

THIS PAGE INTENTIONALLY LEFT BLANK

1

OCT 24 17.1 - 30 14'

If centre to violet, increase the micrometer setting. 2

1

3

Dome Temp.

Focus

Dome Temp.

Hour Angle  
End



5

Date Fr/Sat Apr 12/13 1963 Observer W.B. Julian Day 243.8132  
 @ 22 21 33.3 3527.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
256-2454	$\alpha$ Leo	10 062	+1210		4/6/33	20		19:41		
256-2455	HD 75732	08 504	+2828		6/6/33	20		20:01		
256-2456	"	"	"		"	28		20:11		
256-2457	81 Cen	09 10.3	+1512		6/6/33	28		20:20		
256-2458	"	"	"		"			20:30		
256-2459	$\theta$ UMa	09 30.2	+5152		5/5/33	28		20:42		
256-2460	"	"	"		"	"		20:52		
256-2461	CERES	10 50 0	+2400		7/5/33	28		21:13	+sky	
256-2462	VESTA	11 32.9	+1526		7/4/33	28		21:40	+sky 45 40 only	
256-2463	$\eta$ UMa	10 57.4	+4038		6/5/33	28		22:05		
256-2464	HD 97334	11 10.4	+3601		6/6/33	28		22:28		
256-2465	"	"	"		"	"		22:38		
256-2466	10 CVn	12 43.3	+3930		6/5/33	28		23:05		
256-2467	"	"	"		6/6/33	"		23:15		
256-2468	HD 15043	13 12.0	+5655		6/6/33			23:35		
256-2469	"	"	"		"			23:45	+sky	

Dome Temp. ....

CO<sub>2</sub> in 1845

Transparency Conditions Fine, (clouds lower west)

Focus .....

V = 700

20 30 strong NNW wind

18<sup>th</sup> moon up 2245

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01.14 E		6"	1.25	B7D		RT ST	
0020W		4"	5.97	AKU		DMK	
0030W		"	"	"		"	
0022W		5"	6.5	KOV		DMK	
0032W		"	"	"		"	
0025W		8"	3.19	F6D		DMK windy!	
0035W		"	"	"		"	
0020E		8"	7.1	(S2V)			
0042E		8"	6.6	(S2V)			
0021W		5.1	S2V			DMK	
0026W		6"	6.32	SFG		DMK	
0036W		"	"	"		"	
0029E		6"	5.95	SOV		DMK	
0019E		"	"	"		"	
0030E		6.8	SOV			DMK	
0020E		"	"	"		"	



} Windy!

7

12/13 Cont  
Date Fr/Sat Apr 12/13 1963 Observer vdB 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.
256-2470	61 Vir	13 16.5	-18 05		6/5/33	28		00 06		
256-2471	"	"	"		"	"		00 16		
256-2472	70 Vir	13 26.6	+14 50		6/5/33	28		00 28		
256-2473	"	"	"		"	"		00 38		
256-2474	4D 126053	14 21.3	+01 27		6/6/33	28		00 50		
256-2475	"	"	"		"	"		01 00	+ sky	
256-2476	R324 <sup>→ Hi</sup>	14 00.6	+10 29	not R324, but 48 22, 542	7/5/33	28	July 29, 64.	01 16		
256-2477	R372	15 41.1	-10 49		7/5/33	28		01 48		
256-2478	"	"	"		"	"		01 58	+ sky	
256-2479	AD 144579	16 03.7	+29 16							
256-2479	2 CrB	15 33.0	+26 51		5/4/33	28		02 30		
256-2480	R402	16 52.0	+42 54		7/4/33	28		02 50		
256-2481	"	"	"		"	"		03 00	+ sky	



Sat April 13 166 vis low. Show Mass. Slightly hazy & windy. MK, FL, Holm, I. 8

Dome Temp. ....

Transparency Conditions ... Fine but windy

Focus .....

transparency perfect all night seeing very poor

Dome Temp. ....

Till clouds move in at 245

Seeing OK after 0030  
wind died down

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0005E	(seeing 8-15")	10"	4.74	S6V	DMK	seeing very poor	
0005W			"	"	"		
0010W		8"	4.98	S5V	DMK		
0020W		"	"	"	"		
0021E		8"	6.26	d93	DMK		
0011E		"	"	"	"		
0030W		7"	6.2	S010V	DHV		
0044E		6"	7.2	SdFS	DHV		
0034E		"	"	"	"		
		6.66	d58		DMK		
0008W		2.21	A0V		EXT ST.		
0054E		6.8	S0V		DHV		
0044E		"	"	"	"		
	Thin cloud					from SW	

9

Date Sat/Sun Apr 13/14

Observer FL

Julian Day 2438133.5

0 23 20 20.7 3525.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
26731	H.D. 131.861 FOCUS TEST	14 50.9	+45 43	I-12	$\Pi aOB$	0.008	+10°	23:38	01:18	1

Dome To

Focus

Dome To

Hour Ang

End

0 27

Dome Temp.  $40^{\circ}$

Focus 12.66

Dome Temp. ....

Transparency Conditions *slight haze*

*Dome flashlight needs new batteries, or a new flashlight needed.*

10

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	0 27E	45 26	0	7.64	F3	3-3-	appeared to be somewhat faint but cards check out. [KAFS] Sd 5 5759 5769	fine (L.W.K.)
							12-8 sec,	OK
							Closed down 1:30 (JMF)	
							2 P.H. loaded.	

11

Date SUN/MON APR 14/15 Observer Py - RM Julian Day 2438.134  
 (SH) @ 24 19 06.4 3523.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
26732	HD 66680 HR 3164	7 <sup>h</sup> 59.6	+27°49'	I-12	IIaD	.008	9°C	19 <sup>h</sup> 52 <sup>m</sup>	20 <sup>h</sup> 31 <sup>m</sup>	#2
<del>26733</del>	<del>HD 74393</del>	<del>8<sup>h</sup>38.7</del>	<del>+4°42'</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>20<sup>h</sup>58<sup>m</sup></del>		
26733	HD 74393	8 <sup>h</sup> 38.7	+4°42'	"	"	"	"	20 <sup>h</sup> 58 <sup>m</sup>	22 <sup>h</sup> 05 <sup>m</sup>	#4
26734	HD 107328	12 <sup>h</sup> 15.3	+3°53'	"	"	"	"	22 <sup>h</sup> 23 <sup>m</sup>	22 <sup>h</sup> 35 <sup>m</sup>	#1
<del>26735</del>	HD 136244	15 <sup>h</sup> 14.5	+60°29'	"	"	"	"	23 <sup>h</sup> 22 <sup>m</sup>	01:30	#2
26736	BD 29°2995 Focus test	14 02.6	+29°45'	"	"	.016	8°C	01:49	04:31	3

Dome Te  
Focus  
Dome Te

Hour Ang  
End

237<sup>m</sup>

031<sup>m</sup>

033<sup>m</sup>

358<sup>m</sup>

Dome Temp. 42°

Focus .....

Dome Temp. ....

Transparency Conditions

- sky looks good but seeing not good  
 - saw ♀ in west 20<sup>h</sup> 10<sup>m</sup> EST 12  
 - seeing better at 22<sup>h</sup> 30  
 - fine at 22<sup>h</sup> 30

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 <sup>m</sup> #2	1 <sup>h</sup> 40 <sup>m</sup> W	+27° 37'	-1-0	6.14	B9.	3+3+3	<sup>Sens 6</sup> B8-B9 program Set 5. APPEARS DOUBLE IN VISITOR'S EYEPIECE 5774 5776	Comp. v. wk. fine
			-1	6.28	B8		↑ this object is located as a visual binary (ADS 6589) in Aitken	
05 <sup>m</sup> #4	2 <sup>h</sup> 37 <sup>m</sup> W	+4° 26'	-1	6.28	B8	3+3+3	B8-B9 Sens 6 Set 5. 5777 5779	l. strong
55 <sup>m</sup> #1	♃ 31 <sup>m</sup> E	+3° 30'	0	6.1	K1	3+3+3	STD. VEL. Star <del>KAFS</del> Sens 6 Set 5. 5783 5785	l. strong
30 #2	0:33 m E	+60° 13'	+1	9.08	K3	3+3-3	KAFS. Sens 9 Set 5. 5786 5856	Comp. wk } badly usable } fugged
31 #3	3:58 W	+29° 25'	0	10.00	F8	3+2	seeing getting very bad KAFS Sens 10 Set 5. 5862 5894	too weak } scratched

OK

1 PH loaded

13

Date April 15/16 Mon./Tues. Observer (MR) S<sub>2</sub> F - F Dm Julian Day 2438135.

0 25 17 50.3 3522.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Ang End
<del>26737</del> 26737 .1	<del>α Lyn</del> α Lyn HD 80493	9	15.0 +34 49	I-2 S	IIo 0 B	008	9.100	20:01	20:05	4	
.2	"	"	"	"	"	"	9.05	20 05	20: 47	4	0 00
26738	HD 95735	10	52.9 +36 38	"	"	"	9.4C	20 53	01:32	1	01 48
26739 .1	HD 114710	13	07.2 +28 23	"	"	"	9.4°C	1.40	1:47	2	
.2	"	"	"	"	"	"	"	1.47	2: 29	2	03 30
26740	HD 159181	17	28.2 +52 23	"	"	"	9.2°C	3.37	3.38	3	35 E
"	"	"	"	"	"	"	"	3.38	3.44	"	4 E
"	"	"	"	"	"	"	"	3.44	3:52	"	00 2 E
26741	HD 162076	17	44.1 +20 36	"	"	"	9.3	4:02	5:04	11	0 35 W
26741 F1	Focus Test	Set	15.31	Comp	12.5 C						
26742 F2	"	Set 0	15.34								
		Set 3	15.37								
		" 6	15.40								
		" 8	15.43								
		" 10½	15.46								

W/T April 17/18

Fs Py

Fog

meteor EW @ 21:45 1<sup>st</sup> mag.

Dome Temp. 4.80  
 Focus 1.5.3.3  
 Dome Temp.

Transparency Conditions good - reutilized roof

14  
 15.31

April 15 Changed to 25" Camera  
 12 1/2" was Focus Tilt 20.35  
 25" Focus Tilt 23.15

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4			0	3.3	M0	18	F-Co-Mv	5953 Plate black 5956 scratched 5958 exposure OK 5981
47	0 44W	+34 34	"	"	"	6-6-6	"	5982 FINE 6026 Ca+ wk
32	03 48W	+36 12	1	7.6	M2V	6-6-6	" s.MK <sub>atd</sub>	6027 FINE 6030 6031 Ca+ FINE 6056
1		+28.02	2	4.3	G0 V	NONE	"	6059 fine 6062 6062 6077 6078
29	03 36W		2			6-6-6	"	6103 Ca+ fine 6107 completely 6127 not focused
38	00 35 E	52° 18.	3	3.0	G2 II	NONE	"	
44	00 29 E					9-9	"	
52	00 21 E					9-9	"	
04	0 35W	20° 34	2	5.8	G5	6-6-6	"	

\* Plate loaded upside down? no probably tilted in P.H.  
 Star pins about a bit - image seeing 2  
 - drift is V.V. bad, see below  
 345 guiding now OK (not so far W?)  
 telescope drifts badly in R.A. - some say all this  
 drifts // not in 20<sup>sec</sup>

3 P.H. loaded





Dome Temp. .... 4.6°C (28.30)

Focus ..... 15.30 ..... 11°C (corr'n 0.16)

Dome Temp. ....

Transparency Conditions ..... Poor

16

MR 40 micron. 10.10 thin clouds  
\* m. Distortion

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
57 4	01 07W	+34 34	⊙	3.3	MO	6-6-6	F-Ca-Mu set 1 sens 4 (2) 6135 6160	Ca fine
57 6		+69 30	⊙	4.1	MO II	6-6-6	FCa-Mu Set 6 sens 4 (2) 6162 6162 20/16 Clouded out at Set 9 sens 6 (3) 22:30 - clouds Chichemy	Ca wk?
Jerry. Telescope drifting in R.A. - same way								



Dome Temp.  $+49^{\circ}\text{F}$ Focus  $15.35$   $11^{\circ}\text{C}$ .

Dome Temp. ....

Transparency Conditions Clear

Showed Mars to 220 visitors!

(3 groups)

18

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
05	$03^{\text{h}}03^{\text{m}}\text{W}$	$+34^{\circ}24'$	0	5.5	GBV	6-6-6	set 3. FCa Mv sens. 6	6202 6226 Ca. fine
0	$01^{\text{h}}05^{\text{m}}\text{W}$	$+19^{\circ}17'$	0	6.0	K1	6-12	set 6 Sporadic clouding over! Sens 6	6226 <del>6230</del> Ca. to work fine
							Clouded out at $02^{\text{h}}15$	
							3PH LOADED	



Dome Temp.  $44^{\circ}\text{F}$

Focus 15.35 +11°C

Dome Temp. ....

Transparency Conditions

Seamy Poor; High Wind <sup>MW</sup> 30-35 mph

12:30 Low clouds drifting in from North.  
01:00 Cloud building up

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
52	0 <sup>h</sup> 13W	-10 27	-1	6.17	B9	B+6+6	B8-89; HK 3896; Set 4; Image 6234 unable to complete - pier + 1p 6236	no comparison 440 fine no OTB!
38	0 <sup>h</sup> 47E	+03 35	-1	3.7	M3	6+6+6	F-Ca M. S. Virg Set 5; Set 4 6238 16/12 - no outside comparison! 6263	Ca fine
43	0 <sup>h</sup> 32E	"	"	"	"	6+6+6	" Set 8, Set 4 6264 6267	fine
44	0:06E	+19 17	-1	4.6	G2	6-6-6	" is double <sup>this is brighter</sup> Set 8 Set 7 6269 6281	Ca fine
27	0:17W	"	-1	"	"	6-6-6	" Set 3 " 6280 6283	fine
46	3:37W	"	-1	6.8	K+V	6-6-6	" this is fainter. Set 5 Set 7 6284 6303 20-16 set 9.	Ca wk sl. cloud

3 PH loaded

PH #3 will not go into Capra (the thread is slipped on the screw that holds the spring on)  
Film left in Dome.

Had trouble with outside iron arc spectrometer. Finder Fields are not being drawn!  
He fixed it; OK at 23<sup>h</sup>15 EST  
Iron Arc Acting Up



Dome Temp. 39°F

Transparency Conditions Poor

22

Focus 15.26 +4.5°C

Dome Temp. 34°F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0208W	+9° 42'	0	5.9	K1II	6-6-6	set 3 F Ca Emission	Ca fine 6306 6330
0100 W	20 33	1	5.8	G5	6-6-6	" 6 " " "	Ca fine #6 6331 6349
					20/16	" 9	good
						2 P.H. Loaded.	

23

Date April 24/25 W/Th Observer M. S. V. B. - ve B (F) Julian Day 2438144.  
 @ 34 05 09.3 3506.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
26752	HD 131873	14 51.0	+74 34	I-25	Fla 013	008	6.8C	21 08	21 20	
	"	"	"	"	"	"	"	21 20	21 21	
26753	HD 164058	17 <sup>54.3</sup> <del>55.8</del>	+51 30	"	"	"	6.4C	21 30	21 52	
	"	"	"	"	"	"		21 52	21 53	
26754	HD 163770	17 52.8	+37 16	"	"	"	6.5C	22 00	22 30	
257-2482	47 UMa	10 57.4	+40 38		615/33	28		22 45	3X	
257-2483	VESTA	11 27.5	+15 20		616/33	28		23 15		
257-2484	10 CVn	12 43.3	+39 30		616/33	28		23 38		
257-2485	"	"	"		"	"		23 48		
257-2486	HD 115043	13 12.0	+56 55		714/33	28		00 05		
257-2487	"	"	"		"	"		00 15	+sky	
257-2488	HP 126053	14 21.3	+01 27		714/33	28		00 31		
257-2489	"	"	"		"	"		00 41		
257-2490	R 324	14 00.6	+10 29		715/33	28		00 54	+sky	
257-2491	R 373	15 41.1	-10 49		715/33	28		01 21		
257-2492	"	"	"		"	"		01 31	+sky	



Dome Temp. 40° F

Focus 15.26

Dome Temp. ....

CO<sub>2</sub> in 1900 Transparency Conditions good

V = 700 2200

Sine

E

24.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20	04 18E	+74 17	0	2.2	K6 III	18	F-Ca Mv $\beta$ U-Mi net 3 net 4	6352 6387 Ca Fine
21	04 17E	"	"	"	"	NONE	net 7	88 91 Fine
52	05 44E	+51 29	0	3.4	K5 III	18	F-Ca-MV $\gamma$ -Dra net 3	6396 6426 Ca Fine
53	06 17E		0			NONE	net 5	6426 6429 6430 Fine
10	05 39E	+37 14	0-1	4.0	K1 II		F Ca Mv $\theta$ -Mag net 9	Fine
	(0147E) +0155! W		5"	5.1	S2V			NO FOCUS TEST !!
	0146W			6.5	(S2V)			
	0057W		5"	5.95	S0V		$\Delta$ HV	
	0102W		3"	5.95	S0V		"	
	0048W		3"	6.8	clg 2		$\Delta$ HV	
	0058W		"	"	"		"	
	0005W		4"	6.26	clg 3		$\Delta$ HV	
	0015W		"	"	"		"	
	0052W		8"	6.2	S0 II or V		$\Delta$ HV	
	0022E		8"	7.2	Scl F5		$\Delta$ HV	
	0012E		"	"	"		"	

/ 4 P.H. loaded.

25

CONT

Date... Apr. 24/25 w/14 1963... Observer *red*... 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.
257-2493	R 329	14 25.2	+2847		7/6/33	28		0151		
257-2494	R 329	"	"		"	"		0201 +SK		
257-2495	ρ CrB	15 59.7	+3327		6/5/33	28		0219		
257-2496	ρ CrB	"	"		"	"		0229		
257-2497	R 402	16 52.0	+4254		7/4/33	28		0242		
257-2498	R 402	"	"		"	"		0252 +SK		
257-2499	α CrB	15 33.0	+2651		5/4/33	28		0306		
257-2500	ξ HerAB	16 39.8	+3140		5/5/33	28		0328		

Dome Temp. ....

Transparency Conditions Fine .....

26-

Focus .....

Dome Temp. ....

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	0122W		5"	8.2	KOM		ΔHV	
	0132W			"	"		"	
	0015W		4"	5.4	F8V		ΔHV	
	0025W			"	"		"	
	0013E		4"	6.8	90V		ΔHV	
	0003E			"	"		"	
	0132W			2.21	ΔOV		EXT ST.	
	0045W			2.81	90V		ΔMV	



Dome Temp.  $+48^{\circ}\text{F}$

Focus  $15.33$

Dome Temp. ....

Transparency Conditions ..... excellent!

01<sup>h</sup> Cloud in EAST (nr\*)

01 10 dry hrs in RA -  
2 30 cloud in SW

28

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9 11	3 36W	+49 37	1	6.8	Mo	6-6-6	Set 2 $\frac{1}{2}$ Fity Calo Env. Lens 7	6437 6469 Ca fine
5	0 40W	+74 17	1-2	2.2	K4III	6-12	Set 7 FCa MV Lens 4	6471 6541 Ca fine!
40	0 02W	-02 16	0	5.9	K0	6-6-	Set 3 RA guiding " NOT WORKING Lens 6	6552 6560 Ca ok fine sl c to r
							<p>→ Jony Dryts in RA (fixed L April 26)</p> <p>Can't fix { F           { H<sub>v</sub></p> <p>Cloud up 2.45 on account of RA.</p>	

29

Date Apr 26/27 Fri Observer Vol B - R.M. Julian Day 2438.146  
0 36 02 00.1 3502.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
258-2501	47 UMa	10 57.4	+40 38		615/40	28		20:06		
258-2502	"	"	"		615/33	28		20:16	2x	
258-2503	VESTA	11 27.6	+15 14		715/33	28		20:53	2x	
258-2504	Sum 1830	11 50.4	+38 06		714/33	28		21:22	2x	
258-2505	B Vir	11 48.7	+0 20		615/33	28		21:45	2x	
258-2506	HD 106116	12 10.5	-0 25		814/33	28		22:08	2x	
258-2507	BCVn	12 31.9	+41 34		615/33	28		22:34	2x	
258-2508	HD 104556	12 00.4	+43 19		715/33	28		22:56	2x	
258-2509	B Com	13 10.1	+28 04		615/33	28		23:22	2x	
258-2510	HD 131156 AB	14 48.6	+19 16		615/33	28		23:44	2x	
26757.8	HD 123782	14 04.6	+49.56'	I-25	IIaob	.068'	9.7°C	<sup>00</sup> <del>21</del> 24	<sup>00</sup> 2:52	3
26758.9	131511	14 48.9	+19.34'	"	"	"	"	01:05	04:39	4
	Focus test		0 TR.							

↑  
w/roughly  
numbered.

Dome Temp. 45°

Focus 15.33

Dome Temp. ....

Transparency Conditions

OK but not good enough <sup>30</sup>  
 Sw absolute pot (some), hazy  
 ci low west

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			3"	5.1	S20	38-40		
			"	"	"	"		
			3"	6.5	(S20)	"		
			3"	6.49	S8Vp	"		
			5"	3.63	F8V	"		
			3"	7.4	S8V	"		
			4"	4.92	S0V	"		
			4"	6.6	S8V	"	Star observed is in D (2 <sup>nd</sup> brightest)	
			4"	4.30	S0V	"		
			4"	4.50	S8V	"		
0:52	3	0:45 W +49° 37'	2	6.8	M <sub>2</sub>	6-6-6	STD VEL STARS Set 5 Sens 7.	6599 6617
3:39	4	3:48 W +19° 16'	2	6.0	K <sub>1</sub>	6-6-6	F. Ca. Mv. Set 5 Sens 6	6620 fine Calc fine
						20-16		
							4 PH loaded.	

31

Date Apr. 27/28 1963 Sat/Sun Observer I. vaB - F (Sw) Julian Day 2438147.  
 0 37 00 22.4 3500.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	
259-2511	HD106116	12 10.5	-02 52		8/4/33	28	2146		2x		
259-2512	BCVn	11 48.7	+02 00		6/4/33	28	2208		2x		
259-2513	HD104556	12 00.4	+43 19		7/5/33	28	2229		2x		
259-2514	S=61830	11 50.4	138 06		7/5/33	28	2251		2x		
259-2515	BCVn	12 31.9	+41 34		6/5/33	28	2315		2x		
259-2516	BCom	13 10.1	+78 04		6/5/33	28	2337		2x		
259-2517	HD131156AB	14 49.6	+19 16		6/5/33	28	2358		2x		
26760	HD 165341br	18 00.4	+02 31	T-25	IIa0B	008	11.8°C	00 <sup>h</sup> 38 <sup>m</sup>	01 <sup>?</sup> 00	14	1
	"	"	"	"	"	"	12.0°C	00 <sup>h</sup> 14 <sup>m</sup>	01 <sup>?</sup> 00	26	1
26761	HD 201091 br	21 02.4	+38 15	"	"	"	11.9°C	02 40	03 46		2
26762	HD 201092 br	21 02.4	+38 15	"	"	"	11.8°C	03 48	04 48		3
	Focus Test	(corr'n 0.16)	15.31								
	" "	(corr'n 0.11)	15.37								
3PH loaded + 2 in base											



Dome Temp. 47° at 01h

CO<sub>2</sub> in 1930

Transparency Conditions ..... OK .....

32

Focus 15.31 12°C

V = 700

Dome Temp. ....

2 corr'n. 16

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		(5")	7.4	S8V		} 38/40 Drs. Start out Part 1 line	
		7"	3.63	F8V			
		7"	6.6	S8V			
		7"	6.49	S8Vp			
		8"	4.92	S0V			
		7"	4.30	S0V			
		6"	4.50	S8V			
						Secondary too close to primary ↓	
14	1 46 E	+02 29	0-2	4.1	K0V	6-6-6 DBL Seeing tomorrow kept 165341F separately. <sup>nets</sup> Sens 4)	6657 6662 6662
26	1 34 E	" "	" "	" "	18	FCaMV net 6	6665 6666
26	03 15 E	+38 32	1-2	5.6	K5V	6-6-6 NP SEE FIELD FCaMV sens 6 net 3 (20)	6686 6687
28	02 12 E	+38 32	1-2	6.3	K7V	6-12 SF " " FCaMV sens 6 net 5 (20)	6701
					20/16	net 8 (v. 16)	
					20/16	net 10.5	
						170 upitars, Pass shown	
						0130 dec 5.11 net working 165341F	fixed at 4 hr

18 plates developed

0130 dec 5.11 net working 165341F fixed at 4 hr

33

Date Sun/Mon April 28/29 Observer I - R.M. Julian Day 2438148

0 37 58 42.6 3498.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
26763	21 L mi	10 01.5	+35 44	I-25	IIa0B	.008	13.8°C	20:09	20:48	1
MAY 1/63										
26763 EXT 2	SKY	—	—	I-25	IIa0b	.002				
APR 29/63										
26763 EXT	SKY	—	—	I-25	IIa0b	016		14 19 <sup>30</sup>	14 27 <sup>30</sup>	
	"			"	"	"		14 28	14 34	



35

Date May 12 1963 weth Observer re.B - H.V. Julian Day 2438151  
 ☉ 40 53 30.8 3492.0

Plate No.	Object	R.A. 1900 (+5.6)	Declination 1900 (-4)	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
260-2518	56 Aur A	06 43.2	+43 38		G/S/33	28		20:15	2x	
260-2519	104304	11 58.2	-10 10		714/33	28		20:42	2x	
260-2520	59 Vir	13 14.3	+09 41		714/33	28		21:07	2x	
260-2521	61 UMa	11 38.5	+34 29		714/33	28		21:32	2x	
260-2522	122742	14 01.1	+11 02		715/33	28		21:57	2x	
260-2523	130948	14 48.0	+24 07		714/33	28		22:19	2x	
260-2524	ξ Boo A+B	14 49.1	+19 18		G/S/33	28		22:43	2x	
260-2525	γ CrB AB	15 21.2	+30 28		G/S/33	28		23:04	2x	
260-2526	λ Ser	15 44.0	+07 30		G/S/32	28	5.5	23:27	4x	
26764	HD 136849	15 17.8	33 17	I-25	IIaOb	008	5.4	00 36	00 48	1
"	"	"	"	"	"	"	5.2	00 49	01 15	
"	Focus TEST		OTB.							
26765	HD 169820	18 21.4	+14 55	"	"	"		02 16	03 02	2
26766	HD 172187	18 33.7	43 08	"	"	"	5.4	03 15	04 31	3

Dome Temp. ....

Focus 15.27

Dome Temp. ....

CO<sub>2</sub> in } 1900 EST  
V = 700

Transparency Conditions OK C: to 10° in W

D 7<sup>d</sup> old  
Fine night!

28

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
X			6"	5.31	SOV	38-40	has ST. Colym.	
X			8"	5.54	dgz	38-40		
X			6"	5.52	SOV	38-40		
X			6"	5.33	SOV	38-40		
4			5"	6.28	SOV	38-40		
4			4"	5.75	dgz	38-40		
4			5"	4.70	SOV	38-40	A + B measured	
X			6"	5.63	SOV	38-40	A & B not separated	
4			6"	4.43	SOV	38-40		
48	0013E	+33 03	0-1	5.34	B9	6-6-6	Set 2 B8-B9 #5 6910 6915	fine
15	0014W	"	0-1	"	"	9-9	" 5 " #5 6916 6926	fine
						20/16	" 9 DEVELOPED.	OK
02	0103E	+14 54	0	6.43	B9	6-6-6	" 2 B8-B9 #7 6929 6946	fine
31	0015W	H 311	0	6.40	A5	6-6-6	" 2 N-Spect. Bin. #7 6950 6964	fine
							1 P.H. + 8	



Dome Temp.  $+50^{\circ}\text{F}$ Focus  $15.37$ 

Dome Temp. ....

Transparency Conditions .....

38

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11 4	0 48 W	-24 39	0	7.1	B <sub>9</sub>	6-6-6	B <sub>8</sub> -B <sub>9</sub> prog. Sens 7 <sup>6968</sup>	good
18 1	00 31 W	-23 52	0	6.6	B <sub>9</sub>	6-6-6	Set 5 " "	l wh
						20/16	Set 9 " 7 <sup>6981</sup>	sl. cloud
							0130 Clouds	
							3. P.H. + 4	





Dome Temp. ....

NOCO2

Transparency Conditions ..... Poor

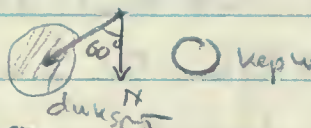
40

Focus .....

V = 700 20100EST

Dome Temp. ....

og Time  
S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						lunar Experiments	
		A 3800		2155		 <p>Closed up 2200</p>	
						Sat May 4	
						159 visitors showed film, "Universe"	
						2100 S slow with not working	



Dome Temp. 45°  
 Focus .....  
 Dome Temp. ....

?? → [May 6/7 focus reads 15.42]

Transparency Conditions .....

clouds out 02:00

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
18 2	2:02 W	38° 02'	0	2.0	G-S	4-3-2	slw 40 sens 8	6999 7039 7065 fine
20 3	0:52 N	64° 31'	0	3.59	A0III	6-6-6	MR-EW (8) Set 3 - Sens 5	7073 7074 7078 stung fine
31	01:03 W	"	"	"	"	"	(4) Set 5	7079 7084 fine (1 wk)
36	01:02 W	"	"	"	"	"	(2) Set 7	7084 7089 fine
64 4	01:13 W	01° 53'	0	5.6	G0	6-12	STD. VEL. STARS (8) Set 5 Sens 6 20/16 Set 9.	7095 fine OK
							4 PH loaded + 4.	
							Clouded out 02:45	



Dome Temp.  $52^{\circ}\text{F}$ 

Transparency Conditions .....

Focus  $15.49-11=15.38$ Dome Temp.  $48^{\circ}\text{F}$ 

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
28	1:01 W	$+35^{\circ}25'$	2	4.63	A7V	$18^{\text{S}}$	Set 0:18 <sup>2?</sup> / Set 1:9 / Set 3:5+c / MR EW	l. str. fine (comp super posed) good
52	0:59 W	$+09^{\circ}27'$	"	3.71	B1b	$18^{\text{S}}$	Set 7:18+c / Set 9:9 / Set 10:5 /	l. str. fine fine good
57	0:50 W	$-24^{\circ}40'$	1	7.1	B9	6-6-6	Set 5 B8B9 + Is this field connected? drawn upside down? (8) { 7453 7483	good
40	2:26 W	$+45^{\circ}26'$	1	7.64	F3	6-6-6	Set 5 KAFS (9) { 7288 7408	fine
13	0:43 E	$+43^{\circ}10'$	2	6.40	A5	6-6-6	Set 5 Spect Binary - N Sans 7 7411 7423	good
24	1:00 E	$+15^{\circ}23'$	2	6.56	gM $\frac{2}{3}$	9-9	Set 5 Hi Vel Spect Binary, Sans 8 7427 7458 (40)	l. wk no lines in v sl. c. to red
						20/16	Set 9	

1 PH loaded + 0 in dome.



170 vis. low: skewed ellipses  
 Dome Temp. 43°F GFL, MR, S.H., +RASC Transparency Conditions very good - some cirrus 46  
 Focus 15.33 set  
 Dome Temp. ....

Time	PA	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
42	2	2 <sup>h</sup> 28 <sup>m</sup> W	+20° 42'	-	2.59	A4V	18 <sup>s</sup>	Set 2: 18 cl; Set 5: 9 cl + comp; Set 8: 4 cl 7469-87 string ⑦ 88-97 fine 98-02 string 7505-83 fine ⑧ 24-33 fine 34-38 fine	
57	3	2 09 W	+14 44	-	2.21	A3 V	"	" " " " " " " "	
15	4	2 21 W	+45 26	1	7.64	F3	6-6-6	Set 5 KAFS Area 34 (12d) ⑨ 7539 7659	fine
15	1	0 43 E	+73 24 <sup>0</sup>	2	8.5	FS	3-3-3	Set 3 FEB counting 3/2 min good! shadow down? 1/2 min (100) ⑨ 7660 7703	weak
							10/8		ctored
								counting started very well - could have finished exposure the load right down (nervous 0/6 on shorter 1 <sup>h</sup> only!)	
								done tracking badly in N moving eastwards eg to W	





Dome Temp.  $52^{\circ}\text{F}$   
 Focus  $15.39 \mu\text{m}$   
 Dome Temp.  $45^{\circ}\text{F}$

Transparency Conditions  $\text{Cirrus clouds (transparency 100\%)}$

49

103:00 (clouding) enters from N.W.

Time T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
27	$02^{\text{h}} 12^{\text{m}} \text{W}$		-1	6.1	K1	6-6-	Std Vel Cirrus clouds in field.	7751 fine but 7757 within V.
07	$03:7^{\text{h}} \text{W}$	$+45^{\circ} 26'$	0	7.64	F3	6-6	KAFS More clouds. 20/16.	7769 d. w.k. 7784 Set 3 c to red focus test super- posed on lower part of companion
							Cloud too thick to continue	03:05
							IPH loaded. 0 in dome.	



Dome Temp. 52°F

Transparency Conditions .....

Focus ..... 15.42 Set.

Dome Temp. ....

clouded over at 01:21 Thin Haze drifted over just after beginning of first exposure

Time T.	PA	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
								cleared 01:45	
11	3	0:53 W		0	2.21	Ao V		Set 3 M.R.E.W. Sens 5	7884 7892 fine
15		0:57 W					9-9	Set 5	7894 7898 fine
21		01:03 W						Set 8	7903 7905 fine
11	1	0:52 W	+43° 10'	00	6.40	A s	12-12-12	Set 5 N Spectroscopic lens Sens 7 20/16 Set 9.	7912 7936 fine sl. extended

4 IIao unbaked in dome.

new batch Baked IIA0

51

Date <sup>Fri</sup> Thurs May 16-17/63 Observer L. F. Julian Day 2438166  
 055.23 30.5 3468.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
26786	HD 133529	14 59.9	-25 24	I 25	B IIA0	set 008		22 35	00 09
26787	HD 190020 Focus at	19 57.9	+73 21	"	IIA0 B	016	17.5	00 38	04 10

Sat May 18 -160 miles  
 showed Mars - clouded  
 out!



53

Date <sup>True May</sup> Mon 20-21 /63 Observer L-Ln-F Julian Day 2438170.

☉ 59 14 38.8 3464.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.	How A. Exp.
26788	HD 134946	15 07.5	-23 38	I-25	BIIA <sub>0</sub>	set 008	13.1	22 22	23 58		
26789	HD 190020	19 57.9	+73 21	"	IIaDB	set 012	12.8	00 16	04 06		
	Focus Test					012					



55

Date Tuesday - Wednesday May 21/22, 1963 Observer Dg - H v Julian Day 2438171

② 60 12 23.0 3462.9

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
26790	HD 131861	14 <sup>h</sup> 50.9	+45° 43'	I-25	II AOB	Set .008	+13.8°C	20 <sup>h</sup> 42	21 <sup>h</sup> 56	1 19 E
26791	HD 151043	16 <sup>h</sup> 39.8	+77° 57'	"	"	"	+14.0°C	22 <sup>h</sup> 32	23 <sup>h</sup> 20	2 40 E
26792	HD 172187	18 <sup>h</sup> 33.7	+43° 08'	"	"	"	"	23 <sup>h</sup> 30	00 10	3 02 47 E
26793	HD 175744	18 51.7	+17 52	"	"	"	"	00 33	01 25	4 05 1 E
26794	" 178065	19 02.1	+00 30	"	"	"	13.8	02 21	03 28	1 08 1 W
	Focus Test		O.T.B.	"	"	"				

background density quite high in new batch of II AOB



Dome Temp. +54°F

Focus 15.39 set

Dome Temp. ....

Transparency Conditions Hazy

Some clouds

56

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
56	1 <sup>h</sup> 19 E	+45° 26'	0	7.64	F3	6-6-6	set 7 Spectr. Bin, (KAFS program) sens. 8 8203	v weak
						20/16	set 2 Focus Test.	OK
20	1 <sup>h</sup> 40 E	+77° 49'	0	7.42	F8	6-6-6	set 5 KA. 8x8 double lines sens. 8 8218	OK - no lens in v
0 10	02 47 E	+43° 10'	0	6.40	A5	6-6-6	set 5 Spectr. Bin. N sens. 8 8241	OK
1 25	01 51 E	+17 55	0	6.39	B9	6-6-6	" 5 B8-B9 Prog. #8 8282	fine
3 28	00 01 W	+00 34	0	6.42	B9	6-6-6	" 5 " " " #8 8319	fine
						20/16	" 9	OK
							3 PH. Loaded IIaOb in fridge.	OK

57

Date Th/Fr May 23/24 1963

Observer vdB - F

Julian Day 2438173

062 07 47.6 3460.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
262-2528	2 Leo	10 06.2	+12 10		5/4/33	20		20:42	
262-2529	HD 84737	09 46.4	+46 15		6/5/33	28		21:04	
262-2530	HD 84737	09 46.4	+46 15		6/5/33	28		21:21	
262-2531	47 UMa	10 57.4	+40 38		6/5/33	28		21:36	
262-2532	Vesta	11 32.6	+13 01		7/5/33	28		21:57	2x + 5u
262-2533	Alcock	13 39	+ 34 18		7/7/33	28		22:36	2x + 5u
262-2534	HD 130948	14 48.3	+24 05		7/4/33	28		23:16	
262-2535	HD 131511	14 51.4	+15 19		7/4/33	28		23:36	
26795	HD 190020 Focus Tent	19 57.9	+73 21	I-25	IlaoB	010	80.0	0 <sup>h</sup> 10	04 00

Dome Temp. ....  
 Focus 15.31 80°C  
 Dome Temp. 38°F

CO<sub>2</sub> in 1945  
 v=700

Transparency Conditions Fine Polaroid  
 Seeing poor after 1.30

58

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0228W		10"	1.25	B7V		EXT. ST.	
0312W		7"	5.2	50V		DMK Similar to @ !!! (Gcolow)	
			5.2	50V			
0232W		7"	5.05	d90		DMK	
0219W			7	(920)			
			8:			Severe dusting problem!	
		9"	5.75	d92		38/40 (Li.)	
		8"	6.02	K1V		38/40 (one)	
0011E	+73 29	0 <sup>+</sup> <sub>1</sub>	8.5	FS	4-6-5	net-3 FElkin	run9 (100) P352 very weak
					17/14		OK
2 PH's loaded							
						1.30 Bad seeing & <u>scintillation</u> present	
						counts not <sup>too</sup> polar	

59

Date Fri/SET May 24/25 1963Observer W.B. - FJulian Day 2439174

☉ 63 05 27.9 3459.0

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
263-2536	HDB4737	09 46.4	+4615		615/33	28		2059		2308
263-2537	"	"	"		"	"		2109		2318
263-2538	47 UMa	10 57.4	+4038		616/33	28		2126		
263-2539	61 UMa	11 38.6	+3428		616/33	28		2148		
263-2540	VESTA	11 33.0	+1258		715/33	28		2212		
263-2541	S4 VV	13 14.6	+0939		714/33	28		2233		
263-2542	HD122742	14 01.4	+1100		715/33	28		2255		
263-2543	HD 131511	14 51.4	+1979		715/33	28		2314		
263-2544	HD 135205	15 11.6	-0112		715/33	28		2334		
26796	H0190020 Focus Test	19 57.9	+73 21	I-25	II00B	016	12.0	00 05	08 59	0305

Dome Temp. ....

Focus ..... 15.36 12.0

Dome Temp. ....

V = 700 }  
CO<sub>2</sub> in } 20:00 EST

Transparency Conditions

Not P.E. 2100

60

2200 looks much better

1.30 thin low lying cloud up in N.

Ending Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0308		6"	5.2	50		DMY	
0318			"	"		"	
		7"	5.04	dsu	38/40	(Li)	
		8"	5.33	S8V	38/40	(Li)	
		7"		(S20)	38/40		
		5"	5.55	50V	38/40	(Li)	
		7"	6.28	S8V	38/40	(Li)	
		6"	6.02	K1V	38/40	(OK)	
		6"	6.60	S8V	38/40	(OK)	
59 007E	+73° 29'	0	8.5	F5	33-3	FEcl Bin	8434 8320
					10/8		good OK w/ detector
		1 PH loaded				Very Thin cloud all over at dawn -	

6/21:30 - 23:30 - 180 meters: viewed Mars: Seeing poor.

Date Sat/Sun May 25/26 Observer I Py - R.M. Julian Day 2438175.

0 64 03 06.9 3457.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
26797	HD 131861 Focus Test	14 <sup>h</sup> 50. <sup>m</sup> 9	+45° 43'	I-25	IIaOB.	.008	16.3°C	23 <sup>h</sup> 49	04 57	4

Date Temp.  
Focus ..... 15  
Date Temp.

Hour Angle  
End

04.54

Dome Temp.  $54^{\circ}\text{F}$ 

Transparency Conditions

Poor

Focus  $15.41$   $16^{\circ}\text{C}$ 

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04.54 <sup>N</sup>	+45° 25'	-1	764	F3	6+6+6	Set 5. Spec Bin (KAFS) Sens. 8. 8529 20/16 Set 9.	wk. OK
4 PH loaded, in Frig.							
The switch on the light illuminating the integrator is an electrical hazard —							





Dome Temp.  $+60^{\circ}\text{F}$ Transparency Conditions Good.

64

Focus (15.44) 15.41

Dome Temp. ....

2255 FORGOT TO SET HEAT CONTROL UNTIL NOW  
FOCUS CHANGED TO 15.41

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
86	S 01W	+45 26	0-1	7.64	F3	6-6-6	Set 5 SPECT. BIN. (KAFS PROG) # 9 <sup>8589</sup> 8207	fine OK
							Seeing bad after 2 <sup>00</sup> - comb value	
							3 PH's loaded.	

55

Date Thurs - Fri May 30-31 Observer I - R.M. Julian Day 2438.180

1963

0 68 51 00.3 3450.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
26799	8 U Ma	11 48.6	54 15	I25	IIa06	008	18.2°C	20 <sup>h</sup> 43	40 <sup>m</sup> 22	1	14 <sup>h</sup> 42
"	"	"	"	"	"	"	"	"	75 <sup>m</sup> 22		
"	"	"	"	"	"	"	"	"	47 <sup>m</sup> 22		14 <sup>h</sup> 2E
26800	<sup>D</sup> 131861	14 50.9	+45 43	I25	IIa06	008	18°C	21 15	23 <sup>h</sup> 37	3	0 <sup>h</sup> 57
	Focus Test										
26801	HD 172187	18 33.7	+43° 08'	"	"	.008"	20°C	23 <sup>h</sup> 58	00:34	4	01 <sup>h</sup> 48
26802	HD 175190	18 49.1	-22 48	"	"	"	20°C	00:50	01:30	1	01 <sup>h</sup> 9
26803	HD 190658	20 00.8	+15° 13'	"	"	"	"	01:48	02:38	2	01 <sup>h</sup> 2
26804	HD 172187	18 33.7	+43° 08'	"	"	"	"	03:04	03:26	3	01 <sup>h</sup> 5
26805	β AQL	19 50.4	+6° 09'	"	"	"	"	03:35	03:44	4	01 <sup>h</sup> 2
	Focus Test.			O.J.B.							

Dome Temp. 61°F  
 Focus 15.44  
 Dome Temp. 56°F

Transparency Conditions Good at Start GG  
1st 1/4  
 - Wasted some time at opening to find some 88-89  
stars too low to observe.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02:2	1h 14E	53 54	+1	2.37	A IV	no comp	MR EW (p. 4) " Set 2 Sens 7	8749 8764 15 fine
7:50	"	"	+1			12-6	Set 5	8765 8783 18 "no comp" 1 star
7:50	1h 2E	"	+1			no comp	Set 8	8784 8797 13 good
3:7	0h 57E	+45 23	0+1	7.64	F3	6-6-6	Hins 355 KAFS SB Set 5 Sens 8	8829 8859 30 no comp 47 good
						20/16	Set 8	no OTB
3:4	01h 48E	+43 10	0	6.40	A5	6-6-6	N Sp. Primary <sup>no faint visual</sup> <sub>comp. in version</sub> Set 5 Sens 6	8861 8866 8868 5 good
3:0	01h 9E	-22 45	0	6.0	S3Ks	6-6-6	H. Vel Spec Bin Set 5 Sens 6	8876 8878 8 good <sup>quad. OTB</sup> <sub>moon</sub>
3:8	01h 12E	+15° 23'	1	8.0	gM2	9-9-9	Hi. Vel. Spec. Bin. Set 5 Sens 8	8918 8925 40 fine
2:6	01h 5W	+43° 10'	1	6.40	A5	6-6-6	N Spec Bin Set 5 Sens 8	8930 8933 5 fine
4:4	0h 2W	+06° 20'	1	3.90	G8 IV	6-6-6	MR STDs. Set 5 Sens 4	8936 3 fine
						20/16	Set 9	good

Comparison spectrum partly missing because iron arc off axis.

1 PH loaded in Fair.  
 Stars a little scarce first half  
 - arc poor  
 - flashlight battery poor

67

SM

Date May 31/1 Fri/Sat 1963 Observer vdB - RM Julian Day 2438181.

0 69 48 30.8 3449.2

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
264-2545	GIU Pa	11 38.6	+34 28		714/33	28		2100			
		21.15	thin cloud		Spectrophotometer			practice	for		SM
264-2546	HD 122742	14 01.4	+11 00		715/33	28		2205			
264-2547	HD 135204	15 11.6	-01 12		715/33	28		2230			
264-2548	44 Boo A	15 02.3	+47 49		615/33	28		2310			
264-2549	$\eta$ Cr B	15 21.5	+30 26								
26806	HD 172187	18 33.7	43° 08'	I-25	II aob	.008"	+20°C	01:03	03:11	1	0.54
26807	$\sigma$ Cyg Focus test	21.13.5	+38° 59'	"	"	"	"	03:30	03:44	2	01:04

Dome Temp.  $62^{\circ}\text{F}$   
 Focus 1.5. 49  
 Dome Temp. ....

CO<sub>2</sub> in 19:45 EST  
 V = 700

D 7<sup>cl</sup> old  
 Transparency Conditions

sky hazy with Ci and Al<sub>2</sub>O<sub>3</sub> in W  
 setting Sun very red. NOT photometric  
 2115 Al<sub>2</sub>O<sub>3</sub> moving  
 2200 clear, sky improved OK  
 68

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		6"	5.33	58V	38/40	Li	
		4"	6.28	58V	38/40	Li	
		3"	6.60	58V	38/40	OK	
			5.20	dg	38/40	Li	very close compact B just visible??
			4.98	52V	38/40	Li	
0 54W + 43° 00'	0	6.4	A5	6.6-6	Spec Binary	N	Set's Sens 8942 5 weak
01:04E + 39° 12'	0	4.28	B9 Ia	6.6-6	MK	STDS.	Set's Sens 8948 5 good compact
				20/16			Set 9, good
2 PH loaded in frig.							
Wanted considerable time trying to get HD 190020 (same as in digest).							



Dome Temp. 64°FFocus 15.50

Dome Temp. ....

Transparency Conditions Poor Very!

0040 haze thickening

70

Time I.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
51	0 08 E	-12 04	0	5.68	B8	6-6-6	B8-9 sens 6	8755 ④ 8959 fine
22		+15 46	0	3.71	B9V	NO ARC	MKStd Set 1 1 Count sens 4	8960 8961 good
29						9-9	Set 2½ 3 Counts	8961 8964 good
35	01 41 E					NO ARC	Set 4½ 2 Counts	8965 8967 fine
51	01 25 E					9-9	Set 7 4 Counts	8967 8971 fine
						20/16	Set 10	OK
							Closed up because no star bright enough for transparency conditions. 4 plate holders loaded.	





Dome Temp.  $+70^{\circ}$ Focus  $15.55$ Dome Temp.  $+63^{\circ}$  FTransparency Conditions FAIR

72

V. POOR Clear only  $40^{\circ}$  SD Zenith  
01.30 to Zenith

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
31	0124E	-2.02	0	6.09	B9	6-6-6	Sets B8-B9 Prog. #7 9014 9026	fine
05	0150E	-12.02	0	5.68	B9 <sup>8</sup>	6-6-6	" 5 " " " #7 9027 9039	good
12	0053E	+03 36	0	6.32	B9	6-6-6	B8-9 dbl hic Set 3 #7 9041 9053	fine
59	0028E	+13 55	0 <sup>+</sup>	6.07	B9	6-6-6	" " " " " #7 9054 9066 9067	completely fogged
10				<del>5.9</del>	<del>B8</del>		B8-B9 Program Set 4 too slow #7	
15	00 36W	+00 33	0	6.42	B9	6-6-6	" " set 7 #7 9068 9080	fine
						20/16	set 10.5	OK w sl c to wd

3 PH's loaded.

73

Date Tues. Wed June 4/5, 1963 Observer <sup>Pa</sup> DG- 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.
<del>26815</del>	HD 131861	14 <sup>h</sup> 50.9	+45° 43'	I-25	IIa0b.	5x .008	+27.5C			2
<p>3 super pancho pres plates of IIa0B developed in Acufine June 6/63 +1 June 7/63</p>										



75

Date Fr/Sat June 7/8 1963 Observer SM W.B. - R.M. Julian Day 2438.188

0 76 30 31.1 3441.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Ang Ecl
	observed through cloud <sup>in</sup> Sa Spectrophotometer practice										
265-2550	HD 122,742	14 <sup>h</sup> 01 <sup>m</sup> 46 <sup>s</sup>	+10° 57' 7"		7/4 12724	28		9 <sup>15</sup>	A+B		
265 2551	HD 130,948	14 48 40	+24° 03' 7"		6/6/24	28		9 <sup>50</sup>	A+B fixed		
265 2552	H.D. 131,156	14 49 43	+19° 15' 1"			28		10 <sup>30</sup>	A		
265 2553	H.D. 150,680	16 40 19	+31° 39' 7"		5/6/53+24	28		11 <sup>20</sup>	A+B		
26814	HD 177410	18 59.5	+69° 23'	I-25"	IIaob	.008"	+24°c	00 58	01:38	2	0:35
26815	HD 182308	19 19.0	+64 13'	"	"	"	"	01:45	02:21	3	0:13
26816	HD 191243	20 03.8	+34° 08'	"	"	"	"	02:34	03:10	4	0:29
	Focus Test O.T.B.										
2 copies, one developed + 3 IIaob spotted 6X's developed June 10/63											

Dome Temp.  $168^{\circ}$ Focus  $15.64$ 

Dome Temp. ....

CO<sub>2</sub> in 20:15  
700VTransparency Conditions  $very\ poor,\ thru\ cloud$   
Still very poor and thru cloud at 23:30

76

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	$7^h 11^m W$		6"	6.28	G8V		through clouds	
	$7^h 13^m E + 0^{\circ} 00'$		7"	5.75	G2		" "	} Do not reduce!
	$7^h 27^m W$		7"	4.70	G8V		" " Wrong star!	
	$7^h 06^m E 0^{\circ} 06' W$		10"	2.91	G0 TV		" "	
38	$20:35 E + 69^{\circ} 26'$		0	6.38	B9	6-6-6	B8-B9 Prog. Set 5 Sens 7	9105 9117 9119 fine
21	$30:13 E + 64^{\circ} 15'$		0	6.31	B9	6-6-6	" " Set 5 Sens 7	9131 good
10	$47:29 W + 34^{\circ} 15'$		0	6.02	B8	6-6-6	" " Ended exposure because dome coming down	9134 9143 fine
						20/16	Set 9	returned
							3PH loaded.	









Dome Temp.  $58^{\circ}\text{F}$ 

Transparency Conditions .....

90

Focus  $15.52$ 

Dome Temp. ....

g Time S.T.	P.D.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
50	3	0:29 E	$-11^{\circ}03'$	0	5.2	gG7	6-6-6	STD VEL STARS. SET 5 SENS <sup>9152</sup> 79160	1 weak
43	2	0:54 W	$+15^{\circ}23'$	0	8.0	gM <sub>2</sub>	6-6-6 20/16	Hi. VEL Spec Bin Set 5 Sens 8 <sup>9164</sup> 9200 Set 9.	fine OK
S P H loaded									



seeing  
quite good  
by Gt. S.

OK except low humidity cloud level

Dome Temp. ....

2200 { V=700  
CO2

Transparency Conditions .....

82

Focus ..... 15.44

Dome Temp. .... 58°F

Time	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	0112 W		10"	2.21	AOV		EXT ST.	
3	0137 W	0145 W		4.43	60E			
5	0027 W	+43°10'	-1	6.40	A5	6-6-6	Sp. Bin - N Set 5 Sens 6	9222 good
2	0105 W	+27°23'	-1	6.24	B9	6-6-6 20/16	B8-B9 Set 4 Sens 6 Set 8	9227 fine 9231 9235 OK
							1 ptt. LOADED	

83

Date JUNE SUN MON 16/17 63 Observer R.M. Julian Day 2438.197

O 85 06 27.5 3437.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	
26821	HD 175190	18 49.1	-22° 48'	I-25	II aob	.008"	18.5	00:25	02:09	4
26822	HD 181828	19 16.9	+35° 00'	"	"	"	"	02:22	02:58	1
26823	HD 192579	20 10.5	+46° 23'	"	"	"	"	03:09	03 45	2
	Focus Test.									
	fresh developer									

Dome Temp.  $+60^{\circ}\text{F}$ 

Transparency Conditions

84

Focus  $1.5.44$ 

Dome Temp.

Ending Time  
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:09	0.38w	$+22^{\circ}44'$	0	6.0	S <sub>7</sub> K <sub>5</sub>	6-6-6	H. Vel. Spec. Bin. Set 5 Sens 6 9253 9261 (8)	fine
2:58	01.00w	$+35^{\circ}06'$	1	6.24	B <sub>8</sub>	6-6-6	B <sub>8</sub> B <sub>9</sub> Prog Set 5 Sens 6 9262 9267	fine
4:52	00:54w	$+46^{\circ}35'$	2	6.92	B <sub>9</sub>	6-6-6	B <sub>8</sub> B <sub>9</sub> Prog Set 5 Sens 8 9269 9395 (4)	fine
						20/16	Set 9	OK
							2 PH loaded.	

85

Mon-Tues.

Date JUNE 17-18/63

Observer S-CC-L-RMHR Julian Day 2438198.

0 86 03 45.1 3437.3

Plate No.	Object	R.A. 1900 1960	Declination 1900 1960	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Am End
26824 ✓	NGC 5904	15 16.6	+02 14	HEWIT	103a0	—	—	21 38	21 40	1	00 12
26825 ✓	" 5634	14 27.5	-5 48	"	"			21 47	22 01	2	00 50
26826 ✓	" "	"	"					22 03	22 17	1	01 14
26827 ✓	" 6218	16 45.1	-01 53					22 31 <sup>10</sup>	22 33 <sup>10</sup>	2	04 58
26828 ✓	" 6254	16 55.0	-04 03					22 38 <sup>50</sup>	22 40 <sup>30</sup>	1	00 50 E
26829 ✓	" 6402	17 35.5	-03 13					23 40	23 52	2	00 18 E
26830 ✓	" 6171	16 30.3	-12 58					23 57	00 07	1	01 04
26831 ✓	" 6093	16 14.7	-22 54					00 11	00 17	2	01 24
26832 ✓	" 6356	17 21.3	-17 47					00 22	00 30	1	00 34
26833 ✓	" 6171	16 30.3	-12 58					00 39	00 49	2	01 44
26834 ✓	" 6356	17 21.3	-17 47					00 53 <sup>30</sup>	01 01 <sup>2</sup>	1	01 05
26835 ✓	" 6402	17 35.5	-03 13					01 05	01 17	2	01 07
26836 ✓	" 6356	17 21.3	-17 47					01 21	01 29	1	01 33
26837 ✓	" 6402	17 35.5	-03 13					01 34 <sup>30</sup>	01 46 <sup>30</sup>	2	01 3
26838 ✓	6934	20 32.2	+07 16					01 53	02 05	1	01 02
26839 ✓	6838	19 51.7	+18 37					02 09 <sup>40</sup>	02 13 <sup>40</sup>	2	00 13

Dome Temp. +66°F

Dec, Add. 3<sup>m</sup>.

Transparency Conditions FAIR A few clouds

86

Focus —

Dome Temp. —

Long Time L.S.T.	Hour Angle End	EX. TIME Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
40	00 12 E	2 <sup>m</sup>					Focused on $\alpha$ Boo.	
01	2 00 58 W	14 <sup>m</sup>					" " $\lambda$ Oph.	
17	01 14 W	14 <sup>m</sup>					" " $\lambda$ Oph.	
33 <sup>10</sup>	2 0 48 E	2 <sup>m</sup>					C. Corvita guiding	
40 <sup>30</sup>	00 50 E	2 <sup>m</sup>					22 45 Clouds.	
52	2 50 18 E	12 <sup>m</sup>					The 16 <sup>th</sup> hour of sidereal time lost in clouds, unfortunately	
07	01 01 W	10 <sup>m</sup>						
17	01 27 W	6 <sup>m</sup>						
30	00 34 W	8 <sup>m</sup>						
49	01 44 W	10 <sup>m</sup>					Foc. on $\beta$ Oph OK	
01	01 05 W	8 <sup>m</sup>						
17	01 07 W	12 <sup>m</sup>						
29	01 33 W	8 <sup>m</sup>						
46 <sup>31</sup>	01 36 W	12 <sup>m</sup>						
05	01 02 E	12 <sup>m</sup>						
13 <sup>40</sup>	00 13 E	4 <sup>m</sup>					Seeing Good (S)	





Dome Temp. ....

Transparency Conditions

Good.

88

Focus .....

Dome Temp.  $+59^{\circ}\text{F}$ 

g Time S.T.	Hour Angle End	EX. TIME <del>Declination</del>	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
15	0131W	6 <sup>m</sup>						
37	0128W	4 <sup>m</sup>						
54 <sup>30</sup>	0012E	12 <sup>m</sup>						
4 <sup>10</sup>	0037W	4 <sup>m</sup>						
49	0054E	30 <sup>s</sup>					Very good night, except for occasional clouds	
							GERRY WILL DEVELOP PLATES	
							In cupboard in DK Rm 3rd from left	

89

TUES. - WED.

Date JUNE 18-19/63

Observer S-CC-RM-HV Julian Day 2438199.

Plate No.	Object	R.A. <del>1900</del> 1960	Declination <del>1900</del> 1960	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
26845 ✓	NGC 5904	15 16.6	+02 14	NEWTON	103a0			21 59 <sup>10</sup>	22 01 <sup>10</sup>	1
26846 ✓	" 5634	14 27.5	-05 48	"	"			22 07	22 19	2
26847 ✓	" 5897	15 15.2	-20 51	"	"			22 24 <sup>20</sup>	22 32 <sup>20</sup>	1
26848 ✓	" 6218	16 45.1	-01 53	"	"			22 41 <sup>50</sup>	22 43 <sup>50</sup>	2
26849 ✓	" 6254	16 55.0	-04 03	"				22 51 <sup>20</sup>	22 53 <sup>20</sup>	1
26850 ✓	" 6171	16 30.3	-12 58	"				23 06	23 16	2
26851 ✓	6402	17 35.5	-03 13					23 22	23 32	1
26852 ✓	6171	16 30.3	-12 58					23 38	23 48	2
26853 ✓	6402	17 35.5	-03 13					23 52 <sup>25</sup>	00 02 <sup>25</sup>	1
26854 ✓	6356	17 21.3	-17 47					00 09	00 17	2
26855 ✓	6093	16 14.7	-22 54					00 23 <sup>30</sup>	00 29 <sup>20</sup>	1
26856 ✓	6171	16 30.3	-12 58					00 33	00 43	2
26857 ✓	6402	17 35.5	-3 13					00 53	01 03	1
26858 ✓	6356	17 21.3	-17 47					01 10	01 18	2
26859 ✓	6284	17 02.1	-24 42					01 28	01 38	1
26860 ✓	6544	18 04.9	-25 01					01 55	02 05	2

Dome Temp. ....

DEC. Corr. + 3°

Transparency Conditions

GOOD.

90

Focus .....

Dome Temp. ....

g Time S.T.	P.	Hour Angle End	EX. TIME Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 <sup>10</sup>	1	00 13 W	2 <sup>m</sup>					Focus unchanged.	
19	2	01 20 W	12 <sup>m</sup>					Seeing Poor	
32 <sup>30</sup>	1	00 46 W	8 <sup>m</sup>						
43 <sup>50</sup>	2	00 34 E	2 <sup>m</sup>						
3 <sup>20</sup>	2	00 33 E	2 <sup>m</sup>					Foc. on $\lambda$ Oph. Focus OK	
6	2	00 15 W	10 <sup>m</sup>						
32		00 35 E	10 <sup>m</sup>						
48		00 47 W	10 <sup>m</sup>						
02 <sup>25</sup>		00 04 E	10 <sup>m</sup>						
17	2	00 25 W	8 <sup>m</sup>						
29 <sup>10</sup>	1	01 45 W	6 <sup>m</sup>						
43	2	01 42 W	10 <sup>m</sup>						
03	1	00 57 W	10 <sup>m</sup>					Foc on $\eta$ Ser. Focus changed $\frac{1}{4}$ turn	
18		01 26 W	8 <sup>m</sup>						
38		02 05 W	10 <sup>m</sup>						
05	2	01 29 W	10 <sup>m</sup>						



Dome Temp. ....

Transparency Conditions

GOOD

Focus .....

Dome Temp. ....

IEEE group

Wed June 1912

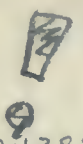
150 in 2 waves,  
4 hrs load; cloudy.

Sachwan, Perry, Clark, 4/4  
Quality

ing Time E.S.T.	Hour Angle End	EXTIME Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS
16 <sup>23</sup>	0006 E	3 <sup>m</sup>					Seeing Poor
32	0031 E	10 <sup>m</sup>					
43 <sup>0</sup>	0151 W	6 <sup>m</sup>					
51 <sup>40</sup>	0148 W	4 <sup>m</sup>					
05	0002 W	8 <sup>m</sup>					
12 <sup>28</sup>	0049 W	2 <sup>m</sup>					
16 <sup>35</sup>	0045 E	30 <sup>s</sup>					A sparkling night, but seeing only fair

2100 EST 0+  
 2200 EST 0+  
 2255 EST 0-0+

Mirror washed  
 Amplifier repaired  
 all the constants now shorter



43

Date June 21/22, 63. (Fri/Sat.) Observer v d B. R.M. Julian Day 2438202

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
2556 - 261	α Cr B	15 <sup>h</sup> 33. <sup>m</sup> 1	+26° 50'					21 05		
2556 - 267	HD 135,101 A	15 11.2	+19° 25'		7/4/28			21 50	traces A, B, C	
2556 - 267	135,102 B	"	"		7/5/28			22 40	traces A, B	
2557 - 267	152,792	16 52.5	+42° 52'		7/4/28			23 40	traces A, B	
2558 - 267	154,345	17 01.8	+47° 07'		7/4/28			00 40	traces A, B	
2559 - 267	157,214 (72 H <sub>2</sub> )	17 19.3	+32° 31'		6/5/28			01 30	traces A, B	
2560 - 267	178,428	19 06.3	+16° 48'		6/6/28			02 25	traces A, B	
2561 - 267	182,572	19 21.3	11 52		7/5/28			03 15	trace A only	

Dome Temp. ....

Focus .....

Dome Temp. ....

Scotia 20:45  
V = 700

Power Air

2100

94

Transparency Conditions OK, NOT AOK. Drifting also stopping

2145 rather thick cirrus streak, not pin.

2205: clouds from horizon up to 30°, general region free  
2210: region of observation to being clouded over again (thinly)  
2225: clouds only at horizon & up to 10° (a streak)

2258: view field clear except horizon

REMARKS

2300 sky Fine

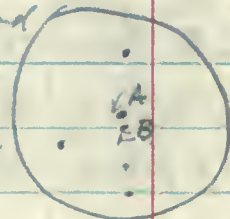
2345: clear sky all around

0045: all clear around

Choose the brighter component

(B) This is a binary. sky covered by clouds.

(F) for 1/2" half of tracing A, star was found at rim of aperture



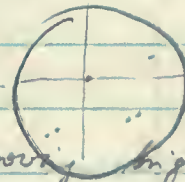
og Time  
S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.
			2.23	A0 <del>I</del>	
A, B, C 00 <sup>h</sup> 23W; 00 <sup>h</sup> 45W; 00 <sup>h</sup> 54W		7"	6.68	G5 <del>I</del>	(B)
A, B 01 <sup>h</sup> 16W; 01 <sup>h</sup> 45W;		6"			(F)
A, B 00 41W; 00 45W		8"	6.81	G0 <del>V</del>	
A, B 01 25W; 01 37W;		8"	6.76	G8 <del>V</del>	
A, B 01 58W; 02 09W		8"	5.39	G2 <del>V</del>	
A, B 01 08W; 01 18W		7"	6.04	d64	
A only 01 42W		6"	5.15	G8 <del>V</del>	

01 35: clear sky

02 45: view field clear, ←

03 20: eastern sky is growing bright



but one cloud drawing up ~ south





Dome Temp. 62°F

Focus 15.95

Dome Temp. 57°F

170 visitors  
showed E 1785  
M13

Transparency Conditions

Excellent

96

100 EST - some in cloud in zenith & South  
100 - very slow coming in

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
29 3	00 <sup>h</sup> 24 <sup>m</sup> E	+43 10	H-D	6.4	A5	66-6	N Sp. Bin. triple in field finder sets Lens 6	9302 9308 5 exp. fine 5 but no comparison
01 4	00 <sup>h</sup> 40 <sup>m</sup> W	+00 30	0	6.42	B9	66-6	B8-B9 triple in field finder sets Lens 6	9310 9316 5 fine
34 1	00 <sup>h</sup> 13 <sup>m</sup> W	+34 17	+1	6.02	B8	66-6	B8-B9 HR 7699 sets Lens 6	9319 9324 5 fine
						20/16	sets 8	d.c. tired
							seeing tests made during the night	
							3 PH's loaded in frig	
							- find cross-hair appear out of focus	
							- broke ach. tray. Lucy (vd B).	



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

Focus  $15.55$

Dome Temp. ....

Transparency Conditions .....

98

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
16 2	00:03E	$-00^{\circ} 39'$	0	6.34	B8	6-6	B8 B9 Prog - Set 5 Series 6. 9357 9362 (S)	good (low)
50 3	00:24W	$+27^{\circ} 21'$	0	6.24	B9	6-6-6	" Set 5 Series 6 9364 (S)	fine
30 4	00:59W	$+35^{\circ} 05'$	1	6.24	B8	6-6-6	" Set 5 Series 6 9370 (S)	fine w.t.
53 1	00:23W	$+46^{\circ} 10'$	1	6.13	B9	6-6-6	" Set 5 Series 6 9375 9376 (S)	fine d.t.
29 2	00:53W	$+53^{\circ} 23'$	2	6.43	B9	6-6-6	" Set 5 Series 6 9381 9387 (S)	d. study
						20/6	Set 9	OK

4PH loaded.



Echo 23 50

Dome Temp. 71°F

Transparency Conditions good. aurora 100

Focus 15.70 - .11 = 15.59

Dome Temp. 68°F

Seeing 2.5 21:00 - 22:30  
03+20 light, high cloud  
heaven cloud from NW

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
16	0:00 W	+65° 42'	2	3.08	B6 III	18 <sup>S</sup>	Set 2 8 cl / Set 5 4 cl / Set 8 2 cl (in Series 6)	strong fine fine
51	0:02 E	+02 41	2 <sup>+</sup>	3.76	A0 V	18 <sup>S</sup>	set 2, 8 cl / set 5, 4 cl / Set 8 2 cl	1. strong fine good
34	0:48 E	+27 21	1	6.24	B9	6-6-6	sets 38-39. ser 6	9608 (8) fine
36	0:10 W	-19 20	1-0	6.7	B8	6-6-6	sets 38-39. ser 7	9613 (12) fine
51	0:45 W	+27 58	0 <sup>+</sup>	6.31	B8	6-6-6	sets " " ser 6	9628 (3) fine
49	0:02 W	+38 55	0 <sup>+</sup>	6.42	B9	6-6-6	sets " " ser 6	9634 (8) fine
35	0:27 W	-01 07	0 <sup>+</sup>	6.26	B8	6-6-6	sets " " ser 6	9640 (8) fine
						20/16	set 9	d.c. to end

PK looked

101

Date Tue. Wed. June 25-26, 1963 Observer Vol B - HV Julian Day Sm

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
2562-268	$\alpha$ CrB	15 <sup>h</sup> 33 <sup>m</sup> 08 <sup>s</sup>	+26° 50'		5/5/14			20 <sup>h</sup> 30 <sup>m</sup>		
2563-268	122,742	14 <sup>h</sup> 01 <sup>m</sup> 46 <sup>s</sup>	+10° 58'		7/4/28			21 40	from A-B	
2564-268	130,948	14 48 40	+24° 04'		7/4/28			10 30	from A-B	
2565-268	133,640 $\omega$ Cen	15 02 35	+47° 48'		6/5/28			23 00	" A-B	
2566-268	137,107 $\gamma$ CrB	15 21 42	+30° 25'		6/5/28			23 45	" A-B	
2567-268	42,267 $\beta$ Ser	15 51.6	+13° 20'		6/6/28			00 20	" A-B	
2568-268	143,761	15 59.8	+33° 25'		7/3/28			00 55 01 25	from A-B	
2569-268 (1)	186,427 16 Cyg $\beta$	19 40 9	+50° 25'		7/4/28			02 00	from A-B	
2570-268 (2)	" $\alpha$	"	"		7/4/28			02 45	from A-B	

Dome Temp. 79°F  
 Focus 15.59  
 Dome Temp. ....

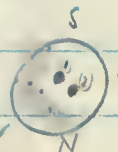
voltage on 700 (20 55)  
 ice in: 0

2100 Not p.e OK for Δ  
 2200 looks OK  
 2300 Fine

107

Transparency Conditions 20<sup>30</sup>: clouds up the south-western horizon (yellow-red setting sun); faint light of horizon cloudy, rest reasonably clear  
 22<sup>00</sup> sky light;  
 22<sup>45</sup> sky light

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 <sup>30</sup> E		8"	2.23	A0V	E+T	ST.	
01 38W, 02 01W,		(3")	6.28	G8V		01 <sup>00</sup> : sky growing slightly blacker. no apparent clouds around; Milky Way coming out;	
01 40W, 01 54W,		6"	5.75	dG2		01 <sup>25</sup> : no change from before	
02 03W, 02 14W,		6"	5.26	dG1		02 <sup>25</sup> : sky O.K.	
02 27W, 02 37W,		7"	5.63	G2V		03 <sup>00</sup> : sky alright, but a few stationary clouds in south west to 40° up.	
02 31W, 02 42W		7"	6.10	G2V			
03 12W, 03 37W		6"	5.40				
03 37W, 00 50W		7"	5.87	G5V		← (1) = north preceding ← (2) = south preceding follows? follows?	
02W, 01 20W		7"					



1 Min Sector found out at dawn.





Dome Temp. 80  
 Focus 15.63  
 Dome Temp.

seeing obs.  
 22h seeing 1+2

Transparency Conditions

22<sup>h</sup> Haze around horizon 104

50 30 dome trolley wires shorted & blew n fuses

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
26		+17 06	2	6.1	G4	none	Let's (Hd) Std Vel. - First special detent as you move north 965 ②	fine
17	0	27W +10 16	1	5.8	F8	none	" (Not sure about this) exposure meter 70 First special detent as you move south 963	fine
05	0	25W -138 54	2-1	6.42	B39	6-66	at 5 B39-B39 Pexga. giving time 969 20 ②	fine
	03:15	Seeing test					- down no focus test	

4P# Lodid

00:30 one of sectors banged closed  
 shutters sound as if require attention, re oil!  
 a new book for finder fields will soon be req'd.

105

Thurs-Fri

Date June 27-28 / 63 Observer L-HV Julian Day 2438208.

0 95 36 18.8 3432.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
26886 <sup>5</sup>	H.D. 131861	14 50.9	45 43	I-25	IIA0B	.008	29.7	21 38	23 50	1
26887 <sup>6</sup>	" 172187	18 33.7	43 08	"	"	"	29.1	00 38	00 54	2
26888 <sup>7</sup>	" 182308	19 19.0	+64 13	"	"	"	29.1	01 05	01 37	3
26889 <sup>8</sup>	" 194668	20 21.8	53 14	"	"	"	29.1	01 54	02 16	4
2689 <sup>8</sup>	" 200614	20 59.4	56 16	"	"	"	"	02 56	03 16	1
	Focus Test O.T.B.									

Dome Temp. .... 80 .....

Focus ..... 15.63 .....

Dome Temp. .... ..

Transparency Conditions ..... Fair .....

0110 CLOUDS

106

cloudy intervals all 2nd half,

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30	1 3 02W	45 29	0	7.64	F3	6-6-6	KAFS SB Haze later on lens 7 { 9687 9699	fine
54	2 00 23 W	43 11	1	6.4	A5	6-12	Set 5 SPECT. BIN. N. #7 <sup>9704</sup> 9716	fine
37	3 00 22 W	64 19	0-1	6.3	B9	6-6-6	" 5 B8-B9 #7 <sup>9722</sup> 9734	fine
16	4 00 02 E	53 24	0-1	6.43	B9	9-9	" 5 " " #7 <sup>9739</sup> 9751	fine
16	00 20 W	56 31	0-1	5.72	B9	6-6-6	" 5 " " " 7 <sup>9760</sup> 9772	fine
						20/16	" 9	good
							1 P.H. Loaded in fudge	



Dome Temp. 780

\* Seeing 0-1-2

Transparency Conditions poor - Very hazy

108

Focus 15.61

Dome Temp. ....

\* P.H. May have been inserted incorrectly  
" Back on upside down.

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
35	2 0048 E	+43° 11'	0	6.4	A5	6-6-6	Sels Speed Run N. Sens #7 9776 9788	no stellar spectrum
11	4 0018 W	+00° 33'	0-1	6.42	B9	6-6-6	Sels BB-B9 * Sens #7 9824 9836	nothing on plate
53	3 00 00	34 19	1*	6.02	B8	6-6-6	" 5 " " " 7 9837 9849	fine
43	1 3037 W	46 42	1*	6.13	B9	6-6-6	" 5 " " " 7 9850 9862	fine
13	2 0050 W	26 18	1	5.50	B9	6-6-6	" 5 " " " 7 9863 9874	fine
						20/16	" 9	select v
							IPH found in file.	
							#26891 - taken with sens 10 hence underexposed. ml	

109

Date <sup>mm</sup> June 30 - July 1 Observer <sup>Dm</sup> Hd - Hvr Julian Day 24382.11  
 @ 98 27 55.3 3431.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
26895 <sup>3</sup>	HD 136202	15 14.2	+02 09	I-25	II AOB	008	+31.6	21 18	21 54	3
"	HD 145001	16 03.6	+17 19	"	"	"	"	22 00	22 46	"
26898 <sup>4</sup>	" 173936	18 43.0	41 20	"	"	"	31.6	00 17	00 35	4
26898 <sup>5</sup>	" 170973	18 27.1	+03 35	"	"	"	"	00 45	02 15	1
26898 <sup>6</sup>	" 197226	20 37.3	38 43	"	"	"	"	02 31	03 01	2
	Focus TEST		OTB							"

Dome Temp. 82

Transparency Conditions *poor - hazy*. 110

Focus 15.67

Dome Temp. 84 79° 03' 00"

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
54	3 W0 57	+1 54	2	5.6	G0	—	sets { Through the first round hole as you slide the prism carriage north. sets { 9877 9885	fine
46	" W0 55	+17 07	1	6.1	G4	—		sets { Through the second hole as you slide the carriage north. " 6 { 9885 9893.
35	4 00 06 W	41 23	1-2	5.86	B9	6-6-6	sets B8-B9. #7 9902 9914	fine
15	1 02 01 W	+03 38	0-1	6.32	B9	6-6-6	" 5 " " #7 9917 9929	fine
01	2 00 37 W	38 57	1	6.42	B9	6-6-6	" 5 " " #7 9935 9947	fine
						20/16	" 9	OK
							3 P.A. Poudet in fidge	





Dome Temp.  $86^{\circ}$

Focus 15.69

Dome Temp.  $75^{\circ}$

Transparency Conditions

$> 1^m$  extinction

poor - extremely hazy

EST. 02:13

Bright fireball from NNW  
driving south

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
51	30	10 E	-02 01	0	6.09	B9	6-6-6 <i>not 5</i> B8-B9 <i>not 6</i> 9951 56	fine
56	40	15 E	+03 56	0-1	6.32	B9	6-6-6 <i>not 5</i> " " <i>not 6</i> 9957 62	fine
31	10	45 E	+43 11	0-1	6.40	A5	6-6-6 <i>not 5</i> N. Sp B. <i>not 6</i> 9963 68	fine
14	20	32 E	+34 18	0-1	6.02	B8	6-6-6 <i>not 5</i> B8-B9 <i>not 6</i> 9970 75	fine
4	30	06 W	-12 28	0	6.39	B9	6-6-6 <i>not 5</i> B8-B9 <i>not 6</i> 9977 82	fine
08	40	28 E	-01 06	0	6.26	B8	6-6-6 <i>not 5</i> B8-B9 <sup>03:02</sup> <i>not 6</i> clouds 6 93 854 15	fine
							<i>not 9</i>	OK

*loaded*

*DK*

113

Date July 2-3, 1963. Tues - Wed. Observer <sup>vAB</sup> Sm - RM <sub>D2</sub> 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.
2571 - 269	139,006 $\alpha$ Cr 8	15 <sup>h</sup> 33.1	+26° 50'		5/4/28			21 <sup>35</sup>	21 <sup>50</sup>	
2572 - 269	146,233 18 Sco	16 13.7	-08° 17'		6/5/28			21 <sup>55</sup>	from c.s.	
2573 - 269	152,391	16 51.2	+00 03		7/4/28			22 <sup>30</sup>	" 20.6.28	
2574 - 269	150,680 $\theta$ Her	16 40.3	+31 40		6/3/28			23 <sup>20</sup>	" 20.6	
2575 - 269	150,997 $\eta$ Her	16 41.7	+38 59		6/4/28			23 <sup>50</sup>	20.6	
2576 - 269	152,792	16 52.5	+42 59		7/4/28			00 <sup>50</sup>	20.6.28	
2577 - 269	157,214 $\gamma$ Her	17 19.3	+32 31		7/3/28			01 <sup>30</sup>	20.6	
2578 - 269	159,222	17 30.75	+34 18		7/4/28			02 <sup>00</sup>	20.6.28	
<del>2579 - 269</del>	<del>182,592</del>	<del>19 21.25</del>	<del>+11° 52'</del>							
2579 - 269	217,017	23 01.9	20 35		7/6/28			03 <sup>15</sup>	from c.s.	

Dome Temp. 76°F

dry ice: 20<sup>00</sup> EST  
voltage on 700v: 20<sup>00</sup> EST

Transparency Conditions

2100: Fine polar air

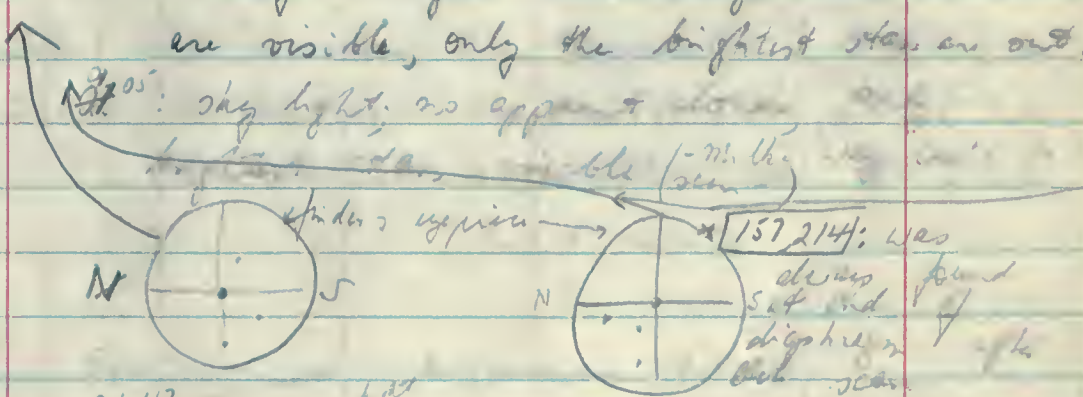
20<sup>30</sup>: yellow setting sun - excellent clear sky  
to see the clouds at horizon - south West  
plus 2 north - north West

194

Focus .....

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
22W		12"	2.23	A0V			
20W 00 30W		12"	5.49	d61		22 <sup>00</sup> : moon very close to star observed,	
20W 00 31W		9"	6.64	G6V		22 <sup>35</sup> : moon located right behind west end of shutter	
16W 01 27W		11"	2.82	G0TV		22 <sup>37</sup> : no clouds in field of view	
46W 02 09W		10"	3.46	G8TV	-TV	23 <sup>00</sup> : sky is "light" and though no clouds	
44W 2 42W		8"	4.81	G0V		are visible, only the brightest stars are out.	
22W 02 50W		9"	5.39	G2V		23 <sup>05</sup> : sky light; no apparent clouds	
01W 0 06W		8"	6.58	G5V		highest stars visible (see)	
			5.17	G8TV		spider's up view	
			5.53	G5V			



01 47: milky way

02 30: sky has become darker

115

Hh = Hhobros.

Wed-Thur  
Date July 3-4, 1963.Observer (Pa) - RM.  
Hd  
2h

Julian Day 2438214.

☉ 101 19 28.5 3430.6

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
26903	HD 144661	16 <sup>h</sup> 01.9 <sup>m</sup>	-24° 11'	I-25	IIa0B	008	20.1	21 <sup>h</sup> 35 <sup>m</sup>	22 <sup>h</sup> 27 <sup>m</sup>	2 0 <sup>h</sup> 49 <sup>m</sup> W
26904	HD 169033	18 <sup>h</sup> 17.6 <sup>m</sup>	-12° 03'	"	"	"	20.1	23 <sup>h</sup> 03 <sup>m</sup>	23 27	1 0 <sup>h</sup> 26 <sup>m</sup> E
26905	HD 171391	18 <sup>h</sup> 29.5 <sup>m</sup>	-11° 03'	"	"	"	20.0	23 <sup>h</sup> 39 <sup>m</sup>	00 01	2 0 <sup>h</sup> 09 <sup>m</sup> W
{ 26906	HD 171391	"	"	"	"	"	20.3	00 05	00 33	3 0 <sup>h</sup> 08 <sup>m</sup> W
{ "	HD 187691	19 46.2	+10° 10'	"	"	"	"	00 39	01:47	3 0 <sup>h</sup> 02 <sup>m</sup> W
26907	HD 187691	19 46.2	+10° 10'	"	"	"	20.1 <sup>c</sup>	01:53	02:09	4 0 <sup>h</sup> 04 <sup>m</sup> W
26908	HD 191243	20 03.8	+34 08	"	"	"	20.1 <sup>c</sup>	02:17	02:47	1 0 <sup>h</sup> 09 <sup>m</sup> W
26909	<del>HD 199892</del>	20 54.9	<del>+41° 55'</del>	"	"	"	"	03:05	03:41	2 0 <sup>h</sup> 11 <sup>m</sup> W
	Focus Test.									
#26909	unidentified		$\alpha_{1900} \sim 20^h 54.9^m$ $\delta_{1963} \sim +40^\circ 50'$							filed with "unidentified spectra"

Dome Temp. 66° F.

Focus 15.47

Dome Temp. ....

Transparency Conditions

Good

106

Trouble was in incorrect processing of H D 144661 - I have corrected it in program.

Ending Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
2:27	0 <sup>h</sup> 49 <sup>m</sup> W	-24° 20'	0	6.5	B8	6-6-6	B8-B9 electric clocks appear to have stopped and to be 1 min slow. Sandra please check. set 5	9989 9001	fine
3:27	0 <sup>h</sup> 26 <sup>m</sup> E	-12° 02'	0-1	5.68	B8	6-6-6	B8-B9 on the other hand. This star indicates mid. clock is ok. Check if first star's spectrum is ok, or if its 138 position is correct. set 8	0015 0027	fine
0:01	E 0 04 <sup>m</sup>	-11 00	0-1	5.2	997	6-6-6	set 5 Std Vel. star	0033 0049	l. star
0:33	W 0 28 <sup>m</sup>	-11 00	0-1	5.2	997	—	set 5 Std Vel. Through the first window when you push the prisms north	0051 0067	fine
0:47	W 0 26 <sup>m</sup>	+10° 20'		5.8	F8	—	" Std Vel. Through the second window etc.	0068 0084	str.
0:09	W 0 48 <sup>m</sup>	+10° 20'	0	5.8	F8	6-6-6	set 5 Std Vel	0089 0101	l. star
0:47	01:09 <sup>m</sup>	+34° 20'	0	6.02	B8	6-6-6	set 5 B8 B9 Prog.	0104 0116	fine
0:41	01:11 <sup>m</sup>	+40° 50'	0	6.01	B9	6-6-6	set 5 B8 B9 Prog.	0118 0124	wrong star white type exp fine C to violet
						20/16	Set 8		
								developed 5 1/2 min in 7" Acc. fine curve ②	
							1 PH loaded.		



Dome Temp. 66 F

Focus 15.51

Dome Temp. 62 F

Transparency Conditions

Becoming cloudy from 118

10<sup>L</sup> light cloud in N

00 20 clouds

01 20 - 01 15 clouds

03 05 clouds beginning

03 20 clear

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
07	W 034	-23° 35'	0-1	5.9	B9	6-12	B8-B9 prog set 5 <u>clouds</u> ) sens 6 0126 0128	good
22	W 146	17° 09'	1	6.1	G4	6-6-6	Star vel. at 8. First sp. at set 5 prob NG, sens 6 0143 0151	l. str.
	W 209	17° 09'	1	6.1	G4	—	" at 5 first window in your hand from carriage northwards * sens 6 0153 0162	1 exp strong + other weak
25	N 025	-11° 01'		5.2	G7	—	Star vel. at 5 <u>clouds</u> sens 6 0163 (9)	OK
							20/16 set 9	
34	O 55E	+56 31	1	5.72	B9	6-6-6	B8-B9 prog set 5 (01 28 light cloud) sens 6 0169 74 (5)	fine
04	O 49E	+52 44	1-2	5.90	B8	12-6	B8-B9 prog set 5 the cloud layer a faint field. sens 6 0177 0182 (5)	fine
25	O 30E	+55 16	1-2	6.04	B9	12-6	B8-B9 prog set 5 sens 6 0185 0190	fine
11	O 41E	+78 03	1	6.48	B9	6-6-6	B8-B9 prog set 5 sens 6 0193 0198	fine
21	O 45E	+54 14	1	6.03	B8	6-12	B8-B9 prog set 5 sens 6 0199 0204	fine
								dec 5" in 73° 20' fine
								decreased exposure meter turned out
								* brighter star of pair

119

Date Frid/Sat July 5/6 - 1963 Observer Hol Gh MT - H V Julian Day 2438216  
 0 103 13 49.6 3430.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
26918	HD 146001	16 08.8	-25 13	I-25	IIa.OB	00.8	23.1	21 <sup>h</sup> 17 <sup>m</sup>	21 47	4
26919	HD 146416	16 11.1	-21 03	I-25	" "	"	23.1	21 56	22 30	3
26920	HD 145001	16 03.6	+17 19	"	" "	"	23.1	22 49	23 06	1
26921	HD 145001	16 03.6	+17 19	"	" "	"	23.1	23 09	23 31	2
<del>26922</del>	HD 171391	18 29.5	-11 03	"	" "	"	23.1	23 38	24 02	2
26922	HD 171391	18 29.5	-11 03	"	" "	"	"	24 05	24 25	3
26923	" 174853	18 47.5	+13 51	"	" "	"	23.2	00 32	00 46	4
26924	" 217312	22 54.8	62 32	"	" "	"	"	01 05	01 45	1
26925	" 194668	20 21.8	53 14	"	" "	"	23.1	01 59	02 21	2
26926	" 198513	20 45.7	51 32	"	" "	"	"	02 27	02 49	3
26927	" 199578	20 53.1	50 41	"	" "	"	23.0	02 55	03 29	4
	Found TEST O.T.B.									



Dome Temp. 72 F.

Focus 15.5.1

Dome Temp. ....

Transparency Conditions *Clear clouds*

120

0230 Clouds (THIN)

Till END OF Night.

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
47	E 0 <sup>m</sup> 10	-25 22	0	6.7	B9	6-6-6	Set 5 B8-B9 pair. <span style="float: right;">sees 6 { 0205</span>	fine
30	W 0 50	-21 12	0	6.3	B9	6-6-6	» » » » <span style="float: right;">» 6 { 0208.5</span>	fine comp & wk towards V
06	W 1 35	+17 08	1-3	6.1	G4	6-6-6	std vel set 5 <span style="float: right;">» 6 { 0209</span>	l. strong
31	W 2 01	"	2-3	"	"	—	" " " 5 <span style="float: right;">» 6 { 0212.5</span>	l. strong
02	W 00 05	-11 01	3	5.2	gG7	—	" " " 5 <span style="float: right;">» 6 { 0218</span>	fine 1st
25	W 00 27	-11 01	"	"	"	6-6-6	" " " 5 <span style="float: right;">» 6 { 0225</span>	fine 1st
46	0031 W	+13 57	0-1	6.07	B9	6-6-6	Set 5 B8-B9 <span style="float: right;">» 6 { 0226</span>	fine 1st
45	0236 E	62 52	1-2	7.8	B <sub>0</sub> IV	6-6-6	" 5 Hd BIN. <span style="float: right;">» 6 { 0233</span>	fine 1st
21	0034 W	53 24	0-1	6.43	B9	6-6-6	" 5 B8-B9 <span style="float: right;">» 6 { 0234</span>	strong
00	0038 W	51 45	0-1	6.26	B9	6-6-6	" 5 " " <span style="float: right;">» 6 { 0241</span>	strong
01	0111 W	50 55	0-1	6.30	B8	6-6-6	" 5 " " <span style="float: right;">» 6 { 0242</span>	strong
						20/16	" 9	OK
							3 Pitt. Loaded in Friday.	OK
							iron are rather weak	OK



Dome Temp. 60

Focus 15.43

Dome Temp. 50

Transparency Conditions

Fair

Moon just past full.

122

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24 1	W 0 56	-21 12	0	6.3	B9	6-6-6	B8-B9 prog out 5' sens 6 { 0307	fine Hg emission
48 2	W 2 31	39 18	0-1	7.2	G8	6-6-6	Std Vel prog out 5' Sandra: field drawn not like sens 7 { 0312 one in program took. check latter 0324	fine spots weak
8 3	0 56 W	+03 39	0	6.32	B9	6-6-6	B8-B9 prog BB set 5 sens 6 0325 (4) 79	fine
22 4	01 20 W	+13 55	0	6.07	B9	6-6-6	" " set 5 sens 6 0330 0334	fine
24 1	01 45 E	+62 52	0	7.8	B0 IV 6	6-6-6	Hd Binary " sens 8 0335 0360	fine
29 2	0 54 E	+57 06	0-1	6.14	B8	6-12	B8-B9 prog " sens 6 0361 (4) 62	fine
01 3	0 37 E	+56 15	0	6.37	B8	6-6-6	" " " sens 6 0366 0370	fine
24 4	0 35 E	+54 15'	0	6.03	B8	6-6-	" " " sens 6 0373 0377	fine
						20/16	set 9	c to violet

dev. 5" 51'  
in 70" aperture

3 PH

# 26929 - finder field in observing programme is correct except for position of one star. it has been changed. Field drawn does not exactly agree but may be all right.







Dome Temp. 68

Focus 15.50

Dome Temp. 64

Transparency Conditions

Fair

80<sup>14</sup> some clouds80<sup>30</sup> clearing

125

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
05 1	W 0 57	+39 15	0-1	7.2	G8	6-6-6	Std Vel. prog. set 5	set 7 {0389 0401	fine
45 2	W 1 36	+39 15	1	"	"	—	" " set 5 Through the first window as you push from carriage north.	set 7 {0408 0420	1 exp. l. weak + other fine
25 2	E 0 12	-11 01	1-2	5.2	9G7	—	" " " set 5 Through the second window ... etc...	set 7 {0421 0433	fine
50 3	W 0 14	"	1	"	"	6-6-6	" " set 5	set 7 {0434 0446	fine
01 4	W 0 14	+47 38	1 <sup>+</sup>	6.55	B8	6-6-6	B8-B9 set 5	set 6 {0449 0453	fine guiding
20 1	O 01 E	+46 37	1 <sup>+</sup>	6.92	B9	6-6-6	" set 5	set 6 {0454 0458	fine
34 2	O 11 W	+46 43	1-2	6.13	B9	6-6-6	" set 5	set 6 {0459 0463	fine
49 3	O 22 W	+53 27	2-3	6.43	B9	6-6-	B8-B9 set 5	set 6 {0464 0468	fine
40 4	I 21 E	+62 52	2 <sup>+</sup>	7.8	B0 IV	6-6-6	Hd Binary set 5	set 8 {0469 0499	fine
06 1	O 22 E	+78 03	2	6.48	B9	6-6-6	B8-B9 set 5	set 6 {0501 0505	fine
25 2	O 00	+57 06	2 <sup>+</sup>	6.14	B8	6-6-6	" set 5	set 6 {0506 0510	fine
44 3	O 15 W	+56 15	2 <sup>+</sup>	6.37	B8	6-6-6	B8-B9 set 5	set 6 {0511 0515	fine lot guiding
						20/16	set 9		OK

4 PH  
washed

127

July 11/63 there are only 4 IIa0B plates until tomorrow!  
They are in PH's.

Date Tues. Febr. July 11-12/63 Observer Gh - Cw Julian Day 2438222  
 @ 108 56 55.3 3432.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. +2.6'	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
26947	HD 131861	14 50.9	45 43	I25	IIa0b	008	26.0	21 39	22 57	1
26948	H.D. 172187	18 33.7	+43 08	"	"	"	25.9	23 05	23 19	2
26949	HD 177817	19 01.1	-16 23	"	"	"		23 40	00 10	3
26950	HD 192666	20 10.9	-12 39	"	"	"	25.7	00 21	00 43	4
26951	HD 197226	20 37.3	+38 43	"	103a0	"		00 47	00 59	1
26952	HD 197018	20 35.9	+40 13	"	103a0	"		01 03	00 11	2
26953	HD 194939	20 23.2	-03 41	"	103a0	"		01 20	01 38	3
26954	HD 199280	20 51.1	-03 57	"	103a0	"		01 43	02 07	4
26955	HD 202753	21 12.9	-04 57	"	103a0	"		02 19	02 29	1
26956	HD 215143	22 38.0	-07 29	"	103a0	"	25.9	02 34	02 56	2
26957	HD 216494	22 48.2	-12 09	"	103a0	"		03 05	03 17	3
26958	HD 199892	20 54.9	+41 33	"	103a0	"		03 22	03 36	4
	Four test									



Dome Temp. +75Focus 15.56Dome Temp. +67°F

Transparency Conditions

Good a few clouds earlier  
00<sup>h</sup> - a little hazy up to alt. 40°  
- Milky way visible.

128

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
57	0304W	45 28	0-1	7.64	F3	6-6-6	Set 5. SPEET BIN. KAFS #8 0547 0572	fine
19	0017E	43 12	1	6.40	A5	6-6-6	" 5 " " N #7 0575 0585	no looks like fine 968
10	0005W	-16 17	1 <sup>+</sup>	5.88	B8	6-6-6	" 5 B8-B9 prog. #7 0593	fine
43	0032E	-12 26	1-2	6.39	B9	6-6-6	set 5 B8-B9 prog #6 0603 0605	(4) fine
59	0041E	+38 57	1-2	6.42	B9	6-6-6	set 5 B8-B9 prog #6 0610 0614	guiding fine
11	0027E		2-3	5.88	B8	6-6-6	set 5 B8-B9 prog #6 0615 0619	strong
38	0012W	-03 29	1-2	6.01	B9	12-6	set 5 B8-B9 prog #6 0621 0625	fine
07	0013W	-03 42	2	6.45	B9	6-6-6	set 5 Field dies not check! B8-B9 prog #6 0626 0630	guiding fine
29	0012W	-04 41	2 <sup>+</sup>	5.63	B8	12-	set 5 Not spotted properly B8-B9 prog #6 0631 0635	fine guiding
56	0045E	-07 10	2 <sup>-</sup>	6.28	B9	6-6-6	set 5 " B8-B9 program #6 0636 0640	fine strong
17	0034E	-11 49	2	5.87	B9	6-6-6	set 5 " B8-B9 program #6 0641 0645	good
36	0140W	+41 48	3 <sup>+</sup>	6.01	B9	12-6	set 5 " B8-B9 program #6 0646 0650	fine guiding
							20/16 set 9 Temp dropped 50% seeing went from 3 <sup>+</sup> to 0	OK
	#26954	field sum count						
	#26966							
		<u>NO</u>					loaded	
							Spotted not working does not click & stay on.	dis 6 <sup>m</sup> on

new batch baked IIaO - emulsion 2AOC1C3

51 51

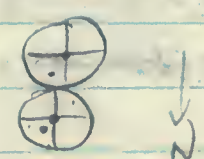
129

Date Frid/Sat 12-13 July 1963 Observer Hd Sm Cm Julian Day 2438223  
Gh 0109 54 07.5 3432.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
2695 <sup>89</sup>	14 6416	16 11.1	-21 03	↓ 25	IIaOB	0.008	27.0	21 14	22 10	
2579 - 270	STANDARD STAR 172, 167 α dya	18 <sup>h</sup> 35.7	+38° 45'		4/5/33	14		22 40		
2580 - 270	130, 948	14 <sup>h</sup> 48.7	+24° 04'		6/6/33	28		23 05	trace a	
2581 - 270	133, 640 44:80	15 <sup>h</sup> 02.6	+47° 48'		6/5/33	28		23 40	trace a, b	
2582 - 270	154, 345	17 <sup>h</sup> 01.8	+47° 07'		7/4/33	28		00 10	trace a, b, sky	
2583 - 270	176, 051	18 <sup>h</sup> 55.7	+32° 51'		7/3/33	28		00 40	trace a, b	
2584 - 270	182, 488	19 <sup>h</sup> 22.1	+33° 08'		7/4/33	28		01 15	trace a, b, sky	
2585 - 270	190, 360	20 <sup>h</sup> 02.1	+29° 49'			28		01 46		
2585 - 270	190, 406 155ga	20 <sup>h</sup> 02.5	+16° 58'		7/4/33			02 10	trace a, b	
2586 - 270	192, 163 WN6	20 10.7	+38 14		7/5/33	20		02 40	trace a	

dry ice in: 21<sup>40</sup> EST, 02<sup>00</sup> EST;  
 Dome Temp. .... 72 ..... vattag on 1 22<sup>15</sup>  
 Focus ..... 15.58 .....  
 Dome Temp. ....  
 Transparency Conditions ..... Good in zenith 120  
 very hazy at low alt.  
 23<sup>00</sup> - distinct yellow sunset  
 - haze all around horizon; otherwise night is clear  
 and no clouds exist

ing Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10	W 0 58	-21 13	0	6.3	B <sub>9</sub>	6-6-6	03 <sup>20</sup> light clouds SAT 138-139 mag, sun 6 { 0652 0654.5 dew with next day's plates	fine
			11"	0.03	A0V			
	23 31 W,		5"	5.75	d62		23 <sup>15</sup> : suspect haze ret position around 130, 948	
	3 46 W,		7"	5.26	d61			
	2 16 W, 02 27 W,		7"	6.77	G8V		00 <sup>30</sup> : moon in east; sky milky	
	01 06 W, 01 16 W		9"	5.36	G0V		← focus not too good	
	01 06 W, 01 15 W		8"	6.4	G8V			
				5.70	G6IV		make finder's field: for reverse run of track, star found towards edge of deep prism	
	1 14 W, 01 25 W		7"	5.80	d61		02 <sup>15</sup> : sky still milky; no clouds	
	1 55 W		6"	7.4			03 <sup>20</sup> : CLOUDS! after all high up in south. no 03 <sup>30</sup> : light cirrus clouds in south, west. clouds in east clouds apparent only in zenith at horizon	



PH loaded



Dome Temp. .... 6.8 .....

Focus ..... 15 47 .....

Dome Temp. .... 6.0 .....

Transparency Conditions ..... Good ..... 132

23:30<sup>h</sup> - few light clouds  
 00<sup>h</sup> - clear, transparency excellent  
 seeing 2-3 in zenith  
 02 - very light cloud cover  
 02:15 leaving dew forming  
 02:30 closed up because of dew & cloud

ding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
27	2 W 0 28	-21 12	1	6.3	B9	6-6-6	Set 5 B8-B9 prog	fine
12	W 0 33	-19 28	0-1	7.0	B8	6-6-6	" 5 " " "	fine
22	4 W 0 29	-25 29	0-1	6.7	B8	6-6-6	" 5 " " "	fine
13	1 W. 0 20	-00 30	1	6.34	B8	6-6-6	" 5 " " "	fine
39	2 W 0 18	-12 27	1	6.39	B9	6-6-6	" 5 " " " finder field " does not check	fine best
5	W 0 02	-14 53	1	6.14	B9	6-6-6	set 5 B8-B9 Prog.	fine
39	0 01 W -04 42	1 <sup>+</sup>	6.45	B9	6-6-6	set 5 " " "	fine	
24	0 27 W -10 45	1	6.47	B9	6-6-6	set 5 " " "	fine	
						20/16 set 9		OK at 2.0 v. 0.

dew 7 1/2 mm in 6 8° clear fine

(photographed)

3 PH loaded.

123

Date Tues-Wed July 16-17, 1963 Observer Hd MR Dg - CwJulian Day 2438227.

① 113 43 02.1

3435.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
26968	HD 172157	18 <sup>h</sup> 33.7	+43° 08'	I25	IIa06	set .008	+25.3°C	23 <sup>h</sup> 24	23 <sup>h</sup> 40	2
26969	HD 178744	19 <sup>h</sup> 04.7	-00° 36'	"	"	"	+25.6°C	23 <sup>h</sup> 50	00 06	3
26970	HD 190658	20 00.8	+15 13	"	"	"		00 15	01 13	1
26971	HD 199280	20 51.1	-03 57	"	"	"	+25.8°C	01 21	01 49	2
26972	HD 217312	22 54.8	+62 32	"	"	"		02 02	02 42	3
26973	HD 217348	22 55.0	+59 16	"	"	"		02 49	03 05	4
26974	HD 217833	22 58.4	+54 42	"	"	"	+25.6	03 12	03 28	1
26975	HD 216523	22 48.5	+49 53	"	"	"		03 34	03 50	2
	Focus Test									







Dome Temp. 78°F

Focus 15.67 - .11 = 15.56

Dome Temp. 73°F

dry ice : 210°; 2240  
Voltage : 700v

126

Transparency Conditions

2100: haze and clouds moving up from north  
2245: all clear except cirrus = 10° up from horizon in south; fair wind;

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20 <sup>39</sup> E, 00 <sup>27</sup> E		9"	6.4	G8V		23 <sup>45</sup> : perfectly clear all around except in south	
05' W		13"	2.03	A0V		23 <sup>55</sup> : a tiny bit of haze - clouds at western horizon too	
						00 <sup>00</sup> : cirrus clouds moving quickly up from horizon in east, north, west & south.	
						00 <sup>15</sup> : all clouded in; strong wind;	
						02 <sup>h</sup> clearing	
						- clouding up after a seeing observation	
						02 <sup>h</sup> 15' closed up	

137

Date Sat/Sun July 20/21, '63 Observer J - L Julian Day 2438231

① 117 32 06.6 3437.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
26976	HD 194939.	20 <sup>h</sup> 23.2	-03' 41'	I 25	Ilab	008	21.0 C	23 <sup>h</sup> 37	23 <sup>h</sup> 49	3
26977	16 CYG (1st)	19 39.2	+50 17	I 25	Ilab	008	+21.0	00 30	00 56	2
26978	HD 198513	20 45.7	+51 38 <sup>2</sup>	"	"	"	+21.0	01 00	01 14	1
26979	" 2021 <sup>+</sup> 9	21 08.9	-11 01	"	"	"	+21.0	01 22	02 20	4
26980	" 215143	22 38.0	-07 29	"	"	"	+21.0	02 25	03 37	1
	Focus Test				O T B					

Dome Temp. 68°F

Focus 15.48

Dome Temp. 66°F

170 visitors;  
"Universe" to 1<sup>st</sup> group  
M13 to second.

Transparency Conditions

Some haze

138

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
49 3	1 <sup>h</sup> 3E	-03 29	+1	6.1	B9	6-6-6	B8-B9 Pg. HR 7821; Sets; Len. 6	849 854 fine guiding
56 E	0 50W	50 26	2-3	6.37	G5V	6-6-6	MIK Sta. " 6	861 869 fine 1st
14 1	0 02W	51 47	1-2	6.26	B9	6-6-6	B8-B9 " 6	870 875 fine
20 4	0 43W	-10 46	1	6.47	B9	6-6-6	" " " 6	872 882 fine
37 1	0 32W	-7 09	1-0	6.28	B9	6-6-6	" " " 6	882 887 fine
						20/16		to violet
							2 P.H.s loaded.	



Dome Temp. .... 79 .....

Transparency Conditions .....

140

Focus ..... 15.57 .....

Some clouds

Dome Temp. ....

ing Time  
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
56	2 W 0 6	-26 14	0	5.9	B <sub>9</sub>	6-	Set 5 B <sub>8</sub> -B <sub>9</sub> Prog (clouds)	Senob { 0890 0891	weak
49	E 0 . 48	64 19	1	6.31	B <sub>9</sub>	6-6-6	" 5 " " "	Senob { 0895 0899	good guiding
30	4 W . 34	43 12	1	6.40	A <sub>5</sub>	6-6-6	" 5 Spect. Binary - N	" 6 { 900 904	fine guiding
20	10:40 E	+40° 27'	1	5.88	B <sub>8</sub>	6-6-6	" 5 B <sub>8</sub> B <sub>9</sub> Prog.	Senob { 0909 0914 0917	l. strong guiding
45	2 0:24 E		2	6.26	B <sub>9</sub>	6-6-6	" 5 - " -	Senob { 0922 0929	l. strong guiding complete
15	3 0:01 E	+50° 56'	2	6.30	B <sub>8</sub>	6-6-6	" 5 - " -	" 6 { 0924 0936	fine strong
37	4 0:12 W	+56° 32'	1	5.72	B <sub>9</sub>	6-6-6	" 5 - " -	" 6 { 0941 0942	l. strong
48	1 0:02 W	+52° 43'	1	5.90	B <sub>8</sub>	6-6-6	" 5 - " -	" 6 { 0947 0948	l. strong guiding
3	2 0:23 W	+55° 15'	1	6.04	B <sub>9</sub>	6-6-6	" 5 - " -	" 6 { 0953 0954	fine
25	3 0:43 W	+57° 05'	1	6.14	B <sub>8</sub>	6-6-6	" 5 - " -	" 6 { 0959 0971	fine comp weak
13	4 0:22 W	+56° 14'	1	6.37	B <sub>8</sub>	6-6-6	" 5 - " -	" 6 { 0976 0978	l. strong guiding
30	0:12 W	+59° 36'	1	6.36	B <sub>9</sub>	6-6-6	" 5 - " -	" 6 { 0983 0986	strong guiding
56	2 0:35 W	+55° 02'	1-0	6.45	B <sub>9</sub>	6-6-6	" 5 - " -	" 6 { 0991 0992	strong guiding
18	3 0:02 W	+59° 47'	1-0	6.37	B <sub>8</sub>	6-6-6	" 5 - " -	" 6 { 0997	four test superposed strong guiding

20/16

Comp ink towards via

4 P+1 loaded.

141

Mon-Tue

Date July 22-23 / 63

Observer H<sup>W</sup> - C<sup>W</sup>

Julian Day 2438233.

0119 26 42.0 3438.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 26.0	Starting Time E.S.T.	Ending Time E.S.T.	P
26995	HD 174853	18 47.5	+13 51	I25	IIa06	.008	26.0	23 12	23 44	1
26996	" 194939	20 23.2	-03 41	"	"	"		23 50	10 10	2
26997	HD 199280	20 51.1	-03 57	"	"	"		00 23	00 53	3
26998	HD 198513	20 45.7	+51 32	"	"	"	25.9	01 03	01 21	4
26999	HD 199578	20 53.1	+50 41	"	"	"		01 26	01 42	1
27000	HD 200614	20 59.4	+56 16	"	"	"		01 51	02 01	2
27001	HD 204428	21 23.4	+52 28	"	"	"	25.6	02 09	02 19	3
27002	HD 212937	22 22.8	+77 44	"	"	"		02 32	02 48	4
27003	HD 217312	22 <sup>34.8</sup> <del>57.2</del>	+62 32	"	"	"		02 59	03 37	1
27004	HD 217348	22 55.0	+59 16	"	"	"	26.0	03 41	03 51	2
27003a	Focus Test	0.7 <sup>B</sup> /17A								
					filed under	"focus test plates"				

Dome Temp. +74  
 Focus 15.56  
 Dome Temp. 70

Transparency Conditions Clearing at 2200? 142

00<sup>+</sup> light cloud in south  
 considerable haze  
 02 cloud patches

light, high clouds at dawn.

ing Time  
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
44	100 36W	+13 54'	0-1+	6.07	B9	6-6-6	Set 5 B8-B9 Prog. #7 0999 1009	fine
10	20 33 E	-03 29	0-1	6.01	B9	6-6-6	" " " #7 1011 1021	(10) fine
53	30 19 E	-03 42	0-2	6.45	B9	6-6-6	" " " #6 1022 1026	(4) fine
21	100 14 W	+51 46	1-2	6.26	B9	6-6-6	" " " #6 1027 1031	(4) fine & strong guiding
42	00 30 W	+50 56	1-2	6.30	B8	6-6-6	" " " many lines #6 1032 1036	(4) l. strong
06	200 44W	+56° 32'	0-1	5.72	B9	6-6-6	" " " #6 1038 1042	l. strong
19	300 37W	+52° 45'	3	5.90	B8	6-6-6	" " " #6 1043 1047	l. strong
48	400 07 W	+78° 02'	2-3	6.48	B9	6-6-6	" " " #6 1049 1053	strong guiding
37	100 24W	+62° 51'	3	7.8	B0IV	6-6-6	" Ad Bin # 1054 1079	(25) good guiding
51	00 37W	+59° 36'	2-3	6.36	B9	6-6-6	" B8-B9 #6 1081 1085	(4) only half of conv or plate rest off plate OK

20/116 Set 9

2PA loaded

143

Date Tue-Wed July 23-24, 1943 Observer Sim - C. J. Van Julian Day 21

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
2589-272	172,167 $\alpha$ Lyr	18 <sup>h</sup> 35.7	+38° 45'	-	5/3/33	28		20 <sup>40</sup>	frame a, b	
2590-272	172,051	18 <sup>h</sup> 36.7	-21° 05'		8/2/33	28		21 <sup>55</sup>	frame a, b	
2591-272	143,761	15 <sup>h</sup> 59.8	+33° 25'		7/3/33	28		22 <sup>35</sup>	frame a, b	
2592-272	144,579	16 <sup>h</sup> 03.7	+39° 15'		8/3/33	28		23 <sup>04</sup>	frame a, b	
2593-272	196,761	20 <sup>h</sup> 38.0	-23° 55'		8/3/33	28		23 <sup>25</sup>	frame a, l, c sky	
2594-272	176,051	18 <sup>h</sup> 55.7	+32° 51'		7/3/33	28		00 <sup>30</sup>	frame a, b	
2595-272	178,428	19 <sup>h</sup> 06.3	+16° 48'		6/6/33	28		01 <sup>05</sup>	frame a, b sky	
2596-272	164,922	18 <sup>h</sup> 03.9	+26° 19'		7/5/33	28		01 <sup>40</sup>	frame a, b sky	
2597-272	197,076	20 <sup>h</sup> 39.1	-19° 48'		6/6/33	28		02 <sup>15</sup>	frame a, b sky	
2598-272	12,697 12,698 $\gamma$ Sag	22 <sup>h</sup> 24.6	-16° 56'		7/4/33	28		02 <sup>55</sup>	frame a, b, c	



Dome Temp. +80°F

Focus .....

Dome Temp. ....

CO<sub>2</sub> in : 20<sup>10</sup> EST; 21<sup>45</sup> EST 01<sup>45</sup> EST

voltage : 700v

Transparency Conditions

Clear

144

20<sup>25</sup>: clear except few isolated cirrus clouds in north and haze at horizon all the way around (up to 2° alt. h.)

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
06	54 E, 1 <sup>36</sup> E	+38°46'	15"	0.03	A0V		instrumental difficulties in frame 2; Brown record	stuck
06	47 E, 0 <sup>37</sup> E		6"	5.69	dG4		suspect haze; but may be ok	
	0 W, 2 <sup>29</sup> W		9"	5.40	3-V=0.60		focused star	southern horizon is better
	0 W		8"	6.67	dG8		suspect haze there	21 <sup>30</sup> : Frank came to repair Brown rec
06	0 W, E 0 <sup>36</sup> E, 0 <sup>40</sup> E		8"	6.36	dG7		star found at edge of field of view in frame a	23 <sup>00</sup> : night clear except low in west
	0 W, 1 <sup>14</sup> W		9"	5.36 7.45	G0Z G0Z		star close to edge of frame 2	for 196,761 since star was so close to horizon
	56 W, 2 <sup>06</sup> W		9"	6.04	dG4		haze might very well have existed	
	44 W		8"	7.00	G8V		suspect haze	24 <sup>25</sup> : sky very clear; no clouds
	33 W, 1 <sup>43</sup> W		9"	6.46	dG2			01 <sup>20</sup> : band of cirri in SW 15° up;
	32 W, 0 <sup>41</sup> W		6.44	dG1			the binary system is replaced by 5-8 large cumulus cloud moving rapidly from N to S	
			6.30	dG2			both stars were put in making nearly vertical v. c. fields	to S along horizon; fair wind appeared
								02 <sup>25</sup> : all clear again

145

Date *Wed / Thurs*  
July 24/25 1963

Observer

MT  
VB - *Pa*  
- *Gr*

Julian Day 2438235

① 121 21 19.1 3439.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27004	HD 131861	14 50.9	+4543	25A	IlcOb	008	30.2	21:30	23:30	
27005	HD 140658	20 00.8	+1513	25"	IlcOb	008	30.0	23:35	00:29	2
27006	HD 194939	20 23.2	-03 41	"	"	"		00:39	01:03	4
27007	HD 200340	20 57.8	-01 19	"	"	"		01:08	01:32	1
27008	HD 197226	20 37.3	+38 43	"	"	"	30.2	01:41	01:57	2
27009	HD 215143	22 38.0	-07 29	"	"	"		02:10	02:32	3
27010	HD 216494	22 48.2	-12 09	"	"	"		02:36	02:52	4
27011	HD 222847	23 39.0	-18 50	"	"	"		03:03	03:13	1
27012	HD 216523	22 48.5	+49 53	"	"	"	30.3	03:38	03:48	2
27013	HD 217348	22 55.0	+59 16	"	"	"		03:52	04:00	3
	Focus Test									

Dome Temp.  $77^{\circ}$  <sup>60</sup>  
 Focus  $6?$   
 Dome Temp.  $76^{\circ}$

20:00 EST  $V=200$   
~~CO2 in~~

Transparency Conditions  $45\% C$  not p.e.  
 $60^{\circ}$  clear but hazy.

146

ing Time  
 E.S.T.

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
30		$+45^{\circ} 26'$	0-1	7.64	F3	6+6+6 SB	Scout only	Set 7
29	0 <sup>h</sup> 19 <sup>m</sup> W	$+15^{\circ} 25'$	0+	8.0	g17	6+6-6 SB	1098 - 1110 (VAB)	Set 7 good
3	0 27 W	$-03 28$	0	6.01	B9	6-6-6	set 5 38-39	#6 1111 1115 (D) fine
32	0 23 W	$-01 04$	0	<del>5.72</del> 6.26	B8	6-6-6	set 5 38-39	rev 6 1116 1120 fine complete
57	1 <sup>h</sup> 07 <sup>m</sup> W	$438 58$	0-1	6.42	B9	6-6-6	set 5 38-39	rev 6 1121 1125 fine
32	0 18 E	$-07 10$	0	6.28	B9	6-6-6	set 5 38-39	rev 6 1126 1130 l. strong guiding
52	0 07 E	$-10 48$	0	5.87	B9	6-6-6	set 5 38-39	rev 6 1131 1135 fine complete
13	0 37 E	$-18 28$	0	5.21	B8	6-6-6	set 5 38-39	rev 6 1137 1141 l. strong guiding
48	0 48 W	$+50 13$	1	6.42	B9	6-6-6	set 5 38-39	rev 6 1145 1149 l. strong guiding
14	0 55 W	$+59 37$	1	6.36	B9	6-6-6	set 5 38-39	rev 6 1150 1154 fine complete
						20/16	set 9	OK

3 PH loaded.

147

2000 I

(McClure)

Mc

-Civ

Date Thurs / Fri July 25 / 26 Observer .....Julian Day 2438236

© 122 19 38.3 3439.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
<del>27014</del>	<del>HD 194939</del>	<del>20 23.2</del>	<del>-03 41</del>	<del>I-25</del>	<del>DaOB</del>	<del>set .008</del>	<del>29.4</del>	<del>00:17</del>		<del>4</del>
<del>27014</del>	<del>HD 194939</del>	<del>20 23.2</del>	<del>-03 41</del>	<del>I-25</del>	<del>DaOB</del>	<del>set 1.008</del>	<del>29.4</del>	<del>00:26</del>	<del>01:10</del>	<del>4</del>
27014	HD 197018	20 35.9	+40 13	I-25	DaOB	1.008		01:17	01:37	4
27015	HD 199578	20 53.1	+50 41	I-25	DaOB	1.008	29.3	01:44	02:14	1
27016	HD 200614	20 59.4	+56 16	I-25	DaOB	.008		02:19	02:39	2
27017	HD 217348	22 55.0	+59 16	I 25	DaOB	.008	29.2	02:44	03:18	3
27018	HD 216523	22 48.5	+49 53	I-25	DaOB	1.008		03:22	03:46	4
	} Focus Test									

Dome Temp.  $78^{\circ} F$   
 Focus  $15.72 - .11 = 15.61$   
 Dome Temp.  $75^{\circ}$

Transparency Conditions  $\infty^h$  Extremely hazy 148

$\infty^h$  - opened up (clear area  $21''$ )  
 02:30 hazy (smog?) worse extinction  $1.2^m$

ng/Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			0	6.01	B9	6	set 5 B8-B9 sens 6 1156	⊙ there but very weak
10	0 37 W	-03 29	0	6.01	B9	6-6-6	set 8 B8-B9 sens 6 1158	
17	4 0 54 W	+40 27	0 <sup>+</sup>	5.88	B8	6-6-6	set 8 B8-B9 sens 6 1162	⊙ fine
14	1 <sup>h</sup> 13 <sup>m</sup> W	+50 56	0 <sup>+</sup>	6.30	B8	6-6-6	set 5 B8-B9 sens 6 1166	fine
39	2 1 33 W	56 32	0 <sup>+</sup>	5.72	B9	6-6-6	set 5 B8-B9 sens 6 1171	fine
18	3 0 16 W	+59 37	0+	6.36	B9	6-6-6	set 5 B8-B9 sens 6 1176	fine scratched comp dark
46	4 0 50 W	+50 12	0+	6.42	B9	6-6-6	set 5 B8-B9 sens 6 1181	dist. v. strong, quibing
						20/16	set 9	OK sl + to vio.

2  
 good

after a false start, focussed telescope + rebalanced exposure meter + then forgot to open plate holder!  
 at least Bob got some practice!



Dome Temp. .... 82° F

Focus ..... 15.63

Dome Temp. ....

Transparency Conditions

lazy

150

Sly per all night

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00	W 0 <sup>m</sup> 23	+43 12	0-1	6.40	A5	6-6-6	set 5 Spect. Binary - N	good guiding
10	21 01 W	-00 30	0	6.34	B8	6-12	» 5 B8-B9 Prog. A.F.W.A.P.	l. wk scratched comp work
54	3 20 18 W	+26 21	0-1	5.50	B9	6-6-6	" 5 " " "	#7 1204 1198.9 1214 fine comp work
			0-1	5.88	B8	6-6	" 5 " " "	#7 1217 fine comp work
56	5 11 6 W	+40 27	"	"	"	6-12	" 9 " " "	#7 1235 1245 lots. guiding comp work
51	12 24 W	+25 15	0	6.42	B9	6-6-6	" 5 " " "	#7 1249 1256 good may be
						20/15	" 9	OK et cetera

4 P.H. Loaded.

151  
 VISITORS: ~160.

1ST HOUR: CLOUDY

2ND HOUR: SHOWED M13; 21:30-22:30 EST : Py. Sq.

Sat-Sun

Date 27/28 JULY

Observer R.M.

Julian Day 2438238

0124 13 18.1 3440.5

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
27024	HD 187235	19 43.9	38° 09'	I 25	II aob	.008"	31°C	23:30	23:46	1	0:03
27025	HD 190658	20° 00.8	15° 13'	1 "	"	"	"	00:07	00:47	2	0:45
27026	HD 199892	20° 54.9	41° 33'	"	"	"	"	00:57	01:11	3	0:16
27027	HD 204428	21 23.4	52° 28'	"	"	"	"	01:25	01:32	A	0:11
27028	HD 204754	21 25.7	54° 59'	"	"	"	"	01:44	01:59	1	0:34
27029	HD 212454	22° 19.3'	56° 47'	"	"	"	"	02:09	02:21	2	0:22
Focus test.											
02:20 clouded over											



Dome Temp. 80° E

Transparency Conditions .....

152

Focus 15.67

Dome Temp. ....

02:00 clouds drifting in from S.W.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
1:46	0:03 N		1	5.65	B <sub>9</sub>	6-6-6	Set 5 Sans 6 B <sub>8</sub> B <sub>9</sub> Prag.	1269 1274 1279	strong
1:47	0:45 W	15° 24'	1	8.0	9M <sub>2</sub>	6-6-6	" Sans P Hi. Vel. Spec. Bin.	1319 1326	good strong
1:51	30:16 W	41° 48'	0	6.01	B <sub>9</sub>	6-6-6	" Sans 6 B <sub>8</sub> B <sub>9</sub> Prag.	1331 1334	guiding strong
1:52	0:11 W	52° 45'	0	3.90	B <sub>8</sub>	6-6-6	" " — " —	1337 1343	strong guiding
1:59	0:34 W	55° 15'	0	6.04	B <sub>9</sub>	6-6-6	" " — " —	1348 1350	strong fine
2:01	2:02 W		0	6.14	B <sub>8</sub>	6-6-	" " — " —	1355	guiding
						20-16	Set 9.		c to red

2 PH loaded.



Dome Temp. 77°

Focus 15.61

Dome Temp.

Transparency Conditions

light cloud.

01<sup>h</sup> heavy cloud from NW

154

Starting Time E.S.T.	Hour Angle End	Declination	Secing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
06 3	01 37 E	+50 13	0 <sup>+</sup>	6.42	B9	6-66	set 5 B8-B9 Program #6 1362 1366	fine
<p>01:20 closed up</p> <hr/> <p>4 PH loaded +1</p>								

155

Date July 29/30 Mon/Tu 1963 Observer MT - CW Julian Day 2438240  
 @ 126 07 59.7 3441.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	
2599-273	$\eta$ Her	16417	+3859		5/6 133 28			20:40	ab	
2600-273	$\lambda$ Sco	15447	+0738		5/6 133 28			2105	ab	
2601-273	$\zeta$ Her	1640.3	+3140		5/5 133 28			2130	ab	
2602-273	HD 152792	1652.5	+4252		7/5 133 28			2155	ab + sky	
2603-273	HD 172051	1836.7	-2105		7/4 133 28			2225	ab	
2604-273	$\alpha$ Lyr	1835.6	+3845		4/5 133 20			2250	52-36	
2605-273	HD 179957	1911.1	+4944		7/4 133 28			2320	ab	
2606-273	$\sigma$ Dra	1938.5	+6936		6/5 133 28			2345	ab	
2607-273	Saturn	2134.4	-1542		5/4 133 28			0015	52-34	
27031	HD 182308	19 <sup>h</sup> -19.0	+64°13'	I-25	IIa0B	.008	21.0°C	0045	0107	1
27032	HD 202753	21 12.9	-04 57	I-25	IIa0B	.008	"	0119	0143	2
27033	HD 216499 <sup>4</sup>	22 <sup>h</sup> 48.2	-12 09	L-25	IIa0B	.008	"	0156	0214	3
27034	HD 215143	22 38.0	-07 29	I-25	IIc0B	.008	20.6°C	0221	0249	4
27035	HD 222847	23 39.0	-18 50	I-25	IIa0B	.008	"	0305	0319	1
27036	HD 1064	00 09.8	-10 07	I-25	IIa0B	.008	"	0329	0357	2
	Focus Test									

Dome Temp. 64°  
 Focus 15.48  
 Dome Temp. ....

CO<sub>2</sub> in } 1945  
 V = 700 }

Transparency Conditions Fine, Polw AN PERFECT! 196  
 D 7d Seeing poor, better later  
 02:15 aurora extremely strong  
 03:05 " " " "

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 17W, 00 27W		12"	3.46	S III-IV		auroral display quite spectacular. - large arc extending 45° in azimuth on either side of pole. It subsides & quivers with bands running up in streamer form to about altitude 75° in the north.	
02 08 W, 01 18 W		12"	4.43	S IV			
03 21W + 131W		10"	2.82	S OE			
04 07W 00 17W		8"	6.81	S IV			
05 04 33W		8"	5.69	dsy			
06 27W 00 37W		0.0		A0V	EXIST		
07 031W, 041W		5"	6.75	S IV		A+B in display sep ~ 7"	
08 00 59		8"	4.68	KO V			
09 01 57W + 64 19		-	0.5			no ♂	
10 0-36W -04 42		0	6.31	B9	6-6-6 set 5	B8-B9 prog. #6	1367 1371 fine
11 0-26E -11° 48'		0	5.63	B8	6-6-6 set 5	B8-B9 prog #6	1372 1376 fine
12 0-18W -7° 09'		0	5.87	B9	6-6 set 5	B8-B9 " #6	1377 1381 fine
13 0-13E -18° 27'		0	6.28	B9	6-6-6 set 5	B8-B9 " #6	1383 1387 fine
14 0-11E -9° 46'		0	5.21	B8	6-6-6 set 5	B8-B9 " #6	1389 1393 fine
15 0-11E -9° 46'		0	5.74	B9	6-6-6 set 5	B8-B9 #6	1395 fine
				20/16	set 9	3 PH loaded	

c to vio.

157

Date July 30/31 1-1/2 1963 Observer vdB RM Julian Day 2438241.

0127 05 21.3 3442.1

Plate No.	Object	R.A. 1000	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Exp.
2608-274	$\lambda$ Sco	15 44.7	+07°28'		615133	78		20 40	20 55		1.5w
2609-274	$\eta$ Cor B	15 21.7	+30 25		615133	78		21 05	21 15		2.0w
2610-27 <sup>1/2</sup>	HD 144579	16 03.7	+39 15		714133	78		21 30	21 55		1.4w
27037	HD 190658	20 00.8	+15°13'	25"	IIaOB	008	21°	22 33	23 43	3	0.9"
27038	HD 193452	20 15.2	-15 06	I 25	IIaOB	008		23 50	00:22	4	00.7
27039	HD 194939	20 23.2	-03.41	"	"	"	21.50	00:30	01:03	1	0.5
27040	HD 216494	22 48.2	-12 27	"	"	"	"	01:22	01:40	2	0.7
27041	HD 224424	22 52.5	+59°28'	"	"	"	"	02:06	02:30	5	0.1
27042	HD 30008	0 26.6	+45 12	"	"	"	"	02 51	03 19	4	0.7
27043	HD 1279	0 11.9	-41 24	"	"	"	"	03 00	03 30	1	0.5
	Focus Test										

fresh developer  
& fixer

Dome Temp. ....  
 Focus 1550  
 Dome Temp. ....

V=700 }  
 CO<sub>2</sub> in } 1950

Transparency Conditions 8<sup>d</sup> D  
 2845 cloudless moon  
 p.c. clouded out

1 isolated Cl.

158

ing Time  
 E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:15W + 1:23W		8"	4.43	50Z		sky OK	
2:04, 2:02W		7"	5.63 5.92	52Z		sky OK A+B	
1:44W 1:52W		6"	6.67	498		cloud dangi!	
0 <sup>h</sup> 07 <sup>m</sup> E	+15° 24'	0 <sup>+</sup>	8.0	9M2	6+9+6	(vdB) SB 1401 - 1440	fine
00:17W	-14° 53'	6+	6.14	B9	6+6-6	Sens 6 1444 - 1449 B8-B9	fine
00:53W		0	6.01	B9	6-6-6	Sens 6 B8 B9 Prog Set 5 1450 1454 <sup>2</sup>	fine - 1st.
20:47E	-11° 49'	0	5.87	B9	6-6-6	Sens 6 B8 B9 Prog Set 5 1456 1461	fine
11E		0	6.37	B8	6-6-6	Sens 6 B8 B9 Prog, Set 5 1462 1467	fine thickening complewk
0:59E	+66° 33'	0	6.40	B9	6-6-6	Sens 6 B8 B9 Prog set 5 1468 1473	fine complewk
00:00 X	+47° 45'	0	5.77	B9	6-6-6	Sens 6 - # — set 5 1477 1482	fine
					20/16	set 9,	OK de to via

4PH loaded.

Thin cloud in west of sky for most of night.







visitors: ~60 from U of T. Showed M13, 20:30-21:20 EST. - Py.  
 Tried moon on celostat, but not bright enough.

161

Date Aug 1/2 Thurs-Fri 1967 Observer Cu - Cu Julian Day 2438243.

0 129 00 06.3 3443.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27044	HD 170973	18 <sup>h</sup> 27.1	+03° 35'	I-25	IIa0B	.008	21.1	21:36	22:04	1
27045	HD 174853	18 <sup>h</sup> 47.5	+13° 51'	I-25	IIa0B	.008	21.1	22:20	22:34	2
27046	HD 178065	19 <sup>h</sup> 02.1	+00° 30'	I-25	IIa0B	.008	21.1	22:42	23:00	3
27047	HD 190658	20 <sup>h</sup> 00.8	+15° 13'	I-25	IIa0B	.008	21.1	23:26	00 16	4
27048	HD 199280	20 <sup>h</sup> 51.1	-03 57	I-25	IIa0B	.008		24:23	00:51	1
27049	HD 202753	21 12.9	-04 57	I-25	IIa0B	.008		00:59	01:17	2
27050	HD 209819	22 01.0	-14 21	"	"	"		01:24	01:32	3
	} Focus Test									

Dome Temp.  $65^{\circ}$   
 Focus 15.48  
 Dome Temp. ....

Transparency Conditions *poor - bright moon, haze  
 & light cloud  
 00<sup>h</sup> more light cloud  
 & dew starting to form* 162

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
04	0 <sup>h</sup> 5 <sup>m</sup> E	+3° 37'	0	6.32	B9	6-6-6	set 5 BB-B9 - (dbl lines) #6 1490 1494	fine guiding
24	0 <sup>h</sup> 6 <sup>m</sup> W	+13° 55'	0	6.07	B9	6-6-6	set 5 " " #6 1496 1500	good
05	0 <sup>h</sup> 36 <sup>m</sup> W	+10° 35'	0+	6.42	B9	6-6-6	set 5 BB-B9 prop. #6 1502 1505	fine
16	0 <sup>h</sup> 35 <sup>m</sup> W	+15 24	0 <sup>+</sup> 1	8.0	M2	9-9-9	set 5 (VdB) SB #8 1506 5	fine
51	0 <sup>h</sup> 18 <sup>m</sup> W	-03° 42'	0	6.45	B9	6-6-6	set 5 BB-B9 #6 1547 1551	fine
17	0 <sup>h</sup> 23 <sup>m</sup> W	-04 41	0 <sup>-</sup>	5.63	B8	6-6-6	set 5 BB-B9 #6 1552 1556	fine
32	0 10 E	-14 01	0	4.30	B8	12-6	set 5 BB-B9 #6 1557 1561	l. st. guiding
						20/16	set 9	c to violet

01:45 closed up  
 - light cloud & heavy dew  
 background fog level  
 higher with fresh  
 developer  
 2 PH loaded.

163

Date Sun/Mon 4/5 Aug 63 Observer Gh Gh Julian Day 2438246

☉ 131 52 19.1 3446.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	How Ang End
27051	169033	18 17.6	-12 03	T-25	IIa06	0.008	20.0	21 30	21 43	4	E 00
52	177817	19 01.1	-16 23	" "	" "	0.008	20.0	21 55	22 35	1	W 00
53	193452	20 15.2	-15 06	" "	" "	0.008	20.0	23 06	23 27	2	E 00
54	192666	20 10.9	-12 39	" "	" "	0.008	20.0	23 38	23 58	3	E 00
55	190658	20 00.8	+15 13'	" "	" "	0.008	20.0	00 11	00 31	4	W 00
56	202149	21 08.9	-11 01	" "	" "	0.008	20.0	00 43	01 11	1	W 00
57	202753	21 12.9	-4 57	" "	" "	0.008	20.0	01 21	01 32	2	W 00
	Focus test										

Dome Temp. .... 66° .....

Focus ..... 15.47 .....

Dome Temp. .... .....

Transparency Conditions ..... Full Moon

164.

ing Time  
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
43	E 00 03	-12 02	0-1	5.68	B <sub>8</sub>	6-6-6	set 5 B <sub>8</sub> -B <sub>9</sub> Prog. pens-7 { 1571 1581	good
35	W 00 04	-16 18	0-1	5.88	B <sub>8</sub>	6-6-6	set 5 B <sub>8</sub> -B <sub>9</sub> Prog. " 7 { 1585 1595	fine fine many lines
27	E 00 17	-14 53	1	6.14	B <sub>9</sub>	6-6-6	set 5 B <sub>8</sub> -B <sub>9</sub> " " 7 { 1599 1609	fine
58	N 00 17	-12 27	0-1	6.39	B <sub>9</sub>	6-6-6	set 5 " " pens 7 { 1611 1621	fine
31	N 1 02	+15 24	0-1	6.56 <sup>8.0</sup>	M <sub>2</sub>	6-6-6	set 5 Hi vel. Spectroscopy Binary (Vd B) " 7 { 1622 1632	fine good many guiding lines
44	N 00 33	-10 45	0	6.47	B <sub>9</sub>	6-6-6	set 5 B <sub>8</sub> -B <sub>9</sub> Prog. " 7 { 1633 1643	fine
32	W 00 50	-4 40	0-1	5.63	B <sub>8</sub>	6-6-6	set 5 " " " " 7 { 1645 1654	centre to violet
						20/16	set 9	

3 P.H. loaded









Dome Temp.  $+78^{\circ}\text{F}$   
 Focus  $15.67 - .11 = 15.56$

Transparency Conditions *Hy. Clouds until 20:45. then wispy.* 168

Dome Temp. ....

ding Time  
E.S.T.

	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
55	0 <sup>h</sup> 5 <sup>m</sup> W	+12° 36'	0	2.14	A5 III	6-6-6	pet 5 MK STD. Prog. #4	{ 1925 fine 1927 fine
35	0 <sup>h</sup> 35 <sup>m</sup> E	+13° 55'	0 <sup>+</sup>	6.07	B9	6-6-6	pet 5 B8-B9 - dbl line. #6	{ 1933 L.W.K. 1937 L.W.K.
38	0 <sup>h</sup> 45 <sup>m</sup> W	+43° 12'	1 <sup>+</sup>	6.40	A5	6-6-6	pet 5 N S.B. period 1.3. #6	{ 1939 good 1943 guiding

NO FOCUS TEST!

22:45 closed up. Heavy cloud

3 P.H. loaded.

169

Date Aug. 7/8 1934 Wed + Thur Observer Sm - Sm <sup>Gh - Gh</sup> <sup>mt - RM</sup> 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
275-2611	172,167 Vega	18 <sup>h</sup> 35. <sup>m</sup> 7	+38° 45'		5/4/33	14		20 <sup>40</sup>		
275-2612	165,201	12 <sup>h</sup> 04. <sup>m</sup> 0	04 <sup>h</sup> 01'		2/3/33	28		21 <sup>00</sup>	trace a	
275-2613	154,345	17 01.8	+47° 07'		8/3/33	28		21 <sup>55</sup>	trace a, sky	
275-2614	160,269 26 Dec	17 34.6	+61° 54'		8/2/33	28		22 <sup>30</sup>	trace a, b	
275-2615	182,572	19 23.3	+11 52		8/2/33	28		23 <sup>10</sup>	trace a, b	
275-2616	187,923	19 50.5	+11 34		8/3/33	28		23 <sup>35</sup>	trace a, b	
275-2617	182,488	19 22.1	+33 08		8/3/33	28		00 <sup>13</sup>	trace a, b	
275-2618	179,957 <sup>A</sup> .3	19 11.1	+49 44		8/3/33	28		01 <sup>00</sup>	trace a, b	
275-2619	186,427 <sup>A</sup> .6	19 40.9	+50 25	<sup>19</sup> / <sub>6</sub>	8/3/33	28		01 <sup>42</sup>	trace a, b	
275-2619	"	"	"		8/4/33	28		03 <sup>00</sup>	trace a, b	

Dome Temp. ....

Focus .....

Dome Temp. ....

dry ice in : 19<sup>05</sup> EST  
Voltage : 700v

Transparency Conditions .....

Moon up 170

19<sup>00</sup>: sky perfect20<sup>00</sup>: strong wind. thin white veil covering

all of sky; haze uniform

ding Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
44 <sup>W</sup> of 41		13"	0.03	A0 I		20 <sup>45</sup> : instrumental difficulties; low level of 2000	
41 <sup>W</sup>		7"	6.79	G2 V		keeps dropping down from 12; called Frank	
45 <sup>W</sup>		7"	6.77	G8 V		21 <sup>45</sup> : thin haze everywhere; uniform; seeing	
46 <sup>W</sup> , 01 <sup>56</sup> W		9"	5.31	G0 V		20 <sup>00</sup> : sky variation, Milky Way not out; good	
36 <sup>W</sup> , 00 <sup>46</sup> W		10"	5.17	G8 V		it was focused	
37 <sup>W</sup> , 00 <sup>49</sup> W		7"	5.78	G2 V			
44 <sup>W</sup> , 01 <sup>52</sup> W		8"	6.4	G8 V			
4 <sup>W</sup> , 02 <sup>57</sup> W		9"	6.75	G4 V		A+B in diaphragm	
32 <sup>W</sup> , 03 <sup>50</sup> W		8"	6.20	G5 V		02 <sup>05</sup> : - instrumental difficulties: 1-2	
4 <sup>W</sup>		9"	5.96	G2 V		- amplifier drops suddenly to zero - and previous <sup>o.k.</sup> ampl. factor causes 2000 scale deflection fixed it with R. Miller	
						02 <sup>20</sup> : amplifier checks out again - 2000 scale	
						02 <sup>45</sup> : sky same as before - MOON UP	

571

Date Aug 3/9, Thur. Fri

Observer

RM  
Sm - HW

ME

Julian Day 2438250

① 135 42 10.0 3450.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour En
276-2620	172,051	18 <sup>h</sup> 36.7	-21° 05'	6/6/33	28			22 <sup>00</sup>	focus		9 <sup>00</sup> V
276-2621	196,761	20 <sup>h</sup> 38.0	-23° 55'								
27070	HD 190857 MWC 395	20 <sup>h</sup> 00.8	+15 1'	I-25	II aob	.008	24°	01:05	1:29	2	02 <sup>00</sup> W
27071	HD 217543	22 <sup>h</sup> 56.3	+38° 10'	I-25	II aob	.008	24	02:03	02:47	3	00 <sup>30</sup> W
27072	HD 1279	0 <sup>h</sup> 11.9	+47° 24'	I-25	II aob	.008	24	02:55	03:05	4	0 <sup>00</sup> 22
27073	HD 7546 } focus test	1 <sup>h</sup> 10.5	+47° 33'	I-25	II aob	.008	24	03:16	03:36	1	0 <sup>00</sup> 48

Dome Temp. ....

Focus 15.53

Dome Temp. 58°

CO<sub>2</sub> m: 210.5

Voltage: 700V

Transparency Conditions .....

20<sup>30</sup>: sky cloudy & hazy21<sup>15</sup>: clearing all over

but upon at horizon still hazy. &amp; no data

11:55 AM 172 E

ding Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 <sup>15</sup> W			5.69	d64		focused star ← 22 <sup>14</sup> : light cumulus clouds moving over star	
						22 <sup>20</sup> : sky all clouded over again except close to horizon in east; very little haze there too	
						22 <sup>24</sup> : clouds moving over 196,761 too !!	
						22 <sup>25</sup> : solid front moving up from west. up 50°	
2 <sup>15</sup> W	15° 24'	0	8.0	M2	9-9	set 5 vdB SB #8 { 1945	fine
3 <sup>10</sup> W	+38° 31'	0 <sup>+</sup>	6.4	B3ne	6-6-6	set 5 Be Prog. - Hd. #6 { 1977	fine
4 <sup>0</sup> 22 E	+47° 44'	0 <sup>+</sup>	5.77	B9	6-6-6	set 5 B8-B9 prog. #6 { 1982	comp. with
10:48 E	+47° 53'	0 <sup>+</sup>	6.45	B8	6-6-6	set 5 " #6 { 1983	fine
					set 9		good

Scanned at 2930

173

Date Fri/Sat 9/10 <sup>Aug</sup> Observer GH - RM <sup>Sm - Sm</sup> Julian Day 2438251  
 @ 136 39 40.7 3452.1

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
<u>27074</u>	158704	17 25.6	-26 11	I-25	520b	0.008	22.0	20 54	21 22	2
277-2621	172,051	18 <sup>R</sup> 36.7	-21° 05'	I	616/33	28	21 <sup>50</sup>		trace a, b	
277-2622	142,267	15 51.6	+13 20		7/4/33	28	22 <sup>22</sup>		trace a, b, sky	
277-2623	182,572	19 23.3	+11 52		6/5/33	28	23 <sup>06</sup>		trace a, b	
277-2624	196,761	20 38.0	-23 55		8/3/33	28	23 <sup>43</sup>		trace a, sky, b,	
277-2625	197,076	20 39.1	+19° 48'		6/6/33	28	00 <sup>40</sup>		trace a, b, sky	
277-2626	208,776	21 56.8	+03° 37'		7/5/33	28	00 <sup>08</sup>		trace a, b, sky	
277-2627	175, <sup>STANDARD</sup> Vega	12° 25.7	+08° 45'		4/5/33	28	02 <sup>10</sup>		trace a	
277-2628	15, <sup>STANDARD</sup> 5185 Cat	02 <sup>h</sup> 26.2	+08° 18'		6/4/33	28	02 <sup>55</sup>		trace a	
277-2629	217,014 519y	22° 01.9	+20° 35'		7/5/33	28	03 <sup>45</sup>		trace a, b	

Dome Temp.  $68^{\circ}$ Focus  $15.5a$ 

Dome Temp. ....

CO<sub>2</sub> in :  $20^{45}$   $00^{35}$   
Voltage : 700VTransparency Conditions  $good$  Moon  $up$ 21<sup>00</sup> : sky perfect  
21<sup>36</sup> : sky perfect all around  
night possibly here  $6^{\circ}$  up over city in S  
or about in place from city lightsding Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 46W	$-26 14$	0	5.9	B <sub>9</sub>	6-6-6	Set 5 - B <sub>8</sub> B <sub>9</sub> Prog.	also 6 { 1997 good 1998
00 <sup>11</sup> W, 00 <sup>24</sup> W		8"	5.69	dG4		22 <sup>10</sup> : black cumuli at horizon in E $4^{\circ}$ up	
00 <sup>30</sup> W, 00 <sup>34</sup> W		9"	6.10	G <sub>2</sub> V		← 22 <sup>45</sup> : star found drifting quite a bit in field of view	
00 <sup>42</sup> W, 00 <sup>50</sup> W		10"	5.17	G <sub>8</sub> V		← 22 <sup>55</sup> : had found visitor star of V <sub>12</sub> but not in field of view	
00 <sup>55</sup> W, 00 <sup>28</sup> W		10"	6.36	dG7			
01 <sup>00</sup> W, 01 <sup>11</sup> W		7"	6.46	dG2		00 <sup>53</sup> : sky perfect	
01 <sup>15</sup> W, 01 <sup>05</sup> W		7"	6.94	G0V		01 <sup>18</sup> : visitor's eyepiece light on for train & again	
01 <sup>44</sup> W		13"	0.03	A0V		01 <sup>25</sup> : sky still fine	
02 <sup>00</sup> W		11"	4.27	B <sub>9</sub> III		moon is quite close to 15,318, - ran out of paper	
02 <sup>50</sup> W, 2 <sup>09</sup> W		5.53	G5V			04 <sup>04</sup> : brown recorder pen makes trouble - its slight does not pull it out sufficiently to give ink	
						for 2629 b, sky growing very bright	
						some plates have been exposed at one end they are marked in book as #27074 (with -)	





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

Transparency Conditions .....

176

Focus  $15:50$ 

Dome Temp. ....

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3:28	01:50 W	$-43^{\circ} 11'$	2	6.40	A <sub>s</sub>	6-6	N Spec Bin. Set s Sens 6	2017 guiding on plate moved during exp. ?? good
4:01:22	01:22 W	$+15^{\circ} 23'$	2	8.0	9M <sub>2</sub>	6-12 20/16	Hi. Vel. Spec Bin. Set s Sens 8 Set 9	2021 2023 l wk + some com. + some sl c to violet
Clouded over.							00:00 - 00:30	



Dome Temp. ....

Focus .....

Dome Temp. ....

dry ice in: 20<sup>35</sup>, 23<sup>45</sup>  
voltage: 700V

Transparency Conditions

20<sup>30</sup>: yellow sunset  
21<sup>30</sup>: night perfect

178

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 <sup>22</sup> W, 00 <sup>43</sup> W		8"	6.28	G5		- this tracing strip, perhaps too long set up to night	
00 <sup>1</sup> W, 00 <sup>2</sup> W		7"	6.79	G2V		in amplifier	
01 <sup>32</sup> W, 01 <sup>48</sup> W		9"	6.58	G5V		21 <sup>40</sup> : excellent night, Milky Way out,	
1 <sup>41</sup> W, 01 <sup>53</sup> W		8"	7.0	G8V		stars visible in Septentrios even low over city	
15' W		14"	0.03	A0V			
1 <sup>01</sup> W, 01 <sup>14</sup> W		9"	5.78	G2V			
00 <sup>5</sup> W, 00 <sup>56</sup> W		10"	5.08	d62		- focussed star	
00 <sup>30</sup> E, 00 <sup>0</sup> E		8"	6.44	d61		00 <sup>5</sup> : still all clear, cold & windy	
00 <sup>40</sup> W, 00 <sup>49</sup> W		8"	6.30	d62		00 <sup>30</sup> : focussed star 00 <sup>30</sup> : Moon in east, 00 <sup>46</sup> : drawing of both stars together	
00 <sup>1</sup> W		7"	6.14	G0			
						- 02 <sup>09</sup> : cirrus into brechtas covering <sup>many</sup> stars whole sky	
						02 <sup>10</sup> : cirrus cloud to right & left of J 217, 166; the stars appear, probably be all cirrus or here only thin haze	
						02 <sup>25</sup> : western horizon pushing through all stars of sky around the horizon	



Dome Temp.  $63^{\circ}$   
 Focus 15.43  
 Dome Temp. ....

CO<sub>2</sub> in: 21<sup>45</sup> EST  
 Voltage: 700V

Transparency Conditions *Very light cloud patches*  
 21<sup>40</sup>: sky perfect

180

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
45	0 52W	-25° 27'	0	6.7	B8	6-6-6	set 5 B8-B9 programme #6 2147 2151	fine	
31	0 27W	-19° 17'	0+	6.7	B8	6-6-6	set 5 B8-B9 #6 2153 2156	fine spots scratched	
	22 <sup>25</sup> W		5"	5.31	G0I				
	20 <sup>26</sup> W 00 <sup>41</sup> W		8"	3.71	G8IV		22 <sup>55</sup> : sky perfect all over except at horizon ~ 5° up		
	22 <sup>24</sup>		10"	0.03	A0I		23 <sup>14</sup> : ink stopped running		
	21 22W		7"	5.70	G6IV				
	<del>3 12 L</del>			6.44 6.30	d6I d62		00 <sup>18</sup> : air moving up quickly in SE, S, SW reaching ~ 70° up		
40	0:12 E	+2° 29'	1	8.7	G5	6-6-6	set 5 Ecl Spec Bin Sens 8 2198	40 fine	
30	0:25 E	+56° 57'	0	6.49	B8	6-6-6	set 5 B8-B9 Prog Sens 6 2209 2213	4 fine guiding	
44	3 0:17 E	+47° 15'	1-2	5.77	B9	6-6-6	" " " 2215 2219	4 strong guiding	
14	0:0	+59° 46'	1	5.90	B9	6-6-6	" " " 2230 2234	4 strong guiding	
50	0:10 E	+47° 55'	1	6.45	B8	6-6-6	" " " 2245	4 strong	
12	0:0	-40° 07'	1	6.39	B9	6-6-6	" " " 2247	fine	
						20/6	set 9	3PH loaded	good

181

Date Thu - Fri 15/16, Aug. 63 Observer Cm Sm - HS Julian Day 2438257  
 0142 25 15.5 3461.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27085	171957	18 <sup>h</sup> 32.4 <sup>m</sup>	-14° 06'	I 25	IIaOB	.008	18°	20 26	20 40	3
280 -2644	157,214	17 <sup>h</sup> 19.3	+32° 31' <sup>star could only be seen at 32° 42'</sup>	7/4/33		28		20 53		
-2644	172,167 Vega	18 35.6	+38° 45'	4/5/33		28			a	
-2645	179,957 <sup>not 2nd</sup> 179,958 <sup>together</sup>	19 11.1	+49° 44'	6/6/33		28		21 44	a, sky	
-2646	187,923	19 50.5	+11° 34'	6/6/33		28		22 10	e, b	
-2647	190,067	20 00.7	+15° 29'	7/5/33		28		22 40	a, sky	
-2648	190,360	20 02.1	+29 49'	7/4/33		28		23 00	e, b	
-2649	193,664	20 17.1	+66° 45'	6/6/33		28		23 33	a	
-2650	190,406 S5ge	20 02.5	+16° 58'	6/6/33		28		23 48	a	
27086	HD 1256	00 11.7	-20 46	I-25	IIaOb	.008	18.2	00 58	01 46	4
27087	" 8837	01 22.0	+39 48	"	"	"	"	01 58	02 12	1

Dome Temp. 63°F  
 Focus 15.44  
 Dome Temp. ....

CO<sub>2</sub> in : 1915  
 voltage : 700V  
 2000 miles

Transparency Conditions .....  
 19<sup>00</sup>: all clear except a few stars  
 20<sup>00</sup>: cirrus covering S, W, N up to 20°

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 38 E	-14 01	0"	6.43	B9	6-12	sets B8-B9 #6 2254 2256	good
			5.39	G2V		one star	
0 <sup>15</sup> W		8"	0.03	A0V		20 <sup>45</sup> : amplifier dark level kept jumping all over - called Frank	
0 <sup>03</sup> W		4"	6.75	G4I		21 <sup>00</sup> : keep getting wrong star, in the prepared	
0 <sup>14</sup> E, 00 <sup>03</sup> E		4"	5.78	G2V		finder's field of 157, 214 gives $\delta = 32^\circ 41'$ , but then got A0 type	
0 <sup>07</sup> W		3"	7.1	G8V		21 <sup>45</sup> : sky perfect at position of 179, 957	
0 <sup>27</sup> W, 00 <sup>37</sup> W		4"	5.70	G6IV		21 <sup>55</sup> : fine all over except one cumulus a 2° up in S	
0 <sup>26</sup> W		3"	5.94	G5V		22 <sup>26</sup> : haze in S = 30° up	
1 <sup>19</sup> W		5"	5.80	dG1		22 <sup>36</sup> : haze in S = 40° up - rest of sky fine	
						23 <sup>05</sup> : hazy blotch 40° up in SE, rest of sky milky	
						" : although around 193, 664 no haze could be noticed directly, sky pretty milky there	
						00 <sup>08</sup> : stroke of cirrus in SW = 47° up not too far from 190, 046	
0111 E	-20 23	00	6.40	B8	6-6-6	sets B8-B9 #8 2262 2288	fine
0155 E	+40 10	0-1	6.34	B9	6-6-6	" 5 " " #7 2293 2303	fine





Dome Temp. ....

Transparency Conditions Good.

184.

Focus .....

A few wisps of cirrus

Dome Temp. +53° F

Timing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
24	20132E	+34 37	0-1	6.23	B8	6-6-6	Sets. B8-B9 #7 <sup>2307</sup> <sub>2317</sub>	Extremely good
34	20123E	41 32	0-1	6.56	B9	6-6-6	" " " #7 <sup>2323</sup> <sub>2333</sub>	Extremely good
336	20123E	39 42	0-1	6.46	B8	6-6-6	" " " #7 <sup>2330</sup> <sub>2345</sub>	Extremely good
351	0124E	39 32	1	6.26	B9	6-12	" " " #7 <sup>2347</sup> <sub>2357</sub>	Extremely good
413	20137E	+11 45	0-1	5.89	B9	6-12	" " " #7 <sup>2363</sup> <sub>2373</sub>	fine
						20/15	" 9	OK
3 P.H. Loaded in fridge.								
# 27077 → 27092 developed for 7.7 in 65° Acufine								



Dome Temp. ....

Transparency Conditions *Good.*

186

Focus *15.44*Dome Temp. *56.0°F*

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
043	2 <sup>h</sup> 04 <sup>m</sup> W	+15° 24'	0	8.0	M2	9-9-9	set 5 (VdB) - SB	select # 8 { 2375 2405 } fine
14	1 <sup>h</sup> 09 <sup>m</sup> W	+23° 15'	0	6.42	B9	6-6-6	set 5 W4 - d & e	select # 6 { 2407 2411 } fine many lines
35	0 <sup>h</sup> 42 <sup>m</sup> E	-18° 27'	0+	5.21	B8	6-6-6	set 5 "	select # 6 { 2413 2417 } fine
48	0 <sup>h</sup> 00	-9° 46'	0	5.74	B9	6-6-6	set 5 B8 - B9 prog.	select # 6 { 2422 2426 } 2 stony guiding
31	0 <sup>h</sup> 43 <sup>m</sup> W	-20° 24'	0	6.40	B8	6-6-6	set 5 "	select # 6 { 2428 2432 } fine complete
04	0 <sup>h</sup> 00	+34° 36'	0+	6.23	B8	6-6-6	set 5 " set 9	select # 6 { 2433 2437 } fine OK

4 ph loaded.

27093 → 27101 dec 8.1 in 64° Azimuth

using <sup>dec</sup> temp vs dec time curve (2)

187

Date <sup>Mon</sup> Sunday, Aug 12/19, 1963 Observer <sup>Hr</sup> <sup>Sm</sup> RM Julian Day 2438260.

① 145 18 22.7 3465.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Am End
1281-2651	160,269 26 Dra	17 <sup>h</sup> 34. <sup>m</sup> 6.	+61° 54'	6/5/33	28			20 <sup>10</sup>	a		9 <sup>00</sup> W
-2652	154,345	17 <sup>h</sup> 01. <sup>m</sup> 8	47° 07'	6/6/33	28			20 <sup>25</sup>	a, b, sky		-9 <sup>00</sup> W
2653	172,051	18 36.7	-21° 05'	6/6/33	28			21 <sup>20</sup>	a, b		9 <sup>00</sup> W
2654	158,614	17 28.5	-01° 02'	6/6/33	28			21 <sup>50</sup>	a; b		9 <sup>00</sup> W
2655	α Lyr	18 35.6	38 45	3/5/33	28			22 <sup>35</sup>	a, b, sky		9 <sup>00</sup> W
"	"	"	"	5/4/33	14			20 <sup>15</sup>	c		9 <sup>00</sup> W
Thin clouds from 01:30 on											
Clouds getting very thick. 03:15 closed up.											
No focus lost since last plate unloaded											
27099	HD 584	00 05.2	+56° 36'	I 25	II aob	.008"	+18.4°	01:15	01:41	1	0:58
27100	HD 2626	00 24.8	+59° 25'	I 25	II aob	.008"	+18.4°	01:49	02:07	2	0:52
27101	HD 11291	1 45.8	+50° 18'	"	"	"	"	02:39	03:05	3	0:15

Dome Temp. 65° F

Focus 15 46

Dome Temp. ....

CO<sub>2</sub> in: 19<sup>10</sup> EST, 00<sup>00</sup> EST

voltage: 700v

Transparency Conditions

17<sup>55</sup>: perfect, yellow sunset;  
- perfect down to horizon on  
all sides, except in SW  
(3° up) cumuli are drawing up

180

iding Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
48" W		6"	5.31	G0V			
01 <sup>13</sup> W		4"	6.77	G8V			
02 <sup>27</sup> W 00 <sup>38</sup> W		8"	5.69	d64		21 <sup>00</sup> : reversed telescope	
02 <sup>09</sup> W 02 <sup>22</sup> W		6"	5.98	G8IV		21 <sup>15</sup> : perfect all around	
1 <sup>41</sup> W 02" W		10"	0.03	A0V		22 <sup>25</sup> : cirrus clouds in S ~35° up, 22 <sup>24</sup> : clouds 60° up & S 22 <sup>24</sup> : but region around Vega is clear, it seems 23 <sup>00</sup> : had found star close to edge of diaphragm in 2655 a 23 <sup>23</sup> : haze in SW, S 05° up, little in SE, E or W; haze moves about rapidly 23 <sup>48</sup> : no haze at all visible at Vega's location, yet all tracings <sup>grx</sup> indicate something is there 00 <sup>15</sup> : try Vega again with new CG in 00 <sup>20</sup> : haze around Vega on the new - clear up	
0:58 E +56° 58'		2-3	6.49	B8	6-6-6	Set 5 B0 B9 Prog	2490 2-strong 2444 guiding 2413 poor
0:52 E +59° 47'		2+	5.90	B9	6-6	"	2449 guiding 2451 fine but
01:15 E +50° 36'		3	5.62	B9	6-6-6	"	2435 what else is about

\* PH probably not regularly perturbed  
when recorded in field - hence about new date.

199

Date Mon. Tue. Aug. 19/20 1963 Observer RMJulian Day 2438261

0146 16 08.0 3466.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
27102	HD 210809 1 filed under "unidentified spectra"	22 07.9	51° 56'	I 25	Haob .008"		-19°C	01:32	02:54	4
					wrong star			clock 1 <sup>h</sup> ahead!		
27103	HD 2626	0 21.8	+59° 25'	"	"	"	"	03:23	03:37	1
27104	HD 8837 Focus lost	1 22.0	+39° 48'	"	"	"	"	03:48	04:03	2
01:30 Auroral zinnig very spectacular display. Kays flashing from 15° above horizon to 90° above.										

Dome Temp.  $+60^{\circ}\text{F}$ Focus  $1.547$ 

Dome Temp. ....

Transparency Conditions .....

190

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1847	03:18W	$52^{\circ}17'$	2+	7.5	09Ib	6-6-6	MK STDS Set 5 Sens 8 2469 2509 (40)	cate type exp fine guiding
		calc $\alpha 1963 = -21^{\circ}10''$	$10''$				(try 1" less + slightly lower dec.)	
1837	00:42W	$-59^{\circ}47'$	1	5.90	B9	6-6-	B8 B9 Prag Set 5 Sens 6 2512 2516	guiding l strong
03	20:12W	$+40^{\circ}09'$	1	6.34	B9	6-6-6	B8 B9 Prag Set 5 Sens 6 2518 2522	fine
						20/16		OK
							2 PH loaded.	





CO<sub>2</sub> in : 20<sup>20</sup> EST

Dome Temp. +72°F  
 Focus 15.52 at  
 Dome Temp. 65°

Transparency Conditions light haze } 100' cloud in SW  
 20<sup>45</sup>: uniform milky sky } 20' good! 192  
 21<sup>25</sup>: too much haze for photometry

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 29 E	+43° 14'	1	6.40	A5	6-6-6	set 5 N Spectra Bin. sens. 6 2528 2534	fine
21 <sup>00</sup> W			5.31	G0V		21 <sup>25</sup> : small ladder very hard to move	
00 27 W	+15° 24'	1-2	8.0	gM2	9-9-9	set 5 vdB Spectra Bin. sens. 8 2541 2581	fine
20 14 E	-01° 03'	0-1	6.26	B8	6-6-6	set 5 B8-B9 program sens 6 2583 2588	good
20 00	-04° 42'	1	5.63	B8	6-6-6	set 5 " " sens 5 2590 2595	fine
3 50 15 W	+23° 11'	1	6.42	B9	6-6-6	set 5 " " sens. 6 2599 2603	guiding fine many stars
2 20 15 W	+02 29	1	8.7	G5	6-6-6	set 5 SEB SZPcc 2604 2644 (10)	l. weak
00 48 E	+66 33	2 <sup>+</sup>	6.40	B9	6-12	set 5 B8-B9 (right star?) 6 2646 2650	guiding! l. strong
2 00 46 E	+65 46	2 <sup>↑</sup>	7.1	B5eB	6-6-6	set 5 Hd Be program 7 2651 2662 (1)	guiding l. strong
3 30 35 E	+63 08	3	7.5	B5e	6-6-6	set 5 Hd Be program 7 2663 2675 (2)	guiding fine
4 00 08 E	+59 28	3-2	8.2	B3e	6-6-6	set 5 Hd Be program 8 2676 2706 (50)	guiding fine
1 30 35 W	+58 25	2	6.19	B9	6-6-6	set 5 B8-B9 field does not check 6 2708 2712	fine

3<sup>rd</sup> H loaded

Small ladder repairs left near center replaced.

field drawn for #2711 & agree with that for previous plate of this star; but, neither agree with earlier fields drawn.

OK d. center to red



Dome Temp. 78°F

Focus 15.67 - .11 = 15.56

Dome Temp. ....

Transparency Conditions very sl. haze

194

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:26	2 0:28 E	+43° 12'	1	6.40	A5	6-6-6	Set 5 SB-N (7) { 2755 2967	top topped fine
14	3 0:11 E	+69° 30'	2	6.38	B9	6-6-6	Set 5 BF-B9 HR7227 (7) { 2773 2785	fine
31	4 1:12 W	+02° 56'	2:	4.00	B5 Ib	18 <sup>s</sup>	Set 0 2 obs, 1 4 obs, 3 8 obs + comb (6) { 2795 - 2798 - 2803 - 2832 -	findings fine 2797 not 2802 strong 2811 strong fine
48	0 31 W	+32 38	2:	3.30	B9 III	18 <sup>s</sup>	Set 7 8 obs, 9 4 obs, 10 2 obs + comb (6) { 2857 2893	-40 -46 fine -49
3 03	1 00 44W - calc.	+15 23	1+	8.0?	M2	6-6-6	Set 5 Vd B5 B (8) { 2857 2893	-46 fine -49
3 36	2 0:13 E	+23° 15'	1+	6.42	B9	6-6-6	Set 5 BF-B9 (7) { 2901 2913	fine temp weak many
1:26	3 13:16 W	+43° 13'	1+	6.40	A5	6-6-6	Set 5 SB-N again (7) { 2917 2929	fine
17	2:4 W	+52° 15'	1+	7.5	09 Ib	6-6-6	Set 5 MK STD'S Sens 7 { 2931 2971	fine 40
4	1:40 E	+56° 58'	2	6.19	B8	6-6-6	Set 5 B8 B9 Prog Sens 8 { 2986 2998	guiding fine
15	11 30 E	+40° 07'	1	6.34	B9	6-6-6	Set 5 B8 B9 Prog Sens 7 { 3008 3020	fine
13	11:15 E	+74° 07'	1	6.37	B8	6-6-6	Set 5 B8 B9 Prog Sens 7 { 3025 3037	guiding good
16	2 42 E	+60° 51'	1	6.58	B8	6-6-6	Set 5 B8 B9 Prog Sens 7 { 3042 3054	fine
3 45	1 0:13 E	+58° 27'	1+	6.19	B9	6-6-6	Set 5 B8 B9 Prog Sens 7 { 3057 3069	d. strong guiding
4 07	2 0:07 E	+61° 32'	2	6.00	B <sup>8</sup>	6-6-6	Set 5 B8 B9 Prog Sens 7 { 3071 3083	temp test temp topped est. guiding
						20/16	Set 9	
						2 PH loaded.		
							CAUTION - ladder is now very skittish!	



Dome Temp.  $74^{\circ}$   
 Focus  $15.66 - .11 = 15.55$   
 Dome Temp. ....

Transparency Conditions .....

196

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
52	3:30 W	$-00^{\circ} 30'$	$\sigma$	6.3K	B-8	6-6-6	set 5 B8-B9 #6 { 3088-3092	1. weak guiding
33	3:10 W	$+26^{\circ} 23'$	1	5.9	B8re	6-6-6	set 5 Be programme #6 { 3094-3100	guiding 4/19 good
56	3:05 E	$+36^{\circ} 22'$	1	4.5	B6e	6-6-6	set 5 Be #4 { 3107-3110	guiding good
45	2:00	$+42^{\circ} 35'$	1+	7.1	B5ne	6-6-6	set 5 " #7 { 3112-3127	guiding good
48	3:52 W	$+57^{\circ} 35'$	2	7.0	B0ne	6-6-6	set 5 " #8 { 3132-3169	37 good guiding
57	3:43 W	$+56^{\circ} 35'$	to 3	8.1	Bse	6-6-6	set 5 " #8 { 3183-3220	good 4/19 comp. weak
48	3:28 W	$+50^{\circ} 00'$	3	6.8	A <sup>4?</sup> Re	6-12	Set 5 " 7 { 3222-3238	16 guiding poor
						20/16	Set 9	time partly fogged in unknown OK
			4:20				thin clouds covering sky.	
								Guiding very poor
							3 PH loaded	
							Frank. there are no more fuses in dome	



Dome Temp.  $+61^{\circ}F$ Transparency Conditions  $V, Good$ 

198

Focus  $15.47$ 2340 DOME WINDOWS OPENED.

Dome Temp. ....

ing Time S.T.	Hour Angle -End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
46	2118E	62 53	0-1	7.8	B <sub>0</sub> IV	6-6-6	Set 5 Double line BIN (Hd) #8 3237 3263	good. 1 wk comp wk
18	0050E	55 19	1-2	7.6	B <sub>1</sub> e	6-6-6	" 2 Be Prog. #8 3267 3304	good comp week
36	0042W	62 01	1-2	8.2	B <sub>3</sub> e	6-6-6	" 8 " " #8 3306 3348	good "
30	<					6	" 2 Ec/ Bin. #8 3351	very weak
							2 PH. Loaded	
							USE P.H #4 ON SET 8 ONLY	

109  
 Date Sun. Mm. Aug 25/26 Observer Hw - Mt Julian Day 2438267  
 ☉ 152 03 06.1 3474.2

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
27140	HD 169033	18 <sup>h</sup> 17.6	-12° 03'	I-25	IIaob	<sup>set</sup> .008	21.5	20 06	20 26	4	0 <sup>h</sup> 00'
27141	{ HD 170973	18 <sup>h</sup> 27.1	+03° 35'	I-25	IIaob	.008	21.5	20 33	21 05	1	0 <sup>h</sup> 30'
27142	{ HD 174853	18 <sup>h</sup> 47.5	+13° 51'	I-25	IIaob	.008	21.5	21 : 13	21 : 39	1	0 <sup>h</sup> 45W
27143	{ HD 182618	19 <sup>h</sup> 20.4	+27° 53'	I-25	IIaob	.008	21.5	21:44	22:06	2	0 <sup>h</sup> 39W
27144	{ HD 193452	20 <sup>h</sup> 15.2	-15° 06'	I-25	IIaob	.008	21.5	22:14	22:44	2	0 <sup>h</sup> 21W
27145	{ HD 205087	21 <sup>h</sup> 27.9	+22° 56'	I-25	IIaob	.008	21.5	22:53	23:15	3	0 <sup>h</sup> 19E
27146	{ HD 209819	22 <sup>h</sup> 01.0	-14° 21'	I-25	IIaob	.008	21.5	23:22	23:26	3	0 <sup>h</sup> 40E
27147	{ HD 202149	21 <sup>h</sup> 08.9	-11° 01'	I-25	IIaob	.008	21.5	23:37	0:05	4	23:53W
27148	{ HD 219113	23 <sup>h</sup> 8.3	+2° 08'	I-25	IIaob	"	21.5	0:18	01:58	4	0:22W
27149	{ HD 3038	0 <sup>h</sup> 28.6	+66° 12'	I-25	"	"	"	02:41	03:00	1	0:27W
27150	{ HD 10425	1 <sup>h</sup> 36.6	+60° 03'	"	"	"	"	03:10	03:20	1	0:22E
27151	{ HD 10260	1 <sup>h</sup> 35.3	+60° 32'	"	"	"	21.0	03:35	03:55	2	0:15W
27152	{ HD 11857	1 <sup>h</sup> 51.4	+61° 12'	"	"	"	"	4:13	4:31	2	0:14W



Dome Temp. ... 68°F

Focus ... 15.49

Dome Temp. ....

Transparency Conditions .....

200

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 <sup>h</sup> 00	-12° 02'	0 <sup>-</sup>	5.68	B8	6-6-6	set 8 B8-B9 prog. sens 6 { 3366 3370	fine -comp weak
0 <sup>h</sup> 30 W	+3° 38'	0	6.32	B9	6-6-6	set 2 " dbl line. sens 6 { 3371 3375	fine
0 <sup>h</sup> 45 W	+13° 56'	0	6.07	B9	6-6-6	set 8 " " sens 6 { 3376 3380	fine
0 <sup>h</sup> 39 W	+28° 01'	0 <sup>+</sup>	6.31	B8	6-6-6	set 2 B8-B9 prog. sens 6 { 3381 3385	fine
0 <sup>h</sup> 21 W	-14° 54'	0	6.14	B9	6-6-6	set 8 " sens 6 { 3386 3390	fine
0 <sup>h</sup> 19 E	+23° 15'	0 <sup>+</sup>	6.42	B9	6-6-6	set 2 Wt d & e sens 6 { 3391 3395	fine line many
0 <sup>h</sup> 40 E	-14° 02'	0 <sup>+</sup>	4.30	B8	6-6-6	set 8 " sens 6 { 3396 3400	fine quad f strong
0 <sup>h</sup> 53 W 0 <sup>h</sup> 54 W	-10° 45'	0	6.47	B9	6-6-6	set 2 B8-B9. sens 6 { 3407 3411	fine quad
0 <sup>h</sup> 42 W	+2° 29'	0 <sup>+</sup>	8.7	G-5	6-6-6	set 8 <sup>Hg</sup> <del>B8</del> sp. bin (no other B8-B9) sens 8 { 3411 3451 (RG)	good quad
0 <sup>h</sup> 27 W	+68° 33'	1 <sup>+</sup>	6.4	B-9	6-6-6	set 2 weight d & e sens 6 { 3431 3435	fine
0 <sup>h</sup> 22 E	+60° 21'	2	5.73	B-9	6-6-6	set 8 " sens 6 { 3436 3440	fine quad
0 <sup>h</sup> 15 W	+60° 51'	2	6.58	B-8	6-6-6	set 2 B8-B9 sens 6 { 3448 3452	fine
0 <sup>h</sup> 34 W	+61° 31'	2	6.00	B-8	6-6-6	set 8 B8-B9 sens 6 { 3453 3457	fine

Plates were not put in dark room drawer!!  
They were left in observing case.





203  
 Visitors: 85 } showed  
 + 65 } M13 1930-21 30 E.S.T

Py. Ln.  
 - MCE  
 - M2

Date Sat/Sun Aug 31/Sep 1 Observer Jm Julian Day 240

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
283- 2057	196,755	20 <sup>m</sup> 37.4	19° 58'		5/5/33	28		20 <sup>30</sup>	a, b, sky	
2458	α Lyr	16 15.6	+38° 45'		4/5/33	28		22 <sup>47</sup>	a	
2659	212, 697 695 58 Arg	21 24.6	-10° 56'		7/4/33	28		23 <sup>55</sup>	a, sky	
2660	215, 812	22 16.0	-04° 25'		1/5/33	28		00 <sup>25</sup>	a, b, sky	
2661	217, 014 51 Arg	23 21.7	+20° 35'		7/4/33	28		01 <sup>00</sup>	a, b	
2662	31443	00 35.4	-24° 58'		7/4/33	28		01 <sup>35</sup>	a, b	
2663	4, 514 η Cas	00 46.9	+57° 38'		5/6/33	28		02 <sup>10</sup>	a, b	
2664	6, 582 ε Cas	01 05.7	+54° 45'		6/5/33	28		02 <sup>40</sup>	a, b	
2665	8, 036	01 17.9	-00° 42'		6/6/33	28		03 <sup>25</sup>	a, b	
2666	11, 202 X For	02 21.0	-23° 59'		6/6/33	28		03 <sup>40</sup>	a, b	
2667	13, 974 δ Tri	02 14.8	+34° 03'		6/5/33	28		04 <sup>08</sup>	a, b	

Dome Temp. 57°F  
 Focus .....  
 Dome Temp. ....

CO<sub>2</sub> in: 22.07 EST, 01<sup>04</sup> EST  
 Voltage: 700V  
 Full Moon in S

Transparency Conditions Perfect (ca. 2) as far as haze is concerned  
 but 4th magnitude stars barely visible

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 <sup>20</sup>	0° W		10"	5.08	d62		focussed star; - very close to the full moon	
	03 <sup>26</sup> W		14"	0.03	A0V		23 <sup>10</sup> : all clear; 23 <sup>12</sup> : instrumental difficulty in	
	04 <sup>00</sup> W		4"	6.44 6.30	d61 d62		passing dome; Frank repaired it	
	04 <sup>00</sup> W, 00 <sup>20</sup> W		6"	6.56	G5V		00 <sup>20</sup> : all clear	
	04 <sup>00</sup> W, 00 <sup>20</sup> W		4"	5.53	G5V		01 <sup>16</sup> : for time to <sup>logged up</sup> check the system in the 3.00	
	07 <sup>00</sup> E, 00 <sup>00</sup> E		8"	5.71	K0(4V)		01 <sup>20</sup> : cumulus cloud in SW - 40° up; high in W 5° up	
	07 <sup>00</sup> E, 00 <sup>00</sup> W		10"	3.45	G0V		02 <sup>10</sup> : light cloud. 10° up in SW	
	07 <sup>05</sup> W, 00 <sup>10</sup> W		4"	5.12	G5V		02 <sup>42</sup> : patches of haze in SW ~ 20° up. rest of sky clear	
	07 <sup>05</sup> W, 00 <sup>10</sup> W		8"	5.86	F5		03 <sup>06</sup> : sky clear again; 0	observed by cloud?
	07 <sup>05</sup> E, 00 <sup>00</sup> E		8"	5.37	F5		03 <sup>41</sup> : all clear	
	07 <sup>07</sup> W, 00 <sup>37</sup> W		8"	4.87	G0V			

205

Date Sun 1/10am Sept 1/2, 63 Observer H2 I 5m 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.
284-2668	161,797 <i>p. 42</i>	17 45.0	+27° 44'		5/0/33	28		19 <sup>45</sup>	a, b, c	
2669	152,633	17 24.7	+67° 21'		7/4/33	28		20 <sup>33</sup>	a, sky	
2670	182,572	19 28.3	+11° 52'					21 <sup>00</sup>		
2671	x <i>log</i>	18 35.6	+38° 43'		5/0/33	28		21 <sup>03</sup>	a, b	
2671	182,512 <sup>9</sup> <i>58 Agl</i>	19 53.5	+06° 19'		6/1-133	28		21 <sup>50</sup>	a, b	
2672	196,755	20 37.4	+09° 58'		6/5/33	28		22 <sup>25</sup>	a, b	
2673	197,076	20 39.1	+19° 42'		7/4/33	28		22 <sup>54</sup>	a, sky	
2674	202,110	21 52.2	+06° 42'		7/4/33	28		23 <sup>16</sup>	a, b, sky	
2675	217,166	22 56.7	+09° 10'			28		23 <sup>55</sup>	a, b, sky	
2676	217,014 <i>51 Agl</i>	23 01.9	+20° 35'			28		23 <sup>50</sup>	a	

Dome Temp. 68°F

CO<sub>2</sub> in: 18<sup>00</sup> EST

Transparency Conditions Fairly Good

206

Focus .....

voltage: 700V

Some cumulus here in E

Dome Temp. ....

Full Moon Up

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 <sup>39</sup> W. 70 <sup>40</sup> W. 01 <sup>20</sup> W		6"	3.42		G5V	20 <sup>20</sup> : some clouds in S-E ≈ 6° up; rest good	
1 <sup>53</sup> W		6"	6.13		K0+V	20 <sup>20</sup> : cumulus on position & rising up ≈ 8° in SW; rest O.K.	
			5.17		G8 IV	21 <sup>01</sup> : alto cumulus descending from W - all over	
0 <sup>07</sup> W 01 <sup>25</sup> W		10"	3.03		A0I	21 <sup>22</sup> : clouds with base = Vega - 263 ft. to	
0 <sup>20</sup> W. 00 <sup>40</sup> W		6"	3.71		G8 IV	21 <sup>25</sup> : <sup>6 pm up</sup> rest way again to N;	
0 <sup>28</sup> W. 00 <sup>32</sup> W		4"	5.08		dG2	21 <sup>20</sup> - fair wind - sky in S-W clear; but 3 <sup>rd</sup> magnitude star clearly visible	
1 <sup>50</sup> W		4"	6.46		dG2	22 <sup>23</sup> : all clear around	
0 <sup>30</sup> E. 00 <sup>01</sup> E		4"	6.14		G0	22 <sup>48</sup> : sky clear to horizon; 23 <sup>23</sup> <sup>first completely free of clouds</sup> if one cirrus fillosus in E	
0 <sup>32</sup> E. 00 <sup>12</sup> W		6"	6.42		dG1	22 <sup>48</sup> : cirrus in E; W high up (≈ 60°)	
						00 <sup>11</sup> : } <sup>about 15° to 60° up</sup> big group of cumuli & stratus coming from W to S	
						00 <sup>40</sup> : had to wait till clouds moved out from S	
						00 <sup>50</sup> : cirrus coming in again from W	
						00 <sup>54</sup> : cirrus fillosus fill sky in N & W and S	
						from horizon up to zenith; finally get a up night!	
						He advises that periscope guide is out of order - <sup>clearly</sup> - water 19 h.	

207

Date Thurs. Fri Sept 5-6/63 Observer MT - HW Julian Day 2438.278

① 162 41 17.8 3490.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
24153	HD 177648 MWC 310	19 <sup>h</sup> 00.5 <sup>m</sup>	+23° 11'	I-25	IIaob	set .008	18.0	20:40	21:40	3
285-2676	190,360	20 <sup>h</sup> 02.1	+29° 49'	7/4/33	28			21:55	2	
2677	193,664	20 17.1	+66° 45'	7/4/33	28			22:15	2	
27154	HD 203374 MWC 366	21 16.7	+61 25	I-25	IIaob	.008	19.0	22:50	23:47	3



Dome Temp. 51°

Focus .....

Dome Temp. ....

CO<sub>2</sub> m, 18<sup>35</sup> EST  
Voltage, 700V

Transparency Conditions

heavy patches  
EAS completely covered with irri (21<sup>25</sup>)  
still, W is better  
magn stars of Big Dipper can be seen

208

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0	3:17 W	+23° 18"	0	7.5	B3e	6-6-6 ref 2	Be programme sense 7 { 3467 3492	good
	0 <sup>43</sup> W		6"	5.70	G6IV		21 <sup>50</sup> : EAS still full of irri; but very in W	none
	0 <sup>47</sup> W		6"	5.94	G5V		22 <sup>40</sup> : fringes not quite circular; transparency still heavy all over	
17	3:40 W	+61° 43"	1	6.6	Bore	6-6-6 ref 8	Be programme sense 6 { 3476 3483	good guiding
Closed down 0005 - heavy dew								

209

Date Sept 6/7 Fri/Sat 1963 Observer CW - CW Julian Day 2438279.  
 0163 39 28.6 3492.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
27155	HD 172817	19 01.1	-16 23	I-25	Ilford	008	19.9	20:05	20:29	1
27156	HD 172187	18 33.7	+43 08	I-25	Ilford	008		20:35	20:52	2
27157	HD 190658	20 00.8	+15 13	I-25	Ilford	008	19.5	20:59	21:33	4
27158	<sup>MWC 361</sup> HD 200775	21 00.4	+67 47	I-25	Ilford	008		21:41	22:19	2
27159	<sup>MWC 381</sup> HD 208682	21 52.9	+64 52	"	"	"		22:23	22:33	2
27160	<sup>MWC 394</sup> HD 217050	22 52.7	+48 09	"	"	"		22:40	22:46	2
27159 <sup>619</sup>	HD 217312	22 54.8	+62 32	"	"	"	19.4	22:54	23:38	3
	Focus Test									
27160 <sup>62</sup>	HD 219113	23 08.3	+02 08	"	"	"		00:06	01:08	4

Dome Temp. 60° F

Focus 15.58-11 15.47

Dome Temp. ....

Transparency Conditions

good  
 Exposure meter does  
 not seem to "fire" properly  
 - OK now

23:30

00:50

21<sup>h</sup> some haze 210  
 Moon up  
 light cloud from N to zenith  
 cloud again!

ing Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
29	1 00 07W	-16 17	0-1	5.88	B8	6-6-6	set 5 B8-B9	3425 3489 fine complete
52	2 00 59W	+43 13	0-1	6.40	A5	6-6-	set 5 NS. Binary	3491 3495 fine complete
33	4 00 17W	+15 24	1	8.0	M2	6-9-9	set 5 uB SB	3497 3537 fine
19	2 00 02W	+68 02	1	7.2	B5e	6-6-6	set 2 Be program	3537 3549 fine
33	2 00 37E	+65 07	1	5.8	B3ne	6-12	set 5 Be program	3551 fine 3555 guiding
46	2 01 25E	+48 27	0+	5.2	B3neb	6-6-6	set 8 Be program	3557 3561 fine guiding
38	3 00 35E	+62 53	1	7.8	B0W	6-6-6	set 5 Hd sp. Bin <sup>cloud</sup>	3564 3586 fine guiding
						20/16	set 9	OK 2 to red
08	0 30 W			8.7	G5	6-12	set 5 E.S.B.	3587 3600 good complete

01:20

clouds up

3PH loaded



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

Transparency Conditions *Some haze*

212

Focus *15.50*

Dome Temp. ....

*Clouds delayed start.*

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
44	014W	37 22	0	5.7	Bzhe	6-6-6	Set 2 1/2 Be Proj 5-1 Lms 6 { 3634	fine
35	027W	46 02	0-1	5.2	Bzhe	9-9	" 7 1/2 " " " clouds " 6 { 3639 3641 3646	l. strong guiding
							Clouds fog heavy dew.	
							NO. FOCUS TEST	
							2 PHS loaded	



Dome Temp. 60.0

Focus 15.48

Dome Temp. ....

20.6 15.59  
11  
15.48 ✓

Transparency Conditions

0240 CLOUDS

good, some cloud earlier

214

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
11	1 <sup>n</sup> 32 <sup>n</sup> W	+43° 13'	1	6.40	A5	6-6-6	Ret 2 Sp. Bin RW	7 { 3668 3680	fine
138	1 30 W	+15 24	0+-1	8.0	M2	9-9-9	" 8 " " sud B	8 { 3681	fine
24	0015 W	+50 01	1-2	6.8	A4e	6-6-6	" 2 Hd BE Proc.	#7 <sup>3760</sup> 3776	fine - 1 string
54	0007 E	46 12	1-2	6.5	B3nc	6-6-6x	" 8 " " "	#7 <sup>3778</sup> 3794	fine - 1 string
40	0318 E	+23 05	1	5.96	B9	6-6-6	" 2 B8-B9 Proc.	#7 <sup>3800</sup> 3813	fine
39	0255 E	+36 55	0-1	6.31	B9	6-6-6	" 8 " "	#7 3817 3829	fine
01	0214 E		0	6.20	B8	6-6-6	" 2 " "	#7 <sup>3835</sup> 3840	good comp dark
						20/15	" 8		OK
							1PA Focused in Friday		comp dark here
							Sandra - Burger on Timer is fixed, fine		

215

Date Tue-Wed Sept 10-11 '63 Observer Hw - Mt Julian Day 2438283

@ 167 32 32.0 3501.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
{ 27172	HD 169820	18 <sup>h</sup> 21.4 <sup>m</sup>	+14° 55'	I-25	IIaob	<sup>set</sup> .008	20°C	19 20	19 32	3
{ 27173	HD 176318	18 <sup>h</sup> 54.6 <sup>m</sup>	+38° 07'	I-25	IIaob	.008	20°C	19 38	19 44	3
{ 27174	HD 180398 MWC 312	19 <sup>h</sup> 11.3 <sup>m</sup>	+12° 56'	I-25	IIaob	.008	20°C	20 01	21 29	4
{ 27175	HD 193009 MWC 336	20 <sup>h</sup> 12.9 <sup>m</sup>	+32° 04'	I-25	IIaob	.008	20°C	21 35	22 13	4
27176	HD 195407 MWC 346	20 <sup>h</sup> 26.0 <sup>m</sup>	+36° 39'	I-25	IIaob	.008	20°C	22 19	23 43	1
<hr/>										
a fresh frozen										



Dome Temp.  $67^{\circ}\text{F}$ Focus  $15.47$ 

Dome Temp. ....

Transparency Conditions

*Good.*

216

Clouds started rolling in around  
2300

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
32	3	$0^{\text{h}} 08^{\text{m}} \text{W} + 14^{\circ} 57'$	1-2	6.43	B9	6-6-6	set 2 B8-B9 wt d & e	sens 6 { 3847 3851	fine
44	3	$0^{\text{h}} 13^{\text{m}} \text{E} + 38^{\circ} 14'$	0+	5.70	B8	6-6-6	set 8 "	sens 6 { 3852 3856	fine guiding
29	4	$1^{\text{h}} 15^{\text{m}} \text{W} + 13^{\circ} 03'$	0+	7.7	B3 ne	6-6-6	set 2 Be prog Hd.	sens 8 { 3861 3898	good. l. wk
13.	4	$0^{\text{h}} 58^{\text{m}} \text{W} + 32^{\circ} 17'$	0	7.0	B0 ne	6-6-6	set 8 "	sens 7 { 3899 3911	good. l. wk
43	1	$2^{\text{h}} 15^{\text{m}} \text{W} + 36^{\circ} 54'$	0	7.7	B3 e	6-6-6	set 2 "	sens 8 { 3912 3934	l. wk comp weak

NO FOCUS TEST!

Closed down 23:50 Cloud.

Comparisons for  
# 27174-6 very weak



Dome Temp. ....

Focus .....

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

Transparency Conditions

At 2230 - few clouds  
in south & high wind

218

ing Time  
E.S.T.

Hour Angle  
End

Declination

Seeing

Ptg.  
Mag.

Sp.

Comp.

REMARKS

Quality

2310 - Clouds much thicker so closed up.



Dome Temp. 54°F

Focus 15.39

Dome Temp. 44°F

Amara 23:20

01:00

07:20 strong

02 very strong

03 (weak) strong

Transparency Conditions

Excellent

04 entire sky "shimmering"

220

ing Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
58	1 50W	25 04	0	6.9	B5e	6-6-6	set 2½ Be Prog	53942 7 3954 fine
20	2 06W	18 14	0-1	6.9	B9.5e	6-6-6	" 7½ "	" 7 { 3956 3968 good
28	2 10W	44 13	0-1	7.2	B1.5e	6-6-6	" 2½ "	" 7 { 3969 3981 fine
43	2 07W	46 00	0-1	4.9	B2.5e	9-9	" 7½ "	" 6 { 3983 3999 l. strong
22	01 08E	+48 06	0+	4.7	B4.7e	9-9	set 3 Be Program	5 4004 fine slightly jagged
51	00 22W	+39 58	1	8.2	K5	6-6-6	set 3 Std Vel	8 4006 fine & strong
49	01 11E	+48 34	0+	7.9	B9.2e	6-6-6	set 7 Be Program	8 4046 4051 good
13	01 43E	+19 31	1	6.4	K1	9-9	set 7 Std Vel	6 4087 fine guiding
35	01 32E	-07 40	0	5.67	B8	9-9	set 2 B8-B9	6 4093 fine 4097
51	01 27E	-03 16	0	5.89	B9	9-9	set 5 B8-B9	6 4098 fine 4103
11	01 43E	-08 42	0	5.62	B8	9-9	set 8 B8-B9	6 4105 guiding, poor 4109
45	01 18E	-18 32	0	6.12	B8	9-9	set 2 B8-B9	6 4111 fine 4115
02	01 02E	-18 31	0	6.31	B8	9-9	set 5 B8-B9	6 4115 guiding 4118 good
						20/16	set 8	OK - d.c to red

3 PH loaded  
103 a 0









Dome Temp. 60°F

Focus 15.43

Dome Temp. 54°

Transparency Conditions

few wispy clouds in north 224  
at 1900.  
00<sup>h</sup> excellentHw - clean off windows esp after  
dry low dew etc

log Time L.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
26	1	0 <sup>h</sup> 10 <sup>m</sup> W +43° 13'	0	6.4	A5	6-6-6	set 2 S.B. - N	4321 sens #6 4326	fine guid
19	1	0 <sup>h</sup> 45 <sup>m</sup> W -22° 42'	0	6.0	SgKS	6-6-6	set 8 Vd B - SB	4327 sens #6 4335	weak
41	2	0 <sup>h</sup> 36 <sup>m</sup> E -02° 33'	0	6.3	B9e	6-6-6	set 2 Be prog Hd.	4336 sens #6 4340	comp v wk good
21	1	0 <sup>h</sup> 29 <sup>m</sup> W +36° 15'	0	7.1	B2ne	6-6-6	set 8 "	4341 sens #7 4353	Comp v wk fine
41	3	0 <sup>h</sup> 30 <sup>m</sup> E +23° 14'	0	6.42	B9	6-6-6	set 2 B8-B9 Wt. d & e.	4355 sens #6 4359	comp v wk fine
3	3	0 <sup>h</sup> 52 <sup>m</sup> E -14° 02'	0	4.30	B8	6-6-6	set 8 "	4361 sens #6 4365	comp v wk fine
26	4	0 <sup>h</sup> 45 <sup>m</sup> W -01° 05'	0	6.26	B8	6-6-6	set 2 B8-B9 prog.	4373 sens #6 4377	comp very weak fine guid
45	4	0 <sup>h</sup> 05 <sup>m</sup> E +02° 29'	0	8.7	G5	6-6-6	set 8 E.S.B. S2PSC	4378 sens #8 4418	comp very weak good guid
42	1	1 10 W +62 53	0 <sup>+</sup>	7.8	B0TV	6-6-6	set 2 dbl. lens bin. - Hd.	4421 sens #8 4451	comp very weak fine guid
34	2	1 17 E +54 20	2 <sup>+</sup>	8.6	B3ne	6-6-6	set 2 Hd Be program	#8 4484	(30) fine guid
58	2	1 47 E +62 15	1 <sup>+</sup>	6.5	B2e	6-6-6	set 8 Hd Be prog.	#7 4486 4498	(12) fine
54	3	1 35 E +63 22	1 <sup>+</sup>	8.1	B3e	6-6-6	set 2 Hd Be	#8 4501 4531	(30) unclass guiding
26	3	0 44 E +41 36	2	7.2	B5ne	6-6-6	set 8 Hd Be	#7 4534 4546	(12) very poor
20	4	1 13 W +48 53	2-19.1	F7	6-6-6	set 2 α - Persei	#9 4547 4615	(20) "	
						20/16	set 8		d & c to red
		3 P# loaded		103	20				no more plots! - use II a.o. un-baked - 1) w/ dat Sept 17/18

225

Date Mon Tue 1963 Sep 16/17 Observer MR <sup>Sm</sup> <sup>Sm</sup> <sup>Hiv</sup> Julian Day 24382.89  
 @ 173 23 10.1 3513.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27211 <sub>a</sub>	HD 190658	20 <sup>h</sup> 00.8 <sup>m</sup>	+15° 13'	I-25	103a0	set 008	20.40	19:39	20:27	1
27212	HD 172187	18 33.7	+43 08	"	IIa0	"	20.50	20:42	21:44	4
27213 <sub>b</sub>	HD 190658	20 00.8	+15 13	"	103a0	"	20.30	21:52	22:44	1
2678	172,167 Vega	18 35.6	+38° 45'		4/5/33	28		22 <sup>47</sup>	a	
2679	215,215	22 46.0	-04° 25'		7/5/33	28		23 <sup>20</sup>	a, b	
2680	217,014	23 01.9	+20° 35'		7/4/33	28		23 <sup>55</sup>	a	
2681	224,930 <sup>20.8</sup>	00 00.3	+26° 54'		7/4/33	28		00 <sup>15</sup>	a, b	
2682	225,239	00 02.9	+34° 28'		7/4/33	28		00 <sup>50</sup>	a, b, sky	
2683	13,700 T6X	01 42.4	-16° 08'		6/4/33	28		01 <sup>00</sup>	a, b	
2684	9,562	01 31.9	-07° 13'		7/4/33	28		01 <sup>55</sup>	a, b	
2685	16,141	02 33.6	-03° 42'		7/5/33	28		02 <sup>22</sup>	a, b, sky	
2686	20,000 <sup>5.5</sup>	04 45.9	-17° 00'		6/6/33	28		03 <sup>25</sup>	a, b	
2687	19,373 <sup>9.2</sup>	03 06.4	+49° 29'		6/4/33	28		04 <sup>13</sup>	a, b	

CO<sub>2</sub> in: 21<sup>00</sup> EST, 22<sup>40</sup> EST, 00<sup>55</sup> ESTDome Temp. 64.95

20.4

Transparency Conditions 22<sup>30</sup>: Fairly Good

226

Focus 15.47

15.58

- 11

Elev 8:15 PM EDTDome Temp. 15.47

15.47

ing Time LST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	dev. at 59° using curve ①	(7 <sup>m</sup> at 68°) Quality
27	0:14 E	+15° 21'	0	8.0	MZ	9-9-9	Set 2 VdB SB	8 { 4632	too weak
44	02:30 W	+43° 12'	1-2	6.40	AS	9-12-12	Set 2 NSB NB: Not Baked I <sub>2</sub> O	7 { 4680 4716	fine
44	2:04 W	+15 21	2	8.0	MZ	9-9-9	Set 8 VdB SB again	8 { 4718 4758	fine good
	23 <sup>00</sup> W		12"	0.03	AOT		22 <sup>30</sup> : aurora in N-NE, sky good photo in track		
	0" W, 00 <sup>00</sup> W		6"	6.66	G5V		for about 25° up in S, & 25° up in SW-W		
	0 <sup>00</sup> W		6"	5.53	G5V	215, 812	have a double star here & 2" apart		
	0 <sup>05</sup> E, 01 <sup>00</sup> W		8"	5.75	G3V	23 <sup>00</sup>	23 <sup>00</sup> : night improving, less haze at 00 <sup>00</sup> - very fine		
	0 <sup>15</sup> W, 00 <sup>00</sup> W		6"	6.12	G2V	01 <sup>00</sup>	01 <sup>00</sup> : sky good & clear		
	00 <sup>00</sup> E, 00 <sup>00</sup> E		8"	3.50	G8IP				
	0 <sup>00</sup> E, 00 <sup>00</sup> W		6"	5.74	dG2				
	0 <sup>00</sup> W		6"	6.82	G5V		02 <sup>00</sup> : still good, aurora in N-NE		
	0 <sup>00</sup> W		6"	5.47	151		and in W about 15° up is large, E is		
	0 <sup>00</sup> W, 00 <sup>00</sup> W		8"	4.0	G0V		04 <sup>00</sup> : aurora in N and NE and NW sky clear		

Plates 283 are  
loaded with 103a0  
others empty  
103a0 discarded.

for Sept 17/18 - PH's  
loaded with IIaOB.

21 IIa06 plates (71) 2AOC2G3  
cut Sept 17/63 51 51

(12 unboxed IIa0 were cut Sept 16/63 - same emulsion no. - only 1 used).  
1 IIa0B plate used for testing

Date Tues-Wed, Sept 17-18, 1963 Observer Wt - Cn

Julian Day 2438290

174 21 43.5 3515-3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
2721 <del>4</del> <sup>3</sup>	HD 177817	19 <sup>h</sup> 01.1	-16° 23' <sup>m</sup>	I-25	IIa0B	sel. 008	22.9°C	19 <sup>h</sup> :32 <sup>m</sup>	20 <sup>h</sup> :00 <sup>m</sup>	2
2721 <del>5</del> <sup>4</sup>	MWC 320	19 41.3	+05 44	"	"	"	"	20 <sup>h</sup> :17	21 <sup>h</sup> :06	3
2721 <del>6</del> <sup>5</sup>	HD 193864	20 18.0	+61 56	"	"	"	"	21:25	21:35	1
2721 <del>7</del> <sup>6</sup>	HD 190658	20 00.8	+15 13	"	"	"	"	21:50	22:55	4
2721 <del>8</del> <sup>7</sup>	HD 219113	23 <sup>h</sup> 8.3	2° 08'	"	"	"	22.8°	23:13	00:23	1
2721 <del>9</del> <sup>8</sup>	HD 16004	02 29.2	+39 15	"	"	"	"	01:40	01:56	2
	"	"	"	"	"	"	"	01:56	02:06	2
27220	HD 19736	03 05.5	+42 01	"	"	"	"	02:13	02:21	3
2722 <sup>19</sup> <del>1</del>	MWC 68 HD 21650	03 24.6 28.6	+41 25	"	"	"	22.8	02:29	03:03	4
2722 <del>2</del> <sup>0</sup>	BD +50° 738	03 13.1	+50 37	"	"	"	"	03:13	03:35	1
2722 <del>3</del> <sup>1</sup>	BD +49° 900	03 11.7	+49 26	"	"	"	"	03:41	04:13	2
2722 <del>4</del> <sup>2</sup>	MWC 79 HD 24560	03 49.3	+44 38	"	"	"	22.8	04:19	05:13	3
	Focus Test	20/16	at 8							

Plates are a bit too wide: - One wouldn't fit down in spotter & broke it trying to load it  
Sandwich: 1/2 the red marker is down on the EST clock.  
2 PH loaded

Dome Temp. 71° F  
 Focus 15.51  
 Dome Temp. 62° F

22.8  
 15.62  
 .11  
 15.51

Transparency Conditions at 19:00 very good.

228

air conditioner  
 stopped for  
 winter.

00<sup>h</sup>: excellent  
 01<sup>h</sup>: light cloud  
 04<sup>h</sup>: still a few light clouds  
 05<sup>h</sup>: W all cloudy.

dear using  
 cedar (A)  
 (7 1/2" at 68°)  
 Quality

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
00	0:23 <sup>m</sup> W	-16° 17'	0	5.88	B9	6-6-6	set 5 B8-B9 prog. sense 6 (terminated due to light cloud)	{ 4773 24777	fine
06	0:50 W	+05 55	0+	8.5	B5 ne	6-	set 5 Be prog. (right star?) sense 8	{ 4779 4783	very weak guiding poor
5	0:45 W	+62 09	1+	5.59	B9	6-6-6	set 5 B8-B9 WEIGHT due sense 5	{ 4786 4791	fine comp with
55	2:20 W	+15 24	2	8.0	9M2	9-9-9	set 5 wd B S.B. sense 8	{ 4797 4837	fine good
23	0:40 W	+02 30	1-2	8.7	G-5	6-6-6	set 5 42 PSL wd B S.B. sense 8	{ 4832 4872	comp with
56	1 10 <sup>E</sup> W	+39 31	0	6.26	B9	6-6-6	set 2 guided on W set of slit B8-B9 #6 4872	4876	fine guiding poor
06	2 20 59 E	"	0	"	"	9-9	set 8 guided on E set of slit B8-B9 #6 4876	4880	fine in opposite sense
21	3 1 20 E	+42 16	1	5.45	B8	9-9	set 5 B8-B9 full auto #6 4882	4886	completely topped!
03	4 00 58 E	+41 37	1+	7.2	B5 ne	6-6-6	set 5 Hd Be #7 4887	4899	fine good
35	00 15 E	+50 51	2	7.0	B9	6-6-6	set 5 a Per. #7 4901	4913	fine poor guid in centre
13	2 00 25 W	+49 39	3	7.8	A0	6-6-6	set 5 a Per. #8 4915	4945	fine guiding
13	00 47 W	+44 49	2+	7.8	B3 ne	6-6-6	set 5 Hd Be light cloud #8 4947	4977	fine sl. topped

00<sup>h</sup> 30: set on B8-B9 HR 562 Sandra - f. f. does

not match previous f. f. in the one I saw. (I agree with 26115)  
 Dec 5M. not working. after checking everything, showed Gary & he  
 told me that probably the voltage had dropped. - at had, to 48 volts!

229

Date Wed - Thurs Sept. 18-19, 62 Observer L. Sm 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.
287-2688	161,797 L Her	17 45.0	+27° 44'		6/4/58	33		19 <sup>45</sup>	o	
2689	202, 10	21 52.2	+06° 42'		7/5/33	28		20 <sup>07</sup>	e	
2690	17,166	22 56.7	+09° 10'		7/5/33	28		20 <sup>30</sup>	a, b, sky	
2691	173, 67 Vega	18 35.6	+38° 45'		4/6/33	14		21 <sup>05</sup>	a	
2692	193, 664	20 17.1	+66° 45'		6/6/33	28		21 <sup>33</sup>	a	
2693	224, 930 <sup>H</sup> 85 Reg	00 00.3	+26° 54'			28		21 <sup>50</sup>	a	

Dome Temp.  $67^{\circ} =$  CO<sub>2</sub> in:  $15^{55}$  EST,  $19^{35}$  EST

Focus ..... voltage: 700v

Dome Temp. ....

Transparency Conditions  $19^{30}$ : sky possibly just O.K. 230

$19^{55}$ : cirri - cumuli at western horizon; down to S, sky very milky elsewhere, only stars of mag  $> 2^m$  visible

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W		10"	3.42	G5IV		Here does not have an obvious cirrus in front,	
E		6"	5.14	G0		just sits in milky sky	
$4^{\frac{1}{2}}$ E, $01^{\frac{3}{4}}$ E		4"	6.42	25I		$20^{10}$ : obvious cirri everywhere <span style="float: right;">stopped the jetter</span>	
W		10"	0.03	20I		$21^{00}$ : obvious cirri visible in S, W, E	
W		4"	5.94	G5V		$21^{55}$ : no haze high in E (above $24^{\circ}$ ); there is haze	
E		4"	$\frac{5.62}{2.7}$	G3V		in W (for alt. $< 60^{\circ}$ ) and S (for alt. $< 45^{\circ}$ up)	
						$22^{15}$ : haze regions not so patchy, but more spread out all across the milky sky	
						3 <sup>rd</sup> magnitude stars just visible	
						$23^{10}$ : fat cirri coming from southern horizon and stretching right from E to W to zenith	
						west partially covered too - finally gave right up	

231

Visitors

First hour 85 - 19:00 EST - 20:00 EST } Showed  
 Second hour 97 - 20:00 EST - 21:00 EST } M13

Py. LH, SH.

Date Sat/Sun Sept 21/22 Observer BK Julian Day 2438294

⊙ 178 16 15.8 3522.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	F
27223	HD 196093-4	20 30'0	+34 54	I-25	II-a0B	Set 1008	+14	22 02	22 32	4
27224	HD 213310-11	22 25.4	+47 11	"	"	"		23 02	23 14	1
27225	HD 218640-1 89 Agr	23 04.5	-23 00	"	"	"		23 28	00 10	2
27226	HD 213470-1	22 26.5	+56 43	"	"	"	+13	00 35	02 25	3
27227	HD 16082-3 Focus test	02 29.9 20/16	+51 <sup>32</sup> 47					02 32	04 10	4



Dome Temp. 51

Transparency Conditions Good

232

Focus 15.39

Dome Temp. ....

Bright aurora all night

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 32 4	01 43 W	35 09	0	4.85	K5A3	6-6-6	set 5 Hynek's-Composite Spectra	4980 4992 fine
5 14	00 30 W	47 30	0	4.61	K0+A0	6-6-6	5	4999 fine 5006 fine
0 10 3	00 46 W	-22 37	0	6.7	G0+A2p	6-6-6	5	5014 fine 5028 fine
2 15 3	03 40 W	57 05	0	6.7	A2p	6-6-6	5 plate broken	5029 fine 5041 fine
4 10 4	01 15 W	51 50	0		G5A5	6-6-6	5 clouds	5042 fine
							8	fine



Dome Temp. 2.5  
 Focus 15.36  
 Dome Temp. 4.2

CO<sub>2</sub> m: <sup>17</sup>18<sup>45</sup> EST  
 10 ktege. 700 v  
 New Moon

Transparency Conditions 18: excellent all over except  
 18<sup>45</sup> - 19<sup>03</sup>, strong aurora all over the sky  
 19<sup>21</sup>: kept low to horizon  
 aurora still coming deep orange

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		8"	5.98 6.26	81/2 Y		19 <sup>00</sup> covered telescope. 19 <sup>50</sup> : 150x is pointing straight into an aurora in SW	
03" W		6"	5.39	62 V		20 <sup>00</sup> : aurora in violet, red and green 20 <sup>00</sup> : X-scanner stopped working - fixed & up 20 <sup>44</sup> : aurora of V-3 mag! in S in violet & green streams aurora coming up to over 72 hrs - ruining observation 20 <sup>54</sup> : Uth water in growth aurora sets has set in all night wait for a while 21 <sup>50</sup> : strong aurora still in most of sky 22 <sup>30</sup> : aurora still bursts in N, S, E, W - give up night	
01 30 W	47 32	0	4.6	KDA0	6-6-6	set 5	6 5099 fine good 5111 hard to see
03 46 W	57 04	0	6.7	AZP0	6-6-6	set 5	7 5112 strong 5135
01 05 W	66 22	0	6.2	FSAZ6	6-6-6	"	6 5136 fine
02 46 E	02 00	0	6.5	GOA0	6-6-6	"	6 5150 fine 5160
01 40 E	-01 45	0	6.2	B5	6-12	"	6 5161 5165
					20/16	8	OK
3 RH + 8 plates in the dome							no photo's tonight faded on edges

235

Date Nov. 25/46 Observer V. F. S. - H Julian Day 2438296.

0180 13 42.7 3526.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
MR - FC	seeing test	up to	20 <sup>00</sup> EST	with	the	spectrophotometer				
2696	196,761	20 38.0	-23° 55'		7/4/33	28	20 <sup>40</sup>		a, b, sky	
2697	188,512 $\beta$ Aqr	19 53.5	+01° 19'		6/4/33	28	21 <sup>10</sup>		a, b	
2698	170,067	20 00.7	+15° 29'		7/5/33	28	21 <sup>38</sup>		a, b, sky	
2699	170,067 53 Aqr	20 24.6	-16° 52'		7/4/33	28	21 <sup>40</sup>		a, b	
2700	174,448	22 36.4	-08° 05'		7/4/33	28	22 <sup>00</sup>		a, b, sky	
2701	208,776	21 56.8	+21° 37'		7/4/33	28	23 <sup>00</sup>		a, b, sky	
2702	197,163	20 14.7	+22° 14'				23 <sup>40</sup>			
2702	172,167 Vega	18 35.6	+38° 45'		4/5/33	28	23 <sup>50</sup>		0	
27233	BD+17° 781	03 06.4	47 43.5	I-25	IIaOb	.012	13.0	01 02	02 46	2
27234	+48° 934	03 23.2	48 11	"	"	"	13.0	03 09	05 31	3
	Four Test		0, T, B,			"				





Dome Temp. 52°F

Focus 15.39

Dome Temp. 47°F

15.50

.11  
15.39

Transparency Conditions ..... some clouds in the west

238

0230<sup>EST</sup> cloud over most of sky  
0315 aurora in northern sky  
(seen through holes in cloud)  
0350 sky partly clear (in west)

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
31	0:37 E	+15°25'	1	8.0	g142	9-9-9	set 5 HV spec. bin. wd B sens. 8 { 5259 5299	fine
48	01:25 W	+64°21'	0-1	6.31	B9	6-6-6	set 5 B8-B9 prog. clouds sens. 7 { 5312 5324	dark background fine fog
13	00:48 W	+62°08'	0-1	5.59	B9	6-6-6	set 5 " " " weight dand e sens. 6 { 5329 5334	fine grid
32	02:36 E	+61°06'	1	5.85	B9	6-6-6	set 5 " " " " " sens. 6 { 5338 5342	fine
40	00:23 W	+02°29'	1	8.7	G5	6-6-6	set 5 S2 P66. Eclipsing. spec. bin. sens. 8 { 5343 5383	fine
00	00:12 W	-18°28'	1	5.21	B8	6-6-6	set 5 B8-B9 prog. wt d & e sens. 6 { 5394 5398	fine
49	01:49 E	+39°45'	1	6.35	B8	6-6-6	set 5 B8-B9 prog. wt d & e sens. 6 { 5400 5404	fine
20	02:58 E	+42°04'	1-2	6.07	B8	6-6-6	set 5 B8-B9 prog. sens. 6 { 5405 5409	fine grid
21	02:13 E	+17°55'	2	6.19	B8	6-6-6	set 5 clouds " " (this is a 2") " " (double star) sens. 6 { 5410 5414	fine
43	01:11 E	+11°46'	2	6.44	B9	6-6-6	set 5 corner broke off plate B8-B9 prog. sens. 6 { 5416 5419	fine (part cent.)
								OK detected
							He suggests spatter turned on when box open (#27237-9)	
							Closed down at 0443 - Clouds.	
							1 P.H. Loaded. in frig.	
							Could not find PH #2.	

239

Date Thurs-Fri, 26-27 Sep Observer Fl; Lg-Cw Julian Day 2438.299

① 183 10 06.1 3531.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27245	1 Ser.			I-12	KaOb.	0.008	70°	19 57	19 57	4
7	"			"	"	"	"	20 01	20 02	4
4	9 (HD 168723)	18 <sup>h</sup> 16. <sup>m</sup> 1	-02 55	"	"	"	"	20 05	20 09	4
27246 <sup>6</sup>	31 Aql	19 20.2	+11 44	"	"	4	70	20 32	20 34	✓
7	31 Aql	HD 182572		"	"	4	"	20 37	20 43	✓
27247	31 Aql			"	"	"	"	20 51	20 58	✓
51	β Aql.	19 50.4	+06 09	"	"	"	"	21 27	21 29	4
	β Aql.	HD 188512		"	"	<del>0.008</del>	"	21 31	21 32	4
	β Aql.			"	"	"	"	21 35	21 37	4
27248	HD 235907	22 17.4	+55 03	"	"	.016	20.3	22 30 <sup>8</sup>	00 54	3
27249	HD 9812	01 30.8	+58 08	"	"	.008		01:10	01:32	4
27250	HD 10700	01 39.4	-16 28	"	"	.108		01:45	02:01	2
	2 1 cut	"	"	"	"	"		02:01	02:07	2
	1	"	"	"	"	"		02:08	02:18	2

note all cut



Dome Temp. 64  
 Focus 12.66  
 Dome Temp. ....

00<sup>h</sup> light cloud.

Transparency Conditions See remarks 240

Sept 25 Changed to 12 1/2" 25" Was Gilt 23.15 <sup>122</sup> T 20.35  
 Focus 15.41 <sup>122</sup> F 12.66

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	plate position	REMARKS	Counts	Quality
9:57	4 1 41 W	-2 53	1-2	4.2	KO II-IV	9	Sec 1	20 <sup>05</sup> : long stream. of cirrus cloud through	1	good
10:02	4 1 45 W	"	"	"	"	9	5	Cosmic ray with ...	2	good
10:09	4 1 52 W	"	"	"	"	18	9	N full of ... +3" up; ...	4	l. strong
10:34	1 17 W	+11 55	"	6.0	68 IV	25	1	at ... SW to N to E; ...	2	good
10:43	1 23 W	"	"	"	"	25	5		4	fine
10:58	1 37 W	"	"	"	"	9-9-9			5493-5501	l. strong
11:09	4 1 37 W	+6 19	"	4.9	68 IV	25			2	good
11:22	4 1 41 W	"	"	"	"	25			4	fine
11:37	4 1 46 W	"	"	"	"	25		Telescopes brought back to normal	8	l. strong
11:54	3 2 37 W	+55 22	0	9.77	Bos II:n	2-2	013	position. Some high cirrus.	5539-5579	fine
12:32	4 00 01 E	+58 27	0	7.4	B5 ms	3-3-3	at 5	Binary & G comp Star Vef ADS 1262A #8	5580 5590	l. strong
12:01	2 00 23 W	-16 06	0	4.2	68 IVp	9	at 2	light cloud. Voss	#6 5592 43	fine
12:07	2 00 29 W	"	0+	"	"	9	at 5		5594 5596	l. strong
12:18	2 00 39 W	"	0+	"	"	9	at 8		5597 5601	l. strong

Note starting due to reversing of telescope and setting difficulties. (Nothing wrong with telescope)

air fine 65° dew 8.8 (dark) d. p. 9.4

241

Date Thurs Fri Sep 26-27 1963 (cont.) Observer - CW 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.
27251	AD 20630	03 14.1	+03 00	I-12	DaOB	.008		02:32	02:36	3
	K Cent "	"	"	"	"	"		02:37	02:41	3
	"	"	"	"	"	"		02:42	02:50	3
27252	AD 23249	03:38.5	-10 06	"	"	"		02:59	03:01	4
	δ Eri "	"	"	"	"	"		03:01	03:05	4
	"	"	"	"	"	"		03:05	03:09	4
27253	AD 26965	04 10.8	-07 49	"	"	"		03:17	03:21	1
	0 <sup>2</sup> Eri	"	"	"	"	"		03:21	03:25	1
	"	"	"	"	"	"		03:25	03:33	1
27254	BD +47° 828	03 20.0	+47 52	"	"	"		03:51	04:05	2
27255	AD 27371	04 14.1	+15 23	"	"	"		04:12	04:14	3
	δ Tau "	"	"	"	"	"		04:20	04:22	3
	"	"	"	"	"	"		04:22	04:28	3
27256	AD 27697	04 17.2	+17 18	"	"	"		04:33	04:39	4
	δ Tau "	"	"	"	"	"		04:39	04:47	4
	Focus cont	"	"	"	"	"		04:47	05:01	4

Dome Temp. ....

Transparency Conditions .....

Focus .....

Dome Temp. ....

02<sup>h</sup> - 04<sup>h</sup> excellent 242

end of plate 56-5-

ing Time E.S.T.	Hour End	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality				
36	3	0	37 E	+03 16	1	5.74	65 V	9	ret 2	YOSS	#6 5604	①	fine
											#6 5605	①	fine
41	3	0	32 E	"	"	"	"	?	ret 5	no companion	#6 5606	①	fine
											#6 5608	①	fine
50	1	0	23 E	"	0 <sup>+</sup>	"	"	9	ret 8	"	#6 5609	④	strong
											#6 5613	④	strong
01	4	0	36 E	-1 53	1	4.7	KO IV	9	ret 2	YOSS	#6 5616	①	good
											#6 5617	①	guiding
05	4	0	32 E	"	"	"	"	9	ret 5	no companion here	#6 5619	③	l. strong
											#6 5621	③	l. strong
09	4	0	28 E	"	"	"	"	9	ret 8	"	#6 5622	④	strong
											#6 5626	④	strong
21	1	0	49 E	-7 42	0 <sup>+</sup>	5.0	dKO	9	ret 2	"	#6 5629	①	fine
											#6 5630	①	fine
25	1	0	45 E	"	"	"	"	9	ret 5	YOSS	#6 5638	②	l. strong
											#6 5638	②	l. strong
33	1	0	36 E	"	"	"	"	9	ret 8	"	#6 5634	④	strong
											#6 5638	④	strong
05	2	0	43 W	+48 06	1-0	6.8	B9	5-4	ret 5	α Per	#7 5639	④	l. strong
											#7 5343	④	guiding
14	3	0	0	"	2	4.60	KO VII	9	ret 2	YOSS	#6 5646	①	fine
											#6 5647	①	fine
22	3	0	08 W	"	"	"	"	9	ret 5	"	#6 5651	④	l. strong
											#6 5653	④	l. strong
28	3	0	15 W	+15 33	"	"	"	9	ret 8	"	#6 5659	④	strong
										light cloud	#6 5658	④	strong
39	4	0	22 W	"	1	4.72	KO VII	9	ret 1	"	#6 5660	①	fine
											#6 5661	①	fine
49	0	0	30 W	"	"	"	"	9	ret 4	YOSS	#6 5662	②	l. strong
											#6 5663	②	l. strong
01	0	0	45	+17 28	1	"	"	9	ret 7	"	#6 5664	④	strong
									ret 9.5	4.84 loaded in fidge	#6 5668	④	OK

243

Date *Mon - Tues 30/1/1963* *Sent out* Observer *Sm, MR - Hrc* *Re MR* 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 E
290-2703	165,401	18 04.0	+04° 40'		7/4/33	28		19 <sup>15</sup>	a, b, sky		
2704	159,222	17 30.7	+34° 18'		7/4/33	28		19 <sup>45</sup>	e, sky		
2705	182,512 <i>RA9L</i>	19 53.5	+06° 19'		6/4/33	28		20 <sup>15</sup>	a, sky		100
2706	172,167 <i>a Lyr</i>	18 35.6	+38° 45'		4/5/33	14		20 <sup>28</sup>	a		0
2707	192,163	26 10.7	+38° 14'		<sup>b</sup> 7/3/33 <sup>a</sup> 7/4/33	28		20 <sup>50</sup>	a, b, sky		0
2708	193,664	20 17.1	+66° 45'		7/3/33	28		21 <sup>40</sup>	o,		0
2709	208,110	21 52.2	+06° 42'		7/4/33	28		22 <sup>03</sup>	a, b, sky		0
2710	217,166	22 56.7	+09° 10'		7/4/33	28		22 <sup>35</sup>	a, sky		0
2711	224,930 <sup>a</sup> <i>85 Peg</i>	00 00.3	+26° 54'		7/3/33	28		23 <sup>00</sup>	a, b		0
2712	3,443	00 35.4	-24° 58'		7/4/33	28		23 <sup>52</sup>	a		0
2713	8,036	01 17.9	-00° 42'		7/4/33	28		23 <sup>50</sup>	a, b		0
2714	12,235	01 58.2	+02° 56'		6/6/33	28		00 <sup>15</sup>	a, b		0
2715	14,802 <i>X For</i>	02 21.0	-23° 59'		<sup>b</sup> 6/5/33 <sup>a</sup> 6/6/33	28		00 <sup>48</sup>	a, b		0
2716	16,141	02 33.6	-03° 42'		6/6/33	28		01 <sup>21</sup>	a, b, sky		0

Dome Temp. 51°F

Focus .....

Dome Temp. ....

CO<sub>2</sub> in: 18<sup>05</sup>, 19<sup>40</sup>, 22<sup>40</sup>

Voltage: 700V

Transparency Conditions 18<sup>00</sup>: Good

Nearly Full Moon

244

0200 CLOUDS.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 <sup>37</sup> W 01 <sup>49</sup> W		6"	6.79	G2V	18 <sup>40</sup> :	Good, no cirri	
02 <sup>49</sup> W		6"	6.58	G5V	20 <sup>09</sup> :	X scanner stuck - fixed it	
03 <sup>47</sup> W		10"	3.71	G8V	20 <sup>40</sup> :	moon bright in SE, otherwise clear - good	
02 <sup>32</sup> W		12"	0.03	A0V			
01 <sup>26</sup> W		4"	7.4	WN6			
01 <sup>11</sup> W		8"	5.94	G5V	21 <sup>40</sup> :	X scanner stopped working - fixed again	
00 <sup>07</sup> W, 00 <sup>47</sup> W		6"	6.14	G0	22 <sup>30</sup> :	moon in S on meridian and is very bright	
00 <sup>00</sup> W		6"	6.42	dG1			
00 <sup>29</sup> E, 00 <sup>19</sup> E		6"	5.82	G3V	23 <sup>00</sup> :	X scanner stopped again	
00 <sup>00</sup> E		6"	5.71	K0			
01 <sup>11</sup> E, 00 <sup>00</sup> E		6"	5.86	gG3	23 <sup>45</sup> :	heavy dripping dew outside	
01 <sup>00</sup> E 00 <sup>32</sup> E		6"	5.87	dG1	00 <sup>35</sup> :	Frank adjusted time smother while recorder	
00 <sup>27</sup> E, 00 <sup>00</sup> E		5"	5.37	F5	00 <sup>40</sup> :	a few clouds (cumuli-cirri) in S.W-W 1300 down	
00 <sup>00</sup> E		4"	6.82	G5V	01 <sup>29</sup> :	circus clouds moving up with gusty wind from SW	
00 <sup>00</sup> E		4"	6.82	G5V		reaching 150 already in SW	
00 <sup>00</sup> E		4"	6.82	G5V	01 <sup>30</sup> :	circus clouds moving by below peak - 18/41	
00 <sup>00</sup> E		4"	6.82	G5V		still with good distance	



part of CO<sub>2</sub> m: 18<sup>35</sup> EST, more in 19<sup>35</sup> EST  
 Dome Temp. 65°F voltage: 700v Transparency Conditions 18<sup>30</sup>: Good; even free of haze, low to horizon in W  
 Focus Ref. at 15.48 should be 12.66 of Full Moon  
 Dome Temp. 58°F

Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	N 0 <sup>52</sup> W		6"	5.31	G0V		19 <sup>14</sup> : excellent as far as no haze, judged by region	
	N. 02 <sup>10</sup> W		8"	5.42	G5IV		illuminated by bright moon, 3 <sup>rd</sup> mag. stars barely visible	
	03 <sup>W</sup>		6"-6"	6.75	G4V			
	2 <sup>10</sup> W		10"	5.0	A0V			
	07 <sup>W. 01<sup>W</sup></sup>		6"	5.70	G6IV		20 <sup>35</sup> : clear all around right down to horizon	
	1 <sup>W</sup>		4"	7.95	—			
	2 <sup>W. 02<sup>W</sup></sup>		6"	5.94	G6V			
	00 <sup>W</sup>		8"	6.22	G0		22 <sup>15</sup> : sky good, but glaring moon at horizon	
	00 <sup>47</sup> W		8"	5.53	G5V			
	00 <sup>W</sup>		6"	6.12	G2V			
05 <sup>m</sup>	0 <sup>h</sup> 42 <sup>m</sup> W	+21° 03'	1+	6.70	K0V	3-3-3	set 2 YOSS.	sens 6 { 5691 5692
17	1 <sup>h</sup> 03 <sup>m</sup> W	"	1	"	"	3-3-3	set 5	sens 6 { 5694 5696
35	2 <sup>h</sup> 21 <sup>m</sup> W	"	1	"	"	3-3-3	set 8	sens 6 { 5697 5701
00 <sup>m</sup>	2 00 <sup>h</sup> 52 <sup>m</sup> E	+03° 14'	1	5.74	G5V	3-3-3	set 2	sens 6 { 5703 5704
08 <sup>m</sup>	2 00 <sup>h</sup> 45 <sup>m</sup> E	"	1	"	"	3-3-3	set 5	sens 6 { 5708 5710
20	2 00 <sup>h</sup> 33 <sup>m</sup> E	"	1	"	"	3-3-3	set 8	sens 6 { 5714 5715

247

(Cont.)

Date Tues. Wed Oct 1/2 1963 Observer mcl Julian Day           

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Angle End
27259	HD 23249	03 38.5	-10° 06'	I 12	IIaOB.	.008	16.4°C	02:47 <sup>h m</sup>	02 48 <sup>h m</sup>	3	00 29 <sup>m</sup> E
	δ Eri "	"	"	"	"	"	16.5°C	02 55	02 58	3	00 19 <sup>m</sup> E
	"	"	"	"	"	"	"	03 03	03 09	3	00 08 <sup>m</sup> E
27260	HD 26965	04 <sup>h</sup> 10.8 <sup>m</sup>	-07° 49'	"	"	"	"	03 42	03 44	4	00 05 <sup>m</sup> E
	0 <sup>2</sup> Eri "	"	"	"	"	"	"	03 52	03 55	4	00 06 <sup>m</sup> E
	"	"	"	"	"	"	"	03 58	04 03	4	00 14 <sup>m</sup> E
27261	HD 28305	04 22.8	+18 58	"	"	"	16.3°C	04 41	04 42	1	00 40 <sup>m</sup> W
	ε Tau "	"	"	"	"	"	"	04 46	04 48	1	00 46 <sup>m</sup> W
	"	"	"	"	"	"	"	04 52	04 56	1	00 59 <sup>m</sup> W
	Focus Test.										

Completely out of focus

Focus 12 1/2" was changed on Fri night. He who changed it did not know what to put it back to. A note was left but it was lost, & did not focus as it was (as instructed)!



Dome Temp. ....

Transparency Conditions

Good

248

Focus .....

Dome Temp. 54°F

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 48	00 <sup>h</sup> 29 <sup>m</sup> E	-09° 53'	1	4.7	KO IV	3-6	set 2 YOSS	sens 6 { 5718 5719
2 58	00 <sup>h</sup> 19 <sup>m</sup> E	"	1	"	"	3-3-3	set 5	sens 6 { 5720 5722
3 09	00 <sup>h</sup> 08 <sup>m</sup> E	"	1	"	"	3-3-3	set 8	sens 6 { 5723 5727
3 44	00 <sup>h</sup> 05 <sup>m</sup> E	-07° 42'	1+	5.0	dKO	3-3-3	set 2	sens 6 { 5728 5729
3 55	00 <sup>h</sup> 06 <sup>m</sup> W	"	1+	"	"	3-3-3	set 5	sens 6 { 5730 5732
4 03	20 <sup>h</sup> 14 <sup>m</sup> W	"	1+	"	"	3-3-3	set 8	sens 6 { 5733 5737
4 42	20 <sup>h</sup> 40 <sup>m</sup> W	+19° 07'	2	4.58	KO III	3-6	set 1	sens 6 { 5738 5739
4 43	20 <sup>h</sup> 46 <sup>m</sup> W	"	2	"	"	3-3-3	set 4	sens 6 { 5740 5742
4 56	20 <sup>h</sup> 54 <sup>m</sup> W	"	2	"	"	3-3-3	set 7	sens 6 { 5743 5747
						11/8	set 9.5	
3 pH loaded in fridge								

id wt  
pH



Dome Temp. 68°F

Focus 12.66

Dome Temp. ....

Transparency Conditions .....

*Much cloud*

250

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21 2 0 <sup>h</sup> 28 <sup>m</sup> W	+11° 52'	1	6.0	G8IV	3-3-3	set 2 Yoss's	series # 6 { 5763 5765 } ② poor
28 0 <sup>h</sup> 32 <sup>m</sup> W	" "	"	"	"	3-6	set 5 "	series # 6 { 5766 5767 } ① poor
37 0 <sup>h</sup> 43 <sup>m</sup> W	" "	"	"	"	3-3-3	set 8 "	series # 6 { 5768 5772 } ④ comp. lines double

20<sup>h</sup> W cloud closed up. cloud

Plate apparently was not seated correctly in plate holder

Focus OK.

These IIAD plates are a little wider than normal! Load them carefully

25L

Date Fr/Sat Oct 4/5 '63 Observer vdB, FL Julian Day 2438307.

0191 01 47.4 3546.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour End
292-2727	51 Peg	22 55.7	+20°35		615/33	28		2124	ab+sv		0536
292-2728	15 Sge	20 02.5	+16 58		615/33	28		2154	ab+sv		0230
292-2729	85 Peg	00 00.3	+26 54		615/33	28		2225	ab+sv		0258
292-2730	HD 225239	00 02.9	+34 28		616/33	28		22 55	ab+sv		0030
292-2731	HD 166	00 04.7	+78 50		616/33	28		23 22	ab+sv		0004
292-2732	HD 10307	01 39.5	+42 26		615/33	28		23 51	ab		0100
27258	47 And.	01 18.0	+37 12	Ft2	IIa0(b)	0.008	12°	00 <sup>h</sup> 26 <sup>m</sup>	00 <sup>h</sup> 34 <sup>m</sup>	1	0 12 E
00 36								00 46	1	0 00	
00 49								00 54	1	0 59	
27259	HD 3546	0 33.3	+28 46	I-12	IIa0(b)	0.008	12°	1:19	1 21	2	1 20 W
1:24								1 26	2	1 25 W	
1:28								1:32	2	1 31 W	
27260	BD+49° 900	03 11.7	+49 26	"	"	"	"	2:07	2:28	1	0 13 E
27261	BD+50 738	03 13.1	+50 31	"	"	"	"	2:41	2:48	2	0 06
27262	BD+48 931	03 <del>22.6</del>	<del>+48 41</del>	"	"	"	"	3:09	4:37	1	1 45

Searched for Comet Percival but could not find it - probably due to bright sky over

Dome Temp.  $\sim 50^\circ$

CO<sub>2</sub> in 2000?

Transparency Conditions Per Sec. Sull. 1700

252

Focus

V = 700 20 50

Dome Temp.

Record focus

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0536	0436		5"	5.53	55V		<p>Appears that when exp. met. is balanced on scale 10 it is <u>not</u> necessarily balanced on scale 8 in fact needle falls slowly. <i>Should be balanced at mid-scale</i></p> <p>- Focus test made at beginning of night.</p>	
0232W	0242W		5"	5.80	dg1			
0058E	0048E	3	5"	5.82	53V			
0030E	0020E		3"	6.12	52V			
0004E	0006W		4"	6.14	K0			
0110E	0100E		4.94	5.20				
012E	37 31	~5"	5.5	A2m	4-5	plate position: 1	Seeing generally	5788-5792 strong
000					4-5	:5	horrible!!	5793-5797 strong plate
009W	37 31				4-5	:9		5798-5800 1 strong
120W	29 08		5.3	G80p	9	:1 [Y]	This plate a very	counts: 1 fine
125W			"	"	9	:5 [S]	light fit - may be	:2 1 strong
131W			"	"	9	:9 [S]	out of focus due to this.	:4 strong guid
013E	49 38	3"	7.8	A0	4-2-3	Set 5. & Per cleanup.	Sens 8	5817-5827 strong guid
006W	50 49	"	7.0	B9	3-3-3	Set 5. & Per "	Sens 8	5829-39 numbered 27262 1 strong guid
145W	48 53	4"+	9.1	F7	3-3-3	Set 5 & Per " Seeing poor - night close	Sens 9	5842-5852 guid poor

by moon and rising sun.

MF.

2 PH loaded and put in refig.

253

Visitors: 170: Showed Ring Nebula

19.00-21.00 E.S.T.

Py. Pa, PH

Date Sat/Sun Oct 5/6, 1963 Observer mce - H5 Julian Day 2438308.

0192 00 54.1 3548.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27263	HD 3651	00 34.2	20°43'	I12	IIaOB	.008	16.5	22 <sup>h</sup> 46 <sup>m</sup>	22 <sup>h</sup> 52 <sup>m</sup>	4
	54 Psc "	"	"	"	"	.008	"	22 <sup>h</sup> 57 <sup>m</sup>	23 <sup>h</sup> 02 <sup>m</sup>	4
	"	"	"	"	"	.008	"	23 <sup>h</sup> 08 <sup>m</sup>	23 <sup>h</sup> 20 <sup>m</sup>	4
27264	HD 6582	01 01.6	54 26	"	"	1008	16.6	23 52	23 55	1
	" m Cas							00 05	00 08	1
	"							00 10	00 18	1
27265	HD 10700	01 39.4	-16 28	"	"	"		00 50	00 50 <sup>30</sup>	2
	" J. Cet							00 53	00 54	2
	"							00 56	00 57 <sup>40</sup>	"
27266		01 03.9	+54 13	"	"	"		01 20	01 27	3
	HD 6833	"	"	"	"	"	16.3	01 28	01 43	"
27267		"	"	"	"	"		01 45	02 17	"
	HD 20630	03 14.1	+03 00	"	"	"		02 37	02 40 <sup>30</sup>	4
	" K. Cet	"	"	"	"	"		02 42	02 47	"
27268		"	"	"	"	"		02 48	03 10	"
	BD +47° 781	03 06.4	47 43.5	"	"	"	16.2	04 06	05 40	1

Pa, PH

Dome Temp. 57°F

Focus 12.66

Dome Temp. ....

Transparency Conditions

some haze

234

2 PH Loaded in fridge

#27268 - out of focus as well as focus  
test being centre to violet - plate prof. not present  
plate 27263 - 5 partially in holder  
fogged - good for microphotometry.

Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
52 <sup>m</sup>	1 <sup>h</sup> 07 <sup>m</sup> E	21° 04'	1-2	6.70	KOII	3-3-3	set 2 "Yoss" sens 6 { 5893 5894	guiding
02 <sup>m</sup>	2 <sup>h</sup> 56 <sup>m</sup> E	"	1-2	"	"	3-3-3	set 5 " sens 6 { 5896 5898	l strong
20 <sup>m</sup>	3 <sup>h</sup> 38 <sup>m</sup> E	"	1-2+	"	"	3-3-3	set 8 " sens 6 { 5900 5904	strong
55	3 <sup>h</sup> 32 <sup>m</sup> E	54° 46'	2	6.1	G5IVp	3-3-3	set 2 " (1c) sens 6 { 5905 5906	fine partial fogged
08	00 19 E					9	" 5 (2c) " 5 5911 5913	strong guid
13	00 09 E		1-2+			9	" 9 (4c) " 5 5914 5918	strong <sup>in violet</sup> guid
50 <sup>30</sup>	00 12.5 E			4.2	G0IVp	9	" 2 " #5 1/2 Count	too weak guid
54	00 09.2 E		0-1			9	" 5 " 1 "	fine <sup>corner</sup> fogged guid
5	00 05.5 E	-16 07				9	" 9 " 2 Counts	fine <sup>in violet</sup> off
27	00 59 W		1-2	8.1	KI III	9	" 2 Yoss 25% #8 5949 5954	guid very poor
23	01 15 W		"	"	"	3-3-3	" 5 50% " 5955 5960	l strong guid
17	2 14.9 W	54 34	1-2	"	"	3-3-3	" 9 100% " 5966 5986	strong guid
40 <sup>3</sup>	00 02.5 W		0-1	5.74	G5V	9	" 2 #6 1 count	fine
47	00 09 W		"	"	"	9	" 5 " 5993 5995	l strong
10	00 31 W	+03 15	"	"	"	9	" 9 " 5996 6000	strong
40	03 01 W	48 00	1-2	8.5	K:	3-3-3	" 2 Ecl B <sub>in</sub> F " 8 Focus Test. #9 6005 6042	guid poor part of frame centre to vio.

255

Date Oct 6 / 17 Sun 1963. Observer MT Sm - Gt Sm Julian Day 2438309.

① 193 00 03.0 3551.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27269	HD 212496	22 19.6	+51 44	D12	II aob	set 1.008	22°C	21:40	21:44	3
"	"	"	"	"	"	"	"	21:48	21:53	3
"	"	"	"	"	"	"	"	21:54	22:02	3
27270 F	Focus Test.									2
293-2733	3,443	00 <sup>h</sup> 35.4 <sup>m</sup>	-24° 58'					22 <sup>20</sup>		
193-2703	4,614 $\eta$ Cas	00 46.9	+57° 38'	5/6/33	28			22 <sup>54</sup>	2,6	
2704	6,582 $\mu$ Cas	01 05.7	+54° 45'	6/5/33	28			23 <sup>45</sup>	0,6	
2705	8,036	01 17.9	-00° 42'	6/6/33	28			00 <sup>15</sup>	2	
2736	13,307	01 39.5	+42° 26'	6/5/33	28			00 <sup>41</sup>	2,6	
2707	STANDARD 15,318 $\gamma$ Cas	02 26.2	+08° 18'	6/4/33	28			01 <sup>06</sup>	2	



Dome Temp. 58°F

Focus 12.66

Dome Temp. ....

no CO<sub>2</sub>  
voltage 700 : 22<sup>20</sup>

Moon Up in E

Transparency Conditions Cloudy until about 21<sup>h</sup> (E.S.T.)

22<sup>50</sup>: clouds gone; sky milky and not many stars  
stars can just be recognized; if it is here  
that you had transparency then it must be a  
very uniform one.

Long Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
44 3	0 06 W	+52 00	0	5.6	G9 III	3-3-3	set 2 25% YOSS (p.2) sens 5 { 6053 6054	useless - plate slipped?
53 3	0 15 W	+52 00	0+	"	"	3-3-3	set 5 50% sens 5 { 6057 6058	best strong
102 3	0 24 W	+52 00	1	"	"	3-3-3	set 9 100% sens 5 { 6060	strong comp. rather weak
							set 5	center to violet!
				5.71	K0113		← couldn't find this star	
	0° E 00° E		6"	3.45	G0V		23 <sup>00</sup> : entrance slit came out and circular diaphragm	
	0° E 90° E		3"	5.12	G5V		looked unusual	
	0° E		5"	5.86	G6B		for η (2 <sup>nd</sup> at middle of tree) saw small starlet 7° away	
	0° E 77° W		6"	4.94	G2V		from η (2 <sup>nd</sup> ); 00 <sup>24</sup> : none on chart. perhaps :: CO <sub>2</sub> missing	
	0° E		5"	4.27	B9 II		77 <sup>00</sup> : leak current behaves bad :: no refrigeration	
							00 <sup>00</sup> : sky milky - free of obvious clouds; not many stars out	
							00 <sup>00</sup> : standard star tree not too good, though	
							moon well off, stars bright - u, here must be in Milky Way	
							01 <sup>32</sup> : had used not "SPECT" setting, but "EXMTR"! else the	
							Very close	

257

Date Oct 6/7 <sup>cont'd</sup> Observer *glt.* 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.
27270	HD 7106	01 06.2	+29 34	I-12	IIaOb	.008	21.4 <sup>c</sup>	2:02.	2:06.	3
"								2:06.	2:12	3
"								2:12.	2:20.	3
27271	HD 23249 δ Eri	03 38.5	-10 06	I-12	IIaOb	.008	21.6 <sup>o</sup>	2:38.	2:40	4
								2:41	2:45	4
								2:46	2:56	4
27272	HD 26965 δ <sup>2</sup> Eri	04 10.8	-07 49	I-12	IIaOb	.008	21.5	3:08.	3:12.	1
								3:13	3:21	1
								3:22	3:34	1
27273	HD 28305 ε Tau	04 22.8	+18 58	I-12	IIaOb	.008		3:45	3:47	2
								3:48.	3:50	
								3:50.	3:52.	
27274	BD+47° 781	03 06.4	+47 43.5	I-12	IIaOb	.008	21.4	4:06.	5:38.	3

Transparency Conditions *Poor Seeing.*

Dome Temp. ....

Focus .....

Dome Temp. ....

3 07 : 5:34

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
06.	1 39 W	+29 54	0 <sup>-</sup>	5.7	KOIII-IV	9	Set 2 25% YOSS P2. sens 6.	78. 79. 80.	guiding very poor
12	1 45 W		0 <sup>-</sup>			3+3+3	Set 5 50% sens 6.	82.	strong guid
20.	1 53 W		0 <sup>-</sup>			3+3+3	Set 9 100% sens 6.	83. 87. 89.	strong
40	0 18 E	-9 54	0 <sup>-</sup>	4.7	KOIII	9	Set 2. 25% YOSS P1. sens 5	90.	fine
45	0 13 E		0 <sup>-</sup>			3+3+3	Set 5 50%	91. 93. 94.	strong
56	0 02 E		0 <sup>-</sup>			3+3+3	Set 9 100%	98.	strong
2	0 18 E	-7 42	0 <sup>-</sup>	5.0	dko	9	Set 2. 25% YOSS P1 sens 5.	100. 01.	fine
21	0 09 E		0 <sup>-</sup>			3+3+3	5 50%	02. 04.	strong
54	0 04 W		0 <sup>-</sup>			3+3+3	9 100%	05. 09.	strong
17	0 04 W.	+19 07	0-1	4.58	KOIII	9	2 25% YOSS P1. Sens 5	11. 12.	fine guid center
50	0 07 W		1+			9	5 Moon is very near & may have influenced the spectrum.	13. 15. 16. 20.	strong guid via
52	0 09 W		1-2			3+6.	9		strong guid via
58	3 11 W	+47 59	1+	8.5	K:	3+3+3	4. Locked telescope in Dec. Sens 9.	28. 70.	70 good
		3 PH's	loaded				in frig.		

239

Date *wed, Thur.* Oct 9/10 63 Observer *Sj - 4<sup>th</sup> yr students; Flt Pa; Cn* Julian Day 2438312.  
 © 195 57 43.8 3558.3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27275	HD 196755	20 <sup>h</sup> 34 <sup>m</sup> .3	+09° 44'	I-12	IIaOb	.008	16.2 <sup>c</sup>	19 <sup>h</sup> 11 <sup>m</sup>	19 <sup>h</sup> 21 <sup>m</sup>	1
"	"	"	"	"	"	"	"	19 42	20 07	1
27276	HD 202109	21 <sup>h</sup> 08 <sup>m</sup> .7	+29° 49'	I-12	IIaOb	.008	16.2 <sup>c</sup>	20 18	20 21	2
"	" " "	21 <sup>h</sup> 08 <sup>m</sup> .7	+29° 49'	I-12	" "	" "	" "	20 27	20 32	2
27277	HD 190658	20 00.8	+15 13	I-12	IIaOb	0.008	16°	20 50	21 50	4
27278	HD 16066	02 29.8	+67 38	I-12	"	"	"	22 08	22 36	1
27279	HD 16440	02 33.2	+68° 03	I-12	"	"	"	22 43	23 14	2
27280	HD 15784	02 27.2	+67 55	I-12	"	"	"	23 24	23 32	3
27281	HD 6833	01 03.9	+54° 13	I-12	"	"	"	23 50	23 56	4
	"							23 58	00 12	4
	"							00 15	00 41	4
27282	BD +47° 781	03 06.4	+47 43.5	I-12	IIaB	.008	"	00 54	02 06	1
27283	BD +49° 967	03 26.5	+49 59	I-12	IIaB	.008	15.8	02 17	04 23	2
27284	AD 42807	06 07.7	+10 40	"	"	"	"	04 38	04 42	3
								04 42	04 50	3
								04 51	05 09	3

Four Test





Dome Temp. 65°F

Focus 12.66

Dome Temp. ....

Transparency Conditions Poor - Very hazy 1900h 262  
light clouds in south.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
16 41 <sup>m</sup> 10 <sup>m</sup> W	+15°24'	0	8.0	gM23-5-7	set 5 set 9	(JdB) SB also 8 } 6422 } 6434	fine guid. OK sl. to vis.

Closed down 2020 - very heavy haze & clouds from south.

- Note: 1) Some plates do not fit flat into grooves because they are too big  
2) "Winn" light on exposure meter with beam Hout or doesn't work.  
3) Could not find "regular" arc strikers

4 plates loaded.

253

Smst trace should be 294-2738  
change numbers!

Date T. / S.T. Oct 11/12 1963 Observer V. S. - MCO Julian Day 2438314.

0197 56 22.7 3562.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	F
293-2733	α Lyr	18 35.7	+38°45'		4/4/33	28		1845		
293-2734	HD 179957A+B	19 11.1	+4945		6/5/33	28		1905	2x + sky	
293-2735	δ Dra	19 32.5	+6936		6/4/33	28		1934	2x	
293-2736	HD 182572	19 23.3	+11052		6/5/33	28		1958	2x	
293-2737	HD 187923	19 50.5	+1134		6/5/33	28		2020	2x	
293-2738	HD 190067	20 00.7	+15°29'		7/4/33	28		2042	2x + sky	
293-2739	HD 190360	20 02.1	+2949		6/5/33	28		2112	2x	
293-2740	HD 208110	21 52.2	+0652		6/5/33	28		2138	2x	
293-2741	HD 208776	21 56.8	+0337		6/6/33	28		2201	2x + sky	
293-2742	HD 217166	22 56.7	+0910		6/6/33	28		2235	2x	
293-2743	HD 116	00 04.7	+28°50'		6/5/33	28		2258	2x	
294-2749	HD 3443	00 35.4	-24°58'		6/5/33	28		2323	2x + sky	
294-2750	HD 8036	01 17.9	-0042		6/5/33	28		2351	2x	
27286	HD 3651	00 <sup>h</sup> 34.2 <sup>m</sup>	+20°43'	I-12½	#a0B	.008 <sup>sat</sup>	14.0°	00 <sup>h</sup> 52 <sup>m</sup>	01 <sup>h</sup> 03 <sup>m</sup>	1
"	" 54 Psc	"	"	"	"	"	"	01 <sup>h</sup> 10 <sup>m</sup>	01 <sup>h</sup> 33 <sup>m</sup>	1
"	"	"	"	"	"	"	"	01 <sup>h</sup> 35 <sup>m</sup>	02 38 <sup>m</sup>	1



Dome Temp. 51 °F

Focus 12.66

Dome Temp. ....

CO<sub>2</sub> in } 1800 GST  
V = 750 }

Transparency Conditions Partly cloudy (Strato-cum) 264

1855 fine clouds very low in S. and W.

2030 very fine

0100 very good.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0116W		8"	0.0	AOV		EXT-ST	
0100W + 0110W		5"	6.75	54V		A+B	
0107W + 0117W		5"	4.68	KOV			
0143W + 0153W		6"	5.17	58IV			
0136W + 0146W		7"	5.78	52V			
0148W + 0158W		6"	7.1	58V			
0216W + 0226W		4"	5.70	56IV		rotw strong image motion - gusty wind	
0254W + 0104W		5"	6.14	50			
0113W + 0123W		5"	6.94	50V			
0045W + 0055W		5"	6.42	49I			
0000 + 0010W		5"	6.41	KO			
0005E + 0005W		8"	5.71	KO			
0019E + 009E		4"	5.86	49K3		F type Spectrum!	
01°28'W + 21°04'		0	6.70	KOV	9	set 2	"Yoss" sens 6 {6444 6445 fine - good
01°58'W	"	0+	"	"	3-3-3	set 5	" sens 6 {6446 6448 d strong
03°03'W	"	0-	"	"	3-3-3	set 8	" sens 6 {6449 6453 strong

265

(cont'd)

Date Fri/Sat Oct 11/12 1963 Observer gnce 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.
27287	HD 28305	04 22.8	+18 58	I-12 $\frac{1}{2}$	ITA0B	.008	13.8°c	03 <sup>h</sup> 01 <sup>m</sup>	03 <sup>h</sup> 02 <sup>m</sup>	2
	" E Tau	"	"	"	"	"	"	03 12	03 16	2
	"	"	"	"	"	"	"	03 18	03 25	2
27288	HD 37171	05 <sup>h</sup> 31.5	+10° 58'	"	"	"	"	03 <sup>h</sup> 45 <sup>m</sup>	04 24	3
27288 <sup>8</sup> F	Focus Test.									
	Closed up - Dew is beginning to drip off dome 05:00 EST.									



267

Visitors: 170

1st hour: Cloudy Demonstration only

1900-2000 EST

2nd hour: Showed Ring Nebula

2000-2100 EST.

Py.  
HWDate Sat/Sun Oct 12/13, 1963. Observer *417 (P) - P. Van* Julian Day 2438315.

© 198 55 45.6 3565.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
275-2751	212, 077 53, 2	22 24.6	-16° 58'		6/6/33	28		21 45	<	
295-2752	214, 148	22 36.4	-08° 05'		6/6/33	28		22 08	0, 2, 3	
-2753	3, 443	00 35.4	-14° 58'		6/6/33	28		22 36	2, 6	
-2754	106	00 24.7	+28° 50'		6/6/33	28		21 00	a, b, c, d, e	
-2755	8, 262	01 24.9	+11° 30'		6/6/33	28			b, c, d, e	
-2756	9, 543	01 5.6	-24° 21'		7/5/33	28		00 00	a, b, c, d, e	
-2757	9, 562	01 31.9	-07° 18'		7/7/33	28		00 07	0, b	
-2758	15, 118 } <i>STANDARD</i> f Cx	02 26.2	+18° 18'		6/4/33	28		01 20	a	
-2759	18, 244	02 00.4	-06° 38'		7/11/33	28		01 41	0, 1, 2, 3, 4, 5	
-2760	17, 226 } <i>6922</i>	20 0.4	+53° 21'		5/5/33	28		02 14	a, b, c	
-2761	19, 273 } <i>P. 2</i>	03 0.4	+49° 9'		5/6/33	28		03 00	a, b	
27290 <sup>89</sup>	E Tau HD 28305	04 22.8	+18° 58'		Du(R) 808	90		03 45	03 45 3	
								03 47	03 49	
								03 52	03 54	
				3-11-33	Ring Nebula most likely		32 rather		d.a. 33	

Dome Temp. 30°F

Focus 12.66

Dome Temp. ....

Transparency Conditions .....

16<sup>30</sup>: Only cumuli around, otherwise good


21<sup>50</sup>: very good, Milky Way out

22<sup>45</sup>: very good right down to horizon, but heavy dew

23<sup>00</sup>: the same

268

ding Time  
E.S.T.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 <sup>30</sup> W		6"	6.40	d61		focused star	
5 <sup>00</sup> W		6"	6.22	G0			
3 <sup>00</sup> E, 00 <sup>00</sup> E		4"	5.7	K0		focused star	
0 <sup>00</sup> W, 00 <sup>00</sup> W		6"	6.14	K0			
00 <sup>19</sup> E, 00 <sup>39</sup> E		6"	6.90	G0E			
00 <sup>00</sup> W, 00 <sup>00</sup> W		4"	5.7	K0			
00 <sup>00</sup> W		4"	5.74	dG2			
0 <sup>00</sup> W		11"	4.7	89III			
0 <sup>00</sup> E, 00 <sup>04</sup> W		4"	6.18	F8III		01 <sup>00</sup> : clear night dew dripping appreciably, etc.	
0 <sup>00</sup> W, 90 <sup>05</sup> W		8"	2.91	F5III		02 <sup>47</sup> : 1 meter broke down - tried to get it working	
0 <sup>00</sup> W, 01 <sup>00</sup> W		8"	4.04	G0I		for about 17 minutes - I worked on it in vain	
00 <sup>06</sup> W			4.58	K0II	9	01 <sup>00</sup> : air very damp; only not changed	Sen 5 <sup>catch</sup> fine
00:30 W					9	set 1, 5, 9.	2 l. strong
00:35 W					9		4 strong good in vis.
00:49						Closed down dew forming on telescope and spectrograph.	
						2 P.H. Coated in dome.	

269

Date Sun/Mon Oct. 13/14 63. Observer Mc Sm - H<sup>v</sup> Julian Day 2438316.

© 199 55 10.8 3567.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour En
296-2762	Vega	12 <sup>h</sup> 36.6	+38° 45'		4/5/32	14		18 <sup>30</sup>	0		
2763	26, 427 16 legs B	19 45.9	+50° 25'		6/6/32	28		19 <sup>33</sup>	a, b		
2764	186, 427 16 legs A	"	"		6/6/32	28		19 <sup>30</sup>	a, b		
2765	190 211	20 38.0	-23° 55'		7/4/32	28		19 <sup>58</sup>	a, b, sky		
2766	211 697 53 Aq	22 24.6	-16° 56'		7/4/32	28		20 <sup>30</sup>	a, b, sky		
2767	214, 448	22 36.4	-08° 05'		7/4/32	28		21 <sup>02</sup>	a, b, sky		
2768	166	00 04.7	+28° 50'		7/4/32	28		21 <sup>43</sup>	a, b, sky		
2769	8, 024	01 17.9	-00° 42'		7/4/32	28		22 <sup>16</sup>	a, b		
2770	4 614 η Cen	00 46.9	+51° 38'		7/4/32	28		22 <sup>50</sup>	a		
2771	6, 582 / Cen	01 05.7	+54° 45'		7/5/32	28		23 <sup>06</sup>	a, b		
2772	9, 562	01 31.9	-07° 13'		6/6/32	28		23 <sup>35</sup>	a		
2773	12, 007 06	01 39.5	+42° 26'		6/5/32	28	13.0	23 <sup>50</sup>	a, b		
2729X <sup>0</sup>	HD 16606	02 29.8	+67 38	I-12 <sup>1/2</sup>	IIa0 b	008	13.0	00 44	01 08	2	00 7
2729X <sup>1</sup>	" 6833	01 03.9	+54 13	"	"	"		01 18	01 24	1	0 22
	"	"	"	"	"	"	12.9	01 26	01 44	1	0 7
	"	"	"	"	"	"		01 44	02 24	1	0 28

Dome Temp. 58°F

Focus 12-66

Dome Temp. ....

CO<sub>2</sub> m: 17<sup>40</sup> EST, 22<sup>15</sup> EST  
voltage: 700V

Transparency Conditions .....

18<sup>10</sup>: hazy patches in E ≈ 25° up  
N ≈ 30° up

S &amp; W uniformly Milky blue; yellow &amp; orange sunset

260

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 <sup>10</sup> W		10	0.03	A0 V		Vega kept drifting out	
0 <sup>2</sup> W		4"	6.20	G5 V		19 <sup>00</sup> : sky much improved - good all over everywhere	
0 <sup>05</sup> W, 01 <sup>16</sup> W		4"	5.96	G2 V			
0 <sup>1</sup> W, 00 <sup>46</sup> W		2"	6.20	dG7		focused star	
0 <sup>38</sup> E, 00 <sup>27</sup> E		3"	6.44	dG1			
		3"	6.20	dG2			
0 <sup>1</sup> E, 00 <sup>09</sup> E		3"	6.22	G0		21 <sup>57</sup> : sky good, Milky Way out	
1 <sup>07</sup> E, 00 <sup>57</sup> E		3"	6.14	K0			
4 <sup>5</sup> E, 01 <sup>34</sup> E		3"	5.86	G63		22 <sup>34</sup> : sky excellent everywhere	
7 <sup>50</sup> E		3"	3.45	G0 V		22 <sup>50</sup> : η Cas has a faint companion; both were visible	
0 <sup>44</sup> E, 20 <sup>34</sup> E		2"	5.12	G5 V		<u>0100 Thin Cirrus</u>	
0 <sup>1</sup> E		2"	5.74	dG2			
2 <sup>34</sup> E, 00 <sup>24</sup> E		3"	4.94	G2 V			
0017 E	67 54	0-1	7.7	F <sub>2</sub> II	3-3-3	S+5 vdB H/Lum.	#8 6513 6523 fine guiding
0127 W		0-1	8.1	K III	9	" 2 Yoss 25%	#8 6527 6532 good - good
0147 W	54 34	"	"	"	3-3-3	" 5 " 50%	" 6534 comp 6544 week fine guid
0223 W	"	"	"	"	3-3-	" 9 100%	" 6545 6565 strong guid





Dome Temp.  $+48^{\circ}$ 

Focus .....

Dome Temp. ....

Transparency Conditions FAIR

272

0335 Faint Aurora  
Occasional Cirrus all Night

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
40 <sup>30</sup>	00 22E		00	5.0	dK0	9	Setz 1/55 25% #5 1 COUNT	fine
46 <sup>20</sup>	00 16E		"	"	"	9	" 5 50% " 2 COUNTS	strong grid
55	00 07E	-07 42	"	"	"	9	" 9 100% 4 counts	strong violet
520	03 21W	47 59	1	8.5	K:	3-3-3	" 5 Ecl. Bin. (F) #9 6581 6637	strong
						10/8	" 9	OK - d.c. to violet
							2 PH + 12 IN DOME	
							0530 Looked for comet but could not find it. Sky too bright. Suggest looking at least 1/2 hr earlier	

273

Date Jan 14/15 Oct 14/15 '63 Observer vdB - Hv Julian Day 2438317

① 200 54 38.2 3569.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
297-2774	$\alpha$ Lyr	18 35.6	+38°45'	-	4/4/33	28		18:40		
297-2775	HD 193664	20 17.1	+66°45'		6/5/33	28		19:05	2x	
297-2776	HD 196761	20 38.0	-23°55'		7/4/33	28		19:31	2x + sky	
297-2777	HD 187923	19 51.5	+11°34'		6/5/33	28		20:02	2x	
297-2778	53 Aqr A+B	22 <sup>m</sup> 24.6	-16°56'		6/5/33	28		20:27	2x + sky	
297-2779	HD 214448	22 36.4	-08°05'		6/6/33	28		20:53	2x + sky	
297-2780	HD 215812 A+B	22 46.0	-04°25'		6/6/33	28		21:22	2x + sky	
297-2781	51 Peg	22 55.7	+20°35'		6/5/33	28		21:50	2x	
297-2782	HD 8262	01 20.4	+18°30'		6/6/33	28		22:17	2x + sky	
297-2783	$\gamma$ (sup. to)	00 <sup>m</sup> 52 <sup>s</sup>	+03°51'		2/5/33	14		23:00	2x	
297-2784	$\gamma$ A	00 <sup>m</sup> 52 <sup>s</sup>	+03°51'		6/5/33	14		23:19	2x + sky	
297-2785	HD 10307	01 39.5	+42°26'		6/5/33	14	(16.5)	23:52	2x	
2729 <sup>4</sup>	HD 16066	02 29.8	+67°38'	I-12 $\frac{1}{2}$	IIa06	008	16.5	00:39	01:27	1
2729 <sup>5</sup>	BD +47° 828	03 20.0	47 52	"	"	"	"	01:39	01:45	2
2729 <sup>6</sup>	BD +46° 780	03 30.6	47 04	"	"	"	16.4	02:04	05:20	3
	Focus 1		OTB							

Dome Temp. ....

Focus .....

Dome Temp. ....

CO<sub>2</sub> in } 1800  
 v = 750 }

Transparency Conditions Fine, Ci. Low in W and N

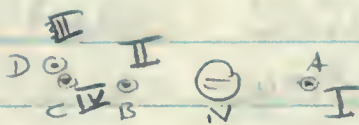
1940 Haze low in South

2200 Haze moving up

Night OK, NOT AOK

274

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0118W		3"	0	A0V		EXT. ST	
0005W + 0015W		3"	5.94	SSV			
0015W + 0025W		5"	6.36	dg 7		* Seeing good <u>MOST</u> of TIME TRANSPARENCY POOR	
0130W + 0140W		3"	5.78	SSV			
0040E + 0030E		5"	6.30 + 6.44	dg 1 + dg 2	A+B		
0025E + 0015E		5"	6.22	SO			
0005E 0005W		5"	6.66	SSV	A+B	NOTC	
0015E 0030E		4"	5.53	SSV			
0140E + 0120E		5"	6.96	SSV			
0030E		—	—	SV		no g	
0013E			+6	SV		Smallest g	
0020E		4"	4.94	SV		= HR 483	
0006W	67 54	00	7.7	F <sub>2</sub> II	33-3	Set 5 vdB Hilum.	#8 6645 6655 fine position
0025E	48 04	2	6.8	B9	9	" 5 α Per.	#7 6657 6667 strong guide.
300W	47 13	2*	9.0	F3	3-3-3	" 5 " "	#9 6666 6706 l strong guiding
					10/8	" 9 3 P.H.T. 3 in Dome	OK d e to vis



275 Fe, New astronomy by students (25) showed to, H

Date Tues/Wed Oct 15/16 1963 Observer Log Cr - Jft Julian Day 2438318.  
 @ 201 54 07.8 3571.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
7 27298	HD 212496	22 19.6	+51 44	I-12 1/2	IIaOB	.008	19.5	20 43	20 44	4
20 45								20 46		
20 46								20 48		
8 27298	TB 5-18 <del>HD 239925</del>	22 16.6	+55 54	I-12 1/2	IIaOB	.016	19.6	21 10	22 46	1
299 27300	HD 215441	22 40.0	+55 02	I-12 1/2	IIaOB	.008	19.6	23 09	23 59	2
0 2730X	HP 16066	02 29.8	+67 38	I-12	IIaOB	.008	19.7	00 21	00 57	3
1 27308	BD +47 781	03 06.4	+47 43.5	I-12	IIaOb	.008	19.6	01 10	02 34	4
2 27308	HD 37171	05 31.5	+10 58	I-12	IIaOb	.008	19.4	02 49	03 11	1
27303	HD 141 <sup>43</sup> <del>44</del>	02 12. <sup>2</sup>	+56 4 <sup>3</sup>	I-12	IIaOb	.008	19.2	03 31	03 37	2
27304	HD 14134	02 12.1	+56 40	I-12	IIaOb	.008	19.2	03 52	04 04	2
27305	BD +48° 943	03 24.8	+48 25	I-12	IIaOb	.008	19.1	04 18	04 28	3
27306	HD 35600	05 20.8	+30 07					4 46	04 48	4
								4 49	04 53	4
								4 53	05 01	4
										3

Focus test

Dome Temp. 65

Focus 12.66

Dome Temp. ....

Transparency Conditions very hazy

*few low clouds in NW*

276

Obs. Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
44	0 20 E		2	5.6	G9 III	NO. <del>1-2</del> set 2	loss #6	6709 6710 (1) guiding
46	0 18 E 9 21 E	+52 03				9 set 5	6711 6713 (1) l strong guid. center	
48	0 16 E					9 set 8	6714 6718 (4) strong guiding	
46	1 44 W	+56 14	2	10.53	B1pe (IV)	1-2 set 5	0 B #10	6720 6790 (20) fine guid
49	2 2 35 W	+55 22'	2	8.6	A0p	3-3-3 set 5	lg Pac A. #8	6794 (10) fine
57	0 19 E	+67 53'	2-1	7.7	F2 II	3-3-3 set 5	lum HV S.B. #7	6806 (10) l strong guid in v.o.
2 34	0 43 W	+47 59	2-1	8.5	Ki	3-3-3 set 5	F Ecl Bin. #8	6817 } both (20) strong 6827 } guid.
11	1 06 E	+11 01	1	7.59	K5 III	3-3-3	HV. S.B. finder field OK #8	6859 same (20) strong guid in v.o.
37	2 39 W	+67 00	1	6.4	B2 <sup>1</sup> Sg	3-3-3	Set 3. Stand. Vel. #7	6862 (4) l strong guid
04	3 06 W	+66 59	1	6.4	B2 <sup>5</sup> Sg	3-3-3	Set 3 #7	67 71 (4) l strong guid
28	2 17 W	+48 37	2	6.5	B9	3-3-3	Set 3. α Pers. #7	73 (4) l strong guid
48	0 41 W		1-2	5.7	B9 Ib	9	Set 3. Mk Stand. #7	(5) good guid
53	0 46 W					3-3-3	Set 5	83 87 (9) fine guid
501	0 54 W					3-3-3	Set 9	88 97 (8) strong guid.
3							Set 9	OK ↑ number written on spectrum

2 PH's in Dome.

27305-326  
upper part of spectrum  
has unusual appearance



Dome Temp.  $+68^{\circ}\text{F}$ Transparency Conditions *poor*

278

Focus *12.66*

Dome Temp. ....

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21	0 23 E	5:3 07	0-1	6.6	A3I <sub>b</sub>	9	Set 2 MK Std. lens 6 1 count	fine
12	0 28 W		0-1			9	Set 5 " " 2 "	fine <small>quid.</small>
31	0 47 W		0-1			9	Set 9 " " 4 "	strong <small>v.o.</small>
							Clouds and more clouds IPH loaded.	

Astronomy 2c Students shown SATURN → 20:30 EST.

279

Date Thur/Fri 17/18 Oct 1963

Observer McCl - Ell

Julian Day 2438320

⊙ 203 53 13.2 3575.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
27308	HD 222404	<sup>n m</sup> 23 35.2	+77 04	I 12½	II a05	.008	21.8	21:03	21:08
	" ♂ Cep	"	"	"	"	"	"	21:17	21:24
								21:27	21:34
27309	HD 3546	00 33.3	+28°46'	n	II a05	.008	21.8	22:00	22:04
	"	"	"	"	"	"	"	22:05	22:13
	"	"	"	"	"	"	"	22:16	22:20 <sup>40'</sup>
27310	HD 7106	<sup>01 06.2</sup> <del>00 04.6</del>	+29°34'	n	n	n	n	23:04	23:10
	"	(telescope was " correctly set)	"	"	"	"	21.7	23:13	23:23
	"	"	"	"	"	"	"	23:25	23:47
27311	HD 6582	01 01.6	+54 26	"	"	"		00:21	00:25
	" Cas						21.4	00:25	00:33
								00:35	01:15
27311 F	Clouds! Everywhere Focus Test.								



Dome Temp. 67°F

Focus ..... 12.66

Dome Temp. ...

Transparency Conditions

Poor

0.40 clouds.

280

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
<sup>h</sup> 01:04 <sup>m</sup> E	77.26	0-1	4.4	K IV	9	set 2 Yoss counts	1 sens 6 { 6913 6914 } good good
00:48 E	"	0-1	"	"	3-3-3	set 5	2 sens 6 { 6915 6917 } fine good
00:39 E	"	0-1	"	"	3-3-3	set 8	4 sens 6 { 6918 6922 } strong
01:07 E	29:07	0-1	5.3	G8 II p	5-A	set 2 Yoss	1 sens 6 { 6929 6930 } Lwk out
00:58 E	"	0-1	"	G8 III p	3-3-3	set 5	2 sens 6 { 6931 6933 } good
00:30 E	"	0-1	"	"	3-3-3	set 8 Small clouds passing in front of star	4 sens 6 { 6934 6938 } fine
00:34 E	29:54	1	5.7	K III-IV	3-3-3	set 2 (clean) Yoss	1 sens 6 { 6938 6939 } good comp
00:21 E	"	1	"	"	3-3-3	set 5	2 sens 6 { 6940 6942 } fine little
00:03 W	"	1+	"	"	3-3-3	set 8	4 sens 6 { 6943 6947 } strong { weak some faint
00:44 W	"	1-2	6.1	G5 II p	9	set 2	1 sens 6 { 49 50 } fine good
00:52 W	55 45	0-1	"	"	3-3-3	5	51 53. strong good
01:34 W	"	0-1	"	"	3-3-3	9	54 58. strong good in vis
						Set 5.	OK of c to orbit
2 P+1's in Dome.						27828-09	dim on lower stellar spectrum (hand on left)

281

TELESCOPE WRAPPED in plastic

Date Fr/Sat OCT 18/19 1963 Observer B-H Julian Day 2438.321  
0204 52 48.9 3577.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
298-2786	$\alpha$ Lyr	18 35.6	+38°45'		4/5/33	28		18 35		
298-2787	16 Cyg A	19 40.9	+50 25		6/6/33	28		19 00	2x	
27312	HD 190658	20 00.8	+15°13'	12"	IIaOb	008	22°	19 59	21 22 <sup>m</sup>	1
27313	+B S-39	23 53.7	+10°36'	"	"	016	"	21 50	23 50	
298-2788	Mira	07 17.5	-03 09		5/7/33	28		00 07	15 <sup>m</sup>	
298-2789	"	"	"		"	50		00 32	Fixed at 3900	
27314	HD 16066	02 29.8	67 38	I-12 $\frac{1}{2}$	IIaOb	.016*	22.8	01 15	01 39	1
"	"	"	"	"	"	.008	22.8	01 43	02 39	"
27315	BD +47° 781	03 06.4	47 43.5	"	"	.012	22.6	02 47	05 35	2
	Focus TEST		S.T. 3.			.008				

Sun/Mon Oct 20/21, 1963

Plastic catches in wind image bounces all over —

Dome Temp. .... 70°F.  
 Focus ..... 12.66  
 Dome Temp. ....

17:30 EST. { CO<sub>2</sub> in  
 V = 700  
 2300 { CO<sub>2</sub> in  
 V = 950

Transparency Conditions Getting Sun very red, hazy  
 Typical tropical air mass OK for A  
 Altocum move in 19:10 EST

00 00 Sky OK but NOT AOK

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0136W			0.0	AOU			
0051W + 0142W						Cloud large Do not reach	
0246W	+15°24'	1+	8.0	g172	3+5+3	vdB (SB) 6959-6979	Partly cloudy plate scratched 1 strong guiding poor
0123W	+60°59'	1-2	10.51	BIV	2+1+	for st. 6981-7045	OB prog p18 comp. table guid. poor exp. fine
0631E			8	g17			
0005E			8	g17			
0034W		0-1	7.7	F <sub>2</sub> II	2-1	Sets H.L. Luma. vdB. *ERROR #8 7051 7061	fine comp guid
0134W	+67°54'	0	"	"	3-3-3	" 9 " " " #8 7062+1 7073	fine when guid. worse
0355W	47°58'	0-1	8.5	K:	2-2-2	" 5 Ecl. bin (F) #9 7076+2 7140	strong guid esp in violet
					10/8	" 9	al. c to violet
I.P.H. Load at							
A POOR NIGHT.							
Closed Down - FL - Pa.				2 P.H. loaded.			

Mon 21 John Percy had visitors (WEA)

Richard Vandewal = vW

1953

Date Mon Tues 21<sup>st</sup> Oct '53 Observer Re mce - H v Julian Day 2439.324

207 51 47.6 3583.2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
27316 {	HD 198149	20 <sup>h</sup> 43.3 <sup>m</sup>	+61° 27'	I 12 $\frac{1}{2}$	IIaOB	.008	17.2	20:29	20:33 <sup>7</sup>	3
	<sup>o</sup> m Cep	"	"	"	"	"	17.2	20:35	20:39	3
	"	"	"	"	"	"	17.2	20:42	20:52	3
27317 {	HD 222404	23 35.2	+77° 04'	"	"	"	"	21:00	21:11	4
	<sup>o</sup> γ Cep "	"	"	"	"	"	"	21:13	21:34	4
	"	"	"	"	"	"	"	21:38	22:23	4
27318 {	HD 15784	02 27.2	+67° 55'	"	"	*"	"	22:43	00 29	1
	Focus TEST	TEST	OTB			.008				

slit width probably changed after #27316  
when focus checked.

Dome Temp.  $52^{\circ}$

Focus  $12.65$

Dome Temp. ....

\*SLIT.000

Transparency Conditions <sup>21:00</sup> Good (slight haze in south)

23:40 scattered clouds 284

Timing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:33	3 01 <sup>h</sup> 18 <sup>m</sup> W	+61° 42'	0-	4.6	K0 IV	3-3-3	set 2 "Yoss" sens 6 1 count	fine - strong
1:59	3 01 <sup>h</sup> 26 <sup>m</sup> W		0-			3-3-3	set 5 " sens 6 { 7156 7158	strong
5:2	3 01 <sup>h</sup> 39 <sup>m</sup> W		0-			3-3-3	set 8 " sens 6 { 7160 7164	strong
11	4 00 <sup>h</sup> 46 <sup>m</sup> E	+77° 26'	0-	4.4	K1 IV	3-3-3	set 2 " sens 6 { 7167 7168	fine - strong comp guid.
34	4 00 <sup>h</sup> 22 <sup>m</sup> E	"	0		K1 IV	3-3-3	set 5 " sens 6 { 7169 7171	strong very
23	4 00 <sup>h</sup> 27 <sup>m</sup> W	"	0		"	3-3-3	set 8 " sens 6 { 7172 7176	strong weak
29	00 21 E	68 10	00	6.77	F4 II	3-6	set 5 High Lum V.D.S. sens 7 { 7177 7178.5	fine comp guid in vis wks
						10/8	" 9	center to violet
							2 P.H. + 8	

285

Date Tues-Wed 22-23 October 1962 Observer mt Da - Julian Day 2438325.

0 208 51 30.8 3584.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
<del>27 319</del>	TB 5-39	23 <sup>h</sup> 53.7	+60° 36'	I-12	IIa06	set .008				2
27 319	HD 6833	01 03.9	+54° 13'	"	"	"	15.4°C	22 <sup>h</sup> 15		2
	"	"	"	"	"	"				"
						"				"



287

Date <sup>Thurs</sup> Wed Oct 23-24/63 Observer L-VW-Hg-Hr Julian Day 2438326.  
 @ 209 51 15.7 3586.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27320	H.O. 198149	20 43.3	61 27	I-12 $\frac{1}{2}$	BIIA <sub>0</sub>	set 008	19.8	19 08	19 09	3
	u η Cep							19 13	19 15	u
								19 16	19 20	u
27321	HD 222404 γ Cep	23 35.2	+77 04	u	u	u	u	19 47	19 48	4
								19 51	19 53	4
								20 01 <sup>30</sup>	20 05 <sup>30</sup>	4
27322	HD 225095	23 58.3	55 00	"	"	"	19.6	21 23	22 07	1
27323	" 6343	00 59.4	65 26	"	"	"	19.5	22 11	22 35	2
27324	" 9105	01 24.6	+62 51	"	"	"	19.4	22 39	23 19	3
27325	" 12302	01 55.6	+59 12	"	"	"	19.2	23 34	00 38	4
27326	" 20017	03 07.9	+48 19	"	"	"	19.1	01 20	02 38	1
27327	" 24560	03 49.3	+44 38	"	"	"	19.0	03 05	05 21	2
	Focus TEST		OTB							
	Oct 24-5/63 VW + Hr opened but was closed +									



Dome Temp. +66°F

Focus 12.65

Dome Temp. ....

Transparency Conditions *Pow. Haze.*

288

FOG + HAZE 2nd Half.

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
09 3	00 13 W		1	4.6	KOTU	9	set 1 4085	plate { exp. fine guiding not
15	00 19 W	+61-42				9	set 5	badly { fine grid in vid
20	00 24 W					9	set 9	scratched { strong
48	02 01 E	calculated	1	4.4	KITV		" 1	grid { fine in vid. { strong
53	01 56 E	"				9	" 5	
05 <sup>30</sup>	01 43 E	"				9	" 9	strong
07 1	0 05 E	55 22	1-2	7.6	B1e	3-3-3	" 5 MWC 409 Be prog. Ser 8 { 7261 7273	exp. fine grid not even plate scratched
35 2	0 39 E	65 48	1-2	7.1	B5eR	3-3-3	" 5 MWC 10 " " Br. Aurora" 8 { 7274 7286	exp. fine grid along ledge not too good
19 3	0 20 E	63 09	2	7.5	cB5e	3-3-3	" 5 MWC 13 " " 8 { 7287 7299	fine not quite evenly grid
38 4	00 27 W	59 30	0-1	8.2	B3e	3-3-3	" 5 MWC 23 " " 8 { 7300 7312	fine grid fine
50 1	0 11 W	48 33	0-1	7.9	B3ne	3-3-3	" 5 Be Prog. MWC 63 #8 7319 7331	fine chip weak grid OK
51 2	0 12 W	44 51	0-1	7.8	B3ne	3-3-3	" 5 " " MWC 79 #8 7334 <sup>+</sup> 7347	scratched plate fine well guided centre to violet
						10/8	" 9	
							1 P.H. + A 3 used for sensitive tests Oct 25/63	
							other included with new plates	

Baked 70 plates 2AOC2.G3 cut Oct 25/63 L

Visitors. 89 1st hour. \*97 2nd hour  
 Showed Ring nebula.

288

Date Sat/Sun Oct 26/27 Observer FL cc

\* including 7 guests from the  
 Kelllogg Obs. in Buffalo. - Py F.I.C.C.  
 Julian Day 24383.29  
 0 212 50 40.9 3591.7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27328	54 Psc.	00 34.2	+20 43	I-12	PaBh1	0.008	21°	21 58	22 10	3
	HD 3651							22 12	22 25	3
								22 26	23 15	3
27329	HD 6582	01 01.6	+54 26	I-12	IIaOB	.008	21.2°	23 <sup>h</sup> 51 <sup>m</sup>	00 02	4
	u Cas "	"	"	"	"	"	"	00 <sup>h</sup> 06 <sup>m</sup>	00 42	4
	"	"	"	"	"	"	"	00 <sup>h</sup> 48 <sup>m</sup>	01 06	4
27329F	Focus Test.									1

fresh developer used  
 (mixed Oct 3, 1963  
 used only for consistency  
 experiments - dev. equivalent  
 of 20 plates)

2nd hour  
in the  
-Pg FIC  
59/2

Dome Temp. 64  
Focus 12.66  
Dome Temp. 65

CO<sub>2</sub> in : 22<sup>40</sup> EST

Transparency Conditions Slight haze with patches of cloud.  
22<sup>00</sup> : clear and no air  
23<sup>00</sup> : sky covered with air in S-W-E

290

Image of star has strange irregular shape.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10 3	0 26 E	+29 04'	0	6.70	K07	9 set 1 YOSS probably only "spotted" once.	fine 2 counts. but grad in use scratch on plate
25 3	0 01 E	"				9 " 5 YOSS	7366 7370: l. strong
15 3	0 40 W.	"	*			9 " 9 Seeing - hard !!!	7370 7318 strong
02 4	00 <sup>h</sup> 57 <sup>m</sup> W		1-2	6.1	G8.7 <sup>5</sup>	3-3-3 set 2 } Plate in P.H. 4 has been double spotted	7389 7390 fine
42 4	01 <sup>h</sup> 38 <sup>m</sup> W	+54 46'	1	"	"	3-3-3 set 5 } 23 <sup>20</sup> : what is an ad hoc source of air	7391 7393 l. strong
06 4	02 <sup>h</sup> 02 <sup>m</sup> W	"	1-2	"	"	3-3- set 8 ← Clouds YOSS.	7394 7396 strong
					11/8	set 5	OK w stars vid.

Completely Clouded over 01 05 EST.

1 pH loaded + 8

\* telescope very much out of focus.



Dome Temp. 41°F

Focus 12.66

Dome Temp. ....

CO<sub>2</sub> m: 20.00  
Voltage: 700V

Transparency Conditions ..... Clear But windy

19:30 considerable haze + light cloud in W.

21:30 clouds from W. + NE. 292

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 20W	+15° 25'	0	8.0	gHz	3-3-3	set 2 v.d.B.H.V. bin.	exp. fine but focus poor - comp. like double
00° E		4"	5.71	KJ1-2)		21:30 p.moon just above star - wire marked	
		3.0	6.5			also above star, but did not pass over x star	
						22:00 patches of wire in SE-E - one patch after another	
						passing over 5 lot - i. excited	
						23:00 whole sky covered with wire everywhere	

cloud up

clouds 22:20

2 23:00 cloud

19:30 Wind catching plastic very badly  
extreme ring motion

203

Date Wed/Thurs Oct 30/31 Observer 4th yr Lab 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
27330 F1	Low Test	OTB	177A	I-12	IIa0 B	.008	7°C			1
"				"	"	"	"			1
"				"	"	"	"			1
27330 F2				I-12	IIa0 B	.008	7.5°C			3
"				"	"	"	"			
" F2				"	"	"	"			
" F3				I-12	IIc0 B	.008	7.7°C			2
27330 F3				I-12	IIc0 B	.008	7.7°C			2
" F3		OTB	177A	I-12	IIa0 B	.008	7.7°C			2

Dome Temp. ....

Transparency Conditions

Thick Cloud.

Focus .....

294

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					12/10	set 2 Focus test - focus 12.85	center weak center to red (in focus at 450)
						set 5 " " " 12.80	center to red (in focus about 450)
						set 8 " " " 12.75	center to red (in focus ~ 450)
						set 2 " " " 12.70	center to red (in focus about 450)
						5 " " " 12.65	tends to be c. to v. focus ~ 400
						8 " " " 12.60	center to violet no focus cent. very strong
						2 " " " 12.55	center to in focus violet
						5 " " " 12.50	no center
					12/10	8 " " " 12.45	center far to violet

redo  
Nov 6

Developed

6 min  
D19

#2  
Empty Plateholder was left in  
ds. box in closed & latched  
condition. Someone might have  
assumed it was loaded.

was F1 done twice? ✓  
+ F3 broken?





Dome Temp. ....

Focus .....


Dome Temp. ....

CO<sub>2</sub> in } 19:30  
V = 700 }

Transparency Conditions Fine, between Cumulonimbus clouds

2100 sky very fine  
2300 drifting cloudfields (Alto Cumulus)

296

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality	
0250W+300W		5"	5.96	92V		Strong wind images dancing		
0312+0322		5"	6.20	95V		" " " " " "		
0105E		5"	5 (52)	28 <sup>g</sup>				
0035E		6"	5 (52)	28 <sup>g</sup>				
0013E		6"	5	32	28 <sup>g</sup>			
0 <sup>h</sup> 00 <sup>m</sup>		Traced across 21 disk with slit						
OBSERVED		ARISTARCHUS		2245 - 2255. EST. Seems to have it)				
normal		yellow color						
0 <sup>h</sup> 00		5"	4.94	92V				
010E		8"	4.87	50E				
Cloud. Very heavy cloud 19:30 "one plate was broken"								

297

Date Nov 19/12 1963 170/12 Observer vdB - Re Julian Day 2438345.

0228 52 11.2 3622.4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
301-2797	$\gamma^2$ Cet	02262	+0818		G/4/33	28		0017		
301-2798	X Cet	0317 <sup>m</sup> 2	+0314'		G/5/33	28		0036		
<del>301-2799</del>	<del>HD22211</del>	<del>03400</del>	<del>+0618</del>							
27331	HD37171	5 <sup>h</sup> 31 <sup>m</sup> .5	+10°58'	25"	IIaOb	.008	6°C	01 <sup>h</sup> 32	02 <sup>h</sup> 58	4
27332	HD42784	6 <sup>h</sup> 7 <sup>m</sup> .6	+18°43'	25"	IIaSB	.008	6°C	03 <sup>h</sup> 20		2
7330	<del>HD 3314</del>	Focus Test	OTB	20/16	Temp	7°C	Focus 1529	0000	151	

CO<sub>2</sub> in 2340

Partly Cloudy Alto Cumulus

298

Dome Temp. ....

Transparency Conditions .....

Focus .....

V = 700  
← record for Nov. 9/63

Focus 12.66

Dome Temp. ....

Changed to 25"

12" camera Max Tilt 20.35

25" F 15.32  
T 23.15

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0105W		6"	4.27	B9		EXT. ST	
		6	4.82	SSE			
		<del>6.98</del>		<del>FS</del>			
0043MW	+11°03m	α+1	7.6	K5 III	6-6 12	VdB HVshen. (Hand swings the telescope) Sub 2; sens 6	good
	+18°42m	1+	6.1	B8		B8-B9 Proj. sing line (but cloudy) sub 2; sens 6	nothing on plate
						light wind from NW. clouds forming over head	
						should have been left in plate holder to be used! (Plate 27332 opened but not developed & posed)	
						1 PH loaded in N rig	
						Close at 3 <sup>h</sup> 50 EST	

d.c. to violet



Dome Temp. ....

Focus .....

Dome Temp. ....

CO<sub>2</sub> in } 1955  
V = 700 }

Transparency Conditions

Partly cloudy Alto cum 300,  
2100 clouded out

ing Time  
E.S.T.

Hour Angle  
End

Declination

Seeing

Ptg.  
Mag.

Sp.

Comp.

REMARKS

Quality

0047E

6"

6

52V

I - I II  
⊖ ⊙ IV?



Dome Temp. +53°F

Focus 15.33 oct

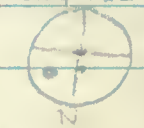
Dome Temp. ....

CO<sub>2</sub> m: 20<sup>00</sup>?  
fill load 20<sup>00</sup>

Transparency Conditions Clear

302

20<sup>00</sup>: quite good20<sup>20</sup>: 5 very milky - in fact up to 40<sup>00</sup> thin wire!

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	4 <sup>22</sup> W	+15° 24'	1	8.0	GM2	6-12-9	Set 5 VAD SB. 7464 40 fine scas 8 7504 guide in v	
	0 <sup>36</sup> E	+67° 55'	1	7.7	F2II	6-6-6	Set 5 VAD SB High Lumin. 7505 30 plate badly fogged scas 5 7525 exp - guide in vis	
	2 <sup>00</sup> W	+42° 10'	1	5.95	B8	6-6-6	Set 5 B8-B9 7541 5 fine scas 6 complete	
	2 <sup>00</sup> E		3	5.90	DG1		focused star; wire finder telescope view	
	00 <sup>00</sup> E		3"	4.71	GOI		00 <sup>44</sup> : clear in all directions; no obvious wire in vis	
			2"	5.94	DG4		01 <sup>04</sup> : motor stopped again; 01 <sup>25</sup> red line out	
	01 <sup>00</sup> E, 00 <sup>00</sup> W		4"	5.23	GOI		01 <sup>06</sup> : sky good - clear 01 <sup>40</sup> : amplifier keeps dropping, erratically to low level; Frank analyzed in p. - OK.	
							02 <sup>00</sup> : 2 big streams of clouds right in vis. WSE VADed...	
							02 <sup>00</sup> : tested sky in p. - results, no wire	
							02 <sup>00</sup> : streams of wire again in SW S, SE up up - 2 of sky in p. in vis.	
							02 <sup>00</sup> : direction of stream of wire (high up) in SW; not - wire p. in vis.	
							from from a tumble - part	
	0145W	+0956	00	6.05	B9	6-6-6	Set 5 B8-B9 #7 7557 fine 20/15 " 9 2 P.H. LOADED	OK - used to vid





Dome Temp. 32° F

Focus 15.24

Dome Temp. ....

Transparency Conditions Clear

304

Windy!

Exp. Water not working properly

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
15 W	+15° 25'	○	8.0	9 M2	9-9-9	set 5 vdB Sp. Bin. Too windy. Star was't really on star	weak
3 15 W						Cloud at 20:00 No relief in night Closed up at 21:30	found test?
						3 P.H. loaded	
						Clear: 23 <sup>00</sup>	
						Starting to cloud over again: 23 <sup>10</sup>	
						Completely covered up to = 02 <sup>00</sup> (3)	
						Clear again = 05 <sup>15</sup>	

205

Sat-Sun  
Date Dec 7-8, 1963

Observer M E, vW, Sm - vW, Sm Julian Day 2438.371

Dec 8

② 255 09 26.3 3656.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27337	HD 190658	20 <sup>h</sup> 00 <sup>m</sup> .8	+15° 13'	F-25	IIaob	set .012	3°C	18:46	19:36	1
27338	HD 3038	0 28.6	+65 12	F-25	IIaob	set .008	3°C	20:05	20:32	2
27339	HD 10425	1 36.6	+60 03	F-25	IIaob	.008	3°C	20:45	21:00	1
27340	HD 9812	1 29.2	+73 47	"	"	"	"	21:16	21:38	2
304-2803	HD 18,894	03 00.4	-06° 32'		7/4/33	28		21:40	e, b, sky	
2804	" 25,680 37,120	04 03.2	+21° 54.8'		7/3/33	28		22:50	a	
2805	" 23,089 23,090	03 42.5	+63° 15'		7/3/33	28		23:10	a, b, sky, tent	
2806	34,411 λ Aur	05 15.6	+40° 04'		7/3/33	28		23:45	a	

Dome Temp. 36°

Focus 15.24

Dome Temp. ....

only CO<sub>2</sub> left for 1/2 of one filling - 23<sup>00</sup> EST  
valley: 700 - 21<sup>30</sup>Transparency Conditions *Clear*

306

Exposure meter not working at first

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
36	4 <sup>20</sup> W	+15° 24'	0	8.0	gM2	9-9-9	set 5 vdB Speed Binary <del>set 8</del>	weak
32	4 <sup>17</sup> W	+66 36	0 <sup>+</sup>	6.4	B9	6-6-6	set 5 B8-B9 out of line	fine
30	5 <sup>00</sup> W	+50 22	1	5.7	B9	6-6-6	set 5 " "	little ground in vis
28	5 <sup>00</sup> W	+74 05	1	6.4	B8	6-6-6	set 5 B8-B9	exp. fine
24	5 <sup>06</sup> E, 00° W		3"	6.18	F8	22°	clear - no air visible - a bit of gr. fog - focused star	guid in vis poor
22			1"	5.90	dG1		← many stars suspected - checked coordinates	scratching on sp.
20	5 <sup>00</sup> W, 39° N		4"	4.79	F5	23 <sup>00</sup>	the lens noticed time drive, clock	guiding poor
18	5 <sup>02</sup> E		4.71	60E	23 <sup>16</sup>		ground fog getting heavy - much considerable at 100 meters, at high up - sky clear 23:29 when clear - 10.	both edges
					23 <sup>50</sup>		bands of air stretching from W to E up to 50°	
					24 <sup>00</sup>		shel sky up to 1000 with air patches!	
							stopped operation and waited a while	
					00 <sup>00</sup>		heavy cumuli moving up from E, air from W & N	possibly
							mount still air streamer	
							cloud up	

307

Date Fr/Sat Dec 13/14 '63 Observer vdB - sm Julian Day 2438377  
 261 15 22.7 3662.8

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.
27341	HD 14272	0213.4	+39° 73'	2511	Ilford	008	-5°	2100	2145	
305-2807	KCET	0317.7	+03° 14'		6/5/33	78		2230		
<del>305-2808</del>	<del>HD 22711</del>	<del>0340.0</del>	<del>+06° 18'</del>		<del>33</del>	<del>28</del>				
305-2808	39 Tau	0403.2	+12° 55'		6/6/33	28		2255		
205-2809	58 Eri	0446	-17° 06'		6/6/33			2325	2x + sky	
205-2810	104 Tau A+B	0504.4	+18° 36'		6/3/33	28		2355	2x	
2811	38,529	0544.7	+01° 10'		6/6/33	28		0021	2x	
2812	43,162	06 <sup>h</sup> 12.3	-23° 51'		7/5/33	28		0105	2x sky	
2813	51,424	0655.2	-08° 05'		7/4/33	28		0140	2x sky	
2814	61,090 92	0758.1	-13° 42'		7/3/33	28		0215	2x	
2815	69,830	0816.7	-12° 31'		7/4/33	28		03 <sup>12</sup>	2x, sky	
2816	81,209	0926.0	-05° 55'		7/4/33	28		04 <sup>15</sup>	2x	

Dome Temp. 20°F

Focus 15.14

Dome Temp. ....

V = 700  
CO2 in 2.15  
10140

Transparency Conditions partly cloudy

2200 clear & windy

Very Windy

wind keeps blowing star out

308

INTEGRATOR STICKS AT FIRING POINT

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0°40' W	+39°41'	0	5.45	B8	6+6+	B8 B9 progr. 7089-94	comp weak fine and in view slightly off
0°27' 03" W		4"	4.82	G2V		Very Windy	
			<del>6.48</del>	<del>F5u</del>			
0°5E+0°5W		5"	5.30	dG1			
0°5E+0°5W		12"	5.47	dG1			
0°5' N		6"	5.84	S464	G4E		
0°E, 00' W		7"	5.94	dG4		00 <sup>45</sup> : clear except for a few clouds very close to horizon	
0°W 00° W		8'	6.37	G5		01 <sup>45</sup> : no obvious clouds + 4.3.12	
0° 1, 00' W		5"	6.33	F5			
0° 1, 00' W		8	5.70	G1E			
0° 1, 00' W		8'	6.00	G8E		3 <sup>15</sup> : still clear 4 <sup>30</sup> : ...	
0° 1, 00' W		5"	5.35	G1E		04 <sup>15</sup> : Fine	
Trouble with the slide of photospectr. Sticky. Can't set!							
Close up 5.50 EST							
SPECTROPHOT. SLIDE MUST BE TREATED WITH SOME LUBRICATOR. HAD TO							
WAIT: SIGNIFICANT NIGHTTIME TO MAKE IT MOVE FT ALL WITH							









12 May, 700, 13 - 1900  
CO<sub>2</sub> in: 20

Dome Temp. 16°F  
Focus 15.21-11 = 15.10  
Dome Temp. ....

Transparency Conditions Clear ..... 312  
20<sup>00</sup>: clear, a few surface clouds only

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9:12	32 <sup>W</sup>	+15° 74'	0	80	8M2	9-12	ref 5 near dB Sp Binary no working sense 8/27/5	fine - quad. in v10
9:29	31 <sup>W</sup> , 00 <sup>29</sup> W		7"	3.50	68V		field of view underneath ⊕	mountaint?
				4.27	89M		21 <sup>00</sup> : air patches in N, NW, W up to zenith, 5 feet; 21 <sup>06</sup> : air moving 21 <sup>09</sup> : haze all over, 5 up to zenith, rest heavily air covered up to zenith 21 <sup>30</sup> : very dense cloud over all over sky now -	





315

Date Sun-Mon Dec 29-30 1913 Observer C. - M. C. Julian Day 2438.393.

0 277 32 59.7 3667.6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	Il.
27345	<i>Herodotus</i> Moon	0	0	1-25	Ilford	.005	-6	20 52.5		2
	Visitors piece	+	0					21 00.5		2
		0	0+	(Comparison)				21 05.5		2
27346	HD 27563	4 15.9	-07 50	tel	Ilford	.008		21 46	22 32	5
27347	HD 37171	5 31.5	+10 58	tel	Ilford	.008		22 39	01 35	4
27347 F	focus test		07 13							

Dome Temp.  $+10^{\circ}F$

Focus  $15.24 - .11 = 15.13$

Dome Temp.  $+3^{\circ}F$

Transparency Conditions  $\dots$   $316$   
cloud till  $\sim 20^h$  - full moon

$10^L$  l. hazy - 2 hats around moon.

00-30 very hazy

0200 - clouded over.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0			26	set 2 Sky 7 Feb Dec 1963	2 counts #4
				A	30	5 exposure $\sim \frac{1}{2}$ min	"
					30	8	"
00 26 W	-7 40	0	5.67	B8	6-6-6	set 2 B8-B9	#7 7794 7806 fine
02 14 W	+11 02	0	7.59	K5 III	8-8-8	set 2 v d B3 SB	#8 7807 7847 good
					20/16	clouds.	center to red



Dome Temp.  $28^{\circ}$   $\pm$   $CO_2$   $m$   $18^{\circ}$   $21^{\circ}$ Focus  $15^{\circ}19'$ Dome Temp.  $+10^{\circ}$ FULL MOON

Transparency Conditions

Good

318

18<sup>55</sup>: clear, no obvious haze, surface clouds = 10  
 20<sup>40</sup>: Perfect photo metrically, bright moon

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 <sup>08</sup> E. 00 <sup>12</sup> W		6"	6.92	KO		20 <sup>13</sup> : slow ded. motion not steady star drifted out - not time left to finish this observation	
00 <sup>46</sup> W		6"	4.27	B9 III			
00 <sup>03</sup> W, 00 <sup>14</sup> W		3"	6.42	i5m			
00 <sup>11</sup> W, 00 <sup>36</sup> W		4"	5.90	dG1		21 <sup>45</sup> : excellent sky	
00 <sup>16</sup> W, 00 <sup>21</sup> W		3"	6.97	G2 V		22 <sup>05</sup> : perfect except for glowing moon	
00 <sup>21</sup> W, 00 <sup>40</sup> W		4"	6.16	dG2		22 <sup>05</sup> : still + good - only a few surface clouds	
00 <sup>21</sup> W, 00 <sup>31</sup> W		4"	6.59	dG0		00 <sup>13</sup> : <u>Not a</u> <u>was</u> <u>at</u> <u>10</u> <u>min</u> <u>ago</u>	
01 <sup>15</sup> W	2° 2'	4"	~9	F6 III + A5 II	3-3-3	YY C M. Alhayera star. set 2. sens q { 7871	l weak
01 <sup>28</sup> W	2° 3'	5"	~9	" V	3-6	set 5. sens q { 7997 8031	weak
						set 8	center to red
						Seeing gets very poor, many bad exposures.	(focus not set for temp)
						o PH loaded	

319

Date Wed - Thurs Jan 8-9, 1964 Observer Fl, Sm 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.1
309-2829	9,407	01 32.1	+68° 46'		7/4/33	28		18 <sup>45</sup>	a, b, sky	
2830	13,043	02 05.8	-55° 46'							
2830	18,757	22 22.9	+61° 36'		7/4/33	28		19.2	a, b, sky	
2831	18,926 8Pls	03 02.0	+53° 22'		5/5/33	28		20 <sup>20</sup>	a	







Dome Temp. ....  
 Focus .....  
 Dome Temp. ....

CO<sub>2</sub>, voltage 700 : 1935 EST

322

Transparency Conditions .....

19<sup>45</sup>: - clouds in S 45° up, horizon clear part  
 - with clear  
 - but improving

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		7"	6.53	66 $\frac{1}{2}$		20 <sup>45</sup> : much everywhere except in E. star just but big stream of haze just beneath clear section	
107		9"	4.27	89 $\frac{1}{4}$		second half of frame 2833 looked into draft much night with photometric Can't move telescope in P.A. anymore Can't close shutters without thundering banging called Frank. Clouds coming from North	



Dome Temp. +2.0 (-1.0 F<sub>2nd</sub>)

Focus 15.0

Dome Temp. ....

Transparency Conditions

Very fine in 2nd half.  
(6mm naked eye)

324

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 35W	+11°	0+	7.59	K5II	6-6	one flap on mirror fell during exposure set 30 vdB star	l wk - scrubbed weak -comp. wks too weak comp. wks not spotted
1 52W	+02°02'	0+	9.50	F6III +A5V	6	set 5 Abogyan's star Dec slow motion does not work. how to <u>GUIDE BY HAND!</u> Guiding will be very poor	some things wrong with EX.MT. NO. reading sens 8 { 8154
1 34 <sup>m</sup> W	+37°34'	1	6.0	B9	6-6	set 5 sens 8 B8-B9 Program.	fine not spotted
1 34 <sup>m</sup> W	-24°40'	0-	7.1	B9	6 6	B8-B9: set 5: sens 8 { 97 OTB Focus Test	weak not spotted sl 2 to vio
						EXP. METER FIXED	
						Close up 04 <sup>h</sup> 30	
						1PH in K Dries	

225

Date Tue-Wed Jan 14-15, 1963 Observer D<sub>1</sub> - H<sub>1</sub> <sup>vW</sup> <sup>vW</sup> Julian Day 24384.09

Jan 15 - 0 293 52 09.1 3668.0

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
27353	HD 16066	2 <sup>h</sup> 29.8	+67° 38'	I-25	Ilab.	1508	-12.52	18:30	19:18	1
27354	BD +47° 781	3 <sup>h</sup> 06.4	+47° 43.5	"	"	"	"	19:30	20:30	2
27355 <sup>5?</sup>	HD 37171	5 <sup>h</sup> 31.5	+10° 58'	"	"	"	-10.4	00:26	02:26	3
27356	HD 102095	11 <sup>h</sup> <del>47.2</del>	+38° 26'	"	"	"	-10.2	03:30	03:56	4
"	"	"	"	"	"	"	-10.2	03 57	04 41	41
27357	HD 111226	12 42.6	-24 18	"	"	"	"	04 59	06 21	1
	Flare Test	07 B		"	"	"				

Dome Temp. +15°F

Transparency Conditions ..... some clouds

326

Focus T15.05

Dome Temp. +8°

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
7	0 <sup>h</sup>	+67°54'	2-1	7.7	F2II	6-6-6	set 5 vdB SB	not spotted exp fine grad poor comp wk.
		+47°56'	1	8.5	K1	5-6-6	set 5 F- SB	out of focus spots holeless
06	04 <sup>h</sup> 12 <sup>m</sup> ? 2 <sup>m</sup> +		2	7.59	K5I	6-9-9	set 5 vdB SB	Lok. (good) grad in blue
56	0037 E	+37°59'	1+	7.3	<del>65</del> K1	6-6-6	set 5 <sup>no mag</sup> STD VEL P.H. out of Position	broken into 2 pieces 1 in focus other out of focus grading L with good grad in blue OK slightly off
41	0009 W	"	2	"	"	6-6-6	" 2 " " *	#7 8467 8483
21	0050 W	-24 39	0	7.1	B9	6-6-6	" 2 B8-B9	#7 8489 8497
						20/15	" 8	ITA weak
							1 P.H. Loaded.	
							6? in Dome	
							1 PH loaded + 6 plates remain of emulsion * 2A0C263 51 51 #27354 - prob loaded backwards not likely - MR - maybe plateholder shifted	
							* Plate found broken in P.H.	





328

Ending Time  
E.S.T.

329

Exposure Chart

April 30/62

IIa06 or 103a0 developed in Acufine

I - 12 $\frac{1}{2}$			I - 25		
Input Selector	B-F	G-M	Input Selector	B-F	G-M
4	1	2	4	2	3
5	2	4	5	5	8
6	2	4	6	5	8
7	4	8	7	12	16
8	10	20	8	30	40
9	40	70	9	120	180
10	70	100			

64.7  
79.3  

---

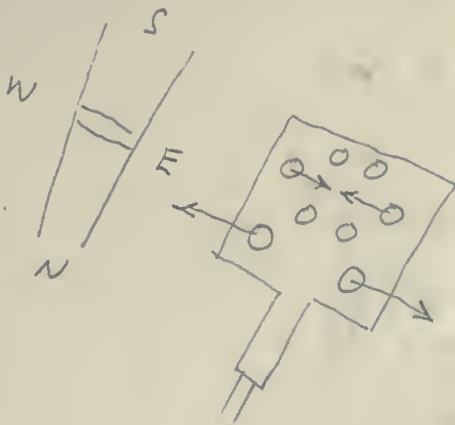
30.4

293  
58.4  

---

97.7

330



44

30.4

Oct 4. 7 21.1 - 10 17.6

- push focus North
- push focus South

HANDBOUND  
AT THE



UNIVERSITY OF  
TORONTO PRESS