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3

Dome Temp.

Focus

Dome Temp.

Hour Angle
Ecl

Dome Temp.

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						David Danlap Observatory 74" logbook Vol 36 Plate Nos 28935 - 29867 Mar. 1966 - Sept. 1966	

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Date 17-18 Jan/66 (Thurs) Observer Mc - MSE Julian Day 173

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
28935	HD 33647	5 06.6	+0 24	G190	E006	13	36°F	19 06 ²⁰	19:46	A
28936	HD 42784	6 07.6	+8 43	"	"	"	"	20:08 ¹⁵	20 38	C
425-1	HR 2990	07 43.2	+28 07		800V	T			middle	A
425-2	HR 3454	08 41.9	+03 21			12 ^s				C
-3	NGC 2903	9 29.3	21 44			20 ^s			21 17	
-4	NGC 3031	9 52.7	+69 14			t=60 ^s				
-5	HR 2990	07 43.2	+28 07			t=20 ^s			22 ^h 52 ^m	
-7	NGC 3379	10 ^h 46.0	+12 46			t=12 ^s			00 37	
-6	NGC 3384	10 45.7	+12 54			t=60 ^s				
-8	HR 2990	07 43.2	+28 07			t=50			01 10	
-9	"	"	"			20 ^s			01 18	
-10	NGC 4258	12 17.3	47 30			"				
-11	HR 4883	12 50.0	+27 44			60 ^s			02 52	
-12	HR 4785	12 32.2	+41 33			20 ^s			03 19	
-13	NGC 5055	13 14.3	42 12			60 ^s				

Dome Temp. 40°F

Transparency Conditions fair

Focus 6 1/2

Dome Temp. 42°F

Observer 2120 1/2 mag absorption

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS							Quality	
1 ^h 53 ^m W	+00° 29'	0.00	6.56	B9	15-15-15	B8-34	focus 6 1/2 #800/16 (?)							average
W1 49	+18° 42'	0.00	6.16	B8	15-15-15	"	" #800/16 (?)							fine
						HPN	HPW	45	42	41	38	35		
			1.21	K011		A5	A1	A3	A5	A5	B2	B3		
0 ^h 02E			4.32	B3V	032	B5	B1	B3	B3	B3	B3	B3		
			9.48	F0		D6	D2	D4	D5	D5	D6	D6		
						D6	D3	D5	D6	D6	D6			
W02 ^h 32			1.21			A5	A1	A3	A5	A5	B2	B3		
0115W			10.5			D6	D2	D4	D5	D5	D6	D6		
			10.9	G5		D6	D2	D4	D5	D5	D6	D6		
0450W			1.21			A5	A1	A3	A5	A5	B2	B3		
0458W			11			"	"	"	"	"	"	"		
			8.90	G0		D6	D3	D5	D6	D6	D6	D6		
1 26W			5.07	G0111		C2	B3	B5	B6	C1	C2	C3		
02 06W			4.3	G0V		B6	B2	B4	B5	B5	B5	B6		
			9.26	F8		D6	D3	D5	D6	D6	D6	D6		

Date Mar 21/22 Monday Observer Re / Db 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.
28937	HD 42657	6 ^h 6.8	-4° 38	G40	Ilford	13	33°F	19 ^h 16 ^m	19 ^h 47 ^m	C
28938	HD 58346	7 ^h 20.1	-22.43	G40	Ilford	13	33°F	20 14	20 47	C
Too foggy — closed up at 20 ^h 47 star vanished.										
28937 T	Calibration step wedge for plate 28937									
Blank plate found in exposed plate box. — left during weekend										

Dome Temp. 37°

Transparency Conditions low fog

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Focus

Dome Temp.

Julian Day

Observer

very hazy 20^h 15

Date

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	1 ^h 16 ^m 5 ^s W	-40° 35'	0	6.22	B9	U-15-15 f 60 1/2		break,
	1 ^h 04 ^m W	-22° 48'	0	5.8	B9	K-15-15 T-33 → f-60 1/2 V	Exp. shortened - close to pier.	nothing

Note: Exp. Meter off. needle goes to ~5 + no further, also oscillates.

Date

Mar 26/27

Observer

E / Db

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.
28937A	Faded 2-2/5V-07			G40	Ia Ob	13	23°F	02:10	04:10	
28938	HD 145792	16 ^h 07.7	-24 10	G40	Ia Ob	13	19°F	03:34	04:22	
28939	HD 161701	17 41.9	-14 42	G40	Ia Ob	13	17°F	04:53	05:22	
								closed up 5 ^h 27 ^m .		

Dome Temp. 26°

Focus

Dome Temp.

Transparency Conditions

Clouds only in evening
cloud in the
20^h 20^m clouded in 12

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
Between + show.					5/5	21 ^h filter focus 56.5	
00 11 W	-34° 20'	0.1	7.0	B8	15/15/15	focus 55.5	} HD 15504 Too low faded weak
00 22 E	-14° 42'	0	6.1	B9	15/15/15	(pBing 4 1/2) 800/21	
clouds + down !!						star lost in slit.	

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Date 2-28 Jan 61 Observer H. H. / H. H. Julian Day 722.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
28940	H243836	6 13.3	123 19	640	IIa06	13	21 ⁸	19 29	19 45	A
28941	"	"	"	"	"	"	"	19 46	19 58	C
28942	B245 ⁸ 1859	10 38.3	45 12	640	IIa06	17	21 ⁸	20 05	22 35	A
28943	H3-92129	13 33.1	45 22	640	IIa06	17	20	22 42	01 26 ⁸²	C
28944	H2131861	14 50.9	45 43	640	IIa06	13	18	4 01	5 15	A
28944 T	Calibration Step Wedge for plates				28938	-44				

Dome Temp. 25.5

Focus 50/55

Dome Temp.

Transparency Conditions FINE

0110 CLOUDS
0330 Seeing again 0110

Time T.	Hour Angle End	Declination	Secing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01	30	23 17	0-1	7.0	B9E	25/25	M.K. STD. (1/2 worm) 800/13(?)	fine
01	40	"	"	"	"	50	M.K. STD. (TOTAL EXP. 8 min) 12(?)	fine
01	44	52	0	9.59	F4	15-15-15	Hd KAFS + 1/2 worm seeing 1/2 worm 1/2 worm	guiding
01	45	03	2	9.78	K5	15-30	Hd KAFS 1/2 worm 1/2 worm	very weak guiding
01	45	27	0-1	7.64	F3	15-15-15	Hd KAFS 1/2 worm 800/20	very weak compared

DOME IS VERY SLUGGISH
TURNING [unclear] [unclear]

Dome Temp. 27° F

Transparency Conditions Excellent

Focus

- no UFO'S - Unusual by moon

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS							Quality
						43N	43W	45	42	41	38	35	
0001W			1.21	KOII		A5	A1	A3	A5	A5	B2	B2	
0123W			1.93	AOIV		A5	A1	A2	A2	A2	A3	A4	
0134W			3.18	G8I6		B3	A4	B2	B4	B4	B6	C2	
0020W		5"	3.76	K4II		B4	A5	A3	B5	B5	C3	C4	
0018W			4.32	B3V		B5	B1	A2	B2	B2	B2	B2	
0125W			1.21	KOII		A5	A1	A3	A5	A5	B2	B2	
0010W		3"				C4	B5	A2	C3	C3	C4	C4	
0030W		5"	3.14	MOII		B3	A5	B2	B5	B5	C3	C4	
0030W				G3	S6I-II	D6	D2	D4	D5	D5	D6	D6	
0315W			1.21	KOII		A5	A1	A3	A5	A5	B2	B2	
0333W			4.32	B3V		B5	B1	B2	B2	B2	B2	B2	
1126			10.9	G5		D6	D2	D4	D5	D5	D6	D6	
0050W			1.21	KOII		A5	A1	A3	A5	A5	B2	B2	
00510W													

* Some minor stars seen in
 counter image not shown

Date.....

Observer *W. C. C. H. B.*

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.
426-14	HD 95225	11 01.5	36 17			20 ^s			01 04	
-15	B 54920	12 57.0	17 38			20			1 28	
-16	NGC 4258	12 17.3	47 30			50 ^s			2 09	
426-17	NGC 4649	12 40.4	+11 44			50 ^s			2 42	
-18	NGC 5055	13 14.3	42 12			60 ^s				
-19	HR 6355	17 03.7	+12 47			20	23 ^o F		4:58	

Dome Temp.

Transparency Conditions FINE

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Focus

moon set ~ 1:05

Dome Temp. 23°F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						HRN HBW 45 42 41 38 35	
02 09 W			7.6	M2 V		D2 C3 D1 D3 D3 D4 D5	
0 38 W		M	B=6.4	M1 III		C2 B3 B5 C3 C3 C6 D2	
1 59 W			8.90	G0	S6	D5 D3 D5 D6 D6 D6 D6	
3 15 W			9.28	G7	E1	D6 D3 D5 D6 D6 D6 D6	
3 12 W			9.26	F8		D6 D3 D5 D5 D6 D6 D6	
0 03 W			4.91	A3 IV		D6 B2 B4 B4 B4 B5 B6	

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Date Jan 30/51 Observer H. G. ... 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.
28945	HD 60452	07 42.0	-15 42	G 44	D 0	13	33	19 35	19 42	A
28946	"	"	"	"	"	"	"	19 53	19 58	B
28947	"	"	"	"	"	"	"	20 07	20 07	F
28948	2) L M1	10 01.5	+35 44	"	"	3	"	22 16	22 19	A
28949	"	"	"	"	"	"	"	22 29	22 39	B
28950	HD 96314	11 01.1	-26 45	"	IIa0B	13	29	23 35	23 37	B
28951	HD 11222	12 32.6	-24 18	"	IIa0B	13	"	23 47	0 17	A
447-1	Exhaust in m. subject			"		4	28	<u>MIDDLE</u>		B
1	HR 47 85	12 32.2	41 33					t=20 ^s	0 50	
2	HR 45 50	11 56.6	38 04					"	1 07	
3	HR 48 33	12 50.0	+27 44					"	1 25	
4	HD 35735	11 01.5	+36 17					"	1 46	
5	HR 54 47	14 32.9	-29 55					"	2 11	
6	HR 47 85	12 32.2	41 33					"	2 30	
7	HR 52 70	14 00.0	+09 52						3 23	
8	HR 47 35	12 32.2	+41 33							

Dome Temp.

Transparency Conditions *fine*

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Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 0 03	-24 50	0	4.3	B 1/2	45	Partially fogged some cap...	work
W 0 37	"	0	"	"	45		work
W 0 38	"	4	"	"	45	A. Stevenson arrived for test of his guide	work
		2	4.3	A 72	—	W/AUTO GUIDE ^{110TV} 200/6	Developed - work
W 0 39	+35 00	2	"	"	—	" " " 200/12	work
W 0 40	-47 05	2	5.6	B 8	15	B 8-84 (Bin)	work
W 0 41	-24 38	0	7.1	B 9	15	B 9-89 (SB)	work
MID -							
W 0 34			4.3	G 0V		B 5 B 1 B 3 B 4 B 3 B 4 B 5	
W 1 32			6.46	G 8V		C 4 B 6 C 2 C 4 C 3 C 4 C 5	
W 0 51			5.07	G 0V		C 1 B 3 B 4 B 5 B 3 B 6 C 2	
W 3 00			7.6	M 2V		D 2 C 4 D 1 D 3 D 3 D 4 D 5	
E 0 07			4.49	F 2V		E 5 B 1 B 3 B 4 E 3 B 4 B 5	
W 2 15			4.3	G 0V		B 5 B 1 B 3 B 4 B 3 B 4 B 5	
W 1 37			6.12	G 1V		C 4 C 1 C 3 C 4 C 4 C 5 C 6	
			4.3	G 0V		B 5 B 1 B 3 B 4 B 3 B 4 B 5	

Saturday April 2: ~ 157 meters. Showed Jupiter and Moon.

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(H6
Re
Mf)

Date April 2/3 1966

Observer Refai

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Pl.
28952	21 L Mi	10 ^h 01. ^m 3	+35° 44'	G40	IIa06	13	32°F	23:15	23:17	C
28953	"	"	"	"	"	"	"	23:22	23:23	A
28954	η Leo	10 ^h 01. ^m 9	+17° 15'	"	"	"	"	23:38	23:39	B
28955	"	"	"	"	"	"	"	23:39	23:40	C
28956	Regulus α Leo	10 ^h 03. ^m 1	+12° 27'	"	"	"	"	23:48	23:48	A
28957	"	"	"	"	"	"	"	23:54	~ 4 minutes later	B
28958	β Leo	10 ^h 11. ^m 1	+23° 55'	"	"	"	"	00		C

Dome Temp. 35
 Focus 60
 Dome Temp.

Transparency Conditions Intermittent Cloud

~160 minutes H_β, M₆

First Visitors Night of 1966 Season - Jupiter & Moon (thru clouds) observed

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 ^h 38 ^m W	+35° 26'	fair- poor	4.66	A7V	15-30	HK STANDARD. 1/2 NORMAL EXPOSURE	200/8 fine
01 ^h 44 ^m W	"	"	"	"	"	1/4 NORMAL EXPOSURE	200/4 good
01 ^h 59 ^m W	+10° 58'	"	3.48	A0 Ib	22-22	" clouds 1/2 NORMAL	200/8 good
02 01 ^m W	"	"	"	"	22-22	" 1/4 NORMAL	200/5 fogged? best
			1.26	B7V	"	" 3/4 NORMAL	200/12 good
02 15 ^m W	+12° 10'		"	"	"	" 1/4 NORMAL	200/4 good
	29-34		3.43	F0 III	22-	"	200/15

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Date 3-4 April 1966 / San Juan Observer M. C. - H. A. Julian Day 2000.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
28958	HD 92728	10 37.4	57 43	G40	IIaBb	13	33°	22 11	22 31*	A
28959	HD 96314	11 01.1	-26 45	G40	IIaBb	13		22 40	22 60	B
28960	HD 11226	12 42.6	-24 18	G40	IIaBb	13		23 06	0 12	A
28961	HD 107328	12 15.3	+03 53	G40	IIaBb	13		0 17	01 19	B
28962	HD 131861	14 50.9	45 43		"	11		01 40	3 52	A
28963	HD 144579	16 01.5	39 24	G40	IIaBb	13		3 56	04 39	B
28963T	Calibration Step Wedge for plates 28952-63									

Dome Temp. $34^{\circ}F$ Focus 60

Dome Temp.

Transparency Conditions *fair ~ full moon**2300 - heavy clouds in N - morning clouds
> 1 mag absorption after 0100*

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W0 19	57 21	0 ⁻	5.8	B9	15-30	B8-B9 (SB) focus 60	400/15 ⁻ fine.
W0 26	-27 06	0 ⁻	5.6	B8	15-15-15	B8-B9 (SB)	400/15 ⁻ weak
E0 03	-24 39	0 ⁻	7.1	B9	15-15-15	B8-B9 (SB)	800/ 30 ²¹ <u>CLOUDS</u> weak
0136W	+3 32	0	6.1	K1	15-30	std. Vel.	" cirrus 400/50 fine
W1 30	45 27	0-1	7.64	F3	15-15-15	KAFS BIN.	" 800/50 fine
0105W	39 12	"	7.2	G8	15-15-15	std. Vel.	800/50 fine

double

* STAR OFF SLIT PART OF TIME - TANGLE
WITH ^{AA} HAND BUTTONS (NOT FOCUSING)
(OR AFTER FOCUSING)

Dome Temp. 45°F

Focus

Dome Temp.

Transparency Conditions

very, very good (at start)
 after 2100 - very good seeing 28

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10.5	↓	+9 16	0-1	3.76	K42	7/610	MR STD focus 59 1/2 (normal) 200/24	fine
10.6		"	"	"	"	"	(1/2 norm) 200/12	fine
29.3	WO 14	"	"	"	"	"	(1/4 norm) 200/6	fine
4.0		+3 320-1	4.30	B32	5 ^s /60	"	(normal) 400/16	fine
4.4		"	"	"	"	"	(1/2 norm) 400/8	fine
4.7		"	"	"	"	"	(1/4 norm) 400/4 1/2	fine
		43 10	2-3	3.74	ATV7	5 ^s /60	(normal) 400/16	fine
10	WO 15	"	"	"	"	"	(1/2 norm) 400/8	fine
		"	"	"	"	"	(1/4 norm) 400/4	fine
							← poor + cloudy again, seeing OK all	
	00-35E	-00 27	+2	5.09	B12	7/610	MR STD (T30) (1/4 norm??) 800/25 1/2	fine
							completely cloudy - closed up at <u>21:55</u>	800/15
								52/7
							* EXP MTR DOESN'T WORK AT SETTING 100	

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Date 7-8 April 1966 Observer Ai 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.
28973	δ LEO	11 08.8	+21°04	G40	IIaOb	13	32°	23:26	23:30	B
28974	"	"	"	"	"	"	"	23:36	23:39	"
28975	θ LEO	11 09.0	+15 59	"	"	"	"	23:55	23:58	"
28976	"	"	"	"	"	"	"	00:09	00:13	"
28977	HD 112206	12 42.6	-24 15	"	"	"	32°	00 11	01 14	A
28978	HD 142363	15 57.2	+18 55	"	"	"	"	01 21	02 15	B
28979	HD 142301	15 48.7	-24 57	"	"	"	"	02 16	03 16	C
28980	HD 142301	16 08.8	-25 15	"	"	"	31°	03 21	03 38	A

Dome Temp. 35° Focus 60

Dome Temp.

Transparency Conditions *Very Poor*

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*Variable**23700 rapid built - polyethylene covered*

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 ^h 05 ^m W	+20° 42'		2.55	A4 V	22-22	MK STANDARD 1/2 NORMAL 200/8	grinding
01 ^h 13 ^m W	"		"	"	"	" 1/4 NORMAL 200/4	fine
01 ^h 38 ^m W	+15° 36'	0.1	7.1	A2 V	22-22	" 1/2 NORMAL 200/8	fine
01 ^h 46 ^m W	"	0.1	7.1	"	"	" 1/2 NORMAL 200/8	fine
01 ^h 55 ^m W	-24° 41'	0-1	7.1	B7	15-15	27-29 SB	weak
00 57E	+18° 42'	0-1	6.2	B9	15-15	B9-59 Proc	weak
00 11W	-25° 07'	0-1	6.2	B9	15-15	B9-59 SB	weak
00 11W	-25° 24'	0	6.7	B9	15-30	B9-59 Proc Cloud → ground 0334	weak
Plate 31 1.15 probably picked up on 2 light film with mag. - note 2 plates						***	Simulation of water not making → proceeding for plate after 50476.

Date 8/4 April 1966 Observer Re? 146 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.
2898 ⁰	HA92729	10 ^h 37.4	+57 ^m 45	G40	Ilford	13	32°	22:00	22:23	A
2898 ¹	31 Com	11 ^h 46.8	+28 ^m 05	G40	Ilford	13	32°	23:56	00:10	B
2898 ²	β Com	13 ^h 07.2	+27 ^m 23	"	"	"	"	00:13	00:24	B
2898 ³	HD 114447	13 ^h 05.5	+35 ^m 02	G40	Ilford	13	31°	00:34	01:04	B
2898 ⁴	δ Boo	14 ^h 28.1	+38 ^m 45	"	"	"	"	01:10	01:11	A
2898 ⁵	σ Boo	14 ^h 30.3	+30 ^m 11	"	"	"	"	01:21	01:23	C
2898 ⁶	ε Boo A	14 ^h 46.8	+19 ^m 31	"	"	"	31	01:34	01:40	A
2898 ⁷	HD 143187	15 ^h 53.9	+59 ^m 12	"	"	"	30°	02:01	02:31	B
2898 ⁸	"	"	"	"	"	"	30°	02:33	02:57	A
2898 ⁹	HD 142301	15 ^h 48.7	-24 ^m 57	G40	Ilford	13	30°	03:06	03:46	B
2898 ¹⁰	HD 161701	17 ^h 41.9	-14 ^m 42	G40	Ilford	13	25°	03:55	04:23	A

Dome Temp. 33°F

Focus 22.5

Dome Temp. 30°F

Transparency Conditions

Poor - Cloudy in S.
Good after 2100

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 ^h 32 ^m W	57° 22'	1+	5.2	B8	15/20	B8 - Sp. C.	sent all later
20 11W	27° 43'	1	6.3	G0 II	15/15	M. Std. 1/2 exposure	good
20 04W	+28° 53'	1	4.0	G0 V	15/15	" 1/2 exposure	(quadrant)
20 26W	+38° 42'	0-1	6.3	F0	15/15	B8 - Sp. C.	fine
20 01E	38 32	1	3.2	A7 III	45	MK Std 1/2 Normal	fine
20 22E	29 52	1	4.4	F2 V	20/20	MK Std 1/2 Normal	level
20 14E	+19 14	1	5.30	G5 V	25/20	MK Std 1/2 Normal	fine
20 30E	58 58	1	6.15	B9	15/15	B8-B9 (1/2) and from 25	fine
20 38E	"	0-1	"	"	15/15	" " 400/20	fine
20 16W	-28° 07'	0	6.2	B9	15/15	B8-B9 SB 400/15	weak
20 17E	-14 42	0	6.1	B9	15/15	B8-B9 SB	fine

[Slides of plates taken cont'd on
- next page -]

Vinton, April 9 Ac, Db, CHa

33

Date April 9/10

Observer ai
Saturday/Easter Sunday Db

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.F.
28,990	HD 111226	12^h 42.6	24 8'	440	IIcOb	17	32	23:21		A

Dome Te

Focus

Dome Te

Hour Ang
Eas

Date April 10-11

Observer H. M. Mel - Mel Julian Day



Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
428-1	HD 3390	07 47.2	+28 07			12 ^s			20 17
428-2	NGC 2417	07 31.6	+15 42			20 ^s			20 46
-3	NGC 2403	09 30.2	+21 45			20 ^s			22 05
-4	HR 2970	07 43.2	+28 07			12 ^s			23 05
-5	HR 4705	12 32.2	+41 33			20 ^s			23 28
-6	HR 2970	07 43.2	+28 07			12 ^s			23 40
-7	NGC 2417	07 31.6	+15 42			20 ^s			00 35
-8	HR 4785	12 32.2	+41 33			20 ^s			01 47
2897 ⁷¹	HD 131861	14 50.9	45 45	G40	II 006	17	30°	02 37	0 457

2895 T₁

Calibration Sky Study

for plates

28973-79,

28991

28991 T₂

28980-90

Dome Temp. +32° (02^h00)

Transparency Conditions

36

Focus 59.4

Dome Temp.

ing Time
E.S.T.

Hour Angle - East	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						45x 48W 45 42 41 38 35	
1447m			1.21	KOTI		A5 A2 A4 A5 A6 B3 B3	
1208			8.0	F2	SEE	D6 D3 D5 ^T D5 D6 D6 D5	
1131			9.48		SLIT	D6 D82 D4 D5 D5 D6 ^{PT.2} D6	
1117			1.21	KOTI		A5 A2 A4 A5 A6 B3 B3	
1043 0-17			4.3	GOV		B5 B2 B3 B4 B4 B5 B6	
954			1.21	SEE	SEE	A5 A2 A4 A5 A6 B3 B3	
0053W			7.8	F7	B1	D6 D2 D4 D6 D6 D6 D6	
0213W			4.3	GOV		B6 B2 B3 B5 B4 B5 B6	
0305W	35 28	0.1	7.64	F3	15-B-15	KAFS BIN. HAZY. 800/22 CLEAR	

37

Date 12-13 APRIL TUES / WED Observer ^L ^{Ha} ^{Ea} ^{m se} ^{mcl - mcl} Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	5hr T	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
429-1	HR 2990	7 43.2	+28 07			12 ^s		800V	20 21	
429-2	HR 3664	9 13.1	+34 47			20 ^s			20 44	
429-3	HR 2990	7 43.2	+28 07			12 ^s			21 05	
-4	NGC 3379	10 46.0	+12 46			50 ^s			22 02	
-5	NGC 3384	10 45.7	+12° 54'			50 ^s	38°F		23 09	
6	HR 2990	7 43.2	+28 07			12^s				
7	NGC 4374	12 23.4	+13 05			50 ^s			0 47	
6	HR 3664	9 13.1	+34 47			20 ^s			0 01	
-8	"	"	"			20 ^s			01 30	
9	NGC 5457	14 01.9	54 31		Too	FAINT	(DIFFUSE)		02 45	
-9	" 5194	13 28.4	47 22			40 ^s			↓	
10	HR 7069	18 45.5	+18 08			20 ^s	36°F		03 41	
11	HR 7178	18 37.6	+32 38			20 ^s			03 57	
12	HR 7235	19 03.8	+13 49			20 ^s			04 12	
12	HR 7525	19 44.6	+10 31			20 ^s			04 31	

Dome Temp.

Transparency Conditions *Hazy in South (21:00) 38*

Focus

Dome Temp.

Hour Angle East	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS						Quality	
						H _{SN}	H _{SW}	A5	A2	A1	B3		
<i>MURKIE</i>													
1 42 W			1.21	KOIII		A5	A1	A3	A5	A5	B2	B3	B3
0 35 W						C4	B5	C2	C3	C3	C4	C5	C5
2 28 W			1.21	KOIII		A5	A1	A3	A5	A5	B2	B3	B3
0 ^h 21 W			10.5	E1		D5	D2	D4	D5	D5	D6	D6	D6
1 ^h 27 W			10.9	E7		D6	D2	D4	D5	D5	D6	D6	D6
			1.21	KOIII		A5	A1	A3	A5	A5	B2	B3	B3
W1 29						D6	D2	D4	D5	D5	D6	D6	D6
W3 53						C4	B5	C2	C3	C3	C4	C5	C5
0523 W						C4	B5	C2	C3	C3	C4	C5	C5
0223 W			8.20	F8									
↓			8.88	F8		D5	D3	D5	D6	D6	D6	D6	D6
1 ^h 54 E			4.37	A3V		B6	B2	B3	B3	B3	B4	B5	B5
1 ^h 54 E			3.50	B9III		B3	A4	A5	A5	A5	A6	B5	B5
1 ^h 45 E			3.02	A0II		B3	A3	A5	A5	A5	A6	B2	B2
2 ^h 07 E			2.80	K3II		B3	A4	B2	B4	B5	C2	C3	C3

Date April 14/15

Observer

MSE /
Re /
Ac /

2125

Mx

Julian Day

Thurs - Fri

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
28990 92	α Leo Regulus	10 03.1	+12° 27'	G40	IIaOb	13	42	21.10	21.14	A
28991 93	α Leo	10 03.1	"	G40	IIaOb	13	42	21.12	21.13	B
28992 94	η Leo	10 01.9	+17° 15'	G40	IIaOb	13		21.17	21.20	C
28993 95	η Leo	"	"	"	"	"		21.29	21.31	B
28994 96	21 LMi	10 01.5	+35° 44'	G40	IIaOb	13		21.35	21.40	A
28995 97	"	"	"	"	"	"		21.42	21.46	C
28996 98	ζ Leo	10 11.1	+23° 55'	G40	IIaOb	13		21.49	21.53	A
28997 99	ζ Leo	"	"	"	"	"		21.54	21.59	B
29000 69 numbered	40 Leo	10 14.3	+19° 59'					22.02		C
29001	HD 131861	14 58.9	45 43	G40	IIaOb	13	39	0 15	1 45	A
29002	"	"	"	"	"	"		01 48	03 20	B
29002 T	Calibration Slip Wedge for plates 28992 - 29002									

Dome Temp.

Focus 6A

Dome Temp.

Transparency Conditions

50% cloudy

40

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11	0017 W	+12°06	0-	1.26	B7V	7	^{G10 filter} ↓ MK 1/2 Normal 200/2	fine
13	0020 W	+ —	0-	1.26	B7V	7	MK 1/4 Normal 200/4	fine
20	0026 W	+17°30	0-	3.48	A0Ib	7	MK 1/4 Normal ^{was up} _{in telescope by cloud} 200/5	fine
31	0040 W	+17°00	0-	3.48	A0Ib	7	MK 1/2 Normal 200/8	fine
40	0047 W	+35°29	0-	4.66	A7V	7	MK 1/2 Normal 200/8	fine
46	0054 W	"	0-	4.66	A7V	7	MK 1/4 Normal 200/5	fine
53	0052 W	+23°38		3.43	F0III	7	MK 1/2 Normal 200/15	fine
59	0058 W	"		3.43	F0III	7	MK 1/4 Normal (clouds) 200/8	fine
	0058 W			4.83	F6IV		MK 1/4 Normal NOT COMPLETE CLOUDS 200/2	fine
							CLOSE UP 22.30	
							clearing again	
45	0006 W	45 29 0	0	7.64	F3	15-15-15	Hd HAFS (FIELD CHECKS) from 62 1/2	fine
20	0142 W			"	"	15-30	" " 0230 CLOUDS. 800/5	weak

41

Date April 15/14

Observer

Re/
Ea/Ai

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.
29003	β Vir	11 45.5	+02 20	G40	IIa0b	13	41	22 44	22 56	C
29004	λ Dra	11 25.5	+69 53	G40	IIa0	13	41	23 30	24 00	A
29005	θ Boo	14 21.8	+52° 19'	G40	IIa0b	13	38	00 53	01 00	C
29006	HD 142301	15 ^m 48.7	-24° 57'	G40	IIa0b	13		01 25	02 10	A
29007	HD 176318	18 ^m 54.6	+38° 07'	G40	IIa0b	13	36	02 35	02 55	B
29008	σ Boo	14 30.3	+30 11	G10	IIa0	9		03 22	03 45	A
29009	λ Ser	15 41.6	+07 40	G10	IIa0	9		03 55	04 34	C
29010	μ Hve	17 42.5	+27 47	G10	IIa0	9				A
29010 ^{os}	HD 176318	18 ^m 54.6	+38° 07'	G40	IIa0b	13	35	04 30	04 55	C
29010 ^{os} F	Focus Test			G40	IIa0b	13	34			
29008 T	Calibration Step Wedge for plates 29003-08 Dec. motors blew fuse three times! Relay for Dome Motion West Jumps Open Closed.									

Dome Temp.

Transparency Conditions *V. Good*

44

Focus

Dome Temp.

g Time S.T.	Hour Angle Kind	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS						Quality	
	<i>middle</i> 0 ^h 07E		4"	4.3	GOV		H _{3N}	H _{2W}	45	42	41	39	35	
34	0 ^h 07E		4"	4.3	GOV		B5	B1	B3	B4	B4	B4	B5	
55	0 ^h 52W			10.10	E3		D6	D2	D4	D6	D6	D6	D6	
03	2 ^h 02W			10.21	E1		D6	D2	D4	D5	D6	D6	D6	
45	2 ^h 35W		3"				B5	B1	B3	B4	B4	B4	B5	
44	2 ^h 37W			8.88	Sc		D6	D3	D5	D6	D6	D6	D6	
53	4 ^h 13W						B5	B1	B3	B4	B4	B4	B5	
46	0 ^h 03W			4.91	A3IV		B6	B2	B3	B4	B4	B5	B5	
10	1 ^h 52E						B2	A3	A4	A5	A4	A5	A6	
27	1 ^h 15E						B5	B1	B2	B2	B2	B3	B4	

45

Date 12/18 Apr 1946
Sun MonObserver ^{Re} H. M. (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.
29011 ⁹	40 Leo	10 14.3	+19°59'	G40	IIaOb	13	48°F	20 03	20 19	A
29012 ¹⁰	40 Leo	10 14.3	+19°59'	G40	IIaOb	13	48°F	20 20	20 27	B
29013 ¹¹	ρ Leo	10 27.5	+09 49	G40	IIaOb	13	48°F	20 29	20 34	C
29014 ¹²	ρ Leo	10 27.5	+09 49	G40	IIaOb	13	48°F	20 36	20 38	A
29015 ¹³	30 Sex	10 25.2	-00 07	G40	IIaOb	13	48°F	20 42	21 16	B
29016 ¹⁴	30 Sex	10 25.2	-00 07	G40	IIaOb	13	50°F	21 17	21 33	A
29017 ¹⁵	γ UMa	11 13.1	+33 38	G40	IIaOb	13	49°F	21 36	21 52	C
29018	α Dra	14 01.7	+64°51'	G40	IIaOb	13		22 02	22 08	A
29019	λ Dra	11 28.5	+69°53'	G40	IIaOb	13		22 16	22 28	B
29019 ¹⁶ F.	fragment in in/and end			G40	IIaOb	13				C
29016 T	Calibration slip wedge							29009-16		

Dome Temp. 53°F

Focus 6.5/1

Dome Temp.

Transparency Conditions Hazy & Scattered cumuli

Thin very hazy

SKY Hopeless 2nd half.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0032 ^m E	19°41'	1	4.83	F6IV	7	G10 filter MK Std = 1/2 Normal 200/15	fine
0025 E	19°41'	1	4.83	F6II	7	G10 filter MK Std = 1/4 Normal 200/8	fine
0032 E	9°30'	1	3.85	B1Ib	7	G10 filter MK Std = 1/2 Normal 200/8	fine
0028 E	9°30'		3.85	B1Ib	7	G10 MK Std = 1/4 Normal 200/4	fine
0014 W	-00°26'		5.04	B6V	7	MK Std = 1/2 Normal 200/8	fine
0031 W	-00°26'		5.04	B6V	7	MK Std very hazy 1/4 Normal 200/4	fine
0000	+33°18'	2-	4.86	F2IV	7	MK Std very hazy 1/2 Normal 200/15	local
0228 E	+64°32'	0	3.04	A6III	7	MK Std 1/4 Normal 200/5	fine
0030 W	+60°34'		5.41	M0II		MK Std 1/4 Normal 200/12	fine
						G10 filter 7/7	O.K.

Ar Repairing Ex. Mtr till 03:30

47

Date 21/22 April 1966

Thurs/Friday

Observer

Mae / Mae
di / Ma

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.
29017	HD 83650	09 34.9	-10 07	G40	Il00b	13	47°	20:02	20:40	A
29018	HD 92728	10 37.4	+57 43	G40	Il00b	13		21:05	21:39	B
29019	λ Dra	11 25.5	+57 53	G40	Il00b	13	44°	?	22:14	Bf
29020	HD 107328	12 15.3	+3 53	G40	Il00b	13		22 27	23 45	A A
29020T	Calibration Step Wedge for plates 29017-20									

Dome Temp. ... 49
 Focus ... ~~62.5~~ / 64.5
 Dome Temp.

2200 - QUITE POOR / ~~cloudy~~
 Transparency Conditions ... SOME LIGHT CLOUD ... 48

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						G16 FILTER	
00 54W	-10° 22'	00	6.2	B9	10	B8 - B9 SPEC. BINARY	800/30 fine
00 38W	+59° 24.5'	0	5.8	B9	4-4	B8 - B9 - SPEC. BINARY	800/40 fine
00 25W	6 9 32		5.4	M0 II	4-4	MK STRAIGHTED 1/4 METAL FOCUS 64.5	800/45 fine.
00 10W	04 43 32	00	6.1	K12	2-22	std. Dec 1. (TURNING DOME)	800/90 fine.
						2:45 - temporarily clouded up.	
						2:45 - clouded up completely	
* LIGHT ON DEC CIRCLE BURST OUT							

49

Date 22/23 APRIL 66 FRI/SAT Observer McL - Db Julian Day 196

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	SHR ↑	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
431 - 1	HR 3800	09 ^h 32 ^m	+36° 33'			20 ^s		800V	21 16	
2	HR 3705 4374	12 23.4 9 18.6	+13 05 34 34						22 05	
29021 ²	Focus Test 45 Boo	15 02.7	20 16	5/5	IIaOb	13	41	23 ^h 04	23 26	A
29022 ¹	"	"	"	"	"	"	"	23 27	23 38	C
29023 ²	HR 3116	14 50.0	+45 43	"	"	"	"	23 55	01 51	A
29024 ⁴	δ Dra	17 ^h 54.3	+51 30	640	"	"	11	02 ^h 02	02 22	A
29025 ⁴	δ Dra	"	"	"	"	"	"	02 23	02 37	B
29026 ¹	θ Her	17 52.8	+37 16	"	"	"	41	02 42	03 07	C
29027 ⁶	γ Lyr Vega	18 33.5	+38° 41'	640	IIaOb	13	39	03 09	03 12	B
29028 ⁷	Vega	"	"	"	"	"	"	03 16		A
29029 ⁵	ν Her	17 54.7	+30° 12'	"	"	"	"	03 22	03 37	B
29030 ²⁹	2 Her	"	"	"	"	"	"	03 39	03 48	A
29031 ¹	85 Her	17 51.4	+26° 04'	640	IIaOb	13	39	03 52	04 09	B
29032 ¹	67 Oph	17 55.6	+02 56	"	"	13	41/30	04 15	04 21	A
29033 ²	67 Oph	17 55.6	+02 56	640	IIaOb	13		04 24	04 28	B

Dome Temp.

Focus 67.9

Dome Temp. 41°F

Transparency Conditions

Clear at first - then ⁵⁰ Cirrus
cloud
- then clear

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	H _{SN}	H _{SW}	45	42	41	38	35	REMARKS	Quality
1 ^h 29W			4.62	G8II		B6	B2	B4	B5	B5	C2	C2		
0 ^h 33E			10.21	E I		D6	D2	D4	D5	D5	D6			
1 ^h 52E	+25° 02	0	4.92	F5I	7	62	MK STD							
1 ^h 40E	"	0	"	"	"	"	MK STD							
0 ^h 29W	+45° 26	0	7.64	F3	7	KAFS	Bin	interrupted						
0 ^h 48E	+51° 30		3.74	K5II	7		MK STD							
0 ^h 33E	+51° 30		—	—	7		MK	completely cloudy now!!						
0 ^h 01E	+37° 15		~5.0	K1II	7		MK 1/4 W							
0 ^h 1 37E	+38° 46	0	0.00	A0V	7		MK	1/2 Normal						
0 ^h 1 33E	do		"	"	7		MK	1/4 Normal						
0 ^h 0 34E	+30° 10		4.48	F2II	7		MK	1/2 Normal						
0 ^h 0 25E	do		4.48	F2II	7		MK	1/4 Normal						
0 ^h 0 00	+26° 05'		5.47	F2Ia	7		MK	1/4 Normal						
0 ^h 0 10	+07° 57'		3.33	F5Ib	7		MK	1/2 N						
0 ^h 0 15W	do		"	"	7		MK	1/4 N						

Visitors, Saturday April 23: 190, cloudy - showed Ranger VII movie.

H6
JH6
Re

51

mse

Date 24/25 Apr 1966
Sun - Mon

Observer Hm

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	F
29034 ³	HD 83650	09 34.9	-10 07	G40	IIaOb	13	48°F	20 04	20 27	A
								20 47		
29038 ⁴	HD 92728	10 37.4	57 43	G40	IIaOb	13		20 47	20 57	B
29036 ⁵	HD 89449 HD 89449	10 14.3	719 59	G40	IIaOb	13		21 07	21 17	C
29037 ⁶	HD 107328	12 15.3	103 53	G40	IIaOb	13		21 26	21 35	A
29037 ^{6F}	focus test in in/out out			G40	IIaOb	13				C
29036 T	Calibration slip wedge for plates 29033-36.									

Dome Temp.

Focus 66

Dome Temp.

Hour Angle
End

30 48

00 04

00 51

00 51

Dome Temp. 56°F

Focus 66

Dome Temp.

Transparency Conditions *fair* OK - Hb 52

finder field in program was wrong (now corrected) coordinates are OK

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0h 48m W	-10 24	0-1	6.2	B9	15/30	finder field or coordinates may be wrong field? (see book) focus 66 not filter 800/30 slow motion RA OUT. * SAME FIELD AS 28854	guiding
00 09 57	22	B-1	5.4	B9	25/25	B8-134 (5B) 500/30 *	dark
00 51 19	40	"	5.3	F5	15/15/15	std. Vel. clouds coming capping device 500/10 *	guiding
00 51 3	30	"	6.1	K1	15/30	std. Vel. came apart 500/16 *	guiding
					7/7	Cr10 filter	OK

* NO RA GUIDING MOTION
Repeat Min. AM & PB - Hb 52

53

Date 25/26 April 1965 Observer Mel - MCL Julian Day 196

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
	<i>Auto Guiding Tests</i>								20:40 MIDDLE	
432-1	HR 3800	9 32.1 <small>(1965)</small>	+36 33 <small>(1965)</small>			T = 20 ^s	800 ^v		21:01	
432-2	NGC 3379	10 ^h 46.0	+12 ^o 46'			Z = 40 ^s	"		21:36	
432-3	HR 3800	9 ^h 32.1	+36 33			Z = 20 ^s	"		22:18	
4	NGC 4406	12 ^h 24.5	+13 08			Z = 10 ^s	" 46 ^o F			
-5	NGC 4374	12 22.6	+13 10			"	"			
-6	HR 3800	9 32.1	36 33			20 ^s	"		00:26	
432-7	NGC 4486	12 29.1	+12 35'			50 ^s				
-8	NGC 5194	13 28.4	+47 22			50 ^s	38 ^o F		02 27	
-9	NGC 1866	25 05.1	55 57			50				
-10	HR 7069	18 45.5	18 08							

Dome Temp.

4:10 - ECHO I, ECHO II, + 3rd satellite

Transparency Conditions

Focus

22 30 - some cloud in S & SW

Dome Temp.

01:00 - clear

cirrus forming at dawn (0400)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
MIDDLE						<u>H₃W</u> <u>H₃N</u> 45 42 41 33 35	
1 ^h 25 ^m W			4.62	G 9 ^{III}		B2 B6 B4 B5 B5 C2 C2	
0 ^h 46 ^m W	Type E I		10.5	G 7		D2 D6 D4 D5 D6 D6 D6	
2 ^h 42 ^m W			4.62	G 8 ^{III}		B2 B6 B4 B5 B5 C2 C2	
	Type E II		10.1	G 7		D6 ↔ D2 D4 D5 D5 D6 D6	
	E I		10.2	G 5		D6 ↔ D2 D4 D5 D5 D6 D6	
04 ^h 51 ^m W			4.62	G 8 ^{III}		B2 B6 B4 B5 B5 C2 C2	
	E I		9.56	G 5		D2 D6 D4 D5 D5 D6 D6	
2 ^h 52 ^m W			8.88	F 81		D2 D6 D4 D5 D5 D6 D6	
	EOP		10.9	G 2		D3 D6 D5 D6 D6 D6 D6	
			4.37	A 3 ^U		B1 B6 B2 B3 B3 B4 B5	

HR SICK (GONE HOME)
AT 1130

Date 26/27 APRIL '66 TUE WED Observer Re/Er/m/se 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 End
29037	HD 95735	10 57.9	+36 38	G40	IIaOb	13	33°F	2014 ²⁸	2250	A	0144
29038	HD 131861	14 50.9	+45 43	G40	IIaOb	13	33°F	2304 ⁵⁰	1 04	C	00 1
29039	HD 136202	15 14.2	+02 09	G40	IIaOb	13		1 10 ¹⁷	1 43	A	00 2
29040	HD 145001	16 03.4	+1 7	G40	IIaOb	13	28	1 48 ¹⁰	1 58	B	00 0
29041	HD 161701	17 41.9	-14 42	G40	IIaOb	13		2 15 ³⁵	3 21	C	00 1
29041 T	Calibration Step Wedge - for plates 29037-41										

Dome Temp. 37°F
 Focus $60.5/5\frac{1}{2}$
 Dome Temp.

Transparency Conditions $\text{Hazy} + \text{Cirrus}$
 after midnight, > 1 mag. absorption
POOR

56

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0144 W	+36°14	1	9.00	M2V	15-15-15	UK Std 1/4 Nominal	25/800 fine
02 12	45 26	0-1	7.64	F3	15-15-15	KAES TRIN	?/1400 weak
03 27+1	54	0-1	5.6	G0	15-15-15	Std. Vel. cirrus	800/40 fine
04 03 17	10	1	6.1	G4	15-15-15	Std Vel. $\text{fuzz } 5\frac{1}{2}$	800/40 jittery
05 22-14	42	0-0	6.1	B9	15-15-15	B8-B9 (SR)	800/ 24 24 weak
↓ STAR NO LONGER VISIBLE ON SLIT							

CHERRY!

- TELESCOPE DRIFTING EAST (LEFT AS SEEN
 IN GUIDING EYEPIECE); RA FAST MOTION
 DIFFERENTIAL IS SLIPPING.

57

Date April 29/30 1966

Observer Pa/

92 cl

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.
29042	HD 96314	1101.1	-26°45'	G40	IIaOb	13	45°	20 15	21 03	A
29043	HD 111226	1242.6	-24°18'	G40	IIaOb	13		21 22 ^{2*}	22 34	B
29043 F	Focus Test	515	G10 Filter							C
433 -1	HR 4785	1232.2	+41 33						23 40	
-2	HR 4883	1250.0	+27 44						02 01	

Dome Temp. 50°F

Transparency Conditions Fair & getting Good

Focus 65

Dome Temp.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03 A	0012 W	-27°03'	1	5.6	B8	15-15-15	B8 B9 Steel Bin 45/800	weak
04 B	0001 W	-24°35'	1-	7.1	B9	15-15-15	B8-B9 Steel Bin 41/800	weak
								O.K.
40	1° 20W							
01	1° 28W						Clouds	
		Final closeup	02	40	EST		Overcast	
							Telescope seems unbalanced in R.A.	

61

Date May Observer _____ 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.
434-17	HR 5511	14 44.5							00 55	
-18	HR 4785							01 ^h 2		
-19	" 5854							01 ^h 41		
-20	" 5933							02 ^h 10		
-21	HR 4785						35 ^o F	2 25		
-22	HD 47379							2 43		
-23	HR 4785							3 05		
-24	HR 6092							3 20		
-25	HR 7178							3 42		
-26	HR 7377							3 55		
-27	HR 7525							4 08		

Dome Temp.

Transparency Conditions EXCELLENT 62

Focus

Dome Temp. 34.0 F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 29 W							
00 01 W							
00 20 W							
00 36 W							
W4 14							
W0 48							
4 ⁿ 55W							
W1 22							
E0 54							
E1 07							
1 16							

63

Date May 23 66 ^{Mont. Tues.} Observer HL
DB
MSE 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.	Hour Angle End
29044	β Cam	13 07.2	+28 23	A40	IIa06	13		22 39	23 44	A	-
29045	"	"	"	"	"	13	focus 37°	23 52	00 07	A	01 23
29046	HD 142301	15 48.7	-24 57	A40	IIa06	13		00 38	01 12	A	02 45
29047	HD 146001	16 08.8	-25 13	A40	IIa06	13		01 21	2 51		
29048	HD 176318	18 54.6	+38 07	A40	IIa06	13		2 59	3 25	B	01 07
29049	HD 176318	"	"	"	"	"		3 26	2 45	A	02 47
29049 T	Calibration Step Wedge for plates 29044-49										

Dome Temp. 40°

Focus

Dome Temp.

Transparency Conditions good - 2000

0120 - hazy
0200 - poor ~ 1-2 mag absorption

64

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
44 A	-	28° 05'	0+	4.85	60 V	7"/610	1/4 normal MK standard	23/800 fine
07 A	01 23 W	28 05'	0++	-	-	7/610	normal -	140/800 fine
12 A	00 14 E	-25° 10'	0+	6.2	B8	15/15/15 ⁶⁹⁰	B8-B9 SR	20/500 low cut
03	-25° 21'	0-	6.7	B9	15/15/15	B8-B9 Prog. cloudy	47/200 weak	
25 F	07	+38° 15'	0	5.7	B8	15/15/15	B8-B9 SB. cloudy	200/33 fine
45 A	00 47	1	0	4	4	15/130	" "	200/15' weak

65

Date

July 4/5

Observer

WJ - mce

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.F.
29050 ✓	HD 89449	10 14.3	+19 59	800	FeO	13	—	20 08 ⁴	20 16	A
29051	HD 92582	10 36.5	-01 13	"	"	13		20 20 ¹⁷	20 54	B
29052	HD 103095	11 47.2	38 26	"	"	13	40°F	21 07 ¹⁵	21 33	A
29053	HD 131861	14 50.9	45 43	"	"	13		21 49 ³⁰	22 49	B
435-1	HR 4785	12 32.2	+41 33			800 ✓				
435-2	HR 4550	11 50.6	38 04							
435-3	HR 4920	12 57.0	+12 38							
-4	HR 5270	14 00.8	+9 52							
-5	HR 4785	12 32.2	41 33							
-6	HR 5340	14 14.2	+19 24							
-7	HR 5511	14 44.5	+02 02							
-8	HR 5933	15 54.8	+15 47							
-9	HR 4785	12 32.2	+41 33							
-10	HD 147375	16 15.7	+67 19							
-11	HR 6092	16 18.6	46 24							

Dome Temp. ⁴⁸.....

Transparency Conditions

Focus ~~64~~ / 63Dome Temp. ⁴² / 40

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 30m	+19 40	2	5.3	F5	22/22	Std Vel Thin plate discarded 400/10 by error	fine
W 0 46	-1 31	1	7.4	K1	15-30	Std Vel	300/27 fine
W 15 ^m		2	7.3	G5	15-15-15	Std Vel	300/40 fine
E 1 31	+45 27	2	7.64	F3	15-15	KATS Binary	300/20 local

cloudy

Dome Temp. 40 =

Transparency Conditions

fair & getting worse

68

Focus

Dome Temp.

2:30 - very heavy clouds in W. & SW.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
E1 39	38 13	0-1	5.7	B8	15-15/15	B8 39(5B) 800/30	fine
E1 12	"	0	"	"	15-15/15	" cloudy 800/26	fine
<u>PH A9B loaded</u>							

69

(use) rise

Date May 5/6 Thurs-Fri Observer Hb - H₁ 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 Angle End
29056	HD 90314	11 ^h 01.7	-26° 45'	G40	Ilab	13	55F	20 31 ²⁹	21 29 ⁵¹	B	01 01
29057	HD 111226	12 42.6	-24 18	"	"	"		21 37	23 19	A	01 00
29058	HD 136202	15 14.2 +2	09 640	Ilab	13	52F	23 24 ¹⁰	23 43	C	50 58	
29059	HD 142301	15 48.7	24 57	G40	Ilab	13	23 54		A		
29059	HD 145001	16 03.6	17 19	G40	Ilab	13	23 54 ⁹	0 11	A	51 19	
29060 (?)	HD 161701	17 41.9	-18 42	G40	Ilab	13	0 18 ²⁰	0 18		52 18	
29061 T	Calibration	Step Wedge			for plates 29056-59						

Dome Temp. 58°F

Focus

Dome Temp.

Transparency Conditions

70
 Fair - scattered clouds in NW
 Very windy turning down here
 2100+ LIGHTNING IN SOUTH

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 01W	-27° 03'	0 ⁻	5.6	B8	15/15/15	B8-B9 SB "seeing is terrible and images are moving about in eyepiece 400/30	local
01 08	-24 38	0 ⁻	7.1	B9	15/15/15	B8-B9 SB 2140: clouds SPECTROGRAPH (N. PIER)	local
03 58 +1	57	0 ⁻	5.6	G10	15/15/15	Std. Vel. from 67 1/2 800/40	local
	47 -3'		6.2	B8		38-39 (SB) 700 COOSE 800/	
11 19 +17	11	0	6.1	G4	15/15/15	Std. Vel. 800/40	fine
16 2 10	-14 40	0 ⁻	6.1	B9	45	38-39 (SB) clouds again	local
P.H. A & C loaded							

Dome Temp. 38°F 35°
 Focus 62.5 61.2
 Dome Temp.

Transparency Conditions $\text{Scattered Cu from NW}$
 (poor) ⁷²

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 01W	$-27^{\circ}04'$	5	5.6	B8	15/15/15	B8-B9 SB clouds	weak
00 ⁺ 12N			7				
2 ⁺ 06W							
01 52 ⁺		0	3.6	AOI	7-60	get low clouds	fine
01 00W		0	4.8	F3II	7-50	take Brook circle	fine
00 12E		0	3.9	10TE	7-60	cloudy	fine
00 23W		0	3.9	B1E	7-80	clear	fine
00 17W		0	3.8	B1E	7-60	(<u>15 min. exposure</u>)	weak
01 34E		0	3.9	K2III	7-60		fine
00 40W		0	7.2	AS1a	64.0 15-15	clouds from NW again	weak
						800/15	weak
						cloud at 0415	weak

May 7 163 visitors looked at Uranus through observatory
too dark to observe later

Hx
G-H
G0

93

Date May 9/10 Mon/Tues Observer Hb Mcl - Mcl Julian Day Mse

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
437 -1	HR 3800	9 ^h 32. ^m 1	+36° 33'							
-2	HR 3815	9 ^h 33.7	+35° 59'							
-3	HR 4785	12 32.2	+41 33							
-4	NGC 3077	10 00.6	+68 54							
5	NGC 3031	9 52.7	+69 14							
-6	NGC 3384	10 45.7	+12 54							
-7	NGC 4258	12 17.2	+7 30				35.2			
-8	NGC 4374	12 23.4	+13 07							
-9	NGC 4406	12 24.5	+13 08							
10	HR 3800	9 ^h 32.1	+36° 33'							
11	HR 3815	9 33.7	+35 59							
12	NGC 5194	13 28.4	+47 22							
-13	NGC 5055	17 14.3	+92 12							
	NGC 5866									
-14	HR 4785	12 32.2	+41 33							
-15	HR 6146	16 27.6	+41 58				33°F			

77

Date May 10/11 1966

Observer

Re
MCC

Julian Day

1 Re
C
D.C.C.

Plate No.	Object	R.A. 1900 ⁶⁰	Declination 1900 ⁶⁰	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
438-1	HR3800	0932.1	+36°33'							
438-2	HR3815	0933.7	+35°59'							
438-3	HR4785	1232.2	+41°33'							
438-4	NGC 2903	0930.1	+21°40'							
438-5	NGC 3031	0952.7	+69°14'							
438-6	NGC 3077	1000.6	+68.54'							
438-7	NGC 4406	1224.5	+13°08'							
438-8	NGC 4374									
438-9	NGC 4486	1229.1	+12°35'							
438-10	NGC 4649	1240.4	+11°44'							
438-11	NGC 4736	1249.3	+10°18'							
438-12	HR 3800	0932.1	+36°33'							
438-13	HR 3815	0933.9	+35°59'							
	Cont. includes 4 plates									
29068	W. 505	10 01.0	-22 38	500	Trieb	13	33	1:20	1:50	A
29069	W. 506	15 17.8	33	17000	Trieb	13		1:51	2:16	C

Dome Temp. 36° =

Focus 61

Dome Temp. 36°F at 0430 EST

Transparency Conditions fair - poor

80

Good transparency toward morning

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
02 02	+18 43	0	6.20	B9	4-4	6.10 filter BB-139	800/40	fine
03 02 W	+14 56	0	6.43	B9	4-4	BB-139 S.E.	800/40	fine
03 05 W	+13 56		6.1	F9	4-4	BB-69 S.B.	800/40	fine
00 03 W	+32 40		2.20	F7II	4-4	MK STANDARD 1/2 VERTICAL	800/15	slightly muddy
03 30 E	+45 04		2.32	B9E II	4-4	MK STANDARD 1/2 VERTICAL	800/15	slightly muddy
					3-3	FOCUS 61		ctv

81

Date May 13/14 Fri/Sat 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.H.
29075 ✓	HD114447 HD114526	13 05.5 15 25.1	+39 02 39 04	G40	F ₁₀ 01	13	46°F	22 14	22 35	A
29076	HD136849	15 17.8	+33 17	G40	F ₁₀ 06	13	46°F	22 40	22 55	B
29077	HD142763	15 57.2	+18 55	G40	F ₁₀ 06	13		23 01	23 31	C

Dome Tem

Focus

Dome Len

Hour Angl
End

00 35

01 17

01 46

Dome Temp. 50°F

Focus 62

Dome Temp.



Transparency Conditions

82
 fair after 2230
 C10 filter for first 2 plates... comparison
 will be overexposed - darn it!
 clouds in south

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 35W	+38° 42'	2-3	6.3 6.2	F0	^{C10} 15/15/15	WRONG STAR Very good seeing	400/(30) strong good
01 17E	+33° 03'	3+	5.34	B9	^{C10} 15	B8-B9 SB(dx)	400/30 fine
01 15E	+18° 44'	3	6.2	B9	^{C10} 15/15/15	B8-B9 2305 - clouds	400/30 ¹⁶ fine
Closed up 2335 - clouds							

143 Visitors: showed double star

HL
o f r
MC

J.H.
Mf

83

Date May 14/15 Sat/Sun Observer H6 - L Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	
29078	HD 136349	15 17.2	-23 17	C40	IIaOb	13	51°F	22 40 ¹⁶	23 11 ³¹	C
29079	HD 142263	15 57.2	+18 55	C40	IIaOb	13		23 16 ³⁰	00 18	A
29080	HD 139160	15 31.5	-25 57	C40	IIaOb	13		00 28 ⁴⁰	01 28	C
29081	" 165814	18 02.7	-25 29	C40	"	"		01 45	03 05	L

Dome Temp. 5.5 F

Transparency Conditions

fou - hazy in south 84

Focus 6.7

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 57 E	+33° 06	0	6.7	E7	15/15/15	B8-B9 SB field diam 400/30	fine
0 24 E	+18° 44	0-1	6.2	B9	12/15/15	B8-B9 400/30	fine
1 05 W	-26 06	0	6.0	B9	15/15/15	B8-B9 SB 400/30	v. weak
0 11 W	-25 25	0	6.7	B8	15-15/15	B8-B9 Clouds	weak

Date May 16/17 Mm/Tues Observer S, C, M, Hr, Julian Day
Hb, Mse

Plate No.	Object	R.A. 1900 1966	Declination 1900 1966	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Ang End
29082	NGC 5904	15 ^h 16 ^m 9 ^s	+2° 13'	NEWT	10300			012455	012540	1	02°
29083	"	"	"	"	"			013036	013236		30°
29084	"	"	"	"	"			014242	014542		0.45°
29085	NGC 6218	16 45.4	-1° 54'	"	"			015200	015500		55.30°
29086	NGC 6254	16 ^h 55 ^m 3 ^s	-4° 04'	"	"			020004	020304		50.28°

06:30

86

Dome Temp.

 ΔS : set = listed + 0

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	total Seeing in	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0129W		4.5 ^s				Focussed on α Ser unguided	
0136W		2 ^m				- Trouble finding a guide star never did find one for 5904 sky !!	
0149W		3 ^m				unguided too bright !!	
0030W		3 ^m				guided	
0028W		3 ^m				A very very poor night Focussed but do not see 2:30	
						Tues-Wed May 17-18 no clearing	
						Wed-Thurs 18-19 "	

Date 19-20 May/66 Observer S. C. Ho, H. M. Mize, M. J. M. S. Julian Day 190.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angl Ecl
29087	5904	15 16.9	+2° 13'		Mont	1030		20:50:00	20:55:00	1	
29088	5904	15 16.9	+2° 13'		Mont	1030		20:58:20	20:58:20	2	
29089	5904	15 16.9	+2° 13'		Mont	1030		21:00:00	21:00:00	1	
29090	5904	15 16.9	+2° 13'		Mont	1030		21:05:00	21:05:00	2	
29091	5904	15 16.9	+2° 13'			4		21:11:50	21:11:22	1	
29092	5904	15 16.9	+2° 13'			"		21:14:00	21:14:00	2	
29093	5634	14 21.8	-5° 50'					22:19:53	22:19:53	1	
29094	5904	15 16.9	+2° 13'			"		22:40:00	22:40:00	2	
29095	5904	15 16.9	+2° 13'			"		22:48:23	22:48:52	1	
29096	5634	14 21.8	-5° 50'			"		22:52:57	23:04:57	2	
29097	5904	15 16.9	+2° 13'			"		23:11:00	23:14:08	1	
29098	5904	15 16.9	+2° 13'			"		23:17:25	23:17:25	2	
29099	5904	15 16.9	+2° 13'			"		01:23:45	01:25:45	1	
29100	5904	15 16.9	+2° 13'			"		01:29:33	01:30:30	2	
29101	6171	16 28.6	-12° 59'			"		01:49:12	01:59:12	1	
29102	6356	17 21.6	-17° 45'			"		02:09:50	21:17:50	2	

Dome Temp. 55° ETransparency Conditions poor clear in 4

88

Focus

Dome Temp.

01:30 clearing again - best sky all night

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	2° 11'					focus & dir	
0 14 E	2° 11'	30"				1/2 m unguided	Hr photographed from platform
0 14 SE		30"				1/2 m unguided	" " " blank
0 13 E	20° 4'	30"				2 m S guided	plate used at -215 to end
0 14 SE		30"				2 m S	
0 10 SE	2° 11'	90"				90" unguided	traced
0 07 E		30"				20" unguided	This plate is exposed on # 29074
0 04 E	-5° 50'	10 ^m				10" guided	
0 10 SE	+2° 12'	3 ^m				3 ^m unguided	Double exposure - 29072 on the plate
0 06 E	"	30"				"	"
0 06 E	"	12 ^m				clouds in S	S guided
0 35 E		3 ^m				clouds in S	unguided
0 32 E	+2° 12'	1 ^m				stop for clouds	"
1 42 W	+2° 13'	2 ^m				off center	"
1 47 W		1 ^m				off center	"
1 32	-12 54	10 ^m				20" guided	plate used
0 29 E		8				focus p o/d - 17 42:0/+4 35	
						focus had changed a great deal	

Dome Temp. 53Transparency Conditions good

90

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 56 W	+02 13	3 ^m				excellent another unsuccessful hunt for guide star	
02 49 W		1 ^m				excellent unguided	
1 56 W 17 01	-13 01	10 ^m				M guided	
03 30 W	+02 12	3 ^m				unguided excellent	
01 38 W	-17 49	8 ^m				S guided	
2 48 W 17 02	-13 00	8 ^m	9m			Cc guided very black	
						NB Please change telescope back to Cassegrain Fri May 20	

Date Fri-Sat May 20-21 1966 Observer C - R 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.F.
29109	HD 107904	12 18.9	+43 05	C40	U20B	17	53	20 53 ¹⁵	21 23	A
29110	"	"	"	"	"	"	"	21 25 ¹³	21 50	B
29111	"	"	"	"	"	"	"	21 51 ²⁰	22 11	C
29112	"	"	"	"	"	"	"	22 12 ¹⁰	22 32	A
29113	"	"	"	"	"	"	"	22 32 ¹¹	22 54	B
29114	"	"	"	"	"	"	"	22 55 ¹¹	23 17	C
29115	"	"	"	"	"	"	51	23 19 ¹¹	23 41	A
29116	"	"	"	"	"	"	"	23 44 ¹²	00 08	B
29117	"	"	"	"	"	"	50	00 12 ¹²	00 36	C
29118	"	"	"	"	"	"	"	00 38 ¹⁴	01 06	B
29119	"	"	"	"	"	"	"	01 06 ¹²	01 30	A
29120	"	"	"	"	"	"	"	01 31 ¹²	01 55	C
29121	"	"	"	"	"	"	"	01 57 ¹²	02 20	B
29122	"	"	"	"	"	"	48	02 20 ¹⁴	02 47	A
29123	BD +22° 3693	(1965) 19 24.8	(1965) +22° 42	"	"	13	"	02 54 ²⁵	03 44	C
29123F	FOCUS TEST			"	"	13	48			B

Rain + clouds in early evening

Dome Temp. *54*

Transparency Conditions *OK at 20:30*

Focus *67/66*

EXPOSURE METER HI VOLTAGE ETC WAS NOT ON

Dome Temp.

Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 P	00 30W	+42 45	0	6.2	F2	15-15-15	On Fe 5 Surti star <i>under test</i>	400 25? fine
01 F	01 03W	"	0+	"	"	15-15-15	"	400 30 fine
01 L	01 24W	"	0+	"	"	15-15-15	"	400 30 fine
02 P	01 45W	"	1	"	"	15-15-15	"	400 30 fine
02 E	02 07W	"	1	"	"	15-15-15	"	400 27 fine
02 L	02 30W	"	1	"	"	15-15-15	"	400 30 fine
02 P	02 55W	"	1	"	"	15-15-15	"	400 25 fine
03 P	03 21W	"	1	"	"	15-15-15	" had to clamp telescope down,	400 30 fine
03 C	03 50W	"	0+	"	"	15-15-15	" X mirror locking off a bit.	400/25 fine
04 P	04 19W	"	0	"	"	15-15-15	" some unstable	400/25 fine
04 L	04 45W	"	0-	"	"	15-15-15	"	400/27 fine
05 P	05 10W	"	"	"	"	15-15-15	"	400/20 fine
05 P	05 33W	"	0+!	"	"	15-15-15	"	400/21 fine
06 P	06 03W	"	"	"	"	15-15-15	" Focus 66	400/25 fine
07 C	06 50C	+32 42	"	8.3?	A2	15-15-15	Re "DUST" Proj. <i>Yoursen??</i> 1/2 Numac	800/7 fine
08 P						5-5	Focus 66.	fine

Dome Temp. 59

Transparency Conditions

fair

94

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 08 M	-26 07	0-1	6.0	B9	15/15/15	B8-B9	400/26
slides in dome, + "universe" Fo 2 nd group,							
2 loaded plate holders in refrigerator							

95

Wed.
Wednesday

Date 22-23 May, Sunday, 1966 Observer Cn - 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.
29125	HD107904	12 18.9	+43 05	G40	E003	17	58°	20 53 ¹⁰	21 13	B
29126	"	"	"	"	"	"	"	21 14 ¹²	21 38	C
29127	HD136849	15 17.8	+33 17	G40	E003	17	"	21 51 ⁶	22 03	A
29128	HD131861	19 ¹⁴ 50.9	+45 43	G40	E003	17	57°	22 10 ⁴⁵	23 40	B
<p><i>looked for Rere D. V. ... = 1 - vis binary. looked for ...</i></p>										
29129	HD107904	12 18.9	+43 05	G40	E003	17	"	00 13 ¹⁵	00 43	C
29130	" 156074	¹⁹⁶⁶ 17 12.5	¹⁹⁶⁶ +42 10	"	"	"	"	00 57 ^{10?}	03 53	A
29130T	<p><i>Calibration Step Wedge for plates 29123-30</i></p>									

Dome Temp. 61

Transparency Conditions

Good.

96

Focus 701

Dome Temp.

g Time S.T.	Hour Angle End	Declination	Secing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
13 E	00 33W	+42 45	1	6.2	F2	15-15-15	S. Surti *	400 30
27 L	01 00W		1	"	"	15-15-15		400 30
03	01 33 E	+33 03	1	5.34	P9	15-15-15	78-79	400 30
40 B	00 31W	+45 29	1	7.64	F3	15-15-15	KAFS Binary	500 50
	HD 140	301	9	could not recognize field.	please check	OK as drawn in book		
	0405 W	+ 42 45	1	6.2	F2	15-15-15	S Surti *	400 30
	0225 W	+42 10	1	7.74	C12	15-15-15	CARBON * HAZE?	80 / 37

97

EXPOSED PLATES IN UNEXP. BOX #3

Date 23-24 May/66 Observer DB - HB Julian Day 175 - 176
Mon - Tues

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
29131	HD 111226	12 42.6	-24 18	640	IIaOb	13	62°F	20 36 ⁴⁸	22 12	A
29132	HD 136849	15 17.8	33 17	640	IIaOb	13	58°F	22 18 ⁶	22 30	B
29133	HD 139160	15 31.5	25 57	640	IIaOb	13	58°F	22 36 ²⁵	23 26	C
29134	HD 142301	15 48.7	-24 57	640	IIaOb	13	57°F	23 32 ³⁰	00 32	A
29135	HD 161701	17 41.9	-14 42	640	IIaOb	13		00 38 ²⁵	01 48	B
29136	HD 169033	18 17.6	-12 03	640	IIaOb	13	54°F	01 50 ²⁸	02 45	C
29137	HD 161701	17 41.9	-14 42	640	IIaOb	13		02 47 ²⁵	03 36	A
29137 F,	focused in in/autoband				640	IIaOb	13			B
29137 T	Collimator Stop Wdy for plates 29131-37									

Dome Temp. 63.0 F

Transparency Conditions

(sunset) (2200)

fair-good

98

Focus

Dome Temp.

Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24	14	-24 37	0 ⁼	7.1	B9	15-15-15	SPECTROGRAPH OF N. PICK B8-B9 (SB) focus 70 1/2	
24	04	33 05	0 ⁼	5.34	B9	7	^{5 (10 1/2 2 1/2)} B8-B9 (SB) focus 69 1/2 800/20	fine
26	00 21	-26 06	0 ⁼	6.0	B9	8	^{5 (6 1/2 2 1/2)} B8-B9 (SB)	well
26	00 27E	-25° 04'	0 ⁼	6.2	B8	15-25-15	B8-B9 (SB) field drawn	ok
28	0 10	-14 40	0-0 ⁼	6.1	B9	15-15-15	B8-B9 (SB)	1/2
28	10 12	-12° 00'	0 ⁼	5.68	B8	15-15-15	B8-B9 focus 60 field drawn 800/49	fine
30	11 39	-14° 40'	0	6.1	B9	15-15-15	B8-B9 (SB) DAWN 800/32 7/7 Gr. filters	ok
<p>~0050 - name of the word "seeing" that I have ever seen - quite obvious even in the 6" finder - HS</p> <p>* according to thermograph, temp. rising since ~23:00 / 23 May</p>								

Date 25 May/66 - Wed Observer S. C. (M.F.) Ho, M.S.A. Julian Day M

Plate No.	Object	R.A. 1900 1966	Declination 1900 1966	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	
29138	5904	15 16.9	+2 13	Newtonian	103A-0			1:23:28	1:26:28	1
29139	"	"	"	"	"	"		01:29:10	01:30:10	2
29140	6171	16 30.6	-12 59		4			1:41:16	1:51:16	1
29141	5904	15 16.9	+2 13		"			02:00:15	02:03:15	2
29142	"	"	"		"			2:08:19	2:09:19	1
29143	6356	17 21.6	-17 47		"			02:15:00	02:25	2
29144	6171	16 30.6	-12 59		"			2:47:55	2:57:55	1
29145	6356	17 21.6	-17 47		"			3:03:25	3:12:25	2
29146	6171	16 30.6	-12 59		"			3:18:20	3:27:20	1
29147	6838	19 52.0	+18 40		"					2

Dome Temp. 59°F

Transparency Conditions

CLEARING AT 0100

100

Focus

Dome Temp.

 $\Delta \delta = 11 \frac{1}{2}$

Hour	Angle End	Declination	Seeing EXPOSURE TIME	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02	00	+2 14 1/2	3 m				focus on H opt Cc guided	
02	05	"	1 m				Cc guided	
01	13		10 m				Cc guided	
02	39 W		3 m				MF guided	
02	44		1 m				MF guided	
00	55		10 m				M guided	
02	19 W		10 m				sun 7 sec Cc guided	
02	43 W		9 m				M guided	
02	50		9 m				Cc guided (700 LIGHT)	

Date 25-26 May 1966 Observer S. C., M., H., M. S. Julian Day 170
Wed - Thurs H/m

Plate No.	Object	R.A. 1900 1966	Declination 1900 1966	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
29147	NGC 5272	13 ^h 40 ^m .7	+28° 33'	NEWT	103a D			21:25:30	21:27:30	2	20017
29148	5904	15 16.9	+2 13	"	"			21:37:13	21:40:13	1	20041
29149	5904	15 16.9	+2 13	"	"			21:44:13	21:45:13	2	20036
29150	5466	14 ^h 04 ^m .0	+28° 41'	"	"			21:54:00	22:04:00	1	20005
29151	5904	15 16.9	+2 13	"	"			22:23:16	22:26:16	2	20051
29152	5904	15 16.9	+2 13	"	"			22:29:54	22:30:54	1	20030
29153	5634	14 ^h 27 ^m .8	-5° 50'	"	"			22:39:21	22:49:21	2	20017
29154	5466	14 04.0	+28 41	"	"			23:15:16	23:25:16	1	20017
29155	5904	15 16.9	+2 13	"	"			23:34:51	23:37:51	2	20017
29156	5904	15 16.9	+2 13	"	"			23:42:10	23:43:10	1	20022
29157	5634	14 27.8	-5° 50'	"	"			23:49:50	23:59:00	2	20028
29158	5904	15 16.9	+2 13	"	"			00:11:18	00:14:18	1	20005
29159	5904	15 16.9	+2 13	"	"			00:16:48	00:17:48	2	20031
29160	6171	16 ^h 30 ^m .6	-12° 59'	"	"			0:29:42	0:39:42	1	20000
29161	6218	16 45.4	-1 54	"	"			00:42:41	00:44:41	2	20005
29162	6254	16 55.9	-4 04	"	"			0:48:11	0:50:11	1	20009

Dome Temp. $64^{\circ}F$ $59^{\circ}F$ at 2330

Transparency Conditions *very good (a little cloud in S)* ¹⁰²

Focus

Dome Temp.

Hour	Angle End	Declination	Seeing	Ptg Mag	Sp.	Comp.	REMARKS	Quality
			EXPOSURE TIME					
	E 00:17		2 ^m				Hn guiding	
	E 01:41	2° 14'	3 ^m				TROUBLE FINDING GUIDE STAR unguided	
	E 01:36		1 ^m				"	
	E 00:05	+28 45	10 ^m				S guide	
	E 00:55	+2 17	3 ^m				Trouble finding guide star... CC guided	
	E 00:50:30	+2 17	1 ^m				unguided	
	W 00:17		10 ^m					
	W 01:17	+28 45	10 ^m				M guiding focus on 3 Vir CC guiding	
	W 00:17	+2 17	3 ^m				CC guiding	
	W 00:22		1 ^m				unguided	
	W 01:28	-5 48	10 ^m				M guided	
	W 00:53	+2 17'	3 ^m				CC guided	
	W 00:56		1 ^m				unguided	
	W 00:05	-12 57	10 ^m				S guiding	
	W 00:05	-15 2	2 ^m				S guiding... good guide star	
	W 00:09	-4 02	2 ^m				"	

12:04 Tried to photograph Echo but it went into deep freeze & we reached it!

Date 26 May/66 - Thurs Observer S, C, M, M, S, H, H Julian Day 172

Plate No.	Object	R.A.		Declination		Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
		1900	1966	1900	1966								
29163	5897	15	15.5	-20	52	NEWT	103a0			00 55 29	01 05 29	2	W 01 40
29164	5904	15	16.9	+2	13	"	"			1:21:55	1:24:55	1	W 02 00
29165	5904	15	16.9	+2	13	"	"			1:29:04	1:30:04	2	W 02 09
29166	6171	16 ^h	30 ^m .6	-12°	59'	"	"			1:39:25	1:49:25	1	W 01 15
29167	6356	17	21.6	-17	47	"	"			01:59:34	02:09:34	2	W 00 44
29168	6093	16	15.0	-22	55	"	"			02:13:14	02:19:14	1	W 2 00
29169	5904	15	16.9	+2	13	"	"			2:27:05	2:30:05	2	W 03 10
29170	5904	15	16.9	+2	13	"	"			2:33:19	2:34:19	1	W 03 14
29171	6171	16	30.6	-12	59	"	"			2:47:55	2:57:55		W 02 -4
29172	6356	17	21.6	-17	47	"	"			3:10:58	3:20:58		W 01 55

Dome Temp. 58°F

Transparency Conditions

very good

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Focus

Dome Temp.

very good

poor seeing

Hour Angle End	Declination	Seeing EXPOSURE TIME	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 01 46	20 48	10 ^m				poor seeing good guide star S guided	
W 02 04		3 ^m				CC guiding	
W 2 09		1 ^m				H _m guided Echo (reunpos) 01:40	
W 1 15		10 ^m				focus a star (15 42.5 + 06° 32')	
W 00 44		10 ^m				CC guiding M guiding	
W 2 00		6 ^m				poor seeing S guiding	Edo ~ 3 16 predicted
W 3 10	+2° 18'	3 ^m				CC guiding	
W 03 14		1 ^m				CC guiding	
W 02 24	-12 56	10 ^m				Declination clamped immediately after setting	TROUBLE WITH DEC SLEWING
W 01 55		10 ^m				down in coming sky begins to brighten	* DECLINATION SET MANUALLY.
						M guided	
						transparency excellent, but seeing not very good on last half	
						* DECLINATION FIXED — due to S clump	

Thursday, May 26 — Changeback to Cassegrainian.

Date May 26-27Observer ^{Hb} McL - ^{Hm} McL Julian Day
_{mse} _{mse}

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.
439-1	HR 4785				-17	HR 6707			21:00	
-2	HR 4550				-18	HR 6418				
-3	HR 6418				-19	HR 7178				
-4	HR 7178				-20	HR 7139				
-5	HR 7139				-21	HR 7067				
-6	HR 5447				-22	HR 7235				
-7	HD 114762				-23	HR 7525				
-8	NGC 4736				-24	HR 8085				
-9	HR 6418				-25	HR 27				
-10	HR 7178				-26	HR 63				
-11	HR 7139				-27	HR 9088				
-12	HR 5914				-28	HR 8781				
-13	HR 5911				-29					
-14	HR 6146				-30					
-15	HR 6406				-31					
-16	HR 6418				-32					

(03^H 39 EST)

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Date May 27/28 Fri/Sat Observer McD, MF / MEO Julian Day 214

Plate No.	Object	R.A. 1900 55	Declination 1900 55	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
440-1	HR 4785	12 32.2	+41 33						21 ^h 43	
440-2	HR 6418	17 14.1	+36 51							
440-3	HR 7178	18 57.6	+32 38							
440-4	HR 7139	18 53.1	+36 50							
440-5	HR 5447	14 53.1	+29 54							
440-6	HR 5911	15 51.8	+13 18							
440-7	HR 5914	15 51.4	+42 33							
440-8	HR 5145	16 27.6	+41 52							
440-9	HR 6418	17 14.1	+36 51							
440-10	HR 7178	18 57.6	+32 38							
440-11	HR 7139	18 53.1	+36 50							
440-12	HR 5406	17 13.1	+14 26							
440-13	HR 6707	17 57.3	+30 12						00 ^h 34 ^m	
440-14	HR 6536	17 29.8	+52 20						00 ^h 48 ^m	
440-15	NGC 6341	17 15.9	+43 11						01 03	
440-16	HR 6418	17 14.1	+36 51						01 14	

Date May 27/28 Fri/Sat. Observer MKL Julian Day ai

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
440-17	HR 7069	18 45.5	+18° 08'						01 ^h 27	
440-18	HR 7235	19 03.9	+13° 49'						01 ^h 37	
440-19	HR 7178	18 57.6	+32° 38'						01 ^h 52	
440-20	HR 7139	18 53.1	+36° 50'						02 ^h 03	
440-21	HR 7525	19 44.6	+10° 31'						02 ^h 18	
440-22	HR 27	00 08.3	+45° 53'						02 ^h 32	
440-23	HR 63	00 15.3	+38° 30'						02 ^h 45	
440-24	HR 8976	23 38.7	+44° 09'						03 ^h 05	
440-25	HR 9088	00 00.3	+20° 55'						03 ^h 21	
440-26	HR 153	00 35.0	+53° 43'						03 ^h 35	
440-27	HR 269	00 54.8	+35° 18'						03 ^h 51	

Dome Temp. 52.....

Transparency Conditions *Good - Excellent*

110

Focus

Dome Temp. 50 (0400 EST)

Time ST.	Hour End	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
27	01	15 E							
29	01	21 E							
2	01	02 G							
3	00	46 E							
8	01	23 E							
22	05	32 E							
45	05	26 E							
05	04	30 E							
2	04	35 E							
35	04	57 E							
51	05	00 E							
			DRWN						

Saturday - ~ 130 minutes - standard source
 May 28, 1946 - cloudy

(100
 Mf
 Wt)

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Date May 28, 1946 Observer [Signature] Julian Day [Blank]

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
29171	HR 5817									
29172	HR 5818									
29173	HR 5819									
29174	HR 5820									
29175	HR 5821									
29176	HR 5822									
29177	HR 5823									
29178	HR 5824									
29179	HR 5825									
29180	HR 5826									
29181	HR 5827									
29182	HR 5828									
29183	HR 5829									
29184	HR 5830									
29185	HR 5831									
29186	HR 5832									
29187	HR 5833									
29188	HR 5834									
29189	HR 5835									
29190	HR 5836									
29191	HR 5837									
29192	HR 5838									
29193	HR 5839									
29194	HR 5840									
29195	HR 5841									
29196	HR 5842									
29197	HR 5843									
29198	HR 5844									
29199	HR 5845									
29200	HR 5846									
29173	HD 155711	17 08.2	+52 32	GKO	1006	13	40°	1 54	15	C
29174	HD 169111	18 17.9	+11 59	GKO	1006	13	40°	2 23	46	C
29175	HD 169033	18 17.6	-12 03	GKO	1006	13	50°	2 55	20	B

Dome Temp

Focus

Dome Temp

Flow Ang
 End

24 30 W

14 10 W

Dome Temp. 41° F

Focus 65/64

Dome Temp.

Transparency Conditions *Some distance cloud (2040)**Solid cloud in N (2125)**0100 - 1/2 mag obscured; 21 mag obsc. etc.*

114

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							3/5 G10 filter found 65	
2	57 + 19	40		5.39	F5	3-3-3	Std. Vel.	800/50
03	21W		0	"	"	4-3-3	" Clouded in 2125 EST.	800/44
							CLOUD	
3	N 3 52	+56° 35'	00	5.17	F0	3-3-3	Std. Vel. / Focus 64 / HAZE	400/21
4	W 08	"	0 → 1	"	"	3-3-3	Std. Vel. " "	400/20
3	N 3 56	55° 07'	0	4.02	F8	7	Std. Vel. (50 mag. B)	400/10
4	W 4 00	"		4	4	7	"	400/10
4	W 2 31	+1 55	0	5.74	F6	3-3-3	Std. Vel. haze getting thicker	800/51
5	W 2 53	"	"	6	4	3-3	"	800/40
							7/7 <u>clouds</u>	

115

PH 'A' loaded

Date 3rd May 1st June 1966 Observer Hs, Mse, Ea Julian Day

Tues - Wed

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
29184	HD 89449	10 14.3	+19 59	6400	4000	17A	47°F	20 59	21 25	A	3 25
										B	
29185	HD 136202	15 14.2	+02 09	"	"	"		01 01	01 15	C	217 W
29185 T	Calibration Slip Wedge for plates 29184-85										

Dome Temp

Focus 6.5

Dome Temp

Hour Angle
End

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

Focus $65/64$

Dome Temp.

Transparency Conditions ^{very} poor at arrival.

2120 - clouds from NE

116

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 25	19 40		5.39	F5	3-3- ^{100 filter}	focus 65 clouds.	800/61 fine
217 W		1	5.74	F6	3-3-3	STD. VEL. clouds closed up 0 300	100/6 fine

117

Date June 16, 1966 Observer Hb, Mse, Ln Julian Day Week - Thurs

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29186	HD 95478	10 55.8	56 55	G40	IaOb	13	50°F	21 06	21 07	A
29187	"	"	"	"	"	"	"	21 08	21 09	B
29188	HD 118439	12 56.4	56 54	"	"	13	"	21 14	21 31	C
29189	"	"	"	"	"	4	"	21 32	21 51	A
29190	HD 110557	13 19.9	55 26	"	"	"	50	21 56	21 58	B
29191	"	"	"	"	"	"	"	22 04	22 06	C
29192	HD 108382	12 22.0	27 22	"	"	"	"	22 16	22 21	B
29193	"	"	"	"	"	"	"	22 24	22 27	C
29194	HD 108486	12 22.7	26° 27'	G40	IaOb	13	"	22 34	23 05	B
29195	"	"	"	G40	IIaOb	17	47°F	23 07	23 30	A
29196	HD 109307	12 28.6	24 50	G40	IaOb	17	"	23 33	23 54	B
29197	"	"	"	"	"	"	"	23 54:30	0 08	C
29198	HD 137391	15 20.7	37 44	G40	IaOb	13	47	00 13	00 22	A
29199	"	"	"	"	"	"	"	00 24	00 30	B
29200	HD 161701	17 41.9	45 42	G40	IaOb	13	"	00 36	01 06	C
29201	HD 176318	18 54.6	43 07	G40	IIaOb	13	46°F	01 11	1 38	A

Dome Temp. 54°F

Focus 66

Dome Temp.

Transparency Conditions

Good - full Moon some cloud in S. side
Excellent after 2200

ing Time S.T.	Hour End	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	EXP. MTR	Quality
							LOW FILTER		FAIRLY STABLE	
07	02	30W	56 35	0-1	2.44	A0	9	Std. Vel / MANUAL GUIDING	200/5	at focus good exposure
09	02	32W	" "	" "	" "	" "	9	" " "	200/5	fine
31	00	54	56 34	0	5.17	F0	3-3-3	" auto	800/50	strong
51	01	13	" "		5.17	F0	3-3-3	"	800/50	strong
51	00	58	55 06	0-1	4.02	A8	9	" MANUAL GUIDING	400/10	fine
00	01	07	" "		4.02	A8	9	"	400/10	dark
21	02	18	27 01		5.10	A2	6-3	" "	800/20	fine
27	02	25	" "		" "	" "	5-5	" autoguiding	800/20	fine
01	03	02	26° 07	1	6.65	A3	3-3-3	" "	800/25	fine
30	03	27	" "	1	6.65	A3	3-3-3	" "	800/25	fine
50	03	45	24 28	0	6.20	A2	3-3-3	" "	800/25	fine
08	04	00	" "		" "	" "	3-3-3	" "	800/25	fine
22	04	23	37 31	1	4.75	F0	3-3-3	"	800/50	strong
30	03	13	" "	1	4.75	F0	3-3-3	"	800/50	strong
06	00	16	-14° 42'	0	6.1	B9	3-5-3	B8-B9 (SB)	800/30	fine
31	03	38° 14'		0	5.7	B8	3-3-3	B8-B9 (SB) Arms set to 64	800/30	fine

119

Date 2 June 1966 - 7 hours Observer Hb, Jn, Mse 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.
29202	HD174853	18 47.5	+13 51	G40	II ₂ 06	13	44	1 36 ¹⁰	1 56	B
29203	HD161701	17 41.9	-14 42	"	"	"	"	2 01 ¹²	02 36	C
29204	HD176318	18 54.6	+38 07	"	"	"	"	02 42 ⁷	02 56	A
29205	HD180553	19 11.9	+27 17	"	"	"	"	03 01 ¹²	03 25	F
29205 F	focus test in in/audant			G40	II ₂ 06	13				
29205 T ₁	Calibration Step Wedge				for plates			29186-94		
29205 T ₂								29194-29205		

Dome Temp. 47°F

Focus 64

Dome Temp. 46°F

Transparency Conditions *very good*

120

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
E0 31	+13 56	0	61	B9	3-3-3	B8-B9 (SB)	800/30 fine
W01 14	-14 42	0	61	B9	3-3-3	"	800/3035 fine
N00 23	+38° 14'	0	5.7	B8	3-3-3	"	800/37 fine
W00 34	+27° 24'	0	62	B9	3-3-3	B8-B9 (SB)	800/35 fine
					9/9		

121

Date 2-3 June/66
Thurs - FriObserver ^{Re / His} Mel / Re
_{mse}

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.F.
	photometry until 2300									
29206	H2136222	15	142 +2	09640	Ilford	13	15	2304: ⁸	23 19	C
29207	"	"	"	"	"	"	"	23 20 ⁷	23 33	A
29208	^{u 2109} FD 137391	15	20.7 37	44	640	Ilford	13	23 37 ⁴	2345	B
29209	"	"	"	"	"	"	"	23 46 ³	23 57	C
29209 T	Calibration Step Wedge for plates 29206-09									

Dome Temp. $55^{\circ} F$ Transparency Conditions $2230 - \text{cirrus}$

122

Focus $6.7/2$

Dome Temp.

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						612 FILTER		
19	00	$18^{\circ} + 1$	5.8	0-1	5.74	F6	3-3-3 std. vel. from 672	800/50 out of focus
33	00	33	1	1	"	4	3-3-3 "	800/50 fine
3	0050 W	37 31	2	4.75	F0	6-3	std. vel.	400/25 strong
11	00	55	2	"	"	4 3-3-3	"	400/25 strong

Observer - Leave the small
rechargeable flashlight
in the 70" dome, plugged in.

Date 3-4 June 1966Observer Q. Sd

Julian Day

Fr - SatD6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29210	78 VIK HD 118052	13 ^h 29.1	+04° 16'	G40	II=06	13	62	21:39	22:00	A
29211	"	"	"	"	"	"	"	22:02	22:22	B
29212	3 II 142 15 HD 116657	13 ^h 19.9	+24° 26'	"	"	"	"	22:29	22:35	C
29213	"	"	"	"	"	"	"	22:36	22:41	A
29214	HD 135202	15 ^h 14.2	+2° 09'	"	"	"	"	22:51	23:26	B
29215	"	"	"	"	"	"	"	23:29	23:50	C
29216	4 B60A HD 137331	15 ^h 20.7	+37° 44'	"	"	"	"	23:57	00:06	A
29217	"	"	"	"	"	"	"	00:09	00:14	B
29218	HD 136840	15 ^h 17.8	+33 17	"	"	"	"	00:22	00:36	C
29219	HD 1169820	18 21.4	+14 55	"	"	"	"	00:46	1:24	A
29219T	1 Coll. in Sep. wedge for plates							29210 - 29219.		

Dome Temp. 66°F Transparency Conditions FOG Focus 70

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00:59W	$+03^{\circ} 50'$	2-1	4.75	F0	5-2-3	STD. VELOCITY STAR A+F ^{focus 70}	800/40 fine
01:20W	"	"	"	"	3-3-3	" " "	800/25 fine
01:44W	$55^{\circ} 06'$	0+	4.22	A3	3-3-3	" " "	800/40 guiding
01:50W	"	1	"	"	3-2-3	A+F std v. -"	800/40 fine
00:42W	$1^{\circ} 55'$	"	5.74	F6	3-2-3	" " (cloudy) (double)	800/50 fine
1:04W	"	1	"	"	3-2-3	focus 70 -"	800/50 fine
1:13W	$37^{\circ} 30'$	"	4.75	F0	3-2-3	" "	400/20 fine
01:22W	"	"	"	"	3-2-3	" "	400/20 fine
1:46W	$33^{\circ} 03'$	"	5.34	B9	3-2-3	138-139 SPEC. BINARY	800/25 fine
0:29E	$14^{\circ} 58'$	⊙	6.43	B9	3-2-3	88-89 SPEC. BINARY	800/30 fine
<u>cloud</u> - finally closed up!!							

Dome Temp. 73°

Transparency Conditions clear

126

Focus 72

Dome Temp.

Time T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
21		45	42 45	0	6.2	FL	4	^(NO FILTER) _(XTRA WIDE SLIT) 5 Sec + i - 552	400/20	very comp fine
		5	"	0			5	"	400/20	fine
		37	"	5	5		5	"	400/20	fine
		57	"		4		5	"	400/20	fine

127

Two loaded plate holders were left
in the dome from Tuesday night.

Date June 8-9 Wed-Thu Observer HB / Jn / Wd Julian Day 1967

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29224	HD 107904	12 ^h 18 ^m	+43° 05'	G40	IIaOb	27	62°F	21:14	21:34	B
29225	HD 118022	13 29.1	+4° 10'	G40	IIaOb	13	-	21:45	22:16	C
29226	"	13 29.1	+4° 16'	G40	IIaOb	13	-	22:19	22:39	A
29227	HD 136849	15 17.8	+33 17	G-40	080	13	58°F	22 48	23 05	B
29228	HD 161701	17 41.9	-14 42	G40	080	13	57°F	23 16	00 00	C
29229	HD 169578	18 20.2	+25 02	G40	080	13	-	00 08	00 53	A
29230	HD 169820	18 21.4	+14 55	G40	080	13	55'	01 05	01 50	A
29231	HD 170200	18 23.1	+26 03	G40	080	13	53°F	01 54	02 30	B
29232	HD 161701	17 41.9	-14 42	G40	080	13	-	02 35	03 22	C
29231T	Collection Sky Watcher for plates 29229-31									

JOAN: June 1-2 there are no
comments on the plates.

Dome Temp. 63°F

Focus 70/68/67

Dome Temp.

Transparency Conditions

Poor Thick Ci everywhere
 Fair after 0000 but seeing very poor
 0215: Cloud becoming quite thick. ①

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02	03W	+42° 44'	0=	6.2	F2	3/3/3	S Sexti star - very slow 400/20	fine 20 min only 10 counts.
01	34W	+03° 52'	0=	4.75	F0	3/3/3	F - Std Vel seeing so horrible transparency good 400/25	fine
01	58W	"	0	"	F0	3/3/3	"	fine
00	36W	+33° 05'	0	5.34	B9	3/3/3	B8-B9 SB. ← seeing device broke - may be fogged transparency good 400/15	fine
00	55E	-14° 41'	0	6.1	B9	3/3/3	B8-B9 SB from too 400/15 **	fine
00	40E	+05° 06'	0	6.54	B9	3/3/3	B8-B9 SB plate loaded backwards	fine
00	17W	+14° 59'	0	6.43	B9	3/3/3	B8-B9 SB (doo) field heads	fine
00	55W	+06° 13'	0	5.6	B3	3/3/3	B2-B9 SB from 67	fine
02	24W	-14° 40'	0	6.1	B9	3/3/1	B8-B9 SB several mag. observations (v3-4)	fine

** FRANK: At 2330 the exposure meter and all lights on the main panel (w side of N pier) went off and then back on again almost immediately. After this the exp meter did not operate at all.
 See on this AM.

Date 10/11 June 66 Tri/lat Observer ^{Re}_{cu} Mel ^{Mel}_{Mo} 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.
442 - 1								21:50		
-24									03 31	

Observed 24 objects with photometer

Dome Temp. ~~5.3°~~

Transparency Conditions

Focus

Dome Temp.

g Time
S.T.

P.M.

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

21:00 EST - found High Voltage Power Supply
not working. Trouble was traced to
the connector at the Power Supply.

U.S. AIR FORCE, H.M., G.H. Showed Uranus & Xi Bootes to 180 Visitors

131

Date 11-12 June / 66
 12:00 - 1:00

Observer A.C. /
 Mee-L

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Filter
29232	HD 142763	15	51.2 +18 55	G40	Ilcob	13	56	23 04 ⁴⁶	23 36 ⁴⁶	A
29233	HD 161701	17	41.9 -14 42	G40	Ilcob	13		23 51 ⁴⁵	01 01	B
29234	HD 169578	18	20.2 +05 02	G40	Ilcob	13		01 08 ⁴³	2 34	C
29235	HD 161701	17	41.9 -14 42	G40	Ilcob	13		2 38 ⁴³	3 24 ⁴³	A
							53			

Dome Temp.

56 °F

Transparency Conditions

cirrus

132

Focus

focus 68

Dome Temp.

490F

fair - poor

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
36A	00 45	+18 45	0	6.20	B9	2-1-2	138-39 focus 68 GND FILTER	F.V.P. MTR NOT FUNCTIONING	fine
31 B	0 18W	-14 42	0	6.1	B9	2-1-2	138-139 (SB)	(POWER SUPPLY?)	fine
30C	01 14	+5 07	0	6.54	B9	2-1-2	138-139 (SB)		fine
24 32A	W 2 44	-14 40	0	6.1	B9	2-1	138-139 (SB)		quadrant

Date 12-13 June 1966 Observer Mae, Ai Julian Day _____
Sunday / Monday

Plate No.	Object	R.A. 1000	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End	
29235 F	focus test in in / out out			6140	Ilad ¹⁰	13	62			A		
29236	115109904	12	18.9	43 05	6140	Ilad ¹⁰	27	"	20:50	20:57	B	01°41'
29237	"	"	"	"	"	"	"	"	20:58	21:04	C	
29238	"	"	"	"	"	"	60	"	21:06	21:14	A	01°57'
29239	"	"	"	"	"	"	"	"	21:15	21:23	B	
29240	"	"	"	"	"	"	"	"	21:24	21:30	C	02°
29241	"	"	"	"	"	"	60 ⁰ F	"	21:31	21:37 1/2	A	
29242	"	"	"	"	"	"	"	"	21:38	21:45	B	02°3'
29243	"	"	"	"	"	"	"	"	21:45:20	21:53:0	C	
29244	"	"	"	"	"	"	"	"	21:54:20	22:02:55	A	02°4'
29245	"	"	"	"	"	"	"	"	22:03:40	22:11:15	B	
29246	"	"	"	"	"	"	"	"	22:11:55	22:19:0	C	03°0'
29247	"	"	"	"	"	"	"	"	22:19:55	22:28:0	A	
29248	"	"	"	"	"	"	"	"	22:28:45	22:35:30	B	03°2'
29249	"	"	"	"	"	"	60 ⁰ F	"	22:36:55	22:45:45	C	
29250	"	"	"	"	"	"	"	"	22:46:20	22:53:40	A	03°3'

Dome Temp. 64°F
 Focus 70/69
 Dome Temp. 63°F

Transparency Conditions

good - cirrus in W at sunset

134

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					(LOW FILTER) 5/5	focus 70	C.K.
01 ^h 41 W	+42° 45'	0-1	6.2	F2	1-1-1	S SCUT: *	800/30 fine
"	"	"	"	"	1-1-1	"	800/30 fine
01 ^h 57 W	"	"	"	"	1-1-1	focus 69	800/30 fine
"	"	"	"	"	1-1-1	"	800/30 fine
W 2 15	"	"	"	"	1-1-1	"	800/30 fine
"	"	0-1	"	"	1-1-1	"	800/30 fine
W 2 30	"	"	"	"	1-1-1	"	800/30 fine
"	"	"	"	"	1-1-1	"	800/30 fine
W 2 47	"	0	"	"	1-1-1	"	800/30 fine
"	"	0	"	"	1-1-1	cirrus	800/30 fine
W 3 03	"	0-1	"	"	1-1-1	clear again	800/30 fine
"	"	"	"	"	1-1-1	CLAMPED IN DEC.	800/30 fine
W 3 20	"	"	"	"	1-1-1	"	800/30 fine
"	"	"	"	"	1-1-1	"	800/30 fine
W 3 38	"	"	"	"	1-1-1	"	800/30 fine

Dome Temp.

63 °F

Transparency Conditions

very good

136

Focus

6.9/68

Dome Temp.

ing Time
EST.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. (GND FILTER)	REMARKS	Quality	
	42 45		6.2	F2	1-1-1	♂ Scuti STAR	800/30	fine
U3	59 "		"	"	1-1-1	" TELESCOPE IN BALANCE IN RA.	800/30	fine
	"		"	"	1-1-1	"	800/50	fine
U4	16 "		"	"	1-1-1	"	800/30	fine
	"	1	"	"	1-1-1	"	800/30	fine
U4	40 "		"	"	1-1-1	"	800/30	fine
EO	14 -14 42	1	6.1	B9	2-1-2	B8-B9 (SB)	800/30	fine
EO	13 +5 07	1	6.54	B9	2-1-2	B8-B9 (SB)	800/30	fine
W1	04 -14 42	0	6.1	B9	2-1-2	B8-B9 (SB)	800/30	fine
W0	47 14 58	1	6.43	B9	2-1-2	B8-B9 (SB) (de) focus 68	800/30	fine
W0	55 +06 12	1-2	5.6	B8	2-1-2	B8-B9 (SB)	800/30	fine
W0	50 +13 57	"	6.1	B9	2-1-2	B8-B9 (SB)	800/30	fine
W1	25 +52 10	1	5.8	B9	2-1-2	B8-B9 (SB)	800/25	fine
W1	16 +27 25	"	6.2	B9	2-1-	B8-B9 (SB) BRIGHT COMPONENT OF VISUAL BINARY / SPECTRAL IN 2	800/	fine

137

74" MIRROR FRESHLY ALUMINIZED!!

Date June 17/18 1966

Observer Fe. Ai

Julian Day

Fri/Sat

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29265	BD - 19°4361(A) HD 19°4361	16 ^h 14.7	-19° 53'	G40	IIaOb	17	62°	21:00:00	21:43	B
29266	BD - 19°4361(B)	"	"	"	"	"	—	21:50	23:10	C
29267	BD - 23°6875	18 ^h 07.1 (1966)	-23° 27' 1966	G40	"	"	58°F/69	23:20	01:50	A
29268	BD +15°3811	19 ^h 21.4	+15° 21'	"	"	"	59/68	02:05	02:53	B
29269	BD +22°3693	19 ^h 21.9	+22° 33'	"	"	"	—	03:00	03:30	A
29269 F	Focus Test	Test.	5/5		setting 68		F=53°			B
								03:45	close up	

all companions done to 31mag

Dome Temp. 60

Focus 70 142°F

Dome Temp. 50

Transparency Conditions Excellent

- Finder Eyepiece Crosshairs had to be moved about 15' W and
and few minutes south to compensate for the collimation
change in the primary
- RA fast motion but focus work only half the time - can give shock
when observer is grounded (i.e., touching telescope)!
Works well when control box is grounded -

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 10 E	19° 58'	(2nd sec)	7.6 ⁺	AO	2-2-2	Re "Dust" Prog. NO 103, the brightness of 2	25/800
00 18 W	"	1	1+ faint	redder	2-2-2	Re "Dust" Prog NO 103 ^a	20/800
01 10 W	-23° 19'	1?	9.9	B9	2-2-2	Re "Dust" Prog NO 115	1/800
00 55 W	+15° 35'	1+	9.0	F0	2-2-2	Re "DUST" Prog NO 125	40/800
01 31 W	+22° 46'	2 or 3	9.1	A2	2-2-2	Re "DUST" Prog NO 126 extremely good seeing!	30/800
Perfect transparency and very good seeing; a <u>VERY GOOD NIGHT</u>							
Would some ABLE technician fix the slow motion handset PROPERLY? One gets nervous getting electric shocks every five minutes during a whole night!							
to Gary - the upper end of the tube seems to be much too heavy							

139 *Virentora*: ≈ 185 ; γ Boo. - binary - fair.
 DG, Re, Wt,

Date June 18/19 Observer Re. L Julian Day
 Sat / Sun.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29270	HD 164514	17 ^h 56.4	-22° 54'	G40	IIaOb	17L	62	2310	23:48	A
29271	"	"	"	"	"	"	61	2350	0004	B
29272	" 169578	18 20.2	+05 02	"	"	"	—	0019	0026	
29273	"	"	"	"	"	"	—	0030	0040	D
29274	" 192040	1966 17.7 19 21.4	1966 -10 53 -10 46	"	"	"	60	0052	02 00	C

Dome Temp. 64

Focus 70/

Dome Temp.

Transparency Conditions Good

Haze in S. E

140

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 44 E	-22° 49'	0+	8.2	A5 Ia	2-2-2	MK STANDARD	800/20
00 27 E	"	1-	"	"	2-2-2	"	800/10
00 28 E	05 07	1	6.54	B9	2-2-2	B8 B9	800/30
00 13 E	"	1	"	"	2-4	B8 B9	800/30
00 09 W	-10 43	1	7.04	G1a	2-2-2	Carbon Star	Increasing Haze 800/30
71 + 70 are double ex. stars??							
comp lines off center							

141

2340 A.E. REEVE APPROX!
S.E. " "TIMES NEED
CORRECTIONDate 19-20 June 1966 Observer H.S. Fe. M.S. Julian Day
Sun - Moon

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29215	HD 131861	14 50.945	43	G40	Ilab	13	65°F	22:57 ³²	00:01	C
29276	+41°37'37"	20 21.342	04	G40	"	17	-	0:33 ⁴⁵	2:02	C
29277	HD 184467	19 29.545	24	G40	Ilab	13	62°F	2 15 ⁰²	03:05	C
29277	Standard Star Wedge for plate								29265-77	

times
corrected

ONE PHASE OF POWER OFF ~ 14:00 EST; SID. & STANDARDS

Dome Temp. 66° F CLOCKS OUT.

Transparency Conditions *fair*

142

Focus 71/70 SET SID. DRIVE FROM ARCTURUS

Dome Temp. (I CHECKED FUSES IN BCD & PHONED HYDRO)

Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						FINDER XHAIR ~ 15' E & 1' N (SEE CHANGE OF)	
02 43 W	45° 29'	0-1	7.64	F3	2-2-2	Hd KAFS ^{focus 71} PLEASE CHECK ^{FIELD} 800/50	fine
02 45	42 18		9.4	(B5)	2-2-2	RE 800/30	ok
02 46 W		0-1	7.5	K5	2-2-2	Std. Vel. focus 70 800/60	fine
BROKEN WIRES TO HUBS PUSHES - E.A.H.							
*NOTE: - BOTH CLOCKS REQUIRE CORRECTION.							

Date 20/21 June /66 Observer Db, Wd Julian Day
Mon/Tuesday

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 Angle End
29278	HD 114376	13 ^h 05.1	+39 04	640	IIa06	17	69°	21 ^h 26 ^m	21 ^h 32	A	2 00 V
29279	—	—	—	"	"	17	—	21 37 ^m	21 42	B	2 10 W
29280	HD 131861	14 ^h 50.9	+45 43	"	"	17	69°	21:51	22:17	C	3 00 W
29281	—	—	—	"	"	17	—	22:20	22:52	A	3 30 W
29282	HD 144334	16 00.2	-23 20	—	—	17	—	23:03	23:21	B	3 55 W
29283	HD 176318	18 54.6	+38° 07'	—	—	17	—	23:35	23:39	C	3 21 W
29284	BD 17° 5080	18 08.8	-17° 24	—	—	17	68	23:57	01:17	A	3 40 W
29285	HD 176318	18 54.6	+38° 07'	—	—	17	66	01:26	01:29	B	3 50 W
29286	HD 176318	—	—	—	—	17	66	01:32	01:36	C	3 50 W
29287	HD 18 1558	19 15.8	-19 25	"	"	17	—	01:49	02:05	A	3 30 W
29288	BD 17° 1332	21 ^h 35.0	+67 44	"	"	17	64	02:29	03:17	B	3 50 W
29289	HD 176318	18 54.6	+38 07	—	—	17	64	03:36	03:40	C	3 22 W
29289T	Calibration	Step	usage	for	plates	29278-89					

Dome Temp. 74°/70°/66
 Focus 73/72/71
 Dome Temp.

Transparency Conditions fair-good
 Very Good - slight cirrus

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:00 W	+38 44	1	6.20	B9	2-4 (f=73)	38-39	400/15
2:10 W	-	1+	-	"	2-2-2 (f=73)	38-39	400/15
01 02 W	+45 28	1+	7.64	F3	2-2-2	KAFS Binamp.	400/25
01:37 W	-	1++	7.64	F3	2-2-2	Exp M unstable, oscillates	400/25
00:55 W	-23 28	0-1	5.8	B8	2-2-2	B8-B9 prog. - lightning persisting	400/15
02:21 E	+38 14	1+	5.7	B8-B9	2-2-2	38-39 Sp Binamp.	800/30
00:42 W	-17° 20	1+	9.4	B8	2-2-2	Re Dist Rojarim - Exp M to unstable	800/30
00:10 W	+38 13	1+	5.7	B8-B9	2-2-2	B8-139 program - Dome blocked 1/2 scope	400/15
00:17 W	+38 13	2	"	-	2-2-2	38-139 sp Bin	400/15
00:23 W	-19 14	1	6.7	B8	2-2-2	B8-139	400/15
00:42 E	+67 01	2	8.5	A0	2-2-2 (f=71)	Re Dist Rojarim MK standards uncertain of Expt. at 800, use 50 mm.	800/31
02:22 W	+38 13	2	5.7	B8-B9	2-	38-139 Sp Bin	400/30
Close up at 0345 EST							
						not in program	
						what's up?	
						Comp line	

145

Date June 21/22 Observer MF 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.F.
29290	HD 131261	14 50.9	+45 43	505	E60	7	56	21 50 ¹⁷	22 24	C
29291	"	"	"	"	"	"	"	22 54 ²¹	23 35	B
29292	BD -19° 4900	18 11.0	-19 49	"	"	"	54	23 45 ³⁸	01 00	C
29293	BD +56° 2604	21 33.6	+57 07	"	"	"	59	01 37 ⁴²	03 00	
29294	HD 192659	20 10.9	+41 48	"	"	"	"	03 21 ⁹	03 38	
29294T	Calibration	Step	Wedge	for plates	29290 - 94					

Dome Temp. 65

Transparency Conditions

Focus 72.6

Dome Temp. 64

focus not aligned with 74" - adjusted correctly

g Time S.T.	Hour End	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24	1 ^h	13	+45 23	0	7.64	F3	4-2	KAF5 binary counter not working	fine
3	2 ^h	24		0-1	7.54	14	2-2-2	(forgot to pull slide in totally)	3 week
04	0 ^h	24	-19 32	-1	9.1	B5	2-2-2	Dust program	two week
05	0 ^h	52	+57 22	1	9.9	B5	2-2-2	" - intermittent clouds after 1 ^h exp	2 week
07	1 ^h	06	+42 02	0-1	6.37	B2	2-2	EG-EG binary - heavy clouds	fine
Close up at 3:40 AM									

Dome Temp. 79°F

Transparency Conditions slightly hazy on horizon

Focus 75.9

Dome Temp.

148

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. G.W.	REMARKS	Quality
00 27 E	-14 42	1	6.1	B9	2-2-2	B8-B9 SB	low
01 26 E	+38 15	1	5.7	B8	2-2-2	B8-B9 SB	fine
01 32 E	+27 25	1	6.2	B9	2-2-2	B8-B9 SB	fine
01 51 E	+13 55	1	6.1	B9	2-2-2	B8-B9 SB	fine
01 08 E	13 16	1	6.07	B8	2-2-2	B8-B9 SB	fine
0 13 E	60 39	1	6.42	B9	2-2-2	B8-B9 SB	fine
1 31 W	-14 40	0	6.1	B9	2-2-2	B8-B9 SB	fine
						Haze increasing clouds.	weak

8 1/2 CONTROL BOX
DROPPED

Date 26-27 June 1966 Observer H.S. Egan, use Julian Day 243800

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29302	HD 169033	18 17.6	-12 03	G40	Ilabk	13	79°F	06 06	00 18	A
29303	HD 171957	18 32.4	-14 06	G40	Ilabk	13	79°F	00 20	00 32	B
29304	HD 171961	18 32.4	-23 36	G40	Ilabk	13	79°F	04 46	01 02	A
29305	HD 173117	18 38.6	-25 05	G40	Ilabk	13	79°F	1 19	1 45	3
29306	BD 193737	20 21.3	42 04	G40	"	17	79°F	2 08	3 21	
29306 T	Calibration by wedge				for plates			29295 - 29305		
29321 T ₁	Calibration by wedge				for plates			29306 - 19		
T ₂	Calibration by wedge				for plates			29320 - 21		

Dome Temp. 79°F
 Focus 2.6
 Dome Temp. 73°F

Transparency Conditions FAIR AFTER MIDNIGHT
 EX. MTP 1121 at 300 V. COUNTS
2

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
18	00 06E	-12 00	0-1	5.68	B8	2-2-2	B8-B9 focus 76 800 / ^(800V) 15-16	shot shot - weak
32	00 03	-14 00	0	6.43	B9	2-2-2	B8-B9 800 / 15	single
14	00 40	-23 28	0	5.73	B9	2-2-2	B8-B9 CAPPING DEVICE CAME APART 800 / 15	scattered background
45	00 05	-25 0		6.4	B8	2-2-2	B8-B9 800 / 15	///
21	00 59	-42 17		9.4	(B5)	2-2-2	RE-IDENT 800 / 20	///

Date 27-28 June Mon-Tues Observer ^{Moe} ^{Hb} ^{Wd} - ^{Ar} ^{Wd} ^{mce} 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.
2930 ⁰⁶ 7	HD 114376	13 ^h 05 ^m .1	+39° 24'	G40	IIaOb	13	73°F	21:04	21:10	A
2930 ⁰⁷ 8	HD 133529	14 ^h 59 ^m .9	-25° 24'	G40	IaOb	13	—	21:15	21:33	B
2930 ⁰⁸ 9	HD 134946	15 ^h 07 ^m .5	-23° 38'	G40	IIaOb	13	—	21:37	21:51	C
2931 ⁰ 0	HD 144334	16 ^h 00 ^m .2	-23° 20'	G40	IIaOb	13	72°F	21:55	22:06	A
2931 ¹⁰ 1	HD 144661	16 ^h 01 ^m .9	-24° 11'	G40	IIaOb	13	—	22:10	22:25	B
2931 ¹¹ 2	HD 144844	16 ^h 02 ^m .8	-23° 25'	G40	IIaOb	13	70°F	22:30	22:40	C
2931 ¹² 3	HD 145792	16 ^h 07 ^m .7	-24° 10'	G40	IIaOb	13	—	22:44	23:10	A
2931 ¹³ 4	HD 146906	16 ^h 11 ^m .1	-21° 03'	G40	IIaOb	13	—	23:13	23:27	B
2931 ¹⁴ 5	HD 152909	16 ^h 51 ^m .2	-19° 22'	G40	IaOb	13	68°F	23:36	23:56	C
2931 ¹⁵ 6	HD 170235	18 ^h 23 ^m .2	-25° 19'	G40	IaOb	17L	—	00:02	00:27	A
2931 ¹⁶ 7	HD 171780	18 ^h 31 ^m .6	+34° 22'	G40	IIaOb	17L	—	00:32	00:36	B
2931 ¹⁷ 8	HD 171780	"	"	G40	IaOb	17L	—	00:39	00:41	C
2931 ¹⁸ 9	HD 174237	18 ^h 44 ^m .5	+52° 53'	G40	IIaOb	17L	—	00:45	00:49	A
2932 ⁰ 0	HD 174237	"	"	G40	IIaOb	17L	—	00:53	00:57	B
2932 ¹ 1	HD 173219	18 ^h 39 ^m .1	-07° 12'	"	"	17	—	01:06	01:40	C
2932 ² 2	HD 123° 1761	19 ^h 41 ^m .2	+24° 04'	G40	IIaOb	17	65°F	01:44	03:40	A

Dome Temp. 72°F
 Focus 74/73/72/71
 Dome Temp. _____

Transparency Conditions Good - thin cloud in a horizon.
 29.30 THIN, SLOW MOVING CLOUDS

152

PLEASE FIX THE ~~X40X~~ EXPOSURE METER (OR TAKE IT OFF!)
 Cn

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	(800V)	Quality
02 06W	+38° 44'	0	6.2	B9	2/2/2	B8-B9 (main program)	800/15'	fine
00 35W	-25° 37'	0	7.1	B8	2/2/2	B8-B9 (")	800/15'	weak
00 45W	-23 48	0	6.6	B9	2/2/2	B8-B9 (")	800/15'	weak
00 08	-23 26	0	5.8	B8	2-2-2	B8-B9 (")	800/15'	weak
0 25W	-24 18	0	6.5	B8	2-2-2	B8-B9 " "	(15min)	weak
0 39W	-23 33	0	5.9	B9	2-2-2	B8-B9 " "	(10min)	weak
01 04	-24° 16'	0→0	7.0	B8	2-2-2	B8-B9 " "	(26 min)	weak
01 18W	-21° 10'	0→0	6.3	B9	2/2/2	B8-B9 " "	800/5'	plate focus
01 07	-19 26	0	7.0	B8	2/2/2	B8-B9 " (BINARY ~ 35-11) poor image focus 72	20 min	weak
00 06W	-25° 12'	0	6.71	B _{1.5c}	2-2-2	Cn Be	800/25'	weak
00 07W	+34° 27'	1	5.98	B _{2c}	6	Cn Be	800/25'	fine
00 12W	" "	1	"	"	2-2-2	Cn Be	800/25'	fine
00 08W	+53° 58'	1	5.81	B _{2c}	2-2-2	Cn Be ← capping device not working may have some blank photos!	800/25'	fine
00 17W	+53° 55'	1	5.81	B _{2c}	2-2-2	Cn Be	800/25'	fine
01 03W	-07° 08'	0	8.02	B _{1.5c}	2/2/2	Cn Be	800/25'	fine
02 02W	+24° 16'	1	9.49	B _{0.5c}	2/2/2	Cn Be	800?	fine

Dome Temp. 76

Focus 74.5

Dome Temp.

Transparency Conditions CLOUDS ALL OVER AT
SUNSET

154

exp meter set at 900 volts.

g Time S.T.	Hour End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03	2	03 +32 45	0	6.20	B9	2-2-1	B8-B9 800/31	fine
04	0	06 +39 16	"	7.2	08	2-2-2	Std Vel meter failed 800/	fine
							<u>7155</u> clouds	

Date 29-30 January 1956 Observer H. J. Mose Julian Day 173.5
(Wed - Thurs)

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 Angl End
29324	HD133529	14 59.9	-25 24	G40	Ilab	13	76F	20 58	21 18	A	10 2
29325	HD134946	15 07.5	-23 38	G40	Ilab	13					
442 T											
29325	HD134946	15 07.5	-23 38	G40	Ilab	13		21 28	21 45	B	10 4
					M attempted photometry						
29326	HD143187	15 53.9	59 12	G40	Ilab	13	74	22 27	22 33	C	10 4
29327	HD159716	17 08.2	52 32	G40	Ilab	13		22 38	22 43	A	10 14
29328	15 Vul	19 57.0	27 29	G10	Ilab	9XL		22 55	23 55	C	10 5 E
29329	"	"	"	"	"	"		00 06	00 46	C	
29329F	focus test in in/and out			G10	Ilab	9L				C	
29330	HD193516	20 15.5	37 28	G40	Ilab	17	70	01 21	1 53	A	10 E
29331	HD198931	20 48.6	03 03	G40	Ilab	17		02 02	2 42	B	10 0
29332	B0443 ^o 39.3	21 21.3	44 01	G40	Ilab	17	68	02 48	3 28	A	10 0

THIN CIRRUS AT SUNSET

156

Dome Temp. 79°F

Transparency Conditions *good.*

Focus $74\frac{1}{2} - 73 - 72$

0100: CIRRUS AT SUNSET

Dome Temp.

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
84	W 0	28-25	37	0	7.1	B8-2.2	B8-34 focus $74\frac{1}{2}$ 900V 20 min	weak
458	W 0	46-23	48	0	6.6	B9-2.2-2	B8-134 800/30	weak
378	W 0	49 59	01	1	6.15	B9-2-2.2	B8-134 (dye) 800/30	weak
434	E 0	14 52	27	1	6.11	B9-3-3	B8-34 (dye) 800/30	weak
605	E	27 40	1	4.74	AS ma	2-1-2	NO FILTER Eq. Width. (4ip) 200/300	weak
600	E	"	"	"	"	2-2-2	" " 200/300	weak
600	E	"	"	"	"	6/6	" " 200/300	weak
53	E 0	10 37	40	1	9.46	B2 2-2-2	NO FILTER FIELD DRAWS FOCUS IS Cu Be 800/40 (?)	weak
42	W 0	05 44	18	120	9.31	B3 Inne 2-2-2	FIELD CHECKS ON Cu Be 800/40	weak
28	W 0	18 44	17	0-1	9.43	B3 2-2	FIELD CHECKS focus 72 800/40	weak

Date 32 June / 1 July 1966 Observer msf Julian Day 243
Thurs 2 Fri 3 sd

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29333	HD 114376	13 05.1	39 04	G40	Iladk	13	74 ⁰ F	21 00	21 07	A
29334	HD 133529	14 59.9	-25 24	G40	Iladk	13	73 ⁰ F	21 13	21 37	B
29335	HD 134946	15 07.5	-23 38	G40	Iladk	13	73 ⁰ F	21 43	22 00	C
29336	HD 144334	16 00.2	-23 20	G40	Iladk	13	.	22 03	22 11	A
29337	HD 144661	16 01.9	-24 11	G40	Iladk	13	.	22 13	22 23	B
29338	HD 144844	16 02.8	-23 25	G40	Iladk	13	.	22 25	22 33	C
29338	HD 144844	16 02.8	-23 25	G40	Iladk	13	.	22 36	22 44	A
29339	HD 145792	16 07.7	-24 10	G40	Iladk	13	.	22 46	23 01	B
29340	HD 161306	17 39.7	-09 46	G40	Iladk	17	71	23 27	00 17	C
29341	HD 16957E	18 20.2	+05 02	G40	Iladk	17	.	0 21	00 28	A
29342	HD 170200	18 23.1	+06 08	G40	Iladk	13	68	0 33	00 37	B
29343	HD 169820	18 21.1	+11 55	G40	Iladk	13	.	0 40	00 45	C
29344	HD 184957	19 29.5	+58 24	G40	Iladk	13	.	0 50	01 15	A
29345	HD 155711	17 08.2	52 32	G40	Iladk	13	.	01 20	01 29	B
29346	HD 172883	18 37.5	52 06	G40	Iladk	13	.	01 35	01 43	C
29347	HD 194668	20 21.8	53 14	G40	Iladk	13	66	01 48	01 55	A

Oh → Poor Transparency circumstances

158

Dome Temp. 78° F

Transparency Conditions ... cirrus - over most of sky
nearly full moon all night.

Focus 74/73/72/71

Dome Temp.

Foot switch Unclamp shorting / Taken off

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	900 V.	Quality
17	2	15 38 44	0-1	6.20	139	2-2-2	5.10 filter B8-B9 (main prog) focus 74	800/40	fine
37	0	50 -25 37	00	7.1	138	2-2-2	B8-B9	800/40	weak
40	0	06 -23 50	00	6.6	139	2-2-2	B8-B9	800/40	weak
11	0	23 -23 29	00	5.8	138	2-2-2	B8-B9	800/40	weak
23	0	35 -24 20	4	6.5	138	2-2-2	B8-B9	800/40	weak
35	0	43 -23 34	"	5.9	139	2-2-2	B8-B9 CAPPING CAME APART (SETSCREW NOT TIGHT)	800/40	weak
44	0	55 -23 34	"	5.9	139	2-2-2	B8-B9	800/40	weak
01	0	12 -24 18	"	7.0	138	2-2-2	B8-B9 doubt getting	800/40	weak
17	0	55 -9 47	⊙	8.77	132 [III-V]	2-2-2	Cu Be worse focus 73	800/35	fine
28	0	23W +5 07	"	6.54	139	2-2-2	B8-B9 (SB)	800/40	fine
37	0	28 +6 13	"	5.6	138	2-2-2	B8-B9 (SB) focus 72	800/40	fine
45	0	38 +15 0	"	6.43	139	2-2-2	B8-B9 (SB)	800/40	fine
54	0	02 +58 32	"	7.5	135	2-2-2	Standard Velocity	800/60	fine
29	0	238 52 26	"	6.11	139	2-2-2	B8-B9 (dse) VERY POOR SKY	800/40	fine
43	0	127 52 09	"	5.83	139	2-2-2	B8-B9 (SB)	800/40	fine
55	0	06 53 26	!	6.77	139	2-2-	B8-B9 focus 71	800/40	fine

Dome Temp. 67°F

Focus 71/

Dome Temp.

Transparency Conditions 1000

> 1 mag absorption

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
48 B	0 17	55 14	1	7.34	B12	2-2-2	Cn B e 800/40	fine
06 W	11	42 00	1	6.37	B8	2-2-2	B8-B9 SB (VISUAL BINARY 2x 15" arc - brighter component) 800/40	fine
15 A	0 36	41 48	1	6.0	B9	2-2-2	B8-B9 SB 800/40	fine
27 B	1 34	47 37		6.6	B8	2-2-2	B8-B9 SB (VISUAL BINARY 2x 1/4" arc - brighter component) 800/40	fine glad
35 C	1 34	62 10		5.6	B9	2-2-2	B8-B9 SB	fine

FINISHED ONE BOX OF PLATES

Both Primary and
(Secondary Mirrors now Aluminized)

161

USE TOGGLE SWITCH ON
PANEL TO UNCLAMP RA

Date 1-2 July 1966 Observer ^{wd} Ac ^{hr} Julian Day
Friday/Saturday

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29352 F1	FOCUS TEST			G10	IIaOb	9	77			C
29352 F1	FOCUS TEST			G40	IIaOb	13	77			A
29353	HD 161701	17 ^h 41.9	-14° 42'	G40	IIaOb	13	77	21:02	21:12	B
29354	HD 176318	18 ^h 54.6	+38° 07'	G40	IIaOb	13	-	21:24	21:28	C
29355	HD 142301	15 ^h 48.7	-24° 57'	G40	IIaOb	13	-	21:47	21:57	A
29356	HD 142184	15 ^h 48.0	-23° 41'	G40	IIaOb	13	-	22:03	22:08	B
29357	HD 142184						-	22:10	22:17	C
29358	16490	17 ^h 52.3	-24° 24'	G40	IIaOb	13	76			
29358	HD 166566	18 ^h 06.1	-15° 42'	G40	IIaOb	13	76	22:54	23:24	A
29359	HD 169578	18 ^h 20.2	+05° 02'	G40	IIaOb	13	74	23:30	23:44	B
29360	HD 170200	18 ^h 23.1	+06° 08'	G40	IIaOb	13	-	23:48	23:52	C
29361	HD 169820	18 ^h 21.4	+14° 55'	G40	IIaOb	13	-	23:55	00:02	A
29362	HD 172694	18 ^h 36.5	-15° 57'	G40	IIaOb	17	74	00:12	00:40	B
29363	HD 173219	18 ^h 39.1	-07° 13'	G40	IIaOb	17	73	00:46	01:09	C
29364	HD 161701	17 ^h 41.9	-14° 42'	G40	IIaOb	13	-	01:17	01:31	A
29365	HD 176318	18 ^h 54.6	+38° 07'	G40	IIaOb	13	-	01:40	01:45	B

Dome Temp. 80°

Focus 75/74

Dome Temp.

Transparency Conditions good, moon N.W. light; v. 23.00
thin clouds directly above

162

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					no filter	PLATE BROKE	
				3	3-3	Focus increased from 0.5 (1.5?) by 1.3 revolutions (2.8?)	approaching find decreasing
					5-5	Focus 75	O.K.
02 11 E	-14 40	0	6.1	B9	2-2-2	B8-B9 SB	800/40 fine
03:08 E		2+	5.7	B8	3-3	B8-B9 SB (Heard noise when went far east - from somewhere - Did sidograph shift? Springs look okay)	800/40 sending
00 26 W	-23° 06'	1+	6.2	B8	2-2-2	B8-B9 SB	800/40 fine
00 37 W	-23° 48'	1+	5.4	B3Vne	2-2-2	Cn Be	800/40 sending fine
00 46 W	-23° 48'	1+	"	"	2-2-2	Cn Be	500/40 fine
						Cn Be	Reflection from moon showing on slit Capping dome broke again? fixed.
00 25 E	-15° 38'	1+	8.13	B1De	2-2-2	Cn Be (cloud)	800/25 fine
00 17 W	+05 07	2+	6.54	B9	2-4	B8-B9 SB	800 - sending fine
00 13 W	+06 13	3	5.6	B8	2-2-2	B8-B9 SB	800/40 fine
00 00	+15 00	3	6.45	B9	2-2-2	B8-B9 SB	800/40 fine
00 22 W	-15 50	2	8:31	B0e (B)	2-2-2	Cn Be	800/40 fine
00 42 W	-07 05	1	8:02	B1Vpre	2-2-2	Cn Be FOCUS 74	800/40 fine
02 07 W	-14° 41'	1	6.1	B9	2-2-2	B8-B9 SB (Capping dome broke at end of exposure)	800/40 fine
01 10 W	+38' 14"	2	5.7	B8	2-2-2	B8-B9 SB	800/40 fine

163

Date 1-2 Jul. 1966

Observer

Wd
ai

Julian Day

Fri/Sat

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
29366	BD +23° 374	19 41.2	+24 04	G40	IIaob	17	73°	01:54	02:51	C	01 30 W
29367	BD +23° 3913	21 213	+44 01	G40	IIaob	17	—	03:04	03:35	A	00 33 W
29368	HD 176318	18 54.6	+38 07	G40	IIaob	17	70°	03:40	03:44	B	03 09 W
29369	HD 176318	18 54.6	+38 07	G40	IIaob	13	—	03:45	03:48	C	03 13 W
29369 F1	FOCUS TEST			G10	IIaob	9	69°			C	

Dome Temp. 72°
 Focus $73/$
 Dome Temp.

Transparency Conditions *full moon, good transparency and a few light clouds in east.* 164

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 30W	+24 15	1 → 2	9.49	B012	2-2-2	Cu Be Focus 73 may be slightly loosed, black plate slipped a check before unloading	800/35 fine
00 33W	+44 19	2	9.43	B7 1.5 PM	2-2-2	Cu Be	800/40 fine
03 09W	+38 14	2	5.7	B8	2-2-2	B8-B9 SB	800/40 fine
03 13W	+38 14'	2	5.7	B8	3-3 no filter 3-3	B8-B9 SB — almost down? Focus Test: / Same camera focus as for Z9352F1	800/40 fine center to mount #29329F

Seeing so good telescope focus had to be adjusted several times!

Pl. No. 5111 ~ 100 ... showed double star

165

Date 2-3 July 1966 Observer AL Ri ^{H_a L} _{Ri} Julian Day

Sat 1 Jan

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29370	HD 161701	17 41.9	-14 42	G40	IIaOb	13	80°	23 25 ⁴	23 32	A
29371	HD 161701	17 41.9	-14 42	G40	IIaOb	13		23 34 ⁴	23 41	B
29372	HD 176318	18 54.6	+38 09	G40	IIaOb	13	78-79	23 58 ²	00 01	C
29373	HD 173219	18 39.1	-07 13	"	"	"		00 44 ¹⁷	01 21	A
29374	BD 41° 3931	20 20.8	42 00	"	"	"	78	01 51 ²⁸	02 47	L
	BD 47 3487	21 32.1	47 28	"	"	"				C

Dome Temp.

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 13W	-14 39	1	6.1	B9	2-2-2	500 in sp. ^{B8-B9} focus 77 B8-B9 54 slightly variable 800/50 expr. net. not used	fine
00 22W	-14 39	2	6.1	B9	2-2-2	800/40 B8-B9 part sply was overexposed OK now	fine
0 31 E	38 14	4	5.7	B8	2-2-2	800/40 B8-B9	fine
1 04W	-07 07	2	8.02	B.V. pnc	2-2-2	800/40 Cu Be	fine
0 50 W	42 13	3	10.0	(B5)	2-2-2	800/40 Re Dust	weak
			9.80	Bpe		Cu Be	

Finder out of adjustment
when finally lined up might give

Dome Temp. 72° - 68°

Focus 74.72.71

Dome Temp.

Transparency Conditions *h. cloud**better after 0^h*

168

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0	23W	+33° 05'	0	5.34	B9	2-2-2	B8-B9 Sb 800/40	fine
0	10W	+39 16	0	7.2	C8	2-2-2	Std Vel 800/50	fine
00	12E	45 27	0	7.3	B3V	2-2-2	B-Std Vel. <i>mirror flap beyond start.</i> 800/40	fine
0		-24 21	0	7.61	B1 ^{IV} pe	2-2-2	Cn Be <i>field shake CLOUDS!</i> <i>(clouds in south)</i> 800/30	fine
00	48 ^M W	+11 05	0	9.66	B1 ^{IV} ne	2-2-2	Cn Be <i>field shake</i> <i>Capping device came apart</i> 800/40	fine
00	03E	47 45	0	7.80	Bpe	2-2-2	Cn Be <i>field shake</i> ↑ FOCUS 71 800/40	fine
00	24W	42 34	0	6.04	B8	2-2-2	B8-B9 (main prog) (universal coupling) 800/50	fine
00	05E	+10 50	0	6.31	B8	2-2-2	B8-B9 " 400/25	fine
0	35	-07 08	0	6.28	B9	2-2-2	B8-B9 " 400/25	fine
					no filter	3-3	G10 FOCUS KNOB WAS SKIPPING - SET SCREW TIGHTENED	
						3-3	Focus 3.0	} Read against black metal edge focussed with numbers decreasing.
						3-3	Focus 0.0	
						3-3	Focus 0.5	
						3-3	Focus 0.2	
							→ G10 focus finally set to 0.4	

Date 5-6 July 1966 Observer In - Mse Julian DayTrans - Wood

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29384	HD143187	15 53.9	59 12	G40	Ilab	13	72°F	21 08	21 15	A
29385	HD123782	14 04.6	49 56	G40	Ilab	13		21 20	21 52	B
29386	HD155711	17 08.2	52 32	G40	Ilab	13	71°F	21 37	21 45	C
29387	HD161701	17 41.9	14 42	G40	Ilab	13		21 54	22 04	D
29388	HD164986	17 58.3	-24 24	G40	Ilab	17	70°F	22 13	22 32	D B
29389	HD169578	18 20.2	+05 02	G40	Ilab	13		22 42	22 55	C
29390	HD169820	18 21.4	+14 55	G40	Ilab	13		22 58	23 04	A
29391	HD161701	17 41.9	-14 42	G40	Ilab	13	68°F	23 07	23 30	B
29392	HD170280	18 23.1	+6 08	G40	Ilab	13		23 34	23 42	C
29393	HD172883	18 57.5	52 06	G40	Ilab	13	68°F	23 49	23 55	B
29394	Blurred by wind for plate 29394 - 93									

Dome Tel

Focus

Dome Tel

Hour Ang

End

*2

* m/

D

Dome Temp. 74°F

Focus 72/72

Dome Temp.

Transparency Conditions

sl. cloud at sunset
cloud in W + S

170

22:30 - cirrus forming
23:00 - 1-2 mag. absorption

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
18	E 0	04 59	0	6.15	B9	2-2-2	B8-B9 (main frag) doe focus 72	800/40
18	U 2	02 49	36	0-1	6.8	M 2	2-2-2	std. vel.
18	E 0	48 52	26	0-1	6.11	B9	2-2-2	B8-B9 (main frag) doe
18	E 1	05 -14	47	0-1	6.1	B9	2-2-2	B8-B9 (SB) (* 22)
18	E 0	53 -24	20		7.61	BIII:pe	2-2	in Be field OK // CIRRUSS 800/40 HOPELESS!
18	E 0	52 +5	25	0	6.54	B9	2-2-2	B8-B9 (SB)
18	E 0	43 14	58	0-1	6.43	B9	2-2-2	B8-B9 (SB)
18	E 0	43 -14	41	0-0	6.1	B9	2-2-2	B8-B9 (SB)
18	E 0	7 +6°12'	0	5.6	B8	2-2-2	B8-B9 (SB)	
18	E 0	7 +52 11	1	5.83	B9	2-2-2	B8-B9 (SB)	

* 2 SOME VERY SLOW TURNING TO NITE
~~* MAY WE HAVE TOR PENCILS FOR THE~~
~~* DOME ?~~

Date July 9/9/66 Observer Ch. J. 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.F.
29394	HD 144334	16 ^h 00.2	-23° 20'	G40	Il00b	17L	68°F	20 58	21 06	C
29395	HD 144661	16 01.9	-24 11	G40	Il00b	17L		21 12	21 27	A
29396	HD 144844	16 12.8	-23 25	G40	Il00b	17L		21 31	21 43	C
29397	HD 164706	17 58.3	-24 24	G40	Il00b	17	67°F	21 52	22 30	A
29398	HD 166566	18 06.1	-15 42	G40	Il00b	17		22 36	23 14	A
29399	HD 170235	18 23.2	-25 19	G40	Il00b	17L		23 19	23 34	C
29400	HD 172674	18 36.5	-15 57	G40	Il00b	17	66°F	23 44	00 20	A
29401	HD 193516	20 15.5	+37 28	G40	Il00b	17	65	00 24	00 58	C
29402	HD 195991	20 01.6	+44 43	G40	Il00b	17		01 04	01 39	A
29403	BD +47° 3487	21 32.1	+47 28	G40	Il00b	17		01 38	02 38	B
29404	BD +47° 3656	21 57.1	+47 42	G40	Il00b	17	63	02 43	03 37	C
29405	Calibration	Star wedge						29399 - 29404		

Dome Temp. 71°

Focus 72/71

Dome Temp.

22^h sun a break

22:45 strong

00^h weakening01^h fairly strong - no clouds

Transparency Conditions

L. cloud scattered sun at dusk

174

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
06	09E	-23°28'	0	5.8	B8	2-2-2	B ^{II} -B ⁹ 800/50	good
07	09W	-24 18	0	6.5	B8	2-2-2	B ⁸ -B ⁹ L. cloud 800/50	fine
08	23W	-24 34	0	5.9	B9	2-2-2	B ⁸ -B ⁹ ← capping device came unknown (second) 800/50	fine
09	43E	-24 21	0	7.61	B ^{IV} pc	2-2-2	Cn Be 800/40	fine
10	07E	-15 39	0	8.13	B ^{IV} e	2-2-2	Cn Be 800/40	fine
11	04E	-25 14		6.71	B ^{III-V} e	2-2-2	Cn Be 800/50	fine
12	29W	-15 52	1	8.31	B ^{IV} e	2-2-2	Cn Be NUMBER ON PLATE MAY LOOK LIKE 06 800/40	fine
13	32E	+37 41	1	9.46	B ^{2:III} e	2-2-2	Cn Be From 71 800/40	fine
14	28E	+44 20	2	9.31	B ^{IV} unc	2-2-2	Cn Be 800/40	fine
15	32E	+47 46	1	9.80	Bpc	2-2-2	Cn Be 800/40	fine
16	26W	+47 02	0	9.23	B ^{3c} ^{III-V}	2-2-2	Cn Be L. cloud 800/43	fine

Dome Temp. 78°F

Focus 73

Dome Temp.

Transparency Conditions Hazy + thick cloud in North.

0300 - cirrus thick

178

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	G10 Comp. 2-2-2	REMARKS	Quality
35	20	23 - 25° 21'	0+	6.7	B9	2-2-2	B8-B9 (regular program) 800/60	
01	12							
07	16						circus	
01	35	53° 26'	1	6.43	B9	2-2-2	B8-B9 800/40	good
08	35	26° 22'	0	5.50	B9	2-2-2	B8-B9 800/40	
31	02	05 - 3 25'	0	6.01	B9	2-2-2	B8-B9 800/40	

copper came apart - plate will be
(nut screw loose) fogged.

Dome Temp. 79°

Focus 75

Dome Temp.

HOW

ABOUT

FIXING

EXP. METER

ONCE

&

FOR

ALL

THE

FIXING

COSTS

180

TIME

&

MONEY

- 71

Transparency Conditions

slight haze near horizon, Phoenix

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 04 W	- 14° 00'	0	6.43	B9	2-2-2	Focus 75 B8-B9 exp meter won't balance	weak
12 48	- 9° 21'	0	10.01	B0 Ia	2-2-2	D6 OB #9 dead at 0045 1/2 min, approx 1:15	weak
10 ^h 33	+ 42° 34'	0	6.04	B8	2-2-2	B8-B9. exposure meter not working; give each ~ 10 min	fine
10 ^h 36	+ 52° 45'	0±	5.90	B8	2-2-2	B8-B9	fine
10 ^h 39	+ 54° 15'	0±1	6.03	B8	2-2-2	B8-B9	fine
10 ^h 23	+ 50° 14'	1	6.42	B9	3-3	B8-B9	fine
10 ^h 16	+ 59° 37'	1	6.36	B9	3-3	B8-B9	fine
10 ^h 00	+ 59° 49'	1	6.37	B8	3-3	B8-B9	fine
10 ^h 12	+ 10 50	1	6.31	B8	3-3	B8-B9	fine
						- dawn -	

181

Cn
7n
Mae

Date 14-15 July 1946 Thurs-Fri Observer Mae Julian Day 29418

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	How Ang.
29418	HD 146001	16 59.9	-25 13	G40	IIaOb	17	71°	21 04 ¹⁰	21 23	A	W 0
29419	HD 146416	16 11.1	-21 03	G40	IIaOb	17 x 4	66	21 33 ¹⁵	22 03	B	W 1
29420	HD 145001	16 03.6	+17 49 ¹⁹	G40	IIaOb	13	68°F	22 26 ⁷	22 40	C	W 1
29421	BD +10° 3714	18 59.4	+10 58	G40	IIaOb	17	68°F	22 47 ³¹	23 49	A	W 0
29422	HD 193516	20 15.5	+37 00	G40	IIaOb	17	68°F	23 09 ¹⁸	0 35	B	E 0
29423	HD 198931	20 48.6	44 03	G40	IIaOb	17	65°F	0 39 ¹⁸	07 15	C	E 0
29424	HD 216629	22 49.4	61 36	G40	IIaOb	17	64°F	1:28 ¹²	7 51	A	W 0
29425	HD 2166 ⁵⁸	22 49.4	61 36	G40	IIaOb	17	64°F	1:52 ⁵²	02:56	B	W 0
29426	BD 60° 358	1 42.7	60 33	G40	IIaOb	17		3:07 ²	03 47	C	W 2
29426T	Calibration Star Wedge f							29418	26		

Dome Temp. 72°

Focus 73/71/70

Dome Temp.

Transparency Conditions *scattered light clouds*

182

2200^h - THICK CIRREUS0^h EXCELLENT

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23	00	23 - 25	0	6.7	B9	2-2-2	B8-39 800/40	good
03	00	-21 10	0	6.3	B9	2-2-2	B8-39 800/50	good
40	01	46 +17 10	0-1	6.1	G4	2-4	std. Oct. 800/60	fine
44	00	00 +11 06	0-1	9.66	B1.5	2-2-2	in Be ^{Vis Bin} focus > 1 4000/200 _{15" N} capping debris come unbound.	good
35	30	+37 41	1	9.46	B2 III	2-2-2	in Be 800/46	ok
40	28	+44 19	1	9.31	B1.5	2-2-2	in Be field ok 800/45	ok
51	00	E 61 59	1	10.03	B2 PE	2-2	see field ok & in ✓ 800/46	ok
00	43	E 61 59	1	9.5	B2 PE	2-2-2	in Be STRONG N.W. WIND 800/45	ok
02	47	E 60 54	0-1	9.61	B3...	2-2-2	in Be field ok 800/50	ok

183

Date *15/16 July '66 Fri Sat* Observer *Jr
Ai
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.A.
447 - 1	HR 5511								21 04	
447 - 21	5 Luc								03 43	

Dome Temp
Focus
Dome Len
Hour Angle
End

1 36 W
0 32 W

Dome Temp. ~~68°~~

Focus

Dome Temp.

Transparency Conditions *Excellent*

184

ing Time
S.T.

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

04

1 36 W

43

0^h 32 W

155 Visitation

346
cc

Showed M13 through 70" telescope

Ri

L

185

Date 16/17 July 26 Sat / Sun Observer 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.M.
448 -1	HR 6918								23 21	
-5	NGC 6779								00 45	
448 -1	HR 6918	21 15.9	42 16	G40	EIaob	13				

187

Date 17/18 July 17/66 Observer EA
MSE
DB 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.
29427	HD 144579	16 ^h 01.5	+39 24	G40	Ilab	13	75 ^a F	20 ^h 53 ⁶	21 ^h 05	A
29428	BD -13° 4930	18 13.3	-13 52	G40	-11-	17	74 ^o F	21 16 ⁶⁰	23 ^h 16	C
29428T	Calibration	Step	Wedge				71 ^o F			
29429	HD 172488	18 35.4	-8° 49				71^oF			

Dome Temp. $78^{\circ} F$ Transparency Conditions *clouds at sunset* 188

Focus

Dome Temp.

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00	25W	$39^{\circ} 16'$	1	7.2	G8	2/2/2	std. vel. focus 74	800/5'0
00	23W	$-13^{\circ} 47'$	FO	9.7	09.5	2/2/2	Db 100 ^{#1} programme INTERMITTENT CLOUDS -35 min. f75.	800/ 26 <u>26</u> - level
							clouds - complete cover, close up f732 at 23 ^h 30. (field check)	
							opened up again 0:30 - more clouds	
							<u>closed up 00^h45</u>	

Dome Temp. 81°F

Transparency Conditions POOR

190

Focus

2300 - LIGHTNING IN W.

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24/11 U 0	33 +0508	1→0	6.54	B9	2-2-2	610 BF-B9 (SB) FOCUS 75 800/40	
					2-2	Weak (should be 5-5) (msec)	
						Lightning + Thick Haze (3 ^m abs.) Closed up 24 ^h 00!	

191

Date 19-20 July 1966 Observer Re-Ha-Wd Julian Day
Tue. Wed.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29430	HD 167143 BD -17° 50' 20"	18 ^h 08 ^m .8	-17° 24'	G-40	IIaOb	17	68°	21:02	22:54 ⁵⁶	A
29431	BD +41° 37' 31"	20 ^h 20.8	+42° 00'	G-40	IIaOb	17	65°	23:10	01:31 ⁷¹	B
29432	BD +41° 37' 39"	20 ^h 21.3	+42° 04'	G-40	IIaOb	17	60°	01:45	03:03 ³⁹	C
29433	HD 217903 BD +71° 11' 81"	22 ^h 58.9	+72° 12'	G-40	IIaOb	17	58°	03:12	03:29	A
29434	HD 210806 BD +72° 10' 20"	22 ^h 07.9	+72° 54'	G-40	IIaOb	17	—	03:35	03:51 ⁸	C
29434 T	Calibration	Setup wedge for plates 29430-34								

Dome Temp. 70° Focus $72-71-69$

Dome Temp.

Transparency Conditions *Some Cirrus*very clear at 1.00 but seeing poor.
dome temp now 60°

192

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 15 W	$-17^{\circ} 21'$	1-0	9.4	B8	2-2-2	Re Dust Prog; #117	800/30 good
00 41 W	$+42^{\circ} 13'$	0	10.0	(B5)	2-2-2	Re Dust Prog; #131 Focus, 71	800/30 1 wear
02 12 W	$+42^{\circ} 17'$	2-1	9.4	(B5)	2-2-2	Re Dust Prog; #132 Focus, 69	800/30 good
00 01 W	$+72^{\circ} 34'$	0	8.2	A0	2-2-2	Re Dust Prog; #157 (no in plate in 34) (by mistake)	800/30 fine
01 15 W	$+73^{\circ} 14'$	0	8.4	A0	2-2-	Re Dust Prog; #150 (note numbered) 0 - sky becoming bright.	800/24 fine
"plate-holder B - faded" - in fridge.							

Dome Temp. 68° F

Transparency Conditions fine

Focus

Dome Temp.

ing Time
S.T.

PR

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

00 21:51

53 15:25

195

~170 VISITORS - MOON TOO LOW TO SHOWED ZETA CORONA BOREALIS
 (1" DOUBLE-B STARS)
 Also showed slides of "Universe",

Date 23-24 JULY 1966 Observer ai L Julian Day 244
 Hn Fr

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	
HD 165814	HD 165814	1802.7	-25 23	G40	IIa06	13	74°	2249		B
29435	HD 169578	18 20.2	+05 02	G40	IIa06	13	74°	2249	23 15 ⁰⁰	B
29436	BD -0° 3584 18 48.4		-0° ⁴¹ / ₃₆	G40	IIa06	17	74°	23 13	01 43 ⁷⁵	C
29437	BD +67° 1332 21 25.0		67° 41'	S	IIa-b	17		02 08 ⁵⁰	03 48	A
29437	Calibration Step Wedge									for plates 29435-37

Dome Temp.

Transparency Conditions

fair to poor

196

Focus *740-744*

Dome Temp.

Ending Time
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+05 06	2	6.7	B8	2/		<i>800/40</i>
<i>0 30 W</i>	<i>+05 06</i>	<i>2</i>	<i>6.54</i>	<i>B9</i>	<i>2-2-2</i>	<i>759-29</i>	<i>500/40</i>
<i>2 33 W</i>	<i>-00 25</i>		<i>9.96</i>	<i>O8</i>	<i>2-2-2</i>	<i>OB - Db #12</i> <i>exp mtr. drifts badly</i>	<i>at. fogged</i> <i>fine</i>
<i>2 00 W</i>	<i>68 02</i>	<i>1</i>	<i>8.5</i>	<i>A0</i>	<i>2-2-2</i>	<i>"Dust" Prog.</i>	<i>Haze</i> <i>Haze & Clouds.</i> <i>weak</i> <i>strong</i>

July 25 (Thurs) ~ 20 Visitors (High School: Peter Bronghton) H6 shows
 199

Date July 28/29, 1966 Observer W.D. De 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
29438	166566	18 06.1	-15 42	G-40	Ilford	13	72°	21 16	21 56	E
29439	BD-13 1550	18 13.3	-13 52	G-40	Ilford	17	70°	22:05	00:20	C
29440	HD 173783	18 42.0	-9 25	"	"	17	66°	00 27	01 37	A
29441	+69 1231	22 11.0	+69 45	"	"	17	64°	01 57	02 57	B
29442	2041 28	21 23.4	52 28	"	"	17	-	03 04	03 09	C
29443	216 057	22 44.6	53 53	"	"	13	61	03:19	03:29	A
29444	216 528	22 48.5	49 53	"	"	13		03:32	03:41	B
29445	217 247	22 55.0	59 16	"	"	13		03:48	03:58	C
29446	224104	22 52.5	59 28	"	"	13		04:06	04:16	F
29445T	Comparison Star Wedge									

Dome Te
Focus
Dome Te

Hour Ang
End

00 05

02 11

03 00

03 53

04 53

05 00

06 11

07 10

08 10

Dome Temp. 73°

Focus 73-71-70

Dome Temp. 62°

Transparency Conditions

First Quarter Moon (at night -20°) 200
exposure meter broken; fresh film broken too.night photometric at 23:30^m

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00:05E	-15° 39'	0	8.15	B1#2	2-2-2	Focus 73 Cr Be [*] Capper may not have been open for this exposure	blank
02:11W	-13° 47'	0-1	9.7	O95	2-2-2	Db #1 OB - field OK.	fine
03:00W	-9° 18'	1+	9.0	OB	2-2-2	Focus 71 ⁺ Db #10 OB - field checks.	fine
0 53W	+69° 56'	2	9.3	(A0)	2-2-2	René 'East' Programme #152 ^{night} published fine	fine
01 53W	+52° 50'	2	9.0	B8	2-2-2	B8 B9 Hb } Handguiding focus 70	fine
0 50W	+52° 15'		6.03	B8	2-2-2	B8-B9 Hb } Handguiding focus 70	fine
1:01W	+50° 14'	1+	6.42	B9	2-2-2	"	fine
1:09W	59° 37'		6.36	B9	2-2-2	"	fine
0129 W	59° 50'	1	6.37	B8	2-2-2	" (Rec fuse, fixed)	fine

sky bright

Date July 20/30 1961 ^{Fri Sat} Observer MF / Dg / mel 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.
2944E	Unidentified			G40	II90	13	66	21:13	21:35	A
29447	HD 173721	19 01.1	-16 23				"	21:55	22:25	B
29447	HD 173723	18 42.0	-9 25	"		17	"	22:31	23:43	C
450-1	HR 6775								00:07	
450-17	HR 7162								03:58	

(Echo I slightly North of Andromeda at 01:57 EST.)

202

Dome Temp. 67

Transparency Conditions

Focus 71.6

Small flashlight broken!! - big one burnt out.

Dome Temp.

Observing programmes should be better organized and neater records to save time. - M.F.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ^h 51 ^m E	-21 37	0			2-2-2	B8/B9 no finder field at last dot may be found - wrong *	fine
0 ^h 47 ^m E	-16 19	0	5.11	B8	2-2-2	B8/B9 Ha got meter going by looking at. 200/30	fine
0 ^h 10 ^m W	-9 10	1	9.0	O B	2/2-	O B red vel. Db #10	weak

* Note: Loaded plates in
74" drawer.

Visitor showed a Her ~ 190 visitor ^{Hu}
 GH
 Jn

(Db)
 Jn

203

wd.

Date July 30/31, 1966

Observer 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.M.
A 51 - 1	HR 7235								22 59	
- 32	HR 8781								04 ^h 02	

Dome Temp.
 Focus
 Dome Temp
 Hour Angle
 Error

Dome Temp. 62°

Transparency Conditions

Full moon

204

Focus

Dome Temp.

g Time
S.T.

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

99

02

Date July 31 / Aug. 1, 1966 Observer Db Julian Day Jul

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.
29449	HD 172488	18 ^h 35.4	-8° 49'	640	IIaOb	17	72° ⁷⁵⁻¹	20:31 ⁷⁵	21:01	A
29450	HD 172527	18 35.6	-4° 11'	640	IIaOb	17	72°	21:09 ⁷⁵	21:54	B
29451	BD -13° 4930	18 13.3	-13° 52'	640	IIaOb	17	72°	22:01 ⁷⁵	23:16	A
29452	HD 175038	18 48.4	-00 42'	"	"	17	70° ⁷³	23:25 ⁷⁰	00:04 ⁷⁰	C
29453	BD -0° 3584	18 ^h 48.4	-00° 41'	"	"	17	70°	00:09 ⁷⁵	02:14	B
29453	BB +60° 358	01 ^h 42.7	+60° 33'	"	"	17	66° ⁷⁵			
29453 ^h	HD 11291	01 ^h 45.8	+50° 18'	640	IIaOb	17	66°	02:44 ⁷⁵	02:53	A
29454 ^h	HD 10260	01 ^h 35.3	+60° 32'	640	IIaOb	17	66°	03:05 ⁷⁵	03 11	C
29455T	Roller stop wedge for plates 29446-55 closed up at 4:15									

Dome Temp. 75°

Focus 74

Dome Temp.

Transparency Conditions

- Full moon at ~1830, -20° 206
- light clouds over sky

N.B: 8030 METER WANT BALANCE FOR LONGER
TRAVEL SECON EITHER 700 OR 900 V.
2175 METER BALANCE BUT GOES
BACKWARD IN STAR. METER SHUT OFF

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
1 ^h 19 ^m E	-8° 44'	0+	7.7	OB	2-2-2	DB Programmed DB #6 8000/1	OK ON 2x100	
0 ^h 25 ^m E	-4° 05'	1	8.6	OB	2-2-2	DB #7 4000/7.5 at 800V	OK ON 2x100	
01 04 W	-13° 48'	1±2	9.7	OB	2-2-2	DB #1 Diff to balance CH meter		
01 32 W	-0° 36'	1+	9.2	B9	2-4	wrong star-field drawn - 800/18		
03: 43 W	-0° 34'	2±1	7.96	OB	2-2-2	DB #12 Cloud during Exposure (52A on plate)		
			5.61	B3ne		Too faint now - Thick cloud cover comp		
02 36 E	+50° 39'	0	5.6	B9	2-2-2	B8-B9 // CANT IDENTIFY FIELD FOR HD 11905	800/40	
02 09 E	+60° 54'	0	8.6	B8	2-2-2	B8-B9	800/40	
22 Dec	Buttons stuck in both directions.					Final dome temp = 65°		

* Declination - past ones faint at +60°, 1^h 53 E.
Rod for Dec Motions want turn.

209

Date Aug 3/4 1966

Observer

Jn Wd
mf (Re)
R1 (Hn)

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.
29457	HD 174567	18 46.0	+31 31	G40	HAO	17	GG	20:59	21:04	A
29458 ¹	HD 177817	19 01.1	-16 23	"	"	"	"	21:16	21:23	B
29457T	Calibration Step Wedge for plates 29456-57									
453-1	HR 5997								21 41	
453-37	HR 39								04 17	

Dome Temp. 68°F

Focus 71 1/2

Dome Temp. 60°F

Transparency Conditions 1 cloud at sunset 210

photometer at 21:30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04	1 ^h 13 ^m E +31°38'	1	6.5	B9	3-3	B8-B9 800/65	full frame
23	1 ^h 10 ^m E =16°14'	1	5.88	B8	3-3	B8-B9 SEP ~ 3" 800/63	BINARY - TOOK BRIGHTEST CAP DID NOT RETURN quaking
41							
7		1					

211

Date Aug 4/5 1966 Observer SD Db / 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	Hour Angle End
29458	HD 172488	18 ^h 35.4	-8° 49'	G-40	IIa0b	-17	72°	20:43	21:08	A	36E
29459	HD 172527	18 ^h 35.6	-4° 11'	G-40	IIa0b	17	72°	21:19	22:20	B	0W
29460 29460T	HD 171305	18 ^h 29.0	-4° 53'	G-40	IIa0b	17	70°	22:30	23:14	C	17W
	454-1 to 454-21				M ce			- Photometry.			
	23:31 to 3:46				then			Clouded over.			

Dome Temp. 74°

Focus 74/73/

Dome Temp.

Transparency Conditions

clouds in North at start
clear by 23:00
Copper not linked - had to fix.

212

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0:56E	-8° 43'	1	7.7	OB	2-2-2	Db #6 OB Prog: Copper came apart again - OK now!	800/40 fine
0:16W	-4° 03'	1+	8.6	OB	2-2-2	Db OB #7	800/40 fine
1:17W	-4° 47'	1+2	8.6	OB	2-2-	Focus 73 Db OB #3	800/35 fine

looked at Saturn and the Moon through clouds.

plate holders A+B loaded and are in frig.

174 Joints: showed 2 Here.

H₂
M₅
JH₆

213

Date 6-7 Aug Sat-Sun Observer AB - C. 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.
29461	HD 121828	19 ^m 16.9	+35° 00	G10	D ₂₀	17	74	23 34	23 43	A
29462	HD 187235	19 43.9	+38 09	"	"	"	"	23 43	23 55	C
29463	15 Vul	19 57.0	+27 29	G10	D ₂₀	9L	"	00 04	01 44	B
29464	216539	22 49.4	+11 26	G40	D ₂₀	17	70°	01 54	02 54	A
29465	RU 400 900	01 42.7	+60 33	DV6	D ₂₀	17	"	03 03	04 13	E
29465 T ₁										
29465 T ₂										

for plate 29463
plates 29461-62, 64-65

Dome Temp. 73°F
 Focus 74.5/73
 Dome Temp. 70°

Frank: Mola for
 spectrophotometer
 dislodged during visitors.
 Doesn't appear damaged

Transparency Conditions

VERY

fazy

Echo 1

01:17

214

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 07 W	+35 08	0+	6.24	B8	2-2-2	B8-B9	450/20 L weak
0 52 W	+38 20	0+	5.65	B9	2-2 no felt	"	400/20 L weak guiding poor weak
02 28 W	+27 41	1-2	4.74	A5m	3-3-3	Yip EW	200/370 L weak
00 46 W	+61 58	1	10.03	B2pe	2-2-2	Ln Be ^{binary 11th mag star 10° NW} FOCUS 73 field checks	800/60 L weak
00 50 E	+60 53	1	9.61	B1ne	2-2-2	Ln Be field checks	800/40 L weak

215

August
Date 8-9 Monday / Tuesday 1966 Observer Hb. F. A. 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 Angle End
29466	HD 171957	18 32.4	-14 06	G40	IIa0b	17	73°	20 40	21 24	C	00:00
29467	HD 174567	18 46.0	+31° 31	"	"	17XL		21 29	21 45	A	00:00
29468	HD 181822	19 16.9	+35° 00	G40	IIa0b	17XL	72°F	21 49	22 01	C	00:00
29469	HD 187643	19 45.9	+28 12	"	"	17XL		22 04	22 20	B	00:00
29470	HD 187643	19 43.9	+38 09	"	"	17XL		22 27	22 38	A	00:00
29471	HD 196504	20 32.8	+26 07	"	"	17XL	71°F	22 48	22 55	C	00:00
29472	HD 197226	20 37.3	+38 43	"	"	17XL		23:04	23:15	A	00:00
29473	HD 188513	20 45.7	+51 32	"	"	17XL	70°F	23:21	23:34	B	00:00
29474	HD 194668	20 21.8	+53 14	"	"	17XL		23:40	23 55	C	00:00
29475	HD 216057	22 44.6	+53 53	"	"	17XL	69°F	00:03	00:14	A	00:00
29476	HD 216523	22 48.5	+49 53	"	"	17XL		00:19	00:34	B	00:00
29477	HD 217348	22 52.0	+59 16	"	"	17XL	68°F	00:44	01 00	C	00:00
29478	HD 224404	23 52.5	+59 28	"	"	17XL		01:05	01 25	A	00:00
29479	HD 225289	23 59.9	+60 46	"	"	17XL		01:29	01:38	B	00:00
29480	HD 209288	21 57.1	+10 29	"	"	17XL	67°F	01:52	02:14	C	00:00
29481	HD 215143	22 38.0	-07 29	"	"	17XL		02:19	02 34	A	00:00

Dome Temp. 75°F

Focus 73 1/2 / 72

Dome Temp.

Transparency Conditions

Hazy & cloudy (poor) 216

Echo SW → NE : max altitude ~ 2215 EST

Echo W-E : Zenith at 0210 EST

CONT. →

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	G.10 Comp.	REMARKS	Quality
00	20 E	-13° 59'	0 ⁻	6.43	B9	2-2-2	B8-B9 Clouds 0-3 mag above the 400/30	fine
00	12 E	+31° 37'	0	6.5	B9	2-2-2	B8-B9 400/35	fine
00	27 E	+35° 10'	0 ⁺	6.24	B8	2-2-2	B8-B9 400/40	fine
00	36 E	+28° 23'	0 ⁻	6.24	B8	2-2-2	B8-B9 (d & e), 400/40	fine
00	17 E	+38° 20'	0 ⁻	5.65	B9	2-2-2	B8-B9 400/40	fine
00	49 E	+26° 22'	0	5.55	B9	2-2-2	B8-B9 400/40	fine
00	34 E	38° 58'	0	6.42	B9	2-2-2	B8-B9 400/40	fine
00	22 E	51° 49'	0	6.26	B9	2-2-2	B8-B9 (CLOSE FOCUS - TAKE NOTE OF FIELD!) 400/42	fine
00	22 W	53° 27'	0 ⁺	6.43	B9	2-2-2	B8-B9 400/40	fine
01	41 E	54° 15'	0	6.03	B8	2-2-2	B8-B9 400/40	fine
01	25 E	50° 14'	0 ⁺	6.42	B9	2-2-2	B8-B9 400/40	fine
01	06 E	59° 30'	"	6.36	B9	2-2-2	B8-B9 FOCUS 72 400/40	fine
01	40 E	59° 50'	"	6.37	B8	2-2-2	B8-B9 400/40	fine
01	34 E	61° 07'	0	5.85	B9	2-2-2	B8-B9 (d & e) 400/40	fine
01	04 W	10° 52'	0 ⁺	6.31	B8	2-2-2	B8-B9 increasing clouds and brightening (almost overhead) 400/40	fine
01	41 E	-7° 07'	0	6.22	B9	2-4	B8-B9 clouds 400/11	fine

CONT.

217

Date Aug 9^(Monday) Tuesday Observer Hb/Fr/Ai 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.
29481 F1	Focus Test			C40	IIaOb	17	67F			B
	Aug 9		Cn, Wd, Ea, Ri							
	Re-aluminized		iron arc assembly mirror							
29481 T1	Full aperture		side out <small>three mirror glass</small>	C40	IIaOb	17	70°	Focus 73		
T2	" "		side out <small>three mirror aluminized</small>	"	IIaOb	17	70°	"		
T3	" "		"	"	"	13				
T4	Focus Test		2 2/4 <small>1/4 in.</small>	"	IIaD	13	71°	Focus 73		
T5	"		"	C40	IIaO	13	69.5°	Focus 73		A
T6	"		"	C40	IIaO	17	69.5°	Focus 72		A
29481 T7	Calibration		Step Wedge					plates 29466-79		
T8	"		"					plates 29480-81		

Dome Temp.

Transparency Conditions

fog and haze

218

Focus *72*

Dome Temp.

ing Time
S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			<i>5-70</i>		<i>5/5</i>	<i>FOCUS 72</i>	<i>C.K.</i>
<i>outside</i>	<i>30^s</i>	<i>640</i>	<i>filter</i>			<i>developed in D19 3 min.</i>	
<i>inside</i>	<i>60^s</i>	<i>640</i>	<i>filter</i>				
<i>outside</i>	<i>5^s</i>	<i>610</i>	<i>filter</i>				
<i>inside</i>	<i>2^s</i>	<i>610</i>	<i>filter</i>				
<i>Outside only</i>	<i>640</i>	<i>filter</i>	<i>10-10-10</i>		<i>8/8</i>	<i>in acufine</i>	<i>sl et to rim r, et to vi in</i>
		<i>610</i>	<i>filter</i>		<i>8/8</i>	<i>changed tilt by backing S screw off 1/6 rev et to vi in</i>	<i>moving N screw in 1/6 rev sl et to red</i>
					<i>8/8</i>		

Date Aug 9/10 Observer Cn | Mcl
Ineo. - Wld | Wld
Rc | Rc 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.F.	Hour Angle
29482	HD 161306	17 39.7	-09 46	G-40	IIaob	17	70°	21:12	22:12	B	1 22
29483	HD 166566	18 06.1	-15 42	G-40	IIaob	17		22:17	23:03	C	1 19
29484	HD 173219	18 39.1	-7 13	G40	IIaOb	17	67°	23:07	23:33	A	1 17
29485	HD 187691	19 46.2	+10 10	G40	IIaOb	17		23:36	23:39	B	1 15
29486	HD 203638	21 18.4	-21 16	G40	IIaOb	13		23:44	23:54	C	1 13
29486 T	Calibration Step Wedge for plates 29482-86										
455-1	HR 8173								00 16		
-16	HR 321								03 52		

New forming on some
(not on mirror!)

Dome Temp. 73°

Focus 72.5

Dome Temp.

22^h Excellent
- until 0300.
then hazy

Transparency Conditions ... very hazy - clouds in east 20:30 EST.

Clouds on meridian and to south 21:00
then very clear at 21:30 - clouds on western horizon

220

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 22W-9°45		0 ⁺	8.77	B2	1-1-1	Focus 72.5 Cn Be	800/40
01 49W-15 38		0	8.13	B1 IIe	1-1-1	Cn Be	800/40
01 45W -7 05		1	8.02	B1 I pne	1-1-1	Cn Be	800/40
00 45W +10 23		2	5.8	F8	B	Std Vel.	400/35
00 32E -20 57		0	5.5	gk2	1-1-1	Std Vel	400/35

Echo I? II? passed M31 going NW to SE
at 02 35 EST

221

Tues-Fri

Date Aug 11/12 1966 Observer Ea Re Hy 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.F.
29487	BD +1° 3694	18 ^h 25.4	+1° 10'	G40	IIaOb	17	60°	22 28	00 44	A
29487T	Calibration strip image for plate 29487									

Dome Temp
Focus G.S.
Dome Temp

Hour Angle
End

See W

Dome Temp. 62° Focus 69

Dome Temp.

Transparency Conditions *Transparency Summary - 12/11/55**Photo taken after 1200**a few Persids spotted, very faint.*

222

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03 18W	+01° 13'	1	10.3	A0	10-10-	Re dust" NO 123 interspersed by clouds. 800/30 CLOUDS till --- 0130 close up loaded P.H. in fluids 4 unexposed prints wasted by improperly closed box; my mistake! (Re)	

Dome Temp. 62°

Focus

Dome Temp. 56°

Transparency Conditions

photometric from sunrise to sunrise 224

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0					
		0+ Echo				South of Cass. 23:50 EST SW to NE.	

Dome Temp. 61

Focus 70.2, 69.

Dome Temp.

Transparency Conditions Very Good; Photometric

0240. As + AC from SW

226

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
15	01 12 E	+48 44	2	8.8	F2	10/10/10	Re "DUST" #0145	800/80
31	00 27 E	+56 05	2	9.9	F2	10/10/10	" 148 - BINARY!	800/80
20	02 17 W	+62 33.5	0-2	10.8	(B)	10/10/1	" #153 100% Field lens	800/111
							CLOUDS - Complete Sky	

227

NEWTONIANDate 15-16 Aug..... Observer Ud. G. M. M. Julian Day
1930 - Tins Ce, Hs, ms, wd

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
29491	M13 NGC 6205	16 40.5	36° 31'	NEWTON	103a O	FILTER B	21 ^h 30	21 ^h 35	1	21 ^m 10
29492	"	"	"	"	103a D	V	21 45	21 52	1	21 20
29493	"	"	"	"	" O	B	21 58	22 03	2	21 20
29494	"	"	"	"	" O	U	22 12 30	22 32 30	1	21 20
29495	M 31 ARLA (D)	00 36.7	+39 49	"	" O	B	00 59	01 01 ³⁰	2	02 15

Dome Temp.

Focus.....

Dome Temp.

Hour Angle
End

Dome Temp. ... 68 °F

Transparency Conditions ... N. HAZY

228

Focus

Dome Temp.

ing Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXPT. Comp.	REMARKS	Quality
35	2 ^H 12	36 30		6.8	F5	5 ^m	DEVELOPED - 2-19, 4 MIN	
52	2 29 W	"		"	"	7 ^m	"	
03	2 40 W	"		"	"	5 ^m	"	
54	3 10 W	"		"	"	20 ^m	"	
55	2 15 E					2.5 ^m	unguided ;	

DOUBLE TAKES
NOT
LIGHT STREAK
? screw trouble, no guide
4 min, 2-19
taken thru intermittent clouds

New Roman

229

Date 16/17 Aug 1955
Observer Mf Mmc
Julian Day 1955

Plate No.	Object	R.A. 1900 1955	Declination 1900 1955	Inst.	Emulsion	Slit FILTER	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Ang. End
29496	M31 Area 1	00 36.7	+39° 49'	NEWT	103a O	B		23 ^h 34 ^m 30 ^s	23 39 ³⁰	1	
29497	" (5)	00 43.3	+41 19	"	"	B		23 44 ²⁰	23 49 ⁰⁰	2	
29498	" (5)	"	" "	"	"	B		23 53	00 03	1	
29499	" (1)	00 36.7	39 49'	"	"	B		0 ^h 10 ^m 05 ^s	00 15 ⁰⁰	2	
29500	" (2)	00 42.3	+41 40	"	"	B		0 22 ³⁰	0 27 ³⁰	1	
29501	M15 NGC 7078	21 28.4	+12 02	"	"	B		1 33 ⁴⁵	1 38 ⁴⁰	2	
29502	"	"	"	"	103a D	Y		1 43 ³⁰	1 50 ⁰⁰	1	
29503	NGC 7331	22 35.5	34 15	"	103a O	B		2 02 ¹⁰	2 12 ¹⁰	2	
29504	NGC 7331	"	"	"	103a D	Y		2 16 ³⁰	2 21 ³⁰	1	
29505	M31 Area 1	00 36.7	+39° 49'	"	103a O	B		2 35 ⁰⁰	2 40 ⁰⁰	2	
29506	" (5)	00 43.3	+41 19	"	103a O	B		3 09 ⁰⁰	03 14 ¹⁰	1	
29507	M31 Area 1	00 36.7	+39° 49'	"	"	"		3 19 ¹⁰	3 29 ⁰⁰	2	
29508	M31 Area 2	00 42.3	+41° 16'	"	"	"		3 34 ⁴⁵	3 39 ⁴⁵	1	
29509	M31 Area 3	00 42.6	+41° 30'	"	"	"		3 48 ⁴⁰	3 53 ⁰⁰	2	
29510	M31 Area 5	00 36.7	+39 49	"	"	"		3 58 ²⁰	4 03 ²⁰	1	

Dome Temp. 6.7

Transparency Conditions

Clearing at 23^h EST.

230

Focus

Dome Temp.

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXP Comp.	REMARKS	Quality
1	0334 E	+39 45				5 ^m	FIELD PLOTTED	mf
2	0332 E	+41 22				5 ^m		mf
3	0317 E	+41 22				10 ^m		mf
4	0259 E	+39 45				5 ^m		mf
21	0253 E	+41 02				5 ^m		mf
22	0135 W			7.3	F3	5 ^m	Focus 30	mf
23	0115 W	+12 01		"	"	7 ^m		mf
24	0100 W	+34 15		11.2	S6	10 ^m		mf
25	0109 W	"		"	"	5 ^m		mf
26	0033 E	+39 43				5 ^m		mf
27	0005 E	+41 26				5 ^m		mf
28	0016 W	+39 44				10 ^m		mf
29	0021 W					5 ^m	useless	mf
30	0034 W	+41 21				5 ^m	"	mf
31	0043 W	+39 43				5 ^m	useless for 14	mf

4 min, 2-19, 69°
4 min, 2-19, 68°
lights from street are on the plate.
4.05 EST.

Good
Good
Better
Good
tolerable
tolerable
black shade
guiding poor
Good
Good
Good
"

Level up - lens approaching.

Newtonian

231

Date 17-18 Aug 1965 - Wed ^{T. sheets} Observer M. M., M. T. W. Julian Day M. S., (Ri)

Plate No.	Object	R.A. 1950 1965	Declination 1900 1965	Inst.	Emulsion	Slit Temp. FILTER	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour An End
29511	M31 AREA 5	0 43.3	41 19	NEOT	103a0	B	21 06 ¹⁰	21 14 ¹⁰	1	E6
29512	M31 AREA ①	0 36.7	35° 49'	"	103a0	B	21 23 ⁴⁵	21 28 ⁴⁵	2	E5
29513	^{M13} NGC 6205	16 ^H 40.5	36 31	"	103a0	B	21 58 ⁰	22 05 ⁰	1	E2
29514	"	"	"	"	103a2	V	22 10 ²⁰	22 13 ²⁰	2	E3
29515	^{M42} NGC 6341	17 16.1	+42 11	"	103a0	B	22 34 ²⁵	22 41 ²⁵	1	E2
29516	"	"	"	"	103aD	V	22 44 ⁴⁵	22 54 ⁴⁵	2	E3
29517	M31 Area 5	0 43.3	+41° 19'	"	103a0	B	23 08 ⁰⁰	23 17 ⁰⁰	1	E4
29518	M31 Area ①	0 36.7	+39 49'	"	103a0	B	23 21 ²⁰	23 26 ²⁰	2	E3
29519	M31 Area ①	0 41.2	41 02	"	103a0	B	23 31 ²⁰	23 38 ²⁰	1	E3
29520	"	"	"	"	103aD	V	23 40 ⁴⁰	23 50 ⁴⁰	2	E3
29521	M31 Area 7	0 41.7	+41 39	"	103a0	B	23 54 ⁴⁰	0 01 ⁴⁰	1	E3
29522	"	"	"	"	103aD	V	0 04 ⁴⁵	0 14 ⁰⁵	2	E3
29523	M31 Area 5	0 43.3	+41° 19'	"	103a0	B	0 19 ¹⁰	0 27 ¹⁰	1	E2
29524	M31 Area ①	0 36.7	+39 49'	"	103a0	B	0 32 ⁴⁰	0 37 ³⁰	2	E2
29525	^{M15} NGC 7078	21 28.4	+12 02	"	103a0	B	0 58 ³⁵	1 05 ³⁰	1	E1
29526	"	"	"	"	103aD	V	1 10 ³⁰	1 20 ³⁰	2	E1

Dome Temp. 72°F

Transparency Conditions VERY GOOD

232

Focus

ECHO - 23:57

Dome Temp.

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Exp. Comp.	REMARKS	Quality
	E 6 03	41 22				8 ^m	mf ← focus star	
	E 5 42	39 45				5 ^m	mf ← focus star	
	W 2 51	36 31		6.8	F5	7 ^m	mmi adjusted 6" finder for Newtonian	dark streak
	W 3 07	"		"	"	10 ^m	" (maxd approx 5' west in R.A. 3' south in dec)	wide streak
	W 2 51	43 10		7.3	F2	7 ^m	"	strange streak
	W 3 05	"		"	"	10 ^m	"	strange streak
	E 4 00	41° 19'				9 ^m	mf	E 5, 1/E, 6/B, 6/N, 7/B, 7/V, 5/E, 1/E
	E 3 35	39° 48'				5 ^m	mf	
	E 3 37	—				7 ^m	mf	
	E 3 23	—				10 ^m	mf	
	E 3 14	41 42				7 ^m	mf	field plotted
	E 3 01	"				10 ^m	mf	
	E 2 50	+41 18				8 ^m	mf	(lights from ^{range bridge} may cause fogging)
	E 2 32	+39 49				5 ^m	mf	
	W 1 04	+12 00		7.3	F3	7 ^m	mmi	strange pattern
	W 1 19			"	"	10 ^m	mmi	lock on plate holder loose - light m. base which in good

Newton (Contd)

233

Date 17/12 Aug 68
Wed Short

Observer Mimi, Mf, Mse Julian Day
Wed

Plate No.	Object	R.A. 1900 1965	Declination 1900 1965	Inst.	Emulsion	Sh Temp. FILTER	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Ang End
29527	NGC ^{m 15} 7078	21.28.4	+ 12 02	Newton	103a0	U	1 25 ⁵⁰	1 50 ⁵⁰	1	W 1 2
29528	NGC 7331	22 35 5	+ 34 15	"	103a0	B	2 04 ²⁰	2 14 ²⁰	2	W 1 8
29529	"	"	"	"	103a0	V	2 18 ¹⁵	2 33 ¹⁵	1	W 1 22
29530	M31 Area 5	0 43.3	+ 41 19	"	103a0	B	2 42 ³⁰	2 49 ³⁰	2	E 0 27
29531	M31 Area 1	0 36.7	+ 39 49	"	103a0	B	2 55 ¹⁵	3.00 ¹⁵	1	E 0 09
29532	M31 Area 5	0 43.3	+ 41 19	"	103a0	B	3:06 ⁰⁰	3:13 ⁰⁰	2	E 0 04
29533	"	"	"	"	103a0	B	3:25 ³⁰	3:32 ³⁰	1	W 0 16
29534	"	"	"	"	"	"	3:35 ¹⁵	3:42 ¹⁵	2	W 0 27
29535	M31 Field 1	0 36.7	+ 39 49	"	"	"	3:47 ¹⁰	3:52 ¹⁰	1	W 0 1
29536	M31 Field 5	0 43.3	+ 41 19	"	"	"	3:51 ²⁰	4.06 ²⁰	2	W 0 50
29537	"	"	"	"	"	"	4 07 ⁴⁵	4 11 ⁴⁵	1	W 0 18
29538	"	"	"	"	"	"	4 14 ⁰⁵	4 17 ⁰⁵	2	W 1 01

Dome Temp.

Focus

Dome Temp.

Transparency Conditions

234

ECHO 5-11, 3:55 EST

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Time Comp Exp	REMARKS	Quality
N 1	20	+12 00		7.3	F3	25 ^m	Mmm	good
N 1	06	+34 14		11.2	S6	10 ^m	Mmm	good
V 1	25	"		"	"	15 ^m	Mmm	streak
2 0	27	+41 19				7 ^m	Mf	
E 0	09					5 ^m	Mf. (Somed crossing with Mf.)	
E 0	04	+41 15				7 ^m	Mf	} (uncertain about field - it looks OK.)
W 0	16	+41 15				7 ^m	Mf.	
W 0	27	"				7 ^m	Mf.	
N 0	43					5 ^m	Mf	
N 0	50	"				7 ^m	Mf	
W 0	56	+41 16				4 ^m	Mf	
N 1	01	"				3 ^m	Mf	
							Closed up at 4 ^h 18 EST.	
							mm state developed together;	
							D. 4, 4 mm, 0.0°C	

235

THURS - FRI

Date Aug 18-19/66

Observer M. me, W. d., H. r. MF Julian Day

Plate No.	Object	R.A. 1900 1965	Declination 1900 1965	Inst.	Emulsion	FILTER 3M	Temp. X	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29539	M 15 NGC 7078	21 23.4	+12 02	NEWT.	103a0	B		01 57	02 04	1
29540	"	"	"	"	103a0	V		02 06 ⁴⁰	02 13 ⁴⁰	2
29541	"	"	"	"	103a0	U		02 17 ²⁰	02 47 ²⁰	1
29542	M 2 NGC 7087	21 31.7	-00 58	"	103a0	B		02 55 ⁵⁵	03 00 ⁵⁵	2
29543	"	"	"	"	103a0	V		03 02 ⁵⁵	03 07 ⁵⁵	1
29544	M 33	01 31.6	+30 28	"	103a0	B		03 18 ²⁰	03 23 ²⁰	2
29545	"	"	"	"	103a0	V		03 24 ⁵⁰	03 31 ⁵⁰	1
29546	M 31 Area 5	00 43.3	+4 19	"	103a0	B		03 36 ⁵⁰	03 41 ⁵⁰	2
29547	" " (1)	00 36.7	39 49	"	103a0	B		03 46 ³⁵	03 50 ³⁵	1
29548	"	"	"	"	103a0	B		03 51 ⁰⁵	03 55 ⁰⁵	2
29549	"	"	"	"	103a0	B		03 55 ²⁵	03 59 ²⁵	1
29550	"	"	"	"	103a0	B		03 59 ⁵⁰	04 03 ⁵⁰	2
29551	"	"	"	"	103a0	B		04 04 ³⁰	04 08 ³⁰	1
29552	"	"	"	"	103a0	B		04 08 ⁵⁰	04 12 ⁵⁰	2
29553	"	"	"	"	103a0	B		04 13 ¹⁰	04 17 ¹⁰	1
29554	"	"	"	"	103a0	B		04 17 ³⁵	04 20 ³⁵	2

Dome Temp. +65°

Transparency Conditions

Clearing at 01h 15

236

Focus

SOURCE OF FOCUSING BEHAVIOR (S.M.M.)

WINDY - 25 lb. wind.

Dome Temp.

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXP. Comp.	REMARKS	Quality
2	07 W	+12 00		7.3	F3	7 ^m	Focused on 50% line	
3	16 W	"		"	"	7 ^m	mf	
4	50 W	"		"	"	30 ^m	mf	
5	01 W	-00 59		7.3	F3	5 ^m	mf	
6	30 W	"		"	"	5 ^m	mf	
7	00 37 E					5 ^m	mf	
8	00 29 E	+30 27				7 ^m	mf	
9	00 28 W	41 19				4	mf	
10	00 45 W	—				4 ^m	mf	
11	00 50 W	—				4 ^m	mf	
12	00 54 W	—				4 ^m	mf - plate holder + 1; lock loose - came open plate may be fogged (but lights were off)	
13	00 58 W	—				4 ^m	mf	
14	01 03 W	—				4 ^m	mf	
15	01 07 W	—				4 ^m	mf	
16	01 12 W	—				4 ^m	mf	
17	01 15 W	—				3 ^m	mf	

Dome Temp.

Transparency Conditions

Focus

Please try to get NGC 617, as early as possible + 1st filter 9:40 EST
 RA $16^h 30^m.6$ $\delta = -12^{\circ} 59'$

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Time Comp.	REMARKS	Quality
W 01 20	+39 49				3m	mf. closed up - 4 26 EST. 4 m 14, D-19, 67°F	

239

Newtonian

(UAB)

Wd, Msc

Date

19-20 Aug 1966 - Fri/Sat

Observer

Marr, MS

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900		Inst.	Emulsion	FILTER		Starting Time E.S.T.	Ending Time E.S.T.	P.I.
							Slit	Temp.			
29556	NGC 6171	16 29.7	-12 57	NIENT	103a-D	NO	FILTER	20 39 ²⁰	20 46 ²⁰	1	
29557	NGC 6171	"	"	"	103a-D	B		20 49 ⁵⁵	20 56 ⁵⁵	2	
29558	NGC 6838	19 52.2	+18 42	"	103a-D	B		21 12 ³⁰	21 17 ³⁰	1	
29559	"	"	"	"	103a-D	V		21 19 ⁵⁰	21 24 ⁵⁰	2	
29560	"	"	"	"	103a-D	U		21 27 ²⁰	21 37 ²⁰	1	
29561	^{m13} NGC 6205	16 40.5	+36 31	"	103a-D	B		21 49 ²⁵	21 54 ²⁵	2	
29562	"	"	"	"	103a-D	V		21 56 ¹⁰	22 01 ¹⁰	1	
29563	AREAS m31	0 43.3	41 19	"	103a-D	B		22 14 ³⁰	22 19 ³⁰	2	
29564	"	"	"	"	"	"		22 20 ²⁵	22 25 ²⁵	1	
29565	"	"	"	"	"	"		22 25 ⁵⁰	22 30 ⁵⁰	2	
29566	"	"	"	"	"	"		22 31 ²⁰	22 36 ³⁰	1	
29567	"	"	"	"	"	"		22 30 ⁵⁰	22 42 ²⁰	2	
29568	"	"	"	"	"	"		22 42 ³⁵	22 47 ³⁵	1	
29569	"	"	"	"	"	"		22 47 ⁵⁵	22 52 ⁵⁵	2	
29570	"	"	"	"	"	"		22 53 ²⁵	22 58 ²⁵	1	
29571	"	"	"	"	"	"		22 59 ¹⁵	23 04 ¹⁵	2	

Dome Temp. 65°F

Transparency Conditions

please!
see note - previous page 240
(same place)

Focus

EXCELLENT

Dome Temp.

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Time Comp	REMARKS	Quality
40	W1 53					7 ^m	Focus 10ph	
55	U2 00	-12 59				7 ^m	CC (UB grinding) — <u>BROKEN!</u>	
56	U2 00	-12 59				7 ^m	mmme ← focus & sgc	
17	E1 00	+18 40		8.3	G2	5 ^m	"	
20	E0 53	"		"	"	5 ^m	"	
37	E0 41	"		"	"	10 ^m	"	
54	U2 49	36 31		6.8	F5	5 ^m	"	
01	U2 55	"		"	"	5 ^m	"	
27	E4 50	41 18				5 ^m	← WIRE PART - REQUESTED MT	
27	E4 44	"				"	"	
30	E4 39	"				"	"	
20	E4 33	"				"	"	
42	E4 27	"				5 ^m 25 ^s	"	
35	E4 22	"				5 ^m	"	
47	E4 17	"				"	"	
58	E4 11	"				"	"	
54	E4 05	"				"	"	

ECHO I (VARIABLE RESISTANCE) ACROSS
 MICHIGAN - 0045^m EST

241

Mant (Cont'd)

Date 19-20 Aug - Fri/Sat Observer Mme. M.S. Wald Julian Day 196.5

Plate No.	Object	R.A.		Declination		Inst.	Emulsion	FILTER		Starting Time E.S.T.	Ending Time E.S.T.	P.F.
		1900 1966.5		1900 1966.5				Slit	Temp.			
29572	AREA #5 M31	0	43.3	41	19	NEWT	103a0	B		23 04 ⁴⁰	23 09 ⁴⁰	1
29573	"	"	"	"	"	"	"	"		23 10 ⁰⁰	23 15 ⁰⁰	2
29574	"	"	"	"	"	"	"	"		23 15 ²⁵	23 20 ²⁵	1
29575	"	"	"	"	"	"	"	"		23 20 ⁴⁰	23 25 ⁴⁰	2
29576	M13 NGC 6205	16	40.5	36	31	"	103a0	B		23 44 ⁰⁰	23 47 ⁰⁰	1
29577	"	"	"	"	"	"	103aD	V		23 48 ⁴⁰	23 51 ⁴⁰	2
29578	"	"	"	"	"	"	103a0	U		23 53 ⁴⁰	00 03 ⁴⁵	1
29579	M92 NGC 6341	17	16.1	+43	11	"	103aD	V		00 11 ⁵⁰	00 18 ⁵⁰	2
29580	"	"	"	"	"	"	103a0	B		00 21 ⁰⁰	00 28 ⁰⁰	1
29581	"	"	"	"	"	"	103a0	U		00 30 ³⁵	00 50 ³⁵	2
29582	"	"	"	"	"	"	103a0	U		00 52 ⁴⁵	01 02 ⁴⁵	1
29583	"	"	"	"	"	"	103a0	B		01 04 ⁵⁰	01 07 ⁵⁰	2
29584	M15 NGC 7078	21	28.4	+12	02	"	103a0	B		01 22 ⁴⁰	01 25 ⁴⁰	1
29585	"	"	"	"	"	"	103a0	U		01 27 ¹⁵	01 37 ¹⁵	2
29586	"	"	"	"	"	"	103aD	V		01 38 ¹⁵	01 41 ¹⁵	1
29587	NGC 6828	19	52.2	+18	42	"	103a0	U		01 48 ³⁰	01 58 ³⁰	2

Dome Temp.

Focus

Dome Temp.

FRANK!
~~FRANK~~

Transparency Conditions ... Good! Excellent!

RA VARIABLE SPEED CONTROL IS NO LONGER
VARIABLE SPEED (find at max^m slowing rate)

Hour	Angle	Declination	Seeing	Ptg. Mag.	1st band	2nd band	REMARKS	Quality
E 4	00	41 18	-		5 ^m	m f		
E 3	55	"			"	"		
E 3	49	"			"	"		
E 3	44	41 19			"	"		
W 4	41			6.8	3^m	M me		
W 4	45	35 30			3 ^m			
W 4	58				10 ^m			
W 4	38	43° 11'		7.3	7 ^m	"		
W 4	46	"		"	7 ^m	"		
W 5	09	"		"	20 ^m	"		
W 5	21	"		"	10 ^m	"		
W 5	26	"		"	3 ^m	"		
W 1	32	+11 59		7.3	3 ^m	"	← FOCUS 3.09 $\alpha_{196} = 21^{\circ} 4.5'$ $\delta_{196} + 30^{\circ} 05.2'$	
W 1	43	"		"	10 ^m	"		
W 1	47	"		"	3 ^m	"		
W 3	41	+18 40		8.3 6.2	10 ^m	"		

newt (cont'd)

243

Date 20 Aug (Sat)

Observer Mrs. M. J. Wood Julian Day 181

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	FILTER		Starting Time E.S.T.	Ending Time E.S.T.	F
						Slit	Temp.			
29588	^{M 71} NGC 6838	19 52.2	+18 42	NEWT	103aD	B		1 59 ⁵⁰	2 02 ⁵⁰	1
29589	"	"	"	"	103aD	V		02 04 ⁰⁵	02 07 ⁰⁵	2
29590	^{M 31} Arct 5	0 43.3	41 19	"	102aD	B		02 14 ⁵⁰	02 19 ⁵⁰	1
29591	^{M 21} Arct 1	0 36.7	39 49	"	"	B		02 24 ²⁵	02 28 ²⁵	2
29592	"	"	"	"	"	"		02 28 ⁴⁵	02 32 ⁴⁰	1
29593	"	"	"	"	"	"		02 33 ⁰⁰	02 37 ⁰⁰	2
29594	"	"	"	"	"	"		02 37 ³⁵	02 42 ³⁵	1
29595	"	"	"	"	"	"		02 42 ²⁵	02 46 ²⁵	2
29596	"	"	"	"	"	"		02 47 ⁵⁵	02 51 ⁵⁵	1
29597	"	"	"	"	"	"		02 52 ²⁵	02 56 ²⁵	2
29598	"	"	"	"	"	"		02 58 ⁰⁰	03 02 ⁰⁰	1
29599	"	"	"	"	"	"		03 02 ²⁰	03 06 ²⁰	2
29600	"	"	"	"	"	"		03 07 ²⁰	03 11 ²⁰	1
29601	"	"	"	"	"	"		03 11 ⁴⁰	03 15 ⁴⁰	2
29602	"	"	"	"	"	"		03 17 ²⁰	03 21 ²⁰	1
29603	"	"	"	"	"	"		03 21 ⁴⁰	03 25 ⁴⁰	2

Dome Temp.

Transparency Conditions

EXCELLENT

244

Focus

02:30 - thin cirrus sun
most of the sky

Dome Temp.

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Time Sp.	Comp.	REMARKS	Quality
02	03	+18 40		P.3	3 ^m	M ni		
07	03	"		"	3 ^m	"		
	E 0	50			5 ^m	M f		
20	0	33E			4 ^m	"		
30	0	29E	"		1	"		
37	0	24E	"		"	"		
42	0	19E	"		4 1/2	"		
47	0	15E	"		4	"	some turned	
52	0	10E	"		"	"		
57	0	05E	"		"	"	prob. numbered as 596	
00	0	01W	"		"	"		
03	0	05W	"		"	"	prob. numbered as 600	
07	0	10W	"		"	"	numbered as 600A	
11	0	14W	"		"	"		
15	0	20W	"		"	"		
20	0	24W	"		"	"		

hute (cont'd)

245

Date 20 Aug (Sat)

Observer *By me, M.F. Wolf, Mrs* Julian Day

Plate No.	Object	R.A. 1900		Declination 1900		Inst.	Emulsion	FILTER		Starting Time E.S.T.	Ending Time E.S.T.	P.
								Stt	Temp.			
29604	AREA #1 M31	0	36.7	39	49	NEWT	10300		B	03 26 ²⁰	03 30 ³⁰	1
29605	"	"	"	"	"	"	"		"	03 31 ³⁰	03 35 ³⁰	2
29606	"	"	"	"	"	"	"		"	03 35 ⁵⁰	03 39 ⁵⁰	1
29607	AREA #1						10300		V			
29608	M31								V			
29607	"	"	"	"	"	"	10300?		B	03 59 ²⁵	04 04 ²⁵	1
29608	"	"	"	"	"	"	10800		B	04 06 ²⁰	04 10 ²⁰	2
29609	"	"	"	"	"	"	"		"	04 11 ¹⁰	04 15 ¹⁰	1
29610	"	"	"	"	"	"	"		"	04 15 ³⁵	04 18 ³⁵	2
29611	"	"	"	"	"	"	"		"	04 19 ²⁵	04 21 ²⁵	1

Dome Temp.

Transparency Conditions *Cirrus*

246

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	T Sp.	Comp.	REMARKS	Quality
00 29W				4 ^{min} 1/2	2.5		
00 34W				4	"		
00 38W				11	"		
01 03W				5	ci		
01 09W				5	ci		
01 03W				5 min	"		
01 09W				4 min	"		
01 14W				11	"		
01 17W				3 min	"		
01 20W	+37° 41'			2 min	"		
						all plates: <u>4 min</u> , D-19, 67°	
						Dave Seaman took over at 4:26 EST to convert back to Cassegrain.	

Dome Temp. 64°F

Focus 7.1

Dome Temp.

Transparency Conditions

Fair, cloud in south ²⁴⁸

2305; Echo (W→E) on zenith - sky deteriorating

2320 almost completely overcast.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					640		
00 52W	+35° 11'	0	624	B8	10/10/10	B8 - B9	850 / X strong
00 01E	-01 02	0	626	B8	10/10/10	B8 - B9 {time lost trying to find zone of he's stars - field wrong (2154)}	fine
Closed up 2340							
HAD NO TROUBLE TO FIND IT M.YSELF. SEE NEXT PAGE							
Re							

249

Date 22/20/66 1966

Observer ^{Eu} ^{Re} / ^{Re} ^{At} ^{Re} ^{At} 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.	Hour Angle
29614	15 Sgr	18 09.2	-20° 45	G40	II.Ob	13	62	2000	2010	C	001E
29615	do	"	"	"	"	"	"	2038	2043	B	0022W
29616	16 Sgr	18 09.3	-20° 25	"	"	"	—	2050	2105	A	0049W
29617	"	"	"	"	"	"	—	2105	2113	C	0052W
29618	BD +31° 4152	20 ^h 32.7	+32° 06	"	"	17	—	2130	0100	B	0115W
29619	BD 64° 1577	22 ^h 27.9	+59° 57	"	"	"	56	0108	0245	C	0130W
29620	BD +57° 22-	00 ^h 05.5	+58° 13	"	"	"	55	0251	0342	A	0133W
29621	BD +57° 19A	00 ^h 05.3	+56° 11	"	"	"	55	0347	0440	B	0134W
29621F	FOCUS TEST			"	"	13	54.5			C	

Dome Temp. 61°F

Focus 69 / 67 / 67

Dome Temp. 56

Transparency Conditions Cloudy! clear at 21^hExp when does NOT work at all!!!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0015 E	-20° 42'	0	5.45	BOIa	10/10/10	MK Sbd 10 ^m exposure bluish clouds	fine
0022 W	"	"	"	"	10/10/10	MK Sbd 5 ^m exposure " "	fine
0042 W	-20° 22'	0	6.02	O9II	10/10/10	MK Sbd 15 ^m exp SKY CLEARING	fine
0050 W	"	1	"	"	10/10/10	MK Sbd 8 ^m exp SKY CLEAR	fine
0215 W	+32° 22'	1	10.4	MOIa gM	10/10/10	Re "DUST" #135 3½ hr exposure	fine
0205 W	+65° 19'	1-2	9.7	B8	10/10/10	Re "DUST" #154 1½ hr exposure	fine
0123 W	+58° 35'	1-2	8.5	A	10/10/10	Re "DUST" #1a 50 min exposure	fine
0202 W	+58° 34'	0-1	(6.9)		10/10/10 30-30	Re "DUST" #1b some cloud ~ 0416 EST. P50 capped. Plate fogged by light? Focus 67	fine

251

Date 24-25 Aug 1966 - Wed/Thurs Observer msc Db - HB FN Julian Day 183

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
457-1	HR 6603		+4° 35'						20 05	
457-g	HR 8332								22 13	
29622	HD 172488	18 35.4	-8° 49'	640	IIaOb	17	59°F	23 03		A
29622	HD 1064	00 ^h 39.2 ^m	-10 07	640	IIaOb	17XL	56°F	02:25	02 31	A
29623	HD 1064	00^h 39.2^m	re Dist					02:59		B
29623	HD 16219	0 ^h 31.1 ^m	+39° 27'	640	IIaOb	17XL		03:08	03 20	B
29624	HD 19692	03 05.2	+11° 30'	"	"	17XL	56°F	03 28	03 35	C
29625	HD 2533	03 27.1	+09 02	"	"	"	56	03 40	03 44	B
29626	HD 23258	03 38.6	+20 37	"	"	"	"	03 53	03 59	A
29627	HD 24769	03 51.2	+22 54	"	"	"	"	04 02	04 09	B
29628	HD 25752	03 54.7	+36 44	"	"	"	"	04 14	04 20	A

Dome Temp. 57°FTransparency Conditions goodFocus 6822:30 clouds - temporarily close

Dome Temp.

23:00 partial clearing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 ^H 15W							
1 35 E						Clouded out	
7 7			03		08-08	clouded out	
						Closed up 11:32.	
00 13W	-9° 42'	0-	5.74	B9	15/30	B8-B9 focus 68 (clouds) used/used guiding	
	RA slipping badly - couldn't set telescope or keep star in visitor's eyepiece						
01 20E	+39 41	0	6.35	B8	10/10/10	B8-B9 (dte)	used/used
01 39E	+11 48	0	5.87	B9	10/10/10	B8-B9	used/35
01 51E	+9 17	0	5.59	B8	10/10/10	B8-B9	used/30
01 48E	+20 52	0+	6.01	B9	10/10/10	B8-B9	used/30
01 51E	+23 07	0+	5.96	B9	10/10/10	B8-B9	used/30
01 44E	+36 56	0+	6.31	B9	17/10/10	B8-B9	used/30
[Please note: This telescope needs an overhaul desperately. It is out of balance on RA for hours angle 2 ^h E with RA clipped and the worm and red constant connecting.] Hs							

Dome Temp. 57°F

Focus 68

Dome Temp.

Transparency Conditions

Good (almost photometric)

254

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 52 E	+42 06	0+	6.07	B8	1/10/	B8-B9	400 / 30 fine
01 57 E	+32 24	0+	6.17	B9	1/10/	B8-B9	450 / fine * light streak

255

Date 25/26 Aug Observer ^{Re} sd / Hf 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.
29631	BD 72° 1012	22 07.2	72° 24	G40	IIaOb	68	10°	23:58		B

Dome Temp

Focus ...

Dome Temp

Hour Angle

End

257

Date 26/27 Aug Observer Db / Jn / Wd Julian Day 205

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 Angle
29631	HD 165814	18 ^h 02 ^m 7	-25° 29'	640	Aa06	17	65	19 47	20 00	B	00 05
29632	HD 170177	18 23.0	-13 34	—	—	17	65	20 11	22 41	A	02 20
29633	HD 171305	18 29.0	-4° 53'	—	—	17	63	22 47	23 32	C	03 02
29634	HD 172527	18 35.6	-4 11	—	—	17	63	23 37	00 11	B	03 00
29635	+47° 4220	23 33.0	+47 57	—	—	17	62	00 51	01 51	B	0 17
29636	+57° 178	00 05.3	+58 11	—	—	17	60	02 15	02 45	A	0 30
29637	+57° 9	00 04.3	+58 07	—	—	17	—	02 54	03 47	B	1 02
29638	+64° 13	00 07.9	+65° 02'	—	—	17	60	03 52	04 44	C	2 15

Dome Temp. 6.7

Transparency Conditions

V. Good

Focus

70 = 170/69/

Gibbons hour at ~1930

Dome Temp.

seeing disc almost completely photometric; some intermittent clouds
inside slit

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 05W	-25°25'	0 ⁺	6.7	B8	10-10-10	B8-B9 star is double took brightest 800/60	
02 17W	-13°26'	1 ⁺	10.2	B0.5 Ia	10-10-10	Db-OB ² F. 16 chess 800/X	
03 02W	-4°45'	1	8.6	OB	10-10-10	Db-OB Programme* #3	
03 34W	-4°5' (-)	1	8.6	OB	10-10-10	Db-OB -#7	
0 17W	+48 19	2-3	9.8	B9	10-10-10	Re* 158 "Dust" (set on wood stage for 20 min) took new plate. field drawn. 700/100	
0 39W	+58 34	2-3	(8.9)	-	10-10-10	(Focus 69) Re dust 1c 800/90	
1 42W	+58 29	2-3	8.1	-	10-10-10	Re dust 1d i. (what is 431) 800/150	
2 35W	+65 21	1	10.9	B	10-10-10	Re dust #2, field plotted. 800/35 only had time for 3 counts before dawn came	
	cloud		04 46	EST			

(Re programme star
not in box??)

261

Date 28-29 August 1966 Observer Db Lee Ri 11r Julian Day 218
Sun - Moon

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 Angle End
296 ³⁹ 40	HD 149881	16 37.4	+14° 40'	G40	Daob	13	66°	20 55 ³⁶	21 50	A	22 2
296 ³⁹ 40 f	of sun test in in / out / out / out			G40	Daob	13	66° F			C	
296 ⁴⁰ 41	HD 172527	18 35.6	-4° 11'	-	"	17	65° F	22 15 ³⁶	23 27	C	23 50
								clouded in patten			
296 ⁴¹ 42	HD 194779	20 22.4	+41 01'	G40	Daob	17	65	00 08 ³⁶	00 43	A	01 30
296 ⁴² 43	+61° 2361	22 47.4	+61° 36'	G40	Daob	17		00 53 ²⁴	01 46	C	02 10
296 ⁴³ 44	64° 13	00 07.9	+65° 02'	G40	Daob	17		02 16 ²¹	04 38	F	05 10

Dome Temp.

Transparency Conditions

POOR - 3/10
cloud

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	(No BALA 1-900) 800 V	Quality
2 25	+14 35	0	6.6	B3.5 11	10-10- 30/30	PC Binary from 71	800/30	fine sl. dust
2 58W	-4° 3	0 ⁺ -0	8.6	DB	10-10-10	Db-OB Ref ¹⁷ interrupted by curse (closed plate)	800/30	weak
2 25 30	+11° 15	1	7.42	B3E	10-10-10	Mk standard	800V 800/25	weak
2 10 4W	+62° 00	1-2	9.9	B2	10-10-10	Re "Dust"	" 800/25	weak
2 27 W	65° 29'	2-3	10.7	B	10-10-10	Re "Dust"	700V 800/30?	weak

Dome Temp. 73Focus 72.5

Dome Temp.

Transparency Conditions HAZY SKY

VERY BRIGHT MOON (FULL)

264

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			6.2	B9		EXP. METER NOT BALANCING PROPERLY ON EITHER 900 V. OR 800 V. 80000 (TOP HUMID)	
3 05W	8 75	?	7.7	OB	10-10-	D6 OB #6 NO EXP. METER (FIGURED ON ABOUT 2 HOURS?) BUT TOO FAR WEST AT THE TIME	weak guiding
00 36W	56° 30'	2-3	5.79	B8IB	10/10/10	MK STD [- 2 mag. absorption] Known	fine guiding
00 47W	"	1-2	"	"	10/10/10	" Seeing very good Known	fine guiding
00 51W	"	"	"	"	10/10/10	" Known	fine guiding
00 06E	+42° 09'	2	3.6	B6	15/15'	Re Dust	strong
	+53 35'	2	(8.9)	-	10/1	Re Dust #10 Thick cloud developing CLOUDS	
01 10W	-07° 06'	1-2	6.28	B9	10/10/10	B8-B9	weak
00 06E	-09 42	1-2	5.74	B9	10/10/10	B8-B9	fine
02 01E	59° 40'	1-2	6.35	B8	10/10/10	B8-B9 (d+e) ~ 2 mag. absorption	fine
02 19E	+11 45	1	5.89	B9	10/10/10	B8-B9	fine
02 28E	+09 17	1-2	5.59	B8	10/10/10	B8-B9	guiding
00 58E	+31 37	1-2	7.5	K5	10/10/10	Re Dust #12	fine
1 13E	+22 10	2	5.9	B9	10/10/10	B8-B9 (d+e) focus 71	strong
			6.11	B8	11	B8-B9 (d+e) clouds	
						B8-B9	

Dome Temp. 70° F

Transparency Conditions VERY POOR

266

Focus 72

Dome Temp.

Thick Haze

2200 - Comets moving from SW

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00	39	$-8^{\circ} 42'$	0+	7.7	OB	10-10-10	Db-OB focus 72 #6	local
10	54	$31^{\circ} 22'$	0	6.5	B9	10-10-10	38-B9 main prog	line
20	20W	$-4^{\circ} 48'$		8.6	OB	10-10-	Db-OB #3	regular

Dome Temp. 69° (21st)

Focus $-1.5 = 72.$

Dome Temp.

Transparency Conditions V good - Plate in die

268

Full moon on East horizon
at start of observing
2nd half - some haze?

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Exp. Time	REMARKS	Quality
02 10W	$-13^{\circ} 28'$	0+	10.2	B ₀	10/10/02	31 ^m	Db-OB Programme #2 Note: Exp. Plate won't work even at 100/50 500V although seems balanced at 500V	
03 12W	$-7^{\circ} 22'$	1+	9.9	BII-2	10/10/10	24 ^m	Db-OB Prog #13	
							clouds 1:50 - 2:10 EST.	
							Generator began making an unusual noise. After turning it off it would not turn on again.	
							<u>FIXED - BLOWN FUSE - 30 x 1mm Buss.</u>	

269

Date 1-2 Sept/66 T. Bridges/Flux Observer DB - Wd ^{mse 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.H.
29660	HD 173010	18 38.1	-9° 26'	640	Taob	17	71°F	19 40 ⁸⁰	22 20	A
29661	BD -0 3584	18 48.4	-0° 41'	640	Taob	17	70°F	22 36 ⁴⁵	00 06	A
29662	HD 216529	22 49.4	+61 36	"	"	"	69°F	00 26 ³⁵	01 35	B

Dome Temp
Focus
Dome Temp

Hour Angle
End

Dome Temp. 72°

Transparency Conditions *thin haze*

270

Focus $74.4 - 1.5 = 72.9 - 72.0$

Ecl. 5-10-10 in East 2 1000 EST

Dome Temp. *full solar*

0125 CLOUDS

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS (reference notes)	Quality
02 04W	$-9^{\circ} 19'$	0.7	10.0	B2 Ia	10/10/10	2460 ¹⁹ D5-05 REFLECTOR DISTANCE	fine
03~0W	$-00^{\circ} 34'$	0-1	9.96	08	10/13/10	212 D6-08 REFLECTOR DISTANCE	weak
01 10W	$+62^{\circ} 03'$	0.1-2	10.03	B2 p	10-10-10	Cm - B2 EX. MTR 700V 2000/13 clouded over completely at 1:35 EST.	fine
<p>MAY WE PLEASE HAVE A <u>LONG</u> PENCIL FOR THE DOME?</p>							

271

Date 2-3 SEPTEMBER FRI/SAT Observer J. ai 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.F.	Hour Angle End
29663	HD 160346	17 ^h 34.3	+3°37'	G40	4a06	17	72°F	20:33 ⁴⁵	22:03 ⁴⁵	B	02:55
29664	HD 174853	18 ^h 47.5	+13°51'	"	"	17	70°F	22:08 ³	22:14	C	01:53
29665	HD 178065	19 02.1	+00°30'	"	"	17K	70°F	22:23 - 22:35 and 22:58 - 23:05	23:05	A	02:11
29666	HD 176318	18 54.6	+38°07'	"	"	"	68°	23:14	23:32	B	02:50
29666.T	Calibration Strip Wedge for plates 29663-66										

Dome Temp. 70

Focus 73 / 72

Dome Temp.

Transparency Conditions

VERY HUMID
Poor - Mostly cloudy

Clear 2145
Cloudy 2230
Clear 2255

METER BALANCES 800V
2200 EST
Overcast 2330

272

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 ^h 55 ^m W	+3°37'	0	7.56	dK3	10-10-10	GH-MK PROGRAM EXPOSURE METER WILL NOT BALANCE AT 900, 800, 700 VOLTS. BALANCES AT 600 VOLTS, BUT WON'T COUNT.	fine
01 ^m 53 ^s W	+13°59'	0	6.1	B9	10-10-10	B8-B9 SB Focus 70 800V - 400/13	fine
02 ^m 29 ^s W	+00°37'	"	6.42	B9	10-10-10	" " capped 22:35-22:58 clouds delay start 800V - 800/35	fine
02 ^h 53 ^m W	+38°15'	00	5.7	B8	10-10-	" " capped 23:02 because of cloud " 800/17	fine
Clouded up 23:30							

273

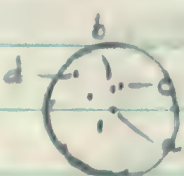
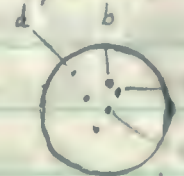
Date 4-5 SEPTEMBER SUN/MON Observer Qi Julian Day (4n)

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29667	HD 192659	20 ^h 10.9	+41° 48'	G40	Ilcob	17XL	62°	01:07	01:16	A
29668	HD 199892	20 ^h 54.9	+41° 33'	"	"	"		01:22	01:27	C
29669	HD 219749	23 ^h 13.2	+44° 57'	"	"	"		01:33	01:38	A
29670	HD 225289	23 ^h 59.9	+60° 46'	"	"	"	60°	01:48	01:51	B
29671	BD +57° 19B	00 ^h 05.3	+58° 11'	"	"	17	60°	02:09	04:38	C
29672	HD 23363	03 ^h 39.7	+55° 37'	"	"	17XL	56°	04:46	04:53	A
29673	HD 23324	03 ^h 39.2	+24° 32'	"	"	"	"	04:58	05:03	B
29676	Focus Test			"	"	13	55°			C

Dome Temp. 62°
 Focus 67.5 / 68.5 / 67.3
 Dome Temp. 56°

Transparency Conditions *Cloudy / Clear after 01:30*

274

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03 41 W	+42° 04'	00	6.37	B8	10-10-10	B8-B9 SB (CLOSE BINARY) (FAINT COMPANION) VOLTAGE 900	800/50
03 07 W	+41° 52'	"	6.0	B9	10-10-10	B8-B9 SB	800/50
01 00 W	+45° 20'	"	6.30	B9p	10-10-10	"	"
00:26 W	+61° 10'	"	5.9	B9	10-10-10	" (VISUAL BINARY) (d & e)	"
03:07 W	+58° 33'	"	(B.9)	-	10-10-10	Re "DIST" PROGRAM ≠ 1c, Focus 68.9	"
<p>Note relation of program stars 1b and 1c are different from finder field as drawn in program -</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Finder field as in program</p> </div> <div style="text-align: center;">  <p>Finder field as observed</p> </div> </div> <p>ie 1c is taken as the star at the obtuse vertex of the small triangle, and is perhaps the slightly fainter component.</p>							
01:11 E?	+55° 50'	0	6.02	B9	10-10-10	FOCUS 67.3 B8-B9 SB	"
00:02 E	+24° 48'	0	5.6	B8	10-10-10 G10 FILTER 5-5	Focus 67.3	"

Little rechargeable flashlight is getting rather spastic !!!

275

Date 5-16 September Mon/Tue Observer F. N. Ai. Cr 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.
29674	HR 7239=HD 177817	19 ^h 01.1	-16° 23'	G40	IIaOb	17XL	62°	20:30	20:40	A
29674 A	HD 176077	18 ^h 53.4	-7° 29'	G40	IIaOb	17	60°	20:50	21:15	B
29675	HD 186547	19 ^h 40.0	+13 03	G40	IIaOb	17XL	60°	21:25	21:33	C
29676	HD 180553	19 ^h 11.9	+27 17	G40	IIaOb	17XL		21:47	21:53	A
29677	HD 196504	20 32.8	+26 07	G40	IIaOb	17XL	58°	22:08	22:12	B
29678	HD 197226	20 37.3	+38 43	"	"	"		22:20	22:30	C
29679	HD 192276	20 09.0	+47 26	"	"	"		22:47	23:04	A
29680	HD 192659	20 10.9	+41 48	"	"	"	56°	23:10	23:17	B
29681	HD 199892	20 54.9	+41 33	"	"	"		23:22	23:27	C
29682	HD 198513	20 45.7	+51 32	"	"	"		23:31	23:36	A
29683	HD 193964	20 18 0	+61 56	"	"	"		23:41	23:44	B
29684	HD 219749	23 ^h 13.2	+44 57	"	"	"		23:51	23:59	C
29685	HD 209819	22 01.0	-14° 21'	"	"	"		00:06	00:07	A
29686	"	"	"	"	"	"		00:09	00:15	B
29687	HD 223311	23 43.4	-06° 56'	"	"	"	55°	00:20	00 40	A
29688	HD 216229	22 49.4	+61 36	G40	IIaOb	17		00 47	02 07	B

Dome Temp.

Focus 69

Dome Temp.

Hour Angle
End

00 16W

00 58W

00:31W

00:20W

00 18 W

00 30 W

00 51 W

00 51 W

00 51 W

00 51 W

00 51 W

00 35 E

00 51 W

00 51 W

00 51 W

00 51 W

Dome Temp. 61°

Focus 69/68/67

Dome Temp.

Transparency Conditions *Some cloud*

occasional l. cloud, northern light still fairly strong.

276

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 16W	-16° 14'	0	5.88	B8	10-20	B8-B9 MAIN PROGRAM 90 VOLTS 800/62	
00 58W	-17° 20'	0	9.9	B1 Ia	10-20	EXPOSURE STOPPED - CLOUDS BETWEEN ANY CHANGE OF PLATE PLACED IMMEDIATELY - FINISHING THIS EXPOSURE - "EXPOSED" BOX.	
00:31W	+13° 16'	0	6.07	B8	10-10-10	B8-B9 SB (dte) 800/60	
1:23W	27° 26'	0	6.2	B9	10-10-10	B8-B9 SB CLOUDS DELAY START 800/60	
00 18 ^m W	26° 21'	0	5.50	B9	10-10-10	B8-B9 MAIN PROGRAM FOCUS 68 800/60	
0 32 W	39° 00'		6.42	B9	10-10-10	" " " "	
1 ^h 35 ^m W	47° 40'	0	6.6	B8	10-10-10	B8-B9 SB (CLOUDS DELAY START) "	
1 ^h 45 ^m W	42° 01'		6.37	B8	10-10-10	" " FOCUS 67 "	
1 ^h 11 ^m W	+41° 50'		6.0	B9	10-10-10	" " " "	
1 ^h 36 ^m W	+51° 50'		6.26	B9	10-10-10	B8-B9 MAIN PROGRAM "	
2 ^h 07 ^m W	62° 13'		5.6	B9	10-10-10	B8-B9 SB (dte) "	
00 35E	+45° 12'		6.30	B9p	10-10-10	B8-B9 SB "	
00 45W	-11° 00'		4.3	B8	10-20	B8-B9 SB (dte) "	
00 50W	"		4.3	B8	15-15	B8-B9 SB (dte) 400/30	
00 25E	-07° 31'	0-1	6.3	gK4	10-10-10	STD. VRL. STAR. 800/100	
01 47W	181 59	1	10.03	F2pe	10-10-10	C. Be. 400/50	

Dome Temp.

Transparency Conditions

Focus

02:40 clouds over present.

Dome Temp.

03 completely overcast.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 18 E	+60 55	1	9.61	FF(he	10-20	02:40 2 clouds, 02:47 sub (cloud field stars) 500/32	lunch
05 30 E	+55 07	1	8.20	B2(2-2)	10-10-10	500/50	fine
00 41 W	+57 30	1	9.02	Bos: Pipe	10-10-10	500/50	fine

Done Earlam: Need some files for dome. ✓

Dome Temp. 59°F

Focus 67 1/2

Dome Temp.

NOTE: ON SEPT 4-5 EX MTR ZERO WAS AT .4 OF FULL SCALE. IT WAS RESET TO
 ~.1 BECAUSE AT THE TIME OF Transparency Conditions some clouds at sunset 280
 SETTING IT HAD NOT COMPLETELY
 WARNED UP. TONIGHT IT WAS AT .075 AFTER leaving 19:45; photometric
 BEING ON FOR 1 HOUR IT WAS RESET TO ZERO. loads 2100 photometric 2300
 BEFORE THE ZERO WAS RESET 40 COUNTS ON THE METER
 = 32 TRUE COUNTS (ON SEPT 4-5) [ZERO SHOULD BE SET WITH THE METER ON THE DESK]

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	EXP. MTR. BALANCE	Quality
150	2	04 -9° 18'	0-1	10.0	B0.2	10-10-10	DB OB # 9 FIELD DRAWN SOME CLOUDS DURING EVENING focus 67 1/2	900V 800/60	fine
36	01	59 41 55	1	5.17	G IV	30	GH *	200/25	fine
13	01	05 46 23	1	5.45	F 2 1/2	30	GH PLATE EDGED??	200/25	fine
46	00	30 -01° 01'	1	6.26	B 8	10-10-10	B 8-139 This plate was left in the plateholder.	800/60	fine

04:15 Completely cloudy.

* HD 18512 appears much brighter than
 HD 18572, if stars are correct

285

Date Sept 9/10Observer MS / Pe

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.F.
462-1	HR 7178								19 30	
462-10	NGC 6712								22 03	
29696	+61° 236f	22 49.4	+67° 36	G40	IIaOb	17	61	23 42	00 50	A
29697	+41° 466A	22 57.3	+41° 47	G40	IIaOb	17		00 54	00 56	B
29698	+65° 230	02 42.8	+67° 25	G40	IIaOb	17		01 10	01 43	C
29699	+61° 570	03 16.0	+61° 11'	"	"	"		01 48	02 38	A
29700	+30° 540	03 19.6	+30° 34	G40	IIaOb	17		02 44	03 26	B
29701	+29° 565	03 22.1	+29° 25	G40	IIaOb	17		03 28	04 06	C
29702	+30° 549	03 23.2	+31° 04	G40	IIaOb	17		04 10	04 50	A
29702F		Focus Test	out out		5/5					L

Dome Temp. 61° Focus 67 Dome Temp. 60°

Transparency Conditions

None at first during

10:30 pm cirrus

286

photometric after 0200

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							Cirrus	
00	55W	+61 58	2	3.9	B2	10/10/10	^{4 clow antipair.} Fine Dust #155 Focus 67	800/40
00	53W	+42 09	1-2	3.6	B6	15/15	Re "DUST" #156	200/10
02	13E	+67° 36'	2	(8.5)	A0	10/10/10	Re "Dust" # 8	800/40
01	45E	+61° 19'	1-2	8.4	B5	10/10/10	Re "DUST" # 11 out. dble.	800/40
01	02E	+36° 50'	2-3	(8.8)	—	10/10/10	Re "DUST" # 13 looks blue (REALLY small seeing!!)	400/40
00	23E	+29° 43'	3	(9.1)	—	10/10/10	Re "DUST" # 16 looks yellow	800/50
00	23W	+31° 20'	3-2	(9.5)	B8p	10/20	Re "DUST" # 17 Field drawn	300/28
							DAWN	
							CLOSE UP 0508	

Dome Temp. 64°F

Focus 71/59

Dome Temp.

Transparency Conditions

288
Good - few scattered cloud patches
(Some haze)
by 2.4-2.5 at 2300 some high cloud

2345 - clouds - 0
0145 - " - 0

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 14 W	-66° 00'	~2	10.6	(B)	10/21/10	* SEE FIELD for iden (146a or 146b) Re Dust #146a clamped to base because telescope not stable	255/45
02 15 E	+60 54	2	9.61	(B)	10/10/10	Can Be Focus 69 field check	255/30
						cloud up 02:30	

Dome Temp. 55°

Transparency Conditions Very Good

Focus

Dome Temp.

g Time
ST.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		8					
		8					

33

5

291

Date Mon/Tues Sept 12/13 Observer Muse JB / G. Pi 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
29705	δ Aql (186791) ^{HD}	19 41.5	+10° 22'	G10	IIaD	9, X Long	62	19 ^h 24 ^m 20 ^s	20 04	C
29706	β Gph (HD 161096)	17 38.8	+4° 37'	G10	"	9 X Long	60	20 15 ³²	21 27	C
29707	ρ Aqr (HD 204867)	21 26.3	-6° 01'	G10	"	"	"	21 35 ⁴²	22 59	C
29708	ϵ Peg (HD 206778)	21 39.3	+9° 25'	G10	"	"	"	23 08 ²¹	23 55	C
29709	β Peg	22 58.9	+27 32'	G10	"	"	56°F	00 00 ⁴²	00 44	B
29710	λ Psc	23 34.8	+5° 05'	G10	"	"	56°F	00 48	02 20	C
	γ Cas	00 54.3	+60 30'	G10						

Dome Temp.

Focus

Dome Temp.

Hour Angle
End

32E

54W

30

20W

51W

22W

Dome Temp. 61°

Focus

Dome Temp.

Transparency Conditions

02^h l. cloud from S.Light carries over To at start 292
+ very where on horizon

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04 0 32E	+10° 26	0-1	4.15	K3 II	10-10-10	STD. U.F.C. Prag. G10 <u>DEVELOPED</u> 2x10/100	(OK?) fine
27 2 54W	+ 4° 37	0-1 → 0	3.93	K2 III	10-10-10	G10 STD VEL Prag. 2x10/100	fine
59 0 39	-5° 42	0	3.73	G0 II b	10-10-10	"	fine
15 01 20W	9° 45	1	3.98	K2 II b	10-10-10	" PLEASE CHECK 1968 RA. 2x10/100	fine
3 00 51 W	+27° 56'	2	4.17	M2 II b	10-10-10	Hx special star 2x10/120	fine
0 1 52 W	+05 30	1	4.64	F7 V	10-10-10	C-10 Std Vel 02 ^h clouds. 2x10/45 60	fine
				20 BOV. pr	G10		
						cloud up 02:30	

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Date 13.14 Sept / Tues. Wed. Observer (Ea) (Hm) (Hm) Wed. H/6 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 Angle End
29711	HD 186791 & Adj.	19 41.5	+10 22	G10	SPOTTED KOD	9		19 14	20 16	C	EC 1
29712	HD 186791	19 41.9	+27 45	G10	KOD	9	65°			B	
29711 F	from test in in part of			G10	KOD	9				B	
29712	HD 204867 B Adj	21 26.3	-6 01	G10	KOD	9	-	21 50	23 26	C	W 1 0
29713	2 Cap	20 43.3	+61 27	G10	KOD	9	-	23 33	00 34	B	W 2 55
29714	2 Cap	23 35.2	+77 04	G10	KOD	9		00 39	01 58	C	W 3 22
29715	HD 27712 2 Cap	00 34.8	+55 59	G10	KOD	9		02 02	02 33		W 4 10
29716	HD 6580 B Adj	01 04.1	+35 05	G10	KOD	9		02 36	03 08	C	W 5 00
29717	HD 11919 2 Adj	02 01.5	+22 54	"	"	"		03 12.5	03 46	V	W 5 50
29718	HD 20092 Per	03 17.2	+49 30	"	"	"		03 50	04 09	C	W 6 30
29719	HD 29139 2 Tam	04 30.2	+16 18	"	"	"		04 14	04 26	V	W 7 00
29720	HD 31397 2 Adj	04 50.5	+35 00	"	"	"		04 30	05 06		W 7 30

Dome Temp. 67°F

Transparency Conditions *very hazy by ≈ .8 2000*

Focus

hazy by ≈ .3 → .6 → .3 0000

Dome Temp.

0400 - very good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 15	+10° 35'	1-2	4.15	K3II	10-10-10	Std. Vel. 200 VOLTS	Weak
			3.42	G5II		4x10/200 4x10/200 An special star (9000) 2x10/80	not to credit
						30/30 complete success	
						2200 clear again	
01 09	-5° 41'	0	3.73	G0IA	10-10-10	Std. Vel. 900 V	Weak
01 25	+61° 44'	1-2	4.33	K0TV	10-10-10	Auto guider or Tele. drifts west 2x10/50	fine
01 33	+77° 28'	1-2	4.22	K1IV	10-10-10	Guided by hand 2x10/100	fine
01 12 W	+56° 21'	1-2	3.34	K0II	10-10-10	Std Vel. 20/100	fine
01 14 W	+35° 28'	2	3.59	M0III	10/10/10	An special star 20/100	fine
00 55 W	+23° 19'	1-2	3.15	K2II	10/10/10	Std Vel - 20/100	fine
00 01 W	+49° 45'	1	2.27	F5Ib	10/10/10	Std. Vel. 20/100	strong
00 50 E	+16 29	1	2.50	K5II	10/10/10	Std. Vel. 20/100	fine
00 34 E	+33 09	1	4.13	K1II	10/10/10	An special star 20/100	fine

295640 Aluminum base plate removed and replaced with a cast-iron one
 Also a new ^{Bausch & Lomb} 240 grating was installed. The new grating is 0.014 inches thicker
 Date Sept. 14, 1966 Observer C. L. Mc 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.
29720	F ₁		In-Dn/Out- <u>out</u>	640	IIaD	13	65°F			C
	F ₂		"	"	IIaD	13				A
	F ₃		"	"	IIaD	13				B
	F ₄		"							
	F ₅		"				64°F			C
				Sept 15						
Sept 15	F ₆		In-Dn/Out- <u>out</u>	640	IIaD	13	58°F			
			Full Aperture	"	"	"	51°F			
	T ₇		Focus test		IIaD	13	50°F			A
			Full Aperture							
	T ₈		Focus test		IIaD	13				B
			Full Aperture							
	T ₉		Focus test		IIaD	13				C
			Full Aperture							
	T ₁₀		Full Aperture		IIaD	13	51°			
			Full Aperture		IIaD	13	51°			
	T ₁₁		Full Aperture		IIaD	13	51°			A

Dome Temp.

Transparency Conditions

Focus

Dome Temp.

Hour End	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						6/20/11		
Focus	70					3/3	(~ 3 min 2-19)	beatty c to west.
Focus	80					5/5	"	c to R OK at 4:00
focus	45					5/5	"	c to red at 3:40
focus	46					5/5	removed N screw out 1/2 rev. S screw in 1/2 rev.	O.K.
focus	46.5					3/3	} on same plate, turned end for end.	
focus	46.5					2 ^s		
Focus	41.0					4 ^s /4 ^s		c to red post lines!
"						2 ^s		
Focus	43.0					4/4 ^s		slc to red
						2 ^s		lines OK
Focus	45.0					4 ^s /4 ^s		slc to red
						2 ^s		
Focus	45.5					2 ^s	#10 - The one with the # on the red end is focus 45.5	
	46.0					2 ^s		
Focus	46.0					2 ^s	#11 - The one with # on red end is focus 46.0	
Focus	46.5					2 ^s		

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Date..... Observer..... 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.
	3m 27	2-2	1-0-0-0		DuOb	13	12°F			
	3m 28	2-0-0	1-0-0-0		DuOb					

Dome Tem

Focus

Dome Tem

Hour Angle

End

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Date Sept 15/16 Shure Observer H. V. B. R., Sd Julian Day

Plate No.	Object	R.A. 1900 1925	Declination 1900 1945	Inst.	Emulsion	FILTER R	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
29721	N6C6910	20 21.8	+40° 21'	NEWT	103a D	Y		20:25:42	20:30:42	1	E 0° 30'
29722	"	"	"	"	103a O	B		20:38 ³⁷	20:45 ³⁷	2	E 0° 15'
29723	"	"	"	"	103a O	U		20:50:38	21:05:38	1	E 0° 00'
29724	V3 Field A	0 ^h 42 ^m 34 ^s	+41° 15' 4"	"	103a O	B		21:28:32	21:33:32	2	E 0° 45'
29725	"	"	"	"	103a O	B		21:36:05	21:41:05	1	E 3° 10'
29726	"	"	"	"	103a D	Y		21:45:00	21:52:00	2	E 3° 30'
29727	"	"	"	"	103a O	U		21:56:00	22:11:00	1	E 3° 10'
29728	"	"	"	"	103a O	B		22:14:55	22:19:55	2	E 3° 10'
29729	V4 Field B	0 ^h 36 ^m 7 ^s	+39° 49'	"	103a O	B		22:27:22	22:32:22	1	E 2° 44'
29730	V3 Field A	0 ^h 42 ^m 34 ^s	+41° 15'	"	103a O	B		22:39:43	22:44:43	2	E 3° 36'
29731	Field C	0 ^h 38.9	+40° 25'	"	103a O	B		22:51:21	22:56:21	1	E 2° 20'
29732	V3 Field A	0 ^h 42 ^m 34 ^s	+41° 15' 4"	"	103a O	B		23:00:27	23:05:27	2	E 3° 10'
29733	V4 Field B	0 ^h 36 ^m 7 ^s	+39° 49'	"	103a O	U		23:10:11	23:25:11	1	E 1° 50'
29734	V3 Field A	0 ^h 42 ^m 34 ^s	+41° 15' 4"	"	103a O	B		23:32:19	23:37:19	2	E 3° 45'
29735	Field C	0 ^h 38.9	+40° 25'	"	103a O	U		23:51:40	00:06:40	1	E 3° 10'
29736	V3 Field A	0 ^h 42 ^m 34 ^s	+41° 15'	"	103a O	B		00:17:00	00:22:00	2	E 3° 10'

Dome Temp. 50
 Focus
 Dome Temp.

Transparency Conditions Very Good

Log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXP. Comp.	REMARKS	Quality
04:42	E 0 ^m 30 ^s	40°43'		7.7		5m.	} DEVELOPED: D-19, 4 min, 67°F (in sec) Sd Guiding	
	E 0 ^m 15 ^s	40°43'		"		7m		
5:38	E 0 ^m 05 ^s	40°43'		"		15m		
3:32	E 3 ^m 48 ^s	41°14'				5m	vd B "	
4:55	E 3 ^m 40 ^s	41°14'				5m	"	
5:00	E 3 ^m 30 ^s	41°14'				7m	"	
7:10	E 3 ^m 10 ^s	41°14'				15m	"	
8:55	E 3 ^m 10 ^s	41°14'				5m	"	
32:28	E 2 ^m 44 ^s	39°49'				5m		
44:43	E 2 ^m 36 ^s	41°14'				5m		
56:21	E 2 ^m 21 ^s	40°23'				5m		
05:37	E 2 ^m 16 ^s	41°14'				5m		
25:11	E 1 ^m 50 ^s	39°50'				15m		
37:19	E 1 ^m 45 ^s	41°14'				5m		
56:11	F 1 ^m 10 ^s					15m		
2:00	C 100 E					5		

Thursday - Friday

Date Sept. 15/16/66 Contd. Observer vd B., Hr., Ri., Mm. Julian Day

Plate No.	Object	R.A. 1950 1966	Declination 1950 1966	Inst.	Emulsion	FILTER 54	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29737	V4 Field B	00 36.7	+39 49	NEWT	103aD	Y		00 40 ⁵⁰	00 47 ⁵⁰	1
29738	V3 " A	00 42 34	+41°15'	"	103aO	B		00 55 ²⁸	01 00 ²⁸	2
29739	V4 Field B	00 36.7	+39°49'	"	103aO	B		01 10 ¹⁹	01 15 ¹⁹	1
29740	V3 " A	00 42 34	41°15'	"	103aO	B		01 24 ²⁹	01 29 ²⁹	2
29741	V3 " A	"	"	"	103aO	B		01 46 ⁴¹	01 51 ⁴¹	1
29742	V4 " B	00 36.7	39 49	"	103aO	B		01 59 ²⁵	02 04 ²⁵	2
29743	V3 " A	00 42 34	41°15'	"	103aO	B		02 15 ⁰⁰	02 20 ⁰⁰	1
29744	" C	00 38.9	+40 25	"	103aD	Y		02 30 ¹⁰	02 37 ¹⁰	2
29745	V3 " A	00 42 34	41° 15'	"	103aO	B		02 46 ⁴⁸	02 51 ⁴⁸	1
29746	" " A	" " "	" "	"	103aO	B		02 57 ¹³	03 02 ¹³	2
29747	V4 " B	00 36.7	39 49	"	103aO	B		03 09 ⁴⁰	03 14 ⁴⁰	1
29748	V3 " A	00 42.6	41 15	"	103aO	B		03 22 ¹⁴	03 27 ¹⁴	2
29749	" " "	"	"	"	103aO	B		03 31 ⁰⁰	03 36 ⁰⁰	1
29750	" " "	"	"	"	103aO	B		03 42 ¹⁸	03 47 ¹⁸	2

Dome Temp. 48°Transparency Conditions very good

Focus

Dome Temp.

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Exp. Camp.	REMARKS	Quality
00	23 E					7 ^m	Focus Very Good.	
00	20 E					5 ^m		
00	00					5 ^m		
00	07 W					5 ^m	few thin clouds through the field	
00	30 W					5 ^m		
00	50 W					5 ^m		
00	57 W					5 ^m		
01	20 W					7 ^m		
01	29 W					5 ^m		
01	40 W					5 ^m		
01	200 W					5 ^m	HA may be incorrect	
02	06 W					5 ^m		
02	15 W					5 ^m		
02	26 W					5 ^m	δ clump stuck!	

303 necessary to re-align finder after replacing caps. secondary - took 1/2 hr.

Date Sept 16/17 Fri. 5:28 Observer m se / Re Julian Day (52)
26

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29751	H2170177	18 23.0	-13 34	G40	Ilford	17	58°F	19 50	21 47	A
29752	+72° 1018	22 07.2	+72 24	G40	" "	17	55	22 05	00 00	C
29753	+37° 79A	03 ^h 29.1	+37° 40	"	"	"		00 15	00 30	B
29754	do	—	—	—	—	—		00 32	00 46	A
29755	+23° 642	04 ^h 06.5	+23° 20	—	—	—		01 00	01 25	C
29756	+9° 549	04 ^h 08.1	+9° 58'	—	—	—		01 30	01 34	B
29757	↑ Tauri	04 ^h 16.2	+19° 18'	—	—	—		01 40	04 00	A
29758	+29° 741	04 ^h 12.0	+29° 37'	—	—	—		04 04	04 10	B
29759	+12° 754	05 ^h 09.3	+12° 54	—	—	—		04 15	04 50	C
29760	+13° 852	05 ^h 12.4	+13° 18'	—	—	—		04 51	05 11	A
29760F	5/5	G10 Filter		Temp.			52			
* T TAURI	was measured photographically at B=11.5 on Sept 11/66 (Re) 52°F									

Dome Temp. 58°

Focus 4.5:5

Dome Temp.

Transparency Conditions very good - photometric

thin cloud from 0100 on.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2h 45W	-13° 29'	0-1†	10.2	B0.5 Ia	10-10/10	D6-08 #2	weak
01h 17W	72 44	1†	10.5	(G)	10-10/10	Re 'Eust Programme #149) / 800/50? HD 17257, D6 #7 (not found in finder field??) m=8.6	fine
03 33 E	+37° 55	1	7.6	A0	10/10/10	Re DUST # 18 800/40	fine
03 20 E	—	0-1	—	—	10/10/0	do # 18 600/30 hand guided	fine
03 20 E	+27° 30'	1-2	8.3	G5	10/10/10	Re DUST # 25 800/60 auto guided	fine
03 12 E	+10° 07'	1-2	6.25	B8	15/15	Re DUST # 26 800/30 hand-guided	fine
00 52 E	+19° 28'	1-2	9.5*	G5e	10/10/10	Re DUST # 28 looks quite faint tonight! 800/60 LST = 0200 011205 seen 2.5" with horns!	fine
01 10 E	+29° 44'	1-2	7.5	B9	10/10/10	Re DUST # 29 800/35	fine
00 58 E	+12° 58'	1-2	(8.5)	G5	10/10/10	Re DUST # 35 800/50 (PLATE NUMBER 65)	fine
00 37 E	+13° 28	1-0	(7.9)	G1.5	10/10/10	Re DUST # 37 600/35 S14 has 5" diameter since 04 5:0.	fine
						0530 Close up.	fine
Temp dropped quickly in last hour of night.							

Visitors #200 Alberio. < 0848 DST a Very bright fireball in N.W. Trail reported visible for 1/2 hr !!

305

Date Sept 17/18 Sat/Sun Observer Hb / Re / Wd 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.
29761	HD 196712	20 34.0	-02 46	640	Ilab	17	61°F	21 36	21 41 1/2	C
29762	BD +65° 1637	21 40.4	+65° 39	"	"	"	—	22 05	00.00	A
29763	HD 192422	20 09.7	+38 28	"	"	13	—	00 09	00:14	B
29764	"	"	"	"	"	"	—	00:15	00:19	C
29765	" P Cgg	20 14.1	+37. 43	"	"	"	—	00:22	—	A
29766	35 Cgg	20 14.8	+34° 40'	"	"	"	—	00:26	—	B
29767	"	"	"	"	"	"	—	00:30	—	C
29768	8 Cgg	20 18.6	+39 56	"	"	"	—	00:34	—	A
29769	"	"	"	"	"	"	—	00:37	—	B
29770	HD 194837	"	"	"	"	"	—	00:40	—	M
29770	41 Cgg	20 25.3	+30 02	"	"	"	—	00:50	—	C
29771	44 Cgg	20 27.2	+36 36	"	"	"	—	00:53	00.59	F
29772	"	"	"	"	"	"	—	01:00	01.07	A
29773	HD 195532	20 27.2	+43 59	"	"	"	—	01:09	01:14	K
29774	"	"	"	"	"	"	—	01:16	01:20	A
29775	6 Cgg	20 42.2	+33 36	"	"	"	—	01:24	—	B

Dome Temp. 61°F

Transparency Conditions *fair*

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 38W	-02° 30'	0-1	6.24	B9	10/10	B8/B9 (d+e) 450/40	starry
01 40W	+65° 59'	1-2	10.6	(B)	10/10	Reidust #146 a 800/30	fine
03 39W	+38° 25'		6.9	B0.5 Ib	5	MK Standards. 1/2 Normal G10 filter 400/15	fine
03 44W			"	"	5	1/4 Normal 400/8	fine
03 43U			5.3	Bp	"	1/2 " 400/15	fine
03 46W			5.22	F5 Ib	"	1/2 " 400/25	fine
03 50W			"	"	"	1/4 " 400/12	fine
03 50U			2.88	F8 Ib	"	1/2 " 400/25	starry
03 53U			"	"	"	1/4 " 400/12	starry
03 54W			7.21	B0.5 Ia	"	1/2 " 400/25	starry
03 54W			4.43	F5 II	"	1/2 " 400/25	starry
04 06W			6.17	F5 Ib	"	1/2 " 400/25	fine
04 14W			"	"	"	1/4 " 400/12	fine
04 21W			6.9	O9.5 Ia	"	uncertain if star. 1/2 " 400/15	starry
04 27W			"	"	"	1/4 " 400/7	fine
04 10W			3.43	K0 Ib		MK Std. 1/2 Normal 400/40	starry

307

Date Sept 17/18 Cont'd Observer Re. Wd Julian Day

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
29776	ε Cyg			G40	Ilab	13	—	01:26		C
29777	HD 199216	20 50.7	+49 09	"	"	1		01:32		A
29778	"	"	"					01:38		E
29779	HD 199478	20 52.4	+47 02					01:42		A
29780	"	"	"					01:44		E
29781	ξ Cyg	21 01.3	+43 32					01:48		C
29782	"	"	"					01:51		A
29783	61 Cyg A	21:02.4	+38 15					01:56		C
29784	"	"	"					02:05		C
29785	"	"	"					02:13		A
29786	61 Cyg B	21:02.4	+38 15					02:17		A
29787	"	"	"					02:29		A
29788	ζ Cyg	21:08.7	+29 49					02:37		A
29789	"	"	"					02:39		A
29790	σ Cyg	21 13.5	+38 59					02:45		A
29791	"	"	"					02:46		A

Dome Temp.

Transparency Conditions

/air to
good!

Focus

for HA .

Dome Temp.

01:46 EST = 01:15.3 Sidereal Time.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04 15W			3.48	K0 II	6	MK Std	1/4 Normal 400/20 fine
04 16W			6.94	B1 II	"	"	1/2 Normal 400/15 fine
04 22W			"	"	"	"	1/4 X 400/7 weak
04 24W			6.16	B8 Ia	"	"	1/2 X 400/15 fine
04 26W			"	"	"	"	1/4 X 400/7 fine
04 21W			5.41	K5 Ib	"	"	1/2 X 400/25 fine
04 24W			"	"	"	"	1/4 X 400/12 blank
04 28W			6.38	K5 II	"	"	1/2 X 400/40 blank
04 37W			"	"	"	"	1/2 X 400/40 fine
04 45W			"	"	"	"	1/4 X 400/20 fine
04 49W			7.46	K7 II	"	"	1/2 X 400/45 fine
05 01W			"	"	"	"	1/4 X 400/22 fine
05 03W			4.20	G8 II	"	"	1/2 X 400/38 fine
05 05W			"	"	"	"	1/4 X 400/16 fine
05 06W			4.32	B9 Ia	"	"	1/2 X 400/15 fine
05 07W			"	"	"	"	1/4 X 400/7 fine

↑
Copper came
down - took over

1/2 X may be
in spec. 400/40

Date Sept 17/18 ^{Cont'd} Observer Re-Wd Julian Day _____

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Hour Ang End
29792	69 Cyg	21 21.7	+36 14	G-40	E-60	13	—	02:50		
29793	"	"	"	"	"	"		02:53		
29794	10 Lac	22 34.8	+38 32					03:02		
29795	12 Lac	22 37.0	+39 42					03:06		
29796	"							03:11		
29797	β Cas	00 03.8	+58 36					03:17		
29798	"	"	"					03:19		
29799	δ Peg	04 08.1	+14 58					03:26		
29800	"	"	"					03:27		
29801	κ Cas	00 27.3	+62 23					03:35		
29801F	Focus Test.		0/0				56			
29801T ₁	Collection strip				for plates			29753-57, 29783-91		
T ₂	"	"	"	"	"			29761-74		
T ₃	"	"	"	"	"			29751-52, 29758-60, 29775-82		
T ₄	"	"	"	"	"			29792-29801		

Dome Temp.

Transparency Conditions *Closing up*Focus *45.5*

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
05 03 W			5.84	B ₀ Ib	6	MK Stds 1/2 x	450/15 fine
05 06 W			"	"	"	" 1/4 x	400/11 fine
01 02 W			4.88	D9 II		" 1/4 x	400/7 fine
04 04 W			5.18	B2 IV		" 1/2 x	400/15 fine
04 09 W			"	"		" 1/4 x	400/7 fine
02 48 W			2.25	F2 V		" 1/2 x	400/25 <i>staring</i>
02 50 W			"	"		" 1/4 x	450/12 <i>staring</i>
02 53 W			2.87	B2 IV		" 1/2 x	450/15 fine
02 54 W			"	"		" 1/4 x	450/7 <i>staring</i>
02 43 W			4.24	B1 Ia		" 1/2 x	400/15 fine
						<i>Focus 45.5</i>	O.K.
NO MORE PLATES!							
<i>Closing up anyway</i>							
* note dark slide for plate-holder "C" is kinked and thus hard to slide in+out							

Date Sept 18/19, 1966Observer Re / Ri
(Hn)
(Mae)

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.
29802	HD 172527	18 35.6	-4° 11	640	Ilao ^{Ilaband}	17	64°	19 07	20 36	A
29803	HD 176077	18 53.4	-7° 29	—	"	17	64°	20 43	22 43	B
29804	110 Her	18 41.5	+20 27	640	Ilao	17	64°	22 42	22 54	C
29805	"	"	"	"	"	"	"	22 54	23 07	A
29806	δ Lyr	18 55.2	+32 33	"	"	"	"	23 05		A
29807	θ Lyr	19 12.9	+37 57	"	"	"	"	23 09		C
29808	"	"	"	"	"	"	"	23 13		A
29809	α Sgc	19 35.6	+17 47	"	"	"	"	23 21		C
29810	"	"	"	"	"	"	"	23 25		A
29811	γ Aql	19 41.5	+10 22	"	"	"	"	23 32		B
29812	δ Cyg	19 41.8	+44 53	"	"	"	"	23 38		C
29813	β Cyg	19 50.4	+06 09	"	"	"	"	23 42		A
29814	"	"	"	"	"	"	"	23 45		B
29815	HD 224930	23 57.0	-26 35	640	Ilao	17	"	00 04	00 17	C
29816	HD 10697	01 39.5	+19 35	"	"	"	"	00 21	00 36	A
29817	HD 1064	00 09.8	-10 07	"	"	"	"	00 43	00 53	B

Dome Temp. 66°F

Focus 464

Dome Temp.

Transparency Conditions

Circus over sky at start
Seeing very good. - Cleaned up
at 20h

312

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
07	30 W	-4° 4'	1-2	8.6	A0 Ib	12-10-10	Setting (46.4) D6-OB Programme #7 Field Checks (unbaked) 800/60	weak
3	25 W	-7° 21'	1-2	9.9	B1 Ia	10-10-10	(46.4) D6-OB #13 800/60	weak
3	43 W			9.2	F6 V	7	G 10 MILT MK MK 1/4	fine
3	46 W			"	"	7	" 1/2	fine
3	40 W			3.2	R9 III	7	"	400/11 fine
3	27 W			4.46	R0 II	7	"	400/50 fine
3	31 W			"	"	7	"	400/25 fine
3	11 W			~4.8	G0 II	7	"	400/30 fine
3	23 W			"	"	7	"	400/15 weak
3	21 W			~4.15	R3 II	7	"	400/25 fine
3	27 W			2.82	B9.5 III	7	"	400/10 fine
3	22 W			3.9	G8 IV	7	"	400/30 guiding
3	24 W			"	"	7	"	400/15 fine
0	11 E	+26° 57'	0-1	5.75	G2 II	10/10/10	G H Star to come, unimpaired 400/50	fine
0	34 E	+19° 56'		6.15	dG4	10/10/10	"	400/50 fine
0	13 W	-9° 43'	0-	5.74	B9	10/10/10	B8-B9 field flatness not in post? 400/40	weak

313

Date Sept 19/66 M.M.M.

Observer

Ri
Hb
(Hh)

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.
29818	HD 16219	02 31.1	+39 27	G40	IIc0	17		01 00	01 08	C
29819	HD 19698	03 05.2	+11 30	G40	IIc0	17		01 16	01 24	A
29820	HD 21212	03 20.3	+62 09	G40	IIc0	17		01 35	02 40	B
29821	HD 22298	03 30.3	+54 50	G40	IIc0	17		02 45	03 43	C
29822	HD 23552	03 41.0	+50 26	G40	IIc0	17		03 48	03 57	A
29823	HD 23594	03 41.3	+56 49	G40	IIc0	17		04 03	04 26	B
29824	HD 23662	03 41.8	+68 12	G40	IIc0	17		04 33	04 43	C
29825	HD 27026	04 11.2	+41 54	G40	IIc0	17		04 53	05 04	A
29825 T ₁	Calibration	Step Wedge								
T ₂		"	"	"	"	"	"			

for plates 29802-15

29816-25

Dome Temp.

Focus

Dome Temp.

Transparency Conditions

Good some high thin cirrus at times

314

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01	54E	39° 45'	0	6.35	B8	19/10/10	B8-B9 (d4e)	400/40 fine
02	11E	+11 46	0	5.89	B9	19/10/10	B8-B9	400/40 fine
01	12E	+62 22	0-1	8.72	B2(V)C	10/10/10	Cn Bc Antoguide kept. some light cloud	450/35 fine
00	16E	+55 04	0	8.2	B2 III-I	10/10/10	Cn Bc	450/35 fine
00	15E	+50° 36'	0-1	5.87	B8	10/10/10	B8-B9	450/35 fine
00	13W	+57° 02'	0	6.46	B9	10/10/10	B8-B9	450/31 fine
00	32W	+68° 21'	0	6.28	B8	10/10/10	B8-B9	fine
00	22W	+42° 03'	0	6.07	B8	10/10/10	B8-B9	fine
							From appearance, focus was slightly under to violet	comparisons & work
							Frank - Under shock - gone to the right only	
							Frank →	not OK
							- Sidereal clock off about 2" (?).	O.K.]

315

Date Sept 19/20, 1966Observer ^{RL}Db, En/

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.
29826	HD 181558	19 15.8	-19° 25	540	IIa06	17XL	62°	19 ^h 16	19 50	C
29827	D Agl	19 21.4	00° 08	"	IIa06	13	62°	19 ^h 56	20 ^h 13	A
29828	"	"	"	"	IIa0umb.	13	"	20 ^h 17	20 22	C
29829	i Agl	19 31.5	-01 31	"	"	"	61°	20 ^h 25	20 ^h 30	B
29830	"	"	"	"	"	"	"	20 ^h 30	20 32	C
29831	K Agl	19 31.5	-07° 15	"	"	"	"	20 34	20 49	A
29832	"	"	"	"	unboxed	"	"	20 50	20 57	B
29833	"	18 41.5	-4° 51	"	"	"	"	21 00	21 05	A
29834	"	"	"	"	"	"	"	21 05	21 08	B
29835	16 Cys A	19 39.2	+50 18	"	"	"	"	21 15	21 35	C
29836	"	"	"	"	"	"	"	21 35	21 50	A
29837	16 Cys B	19 39.2	+50 17	"	"	"	"	21 51	22 04	B
29838	"	"	"	"	"	"	"	22 05	22 14	C
29839	E Agl	20 ^h 42.3	-0° 52	"	"	"	"	22 22	22 25	A
29840	"	"	"	"	"	"	"	22 25	22 29	B

Total

Dome Temp. 62°

Focus 46.2

Dome Temp.

Transparency Conditions Very Hazy

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0	11 ^m W	-19° 15'	0 ⁻	6.7	B8	10/10/10 (46.2)	138-139	800/50 old
0	34 ^m W	+0 19'	0 ⁼	4.64	F2 Ib	7	MK standard 1/2 normal	400/30 fine
0	32 ^m W	-	0 ⁻	-	-	7	field, flat, thin?	400/15 fine
0	20 ^m W	-1° 20'	0 ⁻	4.36	B5 III	7	1/2 normal	400/20 fine
0	34 ^m W	-	0 ⁻	-	-	7	1/4 normal	400/10 fine
0	52 ^m W	-7° 04'	0	5.04	B0.5 II	7	1/2 normal	400/20 fine
0	52 ^m W	-	0 ⁺	-	-	7	1/4 normal	400/10 fine
1	56 ^m W	-4° 44'	0 ⁺	5.32	G5 II	7	1/2	400/30 fine
1	59 ^m W	50° 29'	0 ⁺	-	-	7	1/4 *	400/15 fine
0	132 ^m W	-	-	6.60	G2 V	7	1/2 (need filter)	400/30 fine
1	48 ^m W	50° 28'	-	-	-	7	1/4 (HD 183143)	400/15 fine
2	00 ^m W	-	-	6.86	G5 V	7	1/2	400/30 fine
0	208 ^m W	-	-	-	-	7	1/4 (HD 194839)	400/15 fine
0	0115 ^m W	-9° 28'	0 ⁻	3.77	A1 V	7	1/2	fine
0	0119 ^m W	-	-	-	-	7	1/4	fine

(old)

317

cmk'd

Date Sept 19/20, 1966

Observer

(Re)
Db Fm / 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.
29841	β Aqr	21 26.3	-06 01	G40	IIaO unbr	17	62°	22 ^h 31	22 35	B
29842	"	"	"	"	IIaO unbr	17	"	22 36	22 38	C
29843	α Aqr	22 00.6	-00 48	"	"	"	"	22 40	22 42	A
29844	"	"	"	"	"	"	"	22 42	22 44	B
29845	η Cep	21 35.2	+61 38	"	"	"	"	22 48	22 51	C
29846	"	"	"	"	"	"	"	22 51	22 56	A
29847	μ Cep	21 40.4	+58 19	"	"	"	"	22 57	23 02	B
29848	"	"	"	"	"	"	"	23 04	23 09	C
29849	HD 21212	03 20.3	+62° 9'	G40	IIaO unbr	17	"	23 31	THERE	A
29849	HD 21212	03 20.3	+62° 09'	G40	IIaO b	17	"	00 50	01 36	C
29850	BD +61° 2573	23 50.3	+61° 12'	"	"	17	"	01 41	02 05	B
29851	d°	d°	d°	"	"	"	51	02 06	02 30	A
29852	d°	d°	d°	"	"	"	"	02 30	03 04	B
29853	d°	d°	d°	"	"	"	"	03 05	03 35	A

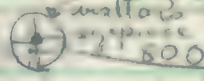
NB had to climb on south pier to set on this one and remove them. All

Dome Temp. 57°Focus 46.2/45.5

Dome Temp.

Transparency Conditions

Thin haze but "creaming" overhead - clear at 4h

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00	41W	-5°40'	0	3.73	60Ib	7	MK standards - 1/2 normal	400/30 fine
00	44W	"	"	"	"	7	" " " 1/4 normal	400/15 fine
00	13W	"	"	3.92	62Ib	7	" " " 1/2	400/30 fine
00	15W	"	0	"	"	7	" " " 1/4	400/15 fine
00	51W	"	"	4.87	132Ib	7	" " " 1/2	400/20 fine
00	56W	"	"	"	"	"	" " " 1/4	400/10 fine
00	57W	"	"	6.40	M2Ia	"	" " " 1/2	400/5 weak
01	04W	"	"	"	"	"	" " " 1/4	400/25 weak
WAS NO PLATE IN SPECTROGRAPH								500/50 (NB)
02	15 E	+62°23'	1	8.7	B2(V)	10/10/10	Cn Be mag Clear Sky	800/80 fine
02	17 W	+61°49'	1	7.46	A0	10/10/10	Be "Dust" #155	800/40 fine
02	10 W	"	1↑	7.46	A0	10/10/10	do "Dust" #155	800/40 fine
02	18 W	"	1.2	7.46	A0	10/10/10	do "Dust" #155	800/40 fine
02	20 W	"	2	7.46	A0	10/10/10	do "Dust" #155	800/40 fine

Continued next page

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Date Sept 19/20 Mon/Tues 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.I.
29854	HD 10362	01 36.2	+60 55	G40	IIa06	17		0340	0350	B
29855	HD 2054	00 19.6	+52° 30	"	"	"		0354	0415	A
29855 F	Focus test		5/5 G10 filter		set at 45.5			T = 50°F		B
29855 T ₁	Calibration		Step Wedge for plates		29840-47					
T ₂	"	"	"	"	29826-39					
T ₃	"	"	"	"	29848-55					

Dome Temp. +52°F

Transparency Conditions rather poor

Focus 45.5

+ thick cirrus

Dome Temp.

0400 completely cloudy!

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
50 3	0147W	+01°15'	2	64	B8	10/10/10	B8/B9	900/60 fine
15 4	0328W		?	5.7	B9	10/20	B8/B9 interrupted by clouds stopped at 0400 - 0405	800/22 fine
		SKY	HOPELESS!					sl. cirrus
						close up	0425	

Date 22-23 Sept/66
Thurs - FriObserver ^{DB} M. S. - / R. R. 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.
29856	BD+2° 3771	18 59.2	+2° 58'	G40	IIa06	17	53	19 05 ⁴⁰	20 24	A
	OPEN UP AGAIN	at 0020								
29857	β Cas	00 03.8	58° 36'	G40	IIa0E	13L ⁹	50	00 41	00 42	B
29858	κ Cas	00 27.3	+62 23	"	IIa06	"		00 47	00 49	C
29859	θ Cas	00 39.1	+47 44	"	IIa0	"		00 52	01 02	A
29860	"	"	"	"	IIa0	"		01 03	01 05	B
29861	ν And	00 44.3	+40 32	"	"	"		01 15	01 18	A
29862	" "	" "	" "	"	"	"		01 27	01 29	B
29863	γ Cas	01 13.8	+57 42	"	"	"		01 39	01 49	C
29864	"	"	"	"	"	"		01 50	01 51	A
29865	η Per	02 43.4	55 29	"	"	"		01 57	02 00	B
29866	"	"	"	"	"	"		02 01	02 02	C
29867	π Tauri	04 ⁿ 16.2	+10° 18'	"	IIa06	17		02 16	03 49	C
29867T	Locus	Inst. 5/5G10			IIa0		48°		set at 45.3	

Dome Temp. 55°F

Focus 45.3 T=50°

Transparency Conditions clearing after sunset

20:20 - more clouds + LIGHTNING (in NW)

Dome Temp. EXP. MTR BALANCES, BOT IS VERY ERRATIC. (very humid)

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24	10W	+3° 06	0 ⁻	9.2	B02I	10-10-	26-08 #15 Field checks	fogged
							sudden rain equal 22:30 ∴ closed up	fast
						610		
42	00 24W		2.5	3.25	F2I	7	focus 45.3 MIL 1/4	fine
49	00 27W			4.24	B1Ja	7	MIL 1/4	fine
02	00 39W			4.70	B2I	7	clouds MIL 1/2	fine
05	00 12W			"	"	7	" MIL 1/4 1/2	lots of
08	00 19W			4.53	B5I	7	" MIL 1/2 1/2	fine
09	00 30W			5"	"	7	" MK 1/4	fine
49	00 13W			5.25	F0Ja	7	" MK 1/2	fine
51	00 31W			"	"	7	" MK 1/4	fine
00	01 0E		1	5.42	K3Ib	7	clearing MK 1/2	fine
02	00 58E		1	"	"	7	clear MK 1/4	fine
04	00 45E	-19° 28	1	9.5V	G5e		Re "035" #28 300/13	comp and
45							Clouds Close Up 0400	fine

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Ending Time
E.S.T.

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BD +31° 3373

14 44.3
+31 28

13x5

22 25 11 counts

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