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Dome Temp.

Focus

Dome Temp.

Hour Angle
End

5

md
rice

MSE
Hr

Date 17-18 Jan/66 (7 hrs) Observer Pi - MCI 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.
28935	HID 33647	5 06.6	+0 24	G40	2006	13"	36°F	19 06 ²⁰	19:46	1
28936	HD 42784	6 07.6	+8 43	"	"	"	"	20:08 ¹⁵	20 38	<
28936 T 425-1	C. W. 2011 deep wedge		for plate 28935-36		800	V			middle	
	HR 2990	07 43.2	+28 07			12 ^s				C
425-2	HR 3454	08 41.9	+03.21			20 ^s			21 17	C
-3	NGC 2903	9 29.3	21 44			t=60 ^s				
-4	NGC 3031	9 52.7	+69 14			t=20 ^s				
-5	HR 2990	07 43.2	+28 07			t=12 ^s			22 ^h 52 ^m	
-7	NGC 3379	10 ^h 46.0	+12 46			t=60 ^s			00 37	
-6	NGC 3384	10 45.7	+12 54			t=50				
" - 8	HR 2990	07 43.2	+28 07			20 ^s			01 10	
-9	"	"	"			"			01 18	
" - 10	NGC 4258	12 17.3	47 30			60 ^s				
-11	HR 4883	12 50.0	+27 44			20 ^s			02 52	
-12	HR 4785	12 32.2	+41 33						03 14	
-13	NGC 5055	13 14.3	42 12			60 ^s				

Dome Temp. $40^{\circ}F$ Focus $6\frac{1}{2}$ Dome Temp. $42^{\circ}F$

Transparency Conditions

fair

2120 $\frac{1}{2}$ mag absorption

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS							Quality
1 ^h 53 ^m W	+00° 29'	000	6.56	B9	15-15-15	B8-B9	focus 6 1/2	#800/16 (?)	lunar				
W 1 49	+18° 42'	000	6.16	B8	15-15-15	"	"	#800/16 (?)	fine				
						HPN	HPW	45	42	41	38	35	
			1.21	KOIII		A5	A1	A3	A5	A5	B2	B3	
0 ^h 02E			4.32	B3V		B5	B1	B3	B3	B3	B3	B3	
			9.48	F0		D6	D2	D4	D5	D5	D6	D6	
						D6	D3	D5	D6	D6	D6		
W 02 ^h 32 ^m			1.21			A5	A1	A3	A5	A5	B2	B3	
0115 W			10.5			D6	D2	D4	D5	D5	D6	D6	
			10.9	G5		D6	D2	D4	D5	D5	D6	D6	
0450 W			1.21			A5	A1	A3	A5	A5	B2	B3	
0458 W			11			"	"	"	"	"	"	"	
			8.90	G0		D6	D3	D5	D6	D6	D6	D6	
1 26 W			5.07	G0III		C2	B3	B5	B6	C1	C2	C3	
02 06 W			4.3	G0V		B6	B2	B4	B5	B5	B5	B6	
			9.26	F8		D6	D3	D5	D6	D6	D6	D6	

Date MAR 17-18/66 Contd. Observer - MSE
Mcl Julian Day

Hv
MSE
Mcl

[illegible]

Dome Temp.

Transparency Conditions FAIR

8

[illegible]

Date Mar 26/27 1966 Observer Fa / Db Julian Day _____

[illegible]

Dome Temp. 26°

Focus

Dome Temp.

Transparency Conditions

Clouds only in evening, 12

20^h 20^m clouded in.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
between + snow.					5/5	C-10 filter	Focus 56.5
00 11 W	-24° 20'	0.1	7.0	B8	15/15/15	focus 55 1/2	Exp Meter slow → 800/30
00 22 E	-14° 42'	0	6.1	B9	15/15/	Sp Bin (54 1/2)	800/21 (HD15504 Too low.)
clouds + dawn !!						star lost in slit.	star spectrum ??? may be slightly fogged weak as top not on i used completely - no light though

Date.

Observer

Julian Day

[illegible]

Dome Temp.

0330 leaving again.

14

Time T.	PB	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
5 ^h	-	W1 30	23 17	0-1	7.0	B9II	25/25	M K STD. ($\frac{1}{2}$ norm) 800 / 13 (?)	fine
5 ^h	C	W1 40	" "	" "	" "	"	50	M K STD TOTAL EXP = 8 MIN $\frac{800}{12}$ (?)	fine
5 ^h	A	E 0 ^h 05 ^m	44 52	Q	9.59	F4	15-15-15	Hd KAFS (* drift N in guide expire 1 slit width per 20-30 min)	guiding
4 ^h	C	O 25 W	45 03	0	9.76	K5	15-30	Hd KAFS (partial clouds) <u>focus 55</u> 800 / 30 very weak comparison	guiding
15 ^h	A	W 2 25	45 27	0-1	7.64	F3	15-15-15	Hd KAFS	very weak comparison

- DOME IS VERY SLUGGISH TURNING (STILL WHEN TRY TO MOVE IT)

Date 28/29 March, 1966

Observer

Julian Day

[illegible]

Dome Temp. 27° F

Focus

Dome Temp.

Transparency Conditions Excellent— no UFO's — almost 1/4 moon

16

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	HBN	HBW	45	42	REMARKS	41	38	35	Quality
00 01W			1.21	KO II		AS	A1	A3	AS	AS	B2	B2		
01 23W			1.93	AO IV		AS	A1	A2	A2	A2	A3	A4		
01 34W			3.18	G8 I6		B3	A4	B2	B4	B4	B6	C2		
00 20W		5"	3.76	K4 III		B4	AS	B3	B5	B5	C3	C4		
00 18W			4.32	B3 V		B5	B1	B2	B2	B2	B2	B2		
01 25W			1.21	KO III		AS	A1	A3	AS	AS	B2	B2		
00 10W		3"				C4	B5	C2	C3	C3	C4	C5		
00 30W		5"	3.14	MO III		B3	AS	B2	B5	B5	C3	C4		
00 39W				G3	56 I-II	D6	D2	D4	D5	D5	D6	D6		
03 15W			1.21	KO III		AS	A1	A3	AS	AS	B2	B2		
02 33W			4.32	B3 V		B5	B1	B2	B2	B2	B2	B2		
01 26			10.9	G5		D6	D2	D4	D5	D5	D6	D6		
05 03W			1.21	KO III		AS	A1	A3	AS	AS	B2	B2		
05 10W														

*

Scans not on dec button on
Counter weight not working

Date.

Observer

 $\eta_{cl}, \eta_{se}, \eta_{HB}$

Julian Day

[illegible]

Dome Temp.

Transparency Conditions FINE

18

Focus

moon set ~ 1:45

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	D3 C3	C6	D2	
1 59 W			8.90	G10	S6	D5	D3	D5	D6	D6	D6	D6	
3 15 W			9.88	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 I		B6	B2	B4	B4	B4	B5	B6	

19

A.S.

L

Hr

Hd

m se

Date

March 30/31

Observer

MF - mcl

Julian Day

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.
28945	HD 63462	07 43.0	-25 42	G 44	IIaO	13	33	19 35	19 40	A
28946	"	"	"	"	"	"	"	19 53	19 58	B
28947	"	"	"	"	"	"	"	20 02	20 07	A
28948	21 L Mi	10 01.5	+35 44	"	"	?	"	22 16	22 17	A
28949	"	"	"	"	"	"	"	22 22	22 29	B
28950	HD 96314	11 01.1	-26 45	"	IIaO B	13	29	23 33	23 39	B
28951	HD 111226	12 42.6	-24 18	"	IIaO B	13	"	23 47	0 17	A
427-1-H	focus test in m. out of focus	"	"	"	"	"	28	MIDDLE		B
427-1	HR 4785	12 32.2	41 33	"	"	t=20"	"	"	0 50	"
2	HR 4550	11 50.6	38 04	"	"	"	"	"	1 07	"
3	HR 4883	12 50.0	+27 44	"	"	"	"	"	1 25	"
4	HD 95735	11 01.5	+36 17	"	"	"	"	"	1 46	"
5	HR 5447	14 32.9	29 55	"	"	"	"	"	2 11	"
6	HR 4785	12 32.2	41 33	"	"	"	"	"	2 35	"
7	HR 5270	14 00.18	+09 52	"	"	"	"	"	3 23	"
8	HR 4785	12 32.2	+41 33	"	"	"	"	"	"	"

Dome Temp.

Transparency Conditions

20

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 0 02	-25 50	0	4.3	B0V	45	Probably forged since caper not working 400/10	weak
W 0 27	"	0	"	"	45	"	weak
W 0 35	"	"	"	"	45	A. Stevenson arrived for test of his guide.	weak
		0	4.66	A7V	—	W/AUTO GUIDING NOT NUMBERED 200/6	Developed weak
W 0 38	-25 17	0	"	"	—	" " "	fine
W 0 50	-27 05	0	5.6	B8	15-15-15	B8-B9 (Bin)	400/10 weak
E 14	-24 38	0	7.1	B9	15-15-15	B8-B9 (SB)	800/20 weak
MID -			(6.12) 5/5			HBN HBN 45 42 111 38 35	
W 0 34			4.3	G0V		B5 B1 B3 B4 B3 B4 B5	
W 1 32			6.46	G8V		C4 B6 C2 C4 C3 C4 C5	
W 0 51			5.07	G0III		C1 B3 B4 B5 B3 B6 C2	
W 3 00			7.6	M2V		D2 C4 D1 D3 D3 D4 D5	
E 0 07			4.49	F2V		B5 B1 B3 B4 B3 B4 B5	
W 2 15			4.3	G0V		B5 B1 B3 B4 B3 B4 B5	
W 1 37			6.12	GIII		C4 C1 C3 C4 C4 C5 C6	
			4.3	G0V		B5 B1 B3 B4 B3 B4 B5	

Date 3/24/66 - 7 hours Observer M. J. Rose Julian Day 186

[illegible]

Dome Temp.

Transparency Conditions

22

Hour Angle Ends	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 3 16			9.26	G 8		H 13N H 13W 45 42 41 38	35
W 4 43			4.3	200		D 6 D 3 D 4 D 5 D 5 D 5	25
						B 5 B 1 B 3 B 4 B 3 B 4	35

- 23

(Hb
Re
Mf)

Observer.....^{key}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.
28952	21 L Mi	10 ^h 01. ^m 3	+35° 44'	G40	IIaOb	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 seconds later	B
28958	β Leo	10 ^h 11. ^m 1	+23° 55'	"	"	"	"	00:00		C

Dome Temp. 35Focus 60

Dome Temp.

Transparency Conditions Intermittent Cloud

~160 minutes

H_b, MF.

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- prior	4.66	A7V	15-30	HK STANDARD. 1/2 NORMAL EXPOSURE 200/8	fair
01 ^h 44 ^m W	"		"	"	"	1/4 NORMAL EXPOSURE 200/4	guiding
01 ^h 59 ^m W	+10° 58'		3.48	A0 Ib	22 nd 22	" clouds 1/2 NORMAL 200/8	guiding
02 01 ^m W	"		"	"	22 nd 22	" 1/4 NORMAL 200/5	logged? strong
			1.26	B7V	"	3/4 1/2 NORMAL 200/12	strong
02 15 ^m W	+12° 10'		"	"	"	1/4 NORMAL 200/4	guiding
23-34			3.43	F0 III	22.	" 200/15	

25

Date 3-4 April 1966 / Sum. from Observer M. S. - H. S. ^{M. S.} Julian Day (142)

Dome Temp.

Transparency Conditions *fair ~ full moon*

2300 - heavy clouds in N. morning slope
 > 1 mag abridgement after 0100³⁵

26

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
* 31 A	W 0 19	57 21	0 ⁻	5.8	B9	15-30	B8-B9 (SB) focus 60	400/15 ⁻ fine.
61 B	W 0 26	-27 06	0 ⁻	5.6	B8	15-15-15	B8-B9 (SB) "	400/15 ⁻ weak
12 A	E 0 03	-24 39	0 ⁻	7.1	B9	15-15-15	B8-B9 (SB) " <u>CLOUDS</u>	800/ 30 ²¹ l weak
19 B	0136W	+3 32	0	6.1	K1	15-30	std. Vel. " cirrus	400/50 fine.
52 A	W 1 30	45 27	0-1	7.64	F3	15-15-15	KAFS BIN. "	800/50 fine.
62 B	0105W	39 12	"	7.2	a 8	15-15-15	std. Vel.	800/50 fine.
Amata.								
* STAR OFF SLIT PART OF TIME TRAMBLE								
WITH ^{RA} HAND BUTTONS (RIGHT, EASTWARD)								
(OK AFTER PLATE 28958)								

Date 4-5 April 1966

Date... 4-5 April 1966

Observer...Msc-Db

Julian Day

[illegible]

Dome Temp. 45°F

Focus

Dome Temp.

Transparency Conditions

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

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
16.3	↓	+9 16	0-1	3.76	K4 ^{HL}	75/610	mk std focus 59 1/2 (normal) 200/24	fine
14.4		"	"	"	"	"	(1/2 norm) 200/12	fine
29.3	W 0	"	"	"	"	"	(1/4 norm) 200/6	fine
4.6		+3 320-1	4.30	B3U	5 ^s /610	filter	(normal) 400/16	fine
44.4		"	"	"	"	"	(1/2 norm) 400/8	fine
47.3		"	"	"	"	"	(1/4 norm) 400/4 1/2	fine
	43' 10"	2-33.74	ATV	7 ^s /610	filter	"	(normal) 400/16	fine
14	W 0 15	"	"	"	"	"	(1/2 norm) 400/8	fine
B		"	"	"	"	"	(1/4 norm) 400/4	fine
							← poor + cloudy again; seeing OK still	
50.5	00 03E	-00 27	1-2	5.04	B6U	75/610	mk std (T3i) (1/4 norm ?) 800/3 5 1/2	two weeks no comp
							Completely cloudy - closed up at <u>2155!</u>	800/15
								800/7

* EXP MTR DOESN'T WORK
AT SETTING 100

Date 7-8 April 1966

Date 7-8 April 1966 Observer ai - Hb Julian Day

Therapy - F.i.

[illegible]

Dome Temp. 35°Focus 60

Dome Temp.

Transparency Conditions Very Poor

30

Variable

0330: Rapid build up of clouds and wind

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3	01 ^h 05 ^m W	+20° 42'		2.55	A4 V	22-22	MK STANDARD 1/2 NORMAL 200/8	glistening
39	01 ^h 13 ^m W	" "		"	"	"	1/4 NORMAL 200/4	fine
7	01 ^h 30 ^m W	+15° 36'	0-1	3.34	A2 V	22-22	" 1/2 NORMAL 200/8	fine
	01 ^h 46 ^m W	"	"	"	"	"	" 1/4 NORMAL 200/4	fine
4	01 ^h 15 ^m W	-24° 41'	0-1	7.1	B9	15-15-15	- OVERCAST - B8-B9 SB	weak
	00 57E	+18 42	0-1	6.2	B9	15-15-15	B8-B9 PROB poor guiding - see note below	etc. etc.
6 C	00 11W	-25° 07'	0-1	6.2	B8	15-15-15	B8-B9 SB	fine
30	00 05W	-25° 24'	0	6.7	B9	15-30	B8 B9 PROB Closed up quickly at 0334	too weak.
Plate #128979 probably pinched up some light from the moon — note in plate corner of this is so.							XXX	Slow slow P.A. motion not working => poor guiding for plate after #8976.

Date 8/4 April 1966 Observer R. J. E. H. b Julian Day 176

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
2898 ⁰	HD 92728	10 ^h 37.4	+57° 43'	G40	IIaOb	13	32°	22 ^h 50	23 ^h 23	A
2898 ¹	31 Com	12 ^h 46.8	+28° 05'	G40	IIaOb	13	32°	23 ^h 56	00 10	B
2898 ²	β Com	13 07.2	+28 23	"	"	"	"	00 18	00 24	A
2898 ³	HD 114447	13 05.5	+39 02	G40	IIaOb	13	31°	00 34	01 04	B
2898 ⁴	γ Boo	14 28.1	+38 45	"	"	"	"	01 10	01 11	A
2898 ⁵	σ Boo	14 30.3	+30 11	"	"	"	"	01 21	01 23	C
2898 ⁶	ϵ Boo A	14 46.8	+19 31	"	"	"	31	01 34	01 45	A
2898 ⁷	HD 143187	15 53.9	+59 12	"	"	"	30°	02 01	02 31	B
2898 ⁸	"	"	"	"	"	"	30°	02 33	02 57	A
2898 ⁹	HD 142301	15 48.7	-24 57	G40	IIaOb	13	30°	03 06	03 46	B
2898 ¹⁰	HD 161701	17 41.9	-14 42	G40	IIaOb	13	28°	03 55	04 37	A

Dome Temp. 33.0°F

Focus 60.5

Dome Temp. 30.5°F

Transparency Conditions

Poor - Cloudy in S.
Good after 0100

32

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 ^h 32 W.	57° 23'	1+	5.8	B9	15-15-15	from 60 ^h B8-9 Sp. Ri.	800/60 slit slit lotting
20 11 W	27° 43'	1	5.63	G0 III	15-15-15	MK std 1/2 exposure from 60 ^h 800/	grinding
20 04 W	+28° 03'	1	4.85	G0 V	15-15-15	" 1/4 exposure	(grinding)
20 46 W	+38° 42'	0-1	6.3	F0	15/15/15	B8-B9	fine
20 44 E	38 32	1	3.23	A7 III	45	MK std 1/4 Normal	fine
20 20 E	29 52	1	4.145	F2 V	20/20	MK std 1/4 Normal	l. weak
00 14 E	+19 14	1	5.30	G8 V	25/20	MK std 1/2 Normal	fine
00 34 E	+58 58	1	6.15	B9	15/15/15	B8-B9 (dte) read from 60 to 59	fine
00 08 E	"	0-1	"	"	15/15/15	"	400/20 fine
00 45 W	-25° 07'	0	6.2	B8	15/15/15	B8-B9 SB probably covered with fingerprint	400/15 weak
00 17 E	-14 42	0	6.1	B9	15/15/15	B8-B9 SB	fine

[Slides of photo holders can't be
in back of camera]

33

Date _____

April 9/10

Observer

ai

Julian Day

Plate No.

Object

R.A.
1900Declination
1900

Inst.

Emulsion

Slit

Temp.

Starting Time
E.S.T.

Ending Time
E.S.T.

P.F.

~~28,990~~

~~HD 111226~~

$$12^h - 12.6$$

2418'

645

11. 306

77

32

232

Q

Dome Temp.

Transparency Conditions

34

Visitors

8pm group: cloudy / showed "Universe"
9pm group: clear / showed Jupiter + M3 cluster (rather faint!)

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2		-24° 39'	Poor	7.1	B9	15	B8 B9 SPECTROSCOPIC BINARY	1800/

Date April 10-11

Observer H. Mcl - Mcl Julian Day

Sun/mor



Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	TC Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
428-1	HR 2990	07 ^h 43 ^m .2	+28°07'			12 ^s			2007
428-2	NGC 2403	07 33.6	+65 +42			20 ^s			20 46
-3	NGC 2903	09 30.2	+21 +40			60 ^s			2205
-4	HR 2990	07 ^h 43.2	+28+07			12 ^s			2303
-5	HR 4785	12 ^h 32.2	+41+33			20 ^s			2328
-6	HR 2990	07 43.2	+28+07			12 ^s			2340
-7	NGC 4549	12 40.1	11 44			50 ^s 60 ^s			00 35
-8	HR 4785	12 32.2	+41 33			20 ^s			01 47
2897 ⁹¹ 70	HD 131861	14 50.9	45 43	G40	IIo06	17	30°	02 37	0 459
28991 T ₁	Calibration Strip Wedge				for plates	28973-79,	28991		
28991 T ₂	"	"	"	"	"	28980-90			

Dome Temp.

Transparency Conditions *Lots of Haze*

36

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11:10						HBn HBW 45 42 41 38 35	
11:47m			1.21	KOTII		A5 A2 A4 A5 A6 B3 B3	
12:10			8.80	F2	SCII	D6 D3 D5 ^T D6 D6 D6 D6	
11:31			9.48		SBII-D	D6 D82 D4 D5 D5 D6 ¹² D6	
14:07			1.21	KOTI		A5 42 44 A5 A6 B3 B3	
10:13 0-17			4.3	GOVI		B5 B2 B3 B4 B4 B5 B6	
11:55h			1.21	SCF KOTII		A5 A2 A4 A5 A6 B3 B3	
00 53W			9.88	G-7 F-1		D6 D2 D4 D6 D6 D6 D6	
02 13W			4.3	GOVI		B6 B2 B3 B5 B4 B5 B6	
0305W	35 28	0-1	7.64	F3	15-15-15	KAFS BIN. Hazy. 800/522 1 week clouds	

37

Date 12-13 APRIL TUES / WED Observer mecl - mcl Julian Day 174

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit T	Temp.	Starting Time E.S.T.	MIDDLE 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 08	
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	
13	HR 7525	19 44.6	+10 31			20 ^s			04 31	

Dome Temp.

Focus

Dome Temp.

Transparency Conditions *Hazy in South (21:00) 38*
Good (22:00)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
MIDDLE						H _{SN} H _{SW} 45 42 41 38	35
21 1 42 W			1.21	KO _{III}		A5 A1 A3 A5 A5 B2	B3
44' 0 35 W						C4 B5 C2 C3 C3 C4	C5
5 2 28 W			1.21	KO _{III}		A5 A1 A3 A5 A5 B2	B3
02 0 ^h 21 W			10.5	E1		D5 D2 D4 D5 D5 D6	D6
08 1 ^h 27 W			10.9	E7		D6 D2 D4 D5 D5 D6	D6
			1.21	KO _{III}		A5 A1 A3 A5 A5 B2	B3
37 W1 29						D6 D2 D4 D5 D5 D6	D6
01 W3 53						C4 B5 C2 C3 C3 C4	C5
30 0523 W						C4 B5 C2 C3 C3 C4	C5
2 0223 W			8.20	F8			
↓			8.88	F8		D5 D3 D5 D6 D6 D6	D6
3 41 1 ^h 58 E			4.37	A3 _V		B6 B2 B3 B3 B3 B4	B5
3 57 1 ^h 54 E			3.50	B9 _{III}		B3 A4 A5 A5 A5 A6	B3
4 12 1 ^h 45 E			3.62	A0 _V		B3 A3 A5 A5 A5 A6	B2
4 31 2 ^h 07 E			2.80	K3 _{II}		B3 A4 B2 B4 B5 C2	C3

Dome Temp.

Focus 6A

Dome Temp.

Transparency Conditions

50% cloudy

40.

Time T.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11	A	0017 W	+12°06'	0-	1.26	B7V	7	6/10 filter ↓ MK 1/2 Normal	200/8 fine
13	2	0020 W	+	0-	1.26	B7V	7	MK 1/4 Normal	200/4 fine
20	C	0026 W	+17°30'	0-	3.48	A0Ib	7	MIL 1/4 Normal interrupted by cloud	200/5 fine slightly fogged
31	B	0040 W	+17°00'	0-	3.48	A0Ib	7	MK 1/2 Normal	200/8 fine
40	A	0047 W	+35°29'	0-	4.66	A7V	7	MK 1/2 Normal	200/8 fine
46	C	0054 W	"	0-	4.66	A7V	7	MK 1/4 Normal	200/5 fine
53	A	0052 W	+23°38'		3.43	F0III	7	MIL 1/2 Normal	200/15 strong
59	B	0058 W	"		3.43	F0III	7	MK 1/4 Normal (clouds)	200/8 fine
	C	0058 W			4.83	F6IV		MK 1/4 Normal NOT COMPLETE CLOUDS	200/2 fine
								CLOSE UP 22.30	
								clearing again (FIELD CHECKS) from 62 1/2	
45		0006 W	45 29	0	7.64	F3	15-15-15	Hd KAFS	fine
20	E	0142 W			"	"	15-30	" "	0230 CLOUDS. 800/5 weak

Date April 15/10

Observer

Re/ Ea/ ai

Julian Day

[illegible]

Dome Temp. 36

Transparency Conditions 50% clear after 2230^h
clear at midnight

42

[illegible]

43

L

[illegible]

Dome Temp.

Transparency Conditions V. Good

44

Focus

Dome Temp.

g Time S.T.	PE	Hour Angle E _{mid}	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS							Quality
								143N	142W	45	42	41	38	35	
04		0 ^h 07E		4"	4.3	GOX		B5	B1	B3	B4	B4	B4	B5	
55		0 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	
33		4 13W						B5	B1	B3	B4	B4	B4	B5	
46		0 ^h 03W			4.91	A3IV		B6	B2	B3	B4	B4	B5	B6	
10		1 ^h 52E						B2	A3	A4	A5	A4	A5	A6	
27		1 ^h 15E						B5	B1	B2	B2	B2	B3	B4	

Date 17/18 Apr 1966

Observer

Julian Day

[illegible]

Dome Temp.

Then very hazy

Sky Hopeless 2nd half.

46

Long Time LST.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
019	A	0032 ^m E	19°41'	1	4.83	F6IV	7	G10 filter looks faint MK Std 1/2 Normal 200/15	fine
27	B	0025 E	19°41'	1	4.83	F6IV	7	G10 filter MK Std 1/4 Normal 200/8	fine
34	C	0032 E	9°30'	1	3.85	B1Ib	7	G10 filter MK Std 1/2 Normal 200/8	fine
38	A	0028 E	9°30'		3.85	B1Ib	7	G10 MK Std 1/4 Normal 200/4	fine
40	B	0014 W	-00°26'		5.04	B6V	7	MK Std clouds interfere 1/2 Normal (auto-gain) 200/8	fine
33	A	0031 W	-00°26'		5.04	B6V	7	MK Std very hazy 1/4 Normal do 200/4	fine
52	C	0000	+33°18'	2	4.86	F2IV	7	MK Std very hazy 1/2 Normal do 200/15	decent
03	A	0228 E	+64°32'	0	3.04	A0III	7	MK Std 1/4 Normal 200/5	fine
38	B	0030 W	+64°34'		5.41	M0III		MK Std 1/4 Normal 200/12	out of focus
	C							G10 filter 7/7 field of view? O.K.	
Ar Repairing Ex. Mtr. till 03:30									

Date 21/22 April 1966

Thurs/Friday

Observer

Use / Use

Julian Day

[illegible]

Dome Temp.

Transparency Conditions *SOME LIGHT CLOUD.*

48

[illegible]

49

Date 22/23 APRIL 66 FRI/SAT Observer McP - Db Julian Day 174

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	slit ↑	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
431 - 1	HR 3800	09 ^h 32.1	+36° 33'			20 ^s		800V	21 16	
2	HR 4374	12 23.4	+13 05						22 05	
	HR 3705	9 18.6	+34 34							
2903 ² F	Focus Test	09 30 AM.	5/5							
29021	45 Boo	115 02.7	25 16	640	IIaOb	13	41	23 ^h 04	23 ^h 26	A
29022	"	"	"	"	"	"	"	23 ^h 28	23 ^h 38	C
29023	HD 131861	14 50.9	+45 43	"	"	"	"	23 55	01 51	B
29024	γ Dra	17 ^h 54.3	+51 30	640	"	"	41	02 ^h 02	02 22	A
29025	γ Dra	"	"	"	"	"	"	02 23	02 37	B
29026	θ Hec	17 52.8	+37 16	"	"	"	41	02 42	03 07	C
29027	α Lyr Vega	18 33.5	+38° 41	640	IIaOb	13	39	03 09	03 12	B
29028	Vega	"	"	"	"	"	"	03 16		A
29029	ν Her	17 54.7	+30° 12	"	"	"	"	03 22	03 37	B
29030	2 Her	"	do	"	"	"	"	03 39	03 48	A
29031	89 Hec	12 51.4	+26° 04	640	IIaOb	13	39	03 52	04 09	B
29032	67 Oph	17 55.6	+02 56	"	"	13	41	04 15	04 21	A
29033	67 Oph	17 55.6	+02 56	640	IIaOb	13	"	04 24	04 26	B

Dome Temp.

Focus 67.9

Dome Temp. 41.1°F

Transparency Conditions

50
 Clear at first - then Cirrus
 Cloud
 then Clear

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1h 28W			4.62	G8 III		H ₃ N H ₃ W 45 42 41 38 35	
0h 33E			10.21	F I		BG B2 B4 B5 B5 C2 C2	
						D6 D2 D4 D5 D5 D6	
1h 52E	+25° 02	0	4.92	F5 I	7	62 MK Std cloudy 200/15	fine
1h 46E		0	"	"	"	" MK Std 200/7	fine
0h 39W	+45° 26	0	7.64	F3	15-1515	KAFS Bin interrupted by clouds 800/12	fine
0h 48E	+51° 30		3.74	K5 II	7	Grohbe 7 MK Std 200/25	fine
0h 33E	+51° 30		—	—	7	MK Completely cloudy Now!! 200/12	fine
01 01E	+37° 15		~5.0	K1 II	7	MK 1/4 W (9 don't agree!!) 400/20	fine
01 37E	+38° 46	0	0.00	A0 V	7	MK 1/2 Normal 200/7 (829)	fine
01 33E	do		"	"	7	MK 1/4 Normal 200/4	fine
00 34E	+30° 10		4.48	F2 II	7	MK 1/2 Normal 400/25	fine
00 25E	do		4.48	F2 III	7	MK 1/4 Normal 400/12	fine
00 00	+26° 05'		5.47	F2 Ia	7	MK 1/4 Normal 400/12	fine
00 10 W	+02° 57'		3.99	B5 Ib	7	MK 1/2 N Db! 400/5	fine
00 13 W	do		"	"	7	MK 1/4 N 400/7	fine

Dome Temp. 56°F

Focus 6.6

Dome Temp.

Transparency Conditions

fair

OK - H6 52

ing Time
EST.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
27 A	0 ^h 48 ^m	-10	24	0-1	6.2	B9	15/30 finder field or coordinates may be wrong field? (see book) focus 6.6 not phase 800/30 slow motion RA OUT. * SAME FIELD AS 285814	guiding
57 B	09 57	22	B-1	5.4	B9	25/25	B8-84 (5B) 800/30 *	l weak
17 C	W 0	51 19	40	"	5.3	F5	15/15/15 + cl. Vel. clouds coming 800/410 *	guiding
35 B	E 0	51 3	30	"	6.1	K1	15/30 std. Vel. capping device came apart 800/516 1/2	Plastic seal straw weak
- C	—	—	—	—	—	7/7	Gr 10 fields	O.K.
							* NO RA GUIDING MOTION Repaired Mon. AM. 2 PB in H1 sw. H5	

53

Date 25/26 April '55 MON/TUES

Observer

 misc
 ai
 mel - 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.l
	Auto Guiding Tests									
432-1	HR 3800	9 32.1 (1966)	+36 33 (1966)			T = 20 ^s	800 ^v		20:40 MIDDLE	
432-2	NGC 3379	10 ^h 46.0	+12° 46'			T = 40 ^s	"		21:01	
432-3	HR 3800	9 ^h 32.1	+36 33			T = 20 ^s	"		21:36	
4	NGC 4406	12 ^h 24.5	+13 08			T = 50 ^s	" 46° F		22:18	
-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° F		02 24	
-9	NGC 5866	05 05.1	55 57			50				
-10	HR 7069	18 45.5	18 08							

Dome Temp.

Focus

Dome Temp.

4:11 - ECHO I, ECHO II, + 3rd satellite

Transparency Conditions

54

22 30 - some cloud in S & SW

01 00 - clear

cirrus forming at dawn (0400)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
MIDDLE						H ₂ O H ₂ N -45 72 41 58 35	
1 ^h 25 ^m W			4.62	G 8 ^{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	
	E 6 ^h		10.9	G 2		D3 D6 D5 D6 D6 D6 D6	
			4.37	A 30		B1 B6 B2 B3 B3 B4 B5	

Date 26/27 APRIL '66 ^{TUE}_{WE}

Observer

HR SICK (GONE HOME)
(AT 1130)

Re/ Ex/ m se

Julian Day

[illegible]

Dome Temp. 37°F
Focus 60.5/56 1/2
Dome Temp.

Transparency Conditions Hazy + Cirrus
after midnight, > 1 mag. absorption
POOR

56

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
50	0144 W	+36°14'	1	9.00	M2V	15-15-15	UK Shd 1/4 Abundant	75/800i	fine
04	20 12 45 26	0-1	7.64	F3	15-15-15	1 KAES T3in	?/1800	l. weak	
03	00 27+1 54	0-1	5.6	G0	15-15-15	Std. Vel. cirrus	800/40	fine	
08	00 03 17 10	1	6.1	G4	15-15-15	Std Vel. fous 5 1/2	800/40	guiding	
11	00 22-14 42	00	6.1	B9	15-15-15	B8-B9 (SR)	800/ 40 24	l. weak	
↓ STAR NO LONGER VISIBLE ON SCIT									
<u>CHERRY!</u> - TELESCOPE DRIFTING EAST (LEFT AS SEEN IN GUIDING EYEPIECE); RA FAST MOTION DIFFERENTIAL IS SLIPPING.									

mel

Observer.

Re

Julian Day

[illegible]

Dome Temp. 50°F

Transparency Conditions Fair & getting Good

Focus 65

Dome Temp.

[illegible]

59

9Mse / Mse
 9Mcl / Mcl

Dome Ten	Focus	Dome Ten	Hour Angle End
			7 ^h 25 ^m
			1 ^h 40 ^m
			2 ^h 14 ^m
			2 ^h 26 ^m
			- 29 ^m
			- 10W
			- 21W
		H	1 20W
			0 35
			0 3 45
			0 0 4
			0 0 5
		MID-	0 1 2
			4 42
			0 28

Dome Temp. 34 ¹/₁

Transparency Conditions

EXCELLENT 62

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
55	0025 W							
	0301 W							
	0020 W							
	0036 W.							
	W4 14							
	W0 48							
	4 ^h 55W							
	W1 22							
	E0 54							
	E1 07							
	E1 16							

Date May 2/3 66 Man/Tues Observer DB Julian Day MM

[illegible]

Dome Temp. 40°

Focus

Dome Temp.

Transparency Conditions Good - Poor

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"/G10	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	15/15/15 ⁶⁴⁰	B8-B8 SR	20/800 weak
51	03	-25° 21'	0 ⁻	6.7	B8	15/15/15	B8-B8 Prog. cloudy	47/800 weak
25 B	07	+38° 15'	0	5.7	B8	15/15/15	B8-B8 SB. cloudy	200/33 fine
15 A	00 47	1	0	4	4	15/130	" "	200/15 weak

65

Date May 4/5 Wed/Thurs Observer Hd - Mf Mc Julian Day 13

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	G40	FeO	13	-	20 08 ⁴	20 16	A
29051	HD 92588	10 36.3	-01 13	"	"	13		20 20 ¹⁷	20 54 ¹³	B
29052	HD 103095	11 47.2	38 26	"	"	13	40F	21 07 ³⁰	21 33	A
29053	HD 131861	14 50.9	45 43	"	"	13		21 49	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	+17 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 16.7	+67 19							
-11	HR 6092	16 18.6	46 24							

Dome Temp. 42/43

Transparency Conditions

66:

[illegible]

Date 4 May/66 - Thurs Observer M se Julian Day

[illegible]

Dome Temp.

Transparency Conditions

Transparency Conditions fair & getting worse 68
; 30 - very heavy clouds in w. & sw.

2:30 - very heavy clouds in w. & sw.

Mag Time S.T.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
44	B	E1	39 38 -13	0.1	5.7	B8	15-15/15	B8.39(5B) from 61	500/30	fine
12	C	E1	12	0	"	"	15-15/15	" <u>cloudy</u>	500/26	fine
PH <u>A 9 B loaded</u>										

69

Date May 5/6 Thurs-Fri (use) rise
Observer HB - HA Julian Day

[illegible]

Dome Temp.

Transparency Conditions

Transparency Conditions *Fair - scattered clouds in NW*
Very windy turning dense at times
2004 LIGHTNING IN SOUTH -

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
29 B	01 01W	-27° 03'	5"	5.6	B8	15/15/15 B8-B9 SB	"seeing" is limited and image is moving about in exposure. 400/30	lurcate
19 A	01 08	-24 38	0"	7.1	B9	15/15/15 B8-B9 SB	2140: clouds SPECTROGRAPH (H. PIER)	lurcate
43 C	05 58 +1	57	0"	5.6	G10	15/15/15 Std. Vel.	from 67 1/2 800/40	lurcate
A	147 -3'			6.2	B8	38-39 (SB)	too close to moon 800/	
11	E1 19 +17	11	0	6.1	G4	15/15/15 Std. Vel.	800/40	fine.
18	E2 10 -14	40	0"	6.1	B9	45 38-39 (SB)	clouds again	too lurcate
							P.H. A & C too lurcate	

Date May 6/2 Lw/St

Observer

Mc
Hb

Re

Ha Julian Day

[illegible]

Dome Temp.

38° F

35°

61.2

Transparency Conditions

Transparency Conditions Scattered Cu from NW ^{1/2}
(poor)

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
25A	01 01W	-27° 04'	5	5.6	B8	15/15/15	B8-B9 SB clouds	weak
4	00 ^h 12 ^m		7	35				
02								
45								
71	2 ^h 06W							
							quit for clouds	
	01 52 ^m		5	3.64	A0III	7-G10	taken through clouds 1/4 norm	fine.
	01 00 ^m		5	4.92	F5V	7-G10	clearing 1/4 norm	fine.
	00 12E		5	2.93	B1III	7-G10	clear 1/4 norm 400/15	fogged
	00 23W		5	3.91	B1E	7-G10	(plate not noted) 1/2 norm 200/15	weak.
	00 17W		5	3.89	B5II	7-G10	1/4 norm + 2/7	fine.
	01 04E		5	3.93	K2III	7-G10	1/2 norm 4 1/4	fine.
	00 40W		5	8.2	A5Ia	15-15- ^{54.5}	close to moon auto guided 1/4 norm 800/15	weak
							photo cap became disoriented 1/4 close by hand	weak.
							< 1000 m 0415	clear.

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

14h
G-4
G-0

Date May 9/10 Mon/Tues Observer Hb Mcl - Mcl 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.
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°F			
-8	NGC 4374	12 23.4	+13 01							
-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	+2 12							
	NGC 5866									
-14	HR 4785	12 32.2	+41 33							
-15	HR 6146	16 27.6	+41 58				33°F			

Dome Temp.

Transparency Conditions

74

[illegible]

Date 10 May / 66

Observer *McClure*

Julian Day

[illegible]

Dome Temp.

Transparency Conditions

76

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							cloud up 03:35	

77

Date May 10/11 1966

Observer

Re
MCE

(Re)

Cei
MCE

Julian Day

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	HR3800	0932.1	+36°33'							
438-13	HR3815	0933.7	+35°59'							
	Cont. for clouds & haze									
29068	Q' Sec	16 01.0	-22 24	6.40	Ilad6	13	33	1:20 ¹⁰	1:50 ¹⁵	A
29069	H10136 849	15 17.8	33 17	6.40	Ilad6	13	4	1:51	2:16	C

Dome Temp.

Transparency Conditions

78

[illegible]

Dome Temp. 36°F

Focus 61

Dome Temp. 36°F at 0430 EST

Transparency Conditions fair - poor

80

absorption 1 mag.

Good transparency toward morning

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
58	W 2 02	+8 43	0	6.20	B9	4-4	^{6.10} BB-139	800/40 fine
35	00 02 W	+14 56	0	6.43	B9	4-4	BF-139 S.B.	800/40 fine
59	00 05 W	+13 56		6.1	B9	4-4	BB-B9 S.B.	800/40 fine
04	00 03 W	+32 40		2.20	B9 III	4-4	^(B3-B5 EXT) MK STANDARD 1/4 NORMAL	800/15 strong guiding
14	00 30 E	+45 04		2.82	B9.5 III	4-4	^(B3-B9 EXT) MK STANDARD 1/4 NORMAL	800/15 strong
						3-3	FOCUS 61	c to v

Date May 13/14 Fri/Sat Observer Hb — Julian Day 171

[illegible]

Dome Temp.



Transparency Conditions fair after 2230 (overcast earlier)
a 10 filter for first 2 plates ... comparison
will be overexposed - darn it!
clouds in south.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
31	00	35W +38° 42'	2-3	6.3 6.2	F0 B9	15/15/15	B8-B9	Wrong STAR Very good seeing 400/(30)	sting good
31	01	17E +33° 03'	3+	5.34	B9	15	B8-B9	SB(dte) 400/30	fine
31	01	15E +18° 44'	3	6.2	B9	15/15/15	B8-B9	2305 - clouds 400/30	fine
Closed up 2335 - clouds									

83

HL
O. H.
ME

JH.
Mf

Date May 14/15 Sat/Sun Observer Hb - L Julian Day 163

[illegible]

Dome Temp.

Transparency Conditions

Transparency Conditions *fun-hazy in south* 84

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 57 E	+33° 06'	0	5.34	B9	15/15/	B8-B9 SB	field drawn 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

[illegible]

$$\Delta S: \text{set} = \text{listed} + 0$$

Transparency Conditions

Focus

Dome Temp.

log Time S.T.	Hour Angle End	Declination	total Seeing in	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
5:40	01 29 W		4.5 ^s				Focussed on α Ser unguided	
2:36	01 36 W		2 ^m				- Trouble finding a guide star never did find one for 5904 sky !!	
1:42	01 49 W		3 ^m				unguided too bright !!	
5:00	00 30 W		3 ^m				guided	
03:04	00 28 W		3 ^m				A very very poor night Focussed but clouded out 2:30	
							Tues - Wed May 17-18 no clearing	
							Wed - Thurs 18-19 "	

Date 19-20 May/66
1 hour - 1 minObserver S. C. H. H. M.
Miss H. M. S.

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29087	5904	15 16.9	+2° 13'		Neut	10300		20:55:12	20:56:50	1
29088	5904	15 16.9	+2° 13'		Neut	10300		21:58:25	21:59:50	1
29089	6456	14 04.0	+28° 41'		Neut	10300		21:14:18	21:15:28	1
29090	5272	13 40.7	+28° 33'		Neut	10300		21:28:13	21:29:15	2
29091	5904	15 16.9	+2° 13'			"		21:38:50	21:40:22	1
29092	5904	15 16.9	+2° 13'			"		21:40:13	21:41:50	2
29093	5634	14 27.8	-5° 50'			"		22:19:53	22:21:53	1
29094	5904	15 16.9	+2° 13'			"		22:40:03	22:43:00	2
29095	5904	15 16.9	+2° 13'			"		22:48:23	22:48:53	1
29096	5634	14 27.8	-5° 50'			"		22:52:57	23:04:57	2
29097	5904	15 16.9	+2° 13'			"		23:11:08	23:14:08	1
29098	5904	15 16.9	+2° 13'			"		23:17:25	23:18:25	2
29099	5904	15 16.9	+2° 13'			"		01:23:45	01:25:45	1
29100	5904	15 16.9	+2° 13'			"		01:29:32	01:30:32	2
29101	6171	16 30.6	-12° 59'			"		01:49:12	01:59:12	1
29102	6356	17 21.6	-17° 47'			"		02:09:50	21:17:50	2

Dome Temp.

Focus

Dome Temp.

Transparency Conditions

poor - cirrus in S

88

01:30 clearing again - best sky all night

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0248E	$20^{\circ} 11'$ <u>$10^{\circ} 53'$</u>	90 ^s				from J. Van 1 1/2 m unguided	
0245E		30 ^s				1/2 m unguided	" " " " blank
0113E	$28^{\circ} 41''$	8 ^m				8 m guided	
0143E		2 ^m				2 m S	
0209E	$2^{\circ} 10'$	90 ^s				90 ^s unguided	Tracked
0203E		30 ^s				30 ^s unguided	This plate is exposed on #29094
0041E	$-5^{\circ} 50'$	10 ^m				6 m unguided	
0105E	$+2^{\circ} 12'$	3 ^m				3 m unguided	Double exposure - 29092 on the plate
0056	"	30 ^s				"	
0006E	—	12 ^m				clouds in S	S guided
0035E		3 ^m				clouds in S	unguided
0030E	$+2^{\circ} 12'$	1 ^m				stop for clouds	"
142W	$+2^{\circ} 13'$	2 ^m 30 ^s				off center	"
147W		1 ^m				off center	"
1732	$-12^{\circ} 59'$	10 ^m				CC guided	slight trail
029E		8 ^m				focus poor 1742:0/+4 35	
						focus had changed a great deal	

HS H

Observer *S, CC, Hm, mse* Julian Day[illegible]

Dome Temp. 53

Transparency Conditions

good

90

Focus

Dome Temp.

Log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02:00	02 46 W	+02 13	3 ^m				excellent another unsuccessful hunt for guide star	
02:23	02 49 W		1 ^m				excellent unguided	
02:32	1 56 W 17 01	-13 01	10 ^m				M guided	
02:10	03 30 W	+02 12	3 ^m				unguided excellent	
02:07	01 38 W	-17 49	8 ^m				S guided	
02:39	2 48 W 13 00	-13 00	8 ^m	9m			Cs guided very black	
							NB	
							Please change telescope back to Cassegrain Fri May 20	

Date Wed May 20-21 1966 Observer C - B 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.F.	Hour Angl End
29109	HD 107904	12 18.9	+43 05	L40	Ua2B	17	53	20 53 ¹⁵	21 23	A	01 36
29110	"	"	"	"	"	"	"	21 25 ¹³	21 50	B	01 03
29111	"	"	"	"	"	"	"	21 51 ¹⁰	22 11	C	01 24
29112	"	"	"	"	"	"	"	22 12 ¹⁰	22 32	A	01 45
29113	"	"	"	"	"	"	"	22 32 ¹¹	22 54	B	02 07
29114	"	"	"	"	"	"	"	22 55 ¹¹	23 17	C	02 30
29115	"	"	"	"	"	"	51	23 19 ¹¹	23 41	A	02 53
29116	"	"	"	"	"	"	"	23 44 ¹²	00 08	B	03 21
29117	"	"	"	"	"	"	50	00 12 ¹²	00 36	C	03 50
29118	"	"	"	"	"	"	"	00 38 ¹⁴	01 06	B	04 19
29119	"	"	"	"	"	"	"	01 06 ¹²	01 30	A	04 45
29120	"	"	"	"	"	"	"	01 31 ¹²	01 55	C	05 10
29121	"	"	"	"	"	"	"	01 57 ¹²	02 20	B	05 33
29122	"	"	"	"	"	"	48	02 20 ¹⁴	02 47	A	06 01
29123	BD +22° 3693	(1965) 19 24.8	(1965) +22° 42	"	"	13	"	02 54 ²⁵	03 44	C	06 05
29123F	FOCUS TEST			"	"	13	48			B	

Rain + clouds in early evening

92

Transparency Conditions OK at 20:30

Dome Temp. -4

Focus 68/67/66

EXPOSURE METER HI VOLTAGE ETC WAS NOT ON

Dome Temp.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23 A	00 36W	+42 45	0	6.2	F2	15-15-15	Cn-Fe 5 Scuti star	undisturbed 400 25? fine.
50 B	01 03W	"	0+	"	"	15-15-15	"	400 30 fine
11 C	01 24W	"	0+	"	"	15-15-15	"	400 30 fine
32 A	01 45W	"	1	"	"	15-15-15	"	400 30 fine
54 B	02 07W	"	1	"	"	15-15-15	"	400 28 fine
7 C	02 30W	"	1	"	"	15-15-15	"	400 30 fine
41 A	02 55W	"	1	"	"	15-15-15	"	400 28 fine
08 B	03 21W	"	1	"	"	15-15-15	" had to clamp telescope in dec.	400 30 fine
38 C	03 50W	"	0+	"	"	15-15-15	" X meter looking off a bit.	400/25 fine
06 B	04 19W	"	0	"	"	15-15-15	" source unstable	400/25 fine
30 A	04 45W	"	0-	"	"	15-15-15	"	400/27 fine
55 C	05 10W	"	"	"	"	15-15-15	"	400/20 at focus
220 B	05 33W	"	0+!	"	"	15-15-15	"	400/21 low star
247 A	06 03W	"	"	"	"	15-15-15	" Focus 66	400/25 " fine
344 C	10 05C +22° 42'		8.3?	A2	15-15-15	Re "DUST" Trag.	X meter?? 1/2 Minute	800/7 weak
B					5-5	Focus 66.		at center

93

Date Sat/Sun 21-22 May Observer MF - 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.	P.I.
160	Visitors -									
29124	HD 139160	15 31.5	-25 57	G 40	Il 0	13	57	23 06 ⁴⁰	00 26	A
29122T	Calibration Slip Wedge							29109-22		

Dome Temp. 59

Transparency Conditions

fair

94

Focus

Dome Temp.

ing Time
S.T.

P.M.

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

slides in dome, & "universe" To 2nd group.

26 A 00 08 M -26 07 0-1 60 B9 15/15/15 B8-B9

400/26 week

At night

2 loaded plate holders in refrigerator

95

Wd.
Wadmiria

Date 22-23 May, Sun Mon, 1966

Observer Cn
$$-H\sqrt{}$$

Julian Day

[illegible]

Dome Temp. 61Focus 701

Dome Temp.

Transparency Conditions

Good.

96.

g Time S.T.	PL	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
13	B	00 33W	+42 45	1	6.2	F2	15-15-15	8 Surti *	400 30 fine	
37	C	01 00W	"	1	"	"	15-15-15		400 30 fine	
03	A	01 33E	+33 03	1	5.34	B9	15-15-15	38-B9	400 30 fine	
40	B	00 31W	+45 29	1	7.64	F3	15-15-15	KAFS Binary	800 50 fine	
41		HD 142301	9	could not recognize field. please check - OK as drawn						25
43	A	0405 W	+42 45	1	6.2	F2	15-15-15	8 Surti *	400 30 fine	
53	A	0225 W	+42 10	1	7.74	C12	15-15-15	CARBON * HAZE?	800/37 fine	

EXPOSED PLATES IN UNEXP. BOX #3

Observer *DB - HB* Julian Day

[illegible]

Dome Temp.

Transparency Conditions

(sunset) (2200)
ions fair-good

98

[illegible]

Date 25 May/66 - WedObserver S. C. (M.F.) H. M. S.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.	Hour Angle End
29138	5904	15 16.9	+2 13	Newtonian	103a-0			1:23:28	1:26:28	1 W2 0
29139	"	"	"	"	"	"		01 29 10	01:30:10	2 W2 03
29140	6171	16 30.6	-12 59		4			1:41:16	1:51:16	1 W1 13
29141	5904	15 16.9	+2 13		"			02 00 15	02 03 15	2 W2 39 W
29142	"	"	"		"			2:08:19	2:10 9:19	1 W2 44
29143	6356	17 21.6	-17 47		"			02 15 00	02 25	2 W2 55
29144	6171	16 30.6	-12 59		"			2:47:55	2:57:55	1 W2 9 W
29145	6356	17 21.6	-17 47		"			3:03:25	3:12:25	2 W2 9 W
29146	6171	16 30.6	-12 59		"			3:18:20	3:27:20	1 W2 50
29147	6838	19 52.0	+18 40		"					2

Dome Temp.

100.

$$\Delta \delta = +1 \frac{1}{2}$$
[illegible]

Date 25-26 May 1966 Observer S, Cc, M, Hb, Mse Julian Day H/m
Wed - Thurs

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	E 00 17
29148	5904	15 16.9	+2 13	"	"			21:37:13	21:40:13	1	E 01 41
29149	5904	15 16.9	+2 13	"	"			21 44 13	21:45:13	3	E 01 36
29150	5466	14 ^h 04 ^m .0	+28° 41'	"	"			21:54:00	22:04:00	1	E 00 05
29151	5904	15 16.9	+2 13	"	"			22:23:16	22:26:16	2	E 00 55
29152	5904	15 16.9	+2 13	"	"			22:29:54	22:30:54	1	E 00 50
29153	5634	14 ^h 27 ^m .8	-5° 50'	"	"			22:39:21	22:49:21	2	W 00 17
29154	5466	14 04.0	+28 41	"	"			23:15:16	23:25:16	1	W 01 17
29155	5904	15 16.9	+2 13	"	"			23:34:51	23:37:51	2	W 00 17
29156	5904	15 16.9	+2 13	"	"			23:42:10	23:43:10	1	W 00 22
29157	5634	14 27.8	-5° 50'	"	"			23:49:50	23:59:50	2	W 01 28
29158	5904	15 16.9	+2 13	"	"			00:11:18	00:14:18	1	W 00 55
29159	5904	15 16.9	+2 13	"	"			00:16:48	00:17:48	2	W 00 55
29160	6171	16 ^h 30 ^m .6	-12° 59'	"	"			0:29:42	0:39:42	1	W 00 00
29161	6218	16 45.4	-1 54	"	"			00:42:41	00:44:41	2	E 00 05
29162	6254	16 55.9	-4 04	"	"			0:48:11	0:50:11	1	E 00 09

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

Transparency Conditions *very good* (scattered clouds in S) ¹⁰²

Focus

Dome Temp.

Exp. Time S.T.	Hour Angle End	Declination	Seeing EXPOSURE TIME	Ptg Mag.	Sp.	Comp.	REMARKS	Quality
27:30	2	00:17	2 ^m				Un guided	
30:13	1	01:41	3 ^m				Trouble finding guide star	
31:13	2	01:36	1 ^m				unguided	
4:00	1	00:05	10 ^m				S guide	
20:16	2	00:55	3 ^m				Trouble finding guide star..... CC guided	
30:14		00:50:30	1 ^m				unguided	
19:21	2	00:17	10 ^m				M guiding	
15:16	1	01:17	10 ^m				focus on 3 Vir CC guiding	
37:51	2	00:17	3 ^m				CC guiding	
3:10	1	00:22	1 ^m				unguided	
39:10	2	01:28	10 ^m				M guided	
14:18		00:53	3 ^m				CC guided	
17:43	3	00:56	1 ^m				unguided	
39:42	1	00:05	10 ^m				S guiding	
44:41	2	00:05	2 ^m				S guiding.... good guide star.	
50:11		00:09	2 ^m				"	

12:04 Tried to photograph Echo but it went into eclipse before we reached it!

Date 26 May/66 - Thurs Observer S, C, M, M, S, H Julian Day 152

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.l	Hour Ang End
29163	5897	15 15.5	-20 52	NEWT	103aD			00 55:29	01 05:29	2	W014
29164	5904	15 16.9	+2 13	"	"			1:21:55	1:24:55	1	W020
29165	5904	15 16.9	+2 13	"	"			1:29:04	1:30:04	2	W20
29166	6171	16 30.6	-12 59	"	"			1:39:25	1:49:25	1	W115
29167	6356	17 21.6	-17 47	"	"			01:59:34	02:09:34	2	W0044
29168	6093	16 15.0	-22 55	"	"			02:13:14	02:19:14	1	W205
29169	5904	15 16.9	+2 13	"	"			2:27:05	2:30:05	2	W310
29170	5904	15 16.9	+2 13	"	"			2:33:19	2:34:19	1	W0314
29171	6171	16 30.6	-12 59	"	"			2:47:55	2:57:55		W0224
29172	6356	17 21.6	-17 47	"	"			3:10:58	3:20:58		W0155

Dome Temp.

very good

poor seeing

104

Log Time L.S.T.	Hour Angle End	Declination	Seeing EXPOSURE TIME	Pts. Mag.	Sp.	Comp.	REMARKS	Quality
05:29	2 W 01 46	20 48	10 ^m				poor seeing good guide star S guided	
4:55	1 W 02 04		3 ^m				CC guiding	
5:04	2 W 2 09		1 ^m				Hm guided Echo (manual) 01:40	
5:25	1 W 1 15		10 ^m				from a Ser. (15 42.1' + 06 32.1')	
5:34	2 W 00 44		10 ^m				CC guiding M guiding	
5:44	1 W 2 00		6 ^m				poor seeing S guiding Echo ~ 03	16 predicted
5:05	2 W 3 10	+2° 18'	3 ^m				CC guiding	
5:19	1 W 03 14		1 ^m				CC guiding	
5:55	2 W 02 24	-12 56	10 ^m				Declination slow motion inoperational after nothing CC guiding	TROUBLE WITH DEC SLEWING
6:58	2 W 01 55		10 ^m				down is coming sky begins to brighten M guided * DECLINATION SET MANUALLY.	
							transparency excellent, but seeing not very good in last half	
							* DECLINATION FIXED — due to S clamp	
Thursday, May 26 — Changeback to Cassegrainian.								

Date May 26-27Observer ^{Hb} Mal - ^{Hm} Mal ^{mse} 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.	How Angl End
439-1	HR 4785			-17	HR 6707				21:00		W.D. 2.
-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	HR 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							

(03H 34 EST)

Dome Temp.

Transparency Conditions

EXCELLENT

106

clouds from N.W. and
down

[illegible]

Date May 27/28 Fri/Sat Observer McD, MF / MEO Julian Day 172

Plate No.	Object	R.A. 1900 65	Declination 1900 65	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 33.1	+29 54							
440-6	HR 5911	15 51.8	+13 18							
440-7	HR 5914	15 51.8	+42 33							
440-8	HR 6146	16 27.6	+41 58							
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 6406	17 13.1	+14 26							
440-13	HR 6707	17 57.3	+20 12						00 ^h 34	
440-14	HR 6536	17 29.8	+52 20						00 ^h 48	
440-15	NGC 6341	17 15.9	+43 11						01 03	
440-16	HR 6418	17 14.1	+36 51						01 14	

Dome Temp.

Transparency Conditions *see 3.001*

108

[illegible]

Date May 27/28 Fri/Sat. Observer MRD Julian Day 2454310.5

[illegible]

Dome Temp. 52.....

Transparency Conditions Good - Excellent.....

110

Focus

Dome Temp. 50 (0400 EST).....

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
27	01 ^h 15 E							
37	01 21 E							
2	01 02 E							
3	00 46 E							
18	01 23 E							
32	05 32 E							
45'	05 26 E							
05	04 30 E							
21	04 35 E							
35	04 ^h 57 E							
51	05 ^h 00 E							
		DAWN						

110

PH C loaded

Date 30-31 May/66 Observer Wd, mse, A. Julian Day Mon - Tues

[illegible]

Dome Temp. 41° F

Focus 65/64

Dome Temp.

Transparency Conditions *Some distance cloud (2040)**Solid cloud in N (2125)**0100 - 1/2 sky obscured; > 1 mag. absorption*

114

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						3/5 <i>610 filter</i> found 65	OK
02 57	+19 40		5.39	F5	3-3-3	std. Vel.	800/50
03 21 W	"	0	"	"	4-3-3	" Clouded in 2125 EST.	800/44
						CLOUD	
03 52	+56° 35'	00	5.17	F0	3-3-3	std. Vel. / Focus 64 / HAZE	400/21
03 08	"	0 → 1	"	"	3-3-3	std. Vel. " "	400/20
03 56	55 07	0	4.02	F8	7	std. Vel. (5 u mag. B) "	400/10
04 00	"	"	"	4	7	" "	400/10
04 23	+1 55	0	5.74	F6	3-3-3	std. Vel. haze getting thicker	800/51
04 53	"	"	"	"	3-3	"	800/40
						7/7 <i>610 filter</i> Cloud	OK

PH '7' loaded

Date ³ May - 1 June / 66 Observer Hs, m se, Ea Julian Day

[illegible]

Dome Temp.

Transparency Conditions

Transparency Conditions ^{very} poor at summit.
2130 - bushy fern NE

116

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
25 3 25	19 40		5.39	F5	3-3-	<i>gr 10 filter</i> <i>gr 10 filter</i> <i>std. vel.</i> <i>focus 65</i> <i>clouds.</i>	<i>500/61</i> <i>fine</i>
217 W		1	5.74	F6	3-3-3	<i>std. vel.</i> <i>clouds</i> <i>closed up 0300</i> <i>100/6</i> <i>fine</i>	

G10 FILTER IS IN POSITION

117

Date June 166

Observer Hb, MSL, In 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.	How Angl End
29186	HD 95418	10 55.8	56 55	G40	IIaOb	13	50°F	21 06	21 07	A	02 30
29187	"	"	"	"	"	"	"	21 08	21 09	B	02 32
29188	HD 113439	12 56.4	56 54	"	"	13	"	21 14	21 31	C	00 54
29189	"	"	"	"	"	"	"	21 32	21 51	A	01 13
29190	^{20 May 3} HD 116657	13 19.9	55 26	"	"	"	50	21 56	21 58	B	00 53
29191	"	"	"	"	"	"	"	22 04	22 06	C	01 07
29192	HD 108382	12 22.0	27 22	"	"	"	"	22 16	22 21	B	02 18
29193	"	"	"	"	"	"	"	22 24	22 27	C	02 20
29194	HD 108486	12 22.7	26° 27'	G40	IIaOb	13	"	22 34	23 05	B	03 02
29195	"	"	"	G40	IIaOb	17	47°F	23 07	23 30	A	03 27
29196	HD 109307	12 28.6	24 50	G40	IIaOb	17	"	23 33	23 54	B	03 45
29197	"	"	"	"	"	"	"	23 54:30	0 08	C	04 00
29198	^{M Boo A} HD 137391	15 20.7	37 44	G40	IIaOb	13	47	00 13	00 22	A	01 23
29199	"	"	"	"	"	"	"	00 24	00 30	B	01 31
29200	HD 161701	17 41.9	14 42	G40	IIaOb	13	"	00 36	01 06	C	00 06
29201	HD 176318	18 54.6	138 07	G40	IIaOb	13	46°F	01 11	1 38	A	01 03

Dome Temp. 54°FFocus 66

Dome Temp.

Transparency Conditions

Good - Full Moon some cloud in SW SE
Excellent after 2200

118

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	EXP. MTR FAIRLY STABLE 3000	Quality
						<u>GEO FILTER</u>			
07 A	02 30W	56 35	0-1	2.44	A0	9	std. Vel / MANUAL GUIDING	200/5	sl. fogged good exposure
09 B	02 32W	"	"	"	"	9	" " "	200/5	fine
31 C	W0 54	56 34	0	5.17	F0	3-3-3	" auto. "	800/50	strong
51 A	W1 13	"		5.17	F0	3-3-3	"	800/50	strong
58 B	W0 58	55 06	0-1	4.02	A8	9	" MANUAL GUIDING	400/10	fine
06 C	W1 07	"		4.02	A8	9	" "	400/10	sl. weak
21 B	W2 18	27 01		5.10	A2	6-3	" "	800/20	fine
27 C	W2 25	"		"	"	5-5	" auto guiding	800/20	fine
05 B	W3 02	26° 07	1	6.65	A3	3-3-3	" "	800/25	fine
30 B	W3 27	"	1	6.65	A3	3-3-3	" "	800/25	fine
54 B	W3 45	24 28	0	6.20	A2	3-3-3	" "	800/25	fine
08 C	W4 00	"		"	"	3-3-3	" "	800/25	fine
22 A	W1 23	37 31	1	4.75	F0	3-3-3	"	800/50	strong
30 B	W1 31	"	1	4.75	F0	3-3-3	"	800/50	strong
06 C	E00 16	-14° 42'	0	6.1	B9	3-3-3	B8-B9 (SB)	800/30	fine
32 A	E1 03	+38° 14'	0	5.7	B8	3-3-3	B8-B9 (SB) Arm set to 64	800/30	fine

Date 2 June 1966 - Thurs Observer H.B. Jones Mse Julian Day 185

[illegible]

Dome Temp. 46°F

Transparency Conditions very good

120

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						<u>G10 FILTER</u>		
56	EO 31	+13 56	0	6.1	89	3-3-3	B8-B9 (SB)	800/30 fine
36	W01 14	-14 42	0	6.1	89	3-3-3	"	800/3035 fine
56	N00 23	+38° 14'	0	5.7	88	3-3-3	"	800/37 fine
25	W00 34	+27° 24'	0	6.2	89	3-3-3	B8-B9 (SB)	800/35 fine
						9/9		

121

Date 2-3 June/66
Thurs - Fri

Observer *Re* / *Hs*
m.d. / *Re*
mse

Julian Day

[illegible]

Dome Temp.

122

[illegible]

Date 2-4 JUNE 1966Observer Q. Sd

Julian Day

Fri - SatD6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29210	78 VIR HD 118022	13 ^h 29.1	+04° 10'	G40	IIaOb	13	62	21:39	22:00	A
29211	"	"	"	"	"	"	"	22:03	22:22	B
29212	9 U MAJ 73 HD 116657	13 ^h 19.9	+56° 26'	"	"	"	"	22:29	22:35	C
29213	"	"	"	"	"	"	"	22:36	22:41	A
29214	HD 136202	15 ^R 14.2	+2° 09'	"	"	"	"	22:51	23:26	B
29215	"	"	"	"	"	"	"	23:29	23:50	C
29216	4 Boo A HD 137391	15 ^R 20.7	+37° 44'	"	"	"	"	23:57	00:06	A
29217	"	"	"	"	"	"	"	00:09	00:14	B
29218	HD 136849	15 ^h 17.8	+33 17	"	"	"	"	00:22	00:36	C
29219	HD 169820	18 21.4	+14 55	"	"	"	"	00:46	1:24	A
29219T	Calibration	Step	Wedge	for plates				29210 - 29219		

Dome Temp. 66° F.

Focus 70/

Dome Temp.

Transparency Conditions *POOR*

Mag. Time S.T.	PL	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00:29	B	00 ^h 29 ^m W	+03° 50'	0-1	4.75	F0	5-2-3	STD. VELOCITY STAR A+F focus 70 800/40	fine
01:20	B	01:20 W	"	"	"	"	3-3-3	" " " 800/35	fine
01:44	C	01:44 W	55° 06'	0+	4.02	A8	3-3-3	" " " 800/40	quivering
01:50	A	01:50 W	"	1	"	"	3-2-3	A+F std V. " 800/40	fine
00:42	B	00:42 W	1° 55'	"	5.24	F6	3-2-3	" " (cloud DV) (double) 800/50	fine
1:4	C	1:4 W	"	1	"	"	3-2-3	focus 70 " 800/50	fine
1:13	A	1:13 W	37° 30'	"	4.75	F0	3-2-3	" " 400/20	fine
01:22	B	01 ^h 22 W	"	"	"	"	3-2-3	" " 400/20	fine
1:46	C	1:46 W	33° 03'	"	5.34	B9	3-2-3	B8-B9 SPEC. BINARY 800/25	fine
0:29	A	0:29 E	14° 58'	①	6.43	B9	3-2-3	B8-B9 SPEC. BINARY 800/30	fine
cloud - finally closed up!!									

HL
JHL
WT

Date 7-8 June 1966
Tues - Wed

Dome Temp
Focus 7
Dome Temp

Hour Angle
End

Dome Temp.

Transparency Conditions airus

126

2.200' drop from ~ 1 mag absorption

[illegible]

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

566

Joan: June 1-2 there are no
comments on the plate.

Dome Temp. 63°F

Focus 70/68/67

Dome Temp. 63°F

Transparency Conditions

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

128

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						<u>210</u>		
02	03 W	+42° 44'	0 =	6.2	F2	3/3/3	S Sexti star - very slow 400/20	fine 20 min only 210 counts.
01	34 W	+03° 52'	0 =	4.75	F0	3/3/3	F - Std Vel seeing is horrible transparency good 450/25	fine
01	58 W	"	0	"	F0	3/3/3	" 400/25	fine
00	36 W	+33° 05'	0	5.34	B9	3/3/3	B8-B9 SB. copying device broke - may be fogged transparency good 400/15	fine
00	55 E	-14° 41'	0	6.1	B8	3/3/3	B8-B9 SB from 68 400/15	fine strong comp out of focus comp. w. star
00	40 E	+05° 06'	0	6.54	B9	3/3/3	B8-B9 SB plate loaded backwards	fine
00	17 W	+14° 59'	0	6.43	B9	3/3/3	B8-B9 SB (d.e) full deck	fine
00	55 W	+06° 13'	0	5.6	B8	3/3/3	B8-B9 SB from 67	fine
02	24 W	-14° 40'	0	6.1	B8	3/3/3	B8-B9 SB several mag. observations (w 3-4)	fine fogged weak

** 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.
Some OK THING. AM.

Date 10/11 June '66 Iri/Sat Observer MCL MSS Julian Day 172

[illegible]

Dome Temp. /

Transparency Conditions

130

g Time S.T.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
ke 31								21:00 EST - found High Voltage Power Supply not working. Trouble was traced to the connector at the Power Supply.	

Dome Temp. 56°F Focus $\text{focus } 68$ Dome Temp. 49°F Transparency Conditions cirrus

132

 fair - poor

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						G10 FILTER		
36A	00 45	+18 45	0	6.20	B9	2-1-2	138-39 focus 68	$\text{EXP. MTR NOT FUNCTIONING}$ fine
01 B	0 18W	-14 42	0	6.1	B9	2-1-2	138-139 (SB)	(POWER SUPPLY?) fine
34C	W1 14	+5 07	0	6.54	B9	2-1-2	138-139 (SB)	fine
24 23A	W2 42 41	-14 40	0	6.1	B9	2-1-	138-139 (SB)	guiding

Date 12-13 June 1966
Sunday / MondayObserver Mac, Qi

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.
29235 F	focus test in in / out out			640	Il a 010	13	62			A
29236	H12107904	12 18.9	43 05	640	Il a 010	27	"	20:50	20:57	B
29237	"	"	"	"	"	"	"	20:58	21:04	C
29238	"	"	"	"	"	"	60	21:06	21:14	A
29239	"	"	"	"	"	"	"	21:15	21:23	B
29240	"	"	"	"	"	"	"	21:24	21:30	C
29241	"	"	"	"	"	"	60°F	21:31	21:37 1/2	A
29242	"	"	"	"	"	"	"	21:38	21:45	B
29243	"	"	"	"	"	"	"	21:45:20	21:53:0	C
29244	"	"	"	"	"	"	"	21:54:20	22:02:55	A
29245	"	"	"	"	"	"	"	22:03:40	22:11:15	B
29246	"	"	"	"	"	"	"	22:11:55	22:19:0	C
29247	"	"	"	"	"	"	"	22:19:55	22:28:0	A
29248	"	"	"	"	"	"	"	22:28:45	22:35:30	B
29249	"	"	"	"	"	"	60°F	22:36:55	22:45:45	C
29250	"	"	"	"	"	"	"	22:46:20	22:53:40	A

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
					(GND FILTER)		
					5/5	focus 70	O.K.
01 ^h 41 W	+42° 45'	0-1	6.2	F2	1-1-1	S Scuti *	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

Date 12-13 June 1966 Observer McL, Ai Julian Day 240
Shim / 2nd

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29251	HD 107904	12 18.9	+3 05	G40	Ilab	27		22:54:05	23:01:40	B
29252	"	"	"	"	"	"		23:02:05	23:13:50	C
29253	"	"	"	"	"	"		23:14:30	23:22:45	A
29254	"	"	"	"	"	"	59°F	23:23:20	23:31:30	B
29255	"	"	"	"	"	"		23:32:20	23:46:30	C
29256	"	"	"	"	"	"		23:47:00	23:55:20	A
29257	HD 161701	17 41.9	-14 42	G40	Ilab	13		00:02	0 24	B
29258	HD 169578	18 20.2	+5 02	G40	Ilab	13	58°F	0 28	1 04	C
29259	HD 161701	17 41.9	-14 42	G40	Ilab	13		1 07	1 42	A
29260	HD 169820	18 21.4	+14 55	G40	Ilab	13	57°F	1 47	2 04	B
29261	HD 170200	18 23.1	+6 08	G40	Ilab	13		2 07	2 14	C
29262	HD 174853	18 47.5	+13 51	G40	Ilab	13		2 17	2 33	B
29263	HD 172883	18 37.5	52 06	G40	Ilab	13	57	2 41	2 57	C
29264	HD 180553	19 11.9	+27 17	G40	Ilab	13		30 7	3 24	A
29264 T ₁	Calibration	Step Wedge	for plate					29232 - 36		
T ₂	"	"	"	"	"	"		29237 - 50		
T ₃	"	"	"	"	"	"		29251 - 64		

Dome Temp. 6.3 °FFocus 6.9/68

Dome Temp.

Transparency Conditions

very good

136

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						(410 FILTER)		
1:54 B		42 45		6.2	F2	1-1-1	8 Scuti STAR. 800/30	fine
3:50 C	U3 59	"		"	"	1-1-1	TELESCOPE IN BALANCE IN RA. 800/30	fine
2:45 A		"		"	"	1-1-1	" 800/50	fine
3:30 B	U4 16	"		"	"	1-1-1	" 800/30	fine
3:30 C		"	1	"	"	1-1-1	" 800/30	fine
5:20 A	U4 40	"		"	"	1-1-1	" 800/30	lunar
24 B	EO 14	-14 42	1	6.1	B9	2-1-2	B8-B9 (SB) 800/30	lunar
04 C	EO 13	+5 07	1	6.54	B9	2-1-2	B8-B9 (SB) 800/30	fine
42 A	W1 04	-14 42	0	6.1	B9	2-1-2	B8-B9 (SB) 800/30	lunar
4 B	W0 47	14 58	1	6.43	B9	2-1-2	B8-B9 (SB) (de) focus 68 800/30	guiding
4 C	W0 55	+06 12	1-2	5.6	B8	2-1-2	B8-B9 (SB) 800/30	lunar
23 B	W0 50	+13 57	"	6.1	B9	2-1-2	B8-B9 (SB) 800/30	fine
57 C	W1 25	+52 10	1	5.8	B9	2-1-2	B8-B9 (SB) 800/25	fine
4 A	W1 16	+27 25	"	6.2	B9	2-1-	B8-B9 (SB) BRIGHT COMPONENT OF VISUAL BINARY / SEPERATED IN 2 800/	lunar

74" MIRROR FRESHLY ALUMINIZED!!

Observer Fe Qi

Julian Day

Feb/2008

[illegible]

139 Visitors: 2185 ; ♀ Boo. - binary - fair.
DG, Re, Wt,

Date June 18/19
Sat/Sun.

Observer... Re. ai ... 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.	P.
29270	HD 164514	17 ^h 56.4	-22° 54'	G40	IIaOB	17L	62	23 10	23:48	A
29271	"	"	"	"	"	"	61	23 50	00 04	B
29272	" 169578	18 20.2	+05 02	"	"	"	—	00 19	00 26	
29273	"	"	"	"	"	"	—	00 30	00 40	B
29274	" 182040	19 21.4	-10 46	"	"	"	60	00 52	02 00	C

Dome Temp.

Haze in S. E

140.

log Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
48	A	00 44 E	-22° 49'	0+	8.2	A5 Ia	2-2-2	HK STANDARD	comp. stronger on 800/20	very weak
49	B	00 27 E	"	1-	"	"	2-2-2	"	comp. one side 800/10	double with 70
50	B	00 28 E	05 07	1	6.54	B9	2-2-2	B8 B9	800/30	guiding, fine
51	B	00 13 E	"	1	"	"	2-4	B8 B9	800/30	fine
52	C	0 09 W	-10 43	1	7.04	G12	2-2-2	Carbon Star	Increasing Haze 800/80	fine
71 + 70 are double exposure??										
comp lines off centre										

2340 M.E. RESET APPROX!
S.E. "

TIMES NEEDED
CORRECTION

Date 19-20 June 1966 Observer Hs, Ea, Mac Julian Day 1966-1967

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
-										
29275	HID 131861	14	52.9 ^m 45° 43'	G40	Ialob	13	65°F	22:57	00 01	C
29276	+41° 37' 37"	20	21.3 ^m 42° 04'	G40	"	17	-	0 33	2 10	C
29277	HID 184467	19	29.5 ^m 58° 24'	G40	Ialob	13	62°F	2 15	03 05	C
29277T	Vibration Step Wedge for plates							29265 - 77		

ED
—
2V

Dome Temp. 66°F

142

Focus 7.1/70

(1 CHECKED FUSES IN BEDGE 'PHONED HYDRO)

[illegible]

Date 20/21 June/66 Observer DB, WD Julian Day 171
Mon/Tuesday

[illegible]

Dome Temp. 74°/70°/66

Focus 73/72/71

Dome Temp.

Transparency Conditions fair-good

Very Good - slight cirrus

144

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
32 A	02:00 W	+38 44	1	6.20	B9	2-4 (f=73)	38-39	400/15
32 B	02:10 W	-11	1+	-11	"	2-2-2 (f=73)	38-39	400/15
7 C	01 02 W	+45 28	1+	7.64	F3	2-2-2	KAFS Binary	400/25
2 A	01:37 W	-11	1++	7.64	F3	2-2-2	Exp M unstable, oscillates	400/25
21 B	00:55 W	-23 28	0-1	5.8	B8	2-2-2	38-B9 prog. - lightning persisting	400/15
19 C	02:21 E	+38 14	1+	5.7	B8-B9	2-2-2	38-B9 Sp Binary	800/30
7	00:42 W	-17° 20	1+	9.4	B8	2-2-2	Re'Dist Program + Exp M. 1st unstable!!	800/30
9 B	00:10 W	+38 13	1+	5.7	B8-B9	2-2-2	38-B9 program - Dome blocked	400/15
C	00:17 W	+38 13	2	"	-4-	2-2-2	38-B9 sp Bin	400/15
A	00:23 W	-19 14	1	6.7	B8	2-2-2	38-B9 prog	400/15
B	00:42 E	+68 01	2	8.5	A0	2-2-2 (f=71)	Re'Dist + MK standards	800/31
0 C	02:22 W	+38 13	2	5.7	B8-B9	2-	38-B9 Sp Bin	400/30
Close up at 0345 EST							uncertain of Exp M. at 800, use 50 mm.	
							not in program - what's up?	
							Comp lines shifted in	

Dome Temp. 64

Transparency Conditions

146

finder not aligned with 74" - adjusted correctly

g Time ST.	PM	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24	CW	1 ^h 13	+45 28	0	7.64	F3	4-2	KAFS binary counter not working	fine
35	B	2 ^h 24	"	0-1	7.64	11	2-2-2	" (forgot to pull slide initially)	1 week
00	C	0 ^h 29	-19 32	01	9.1	B5	2-2-2	"Dust Ruger"	two weeks
00	-	0 ^h 53	+57 22	1	9.9	(B5)	2-2-2	" -intermittent clouds after 1 ^h exp	2 weeks
32	-	1 ^h 06	+42 02	0-1	6.37	B8	2-2	B8-B9 binary - heavier clouds	fine
Close up at 3:40 AM									

147

[illegible]

Hour Angle
End

Dome Temp. 79°F

Focus 75.7

Dome Temp.

Transparency Conditions slightly hazy on horizon

148

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. G10	REMARKS	Quality
20	A 00 27 E	-14 42	1	6.1	B9	2-2-2	B8-B9 SB	l warts
32	B 01 26 E	+38 15	1	5.7	B8	2-2-2	B8-B9 SB	guiding
45	C 01 32 E	+27 25	1	6.2	B9	2-2-2	B8-B9 SB	guiding
61	A 01 51 E	+13 55	1	6.1	B9	2-2-2	B8-B9 SB	fine
39	B 01 08 E	13 16	1	6.07	B8	2-2-2	B8-B9 SB	short slit
56	C 01 13 E	60 39	1	6.42	B9	2-2-2	B8-B9 SB	fine
20	A 1 31 W	-14 40	0	6.1	B9	2-2-2	B8-B9 SB	fine
Haze increasing clouds.								weak

B. 1A CONTROL BOX
DROPPED

149

Date 26-27 June '66
Same - brown

Observer *H. E. Mice* 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.
29302	HD169033	18	17.6 -12 03	G40	IaOb	13	79°F	00 06	00 18	A
29303	HD171957	18	32.4 -14 06	G40	IaOb	13	79°F	00 20	00 32	B
29304	HD171961	18	32.4 -23 36	G40	IaOb	13	79°F	00 46	01 02	A
29305	HD173117	18	38.6 -25 05	G40	IaOb	13	79°F	1 19 ³⁰	1 45	B
29306	BD+1°37'37"	20	21.3 42 04	G40	"	17	79°F	2 08	3 21	
29305 T	Calibration Step Wedge for plates 29295-29305									
29321 T ₁	Calibration Step Wedge for plates 29306-19									
T ₂	Calibration Step Wedge for plates 29320-21									

Dome Temp. 79°F

Focus 2.6

Dome Temp. 73°F Transparency Conditions FAIR AFTER MIDNIGHTEX. MTR 1P21 at 800V, $\frac{\text{COUNTS}}{2}$

ing Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
18	0 06E	-12 00	0-1	5.68	B8	2-2-2	B8-B9 focus 76 800/(800V) $\frac{15}{16}$	short slit l weak
32	BED 03	-14 00	0	6.43	B9	2-2-2	B8-B9 800/15	l weak
14	00 40	-23 28	0	5.73	B9	2-2-2	B8-B9 CAPPING DEVICE CAME APART 800/15	scattered very weak VII
45	01 05	-25 0		6.4	B8	2-2-2	B8-B9 800/15	l weak
21	00 59	42 17		9.4 (B5)	2-2-2	RE "DUST"	800/20	l weak not any stars at focus

Date 27-28 June Mon-Tues Observer Mge Hb - Cu Wd mce Julian Day 181

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 2930 ⁰⁷	HD 114376	13 ^h 05 ^m .1	+39° 04'	G40	IIaOb	13	73°F	21:04	21:10	A
2930 ⁰⁸ 2930 ⁰⁹	HD 133529	14 ^h 59 ^m .9	-25° 24'	G40	IIaOb	13	—	21:15	21:33	B
2930 ¹⁰ 2930 ¹¹	HD 134946	15 ^h 07 ^m .5	-23° 38'	G40	IIaOb	13	—	21:37	21:51	C
2930 ¹² 2930 ¹³	HD 144334	16 ^h 00 ^m .2	-23° 20'	G40	IIaOb	13	72°F	21:55	22:06	A
2930 ¹⁴ 2930 ¹⁵	HD 144661	16 ^h 01 ^m .9	-24° 11'	G40	IIaOb	13	—	22:10	22:25	B
2930 ¹⁶ 2930 ¹⁷	HD 144844	16 ^h 02 ^m .8	-23° 25'	G40	IIaOb	13	70°F	22:30	22:40	C
2930 ¹⁸ 2930 ¹⁹	HD 145792	16 ^h 07 ^m .7	-24° 10'	G40	IIaOb	13	—	22:44	23:10	A
2930 ²⁰ 2930 ²¹	HD 146816	16 ^h 11 ^m .1	-21° 03'	G40	IIaOb	13	—	23:13	23:27	B
2930 ²² 2930 ²³	HD 152909	16 ^h 51 ^m .2	-19° 22'	G40	IIaOb	13	68°F	23:36	23:56	C
2930 ²⁴ 2930 ²⁵	HD 170235	18 ^h 23 ^m .2	-25° 19'	G40	IIaOb	17L	—	00:02	00:27	A
2930 ²⁶ 2930 ²⁷	HD 171780	18 ^h 31 ^m .6	+34° 22'	G40	IIaOb	17L	—	00:32	00:36	B
2930 ²⁸ 2930 ²⁹	HD 171780	— " —	— " —	G40	IIaOb	17L	—	00:39	00:41	C
2930 ³⁰ 2930 ³¹	HD 174237	18 ^h 44 ^m .5	+52° 53'	G40	IIaOb	17L	—	00:45	00:49	A
2930 ³² 2930 ³³	HD 174237	— " —	— " —	G40	IIaOb	17L	—	00:53	00:57	B
2930 ³⁴ 2930 ³⁵	HD 173219	18 ^h 39 ^m .1	-09° 13'	— " —	— " —	17	—	01:06	01:40	C
2930 ³⁶ 2930 ³⁷	BD +23° 3761	19 ^h 41 ^m .2	+24° 04'	G40	IIaOb	17	65°F	01:44	03:40	A

Dome Temp. 72°F
 Focus 7.4/73/72/71
 Dome Temp.

Transparency Conditions

Good - thin cloud in a long way.
 29.30 THIN, SLOW-MOVING CLOUDS IN SW

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

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	(800V)	Quality
10. A	02 06 W	+38° 44'	0	6.2	B9	2/2/2	B8-B9 (main program)	800/15'	fine
33 S	00 35 W	-25° 37'	0	7.1	B8	2/2/2	B8-B9 (")	800/15'	weak
51 C	00 45 W	-23 48	0	6.6	B9	2/2/2	B8-B9 (")	800/15'	weak
06 A	W 0 08	-23 26	0	5.8	B8	2-2-2	B8-B9 (")	800/15'	weak
25 B	0 25 W	-24 18	0	6.5	B8	2-2-2	B8-B9 " "	(15 min)	weak
10 C	0 39 W	-23 33	0	5.9	B9	2-2-2	B8-B9 " "	(10 min)	weak
10 W	04	-24° 16'	0→0	7.0	B8	2-2-2	B8-B9 " "	(26 min)	weak
27	01 18 W	-21° 10'	0→0	6.3	B9	2/2/2	B8-B9 " "	800/5'	plate fogged
56 C	01 07	-19 26	0	7.0	B8	2/2/2	B8-B9 " "	20 min	weak
22 A	00 06 W	-25° 12'	0	6.71	B ₃ Se	2-2-2	Cu Be	800/25'	weak
36 B	00 07 W	+34° 27'	1	5.98	B ₃ Se	6	Cu Be	800/25'	fine
41 C	00 12 W	- " -	1	-	-	2-2-2	Cu Be	800/25'	fine
49 A	00 08 W	+53° 58'	1	5.81	B ₃ Se	2-2-2	Cu Be	800/25'	fine
51 B	00 17 W	+53° 58'	1	5.81	B ₃ Se	2-2-2	Cu Be	800/25'	fine
10 C	01 03 W	-07° 08'	0	8.02	B ₃ Se	2/2/2	Cu Be	800/25'	fine
10 A	02 02 W	+24° 16'	1	9.49	B ₃ Se	2/2/2	Cu Be	800 ?	fine

poor image
 (BINARY 2 85-11)
 focus 72

Increasing cloud.
 Focus 71

Capping device networking
 may have some blank plates!

153

Date June 28/29 Tues/Wed Observer MSE
MF
Jr Julian Day 172

[illegible]

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.	PE	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03 B		2 03	+38 45	0	6.20	B9	2-2-1	B8-B9 800/31	fine
04 C		0 06	+39 16	"	7.2	G8	2-2-2	Std Vel meter failed 800/	fine
					2155		clouds		

Date 29-30 January 1966 Observer H. J. Mose Julian Day 171
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.
29324	HID133529	14 59.9	-25	24 G40	Iladb	13	76°	20 58 ¹⁰	21 18	A
29325	HID134946	15 07.5	-23	38 G40	Iladb	13				
442 T										
29325	HID134946	15 07.5	-23	38 G40	Iladb	13		21 28 ⁹	21 45	B
	Incl attempted photometry									
29326	HID143187	15 53.9	59	12 G40	Iladb	13	74	22 27 ³	22 33	C
29327	HID155711	17 08.2	52	32 G40	Iladb	13		22 38 ³	22 43	A
29328	15 Uul	19 57.0	27	29 G10	Ilad	9XL		22 53 ³⁰	23 55	C
29329	"	"	"	"	"	"		00 06 ²⁰	00 46	C
29329F	focus test in in/and out G10 Ilad 9L									
29330	HID143516	20 15.5	37	28 G40	Iladb	17	70°	01 21 ¹⁶	01 53	A
29331	HID198931	20 48.6	44	03 G40	Iladb	17		02 02 ²⁰	02 42	B
29332	B0 + 43° 39.3	21 21.3	44	01 G40	Iladb	17	68	02 48	03 28	A

THIN CIRRUS AT SUNSET

156

Dome Temp. 79°F

Transparency Conditions *good.*

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

0100: INCREASING CIRRUS IN SW.

Dome Temp.

0.02
211.5

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
18	W 0	28-25	37	0	7.1	B8-2-2-2	B8-B9 focus $74\frac{1}{2}$ 900V 20 min	weak
45	W 0	46-23	48	0	6.6	B9-2-2-2	B8-B9 500/30	weak
33	W 0	49-59	01	1	6.15	B9-2-2-2	B8-B9 (48e) 500/30	weak
43	E 0	14-52	27	1	6.11	B9-3-3	B8-B9 (48e) 200/30	weak
5	0151 E	27	40	1	4.74	ASm 2-1-2	NO FILTER Eq. Width L. (4ip) 200/300	weak approx. comp poor
16	0001 E	"	"	"	"	2-2-2	" 200/300	weak approx. comp poor
						6/6		centered
53	A 0	10	37	40	1	9.46	B2 2-2-2	FIELD DRAWN 200/40 (?) plate fogged
42	B 0	05	44	18	120	9.31	B1 Inne 2-2-2	FIELD CHECKS OK 200/40 good exposure
26	A 0	18	44	17	0-1	9.43	B1 2-2-2	FIELD CHECKS 200/40 fine
						pnne	focus 72	fine

Date 32 June / 1 July 1966 Observer Thurs E. Force ^{inst} 2.5 _{sd} Julian Day 171.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29333	HD 114376	13 05.1	39 04	G40	π aob	13	74 ⁰ F	21 00	21 07	A
29334	HD 133529	14 59.9	-25 24	G40	π aob	13	73 ⁰ F	21 13	21 37	B
29335	HD 134946	15 07.5	-23 38	G40	π aob	13	73 ⁰ F	21 43	22 00	C
29336	HD 144334	16 00.2	-23 20	G40	π aob	13		22 03	22 11	A
29337	HD 144661	16 01.9	-24 11	G40	π aob	13		22 13	22 23	B
29338	HD 144844	16 02.8	-23 25	G40	π aob	13		22 25	22 33	C
29338	HD 144844	16 02.8	-23 25	G40	π aob	13		22 36	22 44	A
29339	HD 145792	16 07.7	-24 10	G40	π aob	13		22 46	23 01	B
29340	HD 161306	17 39.7	-09 46	G40	π aob	17	71	23 27	00 17	C
29341	HD 169578	18 20.2	+05 02	G40	π aob	17		0 21	00 28	A
29342	HD 170200	18 23.1	+06 08	G40	π aob	13	68	0 33	00 37	B
29343	HD 169820	18 21.4	+14 55	G40	π aob	13		0 40	00 45	C
29344	HD 184967	19 29.5	+58 24	G40	π aob	13		0 50	01 15	A
29345	HD 155711	17 08.2	52 32	G40	π aob	13		01 20	01 29	B
29346	HD 172883	18 37.5	52 06	G40	π aob	13		01 35	01 43	C
29347	HD 194668	20 21.8	53 14	G40	π aob	13	66	01 48	01 55	A

Oh → Poor Transparency cirrus streaks

158

Dome Temp. 78°F

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

Focus 74/73/22/71

Dome Temp.

Foot switch unclamp shorting / Taken off

g Time S.T.	PR	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	900 V.	Quality
07A	W 2	15	38 44	0-1	6.20	B9	2-2-2	510 FILTER B8-B9 (main prog) focus 74	800/40	fine
37B	W 0	50	-25 37	00	7.1	B8	2-2-2	B8-B9	800/40	weak
40C	W 1	06	-23 50	00	6.6	B9	2-2-2	B8-B9	800/40	guiding weak
11A	W 0	23	-23 29	00	5.8	B8	2-2-2	B8-B9	800/40	weak
23B	W 0	35	-24 20	4	6.5	B8	2-2-2	B8-B9	800/40	weak
33C	W 0	43	-23 34	"	5.9	B9	2-2-2	B8-B9 CAPPER CAME APART (SETSCREW NOT TIGHT)	800/40	weak
44A	W 0	55	-23 34	"	5.9	B9	2-2-2	B8-B9	800/40	weak
01B	W 01	12	-24 18	"	7.0	B8	2-2-2	B8-B9 clunk getting	800/40	weak
17C	W 0	55	-9 47	(2.2)	8.77	B2e [III-V]	2-2-2	in Be worse focus 73	800/35	fine
28A	W 0	23W	+5 07	"	6.54	B9	2-2-2	B8-B9 (SB)	800/40	fine
37B	W 0	28	+6 13	"	5.6	B8	2-2-2	B8-B9 (SB) focus 72	800/40	fine
45C	W 0	38	+15 0	"	6.43	B9	2-2-2	B8-B9 (SB)	800/40	fine
15A	W 0	02	+58 32	"	7.5	K5	2-2-2	Standard Velocity	800/60	fine
29B	W 2	38	52 26	"	6.11	B9	2-2-2	B8-B9 (dye) VERY POOR SKY	800/40	fine
43C	W 1	22	52 09	"	5.83	B9	2-2-2	B8-B9 (SB)	800/40	fine
55A	E 0	06	53 26	!	6.13	B9	2-2-	B8-B9 focus 71	800/40	fine

Dome Temp.

Transparency Conditions Agos

> 1 mag absorption

160.

ing Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
48	B	0 17	55 14	1	7.34	B1 20	2-2-2	Cn B e 800/40	fine
06	C.V.	1 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	1 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 glazing
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 Ar Hn Julian Day 174
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	21:28.1	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	164906	17 ^h 58.3	-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 20.2	+05° 02'	G40	IIaOb	13	74	23:30	23:44	B
29360	HD 170200	18 23.1	+06° 08'	G40	IIaOb	13	-	23:48	23:52	C
29361	HD 169820	18 21.4	+14° 55'	G40	IIaOb	13	-	23:55	00:02	A
29362	HD 172694	18 36.5	-15° 57'	G40	IIaOb	17	74	00:12	00:40	B
29363	HD 173219	18 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 54.6	+38° 07'	G40	IIaOb	13	-	01:40	01:45	B

Dome Temp. 30°Focus 75/74

Dome Temp.

Transparency Conditions good, moon very bright; ~23.00 thin clouds directly above.

162

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					no filter 3-3 5-5	PLATE BROKE Focus increased from 0.5 (1.5?) by 1.3 revolutions (2.8?) Focus 75	approaching fine decreasing
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 spectrograph shift? Springs look okay)	800/40 sending
00 26 W	-23° 06'	1+	6.2	B8	2-2-2	B8-B9 SB	800/40 weak
00 37 W	-23° 48'	1+	5.4	B3V	2-2-2	Cn Be	800/40 sending fine
00 46 W	-23° 48'	1+	"	"	2-2-2	Cn Be Moon not in finder bit	800/40 fine
						Reflection from moon showing on slit Capping device broke again, fixed.	800/40
00 25 E	-15° 38'	1+	8.13	B1Ie	2-2-2	Cn Be (cloud)	800/25 weak
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 (II-III)	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 linkage broke at end of exposure)	800/40 weak
01 10 W	+38° 14'	2	5.7	B8	2-2-2	B8-B9 SB	800/40 fine

163

Date. 1-2 July 1966
Fri/Sat

Observer..... *Wd*
ai

Julian Day

[illegible]

Dome Temp.

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

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:51 C	01 30 W	+24° 15'	1 → 2	9.49	B _{0.1} e	2-2-2	Cn Be Focus T3 may be slightly fogged; black plate slipped: a little before unloading	800/35 fine
3:35 A	00 33 W	+44° 19'	2	9.43	B _{1.5} p	2-2-2	Cn Be	800/40 fine
4:44 B	03 09 W	+38° 14'	2	5.7	B8	2-2-2	B8-B9 SB	800/40 guiding
4:48 C	03 13 W	+38° 14'	2	5.7	B8	3-3 no filter	B8-B9 SB : almost down!	800/40 fine
C						3-3	Focus Test. / Same camera focus as for Z9352F1	centro to worse than #29329 F
							Seeing so good telescope focus had to be adjusted several times!	

Ai, H_n , $G H_n \sim 180$ visitors - showed double star

165

Date 2-3 July 1966 Observer ^{Hn} AL ^L RL Julian Day Sat 1 Jan

[illegible]

167

Date July 4/5th
Mon / Tues

Observer

En
Mae
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.I.
29375	HD 136849	15 17.8	+33 17	G40	IIaOb	13	74°	21:02	21 10	A
29376	HD 144579	16 01.5	+39 24	G40	IIaOb	13	74° F	21:14	21:41	B
29377	HD 156110	17 10.6	45 30	G40	IIaOb	13	—	21:52	22:28	C
29378	HD 164906	17 58.3	-24 24	G40	IIaOb	17	—	22:36	23:20	A
29379	BD +10°3774	18 59.4	+10 58	G40	IIaOb	17	69°	23:44	01:18	C
29380	BD +47°3787	21 32.1	47 28	G10	IIaOb	17	66°	01:28	02:58	A
29381	HD 202862	21 13.6	+42 16	G40	IIaOb	17L	64	3 02	3:07	B
29382	HD 209288	21 57.1	+10 29	G40	IIaOb	17L		3 10	3:18	C
29383	HD 215143	22 38.0	07 29	G40	IIaOb	17L		3 20	3:32	A
29383F1	FOCUS TEST			G10	IIaOb	9	63°			C
29383F2	"			G10	IIaOb	9	63°			C
29383F3	"			G10	IIaOb	9	63°			C
29383F4	"			G10	IIaOb	9	63°			C
29383T	Calibration Step Wedge									

for plates 29375-83

Dome Temp. $72^{\circ} - 68^{\circ}$ Focus $74 - 72.71$

Dome Temp.

Transparency Conditions *h. cloud*
better after 02

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 banged shut.</i> 800/40	fine
0	-24 21	0	7.61	B1 ^{IV} pe	2-2-2	Cn Be <i>field chucks CLOUDS ! (clouds in south)</i> 800/30	fine
0 48' W	+11 05	0	9.66	B1 ^{IV} pe	2-2-2	Cn Be <i>field chucks</i> 800/40	fine
00 03E	47 45	0	7.80	B3pe	2-2-2	Cn Be <i>capping device came apart</i> 800/40	fine
00 24W	42 34	0	6.04	B8	2-2-2	B8-B9 (main prog) (universal coupling) <i>field chucks ↑</i> 800/50	fine
00 08E	+10 50	0	6.31	B8	2-2-2	B8-B9 " 400/25	fine
0 35	-07 00	0	6.28	B9	2-2-2	B8-B9 " 400/25	fine
						<i>no filter</i> G10 FOCUS KNOB WAS SLIPPING - SET SCREW TIGHTENED	
						3-3 Focus 3.0	
						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 1966Observer In - Mse Julian DayTrans - W. cal

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	A
29388	HD164906	17 58.3	-24 24	G40	Ilab	17	70°F	22 13	22 32	B
29389	HD169578	18 20.7	+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	HD170200	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
29293T	Comparison by Wodge for plates 29384-93									

Dome Temp

Focus

Dome Temp

Hour Angle

End

FO

W2

E1

E1

E1

FO

FO

FO

FO

FO

FO

FO

FO

FO

FO

FO

FO

FO

FO

FO

FO

FO

Dome Temp. 24°F Focus $72/72$

Dome Temp.

Transparency Conditions

sl. cloud at sunset
cloud in W + S

170

2230 - cirrus forming
23:00 > 1-2 mag. disruption

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04	59	0	0	6.15	B9	2-2-2	B8-B9 (main frag) drc	fine
02	49	36	0-1	6.8	M2	2-2-2	std. Ve/.	fine
48	52	26	0-1	6.11	B9	2-2-2	B8-B9 (main frag) drc	fine
05	-14	47	0-1	6.1	B9	2-2-2	B8-B9 (SB) (*22)	fine
53	-24	20		7.61	B11	2-2-2	in Be field OK // CIRRUSS 800/725- HOPELESS!	very weak
52	+5	25	0	6.54	B9	2-2-2	B8-B9 (SB)	fine
43	14	58	0-1	6.43	B9	2-2-2	B8-B9 (SB)	fine
43	-14	41	0-0	6.1	B9	2-2-2	B8-B9 (SB)	weak
7	+6	12'	0	5.6	B8	2-2-2	B8-B9 (SB)	fine
7	+52	11	1	5.83	B9	2-2-2	B8-B9 (SB)	fine

*2 DOME VERY SLOW

TURNING TO NITE

* MAY WE HAVE
* DOME ?

FOR 2 PENCILS FOR THE

Date July 6-7/66 Observer ^{MCL}R. Hr Mse Julian Day 2439500

[illegible]

Focus 74

172

Dome Temp.

[illegible]

173

Date July 8/9/66 Observer C. J. Julian Day 172

[illegible]

Dome Temp. 71°

Focus 72/71

Dome Temp.

22^h aurora borealis

22:45 strong

00^h

weakening

01^h

fairly strong - no clouds.

Transparency Conditions

l. cloud settled over sky at dusk.

174

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
06 C	00 09E	-23°28'	0	5.8	B8	2-2-2	BP-B9 800/50	good
27 A	00 09W	-24 18	0	6.5	B8	2-2-2	B8-B9 l. cloud. 800/50	fine
43 C	00 25W	-24 34	0	5.9	B9	2-2-2	BP-B9 ← capping device came 800/50	fine
30 A	00 43E	-24 21	0	7.61	B1/IV pc	2-2-2	Cn Be undr (sund) 800/40	fine
14 B	00 07E	-25 39	0	8.13	B1/IIe	2-2-2	Cn Be 800/40	fine
34 C	00 04E	-25 14		6.71	B15c ^{III-V}	2-2-2	Cn Be 800/50	fine
20 A	00 29W	-15 52	1	8.31	B0e ^{III-V}	2-2-2	Cn Be NUMBER ON PLATE MAY LOOK LIKE 06 800/40	fine
8 C	00 32E	+37 41	1	9.46	B2:III:e	2-2-2	Cn Be field chub from 71 800/40	fine
4 A	00 28e	+44 20	2	9.31	B1:II:nc	2-2-2	Cn Be field chub 800/40	fine
B	00 00	+47 46	1	9.80	Bpc	2-2-2	Cn Be field chub 800/40	fine
27 C	00 26W	+48 02	0	9.23	B3c ^{III-V}	2-2-2	Cn Be field chub l. cloud 800/43	fine

17b — Lecture + Ranger IX 11 from
Mt
W

Date 12-11 July 1966
Cham - Mon

Observer *M. C. Rose, Jr.* Julian Day *Db*

Dome Temp
Focus
Dome Temp

Hour Angle
End

430 0
W 1:38

Dome Temp. 80°F

Focus

Dome Temp.

Transparency Conditions

very good

176

g Time
ST.

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

06 20 07

44 21 38

Date 11-12 July 1966 Mon - Tue Observer Msc McI HJ Julian Day

Msc
Mcl
Hb
W

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
29405	HD 146001	16 08.8	-25 13	G40	IIaOb	17xL	71°F	21 15	21-35 ⁰	C
446-1	HR 6418	" "	" "	"	"	"	"	"	22 01	
446-13	NGC 6838	16 " "	" "	"	"	"	"	"	22 07	
29406	HD 194668	20 21.8	+53 14	G40	IIaOb	13	70°	2 45	2 58 ^m	A
29407	HD 196504	20 32.8	26 07	G40	IIaOb	13	70°	3 02	3 09	B
29408	HD 194939	20 23.2	-03 41	G40	IIaOb	13	70°C	3 15	3 31	C
29408T	Calibration	Step wedge	for plates 29405-28							

Dome Temp. 78°FFocus 73

Dome Temp.

Transparency Conditions Haze + thick cloud in North.0300 - cirrus thick

178

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	G10 Comp. 2-2-2	REMARKS	Quality
3/10	23	-25° 21'	0+	6.7	B9	2-2-2	B8-B9 (regular program) 800/60	fine.
01	E0	12		6				
07	01	-16		7.0			<u>cirrus</u>	
09	A 01 ^h	35 ^m 53° 26'	1	6.43	B9	2-2-2	B8-B9 800/40	guiding
09	B 01	35' 26° 22'	0	5.50	B9	2-2-2	B8-B9 800/40	fine
3/10	02	05 - 3 25	0	6.01	B9	2-2-2	B8-B9 800/40	2. fogged guiding OK

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

179

~ 30 North York H.S. students. Hb, showed two films + 2 Here and M13, through 74" telescope

Date. 12-13 July, 66 Tue-Wed

Observer.....mf
wd

Julian Day

[illegible]

Focus

Dome Tem.

Hour Angle
End

Dome Temp. 79°

Focus 75

Dome Temp. .

HOW

ABOUT

FIXING

EXP. METER

ONCE

& FOR

ALL

- GUESSING COSTS

180

TIME & MONEY - ml

Transparency Conditions

slight haze near horizon, otherwise

OK

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
02 48	-9° 21'	0	10.01	B0 Ia	2-2-2	D6 OB #9 clouds at 0045 for 5 min, again at 1:15	weak
03 33	+42° 34'	0	6.04	B8	2-2-2	B8-B9. exposure meter not working; give each ~ 10 min	fine
05 56	+52° 45'	0±	5.90	B8	2-2-2	B8-B9	fine
07 33	+54° 15'	0±	6.03	B8	2-2-2	B8-B9	fine
09 23	+50° 14'	1	6.42	B9	3-3	B8-B9	fine
11 16	+59° 37'	1	6.36	B9	3-3	B8-B9	fine
13 00	+59° 49'	1	6.37	B8	3-3	B8-B9	fine
15 12	+10 50	1	6.31	B8	3-3	B8-B9	fine
— down —							

-0h 2m -2° 10'

Date 14-15 July 1966 Thurs-Fri Observer Mae⁴ⁿ Julian Day 19660714

[illegible]

Dome Temp. 72°

Focus 73/71/70

Dome Temp.

Transparency Conditions scattered light cloud at sunset

182

2200 - THICK CIRREUS
0^h EXCELLENT

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23 A	00 23	-25 20	0	6.7	B9	2-2-2	B8-B9 800/40	guiding
03 B	01 00	-21 10	0	6.3	B9	2-2-2	B8-B9 800/50	guiding
40 C	01 46	+17 10	0-1	6.1	G4	2-4	std. vel. 800/60	fine
49 A	00 00	+11 06	0-1	9.66	B1.5	2-2-2	in Be Vis Bin 10" N. focus 71 4000/200	weak
35 B	00 30	+37 41	1	9.46	B2 III	2-2-2	in Be capping dusties come undone. 800/46	fine
5 C	00 28	+44 19	1	9.31	B1.5	2-2-2	in Be field OK. 800/45	weak
51 A	02 00	E 61 59	1	10.03	B2 PE	2-2	all under field & in ✓ 800/45	weak
56 B	00 43	E 61 59	1	9.5	B2 PE	2-2-2	in Be STRONG N.W. WIND 800/45	weak
47 C	02 47	E 60 54	0-1	9.61	B3...	2-2-2	in Be full check. 800/50	weak

Date 15/16 July '22 Fri-Sat Observer ^{Jn}_{Ai} mcl Julian Day

[illegible]

Domc Temp.

Transparency Conditions *Excellent*

184

[illegible]

185

Date 16/17 July '66 Sat/Sun Observer MCE Julian Day 2

[illegible]

Dome Temp.

186

[illegible]

187

Date 17/18 July 17/66 Observer EA Julian Day 17
MSE
DB

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 60	G10	Da06	13	75°F	20 ^h 53 ⁶⁰	21 ^h 05	A
29428	BD -13° 4930	18 13.3	-13 52 60	G10	-11-1	17	74°F	21 16 ⁶⁰	23 ^h 16	C
29428T	Calibration Step Wedge						71°F			-
29429	HD 172488	18 35.4	-8° 49				71°F			

Dome Temp. $78^{\circ} F$

Focus

Dome Temp.

Transparency Conditions *clouds at sunset* 188

Mag Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
05 A	00 25W	$39^{\circ} 16'$	1	7.2	G8	2/2/2	std. vel. focus 74	800/50
16 C	00 23W	-13 47	F0	9.7	09.5	2/2/2	Db OB ^{#1} programme ^{INTERMITTENT} CLOUDS 35 min. 800/ 26	l. guiding O/K
							f73.	
							Clouds - Complete cover, close up	
							f73.2 at 23 ^h 30. (field checks!)	
							opened up again 0:30 - more clouds	
							<u>Closed up 00^h 45</u>	

Date 18-19 July 1966

Observer (Ar. D. 6.)

Julian Day

[illegible]

Dome Temp. 81

Transparency Conditions

190

Focus

Dome Temp.

2300 - LIGHTNING IN W.

g Time ST.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24	A	11 00	33 +05 08	1.0	6.54	B9	2-2-2	610 BF-B4(SB) FOCUS 75- 800/40	good
-	B						2-2	Weak (should be 5-5) (msu)	OK
								Lightning + Thick Haze (3 ^m abs.) Closed up 24 ^h 00!	

191

Date 19-20 July 1966 Observer Re-Ha-Wd Julian Day 19660719
Tue. Wed.

[illegible]

Dome Temp.

very clear at 1.00 but selling poor.
dome temp now 60°

192.

g Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
54	A	00 15 W	-17° 21'	1-0	9.4	B8	2-2-2	Re Dust Prog; #117	800/30 good.
3/	B	00 41 W	+42° 13'	0	10.0	(B5)	2-2-2	Re Dust Prog; #131 Focus, 71	800/30 l weak
3	C	02 12 W	+42° 17'	0.7-1	9.4	(B5)	2-2-2	Re Dust Prog; #132 Focus, 69	800/30 good
29	A	00 01 W	+72° 34'	0	8.2	A0	2-2-2	Re Dust Prog; #157 (no in plate #234) (by mistake)	800/30 fine
51	C	01 15 W	+73° 14'	0	8.4	A0	2-2-	Re Dust Prog; #150 (note numbered) - sky becoming bright.	800/24 fine
"plate-holder B - faded" - in fridge.									

Date 20-21 July 1966
Wed - Thurs

Observer *mel*.....

Ri
mse
mf

Julian Day

[illegible]

Dome Temp. 68.5

Focus

Dome Temp.

Transparency Conditions *fine*

194

[illegible]

~170 VISITORS - MOON TOO LOW SO SHOWED ~~ZETA~~ CORONA BOREALIS
(6" DOUBLE-B STARS)
Also showed slides of "Universe".

Also showed slides of "Universe".

Date 23-24 July 1966 Observer Hn ^{at} 1 ~~5~~ Julian Day

[illegible]

HL5

Dome Temp.

Focus 74.0 - 74.4

Dome Temp.

Transparency Conditions fair to poor

196

ding Time
EST.

00
15 B

43 C

48 A

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+05 06	2	6.7	B8	2/		800/40
0 30 W	+05 06	2	6.54	B9	2-2-2	B8-B9	800/40
2 ⁿ 39 ^m W	-00 25		9.96	08	2-2-2	OB - Db #12 exp mtr. drifts badly	sl. fogged fine
2 00 W	68 02	1	8.5	A0	2-2-2	"Dust" Prog.	Haye Haye & Clouds. strong

Date 25-26 July 66 Observer F. M. S. Julian Day

Observer F. M. Rose

Julian Day

[illegible]

Dome Temp.

Transparency Conditions

198

[illegible]

Dome Te
Focus ...
Dome Te

Observer

Julian Day

Hour	Any	End
00	05E	
02	11	
03	00	
05	53	
07	53	
08	50	
10	1W	
11	1W	
12	29W	

Dome Temp. 62°

Transparency Conditions First Quarter Moon - (at $\sim 18^\circ - 20^\circ$) 200 good trans.

exposure meter broken; flashlite broken too.

night photometric at 23:30^h.

ing Time EST.		Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
056	B	00:05E	-15° 39'	0	8.13	B1#2	2-2-2	Focus 73 Cr Be #1 * Capper may not have been open for this exposure	blank
020	C	02:11W	-13° 47'	0.19.7	09.5V	OB	2-2-2	D6 OB - field OK.	fine
037	A	03:00W	-9° 18'	1.29.0	OB	OB	2-2-2	Focus 71 # D6 #10 - field checks.	weak
057	B	0 53W + 69° 56'		2	9.3	(A0)	2-2-2	René 'Dust' Programme #152 ^{written B.B} field checked fine	fine
039	C	01 53W + 52° 50'		2	5.90	B8	2-2-2	B8 B9 Hb } Handguiding Focus 70	fine
032	A	0 50W + 52° 15'			6.03	B8	2-2-2	B8-B9 Hb }	strong
03		1:01W + 50° 14'		1+	6.42	B9	2-2-2	"	fine
0358		1:09W 59° 37'			6.36	B9	2-2-2	"	fine
0416	A	0:29 W 59° 50'		1	6.37	B8	2-2-2	" (Rec fuse, fixed) <u>sky bright</u>	fine

Date July 29/30 1966 Observer MF Ds / Mcl Julian Day 1966255

[illegible]

202

Focus 71.6

Dome Temp.

Transparency Conditions

Small flashlight broken!! & big one burnt out.

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

[illegible]

203

(Db)
Jn
wd.

Date July 30/31, 1966

Observer.....*mc*

Julian Day.

[illegible]

Dome Temp.

Transparency Conditions

Full Moon

204

[illegible]

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

[illegible]

Dome Temp. 75°

Focus 74

Dome Temp.

Transparency Conditions

- Full moon at $\sim 18^h 30$, -20°
- Light clouds over sky

206

N.B.:

2030 METER WON'T BALANCE FOR LONGER
THAN 5 Sec ON EITHER 900 OR 800 V.
21:15 METER BALANCES BUT GOES
BACKWARD ON STAR. METER SHUT OFF
23:45: DISCOVERED THAT METER WAS ON (4)X1000

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01:19"E	$-8^{\circ}44'$	0+	7.7	OB	2-2-2	DB Programme DB #6	800/ (Stopped 4 min) at 20:36-Exp. 1 weak
01:25"E	$-4^{\circ}05'$	1	8.6	OB	2-2-2	DB #7	4000/7.5 at 800V
01:04W	$-13^{\circ}48'$	1 $\pm$ 2	9.7	09.5	2-2-2	DB #1	Diff. to balance exp. meter
01:32W	$-0^{\circ}36'$	7+	9.2	B9	2-4	Wrong star-field drawn - 800/18	fine
03:43W	$-0^{\circ}34'$	2 $\rightarrow$ 1	9.96	08	2-2-2	DB #12 Cloud during exposure (52A on plate)	800/40 fine
			9.61	B3ne		Too faint now - Thick cloud cover comp. in.	
02:36 E	$+50^{\circ}39'$	0	5.6	B9	2-2-2	B8-B9 // CAN'T IDENTIFY FIELD FOR // HD 11905	800/40
02:09 E	$+60^{\circ}54'$	0	8.6	B8	2-2-2	B8-B9	800/40 fine
22: Dec	Buttons stuck	in both directions.		Final dome temp = 65°			

* Declinations past ones gain at $+60^{\circ}$, $1^h 53 E$.
Rod for Dec Motions won't turn.

Date Aug 2/25 3 1966 Observer Hr
Fr Mc
Rt Julian Day 174

[illegible]

Dome Temp.

Transparency Conditions

208

[illegible]

Date..... Aug 3/4 1966

Observer

Jn	Wd
Mf	mel
Ri	(Re)
	(Ita)

Julian Day

[illegible]

Dome Temp. 60° F.....

Transparency Conditions 1 cloud at sunset 210
photometric at 21:30

[illegible]

211

Date Aug 4/5 1966

Observer wd SD DB / MQR

Julian Day

[illegible]

Dome Temp.

Transparency Conditions

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 Proj: 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.							

H₂
Mg
O H₂

116
PWA

Date 6-7 Aug Sat-Sun Observer ¹⁴⁶PHF - C. Julian Day

[illegible]

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	
42 A 1 07 W	+35 08	0 ⁺	6.24	B8	2-2-2	B8-B9	400/20	lucate
55 0 52 W	+38 20	0 ⁺	5.65	B4	2 -2	"	400/20	lucate guiding
44 02 28 W	+27 41	1-2	4.74	A5m	3-3-3	Yip EW	200/370	plata not lucate
54 A 00 46 W	+61 58	1	10.03	B2pe	2-2-2	binary 11th mag star 10" NW Focus 73 field checks.	800/60	lucate
13 00 50 E	+60 53	1	9.61	B(3)ne	2-2-2	field checks	800/40	lucate

215

Date ^{August} 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	DaOb	17	73°	20 40	21 24	C	00 20 E
29467	HD 174567	18 46.0	+31° 31'	"	"	17XL		21 29	21 45	A	00 12 E
29468	HD 181828	19 16.9	+35° 00	G40	DaOb	17XL	72°F	21 49	22 01	C	00 27 E
29469	HD 187640	19 45.9	+28 12	"	"	17XL		22 04	22 20	B	00 36 E
29470	HD 187235	19 43.9	+38 09	"	"	17XL		22 27	22 38	A	00 17 E
29471	HD 196504	20 32.8	+26 07	"	"	17XL	71°F	22 48	22 55	C	00 49 E
29472	HD 197226	20 37.3	+38 43	"	"	17XL		23 04	23 15	A	00 34 E
29473	HD 198513	20 45.7	+51 32	"	"	17XL	70°F	23:21	23:34	B	00 22 E
29474	HD 194668	20 21.8	+53 14	"	"	17XL		23:40	23 55	C	00 22 W
29475	HD 216057	22 44.6	+53 53	"	"	17XL	69°F	00:03	00:14	A	0 41 E
29476	HD 216523	22 48.5	+49 53	"	"	17XL		00:19	00:34	B	0 25 E
29477	HD 217348	22 55.0	+59 16	"	"	17XL	68°F	00:44	01 00	C	0 06 E
29478	HD 224404	23 52.5	+59 28	"	"	17XL		01:05	01 25	A	0 40 E
29479	HD 225289	23 59.9	+60 46	"	"	17XL		01, 29	01, 38	B	0 34 E
29480	HD 209288	21 57.1	+10 29	"	"	17XL	67°F	01, 52	02:14	C	0 04 W
29481	HD 215143	22.38.0	-07.29	"	"	17 XL		02:19	02 34	A	00 44 E

Dome Temp. 75°F Focus $73\frac{1}{2}/72$

Dome Temp.

Transparency Conditions

Hazy & cloudy (poor) 216

Echo SW $\rightarrow$ NE: max. altitude $\sim 2215^{\circ}\text{EST}$ Echo W-E: Zenith at 0210°EST CONT. $\rightarrow$

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Geo Comp. 222	REMARKS	Quality
00 20 E	$-13^{\circ}59'$	0	6.43	B9	2-2-2	B8-B9 Clouds 0-3 mag above 400/30	weak
00 12 E	$+31^{\circ}37'$	0	6.5	B9	2-2-2	B8-B9 400/35	fine
00 27 E	$+35^{\circ}10'$	0+	6.24	B8	2-2-2	B8-B9 400/40	fine
00 36 E	$+28^{\circ}23'$	0	6.24	B8	2-2-2	B8-B9 (d & e) 400/40	fine
00 17 E	$+38^{\circ}20'$	0	5.65	B9	2-2-2	B8-B9 400/40	fine
00 49 E	$+26^{\circ}22'$	0	5.55	B9	2-2-2	B8-B9 400/40	fine
00 34 E	$38^{\circ}58'$	0	6.42	B9	2-2-2	B8-B9 400/40	fine
00 22 E	$51^{\circ}48'$	0	6.26	B9	2-2-2	B8-B9 (CLOSE DOUBLE - PLEASE NOTE ON ENVELOPE!) 400/42	fine
00 22 W	$53^{\circ}27'$	0+	6.43	B9	2-2-2	B8-B9 400/40	fine
01 41 E	$54^{\circ}15'$	0	6.03	B8	2-2-2	B8-B9 400/40	fine
01 25 E	$50^{\circ}14'$	0+	6.42	B9	2-2-2	B8-B9 400/40	fine
01 06 E	$59^{\circ}38'$	"	6.36	B9	2-2-2	B8-B9 FOCUS 72 400/40	fine
01 40 E	$59^{\circ}50'$	"	6.37	B8	2-2-2	B8-B9 400/40	fine
01 34 E	$61^{\circ}07'$	0	5.85	B9	2-2-2	B8-B9 (d & e) 400/40	fine
01 04 W	$10^{\circ}52'$	0+	6.31	B8	2-2-2	B8-B9 400/40	fine
00 44 E	$-7^{\circ}07'$	0	6.28	B9	2-4	B8-B9 400/11	weak

Increasing clouds and
lightning (almost overhead)
Exp. are meter found unbalanced - counts too high
CLOUDS

CONT.

217

Date ¹⁹¹ Aug 9 ^(Monday) TuesdayObserver ^{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	67°F			B
	Aug 9		Cn, Wd, Ea, Ri							
	Re-aluminized iron arc assembly mirror									
29481 T1	Full aperture side out			C40	IIaOb	17	70°	Focus 73		
T2	" " three mirror glass side out			"	IIaOb	17	70°	"		
T3	" " three mirror aluminized side out			"	"	13				
T4	Focus Test 2-2/1000			"	IIaO	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 for plates							29466-79		
T8	" "							29480-81		

Dome Temp.

Transparency Conditions Fog and haze

218

[illegible]

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.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							640 filter	
2	E	01 22W - 9 45	0 ⁺	8.77	B250-1	1-1-1	Focus 72.5 Cn Be	800/40 l weak
3	L	01 49W - 15 38	0	8.13	B11e	1-1-1	Cn Be	800/40 l weak
33	P	01 45W - 7 05	1	8.02	B11pnc	1-1-1	Cn Be	800/40 l weak
9	B	00 45W + 10 23	2	5.8	F8	B	Std Vel.	400/25 l weak
54	L	00 32E - 20 57	0	5.5	gk2	1-1-1	Std Vel	400/35 l weak
016								
352							Echo I? II? passed M31 going NW to SE at 0235 EST	

221

Tues-Fri

Date Aug 11/12 1966 Observer Ea Re Hy Julian Day 2439112

[illegible]

Dome Temp. 62°Focus 69

Dome Temp.

Transparency Conditions Drifting Cumulus Nimbus~~Photo taken after 1200~~

a few Persids sighted. very suff. h.

222

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
14	03 18W	+01° 13'	1	10.3	A0	10-10-	Re "DUST" NO 123 interrupted by clouds $\frac{1}{2}$ hr. 800/30 CLOUDS till --- 0130 close up I loaded P.H. in Aids 4 unexposed plates worked by improperly closed box; my mistake! (Re)	weak

Date Aug 12/13, 1966

Observer Mcl-Db-Wd

Julian Day

[illegible]

Dome Temp. 56°

Transparency Conditions photometric from sun-set to sunrise

[illegible]

[Ac, Mf, Re] Echo I seen tumbling overhead at 20:15 and 22:15 EST,
170 visitors - showed α Herculis at 20:00 EST 2 also showed
M13 at 21:00 EST 5 slides in dome

Date August 13/14 1966 Observer Re Mc SD HB Julian Day _____

[illegible]

Dome Temp.

0240. - As + AC from SW

226

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
15	01 15 E	+48 4.4	2	8.8	F2	10/10/10	Re "DUST" NO 145	800/80 fine
31	00 27 E	+56 05	2	9.9	F2	10/10/10	" 148 - BINARY!	800/80 fine
29	2 17 W	+62 33.5	0-2	10.8	(B)	10/10/	" #153 10? Field drawn	800/ weak
CLOUDS - Complete Sky								

227
NEW TO NIAN

Date 15-16 Aug
Mon - Tues

Observer. *Ud. b. Mt. M. me* Julian Day. *Cc, Hls, msc, wd*

Hour Angle
End

Dome Temp. ... 68 °F

Transparency Conditions ... n. HAZY

228

Focus

Dome Temp.

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXPOS. Comp.	REMARKS	Quality
35	N 2 ^H 12	36 30		6.8	F5	5 ^m	DEVELOPED - DOUBLE IMAGES D-19, 4 min	
52	0 229 W	"		"	"	7 ^m	" NOT NUMBERED.	
03	2 2 40 W	"		"	"	5 ^m	LIGHT STREAK	
32	0 3 10 W	"		"	"	20 ^m	? screw trouble, no guide 4 min, D-19	
01 ³⁰	2 2 15 E			—	—	2.5 ^m	unguided ; taken thru intermittent clouds	

Newtonian

229

Date 16/17 Aug
Tues - Wed

Observer Mf Mme
Mr. G.D.

Julian Day

Plate No.	Object	R.A. 1900 1965	Declination 1900 1965	Inst.	Emulsion	Slit FILTER	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
29496	M31 AREA ①	00 36.7	+39° 49'	NEWT	103a ①	B		23 ^h 34 ³⁰	23 39 ³⁰	1
29497	" " ⑤	00 43.3	+41 19	"	"	B		23 44 ²⁰	23 49 ²⁰	2
29498	" ⑤	"	"	"	"	B		23 53	00 03	1
29499	" ①	00 36.7	39 49'	"	"	B		0 ^h 10 ⁰⁵	00 15 ⁰⁵	2
29500	" ②	00 42.3	+41 10	"	"	B		0 22 ³⁰	0 27 ³⁰	1
29501	M 15 NGC 7078	21 28.4	+12 02	"	"	B		1 33 ⁴⁵	1 38 ⁴⁵	2
29502	"	"	"	"	103a D	Y		1 43 ³⁰	1 50 ³⁰	1
29503	NGC 7331	22 35.5	34 15	"	103a ①	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 ①	B		2 35 ⁰⁰	2 40 ⁰⁰	2
29506	" " ⑤	00 43.3	+41 19	"	103a ①	B		3 09 ¹⁰	03 14 ¹⁰	1
29507	M31 Area 1	00 36.7	+39° 49'	"	"	"		3 19 ¹⁰	3 29 ¹⁰	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 ⁴⁰	2
29510	M31 Area ①	00 36.7	+39 49	"	"	"		3 58 ²⁰	4 03 ²⁰	1

Dome Temp. 67

Focus

Dome Temp.

Transparency Conditions Clearing at 23^h EST.

230

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXP Comp.	REMARKS	Quality
39 ³⁰	10 334 E	+ 39 45				5 ^m	FIELD PLOTTED mf	Good
9 ²⁰	20 332 E	+ 41 22				5 ^m	" " mf	Good
	10 317 E	+ 41 22				10 ^m	mf	Reiter
5 ⁰⁰	20 259 E	+ 39 45				5 ^m	mf	Good
27 ³⁰	10 253 E	+ 41 08				5 ^m	mf	OK could be long
38 ³⁰	20 135 W			7.3	F3	5 ^m	Focus O.K. mme	tolerable
50 ⁰⁰	15 45 W	+ 12 01		"	"	7 ^m	mme	tolerable
12 ⁰⁰	01 00 W	+ 34 15		11.2	S6	10 ^m	mme	black shade
21 ³⁰	01 09 W	"		"	"	5 ^m	mme	guiding poor
40 ⁰⁰	00 33 E	+ 39 43				5 ^m	mt	Good
	00 05 E	+ 41 26				5 ^m	mt	5 min, D-19, 58° F
29 ⁰⁰	00 16 W	+ 39 44				10 ^m	mt.	OK "
39 ⁰⁰	00 21 W					5 ^m	useless mlf	lights from street are shining on the plate.
53 ⁰⁰	00 34 W	+ 41 21				5 ^m	" mf.	"
03 ²⁰	00 40 W	+ 39 43				5 ^m	usable in 14 mf.	"

Reset up - dawn approaching -

4.05 EST.

Newtonian

231

Date 17-18 Aug 1966 - Wed - Thurs Observer M. mi., M. + W. M. se., (Ri) Julian Day 244.5

Plate No.	Object	R.A. 1950 1965	Declination 1900 1965	Inst.	Emulsion	Slit FILTER	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Ang End
29511	M31 AREA 5	0 43.3	41° 19'	NEUT	103a0	B		21 06 ¹⁰	21 14 ¹⁰	1	E6
29512	M31 AREA ①	0 36.7	39° 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	W2 5
29514	"	"	"	"	103a0	V		22 10 ²⁰	22 120 ²⁰	2	W3 0
29515	M92 NGC 6341	17 16.1	+43 11	"	103a0	B		22 34 ²⁵	22 41 ²⁵	1	W2 5
29516	"	"	"	"	103aD	V		22 44 ⁴⁵	22 54 ⁴⁵	2	W3 0
29517	M31 Area ③	0 43.3	+41° 19'	"	103a0	B		23 08 ⁰⁰	23 17 ⁰⁰	1	E4 00
29518	M31 Area ④	0 36.7	+39° 49'	"	103a0	B		23 21 ²⁰	23 26 ²⁰	2	E3 35
29519	M31 Area ⑥	0 41.2	41 02	"	103a0	B		23 31 ²⁰	23 38 ²⁰	1	E3 3
29520	"	"	"	"	103aD	V		23 40 ⁴⁰	23 50 ⁴⁰	2	E3 1
29521	M31 Area ⑦	0 41.7	+41 39	"	103a0	B		23 54 ⁴⁰	0 01 ⁴⁰	1	E3 10
29522	"	"	"	"	103aD	V		0 04 ⁴⁵	0 14 ⁰⁵	2	E3 0
29523	M31 Area ⑤	0 43.3	+41° 19'	"	103a0	B		0 19 ¹⁰	0 27 ¹⁰	1	E2 5
29524	M31 Area ①	0 36.7	+39° 49'	"	103a0	B		0 32 ³⁰	0 37 ³⁰	2	E2 3
29525	M15 NGC 7078	21 28.4	+12 02	"	103a0	B		0 58 ³⁵	1 05 ³⁵	1	W1 04
29526	"	"	"	"	103aD	V		1 10 ³⁰	1 20 ³⁰	2	W1 9

Dome Temp. 72°F

Focus

Dome Temp.

Transparency Conditions VERY GOOD

232

ECHO - 23:57

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

Newt. (Contd.)

233

Date 17/18 Aug 66
Wed Sun

Observer Mini Mt. Mse Julian Day
Wed

Plate No.	Object	R.A. 1900 1965	Declination 1900 1965	Inst.	Emulsion	Slit Temp. FILTER	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angl End
29527	^{m 15} NGC 7078	21.28.4	+ 12 02	Newt	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 06
29529	"	"	"	"	103a0	✓	2 18 ¹⁵	2 33 ¹⁵	1	W 1 25
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 21
29535	M31 Field 1	0 36.7	+ 39 49	"	"	"	3:47 ¹⁰	3:52 ¹⁰	1	W 0 43
29536	M31 Field 5	0 43.3	+ 41 19	"	"	"	3:59 ²⁰	4.06 ²⁰	2	W 0 50
29537	"	"	"	"	"	"	4 07 ⁴⁵	4 11 ⁴⁵	1	W 0 56
29538	"	"	"	"	"	"	4.14 ⁰⁵	4 17 ⁰⁵	2	W 1 01

Dome Temp.

Focus

Dome Temp.

Transparency Conditions

234

good
some light cloud after 0100.
ECHO 5-11, 3:55 EST

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	TIME Comp. EXP	REMARKS	Quality
50 ³⁰	N 1 20	+12 00	1	7.3	F3	25 ^m	Mme	good
14 ²⁰	N 1 06	+34 14	1	11.2	S6	10 ^m	Mme	good
33 ¹⁵	N 1 25	"		"	"	15 ^m	Mme	streak
49 ²⁰	E 0 27	+41 19	1	—	—	7 ^m	Mf	
00 ¹⁵	E 0 09	—	—	—	—	5 ^m	Mf (Shroud covering well. Mf.)	
32 ³⁰	E 0 04	+41 15	—	—	—	7 ^m	Mf	(uncertain about field - it looks OK.)
32 ³⁰	N 0 16	+41 15	—	—	—	7 ^m	Mf.	
2 ¹⁵	N 0 27	"	—	—	—	7 ^m	Mf.	
2 ¹⁵	N 0 43	—	—	—	—	5 ^m	Mf	
06 ²⁰	N 0 50	"	—	—	—	7 ^m	Mf	
11 ⁴⁵	N 0 56	+41 16	—	—	—	4 ^m	Mf	
17 ³⁵	N 1 01	"	—	—	—	3 ^m	Mf.	
							closed up at 4 ^h 18 EST.	
							mini slats developed together;	
							D: 14, 4 min, 60°	

235

Thurs. - Fri.

Date Aug 18-19/66

Observer Mmc, Wd, H, MF

Julian Day

Plate No.	Object	R.A. 1900 1965	Declination 1900 1965	Inst.	Emulsion	Filter Sht	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
29539	M 15 NGC 7078	21 28.4	+12 02	NEWT.	103aO	B		01 57	02 04	1	2 07 W
29540	"	"	"	"	103aD	V		02 06 ⁴⁰	02 13 ⁴⁰	2	2 16 W
29541	"	"	"	"	103aO	U		02 17 ²⁰	02 47 ²⁰	1	2 50 W
29542	M 2 NGC 7089	21 31.7	- 00 58	"	103aO	B		02 55 ⁵⁵	03 00 ⁵⁵	2	3 01 W
29543	"	"	"	"	103aD	V		03 02 ⁵⁵	03 07 ⁵⁵	1	3 08 W
29544	M 33	01 31.6	+30 28	"	103aO	B		03 18 ²⁰	03 23 ²⁰	2	00 37 E
29545	"	"	"	"	103aD	V		03 24 ⁵⁰	03 31 ⁵⁰	1	00 39 E
29546	M 31 Area 5	00 43.3	+41 19	"	103aO	B		03 36 ⁵⁰	03 40 ⁵⁰	2	00 42 W
29547	" " (1)	00 36.7	39 49	"	103aO	B		03 46 ³⁵	03 50 ³⁵	1	00 45 W
29548	"	"	"	"	103aO	B		03 51 ⁰⁵	03 55 ⁰⁵	2	00 50 W
29549	"	"	"	"	103aO	B		03 55 ²⁵	03 59 ²⁵	1	00 54 W
29550	"	"	"	"	103aO	B		03 59 ⁵⁰	04 03 ⁵⁰	2	00 58 W
29551	"	"	"	"	103aO	B		04 04 ³⁰	04 08 ³⁰	1	01 03 W
29552	"	"	"	"	103aO	B		04 08 ⁵⁰	04 12 ⁵⁰	2	01 07 W
29553	"	"	"	"	103aO	B		04 13 ¹⁰	04 17 ¹⁰	1	01 12 W
29554	"	"	"	"	103aO	B		04 17 ³⁵	04 20 ³⁵	2	01 15 W

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

Focus

Dome Temp.

Transparency Conditions

Cleaning at 01^h 15 236

SOURCE OF FOGGING REMOVED (2 HOURS)

WINDY - 25 lb. Added.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXP. Comp.	REMARKS	Quality
04 2 07 W	+12 00		7.3	F3	7 ^m	Focussed on 5 Cyg. None	
13 2 16 W	"		"	"	7 ^m	None	
17 2 50 W	"		"	"	30 ^m	None	
00 3 01 W	-00 59		7.3	F3	5 ^m	None	
07 03 08 W	"		"	"	5 ^m	None	
13 00 37 E					5 ^m	mf	
31 00 29 E	+30 27				7 ^m	mf	
00 00 28 W	41 19				4	mf	
34 00 45 W	—				4 ^m	mf	
05 00 50 W	—				4 ^m	mf	
59 00 54 W	—				4 ^m	mf. — plate holder + 1; lock loose. came open	
03 00 58 W	—				4 ^m	mf	plate may be fogged (but lights were off)
08 01 03 W	—				4 ^m	mf	
12 01 07 W	—				4 ^m	mf	
17 01 12 W	—				4 ^m	mf	
20 01 15 W	—				3 ^m	mf	

Thurs/Fri

Date..... Aug 18-19 / 66

Observer. *Mme, wd, Ht, mf*
(cc)

Julian Day

[illegible]

Dome Terr.

Hour Angle
End

238

Dome Temp.

Transparency Conditions

Focus

Please try to get NGC 6171 as early as possible - + not after 9:45 EST
 RA $16^h 30^m.6$ $\delta = -12^\circ 59'$

Dome Temp.

ing Time
S.T.

24

Hour Angle
End

Declination

~~Seeing~~Ptg.
Mag.

Sp.

Time
Comp.

REMARKS

Quality

W01 20

+39 49

3m

mf.

Closed up - 4 26 EST.

4 m ix, D-17, 67°F

239

Newtonian

(UAB)

Wd, Msc

Date

19-20 Aug 1961 - Fri/Sat

Observer

M. M. M. M. M.

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 29.2	-12 57	NEWT	103aD	NO	FILTER	20 39 ²⁰	20 46 ²⁰	1
29557	NGC 6171	16 29.2	-12 57	"	103aD	B		20 49 ⁵⁵	20 56 ⁵⁵	2
29558	NGC 6838	19 52.2	+18 42	"	103aD	B		21 12 ³⁰	21 17 ³⁰	1
29559	"	"	"	"	103aD	V		21 19 ⁵⁰	21 24 ⁵⁰	2
29560	"	"	"	"	103aD	U		21 27 ²⁰	21 37 ²⁰	1
29561	^{m13} NGC 6205	16 40.5	+36 31	"	103aD	B		21 49 ²⁵	21 54 ²⁵	2
29562					103aD	V		21 56 ¹⁰	22 01 ¹⁰	1
29563	AREAS m 31	0 43.3	41 19	"	103aD	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 36 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. 65.5

Focus

Dome Temp.

Transparency Conditions

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

EXCELLENT

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Time Comp.	REMARKS	Quality
46 ²⁰	W1 53					7 ^m	Focus 10ph	
55	2 N 2 00	-12 59				7 ^m	CC (JHB guiding) — <u>BROKEN!</u>	
56	1 E 1 00	+18 40		8.3	G2	5 ^m	mm ← focus & sgc	
17 ⁵⁰	2 E 0 53	"		"	"	5 ^m	"	
24 ⁵⁰	1 E 0 41	"		"	"	10 ^m	"	
37 ²⁰	2 N 2 49	36 31		6.8	F5	5 ^m	"	
54 ²⁵	1 W 2 55	"		"	"	5 ^m	"	
10	2 E 4 50	41 18				5 ^m	← WIRE CARRY A TOWER 40 BR. 6.5 PH. 1.5 APART. — REQUIRED REPAIRS.	
01	1 E 4 44	"				"	mf	
19 ²⁰	2 E 4 39	"				"	"	
25 ²⁵	1 E 4 33	"				"	"	
30	2 E 4 27	"				5 ^m 25 ³	"	
30	1 E 4 22	"				5 ^m	"	
36	2 E 4 17	"				"	"	
42	1 E 4 11	"				"	"	
47 ³⁵	2 E 4 05	"				"	"	
52 ⁵⁵								
58 ¹⁵								
04								

241

Newt (Cont'd)

ECHO I (VARIABLE BRIGHTNESS) ACROSS
MERIDIAN ~ 00^h45^m ESTDate 19-20 Aug - Fri/Sat Observer M. M. S. W. L. Julian Day 21st 1958

Plate No.	Object	R.A. 1900 1966.5	Declination 1900 1966.5	Inst.	Emulsion	FILTER Slit Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
29572	AREA #5 M31	0 43.3	41 19	NEWT	103a0	B	23 04 ⁴⁰	23 09 ⁴⁰	1	E 4 00
29573	"	"	"	"	"	"	23 10 ⁰⁰	23 15 ⁰⁰	2	E 3 55
29574	"	"	"	"	"	"	23 15 ²⁵	23 20 ²⁵	1	E 3 49
29575	"	"	"	"	"	"	23 20 ⁴⁰	23 25 ⁴⁰	2	E 3 44
29576	M13 NGC 6205	16 40.5	36 31	"	103a0	B	23 44 ⁰⁰	23 47 ⁰⁰	1	W 4 41
29577	"	"	"	"	103aD	V	23 48 ⁴⁰	23 51 ⁴⁰	2	W 4 46
29578	"	"	"	"	103a0	U	23 53 ⁴⁵	00 03 ⁴⁵	1	W 4 50
29579	M92 NGC 6341	17 16.1	+43 11	"	103aD	V	00 11 ⁵⁰	00 18 ⁵⁰	2	W 4 59
29580	"	"	"	"	103a0	B	00 21 ⁰⁰	00 28 ⁰⁰	1	W 4 46
29581	"	"	"	"	103a0	U	00 30 ³⁵	00 50 ³⁵	2	W 5 09
29582	"	"	"	"	103a0	U	00 52 ⁴⁵	01 02 ⁴⁵	1	W 5 21
29583	"	"	"	"	103a0	B	01 04 ⁵⁰	01 07 ⁵⁰	2	W 5 23
29584	M15 NGC 7078	21 28.4	+12 02'	"	103a0	B	01 22 ⁴⁰	01 25 ⁴⁰	1	W 1
29585	"	"	"	"	103a0	U	01 27 ¹⁵	01 37 ¹⁵	2	W 1
29586	"	"	"	"	103aD	V	01 38 ¹⁵	01 41 ¹⁵	1	W 1
29587	NGC 6828	19 52.2	+18 42	"	103a0	U	01 48 ³⁰	01 58 ³⁰	2	W 3 4

Dome Temp.

Transparency Conditions Good! Excellent!

Focus

~~FRANK~~ RA

VARIABLE SPEED CONTROL IS NO LONGER

Dome Temp.

VARIABLE SPEED (fixed at max^m slewing rate)

Mag Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Time Sp.	Comp.	REMARKS	Quality
09 1	E 4 00	41 18	—		5 ^m	m f		
15 2	E 3 55	"			"	"		
20 2	E 3 49	"			"	"		
25 2	E 3 44	41 " 19			"	"		
47 1	N 4 41		—	6.8	3 ^m	me		
51 2	N 4 46	36 30			3 ^m	"		
03 1	W 4 58				10 ^m	"		
18 50 2	W 4 38	43° 11'		7.3	7 ^m	"		
28 2	W 4 46	"		"	7 ^m	"		
30 35 2	W 5 09	"		"	20 ^m	"		
42 1	W 5 21	"		"	10 ^m	"		
07 50 2	W 5 26	"		"	3 ^m	"		
25 15 1	W 1 32	+11 59		7.3	3 ^m	"		
37 15 2	W 1 43	"		"	10 ^m	"		
41 1	W 1 47	"		"	3 ^m	"		
58 2	N 3 41	+18 40		8.3 6.2	10 ^m	"		

← FOCUS 3. Cyg $\alpha_{1966} = 21^h 11.5^m$ RA +30° 05.2

wind makes tracking diff. (+ color!)

newt (cont'd)

243

Date 20 Aug (Sat)

Observer Mme. M. J. Wd
A. J. Mee

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	FILTER		Starting Time E.S.T.	Ending Time E.S.T.	I	Hour Angle End
						Shut	Temp.				
29588	^{m 71} NGC 6838	19 52.2	+18 42	NEWT	103aD		B	1 59 ⁵⁰	2 02 ⁵⁰	1	02 45
29589	"	"	"	"	103aD		V	02 04 ⁰⁵	02 07 ⁰⁵	2	03 49
29590	^{M 31} area 5	0 43.3	41 19	"	103aD		B	02 14 ⁵⁰	02 19 ⁵⁰	1	00 50
29591	^{M 31} area 1	0 36.7	39 49	"	"		B	02 24 ²⁵	02 28 ²⁵	2	03 38
29592	"	"	"	"	"		"	02 28 ⁴⁵	02 32 ⁴⁵	1	02 29
29593	"	"	"	"	"		"	02 33 ⁰⁰	02 37 ⁰⁰	2	02 41
29594	"	"	"	"	"		"	02 37 ³⁵	02 42 ³⁵	1	01 16
29595	"	"	"	"	"		"	02 42 ²⁵	02 46 ²⁵	2	01 58
29596	"	"	"	"	"		"	02 47 ⁵⁵	02 51 ⁵⁵	1	01 42
29597	"	"	"	"	"		"	02 52 ²⁵	02 56 ²⁵	2	01 05
29598	"	"	"	"	"		"	02 58 ⁰⁰	03 02 ⁰⁰	1	01 01
29599	"	"	"	"	"		"	03 02 ²⁰	03 06 ²⁰	2	01 05
29600	"	"	"	"	"		"	03 07 ²⁰	03 11 ²⁰	1	01 10
29601	"	"	"	"	"		"	03 11 ⁴⁰	03 15 ⁴⁰	2	01 14
29602	"	"	"	"	"		"	03 17 ²⁰	03 21 ²⁰	1	01 20
29603	"	"	"	"	"		"	03 21 ⁴⁰	03 25 ⁴⁰	2	01 24

Dome Temp.

Transparency Conditions

EXCELLENT

244

Focus

Dome Temp.

02:30 — thin cirrus over
most of the sky

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Time Sp.	Comp.	REMARKS	Quality
02	3	45 +18 40		P.3	3 ^m	Mini		
07	3	49 "		"	3 ^m	"		
19	0	50			5 ^m	Mf		
28	0	33E			4 ^m	"		
32	0	29E	"		1	"		
37	0	24E	"		"	"		
42	0	19E	"		4 1/2	"		
45	0	15E	"		4	"	down turned	
56	0	10E	"		"	"		
56	0	05E	"		"	"	prob. numbered as 596	
02	0	01W	"		"	"		
06	0	05W	"		"	"	(prob.) numbered as 600	
3 11	0	10 W	"		"	"	numbered as 600A	
3 12	0	14 W	"		"	"		
3 11	0	20 W	"		"	"		
3 25	0	24 W	"		"	"		

hute (cont'd)

245

Date 20 Aug (Sat)

Observer *Lyne, M.F., Wd, Mse* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	FILTER		Starting Time E.S.T.	Ending Time E.S.T.	P.
						Slt	Temp.			
29604	AREA #1 M31	0 36.7	39 49	NEWT	103a0		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	M31				103a0		V			2
29608	M31				103a0		V			4
29607	"	"	"	"	103a0?		B	03 59 ²⁵	04 04 ²⁵	1
29608	"	"	"	"	103a0		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

Circus

246

Focus

Dome Temp.

ing Time
E.S.T.35
35
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35
39Hour Angle
End

Declination

Seeing

Ptg.
Mag.T
Sp

Comp.

REMARKS

Quality

00 29 W

00 34 W

00 38 W

01 03 W

01 09 W

01 14 W

01 17 W

01 20 W

+39° 41'

4 min 25

4 "

11 "

~~5 00~~~~5 00~~

5 min "

4 min "

11 "

3 min "

2 min "

*all plates: 4 min, D-19, 67°F**Dave Sakim took over at 4:26 EST to
convert back to Cassegrain.*

247

Date 20/21 Aug. Sat/Sun Observer AB Julian Day 174

Hour Angle
End

Dome Temp.

Transparency Conditions

Fair, cloud in South ²⁴⁸

2309; Echo ($W \rightarrow E$) on zenith — sky determining

2320 almost completely overcast.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 52W +35° 11'	0	6.24	B8	10/10/10	B8-B9	800/X	strong
00 01E -01 02	0	6.26	B8	10/10/10	B8-B9	{time lost trying to find one of Re's stars → field wrong (1154)}	fine
Closed up 2340 HAD NO TROUBLE TO FIND IT MYSELF. SEE NEXT PAGE <u>Re</u>							

249

Date.....23/24 Jul.....1966

Observer *Ea Re / sd Re Ar* Julian Day

[illegible]

Dome Temp. 61°F

Focus 69/67/67

Dome Temp. 56

Transparency Conditions cloudy! clear at 21^hExp taken 0000 NOT work at all!!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0015 E	-20° 42'	0	5.45	BO Ia	10/10/10	MK Std 10 ^m exposure between clouds	fair
0022 W	"	"	"	"	10/10/10	MK Std 5 ^m exposure " "	weak comp weak
0042 W	-20° 22'	0	6.02	O9 II	10/10/10	MK Std 15 ^m exp SKY CLEARING	weak
0050 W	"	1	"	"	10/10/10	MK Std 8 ^m exp SKY CLEAR	comp weak
0215 W	+32° 22'	1	10.4	MO Ia ⁷ GM	10/10/10	Re "DUST" #135 3½ hr exposure.	guiding
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	strong
0222 W	+58° 34'	0-1	(8.9)		10/10/10	Re "DUST" #1b some cloud ~ 0416 EST. Plate capped. Plate fogged by light?	strong
					30-30	Focus 67	strong

251

Date 24-25 Aug 1966 - Wed/Thurs Observer Db ^{m se} ^{Hb} ^{FN} 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.
457-1	HR 6603		+4° 35'						20 05	
457-9	HR 8302								22 13	
29622	HD 172488	18 35.4	-8° 49'	G40	IIaOb	17	59°F	23 03		A
29622	HD 1064	00 ^h 09.8 ^m	-10 07	G40	IIaOb	17xL	56°F	02:25	02 31	A
29623	BD +65° 250	00^h 42.8	Re Det					2:59		B
29623	HD 16219	0 ^h 31.1 ^m	+29° 27'	G40	IIaOb	17xL	56°	03:08	03 20	B
29624	HD 19698	03 05.2	+11° 30'	"	"	17xL	56°F	03 28	03 35	C
29625	HD 21933	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 25152	03 54.7	+36 44	"	"	"	"	04 14	04 20	A

Dome Temp.

Transparency Conditions

Transparency Conditions good 252

22:30 clouds - temporarily close shutter

23:00 partial clearing

23:00

partial chaining

[illegible]

Date 24-25 Aug 66 Wed-Thurs. Obs

Observer. Ab, J. A.

Julian Day

Dome Temp
Focus
Dome Temp

Hour Angle
End

0152^h A
0576

Dome Temp.

Transparency Conditions Good (almost photometric).

254

g Time ST.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23	C	0152 ^h E	+42 06	0+	6.07	B8	18/10/	B8-B9	400 / 30 * fine
36	F	0157 E	+32 24	0+	6.17	B9	18/10/	B8-B9	400 / * fine * light streak.

Date 25/26 Aug

Observer ^{Re} sd / H5

Julian Day

[illegible]

Dome Temp.

Transparency Conditions

clouds + rain 1st half

256

[illegible]

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.H.
29631	HD 165814	18 ^h 02 ^m 7	-25° 29'	GUO	Dagob	17	65	19 47	20 00	B
29632 ³¹	HD 170177	18 23.6	-13 34	—	—	17	65	20 11	22 41	A
29633 ³²	HD 171305	18 29.0	-4° 53'	—	—	17	63	22 47	23 32	C
29634 ³³	HD 172527	18 35.6	-4 11	—	—	17	63	23 37	00 11	B
29635 ³⁴	+47° 4220	23 33.0	+47 57	—	—	17	62	00 51	01 51	B
29636	+57° 198	00 05.3	+58 11	—	—	17	60	02 15	02 45	A
29637 ³⁵	+57° 9	00 04.3	+58 07	—	—	17	—	02 54	03 47	B
29638 ³⁶	+64° 13	00 07.9	+65° 02'	—	—	17	60	03 52	04 44	C

Dome Temp. 6.7

Focus 702/170/68/

Dome Temp.

Transparency Conditions

V. Good

Gibbons moon at ~1930

(seeing disc almost completely) photometric; some intermittent clouds
inside slit.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 00 05W	-25°25'	0+	6.7	B8	10-10-10	B8-B9 Star is double took brightest 800/60	not flat? not in place?
01 02 17W	+13°26'	1+	10.2	B0.5 Ia	10-10-10	Db-OB*2 F. 1d checks 800/X	completely of of won't find it
02 03 02W	-4°45'	1	8.6	OB	10-10-10	Db-OB Programme* #3	fine
03 03 34W	-4°5' (?)	1	8.6	OB	10-10-10	Db-OB — #7	fine
04 00 17W	+48 19	2→3	9.8	B9	10-10-10	Re* 158 "Dust" (set on word star for 20 min) took new plate, field drawn.	weak ~70 counts fine (if meteorite)
05 00 39W	+58 34	2→3	(8.9)	—	10-10-10	(Found 69) Re dust 1c	800/90 c to f
06 01 42W	+58 29	2→3	8.7	—	10-10-10	Re dust 1d: (plate out marked as 631 or something like that)	800/550 fine
07 02 35W	+65 28	1	10.9	B	10-10-10	Re dust #2, field plotted, only had time for 35 counts before down some	800/35 very weak
Closed 04 46 EST							

(Re programme star
not in box??)

259

Observer ^{sd} ~~Hov~~, ~~Fr~~ ^{Hv} Julian Day

[illegible]

Dome Temp.

Transparency Conditions

0345 THIN CLOUD.

fair poor $\log 2.45 \rightarrow 1.65$ 260

Mon near Bull

[illegible]

Date 28-29 Aug 1966 Observer D6 Hr
Sun - Moon In sec - Ri Julian Day

[illegible]

Dome Temp.

Transparency Conditions

POOR - 3/4 rky 262
covered

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	(No BTLA. AT 900V) 800V	Quality
2 25	+14 35	0	6.6	B3.5	10-10-	PC Binary focus 71	800/30	fine.
					30/30			sl. centre to red
2 58W	-4° 3	0 ⁺ -0	8.6	OB	10-10-10	Db-OB Reg 17 - interrupted by curse (closed plate)	800/30	weak.
2 30	+41° 15	1	7.42	B3.5	10-10-10	Mk standard	800V/ 800/25	weak
104W	+62° 00	1-2	9.9	B2	10-10-10	Re "Dust"	" 800/25	poor guiding weak.
2 37W	65° 29'	2-3	10.9	B	10-10-10	Re "Dust"	900V, 800/38?	weak

Date 29-30 Aug. 1966 Observer Er - / Hb, Fu Julian Day 175
MON. - TUE.

[illegible]

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 500V. OR 800V. MODE (TOO HIGH)	
3 05W	8 75	?	7.7	OB	10-10-	DB OB #6 NO EXP. METER (FIGURED ON ABOUT 2 HOURS) BUT RAN TOO FAR WEST AT 1 1/2 hr. exp	weak
00 36W	56° 30'	2-3	5.79	B8IB	10/10/10	MK SKD [- 2 mag absorption] Known	guiding
00 47W	"	1-2	"	"	10/10/10	" Seeing very good normal	fine
00 51W	"	"	"	"	10/10/10	" Known	guiding
00 06E	+42° 09'	2	3.6	B6	15/15'	Re Dust	strong
	+58 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	39 46'	1-2	6.35	B8	10/10/10	B8-B9 (dte) ^{at this the star is completely inside slit} ~ 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
01 13E	+22 10	1-2	5.9	B9	10/10/10	B8-B9 (dte) from 71	too weak
			6.11	B8	11	B8-B9 (dte)	
						B8-B9 clouds	

Date 30-31 Aug 1966

Date 30 - 31 Aug 1966

Observer

nm se

Julian Day

[illegible]

Dome Temp.

Transparency Conditions VERY GOOD

266

Thick Haze

2200 - connector moving from SW.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
50	39	-8° 42'	0+	7.7	OB	10-10-10	DB-OB focus 72 #6	Too humid FOR EXP MTR (marked) 155 st? low
25A	54	31° 22'	0	6.5	B9	10-10-10	B8-B9 main prog	fine
54	20W	-4° 48'		8.6	OB	10-10-	DB-OB #3	very weak

Date 31 Aug - 1 Sept. Wed - Thurs Observer Mf / McI
Db / Ri Julian Day

[illegible]

Dome Temp. 69° (21^h)

Focus $7.6 - 1.5 = 72.1$

Dome Temp.

Transparency Conditions

V. good - Photometric

268

~ Full moon on East Horizon
at start of observing.

2nd half - some haze?

Plate "X" - left from last night in drawer - what
is it?
Exp. Time.

REMARKS

Quality

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 10W	-13° 28	0+	10.2	B0,5 Ia	10/10/102 ^h 31 ^m	Db-OB Programme #2	Note: Exp. Meter won't work even at 800/50 500V although seems balanced at 500V
03 12W	-7° 22	1-2	9.9	B1 Ia	10/10/101 ^h 24 ^m	Db-OB Prog. #13	class and comp work
						clouds - 1:50 - 2:10 EST.	
						Generator began making an unusual noise. After turning it off it would not burn on again.	
						FIXED - BLOWN FUSE - 3¢ xfmr. Bank.	
						Hv	

Date 1-2 Sept/66 - Thurs/Fri Observer DB ^{mse} ^{Hr} - Wd Julian Day 173

[illegible]

Dome Temp.

Echo II visible in East at 1000 EST

0125 CLOUDS.

270

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
220 1	02 04W	-9° 19'	0.7	10.0	302a	10/10/10	2 ^h 40 ^m *9 Db-0B Focus 73 REPLACE DEC FUSE	fine
006 1	03~40W	-00 34	0-1	9.96	08	10/13/10	*12 Db-0B REPLACE DEC FUSE	weak
35 B	0110W	+6200	1→2	10.03	B ₂ pe	10-10-10	Cn - Be EX-MTR 700V 2000/13 ⁽³⁰⁾ clouded over completely at 1:35 EST.	fine
MAY WE PLEASE HAVE A <u>LONG</u> PENCIL								
FOR THE DOME?								

271

Date 2-3 SEPTEMBER FRI/SAT Observer Jm Julian Day.....
21[illegible]

Dome Temp.

Transparency Conditions

VERY HUMID

Chair 2145

Quadr. 7230

Charly 2253

METER BALANCES 80
2200 EST

200 V Overcast

2330

272

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03	102155W	+3°37'	0	7.56	4K3	10-10-10	GH - MK PROGRAM	EXPOSURE METER WILL NOT BALANCE AT 900, 800, 700 VOLTS, BALANCES AT 600 VOLTS, BUT WON'T COUNT.
14	01°53W	+13°59'	0	6.1	B9	10-10-10	B8-B9 EB Focus F2	800V - 400/13
	22°29W	+00°37'	0"	6.42	B9	10-10-10	" " capped 22:35-22:58 / clouds delay start	800V - 800/35
	02°53W	+38°15'	00	5.7	B8	10-10	" " capped 23:22 because of cloud	800V - 800/17
							Clouded up 23:30	

273''

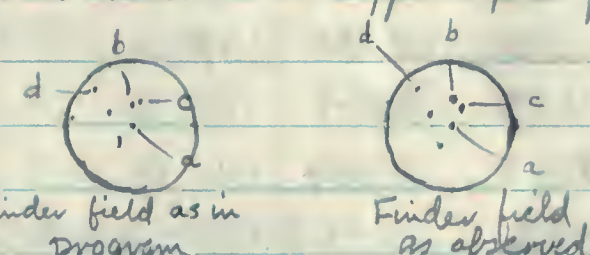
Date 4-5 SEPTEMBER SUN/MON Observer Gi Julian Day
(Hm)

[illegible]

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

Transparency Conditions *Cloudy / Clear after 0130*

274

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
16	03 41 W	$+42^{\circ} 04'$	00	6.37	B8	10-10-10	B8-B9 SB (CLOSE BINARY) ^{VISUAL} (FAINT COMPANION) VOLTAGE 900	800/50 <i>in one long curved line</i>
27	03 07 W	$+41^{\circ} 52'$	"	6.0	B9	10-10-10	B8-B9 SB	800/50 fine
38	01 00 W	$+45^{\circ} 20'$	"	6.30	B9p	10-10-10	"	" fine
51	00:26 W	$+61^{\circ} 10'$	"	5.9	B9	10-10-10	" ^{VISUAL} (BINARY) (d & e)	" fine
38	03:07 W	$+58^{\circ} 33'$	"	(B.9)	-	10-10-10	Re "DUST" PROGRAM $\neq$ 1c, Focus 68.5	strong
Note relation of program stars 1b and 1c are different from finder field as drawn in program -								
i.e. 1c is taken as the star at the obtuse vertex of the small triangle, and is perhaps the slightly fainter component.								
53	00:11 E?	$+55^{\circ} 50'$	0	6.02	B9	10-10-10	Focus 67.3 B8-B9 SB	fine
103	00:02 E	$+24^{\circ} 48'$	0	5.6	B8	10-10-10	"	fine
						Q10 FILTER 5-5	Focus 67.3	O.K.

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.	Hour Angle End
29674	HR 7239=HD 177817	19 ^h 01.1	-16° 23'	G40	IIaOb	17XL	62°	20:30	20:40	A	00 16W
29674 A	HD 176077	18 ^h 53.4	-7° 29'	G40	IIaOb	17	60°	20:50	21:15	B	00 58W
29675	HD 186547	19 ^h 40.0	+13 03	G40	IIaOb	17XL	60°	21:25	21:33	C	00:31W
29676	HD 180553	19 ^h 11.9	+27 17	G40	IIaOb	17XL		21:47	21:55	A	1:23W
29677	HD 196504	20 32.8	+26.07	G40	IIaOb	17XL	58°	22:08	22:12	B	1:18W
29678	HD 197226	20 37.3	+38 43	"	"	"		22:20	22:30	C	1:39W
29679	HD 192276	20 09.0	+47 26	"	"	"		22:47	23:04	A	1 ^h 35 ^m W
29680	HD 192659	20 10.9	+41 48	"	"	"	56°	23:10	23:17	B	1 ^h 45 ^m W
29681	HD 199892	20 54.9	+41 33	"	"	"		23:22	23:27	C	1 ^h 11 ^m W
29682	HD 198513	20 45.7	+51 32	"	"	"		23:31	23:36	A	1 ^h 38 ^m W
29683	HD 193964	20 18.0	+61 56	"	"	"		23:41	23:44	B	2 ^h 07 ^m W
29684	HD 219749	23 ^h 13.2	+44 57	"	"	"		23:51	23:59	C	00 35E
29685	HD 209819	22 01.0	-14° 21'	"	"	"		00:06	00:07	A	00 45W
29686	"	"	"	"	"	"		00:09	00:13	B	00 50W
29687	HD 223311	23 43.4	-06° 56'	"	"	"	55°	00:20	00 40	A	00 25E
29688	HD 216629	22 49.4	+61 36	G40	IIaOb	17		00:47	02 07	B	01 57W

Dome Temp.

Focus 69

Dome Temp.

Dome Temp. 61°

Focus 69/68/67

Dome Temp. ...

Transparency Conditions *Some cloud**0^h occasional l. cloud. Northern lights still fairly strong.*

27.6

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
40	A 00 16W	-16° 14'	0	5.88	B8	10-20	B8-B9 MAIN PROGRAM 90 VOLTS 800/62	double edges with 78
5	B 00 58W	-17° 20'	0	9.9	B1 Ia	10-20	EXPOSURE STOPPED - CLOUDS DESTROY ANY CHANCE OF PLATE PLACED UNNUMBERED IN DO-OB #13 - FINISHING THIS EXPOSURE - "EXPOSED" BOX.	fine
3	C 00:31W	+13° 16'	0	6.07	B8	10-10-10	B8-B9 SB (dte) 800/60	fine
35	f 1:23W	27° 26'	0	6.2	B9	10-10-10	B8-B9 SB CLOUDS DELAY START 800/60	double edges with 78
2	F 00 18 ^m W	26° 21'	"	5.50	B9	10-10-10	B8-B9 MAIN PROGRAM FOCUS 68 800/60	fine
30	C 0 32 ^m W	39° 00'		6.42	B9	10-10-10	" " " "	double edges with 74
4	f 1 ^h 35 ^m W	47° 40'	0	6.6	B8	10-10-10	B8-B9 SB (CLOUDS DELAY START) "	fine
17	f 1 ^h 45 ^m W	42° 01'		6.37	B8	10-10-10	" " FOCUS 67 "	fine
37	f 1 ^h 11 ^m W	+41° 50'		6.0	B9	10-10-10	" " " "	plate sl. fogged comp. whole
36	f 1 ^h 36 ^m W	+51° 50'		6.26	B9	10-10-10	B8-B9 MAIN PROGRAM " "	fine
3:44	2 ^h 07 ^m W	62° 13'		5.6	B9	10-10-10	B8-B9 SB (dte) "	fine
3:59	C 00 35E	+45° 18'		6.30	B9p	10-10-10	B8-B9 SB " "	fine
7	A 00 45W	-14 00		4.3	B8	10-20	B8-B9 SB (dte) "	fine
1:15	00 50W	"		4.3	B8	15-15	B8-B9 SB (dte) 400/30	fine
40	A 00 25E	-07° 31'	0-1	6.3	gK4	10-10-10	STD. VEL. STAR. 800/100	fine
07	01 57W	+61 59	1	10.03	B2pe	10-10-	Cu Be field check 800/50	fine

Date Sept 5-6 1966 Cont. Observer Ch. Julian Day 172

[illegible]

Dome Temp.

Transparency Conditions

Focus

02:40 clouds more frequent.

Dome Temp.

03 completely overcast.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 16 E	+60 55	1	9.61	B3he	10-20	Cn Be 02:40 f. cloud. 02:47 solid cloud field checks (30 counts) 500/32	1 weak
00 30 E	+55 07	1	8.20	B2e	10-10-10	Cn Be 500/50	fine
00 41 W	+57 30	1	9.02	B05:8:pe	10-10-10	Cn Be 500/50	fine.
Dave Earlam: Need some fuses for dome. ✓							

Date Sept 6-7, 1966 Observer Jn^{se} / Ri Julian Day 1966087

(Mcl) Mcl
Mse, / Ri
Jn, / #b

[illegible]

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
WARMED UP. TONIGHT IT WAS AT .075 AFTER *Leaving 19:45; photometric*
BEING ON FOR 1 HOUR IT WAS RESET TO ZERO. *Leaving 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 End	Declination	Secing	Ptg. Mag.	Sp.	Comp.	REMARKS	EXP. MTR. BALANCES OK	Quality
09	A 2	04 -9° 18'	0-1	10.0	BQ Ia	10+0-10	DB OB # 9 FIELD DRAWN SOME CLOUDS DURING EXPOSURE focus 67 1/2	900V 800/60	fine
36	C 1	59 +11 53	1	5.17	G 8 IV	30	GH *	200/25	fine
13	D 1	05 +6 23	1	5.45	F 2 V	30	GH PLATE FOGGED??	200/25	fine
46	E 0	30 -01° 01'	/	6.26	B 8	10-10-10	B 8-B 9 This plate was left in the plateholder.	800/60	fine 20' 10"
09									
4 03							04:15 Completely Cloudy.		
							* HD 18512 appears much brighter than HD 182572, if stars are correct		

Date 7/8 Sept '66

Observer

Sd.
Mae.

wd

Julian Day

[illegible]

Dome Temp. 58°

Focus

Dome Temp.

Transparency Conditions V. Good

282

(Some cloud in South at 20:50 EST)

g Time
S.T.

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

941

507

Date 8/9 Sept 66

Observer

Inc.

Hv
.....

Julian Day

[illegible]

Dome Temp. 62°

Focus

Dome Temp.

Transparency Conditions Haze at first

Very good at 22.00 EST.

284.

g Time
S.T.

Hour Angle
End

Declination

Seeing

Ptg.
Mag.

Sp.

Comp.

REMARKS

Quality

31

06

Date. Sept 9/10

Observer

McL / Re

Julian Day

[illegible]

Dome Temp. 60°.....

Transparency Conditions

Transparency Conditions *Hoze at first clearing*
10:30 PM cirrus 286
photometric after 0200

[illegible]

287

Date Sat/Sun Sept 10/11 Observer HB / CM Julian Day

[illegible]

Dome Temp.

Transparency Conditions

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

2345 - clouds - 10
0145 - " -

288

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
55	02 14 W	+66° 00'	~2	10.6	(B)	10/10/10	* SEE field for iden (146a or 146b) Re Dust #146a clamped in due because telescope unstable 8:00 / 45	in cab
50	00 53 E	+60 54	2	9.61	B(3)ne	10/10/10	Cn BeFocus 69 field checks 8:00 / 30	in cab
							cloud up 02:30	

Date Sun / Mon Sept 11 / 12 Observer Mcl / Mc / Db, Ea / Rb / Rr Julian Day 174

[illegible]

Dome Temp.

290

[illegible]

291

Date Mon/Tues Sept 12/13 Observer Huse, D6/C, Ri 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	α Aql (HD 186791)	19 41.5	+10° 22'	G10	SPOTTED IIaD	9, X Long	62	19 ^h 24 ^m 20 ^s	20 04	C
29706	β Aql (HD 161096)	17 38.8	+4° 37'	G10	"	9, X Long	60	20 15 ^m 36 ^s	21 27	C
29707	β Aql (HD 204867)	21 26.3	-6° 01'	G10	"	"	"	21 35 ^m 42 ^s	22 59	C
29708	ϵ Peg (HD 206778)	21 39.3	+9° 25'	G10	"	"	"	23 08 ^m 24 ^s	23 55	C
29709	β Peg	22 58.9	+27 32	G10	"	"	56°F	00 00 ^m 32 ^s	00 44	B
29710	γ Psc	23 34.8	+5° 05'	G10	"	"	56°F	00 48 ^m 46 ^s	02 20	C
	γ Cas	00 54.3	160 30	G10	"	"	"			E

Dome Temp.

Focus

Dome Temp.

Hour Angle
End

032E

254W

39

0120W

0051W

52W

Dome Temp. 61°

Focus

Dome Temp.

Transparency Conditions

Transparency Conditions *Light clears over To at start*
02^k l. cloud from S. + every where on horizon

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04 C 0 32 E	+10° 26	0-1	4.15	K3 II	10-10-10	STD. VEL. Prog. G10 <u>DEVELOPED</u> 2x10/100	(OK?) fine
27 C 2 54 W	+4° 37	0-1 → 0	3.93	K2 III	10-10-10	G10 STD. VEL Prog. 2x10/100	fine
59 C 0 39	-5° 42	0	3.73	G0 Ib	10-10-10	" " 2x10/100	fine
55 C 01 20 W	-9° 45	1	3.98	K2 Ib	10-10-10	" PLEASE CHECK 1968 RA. 2x10/100	fine
4 B 00 51 W	+27° 56'	2	4.17	M2 II-III	10-10-10	Hx special star 2x10/120	fine
20 C 1 52 W	+05 30	1	4.64	F7 V	10-10-10	Std Vel 02 ^h clouds. 2x10/45 60	weak
						20 B0 IV ps G10	
						cloud up 02:30	

293

Date 13-14 Sept / Tues - Wed Observer Mse / Hb Julian Day (Hm) Wed 116

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.L.	Hour Ang End
29711	HD 186791 J Agl.	19 41.5	+10 22	G10	SPOTTED HAD.	9		19 14	20 16	C	E0
29712	HD 186791 J Agl.	19 41.5	+10 22	G10	SPOTTED HAD.	9	65°			B	
29711 F ₁	four tent in in faint and			G10	HAD	9				B	
29712	HD 204867 B Agl	21 26.3	-6 01	G10	HAD	9	—	21 59	23 26	W	0
29713	B Cap	20 43.3	+61 27	G10	HAD	9	—	23 33	00 34	B	W 255
29714	B Cap	23 35.2	+77 04	G10	HAD	9		00 39	01 58	C	W 133
29715	HD 3712 L Cas	00 34.8	+55 59	G10	HAD	9		02 02	02 33	B	W 12W
29716	HD 6860 B And	01 04.1	+35 05	G10	HAD	9		02 36	03 08	C	01 14W
29717	HD 12929 L Axi	02 01.5	+22 59	"	"	"		03 12.5	03 46	V	W 55W
29718	HD 20902 L Per	03 17.2	+49 30	"	"	"		03 50	04 09	C	W 01W
29719	HD 29139 L Tan	04 30.2	+16 18	"	"	"		04 14	04 26	B	W 50
29720	HD 31398 L Aur	04 50.5	+33 00	"	"	"		04 30	05 06		W 34W

Dome Temp. 67°F

Focus

Dome Temp.

Transparency Conditions

0400 - very good

294

very hazy by $\approx .8$ 2000
hazy by $\approx .3 \rightarrow .6 \rightarrow .3$ 0000

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
16	00 15	+10° 35'	1-2	4.15	K3II	10-10-10	Std. Vel.	weak
				3.42	G5II		4x10/100 (9000) 2x10/80	certainty violet
							30/30 complete overcast	
							2200 clear again	
26	01 09	-5° 41'	0	3.73	G0IA	10-10-10	Std. Vel.	weak
34	01 25	+61° 44'	1-2	4.33	K0IV	10-10-10	Auto guider or Telescope drifts West 2x10/100	fine
58	01 33	+77° 28'	1-2	4.22	K1IV	10-10-10	Guider motor will not slow down enough so guided by hand 2x10/100	fine
33	01 12 W	+56° 21'	1-2	3.34	K0II	10-10-10	Std Vel.	fine
08	01 14 W	+35° 28'	2	3.59	M0III	10/10/10	1 hr special star	fine
46	00 55 W	+23° 19'	1-2	3.15	K2III	10/10/10	Std Vel.	fine
09	00 01 W	+49° 45'	1	2.27	F5II	10/10/10	Std Vel.	strong
26	00 50 E	+16 29	1	2.39	K5III	10/10/10	Std Vel.	fine
06	00 34 E	+33 09	1	4.13	K3II	10/10/10	1 hr special star	fine

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

Dome Temp.

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					<i>6/10 plates</i>		
Focus	70				3/3	(~ 3 mm D-19)	badly c to red.
Focus	80				5/5	"	c to R OK at 4500
focus	45				5/5	"	c to red at 3900
focus	46				5/5	screwed N screw out 1/2 rev. S screw in 1/2 rev.	O.K.
focus	46.5				3/3	} on same plate, turned end forward.	
focus	46.5				2 ^s		
Focus	41.0				4 ⁵ /4 ⁵		c to red poor lines!
"					2 ^s		
Focus	43.0				4/4 ^s		pl c to red
					2 ^s		lines OK
Focus	45.0				4 ¹ /4 ^s		pl c 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		

297

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

[illegible]

Transparency Conditions

Focus

Dome Temp.

[illegible]

299

Date Sept 15/16 Thurs Observer H. V. B. R. S. Julian Day 244

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	FILTER	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
29721	N 6 C 6910	20 21.8	+40° 41'	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° 05'
29724	V 3 Field A	0 ^h 42 ^m 34 ^s	+41° 15' 4"	"	103a O	B		21:28:32	21:33:32	2	E 3° 48'
29725	"	"	"	"	103a O	B		21:36:05	21:41:05	1	E 3° 40'
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° 00'
29729	V 4 Field B	0 ^h 36 ^m 7 ^s	+39° 49'	"	103a O	B		22:27:22	22:32:22	1	E 2° 49'
29730	V 3 Field A	0 ^h 42 ^m 34 ^s	+41° 15'	"	103a O	B		22:39:43	22:44:43	2	E 2° 36'
29731	Field C	0 ^h 38 ^m 9 ^s	+40° 25'	"	103a O	B		22:51:21	22:56:21	1	E 2° 21'
29732	V 3 Field A	0 ^h 42 ^m 34 ^s	+41° 15' 4"	"	103a O	B		23:00:27	23:05:27	2	E 2° 16'
29733	V 4 Field B	0 ^h 36 ^m 7 ^s	+39° 49'	"	103a O	U		23:10:11	23:25:11	1	E 1° 50'
29734	V 3 Field A	0 ^h 42 ^m 34 ^s	+41° 15' 4"	"	103a O	B		23:32:19	23:37:19	2	E 1° 45'
29735	Field C	0 ^h 38 ^m 9 ^s	+40° 25'	"	103a O	U		23:51:40	00:06:40	1	E 1° 10'
29736	V 3 Field A	0 ^h 42 ^m 34 ^s	+41° 15'	"	103a O	B		00:17:00	00:22:00	2	E 0° 10'

Dome Temp. 50

Transparency Conditions Very Good

Focus

Dome Temp.

Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXP. Comp.	REMARKS	Quality
01:42	1 E 0° 30'	40° 43'		7.7		5m.	} DEVELOPED: D-19, 4 min, 67°F (m se) Sd Guiding	
05:37	2 E 0° 15'	40° 43'		"		7m		
05:38	1 W 0° 05'	40° 43'		"		15m		
03:32	2 E 3° 48'	41° 14'				5m	vd B "	
04:05	1 E 3° 40'	41° 14'				5m	"	
02:00	2 E 3° 30'	41° 14'				7m	"	
01:00	1 E 3° 10'	41° 14'				15m	"	
09:55	2 E 3° 10'	41° 14'				5m	"	
02:22	1 E 2° 44'	39° 49'				5m	"	
04:43	2 E 2° 36'	41° 14'				5m	"	
05:21	1 E 2° 21'	40° 23'				5m	"	
05:27	2 E 2° 16'	41° 14'				5m	"	
02:11	1 E 1° 50'	39° 50'				15m	"	
03:19	2 E 1° 45'	41° 14'				5m	"	
06:40	1 F 1° 10'					15m		
02:22	2 0100 E					5		

Thurs - Friday

Date Sept. 15/16/66 Contd.

Observer v.d.B., Hr., Ri., Hn. 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. Clamp.	REMARKS	Quality
17 ⁵⁰	1 00 28 E		=			7 ^m	Fours Very Good.	
20 ²⁸	2 00 20 E					5 ^m		
19 ⁵	1 00 00					5 ^m		
29 ²⁹	2 00 07 W					5 ^m	few thin clouds through the field	
51 ⁴¹	1 00 30 W					5 ^m		
04 ²⁵	2 00 50 W					5 ^m		
20 ⁰⁰	1 00 57 W					5 ^m		
37 ¹¹	2 01 20 W					7 ^m		
51 ⁴⁰	1 01 29 W					5 ^m		
02 ¹³	2 01 40 W					5 ^m		
14 ⁴⁰	1 02 00 W					5 ^m	HA may be incorrect	
27 ¹⁴	2 02 06 W					5 ^m		
36 ⁰⁰	1 02 15 W					5 ^m		
47 ¹⁸	2 02 26 W					5 ^m	5 clamp stuck!	

303

Date.

Fri - Sat

Observer

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Ke

Julian Day

29760 F

* T TAURI

was measured photovoltaically at

B = 11.5 on Sept 11'66 (Re) 52°F

Dome Temp. 58° Focus 45.5

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	$-13^{\circ} 29'$	0.7 ⁺	10.2	B0.5 Ia	10-10-10	D6-08 #2	weak
01h 17W	72 44	1 ⁺	10.5	(G)	10-10/10	Re 'Dust Programme' (#149) <i>800/50?</i> <i>AD 17257, Db #7</i> <i>(not found in field??)</i> <i>m = 8.6</i>	fine
03 33 E	$+37^{\circ} 55'$	1	7.6	A0	10/10/10	Re DUST #18 <i>800/40</i>	fine
03 20 E	—	0-1	—	—	10/10/10	do #18 <i>600/30</i> hand guided	fine
03 20 E	$+27^{\circ} 30'$	1-2	8.3	G5	10/10/10	Re DUST #25 <i>800/60</i> auto guided	weak
03 12 E	$+10^{\circ} 07'$	1-2	6.25	B8	15/15	Re DUST #26 <i>800/30</i> hand-guided	fine
00 52 E	$+19^{\circ} 28'$	1.72	9.5 [*]	GSe	10/10/10	Re DUST #28 <i>looks quite faint</i> <i>800/60</i> <i>LST = 0200 sirius seen 10° above horiz!</i>	poor
01 10 E	$+29^{\circ} 44'$	1-2	7.5	B9	10/10/10	Re DUST #29 <i>800/35</i>	fine
00 58 E	$+12^{\circ} 58'$	1-2	(8.5)	G5	10/10/10	Re DUST #35 <i>800/50</i> (PLATE NUMBERED <i>60</i>)	weak
03 7 E	$+13^{\circ} 28'$	1.0	(7.9)	G4.5	10/10/10	Re DUST #37 <i>600/35</i> <i>sky shows slight end of exp.</i>	ok
0530 Close up.							slower to right
Temp. dropped quickly in last hour of night.							

Visitors ~200 Alberio. < 0848 DST a Very bright fireball in N.W. Trail reported
Hb JHb Re 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 Cyg	20 14.1	+37 43	"				00:22	—	A
29766	35 Cyg	20 14.8	+34 40					00:26		B
29767	"	"	"					00:30		C
29768	8 Cyg	20 18.6	+39 56					00:34		A
29769	"							00:37		B
HD 194839										A
29770	41 Cyg	20 25.3	+30 02					00:50		C
29771	44 Cyg	20 27.2	+36 36					00:53	00:59	F
29772	"	"	"					01:00	01:07	A
29773	HD 195592	20 27.2	+43 59					01:09	01:14	C
29774	"	"	"					01:16	01:20	A
29775	E Cyg	20 42.2	+33 36					01:24		B

Dome Temp. 61°F

Focus

Dome Temp.

Transparency Conditions

fair

306

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
41/2	00 38W	-02° 30'	0-1	6.24	B9	10/10/10	B8/B9 (d + e) 450/40	strong
00	01 46W	+65° 59'	1-2	10.6	(B)	10/10/10	Reidust " #146 a 800/30	fine
01 14	03 39W	+38° 25'		6.9	B0.5 Ib	5	MK Standards. 1/2 Normal G10 filter 400/15	fine
01 19	03 44W			"	"	5	1/4 Normal 400/8	fine
	03 43W			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 50W			2.88	F8 Ib	"	1/2 " 400/25	strong
	03 53W			"	"	"	1/4 " 400/12	strong
				2.21	B0.5 Ia	"	1/2 " 400/15	
	03 59W			4.43	F5 II	"	1/2 " 400/25	strong
01 99	04 06W			6.17	F5 Ib	"	1/2 " 400/25	fine
01 07	04 14W			"	"	"	1/4 " 400/12	fine
01 14	04 21W			6.9	O9.5 Ia	"	1/2 " 400/15	weak
01 22	04 27W			"	"	"	1/4 " 400/7	weak
	03 16W			3.48	K0 II		MK Std. 1/2 Normal 450/40	strong

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	E Cyg			G40	Daob	13	—	01:26	—	C 14 18 W
29777	HD 199216	20 50.7	+49 09	"	"	"		01:32		I 14 16 W
29778	"	"	"					01:38		E 14 22 W
29779	HD 199478	20 52.4	+47 02					01:42		A 14 24 W
29780	"	"	"					01:44		E 14 26 W
29781	E Cyg	21 01.3	+43 32					01:48		C 14 21 W
29782	"							01:51		I 14 24 W
29783	61 Cyg A	21:02.4	+38 15					01:56		— 14 25 W
29784	"	"	"					02:05		C 14 27 W
29785	"	"	"					02:13		I 14 45 W
29786	61 Cyg B	21:02.4	+38 15					02:17		— 14 49 W
29787	"	"	"					02:29		— 15 01 W
29788	3 Cyg	21:08.7	+29 46					02:37		— 15 03 W
29789	"							02:39		— 15 04 W
29790	5 Cyg	21 13.5	+38 59					02:45		— 15 06 W
29791	"							02:46		— 15 07 W

Dome Temp.

Focus

Dome Temp.

Transparency Conditions

10 into
good!

308

for HA

01:46 EST =

01:15.3 Sidereal Time.

Leading Time
EST.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04 18W			3.48	K0 II	6	MR 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			7.40	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
lower to horizon1/2 X may be
in spectra.blank
copper along

Date Sept 17/18 Cont'dObserver 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	Enob	13	—	02:50		5 03
29793	"	"	"	"	"	"		02:53		06
29794	10 Lac	22 34.8	+38 32					03:02		02
29795	12 Lac	22 37.0	+39 42					03:06		04
29796	"							03:11		09
29797	β Cas	00 03.8	+58 36					03:17		48
29798	"	"	"					03:19		50
29799	δ Peg	00 08.1	+14 38					03:26		51
29800	"	"	"					03:27		52
29801	K Cas	00 21.3	+62 23					03:35		54
29801F	Focus Test.	0/0					56			
29801T ₁	Calibration step	Wedge			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 *Clouding up*Focus *45.5*

Dome Temp.

Clocking Time
EST.

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

311

Date Sept 18/19, 1966 Observer Re / Ri (Hn)
Db Ea / H (Hn)
 Julian Day 181.5

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	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 48	22 54	C
29805	"	"	"	"	"	"	"	22 54	22 57	A
29806	γ 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 Sge	19 35.6	+17 47	"	"	"	"	23.21	—	C
29810	"	"	"	"	"	"	"	23.25	—	A
29811	γ Aql	19 41.5	+10 22	"	"	"	"	23.32	—	B
29812	ε 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° 33	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

Cirrus over sky at start
Seeing very good. - Cleared up
at 20^h

312

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
36 A	01 ^h 30 W	-4° 4'	1-2	8.6	A0 Ib	12-10-10	Setting (46.4) D6-OB Program #7 Field Checks (unbaked) 800/60	weak
43 B	3 25 W	-7° 2'	1-2	9.9	B1 Ia	10-10-10	(46.4) D6-OB - " #13 800/60	weak
54 C	3 43 W			9.2	F6 U	7	G 10 RIL 7.4 R MK 1/4 x 400/30	fine
	3 46 W			"	"	7	" 1/2 x 400/15	fine
	3 40 W			3.2	B9 III	7	" 400/11	fine
	3 27 W			4.46	K0 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			~9.15	K3 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 25 W			"	"	7	" 400/15	fine
17	0 11 E	+26° 57'	0.1	5.75	G2 II	10/10/10	G H Star to counts under program 400/50	fine
36	01 34 E	+19° 56'		6.15	d G4	10/10/10	" 400/50	fine
53	00 13 W	-9° 43'	0	5.74	B9	10/10/10	B8-B9 field flattener not in post? 400/40	less blurry

313

Date Sept 19/66 M.M.T.M.Observer Hb
(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.
29818	HD 16219	02 31.1	+39 27	440	IIaO	17		01 00	01 08	C
29819	HD 19698	03 05.2	+11 30	440	IIaO	17		01 16	01 24	A
29820	HD 21212	03 20.3	+62 09	440	IIaO	17		01 35	02 40	B
29821	HD 22298	03 30.3	+54 50	440	IIaO	17		02 45	03 43	C
29822	HD 23552	03 41.0	+50 26	440	IIaO	17		03 48	03 57	A
29823	HD 23594	03 41.3	+56 49	440	IIaO	17		04 08	04 26	B
29824	HD 27462	03 41.8	+68 12	440	IIaO	17		04 33	04 48	C
29825	HD 27026	04 11.2	+41 54	440	IIaO	17		04 53	05 04	A
29825-T ₁	HD Calibration Step Wedge	for plates 29802-15								
T ₂	"	"	"	"	"	29816-25				

Dome Temp.

Transparency Conditions

Transparency Conditions *Good some high thin rim at times* 3/4

ing Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							G40		
108	C	U1 S4E	39° 45'	0	6.35	B8	10/10/10	B8-B9 (d+e)	VW/40 fine
24	A	O2 11E	+11' 46	0	5.87	B9	10/10/10	B8-B9	VW/40 light streak fine
40	S	O1 12E	+62 22	0-1	8.72	B2(V)=	10/10/10	Cn Be Antogunda Kymt.	400/35 comp weak fine
43	C	O0 16E	+55 04	0	8.2	B2 III-I	10/10/10	Cn Be some light cloud.	400/31 fine
57	A	O0 1 SE	+50° 36'	0-1	5.87	B8	10/10/10	B8-B9	400/35 fine
26	O	O0 13W	+5.7° 02'	0	6.46	B9	10/10/10	B8-B9	400/31 fine
-3	O	O0 32W	+68° 2 ✓'	0	6.28	B8	10/10/10	B8-B9	fine
04	O	O0 22W	+42° 03	0	6.07	B8	10/10/10	B8-B9	fine
from appearance of stars comparisons I will ↑ slightly centre to violet Cn II									
Frank — Under slack — goes to the right only! or fix directly not OK									
— Sidereal clock off about 2 min(?). O.K JMB									

Date Sept 19/20, 1966Observer Re,
D.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.
29826	HD 181558	19 15.8	-19° 25	G40	IIaOb	17XL	62°	19 ^h 16 ^m 17 ^s	19 50	C
29827	DAgl	19 21.4	00° 08	"	IIaOb	13	62°	19 ^h 56 ^m 9 ^s	20 ^h 13 ^m	A
29828	"	"	"	"	IIaOb	13	-2°	20 ^h 13 ^m 5 ^s	20 22	C
29829	i Agl	19 31.5	-01 31	"	"	"	61°	20 ^h 25 ^m 2 ^s	20 ^h 29 ^m	B
29830	"	"	"	"	"	"	"	20 ^h 30 ^m 1 ^s	20 32	C
29831	K Agl	19 31.5	-07° 15	"	"	"	"	20 34	20 49	A
29832	"	"	"	"	Unbaked	"	"	20 50	20 57	B
29833	3 Oct	18 41.9	-4° 51	"	"	"	"	21 00	21 05	A
29834	"	"	"	"	"	"	"	21 05	21 08	B
29835	16 Cyg A	19 39.2	+50 18	"	"	"	"	21 15	21 35	C
29836	"	"	"	"	"	"	"	21 35	21 50	A
29837	16 Cyg B	19 ^h 39.2	+50 17	"	"	"	"	21 51	22 04	B
29838	"	"	"	"	"	"	"	22 05	22 14	C
29839	E Agl	20 ^h 42.3	-09 52	"	"	"	"	22 22	22 25	A
29840	"	"	"	"	"	"	"	22 25	22 29	B

(tel)

Dome Temp. 62°

Focus 46.2

Dome Temp.

Transparency Conditions Very Hazy

316

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
50 C	0 ⁿ 11 ^m W	-19° 15'	0 ⁻	6.7	B8	10/10/16 (46.2)	138-139	800/50 slit too long
1 A	0 ⁿ 24 ^m W	+0 19	0 ⁼	4.64	F2 Ib	7	MK standard 1/2 normal	400/30 fine
22 C	0 32 W	"	0 ⁻	"	"	7	field, flat, thin?	400/15 fine focus
1 E	0 30 ^w	-1° 20'	0 ⁻	4.36	B5 III	7	" 1/2 normal	400/20 fine
32 C	0 34 W	"	0 ⁻	"	"	7	" 1/4 normal	400/10 fine
4 P	0 50 W	-7° 04'	0	5.04	B0.5 II	7	" 1/2 normal	400/20 fine
5 C	0 58 W	"	0 ⁺	"	"	7	" 1/4 normal	400/10 fine
105 A	1 56 W	-4° 44'	0 ⁺	5.32	G5 II	7	" 1/2	400/30 weak
8 B	1 59 W	50° 29'	0 ⁺	"	"	7	" 1/4 *	400/15 fine
35 C	0 132 W	"	"	6.60	G2 IV	7	" 1/2 (need finder field for HD 183143)	400/30 fine
50	1 48 W	50° 28'	"	"	"	7	" 1/4	400/15 fine
04 C	2 00 W	"	"	6.56	G5 V	7	" 1/2	400/30 fine
14 C	02 08 W	"	"	"	"	7	" 1/4 (also for HD 194839)	400/15 fine
25 A	01 15 W	-9° 28'	0 ⁻	3.77	A1 V	7	" 1/2	fine
29 B	01 19 W	"	"	"	"	7	" 1/4	fine
					(old)			

carbide

Date.....Sept 19/20, 1966

Observer

$$\frac{(Re)}{Dh} = F$$
$$\frac{(Re)}{Dh} = F$$

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.	Hour Angle End
29841	β Aqr	21 26.3	-06 01	G40	IIaO unbrakel	17	62°	22 ^h 31 ^m	22 35	B	00 41
29842	"	"	"	"	IIaO unbrakel	"	"	22 36	22 38	C	00 44
29843	α Aqr	22 00.6	-00 48	"	"	"	"	22 40	22 42	A	00 13W
29844	"	"	"	"	"	"	"	22 42	22 44	B	00 15W
29845	η Cep	21 35.2	+61 38	"	"	"	"	22 48	22 51	C	00 51W
29846	"	"	"	"	"	"	"	22 51	22 56	A	00 56W
29847	μ Cep	21 40.4	+58 19	"	"	"	"	22 57	23 02	B	0 57W
29848	"	"	"	"	"	"	"	23 04	23 09	C	0 04W
29849	HD 21212	03 20.3	+62° 9'	G40	IIaO unbrakel	17	"	23 31	THERE	"	WAS NO
29849	HD 21212	03 20.3	+62° 09'	G40	IIaO b	17	"	00 50	01 36	C	025 E
29850	BD +61° 2573	23 50.3	+61° 12'	"	"	17	"	01 41	02 05	B	0 49W
29851	d°	d°	d°	"	"	"	51	02 06	02 30	A	0210W
29852	d°	d°	d°	"	"	"	"	02 30	03 04	B	0248W
29853	d°	d°	d°	"	"	"	"	03 05	03 35	A	320

NB had to climb on south pier to set on this one and removed thermometer. left it

Dome Temp. 57°Focus 46.2/45.5Dome Temp. 57°Transparency Conditions Thin haze but "creeping"
overhead - Clear at 4h

318

115

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
35 B	00 41W	-5°40'	0	3.73	G0 Ib	7	MK standards - 1/2 normal	400/30 fine
38 C	00 44W	"	"	"	"	7	" 1/4 normal	400/15 fine
42 A	00 13W	"	"	3.92	G2 Ib	7	" 1/2	400/30 fine
44 B	00 15W	"	0	"	"	7	" 1/4	400/15 fine
51 C	00 51W	"	"	4.87	B2 Ib	7	" 1/2	400/20 fine
56 A	00 56W	"	"	"	"	"	" 1/4	400/10 fine
02 B	0 57W	"	"	6.40	M2 Ia	"	" 1/2	400/5 weak
09 C	01 04W	"	"	"	"	"	" 1/4	400/25 weak
HERE WAS NO PLATE IN SPECTROGRAPH							 ^{reticle eyepiece} 800/50 (NB)	
36 C	0215 E	+62°23'	1	8.7	B2(V) 10/10/10	Cn Be mag	Clear Sky	800/80 fine
05 E	0147 W	+61°49'	1	7.46	AO 10/10/10	Re "DUST" #159		800/40 comp weak
30 C	0210W	"	1↑	7.46	AO 10/10/10	d° focus 45.5	high thin cirrus	800/40 comp weak photo fogged
04 B	0248W	"	1.2	7.46	AO 10/10/10	d°	thicker cirrus now!	800/40 comp weak fine
335 A	0320W	"	2	7.46	AO 10/10/10	d°		800/38 fine
3 obs circled.							Continues next page	

Date Sept 19/20 Mon/7mo Observer Re Julian Day 172

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	G 40	IIa06	17		03 40	03 50	B
29855	HD 2054	00 19.6	+52 30	"	"	"		03 54	04 15	A
29855 F	Focus test		5/5	G 10	Finder	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

Focus45.5

Dome Temp.

Transparency Conditionsrather poor

thick cirrus

0400 completely cloudy!

320

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0147W	+41°15'	2	6.4	B8	10/10/10	B8/B9 800/60	fine
0328W	"	?	5.7	B9	10/20	B8/B9 interrupted by clouds capped at 0400 - ends 800/22	fine
SKY	HOPELESS!						violent at center to
					Close up	0425	

321

Date 22-23 Sept 1966
Thurs - FriObserver ^{D6} h. se - / 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	IIaOb	17	53	19 05	20 24	A
OPEN UP AGAIN at 0020										
29857	β Cas	00 03.8	58° 36'	G40	IIaOb	13L ⁹	50	00 41	00 42	B
29858	K Cas	00 27.3	+62 23	"	IIaOb	"		00 47	00 49	C
29859	O Cas	00 39.1	+47 44	"	IIaO	"		00 52	01 02	A
29860	"	"	"	"	IIaO	"		01 03	01 05	B
29861	V And	00 44.3	+40 32	"	"	"		01 15	01 18	A
29862	"	"	"	"	"	"		01 27	01 29	B
29863	Y Cas	01 13.8	+57 42	"	"	"		01 39	01 49	C
29864	"	"	"	"	"	"		01 50	01 51	A
29865	MD Per 53	02 43.4	55. 29	"	"	"		01 57	02 00	B
29866	"	"	"	"	"	"		02 01	02 02	C
29867	π Tauri	04 ^h 16.2	+10° 181	"	IIaOb	17		02 16	03 49	C
29867T	Focus	Just	5/5G10	"	IIaO		48°	5:29	at 45.3	

Dome Temp. 55°F Focus 45.3 $T=50^{\circ}$ Transparency Conditions *clearing after sunset*20:30 - now clouds + LIGHTNING (in NW)

Dome Temp.

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

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24 A	10W	$+3^{\circ} 06$	0	9.2	B0II	10-10-	D6-08 #15 Field checks fine	fogged
							sudden rain squall 22:30 $\therefore$ closed up	fast
42 B	00 24W		2.25	2.25	I-2II	7	610 focus 45.3 MIL $\frac{1}{4}$	400/14 fine
49 C	00 07W			4.24	B1Ja	7	MIL $\frac{1}{4}$	400/17 fine
02 F	00 09W			4.70	B2II	7	clouds MIL $\frac{1}{2}$	400/17 fine
05 B	00 12W		"	"	"	7	" MIL $\frac{1}{4}$ Mn	400/11 history
08 F	00 19W			4.53	B5II	7	" MIL $\frac{1}{2}$ Mn	400/18 fine
29 B	00 30W		"	"	"	7	" MK $\frac{1}{4}$	400/8 fine
49 C	00 19W			5.25	F01a	7	" MK $\frac{1}{2}$	400/30 fine
51 A	00 21W			"	"	7	" MK $\frac{1}{4}$	400/15 fine
00 B	01 00E		1	5.42	K3.Ib	7	clearing MK $\frac{1}{2}$	400/51 fine
02 C	00 58E		1	"	"	7	clear MK $\frac{1}{4}$	400/26 fine
49 C	00 45E	$+19^{\circ} 28$	1	9.5V	G5e		Re "DUST" #28 800/18	comp and slow work fine
+453							Clouds Close Up 0400	

323

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

[illegible]

324

ending Time
E.S.T.

325

BD +31° 33' 3

14 44.3

+31 = 8

13x5

22 25 11 even to

326

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