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3.

Spectr. Temp. . .

FOCUS

Spectr. Temp. .

Sp. Mtr. See

Transparency Conditions

Dome Temp./Hum.

[illegible]

Date AUG. 15/16/81 Observers Ri - Fd

Emulsion Batches:

Flav-E 05031-06081	21 190
Flav-Eb 07119 -06081	79 3.5

[illegible]

Exp. Mr.

Spectr. Temp. 70°

Dome Temp./Hum. 69°/97%

Transparency Conditions . . . POOR, HAZY . . . 6
SCATTERED CLOUDS

Comparison e/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-	11-1	80/75		3.93	F0p	B.C.	1200/-0.025	BS	IIaDE	A	Asm-Sp/KK	Exposure time limited by dome edge.	sl. work
1-	8-1	40/300		2.2	A5III	B.C.	1200/-0.025	BS	IIIaJeb	B	"		heavy fog
D2 101									IIaO-E				
1-	15-	20/100		0.04	A0V	"	"	BS	IIIa-Jeb	A	"		heavy fog
1-	15-12					"	"	"	IIaO-E	B			
									IIIaJeb				
												HUMIDITY 100% IN DOME. HAD TO CLOSE UP.	

Date SUN + MON. AUG. 16/17, 1981 Observers Fln - Ri

8m 68° 1140-E 05031-12081.. 20 196
5m 68° 098-02E 05031-13081.. 42 212

[illegible]

Spectr. Te
Focus...4
Spectr. Te

MON./TUES.

Emulsion Batches:

Emulsion Batches:
8^m 6^{ju} .IIaC-E.05031-12081 20 191

Spectr. Tem

Focus . . . 40

Spectr. Terr

[illegible]

Spectr. Temp. 60°F.....Dome Temp./Hum. 62°F/75%

Dome Temp./Hum. 55°F / 98%

Transparency Conditions Specified.....

40/28

Comparison pe/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
/-	15-5	-				BC	830/.68	BS	IIaO-E	A		T=67°F F=498	
/-	5-5	400/360	3-4"	6.87- 7.66	FO- G1	"	"	"	"	B	CEPH/EVANS		Fine
	4-10								"				
/-	5-5	200/175		6.42	B2.5IIIe	BC	830/.68	BS	IIaO-E	A	Runaway *	T=66°F F=498	Fine
/-	5-5	400/350	3-4	7.26	B0.5II	"	"	"	"	B	Runaway *	T=65½°F F=498	"
/-	5-5	400/350	2-3	7.39	B2IV	"	"	"	"	A	Runaway *	T=63°F F=499	"
/-	5-5	400/350	2	7.01	B0.5III	"	"	"	"	B	Runaway *	T=63°F F=499	"
/-	5-5	400/350	2	6.94	B2IV	"	"	"	"	A	Runaway *	T=61°F F=500	"
/-	5-5	400/350	2	8.29	09.5III	"	"	"	"	B	Runaway *		vs/wt
/-	7-5	20/35		2.2	K2IIIab	"	"	"	"	A	Std. Velocity		5x

TUES./WED.

Date AUGUST 18/19, 1981 Observers Gis - Ri

Emulsion Batches:

Emulsion Batches:
8^m 6^s ... IIaO-E ... 05031-17081 19¹⁹⁰

Spectr. Te

Focus . .

Spectr. Te

[illegible]

Spectr. Temp. 71°F

Dome Temp./Hum. 68°F/70%

Transparency Conditions 12

Focus 497

Spectr. Temp. 64°F

Dome Temp./Hum. 60°F/89%

40/28

Comparison
Filter Exp.

Comparison Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
- 151					BC	830/.68	BS	IIaO-E	A		T=71°F F=497	
- 7-7	80/121	2"	5.45	09.7I	"	"	"	"	B	Std. - B/n		
- 5-5	800/700	2	8.16	B05V	"	"	"	"	A	Runaway *		
2 03 118	③ D2 4810							IIaO-E				
- 5-5	400/360		6.87- 7.66	F0- G1	BC	830/.68	BS	IIaO-E	B	CEPH / EVANS		
- 5-5	400/350	1-2	7.93	05f	"	"	"	"	A	Runaway *	T=70°F	
- 5-5	400/350		7.83	B0III	"	"	"	"	B	Runaway *	T=69°F	
- 5-5	400/350	2-3	7.26	B05IV	"	"	"	"	A	Runaway *	T=68°F	
- 5-5	400/350		7.05	B1III	"	"	"	"	B	Runaway *	T=67°F	
- 5-5	80/70	2	5.53	B5V	"	"	"	"	A	Runaway *	T=66°F F=498	
- 5-5	400/350		7.08	B2Inc	"	"	"	"	B	Runaway *		
- 5-5	400/350		7.01	B2II	"	"	"	"	A	Runaway *	T=65° BROKEN 2 PAGES	
- 5-5	400/300		6.94	B2III	"	"	"	"	B	Runaway *		

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JD 44636 7

Wed-Thurs

8^m 68° Emulsion Batches:
...D.E. 05031-18081 20 180

Date Aug 19/20 1981 Observers Rm-Th

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Spectr. Te.
46125 F	Focus Test					00 07W	00 00	Fe/-	15-15	
46125	HD 180583 = HR 7308	19 ^h 12 ^m 0	+27° 45'	19:47	20 12	01 26E	+27° 56.7	Fe/-	5-5-5	20/100
46126	HD 162714 = γ Oph	17 ^h 47.3	-06° 07'	20:16	22:32	02 ^h 17W	-06° 05'	Fe/-	5-5-5	20/130
46126 [✓] T	Spot Calc for 46125-37			15m @ 15V		D4 3900	D3 4300	D2 4800		
46127	HD 186688 = 5U Cyg	19 ^h 40.8	+29° 01'	22:36	00:04	01 58W	+29° 15'	Fe/-	5-5-5	4/70
46128	HD 194995 = 41 Cyg	20 ^h 25.3	+30° 2'	00:07	00 15	01 24W	+30° 20'	Fe/-	7-7	4/90
46129	HD 192713 = 22 Vul	20 ^h 11.2	+23° 12'	00:18	00 36	01 59W	+23° 30'	Fe/-	7-7	40/50
46130	HD 143370 = 35 Cyg	20 ^h 14.8	+39° 40'	00:38	00 57	02 17W	+34 59	Fe/-	7-7	40/50
46131	HD 194093 = 8 Cyg	20 ^h 18.6	+39° 56'	01:00	01 02	02 18W	+40 16	Fe/-	7-7	40/45
46132	HD 194093 = γ Cyg	20 ^h 18.6	+39° 56'	01:01	01 03	02 20W	+40 16	Fe/-	7-7	4/30
46133	HD 180583 = HR 7308	19 ^h 12.0	+27° 45'	01:07	02 01	04 25W	+27° 58'	Fe/-	7-7	20/80
46134	HD 203156 = HR 8157	21 ^h 15.4	+31° 49'	02:05	02 42	03 01W	+38° 12'	Fe/-	7-7	200/10
46135	HD 214930	22 ^h 36.6	+23° 19'	02 46	04 21	03 19W	+23° 47'	Fe/-	5-5-5	20/50
46136	HD 4142	00 ^h 38.9	+47° 19'	04 25	04 39	01 34W	+47° 48'	Fe/-	7-7	35
46137	HD 12929	02 ^h 01.5	+22° 59'	04:43	04 43	00 16	+23° 24'	Fe/-	7-7	33

Spectr. Temp. 71°F Dome Temp./Hum. $66^{\circ}\text{F}/79\%$ Transparency Conditions *Fine* 15Focus *496*

Spectr. Temp.

Dome Temp./Hum. $45^{\circ}\text{F}/88\%$ Comparison
Filter Exp.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
- 5-5				13C	830/.68	BS	IlaoE	A			
- 5-5-5	200/180	1"	6.7	F6I-16	BC	830/.68	BS	IlaoE	B	Ceph/Evans	<i>Fine</i>
- 5-5	400/1300	2"	7.0	F8I6	BC	"	"	"	A	Ceph/Evans	<i>Fine</i>
							"				
- 5-5	400/720	1"	6.9	F0	BC	"	"	"	B	Ceph/Evans	69°F <i>str</i>
- 5-5	40/80	1"	4.4	F5II	"	"	"	"	A	Ceph/Evans	<i>str</i>
- 7-7	40/82	1"	5.2	G2I6	"	"	"	"	B	Ceph/Evans	<i>Fine</i>
- 7-7	40/52	1"	5.9	F5I6	"	"	"	"	A	Ceph/Evans	67°F Focus 498 <i>Fine</i>
- 7-7	40/45	1"	3	F8I6	"	"	"	"	B	Ceph/Evans	
- 7-7	40/36	1"	"	"	"	"	"	"	A	Ceph/Evans	<i>Fine</i>
- 7-7	200/180	2"	6.7	F6I-16	"	"	"	"	B	Ceph/Evans	"
- 7-7	200/180	2"	5.9	F2	"	"	"	"	A	Ceph/Evans	"
- 5-5	400/350	2-3'	7.39	B2II	"	"	"	"	B	Runaway*	<i>Fine</i>
- 7-7	40/35	3"	5.53	B5II	"	"	"	"	A	Runaway*	"
- 7-7	40/33		2.2	K2I16	"	"	"	"	B	std. vel.	"

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Thurs-Fri

Date Aug. 20/21/81 Observers K.K. - T.H. - F.D.

8^m 68°

Emulsion Batches:

..... II A.D.E. 05031-2008/18/177

5^m 68°

..... T.H. R.T. 09061-2008/25/297

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
46138	^{HD} 137909	15 ^h 23.7 ^m	+29° 27'	19:52	19:56	2 ^h 10 ^m W	+29° 08'	Fe/-	11-11	40/61
46139	HD 159561	17 ^h 30.3 ^m	+12° 38'	20:02	20:08	0 ^h 15 ^m W	+12° 32'	"	18-18	40/26
46140	HD 161096	17 ^h 38.5 ^m	+4° 37'	20:14	20:18	0 ^h 18 ^m W	+4° 32'	"	11-11	40/15
46141	HD 8890A	1 ^h 22.6 ^m	+88° 46'	20:36	20:39	7 ^h 55 ^m E	+89° 10'	"	7-7	40/48
46142	HD 8890 B	"	"	20:41	23:59	4 ^h 36 ^m E	+89° 09'	Fe/-	5-5-5	200/230
46143	Spot C ₉ h' for 46138, 40-43, 45-50			15min @	15V	3900	4300	4800		
46143	HD 201156 B	21 ^h 02.7 ^m	+33° 44'	00:08	01:54	2 ^h 29 ^m W	+34° 01'	Fe/-	5-5-5	400/169
46143	Spot C ₆ h' for 46139, 44			15min @	17.5V D4	3900	4300	4800		
46144	HD 171167 ^{Vega}	18 33.5	+38 41	02:06	02:08	5 ^h 14 ^m W	+38° 46'	Fe/-	18-18	20/103
46145	HD 217782	22 ^h 58.0 ^m	+42° 13'	02:14	02:27	1 ^h 07 ^m W	+42° 38'	Fe/-	11-11	40/51
46146	HD 217675	22 57.3	+41 47	02:30	02:33	1 ^h 13 ^m W	+42° 12'	"	11-11	40/45
46147	HD 186688 ^{SU Cyg}	19 ^h 40.8 ^m	+29° 01'	02:40	03:32	5 ^h 29 ^m W	+29° 12'	"	5-5-5	400/152
46148	HD 191610 ^{28 Cyg}	20 ^h 05.8 ^m	+36° 33'	03:37	03:55	5 ^h 27 ^m W	+36 48	"	5-5-5	40/40
46149	HD 4142	00 ^h 38.9 ^m	+47° 19'	03:59	04:13	1 11 W	+47 42	"	7-7	40/35
46150	HD 14220	02 ^h 12.8 ^m	+52° 07'	04:16	04:52	0 13 W	+52 25	"	7-7	200/116

2008/10/17
2008/10/17

Spectr. Temp. 74° Dome Temp./Hum. 70°F/82% Transparency Conditions excellent 16
 Focus 496
 Spectr. Temp. 66 Dome Temp./Hum. 60°F/80%
 to sl hazy

Companion
Filter Exp.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-1-11	40/61	1"	3.9	F0p	B.C.	1200/-0.025	B.S.	IIα0-E	B	Asm-Spk	(Note focus Test) vsl strong uneven
1-1-18	40/186	"	2.2	A5III	"	"	B.S.	IIIα-J	A	"	46138F done 68 Fe w/str
"	40/65	"	3.9	K2III	"	"	B.S.	IIα0-E	B	St. vel	at beginning of night PHA? Fine
7-7	40/48	"	~2	F	"	830/.680	150/3	IIα0-E	A	Asm-Sp.	str
1-5-5	800/290	"	8.6	F	"	"	150/5	IIα0-E	B	"	* Prob more currents Exp out of balance good exp sl uneven
								IIα0-E			
1-5-5	400/169	1"	8.1	?	B.C.	830/.680	150/3	IIα0-E	A	Asm Sp.	T=69°, Set=498 s/str
								IIIα-J-E			
1-1-18	20/103	1"	0.0	A0V	"	1200/-0.025	B.S.	IIIαJ-E	B	Asm Sp.	T=68 Set 498 strong
1-1-1	40/51	"	5.17	A2	"	"	"	IIα0-E	A	"	Fine
"	40/45	"	3.6	B6p	"	"	"	"	B	"	"
5-5-5	400/152	2.5"	6.9-7.7	F0-61	"	830/.680	"	IIα0-E	A	Cepheid Binaries/Events	vsl weak
5-5-5	40/40	"	4.8	B3IV	"	830/.680	"	"	B	Request Percy-Fd	was photometrically active 5 days ago. labeled 46?
7-7	40/35	1.2"	5.5	B5V	"	"	"	"	A	Run away	sl str
7-7	200/116	1"	7.01	B2V	"	"	"	"	B	"	Fine

Date Fri-Sat., AUG. 21/22, 1981 Observers ... Fln.-In.

8^m 680

Emulsion Batches:

IIaO-E 05031 - 2008/19, 20

Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

[illegible]

Spectr. Temp.

Dome Temp./Hum. ... 70°F / ... H = 84% @ 23^h 20^m

Transparency Conditions *same cloud* 18
more cloud

[illegible]

Mon-Tues

Observers Rm-Th

8^m 680

Emulsion Batches:

IIaOE 05031 - 21.081 20, 20

[illegible]

Spectr. Temp. 70°F.....

FOCUS 49.0°F

Spectr. Temp. 6800F.....

Dome Temp./Hum. 66°F/94%

Dome Temp./Hum. 58°F / 98%

Transparency Conditions . . . *Some Good* 20

[illegible]

1081 p. 19c

..+677/877

hazy

497

68°F

1. $+63 \dots \dots \dots / 100 \dots$

Comparison	
e/Filter	Exp

[illegible]

23.

Wed - Thurs

Date Aug. 26-27, 181... Observers McC-Ts.....

Emulsion Batches:

Emulsion Batches:
...Π.Ο.-Ε 03051-2108121²⁰⁰

[illegible]

Spectr. Temp. ... 73°F

Dome Temp./Hum. 69°F./70%

Transparency Conditions *Cloudy* *2.5*

Focus 497

Spectr. Temp.

Dome Temp./Hum. /

[illegible]

Date *Sept 7-8 1981*...

Mon - Tues

Observers AEE-R:

8^m 67°

5m 67° to 29

Emulsion Batches:

II-0-E 05031-26081

09802..20081.-21081

[illegible]

Spectr. Temp. 73° F.....

Focus 496

Dome Temp./Hum. 21°C (70°F) 89%

Transparency Conditions 76

Spectr. Temp.

Dome Temp./Hum.

40/26

[illegible]

27.

Tues - Wed.

Date SEPT. 8-9, 1981 Observers ARC-R

Emulsion Batches:
8m 67° H&O-E...05031-26081

Emulsion Batches:

Doc-E 05031-26081

[illegible]

Spectr. Temp.

Dome Temp./Hum. 62°F 85%

Dome Temp./Hum. . . 60°F 95%

Transparency Conditions 28

[illegible]

9 10
Wed Thurs.

Emulsion Batches:

...DAO-E...05031...08091

11 1.94

[illegible]

08091 20 1.96

Transparency Conditions ... *Some haze, cloud* ... 30...

Spectr. Temp. 60°FDome Temp./Hum. 58°F/90%[illegible]

317

Thurs - Fri

Date Sept 10-11, 1981 Observers Rm - Tr - Gls8^m 68^m Emulsion Batches:
II-0-E 05031-08091 19 192

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46167	HD 176155 = FFA ₂	18 ^h 53.8	+17° 14'	19:15	19:52	00 02E	+17 22	Fe/-	5-5
46168	HD 186688	19 40.8	+29 01	20:02	21:42	01 00W	+29 15	Fe/-	5-5-5
46168T	Spot + Calc for 46167-46181			15 min @ 15V		D4 3900	D3 4300	D3 4810	
46169	HR 8157 = HD 203152	21 ^h 15.4	+37° 49'	21:45	22:13	00 02E	+38 10	Fe/-	5-5-5
46170	HD 1976	0 ^h 18.9	+51° 28'	22:19	22:38	02 42E	+51° 55'	Fe/-	5-5-5
46171	HD 4180	0 ^h 39.1	+47° 44'	22:41	22:48	02 52E	+48° 10'	Fe/-	7-7
46172	HD 18537	2 ^h 53.7	+51° 47'	22:52	23:08	04 47E	+52° 16'	Fe/-	7-7
46173	HD 20315	3 ^h 11.1	+43 39	23:12	23:34	04 38E	+43° 58'	Fe/-	7-7
46174	HD 20365	3 ^h 11.5	+49 51	23:38	23:56	04 19E	+50° 09'	Fe/-	7-7
46175	HD 209750	22 ^h 06	-0° 48'	00:00	00:07	01 06W	-00 24	Fe/-	7-7
46176	HD 214930	22 ^h 36.6	+23° 19'	00:12	01:18	01 40W	+23° 45'	Fe/-	5-5-5
46177	HD 219188	23 ^h 08.9	+4° 27'	01:20	02:19	02 08W	+4° 54'	Fe/-	5-5-5
46178	HD 29866	4 ^h 37.3	+40° 36'	02:30	03:04	02 35E	+40° 45'	Fe/-	5-5-5
46179	HD 34078	5 ^h 09.7	+34° 12'	03:06	03:46	02 25E	+34° 17'	Fe/-	5-5-5
46180	HD 36576	5 ^h 27.7	+18° 28'	03:50	04:18	02 10E	+18° 31'	Fe/-	5-5-5

Spectr. Temp. 67°F

Dome Temp./Hum. 165°F/91%

Transparency Conditions 5/ here to fog 3.2

Focus 497

Good Aurora despite haze & Moon

Spectr. Temp.

Dome Temp./Hum. 155°F/99%

Comparison
Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/104	2"	5.8	CF5	BC	830/.68	BS	IIaD-E	B*	Ceph-Rm	(* B Bottom A TOP) 67°F spect. focus 497 exposure meter acting up	
100/308	2-3"	7.0	F5	"	"	BS	"	B	"		
						"	"				
40/30	2"	6.0	F2	"	"	"	"	A	Ceph/EJans	T=67°	
400/160		5.48	BS-IV	"	"	"	"	B	SU Cas Assoc		
200/164		4.51	BS-IV	"	"	"	"	A	SU Cas Assoc		good
200/144	2-3"	5.0	B7IV	"	"	"	"	B	SU Cas Assoc	exposure meter acting up again	
200/203	2-3"	5.40	B8V	"	"	"	"	A	SU Cas Assoc		
200/261		5.09	B3V	"	"	"	"	B	SU Cas Assoc		
40/52	2"	3.91	G2-6	"	"	"	"	A	Bin Ceph	Focus 499 T=63°F	
400/355	2"	7.39	B2IV	"	"	"	"	B	Runaway*		
400/358	2"	7.01	B05III	"	"	"	"	A	Runaway*		
400/356	2"	5.87	B8IV	"	"	"	"	B	Runaway*		
400/352	2"	6.18	O95V	"	"	"	"	A	Runaway*		
400/363	2	5.71	B2IV-1e	"	"	"	"	B	Runaway*	T=61°F	

33. Cont

Con't

Thurs-Fri

Date .. Sept. 10-11, 1981 .. Observers .. Gis-Tn

Emulsion Batches:

8468

Emulsion Batches:
8th 6th DAO-E* 05031-10091

[illegible]

Transparency Conditions 34...

Dome Temp./Hum. 153°F/100%

[illegible]

2 Vis. for Tours

Emulsion Batches:

5^m 68^m . III a. l. e. . 0.7119 - 29081
 . 09802E . 05031 . 05091 no 2
 8^m 68^m . II a. d. E . 05031 - 10091 201

[illegible]

29081
05091
10091

Spectr. Temp. 70°F
Focus 499
Spectr. Temp. 69°F

Dome Temp./Hum. $65^{\circ}\text{F}/81\%$
Dome Temp./Hum. $57^{\circ}\text{F}/92\%$

Transparency Conditions $\dots$ hazy $\dots$ full moon 36

Comparison
Type/Filt. Ex

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/200	2"	4.51	B1e	BC	830/68	BS	IIa-J-e	A	Be - Blu	$T = 70^{\circ}\text{F}$ $F = 499$	vs strong high fog
							IIa-J-e	(note)	Blank A strip from IIa-J box 09061-20081 labelled 'X' included		
40/100	2"	4.51	B1e	BC	1200/7	RS	09802E	B	Be - Blu	$T = 68^{\circ}\text{F}$ Set 498	good dust on lens?
							09802E				
400/400	3"-2"	7.30	B2I	BC	830/68	BS	IIa-O-E	A	Blu - He *	$T = 68^{\circ}\text{F}$ $F = 498$	fine
							IIa-O-E				
40/37	3	2.27	F5IV	13C	830/68	BS	IIa-O-E	B	Std. Vel - Blu		sl. str. fine
200/175	3-2"	6.0	B6V	BC	830/68	BS	IIa-O-E	A	Std. Vel - Blu		fine
400/350	2"	7.01	B2V	BC	830/68	BS	IIa-O-E	B	Runaway *		fin
40/201	2"	4.07	B2IVe	BC	830/68	BS	IIa-J-E	A	Be Blu	$T = 69^{\circ}\text{F}$ $F = 499$	vs sl. str.
				13C	830/68	BS	IIa-O	B		$T = 69^{\circ}\text{F}$ $F = 499$	sl. red

27

Date 13/14 Sept. 1981 Observers Gris - Th
Sun./Mon.

Emulsion Batches:
8^m 68° Fluo-E 05031-10091 20.1.76

[illegible]

39

Date 14/15 Sept. 1981 Observers Gis - Tn
Mon/Tues.

Emulsion Batches:

IIaO-E 05031-10091 21 1.94

[illegible]

Spectr. Temp. $+70.5^{\circ}\text{F}$Dome Temp./Hum $65^{\circ}\text{F}/.8870$.Transparency Conditions *Some cloud*.....4.0...Focus *4.9.7*.....Spectr. Temp. $+59^{\circ}\text{F}$Dome Temp./Hum. $+54^{\circ}\text{F}/.9070$ Comparison
e/Filter Exp

Comparison e/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-15-15					BC	830/68	BS	IIaO	A			
1-7-7	40/30	4"	3.9	K2 III	"	"	"	IIaO-E	A	Std. Velocity	messy labelling "71 prob"	
1-7-55	400/350	3-4	6.42	B2S IVe	"	"	"	"	B	Runaway *		Fine
2 80								IIaO-E				
1-55-5	400/250	3-4"	7.85	B1S IVe	BC	830/68	BS	"	A	Runaway *	T=70°F. cloud	s/wk
1-7-7	200/182	3'	4.98	08 V	"	"	"	"	B	Runaway *	T=63°F F=499	s/str
1-7-7	200/176	2-3"	5.29	06 F	"	"	"	"	A	Runaway *		Fine
1-55-5	400/350	2-3"	7.05	B1 III	"	"	"	"	B	Runaway *		v s/wk
1-55-5	400/350	2"	7.08	B2 I ne	"	"	"	"	A	Runaway *	T=61°F	Fine
1-55-5	400/352	3"	6.18	09.5 V	"	"	"	"	B	Runaway *	cloud	fine

Date 15/16 Sept. 1981

Observers Gis-Tn

Tues./Wed.

Emulsion Batches:

DAO-E 05031-13091

[illegible]

13091

Spectr. Temp. 63°F Dome Temp./Hum $63^{\circ}\text{F}/68\%$ Transparency Conditions *some cloud* 4.2Focus 499 Spectr. Temp. 56°F Dome Temp./Hum $50^{\circ}\text{F}/95\%$

Comparison of Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0/- 15-15					BC	830/1.68	BS	IIaO	A			Red
0/- 7-7	40/32	2-3"	3.9	K2III	"	"	"	IIaO-E	B	Std. Velocity		good comp. str.
0/- 5-5	400/350	"	6.42	B25IIe	"	"	"	"	A	Runaway*		Fine
02 4800								IIaO-E				
0/- 5-5	400/350	2	7.93	O5F	BC	830/1.68	BS	"	B	Runaway*		vs/weak
0/- 7-7	200/179	1-2"	4.98	O8II	"	"	"	"	A	Runaway* $T=61^{\circ}\text{F}$		vs/str
0/- 5-5	400/350	1-2"	7.05	B1III	"	"	"	"	B	Runaway* <i>some cloud</i>		Fine
0/- 5-5	400/352	2-3"	6.94	B2IV	"	"	"	"	A	Runaway* $T=60^{\circ}\text{F}$ $F=500$		Fine
0/- 5-5	400/351	1"	7.08	B2Vne	"	"	"	"	B	Runaway*		vs/weak
0/- 5-5	400/246	1-2"	8.29	O9.5III	"	"	"	"	A	Runaway* $T=58^{\circ}\text{F}$ ^{then} cloud $F=501$ (broken 2pxs) ↑		vs/weak

Wed-Thurs

Date Sep 16-17/81..... Observers AK-Tn.....

8^m 680 PaO-E 05031-16091

[illegible]

1091

Spectr. Temp. $+62^{\circ}\text{F}$ Dome Temp./Hum $+56^{\circ}\text{F}/89\%$ Transparency Conditions... *cloudy*..... 44
 Focus 499
 Spectr. Temp. $+61^{\circ}\text{F}$ Dome Temp./Hum $+56^{\circ}\text{F}$

Comparison Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10/93			V= 3.24	K511? +B?	BC	1200/.2	150/5	IIaD-E	B	Asm Spec/KK		sl weak
								IIaD-E				4100 sl wk
					"	"	"	IIaD-E	B			sl red
$T = 54^{\circ}\text{F}$ Focus set to 503 using IIaD-E 05031-13091												
					BC	830/.68	135	IIaOE	B	Test		
									A			
									B			
									A			
									B			
									A			
									B			

Large RASC Tour Ring Nebula 2 hrs

8m 680

Emulsion Batches:

IIaO-E 05031- 16091

Date Sept 18-19/81..... Observers Gies-Th.....

[illegible]

16091

46

100

44

1

Aurora seen
very good, with "Red" again thru cloud
by 03hrs

Comparison pe/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0/- 15-					BC	830/68	BS	IIaO	A			sl RED
0/- 7-7	40/23	2"	3.9	K2IV	BC	"	"	IIaO-E	A	std Vel	Tour	Fine
0/- 5-5	200/350	2-3"	6.52	B2Ve	BC	830/68	BS	IIaO-E	A	Runaway*	cloud	
0/- 8-0								IIaO-E				
0/- 5-5	200/350	3"	7.01	B05III	BC	830/68	BS	IIaO-E	B	Runaway*	T=58°F F=501	
0/- 5-5	400/350	3"	7.05	B1III	"	"	"	"	A	Runaway*	T=56°F	
1- 5-5	200/176	3"	5.87	B8IIIh	"	"	"	"	B	Runaway*		
1- 5-5	200/164	2"	5.71	B2IIIe	"	"	"	"	A	Runaway*		

47

SAT-Sun

Date . Sept. 19-20/81. Observers JBL-Tn

Emulsion Batches:

8^m 68^m .. II. 0-E 05031 .. -19091 .. 1.96
 4^m 68^m .. 098-02E 05031 .. -05091 .. 43.92

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46216	HD 161096	17 38.5	+4 37	18 55	18 59	0 53 W		Fe/-	7-7
46217	HD 173654 B	18 41.3	-1 04	19 14	21 37	2 29 W		Fe/-	5-5.5
46217T	Spot Calc	for 46216	-22	15 min @ 15V		D4 3900	D3 4300	D2 4810	
46218	HD 173654 A	18 41.3	-1 04	21:39	22:25	3:17 W	-0 52	Fe/-	7-7
46219	HD 209625	21 59.7	-1 23	22:31	22:53	0:26 W		Fe/-	7-7
46220	HD 6116	00 57.3	+40 48	22:56	23:34	1:49 E		Fe/-	7-7
46221	HD 11257	01 45.6	+10 33	23:38	00:49	1:22 E	+10 59	Fe/-	7-7
46222	HD 16861	02 37.1	+10° 19'	00:55	01:49	1:14 E	+10 40	Fe/-	7-7
46223	"	"	"	02:00	03:57	0:54 W	"	Fe/-	4-4
46223T	Spot Calc for 46223			15 min @	15V D3 4810	7V D1 Hd	7V D2 5450	Ne/-	4-14
46223F	Focus Test							Fe/-	25-25

Spectr. Tem.

Focus...

Spectr. Tem.

Exp. Mr.

4/28

4/350

20/175

20/175

20/180

200/180

40/350

4-14

Spectr. Temp. $+36^{\circ}F$
Focus 501

Dome Temp./Hum. 153°F / 90%

Transparency Conditions . . . *some cloud* *58*

Spectr. Temp. $+51.0^{\circ}\text{F}$Dome Temp./Hum. $+45^{\circ}\text{F} / 100\%$

Comparison pe/Filted Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0-7-7	40/28	2"	3.9	K2III	BC	830/68	B5	I _{40-E}	B	stallve1		
1-5-5	200/350	2.4"	8.1	Am	"	"	"	"	A	Am stars	clouds	good
0-7-7	200/175	3"	5.8	Am	BC	830/68	B5	I _{40-E}	B	Am star	T=56°F	fine
0-7-7	200/175	3"	5.5	Am	"	"	"	"	A	"		vsl sm
0-7-7	200/182	2.4"	6.1	Am	"	"	"	"	B	"		vsl sm
0-7-7	200/180	3"	6.2	FoV	"	"	"	"	A	"	some cloud	fine
0-7-7	400/350	4"	6.3	A2V	"	"	"	"	B	"	T=53°F set 502	fine
1-4-4	200/	2	"	"	"	1200/.7	RS	O9802E	A	"	T=52.5 set 502	same fog fine
1-4-4								"			set 502 check 46184	dust on RS? fine
1-5-5					<u>KK-</u>	1200/.7 urgent		O98-E	B		we need more I ₄₀ to be cut and evacuated in Dome.	center Ref
											Also - No O98 4x5's left, so more needed before O98s required.	
											I left Unexp O98 box in vacuum however.	

49
SUN.-MON.

Date Sept. 20-21 / 1981 Observers Gis-Tn

Emulsion Batches:
8^m68^o .. ΠαΟ-Ε 05031-19091

[illegible]

Spectr. Temp. .. 5.0.....

Dome Temp./Hum. 52°F / 88%

Dome Temp./Hum. 42°F / 100%

Transparency Conditions ... *Fine* ... *5 clouds* ... *50* ...

[illegible]

Tues. - Wed.

Emulsion Batches:

PhO-E

[illegible]

Spectr. Temp.

Dome Temp./Hum. 47°F/96%

Transparency Conditions 52

[illegible]

53.

Date Sept 23/24 Observers Wh/RiEmulsion Batches:
8^h 68^m Har-E. 05031-19091 20 1.99
4^h 68^m 2415

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
46228	HD 154417	17 ^h 02 ^m	0° 51'	19 ^h 20 ^m	19 37		+00° 43'	Ne/ND	12/12
46229	HD 182572	19 ^h 20.2	11° 44'	19 41	19:48	00 ^h 18W	+11° 53'	Ne/ND	12/12
46230	HD 187691	19 ^h 46 ^m .2	+10° 16'	19.52	20:00	00 ^h 04W	+10° 21'	Ne/ND	12/12
46230F	focus test							Ne/ND	20/75
46231	Su Cyg #1	19 40.8	+29 01	20 ^h 17 ^m	21:47	1 ^h 58W.	+29° 12'	Ne/ND	8/9 8
31F	focus test	—	—					Ne/ND	10/10
46232	HD 212943	22 ^h 22.8	+4° 12'	22 ^h 07 ^m	22 ^h 12 ^m	0 ^h 20 ^m E	4° 25'	Ne/ND	13/12
33	HD 222368	23 ^h 34 ^m .8	+5° 05'	22 ^h 16 ^m	22 ^h 19 ^m	1 ^h 25 ^m E	5° 32'	Ne/ND	12/12
34	HD 213014			22 ^h 25 ^m	23:01	0 28W	17° 09'	Ne/ND	5/8
34F	focus test	—	—					Ne/ND	24/
✓46235	V1016 Cyg	19 53.6	+39 33	00:02	00 47	04 45W	39° 46'	Fe/ND	9/7/
46235T	spot cal for plate	46238-34			15mm @ 7U	⊙ D3 5450			
46236	HD 3765			1 ^h 41 ^m	2 ^h 08 ^m	1 ^h 28W	40° 04'	Ne/ND	8/4
36F	focus -							"	20/2
46236T	spot cal for plate	46235		15mm @ 15U	15	D4 3900 D3 4300 D2 4810			

Spectr. Temp. Dome Temp./Hum. 50°F/87% Transparency Conditions good 54

Focus

Spectr. Temp. Dome Temp./Hum.

Comparison Type/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Ne/ND 12/1		100/30	4"	5.9	G0I	BC+IT	1200/.475	150/.5	2415	1	std vel.	IJ. test o.	
Ne/ND 12/2		200/30		5.2	G8II	"	"	"	"	2	"		
Ne/ND 12/3		200/30		5.11	F8I	"	"	"	"	3	"		
Ne/ND 12/4		-				"	"	"	"	4			
Ne/ND 12/5		300/76				"	"	250/.3	"	1	Evans	new film	
Ne/ND 12/6		-						"	"	2			
Ne/ND 12/7		200/31		5.9	K0III	BC+IT	"	150/.5	"	1	std vel.		
Ne/ND 12/8		200/32					"	"	"	2	"		
Ne/ND 12/9		400/60		7.7	G8				"	3	"	Tube arcing slightly removed for cleaning	
Ne/ND 12/10										4		red to red blue to blue	
Ne/ND 12/11		500/-		10.4	[]	BC	830/.68	250/.5	IIa0E	A		focus 502 T 52°F	
									2415				
Ne/ND 12/12		400/60		7.36	JK5	BC+IT	1200/.475	150/.5		1	"	Tube cleaned & replaced. Seams improved.	
		-								2			
									IIa0-E				

Over →

Dome Temp./Hum.

56

Spectr. Temp.

Dome Temp./Hum. 40°F 96%

Comparison Type/Filter		Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/ND	8/5		400/60	2-3"	6.5	gKO	BC+15	1200/475	150/.5	2415	1	Std Vel.		
"	20/20										2	"		
1/ND	12/2		400/60		5.1	K4III	"	"	"	"	1	"		
1/ND	2		400/65		5.5	K2III	"	"	"	"	2	"		
											3	"		
1/ND	10		400/60		7.3	dg2					1	"		
											2			
8/ND	8/8		800/87		10.5	wc6		1200/575	150/.5	"	1	wh. wh.		

Date Sept 24/25 '81 Observers Rm - Ri

Emulsion Batches:

Emulsion Batches:
~~Thio~~-E 05031-21091 19 2.00

[illegible]

Spectr. Temp. 570 F

Dome Temp./Hum. 54°F 68%

Transparency Conditions 58

Focus 501

Spectr. Temp. 56°F

Dome Temp./Hum. 50°F 80%

40/31

[illegible]

Sun - Mon

Emulsion Batches:
8th 680 ... II-O-E 05031-21091₂ 196

[illegible]

Spectr. Temp.

Dome Temp./Hum. /

Very gusty
Transparency Conditions Cloud after kt exp 60

[illegible]

Date Mar 28-29 1981 Observers G-Cy-R-BI

Emulsion Batches:

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[illegible]

Spectr. Temp. Dome Temp./Hum. 48°F 68% Transparency Conditions 62

Focus

Spectr. Temp. Dome Temp./Hum.

Comparison of Filter Exp	Exp. Star	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10, 20, 30, 40, 60, 80, 100	5, 10s, 20s, 40s, 80s, 2 1/2 min	6"	3.71	B9 IV	NEWTON SPECT.	1200/4.20	50u/12	II-O		MK-801	F = 5.02	
80s											T = 44°F	
10, 20, 30, 40, 60, 80, 100	2 1/2 min, 5 min	5-6	3.7	B9 IV	"	1200/4.20	50u/12 mm	II-O		MK-801	F = 5.02	
80s	2 1/2 min, 5 min	6-8	3.7	B9 IV	"	"	"	"		"	NEW BATCH	
10, 20, 30, 40, 60, 80, 100	2 1/2, 5, 10, 20 min		5.19	K1 IV	"	"	"	"		"		
80s	10 min		"	"	"	"	"	"		"	F = 5.00 T = 40°F	
80s	17 min		"	"	"	"	40u/12	"		"		
10, 20, 30, 40, 60, 80, 100	2 1/2, 5 min, 10 min, 20 min		4.22	M2.5 II III	"	"	40u/12	"		"		
80s	2 1/2, 5 min, 10 min		6.06	M1 IIIab	"	"	"	"		"	Clouded out	

63

Emulsion Batches:

Date *Tues - Wed Sep 23-30* 8 Observers *L.R. - R. - C. - Y.*

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46248	HD 182835	19 21.2	+00°08	18:53	19:04	00 ^h 04 E	+00 30	Ne	80 sec
"	HD 231195	19 16.1	+14°14	19:16	21:17	02 ^h 15 W	+14:33		
"	HD 206859	21 39.8	+16°53	21:22	22:04	00 ^h 37 W	+17 26		
"	HD 207089	21 41.5	+22°29'	22:08	22:49	01 ^h 21 W	+23°02		
"	HD 208057	21 48.5	+25°27	22:53	23:18	01 ^h 43 W	+26°01	Ne	80 sec
46249	HD 3690	0 ^h 34.7	+20°53	23:32	23 36	00 ^h 44 E	+21°30'	Ne	80 sec
"	HD 3651	6 34.2	+20°43	23:39	00:21	00 ^h 00	+21°19'		
"	"	"	"	00:22	00:30	00 ^h 09 W	+21°19'		
"	"	"	"	00:30	00:37	00 ^h W	"		
"	"	"	"	00:37	00:41	00 ^h 20 W	"		
"	"	"	"	00:41:17	00:43:17	00 ^h 22 W	"	Ne	80 sec
"	HD 9270	01 26.1	+14°50	00:50	01:14	00 ^h 01 W	+15°25'		
"	HD 10761	01 40.1	+08°39	01:17	01:38	00 ^h 12 W	+09°13		
"	HD 11443	01 47.4	+29°06	01:42	01:52	00 ^h	+29°40	Ne	80 sec
46250	HD 11636	01 49.1	+20°19	02:03	02:08	00 ^h 32 W	+20°53	Ne	80 sec

Spectr. Temp. Dome Temp./Hum. 48°F./80%

Transparency Conditions 64

Focus

Spectr. Temp. Dome Temp./Hum.

Exp. Filter	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5 sec 30 sec 1, 2, 5 min	4	5.23	F2 Ib	NEWTON SPECTR.	1250/4.20	40μ/1.2mm	IT40		MK-87d	F 5.00	
2 hrs	2-3	9.38	F5 Ia	"	"	"	"		"	some cirrus clouds 1/3 mag last 1/2 hr	
1, 2, 5, 10, 20 min	4-6	5.54	G5 Ib	"	"	"	"		"	clouds	
2 1/2, 5, 10, 20 min	3	6.7	K0 Ib	"	"	"	"		"	clear again	
1, 2, 2 1/2, 5, 10 min		4.89	B3 V	"	"	"	"		"		
2 1/2, 2 1/2 min		6.3	K0 II-III	"	"	"	"		"		
2 1/2, 5, 10, 20 min		6.7	K0 II	"	"	"	"		"		
7 1/2		"	"	"	"	40μ/1.2mm	"		"		
6 min		"	"	"	"	40μ/1.6mm	"		"		
4 min		"	"	"	"	40μ/1.4mm	"		"		
2 min		"	"	"	"	"	"		"	R.V. darker cloud	
30 sec 1, 2 min 2 1/2, 5, 10 min	4	4.59	G8 III	"	"	40μ/1.2mm	"		"		
2 1/2, 5, 10 min	5	5.22	G8 III	"	"	"	"		"		
1, 2, 5 min		3.92	F6 IV	"	"	"	"		"		
30 sec 2 min		3.78	A5 V	"	"	"	"		"		

65.

Conc

Date Thurs-Wed Sept 29-30 '81 Observers R-Q-Ri

Emulsion Batches:

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[illegible]

Transparency Conditions .. Good 66

Dome Temp./Hum. 40°F 99%

Comparison	
e/Filter	Exp

Two Large Tours 2hrs
SAT-SUN

8^m 68^o

Emulsion Batches:
 . . . *Π₄O-E 03051-2709/22,202* . . .

Date Oct 3-4/81..... Observers JPL-Tn.....

[illegible]

2709/90

m. +41°F / 101°F

Some Cloud 68.

501.5

 $+42^\circ$

+35°F / 103°F

NEW D-19

Comparison	
Type/Filter	Ex

6^a THURS - FRI

Date Oct 8-9, 1981 Observers Gris-Tn

8^m 68^o Emulsion Batches:
IIaO-E 03051 - 27291

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46255	HD 187567	19 ^h 45. ^m 4	+7° 39'	18:17	18:56	0 ^h 01 ^m E	+7° 53'	Fe/-	5-55
46255T	Spot Colls for 46255-62			15 min @	15V 3900	D4 D3 4300	D3 4810		
46256	HD 195907	20 29.0	+31 19	19:00	21:15	1 35W	+31 37	Fe/-	55-5
46257	HD 184927	19 31.6	+31 04	21:23	0:01	5 20W	+31 16	Fe/-	5-55
46258	HD 3950	0 37.0	+51 48	0:06	0:53	1 05W	+52 15	Fe/-	5-5-5
46259	HD 14220	2 12.8	+52 07	0:58	1:55	0 29W	+52 29	Fe/-	5-5-5
46260	HD 16429	2 33.1	+60 51	2:00	4:48	3 01W	+61 12	Fe/-	55-5
46261	HD 34078	5 09.7	+34 12	4:52	5:22	0 58W	+34 18	Fe/-	5-5-5
46262	HD 36576	5 27.7	+18 28	5:26	5 51	1 09W	+18 32	Fe/-	7-7
46262F	Focus					"	"	Fe/L	15-15

Spectr. Temp. 43°F.....

Dome Temp./Hum. 47° F / 86 %

Dome Temp./Hum. 135° / 102%

Transparency Conditions ... *Fine* 70.

Comparison pe/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
e/-	5-5	100/177	2"	6.42	B25II _c	BC	830/.68	BS	IIa0-E	A	Runaway *		
									IIa0-E				
e/-	5-5	100/350	2"	7.85	B15II _c	BC	830/.68	BS	IIa0-E	B	Runaway *		
e/-	5-5	100/400	3-4"	7.30	B2II _p	"	"	"	"	A	Blu-He *	T=49°F F=501	
e/-	5-5	200/180	2"	7.05	B1III	"	"	"	"	B	Runaway *	T=46°F F=502	
e/-	5-5	200/175?	1"	7.01	B2II	"	"	"	"	A	Runaway *		
e/-	5-5	400/350	2"	8.29	09.5II	"	"	"	"	B	Runaway *	T=45°	
e/-	5-5	200/175?	"	6.18	09.5I	"	"	"	"	A	Runaway *	T=44° F=503	
e/-	7-7	200/175	2	5.71	B2II-III	"	"	"	"	B	Runaway *		
e/-	8-8								"	A		Set 503	

FRI-SAT.

8th 68th Emulsion Batches:
II a.O.E. 02051 - 02101 22 1972

Emulsion Batches:

II a. O. E. 03051-02101 22¹⁴

Spectr. T.

Focus...

Spectr. T.

[illegible]

Spectr. Temp. . . . 74

Dome Temp./Hum. 73°F / 100%

Transparency Conditions *clearing - thin cloud* 12

Comparison of Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
- 1-5					BC	830/.68	BS	IlaO-	B		1" missing	
- 7-2	40/39	1"	4.1	K3II	"	"	"	IlaO-E	A	Std. Velocity		fine *
- 5-5	400/350	1"	7.26	B05II	"	"	"	"	B	Runaway *		v sl str
								IIaF				
- 5-5	200/350	2"	7.01	B05III	BC	830/.68	BS	IlaO-E	A	Runaway *	T=49°	fine
								IIaO-E				
- 5-5	400/355	1.2"	7.93	O5f	BC	830/.68	BS	IlaO-E	B	Runaway *		fine
- 5-5	200/175	1"	7.05	B1III	"	"	"	"	A	"	+47°F	v sl. str.
- 5-5	200/178		6.94	B2IV	"	"	"	"	B	Runaway *		fine
- 7-5	200/175	2"	5.53	B5I	"	"	"	"	A	Runaway *	T=45°F F=502	v sl str.
- 5-5	200/175	1"	7.08	B2Ire	"	"	"	"	B	Runaway *		fine
- 5-5	200/175	1"	7.01	B2V	"	"	"	"	A	Runaway *	($\angle = 50^\circ$ / 110° 79 by wandant)	
- 5-5	400/333	1"	7.47	B6V	"	"	"	"	B	Runaway *	T=45°F cloud	fine
											* no central shadow from slicer	

73 Sun-mon

8^m 68^s

Emulsion Batches:

...II.0-E.05031...-10101

Date Oct. 11.12.181..... Observers KK-Th.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mir.
46273F	Focus Test							Fe/-	15/5	
46273	HD 186791	19 41.5	+10 22	18 18	18 40	0 01 E	+10 32	Fe ¹¹² / _{bb}	5-5-5	40/225
46274	HD 183912	19 26.7	+27 45	18 43	19 06	0 48 W		Fe ¹¹² / _{bb}	5-5-5	40/200
46275	HD 172167	18 33.6	+38 41	19 09	19 10	1 37 W		Fe ¹¹² / _{bb}	7-7	40/200
46276	"	"	"	19 13	19 14	1 41 W		Fe ¹¹² / _{bb}	7-7	40/10*
46277	HD 202109	21 8.7	+29 49	19 17	19 46	0 23 E		"	5-5-5	40/225
46278	HD 215182	22 38.3	+29 42	19 48	20 05	1 32 E		"	5-5-6	40/200
46279	HD 3712	0 34.8	+55 59	20 10	20 17	3 18 E		"	7-7	40/205
46279T	Spot calibration	15 ^h ① 3600 D4	②	3900 D4	③ 4100 D4	15 min	for 462	73-85	88.	
46280	HD 18925	2 57.6	+53 07	20 22	20 39	5 20 E	+53 23	Fe ¹¹² / _{bb}	5-5-5	40/210
46281	HD 1326 A	0 12.7	+43 27	20 54	23 28	0 18 W	+43 51	Fe/-	5-5-5	40/250
46281 ¹	Spot Cal'n	(1) 15 V 4100 D4	(2)	4300 D3	(3) 4810 D2		for 46273-85,	88.		
46282	HD 18884	2 57.1	+3 42	23 36	23 39	2 17 E		Fe/-	7-7	40/25
46283	HD 12323	1 ^h 55.8 01 ^m 12.8	55 08 +52 07'	23 52	03 19	0 24 W	+55 28	Fe/-	5-5-5	800/603
46284	HD 20902	03 ^h 17 ^m .2	+49° 30'	03 23	03 24	01 07 W	+49 44	Fe/-	7-7	40/20

-10/01

Spectr. Temp. 752.5°FDome Temp./Hum. $45^{\circ}\text{F}/72\%$ Transparency Conditions *clear*..... *74*Focus $+500$

Spectr. Temp.

Dome Temp./Hum.

Comparison
of Filter Exp

2-15/5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

66 5-5-5

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	830/.68	B5	II ₄ O	B			
40/225	2"	4.1	K3II	BC	1200/4.20	150/5	II ₄ O-E	B	std/Vel	primary mirror v. poor - much worse than seeing	sl weak
40/200		4.2	K5II+ B?	BC	"	"	"	A	Asm Spec/KK		fine
40/68		0.0	A0V	"	"	"	"	B	Asm Spec/KK		strong
40/104		"	"	"	"	"	"	A	"	* Blue filter in exp meter	strong
40/225		3.8	G8II	"	"	"	"	H	"	T=51°F	fine
40/200	2"	3.8	G8II+ F	"	"	"	"	B	"		fine
40/205		2.5	K0III	"	1200/4.20	"	"	A	Std Vel	dust in tubes? 4100 sl. str. try lower voltage?	fine
40/210		3.6	G8II+ 13V	BC	1200/4.20	150/5	II ₄ O-E	B	Asm Spec/KK		fine
400/250	1-2"	8.07	M1V	"	830/.68	150/3	"	A	"		
							"			4100 sl. str.	
40/35	3"	2.8	M15II	BC	830/.68	150/5	II ₄ O-E	B	std/Vel		
300/603	1-6"	8.88	ON9II	BC	830/.68	B5	II ₄ O-E	A	JB-Bln	Set 501 (1st 100 cats in 30 mins)	wrong grating
40/30	1-2	227	F5II	BC	830/.68	B5	II ₄ O-E	B	std Vel-Bln	45°F set 502	

75

Date Observers

5^m 680 Emulsion Batches:

5^m 680 Emulsion Batches:
III a J-E 07119-04101
 37312

[illegible]

04:01
373

Transparency Conditions

Transparency Conditions Excellent - slight

.....
wa. ze

Dome Temp./Hum. 40°/89%.

76

[illegible]

Mon - Tues.

Date Oct. 12-13, 1981 Observers Gris - T_n

8m 680

Emulsion Batches:

ΠαΟ-Ε 05031 11101

[illegible]

Spectr. Temp. $+52^{\circ}\text{F}$Dome Temp./Hum. $47^{\circ}\text{F}/81\%$ Transparency Conditions *Full Moon Humid*
Fine s/hazy.....Focus 500Spectr. Temp. $+43^{\circ}\text{F}$Dome Temp./Hum. $37^{\circ}\text{F}/100\%$

78

Comparison of Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
15-5					BC	850 850/.68	BS	IIa0	B			ok
7-7	40/35	2"	4.1	K3II	"	"	"	IIa0-E	B	Std. Velocity		
5-5	400/350	2-4"	7.83	B0III	"	"	"	"	A	Runaway *		
5-5	400/350											G11
5-5	400/350		7.30	B2Ip	BC	850 850/.68	BS	IIa0-E	B	Bln-He *	T=50°F	wrong grating
5-5	200/175	2"	7.05	B1III	"	"	"	"	A	Runaway *	T=47°F F=502	ok
5-5	400/350	1-2"	8.31	09.5II	"	"	"	"	B	Runaway *	+35 cont.	on
5-5	400/350	1-2"	6.18	09.5II	"	"	"	"	A	Runaway *	T=43°F F=503	all.
5-5	200/175	2"	7.29	B6II	"	"	"	"	B	Runaway *		
7-7	200/200	1"	5.67	B1II	"	"	"	"	A	Runaway *		
15-5					BC	1800/.68	BS	098	A			ok

↑ Tues/Wed

Date 13/14 Oct 1981 Observers Blu-Tu - Busch-Colbeck

Emulsion Batches:

Ma J-E
Ma O-E 05081-11101
O 98-02 E prob 20081-27091

↓ prob 07119-04101
batch 2.46
batch 7.42

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
46297	HD 200120	20 ^h 56 ^m .4	+47° 08'	18:16	18:55	00 51E	+47° 24'	Fe/-	20-20	40/200
46298	HD 184927	19 ^h 31 ^m .6	+31° 09'	19 02	21 41	23 18W	+31° 10'	Fe/-	5-55	40/500
46298T	Spot Cal'n for 46297				15 min @ D4	17.5V 3900	15V 4300	15V 4810		
46299	HD 200120	20 ^h 56 ^m .4	+47° 08'	21 49	22 14	02 27W	+47° 24'	Fe/-	6-6	40/100
46299T	Spot Cal'n for 46298				15 min @ 15V	3900	4300	4810		
46300	HD 21071	03 ^h 18 ^m .9	+48° 45'	22 22	23 00	03 12E	+48° 58'	Fe/-	55-5	40/35
46300T	Spot Cal'n for 46299			15 min @	15V D3 4810	01.7V Hx	02 7V 5450			
46301	HD 20902	03 17.2	+49 30	23 05	23 06	03 04E	+49 44	Fe/-	7-7	35

Spectr. Temp. 54°F

Dome Temp./Hum. +48°F/77%

Transparency Conditions... Fine... Hazy... Humid...

Focus... 500

Spectr. Temp. 47°F

Dome Temp./Hum. 42°F/100% condensing

Fine Aurora

80

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/200	1-2	4.51	B1e	BC	830/68	BS	IIIa-JE	A	Be - Blu	Focus = 500 T = 54°F	vd sm high fog
400/500	2-3	7.30	B2Vp	BC	830/68	BS	IIa-OE	B	Blu - He *		
							IIIa-J-E				
40/100	2"	4.51	B1e	BC	1200/.7	RS	09802E	A	Be - Blu	Set 501	exp good sl high fog
							IIa-O-E				
500/175	1"-2"	6.0	B6V	BC	830/68	BS	IIa-OE	B	Std Vol-Blu	T=48°F Focus=501	
							09802E				
0/35		2.27	F5Ib	BC	830/68	BS	IIa-OE	A	Std Vol-Blu	T=47°F	

Date Oct 16/17 Observers JBL-BLS-Bjo-Zk

Emulsion Batches:

8^m 6^{pm} IIaOe 05031 - 11101 22 193
 05031 - 13101 23 216

[illegible]

Date ... Oct. 17-18 ... Observers Cow-Bros-Box ...

Emulsion Batches:

... Παο-ε ... 080.3.1-13101

23 12

Spectr. Ten

Focus . . .

Spectr. Ter

[illegible]

Spectr. Temp. 50°

Dome Temp./Hum. 46°/98%

84

[illegible]

Date Oct 19/20 Observers Wln/Ri

8^m 69° Emulsion Batches:
Tiao-E 05031-13101

[illegible]

Spectr. Temp.

Dome Temp./Hum.

86

[illegible]

87 Tues./Wed

Date OCT 20/21, 1981

Observers Busch - Gis - In

8^m 69°

Emulsion Batches:

Emulsion Batches:
HaO-E 05031 - 17101

Spectr. T.
Focus...
Spectr. T.
Exp. Mtr.

Spectr. Temp.

Dome Temp./Hum. 52°F/72%

Transparency Conditions *Cloud* 12

88

Dome Temp./Hum. /

[illegible]

Fr-Sat

8m 680

Emulsion Batches:
T40-E 05031 - 17101

Spectr. T.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46310	HD 186688 SU CYG	19 ^h 40. ^m 8	+29°01'	18 51	20 25	2 32 W	+29°0	Fel-	5-5-5
46310T	Spot Cal'n for	46310 - 19		15 min @ 15V		D4 3900	D3 4300	D2 4810	
46311	R AQL	19 ^h 01. ^m 5	+8°05'	20:33	21 35	4 ^h 22 ^m W	+8°08'	Fel-	5-5-5
46312	R CAS	23 ^h 53.3	+50 50	21:44	22 32	0 27 W	+51°12'	Fel-	5-5-5
46313	S' PSC	0 ^h 41. ^m 3	+14°56'	22:39	23:21	0 ^h 27 W	+15°22'	Fel-	7-7
46314	O CET	2 ^h 14. ^m 3	-3°26'	23:25	23:43	0 ^h 48 ^m E	-3°04'	Fel-	7-7
46315	45 RZ ARC	2 ^h 50. ^m 2	+17°56'	23:47	0:18	0 ^h 44 ^m E	+18°16'	Fel-	7-7
46316	HD 3950	0 ^h 37. ^m 0	+51°+8'	0:24	1:26	2 ^h 37 ^m W	+52°14'	Fel-	5-5-5
46317	HD 4142	0 38.9	+47 19	1:-33	1:55	3 ⁿ 04 ^m W	+47 46	Fel-	5-5-5
46318	HD 30650	4 44.4	+43 24	1:59	3:27	0 ^h 30 ^m W	+43 33	Fel-	5-5-5
46319	HD 37737	5 35.7	+36 09	3:31	6:13	2 ^h 25 ^m W	+36 12	Fel-	5-5-5
46319F	Focus Test					1 ^h 14 ^m E	-8 34	Fel-	17-1

-17/01

Spectr. Temp. ... +43°F

Dome Temp./Hum. +35°F/90%

Transparency Conditions ... Some Cloud

Focus ... 503

Spectr. Temp.

Dome Temp./Hum. +27°F/96%

 3
 065-5399
 Dave Reed 613-4058

90

Comparison
of Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
400/400	5"	6.87 7.66	FO G1	B.C.	830/ 0.68	BS	IIaO-E	A	Rm Ceph	some cloud	fine
							"				
400/320	4"	7.6	M50 -M6C	BC	830/1.68	50/13	IIaO-E	B	CRW MIRAS	EXPOSURE TIME = 62 ^m	weak
400/460	3"	7.0	M6C -M6C	"	"	"	"	A	"	loss of 10 ^m due to problem with R.A. clamp	fine
400/40	3"	7.1	M41	"	"	"	"	B	M-STANDARD	Set 504 T = 38°F	fine
400/40	3 1/4"	6.2	Fe-M6C	"	"	"	"	A	CRW-MIRAS	Exposure = 18 ^m	fine
400/40	2 1/2"-3"	6.8	M61	"	"	"	"	B	M-STANDARD	Exposure = 31 ^m	fine
400/350	3 1/4"	7.05	B1 III	BC	830/1.68	BS	IIaO-E	A	Runaway *		fine
400/177		5.53	B5 V	"	"	"	"	B	Runaway *		v slstr
400/350	2 1/2"	7.47	B6 V	"	"	"	"	A	Runaway *	T = 36°F	fine
400/300	"	8.31	O9.5 I (n)	"	"	"	"	B	Runaway *		fine
				"	"	"	"	A		T = 33°F F = 504	

SAT Sun

8m 680

II-40-E 05031 - 23 21

Spectr. T

[illegible]

73 11

$$+35\% / 68\%$$

Some Cloud

503

.....+38°F.....

+32 / 902

92

[illegible]

Date 25/26 Oct 1981 Sun/Mon. Observers Bln-Tu

Emulsion Batches:
8th 6th H₂O-E 05031-23101

[illegible]

3101

42°F / 86%

94

Focus .. 502

Spectr. Temp. 74.5° F

Dome Temp./Hum. 70°F/93%

Comparison	
De/Filter	Exp

95

Date 29-30 Oct 81... Thurs-Fri Observers Pla-Tn-Wah.....

Emulsion Batches:

Emulsion Batches:

8 th 68 ^o	II ^o O-E	05031	23/10/21	198
4 th 68 ^o	II ^o O-E	07119	04/10/35	296

Am 68 II 0 J-E 07119 04/0135 29

[illegible]

Spectr. Temp. $+46.8^{\circ}\text{F}$Dome Temp./Hum. $41^{\circ}\text{F}/92\%$ Transparency Conditions *Hazy - cloudy*.....Focus 50.2Spectr. Temp. $+42^{\circ}\text{F}$Dome Temp./Hum. $137^{\circ}\text{F}/100\% +$ *Fog*

96

Comparison
Filter Exp

0/- 55-5

0/- 55-5

0/- 15-10

15V

40

0/- 55-5

0/- 7-7

1- 20-20

1- 20-20

1- 55-5

1- 1-1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
400/350	3-4	7.27	B5V	BC	830/68	BS	IIa-OE	A	Runaway*	Cloud	Fine
							IIa-OE				
400/350	3-4	7.05	B1IV	BC	830/68	BS	IIa-OE	B	Runaway	T=45°F	Fine
40/160	4"	4.07	B2IVe	BC	830/68	BS	IIIa-J-E	A	Be Pln		exp good finger prints
							IIIa-J-E				
400/250	3-4	6.0	B6V	BC	830/68	BS	IIa-O-E	B	std vel - Pln	T=43°F set 503	str
40/35				"	"	"	"	A	std vel		str
40/200	4"	4.07	B2IVe	BC	830/68	"	IIIa-J-E	B	Be Pln		fine
40/100		3.51	095V	BC	830/68	"	IIIa-J-E	A	SB - Bln		fine
400/254		6.62	B2V	BC	830/68	"	IIa-OE	B	SB - Bln		Fine
				BC	830/68	"	"	A		T=42°F Focus=503	vsl blue

97

Fri - Sat

Date ... Oct 30-31/81 Observers ... Crow - Tr. - Zhi - G. S.

Emulsion Batches:

Then ^{5m} ~~evacuated 2hrs~~ ... II^o.D. unevacuated. 05081-30101
 ... II^o.D. ^{same batch} 22 183

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46336	HD 186791	19 ^h 44. ^m 5	+10°22'	18:21	18:27		+10°39'	Fe/-	9-9
46337	HD 177940 R A&L	19 ^h 01. ^m 6	+8°05'	18:32	21:07	4 ^h 21 ^m W	+8°18'	Fe/-	7-7
46337T	Spot Calc for 46336-37			15min	@ 15V	D4 3900	D3 4300	D2 4810	
46338	HD 224481 R. CAS	23 ^h 53. ^m 3	+50°50'	21:17	21:50	0 ^h 13 ^m W	+51°22'	Fe/-	7-7
46339	HD 222643	23 ^h 37. ^m 3	-16°00'	22 12	23:05	1 ^h 27 ^m W	-15 26	Fe/-	5-5
46340	HD 14386 O CET	2 ^h 14. ^m 3	-3°26'	23:12	23:24	0 ^h 34 ^m E	-3°04'	Fe/-	7-7
46340T	Spot Calc for 46338-46			15min	@ 15V	D4 3900			
46341	HD 224935 30 PSC	23 ^h 56. ^m 8	-6°34'	23 29	23:43	2 ^h 02 ^m W	-6°09'	Fe/-	7-7
46342	HD 1013 X PEG	0 ^h 09. ^m 4	+19°39'	23:50	00:05	2 ^h 27 ^m W	+20°04'	Fe/-	7-7
46343	HD 3950	0 37.0	+51 48	0:12	1:00	2 ^h 38 ^m W	+52 20	Fe/-	5-5
46344	HD 14220	2 12.8	+52 07	1:07	2:00	2 ^h 02 ^m W	+52 33	Fe/-	5-5
46345	HD 36576	5 27.7	+18 28	2:04	2:22	0 ^h 48 ^m E	+18 37	Fe/-	7-7
46346	HD 43112	6 09.5	+13 53	2:26	2:54	1 ^h 00 ^m E	+13 57'	Fe/-	7-7
46346F	Focus					1 ^h 00 ^m E	+13°57'	Fe/-	15-15

21-30/01
22

Spectr. Temp. $+49^{\circ}\text{F}$

Dome Temp./Hum. $+44^{\circ}\text{F}/92\%$

Transparency Conditions *CLEAR - hazy* ⁹⁸

Focus ... *501*.....

Spectr. Temp. $+46^{\circ}\text{F}$

Dome Temp./Hum. $+40^{\circ}\text{F}/100\%+7$

cloud, fog, Too, wed

Comparison e/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-9-9	40/40	2"	4.1	K3III	BC	830/0.68	150/3	IIa-O	A	Std Velocity		
2-7-7	400/430	2"	8.8	M50 -M8c	"	"	"	"	B	CW-MIRAS	EXPOSURE = 155 ^m	weak
3-7-7	400/500	2"	6.9	M6c -M8c	"	"	"	IIa-O*	A	"	EXPOSURE = 33 ^m	fine, but trail uneven
4-5-5	400/400	2.3	7.4	K4III	"	"	"	"	B	K STANDARD	EXPOSURE = 53 ^m	fine
5-7-7	40/50	"	5.8	M50 -M8c	"	"	"	"	A	CW-MIRAS	EXPOSURE = 12 ^m	
								"	B			
6-7-7	40/50	"	6.0	M3III	"	"	"	"	A	M STANDARD	EXPOSURE = 14 ^m	blank
7-7-7	40/50	"	6.0	M2III	"	"	"	"	B	M STANDARD	T=+97 still 1501	comp. series doubled!
8-5-5	400/400	2"	7.05	B1III	"	"	BS	"	A	Runaway*	Labelled twice to be sure	fine
9-5-5	400/404	2"	7.01	B2II	"	"	"	"	B	Runaway*		fine
10-7-7	400/200	1"	5.71	B2IIc	"	"	"	"	A	Runaway*		fine
11-7-7	400/200	1"	5.67	B1V	"	"	"	"	B	Runaway*		sl strong
12-1-1					"	"	BS	IIa-O	A		T=46°F F=501	

Date Sun/Mon 1/2 Nov 81 Observers KK-Tn / Ly-Tn

4^m 68² III-2-Jeb - - 27101 3^h barrel
8^m 68⁰ II-0-F 05021 - 30101 73 217

[illegible]

10/3
10/23

Spectr. Temp. 54°

Dome Temp./Hum. $52^{\circ}/86\%$

Transparency Conditions *sl. haze* 100

Focus 499

Spectr. Temp.

Dome Temp./Hum. $110^{\circ}/8$

Companion
type/Filter

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
$10/200 \pm$	1"	2.2	A5III	BC	830/.68	BS	IIIJeb	B	AsmSp-KK		s/str.
$10/50$	1"	4.1	K3II	"	"	"	II90-E	B	Std Vel	R.H. side of box	mottled! fine v sl blue
			"	"	"	"	IIIJeb	A		(The 2 IIIa's are together)	
$55^{\circ}/156$	3"	7.3	K3V	BC	830/.68	BS	II90-E	A	Asm - KK	T=55°F set 500	
							II90-E			95% inside 98% outside humidity filling clouds	

10 pg #1

Date Mon-Tues. 2/3 Nov. 81 Observers Ly-Tn / Bls-Ty.....Emulsion Batches:
8"69" IIA-E 05031 - 3/10/1
4"68" III-E 09061 - 2/10/1 40 34

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
46350F	Focus Test						+10 34	Fe/-	15-15	
46350	HD186791	19 41.5	+10 22	17 40	17 45	00 30W	"	Fe/-	7-7	40/40
46351	HD219150	23 08.6	+1° 39'	17 54	20 00	00 40E	+02 06	Fe/-	5-5-5	400/350
46351T	Spot Cals for 46350-56, 59, 61, 63.				15 min @ 15V	D4 3900	D3 4300	D2 4810		
46352	HD1337	00 12.4	+50 53	20 11	20 52	0 54E	+51 19	Fe/-	7-7-7	200/250
46353	"	"	"	20 53	21 34	00 12E	"	"	7-7-7	1/250
46354	HD10260	01 35.3	+60 32	21 39	23:00	00 07E	+60 56	"	7-7-7	200/225
46355	HD1337	00 12.4	+50 53	23 05	23:41	01 57W	+51 17	"	7-7-7	200/225
46356	HD 22484	03 31.8	+0 05	23 57	00:06	00 57E	+0 20	"	10-10	40/40
46356F	Focus Test					"	"	"	20-20	
46357	HD 33328	05 4.4	-8 53	00 17	00 50	01 15E	-8 47	"	20-20	40/200
46358	HD37468	05 33.7	-2° 39'	00 54	01 14	1 52E	-2° 37'	Fe/-	20-20	40/200
46358T	Spot Cals for 46357-58, 60, 62				15 min @ D4	175V 3900	15V 4300	15V 4810		
46359	ADS 4241D	05 33.7	-2 39	01 16	02 34	00 32E	-2 37	Fe/-	5-5-5	400/500
46360	HD 33328	05 4.4	-8 53	02 39	03 05	00 29W	-8 47	Fe/-	20-20	40/200

2/10/10
29/10/10

Spectr. Temp. $+55^{\circ}\text{F}$

Dome Temp./Hum $+50^{\circ}\text{F}/78\%$

Transparency Conditions *Same Cirrus*.....

102

Focus *500*.....

Spectr. Temp.

Dome Temp./Hum.

*Then largely photometric
many Brit meteor seen early in evening*

Comparison
Type/Filter Exp

Comparison Type/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe-15					BC	830/68	BS	IIaO	A			vsl red
Fe-75	40/40	2"	4.1	K3II	"	"	"	IIaO-E	A	std vel		fine
Fe-55	100/350	3"	7.5	Fo	"	"	"	IIaO-E	B	Fe *		good
								IIaO-E				
Fe-75	100/250	2"-4"	6.05	09III	BC	1200/-0.025	BS	IIaO-E	A	MSB-Ly	Set 499 T=540F	fine
75	100/250	"	"	"	"	"	"	"	B	"		fine
75	100/225	2-4	5.6	B8	"	"	"	"	A	SpBin-Ly	* much fainter 2	fine
75	100/225	"	6.05	09III	"	"	"	"	B	MSB-Ly	Set 500 T=50°F.	fine
100	10/40	2"	4.4	F8V	"	"	"	"	A	std vel		good
100					"	"	"	IIaO	A		T=49.5 Set=500	vsl blue
100	10/200		4.07	B2V	"	830/68	"	IIIaJ-E	B	Be Blu	Set=501	sl strong
100	10/200		3.51	09.5V	"	830/68	"	IIIaJ-E	A	SB-Blu		strong
								IIIaJ-E				
Fe-55	100/500	3"	6.62	B2V	BC	830/68	BS	IIaO-E	B	SB Blu		sl strong
Fe-100	100/200	3"	4.07	B2V	"	"	"	IIIaJ-E	A	Be Blu		strong

pg #2

Emulsion Batches:

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[illegible]

Exp. Mtr.

Spectr. Temp. 46°FDome Temp./Hum. $\rightarrow 38^{\circ}\text{F} / 80\%$

All four prt Planets soon

Merkur, Jupiter, Saturn & Mars in Ordnung

[illegible]

165

TUES. / WED.

Date Nov. 3/4, 1981 Observers Gis-In

Emulsion Batches:

8^m 68°

Emulsion Batches:

8th 68° Π_{20} -E... 05031-31101 22 288
 Π_{20} -E... 05031-01111 24 288

Π.Ο. Ε. 05031 - 01111 24 238

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Type/Filter	Comparison Exp.
46364	HD 186791	19 ^h 41.5	+10° 22'	17:36	17:39	0 ^h 28 ^m W	+10° 31'	Fe/-	7-7
46365	HD 3950	0 37.0	+51 48	17:45	18:28	3 ^h 37 ^m E	+52 11	Fe/-	7-7-3
46365T	Spot calc' for 46364 - 71,			15 min @ 15V		b4 D3 3900	D3 +300	D2 +810	
46366	HD 195907	20 29.0	+31 19	18:32	20:15	2 ^h 20 ^m W	+31 34	Fe/-	5-5-5
46367	HD 220057	23 15.7	+60 37	20:23	20:56	0 ^h 14 ^m W	+60 51	Fe/-	5-5-5
46368	HD 16429	2 33.1	+60 51	21:01	22:45	1 ^h 19 ^m E	+61 08	Fe/-	5-5-5
46369	HD 11606	1 48.8	+58 47	22:50	23.28	0 ^h 16 ^m W ^x	+59 07	Fe/-	5-5-
46370	HD 37737	5 35.7	+36 09	23:35	1:52	1 ^h 13 ^m E	+36 09	Fe/-	5-5-
46371	HD 37657	5 35.1	+43 00	2:03	2:49	0 ^h 16 ^m E	+43 00	Fe/-	5-5-5
46372	HD 39680	5 49.0	+13 49	2:52	4:44	1 ^h 26 ^m W	+13 48	Fe/-	5-5-5
46373	HD 30650	4 44.4	+43 24	4:47	6:16	4 ^h 02 ^m W	+43 32	Fe/-	5-5-5
46373T	Spot Calc' for 46372 - 73,				15min e 15V	b4 D3 3900	D3 +4300	D2 +810	
46373F	Focus test					4 ^h 02 ^m W	+43 32	Fe/-	20--

1/10/12 208
1/11/24 258

Spectr. Temp. $+51^{\circ}\text{F}$ Dome Temp./Hum. $+48^{\circ}\text{F}/60\%$ Transparency Conditions *Fine... s/haze*..... 106
Focus 501
Spectr. Temp. $+17.5^{\circ}\text{F}$ Dome Temp./Hum. $+44^{\circ}\text{F}/85\%$

Companso
pe/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0/50	1"	4.1	K3II	BC	830/68	BS	IIaO-E	A	Std. Velocity		fine
00/175	2"	7.05	B1II	"	"	"	"	B	Runaway*		fine
							"				
00/350	1"	7.85	B15Ie	BC	830/68	BS	IIaO-E	A	Runaway*		fine
00/350	1"	6.94	B2IV	"	"	"	"	B	Runaway*		fine
00/350	2"	8.29	09.5III	"	"	"	"	A	Runaway*	T=50°F	
00/175	1"	7.08	B2IIne	"	"	"	"	B	Runaway*		fine
00/175	2"	8.31	09.5III	"	"	"	"	A	Runaway*	T=48.5°F	fine
00/175	1"-2"	7.22	B3IIne	"	"	"	"	B	Runaway*	T=47°F F=502	v sl. strong
00/175	1.2"	8.01	06.5I	"	"	"	IIaO-E*	A	Runaway*		sl. strong
00/182	1"	7.47	B6V	"	"	"	"	B	Runaway*	Thin cloud	sl. strong
							"				
				BC	830/68	BS	098	A			

107 Wed/Thurs

Date Nov 4/5 1981 Observers Rm. Ri // Gus - Ri

8m 68

Emulsion Batches:

Ilford E 05031-

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46374	Focus test						+26°	Fe/-	15-15
46379	HD 186791	19 ^h 41.5	+10° 22	17:30	17:32	0 25 W	+10° 30	Fe/-	7-7
46375	HD 186688 = SV Cyg	19 ^h 40.8	+29° 01	17:36	18:06	1 ^h 00 W	+29° 11	Fe/-	5-5-5
46375T	Spot Calif for 46374-84			15 min	@ 15	D4 3900	D3 4300	D2 4810	
46376	HD 184927	19 ^h 31.6	+31° 04	18:10	19:12	2 ^h 16 W	+31° 12	Fe/-	5-5-5
46377	HD 180583	19 ^h 12.0	+27° 45	19:15	19:48	3 ^h 13 W	+27° 52	Fe/-	5-5-5
46378	HD 197572 = X Cyg	20 ^h 39.5	+35° 14	19:52	21:41	3 ^h 38 W	+35° 30	Fe/-	5-5-5
46379	HD 203156 = HL 7157	21 ^h 15.4	+37° 49	21:45	22:05	3 ^h 25 W	+38° 08	Fe/-	5-5-5
46380	HD 30282 = AW Per	04 ^h 41.1	+36° 33	22:11	23:42	2 ^h 25 E	+36° 39	Fe/-	5-5
46381	HD 20902 = α Per	03 ^h 17.2	+49° 30	23:48	23:50	00 453 E	+49° 44	Fe/-	7-7
46382	HD 3950	0 37.0	+51 48	23:58	0:40	2 37 W	+52 12	Fe/-	5-5-5
46383	HD 16429	2 33.1	+60 51	0:47	2:15	2 15 W	+61 10	Fe/-	5-5-5
46384	HD 39680	5 49.0	+13 49	2:20	4:10	0 57 W	+13 49	Fe/-	5-5-5

Spectr. Ten

Focus....

Spectr. Ten

Exp. Mtr.

Spectr. Temp. 55°F Dome Temp./Hum. $53^{\circ}\text{F}/66\%$ Transparency Conditions 1081

Focus 500

Spectr. Temp. 48°F

Dome Temp./Hum. $42^{\circ}\text{F}/100\%$

TD 4913.6

40/32

Comparison Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/-					13C	830/.68	135	IIaOE	A		focus test	
1-7-	40/50		4.1	K3III	"	"	"	IIaOE	B	std. vel		fine
1-5-5	00/400	2	6.7- 7.7	F0- G1	"	"	"	"	A	Ceph/Evans		sl strong
								IIaOE			T = 55°F (spectrograph)	
1-5-5	00/500	2	7.30	B2I _p	"	"	"	"	B	Blm He ⁺		sl. strong
1-5-5	00/400		6.7	F6I-T	"	"	"	"	A	Ceph/Evans		sl strong
1-5-5	00/600	2-3	6.6	F7Ib	"	"	"	"	B	Ceph/Evans		strong
1-5-5	00/80		5.9	F2	"	"	"	"	A	Ceph/Evans	T = 54°F	sl str.
1-5-5	00/400		7.9- 8.2	F6- G1	"	"	"	"	B	Ceph/Evans		fine
1-7-	20/20		2.27	F5Ib	"	"	"	"	A	Ceph/Evans		strong
1-5-5	00/175		7.05	B1III	"	"	"	"	A	Runaway *	T = 51°F F = 501	strong
1-5-5	00/350		8.21	O9.5II	"	"	"	"	B	Runaway *	T = 50°F	sl str.
1-5-5	00/314	3"	8.01	O6.5I _{re}	"	"	"	"	A	Runaway *	T = 49°F Cloud - Fog	fine

Sat/Sun

Date Nov 7/8 1981 Observers JBL-Ri

Emulsion Batches:
8^m 6⁸ DAO-E 05031-04111 22 215

[illegible]

Spectr. Temp. 42°FDome Temp./Hum. 40°F 65%Transparency Conditions excellent

110

Focus 504

Spectr. Temp.

Dome Temp./Hum. 33°F 100%

40/35

Comparison
of Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1- 5-5 800/700		8.03	Am	B.C.	830/.680	B.S.	IIAD-E	B	Am		fine
1- 15-5				B.C.	830/.680	B.S.	IIAD-E	A		BROKEN T 42°F F 504	light truck
0 DS 38							IIAD-E				
4300 48											
1- 5-5 800/300	3	8.55	Am	B.C.	830/.680	B.S.	IIAD-E	A	Am	? mag wrong?	sl. weak
1- 5-5 800/700		8.52	B8.5	B.C.	830/.68	B.S.	IIAD-E	B	Am	T 91°F F 504	fine
1- 5-5 800/175		7.31	Am	B.C.	830/.68	B.S.	IIAD-E	A	Am	T 40°F F 504	v sl. str.
1- 5-5 400/350		8.26	Am	B.C.	830/.68	B.S.	IIAD-E	B	Am	T 39°F F 505	fine
1- 5-5 400/175 ¹⁴	3	6.06	B9	B.C.	830/.680	B.S.	IIAD-E	A	Am		fine
1- 5-5 400/175		7.06	A2V	B.C.	830/.680	B.S.	IIAD-E	B	Am		fine
1- 5-5 40/50		5.5	K2III	B.C.	830/.680	B.S.	IIAD-E	A	Std. Vel		fine
1- 15-							IIAD-E	B		T=38°F F 505	

III

SUN - MON.

Date NOV. 8 - 9..... 1981 Observers AK-Riv/Ly.-Ri.....

Emulsion Batches:

8^m 68^o Ilad-E.05031-09111.... 19 197
..... 22 212

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
	<u>h Peg.</u> <u>HD 215 182</u>	<u>22.389</u>	<u>+ 29° 42</u>	<u>20:00</u>	<u>20:08</u>		<u>+30° 07</u>		
				<u>20:11</u>	<u>20:16</u>				
<u>46392T</u>	<u>comparison test</u>							<u>Fe/Ne/-</u>	<u>15</u>
<u>46392T</u>	<u>optical for new BURCH Ilad test</u>					<u>15min @ 150 volts</u>	<u>③ D3</u> <u>4300</u>		
<u>46392F1</u>	<u>focus test</u>							<u>Ne/-</u>	<u>10-10</u>
<u>F2</u>	<u>"</u>							<u>Ne/-</u>	<u>10-10</u>
<u>F3</u>	<u>"</u>							<u>Fe/ND</u>	<u>10-10</u>
<u>F4</u>								<u>Ne/-</u>	<u>10-10</u>
<u>F5</u>								<u>Fe/ND</u>	<u>10-10</u>
<u>46393</u>	<u>HD1337</u>	<u>0 12.4</u>	<u>+50 53</u>	<u>01:48</u>	<u>02:43</u>	<u>05 20W</u>	<u>+51° 22</u>	<u>Fe/-</u>	<u>8-8-8</u>
<u>46393T</u>	<u>SPOT CALN' FOR PLATES</u>	<u>46393-</u>			<u>5MIN @ 150VOLTS</u>	<u>3900</u>	<u>① D4</u> <u>② D3</u> <u>③ D2</u> <u>4300</u> <u>4810</u>		
<u>46394</u>	<u>HD 28226</u>	<u>4 22.1</u>	<u>+21 24</u>	<u>02:51</u>	<u>03:52</u>	<u>02 18 W</u>	<u>+21 34</u>	<u>Fe/-</u>	<u>8-8-</u>
	<u>focus test</u>					<u>02 18 W</u>	<u>+21 34</u>		<u>20/20</u>

Spectr. Temp. 51°F

Dome Temp./Hum. 38°F 90%

Transparency Conditions ... intermittent cloud 1/2

Focus 502

Spectr. Temp.

Dome Temp./Hum.

comely - gusty
to permanent cloud.Comparison
e/Filter Exp.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1 min 15 sec											
5 min 1 min	2 min	2.95								Knifed se test N	
3 min 5 sec	15 sec	1 min	2 sec	10 sec						" " E	
							200 7098	A			
19 197							II ₂ D-E				
				BC/IT	1200/.475	120μ	II ₂ D				
				"	"	"	2415				Blank
				"	"	"	2415				"
				"	"	"	II ₂ D			after removing skin from	
				"	"	"	"			veil side	
8-8-8 100/380	5	6.1	09 III	BC	1200/.025	BS	II ₂ De	A	MSB - Ly	50°F set 499 hanged a chain on the spring and for balance scattered clouds	good
8-8-8 100/360	3.5	6.0	Am	BC	1200/.025	BS	II ₂ De	B	Hyades - Ly	48°F set 502 clouds	good
				"	"	"	"	A		46°F set 502	

113

Mon/Tues

Date Nov 9/10 1981 Observers Ly Ri / Blw-Ri

8^m 68°F

Emulsion Batches:

4^m 70°F

Ilford 05631-07111

Ilford-Eb. 09061-05111 36 34

098-025.20031-31101 40 215

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46395F1	focus					00 02W	+36	Fe/-	20/20
46395	HD191610	20 05.7	+36 33	17:25	17:42	00 32W	+36 46	Fe/-	7-7-7
46396	"	"	"	17:44	17:58	00 47W	"	"	7-7-7
46397	HD1337	00 12.4	+50 53	18:05	18:52	02° 26E	+51 17	Fe/-	7-7-7
46397T	SPOT CALN' FOR PLATES	46395-400, 403		15 MIN @	15 VOLTS		① D4 3900	② D3 4300	
46398	HD1337	00 12.4	+50 53	18:55	19:39	01 37 E		Fe/-	7-7-7
46399	HD191610	20 05.7	+36 33	19:44	19:56	02 47W	+36 47	Fe/-	7-7-7
46400	"	"	"	19:57	20:08	02 59W	"	"	7-7
46401	HD219150	23 08.6	+01° 39'	20:22	23:57	03° 45W	+02° 06	Fe Ne/66	4-4-4
46402	HD33328	05 ^h 04 ^m .4	-8° 53'	00 09	00 : 35	01 ^h 32 ^m E	-8° 54'	Fe/-	20-2
46402T	SPOT CALN' FOR PLATES	46402		15 MIN @	D4		① 17.5V 3900	② 15V 4300	
46403	HD28226	09 ^h 22 ^m .1	+21° 24'	00:43	01:09	00:39E	+21° 28'	Fe/-	7-7-7
46404	HD33328	05 ^h 04 ^m .4	-8° 53'	01:15	01:30	00 ^h 38 ^m E	-8° 54'	Fe/- Ne/-	0-6 13-13
46404T	SPOT CALN' FOR PLATE	46401		15 MIN @		① 15V D4 3600	② 15V D3 4100	③ D3 R 4500	
46405	HD33328	05 ^h 04 ^m .4	-8° 53'	01:35	01:59	00:09E	-8° 54'	Fe/-	20-2

✓ Spectr. Temp. 43°F Dome Temp./Hum. 39°F 70% Transparency Conditions Good 115...

Focus SD1

Spectr. Temp. Dome Temp./Hum.

40/32½

Comparison Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1- 20/20	-				BC	1200/-0.05	BS	IIa-O	A		43°F set SD1	red vs blue
1- 7-7	80/100	3	5.0	B3Ve	"	"	"	"	B	Be-Blu		fine
1- 7-7	80/100	3-5	"	"	"	"	"	"	A	"	42°F	fine
1- 7-7	200/250	3-5	6.1	09III	"	"	"	"	B	MSB-Ly	"	fine
D3 300	③ D2 4810							IIa-E				
1- 7-7	200/250	3	6.1	09III	B.C.	1200/-0.025	BS	IIa-E	A	MSB-Ly	40°F set 502	fine
1- 7-7	80/100	3	5.0	B3Ve	"	"	"	"	B	Be-Blu.		fine
1- 7-2	80/100		"	"	"	"	"	"	A	"		1st try
1/16 4-4	400/550	3	7.39	F0J	B.C.	830/.800	159 1.3	"	B	Blu-Fe	38°F set 504	5H
1- 20-2	40/200	2	4.07	B2IVe	B.C.	830/.68	B.S.	IIIa-JEb	A	Be-Blu	35°F set 505	strong
15U 4300	③ 15U 4810							IIIa-JEb				
1- 7-7	200/250	1-2	5.99	A _m	BC	1200/-0.025	BS	IIa-OE	B	Hyades Bin	T=35°F Set 503	fine
1- 7-7	40/100	2	4.07	B2IVe	BC	1200/.7	RS	09B-02E	A	Be-Blu	T=35°F Set 505.5	exposure good
③ D3 4500								IIa-E				
1- 20-2	40/200		4.07	B2IVe	BC	830/.68	BS	IIIa-JE	B	Be-Blu	T=34°F Set 506	✓ str

Contd.

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Date NOV 10 1981 Tue Observers Bla-Ri

[illegible]

Spectr. Temp. 32°F

Dome Temp./Hum. ... 28°F / 84%

Transparency Conditions . . . Near Photometric 9/6

[illegible]

117 Wed / Thurs

Date Nov 14/12 1981 Observers Rm - Tr - Swt - GHS.

Emulsion Batches:

8^m 68° ... II 90-E ... 05031-09111 22 215

... IIE R.414.3-034-06-03

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46411	HD 30282 = AW Per	09 ^h 41.1	+36° 33'	23:17	0:44	0 ^h 56 ^m E	+36° 46'	Fe/HD	5-5-5
46411 T	Spot + Col's for 46411-13				15 min @ 15V	D4 3900	D3 4300	D2 4810	
46412	HD 3950	0 ^h 37.0	+51° 48'	0:49	2:19	4 46 W	+52° 18'	Fe/-	5-5-5
46413	HD 34078	5 09.7	+34 12	2:24	3:26	1 18 W	+34 21	Fe/-	5-5-5
46413	HD 43112	6 09.5	+13 53	3:28			+13 56	Fe/-	5-
46413 F	Focus Test					0 ^h 00 ^m	+13° 56'	Fe/-	15-15
46413 I	spot test (baked forming gas 3 hrs @ 65°C)			7 1/2 V	D4 10 min 7680	D3 30 min 8464			

Spectr. Tr.

Focus...

Spectr. Tr.

Exp. Mtr.

1205

200/175

200/180

200/180

119

Comparison	
Type/Filter	Exp

D2

22

6-55

51-52

Feb-5-

2-15-5

Spectr. Temp. *..+40°F.....*

Focus . . . 503

Spectr. Temp. $\star$Dome Temp./Hum. +30°F / 82%Dome Temp./Hum. $+26^{\circ}\text{C} / 98\%$

Transparency Conditions *Fine with scattered clouds*

Fine Aurora with Red in NW

Pln saw Firebullet ^{dispite} Full moon
3:10 AM near Sirius

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
205	3.4"	7.9-8.8	F6-G1	13C	830/.68	135	II00E	B	Ceph/Evans		v. sl streak
							II00E				
200/175	3.4"	7.05	BIII	BC	830/.68	BS	II00-E	A	Runaway*		fine
200/180		6.18	09.52	"	"	"	"	B	Runaway*	T=35° cloud F=505	fine
205/	5"	5.67	BI I	"	"	"	"	A	Runaway*	cloud - cutoff	
				BC	830/.68	BS	098	A		T=33°F F=505	sl blue
							4IE bfg				

119

Large Tour = 70 15 min on Telescope

Thurs - Fri

Date Nov 12-13/81..... Observers Bln-Tn / AK-Tn.....

Emulsion Batches:

A^W III-1-E 09061-05111
 8^W D-0-E 05031-09111
 A^W 098-02E 20081-31101 33 184

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46414F	Focus Test					0 ^H	+32°	Fe/-	
414	HD 191610	20 ^h 05 ^m 7	+36° 33'	17:20	17:54	00 56 W	+36° 49'	Fe/-	13-13-13
46414T	Spot Cal for 46414				15 min @ DA	17:54 3900	15V 4300	15V 4810	
46415	HD 184927	19 ^h 31 ^m 6	+31° 04'	17:58	19:58	03 34 W	+31° 12'	Fe/-	5-5-5
46415T	Spot Cal for 46415				15 min @ 15V	04 3900	D3 4300	D2 4810	
46416	HD 191610	20 ^h 05 ^m 7	+36° 33'	20:00	20:26	03 28 W	+36° 44'	Fe/-	13-13-13
46417	HD 191610	20 ^h 05 ^m 7	+36° 33'	20:29	20:58	04 00 W	+36° 44'	Fe/-	9-1
46418	HD 200120	20 56 ^m 4	+47° 08'	21:14	21:38	03 51 W	+47° 23'	Fe/-	9
46419	HD 200120	20 56 ^m 4	+47° 08'	22:06	22:32	04 39 W	+47° 23'	Fe/-	20-20
46419T	Spot Cal for 46419				15 min @ 15V D3	7V D1 4810	7V D2 5450		
46420	HD 14220	02 ^h 12 ^m 8	+52° 57'	22 47	23:33	00 26 W	+52 25	Fe/-	5-5-5
46421	HD 33328	05 ^h 09 ^m 4	-8° 53'	23:39	23:58	02 01 E	-8° 50'	Fe/-	20-20
46422	HD 32147	04 05.9	-5 52	0:07	0:40	01 08 E	-5 51	Fe/-	5-5-5
46423	HD 26965 B	04 10.7	-7 49	0 45	3:50	02 50 W		Fe/-	5-5-5
46424	HD 26965 A	04 10.7	-7 49	3:53	4:06	03 06 W		Fe/-	5-5-5

Spectr. Temp. 23°FDome Temp./Hum. $35^{\circ}\text{F}/68\%$Transparency Conditions $\text{OK} - \text{some thin clouds}$Focus 505

Spectr. Temp.

Dome Temp./Hum.

Comparison
per/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	830/.68	BS	098	A			OK
40/162	2-3	4.82	B2Ve	BC	830/.68	BS	IIIa-JEB	B	Be - Blu	Cloud	sl strong
							IIIa-JEB				light struck?
40/500	2"	7.30	B2Vp	BC	830/.68	BS	IIa-OE	A	Blu - He *	Cloud	Fine
							IIa-O-E				
40/164		4.82	B3Ve	BC	830/.68	BS	IIIa-JEB	B	Be - Blu	T=39°F Set=505	str
40/100	2"	4.82	B3Ve	BC	1200/.7	RS	098-02E	A	Be - Blu	T=37°F Set=505	str dirt? ununiform Fine exp
40/120	2"	4.51	B3Ve	BC	1200/.7	RS	098-02E	B	Be - Blu		Fine exp
40/150	1-2"	4.51	B3Ve	BC	830/.68	BS	IIIa-JEB	A	Be - Blu	Forgot to uncover grating T=36°F Set=505	str
							098-02E				
40/175	1-2"	7.01	B2V	BC	830/.68	BS	IIa-O-E	B	Runaway		dirt? Fine
40/160	2-3	4.07	B2IV	BC	830/.68	BS	IIIa-JEB	A	Be - Blu		str
40/42	1.5"	7.3	K3V	"	"	"	IIa-JEB	B	Asm Sp	T=35°F Set=505	Fine
400/140	2"	9.6	DA	"	"	"	"	A	Asm Sp	11 th mag companion visible on TV	sl. weak
40/40	5.	KOV	"	"	"	"	"	B	"	F=506 9°F 33.5°F	exp good pec. dens. disturbance from mag slit

Emulsion Batches:
7/1A H.E. R.4143-034-06-03

Date Nov 12/13 cont. Observers

[illegible]

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions 122

122

Focus

Spectr. Temp. ... 33°F.....

Dome Temp./Hum. 42.8/90.7

Comparison pe/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
e/-	10/10	40/71		3.6	G8 II + A3 V	BC	1200 / .025	BS	IIaD-E	A	Asm Sp	Set 504	v sl. str.
e/-	12.10	40/51	2"	1.9	A0 II	"	"	"	"	B	Asm Sp		dirt?? v sl. str
e/-	17.7	40/6A		7	dF8	"	"	"	"	A	Asm Sp		dirt? fine
e/-	7.7.7	40/65		5.31	dG3	"	"	"	"	B	Asm Sp		fine
e/-	11	40/50		7.20	G8 II	"	"	"	"	A	Asm Sp		good
② B 30 min 2464 " HIE HIE bfg													

123

FRI/SAT.

Date NOV. 13/14, 1981. Observers Gis-Tn-Zki.....

Emulsion Batches:

IIaD-E 05031-1311/21 190

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46430	HD 201910	21 ^h 07.5	+40° 47'	17:31	18:55	1 ^h 00 ^m W	+41° 03'	Fe/-	5-5-5
46431	HD 214930	22 36.6	+23 19	19:09	20 05	0 38W	+23 45	Fe/-	5-5-5
46431T	Spo + Cal's	for 46430-43		15min @ 15V		D4 3900	D3 4300	D2 4810	
46432	HD 219188	23 08.9	+4° 27'	20:08	20:44	0 ^h 47 ^m W	+4 54	Fe/-	5-5-5
46433	HD 3950	00 37.0	+51 48	20:51	21:26	0 ^h 00 ^m W	+52 09	"	5-5-5
46434	HD 4142	00 38.9	+47 19	21:30	21:39	0 ^h 10 ^m W	+47 46	Fe/-	5-5-5
46435	HD 11606	01 48.8	+58 47	21:42	22:16	0 25E	+59 07	Fe/-	5-5-5
46436	HD 14220	02 12.8	+52 07	22:19	22:57	0 06E	+52 23	Fe/-	5-5-5
46437	HD 30650	04 44.4	+43 24	23:06	00:14	1 20E	+43 27	Fe/-	5-5-5
46438	HD 37657	05 35.1	+43 00	00:16	01:05	1 21E	+43 01	Fe/-	5-5-5
46439	HD 37737	05 35.7	+36 09	01:08	02 45	0 19W	+36 07	Fe/-	5-5-5
46440	HD 39680	05 49.0	+13 49	02:49	04:12	1 34W	+13 46	Fe/-	5-5-5
46441	HD 52533	06 56.5	-2 59	04:15	05:40	1 56W	-3 07	Fe/-	5-5-5
46442	HD 44172	06 15.3	+14 45	05:44	06:25	3 22W	+14 40	Fe/-	5-5-5
46443	HD 81797	09 22.7	-8 14	06:28	06:29	0 20W	-8 37	Fe/-	7-7
46443	Focus Test					0 20W	-8 37	Fe/-	17-1

Spectr. Te

Focus.

Spectr. Te

Exp. Mtr.

2/1/82

30/175

10/35+

40/36

40/37

40/40

30/175

200/178

200/176

200/180

200/175

200/175

40/40

40/42

2/1/21

Spectr. Temp. $42\frac{1}{2}^{\circ}\text{F}$ Dome Temp./Hum. $43^{\circ}\text{F}/62\%$ Transparency Conditions *hazy to thin cloud* 129Focus 50.3 Spectr. Temp. 4.3 Dome Temp./Hum. $40^{\circ}\text{F}/82\%$ was 96°F *mainly clear*
Earlier Great Night, Eh!?

Comparison Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
- 5-55	200/182	1"	7.27	B5V	BC	830/68	BS	IIaO-E	A	Runaway*	Note* there was a short strip already in exposure	edges too sharp Fine
- 5-55	200/175	1"	7.39	B2IV	"	"	"	"	B	Runaway*	T=44°F	Fine
- 5-55	40/35+	1"	7.01	B0.5III	BC	830/68	BS	IIaO-E	A	Runaway*		Fine
- 5-55	40/36	<1"	7.05	B1/II	"	"	"	"	B	"		"
- 5-55	40/37	<1"	5.53	B5V	"	"	"	"	A	"	T=44°F	"
- 5-55	40/40	<1"	7.08	B2IV	"	"	"	"	B	Runaway*	some cloud	"
- 5-55	200/175	<1"	7.01	B2V	"	"	"	"	A	Runaway*	" "	"
- 5-55	200/178	<1"	7.47	B6V	"	"	"	"	B	Runaway*	cloud	"
- 5-55	200/176	<1"	7.22	B3IV	"	"	"	"	A	Runaway*	Note All show this (dust) effect in 2 places.	"
- 5-55	200/180	<1"	8.31	O9.5III	"	"	"	"	B	Runaway*		vs slat JUH Em
- 5-55	200/175	1"	8.01	O6.5IV	"	"	"	"	A	Runaway*	T=43°F	Fine
- 5-55	200/175	<1"	7.61	O9II	"	"	"	"	B	Runaway*		Fine
- 5-55	40/40	<1"	7.29	B6V	"	"	"	"	A	Runaway*		slat like Fine
- 7-7	40/42	<1"	2.2	K3II	"	"	"	"	B	Std. Velocity		Fine
- 17-1					"	"	"	"	A		T=43 F=503	vs slat

125

Sat./Sun.

Date Nov. 14/15, 1981. Observers Gis-In

Emulsion Batches:
8^m 680 H₂O-E 05031-14111 20 206

[illegible]

Spectr. Temp. 749° F.....

Dome Temp./Hum. +48°F/60%

Dome Temp./Hum. /

Transparency Conditions *cirrus - hazy* 126

[illegible]

129. Tues./Wed.

Date 24-25 Nov. 1981

Observers Beh - Gis - Th

Emulsion Batches:

Emulsion Batches:
8m @ 60% II O-E 05031 -18111 20223

[illegible]

Spectr. Temp. 36.5°F Dome Temp./Hum. $29^{\circ}\text{F}/76\%$ Transparency Conditions *Some haze* 130Focus 505 *But Fine.*Spectr. Temp. 27°F Dome Temp./Hum. $+19^{\circ}\text{F}/99\%$ *Faint Aurora for short time*Comparison
of Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	830/62	BS	IIa0	A		$T=36.5^{\circ}\text{F}$ $F=505$	<i>cont. blue</i>
40/41	3"	3.7	G0Ib	"	"	"	IIa0-E	A	Std. Velocity		Fine
00/175	4"	7.93	05f	"	"	"	"	B	Runaway *		Fine
							IIa0-E				
30/75	3-4"	7.05	B1III	BC	830/68	BS	IIa0-E	A	Runaway *		Fine
40/35	3-4	5.53	B5V	"	"	"	"	B	Runaway *	$T=31^{\circ}\text{F}$ $F=506$	"
40/35	3"	7.02	B2IIne	"	"	"	"	A	Runaway *		"
00/175	3"	8.29	095II	"	"	"	"	B	Runaway *	$T=30^{\circ}\text{F}$ $F=507$	<i>rs/wt</i>
00/175	3-4"	8.01	065Vne	"	"	"	"	A	Runaway *	$T=27^{\circ}\text{F}$	Fine
40/35	3"	7.22	B5IIne	"	"	"	"	B	Runaway *	$T=27^{\circ}\text{F}$	Fine
40/35	4"	6.04	B2IIne	"	"	"	"	A	"		Fine

13) Wed - Thuro

Date Nov 25-26, 1981 Observers Rm-Ri

Emulsion Batches:

8mm 200-E 05031-1341... 21 196
Q 68°F DND-E 05031-2411... 20 196

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
46466F	Focus Test							Fe/-	15.5	
46466	HD 195295 = 41 Cyg	20 ^h 25.3	+30° 2'	17:13	17:25	1 ^h 00	+30° 16	Fe/-	7-7	1/80
46467	HD 204867 = 31 H ₂	21 ^h 26.3	-6° 1'	17:30	17:38	0 ^h 10 W	-5° 40	Fe/-	7-7	46/45
46468	HD 204867 - 31 H ₂	"	"	17:39	17:49	0 ^h 22 W	"	Fe/-	7-7	40/65
46469	Spot Calib for 46466	-46471		15 min @ 15v		D4 3900	D3 4300	D2 4810		
46469	HD 209750 = 2 Aps	22 ^h 0.6	-0° 48	17:52	17:59	0 02 E	-0° 26	Fe/-	7-7	40/65
46470	HD 209750 = 2 Aps	22 0.6	-0° 48	18:00	18:19	0 12 W	"	Fe/-	7-7	40/90
46471	HD 186688 = 50 Cyg	19 ^h 40.8	+29° 01	18:18	20:32	04 ^h 52 W	+29° 16	Fe/-	5-5	50/500
46472	HD 203156 = 11 R857	21 ^h 15.9	+37° 49	20:38	21:36	04 ^h 21 W	+38° 05	Fe/-	5-5	200/200
46472	Spot Calib for 46472	-		15 min @ 15v		D4 3900	D3 4300	D2 4810		
46473	HD 17463 = 50 Cas	02 ^h 43.0	+68° 28	21:42	23:17	00 ^h 30 W	+68° 44	Fe/c	5-5	400/535

Spectr. Temp. 34°F

Dome Temp./Hum. 32°F/66%

Transparency Conditions 132

Focus 500

Spectr. Temp. 33°F

Dome Temp./Hum. 26°F/95%

10/31

Comparison Type/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
15					13C	830/.68	BS	IlaoE	A			cont rvs/blue
1-7	40/80	3-4"	4.4	F5II	"	"	"	"	B	Ceph/Evans		sl str
1-7	40/45		3.7	G2Ib	"	"	"	"	A	Ceph/Evans		Fine
1-7	40/65		3.7	G2Ib	"	"	"	"	B	Ceph/Evans	hazy in S	Fine
								IlaoE				
1-7	40/65		3.9	G2Ib	"	"	"	"	A	Ceph/Evans		Fine
1-7	40/90		3.9	G2Ib	B.C.	830/.68	B.S.	Ilao-E	B	Ceph/Evans		sl str
5-5	200/800		6.9- 7.7	F0- G1	"	"	"	"	A	Ceph/Evans	39°F spect.	few wk sl wk
1-7	200/200		5.9	F2	"	"	"	"	B	Ceph/Evans		few K Fine
								Ilao-E				
1-7	400/535		6.5	F5Ib	"	"	"	"	A	Ceph/Evans	cloud	few wk Fine

125

Date MON-TUES NOV 30 DEC 1 Observers Lx-Ri-Gis8^h 68^m

Emulsion Batches:

Duo-E 05031-29/11

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
46479	HD 1337	00 12.4	+50 53	17:50	18:05	1 ^h 39E	+51° 15'	Fe/-	7-7-7	400/505
46480	"	"	"	18:17	18:41	1 15E	"	Fe/-	7-7-7	200/250
46481	HD 217312	22 54.8	+62 32	18:49	20:18	1 37W	+62° 55'	Fe/-	7-7-7	400/500
46481 [✓]	SPOT CHLN' FOR PLATES 46479-			15 MIN. @ 1500 LVS			0 D4 2 D3 4300	③ D2 4810		
46482	HD 1337	00 12.4	+50 53	20:23	20:48	0 48W	+51 17	Fe/-	7-7-7	200/250
46483	"	"	"	20:49	21:12	0 14W	"	"	7-7-7	200/250
46484	HD 28226	4 22.1	+21 24	21:18	21:50	02 18E	+21° 34'	"	7-7-7	200/200
46485	HD 28911	4 28.2	+13 13 ⁰²	21:53	22:56	01 17E	+13° 10'	"	7-7-7	400/465
46486	HD 1337	0 12.4	+50 53	23:01	23:46	03 47E [✓]	+51° 17'	"	7-7-7	400/550
46486F	focus					"	"		20/20	
46487	HD 29866	4 ^h 37.3	+40° 36'	00:03	00:25	0 ^h 05 ^m W	+40° 44'	Fe/-	5-5-5	200/175
46488	HD 34078	5 09.7	+34 12	00:29	00:47	0 ^h 05 ^m E	+34 15'	Fe/-	5-5-5	200/175
46489	HD 37657	5 35.1	+43 00	00:50	01:36	0 ^h 19 ^m W	+43 01	Fe/-	5-5-5	400/350
46490	HD 30650	4 44.4	+43 24	01:40	03:30	3 ^h 02 ^m W	+43 31	Fe/-	5-5-5	400/322
46490F	Focus test					3 ^h 02 ^m W	+43 31	Fe/-	17-17	

Spectr. Temp. 38°F

Dome Temp./Hum. 34°F/66%

Transparency Conditions 136

Focus 503

Spectr. Temp. 34°F

Dome Temp./Hum. 30°F/89%

Comparison pe/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
7-77	400/505	2-3	6.1	09IV	B.C.	1200/ -.025	BS	Ilao-E	A	MSB - Ly.		revs/wk Fine
7-77	400/250		"	"	"	"	"	"	B	"		
7-77	400/500	2-3	7.7	B0II+B0IV	"	"	"	"	A	MSB - Ly.		
7-77	400/250	2	6.1	09III	B.C.	1200/ -.025	BS	Ilao-E	B	MSB - Ly.	37½°F	Fine
7-77	400/250	"	"	"	"	"	"	"	A	"		Fine
7-77	400/250	"	6.0	Am	"	"	"	"	B	Hyades - Ly.	37°F	Fine
7-77	400/465		7.0	FSV	"	"	"	"	A	"		sl/wk
7-77	400/250	"	6.1	09III	"	"	"	"	B	MSB - Ly.	circus	wk
7-77	400/250	"	"	"	"	"	"	"	A	"	36°F 503	cent sl/blue
7-77	400/175	2-3	5.87	B8II	"	830/.68	BS	Ilao-E	B	Runaway*	35°F 506	Fine
7-77	400/175		6.18	095V	"	"	"	"	A	Runaway*		Fine
7-77	400/350		7.22	B8Ire	"	"	"	"	B	Runaway*	35°F	revs/wk Fine
7-77	400/322		7.47	B6V	"	"	"	"	A	Runaway*	Cloud,	revs/wk Fine
7-77	400/322		"	"	"	"	"	"	B	"	34°F	cent sl/blue

Date 3/4 DEC 1981 THU/FRI Observers Blu-Tu

Emulsion Batches:
 8^m 68° II₂O-E 05031 - 30111
 4^m 68° III₂O-E 07119 - 16111

[illegible]

Spectr. Temp. 39°F Dome Temp./Hum. $35^{\circ}\text{F}/89\%$ Transparency Conditions *Sl Hazy* *some cloud* 138Focus $50.4 - 50.5$ Spectr. Temp. 35°F Dome Temp./Hum. $27^{\circ}\text{F}/98\%$ * An extra plate in Exp Box should have
OK 1 FeAr, IF it's in staller area, then
there are decker problems

Compans pe Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
7-11	40/35	3"	5.53	B3V	BC	830/68	BS	IIa-OE	A	Runaway*	* broken. 1" missing	Fine
16-1	50/175	2-3'	7.01	B2V	BC	830/68	BS	IIa-OE	A	Runaway*		Fine
16-1								IIa-OE				
16-1	10/120	4-5	4.07	B2IV	BC	830/68	BS	IIIa-JE	B	Be-Bln	T=39°F	S/str
16-1	10/120	3"	3.51	O9.5V	BC	830/68	BS	IIIa-JE	A	SB-Bln		S/str
16-1	200/350	3"	6.6	B2V	BC	830/68	BS	IIa-OE	B	VB-Bln	T=37.5°F cloud	S/str
16-1								IIIa-JE			* fogged? light struck?	
16-1	10/120	3"	4.07	B2V	BC	830/68	BS	IIIa-JE	A	Be-Bln	T=37°F cloud	Fine
16-1	200/300	3"	7.20	B ⁶⁵ _{A2}	"	"	BS	IIa-O-E	B	VB-Bln		Fine
16-1	200/156	3-4"	7.18	B2V	BC	830/68	BS	IIa-OE	A	Runaway*	cloud T=35° F=505	Fine
16-1					BC	830/68	BS	IIa-O	B		Set 505 T=35°F	cent blue
										* box 5 checked for light leaks —		
										none apparent		

139

Fri/Sat

Date Dec 4/5, 1961 Observers BK-Ty

Emulsion Batches:
8^m68° Παοε 05031-3011

[illegible]

Focus . . . 505

Spectr. Temp. 137.....

Dome Temp./Hum. 32°F/90%

Dome Temp./Hum. *+30° / 96%*Transparency Conditions . . . *Semi Cloudy* . . . *Cirrus*

150

[illegible]

SAT - SUN

Date Dec 5-6 / 81 Observers JBL-Tn

Emulsion Batches:
8m 680 IIAD-E 05031-04121

Emulsion Batches:

...II-0-E 05031-04121

Date Dec 5-6 / 81 Observers JBL-Tn

[illegible]

Spectr. Temp. 127.....

Dome Temp./Hum. + 20° / 97%

Transparency Conditions *Hazy - cloudy 142*

[illegible]

SUN-MON

Date Dec - 6-7/81 Observers Cow - Tr

Emulsion Batches:
8^m 68 II₀0-E... 05031-... 04/21

[illegible]

Spectr. Temp. 32°F Dome Temp./Hum. $27^{\circ}\text{F}/\text{H}=88\%$

Transparency Conditions CLEAR - hazy 1941

Focus 506

Spectr. Temp. 30.5°F Dome Temp./Hum. $24^{\circ}\text{F}/99\%$ Comparison
pe/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/40	2"	6.6	MSe -M9e	BC	830/.68	150/.3	IIaO-E	A	Cen-MIRAS	EXP = 24 ^m	Fine
40/45	1"-2"	6.7	M6e -M8e	"	"	"	"	B	"	EXP = 26 ^m	Fine
40/44	2-3	?	Mpe	"	830/.68	"	"	A	"	Cloud + haze	Wk but E. ok
40/40	2"	7.4	M6e -M8e	"	"	"	IIaO-E	B	Cen-MIRAS	EXP = 47 ^m CLEAR	Fine

145' Tues./Wed.

Date Dec. 8/9, 1981 Observers Gris-Tn

Emulsion Batches:
8^m 69° IIaO-E 05031-04121

[illegible]

Spectr. Temp.

Dome Temp./Hum. 21°F / 90%

Dome Temp./Hum. ^{41.8°F} / 90%

Transparency Conditions . . . *Semi-Open - Just* '46 . . .

[illegible]

147

Date 11/12 DEC '81 Fri/Sat Observers Blu-Tu

Emulsion Batches:

4^m 68° II₀1-E 09051-7-21
8^m 68° II₀0-E 74600-06121

Spectr. Te

Focus . . .

Spectr. Te

[illegible]

Spectr. Temp. 29.5 F.....

Dome Temp./Hum. 23°F/96%

Transparency Conditions *Fine - sl. hazy '48*
High mag at times

Focus F=507.....

Spectr. Temp. F=.....

Dome Temp./Hum. 19°F/102%

Companson pe/Filtet Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-2	20/120	3	4.07	B2IVc	BC	830/68	BS	IIIa-JEb	A	Bc-Bln		Res sl. w/lt Str
								IIIa-JEb			✓ fogged? light struck?	
1-4	20/250	3-5	6.42	B2IVp	BC	830/68	BS	IIa0-E	B	He-1/6		Fine
								IIa0-E				
1-10	40/121		3.51	09.5V	BC	830/68	BS	IIIa-JEb	A	SB-Bln	T=29°F	Res sl. w/lt Sl str
1-10	40/121		4.07	B2IVc	BC	830/68	BS	IIIa-JEb	B	Bc-Bln		Res sl. w/lt Fine
1-10	200/250	4	6.42	B2IVp	BC	830/68	BS	IIa0-E	A	He-Rich *		Fine
1-10	20/55		2.19	09III	BC	830/68	BS	IIIa-JEb	B	CIND Std	T=25°F F=509	Res sl. w/lt Str
1-10	20/30		1.99	09.5II	BC	830/68	BS	IIIa-JEb	A	CIND Std		Res sl. w/lt Str
1-10	200/175		7.13	B2IV	BC	830/68	BS	IIa0-E	B	He-Rich *	broken spec saved High mag at times	Fine
					EC	830/68	BS	IIa0	A		T=25°F 509?	conts/blue
											* same pattern at 46495T (but that's from a completely different batch of IIIa-JS) 07119-16111	Tu

149

Emulsion Batches: *8^m 68° Trade 06/21*

Date Dec 16/17 Wed-Thurs Observers Rm-Ri

Emulsion Batches:

[illegible]

Spectr. Temp.

Dome Temp./Hum. 24°F / 92%

Transparency Conditions

150

Comparison	
Type/Filter	Exp

[illegible]

40/31

[illegible]

Sat-Sun

Date Dec. 19-20 Observers Crow - Ri

Emulsion Batches:

IT-2-E 12081-17121 16 191

[illegible]

Transparency Conditions . . . CLOUDY / CLEAR ¹⁵⁴
at 1:00 AM

Focus 512/513.

Spectr. Temp. Dome Temp./Hum. $\uparrow 04^{\circ}\text{F}$ 98%[illegible]

155 *1

Date 20/21 DEC 1981 Observers Bln-R1
SUN/MONEmulsion Batches:
4^m 68.5 ~~IIA-I-E~~ 09.06.1-0.3121 2¹/₂ hrs 37 34
8^m 68 ~~IIA-I-E~~ 12.08.1-17.12.1... 17 180

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
46533 ✓	HD 11241	01 ^h 45 ^m .6	+54° 39'	18:47	19:15	00:55E	+54° 49'	Fe/-	14-14	40/120
46533T	SPOT CALN' FOR PLATES	46533-			15 MIN @ D4		① 17.5V ② 15V ③ 15V 3900 4300 4810			
46534	HD 27192	04 ^h 12 ^m .6	+50° 41'	19:19	20:21	02:17E	+50° 49'	Fe/-	14-14	20/60
46535	HD 37017	05 ^h 30 ^m .4	-4° 34'	20:27	21:36	02:17E	-04° 27'	Fe/-	6-6-1	80/100
46535T ✓	SPOT CALN' FOR PLATES	46535			15 MIN @ 15V OLTS		① D4 ② D3 ③ D2 3900 4300 4810			
46536	HD 33328	05 ^h 04 ^m .9	-08° 53'	21:40	21:58	01:29E	-08° 47'	Fe/-	20-20	20/50
46537	HD 37468	05 ^h 33 ^m .7	-2° 39'	22:01	22:12	01:45E	-02° 40'	Fe/-	20-20	20/50
46538	ADS 4241D	05 ^h 33 ^m .7	-2° 39'	22:14	23:10	00° 46E	-2° 40'	Fe/-	6-6-1	80/100
46539	HD 37017	05 ^h 30 ^m .4	-4° 39'	23:16	23:56	00° 03W	-04° 33'	Fe/-	6-6-1	20/100
46540	HD 36485	05 ^h 26 ^m .9	-0° 22'	23:59	00:51	01° 02W	-00° 21'	Fe/-	6-6-6	80/100
46541	HD 36486	05 ^h 26 ^m .9	-0° 22'	00:53	00:56	01° 07W	-00° 22'	Fe/-	20-20	20/40
46542 ✓	HD 37043	05 ^h 30 ^m .5	-5° 59'	01:03	01:09	01° 16W	-05° 58'	Fe/-	20-20	20/40
46543	HD 33328	05 04.4	-08° 53'	01:14	01:44	02 17W	-08° 45'	Fe/-	20-20	20/50
46544	HD 37017	05 ^h 30 ^m .4	-4° 34'	01:46	03:21	03 29W	-04° 32'	Fe/-	6-6-1	200/200
46545	HD 88001/2	10 ^h 03-8	+20° 49'	03:26	05:28	01 02W	+20° 23'	Fe/-	6-6-6	200/100

Spectr. Temp. 22°F

Dome Temp./Hum. 20°F / 88%

Transparency Conditions

Focus 512

Spectr. Temp.

Dome Temp./Hum.

156

Comparison
pe/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/120	1"	5.34	B2V	BC	830/68	BS	IIIa-JEB	A	SB-Bln		str
							IIIc-JEB				
20/60		5.50	B2IV	BC	830/68	BS	IIIa-JEB	B	SB-Bln	T=22°F clouds	str
30/100		6.42	B2V _p	BC	830/68	BS	IIa-OE	A	He-Rich*	T=23°F F=511	Fine
							IIc-OE				
20/50		4.07	B2IV _c	BC	830/68	BS	IIIa-JEB	B	Bc-Bln	T=23°F	str
20/50	2	3.51	09.5V	B.C	830/68	BS	IIIa-JEB	A	SB-Bln		str
80/100		6.4	B2V	BC	830/68	BS	IIa-OE	B	VB-Bln	T=23°F	vsl str comp. sl. str.
80/100		6.42	B2V _p	BC	830/68	BS	IIa-OE	A	He-Rich*		vsl str
80/100		6.70	B2V _p	BC	830/68	BS	IIa-OE	B	He-Rich*	T=22°F F=512	fine
20/40		1.99	09.5II	BC	830/68	BS	IIIa-JEB	A	CNO *		sl. str.
20/40		2.49	09.5II	BC	830/68	BS	IIIa-JEB	B	CNO *		sl str.
20/50		4.07	B2IV _c	BC	830/68	BS	IIIa-JEB	A	Bc-Bln		badly fugged
200/200		6.42	B2V _p	BC	830/68	BS	IIa-OE	B	He-Rich*		vsl str
200/400	1	7.20	B2V _p H2	BC	830/68	BS	IIa-OE	A	VB-Bln	T=21.5 F	sl str.

Spectr. Temp.

Dome Temp./Hum.

Dome Temp./Hum. 18°F / 97%

Transparency Conditions

Transparency Conditions *Cloud off and am...* ¹⁵⁸
Increasingly cloud toward morning

[illegible]

159

Wed. / Thurs.

Date Dec. 23/24, 1981 Observers Gis - Tn

Emulsion Batches:

 $\Pi a O \cdot E$ [illegible]

Spectr. Temp. $+33^{\circ}\text{F}$Dome Temp./Hum. 28 F / 88 %

Transparency Conditions 60

Focus 507

Spectr. Temp.

Dome Temp./Hum.

[illegible]

161

Thur.
Date Fri. 7/8 Jan 1982 Observers Bln-Ri

Emulsion Batches:

8^m68°4^m68°

Dad-E 12091-17121

Dad-E 12091-07012

Dad-E 12091-20121

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46547F	FOCUS TEST							Fe/-	17-17
46547	HD 11241	01 ^h 45 ^m .6	+54° 39'	17:25	18:34	00 ^h 27 ^m E	+55° 01'	Fe/-	20-20
46548	HD 33328	05 ^h 04 ^m .4	-8° 53'	18:40	19:28	02 ^h 48E	-08 47'	Fe/-	20-20
46549	HD 36486	05 26.9	-00° 22'	19:36	19:41	02 ^h 58E	-0 23'	Fe/-	20-20
46550	HD 36485	05 26.9	-0° 22'	19:46	21:57	00 ^h 42E	-0° 22'	Fe/-	6-6-6
46550T1	SPOT CALN' FOR PLATES 46547-				15 MIN @ D4	0 1750 3900	0 150 4300	0 150 4810	
46550T2	SPOT CALN' FOR PLATES 46550-				15 MIN @ 150	0 D4 3900	0 D3 4300	0 D2 4810	
46551	HD 37468	05 ^h 33 ^m .7	-2° 39'	22:17	22:38	00 ^h 07E	-2° 39'	Fe/-	20-20
46552	HD 33328	05 04.9	-08° 53'	22:45	23:15	00 ^h 59W	-08° 48	Fe/-	20-20
46553	HD 44172	06 15.3	+14° 45'	00:33	01:55	02 ^h 28W	+14° 40	Fe/-	6-6-6
46553T	SPOT CALN' FOR PLATES 46553-				15 MIN @ 150	04 3900	D3 4300	D2 4810	
46554	HD 88021/2	10 03.8	+20° 49'	02:00	05:10	01 ^h 54 ^m W	+20° 23'	Fe/-	6-6-6
46555	HD 97991	11 11.1	-02° 55'	05:15	07:13	02 ^h 52 ^m W	-3° 24'	Fe/-	6-6-6
46555F	FOCUS TEST							Fe/-	40-40

Spectr. Te.

Focus...

Spectr. Te.

Exp. Mir.

40/110

40/100

24/50

24/201

20/50

40/47

80/73

8/200

10/00

Spectr. Temp. 300°FDome Temp./Hum. 22°F/70%Transparency Conditions Occasional Cloud ¹⁶²
Some snow otherwise GoodFocus 509

Spectr. Temp.

Dome Temp./Hum. 10°F/90%40/29 80%

Comparison e/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
17-7					B.C.	830/.68	B.S.	IIc0-E	A		T 300°F F= 509	dk
20-2	40/110	5"	5.34	B2V	B.C.	830/.68	B.S.	IIIa-JEb	B	SB-Bln	DK slide not fully in/red edge light when P.H. removed / smoke	sl. str
20-2	20/100		4.07	B2V	B.C.	830/.68	B.S.	IIIa-JEb	A	Bc-Bln		vs sl str
20-2	20/50		1.99	09.5V	B.C.	830/.68	B.S.	IIc-JEb	B	CNO-Prag	T=260°F F=510	strong
6-6	200/201		6.70	B2Vp	B.C.	830/.68	B.S.	IIa0-E	A	He-Rich*	clouds	vs sl str
150								IIIa5-Eb				
22								IIa0-E				
40-2	20/50		3.51	09.5V	B.C.	830/.68	B.S.	IIIa-JE	B	SB-Bln	Clouds + snow	sl. str
4-2	40/47		4.07	B2Vc	B.C.	830/.68	B.S.	IIIa-JEb	A	Bc-Bln	T=230°F F=511	sl. weak
6-6	80/73		7.29	B6V	B.C.	830/.68	B.S.	IIa0-E*	A	Runway	T=210°F F=512	fine, but faded late
02								IIa0-E*				
49-0	50/200		7.20	9 ⁹⁵ A2+	B.C.	830/.68	B.S.	IIa0-E*	B	V.B-Bln	clouds	vs sl str
6-6	80/80		7.18	B2V	B.C.	830/.68	B.S.	IIa0-E*	A	Runway	T=17°F F=513	fine
40-4					B.C.	830/.68	B.S.	IIIa5-Eb	B		T=15.5°F F=513	dk

Sat-Sun

8^m 680

Emulsion Batches:

Two-E 12081-20121

Date Jan 9-10 Observers Cnd-Ku

Cnw-Ri

[illegible]

Spectr. Temp. *F 180°*Dome Temp./Hum. *+05°F 70%*Transparency Conditions *CLEAR 164*Focus *513*

Spectr. Temp.

Dome Temp./Hum. *-02°F**40/39**-low cloud*Comparison
Type/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>Fe-191</i>				<i>B.C</i>	<i>820/68</i>	<i>150/1.0</i>	<i>IIAD-E</i>	<i>A</i>		<i>F 513 T 18°F</i>	<i>ok</i>
<i>Fe-77</i> <i>0.2</i> <i>980</i>	<i>250/100</i>	<i>5"</i>	<i>7.8</i>	<i>Mte</i> <i>-178</i>	<i>"</i>	<i>150/3</i>	<i>IIAD-E</i> <i>IIAD-E</i>	<i>B</i>		<i>EXP = 165^m</i>	<i>exp good</i> <i>some flexure</i>
<i>Fe-99</i>	<i>20/20</i>		<i>2.28</i>	<i>M2Tab</i>	<i>Be</i>	<i>830/68</i>	<i>BS</i>	<i>A</i>		<i>F=515 T=11°F</i>	<i>good</i>
<i>Fe-99</i>	<i>20/25</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>B</i>			<i>fine</i>
<i>Fe-99</i>	<i>20/31</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>A</i>		<i>mostly covered with</i> <i>thin cloud</i> <i>- shut down at 21:00</i>	<i>fine</i>

16 Mon-Tues

Date Jan 11/12, 82 Observers Ann-Ri//L-R

8^h 68°

Emulsion Batches:

100E 12081-20121

100E 12081-11012 26 208

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
46560F	Focus Test							Fe/-	17-A	
46561	HD263156 HR 157	21 ^h 15.4	+37° 49	17:39	19:13	5 ^h 03W	+38° 06	Fe/-	6-A	20/2
46560T	Spot calib for plates 46560-46564				15 min @ 15V	3:00	4:30	02 4810		
46561	HD17463 S Cas	02 ^h 43.0	+68° 28	19:20	21:52	2 ^h 10W	+68° 46	Fe/-	6-6	20/40
46562*	HD26630 = μ Per	04 ^h 7.5	+48° 9	22:01	23:03	01 58W	+48° 19	Fe/-	6-6	20/50
46562*	HD39801 = λ Ori	5 ^h 49.7	+70° 23	23:12	23:20	00 34W	+70° 22	Fe/-	9-9	20/120
46563A	HD39801 = λ Ori	"	"	23:21	23:35	00 49W	+70° 22	Fe/-	9-9	20/130
46564	HD52173 = γ Gem	6 ^h 58.2	+20° 43	23:40	00 65	00 11W	+20° 35	Fe/-	6-6	20/40
46565B	HD28226	4 ^h 22.1	+21° 24	00:22	01:19	04 01W	+21° 33	Fe/-	7-7	80/110
46565T	SPOT CALIB FOR PLATES 46565-46569				15 min @ 15V	3:00	4:30	02 4810		
465667	HD36695	5 28.1	-01 14	01:25	02:06	03 43W	-01 10	Fe/-	7-7	80/80
465678	HD47129	6 32.0	+6 13	02:11	03:34	04 06W	+06° 09	Fe/-	7-7	80/90
465689	HD118216	13 30.3	+37 42	03:43	04:36	02 ^x 11E	+37° 15	Fe/-	7-7	80/200
4656910	HD128661	14 33.1	+36 22	04:40	07:18	00 ^x 03E	+35 59	Fe/-	7-	200/160
46569F	FOCUS TEST					00 03E	+35 59	Fe/-	20-20	

Spectr. Temp. 100°F Dome Temp./Hum. 0°F 80% Transparency Conditions *Lazy* 166 Focus 515 $\sim 3\text{ AM} - 16^{\circ}\text{F}$

Spectr. Temp.

Dome Temp./Hum. -12°F 82% $40/40$

Comparison Filter/Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
F ₂ -17					BC	$830/-28$	BS	IIaOE	A		Eberhard effect! why?	OK
-6	$200/200$	5"	5.81	F2	BC	$830/-68$	BS	IIaOE	B	Ceph/Evano	ONE EXPOSED BAR	sl/wk
02 43d								IIaOE			broken in 2 large pieces	☐
-6	$20/400$		6.4- 7.5	F ₂ F ₂	BC	$830/-68$	BS	IIaOE	A	Ceph/Evano	spec $+6^{\circ}\text{F}$ 517	sl str.
-6	$2/50$		5.10	GOTb	"	"	"	IIaOE	B	Ceph/Evano	T = -0.1°F Focus 517	sl str.
-1	$2/120$		2.28	M2Ib	"	"	"	"	A		T = -0.3°F Focus 520	strong
-1	$2/83$		"	"	"	"	"	"	B		Citrus	v str
-6	$20/40$		4.3- 5.1	F ₂ Ib- G ₂ Ib	"	"	"	"	A	Ceph/Evano	T = -0.3°F	str
-1	$30/110$	4.5	6.0	Am	"	$1200/-125$	"	IIaOE*	B	Hydro/Ly	T = -0.4°F Set 513	sl/wk
								IIaOE*			ANOTHER EXPOSED BAR	
-1	$30/80$		5.4	BIV	"	"	"	"	A	MSB-Ly	T = -0.5°F	sl/wk
-1	$30/90$		6.0	08	"	"	"	"	B	"	"	sl/wk
-1	$30/200$		4.9	F2IV	"	"	"	"	A	RSCVn-Ly	T = -0.7°F	Fine
-1	$200/160$	4.5	6.9	A0	"	"	"	"	B	SB-Ly	"	sl/wk
-1								"	A		T = -0.8°F F: 513	nominal exp discarded
											* Note label mistake	

167 THURS / FRI

Date JAN 14/15 1982 Observers Ly - Tn

8th 69^o

Emulsion Batches:

Emulston Batches.
 II-O-E 12081 - 11012 23 206

[illegible]

Spectr. Temp. $+17$ Dome Temp./Hum. $5^{\circ}\text{F}/93\%$ Transparency Conditions $\text{clouds off on } 1/68$ Focus 509

Spectr. Temp.

Dome Temp./Hum.

Comparison
e/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
99-400/550	3"	6.08	09VII	BC	1200/-0.025	BS	Ilad e	B	MSB-Ly	clouds 140 counts in first 75 min. +17 set 509	vs. wtk
99-400/510	"	6.0	Am	BC	1200/-0.025	BS	Ilad e	A	Hyades-Ly	Same cloud. Set 510 T: +13°F	Fine Emulsion peeling
							Ilad e				
99-200/250	2-3	5.2	BIX	BC	1200/-0.025	BS	Ilad e	B	MSB-Ly		Fine
12-20/26	"	2.2	09.5II	"	"	"	"	A	"		Fine
12-20/31	"	"	"	"	"	"	"	B	"		Fine
12-20/30	"	2.6	09III	"	"	"	"	A	"		Fine
12-20/31	"	"	"	"	"	"	"	B	"		Fine
				"	"	"	"	A	"	cloud	red!
										peeling emulsion on all	

Fri - Sat

Date Jun 15-16 1982 Observers JBL-Tn

Emulsion Batches:

Emulsion Batches.
 ..*Π.Ο.-Ε* 12081.....-14012 *20 194*

[illegible]

19012 20 184

Dome Temp./Hum. 41.5°F / 78%

Transparency Conditions . . . *hazy to cloudy* 170

Focus 513

Spectr. Temp.

Dome Temp./Hum. /

[illegible]

Sun-mon

Emulsion Batches:

U.O.-E. 12081.....-14012

.....

• • • • •

[illegible]

Spectr. Temp.

Dome Temp./Hum. /

Transparency Conditions *hazy - cloudy* *172*
gusty

[illegible]

173 Mon-Tues

#1

Date Jan 18/19, 1982

Observers

Rm-Tn / Gies-Tn

8^m 68^o

Emulsion Batches:

... II-0-E-12081-14012 18 195
 ... II-0-E-12081-18012 17 187

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46583F	Focus Test					0 10W	+6°	Fe/-	25-25
46583	HD 3712	0 ^h 34.8	+55° 59	17:36	17:38	0 32W	+56° 24	Fe/-	11-11
46584	HD 200150 = HR 8157	21 ^h 15.4	+37° 49	17:46	18:27	4 ^h 45W	+38° 09	Fe/-	8-8-8
46585	Spot Calc for galathea		4 6583-93		15min @ 15v		0 ^h 31.00	D3 4300	D2 4310
46585	HD 2007 = T. 55	00 ^h 20.9	+50° 44	18:32	21:13	4:25W	+51° 08	Fe/-	8-8-8
46586	HD 8840 = XUMi	1 ^h 22.6	+89° 15	21:24	21:26	3 00W	+89° 15	Fe/-	11-11
46587	HD 4512 = K Aur	6 ^h 22.1	+30° 33	21:42	23:10	0 49W	+30° 28	Fe/-	8-8-8
46588	HD 29094 = 58 Per	4 ^h 24.8	+41° 04	23:14	23:28	2 ^h 28 W	41 13	Fe/-	11-11
46589	HD 52173 = 5 Gem	6 ^h 58.2	+20° 43	23:32	23:47	0 ^h 20W	+20° 36	Fe/-	11-11
46590	HD 23230 = 7 Per	3 ^h 3.9	+42° 16	23:51	00:00	3 ^h 52W	+42 27	Fe/-	11-11
46591	HD 61574 = 5 Mon	8 ^h 3.6	-2° 42	00 05	00:21	0 10E	-2° 56	Fe/-	11-11
46592	HD 45995	6 25.8	+11 19	00:26	00:50	1 56W	+11 16	"	11-11
46593	HD 52533	6 56.5	-2 59	00:54	02:53	3 30W	-3 06	"	8-8-8
46594	HD 88021/2	10 03.8	+20 49	02:58	05:27	2 55W	+20 25	"	8-8-8
46594T	Spot Calc For	46594		15min @ 15V	D4 3900	D3 4300	D2 4810		

Spectr. Temp. $+10^{\circ}\text{F}$Dome Temp./Hum. $+7^{\circ}\text{F}/72\%$Transparency Conditions *getting hazy*..... 174...Focus *5.16*.....

Spectr. Temp.

Dome Temp./Hum. *1*.....

Comparison pe/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1- 25					BC	830/68	BS	II-O	B			cont v slat
1- 1	40/34	2"	2.5	KOE	BC	830/68	BS	II-O-E	A	std vel		
1- 2	40/40	1-2"	5.9	F2	"	"	"	"	B	Ceph/Evano		Fine
1- 2								II-O-E			exposed through glass (cont on Nancy)	
1- 2	200/200	2"	7.4- 2.9	F3II F2	"	"	"	"	A	Ceph/Evano	circus	
1- 1	200/18	14	2.5- 2.7		"	"	"	"	B	Ceph/Evano	Not used	
1- 8	200/101	2"	6.0	G7II	"	"	"	"	A	Ceph/Evano	spect T = 9°F	Fine
1- 11	40/21		~5	G8II+	"	"	"	"	B	Ceph/Evano		
1- 1	40/30		4.9- 5.1	F7II F3b	"	"	"	"	A	Ceph/Evano	Dome 4°F <i>slat 1"</i>	Fe str Fine
1- 1	40/36	2"	4.2	F5II	"	"	"	"	B	Ceph/Evano	cloud 91	
1- 1	40/81		5.32	G2II	"	"	"	"	A	Ceph/Evano	cloud 92	Fe str Fine
1- 1	200/175	1"	6.04	B2V	"	"	"	"	B	Runaway X		Fe str Fine
1- 8	200/92	1-3"	7.61	O9II	"	"	"	"	A	Runaway X	cloud	Fe str slat
1- 8	200/330	2"	7.20	G95- A2	"	"	"	II-O-E	B	VB-Blu	Emulsion pooled	Fe str Fine
								II-O-E				

Spectr. Temp. Dome Temp./Hum.

Transparency Conditions 176

Focus 516

Dome Temp./Hum. 43°F/90%

Dome Temp./Hum. 43°F/90%

[illegible]

Focus
Spectr. Temp. ... + 20° F

Dome Temp./Hum. ^{+5°F}/66%

Dome Temp./Hum. 67/70

Transparency Conditions *Fine* 178,

Comparison ne/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2/- 20"					BC	830/1.68	BS	IL00-	A			
4/- 16"	40/35	4"	5.29	06f	"	"	"	IL00-E	A	Runaway *		Fine
4/- 7.7	200/175	5"	7.05	B1 III	"	"	"	"	B	Runaway *	Some cloud	Fine
								"				
4/- 7.7	200/175		5.87	B8 IV	BC	830/1.68	BS	"	A	Runaway *	T=9° F=516	Fine
4/- 7.7	200/175	5"	7.22	B3 Vne	"	"	"	"	B	Runaway *		Fine
4/- 7.7	200/175	4"	6.18	B9.5 I	"	"	"	"	A	Runaway *	T=7° F=516	Fine
4/- 10	200/100		5.67	B1 II	"	"	"	"	B	Runaway *		sl w/ Fe
4/- 10	200/172	4"	7.18	B2 I	"	"	"	"	A	Runaway *	T=5° F=517	sl w/ Fe
4/- 15-A	40/35	4"	5.0	M2 IIa	"	"	"	"	B	Std. Vel.		sl w/ Fe
											* Filter wheel problem on res no doubt filter was #6 though	

A

M. H. H. S.

8ⁿ 68^o

Emulsion Batches:

1100-E 12081-18012 216

Date Jan 25-26 Observers R. M. T. / L. Y. T.

210-8* 12081-21012

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
46604	HD 203156 = PR 157	21 ^h 15.4	+37 49	17:58	18 34	5 ^h 18 W	38° 08	Fe/-	1-1
46605	HD 2207 = TVCaw	0 ^h 20.9	+50° 43.6	18:41	18 55	2 ^h 34 W	51° 11	Fe/-	7
46605	HD 2207 = TVCaw	0 ^h 20.9	+50° 43.6	18:56	21:18	4 ^h 57 W	51° 11	Fe/-	7-7
46606	Spot Calibrator	46604-08.		15 min @ 15v		09 3900	03 4300	02 4810	
46606	HD 4000 = HD 4000	2 ^h 32.5 ^x	+55° 17 ^x	21:22	23:30	5 11 W	+55° 17	Fe/-	7-7-7
46607	HD 52973 = 5 Gem	6 ^h 58.2	+20° 43	23:35	23:47	0 48 W	+20° 37	Fe/-	10-10
46608	HD 2904 = S.P.S.	4 ^h 29.8	+41° 4	23:50	00:12	3 ^h 40 W	+41 13	Fe/-	10-10
46609	HD 43818	6 13.2	+23 30	00:20	01:39	3 ^h 25 W	+23 28	Fe/-	7-7-7
46610	HD 118216	13 30.3	+37 42	01:49	02:24	3 05 E	+37 17	Fe/-	13-1
46611	HD 65041	7 51.7	+43 47	02:31	05:06	5 14 W	+43 33	Fe/-	9-9-9
46611T	Spot Calibrator	For 46609-15		15 min @ 15v		104 3900	03 4300	02 4810	
46612	HD 118216	13 30.3	+37 42	05:11	05:41	0 12 W	37 15	Fe/-	9-9-9
46613	HD 139892	15 35.6	+36 58	05:45	06:10	01 25 E	+36 40	Fe/-	13-1
46614	"	"	"	06:13	06:37	00 58 E	"	Fe/-	13-1
46615	HD 136202	15 14.2	+2 09	06:42	07:09	00 02 E	+1 51	Fe/-	13-1
46615F	FOCUS					00 02 E	+1 51	Fe/-	23-2

212

Spectr. Temp. $+15$ /
 Focus 5.5
 Spectr. Temp. 70°F /

Dome Temp./Hum. 110 / 65%
 Dome Temp./Hum. -4°F / 85%

Transparency Conditions Fine $5/14/72$ 180

Comparison
Type/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/40	3	5.9	F2	BC	830/.68	BS	IIROE	A	Ceph/Evans		
2/4		7.4-8.9	F3I - F4I	"	"	"	"	B	Ceph/Evans	went to and read 1st plate: found it was in B so we started the exposure again	
2/130	3-4	7.4-9.9	F3II - F5II	"	"	"	"	A	Ceph/Evans		Fine
							"				
39V	3	F7IIb	6.3	"	"	"	"	B	Ceph/Evans		Fine
4/80	2-3	F7IIb	4.3	"	"	"	"	A	Ceph/Evans		Fine
4/100	2-3	G8II	4.3	"	"	"	"	B	Ceph/Evans		Fine
100/175	3	B0II	6.8	"	"	"	IIRO-E	A	Tru prog	$T = +11^{\circ}\text{C}$	
40/100	3	F2IV	4.9	"	1200/.025	BS	"	B	RSCM/Ly	$T = 11^{\circ}\text{F}$ set 508	Fine
40/200	2-3	B2IV	6.9	"	"	"	"	A	Sp Bin/Ly	some cloud	Fine
							"				
40/100	3	F2IV	4.9	BC	1200/.025	BS	"	B	RSCM - Ly	$T = 80^{\circ}\text{F}$	Fine
40/60	3	B7IV	5.1	"	"	"	"	A	MSB - Ly		Fine
40/63	"	"	"	"	"	"	"	B	"		Fine
40/40	3	F8IV	5.6	"	"	"	"	A	Std Vel.		
								B		$T = 70^{\circ}\text{F}$ set 508	blue

18th Tues. / Wed.

Date Jan. 26/27, 1982 Observers G.S. - Th

8ⁿ 69° Emulsion Batches:
 #20-E 12081 - 26012₂₁ w8
 #20-E* 12081 - 26012
 (1/2 box) 21 w8

[illegible]

Transparency Conditions *Fine - cloudy* 182

Exp. Mtr.	Seeing	Ptg. Mag	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
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Feb 177

Spectr. Temp. 18°FDome Temp./Hum. $18^{\circ}\text{F}/70\%$

Transparency Conditions 184

Focus ... 513.....

Spectr. Temp. 22°FDome Temp./Hum. $19^{\circ}\text{F}/77\%$

40/35

Comparison pe/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2/- 17-18					BC	830/.68	BS	IIaO-E	A			ok
2/- 10-10	40/35	2-3"	5.29	06f	"	"	"	"	B	Runaway*		fine
2/- 10-11	40/35		5.87	B8IIIn	"	"	"	"	A	Runaway*		fine
2/- 10-10	40/35	3	6.18	09.5II	B.C.	830/.68	BS	IIaO-E	B	Runaway*	clouds	fine
2/- 10-10	40/35		5.71	B2II-IE	"	"	"	"	A	Runaway*	T=21°F F=5/2	fine
2/- 7-14	50/30		7.22	B3IIn	"	"	"	"	B	Runaway*	clouds again BROKEN 2 PIPES	

Date JUN 28-29 1982 Observers Blm - Ri

Emulsion Batches:
Two-E 12081-27012 17184

[illegible]

Spectr. Temp. ..32°F.....

Focus 509

Spectr. Temp.

Dome Temp./Hum. . 23°F . . . 76%

Dome Temp./Hum. 20°F / 78%

Transparency Conditions . Good at short term

[illegible]

JDS 2.7

187

Mon/Tues

Date Feb 1/2 Observers Rm Ri / Ly - Ri

8^m 68⁰

Emulsion Batches:

Thos. E. 12081-27012.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46629F	Focus test					00 10W	+7° 37	Fe/-	17-17
46629	HD 203156 = HR 107	21 ^h 15.4	+37° 49	17:56	18:28	5 ^h 45W	+38° 08	Fe/-	7-7-7
46630	HD 9250	1 ^h 25.9	+63° 4	18:39	21:03	4:03W	+63° 29	Fe/-	7-7-7
46630	Spot Calib	for 46629	15 ^h 11.6 @ 15v			D4 3400	D3 9300	D4 410	
46631	HD 20902 = α Per	3 ^h 17.2	+49° 30	21 07	21 10	2 18W	+49° 27	Fe/-	10-10
46632	HD 20902 = α Per	"	"	21 10	21 12	2 ^h 20W	+49° 27	Fe/-	10-10
46633	HD 23230 = ν Per	3 ^h 38.4	+42° 16	21 16	21 28	2 ^h 15W	+42° 30	Fe/-	10-10
46634	HD 4450 = τ Lib	6 ^h 19.8	+07° 08	21 35	23:12	1 ^h 20W	+07° 04	Fe/-	7-7-7
46635	HD 42329 = ε Gem	6 ^h 37.8	+25° 14	23 25	23:39	1 ^h 28W	+25° 16	Fe/-	10-10
46636	HD 52973 = ζ Gem	6 ^h 58.2	+20° 43	23 43	00:08	1 ^h 37W	+20° 46	Fe/-	10-10
46637	HD 36486	5 26.9	-00 22	00:17	00:41	3 42W	-00 16	Fe/-	15-15
46638	HD 81797	9 22.7	-08 14	00:47	01:01	0 02W	-8 30	Fe/-	15-15
46639	"	"	"	01:03	01:18	0 21W	"	Fe/-	15-15
46640	HD 99028	11 18.7	+11 05	01:23	01:42	1 09E	+10 40	Fe/-	9-9-9
46641	HD 118216	13 30.3	+37 42	01:46	02:16	2 46E	+37 17	Fe/-	9-12
46641F	Focus test					0 0	"		23-23

Spectr. Temp. 25°F

Dome Temp./Hum. 20°F 70%

Transparency Conditions good at start 189

Focus 310

severe haze by midnight

Spectr. Temp.

Dome Temp./Hum. 11°F 100%

40/35

peeling

emulsion on all

Comparison of Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-17-7					BC	.830/.68	BS	IaOE	A			
1-7-7	40/40	1-2"	6.3	F2	BC	.830/.68	BS	IaOE	B	Ceph/Evans		fine
1-7-7	80/125	24	7.9	G01b	"	"	"	IaOE	A	Ceph/Evans		reduces
								IaOE				
1-1-7	20/40		2.27	FSIb	"	"	"	"	B	Ceph/Evans	T _{spec} 23°F Focus 511	sl. strong
1-1-7	20/30		"	"	"	"	"	"	A	"		sl. strong
10-1-7	20/40		4.2	FSII	"	"	"	IaOE	B	Ceph/Evans		strong
1-7-7	40/80		6.5	F7ab	"	"	"	IaOE	A	Ceph/Evans		fine
1-1-7	20/40		4.0	G8Ib	"	"	"	IaOE	B	Ceph/Evans	T _{spec} 20°F Focus 512	vs. sl. str.
1-1-7	20/40		4.4- 5.1	F7Ib- G3Ib	"	"	"	IaOE	A	Ceph/Evans		sl strong
1-1-7	20/19	3	2.0	09.5II	BC	1200/.025	BS	IaOE	B	MSB-Ly	numbered 36 T _{spec} = 19°F Focus 506	good but spotted
1-1-7	20/30		2.2	K3II	"	"	"	"	A	std vel	= 18°F Focus 506	good
1-1-7	20/20		"	"	"	"	"	"	B	"	= 18°F Focus 503	good
1-1-7	40/50		4.3	F2IV	"	"	"	"	A	Asm-KK	= 18°F Focus 506	good
1-1-7	40/13		4.9	F2IV	"	"	"	"	B	RSCN-Ly	cloudy BROKEN = 18°F	weak
1-1-7									A			

Date Thurs. Feb 7-5 1982 Observers Bla-Ri

Emulsion Batches:

4 ^m 68°	Tha-Jcb 09061-15012	22	310
8 ^m <u>Aurifine</u> 67°	Itas-E...12081-02022	26	164

[illegible]

2 26 16A

+08°F 65%

Pottery ¹⁹⁰ crabs inc. ¹⁹⁰

511

Dome Temp./Hum. 40.9°F/80%

Dome Temp./Hum. 40.9°F/80%

[illegible]

191 Sat./Sun

Date February 6/7, 1982 Observers Gies-Tn.....

Emulsion Batches:

Emulsion Batches:
87680 ... II-0-E 12081 -02022

[illegible]

Spectr. Temp.

Dome Temp./Hum. + 14°F / 74.3

Dome Temp./Hum. /

Transparency Conditions *Cloudy* 192

[illegible]

Spectr. Temp. $+26^{\circ}\text{F}$

Dome Temp./Hum. $+19^{\circ}\text{F}/80\%$

Transparency Conditions . . . Cloudy, then clearing.

Focus 511

Spectr. Temp.

Dome Temp./Hum. *+11°/89%*[illegible]

Date Feb 10-11, 1982 Observers Ly-Ty

Emulsion Batches:

Emulsion Batches:
w/ 8m 680 9-10 batch. #40-E. 12081-06022
.....

[illegible]

Spectr. Temp. ... 15°F Dome Temp./Hum. 6°F / 75% Transparency Conditions Sl. hazy - cloudy 196.
 Focus 511
 Spectr. Temp. ... 11°F Dome Temp./Hum. 5°F / 84% ~ 2 AM.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
250	3"	6.0	Am.	BC	1200/-0.025	BS	Ilaoe	A	Hyades-Ly	clouds	Fine
							Ilaoe				
				BC	1200/-0.025	BS	Ilao	B		+11 set 512	vs/Red

Spectr. Temp. $+15^{\circ}F$

Dome Temp./Hum. +12°F / 71%

Transparency Conditions *Ok - cloudy - hazy* ¹⁹⁸

Focus 514

Spectr. Temp. $+12^{\circ}\text{F}$

Dome Temp./Hum. *+15° / 100%*[illegible]

Tues. / Wed.

Date Feb. 16/17, 1982 Observers Gis-Tn/Tn

Emulsion Batches:

8^m 10⁰⁰ Emulsion Batches.
#0-E 12081 -12022

[illegible]

Spectr. Temp. $+39^{\circ}\text{F}$ Dome Temp./Hum. $+32^{\circ}\text{F}/72\%$ Transparency Conditions $\text{hazy} - \text{cloudy} - \text{Clear by } 3\text{ AM}$ ²⁰⁰Focus 506 Spectr. Temp. $+25^{\circ}\text{F}$ Dome Temp./Hum. $+12^{\circ}\text{F}/80\%$

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
200/99	3"	5.87	B8II _n	B.C.	830/68	BS	II ₆₀ -E	A	Runaway*	cloud	slwk
							"				
200/93	4"	6.04	B2III _n	BC	830/68	BS	"	A	Runaway*	cloud again	slwk
200/200	4"	5.3	F6IV	"	"	"	"	A	Std. Velocity	some cloud Set 507	Fine
40/70	5"	3.93	F0p	"	1200/2025	"	"	B	KK prog	T=31°F Set 507	Fine
200/250	4"	5.1	B7V	"	"	"	"	A	Ly prog	separation difficult Brt comp gusty SE	Fine
200/260	4"	"	"	"	"	"	"	B	"		fine
80/200	5"	4.9	F2IV	"	"	"	"	A	"	T=26°F Set 509 ^{cloud}	Fine
40/60	5"	3.9	K2III	"	"	"	"	B	std vel		slwk
				"	"	"	"	A		T= Set 509	

Focus Test Failed -

Date 23/24 Feb 1982 Observers Blu-Ri
Tues/Wed

Emulsion Batches:

.....

.....

.....

[illegible]

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions Patchy cirrus and 202
cirrus-shadows. Poor

[illegible]

203 Wed-Thurs

Date 24-25 Feb/82 Observers Crow-Tm

Emulsion Batches:

Emulsion Batches:
8^m 68 II-0-E 12081 -12022

[illegible]

-12022

Spectr. Temp. 23°F Dome Temp./Hum $49^{\circ}\text{F}/75\%$ Transparency Conditions mostly clear 909Focus 512 Spectr. Temp. $+13^{\circ}\text{F}$ Dome Temp./Hum $44^{\circ}\text{F}/75\%$ good Aurora
super by 03 hrsComparison
pe/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
90/50	75"	4.95	M3III	BC	830/68	150/3	II-O-E	A	CW-MRAS	EXP = 19 ^m	vsl str
200/230	"	6.95	M4-4.5III	"	"	"	"	B	"	EXP = 87 ^m	vsl str
							"			focus: 513 20°F	
200/200	3"-4"	7.5	M7III	"	830/68	150/3	"	A	CW-MRAS	EXP = 127 ^m	good
200/210	"	6.7	57-510	"	"	"	"	B	"	EXP = 60 ^m	good
				"	"	150/1.0	"	A		T + 13°F Set 513	ok
				"	"	"	"	B		" "	exp ok uneven

208 Thurs./Fri.

Date 25-26 February, 1982 Observers Gis-Tn

Emulsion Batches:

8^m 68° IIaO-E 12081-23022

[illegible]

3022

206

406
4...

Comparison

Fine Aurora after 1 AM

[illegible]

207 Fri / Sat

Date 26-27 February, 1982 Observers Gies - Tn

Emulsion Batches:
8m 680 IqO-E 12081-23022

[illegible]

Spectr. Temp. $+25^{\circ}\text{F}$Dome Temp./Hum. $20^{\circ}\text{F}/81\%$Transparency Conditions *hazy...clouds*.....208...

Focus...511.....

Spectr. Temp.

Dome Temp./Hum. $17^{\circ}\text{F}/95\%$Comparison
Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
200/175	2"	5.67	B1V	BC	830/1.68	BS	IIaG-E	A	Runaway*		very clear
100/186	2"	8.01	06.5I _{nc}	"	"	"	"	B	Runaway*	cloud	good
							"				
40/53	1-2"	5.1	B7II	BC	1200/-0.25	BS	"	A	Ly	T=23°F cloud F=509	fine
200/	2"	3.93	Fop	"	"	"	"	A	KK		
				BC	1200/-0.25	BS	IIaG-E	A	set 509	T=23°F F=509	
								IF no shift it may be a	(Comp - Comp) Test		

209 $\square$ 1 Sat/Sun

10 35

Date Feb 27/28

Observers Rm-TL/KK-TL...

Emulsion Batches:

8^m 68° II-0-E 12081-26022
4^m 68° II-0-E 09061-15017 22 30

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46674	HD 16907 = TWCos	2 ^h 37.6	+65° 18'	18:44	21:47	5 ^h 16W	+65° 41'	Fe/-	7-7-7
46674T	Spot Calib	for 46674-85		15 min @ 15V		D9 3900	D3 4300	D2 4810	
46675	HD 8890 = x UMi	1 ^h 22.6	+55° 46'	21:55	21 58	6 08W	+89° 13'	Fe/-	10-10
46676	HD 8890 = x UMi	"	"	22:01	22 04	6 14W	"	Fe/-	10-10
46677	HD 44990 = TRAn	6 19.8	+07 08	22:12	00 05	3 ^h 55W	+7 06	Fe/-	7-7-7
46678	HD 99028	11 18.7	+11° 5'	00 13	00 23	0 48E		Fe/-	14-14
46679	HD 102955	11 47.2	+38 26	00 27	02 02	1 23W	+	Fe/-	10-10-1
46680	HD 122742	13 58.6	+11 16	02 06	03 52	0 06E		"	10-10-1
46681	HD 121370	13 49.9	+18 54	03 56	03 59	0 19W		"	14-14
46682	HD 124752	14 11.1	+19 42	04 04	04 04	0 03W		"	14-14
46683	HD 137909	15 23.7	+29 27	04 09	04 18	0 55E		"	14-14
46684	HD 130948	14 45.8	+24 20	04 22	05 03	0 22W		"	10-10-1
46685	HD 159561	17 30.3	+12 38	05 07	05 12	2 08E		"	20-20
46686T	Spot Calib	for 46685-87		15 min @ D4		3900 17:58	4300 15V	4810 15V	
46686	HD 159561	17 30.3	+12 38	05 14	05 19	2 00E		FeNe/ Airb	20-20

Spectr. Temp. 30°F Dome Temp./Hum. $27^{\circ}\text{F}/68\%$ Transparency Conditions *fine-hazy* 210Focus 509

Spectr. Temp.

Dome Temp./Hum.

Comparison of Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
7-7	400/290	$\leq 1''$	8.4	B9+G	BC	830/.68	BS	100E	A	Ceph/Evans	* Reversed (loose holder) (may be fogged)	good
10-1	40/40	$1''$	2.5	F7b	BC	830/.68	BS	"	B	Ceph/Evans		fine
10-1	40/60	$1''$	"	"	"	"	"	"	A	Ceph/Evans		sl str
7-7	20/437	$1''$	6.5	F7a6	"	"	"	"	B	Ceph/Evans	27°F focus 510	sl strong
4-4	4/65		4.3	F2	"	1200/.025	"	"	A	Asm Sp/KK	25°F focus 509	fine
10-1	20/310	$2''$	7.2	G8V	"	"	"	"	B	Asm Sp/KK	F=510	fine
10-1	20/300		6.9	G8V	"	"	"	"	A	"	some cloud streaks	fine
14-1	40/50		2.8	G0	"	"	"	"	B	"		fine
1-1	40/45		1.3	K2T	"	"	"	"	A	Std Vel		fine
1-1	40/60		3.9	F0p	"	"	"	"	B	Asm Sp/KK		fine
1-1	40/65		6.5	dG2	"	"	"	"	A	Asm Sp/KK		fine
20-20	40/166		2.2	A5T	"	"	"	TH25eb	B	"		fine
4-4							"	"				fine
15V	40/174		"	"	"	"	"	"	A	"	comp wk &	good uneven

211 #2

Date 82 Feb 28 cont Observers KK-TN

Emulsion Batches:

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.....

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[illegible]

Transparency Conditions clear 2/2

Spectr. Temp. 21°F

Dome Temp./Hum $+13^{\circ}\text{F}/100\%$

[illegible]

213, Sun./Mon.

Date 28 Feb/1 March, 1982 Observers Gis - Tn

Emulsion Batches: *Small box*
8^m 68° II 90-E 12081-28022

[illegible]

Spectr. Temp. +21°F.....Dome Temp./Hum. *+14° F / 93%*

Transparency Conditions *getting busy*..... 214

Companso. Type/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/-	20-20					BC	830/68	BS	IIaO-L	A			sl smry
Fe/-	7-7	40/35	2"	5.87	B8II n	"	"	"	"	B	Runaway*		fine
Fe/-	7-7	400/350	3"	7.22	B3I ne	"	"	"	"	A	Runaway*		fine
Fe/-	7-7	300/180	3"	6.04	B2I ne	"	"	"	"	B	Runaway*	T = 24°F	F = 5 1/2 sl sm
Fe/-	7-7	400/156	2"	7.29	B6V	BC	830/68	BS	"	A	Runaway*	Cloud	good

- Mon - Tues

Date Mar 1-2/82 Observers Lg-Tn

Emulsion Batches:

Small box

U.C. 1892-28022

[illegible]

Spectr. Temp. ... 270° F

Dome Temp./Hum. 19°F/88%

Transparency Conditions fine, then load 216
Super aurora. (red part).
'windy'

[illegible]

217 Tues. / Wed.

Date March 2/3, 1982 Observers Gis-Tn

Emulsion Batches:

Πα Ο-Ε 18012 - 28022

.....

.....

[illegible]

Spectr. Temp. $+23^{\circ}\text{F}$Dome Temp./Hum. $+16^{\circ}\text{F}/70\%$ Transparency Conditions *Hazy - ... cloudy - Fine* ²¹⁸Focus 510Spectr. Temp. $+13^{\circ}\text{F}$Dome Temp./Hum. $+13^{\circ}\text{F}/82\%$ Comparison
pe/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	830/.68	BS	IIaO	B			
40/35	2-4"	4.04	O7	"	"	"	IIaO-E	B	Runaway*		
200/180	4"	6.18	O95I	"	"	"	"	B	Runaway*	set 512	
200/180	3"	5.67	B1I	"	"	"	"	A	Runaway*		
200/180	3-4"	6.04	B2I	"	"	"	"	B	"		
							"				
200/180	3-4"	7.18	B2I	BC	830/.68	BS	IIaO-E	A	Runaway*	T = 21°F	
400/260	4"	7.76	Ba5I	"	"	"	"	B	Runaway*	T = 17°F F = 514	

Big Box
28.22
33 302

Spectr. Temp. ... 19°F

Dome Temp./Hum. 13°F/58%

Transparency Conditions good - heavy cloud 220

Focus ... 510

Spectr. Temp.

Dome Temp./Hum. +40°F/80%

Comparison pe/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/ 14-16	40/60	4	2.8	09 III	BC	1200/ -.025	BS	Ilad e	A	MSB-Ly		
1/ 14-16	40/53	4	"	"	"	"	"	"	B	"		
" 14-16	200/260	4"	6.1	08	"	"	"	"	A	"		
" 10-12	200/250	4"	6.8	B5	"	"	"	"	B	MSB-Ly	Set 511 +15°F * unfortunate omission	
1/ 10-12	200/100	3"	6.0	Am	BC	1200/ -.025	BS	Ilad e	A	Hyads-Ly		
1/ 10-12	200/240	3-2"	6.9	B2 V	"	"	"	"	B	Sph-Ly	thin cloud	
" 10-12	40/103	3	4.9	F2 IV	"	"	"	"	A	RSCVh-Ly	+13°F 511	
" 10-12	40/49	3-4	5.0	B7 V	"	"	"	"	B	MSB-Ly	cloud	
" 10-12	40/34	4	3.9	K2 III	"	"	"	"	A	std vel	heavy cloud	
" 24-24					"	"	"	"	B		Set 512 T=+12°F center/red	

221. Fri. / Sat.

Date March 5/6, 1982 Observers Gies: Tn

Emulsion Batches:

IIQD-E...18012...-03032

[illegible]

Focus 509.....

Dome Temp./Hum. +21°F/84%

Transparency Conditions 231

Spectr. Temp.

Dome Temp./Hum. $+16^{\circ}\text{F.}/90\%$

[illegible]

Sun / Mon

Date Mar. 7-8, 192 Observers Gies-Tn/Tn

Emulsion Batches:

...До-Ф...18012...0.3032

[illegible]

Spectr. Temp. $+31^{\circ}\text{F}$Dome Temp./Hum. $121^{\circ}\text{F}/70\%$ Transparency Conditions ... *Fine-hazy* 225...

Focus 510

Spectr. Temp. $+15^{\circ}\text{F}$Dome Temp./Hum. $15^{\circ}\text{F}/88\%$ Comparison
pe/Filter Exp

Exp. Mir.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10-6 W6 e 5-5 02 80 W6 e 8-4 13-5 W6 e 11-6 W6 e 12-6 W6 e 13-5 W6 e 14-6 W6 e 15-6 W6 e 16-6 W6 e 17-6 W6 e 18-6 W6 e 19-6 W6 e 20-6 W6 e 21-6 W6 e 22-6 W6 e 23-6 W6 e 24-6 W6 e 25-6 W6 e 26-6 W6 e 27-6 W6 e 28-6 W6 e 29-6 W6 e 30-6 W6 e 31-6 W6 e 32-6 W6 e 33-6 W6 e 34-6 W6 e 35-6 W6 e 36-6 W6 e 37-6 W6 e 38-6 W6 e 39-6 W6 e 40-6 W6 e 41-6 W6 e 42-6 W6 e 43-6 W6 e 44-6 W6 e 45-6 W6 e 46-6 W6 e 47-6 W6 e 48-6 W6 e 49-6 W6 e 50-6 W6 e 51-6 W6 e 52-6 W6 e 53-6 W6 e 54-6 W6 e 55-6 W6 e 56-6 W6 e 57-6 W6 e 58-6 W6 e 59-6 W6 e 60-6 W6 e 61-6 W6 e 62-6 W6 e 63-6 W6 e 64-6 W6 e 65-6 W6 e 66-6 W6 e 67-6 W6 e 68-6 W6 e 69-6 W6 e 70-6 W6 e 71-6 W6 e 72-6 W6 e 73-6 W6 e 74-6 W6 e 75-6 W6 e 76-6 W6 e 77-6 W6 e 78-6 W6 e 79-6 W6 e 80-6 W6 e 81-6 W6 e 82-6 W6 e 83-6 W6 e 84-6 W6 e 85-6 W6 e 86-6 W6 e 87-6 W6 e 88-6 W6 e 89-6 W6 e 90-6 W6 e 91-6 W6 e 92-6 W6 e 93-6 W6 e 94-6 W6 e 95-6 W6 e 96-6 W6 e 97-6 W6 e 98-6 W6 e 99-6 W6 e 100-6	40/35	23	4.04	07	BC	830/68	BS	II-D-E	A	Runaway, * Fe Arc problem	Fe vuk Fine
5-5	200/175	3"	6.18	09.5	"	"	"	"	B	Runaway *	comp ok Fine
10-6	40/41	23	5.5	K2 III	BC	830/68	BS	"	A	Std. Velocity $T=27\frac{1}{2}^{\circ}\text{F}$	Fine
13-5				"	"	"	"	"	A	$T=27^{\circ}\text{F}$ Set 510	OK
5-5	200/140	3"	7.22	B3 Inc	"	"	"	"	B	Runaway *	Fine
6-3	200/140	4"	7.18	B2 I	"	"	"	"	A	$T=20^{\circ}\text{F}$ Set 513	Fine
7-7	40/63	4"	3.93	F0	"	1200/-025	"	"	B	Asm sp KK $T=17^{\circ}\text{F}$ Set 512	comp ok Fine
7-7	200/310	4"	6.22	LF8	"	"	"	"	A	SB-BH/Ly	comp ok Fine

Date 9/10 MAR 1932

Date 9/10 MAR 1982
Tues/Wed

Observers Blu-Tu

Emulsion Batches:

IIQ-E 18012 - 03032

[illegible]

0.3032

m. 17°F/90%...

२२८

Spectr. Temp. + 21...°F.....

$$\text{m.} + 13.2 / 100.0 +$$
[illegible]

227 Sun-Mon
Date .. Mon. 14-15/82 Observers Crow-Ri

Emulsion Batches:

Emulsion Batches.
 Prod-E 12081 - 07032

Date ... Mar. 14-15/82 Observers CW-K

[illegible]

Spectr. Temp. ... 37°F

Dome Temp./Hum. ... 30°/65%

228

6/-	7/-
5/-	22
4/-	490
6/-	7/-
5/-	5a

MON-TUES

Date MAR 15-16 1982 Observers Ly-Ri

Emulsion Batches:

Emulsion Batches:
 8th 6th HCO-E 12081-07032
 4th 6th 09802E 12081-07032 26155

[illegible]

732
3.2 26 155
Com 500
pe/Filte Exp
10-10
03 002
300 -90
15-5
7
10
2-7
10-1
00 20
540
Fe/- 250
Fe/- 77
Fe/- 77
Fe/- 22

Spectr. Temp. 37°F
505
Focus
Spectr. Temp.

Dome Temp./Hum. $29^{\circ}\text{F}/81\%$
26 $^{\circ}\text{F}/81\%$

Transparency Conditions ... fair to poor ... 2.30.
to good after 2 H.M.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
100/250	4	6.1	08	BC	1200/.025	BS	IladE	A	MSB-Ly		good
							Ilad-E				
100/60	3.4	2.2	K3U	BC	1200/.025	BS	IladE	B	Std vel	T=36°F F=505	fine
100/20	"	"	"	"	1200/.7	RS	098-02E	A	"	"	
20/12	"	"	"	"	"	RS	098-02E	B	"	T=35°F F=508	
							098-02E			cloud obviously !!	
				BC	1200/.7	RS	098-02E	A		T=34°F	
100/225	3	9.5	K5	BC	830/.08	BS	IladE	A	H-K-Ly	T=34°F F=508	v slwk
50/60	3	6.2	B0.5U	"	"	"	"	B	Runaway #	T=32°F	
				B.C.	820/.68	RS	Ilad-E	A		F=508	

WED. THURS

Date MAR 17-18 1982 Observers Ri/wh

Emulsion Batches:

8th 68 Tao-E 12081-07032...

[illegible]

Spectr. Temp. ... 37°F

Dome Temp./Hum. ... 34°F 84%

Transparency Conditions ... CLOUDS after MIDNIGHT
much before that

Focus ... 507

Spectr. Temp.

Dome Temp./Hum. ... 32°F 99%

40/33

232

Comparison Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/-	22-23					B.C.	830/.68	B.S.	IIAD-E	A			
Fe/-	7-7	40/35	1-2	5.87	BBIV	B.C.	830/.68	B.S.	IIAD-E	B	RUNWAY*	TESTING CLOCK DRIVE	
Fe/-	7-7	40/35	1-2	5.67	81V	B.C.	830/.68	B.S.	IIAD-E	A	"	BROKEN 1/2" MISSING	fine (unclear)
Fe/-	7-7	200/100	2-3	2.61	09V	B.C.	830/.68	B.S.	IIAD-E	B	"	1/2 in TESTING TELESCOPE LIMIT	
Fe/-	7-7								IIAD-E				
Fe/-	7-7	200/91	2	7.18	B0Z	B.C.	830/.68	B.S.	IIAD-E	A	RUNWAY*	CLOUDED IN 38°F 506	
Fe/-	22-23					B.C.	830/.68	B.S.	IIAD-E	B		37.5°F 506	

Date Mar 19-20/82 Observers Cow-Ri

Emulsion Batches:

Hao-F 12081-17032

[illegible]

Spectr. Temp. 38°F

Dome Temp./Hum. 32° / 100%

235

5/-7.7	100/2843"	8.5	Mge -Mre	Be	830/.68	150/.3	ITAO-E	A	Crow-MIRAS	EXP = 216 ^m	OK slwk
502 480							ITAO-E				
5/-						150/.10		B		381F 506	sl Blue OK

235

Date March 20/21 Sat/Sun Observers PK Ri

1982

Emulsion Batches:

HAD-E 12081-17032 26180

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46737	HD 74874	8 41.5	+6 47	22 36	22 46	1 35W	+6 30	Fe/-	7-7-7
46738	HD 87822	10 02.5	+32 06	22 51	23 58	1 25W	+31 42	Fe/-	7-7-7
46738T	SPOT CAL FOR PLATES 46737-39				15 MIN	15 VOLTS 3900	① D4 ② D3 ③ D2 4300 4810		
46739	HD 101177	11 33.5	+45 40	0 01	01 46	1 44W	+45 15	Fe/-	7-7-7
46739F	FOCUS TEST							Fe/-	27-22
SUN MARCH 21		1982	AK-Ri						
46739F.	Focus TEST							Ne/-	10-10
T2	"							Ne/-	10-10
T3	comparison							NE/-	10
T4	comparison							NeFe/Ne6 +1.0	5
46739T5	Spot cal.								

Spectr. Temp. 400F

Dome Temp./Hum. ... 33°F 91%

Transparency Conditions ... hazy

Focus 506

Spectr. Temp.

Dome Temp./Hum. ... 32°F 90%

236

Comparison of Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-1-1	20/30	3	398	F8	B.C.	830/.68	B.S.	Ind-E	A	Waterloo		Fine
1-1-2	80/120	3	660	F5	B.C.	830/.68	B.S.	Ind-E	B	"		Fine
1-1-3								Ind-E				
1-1-4	200/178		690	G0	B.C.	830/.68	BS	Ind-E	A	"	T 39°F clouds F 506	Fine
1-1-5					-	-	-	Ind-E	B		T 38°F F 506 ceph/Blue	
1-1-6												
1-1-7												
1-1-8												
1-1-9												
1-1-10					B.C./11	150/.5	150/.5	Ind	1			
1-1-11					"	"	"	"	2		TURNED N. SCREW ONE TURN IN	
1-1-12					"	"	"	"	3			
1-1-13					"	"	"	"	4			
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2415

237. 2¹/₂ half of mar 21

Date MAR 22 1982 Observers R.

Emulsion Batches:

Παο+Ε 12081-17032

[illegible]

Spectr. Temp. 37.5 F

Dome Temp./Hum. 32°F.....99%

Transparency Conditions ... *some climb around* ...

Focus 507

Spectr. Temp. 36°F

Dome Temp./Hum. 30°F.....97%

CLEAR AGAIN 238

[illegible]

239.

Date MON-TUES MAR. 22-23. Observers *Lx - Ri*

Emulsion Batches:

How-E 12031-22032

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46741F	FOCUS TEST			19:10				Fe/-	25-25
46741	HD36486	05 26.9	-00 22	19:10	19:13	01 24W	-00 18	Fe/-	15-15
46742	"	"	"	19:15	19:17	01 28W	"	Fe/-	15-15
46743	HD36695	05 ^{28.5} 28.1	-01 14	19:23	19:55	02 05W	-01 11	Fe/-	15-15
46744	HD37043	05 30.5	-05 59	19:58	20:03	02 12W	-05 55	Fe/-	15-15
46745	"	"	"	20:05	20:09	02 16W	"	Fe/-	15-15
46746	HD 28911	04 28.2	+13 02	20:13	21:25	04 35W	+13° 11	Fe/-	10-20
46746T	SPOT CALN' FOR PLATES 46741-46752				15 MIN @ 15 VOLTS	0 24 2 03 3 02	4300 4810		
46747	HD118216	13 30.3	+37 42	21:32	22 17	03 35E	+37 16	Fe/-	15-15
46748	HD65041	07 51.7	+43° 47	22:26	00 09	03 55W	+43 33	Fe/-	10-10
46749	HD118216	13:30.3	+37° 42	00:15	00 56	00 54E	+37° 15'	Fe/-	10-2
46750	HD143313	15 54.6	+25 52	01:04	04 22	00 09W	+25° 38	Fe/-	7-7-7
46751	HD 188439	19 50.1	+47 33	04:28	05 03	03 05E	+47 46	Fe/-	7-7-
46751F	FOCUS TEST					"	"	Fe/-	22-22
46752	HD118216	13 30.3	+37 42	05:14	05:50	04 01E	+37° 15'	Fe/-	15-
46752F	FOCUS TEST					"	"	Fe/-	25-25

Spectr. Temp. 41°F

Dome Temp./Hum. 35°F 71%

Transparency Conditions ... good

Focus 503

Spectr. Temp. 33°F

Dome Temp./Hum. 26°F 95%

40/30

250

Comparison pe/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
c/- 252					B.C.	1200/ -.025	B.S.	IIAD-E	A		T=41.5°F F=503	OK?
e/- 15.	20/25	3	2.2	09.5II	"	"	"	"	B	MSB-Ly		Fine
e/- 15.	20/25	"	"	"	"	"	"	"	A	"		Fine
e/- 15.	40/50	"	5.2	B1V	"	"	"	"	B	"		Fine
e/- 15.	20/25	"	2.5	09.5II ²	"	"	"	"	A	"	T=41°F	Fine
e/- 15.	20/25	"	"	"	"	"	"	"	B	"		Fine
e/- 15.	100/123	3"	7.0	F5V	"	"	"	"	A	Hypder-Ly		wt
e/- 15.	10/110	3	5.0	F2IV	B.C.	1200/ -.025	B.S.	IIAD-E	B	RSCUn-Ly		Fine
e/- 13.	10/160	3	7.0	B0II	B.C.	1200/ -.025	B.S.	IIAD-E	A	SpBin-Ly	T=38°F F=504	s/ wt
e/- 10.	10/110	3	5.0	F2IV	B.C.	1200/ -.025	B.S.	IIAD-E	B	RSCUn-Ly	T=36°F F=505	Fine
e/- 7.7	100/225	3	9.5	K5	"	830/ .68	"	"	A	SpBin-Ly	T=35°F F=507	wt
e/- 7.7	10/70	3	6.2	B0.5III	"	"	"	"	B	Runaway	T=33°F F=508	Fine
Fe/- 12					"	"	"	"	A		T=33°F F=508	cont s/b/ke
Fe/- 15.	10/94	3	5.0	F2IV	B.C.	1200/ -.025	B.S.	IIAD-E	B	RSCUn-Ly	T=33°F F=506	Fine
Fe/- 25					"	"	"	"	A		T=33°F F=506	OK

.....

.....

KK

[illegible]

Spectr. Temp. Dome Temp./Hum. Transparency Conditions

Focus

242

Spectr. Temp. Dome Temp./Hum.

Comparison Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-200					BL	1200/.025	BS	ILSO	A	Test	T=31° F=505	
1-100	∞/150				"	"	"	"	B			
1-200					"	830/.68	"	"	A		T=32° F=507	
1-0	20/20								B		508	
1-0						400/.38			A		T=32° F=514	this is not good!
1-0	20/15								B	BRUCE	CONVERSION PLATE!	
1-0	20/18					1800/.4			A		32° 508	
						830/.68	BS	ILSO	B	-033	508	cent v blue
						"	"	"	A	-037	506	cent v blue
						"	"	"	A	-034	508	cent v blue

243

Tues./Wed.

Date March 23/24, 1982. Observers Gies-T_h.....

Emulsion Batches:

...II-0-E...12081...-23032

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46753F	Focus test (without corrector plate)			+11 units above chart				Fe/-	20-20
46753	HD 43112	6 ^h 09 ^m .5	+13° 53'	19:38	20:01	1 ^h 34 ^m W	+13° 52'	Fe/-	7-7-7 80/70
46754	HD 66141	7 57.1	+2 36	20:11	~20:30	~0 15W	+2 23	Fe/-	777 80/80
46754T	Spot Colln	for 46753-59			15mi @ 15V	D4 3900	D3 4300	D2 4810	
46754F1	Focus test (without corrector plate)					1 ^h 00 ^m E	+2 35	Fe/-	25-25
46754F2	Focus test					0 ^h 53 ^m E	+2 35	Fe/-	25-25
46754F3	Focus test					0 ^h 48 ^m E	+2 35	Fe/-	25-25
46755	HD 97991	11 ^h 11 ^m .1	-2° 55'	21:51	00:48	1 ^h 21 ^m W	-3° 22'	Fe/-	9-9-6 40/310
46755F1	Focus test					1 ^h 30 ^m W	-3° 22'	Fe/-	16-16
46755F2	Focus test					1 ^h 35 ^m W	-3° 22'	Fe/-	16-16
46755F3	Focus test					1 ^h 45 ^m W	-3° 22'	Fe/-	16-16
46756	HD 115521	13 ^h 12 ^m .6	+6° 00'	01:19	01:26	0 ^h 08 ^m W	+5° 34'	Fe/-	9-9 40/50
46757	HD 115521	13 ^h 12 ^m .6	+6° 00'	01:45	02:10	0 ^h 42 ^m W	+5° 34'	Fe/-	9-9 40/50
46757F1	Focus test					0 ^h 44 ^m W	+5° 34'	Fe/-	19-19
46757F2	Focus test					0 ^h 48 ^m W	+5° 34'	Fe/-	19-19

33032

Spectr. Temp. $+40^{\circ}\text{F}$ Dome Temp./Hum. $+37^{\circ}\text{F}/76\%$ Transparency Conditions *Fine - haze - cloudy*Focus 51.7 *Tour - 50 people, 244*

Spectr. Temp.

Dome Temp./Hum.

Focus offset (without corrector plate)

Comparison pe/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0/- 20					BC	830/.68	BS	IIaO	A		Set 517 $T=+40^{\circ}\text{F}$	$-.015\text{mm}$ cent blue
0/- 77	40/70	1"	5.67	B1II	"	"	"	IIaO-E	A	Runaway*		
0/- 77	80/80		5.2	K2III	"	"	"	IIaO-E	B	Std. Velocity		
0/- 25					BC	830/.68	BS	IIaO-E	A		$T=40^{\circ}\text{F}$ Set 526	Conts/Red.
0/- 25					"	"	150/10	"	B		Slit Comparison Field lens still in place.	cont Red back 2 cont Red
0/- 25					"	"	150/10	"	A		Set 531	cont Red
0/- 9-1	100/310	1"	7.18	B2II	"	"	150/0.5	"	A	Runaway*	Cloud Set 526	cont blue
0/- 16							150/10	"	B		$T=37\frac{1}{2}^{\circ}\text{F}$ real out v. red	Set 522 v. blue
0/- 16							150/10	"	B		Set 527	sl red
0/- 16							BS	"	B		Set 524	
0/- 9-1	40/50	1"	5.0	M2IIa	BC	830/.68	BS	"	A	Std. Velocity		
0/- 9-1	40/80	"	"	"	"	1200/-.025	"	"	A	"	$T=37^{\circ}\text{F}$ Set 524	
0/- 19					"	"	"	"	B		Set 524	
0/- 19					"	"	"	"	B		Set 528	

Date March 23/24, 1982 Observers Gies-Th
(cont)

UO-E Same

[illegible]

pectr. Temp.

Dome Temp./Hum.

Transparency Conditions 246

ocus

pectr. Temp. ... +35°F

Dome Temp./Hum. ... +29°F / 84%

Comparison type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality	
Fe-1	40/110	1"	4.9	F2II	BC	1200/-0.025	BS	IIaD-E	A	RSCVn-Ly	Set=524		
Fe-1	40/80		3.93	F0p	"	"	"	"	B	KK-Asmbn.			
dx/mb	10				"	"	150μ	"	A		T 40° F 525		
"	"				"	"	"	"	A		515	center de blue waves	
"	"				"	"	"	"	A		least flare in blue	505	
"	"				"	"	"	"	A		515 again	center de	
												</	

Date Apr 13-14/82 Observers Ly-Tn.
Tues Wed.

Doc 12081 - 23032

Spectr. Tem.	Focus.....	Spectr. Tem.
Exp. Mtr.	7/110	
	40/110	
	21/110	
	22/110	
	210/110	

Spectr. Temp. 43°F Dome Temp./Hum. $37^{\circ}\text{F}/85\%$ Transparency Conditions *Fine*

Focus 524

Spectr. Temp. Dome Temp./Hum. $130^{\circ}\text{F}/90\%$ *no corrector plate.* 248

Compansor pe/Filter E	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
e/- 1-1	10/110	3	4.9	F2IV	BC	1200/.1	BS	IaDe	A	RSCUn-ly		Fine
e/- 2-2	10/110		"	"	"	"	"	"	B	"		Fine
" 3-3	10/110		"	"	"	"	"	"	A	"		Fine
" 4-4	10/110		"	"	"	"	"	"	B	"		Fine
" 5-5	10/110		"	"	"	"	"	"	"	"		Fine
e/- 1-1	10/60	3.		K2III _p	BC	1200/.1	BS	IaDe	A	Std Id. -5.2	40°F Se/524	centd Red in Red
e/- 14-14					"	"	"	"	B		focus OK →	OK in Blue

These plates don't look too bad except for Red Fe gr lines.
T_h

Date Apr 15/16 82 Observers by - Tm.

Emulsion Batches:

...F40-F 12081-23032

Date Apr. 15/16 82 Observers hy - In.

Thurs Fri.

[illegible]

Spectr. Temp. ... 52°F

Dome Temp./Hum. ... 45°F/72%

Transparency Conditions ... good.

Focus ... 522

Spectr. Temp.

Dome Temp./Hum. ... 45/802

no corrector plate 250

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
9-8-90 / 112	2	5	F2IV	BC	1200	BS	Inde	A	RSC Un-Ly		Fine
9-9-90 / 110	"	"	"	"	"	"	"	B	"	50°F	"
9-9-90 / 115	"	"	"	"	"	"	"	A	"		"
9-9-90 / 110	"	"	"	"	"	"	"	B	"	49.5°F	"
9-9-90 / 110	2-5	"	"	"	"	"	"	A	"	circus?	"
9-9-90 / 110				"	"	"	"	B		49.5°F set 522	OK

3-8 seeing variation caused image to oscillate ± 1 arc sec.

Polar Axis Alignment test

note - no change in image pos'n between telescope pos'n 6 28E and 6 45E

- Image after start moved south (down on TV), then was back on slit at 5 25E
- Max travel of image south was ≈ 2 arc sec.
- Image settled approx 1-2 arc sec North of slit after waiting for 94 mins.

N

— end pos'n of image
 — slit (start and at 5 25E)
 — Max travel South in 1st half

251 1 Tour did extensive planet gazing

Date ^{Sun Mon} Apr. 18-19. 182...

Observers Ly. Th......

Emulsion Batches:

Ποτ-Ε 12081-15092

[illegible]

Spectr. Temp.43°F.....

Dome Temp./Hum. 43°F / 85%

Transparency Conditions ... *Good - s/d cond.* ...

No CORRECTOR RATE 252

Comparison pe/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10/-	100					BC	1200/0.1	BS	II ₀ 0-E	A			Fin 2
10/-	9.9.0	40/112	2	5.0	F2IV	"	"	"	"	B	RSCV _h -Ly		"
10/-	9.4.9	40/113	"	"	"	"	"	"	"	A	"		"
10/-	9.1.5	40/111	"	"	"	"	"	"	"	B	"		"
10/-	8.0								"				
10/-	10.0					BC	1200/0.1	150/10	"	A		T=44°F set 525	1
10/-	9.9.0	40/110	2	5.0	F2IV	"	"	150/7	"	A	RSCV _h -Ly		Fin 2
10/-	9.9.0	40/110	"	"	"	"	"	"	"	B	"	cloud	"
10/-	13.0	40/42	"	3.0	K2III	"	"	"	"	A	Sid val	T=43°F	"

253

Newtonian Spectroscopy

Emulsion Batches:

II90

Tues Wed

Date Apr. 20:21/82..... Observers Cy. Myd. Tr.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46776	HR 4540 B Vir	11 45.5	+2 20	21 46	22 07	00 05E	+1 45	Ne	15
"	HD 101501 HR 4496	11 35.8	+34 46	22 13	22 23	00 37W	+34 21		
"	31 Com HR 4883	12 ^h 46.8	+28° 05'	22 29	22 46	00 05E	+27 42		
"	HD 114710	13 07.2	+28 23	22 50	22 57	00 36E	+28 01	Ne	15
46777	^{45Bm} HD 134083	15 02.9	+25 16	23 22	?	? E	+24 59	Ne	15
46777F1	FOCUS TESTS			collimator rotated	CW before clamping			Fe/Ne	10
F2				beam evenly illuminates	this way but not			"	"
F3				centered in grating				"	"
F4				Beam now centered,	Hartmann mask moved			Fe/Ne 6.6	10/10
F5					by hand			"	10
S6								"	10

Spectr. Temp. Dome Temp./Hum. $+15^{\circ}\text{F}/80\%$

Transparency Conditions ... *Fine ... some cloud* ...

Focus

Spectr. Temp. Dome Temp./Hum. $+14.3^{\circ}\text{F}/90\%$

254

Comparison pe/Filter Exp	Exp. Mag.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/e 15	180, 360, ⁷²⁰	4"	4.16	F9V	Newt Spect	1200/5.0	0.6	IIaO		mt Std	2 mag filter F5.08	
	180, 360	4"	6.07	G8V	"	"	"	"		"	no filter	
	90, 180	"	5.63	G0IIIp	-	"	"	"		"	2 mag filter for 15 Exp, then no filter	
1/e 15	36, 72, 90	2 1/2"	4.85	G0V	"	"	"	"		"	no filter	
1/e 15	36, 60	"	5.36	F5V	"	"	"	"		"	- stopped by cloud	
1/e					old collimator	830/.68	13	IIaO	A		T=40° F=530	
									B		510	
									A		490	
1/e 10									A		T=40 F=540	red
1/e 10									B		540	
1/e 10									A		550	

255

Emulsion Batches:

Date WED. THURS. APR 21-22 Observers Cy. - Mxd - Ri

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46778	HD 109 011	12 26.5	+55° 40	20: 19	20: 50	01° 57 E	+55° 15	Ne	15 sec
"	HR 4540	11 45.5	+02° 20	21: 07	21: 09	00° 58 E	+01° 57		
"	HR 5404	14 21.8	+52° 19	21: 48	21: 52	02° 49 E	+51° 58		
"	HR 4932	12 57.2	+11° 30	22: 00	22: 08	01° 11 E	+11° 09		
46778T ₁	FOCUS TESTS							FC-Ne WR67G	10
" T ₂								"	"
" T ₃								"	"
" T ₄								"	"
" T ₅								"	"
46778	JUPITER IV	¹⁹⁸² 14 ^h 17 ^m ₁₉	¹⁹⁸² +12° 08	23: 39	23: 52	00° 43 E	-12° 07'		
46778	HR 5901	15 47.5	+35° 58	00: 50	00: 10	E	+35° 47'	Ne	15 SEC
46779	HR 6012	16 37.5	+31° 47	00: 21	00: 30	2° 27 E	+31° 41	Ne	15 SEC
"	HR 6623	17 42.5	+27° 47'	01: 51	01: 56	02° 06 E	+27° 46'		
"	HR 6703	17 53.9	+29° 16	02: 01	02: 11	02° 03 E	+29° 17'		
"	HR 6752	18 00.4	+02° 31	02: 17	02: 36	01° 49 E	+02° 34		

Spectr. Temp. Dome Temp./Hum. *38°F 64%* Transparency Conditions *fixed with some clouds between 02:20-3:00*
 Focus
 Spectr. Temp. Dome Temp./Hum. *256*

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>15</i>	<i>0 min.</i>	<i>2</i>	<i>9.0</i>	<i>K2V</i>	<i>NEWT. SPECT.</i>	<i>1200/.5-00</i>	<i>0.6</i>	<i>Ilw</i>		<i>#53 MK STD.</i>	<i>From 5.080</i>	
	<i>trial 10, 20 20 trail</i>		<i>4.16</i>	<i>F9V</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>MK STD. #73T1</i>		
	<i>5, 10, 20 fast trail</i>		<i>4.56</i>	<i>F7V</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>MK. STD. #53</i>		
	<i>15, 30 fast trail 1 slow trail</i>		<i>2.83</i>	<i>G8 sub</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>MK STD. #73T2</i>	<i>2x FILTER IN</i>	
<i>10</i>					<i>OLD COLLIMATOR</i>	<i>1200/.2</i>	<i>13</i>	<i>Ilw</i>	<i>A</i>		<i>T 40°F 504</i>	<i>1 1 1</i>
									<i>B</i>		<i>best center focus 514</i>	<i>1 1 1</i>
									<i>A</i>		<i>524</i>	<i>1 1 1</i>
									<i>B</i>		<i>494</i>	<i>1 1 1</i>
									<i>A</i>		<i>484</i>	<i>1 1 1</i>
	<i>4 slow trail</i>	<i>2 1/2</i>	<i>6.5</i>	<i>G2V</i>	<i>NEWT. SPECT</i>	<i>1200/.5</i>	<i>0.6</i>	<i>Ilw</i>				
<i>15</i>	<i>5, 30 fast trail 1 slow trail</i>		<i>5.5</i>	<i>K1Va</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>MK STD.</i>		
<i>15</i>	<i>5, 30 fast trail 1 slow trail</i>		<i>3.46</i>	<i>G0IV</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>MK STD. #73T1</i>	<i>2x FILTER IN</i>	
	<i>5, 10, 20 fast trail</i>		<i>4.2</i>	<i>G5IV</i>	<i>"</i>	<i>"</i>	<i>400/.6</i>	<i>"</i>		<i>MK STD. #75T2</i>		
	<i>5, 10, 20, 30 fast trail</i>		<i>4.6</i>	<i>G8+IV</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>MK STD. #75T2</i>		
	<i>14, 19, 28 fast trail</i>		<i>4.9</i>	<i>K0V</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>		<i>MK STD. #53</i>	<i>some clouds</i>	

Cont

Emulsion Batches:

[illegible]

Focus

Spectr. Temp.

Dome Temp./Hum.

Dome Temp./Hum. 29.0 F 82%

Transparency Conditions

258

[illegible]

Date From April 23, 1982 Observers Cy-Ri

Emulsion Batches:

ПАОБ - 3 hrs

• • • • •

• • • • •

[illegible]

Focus

Spectr. Temp.

Transparency Conditions

260

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Ne 10-10	2 foot trail		5.6	F81	NEWTON SPECT	1200/.5	40u/4	IIaOB		8d 2d		
Ne 10-10	2 foot trail		5.9	G01	"	"	"	"		8d 2d		
Ne 10-10	12 min		8.9	F7D	"	"	"	"		S.S.U.		
Ne 10-10	20 foot trail		5.4	B9	"	"	"	"		8d 2d		
Ne 10-10			~11	?	"	"	"	"			curious clouds near end	
								IIaOB				
Ne 10-10			5.2	G81D	"	"	"	"		8d 2d	clouds	

Date Fri Sat Apr 23/24 1982 Observers Hy-Ri-wir

Tao-E 12081-15042

[illegible]

Spectr. Temp. ... 54° F.

Dome Temp./Hum. . . 47°F . . . 75%

Transparency Conditions *good*

fresh coat on secondary
no corrector plate.

262

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/-	9.5 40/110	2-3	4.9	F2IV	BC	1200/.1	B.S	Two-E	B	RSCUN Ly		NO COMP
Fe/-	9.5 40/110	"	"	"	"	"	"	"	A	"		↓
								Two-E				
Fe/-	9.5 40/110	2-3	4.9	F2IV	BC	1200/.1	B.S	Two-E	B	RSCUN Ly		
Fe/-	9.5 40/115	"	"	"	"	"	"	"	A	"		
Fe/-	9.5 40/110	"	"	"	"	"	"	"	B	"		
Fe/-	9.5 40/50	2-3	5.2	K1III	"	"	"	"	A	Std dbl.	small piece broken off end.	
Fe/-	10.0								B		T = 540F	
											KK adjusted comp feed	
											mirror for old collimation	
											apparently 100 far off for slits/Fe arc	

Date Sat Sun April 24-25 Observers Ly-Ri

Emulsion Batches:

Two - E 05031-23042 2A 196

[illegible]

2A 196

Transparency Conditions Good

264

Dome Temp./Hum. 54°F 67%

no corrector plate

[illegible]

Date Apr 27-28/82
Tues - Wed

Date Apr 27-28/82 Observers ky-Kt

Doc 05031-23042

[illegible]

3042

Spectr. Temp. 50°F Dome Temp./Hum. 40°F 75% Transparency Conditions *hazy windy*Focus 522 *adjusted comparison fixed mirror*

Spectr. Temp.

Dome Temp./Hum.

266

Comparison
pe/Filter Ex

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/110	4-6	5.0	F-IV	BC	1200/.1	BS	Ilude	B	RSCV-Ly	50°F 522	
40/110	3-4	"	"	"	"	"	"	A		48°F 523	
40/110	3-4	"	"	"	"	"	"	B			
							Ilude				
				BC	1200/.1	BS	Ilude	A		45°F set 523	
				X	"	B	Il20	A		50°F set 494	very blue
				X	"	B	Il20	B			
				X	1200/.5	B	098	A			very blue
				X	"	B	098	B			

267
Date Apr 28/29, 1982 Observers Ly - Tn
Ward Thomas

Emulsion Batches:

...Tube 05031-23042

Spectr.

Focus.

Spectr.

[illegible]

Spectr. Temp. 50°F Dome Temp./Hum. $45^{\circ}\text{F}/57\%$ Transparency Conditions good Focus 522 Spectr. Temp. 45.5°F Dome Temp./Hum. $39^{\circ}\text{F}/59\%$ gusty

268

Comparison pe/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/110	3-4	5.0	F2IV	BC	1200/.1	BS	IIaD-E	A	RSCV _h			Fine
40/110	"	"	"	"	"	"	"	"	B	"		"
40/120	2-4"	"	"	"	"	"	"	"	A	"		"
40/110	"	"	"	"	"	"	"	"	B	"	$T=48^{\circ}\text{F}$	"
40/45	3-4	3.0	K2III	"	"	"	"	"	A	Std Vel		"
*lost	4x5	was	less than complete					"				
					BC	1200/.1	BS	IIaD-E	A		done manually $T=45.5^{\circ}\text{F}$	
					X	1200/.15	13	IIaD	A		(photo - probably not representative of normal test. mask too far south on stellar exp.)	
					X	"	"	"	"			
					"	"	"	"	B			
					"	"	"	"	A			
					"	"	"	"	B			

Date Apr 29/30 1982
Thurs Fri

Observers hy - Tu

До-с 05031-28042

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
46799F	Focus					00 25W	+23 47	FeNe/ N16	10-10	
46799	HD 84441	9 40.2	+24 14	20:03	20:13	00 42W	"	FeNe/ N16	7-7	4c/7
46800	"	"	"	20:24	20 29	00 59 W	"	Fe/-	13-13	4c/40
46801	HD 118216	13 30.3	+37 42	20:34	21:23	01 57 E	+37 15	Fe/-	9-9-9	4c/120
46802	"	"	"	21:26	22:14	01 07 E	"	"	9-9-9	4c/20
46802T	Spot Colln	for 46799-46806				15 min @ 15V	^{D4} 3900	^{D3} 4300	^{D2} 4810	
46803	HD 118216	13 30.3	+37 42	22 15	23 06	00 15 E	+37 15	Fe/-	9-9-9	4c/120
46804	"	"	"	23 07	23 46	00 26 W	"	Fe/-	9-9-9	4c/120
46805	"	"	"	23 49	00 34	01 11 W	"	Fe/-	9-9-9	4c/120
46806	"	"	"	00 35	01 32	02 11 W	"	"	9-9-9	4c/120
46806F	Focus Test					"	"	"	19-19	

Spectr. Temp. ... 58°F

Dome Temp./Hum. 54°F / 50%

Transparency Conditions ... Fine ... sl. hazy ... 270

Focus

Spectr. Temp. ... 53.5°F

Dome Temp./Hum. 48° / 60%

good Aurora for short time
around 20 hrs.

Comparison Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
No N/A					X	1200/.18	13	098	B		T=58°F set 512.5	Stellar weak
No N/A	40/7	2-3	3.	G1 Iab	"	"	"	Da0-e	A	Std Vel test		
No N/A	40/40	"	"	"	BC	1200/.1	BS	Da0-e	B	"	T=57°F set 521	5/wk
No N/A	40/120	3	5.0	F2 IV	"	"	"	"	A	RSCVh-Ly		
No N/A	40/120	2-3	"	"	"	"	"	"	B	"		
No N/A	40/120	2-3	5.0	F2 IV	BC	1200/.1	BS	"	A	RSCVh-Ly	T=56.5°F set 521	
No N/A	40/120	"	"	"	"	"	"	"	B	"		
No N/A	40/120	"	"	"	"	"	"	"	A	"		
No N/A	40/120	"	"	"	"	"	"	"	B	"		
No N/A	40/120	"	"	"	"	"	"	098	A	T 53.5°F	set 521	

Fri - Sat

Date Apr. 30/may 1. 182. Observers Tn.-KK-.....

Emulsion Batches:

Doc 05031-28042

[illegible]

Spectr. Temp. ..62.5.....

Dome Temp./Hum. +58°/50%

Transparency Conditions ... Clear - s/hearing ...

Focus 521

Spectr. Temp. 58° F.

Dome Temp./Hum. +52°/55%

272

[illegible]

273.

Vis Tour 2 hrs

SAT-SUN

Date MAY 1-2 / 82 Observers Tn

Emulsion Batches:
8^m 680 ... Π-0-C 05031-30092

[illegible]

Spectr. Temp. 54.5°F.....

Dome Temp./Hum. 48°F / 70%

274

[illegible]

Date May 2-3/82 Observers Tn

Emulsion Batches:

Spectr. Te
Focus . . .
Spectr. Te

Exp. Mtr.

Spectr. Temp.

Dome Temp./Hum. 54°F/73%

Dome Temp./Hum. 48° / 85%

Transparency Conditions *Fine*

276

[illegible]

Spectr. Temp. 65° Dome Temp./Hum. $58^{\circ}/75\%$ Transparency Conditions *scattered cloud*Focus 497 Spectr. Temp. 63° Dome Temp./Hum. $54^{\circ}/75\%$

(cemental corrector plate)

clear at end

278

Exp. Mir.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				B.C.	1200/-0.025	B.S.	Il20	A			vs blue
40/90	5"	22	K3 Π	BC	1200/-0.025	BS	Il20e	B	Std Vel.		vs blue
20/250	3"	6.8	G82	"	"	"	"	A	Asm Spec KK.		good comp sl blue
20/30		1.3	K2	"	"	"	"	B	Std Vel	α Bod -4.3 $\pm$.1	fine
20/20		"	"	"	830/.68	BS	Il20e	A	Std Vel		vs sl str comp
80/110		5.6	F8	"	"	"	"	B	Std Vel	T=63°F F498	fine
							Il20-E				
				"	"	"	"	A			vs blue

279

Sat-Sun

Tom looked at Saturn

Emulsion Batches:

8m 60

Tiao-E 05031-14052

25 207

Date ... MAY 15-16/82 ... Observers ... Crow - Ri ...

[illegible]

Spectr. Temp.

Dome Temp./Hum. 60°F 67%

Transparency Conditions CLEAR

280

[illegible]

Date May 21-22, 1962 Observers KK-Phi-Tu

Emulsion Batches:

8^m 68^o

Emulsion Batches:
 ... H.O.C 05031-? ^{not}_{noted}

[illegible]

? no.
... noted
26 28

Spectr. Temp. $+63^{\circ}\text{F}$

Dome Temp./Hum. $+55^{\circ}\text{F}/80\%$

Transparency Conditions .. getting cloudy

Focus 49.9

Spectr. Temp. $+55^{\circ}\text{F}$

Dome Temp./Hum. $47^{\circ}\text{F}/83\%$

282

Comparison
pe/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
26-100-200/263	5-7"	7.2	G8U1	BC	1200/-0.025	BS	Ilco-e	A	Asm sp KK	some cloud	sl weak comp good
							Ilco-e				
26-100-400/82	6"	3.9	F0p	BC	1200/-0.025	BS	"	B	Asm sp KK	cloud	fine comp good
11 16-100-200/57		2.2	AS111 65	BC	1200/-0.025	BS	Ilco-e	A	Asm sp KK	Set 502 T=56°K	comp weak good
11 16-100-400/49	6"	3.9	K2U1	"	"	"	"	B	std vel	cloud	comp w/2 OK, but
11 26-200-400/49				"	"	"	Ilco	A		T=55°K Set 502	very weak

283 Tues - Wed

Date JUNE 1-2/82 Observers T₂

Emulsion Batches:

...Doo-e 05031- fairly old

.....

.....

[illegible]

Spectr. Temp. $+64^{\circ}\text{F}$Dome Temp./Hum. $+56^{\circ}\text{F}/76\%$ Transparency Conditions... *just clearing*.....Focus *499*.....Spectr. Temp. $+61^{\circ}\text{F}$Dome Temp./Hum. $+56^{\circ}\text{F}/96\%$

284

*Cloud, seeing and focus system all conspired*Comparison
ne/Filter Exp

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
-----------	--------	-----------	-----	-------	--------------	------	----------	------	---------	---------	---------

9-14-85	2-3-5	4.2	965 +A2	BC	830/68	85	U-0-e	A	VB Blu	some cloud lingering too long	ok/exp with
9-14-85							U-0-e				
9-14-85				BC	830/68	BS	"	B	T = +61°F	Set 499	no good
9-14-85				"	"	"	"	B	"	"	m - 7.1u conts/ble
										should be discarded	Two

Date VED-THURS JUNE 2-3 Observers RI

Law-E 05031-02062

Exp. Mt.

Spectr. Temp.

Dome Temp./Hum. 44°F 91%

Transparency Conditions . . . *Good then slatted*
curtain clouds on & off
the rest of the night 286

Comparison of Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
6/- 23-27					B.C.	830/.680	B.S.	I ₁₀₀	A		T=650F F=498 vs/blue center m -5.3	
1/- 15-18	80/110	4.5	5.3	F6 IV	B.C.	830/.680	B.S.	I ₁₀₀ -E	B	Sd Val		Fine
1/- 15-18	400/180	"	7.76	B0 V	B.C.	830/.680	B.S.	I ₁₀₀ -E	A	RUNAWAY	cirrus clouds tho do all d rest on and off	S/wk
3 02 483								I ₁₀₀ -E			clouds agw near dawn	
1/- 15-18	400/235		6.42	B2.5 IV	B.C.	830/.680	B.S.	I ₁₀₀ -F	B	RUNAWAY	T=550F F=501	vs/wk
1/- 30-32					B.C.	830/.680	B.S.	I ₁₀₀ -E	A		T=530F F=501 m -10.0	center blue

Date JUNE 7-8 MON TUES Observers PLi - Ri

4th 680

Emulsion Batches:

Nav-E 05031-02062..

Trk Jelb. 09061-02062. $4\frac{1}{2}$ hrs 161 3+

[illegible]

Focus 498

Dome Temp./Hum. . 58°F . . . 95%

Transparency Conditions . good at first the weather
clouds

Spectr. Temp.

Dome Temp./Hum. . 53°F 100%

288

[illegible]

Date .. June 8-9, Tues-Wed, 1982. Observers .. Gis - Ri

Emulsion Batches:

IIaO-E.05031-02062..

[illegible]

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

Dome Temp./Hum. +62°F / 80%

Transparency Conditions .. *fazy*

Focus . . . 497

Spectr. Temp. ... +6.2° F

Dome Temp./Hum. 57°F / 95%

২৭০

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
F ₂ - 30						830/.68	BS	IIa0	A		T=67°F F=497 ^m	-6.7 cent blue
F ₂ - 15	80/150	2-3	5.0	M2.IIa	B.C.	830/.68	BS	IIa0-E	B	Std. Velocity		good
F ₂ - 15	100/620		7.76	B0.5V	"	"	"	"	A	Runaway X	T=67°F	good
0 02 9810								IIa0-E				
F ₂ - 15	100/325	2-3	7.26	B0.5V	BC	830/.68	BS	IIa0-E	B	Runaway X	T=64°F F=498	good
F ₂ - 30					B.C.	830/.68	B.S.	IIa0-E	A		T=62°F F=498 ^m	-10.9 cent blue

Date June 10-11, Thurs.-Fri. 1982 Observers GIS-Tn.....

DAO-E 12081-08062

[illegible]

[illegible]

Date 1982 Jun 11/12 Fri/Sat Observers Blu-Tu

Emulsion Batches:

.....

.....

[illegible]

262

Spectr. Temp. $T=68^{\circ}\text{F}$

Dome Temp./Hum. $64^{\circ}/71\%$

Transparency Conditions... *Cirrus (exp... 840°)*

Focus 499

Getting worse!

294

Spectr. Temp. 64°F

Dome Temp./Hum. $64^{\circ}/84\%$

Comparison
Type/Filter

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	1200/-0.025	BS	IIa-OE	A		$T=68^{\circ}\text{F}$	<i>cent/s/Rel</i>
<i>10/16</i>	<i>0.1C</i>	<i>1.29</i>	<i>K2III_p</i>	BC	1200/-0.025	150/3	IIa-OE	B	Std. Vel.		<i>vsl str.</i>
<i>200/200</i>	<i>1-2</i>	<i>6.22</i>	<i>dF8</i>	BC	1200/-0.025	150/3	IIa-OE	A	SB-Blu/Ly	<i>* changed gain to 400 at 200/125 some cloud real 400/150</i>	<i>vsl. strong</i>
							IIa-OE				
<i>20/59?</i>	<i>2-3</i>	<i>7.30</i>	<i>B2V_p</i>	BC	830/68	BS	IIa-OE	B	Blu-He*	<i>T=66°F @ begin F=499 The P.t.s!</i>	<i>weak</i>

Date 1982 Jun 13/14 Sun - Mon Observers Tn - Phi

Emulsion Batches:

Π.Ο.Ε. 12081 - 08062

Ποδ^{*}-Ε... 12081... - 12062

[illegible]

Spectr. Temp. ... 64°F

Dome Temp./Hum. 63°F / 83%

Transparency Conditions ... Fine ... vs. haze

Focus ... 4.99

Spectr. Temp.

Dome Temp./Hum. 53° / 90%

weak aurora

296

Comparison pe/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 20-25					BC	830/-68	BS	II ₄₀ -E	A		m -0.4	fine
Fe/- 20-25	40/51		-0.06	"	"	"	"	"	B	Std Vel	comp wk	fine
Fe/- 15-20	400/274	3"	8	MB	171	"	"	"	A	Asm Sp KK		sl wk
							"				should have 3600 Å for UV	
Fe/- 20-25	400/319	2"	6.8	G8V	BC	1200/-0.25	BS	"	B	Asm Sp KK		good
Fe/- 10-15	40/206	3"	4.8	KSV?	BC	1200/40.2	150/5	"	A	Asm Sp KK		fine
Fe/- 20-25	40/72	2"	3.68	F0 IV	BC	1200/A.*	BS	"	B	Asm Sp KK	* I forgot to change from UV Tilt.	ok to 4550
Fe/- 20-25	40/71	2"	3.78	F5 IV	BC	1200/+2*	BS	"	A	Asm Sp KK	Should have been 1200/-0.25	"
Fe/- 20-25	40/47	2"	5.2	G8 II	BC	1200/-0.25	BS	II ₄₀ -E*	B	Std. Vel.		good

297

Date 1982 JUN 19/20 Observers Bla-Tu

$$= A^{-1} / \text{sum}$$

Emulsion Batches:

..Π40-F..12081...-12062

[illegible]

Spectr. Temp. $T=59^{\circ}F$

Dome Temp./Hum. 50°F / 98%

Transparency Conditions Good-Excellent

FOCUS $F = 502$

Spectr. Temp. 56°F

Dome Temp./Hum. $70^{\circ}\text{F} / 100 + 30$

Cloud at end 298

[illegible]

Date WED-THURS JUNE 23-24 Observers Ki-Boms

ITD-E 2081-2062...

[illegible]

Transparency Conditions ... Good

300

pe/Filter	Comparison	Exp
1/-	30/2	
2/-	15/2	
3/-	15/2	
4/-	15/2	
5/-	15/2	
6/-	15/2	
7/-	15/2	
8/-	15/2	
9/-	15/2	
10/-	15/2	
11/-	15/2	
12/-	15/2	
13/-	15/2	
14/-	15/2	
15/-	15/2	
16/-	15/2	
17/-	15/2	
18/-	15/2	
19/-	15/2	
20/-	15/2	
21/-	15/2	
22/-	15/2	
23/-	15/2	
24/-	15/2	
25/-	15/2	
26/-	15/2	
27/-	15/2	
28/-	15/2	
29/-	15/2	
30/-	15/2	
31/-	15/2	
32/-	15/2	
33/-	15/2	
34/-	15/2	
35/-	15/2	
36/-	15/2	
37/-	15/2	
38/-	15/2	
39/-	15/2	
40/-	15/2	
41/-	15/2	
42/-	15/2	
43/-	15/2	
44/-	15/2	
45/-	15/2	
46/-	15/2	
47/-	15/2	
48/-	15/2	
49/-	15/2	
50/-	15/2	
51/-	15/2	
52/-	15/2	
53/-	15/2	
54/-	15/2	
55/-	15/2	
56/-	15/2	
57/-	15/2	
58/-	15/2	
59/-	15/2	
60/-	15/2	
61/-	15/2	
62/-	15/2	
63/-	15/2	
64/-	15/2	
65/-	15/2	
66/-	15/2	
67/-	15/2	
68/-	15/2	
69/-	15/2	
70/-	15/2	
71/-	15/2	
72/-	15/2	
73/-	15/2	
74/-	15/2	
75/-	15/2	
76/-	15/2	
77/-	15/2	
78/-	15/2	
79/-	15/2	
80/-	15/2	
81/-	15/2	
82/-	15/2	
83/-	15/2	
84/-	15/2	
85/-	15/2	
86/-	15/2	
87/-	15/2	
88/-	15/2	
89/-	15/2	
90/-	15/2	
91/-	15/2	
92/-	15/2	
93/-	15/2	
94/-	15/2	
95/-	15/2	
96/-	15/2	
97/-	15/2	
98/-	15/2	
99/-	15/2	
100/-	15/2	

Date Sat-Sun June 26/27 Observers Bk-Ri

Trav-E 12081-14062

[illegible]

Spectr. Temp. 66°F

Dome Temp./Hum. ... 62°F 84%

Transparency Conditions ... good

Focus 500

Spectr. Temp. 56°F 94%

302

Comparison pe/Filter E	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 5-5	200/250	1-2	6.20	F8V	B.C.	830/.68	B.S.	Ilad-E	A	Waterloo		Fest str Fine
Fe/- 5-5	400/500	2-3	7.31	G1V	B.C.	830/.68	B.S.	Ilad-E	B	"	T=66°F	Fine
Fe/- 5-5	400/250		7.0	G51V	B.C.	830/.68	B.S.	Ilad-E	A		T=64°F	Fine
Fe/- 5-5	400/150		5.5	K31V	B.C.	830/.68	B.S.	Ilad-E	B		T=63°F	Fine
Fe/- 5-5	20/.50		4.0	K2I	B.C.	830/.68	B.S.	Ilad-E	A			Fest str S/str
Fe/- 3-3					B.C.	830/.68	B.S.	Ilad-E	B		T=62°F T=500	cat blue
	Developed by Tn, June 29,							8min @	68°F			
											All Fe areas could be cut back by 252 angstroms	

Date ..Tues.-Wed., June 29/30
1982

Observers Gis - Ri

IIAO-E. 12081-14062.

[illegible]

Spectr. Temp. $+20^{\circ}\text{F}$

Dome Temp./Hum. 67 F / 44%

Transparency Conditions *Some scattered clouds*

Focus 497.....

Spectr. Temp. 64°F

Dome Temp./Hum. 58°F / 92%

304

Comparison Type/Filter	E	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe-	303					BC.	830/.68	BS	IIaO	A		T=72°F F=497	OK
Fe-	20	10/25	3"	3.9	K2 III	"	"	"	IIaO-E	B	Std. Velocity		Fine
Fe-	15	50/166		8.16	B0.5 I	"	"	"	"	A	Runaway *	Clouds below equator	OK
Fe-	48								IIaO-E			—missing some emulsion	
Fe-	8	100/352	3-4	7.27	B5 I	BC	830/.68	BS	"	B	Runaway *	T=69°F F=498	Fine
Fe-	15	50/200	3-4	6.17	F2	"	"	"	"	A	Cepheid/Evans	T=66°F F=499	Fine
Fe-	303					"	"	"	"	B		T=64°F F=499	cert 5/6/49

305 June 30 - July 1/82

Date _____

Date Wed-Thursday Observers Crow-Tr

Emulsion Batches:

..IIO-F 12081 - 29062

[illegible]

79062

65°F / 69%

S. residual cloud

499
.....

Spectr. Temp.

Dome Temp./Hum. /

306

Comparison pe/Filt. Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 30-3					BC	830/68	150/10	IIa O	A			OK
Fe/- R-140/40	3-5"	5.8	M5.16-17		BC	830/68	150/13	IIo O-E	B	M STD Std/Vel	Exp=12 ^m	Fine
Fe/- 11-1400/250	"	8.9	M7.5-8	"	"	"	"	"	A	M STD	* Approx comp times } Exp=132 ^m	weak
Fe/- 11-1400/345	3"	8.5	M6-M8e	"	"	"	"	"	B	Crw MIRAS	Exp. Time 130 ^m	FOOK Fine
Fe/- 11-1400/415	3-5"	7.6	M5e-M8e	"	"	"	"	"	B	"	T-619 Set 501 Exp=70 ^m	Weak Fine

Date July 1-2, 1982 Observers Bm. - Tg.

Emulsion Batches:

...PO# 12081 - 29067...

[illegible]

Spectr. Temp. ... 66.5

Focus 499

Spectr. Temp. ... 61.°F.....

Dome Temp./Hum. 68°F/66%

Dome Temp./Hum. 56°/81%

Transparency Conditions *v.s./haze but fine*

308

[illegible]

309 Fri-Sat.

Date July 2-3 / 82

Observers Gris - Tn

8th 69th

Emulsion Batches:

II-0-E 12081 - 02072

[illegible]

Spectr. Temp. 70°F.....

Dome Temp./Hum. 64°F / 69%

Transparency Conditions *cloudy*

Focus 498

Spectr. Temp. 66°F.....

Dome Temp./Hum. 61°F/81%

310

[illegible]

31 Jan-Mon

8^m 69°

Emulsion Batches:

U40-E 12081-02072

Date _____

July 4-5 1922

Observers

Rm - Tu

[illegible]

7032

65% / 70%

312

...

Comparison	
type/Filter	Exp

59°/90°.

[illegible]

Spectr. Temp. ... 73°

Focus 498

Spectr. Temp. ... 68°F

Dome Temp./Hum. 66°F. / 80%

Dome Temp./Hum. 62°/90%

Transparency Conditions *Hazy - cloudy*
nice Lunar eclipse between clouds 314

Comparison Type/Filter	E.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe- D2	141A	100/350	2-3-1968	BOSIP	BC	830/68	BS	Ito-E	A	Running	1st half very slow	Flex? Focus? exp da	
AgIO								Ito-E					
Fe- 3A-2	141A	200/90	1"	617	F2	BC	830/68	BS	Ito-E	B	Ceph film	someday T: 69°F	good Fe sl wh
					BC	830/68	BS	Ito-D	A		missing 1"		

315 Tues-Wed

Date July 6-7/82..... Observers 1, 2, WLF.....

Emulsion Batches:
8m 680 H-0-E 12081-05072

[illegible]

Spectr. Temp. *76°F*

Dome Temp./Hum. 77.6 / 82.8

Transparency Conditions 51/429

Focus 498

Spectr. Temp. 75°.....

Dome Temp./Hum. + 71°/93%

316

[illegible]

Wed - Thurs

Emulsion Batches:

ΠαΟ* 12081-07072

* Right out of Frig

2 very old
box

..... 19 128

[illegible]

Spectr. Temp. 73.5°F.....

Dome Temp./Hum. +67°E/95%

Transparency Conditions *cloudy partly*.....

318

[illegible]

319

Thurs - Fri

Date

July 8-9/82

Observers .. Crw - Tn

Emulsion Batches:

8^m 680

.. II-0-E 12081 .. -07072

20 183

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
46901F	Focus Test					0 20W	+4 34	Fe/-	28-2
46901	HD 161096	17 ^h 38 ^m .5	+4°37'	21:05	21:27	2 ² h34 ^m E	+4°37'	Fe/-	19-1
46902	R SER (HD 141850)	15 ^h 46 ^m .5	+15°26'	21:34	00:55	3 ^h 54 ^m W	+15°12'	Fe/-	15-15
46903 ✓	R AOL (HD 177940)	19 ^h 01 ^m .5	+08°05'	1:01	03:14	2 ^h 58 ^m W	+8°10'	Fe/-	15-15
46903T	Spot cal'n for 46901		-04	15 min @ 15V		b4 3900	b3 4300	b2 4810	
46904	30 PSC (HD 224935)	23 ^h 56 ^m .8	-6°34'	3:21	4:04	1 ^h 07 ^m E	-6°05'	Fe/-	21-2
46904T1	Spot cal'n	DA 4300	4 ^m batd 12081	unvac					
T2	"	11	20012	unvac					
T3	"	11	12081	24 ^{hr} vacuum					
T4	"	1	20012	24 ^{hr} vacuum					

07072
20

Spectr. Temp. $+76^{\circ}\text{F}$

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

Transparency Conditions ... *some cloud*

Focus 497

Spectr. Temp. 63.5°F

Dome Temp./Hum. $58^{\circ}\text{F}/85\%$

320

Comparison
type/Filter E

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
							$\Pi 90$	A			stellar v weak, sl blue
70/40	5"	3.9	K2III	B.C.	830/0.68	150/3	$\Pi 90-E$	B	Std. Velocity	Exp = 22 ^m	strong good
100/400	6"	8.4	M6e-M8e	"	"	"	"	A	Crw-MIRAS	Exp = 201 ^m	good
200/400	2"	7.6	M5e-M8e	"	"	"	"	B	"	Exp = 133 ^m 67°F / focus: 499	fine
40/35	1"-2"	6.0	M3III	BC	830/0.68	150/3	"	A	M standard	Exp = 43 ^m	fine
							$\Pi 20$				Fe sl wh
							$\Pi 20$				
							$\Pi 20e$				
							$\Pi 20e$				
batch 2002 slightly slower than 12081											

Fri - Sat

Date July 9-10/82 Observers Gis-Ty

Emulsion Batches:

8m 650 .IIaQ-E...12081-...08072 18 150

[illegible]

18072
18 157

75°F / 79.6.

Transparency Conditions Hazy - s/c cloudy

496

74°F

Dome Temp./Hum. *69°/90%* $169^\circ / 90^\circ$

322

[illegible]

323

Date 1982 JUL 11/12 Observers Blu-Tu
Sun/MON

Emulsion Batches:

.....

.....

.....

[illegible]

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions

324

[illegible]

Spectr. Temp. +76°F.....

FOCUS 496

Spectr. Temp. ... +63.5 °F.

Dome Temp./Hum. 168°F / 80%

Dome Temp./Hum. $+58^{\circ}\text{F.} / 98\%$

Transparency Conditions .. *some have*

Good Aurora

326

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 200/39	2"	3.9	K211	BC	830/.65	BS	IIcD-E	B	Std Vel		* Approximate exp of Fe arc	Fe Arc
Fe/- 200/400	3.5"	7.9	FST-1	"	"	"	"	A	Ceph/Evans		Fe Arc OK after adjustment	Fe w/k OK
							IIcD-E				Flexure	
Fe/- 200/453		6.2	F2	"	"	"	"	B	Ceph/Evans	T = 68°F	499	rowt OK
Fe/- 33				"	"	"	"	A	set 499	T = 65.5°F	Fe w/k →	conts/ blue

Date Tues.-Wed, July 13-14
1982

Observers Gis - Th.....

8th 680

Emulsion Batches:

II a 0-E 12081-08072

[illegible]

08072

Spectr. Temp. 73°F Dome Temp./Hum. $70^{\circ}\text{F}/70\%$

Transparency Conditions ... Good ... 5/1/78

Focus ... 498

Excellent Aurora at 21 hrs to south of Zenith

Spectr. Temp.

Dome Temp./Hum. $65^{\circ}\text{F}/82\%$

328

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 35					BC	830/68	BS	IIaO	A		no stellar	discarded
Fe/- 22	20/50	1"	3.9	K2III	"	"	"	IIaO-E	A	Std. Velocity		Fine Fe strong
Fe/- 16	20/400	1"	7.26	B0.5III	"	"	"	"	B	Runaway *	dust expose fuzzy, Fe sl str.	
Fe/- 16	20/350	1"	7.93	O5F	BC	830/68	BS	"	A	Runaway *	T = 72°F	dust expose sharper, vsl flexure good
Fe/- 16	20/290	<1"	7.85	B1.5Ve	"	"	"	"	B	Runaway *	T = 70° F = 499 ← 1.5 inches missing	

Date Wed.-Thurs. Jul. 14-15. Observers Bln. - Fln.
1982

IIaO-E... 12081-13072

[illegible]

Spectr. Temp. .. 69°F.....

Dome Temp./Hum. 65°F/H=82%

Transparency Conditions *hazy - partly cloudy*.....

330

[illegible]

331

Date Thurs. Feb. July 15-16, 1962 Observers Bln - Fln

Emulsion Batches:

$\Pi aO-E \dots 12081-13072 \dots$

[illegible]

Focus 496

Dome Temp./Hum. ... 72°F / 97%

332

Spectr. Temp. ... 77°F.....

Fe-	100
02	?
4310	

Date Sat-Sun July 17-18 Observers KT-R

Emulsion Batches:

ITC 56 09061-17072

ITCO-E 12081-13072.

[illegible]

Spectr. Temp. 75°F.....

Dome Temp./Hum. 71°F.....

334

Comparison	
Type/Filter	Ex

Date Mon-Tues, July 19-20/82 Observers Gris - Ri

Emulsion Batches:

IIaO-E 12081-18072

[illegible]

Spectr. Temp. 73°F.....

Dome Temp./Hum. 68°F/89%

Transparency Conditions *Cloudy*.....

336

[illegible]

Date Tues. - Wed., July 20-21/82 Observers G15 - R1

IIaO-E..12081-18072....

[illegible]

339

Emulsion Batches:

IIaD-E...12081-18072

*IIaD-E...12081-21072

Date Wed-Thurs July 21-22 Observers Flin-Ri.....

VACUUM FOR 340

1982

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Ex
46928f	Focus Test					0 ^h 05 ^m W	—	Fe/-	35-3
46928	HD 161096	17 ^h 38.5 ^m	+4° 37'	20:25	20:29	14 34 E	+04 35'	Fe/-	22-2
46929	HD 165174 (=V1269h)	17 ^h 59.6 ^m	+1° 55'	20:34	21:18	01 ^h 05 E	+01° 54'	Fe/-	16-16
46930	HD 165174	17 ^h 59.6 ^m	+1° 55'	21:19	21:50	00 ^h 34 E	+01° 54'	Fe/-	16-16
46931	HD 165174	17 ^h 59.6 ^m	+1° 55'	21:54	22:42	00 ^h 18 W	+01° 54'	Fe/-	16-16
46932	HD 165174	17 ^h 59.6 ^m	+1° 55'	22:44	23:29	01 ^h 06 W	+01° 54'	Fe/-	16-16
46932T✓	SPOT CAL FOR PLATES 46928-32			15 MIN @ 150.65		0 04 0 03 0 02 3900 4300 4810			
46933	HD 165174	17 ^h 59.6 ^m	+1° 55'	23:31	00:09	01 ^h 46 W	+01° 54'	Fe/-	16-16
46934	HD 165174	17 ^h 59.6 ^m	+1° 55'	00:11	01:06	02 ^h 43 W	+01° 54'	Fe/-	16-16
46935	HD 203156 (HR 8157)	21 ^h 15.4 ^m	+37° 49'	01:18	02:24	00 ^h 46 W	+38° 07'	Fe/-	16-16
46936	HD 214930	22 ^h 36.6 ^m	+23° 19'	02:28	04:15	01 ^h 15 W	+23° 44'	Fe/-	16-16
46936T✓	STP CAL FOR PLATES 46933-36			15 MIN @ 150.65		0 04 0 03 0 02 3900 4300 4810			

Spectr. Temp. ... 76°F

Dome Temp./Hum. 73°F/H=62%

Transparency Conditions *thin, cirrus clouds around*

Focus ... 49.6

clouds thickening after 01:00

Spectr. Temp. ... 72°F

Dome Temp./Hum. 65°F/H=89%

340

Compars Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe-25					BC	830/.68	BS	IIaO-E	A			
Fe-25	C/40	2	B=3.9	K2III	"	" / "	"	IIaO-E	B	STD. VEL		fine
Fe-25	20/160	2	B=6.15	09.5III	"	" / "	"	"	A	Var Blk/Fin	BROKEN 2 PIECES	
Fe-25	200/160		6.15	09.5III	"	" / "	"	"	B	"	T=76°F; middle arc misfired.	
Fe-25	200/150		"	"	"	" / "	"	"	A	"		arc weak
Fe-25	200/150	~2	"	"	"	" / "	"	"	B	"	T=75°F	
Fe-25								IIcO-E				
Fe-25	200/160		6.15	09.5III	"	" / "	"	* IIcO-E	A	"		
Fe-25	200/150		"	"	"	" / "	"	* "	B	"	Some cloud.	arc weak
Fe-25	200/425		B=6.17	F2	"	" / "	"	* "	A	Cepheid/Evans	BROKEN 2 PIECES	
Fe-25	200/250	3	B=7.39	B2IV	"	" / "	"	* "	B	RUNAWAY*	T=73°F. Cloud.	arc weak

Date Thurs Fri July 22/23 Observers KK-Ri

Doc 12081-21072

[illegible]

Spectr. Temp. 76°

Dome Temp./Hum. .. 70°F ... 7.7%

Transparency Conditions .. Streaks

Focus 495

Spectr. Temp.

Dome Temp./Hum. .. 67°F ... 8.7%

342

Comp. Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 35					BC	1200/-0.025	B3	Ilad	A		NO STELLAR - DISCARDED	
Fe/- 16	40/60	3"	3.93	Fop	B.C.	1200/-0.025	B.S	Ilad-c	B	Asc Sp/KK		weak are
Fe/- 16	30/131		5.58	G2II	B.C.	1200/-0.025	B.S	Ilad-c	A	"		weak are
Fe/He 12	40/120		4.2	K5II+ B	B.C.	1200/1.200	150/.5	Ilad-E	B	"	T=750°F	could be stronger
								Ilad-E				
Fe/He 15	40/80		0.99	A7II	B.C.	1200/1.200	150/.5	Ilad-E	A	"	Altair T=730°F F 496	strong enough
Fe/He 12	40/150		3.8	G8II +F	B.C.	1200/1.200	150/.5	Ilad-E	B	"	BROKEN 2 PIECES some clouds	
D2 4								Ilad-E			clouded in	
Fe/He 3					BC	1200/1.2	150/	HIEbf _γ	B		72°F 496	strong

Date 23/24 JUL 1982 Observers Blm-TR
FRI/SAT

Two-E. 12081-22074.

[illegible]

Spectr. Temp. 75°F

Dome Temp./Hum. 73°F/75%

Transparency Conditions ... *Stud*

Focus...498.....

Spectr. Temp. 690° F.....

Dome Temp./Hum. 64°F / 96%

344

[illegible]

Date Sat. Sun. July 24-25 Observers Rm-R

How-E 12081-22072...

[illegible]

Spectr. Temp. ... 76°F

Dome Temp./Hum. ... 68°F ... 37%

Transparency Conditions ... SOME CIRCUITS CHAOS ...

Focus 497

Spectr. Temp.

Dome Temp./Hum. 66°F 94%

346

Comparison Type/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1-10	100	386	2-3	6.2	F2	BC	830/.68	PS BS	IIaOE	A	Ceph/Evano	Cirrus discovered the wrong slit was in	sl wh uneven
									IIaOE				
1-10	100	290		6.2	F2	BC	830/.68	BS	IIaOE	B	Ceph/Evano	73°F = focus 497 "brky cloudy	
1-10	100					"	"	"	IIaOE	A		71°F	

511
Date Sun - Mon
July 25-26/82 Observers Crow - Ri

Emulsion Batches:
Nov-E 12081-22072

[illegible]

Spectr. Temp. ... 78° F.

Dome Temp./Hum. 75°F/92%

Transparency Conditions . . . *CLEAR (some . . . page) . . .*

Focus 496

Spectr. Temp.

Dome Temp./Hum. 71°F / 82%

348

[illegible]

Date 1982 July 26/27 Observers KK - Ri

Emulsion Batches:

Ilade 12081-12092...

Wet. 09061-22072 8440°C

[illegible]

Spectr. Temp.

Dome Temp./Hum. ... 72° ... / ... 75%

Dome Temp./Hum.

Transparency Conditions Scattered cloud.....

350

Comparison pe/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/- 35-38					B.C.	1200/-0.025	B.S.	II20-E	A			v sl blue
1/- 16-18	40/60	3.9	F0p	"	"	"	"	"	B	AsmSp/KK		fine
1/- 38-40	40/116	2.2	A5 III	"	"	"	"	III2Jeb	A	AsmSp/KK	clouds	fine some fog
57 980								II20-E				
50 40								II2Jeb				
1/- 10					BC	1200/-0.025	BS	II20	A			good
N4 1/- 10					"	"	"	"	B			v. strong

Date WED. - THURS. JULY 28-29 Observers G. L. & R. L.

Two-E 12081-26072

[illegible]

Spectr. Temp. ... 70°F

Dome Temp./Hum. ... 66°F 82%

Transparency Conditions ... good

Focus ... 498

Spectr. Temp. 65°F

Dome Temp./Hum. ... 60°F 95%

352

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5-1-20-12	5	these did not go out		B.C.	830/.68	B.S.	IIAD	A			
5-1-7-1	0/40	3"	3.9	K2III	B.C.	830/.680	B.S.	IIAD-E	B	ST 2.1	fine and sl. str.
5-1-5-2	00/330	3-4	7.93	05F	"	"	"	A	Runaway*	T=69°F F=499	
5-1-5-3	00/350		7.27	B5I	B.C.	830/.680	B.S.	IIAD-E	B	Runaway*	T=67°F F=500
5-1-5-4	00/70		5.29	06F	B.C.	830/.680	B.S.	IIAD-E	A	Runaway*	T=65°F
5-1-5-5	00/70	3-4	5.53	B5I	B.C.	830/.680	B.S.	IIAD-E	B	Runaway*	
5-1-20-1				B.C.	830/.680	B.S.	IIAD	A		T=65°F F=500	
5-1-10-1				"	"	"	"	A		T=66°F F=500	blue
5-1-10-2				"	"	"	"	A		T=68° F=505	ok
5-1-15-1	Arc stayed on	both times		"	"	"	"	B			good
5-1-15-2	Difficult to start	hollow cathode						B			sl. str.

Date THURS-FRI JULY 29-30 Observers Rm - Ki

Doc-E 12081-26072

[illegible]

Spectr. Temp. ... 73°F

Dome Temp./Hum. 70°F . . . 78%

Transparency Conditions .. SCATTERED CLOUDS

Focus 503

Spectr. Temp.

Dome Temp./Hum. . . 63°F . . . 88%

NEW CORRECTOR PLATE IN 354

[illegible]

Emulsion Batches:

Date Observers

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.....

.....

[illegible]

356

Comparison
Type/Filter

357

358