " "	" 7 { 8161 8175 } "
10	00 10 E	-02 32	0-1	6.3	B _{9e}	6-6-6	" 5 Be Proj.	" 7 { 8176 8188 } "
56	0 13 W	-1 5	0	6.26	B ₈	6-6-6	" 5 B 8 B ₉ Proj.	" 7 { 8192 8204 } "
2	0 8 W	-6 2 25	0	7	B ₂	6-6-6	Set 1 Eclipping Binary AB.	7 { 8206 8218 } Extra strong
07	0.32W	"	0	"	"	6-6-6	Set 5	" { 8219 8231 } "
28	0 53W	"	0	"	"	6-6-6	Set 8	" { 8232 8244 } fine
56	1 22W	"	0	"	"	6-6-6	Set 1	7 { 8246 8258 } "
20	1 51W	"	0	"	"	6-6-6	Set 5	7 { 8259 8271 } "
01	2 27W	"	0	"	"	6-6-6	Set 8	" { 8272 8284 } Extra strong
3	2 152W	"	0	"	"	6-	Set 5	" { 8285 8294 } fine
							20/16	OK

Dust cover over sliding mirrors falls closed in N.W.

Running out of IIaO.
Increase exposures 25% for 103 aO

Date Friday July 31 / Aug 1 / 64 Observer Hb - H_v Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27651	HD 139892	15 ^h 35 ^m .6	+36° 58'	I-25	IIaO.6	.008	23°C	20:42	21:29	4
	"	"	"	"	"	"	"	21:45	22:11	"
27652	MWC 310 HD 172648	19 ^h 00 ^m .5	+22° 11'	"	"	"	"	22:29	00:31	1
27653	HD 208392	21 50.9	62 08	"	"	"		0220	¹³ 0246	2
	"	"	"	"	"	"		0247	¹⁷ 0315	
							22.6	0315	²⁴ 0413	

Dome Temp. 69°F

Transparency Conditions Scattered Ci

Focus 15.62 - .11 = 15.51

Cloud after Midnight.

Dome Temp.

0030 - 0215 Trouble w/ Ex. MTR.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
29 4	02:13 W	+36° 46'	0	5.1	B8n	6-6-6	Set 2 1/2 S. C. B.A. sens 5 { 8299 8309	strong
1	02:56 W	+36° 46'	0-1	"	"	6-6-6	Set 7 1/2 " sens 5 { 8313 8322	"
1	01:49 W	+23° 15'	0-1	7.5	B3e	6-6-6	Set 5 EXP MT. NOT ZEROING SOME BE PROG. DON'T ABOUT FIELD. sens 7 { 8328 8343	l wh
6 2			0	7.	B2	6-6-6	" 1 Ab B14 #7 8408 8426	strong
5 1	01:44 W			"	"	18	" 5 " " " 8427 50	fine good
3	02:42 W					6-6-6	" 9 " " " 8451 8470	fine

2 P.H. Loaded

Date MON/TUES, 3/4 AUG '64

Observer ^{Lu} ~~9mce~~ - H_v

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
27654	HD 158704	17 ^h 25.6	-26 11	I-25	II a0 b	.008	22.0	20 23	21:11	3
27655	HD 171957	18 ^h 32.4	-14° 06'	"	"	"	22.5	21:19	22:13	4
27656	HD 175360	18 ^h 49.9	-23° 18'	"	"	"	22.1	22:17	22 59	1
27657	HD 187691	19 ^h 46.2	+10° 10'	"	"	"	22.2	23:08	23 22	2
27658	HD 208392	21 ^h 50.9	+62° 08'	"	"	"		23:37	00 02	3
	"	"	"	"	"	"	22.0	00:03	00 25	"
	"	"	"	"	"	"		00 25	00 49	"
27659	"	"	"	"	"	"		00 50	01 18	4
	"	"	"	"	"	"		01 18	02 10	"
	"	"	"	"	"	"	22.1	02:10	03 28	"
27659F	Focus TEST	OTB		"	103a0	"				1

Dome Temp. 72

AURORA at midnight till 0100 Transparency Conditions Fair - some Cirrus.

Focus 15.49

0120 Thin Cloud.

22:30 - thin cloud over most of sky.

Dome Temp.

0220 MORE CLOUD

23:00 EXCELLENT.

Time I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11 3	0 ^h 15 ^m W	-26° 13'	0-1	5.9	B9	6-6-6	Set 5 BB-B9 Sens 7 { 8474 8487	strong
13 4	0 ^h 09 ^m W	-14° 01'	0-1	6.43	B9	6-6-6	Set 5 BB-B9 Sens 7 { 8489 8501	wh - plate loaded back
59 1	0 ^h 39 ^m W	-23 12	0-1	5.84	B8	6-6-6	Set 5 BB-B9 Clouds. Sens 7 { 8502 8515	strong
22 2	0 ^h 07 ^m W	+10° 19'	0-1	5.9	F8	6-6-6	Set 5 STD. VEL Sens 5 { 8518 8523	fine
02 3	1 ^h 17 ^m E	+62° 27'	1	7	B2	6-6-6	Set 2 Ab. Ecl. Binary Sens 7 { 8524 8536	fine
25 4	"	"	1	"	"	6-6-6	Set 5 " " " Sen 7 { 8536 8548	fine
49	0030E	"	"	"	"	6-6-6	" 9 " " " " 8548 8560	strong
18 4	0001E	"	1	"	"	6-6-6	" 1 " " " #7 8560 8572	fine
5	0051W	"	0-1	"	"	6-6-6	" 5 " " " #7 8572 8584	fine
8	0210W	"	0	"	"	6-12	" 9 CLOUDS!! " " #7 8584 8588	wh
1						25/20	" 5	c. obs. v. i.

3 P.H. Loaded 103a0

235 Echo I SW → E meridian 20:37 EST α 17^h 23^m δ = +15° α + ω
 Echo II ?? at 345° & 360° alt 20° → 15° 21:59 → 21:42 EST
 Echo III W → E meridian 22^h 41^m

Date Wed/Thurs, 1964 Aug 5/6 Observer Cr - H ✓ Ab Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.			
27661	HD 139892 (SCRS A)	15 ^h 35 ^m .6	+36° 58'	I-25	103a0	.008 long	21.5	20:25 ¹⁴	20:53	3			
								20:53 ¹⁰	21:13	3			
27662	HD 171961	18 ^h 32.4 ^m	-23° 36'	"	"	.008 normal	"	21:21 ¹⁰	21:59	4			
27663	HD 175360	18 ^h 49.9 ^m	-23° 18'	"	"	"	"	22:02	22:50	1			
27664	HD 208392	21 ^h 50.9 ^m	+62° 08'	"	"	"	"	22:57	23:34	2			
"								"	"	"	23:35	00:17	"
"								"	"	"	00:19	00:47	"
27665	"	"	"	"	"	"	21.9	00:48	01:12	3			
	"	"	"	"	"	"	"	01:13	01:41	"			
	"	"	"	"	"	"	21.7	01:41	02:37	"			
27666	"	"	"	"	"	"	02:38	04:00	"				
	FOCUS TEST			STR									

Dome Temp. 65°F
 Focus 15:60 - 0:11 = 15:49
 Dome Temp.

Transparency Conditions *Excellent except for occasional
 high light cloud
 Excellent after 21^h.*
 0100 BREERY IMAGE UNSTEADY

Time I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3	1 ^h 55 ^m W	+36° 47'	0-1	5.1	B8n	6-6-6	ret 2. Ab Spec. Bin.	Set 5 { 86167 } 10 strong
3	2 ^h 16 ^m W	"	"	5.1	B8n	6-6-6	ret 5 "	Set 5 { 86273 } 12 "
4	3 ^h 04 ^m W	-23° 32'	0	5.73	B9	6-6-6	ret 5 B8-B9	Set 7 { 86411 } 15 fine
4	3 ^h 37 ^m W	-23° 11'	0-1	5.84	B8	6-6-6	set 5 B8-B9	Set 7 { 86572 } 15 "
4	1 ^h 37 ^m E	+62° 24'	0-1	7	B2	6-6-6	set 2 Spec. Bin (Ab)	Set 7 { 86753 } 15 ^{and} good
7	00 55 E	"	"	"	"	6-6-6	set 5 "	" { 86889 } 15 "
						7-7-7	" 9	#7 { 8705 } 15 "
2	3 ^h 01 W	"	0	"	"	7-7-7	" 2 "	#7 { 8721 } 15 fine
	3 ^h 37 W	"	0	"	"	7-7-7	" 5 "	" { 8737 } 15 good
2	3 ^h 26 W	"	0	"	"	7-7-7	" 9 "	" { 8752 } 15 fine
		"	"	"	"	7-7-7	" 2 "	" { 8767 } 15 fine
						25/20	" 9	" { 8782 } 15 OK

4 P. H. Loaded 103a0

Dome Temp. 66°F

Focus 15.60 - 11 = 15.49

Dome Temp.

Transparency Conditions 2300 EST good, scattered Ci clouds building up Ac

Closing 0110

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+62° 27	0	7	B26-		set 2 - Ab Spec Bin set 7	X
						3PH loaded	

58795

Date FRIDAY/SATURDAY, AUG 7/8 Observer FI - mcl Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27667	HD 208392	21 50.9	+62° 08'	I-25	103a0	0.008	26.0	23:36	00:54	2
	"	"	"	"	"	"	25.7	00:55	02:27	"
	"	"	"	"	"	"	25.7	02:31	03 25	"
27668	"	"	"	"	"	"	25.6	0326	04 06	3
	FOCUS TEST	GTB								
/										
15CC replen										

Dome Temp. 72°F
 Focus $15.67 - 0.11 = 15.56$
 Dome Temp. 63°F

Transparency Conditions Very Good
 Almost all "first half" clouded out.
 Some wind but not troublesome
 00:30 - 02:30 variable cloudiness

Time r.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
54	$0^{\text{h}} 09^{\text{m}} \text{E}$	$+62^{\circ} 25'$	0-1	7	B2	7-7-7	Set 1 Ab-Eclipsing Binary	Sens 7 { 8808 (15) 8823 } lwb
27	$1^{\text{h}} 24^{\text{m}} \text{W}$	"	0	"	"	7-7-7	Set 4 Clouds!	" 7 { 8824 (15) 8839 } "
25	$2^{\text{h}} 22^{\text{m}} \text{W}$	"	0	"	"	7-7-7	Set 7 " " "	" 7 { 8841 (13) 8856 } good
06	"	"	0-1	"	"	7-14 25/20	Set 2 Clouded out.	{ 8857 (2) 8858 } wkb OX
							1 PH Loaded in fris.	

Aug 8 120 visitors. showed "The Universe" ma, u, fl, fm

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Wed / Thurs Aug 12/13 1964
~~Aug 8th, 64~~ Sub/Gen
 Date ~~Aug 8th, 64~~ Observer ^{LV} ~~CW~~ - Hb Julian Day _{VF}

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27669	HD 139892	15 35.6	+36 58	I-25	103aD	long .008	18°C	21:07 ¹³	21:33	4
							18.2°C	21:34	22:07	4
Tour Trail										
27670	HD 208392	21 50.9	+62 08	" "	103aD	normal .008		22:51 ²¹	23:33	3
								23:34 ²⁶	00:26	"
							17.9°C	00:27 ^{40 1/2}	01:50	"

Dome Temp. 56°F
 Focus $15.55 - .11 = 15.44$
 Dome Temp. 53°F

Transparency Conditions

cloud low in N & E
 22° cloud in S, W & NE
 1^{h} completely overcast (patches of thin clouds occasionally)

242

Time I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3	3:04W	+36 46	0	5.1	B8n	6-6-6	ret 2 Ab. Sp. Bin. ret 5 8959 8969 (10)	strong
4	03 27W		0			6-6-6	ret 5 l. cloud, ret 5 8969 8981 (12)	"
						$2\frac{1}{2}/20$	clouds from $22^{\circ} \rightarrow 22^{\circ} 45'$	c. l. to v.
3	1 11E	+62 26	0	7	B2	6-6-6	ret 2 AB Ex. Bin. ret 7 8985 9000	brk
6	00 18E	"	"	"	"	6-6-6	ret 5 " " 9000 9015	"
	01.08W	"	"	"	"	6-6-6	ret 8 " " 9016 9025	"
4 pH loaded.								

Dome Temp. 57°F Focus 15.41 Dome Temp. 49°F Transparency Conditions *Good*

244

Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
40	0 11E	23 15	0-1	7.5	B3e	6-6-6	Be Prog	Sens 7 { 9031 9046 } fine
23	2 3 ^h 52 ^m W	05 49	0-1	8.5	B5ne	6-6-7	" "	Sens 8 { 9047 9084 } (37) good
57	3 0 ^h 13 ^m W	+46° 13'	1	6.5	B3ne	7-7-7	Set 5 " "	Sens 7 { 9087 9102 } (15) fine
41	4 0 ^h 10 ^m E	+65° 46'	1	7.1	B5ep	7-7-7	Set 5 " "	Sens 7 { 9103 9118 } (15) "
36	1 0 ^h 21 ^m W	+63° 08'	1-2	7.5	B5e	7-7-7	Set 5 " "	Sens 7 { 9119 9134 } (15) fine
						25/20		OK

2 P.H. Loaded.

Dome Temp. 62°F Transparency Conditions *Excellent*Focus 15.42 Dome Temp. 55°F

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2	0:23W	$-14^{\circ}02'$	1	6.43	B9	7-7-7	set 5 B8-B9 sens 6 { 9143 9149	l strong
34	2:04 E	$+62^{\circ}25'$	1-2	7	B2	7-7-7	set 2 Ab. Eclipsing Binary sens 7 { 9150 9165	fine
25	1:30 E	"	"	"	"	7-7-7	set 5 " sens 7 { 9166 9181	fine
48	0:47 E	"	1	"	"	7-7-7	set 8 " sens 7 { 9181 9196	l strong
29	0:8 E	"	1-2	"	"	7-7-7	set 2 sens 7 { 9198 9213	fine
20	0:44 W	"	1	"	"	7-7-7	set 5 " sens 7 { 9214 9229	l strong
01	01:25 W	"	0	"	"	7-7-7	Set 8 " sens 7 { 9230 9245	fine
40	02:05 W	"	1	"	"	7-7-7	Set 2 " sens 7 { 9246 9261	fine
20	02:45 W	"	1	"	"	7-7-7	set 5 " " { 9262 9277	fine
56	03:20 W	"	1	"	"	7-7-7	Set 8 " " { 9278 9293	good fine
39	04:03 W	"	1	"	"	7-7-7	Set 2 " " { 9294 9309	fine
							20/16 Set 6	OK
							1 PH loaded 103.92	

247

Set Visitors: ~150 Showed M13 to 1st Group
 " " and M57 (Ring Neb.) to 2nd Group (~2 people)
 Fl, M7, Cc.

Date..... Sat/Sund. Aug. 15-16 Observer..... Re..... Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27681	HD 202109	2108.7	+29°49	25i	103a0	.008	+18°	23 50"	0003	1
								0003	0027	
27681F	OTB	17/22		OK						
/ 14CC replew										

Dome Temp. 66°F Transparency Conditions *Some alto cumulus drifting over*Focus $15.61 - .11 = 15.50$

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
—	$+36^{\circ}46'$	0	5.1	B8 α	6-12	<i>Set 2 clouded out about 22:00 closed up.</i> <i>read read sheet in with h dr</i> (5) { 9365 9370 2nd H loaded 103a0	Strong

Date Aug 18-19/64 Tues-Wed Observer Hb - R.M. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27683	MWC 312 HD 180398	19 ^h 11.3	+12° 56'	E.25	103a0	.008	18°C	22:56	00:53	4
27684	MWC 409 HD 225 095	23 58.3	+55 00	"	"	"	17.6°C	01:11	02:47	1
27685	YP 478	01 31.9	48° 07'	"	"	"	18°C	03:00	03:02.5	2
	"	"	"	"	"	"	"	03:06	03:40.5	"
	"	"	"	"	"	"	"	03:12	03:17	"
27686	HD 208392	21 50.9	62° 8'	"	"	"	18.	03:40	04:44	3
	Focus lost									

Dome Temp. 59°F

Transparency Conditions 22 FEB 77 clear

Focus ... 15.55 - 1.11 = 15.44

Dome Temp. 55°F

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
53	03:12W	+13° 02'	0	7.7	B3ne	6-15	SET 5 Be Prog. SENS 7 { 9373 9378	1 wch to far west.
							Cannot keep stars in viewers eyepiece	
47	00:19W	+55° 19'	0	7.6	B1c	7-7-7	Set 5 Be Prog. SENS 7 { 9380 9398	fine
22.8	01:00E	48° 26'	1	3.77	K3 III	10-11	Set 2 M1 std. 50% SENS 5 { 9406 9411	good
16.5	00 52E	"	"	"	"	10-11	Set 5 " 100% " { 9419 9429	fine
7	00 57E	"	"	"	"	10-11	Set 8 " 150% " { 9432 9447	strong
44	04 25W	62° 28'	0	7	B2	7-7	Set 2, Ad. Edgys Bin. SENS 7 { 9449 9462	fine
						20/16	Set 8.	OK
							2 PH loaded 103 no.	

Date Wed-Thurs Aug 19-20/64 Observer Hb Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27687	MWC 8 HD 4180	00 ^h 39 ^m .2	+47 44	T 25	103aD	.058	18.6c	01:03	01:09	1
"	"	"	"	"	"	"	"	01:10	01:13	"
"	"	"	"	"	"	"	"	01:15	01:44	"
27687 F	Focus Test									
98										
15cc replen										

Date *Sun/Mon Aug 23/24, '64* Observer *MT - RM* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour An End
27693	HD 189691	19 ^h 46.2 ^m	+10° 10'	I-25	10320	set .008	21.5°C	22:24 ^{15^s}	22:55	2	0 58
27694	HD 203638	21 18.4	-21 16	"	"	.008	21.2°C	23:08 ^{40^s}	00:29	3	0 58
27695	HD 9138	01 24.9	+05° 38'	"	"	"	21.0	01:34 ⁰⁵	01:44	4	0 20
27696	HD 22484	03 31.8	+00° 05'	"	"	"	21.0	02:05 ⁰⁹	02:19	1	04:37
27696F	Focus lost.										
								136			
<u>15cc replen</u>											

Dome Temp. 64°F Focus 15.49 Dome Temp. 60°F Transparency Conditions \dots Clouds, clearing about 22^{h} EST
Some haze + cloud until about $23:30$

Time I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
55	$20^{\circ} 58' \text{W}$	$+10^{\circ} 19'$	1	5.8	F8	7-7-7	Set 5 Standard Velocity sens 6 { 9651 9658	fine
29	$00^{\circ} 58' \text{W}$	$-21^{\circ} 00'$	1	5.5	gK2	7-7-7	Set 5 sens 6 { 9662 9672	ok
44	$02:08 \text{E}$	$+06^{\circ} 00'$	2	6.2	K1	7-7-7	Set 5 sens 7 { 9674 9694 20	ok*
19	04.37E	$00^{\circ} 17'$	1	5.2	Fg	7-7-7	Set 5 sens 6 { 9705 9711 6	fine
						20/16	Set 5	OK
								* over plate
						01:10	Clouded over completely.	
						01:30	Cleared up again.	
						02:00	Clouds drifting by.	
						02:20	almost completely overcast.	
						00:35 - 00:55	a brief pause to help the first half observer start his horseless carriage!	

Dome Temp. 68°F

Transparency Conditions

Focus 15.61 - 11 = 15.50

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
35	22 ^m W	+36° 45'	1-2	5.1	B8 _n	6-6-6	Set 2 living slit (5) { 97207 } 10 Strong	
35	37 ^m W	"	1-2	"	"	6-6-6	Set 7 (5) { 97333 } 10 "	
35	55 W	-140 2'	1	6.43	B9	6-7-8	Set 5 (B9) regular slit any more required? (7) { 9748 } 16 fine	
19	05 W	+47 38	1	6.53	B8	6-7-8	Set 5 (") (7) { 9765 } 18 good	
27	10 W	+37 37	2	7.2	B0.5 V	7-7-7	Set 5 (OB p.9) (7) { 9787 } 18 "	
26	00 W	-21 00	1	5.5	gk2	7-7-7	Set 5 (Std. vel.) (7) { 9809 } 16 with vi. obj 4 cond	
							set on next star but D was in the way	
							Second Half Obs. didn't show up.	
							Closed 01:00+	
							4 Pl. H. loaded 10300	

Date Aug 25/26/64 Observer R.M. - HV Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27702	HD 208392	21 50.9	+62 08	I-25	103a0	.008	21.0°	22:02	22:48	1
"	"	"	"	"	"	"	"	22:50	23:40	"
"	"	"	"	"	"	"	"	23:44	00:50	"
27703	"	"	"	"	"	"	"	00:51	01:55	2
"	"	"	"	"	"	"	"	01:56	02:42	"
"	"	"	"	"	"	"	21.0°	02:46	03:52	"

Nothing on plates (no spots)
Possibly Not developed properly
(Not in developer)

Dome Temp. 6.3° F.

Focus 15.48

Dome Temp.

Transparency Conditions

Thin Cloud till 00^h 50

EX. MTR. Not Working Well

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Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
48	01 05 E	+62° 27'	1	7	B ₂	7-7-7	Sat 2. Ab. Ecl. Bi. Sens 7	{9863} 5
10	0:13 E	"	0	"	"	7-7-7	Sat 5	{9878} 5
50	00 58 W	"	0	"	"	7-7-7	Sat 8	{9879} 15
5	20 20 W	"	0	"	"	7-7-7	" 2	{9894} 16
42	02 50 W	"	0	"	"	7-7-7	" 5	{9896} 16
2	04 00 W	"	0	"	"	7-7-7	" 9	{9912} 18
							#8	9913 15
								9928
								9929
								9947 18
								9951
								0006 55
							1 ### Loaded	

Dome Temp. 70°F

Focus 15.48

Dome Temp.

Transparency Conditions Cirrus then (2 hr) clear
21:15 Perfect

CONTINUED

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
0002E	-23°32'	0	5.7	B9	7-7-7	B8-B9 set 8 sens 6 { 29 36 (3 extra counts) ⑦	l strong	
0045W	-23°12'	0	5.8	B8	7-7-7	B8-B9 set 5 (wrong #) set 8 (right!) sens 6 { 61 68 (see-NB) ⑦	fine Comp. w/ l. weak	
0055W	-19°18'	0	6.7	B8	7-7-7	B8-B9 set 5 sens 6 { 72 80 ⑧	l. weak	
0045E	+30°04'	1	4.4	G8II	11-10 10-10 -21-	Y055' sens 6 set 2 3	⑩ (81-81) 2 minute exp. 1 min exp	Comp. weak l. strong fine
0032E	+62°25'	2	7.	B2	7-7-7	Ab. Ecl. Bin. set 2 30 min exp	comp w/ l. strong	
0014W	"	1-2	"	"	7-7-7	Ab. Ecl. Bin. set 5 45 min exp	fine	
0116W	"	2-3	"	"	7-7-7	Ab. Ecl. Bin. set 8 60 min exp	l strong	
0035E	+61°05'	2-3	5.85	B9	7-7-7	sets B8-B9 sens 6 { 0132 0138	l strong	
0025E	"	"	"	"	7-7-7	set 8 sens 6 { 0140 0150	strong	
0102E	+74°05'	2	6.37	B8	7-7-7	set 5 B8-B9 sens 6 { 0154 comp 0161 w/ l. strong	quite l strong	
0055E	+50°34'	2	5.62	B9	7-7-7	set 3 B8-B9 sens 6 { 0163 0170	l strong	
0038E	"	1-2	"	"	7-7-7	set 7 sens 6 { 0172? 0185?	comp w/ l. strong	
NB:		21:30 EXP METER not going back to zero but to .5 after a "click" then slowly drifting toward zero. I think nothing wrong with the exp. meter in the lab!						
		00:45 EXP METER APPEARS TO BE WORKING NOW - A BIT ERRATIC						
		02:10 EXP METER ACTIVATES UP AGAIN (AS ABOVE)						
		03:10 " " WILL NOT RESET AT ALL. →						

CONTINUED

Date.....Observer *Hb*.....Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27710	HR 561 HD 11857	01 ^h 51.4	+61° 12'	I-25	103aD	.008	21°C	03:22 ¹⁴	03:50	2
{ 27711	HR 785 HD 16727	02 ^h 35.8	+54° 41'	"	"	"	"	04:04 ^{10^k}	04:25	4
FOCUS TEST										
<hr/>										
23 CC replen										
Comparisons generally wk.										

Dome Temp.

Transparency Conditions EXCELLENT

Focus

Dome Temp.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
50	0001 E	+61° 31'	2-3	6.00	B8	7-7-7	set 3 B8-B9 sens 6 18/1?	comp with strong
25	0011 E	+54° 55'	2-3	5.61	B8	7-	set 3 B8-B9 set 7 20/25	comp with strong OK
							3PH loaded	

Dome Temp. 68°F

Transparency Conditions

Focus 15.48

Dome Temp.

Time E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
27	$0^{\text{h}} 30^{\text{m}} \text{W}$	$-18 47$	0	6.32	B ₈	6-6-6	B ₈ -B ₉ Prog. Sens 7 { 0652 0667 Exposure meter is Report.	Strong
							Clouds + HAZE after Midnight Closed at <u>0130</u>	

Dome Temp. $+73^{\circ}\text{F}$ Transparency Conditions GoodFocus 15.56

Dome Temp.

Time	Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 2	00 ^h 50W	+17 06	00	8.5	G8	3-4-4	Set 5 STD. VAL. #8 1028 1068	l. weak
08 3	01 16E	59 30	0	8.2	B3e	7-7-7	" 5 Ber Bin. #8 1074 1113	L. weak poor guide
08 4	00 32W	54 18	1-2	8.6	B3nc	7-7-7 20/15	" 5 " " #8 1119 1167	l. strong sl. co. he slightly tired
							3 P.H. +4 103a0	

Date Mon June 1964 Aug 31 - Sep 1 Observer MD CP R.M. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27716	HD 171391	18 ^{h m} 29.5	-11° 03'	I-25	103a0	008	22.5	19 ^h 35 ^m 35 ^s	19 ^h 46 ^m	3
27717	HD 171961	18 32.4	-23 36	I-25	103c0	008	22.5	19 52 ^m	20 ^h 20 ^m	2
27718	HD 175360	18 49.9	-23° 18'	2-25	103a0	008	23.0	20 26 ^m 15 ^s	20 55 ^m	1
27719	HD 198626	20 46.5	+30° 32'	I-25	IIa0	008	23.0	21 ^h 10 ^m 38 ^s	22 ^h 06 ^m	4
27720	HD 199154	20 ^{h m} 50.2	+47° 33'	2-25	IIa0	008	"	22 16 ^m 36 ^s	23 ^h 29 ^m	1
27721	HD 200407	20 58.2	+43° 47'	2-25	IIc0	008	"	23 ^h 36 ^m 33 ^s	00:42	2
27722	HD 212943	22 22.8	+04° 12'	"	"	"	22.6c	00:52 ^m 18 ^s	01:19	3
27723	HD 222514	23 36.2	+57° 17'	"	"	"	22.6c	01:34 ^m 25 ^s	02:43	4
27724	HD 4321	00 40.6	+54° 45'	"	"	"	"	02:53 ^m 25 ^s	03:42	1
27725	HD 16855	02 37.1	+42° 07'	"	"	"	"	03:48 ^m 23 ^s	04:34	2
Focus test.										
21cc. repla.										
454										

Dome Temp. 66°F
 Focus 15.61-11 = 15.50
 Dome Temp. 60°F

Transparency Conditions *clearly at sunset*

274

Time L.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
46	0:25 E	-11° 00'	1	5.2	g67	7-7-7	Set 5 Std. Vel. lens 7	16 fine guid.
60	0:08 E	-23° 32'	1	5.93	B9	7-7-7	Set 5 B8-B9 " 1184	12 fine
57	0:25 W	-23° 11'	1-	5.84	B8	7-7-7	Set 5 " " 1196	13 strong
06	0:18 W	+30° 18'	1-	6.9	Am	7-7-7	Set 5 Am Stars lens 8	45 strong
42	1:01 W	+48° 07'	1	7.3	Am	7-7-7	Set 5 " " lens 8	45 strong
42	1:06 W	+44° 00'	1	6.9	Am	7-7-7	Set 5 " " lens 8	45 strong
9	1:17 W	+04° 29'	1	5.9	Ko	7-7-7	Set 5 Std Vel. lens 7	16 very weak comp.
43	1:28 W	-57° 38'	1	7.5	Am	7-7-7	Set 5 Am Stars lens 8	45 strong
42	1:22 W	+55° 05'	1	6.6	Am	7-7-7	Set 5 " " lens 8	45 very weak comp.
34	1:15 W	+43° 20'	1	6.7	Am	7-7-7	Set 5 " " lens 8	45 strong

20/16. Set 9.
 03:49 Clouds 04:30 - thick clouds
 Bull in *Vistula* ergo piece has burned out.

Dome Temp. 65°F Transparency Conditions *excellent*Focus 15.99 Dome Temp. 55°F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
0 ^h 17 ^m W	-24° 42'	0	6.2	B9	6-6-6	Set 5 B8-B9	Sens 8 { 1551 1581	(30) d. strong
0 ^h 02 ^m E	+10° 20'	0	5.8	F8	6-6-6	Set 5 Std. Vel	Sens 7 { 1587 1599	(12) strong
0 ^h 20 ^m W	+30° 48'	0-1	6.9	Am	6-6-6	Set 5 Am Stars	Sens 7 { 1600 1618	(18) fine
02.03 W	+48° 08'	1	7.3	Am	6-6-6	Set 5 " "	Sens 8 { 1619 1664	(45) strong
03.24 W	+44.03	1	6.9	Am	6-6-6	Set 5 " "	Sens 8 { 1669 1714	(45) strong
01:56 W	+57° 39'	1	7.5	Am	6-6-6	Set 5 " "	Sens 8 { 1719 1764	(45) strong
01:45 W	+55° 05'	1	6.6	Am	6-6-6	Set 5 " "	Sens 8 { 1770 1815	(45) strong
0 41 W	+43° 21'	1	6.7	Am	6-6-6	Set 5 " "	Sens 8 { 1818 1863	(45) strong good.
					20/16	Set 9		OK
04:45	Clouds.					1 Ph loaded.		

Dome Temp. 69°
 Focus 15.49
 Dome Temp. 60°

Transparency Conditions *some haze*

clouds in north

*Should have been 40 counts!
 & goofed*

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	0400 - hozy.	Quality
23	00.11 E	$-24^{\circ} 42'$	1	6.2	B9	6-6-6 sets	B8 - B9 Program	misc { 1856 1861	strong guiding
11	00.24 W	$+58^{\circ} 29'$	2	7.5	K5	6-6-6 sets	Std. Vel.	sens 8 { 1853 1873	strong
68	00.35 W	$+31^{\circ} 09'$	2-3	6.9	Am	6-6-6 sets	Am stars	sens 8 { 1877 1927	strong guiding
10	00.00	$+61^{\circ} 26'$	1	7.2	Am	6-6-6 sets	Am stars dynamical binary; brighter component taken	sens 8 { 1933 1964	fine
03	0 ^h 08 ^m W	$+4^{\circ} 30'$	2	5.9	K0	6-6-6 sets	Std. Vel.	sens 6 { 1971 1979	teating
30	0 ^h 02 ^m W	$+73^{\circ} 22'$	1-2	6.8	Am	6-6-6 sets	Am Stars	Sens 7 { 1987 (18) 2005	strong
27	0 ^h 58 ^m W	$+72^{\circ} 56'$	2	7.8	Am	6-6-6 sets	" "	Sens 8 { 2007 (45) 2052	strong
50	0 ^h 18 ^m E	$+60^{\circ} 20'$	2	5.73	B9	6-6-6 sets	B8 - B9 Prog.	Sens 5 { 2059 2064 (5)	strong
12	1 ^h 43 ^m E	$+61^{\circ} 06'$	2	5.85	B9	6-6-6 sets	" " "	Sens 5 { 2066 (5) 2071	strong
54	0 ^h 14 ^m W	$+48^{\circ} 32'$	2-3	7.9	B9 ne	6-6-6 sets	Be Prog.	Sens 8 { 2073 (37) 2110	fine
						20/16			OK

Slow motion Dec. Button is broken.

4 PH loaded.

Date Sept. 4-5, Fri-Sat, 1964 Observer Fl - Hvr Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27744	H.D. 203638	21 ^h 18 ^m .4	-21° 16'	I-25	IIaObkd	0.008	26°	20:45 ["]	22:17	1
27745	H.D. 209819	22 01.0	-14 21	I-25	IIaObkd	0.008	26°	22:29 ["]	22:53	2
27746	H.D. 215242	22 38.7	+46 38	I-25	IIaObkd	0.008	26°	23:19 ["]	23:56	3
27747	H.D. 216608	22 49.2	+44° 13'	I-25	IIaObkd	0.008	26°	00:02 ["]	00:20	4
27748	" 222407	23 35.2	+63 10	"	"	"	25.7	00:40 ["]	01:33	1
27749	" 221671	23 29.0	59 29	"	"	"	25.6	01:47 ["]	04:21	2
	Focus Test		O.T. B		"	"				
									383	
<p>Strange multicoloured fireballs seen in south!! Azimuth 179° Elevation 0° (1:10 p.m. E.S.T.)</p>										

Dome Temp. 55° Focus $15.55 - .11 = 15.44$ Dome Temp. $50^{\circ}F$ Transparency Conditions excellent (0000)

0145: light scattered Ci in south

0200 excellent

Time I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
25 4	0 ^h 56 ^m E	-14° 02'	0-1	4.3	B8	6-6-6	Set 5 B8-B9 Prog.	Sens 5 { 2250 2255 } ⑤ history
54 3	1 ^h 47 ^m W	+10° 18'	1	5.8	F8	6-6-6	Set 5 STD VEL.	Sens 5 { 2260 2265 } ⑤ fine
27 1	0 ^h 36 ^m E	-6° 35'	0	6.3	gK4	6-6-6	Set 5 " "	Sens 7 { 2266 2282 } ⑥ weak
4 -	0 ^h 02 ^m E	+73° 23'	0	6.8	Am	6-6-6	Set 5 Am Stars	Sens 7 { 2283 2299 } ⑥ hist
40 2	01 22 W	+72° 56'	0	7.8	Am	6-6-6	Set 5 "	Sens 8 { 2301 2341 } ④ strong
0 3	0 14 W	+60° 19'	0	5.73	B9	6-6-6	Set 3 B8-B9	Sens 6 { 2342 2347 } ⑤ strong
41 2	00 10 E	+39° 44'	0-1	6.35	B8	6-6-6	Set 5 "	Sens 6 { 2348 2353 } ⑤ strong
03	00 55 E	+24° 42'	0	5.58	B8	6-6-6	Set 5 "	Sens 6 { 2353 2358 } ⑤ strong
24	00 34 E	-01° 17.5'	0	5.04	B8	6-6-6	Set 5 "	Sens 5 { 2361 2366 } ⑤ history
45 3	00 18 E	+22° 08'	0	5.90	B9	6-6-6	Set 5 "	Sens 6 { 2368 2373 } ⑤ history
01 3	0 21 E	+22° 20'	0	6.11	B8	6-6-6	Set 3 " incomplete	Sens 6 { 2374 2378 } ⑤ fine
							Set 7 16/20	sl. cir. slightly to west

4 pH loaded

Dome Temp. 64 F
Focus 15.48
Dome Temp.

Alhambra

Transparency Conditions clouds earlier
0300 Clouds.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 1 ^h 00	10 20	0	5.8	F8	6-8-8	net 5 std vel. ans 6 2382 2386	best
E 26 ^m	62 25	0	7	B2	4-4-4	" 2 Ab SB ans 7 2387 2389	fine
E 01 ^m		1	T	"	4-4-4	" 5 " 7 2399 2411	fine good
W 34 ^m		1			5-5-5	" 8 " 7 2413	fine
0109W		1			5-5-5	" 2 " 7 2413 2435	strong
0142W	"	1-2	"	"	5-5-5	" 5 " " #7 2435 2447	fine
0239W	"	1	"	"	5-5-5	" 9 " " #7 2447 2459	fine
0430W	"	"	"	"	3-6	" 2 #7 2460 2468	weak
					10/8	" 9	slightly to weak
I.P.H. Loaded							

Date Fri. Sept. 11-12/64 Observer Mt - Mt Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27765	HD 176318	18 ^h 54. ^m 6	+38° 07'	I-25	II.006	^{net} .008	20.30	20:00 ¹⁰	20:32	2
27766	HD 186547	19 40.0	+13 03	"	"	.008	20.00	20:39 ²³	21:24	3
27767	HD 193964	20 18.0	+61 56	"	"	"	19.8°	21:34 ¹¹	21:55	4
27768	HD 207990	21 48.1	+61 09	"	"	"	"	22:08 ⁵⁰	23:47	1
27769	HD 225289	23 59.9	+60 46	"	"	"	"	23:52 ⁸	0:07	2
27770	HD 222847	23 39.0	-15 50	"	"	"	"	0:18 ¹¹	0:42	3
27770 F	HD 3765 Focus test	00 35.3	+39 40	"	"	"	"	0:57 ⁹	1:15	4

Dome Temp. 62°
 Focus 15.47
 Dome Temp. 52°

Transparency Conditions some cloud about consistently
 Held up at 1:00 by clouds

Time	Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2	2:44 ^m W	+38° 13'	0	5.70	B8	6-6-6	sets B8-B9 wt dx-e sens 8 { 2473 2478	fine gold
4	3:06 E	+13° 14'	0	6.07	B8	6-6-6	sets " sens 6 { 2479 2484	fine
5	2:43 W	+62 07	0	5.59	B9	6-6-	sets " sens 6 { 2485 2490	d. strong weak
47	2:33 W	+61 25	0	7.2	Am	6-6-6	sets Am stare sens 7 { 2491 2501	
7	2:48 E	+61 04	0	5.85	B7	6-6-6	sets B8-B9 wt dx-e sens 6 { 2502 2507	d. strong gold
2	3:07 W	-18 27	0	5.21	B8	6-6-6	sets " sens 5 { 2509 2514	d. strong
-	3:31 W			8.2	K5		sets St. Vel. sens 8 { 2515 2555	in star inspected slightly to violet

Clouds. Closed up 1:20

Echo II in east at 01:09 (into earth's shadow)

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Date Sat-Sun, Sept 12-13/64 Observer MT - FL Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27772 ¹	HD 203638	21 ^h 18. ^m 4	-21 16	I-25	IIaOb	set .008	16.7°C	21:50 ³²	22:53	1
27773 ²	HD 213014	22 23.4	+16 46	"	"	.008	16.1	23:05 ⁷	02:27	2
27774 ³	{ H.D. 25291	4 ^h 01. ^m 3 (1965)	59° 04' (1965)	"	"	0.008	"	02:45	02:52	3
02:54								03:07	"	
03:10								03:21	"	
27775 ⁴	H.D. 19243	03 00.7	+62 00	"	"	"	16.0	03:38 ¹⁰	03:58	4
27776 ⁵	H.D. 21650	03 24.6	+41 25	"	"	"	16.0	04:09 ¹⁴	04:42	1
27777	{ H.D. 28497	04 24.5	-13 17	"	"	"	"	04:50 ¹³	05:15	2
FOCUS TEST										

Dome Temp. 55°
 Focus 15.52 - .11 = 15.41
 Dome Temp. 50° (brr)

Transparency Conditions Some light cloud otherwise good
2nd Half - Excellent transparency.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
53	0:42 W	-21° 00'	0	5.5	3K2	6-6-6	Set 5 Old Vel. sens 6 { 2520 2528	fine quiet
27	2:13 W	+17 05	0	9.5	G8	6-6-6	Set 5 sens 8 { 2529 2569	l. strong
52	01:57 E	+59 03	1	5.07	FO	18	Set 2 HR 1242 sens 5 { 2573 2576	strong
07	01:42 E	"	1	"	"	18	Set 5 sens 5 { 2576 2583	l. strong
21	01:29 E	"	1	"	"	-	Set 8 Sens 5 { 2583 2593	weak
03	00:03 W	+62° 13'	1	6.5	B2e	6-6-6	Set 5 Be Program Sens T { 2594 2606	fine
2	00:25 W	+41° 36'	0-1	7.2	B5ne	6-6-6	Set 5 " " Sens T { 2607 2619	fine
5	00:00 (E/W)	-13° 08'	0	5.5	B3ne	6-6	Set 5 " " NO INDICATION OF SKY ON EXMTR AT EXPOSURE END Sens 6 { 2623	with plate -dich de
							Set 9	
							3. P. H. loaded.	
							Some trouble with D.A. Clamp and unclamp at eastern hour angles	
								21 cc

Note: Mr. J. Crampton and Miss H. Meen married this day. (12th)

Dome Temp. 59° Transparency Conditions *Excellent*Focus $15.55 - .11 = 15.44$ Dome Temp. 53°

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
5	20:33 ^m W	+38° 12'	1	5.70	B8	6-6-6	sets 5 B8-B9 not dxl sens 6 { 2637 2642	b. strong
3	20:15 W	+13 13	1	6.07	B8	6-6-6	sets 5 sens 6 { 2644 2649	fine
29	10:38 E	-21 00	2	5.5	gK2	6-6-6	sets 5 <i>Old Vel</i> sens 6 { 2654 2659	weak
34	1 ^h 23 W	+17 06	1	8.5	G8	6-6-6	sets 5 sens 8 { 2660 2700	4015 - not seen 4250 just measured
11	0 ^h 17 ^m W	+56° 58'	1	6.49	B8	6-6-6	Set 5 B8-B9 Sens 6 { 2703 2707	1 strong
0	0 ^h 49 ^m E	+74° 06'	2	6.37	B8	6-6-6	Set 5 Sens 6 { 2709 2713	4 fine
50	0 ^h 33 ^m E	+58° 24'	2	6.19	B9	6-6-6	Set 5 Sens 6 { 2715 2719	1 strong
04	0 ^h 31 ^m E	+50° 34'	2+	5.62	B9	6-6-6	Set 5 Sens 6 { 2722 2726	2 strong
34	0 ^h 21 ^m E	+47° 56'	2	8.5	G5	6-6-6	Set 5 Hd + F binary Sens 8 { 2729 2761	32 1 weak
55	0 ^h 03 ^m W	+11° 43'	1-2	5.89	B9	6-6-6	Set 5 B8-B9 Sens 6 { 2764 2768	4 fine
11	0 ^h 04 ^m E	+9° 14'	2	5.59	B8	6-6-6	Set 5 Sens 6 { 2771 2775	4 1 strong good
32	0 ^h 50 ^m E	+20° 48'	1-2	6.01	B9	6-6-6	Set 5 Sens 6 { 2777 2781	1 strong
55	0 ^h 11 ^m E	+20° 53'	1	5.87	B8	6-6-6	Set 5 Sens 6 { 2783 2787	4 fine good
09	0 ^h 3 ^m W	+34° 03'	1	5.53	B8	6-6-6	Set 5 Sens 6 { 2789 2793	4 1 strong sl. air but light to red
						20/16	1	

1 PH Loaded.

Date Sept. 25-26, 1964 Observer Fl-L; Julian Day

Plate No.	Object	R.A. 1900 1960	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27790	α Lyr	18 ^h 35 ^m .6	+38° 45'	G10	IIaO	6		19:29	19:30.5	3
27791	"	"	"	"	"	6		21:19	21:20	3
27792	α Cyg	20 40.1	+45 08	G10	"	6		22 05	22 09.30	3

Sept 27 Hd 14h Tests for slit width (7e arc only)

27791 T ₁	reading = 7 small divs (probably 6)	A
27791 T ₂	" 9 " " " 8	B
27792 T₃	" 11 " " " 10	C

On 27791 T₁, a doublet with separation 19 μ is well resolved
 " 27791 T₂ this doublet is just resolved
 so slit setting 9 small divs against the

Dome Temp. 54

Transparency Conditions Good-but some very thin
cloud patches at times.
+ thin haze.

Focus

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0.5	00:56W	+38° 45'	1	+0.04	A0	6	Seeing went bad near one edge during trail { Exposure time not too accurate; time = one very slow trail along slit. (W → E) Developed in Acufine 10 min at 62°F Plate a little weak. Later found that periscope prism was occulting ~1/2 of light beam. Exp Time = 1 min	
0	02:46W	"	1	"	"	6	{ Timed exposure = 1 min to trail. ∴ above has same exposure - prism now out of beam. 10 min in Acufine at 63°F. Plate broke while in plateholder. No. Good.	
9.30			1	+1.35	A2	6		very weak - no good.
						6 s		
						4 1/2 s		
						3 1/10 s		
							Plate Broke in P.H.	
							resolved	
							black index should be OK	

297 Sept. 26 - Visitors \approx 170 - Clouds. Showed "U" and "7A".
 - Fl, Hw & Cc.

Date Sept. 27/28 Sun-Mon Observer Hd ^{Hb} Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27792	α Aql.	19 ¹⁹⁶⁰ 48.8	+ 8 46	G10	Ilad	9 ^{small drive}	54	20:34:15	20:36:15	A
27793	β Aql	21 ¹⁹⁶⁰ 29.5	-05 45	G10	"	"	50	20:56:30	21 08	B
27793T1	Test for slit width			G10	"	12				C
27794	α Peg.	23 ¹⁹⁶⁰ 02.8	+14 59	"	"	9	48°F	22:30:15	22 44	A
27796	α Cas	00¹⁹⁶⁰ 38.2	+56 09	"	"	"	"	23 45	23 51	A

Dome Temp. 54

Focus

Dome Temp.

Transparency Conditions

± 27794 Clear

298

2056-2107

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
15	00:57W	+08° 45'	0	B=0.99	A7IV-V	5	star spectrum is weak Bright star for test (2 min exp) star west clouds at 2108	weak
8	E 18 m	-05° 44'	0	3.68	G0	5	Std Vel. star (see IAU Trans, vol IX p 442)	weak
						4	The 19 μ doublet is not really resolved i.e. 12 is too wide	
4	E 9 m	+15° 00'	0-	2.47	B9.5	5	Bright star Sided by clouds	good
51	E 36 m	+56° 22'	0	B=3.34	K0	5	Bright star. Std. vel. stopped by clouds <u>Drizzle!</u>	Photo broken in PH - no. Good
							All developed except last one. Develop 10 min at 63°F - but it must be too weak. It is in PH A in top dark drawer.	

- H 5

Date Sept 28-29/64 Observer Ch. MR - M. FP Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27795	δ Cyg	20 ^h 20 ^m 0 ^s	+40° 08'	G10	IIaO	9	50°	20:20	20:50	A
27796	E Peg A	21 ^h 42.2 ⁽⁶⁰⁾	+9° 41 ⁽⁶⁰⁾	"	"	"	48°	21:05	22:35	
27796F	Frees Jet			"		9				
27797	α Tri.	$\frac{1960}{01, 50.8}$ $\frac{1900}{01, 47.4}$	$\frac{1960}{+29, 23}$ $\frac{1900}{+29, 06}$		"	"		0039	0107	B
27797Ti	Sky spectrum			G10	IIaO	9		30.5 on sky (blue)		
						short slit.				

Dome Temp. 52.....

Transparency Conditions

Focus

0045 Clouds

Dome Temp.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 23 ^m	W	+40° 08'	0	2.88	F8	2-2-2		fine
00 27 ^m	W	+9° 45'	0	3.86	KaIb	2-2-2	Some light cloud.	good.
						6/6	ask Murray ? should turn knob clockwise by about 1/8 turn	
00 30	E			3.91	F6 IV	2-4	Exp. Col. "K" Read hours for minutes	
							PH "A" loaded IIa0	
at		14.30 EST Sep 29				5		strong
							4th, 3th, 1st 15m	



Date Sept. 29-30/64

Observer Fl, Mt - H_v Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	DOME Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27798	X Oph	17 ^h 30 ^m .3	+12° 38'	G10	IIaO	9	55°	19:10	19:25	C
27799	π ₉ HD 212571	22 20.2 09 34.8 (1900)	+00 52 +55 59 (1900)	"	"	9	52°	20:19	23:55	C
27800	X Cas	0 ^h 38 ^m .2 (1960)	+56 19	"	"	"	50°	00 46	02 18	B
27801	X Cet.	03 ^h 00.2 02 57.1 (00)	+03 56 +03 42 (00)	"	"	"	49°	02 37	04 59	C

Dome Temp. 61°
 Focus
 Dome Temp.

Transparency Conditions a bit hazy, no clouds (19:00 EST)
0315 A few clouds
 *0435 Seeing Very Poor

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 ^h 10 ^m W	+12° 35'	0	M _v =2.14 M _g =2.28	AS III	2-2-2	Interstellar Line Prog. (Floating badly in R.A. (2 ^h W))	fine
00 ^h 02 ^m W	+1° 12'	1-	M _v =4.44 M _g =4.5	B1P	2-2-2	" " "	fine
01 ^h 50 ^m W	+56° 22.5'	1+	3.34	K0 II-	2-2-2	Std. Vel.	strong
02 19 W	+03° 56'	0-1*	4.17	M ₂ III	2-2-2	" " EXPOSURE CHART IN INSTRUCTION BOOK	weak
						3 EMPTY P.H. IN DOME (N.P.)	
						1 "EXPOSED PLATES" BOX IN DOME (N.P.)	
						7 UNEXPOSED PLATES IIaO IN DKrm.	
						2 EXPOSED " " "	

Dome Temp. 52° Transparency Conditions Excellent. (18:40)

Focus

Good. (20:50)

Dome Temp.

" (22:30)

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 ^h	03 ^m W	+12° 34'	0	2.28	A5 III	2-2-2	Interstellar Line Program	fine
6 ^m	0 08 W	+40° 09'	0	2.88	F8 III	2-2-2	"	fine
0 ^m	1 20 W	+9° 43'	0-1	3.86	K2 Ib	2-2-2	" Bright Std Vel.	fine
5 ^m	1 46 E	+23° 17'	0-1 ⁺	3.15	K2 III	2-2-2	" " "	strong
17	3 10 1 W	56 21	0-1	3.34	Ko ^{II-III}	2-2-2	" " "	strong
	3 20 31 W		0-1	3.13	A5 III	2-2-3		strong
5	4 00 15 W	49 44.5	0-1	2.28	F5 Ib	2-2-2	" " "	strong
							3 EMPTY P.H. in NIP.	
							NO MORE PLATES	
								out of focus at red end. why?

Date Oct 1-2 Thurs. / 64 Observer L. Re-Mt Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27809	α Oph HD 194093	17 30.3 (60)	12 38 (60)	G 10	Baked IIA0	9 long	57	19 06 ⁷	19 20	A
27810	β Cyg	20 20.8 20 18.6 (60) (00)	+40 08 +39 56 (60) (00)	G 10	"	9 short	56	19 32 ⁷	19 46	B
27810 F	Focus Test			"	"					C
	1500 replen Photographic tests for collimation									
27811	HD 3712 α Cas	00 34.8	+55 59	"	"	9 long	55	22:36 ²⁰	23 16	A
27812	HD 12929 α Ari	02 ^h 01 ^m .5	+22 ^o 59'	G 10	IIA0b	9 short	55	23 31 ¹⁵	00:01	B
27813	HD 13161 β Tri	02 07.2 02 03.6 (00)	+34 44 +34 31 (00)	"	"	9 short	55	00:25		C
27813	"	"	"	"	"	"	"	01 07 ²	01 12	A

Dome Temp. 58°F

Transparency Conditions Good Wind From SE

Focus

Dome Temp.

Observers! pay more attention to dec slow motion
screw, to close to the end.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 A	2 14W	12 36	0	2.28	A5 III	2-2-2	Münch's std Focus had been c to v by 4 μ . \therefore turned big knob clockwise $\frac{1}{2}$ turn or so	weak
6 B	0 09E	40 09	0	2.88	F8 Ib	2-2-2	This test now shows c to red very slightly, no turned big knob counter- clockwise about 24" (counter?)	weak c. slit slightly thin
						6/6		
6 A	0 57E	56 22	0	3.34	K ₀ II-III	2-2-2	Bright Std. Vel. stars	strong
6 B	1 35E	+23 18	1	3.15	K ₂ III	2-2-2	Bright Std. Vel. stars	strong
C				3.13	H5 III	2-4		nothing
7 F	00 26 E			3.13	11	2-4	0025 Clouds Cleared by 0100 01:15 Clouds again Closed up 2 PIT loaded in fudge (but two plates will be useless)	very weak

3307

Date OCT 2/3 1960

Observer

vdB

HV

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
347-3112	51 Peg	22 55.7	+20° 35'		5/4/3	28		23 48	
347-3113	R2 Ari = 45 Ari	2 ^h 53	+18 10		5/5/3	28		00 18	
347-3114	{ ² Cet	02 26.2	+08 18		5/5/3	28		01 12	
1 347-3115	"	"	"		"	"		01 30	
3116a	"				6/5/3	28		01 42	
3116b	"				"			01 50	
3117a	X Cet	03 17.7	+03 14		3	28		02 05	
b	"	"	"		"	"		02 13	
347-3118	γ IV	03 ^h 32'	+17 54		6/5/3	28		02 35	2x + SK
3118	γ III	"	"		6/4/3	28		03 05	2x + SK

Dome Temp.

CO₂ in 2330

Transparency Conditions

OK

Focus

V = 700

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		4"	5.53	95E		Time constant test	
		4"	5.9	17GIII		uv filter	
00° 30' E		4"	4.27	B9III		Standard	
		"	"	"		3500 - 2200 Å	
0° 15' W						uv without filter	
		"				uv with U92	
			4.82	95E		uv without filter	
			"			uv with U92 filter	
0° 20' E			6	92E		0 I II III	
0° 05' W			"				

Dome Temp. 56°Transparency Conditions ExcellentFocus —Dome Temp. —

Found P.H. Had a broken plate in it. (before exposing)
 03 WEST: SEEING VERY POOR.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
06	01:02 W	+05° 22'	0	4.8	F7 V	2-1-2	Bright Std. Vel. (early two P.H.)	fine
22	00:32 E	+50° 31'	0	3.95	B0p	2-1-2	Special Star for G10	very strong
00	00:29 W	+23° 17'	0	3.15	K2 III	2-1-2	Bright Std. Vel.	strong
50	01:24 W	+03° 58'	0	4.17	M2 III	2-2-2	" " "	strong
13	01:26 W	+49° 44'	0	2.28	F5 Ib	2-1-2	" " "	strong
26	00:27 W	+16° 26'	0	1.38	K5 III	3-3	" " "	2 min fine
27	00:33 W	"	0	"	"	2-1-2	" " "	7 min strong
09	00:13 W	-17° 50'	0	2.80	F0 Ib	2-1-2	" " "	fine
28	01:40 E	+28° 07'	0	2.18	K0 III	2-1-2	(Pollux) " " "	strong
	In - In/out - out ?					5?		fine
							2 unloaded plate holders in north pier.	
							7 unexposed plates in north pier	
							9(?) exposed " " darkroom	
							→ Use a new "EXPOSED PLATES" box.	

Date Sun Oct 4-5/64 Observer Ad Julian Day _____

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
27822 T	Test of filter — HD1867910				GG18	over one (east side)		comparison		B
27823	X obj	19 41.5	+10 22	G10	IIaOB	short 8	44	21 ⁴³ 17 ²³	22 29	C
27823 F	Fovus test		In - In/out - Out							B
20cc replen										

Mon/Tues Oct 5-6/64

Photographic test for collimation after slits inserted in spectrophotometer

Collimator now removed

Plates as at right →

Tues - Wed Oct 6-7/64 Ad - L

L had moved the optical plate in two directions to try to cure lack of collimation. a test showed it overdone. ~~another~~ another adjustment resulted in perfect collimation i.e. like this →

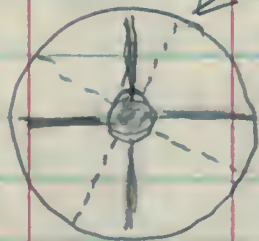
Dome Temp. 46 F

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 3 13	+10 33	0-1	4.15	K $\frac{3}{4}$	2-2	full aperture - both comp & stars GG 1/8 filter now on clouds till 21:45 Bright 8d vel. Clouded out.	fine weak fine
					5/5	Where is P.H. A?	
						4 plates in unexposed box in dome PH B + C in dome.	
						Joan - Please number both unexposed + exposed boxes (1, 2, 3 each) using the plastic label maker.	
							J.F.B.



Diffraction
pattern of Cos.
secondary
is concentric
with pattern of
the small mirror
and its supports in
the collimator.

Date Oct. 6-7, 1964

Observer Fl. Dg. Mcl. - H. v Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27824 F	Focus Test			G10	Ilford	9				A
27825	^{HD 206778} ε Peg. A	21 39.3	+9° 25'		"	short		20 ³⁰ ' 52	21 ³⁰ ' 52	B
27826	^{α Cas.} HD 3712	0 ^h 34.8	+55° 59'		"	"		22 ²⁰ ' 14	22 54	C
27827	γ Per.	1 ^h 37.4	+50° 11'		"	"	38°	23 06	23 46	A
27828	^{HD 18884} α Cet.	2 ^h 57.1	+03° 42'	"	"	"	35°F	00 44 ⁵⁰	02 24	B
27829	HD 29248	4 ^h 31.3	-03° 33'	"	"	"	32°	03 00 ⁶⁰	05 00	C
27829 F	Focus Test	after moving plate away from mirror								C
	15 sec. exposure									

Dome Temp. 37°

Transparency Conditions Clear

Focus

Dome Temp.

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
A						5-5	Centre to violet.	
2 B	1 ^h 00.5W			3.86	K2 Ib	2-2-2	Bright std Vel.	fine.
3 C	0 57 E	+56° 22'	0	3.34	K0 II-III	2-2-2	" "	l. strong
6 A	1 ^h 09 ^m E	+50° 29'	0-1	3.95	B0 p	2-2-2	Special Star for G10	l. weak
4 B	00 10 W	03 56 W	0	4.17	M ₂ III	2-2-2	Bright STD. VEL.	l. strong
C	0 11 3 W		0-1?	4.12	B ₂ III	2-2-2	INTERSTELLAR LINE PROG.	strong
C	by 1/4 rev and turning					5-5	1/6 9 N. screw out 1/6 turn.	OK in red.
	re-calculation						showed probably moved it wrong way in tilt.	

Wed.
Date Oct 7-8/64

Observer

Re
Cr
Hd - HV

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27830	HD 186791 γ Aql	19 41.5	+10 22	G10	IIaOB.	9 μm	43°F	18 56 ²²	19:40	A
27830F	Focus test	after moving plate away from mirror by 1/2 rev and moving N screw in 1/3 rev + S screw out 1/3 rev								C
27831	HD 206778 ε Peg A	21 ^h 39.3	+9° 25'	"	"	"	42°F	20 02 ¹⁸	20:38	A
27831F	Focus test	after moving N screw out 1/2 rev + S screw in 1/2 rev								A
27832	HD 222368 6 Psc	23 34.8	+05 05	"	"	10 μm		20:54	23:10	C
27833	HD 10516 δ Per	01 37.4	+50 11	"	"	10 μm	42°F	23:27 ²⁵	00:17	C
27834	HD 18284 λ Crt.	2 ^h 57.1	+03 42	"	"	"		00 34 ⁴¹	01 56	A
27835	HD 29248	4 ^h 31.3	-03 33	"	"	"	40°	03 31 ⁶⁴	05 37	C
<p>Thurs Oct 8 Changed tilt by moving N screw out 1/12 rev, S screw in 1/12 rev.</p>										
27835F	Focus Test	In - In / out - out.								C
<p>Tilt nearly perfect. Centre to red about 8μ Should turn knob 1/6 rev counter clockwise</p>										

Dome Temp. 43

Transparency Conditions Excellent

Focus

0200 Clouds

Dome Temp.

Thin clouds for last 2 hr.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 45 W	+10 31	1	4.15	K3 II	2-2-2	Bright Std Vel star. (probably underexposed)	weak
					7-7	sl. ct vi in red, v. sl. ct vi in vi	Better
0 14 E	+09° 44'	1	3.86	K2 Ib	2-2-2	Bright Lk Vel. star (probably overexposed)	strong
					7-7	C. to vi. ! ⇒ plateholders different! → use plateholder	
0 22 W		1	4.8	F7 V	2-2-2	Bright Std Vel.	plate
0 34 E	+50 31	1	3.95	B0 p	2-2-2	Special Stars	far too strong
0 44 E		1	4.17	M2 III	2-2-2	Bright Std. Vel.	poor focus broken. but very good
0 55 W	-03 25	1	4.12	B2 III	2-2-2	In. Std. Line Prog.	poor guiding weak.
<u>ONE</u> of last two plates <u>BROKEN</u>							
sl. center to red.							
5-5							

Hd
MCL vdB
~~MCL~~
H se -HS

Date Sun Oct 11-12/64 Observer H S Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27839	HD186791 & Obj.	19 ^h 41.5	+10° 22'	G10	IIaOB	9		18 37 ¹³	19:03	C
348-3120	α Lyr	18 35.7	+38 45		4/4/3	28		19 16		A
348-3121	HD187923	19 50.5	+11° 34'		7/4/5	28		19 47		
348-3122	HD186408	19 40.9	+50 25		6/5/5	28		20 18		
348-3123	HD186427	19 40.9	+50 25		7/4/5	28		20 33		
348-3124	HD217014	22 55.7	+20° 35'		6/5/5	28		21 00		
27840	^{HD10516} Φ Per	1 37.4	+50	" G10	IIaOB	long 9	39	21 40 ¹⁵	22 10	C
27841	"	"	"	"	"	short 9	39	22 14 ¹⁵	22 44	F
27841 F	Focus Test		In-in/out-out			Setting	2.50	slit 9		C
27842	HD19275	03 01.1	+74 01	G10	IIaOB	short 9	38°	23 20 ⁴⁶	0052	C
27843	HD 34787	05 14.9	+57 27	"	"	"	37°	0108 ⁶⁰	0308	B
27844	" 75486	08 ^h 45.2	+62° 20'	"	"	"		0327 ²⁵	0417	C

17cc
syringe

Dome Temp. 48°

CO₂ in
V=700 1800±

Transparency Conditions AOK

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ^h 23 ^m W	+10° 32'	2	4.15	K3II	^{2 1 2} 2-1-2	Bright star vel. <u>Developed</u>	l wk
01 50 W			0.04	A0 V		E.T. ST	
01 15 W		3"	6.15	S2 V		SSS Z3, Z4 exp	
01 50 W		2"	5.96	S2 V		SSS " upper left	
02 05 W		3"	6.20	S5 V		SSS	
03 45 E		2"	5.5	S5 V		SSS	
Σ 2 ^h 27 ^m	50 31	2	3.95	Bop	2-2-2	140 ^h n *	fine
Σ 1 ^h 53 ^m	"	2	"	"	2-2-2	"	This plate was caught between the pins. Probably fine-focus bad focus. P.H.A. defective? specimen to get lit in red slightly to red towards
01 10 E	+74 16	2	4.89	A2	2-2-2	Interstellar line Prof	fine
01 07 E	+57 30	2	5.25	A0	2-2-2	" " "	fine
02 27 E	62 07	1-2	5.72	gFon	2-4	" " "	poor guiding
						0345 Clouds in S.W. 0410 Clouded out from N.W. very white.	
						2 or 3 plates in unexposed box in dome Box of 22 " " " in 3rd drawer of dark room house	

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CLASS VISIT: 24 Hd, Cr, Fl, Dm showed lecture to 40(?) students

Date ^{more} ~~to~~ Tues-Wed Oct 13-14 1964 Observer Cr - H V Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27845	HD 222368 C Psc	23 ^h 34. ^m 8	105° 05'	G 10	IIa0B	9	49°F	20 ^h 32 ^m 59	22:30 ^m	C
27846	HD 3712 α Cas	0 ^h 34. ^m 8	+55° 59'	G 10	IIa0B	9	46°F	22 ^h 42 ^m 18	23:18 ^m	B
27847	HD 10516 φ Psc	01 37.4	+50° 11'	G 10	IIa0B	9	45°F	23 ^h 33 ^m 20	00 13	C
27848	HD 19275	03 ^h 01. ^m 1	+74° 01'	G 10	IIa0B	9	44°F	0 ^h 32 ^m 37	03 30	B
27849	ε Gem	$\frac{1960}{06\ 43.0}$ $\frac{1900}{06\ 40.6}$	$\frac{1960}{+1256}$ $\frac{1900}{+13\ 00}$	"	"	"	42°	04 18	0536	C

Dome Temp. 49°

Focus

Dome Temp.

Transparency Conditions

cloud & haze in early evening
clearing ~ 20^{\wedge} 322
2⁺ good! Dew forming on dome.
0115 MIST RISING

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 06 ^m W	+05° 27'	0-1	4.8	F7 V	2-1-2	Bright. Std. Vel. Stars	fine
00 08 ^m E	+56° 21'	0-1	3.34	K00-70	2-1-2	" " "	strong
route of travel							
00 15 ^m E	+50° 31'	0-1	3.95	B0 _D	2-1-2	Special Star (40 min)	fine
00 31 ^m W	74 15	1-2	4.89	A-2	2-2-2	Interstellar Line Program	guiding strong
00 57 ^m W	+12 56	0+	3.81	F5 V	2-2-2	star from Observer's Handbook.	guiding fine
*0125 <u>VERY</u> MISTY/FOGGY							
<p>① Did not find the 2 or 3 stars referred to on previous page</p> <p>② One plate broke, unusually enough, ^{a moment} after loading in the p.l.</p>							

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ing Time
E.S.T.



O B A F G K M R N S

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