

7

May 29/76-

SPECIAL TEST INDEX

TV Prism guiding (Counts/time Test)
Flexure Test

June 7/8 1975
Sept 15/25 1975

2

G65 - 127-E of 4 Boo

Nov 19/20 1975

Anomalous Fo Arc Tests

Dec 2/3 1975

HIE Film G24 - K_KG664-098 Exp

Dec 5/6 1975

IIa0 strip & spot Cal'n Tests

Jan 17/18 1976

IIIaJ strip & spot Cal'n Tests

Jan 19/20 1976

G43 IIa0 exp example

Jun 4-5 1976; July 11-12, Aug 15-16

G16 IIaF exp of 88 IV star

Jun 11-12 1976, July 8-9, Sep 4-5

G16 127-05E Algol

around Mar 1-2

G16 098-01E G5E

Sep 23-24

G24 098-01E Tilt 0.6 Bot 12 Grating

Feb 20-21, Mar 23 1977

Strip Cal'n

098 Nov 16-17, prob = 1 min OK - APR 10-11 90 sec

G8 IIa0

Oct 15/16

G8 IIIaJ

Oct 3/4

2 Reg Tours till 22:30

2.5 hrs

IIa-0-c 28115-17056

Date 29/30 May 1976 Sat/Sun Observer Blm-Tn Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40590	HDE 226868	19 ^h 54 ^m 32 ^s	+39° 56'	G12	IIa-DE	25/3	60°P	*22 54*	3 4.3	A
40590 T	Coln for 40590				"	50sec				
			*perhaps realistic starting time should be 23 30						3 43	
Tonight's adventures (due to cloudy beginning)										
1. Around 2 AM EST persons with light were messing around in parking lot. I shouted & they left, I investigated & only found that my glove compartment was open. Nothing gone.										
2. Maybe it came ajar itself, but that's why I like to park in circle. My car wasn't locked as I usually do in parking lots.										
3. Just as I was contemplating phoning police, a Cruiser pulls up in circle. He wonders what I'm doing & so do I. I told him that I'm star gazing thru the clouds. He only half believed me & wanted me to prove it, so I gave him tour & told him of #1 incident but no official report made of it. He will check parking lot use often.										
Tn.										

Dome Temp

Focus

Dome Temp

Hour Angle
End

0.0 W

Didn't

TV

Dome Temp. 68°F H-90%

Transparency Conditions cloud moving in

6

Focus 10-R

Dome Temp.

Plates in Exp Box labelled "IIaF"

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00W	+35°10'	2	9.74	09.7Tab	5-3-2	Sp. Bin + Bln	800/90	cloud → cloud / 3 over day	very wk
Didn't think I would get this. Miracles do happen									
TV actually helps to maximize count rate									
Dew 15 min D19 @ 68°F Dew but ...									
Tour students should try to remember to plug in Cal'n equipment if they unplug it for tour purposes.									

Dome Temp. 67°F H=50%Transparency Conditions *Photometric* \rightarrow some haze ¹⁰ LaterFocus *10-R*

Dome Temp.

me	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1	A	01 ^h 01 ^m W	-76 20'	1"-3"	2.97	B9.5	^{NO FILTER} 6-6-6	Brt. * Program	40/120		Fine sl/gng
		Des D19 4 1/2 m @ 68°F N ₂ burst .7 dia 10 int.									
2	B	01 07 W	+ 7° 51'	1"	5.0	A _m A6-F6	7-8-7	Am std	400/140		Fine
6	C	01 03 W	+ 10° 41'	1'-2"	7.19	A0	7-8-7	A _m MR	400/180		Fine
		Des D19 8 m @ 68°F N ₂ burst .7 dia 10 int.									
9	A	00 23 W	+ 25 56	1"-2"	7.04	A1	7-8-7	A _m MR	400/180		Fine
12	C	01 11 W	+ 45 23	"	7.42	A1	7-8-7	A _m MR	400/180		Fine
17	B	00 29 W	+ 31 29	"	6.65	A0	8-9-8	A _m -MR	400/140		vis/wk

Dome Temp. 73°F H-496

Transparency Conditions *very good*

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Focus *0-R*

Dome Temp.

me	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2	A	00 50E	-15 53	1.3"	2.89	Ami	^{no filter} 7-7-7	Spec. Bin	40/160	RHS box #3	gma S/WK
		Dev	4 1/2 m	D19	0.8°F	N ₂ burst	.7 den	Wit.	RHS		
	B	00 12W	+35 11	1-3'	9.74	0971.66-6-6	Sp Bin 6/6	200/270		was out at begin * Chert	Flame?? Proc
		Dev	12 1/2 m	D19	0.8°F	N ₂ burst	.7 den	osc interval		* with Tom	
										as to pop pushing he wanted 500 counts	

Dome Temp. 66°F H=50%

Focus 0-R

Dome Temp. 62°F H=65%

Transparency Conditions *some cloud but good*

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PH.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3	A	2 15 W -5 58	1.3"	7.9	B8	6-6-6	-T ₁	400/155	thin cloud	Fine
3	B	1 16 E +41 41	1"	9.2	A0	2-3-2		800/97	some cloud	Fine
2	C	0 04 W +46 16	1"	7.3	A2+K0	3-3-2		800/120	cloud by hand	Fine
	A	no filter at				2/2	no filter			v s! blue
	A	no filter at				5/5	no filter			v s! blue
									* One extra plate "black"	
									just in case something	
									missed.	

75

1 Vis Tour 80 persons "located at Bank of" 1.5 hrs 1700-28115-03066

Where is water also?

Date June 5-6 Sat-Sun/76 Observer Tm Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	
40605	HD132792	14 55.6	-8 05	612	Ilford	9/5	62	22:00	22 20	A	
40606	HD161321	17 39.7	+14 27	"	"	13/5		22 30	23 15	B	
40606T	Coll for	40605-	07	90sec	"						
40607	HD157702	17 19.7	+18 56	612	"	13/5	65	23 32	01 10	C	
40607C	Test of effect of plate copying during exp						13/5		11/cop 3 times	11 sec	B

Dome Temp. 70°F H=50%

Focus 0-R

Dome Temp. 65°F H=65%

Transparency Conditions Hazy - some cloud 16

ne	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0	A	0 01 W	-8 21	2	4.9	A.V	8-8-8	SpBin-Ly	40/15	reason incident? Fe ok	Fine
5	L	1 47 E	+14 29	2-3	6.07	Hm	7-8-7	EclBin	400/155		Fine
0	S	0 29 W	+18 56	1-2	7.48	AO	8-7-7	Am MR.	400/110	some cloud / much cloud ← but gng vs/ut 1:10	
<p>Kicked some kids out of parking lot they had been rodding around etc up to no good but prob harmless</p>											

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IIo-o 2215-03066

IIIo-j-e 0315-03066

Date Jan 7-8 1936 Observer T. J. Van Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40608	HD 106112	12 07.5	+78 10	G12	IIo-o-e	9/5		20 47	21:16	A	53
406087	Coll. stop. obj. for 40608-12				"	90sec					
40609	HD 128092	14 29.9	+43 27	G12	"	9/5		21:22	23:19	B	135
40610	HD 156547	17 13.1	+26 00	"	"	13/5		23:23	01:29	C	102
40611	HD 112003	17 56.0	+44 05	"	"	"		01 31	03:07	A	101
40612	^{2 AND} HD 217675	22 57.3	+41 47	"	IIIo-j-e	9/9		03 13	03:49	B	02 21
406127	Coll. for 40612.			180sec	"						
	Test done	Prism	in (TV guided)					1 55	6 55		
	at 22 hr	Prism	out (telescope guided)					8 22	13 22		
	on HD 128092	Prism	in (TV guided)					14 45	19 45		
	on HD 156547	Prism in						58 23	03 23		
		Prism out						04 44	07 44		

Dome Temp.

Transparency Conditions VERY VERY HAZY

29

Focus 108Dome Temp. 78°F 75%

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
					2.89	Am	^{no filter} 7-	Sp.		traces	
8		00415W	+32025	2"	6.18	A3V	7-7-3	Sp. Bin-Blm	400/160		weak
5		00453W	+14029	2-3	6.07	Am	7-8-7	Ed. Bi. Blm	400/123	dots middle of Bar overdevelop	weak
04		10 ₁ band	@ 69°F	.7	dur		10 sec	interact			
05		10 ₂ band	@ 67°F	.7	dur		10 sec	develop		middle of Bar	

Dome Temp. 74°F 84%

Focus 15 B

Dome Temp. 58 86%

Transparency Conditions

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g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
18		0°12E	33 55	5sec	8.3	K5III	7-77	HA Vis bin	800/200	processing	s/wt
41		0°05W	113 18.5	3-4	6.1	BaW	^{no filter} 5-6-5	HA SP bin	400/500	tot 0.78 P.H.S	s/wt
		Dew D	9 Nebula	10sec			interval	7 dur 4 1/2 min		87° P.H.S.	
		" "	" "	" "	" "	" "	" "	8 min "			
15		0°30W	110°25	4	5.8	F8	7-87	Std. Vel	400/110		
13		1 37E	114 38	4	5.9	K0	78	"	400/130		

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200-B 28115-07066

200-B 03075-07066

Date *59 June* 12-13 1976Observer *BA-R*

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40623	HD 216848	19 34 16	23 41 56	G 12	200-B	25/3	60°F	23 08	03 54	4
40624	HD 217622	22 57 19	4 41 47	G 12	200-B	9/9		02 27	03 51	3
40625	cal. obj. only				200-B					
40626	cal. obj. only				200-B					

Dome Temp.

Focus

Dome Temp.

Hour Angle
End

Dome Temp. 54°F 77%

Transparency Conditions good with some haze

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Focus 108

Dome Temp. 80°F 89%

Time M.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
24		01 ^h 37 ^m W	+17°37'	2-3	7.24	A7	7-8.7	Ap-Mid	450/180		
25		01 ^h 36 ^m W	+25°57'		7.01	A1	7-8.7	Am-ME	400/180		
26		01 ^h 44 ^m W	+43°15'		7.57	A3	7-8.7	Am-ME	450/180	Broken 2 pieces	
27		01 ^h 29 ^m E	+58°17'	2-3	4.3	B7	7-8	Sp. Mtr. Pln	400/180		
		Pew DA	8 min	0.68"		Nz burst	7 dia.	10 interval			

Dome Temp. 70° H=75%

Focus 10-R

Dome Temp. 62° H=97%

Transparency Conditions Good but st Hazy

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Time S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
22	A	01 02 W	-15 53	2-3"	2.84	Am	7-7-7	Sp. Bin-Bln	40/200	hazy - SW RHS	Fine
										RHS	
53	B	0 42 E	+35 46	1-2"	7.60	WN4.5+ 09.5 Id	7-8-7	Sp. Bin-Bln	400/355	thin dust / haze bad - prob useless - wrong side?	S/SR
03	A	2 12 W	+71 21	1-2"	4.18	Ap si	6-6-6	Sp Bin-Bln	40/65	RHS	Fine
53	E	1 36 E	+42 12	"	3.63	Rsp	6-5-7	Shell-Bln	40/98	RHS	Fine

Dome Temp. 80°F H 853

Transparency Conditions Hazy 10-8 38

Focus 10-B

Dome Temp.

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10	A	02 17E	+71 24	2-4"	4.7	Apsi	7-8-6	50 filter 507 - Lnc	200/375	hazy broken 2pc RMS	slwk *
										Dew Dig 7 min 10.6°F Nebulnt. 7 dia 10sec unit 6 psi RMS	*
10	A	01 22E	+29 17	1-2"	6.5-7.7	130-G1	7-8-6	Optical/Evo	400/117	cloud	slwk
										Dew Dig 12 min 10.5°F Nebulnt. 7 dia 10sec unit 6 psi	
05	C	01 52W	+71 24	1-3"	4.18	Apsi	7-8-6	Sp Bin-Lnc	260/366	cloudy? RMS	slwk v
8	B	01 50E	+42 16	"	3.63	Blop	7-8-8	short Bk	40/165	RMS	slwk *
11	C	00 23E	+49 16	2"	4.08	Apsi	7-8-6	4x Comp	40/30		Fine
31	A	00 54W	+36 30	2-3"	4.42	BSP	7-8-7	Sp Bin Bln	40/23		Fine
	B					OK	8/3	Centre vs/ red		* All Titl 3 units fogged Discarded remainder of Unexposed Titl 03075-03066	

Dome Temp. 76°F 88%

Transparency Conditions *clear - clouds*

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Focus 103

Dome Temp. 75°F 84%

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		25 DE	+35°45'	2	6.8	WN4.5 +0.15	7-8-7	Fgi	400/250		Fine
		05°29W	+12°52'	3	6.8	AD	10-15-10	Bin Sp Bin	400/150		Fine
		01°15'W	+7°02'	2-3	4.2	A.S.	7-15	Lnc	40/17		Fine
		02°10'W	+35°45'	2	6.8	WN4.5 +0.15	5-6-5	Fgi	400/462	R.H.S. check camera up for 12.45	wk
		July 4	D19 @ 67°F	4 1/2 min		N ₂ burst		7 sec at 10 sec interval		R.H.S.	
		July 4	D19 @ 67°F	8 min		N ₂ burst		9 sec at 10 sec intervals			

Dome Temp. $74^{\circ}E$ $H=8570$

Focus $5-8$

Dome Temp. $67^{\circ}F$ $H=9470$

Transparency Conditions

*Excellent except for
blue haze in P.H.*

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Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality	
6		2 ^h 15 E	+71° 23	2-3"	4.18	Ap5	^{no 5/118} 6-6-6	Sp. Bin-Bln	40/80	RMS	Fine	
										RMS		
20	B	1 13 W	+35 11	2-4"	9.74	DA. II. 4	6-7-4	Sp. Bin. Fln	800/460		sl/wk	
										RMS		
22	C	1 15 E	+42 15	2-3	3.63	B6p	^{no 5/118} 6-6-6	Shell-Bln	40/170	RMS	vs/wk	
22	A	0 25 E		2-4"	"	"	^{no 5/118} 5-5-	Shell-Bln	40/275	Center T.H. 0.76	Fine	
		July 10th. 45 min @ 68°F in D19 No Band dur. 0.7sec & in 1.0sec							Center			
	B	no 5/118							5/5	no filter		center - red

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Ma-0-e 2815 - 07076

Ma-5-e 03075 - 28366

Date July 9/10 Fri 1957 Observer CM - Tom Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40654	HD 170000	18 ^h 22 ^m .2	171° 17'	G-12	Ma-5-e	9/5	71°F	20:41	21:12	A
40654 T	C. of A. for 40654			18000	"					
40655	HD 157779	17 ^h 20.2	137° 14'	G-12	Ma-0-e	13/5		21:16	21:21	B
40656	HD 157778	17 ^h 20.2	137° 14'	G-12	Ma-0-e	13/5		21:32	21:41	C
40656 T	C. of A. for 40655-63			9000	"					
40657	HD 147547	16 ^h 17.5	+19° 23'	G-12	Ma-0-e	13/5		21:49	21:53	A
40658	HD 161797A	17 ^h 42.5	127° 47'	G-12	Ma-0-e	13/5		22:00	22:05	B
40659	HD 155103	17 ^h 07.5	136° 04'	G-12	Ma-0-e	13/5		22:08	22:40	C
40660	HD 187013	19 ^h 42.6	+33° 20'	G-12	Ma-0-e	13/5		22:48	23:16	A
40661	HD 175538	18 51.0	+36 47	G-12	Ma-0-e	13/5		23:20	23:47	B
40662	HD 19409B	20 18.6	139 56	G-12	Ma-0-e	13/5		23:54	23:58	C
40663	"	"	"	"	"	"	68°F	00:01	00:06	A

Dome Temp. 80°F 11-677

Focus 5-R

Dome Temp. 90°F

Transparency Conditions Hazy → Cloudy

48

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		0 21 E	+37° 19'	1-2"	4.18	Ap	7-14	Spl. in	40/83	RHS box #2	Fine sl 949
		July 10	4.5 min @ 68°F in D19	No Rust	7 sec dur	c 10 sec int	From 40650	RHS "			
		0 06 E	+37° 12'	1-2"	4.5	Ap	7-14		200/90	3 ment. to do 1015-7910	Fine 949
		0 47 E	+37° 11'	1-2"	5.5	B9V	7-77		200/?	J	Fine sl 709
		July 10	@ 68°F in D19	No Rust	7 sec	10 sec dur	intend 8psi	10 min dev	From 40698		
		0 27 W	+19° 15'	2-3"	4.0	A9 III	7-7-7	wide Dis ben. park	10/20	Cloudy in	Fine sl 949
		0 45 E	+27° 45'	2"	4.2	G5 IV	7-7-7	close Dis ben. park	210/25	* Labeled 56, 57	Fine
		0 28 W	+36 00	2-3"	5.71	A5	7-7-7	close Dis ben. park	200/96	* Cloudy / clearing	Fine
		1 35 E	+33 41	"	5.5	F5 I	7-7-7	wide Dis ben. park	200/114	Cloud again	Fine
47		0 12 E	+36 53	"	5.9	M4 II	7-7-7	"	200/220		Fine
58		1 28 E	+40 11	"	2.9	F8 Ib	7-14	"	40/?		Fine
06		1 20 E	"	"	"	"	10-11	"	40/26	Thick	Fine

Dome Temp. 83°F H=75%

Transparency Conditions $sl. hazy - but good - high winds$

Focus $10-B$

Dome Temp.

50

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
06	A	1 09 W	$-8^{\circ}22'$	2"	4.9	10	7-77	spec. bin. - RB	200/80		
10	B	1 13 E	$+41^{\circ}40'$	2.5"	9.2	10	24-2	"	900/110	cloud	
										Rain	
										9" 1 1 0 10"	

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II-o-c 2815-11976

Date July 16/7 42.511 Observer M-Jr Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40665	HD 147547	15 17.5	19 23	G12	II-o-c	13/5	71°F	20:31	20:38	A
40667	HD 152863	16 50.9	25 54	G12	II-o-c	13/5		20:44	21:57	B
40667 T	16 50.9	40666-72		9sec	"					
40668	HD 159466	17 29.8	13 14	G12	"	"		22:01	0:04	C
40669	HD 196758	20 34.3	0 08	"	"	"		0:13	0 53	A
40670	HD 199442	20 52.1	0 05	"	"	"		0:54	2:37	C
40671	HD 211073	22 09.6	39 13	"	"	"		2:41	3:02	A
40672	HD 209160	21 56.2	12 38	"	"	"		3:05	3 51	B

Dome Temp

Focus

Dome Temp

Hour Angle
End

Dome Temp. 73° H=733

Focus 10-B

Dome Temp. 62° H=907

Transparency Conditions

seeing 5 windy 59
 excellent transparency

g Time S.T.	P.A.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
38	A	0 20 E	+19 17	4-8"	4.0	A1 II	7-7-7	WIDE VIT SUN SPOTS	400/16		
57	B	0 26 W	+25 51	4-2"	7.0	G8 III	7-7-7	"	900/250		
64	C	1 54 W	+13 15	3-4"	7.5	G8 III	7-7-7	"	700/290		
53	D	0 22 W	+0 29	3-4"	6.2	K0 III	7-7-7	"	400/270		
33	C	1 04 W	+0 27	3-4"	7.3	K2 III	7-7-7	"	400/270		
02	A	0 12 W	+39 40	"	5.5	K3 III	7-7-7	"	200/140		
51	M	1 14 W	+13 05	"	5.9	F1 II	7-7-7	"	200/130	sl. cloud	1.5
										W's - 2:17 @ 18"	

S7

IIIa-Jc 03075 - 28068
 IIa-Oc 22115 - 11076
 IIc-F 03075 - 16016

Date Sun/Mon July 18/19 Observer Fz-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40674	HD 130841	14 ^h 45.4	-45° 30'	G8	IIIa-J	9/7	70°F	20 ^h 42	21 ^h 22	B	2:05
40674T	Col's for 40674-75,	78, 80-83			"	9/80sec					
40675	HD 172000	18 ^h 22.2	+71 17	G12	IIIa-Jc	9/5		21:40	22:07	C	0:42
40676	HD 190918	20 ^h 02	+35° 31'	"	IIa-Oc	13/5		22:17	23:22	B	1:00
40676T	Col's for 40676-77,	80-83.		90sec	IIa-Oc						
40677	HD 186682	19 40.8	+29 01	G12	IIa-Oc	13/5		23:33	0:21	C	0:05
40678	HD 217675	22 57.3	+41 47	"	IIIa-Jc	9/9		0:30	0:59	A	2:30
40679	"	"	"	G16	IIa-Fc	"		1:04	2:02	C	1:27
40679T	Col's for 40679			5min	"						
40680	HD ^{NO 213306} 213307A	22 25.5	+57 54	G12	IIa-Oc	13/5		2:19	2:30	A	0:27
40681	HD 213307C	"	"	"	"	"		2:32	2:51	B	0:27
40682	HD 14392	2 ^h 14.4	+49 42	"	"	9/9		3:02	3:42	A	3:05
40683	HD 207330	21 42.1	+48 51	"	"	18/9		3:58	4:02	B	2:18

Dome Temp. 77°F 4:30

Transparency Conditions Very good - sl haze

58

Focus 5-B

Dome Temp. 72°F 8:57

Some clouds, but light

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2	B	2 05 W	-15 53	2.5"	2.87	Am	no filter 10-1009	6 in sp Bin	40/200	Reversed RNS	fine
7	C	0 42 E	+71 20	1-2"	4.18	Ap S	no filter 6-7-7	Line-sp Bin	40/80	Reversed RNS	fine
22	B	1 10 E	+35 47	1-2"	7.6	Ap S	7-7-7	Fgi-sp Bin	400/300		not too
0	C	0 05 E	+29 13	1-2"	6.8-7.9	FO-61	7-7-7	Ceph-Rim	200/110		fine
57	L	2 31 E	+42 12	2"	3.63	B6p	7-7-7	Bin Sp Bin	40/192	RHS	fine
2	C	1 27 E	"	1-3"	"	"	5-6-5	"	40/280	center	fine
30	A	0 27 E	+58 18	1-2"	3.7	F5J6	7-7-7	Bin Sp Bin	200/116	SC/A	fine
54	B	0 03 E	"	2"	6.3	B7	7-7-7	"	200/70		fine
42	A	3 05 E	+50 17	"	5.44	Ap S	8-7-10	Ap Bin	200/160		fine
02	B	2 12 W	49 13	"	4.08	B25III	9-9	Ma-Comp	40/30		fine

0 10 1/2 2-17 @ 68°F

65

Date July 27/28 Observer M.W. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40680	SLIB?	1756.1	-8.07	612	Ilao	13.5	75°	9 00	10 10	A
40683	HO 19055	1758.9	28.02	"	"	13.3		9 30	10 24	B
*40689 92	HO 19055	20 00.9	15.73	"	"	"		11 13	12.36	A
*40695 93	211419	22 11.8	33.14	"	"	"		1 04	2 50	B
*40696 94	213358	22 25.9	51.54	"	"	"		3 05	4 01	A
*40694	CALIBRATION	for 40689-96		"	"	90sec		90sec		
*Relabeled by In, plates also.										

Dome Temp. 71° 74%

Transparency Conditions 9000 *6/4 fair seeing*

66

Focus

very good *seeing, good*

Dome Temp. 66 85%

RA - 15sec

MILKY WAY good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	-8 33						200/4	<i>before 5:15</i>	No Good
	28 19		8.4	<i>1-5</i>	7	FSV LIST II HD	800/14	<i>star very small</i> <i>LHA 1/200</i>	
00 38 W	15 28 2	4-5	6.3	<i>M. III</i>	7-7-8	SP Bin Hd	800/750		
00 43 W	? scribbled	5	7.4	FRV	7-8-8	Vis Bin Hd	800/150		
01 38 W	52 17	4-5	6.5	68 II	8-16	Vis Bin Hd	800/120	<i>cloud water dickerly crazy</i>	
								<i>Left + 4/1/18</i>	
								<i>all 13th D. 19 @ 0500</i>	

Dome Temp. 24°E 96570
 Focus 10-B
 Dome Temp. 72°F 9570

Transparency Conditions *Hazy but clouds staying away*

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 33 E	+71 17	2.5"	4.18	B4	8-8-8	Lanie	40/18		fine comp. st. wh.
1 50 E	+3 19	"	6.36	B4	8-8-8	3 Cap...-Lra	400/140		v. st. wh.
1 00 E	"	"	"	"	8-8-8	"	400/137		fine
0 31 W	"	"	4.18	APS	8-8-8	Lanie	40/20		fine, comp. wh.
0 05 W	+3 19	2"	6.36	B4	8-8-8	3 Cap...-Lra	400/139		fine, comp. wh.
0 52 W	"	"	6.36	B4	8-8-8	3 Cap...-Lra	400/140		fine, comp. st. wh.
1 43 W	"	2"	"	"	8-8-8	"	400/95	<i>smoked Thick</i>	st. wh.
								10" D-19 @ 68°F	

Dome Temp. 73°F H=936

Focus 15-R

Dome Temp.

Transparency Conditions

SI Haze - *50% clear*
at 23"

70

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
57	A	034 E	+28 25	3-5	6.44	B37C	89-7	Lnc	400/135		
15	B	016 E	"	4-5"	"	"	77-7	Lnc	400/85		
9	A	1:34 W	+03 19	3-4	6.36	B3	6-7-6	β6 plate Lnc	400/80		
11	B	1:56 W	"	4-6"	"	"	6-7-6	"	400/84		
30	C	2:14 W	"	"	"	"	6-7-6	"	400/85		
51	A	2:35 W	"	"	"	"	6-7-6	"	400/85		
13	B	2:57 W	"	"	"	"	6-7-6	"	400/85		
37	C	3:23 W	"	3-4"	"	"	6-7-6	"	400/84		
7	A	4:54 W	+29 15	"	6.27	TOG	88-3	(Cyclic) / Full	400/135	{RHS * } Puch: 1/2 sec {RHS * } det. (should have got over 200 counts)	
									all other 10" D-19 @ 68°F		

Dome Temp. 71°F 74%

Transparency Conditions *Scattered cloud*

72

Focus *15-B*

Dome Temp.

Time T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5	A	101E	$71^{\circ} 16' 12''$		4.18	ApSi	^{no filter} 7-7-7	Lne	40/75	cloud LMS	low
5	B	021E	" "		"	"	^{no filter} 7-7-	Lne	40/40	sl cloud clouded in R45 Rev 23	5 wk, low
										$4\frac{3}{4}''$ D-19 @ 68"r	

73

Dr. J. c 07075-26076

IIa-O-e 28115-01086

* E-o-e 28115-02086

Date Aug 23 Mon-Tues Observer Lne-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40713	HD 170000	18 22.2	71 17	G12	IIIaJc	9/5	63°F	20:48	20:54	A	0:516
40713T	Calc for 40713			180sec	"						
40714	HD 199140	20 50.1	28 06	G12	IIaOe	18/3	"	21:02	21:19	B	2:05
40715	"	"	"	"	"	"	"	21:25	21:46	C	2:37
40716	"	"	"	"	"	"	"	21:48	22:06	B	2:7
40717	"	"	"	"	"	"	"	22:07	22:26	C	1:58
40718	"	"	"	"	"	"	"	22:28	22:45	A	1:39
40719	"	"	"	"	"	"	"	22:47	23:01	B	2:2
40720	"	"	"	"	"	"	"	23:02	23:15	C	1:08
40721	"	"	"	"	"	"	"	23:14	23:31	A	0:5
40722	"	"	"	"	"	"	"	23:32	23:46	B	0:27
40723	"	"	"	"	"	"	60°F	23:54	0 8	C	0:15
40724	"	"	"	"	"	"	"	0 9	0 22	A	0:31
40724T	Calc for 40724 - 24				"	90sec	"			B	
40725	HD 199140	20 50.1	28 06	G12	IIaO-e*	18/3	59°F	0 23	0 52	B	0:28
40725T	Calc for 40725				"	90sec					

Dome Temp. 72°F 74%

Transparency Conditions

Excellent - 2/hoze

Focus 15-B

Dome Temp. 72°F 17-8670

Plates 12 Exp B37 = 1

Time T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4	A	0157E	+71 20	2"	4.8	A.S.	^{no filter} 7-7-7	Line	410/35	5" D-19 @ 68*	high fog occasionally over-developed
9	B	2 ^h 05E	+28 28		6.44	B2W	6-7-6	Line	200/40		Line
13	C	2 37E	"		"	"	6-7-6	"	200/45		
16	B	2 17E	"		"	"	6-7-6	"	200/45		Line
18	C	1 58E	"		"	"	6-7-6	"	200/45		
25	A	1 39E	"	2-3	"	"	6-7-6	"	200/45		
1	B	1 23E	"		"	"	5-5-5	"	200/44		BAD - NOT ISO!
18	C	1 08E	"				5-6-5	"	200/45		
21	A	0 51E	"		"	"	5-6-5	"	200/45		
46	B	0 37E	"		"	"	5-6-5	"	200/45		
9	C	0 15E	"		"	"	5-6-5	"	200/45		
27	A	0 2E	"		"	"	5-5-6	"	200/45		
52	B	0 28 W	+28 28	"	6.44	B2W	6-6-3	Line	200/31	cloud Push plates 12-2-17 @ 68*	

all others 10" D-19 @ 68*

Separated from rest of plates

Dome Temp. 74°F H-6870

Transparency Conditions NAZY Horizon

76

Focus O-R

Dome Temp. 72°F 90%

Time	Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
6	Q 41W	77 40	1	6.6	A0	7-10	SP BIN Hd	200/80		fine
8	O 40E	29 10	<1.5"	9.1	G8 III	8-11-8	SSV LIST Hd	800/254		fine
15	C 1 34E	26 29	1.3"	8.9	K4 III	8-10-8	"	800/270		sl. wk
18	A 2 18W	15 30	2"	6.3	M III	8-11-8	SP BIN Hd	400/181	s/l length may have been 1.5 → 1.6	sl. wk, gutt.
20	C O 16E	28 35	1.2"	9.0	K5 III	8-11-8	SSV LIST I	800/263		sl. wk
21	B O 10W	30 57	"	8.8	K III	8-16?	SSV LIST I	800/239	NE d1 w0 ch. to d10 cat w/ 100% d10	sl. wk
									<p>↑ Comp dbl due to break Broken 2 pcs <u>on one piece.</u></p>	
									at 10 ^m D-19 @ 650E	

Dome Temp. 74°F 74°
 Focus $0-$
 Dome Temp. 60°F 88°

Transparency Conditions *Thin cloud*

78

Exp Box #1

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3	C	0 15 W	+14 30	2-4"	6.00	Ami	8-11-8	E-1. Pin-Blk	400/160		
1	C	0 43 W	+71 22	2"	4.18	Aps	^{no filter} 7-8-8	Sp Bin-Lne	40/83	1 inch bracket of RNS	Sp
42	B	2 33 E	+42 16	3-4"	3.63	B6p	^{no filter} 5-7-5	Skull *	40/155	Thicker (good) Middle Box	Sp, mag
11	C	1 04 E	+42 16	2-3"	3.63	B6p	^{no filter} 7-8-7	Skull * 2	40/200	RNS	Sp, mag
1	B	1 31 E	+59 04	"	2.6	F2 IV	^{no filter} 7-7-7	Ed Star Pro	40/235	RNS	4-5, mag
29	C	0 48 W	+58 20	3-4"	6.3	B7	8-11-8	Sp Bin-Blk	400/150	SCapC	Sp, mag NOT 1100
13	A	1 19 E	+50 05	2"	5.44	Apsi	^{no filter} 7-7-7	Ap Blk	40/63	63 And mounted RNS	Sp
										11 20	10" 017 @ 60F
										others	6" 012 @ 60F

Dome Temp. 73°F H=90%

Focus 10-R

Dome Temp. 74°F? 98%

Transparency Conditions Just clearing - some cloud

80

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
14	B	4 27 W	+25 45	2.3"	6.67	B9	8-10-8	Ap-MR	400/175	Cleared slit, then started	sl wk
									P	Too many clouds	
										Broken 3pc sensor	
										do what you want with it	
										Better ask MR first	

Dome Temp. 76
 Focus 10-B
 Dome Temp.

76%
 81%
 94%

Transparency Conditions

good seeing but hazy. 84
 clouds in NW part
 of field
 7:15 AM

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
13	A	00 126	38 34	2	7.2	K ₀ III	8-11-8	V.3 Bin Hd	400/175		sl. wh.
13	B	2 39 W	28 18	2	9.6	K ₁ III	8-11-7	SSV LINTJ Hd	800/175	fringe large can't see it 1 m / 1000	fish RHS v. wh.
										40741 & 40741T 9 1/2 ^m D-10 @ 69°F	
										40742 12 ^m . . .	

85

Date Aug 15/16 (Sun/Mon)

Observer BB

Julian Day 3001.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40743	RV Obj.	17 ^h 29. ^m 7	+7° 19'	G43	Il-Dc	20f.5		20:49	22:57	A
40744	SILV Obj	20 ^h 3. ^m 8	+46° 1'	G43	"	"		23:42	4:02	"
40744T	calibration					90°				
<p>note: Please over-develop 40743 - maybe something will be on the plate.</p>										

Dome Temp. 67°F $H = 70\%$

Focus $3B, 10R$

Dome Temp. 58.5°F $H = 85\%$

Transparency Conditions *cloudy → clearing*

86

Time A.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
57	$2^{\text{h}}46^{\text{m}}\text{W}$	$47^{\circ}06'$		~ 10.3	AO	2-3-2	Enlarging lens	800/25	1-2 terrible seeing	sl. wk.
	$5^{\text{h}}17^{\text{m}}\text{W}$	$46^{\circ}45'$		9.3	AS	3-2-2	"	800/20	before start of exposure 62°F → 10°F	fine
									↑ The plate looks as if it was re-focused during exposure??	No Good! blank
									40743 15" 0-19 @ 68°F	
									others 10" " "	

Dome Temp. 74 70%
 Focus 108 7870

Transparency Conditions good 90

Dome Temp. 66 70%

spring changeable wild weather in RA 7.2
 no 4.000

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00	52W	+03 24	4"	6.9	K ₂ III	8-9-8	Vis Bin Hd	800/220		fine
2	07E	+30 47	3"	8.8	K ₂ III	8-15	SSV 215± Hd	800/9	5.1 RATE 5m/count	fine
2	02W	+22 26	4"	6.6	G ₅ III	8-9-8	Vis Bin Hd	800/275		sl. dr
2	17N	+54 10	4"	7.2	F ₂ II	8-7-8	"	800/40		100
									PUSH AND COUNTS PERIOD	
									15 ^m D-19 @ 68°F	
									<u>New D-19</u>	

Dome Temp. 73°F $H=80\%$
 Focus $10-B$ 94%
 Dome Temp. 66

Transparency Conditions *Very good* - sl. haze

92

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
32	A	0 0	+28 16	2"	8.36	G5IV	8-11-9	SSV LIST II Hd	800/292		fine
57	B	0 0 W	+25 51	1.2"	8.44	K2III	8-11-8	SSV LIST II	800/278		fine
34	C	0 45 E	+30 50	"	8.8	K3III	8-11-8	SSV LIST I	800/290	NE STAR 1/2 cloud 3/4 hr.	fine
35	A	0 15 W	+29 23	"	7.49	K0III	8-11-8	SSV LIST II	800/235		sl. str
40	B	0 11 W	+28 18	2"	7.60	K1III	8-11-8	"	800/248		sl. str
										10" D-19 @ 68°F 11d0	

Dome Temp. *Hot* H-743Transparency Conditions *Hazy but OK*

96

Focus *10-B*

Dome Temp.

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
08	A	0 13E	+71 22	1"	4.18	Ap 51	^{no filter} 7-9-8	Sp. Bin-Bl _n	40/84		sl. wh, sl fog
2	B	0 11E	+35 45	1-2"	7.60	^{WNA 4.5} _{+09.5}	8-8-8	Sp Bin-Bl _n	400/300		fine
30	C	2 26W	+29 15	1-2"	6.8-7.6	F0-61	8-8-8	Cepheid/Evans	400/240		fine
21	A	0 35W	+58 19	2"	6.3	B7	8-8-8	Sp. Bin Bl _n	400/150	5 Ceph C. 1-INCH PIECE BROKEN OFF, LOST	fine
3	B	2 46E	+41 19	2"	5.78	dF2	8-8-8	mistake	400/140		sl wh, quick
3	C	1 20E	+41 24	2"	7.26	08V	8-8-8	Sp Bin-Bl _n	400/140		sl wh
44	A	1 31E	+48 07	2"	7.80	B7V	8-8-8	Ecl Bin-Bl _n	400/130		sl wh, quick
										III 25 4 3/4" D 19 @ 67°F	
										III 20 10" " "	

99

IIa-J-c 03075 -22086
IIa-O-c 28115 -19086

Date 22/23 Aug Sun/Mon Observer Fgi-Tn-Zd Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40770	HD 170000	18 ^h 22.2	+71° 17'	612	IIa-J-c	9/1.5	78°F	19:47	20:49	B
40770 T	Comp for	40770			"	120 sec				
40771	HD 190918	20 ^h 2.2	+35° 31'	"	IIa-O-c	13/1.5		21:00	0:13	C
40771 T	Comp for	40771			"	90 sec				
40772	HDE 235679	21 ^h 55.0	+54° 01'	"	"	25/4		00:23	04:20	B
40773	HD 24760	3 ^h 51.1	+39° 43'	G 8	IIIa-J-c	9/1.7		04:29	04:55	C

Dome Temp
Focus
Dome Temp
Hour Angle
End
00:15
1:57
04:12
01:25

Dome Temp. *Warm* $H = 72\%$

Transparency Conditions *Hazy*

100

Focus *20-B*

Dome Temp.

ing Time S.T.	P.H.	Hour Angle Erel	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04:49	B	00:15W	71° 20	2"	4.18	Ap Si	^{NO FILTER} 7-8-8	Line *	40/81	May have fogged dumb accident.	sl. wk, one end fogged
13	C	1:57W	35° 45	1.2"	7.60	09.51 LUNAR	8-8-8	Fgi Thesis	400/300		good
04:20	B	04:12W	54° 23	1.2"	9.21	32.51	5-6-6	Blu Sp Bin	800/238	broken, but still connected	fine
01:50	C	01:12E	39° 58	"	2.71	B0.5	^{NO FILTER} 5-8-6	Blu Sp Bin	40/116		wk *
										Ilx 0 10" 017 670	
										uaj 4 3/4	
											* insufficient exposure

Dome Temp. *Cooler* H693

Transparency Conditions *Very Good*

102

Focus *20-B*

Dome Temp.

g Time P.H. S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
49 A	0 6E	+31 28	2.4"	6.65	A0	8-9-9	Am-MR	400/180		fine
48 B	1 34W	+35 45	2.4	7.6	^{095 Job} +41N 95	8-8-8	Sp Bin-Fgi	400/280	Much cloud	fine
76	1 53W	+42 24	2.5	6.7	B.9	8-8-8	AP MR	400/138	Scattered Cloud Cloud!	exp. fine some scratched
									11" D-19 @ 67°F	

Dome Temp. Cool #70%

Transparency Conditions Excellent

104

Focus 10-B

mainly Photometric
A SUPER night

Dome Temp.

Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
27	A	0 26 W	+62 23	4-2"	7.44	G8II	8-8-8	Vis Bin-Hd	400/225	LHS Box #1 LHS	
40	B	4 25 W	+20 18	1-2-3"	10.5	F5I	5-4-4	F6 Sge	800/190	some haze at 0 ^h fields. Seemed to brighten after 0 ^h as seen on TV " " to be brighter on the hour for 10 mins? Perhaps imagination? ie sl brighter than nearby star to the SW then sl fainter for most of the hour. * Both 40778 & 40778T at R HS & should be pushed	Plate shifted L to disp
46	C	2 01 E	+27 54	1-2"	7.60	G5I	8-9-8	SSV	400/190	LHS	
28	A	1 46 E	+22 24	"	6.11	B8	10-8-8	Ap MR	400/170	LHS	
58	B	1 0 E	+39 59	"	2.71	B05I	6-5-9	sp Bin-Tn	40/130	Middle Box #1	sl. str
										noticed a "white spot" about 25° N of Spoke	
										IIaO 11" D. 9.0 675	
									40778 - IIIaO 11" " "		
										IIIaO 7" 0.90 675	

Dome Temp. *WARM, H = 68%*

Transparency Conditions *SOME clouds*

106

Focus *10-B*

Dome Temp.

Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10	A	0 10E	+71° 20	1"	4.18	ApSi	^{NO FILTER} 6-8-7	Line *	40/80	} RHS	fine
13	B	0 11W	+35° 40	1"	7.6	^{WN4.5} 1045IN	6-8-7	Splis-Fgi	400/308	some cloud	fine
50	C	0 22E	+57 03	-	^{V=5.88} 6.81	58 III	^{NO FILTER} 5-4-4	^{RS CV} test stm	200/250	Tilt 0.7 B } Middle of Box # 1	fine
21	B	04:24W	+71 21	1"	4.18	ApSi	^{NO FILTER} 7-7 7	Line *	40/70	RHS Reversed <u>clouds</u>	st. w. k.
										H&O 10" 0.19 6"	
										DOF 5" . . .	
										DOJ 6" . . .	

Dome Temp. Warm 88%

Transparency Conditions very hazy

108

Focus 10-B

getting windy too

Dome Temp.

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			2"			3-3	EB	800/18	Not numbered but may as well be	
1 56	W	+35 44	1-2-3	7.6	095K	8-8-8	SIRN-Fiji	800/440	cloud by 0h	
									120 10" 0.1 10"	

Dome Temp. ^{It's really cold, brrrr!! Shiver, shake.} cold H=84%
 Focus 20R H=977
 Dome Temp.
 Transparency Conditions *Photometric*

112

Time I.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
48	A	0 03W	+35° 45'	3"-5"	7.6	WN4.5I 09.5I _a	8-7-8	Fgi WR*	400/300		
52	B	2 06W	"	2"-5"	"	"	8-7-8	"	400/300		
5	C	4 46W	+71 18	2"-6"	4.18	ApSi	NO FILTER 7-8-8	Line *	40/80	RHS	Reversed
56	A	5 12W	+35 42.7	"	7.6	WN4.5I 09.5I _a	7-8-7	Fgi WR*	400/300		Reversed
46	B	7 47W	+71 24	1"-3"	4.18	ApSi	NO FILTER 7-8-6	Line *	40/80	RHS	Reversed
54	B	0 54W	+41 24	1"-2"	7.26	DBI	8-8-8	Sp Bin B/n	400/40		
										Vacuum was low - 1 1/2 inches short of full vacuum this AM	
										ISO 100 017 600	
										NET 65	

773

YORK U.

IIa-E 28115-25086

Date Sept 1/2, Wed/Thurs Observer Fj-Ri/JF-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40797	HD 190918	20 ^h 2.2	+35 ^o 31	G12	IIa-Oc	13/5	64°F	19:46	21:21	B
4079771	slit step wedge for plate 40797				IIa-E		90°			
	spectrophotometry							21:30		
	58 Angl std									
	Cyg X=1									
	58 Angl std									
	29 Per std									
	HD 190918									
	29 Per									
	x Per									
	29 Per								04:00	

775

IIa-D 28115-25086

Date Sept 2/3 Thurs/Fri Observer F.Ri/SF.Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40798	HD 190918	20 ^h 2.2	+35° 31'	G12	IIa-D	13/5	60°F	19:33	20:49	B
40798T1	cal slip wedge for plate 40798 spectrophotometry		York U.		IIa-D	90µ		21:00	09:35	

Dome Temp.

Focus

Dome Temp.

Hour Angle
End

Dome Temp. cool H=75%

Transparency Conditions scattered cloud

120

Focus 0.2

Dome Temp.

exposure box #3

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
7	A	00407E	+35° 45'	3"	7.6	NN4.5H 09.5H	7-8-7	Fgi WK*	400/300		fine
7	B	02415W	+71° 19'		4.18	ApSi	ND FILTER 7-7-7	Lne *	40/80	RHS H=88%	fine
33	C	00430W	+55° 39'		V= 6.49	9G4	ND FILTER 5-5-5	RSCVn test #	400/378	R.H.S middle of Box middle of Box clouded out	fine
										II & F 6" D19 68°F	
										III & J 6" D19 68°F sl. overday.	

Dome Temp. 79%

Focus ... 20R

Dome Temp. 95%

Transparency Conditions ... thin cirrus clouds around 122

exposed Box #2

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
14	A	0 ^h 39W	-71 20	3-4	4.18	ApSi	7-77	LINE #	40/80	R.H.S.	
15	B	2 ^h 30W	+29° 15'	4"	6.2-7.1	F0.4	7-8-7	Evans (spid)	400/200	R.H.S.	
16	A	4 ^h 20W	+35° 43'	3-4	7.6	WIN 4.5 0.5 SH	7-8-7	Fgi WR*	400/301		
17	B	0 ^h 27W	+41° 22'	3-4	7.26	08II	7-7-7	Bli-Bln	400/160		
18	C	0 ^h 07E	+48 04	3-4	7.80	BTU	7-3-7	Bl-Bln	400/160		
										IIa0 10" D19 68°F	
										IIIa5 6" D19 68°F - sl. overex	

Dome Temp. 67%

Focus OR

Dome Temp. 80%

Transparency Conditions

cirrus clouds around first half
clear again after midnight 126

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
07	-	14 ^h 23 ^m	+33° 54'	2	^{4.5} 8.24	K5 ^{III}	7-8-7	Vio. Ben	800/256	Very thick	fair
06	0	014/2W	+26° 11'	2-3	8.16	K0 ^{III}	7-8-7	^{Hd} SSU. LIST II	800/300		sl. dr.
52	0	01442W	+25° 50'	2-3	8.26	G8 ^{III}	7-8-7	^{Hd} SSU. LIST II	800/300		sl. dr.
										10: 019 43°	

Dome Temp. *cloudy* H 73^o

Focus 10-B

Dome Temp. *cool* 99^o

Transparency Conditions *S1 Hazy - very hazy*

Full moon

max *of* ~~the~~ morning

128

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
14	A	0 48 W	+71 21	2.4"	4.18	Ap si	^{no filter} 6-7-8	Sp Bin-Lne	40/75	RHS of Box #1 RHS	
30	B	1.21 W	+35 45	2.3"	7.6	WN45 0.95	7-8-7	Sp Bin-Fji	400/320		
10	C	0 22 E	+58 18	1.2"	6.3	B7	8-8-8	Sp Bin-Blu	400/145	same thin cloud scope	
10	A	4 46 W	+71 18	1"	4.18	Ap si	^{no filter} 8-8-8	Sp Bin-Lne	40/73	RHS Reversed	
11	B	1 31 W	+42 29	1"	6.77	B9	8-8-9	Ap MR	400/175		
13	C	0 57 W	+16 03	1.2"	5.8	B8	8-9-8	"	400/150		*
	A						5/5	no filter		Fog	
								* KK		more had need be cut,	
										I20 10" D19 6"	
										I25 6" D19 6" - over dew, use 5"	
										* 40817 dew. separately 10 1/2" D19 6"	

Dome Temp. Cool H=80%
 Focus 40-R → 30-R for 40819
 Dome Temp. 90%

Transparency Conditions Clearing by 226 very good
 130
 Karl* Renumbering may be appropriate

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
32	C	3 14 W		3"	8.7	B2	3-2-2	Var-BB	800/40	RHS Push plate RHS	ok ^{but} ok
20	B	2 22 W	+35 42	2"	7.6	WN4.5 09.5	3-	SpBin-Fji	400/90	RHS - Forget Getting Tilt	9.4
0	C	4 03 W	"	"	"	"	8-7-7	"	400/302	new start	Fine
40	B	1 32 E	+28° 40	1"-2"	V=6.5 6.5	65V +K0V	8-7-7	RSCVn-Fji	400/220	UX Ari	
47	C	0 38 E	+0° 25	2	6.82	65I	8-8-8	"	400/218	HR 1099	
03	B	1 50 W	+41 20	2	7.26	08I	6-8-8	Blk Sp Bin	400/143		vis/ok vis/ok
	A						5/5	no filter			
										A0818-19 15" D19 65°	
										others 10 1/2" D19 65°	

Dome Temp. Warm H=64%

Transparency Conditions Very Good - sl haze } 32

Focus 3-B

Dome Temp. H=84%

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
27	E	0 16 W	+71° 21	1"	4.18	Ap Si	NO FILTER 7-7-7	Line Trip Sys	40/80	RHS Box #3	Fine
46	C	0 13 W	+29° 14.5	1"	6.3-7.6	FO-61	8-8-8	Cepheid/Em	400/203		
55	B	1 01 W	+35° 45	1"	7.6	WV4.54 01.51	7-8-8	Fg WR*	400/300		sl w/
10	A	3 25 W	+54° 23	1"	9.21	B2.51	6-7-7	Sp Bin Bin	800/400	some thin cloud	Fine inf
04	B	0 05 E	+41° 23	1-2"	7.26	08 I	8-7-8	Sp Bin Bin	400/140		
31	A	1 12 E	+39 57	"	2.71	B0.5 I	NO FILTER 6-11-10	Sp Bin - T _n	40/170	RHS	fine
7	B	2 13 E	-8 10.3	"	0.3	B8 p	10-18	Br*	40/175	β Ori	sl. str.
33	A	1 32 E	+33 47	2-3"	5.82-6.49	Ap	8-8-8	Ed Bin/Bin	400/140	cloud	
										IIaO 10 1/2" D19 68°	
										IIaJ 4 3/4" D19 68°	

133

IIa0-e 28115-09096

IIa0-e* 28115-13096

IIIa0-e 03075-13096

Date MON/TUES Sep 17/14 Observer Est-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40832	HD 176003	18 53.0	+44 05	G 12	IIa0-e	131.5	70°F	19 10	20 05	A	025W
40832T	Calc for 40832-35.				"	90sec					
40833	HD 190165	19 58.0	+45 11	G 12	"	131.5		20 09	21 56	B	1 10W
40834	HD 208835	21 53.9	+46 23	"	"	"		21 58	0 11	C	1 30W
40835	HD 217695	22 57.4	+47 24	"	"	"		00 13	2 17	A	2 33W
40836	HD 26571	04 07.0	+22 09	"	IIa0-e*	91.5		02 26	3 09	B	1 46E
40837	HD 51418	06 52.2	+42 26	"	"	"		03 12	4 32	C	3 08E
40837T	Calc for 40836-37				"	90sec					
40838	HD 24760	3 51.1	+39 43	G 8	IIIa0-e	91.9	63°F	04 43	5 02	A	20 21W
40838T1	Calc for 40838.				"	180sec					
40838T2	flame star				IIIa0-e	9				A	
40838T3	"				"	"				B	P.S.
T4	"				"	"				C	P.H.V.
T5	"				"	"				A	P.S.
T6	"				"	"				B	P.H.V.
T7	"				"	"				B	H.S.

137 Visitors ~ 50 one hour ~ 1 3/4 hours

IIa-e 28115 - 13096
 IIIa-e 03075 - 16096
 127-05 00095 - 16096

Date Sat/Am Sept 18/19 Observer Fj-Tn/Ed Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40839	HD190918	20 ^h 2.2	+35 ^o 31	G12	IIa-D-e	13/5	69°F	21 15	23 28	A
40839T	Calc for 40839.				"	45sec				
40840	HD19356	3 ^h 1.7	+40 34	G8	IIIa-J	9/7	65°F	02 00	02 43	A
40840T	Calc for 40840, 44.				"	180sec				
40841	HD19356	3 ^h 1.7	+40 34	G16	127-05	9/5	65°F	02 47	3 45	C
40842	"	"	"	"	"	"	"	3 46	4 26	A
40843	"	"	"	"	"	"	"	4 27	4 53	B
40843T	Calc with only Filter				127-05		$\lambda = 5100$			
40844	HD24760	3 51.1	+39 43	G8	IIIa-J	9/7		4 57	5 19	C
40844T	Calc for 40841-43				127-05		HD, 5950, 5100.			

Dome Temp. *was on 11-8570*

Transparency Conditions *Some haze & cloud 138*

Focus *3-B*

Dome Temp. *M=807*

Il-0 & Il-1 in Box #2

g Time ST.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
28	A	2 59 W	+35 44	2"	7.6	<i>WNH. ST 09.51a</i>	8-8-0	Fgi NR*	400/200	<i>some cloud } 3* P. us / LHS LHS</i>	
43	A	0 48 E		2-3"	<i>V= 2.2</i>	88V	10-10-10	zd-algal	40/185	Tilt -1 turn RHS RHS	
45	C	0 14 W	+40 51	3"	<i>V= 2.2</i>	88V	<i>not Her 6-9-8</i>	zd-algal	40/200	Tilt +.7B	In Large
26	A	0 55 W	"	2-3"	"	"	8-9-8	"	40/149		<u>Box #1</u>
53	B	1 22 W	"	"	"	"	8-7-7	"	40/100		
				2 min							
19	C	0 58 W	+39 55	2-4	2.71	80.5V	10-10-10	Splis-Ts	40/170	RHS	Fine
				2 min						In Large Box #1	Fine
										Il-0 11"	
										Il-1 5"	
										127 7"	

Dome Temp. *warm* 7570 H

Transparency Conditions *Cloudy shortly after sunset* 190

Focus *3-B*

Dome Temp. *807*

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
37	B	0 53 W	+71° 21	1-2	4.18	ApSi	9-10-9	Line Trp Sys	200/78	thick cloud	fine
45	B	1 19 W	+35° 45	1-3	7.6	WV9.5 WV9.5	7-8-8	Fji WR*	400/285	some cloud	fine
										I&O 10 ^m D19 63° N	

Dome Temp. cold

Transparency Conditions

192

Focus 40R

Dome Temp.

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A		+35° 45'		7.60	WN 4.5 0.155	8	Fgi WRA	800/		
		R.A 3 ^h E 10 ^m	3 ^h W	20 ^{sec}						R.H.S	
	C	Dec. 80° 10 ^{sec}	-20	20 ^{sec}						R.H.S	ouch!!
25	B	02 ^h 08 ^m E	+28° 40'	3-4	V=6.5	ASV +K0W	8-8-8	RS CVn / Fgi	800 / 302	UX Ari	fine
										power failure in 1 hr when power went on it was cloudy	
										IIa0 10 1/2 ^m	} D19 68°F
										IIIa5 5 ^m	

Dome Temp. *cold!* 61%

Transparency Conditions *v. clear*

192

Focus *40R*

Dome Temp.

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8	A	00 ^h 50W	+71° 20'		4.18	Ap Si	^{no filter} 10-10-10	Sp Bi-BL	40/80	R.H.S.	fine comp. sl. str
00	B	01 ^h 58W	+59° 23'		9.21	B25 Ib	6-6-6	Sp Bi-BL	800/262	a few clouds	fine
30	C	02 ^h 09E	+00° 33'		6.82	65 I	8-8-8	RS CV _n /Fg	800/442	HR 1099	fine
56		00 ^h 43E	+00° 32'		-	-	^{no filter} 3-3-3	-	460/250	HR 1099 Middle of exposed Box #7	Strongly comp. sl. str
9	3	00 ^h 10W	+00° 32'		6.82	65 I	^{NO FILTER} 3-3-3	RS CV _n /Fg	400/170	HR 1099 Middle of Box #2	sl. str. comp. sl. str
30	C	01 ^h 36W	+00° 32'	4-5	6.82	65 I	8-8-8	RS CV _n /Fg	400/210	HR 1099	fine
		RA 3 ^h 45	3 ^h 45				10-20			R.H.S.	
		D _{ra} 80	-20°							R.H.S.	
										M20 10 1/2 ^m } 098 7 1/2 ^m } D19 68°F fog M25 5 ^m }	.22 .26 .18
										fog too high on 098, will drop down time to 6 ^m , so hold out 400/170 as on 10852	

Dome Temp.

Transparency Conditions *good*

Focus *SOR*

Dome Temp. *91%*

Time	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		<i>R.A 10h at 3h E</i>	<i>20h at 3h W</i>							} <i>exposed 300 #1</i>	
		<i>Dec 10h at 80°</i>	<i>20h at -20°</i>								
<i>00</i>	<i>A</i>	<i>04h 03W.</i>	<i>+35° 10'</i>	<i>2-3</i>	<i>9.74</i>	<i>09.7 Tab</i>	<i>6-6-6</i>	<i>Sp. Bin - Blin</i>	<i>800/293</i>	} <i>exposed 300 #1 B₁B₂</i>	<i>fine</i>
<i>21</i>	<i>B</i>	<i>02h 07E</i>	<i>+0° 32</i>		<i>6.82</i>	<i>65V</i>	<i>7-7-7</i>	<i>RSCH/Fgi</i>	<i>400/220</i>		<i>HR 1097</i>
<i>15</i>	<i>C</i>	<i>01h 20E</i>	<i>+0° 32</i>	<i>3</i>	<i>"</i>	<i>"</i>	<i>3-3-3</i>	<i>"</i>	<i>400/170</i>	<i>RHS</i>	<i>fine</i>
<i>5.42</i>										<i>" "</i>	
<i>01</i>	<i>A</i>	<i>00h 35E</i>	<i>+0° 32</i>		<i>6.82</i>	<i>65V</i>	<i>NO FILTER 3-3-3</i>	<i>RSCH/Fgi</i>	<i>400/170</i>	<i>RHS</i>	<i>fine</i>
<i>16</i>	<i>B</i>	<i>01h 12W</i>	<i>"</i>		<i>"</i>	<i>"</i>	<i>NO FILTER 3-3-3</i>	<i>"</i>	<i>400/170</i>	<i>RHS</i>	<i>fine</i>
<i>51</i>	<i>C</i>	<i>01h 15W</i>	<i>"</i>		<i>"</i>	<i>"</i>	<i>7-7-7</i>	<i>"</i>	<i>400/220</i>		<i>fine</i>
<i>30</i>	<i>A</i>	<i>00h 06W</i>	<i>+2° 21'</i>		<i>6.16</i>	<i>137L</i>	<i>7-7-7</i>	<i>Sp Bin Blin</i>	<i>400/110</i>		<i>fine</i>
										<i>II 20 10^m</i>	
										<i>III 65 5^m</i>	} <i>D17 68°F</i>
										<i>098 6 1/2^m</i>	

747

Visitors 1 group 1 1/2 hr

Date 25/26. Sat/Sun Sept Observer Fji - Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40861	HD 190918	20 ^h 2.2	+35° 31'	G12	IIa-D-c	13/5	57°F	20 ^h 28	22 ^h 41	A
40861T1	cal slip wedge for plates 40861				IIa-D-E	9000				
40862	22 468	3 ^h 31.6	+0° 16'	G12	IIa-D-c	13/5		22 ^h 48	02 ^h 24	B
40863	"	"	"	G16	098-D-E	"		02 ^h 31		C
4086271	flexure test				IIaJ	9				A
4086272	flexure test				IIIaJ	9				B
		Sun Sept 26								
4086273	flexure test				IIIaJ	9				A
4086274	flexure test				IIIaJ	9				B
		Mon Sept 27								
4086275	flexure test				IIIaJ	9				A
4086276	flexure test				IIIaJ	9				B

157

Hao-E 2815-25096

Gen = Bob Mauthier

098-01-E - 23026 - 27096

Date Tue Sep 28-29/76Observer ^{Hd} Jan / Fg-R

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40863	HD 171767	18 31.5	+4 52	G12	Hao-E	13/3	54°F	19 40	21 18	A
40864	HD 210925	22 05.6	+3 26	G12	"	"		21 26	22 46	B
40865	HD 222033	23 32.1	+30 07	"	"	"		22 55	00 20	C
40866	HD 22468	3 31.5	+0 16'	"	"	13/5		00 25	01 37	A
40866T1	cal step wedge	for plates 40863-66, 71.			Hao-E	90um				
40867	HD 22468	3 ^h 31.5	+0° 16'	G16	098-01-E	13/5		01:58	02:38	B
40867T1	cal step wedge	for plates 40867-70.			098-01-E		D3 D3 D1 5100, 5450, Ha	15mm at 75V		
40868	HD 22468	3 ^h 31.5	+0° 16'	G16	"	13/5		02:38	03 11	C
40869	HD 22468	"	"	"	"	"		03:12	03:38	A
40870	"	"	"	"	"	"		03:39	04:17	B
40871	"	"	"	G12	Hao-E	"	45°F	04:23	05:31	C

Dome Temp. 86%

Transparency Conditions good

152

Focus 4.02

Dome Temp. 96%

exposed Box #1

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
18	-	02 ^h 57 ^m	+4 56"	3"	7.87	K ₀ III	7-7-7	Hd Via Bin	800/210		fine
19	-	02 ^h 50 ^m	+25 50	3"	8.05	K ₀ III	7-7-7	Hd SSV 400	800/240		fine
20	-	02 ^h 58 ^m	+30° 33'		8.02	GOV	7-7-7	Hd SSV 400 II	800/250		vdn
37	H	1 ^h 44 ^m E	+0° 31'		6.82	65 V	7-2-7	RS CV _n /Fgi	400/220	HR 1099	fine
38	B	0 ^h 43 ^m E	+0° 31'		6.82	65 V	3-3-3	RS CV _n /Fgi	400/135	RHS:	fine
40	-										same as 38
41	-	0 ^h 09 ^m E	+0° 31'		6.82	65 V	3-3-3	RS CV _n /Fgi	400/120	RHS	fine
42	-	0 ^h 18 ^m W	"		"	"	3-3-3	"	400/100	RHS	fine
47	B	0 ^h 56 ^m W	"		"	"	3-3-3	"	400/120	RHS	fine
31	-	2 ^h 11 ^m W	"		"	"	7-7-7	"	400/221	BROKEN 1/2 missed	fine

153

III-e 03075-16096
 II-o-e 28115-25096
 098-01-E 23026-27096

Date Wed Sept 29-30/76 Observer Tn - W bl/Tq: Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40872	HD 170000	18 22.2	+71 17	G12	III-e	9/5	54°F	18 48	19 28	A
40872T	Caln for	40872, 75		180sec	"					
40873	HD 186688	19 40.8	+29 01	G12	II-o-e	13/5		19 44	21 06	B
40873T	C ₉ / for	40873-74, 78		90sec	"					
40874	HD 14633	02 16.7	+41 02	G12	II-o-e	13/5		21 28	23 03	A
40875	HD 24760	3 51.1	+39 43	G8	III-o-e	9/7		23 15	23 44	A
40876	HD 22468	3 ^h 31.5	+0° 16'	G16	098-01-E	13/5		23 51	0 44	B
40877	"	"	"	"	"	"		0 46	1 29	C
40878	"	"	"	G12	II-o-e	"		1 32	2 31	A
40878T	C.I. stop-alys for	40876-77, 79			098-01-E	2 5100	D3, D3, D1 5460, Hd	each 15m. @ 7.5V		
40879	HD 22468	3 ^h 31.5	+0° 16'	G16	098-01-E	13/5		2 35	3 05	B
40880	"	"	"	"	"	"		3 06	3 39	C
40881	"	"	"	"	"	"		3 40	4 13	A
40882	"	"	"	G12	II-o-e	"		4 21	5 20	B

Dome Temp.

H=75.76

Transparency Conditions

some cloud - slazy

Focus 40-R

Dome Temp.

Karl *cut plates slosh around in Box #2

ig Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
28	A	1 24 W	+71 19	2.5	4.18	Apsi	^{no filter} 8-8-8	Sp Tri-Lne	40/83	RHS box #1 RHS	
06	C	1 41 W	+29 12	2.3	6.8 7.66	F0- G1	8-9-8	Cep-Lin	400/202	LHS x in Middle, given 0.5" dia LHS	fine
03	A	2 59 E	+41 23	3-4"	7.26	09 V	8-9-8	Sp Bin-Bln	400/145	LHS	fine
44	A	3 53 E	+39 56	"	2.74	B05 V	^{no filter} 10-10-10	Sp Bin-Tr	40/160	RHS Tilt 174 in under 0	
44	B	2 32 E	+0° 31	"	6.82	65 V	^{NO FILTER} 3-3-3	RS Chn/Fg	400/120	Middle box #2 Tilt 0.7 B	
24	C	1 45 E	+0° 31	"	"	"	^{NO FILTER} 3-3-3	"	400/120	"	
31	A	0 44 E		2-3	"	"	8-7-7	"	400/220	LHS	fine
5-11		Forgo* lock	large 5450	D to	D2	D3	instead			Cal plate has barage	
15	B	0 11 E	+0° 30		6.92	65 V	^{NO FILTER} 3-3-3	RS Chn/Fg	400/120	middle box X on LHS, also 1"	
39	C	0 23 W	"		"	"	^{NO FILTER} 3-3-3	"	400/120	"	
13	A	0 57 W	"		"	"	^{NO FILTER} 3-3-3	"	400/121	" H=96%	
20	B	2 05 W	"		"	"	7-7-8	"	400/223	LHS	
										IIa0 10" IIa3 5" 098 6 1/2" } D19 68°F sun visible	

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III-J-e 03075-16096
 098-01E 23026-27096
 IIa-0-e 28115-29096

Date 30 Sept / Oct 1976 Thu-Fri Observer Blu-Tu Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40883	HD 170000	18 22 12	+71 17	G12	III-J-E	13/5	56°F	19 03	19 31	A
40883 T	Calc for	40882, 90			"	180sec				
40884	HD 222964	23 35 14	+77 04	G16	098-01E	13/5		19 42	19 45	B
40885	"	"	"	G8	IIa-0-e	"		19 53	20 05	C
40886	"	"	"	G16	098-01E	"		20 11	20 13	A
40887	HD 221861	23 30.6	+71 05	G16	"	13/3		20 22	20 54	B
40888	HD 221861	23 30.6	+71 05	G16	098-01E	13/3		20 55	21 15	C
40889	HD 221861	23 30.6	+71 05	G8	IIa-0E	13/3		21 22	23 31	A
40889 T1	Calc for	40885, 89, 92			"	90sec				
40889 T2	Calc for	40884, 86-88, 91, 93			098-01E	5/100	D3, D2, D1 5450 Hx each 15 min @ 7.5V			
40890	HD 229760	3 51.1	+39 43	G8	III-J-e	9/7		23 37	23 58	C
40891	HD 22968	3 31.5	+0 16	G16	098-01E	13/5		0 06	0 55	B
40892	"	"	"	G12	IIa-0-e	"		01 00	01 56	C
40893	HD 22968	3 31.5	+0 16	G16	098-01E	"		02 07	2 51	B
40894	"	"	"	"	"	"		2 52	03 20	C

Dome Temp. $H=86.7$ Focus $40-R$ Dome Temp. $H=100.6$ Transparency Conditions $\text{Good hazy } 156$ Dome getting drippy by 23^h
Fog

log Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
31	A	131 W	+71 19	2-3	4.18	A ₂	^{no filter} 7-7-7	Sp. B ₂ -B ₁	40/82	broken spec RHS RHS	
05	B	03 32 E	+77 30		4.25	K1D	^{1/2 filter} 3-6	RV Test	40/13	Box #2	sl. strong
05	C	03 12 E	"		"	"	18-18	"	40/30	LHS Box #1	fine
3	A	03 4 E	"		"	"	^{no filter} 5-5	"	40/6		sl. weak
4	B	02 18 E	+71 29		7.64	K0J	3-3-3	"	400/100		sl. strong
5	B	01 57 E	"		7.64	K0J	3-3-3	"	400/50		fine
31	A	00 20 W	"	2"	7.64	K0J	1212-12	"	400/300	LHS Tiltting to sl. strong ✓ LHS	fine
50	C	03 35 E	+39 56		2.91	K0J	^{no filter} 10-10-10	Sp B ₂ -T ₂	40/100	RHS Tiltting to strong	fine
55	D	2 16 E	+0 31		6.82	G5I	^{no filter} 3-3-3	RSCV ₂ Fgi	400/120		fine
50	C	01 16 E	"	1'-2'	"	"	3-3-3	"	400/220	LHS	fine
51	B	0 19 E	+30 31		7.64	K0J	3-3-3	RV Test Fgi	400/120		fine
50	C	00 27 E	"		"	"	3-3	"	400/96	cloudy, foggy, sl. strong	fine
098 6' ^m , 1125 5' ^m , 1120 10' ^m Dig at 68°F = ALL 098's light struck on one edge, including Col.											

Dome Temp. Warm H=85 70

Transparency Conditions Fine in Hazy Fog

Focus 40-R -30-R

Dome Temp.

Time ST.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
16	A	110 W	+71 23	1-2	4.18	A _p Si	^{no filter} 7-8-8	Sp Tri - LHO	40/80	RHS box #1	fine
										RHS "	
19	B	110 W	+38 48	1-2	.04	A0	^{no filter} 5-22	H ₂ O - Vega	410/263	.7 Bitt Box #2	v. str. with dark clouds
26	V									"	
9	C	139 W	+54 29	1-2	9.21	^{62.5} I _b	6-5-5	Sp Bin - Blm	800/180	Foggy with Push/LHS	fine
										Same Fog increasing Push/LHS	
27	A	520 W	+38 48	2"	.04	A0	^{no filter} 12-12	H ₂ O Vega	40/241	.7 Bitt Box #2	v. str. with dark clouds

Dome Temp. Warm H=7770

Transparency Conditions S/ Haze but Very Good

Focus 20-R

Dome Temp. H 9576

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	B			in in / out			no filter 5-5			LHS Box #2 Shifted (in the blue only)	
55	A	1 6 W	+71 23	1"-2"	9.18	Apsi	no filter 8-8-8	SyTri-Lne	40/85	RHS " "	val wh
										RHS " "	
41	B	4 18 W	+35 12	1"	9.74	0971	6-5-6	SpBin-Bl	800/360	LHS Box #2 broken opcs	fine
										LHS "	
45	C	1 2 E	+41 26	1"-2"	7.26	08V	8-8-8	SpBin-Bl	400/140	LHS "	fine
20	A	0 30 W	+29 50	"	9.0?	K3 U	8-8-8	SSV List I	800/250	LHS " Looks bright fld: pcc checks	fine
18	B	2 11 W	+25 43	1"-3"	9.4	G2V	8-8-8	"	800/200	LHS seeing 1.5" /	fine
40	C	2 19 W	+40 00	1"	2.71	B05V	10-10-10	SpBin-Tn	40/160	RHS	fine

Dome Temp. 63°F H=728

Transparency Conditions GOOD → cloudy

769

Focus 20-R

Dome Temp. H=1008

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
39	A	1 55 W	+71 25	2.4'	4.18	Ap 5	NO FILTER 10.7	Sp Tri Lre	40/82	RHS	fine
										RHS	NO GOOD
	C	13 31 W	+44 18	2.3'	7.00	A 1	8-8-8	A _m MR	400/181	LHS	fine
										LHS	fine
13	A	4 38 W	+30 59	2.3'	7.56	B 9	8-8-8	A _p MR	400/160	LHS Cloud	fine
16	C	1 12 W	+43 30	"	6.7	A 2	8-8-	A _p MR	400/180	LHS fog/last Fe	fine
34	C	01 01 W	+22 28	"	6.4	B 8	8-9-8	A _p MR	400/178	LHS Fog	fine
										IIa0 10 ^m	} D19 68°F
										IIIa3 5 ^m	

Dome Temp. 70°F H=757

Focus 20-R

Dome Temp. H 927

Transparency Conditions Hazy → cloudy

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
7	L	1 55 W	+71 24	2-4	4.18	ApSi	no filter 8-8-8	SpTri-Lne	40/92	cloud coming R/H	good!
							no filter 6/6			RHS	
44	B	2 33 W	+37 01	2-3	5.51	B3	8-8-8	Splm-Ly	400/170	LHS	shift to red (in blue color) fine
52	C	2 33 E	34 57	2-4	3.13	A5 III	no filter 8-8-8	Brit star	40/168	B Tri "broken"	dark
7	A	3 6 E	40 01 45	2-3	2.71	B5 V	no filter 10-11-10	Splm-Tr	40/163	RHS	the color
										two 10"	
										two 5" } D19 68°F	

Dome Temp. *cool* H=67°

Focus *50-R*

Dome Temp. *cold* H=87° Frost

Transparency Conditions *Scat clouds windy but clear* 168

*Venus good at sunset
Saw Mercury after sunrise*

g Time ST.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
52	A	2 0 W	+37 00	3-8'	5.51	B3	8-7-8	Sp Bin-Ly	200/90	Faint cloud only plenty	very poor
9	B	02 10 E	+41 29	3"	7.26	08V	8-8-8	Sp Bin-B/Ly	400/150		good
3	C	0 40 E	+29 40	2-3	7.17	B9	8-8-8	Ap-MR	400/180	close vis Bin? red broken 2pc	very poor
58		3 3 W	+29 22	2'	9.0	K2 III	8-8-8	SSV	800/315	Fld diam? must be through	very poor
37	B	1 29 W	+22 29	1-2'	6.11	B8	8-8-8	Ap-MR	400/180	should have been 9.5 slit	very poor
8	C	1 52 W	+50 56	"	5.5	B3	8-8-8	SB2-Lne	40/29		very poor
41	E	2 47 W	+70 2	"	2.71	05 V ^{no filter} 10-10-10	8-8-8	Sp Bin-Tn	40/250	RHS RHS	strong
										Ia0 10" } III 5" } DIA 600	

Dome Temp. 55 F H-607

Focus 50-R

Dome Temp.

Transparency Conditions S/Hazy - thin cloud from SE 170

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
25	A	03 11 W	+15 56	2-3	7.08	FO	8-8-8	Ap MR	400/190		fine
21	B	3 14 W	+30 56	1.7"	7.56	B9	8-8-8	Ap MR	400/168	some thin cloud	fine
27	C	1 55 E	+40 00	"	2.71	Bos I	10-11-10 <small>no A/Mor</small>	Splix-Tn	40/x 200	cloud RHS box #4 cloud RHS	fine (by hand)
										1100 15" } D19 680 1105 5" }	

Dome Temp. 55°F 84%

Transparency Conditions Scattered clouds

172

Focus 802

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4 ^h 51 W	+36° 58'	5	5.51	B3	8-88	Sp Bi-Ly	400/154	clouds in rain	fine
004 35 W	+40° 53'	5	5.5 2.2	888	no filter 8-8-8	algol	40/203	clouds at end of exposure in rain	Very strong in rain
haul II									
There is only 2 127-05 plates left									
								1120 10 ^m } 127 7 ^m } 119 68°F	.13

773

IIa0-E 2415-04106
 127-05 00025-14106
 098-01 23026-30096

Date ⁷⁶ FRI 9 SAT OCT 15/16 Observer Wtu-Ri/ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
4092 ³⁰ 6	HD22928	3 ^h 35 ^m .8	+47°28'	G-16	127-05	9/5	55°F	19:56	20:42	A
4092 ³¹ 7	HD221861	23 ^h 30 ^m .6	+71°05'	G-8	IIa0-E	13/3		20:53	23:53	B
4092 ³² 71	cal step wedge for plates 40926-				127-05	15mm at 7.5U		5:00	5:50 Hd	
4092 ³³ 8	HD221861	23 ^h 30 ^m .6	+71°05'	G-16	098-01-E	13/3		23:57	00:27	C
4092 ³⁴ 9	HD14633	02 ^h 16 ^m .7	+41°02'	G-12	IIa0-E	13/5		24:39		A
4092 ³⁵ 10	cal step wedge for plate 40927,29				IIa0-E	90x0			05 02 01	
4092 ³⁶ 12	cal step wedge for plate 40928				098-01-E	15mm at 7.5U		5:00	5:50 Hd	

Dome Temp. 56°F 56%

Transparency Conditions *lazy & windy*

174

Focus H.O.R.

Dome Temp. 52°F 91%

P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
12 A	05 ^h 39E	+47°43'	3-4	3.03	B5-III	8-8- <small>NO FILTER</small>	B14*	40/100	LHS UV FILTER IN .78 <small>superb</small>	fine
53 B	01 ^h 41W	+71°30'	3	7.64	KoIab	12-12-12	B16-RVTest	400/380	one turn past OB <small>F/</small>	fine <small>not quite way</small>
07 C	02 ^h 15W	+71°30'		7.64	KoIab	3-3-3 <small>no filter</small>	B16-RVTest	400/50	UV Filter in .78 <small>PLS</small>	not strong
				7.26	08V	8-	Sp. Bin - B14	400/	clouded in	
									} labelled	
									run for 2 of Box } 29	
									I 20 10"	
									127 6 1/2 } D17 48°F	
									098 6 1/2 } 28	<small>reference to</small>

777

IIaD-E 29115-11106
 IIIaJ-E 0375-13106
 127-05-E 00095-14106

Date San Mon 09/17/18 1976 Observer Ri Julian Day _____

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40930 ^b 34	HD 186882	19 ^h 41 ^m 51 ^s	+44 ^o 53'	G-16	125-05	9/5	40°F	18:30	19:16	A
40930 ^b 34	cal step wedge				125-05	15mm	9.5V	5:00	5:50	11A
40934 ^b 35	HD 186882	19 ^h 41 ^m 51 ^s	+44 ^o 53'	G-16	"	9/5		22:10	22:44	C
40932 ^b 36	HD 14633	02 ^h 16 ^m 7 ^s	+41 ^o 02'	G-12	IIaD-E	13/5		23:59	00:45	A
40933 ^b 37	HD 24760	03 ^h 51 ^m 8 ^s	+39 ^o 43'	G-8	IIIaJ-E	9/9	35°F	00:55	01:33	B
40934 ^b 38	HD 24309	02 ^h 52 ^m 30 ^s	+48 ^o 51'	G-12	IIaD-E	13/5		01:47	04:25	C
40934 ^b 38	cal step wedge for plates 40933				IIIaJ-E	180 mic				
40934 ^b 38	cal step wedge for plates 40932, 34				IIaD-E	90 mic				

Dome Temp.

Transparency Conditions

good after second half

778

Focus 70R

Dome Temp.

95%

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality	
06	F	01 410W	+45° 05'		2.84	B95V	no filter 8-8-8 H ₂ and Bl		40/101	UV filter in some clouds	exposed Box #7 7	fine
04	G	04 430W			2.84	B95V	no filter 8-8-8	"	40/100	UV filter in	exposed Box #7	fine
05	H	00 406E	+41° 24'	3	7.26	08V	8-8-8	Sp Bl - Bl	400/160		exposed Box #3	fine
03	B	00 454E	+39° 58'		2.71	B05V	no filter 10-10-10	Sp Bl - Bl	40/224	RHS of Box	" - 3	fine
05	C	01 456W	+48° 05'		7.80	B7V	8-8-8	Ed Bl - Bl	800/220	clouds	" - 3	fine
										R.H.S.	" - 3	
											" - 3	
										II 0 10 ^m	.20	
										127 6 1/2 ^m	019 6 1/2 ^m	.20
										III J 5 ^m		.25

Dome Temp. 30°F H 99%

Focus 70-R

Dome Temp. cold 38%

Transparency Conditions Hazy - Cloud

Very good from 0^h - 6^h

182

Hour	Angle	End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
58	A	01 30W	+20 28	3	~7	Em	^{no filter} 3-3-6	None	1/13	T.H. 40%	weak
41	C	04 53W	"	"	"	"	^{no filter} 3-3-4	"	800/45	" 7B	sl. weak
6	A	1 44W	+16 03	4-5	5.20	B2	9-9-9	A _p MR	400/140		fine
7	B	3 26W	+43 28	3-4	6.7	B2	9-9-9	A _m MR	400/160		fine
7	C	1 53W	+15 53	4-5	7.16	B2	7-8-7	A _p MR	400/152		fine
										1120 10 ^m 108 6 ^m } D19 67.5%	

Pg #1
183089-01-E 23026-30096
IIIa-e 03075-13106
IIa0-e 28115-11106

Date Oct 26/27 Tues/Wed Observer Str Tn/Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40944	Nova Vul 1976	19 28.4	+20 27	G16	089-01-E	13/5	33°F	17.59	19 15	A	151 W
40944T	Calc. step wedge for 40944-55.				"	15 min @	7.5 V	D3 D2 D1 5100 5950 HD			
40945	Nova Vul 1976	19 28.4	+20 27	G16	"	13/5		19 16	19 31	B	2 7 W
40946	"	"	"	"	"	"		19 32	19 47	C	2 23 W
40947	"	"	"	"	"	"		19 52	20 09	A	2 46 W
40948	"	"	"	"	"	"		20 12	20 26	B	3 02 W
40949	"	"	"	"	"	"		20 29	20 41	C	3 18 W
40950	"	"	"	"	"	"		20 44	20 57	A	3 33 W
40951	"	"	"	"	"	"		21 2	21 17	B	3 53 W
40952	"	"	"	"	"	"		21 23	21 40	C	4 16 W
40953	"	"	"	"	"	"		21 42	21 59	A	4 35 W
40954	"	"	"	"	"	"		22 00	22 16	C	4 52 W
40955	"	"	"	"	"	"		22 17	22 27	B	5 3 W
40956	HD 24760	3 51.1	+39 43	G8	IIIa-e	9/9		22 49	23 19	C	2 33 E
40956T	Calc for 40956 62.				"	180 deg					
40957	HD 14633	2 16.7	+41 02	G12	IIa0-c	13/5		23 29	0 40	A	0 22 W

Dome Temp. *very cold!!* 603H

Transparency Conditions *Very Good - Excellent*

Focus *70-R*

139

Dome Temp.

Mag Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
15	A	151 W	+20 27	3"	<i>v2</i> 6.7	<i>H.E. Em</i>	<i>no filter</i> 3-3-3	<i>Nova</i>	400/112	<i>Tilt .7B</i> <i>Almost as bright as</i> <i>HD 183537 V=6.32</i>	<i>ble at</i> <i>End of D</i>
31	B	2 7 W					3-3-3		400/22	} <i>Exp meter noticeably out</i> <i>weaker than indicated</i>	<i>ble at</i> <i>End of D</i>
47	C	2 23 W					3-3-3		400/19		
109	A	2 46 W					3-3-3	"	400/20		
26	B	3 02 W		2"-3"			3-3-3	"	400/19	* <i>G16 Grating may not have</i> <i>been perfectly set for</i>	
41	C	3 18 W					3-3-3	"	400/18		
57	A	3 33 W					3-5	"	400/19	<i>I forgotten</i> 40944-55	
17	B	3 53 W					4-4	"	400/19	** <i>All 098-01 plates in</i>	
0	C	4 16 W					4-4	"	400/18	<i>Red Box #2 [127 caln</i>	
59	A	4 35 W					4-4	"	400/18	<i>in at very front of sun</i>	
16	C	4 52 W					4-4	"	400/18	* <i>127 spectra in middle of Blue</i>	
27	B	5 3 W					4-4	"	400/19	<i>Last 098 plate in</i> Box	
319	C	2 33 E	+39 58	2"	2.71	<i>cos V</i>	<i>no filter</i> 10-10-10	<i>Sp Pin - T₉</i>	40/190	* <i>Had Trouble changing Tilt and found</i> <i>that Grating was jammed -</i>	<i>v sl str</i>
							<i>both 40956 & 56T at RHS box</i>			<i>"caught on a rough edge"</i>	
40	A	0 22 W	+41 25	2"-3"	7.26	08V	8-8-8	<i>Sp Pin - L₉</i>	400/140	<i>may have been "twisted" for G16 Egrisms</i>	<i>Tilt</i>

Dome Temp. v cold 93/8

Transparency Conditions Photometric

136

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
								LHS ↓ Photometric Sky	
13 B 02 +	0 21 E +47 45	2'	2.85	B5 III	8-8-8	H20 - Bln	40/95	8 Per H "outside" = 83% in front part of Red Box (Farthest from stellar plates) UV filter in ↑	v sl strong
37 C	0 31 W +22 23	2-3'	6.11	B8	8-9-8	Ap MR	400/165	LHS Blue Box #2	fine
25 A	1.11 W +50 53	"	5.5	B3	8-8-8	SB2 - Lne	200/125	LHS "	fine
42 B	2 21 E +20 29	3-4'	7.2	965+ A2	11-2-11	V B - Bln	400/250	LHS "	guide
0 C	4 9 W	2.4	2.7	B05 V	10-10-10	Sp Bln - Tn	40/90	RHS "	sl strong
24 A	4 50 W	"	2.85	B5 III	8-8-8	Hab - Bln	40/65	* Again - 127-05 (UV in stellar plates put in middle of Blue Box #2; H = 93% outside Lower spring rod part way up to 7 wrong tilt (Spring no good)	Tilt way off all Balmer series except Hβ!!

pg #1
187

098-01-E 23026-27106
III a-l-e 03075-13106
127-05-E 00095-14106

Date Oct 27/28 Wed-Thurs Observer Tn / 2d Wd - Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40964	Nova Vul 76	19 28.4	+20 27	G16	098-01-E	131.5		19 40	19 55	A	2 35 W
40965	'							20 00	20 17	B	2 57 W
40966								20 21	20 37	C	3 17 W
40967								20 44	21 3	A	3 43 W
40968								21 8	21 28	B	4 8 W
40969								21 33	21 51	C	4 31 W
40970								21 55	22 8	A	4 48 W
40971								22 9	22 22	B	5 2 W
40972								22 32	22 46	C	5 26 W
40972 T	Coln step wedge for 40964-72				"	15 min @	7.5V	D3 5100	D2 5450	D1 Hx	
40973	HD 24760	3 51.1	+39 43	G8	III a-l-e	9/19		0 25	0 45	A	1 25
40973 T	Coln for 40973				"	180 sec					
40974	HD 19536	3 01.7	+40 34'	G16	127-05-E	9/1.5		01 15	1 32	B	0 34 W
40975	"	"	"	"	"	"		01 42	1 55	C	0 57 W
40975 T	Coln step wedge for 40974-78				"	15 min @	7.5V	D4 5100	D3 5450	D2 Hx	
40976	HD 19536	3 01.7	+40 34'	G16	127-05-E	9/1.5		02 02	02 26	A	1 28 W

Dome Temp. *coll. 09.00 H=8073*

Transparency Conditions *clearing by 19^h w s/hoze* 183

Focus *70-R*

Dome Temp.

ng Time S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
55	A	2 35 W	+20 27	3-4	<i>v₁</i> 6.5	<i>En the</i>	<i>no filter</i> 4-4	<i>None</i>	400/18	Tilt .78 UV Filter in	OK at Hx sl. w/c
17	B	2 57 W		2-3			4-4		400/18	still as bright as	OK at Hx
37	C	3 17 W					4-4		400/17	Last night - ie s/finder	
3	A	3 43 W		2"			4-4		400/17	then #D183537 of V=6.32	
28	B	4 8 W					4-4		400/18		
51	C	4 31 W					4-4		400/17		
8	A	4 48 W					4-4		400/10	cloud	
22	E	5 2 W					4-4		400/9		very narrow
46	C	5 26 W	+20 24				4-4		400/6	reversed then real cloud	very narrow
45	A	1 2 E	+39 59	1.2"	2.7	B05 E	10-7-7	Spln-Tn	40/160	RHS Blue box RHS Blue box	fine
52	B	0 34 W	140 55		2.2v	BSE	8-7-7	2d disp	40/110	LHS "	sl. str.
55	C	0 57 W			"	"	8-7-7	"	40/104	LHS "	exp. fine guide uneven
2										Front of Red box (LHS)	
26	A	1 28 W	140 55	2"	2.2v	BSE	8-7	2d disp	40/88	LHS Blue box clouds	labelled 77 fine

pg #1
197

127-05-E 00095-14106 IIo0e 28115-27106
098-01E 23025-27106
IIo1-e 03075-28106

Date 1976 Oct 28-29 Thurs-Fri. Observer Ch-Ty/Ty Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40979	Novae Vul '76"	19 28.4	+20 27	G16	127-05-E	13/1.5	34°F	17 47	18 34	A
40980	" "	"	"	"	098-E	20/1.5		18 37	18 57	C
40981	" "	"	"	"	"	20/1.5		19 00	19 16	A
40982	" "	"	"	"	127-05-E	20/1.5		19 20	20 20	B
40982T	Calc stop wedge for 40979, 82, 83				"	15 min @ 7.5V		D4 5100	D3 5400	D2 Hx
40983	" "	"	"	"	"	20/3		20 21	21 20	C
40984	" "	"	"	"	098-E	20/1.5		21 21	21 44	B
40985	" "	"	"	"	"	"		21 44	22 12	A
40985T	Calc stop wedge for 40980-81, 84-85				"	15 min @ 7.5V		D3 5100	D2 5450	D1 Hx
40986	HD 24760	3 51.1	+39 43	G8	IIo1-e	9/1.9	36°F	22 24	23 35	B
40986T1	Calc stop wedge for 40986, 89.				"	15 min @ 15V		D3 4100	D4 4300	D4 4800
40986T2	Calc for 40986, 89.				"	180sec				
40987	HD 14633	02 16.7	+41 02	G12	IIo0E	13/1.5		23 43	1 8	C
40987T	Calc for 40987, 88.				"	90sec				
40988	HD 27192	4 12.6	+50 41	G12	"	13/1.9		1 11	3 39	A
40989	HD 24760	3 51.1	+39 43	G8	IIo1-e	9/1.9		3 50	4 25	B

28/15-27/06

Dome Temp. *Warmer H=7670*
 Focus *70-R*
 Dome Temp.

Transparency Conditions *Fine sl haze - occasional cloud* 192

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4	18W	+20 25	2-3	N7	EmH2	^{no filter} 8-20	NOVA	400/95	LHS of Red Exp. Box Broken 4 pcs!	
57	10 N				Nova	^{No Filter} 3-5	Nova	400/20	cloud RHS Red Box	ok.
6	200W				Nova	3-3	Nova	400/18	RHS	fine
7	0354W		2-3		Nova	8-8-8	Nova	400/59	Probably blank - Plate not uncapped? LHS	Blank
8	04W				"	8-8-	"	400/44	Front of Red Box <i>Sun on convex side</i>	ok, guide unrecn
44	28W		5-8"			4-2	"	400/18	RHS	
12	455W		3-5"			3-3	"	400/20	RHS	
35	0209E	+39 56	3-4"	2.71	B05V	^{no filter} 8-9-8	SpBin-Tn	40/150	<i>cloud 27'40"</i> RHS Blue Box Till ^{2 hrs} below	ruined in darkroom 4100 nls, use diaphragm 4
<p>* Stored at very back of Red Box [next to stellar plates] (stored in H₂O for 12 hrs but only vacuum for 4 hrs)</p>										
8	10W	+41 22	2-4"	7.26	082	3-8-8	SpBin-Tn	400/140	LHS Blue Box	fine
									LHS "	
39	134W	+50 51	3-4	5.5	B3	8-8-8	SB2-Lnc	200/130	LHS " cloud thick	guide unrecn
25	241W	+39 55	2-3	2.71	B05V	^{no filter} 8-8-8	SpBin-Tn	200/300 40/76	LHS "	in fine

Dome Temp.

Transparency Conditions

194

Focus H=8070

Dome Temp.

Push (dry ask Bln first)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
15 C 1 39 E	+20 26	2.8"	7.2	65 +A2	11-12-5	VB Rln	400/140	remade again middle Blue BOX	
								Am I going nuts. Somethings scratching at the walls.	
								Karl	
								*Make sure you get all red plates out of Box. One broken plate a 098 near the R.H.S. seems stuck about 1" down.	
								Really ugly boxes eh?	
								*Make sure we get lots of 098 & 127 OK	

40990 47 } 12"
 other 120 } 10"
 1125 }
 098 } 6 1/2"
 127 }

D19 68PF

195

098-E04266 -10296
 IIIaJ-e 03075-28106
 IIa0-e 28115-11106

Date Oct 29-30 Fri-Sat '76 Observer W.H.T. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40991	Nov Vul "76"	19 28.4	+20° 27'	G16	098-E	13/0.5		21:12	21:40	A	4 28W
40991 T	Col's stop wedge for 40991				"	15min @	7.5V	D3 5100	D2 5950	D1 HX	
40992	HD 24760	3 ^h 51 ^m .1	+39° 43'	G8	IIIaJ-e	9/0.9		21:40	22 41	C	30E
40992 T	Col's stop wedge for 40992				"	15min @	15V	D4 9100	D4 9200	D4 9210	
40993	HD 14633	02 ^h 16 ^m .7	41° 02'	G12	IIa0-e	13/0.5	41F	22 57	0 9	B	0 5W
40993 T1	Col's for 40993, 9A.				"	90sec					
40993 T2	Col's stop wedge for 40991				098-E	15. @	7.5V	D3 5100	D2 5950	D1 HX	
40994	HD 27192	9 12.6	+50 41	G12	IIa0-e	13/0.9		0 14	1 15	A	0 45E

pg #1
10/7

098-E 04266-10296
IIIa J-E 03075-28106

Date Oct 31 - Nov 1 Sun - Mon 76. Observer T_n Julian Day

Plate No.	Object	R.A. 1900 76	Declination 1900 76	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40995	Nova Vul 76	19 28.4	+20 27	G16	098-E	13/15	40°F	17 44	18 1	A	056V
40996	"	"	"	"	"	"		18 4	18 27	B	122V
40997	"	"	"	"	"	"		18 34	18 53	C	148V
40998	"	"	"	"	"	"		18 57	19 15	A	29V
40999	"	"	"	"	"	"		19 22	19 40	B	235V
41000	"	"	"	"	"	20/5		19 41	19 51	C	296V
41001	"	"	"	"	"	"		20 21	20 52	A	347V
41002	"	"	"	"	"	"		20 52	21 9	B	44V
41003	"	"	"	"	"	"		21 11	21 29	C	424V
41004	"	"	"	"	"	"		21 33	21 47	A	442V
41005	"	"	"	"	"	"		21 48	22 5	C	51V
41005T	Caln step w/lyc for 40995-41008					15 min @ 75V		D3 5100	D2 5450	D1 H α	
41006	Nova Vul	19 28.4	+20 27	G16	"	20/5		22 15	22 32	A	527V
41007	"	"	"	"	"	"		22 33	22 55	C	550V
41008	"	"	"	"	"	"		23 1	23 25	A	620V
41009	HD 24760	3 51.1	+39 43	G8	base	9/9		23 44	0 3	B	129E

Dome Temp. *colld H=818*

H0175476

Transparency Conditions *Some thin cloud but Good*

198

Focus *70-R*

Dome Temp.

10502 36 58

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1	A	056 W	+20 28	2-3"	<i>V=</i> 6.8	<i>EnHd</i>	4-4	<i>No filter</i> Nova	400/20	<i>Tilt .7 400/20</i>	<i>cloud</i>
27	B	122 W	"	"	"	"	4-4	"	400/18	"	<i>fine</i>
53	C	148 W	"	2"	"	"	4-4	"	400/18	"	<i>fine</i>
15	A	209 W	"	21	"	"	4-4	"	400/17	<i>cloud coming</i>	<i>weaken</i>
40	B	235 W	"	"	"	"	4-4	"	400/14	"	<i>weaken</i>
51	C	246 W	"	2-3"	"	"	3-3	"	400/13	<i>cloud</i>	<i>fine</i>
52	A	347 W	"	3"	"	"	3-3	"	800/30	<i>blurred because of cloud</i>	<i>vs/wh</i>
9	B	44 W	+20 29	"	"	"	3-3	"	800/33	"	<i>fine</i>
29	C	424 W	"	2-4"	"	"	3-3	"	800/35	<i>No TV with going</i>	<i>fine</i>
47	A	442 W	"	3-4	"	"	3-3	"	800/34	<i>TV on again</i>	"
5	C	51 W	"	"	"	"	3-3	"	800/37	"	"
232	A	527 W	+20 26	3"	"	"	3-3	"	800/35	<i>reversal</i>	
255	C	550 W	"	"	"	"	3-3	"	800/34	"	
325	A	520 W	"	"	"	"	3-3	"	800/32	<i>" lost 0.8 plates</i>	
3	B	129 E	"	1.2"	"	"	<i>89-9</i>	"	40/150	<i>RHS</i>	<i>fine</i>

201

098-E 09266-01116

Dad-e 28115-27106

Dad-e 03075-01116

Date MON/TUES NOV 1/2 76 Observer D. J. T. Tims Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41016	NOVA VUL 76	19 20.4 ⁷⁶	+20 24 ⁷⁶	G16	098-E	20/5	37°F	18 12	18 25	A	01 24
41017								18 30	18 39	B	1 37
41018						13/5		18 44	18 55	C	1 53
41019								18 58	19 07	A	02 08
41019T	Calc slip wedge for 41016-19					15min @ 7.5V		D3 5:20	D2 5:45	D1 5:00	
41020	HD 202313	21 9.9	+30 33	G12	Dad-e	13/5		19 39	22 48	A	4 30
41020T	Calc for 41020-24.					"	90sec				
41021	HD 7374	1 8.8	+15 36	G12	"	9/5		22 52	23 28	B	04 20
41022	HD 16855	2 37.1	+43 7	"	"	"		23 32	00 51	C	0 37
41023	HL 22860	03 35.2	+28 23	"	"	"		00 55	2 24	A	1 12
41024	Hb 30409	4 42.3	+44 3	"	"	13/5		02 28	5 43	B	3 24
41024T	Calc for 41025.				Dad-e	180sec	34°F				
41025	HD 24760	3 51.1	+39 43	G12	"	9/9	"	05 48	06 09	A	04 42

203

Date Nov 3/4/76 Wed Thru Observer Ri // 2d-WW-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41026	NOVA VUL 76	19 ^m 28.4	+20° 27	G-16	098-E	20/5	440F	18:15	18:42	A
41027	"	"	"	"	"	"	"	18:45	19:18	B
41028	"	"	"	"	"	"	"	19:20	19:47	C
41029	"	"	"	"	"	"	"	19:49	20:19	D
41030								20:22	20:53	B
4103071	cal step wedge for plates 41026-41031				098-E	15mm	@ 7.5U	⁰³ 5:00 ^{D2} 5:50 ^{D1} Hx		
41031					"			20:55	21:40	C
41032	^{E.D.} HD 24760	03 ^m 51.5	+39° 43	G-8	IIIaJ-F	9/9		22:30	22:45	F
41033	^{Hx} HD 19536	03 ^m 01.7	+40° 34	G-16	127-E	9/5	420F	22:58	23:27	B
41034	"	"	"	"	"	"	"	23:29	00:54	C
41034T1	cal step wedge for plates 41033-34				127-E	15mm	@ 7.5U	^{D4} 5:00 ^{D2} 5:50 ^{P2} Hx		
41034T2	cal step wedge for plate 41032				IIIaJ-E	1800x				

Dome Temp. 74%
 Focus 60R
 Dome Temp. 90%

2330

Transparency Conditions *lazy with some cirrus clouds after 21:30*

209

g Time S.T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
12		01 ^h 45 ^m 00 ^s W	+20°38'	3		F64	^{no filter} 2-2-2	UVVA	500/35	UV filter in	LHS fine
		02 ^h 25 ^m				7	2-2-2	"	800/35		LHS ble.
		02 ^h 55 ^m				-	3-3-3	"	800/35		LHS guiding com.
		03 ^h 28 ^m 00 ^s W				"	3-3-3	"	800/36		L.H.S guiding 1st
		04 ^h 01 ^m 00 ^s W					3-3-3		500/36		L.H.S fine
										Back of Box #2	
		04 ^h 49 ^m 00 ^s W					3-3-3		500/33	circus cloud much exposure	LHS
		02 ^h 34 ^m 00 ^s E	+39°47'	2	2.71	B0.5V	^{no filter} 10/10-10	Sp. Be - RR	40/103		fine
		01 ^h 03 ^m 00 ^s E	+40°53'	2	2.2-3.5	B8V	^{white} 8-7-7	2d. Apsol	40/90		RHS fine
		00 ^h 24 ^m 00 ^s W	"	"	"	"	8-7-7	"	40/73	clouded in	RHS fine
										front of Box #2	

207

127-05 E 00095 - 02116

* EST had to be reset
& maybe off 1-2 min

Date NOV 10/11 Wed-Thurs Observer Z d-Tr Wb/Th Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. *	Ending Time E.S.T. *	P.H.	Hour Angle End
41036	HD 19536	3 ^h 01 ^m .7	+40° 34'	G 16	127-05 E	9/5	33°F	23 07	23 25	A	0 38 E
41037								23 29	23 43	B	0 20 E
41038								0 10	0 26	C	0 4 W
41039								0 30	0 45	B	0 43 W
41040								01 00	01 12	A	1 0 W
41041								01 15	1 32	B	1 30 W
41042								1 34	1 48	A	1 46 W
41043								1 51	2 3	B	2 1 W
41044								2 11	2 24	C	2 32 W
41045								2 32	2 44	A	2 42 W
41046								2 49	3 00	B	2 58 W
41047								3 4	3 16	C	3 14 W
41047T	Cal'n stop wedge for 41036-47				127-05-E	15 min @ 75V		D 4 5100	D 3 5450	D 2 HA	(*)

Dome Temp. *cold* H=90%

Focus *90-R*

Dome Temp. *H=89%*

Transparency Conditions *Clearing by 2.3 hr*

occasional cloud in very good

208

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
25	A	0 38 E	+40° 56.5	3"	2.2V	B8V	^{no filter} 8-7-7	2d-4' gal	40/85	UV Filter in - Tilt 0.7B	1.2/1.0
43	B	0 20 E					8-7-7		40/84		
26	C	0 24 W					8-7-7		40/87		
45	D	0 43 W					8-7-7		40/83	*Karl - we need more	
12	L	1 10 W					8-7-7		40/80	127.5 in Vac but good	
32	A	1 30 W					8-7-7		40/88	not full mag. wet	
48	F	1 46 W		2-3			7-8-7		40/90	1.00 (1.00) (1.00) (1.00)	
3	B	2 1 W					7-8-7		40/77	(2.00) (1.00)	
24	C	2 22 W					7-8-7		40/77	Approaching Maximum	
44	A	2 42 W	+40 47.0				7-8-7		40/74	Prob max at 6' approx	
00	B	2 58 W					7-15		40/70		
16	C	3 14 W					7-8-7		40/75	clouds snow gradually	
<p>(* Calc done in dark room in main list) High of Temp's lower H than before</p>											
6" D17 6" P											

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IIIa-J-E 03075 -11116
098-E 04266 -01116

Date Nov. 13-14 Sat-Sun 1976 Observer Tn / Bln-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41060	HD 11443	1 47A	+39 43	G8	IIIa-J-E	9/1.5	35°F	17 26	18 36	A	4 1
41060T	Calc for 41060, 63-66, 68-70,				"	180sec					
41061	Nova Vul ⁷⁶ 35	19 28.4	+20 27	G16	098-E	20/1.5		18 47	19 15	B	3 2
41062	"	"	"	"	"	"		19 18	19 44	C	3 31
41062T	Calc. strip wedge for		41061-62, 67, 71	"	"	15 min @ 35V		D3 E100	D2 5A50	D1 Ma	
41063	HD 24760	3 51.1	+39 43	G8	IIIa-J-E	9/1.9	35°F	19 55	20 16	A	4 25
41064	HD 33328	5 4.4	- 8 47	G12	"	13/1.7		21 28	22 50	B	3 2
41065	HD 33328	05 ^H 04 ^M .4	-8° 47'	G12	IIIa-J-E	13/1.7		22 52	23 49	C	2 38
41066	HD 33328	05 ^H 04 ^M .4	-8° 47'	G12	IIIa-J-E	13/1.7		23 49	0 39	A	01 13
41067	HD 33328	05 04.4	-8 47	G16	098-E	13/1.7	34°F	0 44	1 5	B	0 47
41068	HD 33328	05 04.4	-8 47	G12	IIIa-J-E	13/1.7		1 11	1 48	C	0 4
41069	HD 33328	05 04.4	-8 47	"	"	13/1.7		1 52	2 31	A	0 38
41070	HD 33328	05 04.4	-8 47	"	"	13/1.7		2 32	3 11	B	1 19
41071	HD 33328	05 04.4	-8 47	G16	098-E	13/1.7		3 19	3 54	C	0 1

Dome Temp. ^{cool} H=75

Transparency Conditions Platematic till 2^h ^{variable}

Focus 75-R

Dome Temp.

ing Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS <i>OR should be read</i>	Quality
36	A	4 1 E	+29 34	2-3	$V \approx 3.53$	F6 III	^{no filter} 10-10-10	Sp Bin - Ly	40/20	RHS box #2 151.4 51.0	27
										RHS	
15	L	3 2 W	+20 30	3-4	$V \approx 8-9$	Fa III	^{UV UV} 2-3-2	Novas 76	400/20	UVFe Filter inserted UV in Tilt 0.7 B	h fog, vsl. hie
44	C	3 31 W	"	"	"	"	23-3	"	400/19	1928.4 26.2	2.7 ^{sl. hie} fuzzy h. fog
										Poster	
16	A	4 25 E	+40 02		2.71	Bos V	^{no filter} 10-10-10	Sp Bin - Tn	40/90	RHS 24.3 53.8	25
250	B	3 2 E	-8 41	4"	4.07	B2 IV	7-6-6	Sp Bin - Blu	40/65	RHS 58.1 5.9	27
44	C	02 08 E			4.07	B2 IV	6-6-6	Sp. Bin - Blu	40/65	RHS	27
39	A	21 13 E	-8 42		4.07	B2 IV	6-6-6	Sp. Bin - Blu	40/65	RHS 5.6	2.5
5	B	0 47 E			"	"	3-2-2	"	40/28	UV in 24.3	fine, h fog
48	C	0 4 E		2.3"	"	"	6-6-6	"	40/65	RHS	27
31	A	0 38 W		"	"	"	6-6-6	"	40/66	RHS 28.1	27
11	B	1 19 W		"	"	"	6-6-6	"	40/62	RHS some cloud	27
54	C	2 01 W		"	"	^{H. 7.1} 3-3-3	"	"	40/17	RHS " ^{UV in} Most cloudy last 15 min	27

→ all III's that give slightly *unstable*

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IIa0-e 28115-07116
IIIa1-c 03075-11116

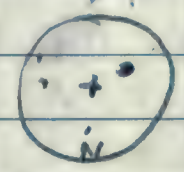
Date Nov. 14-15 Sun-Mon 1976 Observer T. J. Blin-T. J. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41072	HD 11443	01 47.4	+29 06	G8	IIa0-e	91.5	35°F	19 42	19 56	A	2 37
41072T	Calc for 41072, 74-81.				"	90sec		10 31			
41073	HD 24760	03 51.1	+39 43	G8	IIIa1-e			20 00	20 23	B	4 14
41073T	Calc for 41073, 82.				"	180sec					
41074	HD 34576	05 13.4	+36 34	G43	IIa0-e	131.5		23 28	00 01	C	2 58
41075	"	"	"	G43	IIIa1-e	131.5		00 07	00 55	C	1 4
41076	"	"	"	"	"	"		00 58	1 44	A	0 15
41077	"	"	"	"	"	"		1 46	2 28	B	0 29
41078	"	"	"	"	"	"		2 31	2 55	C	0 56
41079	HD 34626	05 13.8	+36 32	G43	IIa0-e	131.5		2 57	3 59	A	2 01
41080	"	"	"	"	"	"		4 01	5 05	B	3 07
41081	"	"	"	"	"	"		5 05	6 11	C	4 12
41082	HD 24760	03 51.1	+39 43	G8	IIIa1-e	91.9	33°F	6 17	6 39	B	6 31
41082F	Focus Test			G8	IIa0	9				A	

Dome Temp. *comfy* $11-80^{\circ}$
 Focus $75-R$
 Dome Temp. 99°

Transparency Conditions *very hazy - thin better* ^{~16}

ing Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
56	A	2 37E	+	1.2"	$V=3.53$	F6IV	11-11-11	SpBin-Ly	40/30	2 Tri LHS Box #3	Fine
53	A	4 14E	+40 02	1"	2.71	BSII	10-10-11	SpBin-Tn	40/90	6 Per RHS Box #3	slat
			Trouble with RA clamp for 3 hrs							should be 100	
01	C	1 58E	+36 42	1.2"	7.91	B3	3-3-3		800/90	LHS } 5 2.5 18.1	
55	C	1 4E	"	2-3"			3-3-3	wrong star	800/110	LHS } FU drawn	
44	A	0 15E	"	"	"	"	3-3-3		800/110	LHS } Oh well	fine
38	B	0 29W	"	"	"	"	3-3-3		800/105	LHS } cut in on all 1	fine
55	C	0 56W	"	"	"	"	3-3-3		800/70	LHS } - 5 18.2	fine
59	A	2 01W	+36 40	2-3"	8.2	B25	3-3-3	Py Prog	800/90	on board 5 18.7 5 18.6	fine
05	A	3 07W		2"	"	"	3-3-3	"	800/95	LHS	fine
11	C	4 12W			"	"	3-3-3	"	800/110	seems brighter at end	fine
39	B	6 3W	limit	3"	2.71	BSII	10-10-10	SpBin-Tn	40/85	RHS Box #3	slat
	A									LHS .003 blue @ 2700 Å center of slit	
										.05 blue @ 450 Å blue esp in the red	



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pg #1

098-E 04266-13116
II₀-e 28115-15116
III₀-e 03075-16116

Date Nov. 16-17 Tues-Wed 1976 Observer Tn-Ly/Tn Julian Day

Plate No.	Object	R.A. 1900 1976	Declination 1900 1976	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41089	Nova Vul 76	19 28.4	+20 27	G16	098-E	20/5	35°F	17 31	17 58	A
41090	"	"	"	"	"	"		17 59	19 11	B
41090T	Calc step wedge for 41089-90				"	15 min @	7.5V	D3 5100	D2 5450	D1 HX
41091	HD 11443	01 47.4	+29 06	G8	II ₀ -e	9/5	37°F	19 21	19 35	C
41091T	Calc for 41091, 94-96, 98-99, 41102				"	90sec				
41092	HD 24760	03 51.1	+39 43	G8	III ₀ -e	9/9		19 41	20 03	A
41092T	Calc for 41092-93, 97, 41100-01				"	180sec				
41093	λ And	23 32.7	+45° 55'	G8	"	9/5		20 22	21 30	B
41094	HD 11443	01 47.4	+29 06	"	II ₀ -e	"		21 38	21 49	A
41095	HD 26571	04 07.0	+22 09	G12	"	"		22 03	23 27	B
41096	HD 11443	01 47.4	+29 06	G8	"	"	34°F	23 34	23 48	C
41097	HD 24760	03 51.1	+39 43	"	III ₀ -e	9/9		23 53	00 8	A
41098	HD 14633	02 16.7	+41 02	G12	II ₀ -e	13/5		0 27	01 55	B
41098T1	Strip calc for 41089-90				098-E			4 min		
41098T2	" " "	"	"		098-E			2 min		
41099	HD 27192	04 12.6	+50 41	G12	II ₀ -e	13/9		1 58	2 26	C

Dome Temp. *summer H=50%*

Transparency Conditions *Excellent sl. Haze developing*

220

Focus *75-A*

Dome Temp.

ing Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
58	1 56 W	+20 31	1-2"	v2 8.5	v red Hα En	no filter 2-2-3	Nova "76"	400/30	UV filter in 2 should be a read diff 19 28.4 19 27.7	fine, comp sl str
11	3 09 W		2"	"	"	3-2-2	"	400/70	"	fine for cont'n
	done in main bld darkroom									
35	2 49 E	+29 34	1.2"	v2 3.53	F6 IV	filter in 11-11-11	Sp Bin - Ly	40/33	α Tri LHS 1 51.4 1 51.1	sl str sl str small star
									LHS	
03	4 25 E	+40 03	1-2"	2.71	B05 V	no filter 11-11-11	Sp Bin - T ₂	40/100	ε Per RHS 3 56.3 3 54.6	9 th sl str
									RHS	fine
30	1 19 W	+	2"	1.3.75	G8 II	11-11-11	Call Bin - Ly	40/140	RHS 23 36.4 23 33.7	Fine
49	0 35 E	+29 33	2-3	v-3.53	F6 IV	filter in 11-11-11	Sp Bin - Ly	40/31	LHS 1 51.4 1 28.0	sl. str.
27	1 17 E	+22 27	2"	6.11	B8	7-7-7	Ap - MR	400/170	LHS	using old fine
48	1 24 W		2-3	v- 3.53	F6 IV	filter in 11-11-11	Sp Bin - Ly	40/31	LHS	RA set up v sl str.
8	0 21 E	+40 02	1"	2.71	B05 V	no filter 11-11-11	Sp Bin - T ₂	40/100	RHS	fine
55	3 01 W	+41 29	2"	7.26	O8 V	filter in 7-7-7	Sp Bin - Bin	400/155	LHS	read ST v sl str
	Taken from side facing possible fog source. 41089-41090T not exposed to									
	taken from opposite side of fog source possible fog source									
26	1 35 W	+50 58	1"	5.5	B2 IV	7-7-7	Sp 2 - Lnc	200/130	LHS	v. sl. str.

222

Dome Temp.

Transparency Conditions Hazy but Fine

Focus

Dome Temp.

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality	
37	A	5 13W	+29 34	3"	V= 3.53	F6 IV	^{no filter} 10-10-10	SpBin-Ly	40/100	4Tj Tilt - 1 Turn	RHS	wh
56	B	3 28W	+40 03	1.2"	2.71	B5 V	13-8-10	SpBin-Ty	40/90		RHS	vsl wh
40	C	0 0	+20 32	1.2"	7.2	965+ A2	^{Filter in} 10-9-9	VB-Plg	400/330		LHS	sl. str.
<p>All new chemicals, Fixer is now Ektaflo</p>												
<p>II20 10^m } II25 6^m } D19 08² 098 6^m }</p>												
<p>098 should be 4^m? this emulsion batch has higher fog than previous, apparently</p>												
<p>Mice climbing the walls. May join them soon!!</p>												

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IIa0-e 28115-15116
 IIIa-e 03075-16116

Date Nov 18-19 Thurs-Fri Observer Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41105	HD11443	01 47.4	+29 06	G8	IIa0-e	91.5	36°F	00 09	00 35	C
41105T	Calc for 41105, 8-10.				"	90sec				
41106	HD24760	03 51.1	+39 43	G8	IIIa-e	91.9		00 44	01 09	C
41106T	Calc for 41106-7.				"	180sec				
Test Setting	Y 011	05 23.9	05 23.0							
-	"	"	5 23.0							reset after going West 2 hrs
	"	"	5 23.0							reset after going East 2 hrs
	"	"	5 23.1							reset after locking within 1 hr or Star.
	"	"	5 23.4							This was reading after 25 min Time -
41107	HD37468	05 33.7	-2 39	G12	IIIa-e	131.5	36°F	02 15	02 44	A
41108	HD 37479	05 33.7	-2 39	"	IIa0-e	"		02 46	04 11	B
41109	HD 73731	08 34.7	+19 54	"	"	"		04 15	05 08	C
41110	HD 97937	11 10.7	+13 23	"	"	"		05 19	06 38	A

Dome Temp. ^{Paranal H=948}

Focus 75-R

Dome Temp. H=928

Transparency Conditions clear by 23^h Very hazy

226

Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
35	C	2 19 W	+29 28	3-5"	3.52	F6	10-11-11	Spln-Bly	200/124	2Tri Thru cloud again LHS - close LHS	vs str
09	C	0 48 W	+39 56	3-10"	2.7	M=V	13-8-11	Spln-Tri	40/108	RHS sudden overexposure RHS Box=2	Fine & dsl
		console Hrk circle						Δ (Console - Hrk circle)			
		0 19.2 E	0 20 E					- 0.8 mag (some problem here, the Hrk agreement was perfect before this)			
		} no problem on these setting though.									
		00 00 26 W	00 00					Y Ori still centered on finder cross hairs - as it is			
44	I	00 42 W	-	4.6'	3.51	09.5J	7-7-7	Spln-Bly	40/70	Hrk circle console reading & sec RHS	sl str
11	E	02 09 W	-2 33.9	3.4	6.32	R3p	8-8-8	Rp Bly	400/140	LHS 02 00 W	fine
08	C	00 05 W	+19 40	"	6.38	A ₇	8-8-8	Spln-Bly	400/145	00 45 E 00 43 55 E 65 W 00 10 E 00 9 35 E 35 W	fine
38	A	01 00 E	+13 00	"	6.49	A ₆	8-8-8	Spln-Bly	400/130	02 15 E 02 13 00 E 120 W 02 00 E 01 58 30 E 90 W 01 45 E 01 43 25 E 90 W	guide some seeing
								↑ some cloud		01 00 E 00 52 20 E 90 W	
								Coming west after last exposure →		00 30 E 00 27 55 E 125 W 00 20 E 00 8 03 E 117 W	
		note on attempting setup for HD 93431 at 5:10 EST 6.2° E Hrk read 3 min. too far W & I couldn't be sure of correct star. S setup 1097737 Hrk Hrk 2 and 21									

Dome Temp. ~~94~~ 100F 74%

Transparency Conditions good - very windy
 poor seeing

232

Focus 100 - B
 Dome Temp. very amg cold 89%

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
55		04 17W	+46° 47'	4" 8"	7.29	A0	8-8-8	Ap MR	800/361		fine
42		02 16W		3"	7.17	B1	8-8-8	"	800/360	(v windy)	fine
47		01 30W	+29° 50'		7.26	A3	8-8-8	Am - M12	800/360		fine
44		01 32W	+58° 19'		6.96	A2	8-8-8	Am - M12	800/360		fine
46		01 54W	+02° 25'		3.82	B7.5 _F	8-8-	Sp - Bin - Bh	40/28		fine
										D19 10 ^m at 68°F fog =	

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ITa J E 03075-16116
098-01 04226-3116

ITa O-E 28115-19116

Date Nov 30/Dec 1 1976 (Nov/Dec) Observer Ri/Ly/BB//R Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41117	HD 204213 (11H L ₁)	22 ^h 01.0	+46° 45'	G-16	098-02	13/5	20°F	17:36	19:58	A	
41118	HD 222107 (A And)	23 ^h 32.7	+45° 55'	"	"	"		20:02	20:14	B	
41119	HD 216489 (HR 8703)	22 ^h 48.2	+16° 19'	"	"	"		20:19	21:23	C	
41120	HD 33328	05 ^h 04.4	-08° 53'	G-12	ITa J-E	13/7	18°F	21:29	22:31	A	
41120T1	cal step wedge	for plate 41120			ITa J-E		90 sec				
41120T2	cal -	41117-41119			098-02		D3 5100	02 5450	D 116		
41121	HD 33328	05 ^h 04.4	-08° 53'	G-12	ITa J-E	13/7	18°F	00:55	01:25	A	
41122	"	"	"	"	"	"		01:41	07:22	B	
41122T1	cal step wedge	for plates 41121-41123			ITa J-E		180 sec				
41123	HD 33328	05 ^h 04.4	-08° 53'	G-12	ITa J-E	13/7		02:35	03:22	C	
41124	HD 416516	06 ^h 28.41	+19° 30'	G-12	ITa O-E	13/5		03:33	05:05	A	
41125	HD 920131	10 ^h 47.06	+6° 52'	G-12	ITa O-E	13/5	140°F	05:14	06:47	B	
41125T1	cal step wedge	for plate 41124, 25			ITa O-E		90 sec				

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098-01-E 04526 -13116

Wal-e 03075 -16116

Date Dec 2/3 Thurs-Fri 1976 Observer Tm

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41126	HD 11443	01 47.4	+29 06	G16	098-01-E	9/5	14°F	17 29	17 55	A	325
41126T	Col's stamped for 41126-28		no 4x5 plates		"	100sec	strip cal'n		exp local on 41098T1072		
41127	Nowa Val 76	19 25.1	+20 17	G16	"	20/5		18 08	19 17	B	A 19
41128	HD 11443	01 47.4	+29 06	"	"	9/5		19 25	19 44	A	136E
41129	HD 24760	03 51.4	+39 43	G8	Wal-e	9/7		19 53	20 25	B	302E
41129T	Col for 41129				"	180sec					
41129TA	(Test for Sierra Gas Fe arc on Sp. in area)			G8	Wal-e	9/7				A	
B	"			G8	"	9/5				B	
C	"			G8	"	9/9				A	
X	"			G8	"	9/9	Slit head shielded from Fe arc			B	
41130	HD 33328	05 04.4	-8 53	G12	"	13/7	11°F	21 10	22 32	B	00 04E
					III 25 4" D19		68°F				
					098-01 4" "		"				

30°F
Dome Temp. Very cold 72°

Focus 100-B

Dome Temp. 87° * Nova is still 2nd brightest star in field (just barely)

Transparency Conditions

Excellent - snow to the north
& very dusty
(Tending to stay away from wind)

236

g Time S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Δ d read HRL	Quality
55	F	3 25 E	+29 30.5	5"00	V= 3.53	F6 IV	no filter 3-3-3	SpBin-Ly	200/68	UV in d.Tri 3 51.4	3 51.7-0.3 OK	fine
		dome in dark room										
17	E	4 19 W	+20 28	5"10	V= 3.9	Hd Em *	no filter 3-2-2	Nova Prog	800/36	UV in 19 28.4	19 25.9+25	Hd fine
44		1 36 E	+29 30.5	5"8"	V= 3.53	F6 IV	no filter 3-2-2	SpBin-Ly	200/63	UV in 3 51.4	3 49.6+1.8	
25	E	3 02 E	+39 59.2	"	2.71	B05 V	no filter 8-8-8	SpBin-Ts	40/79	uvout 3 56.3	3 57.3+3.0	fine
							no filter			at star	cloud too	
							1 min			* All III a Left Hue Box		
							1 min			Conclusion - All anomalies Fe on stellar spect. is independent of slit length & even Fe arc.		
							1 min					
							1 min + 10 sec				5.091 5.037+1.4	
32	B	02 04 E	-8 54	4-7'	4.07	R2 V	no filter 6-6-6	SpBin-Bln	80/115	more cloud - snow to		guide
										much snow on		
										Red PS - some more clouds at 9:50 of 1st 099 but should may be dust? / not so much in anyway.		
										→ IF DSS are bad (fog) could use other filter?		

Dome Temp. 20th Oct H=9076

Focus 100-Box OR

Dome Temp.

Transparency Conditions Good sl mist 238

Novo still 2nd ...

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
41	F	3 55 W	+20 30	2"	V ₂ 9	H ₂ Em	no filter 2-2-2	UV Filter (Novo) in	800/43	(still some sky) bracket 2pc saved	Ad fine cont. note
8	C	1 02 W	+ —	2-3"	V ₂ 8.07	M12 V	Wr 8 filter 1-2-1	Astrom-Spec KK	800/20	Grm 34A Wr 8 filter in front of slit	sl. sm
46	E	1 22 W	+54 53	1-2"	5.81	GSV	7-8-8	Astrom Spec KK	200/155		fine
05	C	1 37 W		2"	4.50	A7 V	8-16	Astrom Spec KK	200/114	40% ...	fine
29	F	0 03 E	-7 36	2-3"	5.24	K25	8-8-8	Acm-Sp KK	200/150	...	fine
54		0 09 W	+18 30		-13	GSV	10-1)	test	20/40	...	film should be positioned on slit darkest ...
				HI	10 ^m	80°	29				
				098-01	4 ^m	68° F	D19				
				IIIa 0	10 ^m	68° F	D19				
				41133	received July 9 th 1955						

Dome Temp. Very cold 78°

Transparency Conditions Good

240

Focus 100-B

super bad seeing

Dome Temp. 87°

Novo still red & slightly fainter now.

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS x 1977 real	Quality
57 A		4 19 W	+20 24.5	8"∞	9 ^v	Hx Em	no filter 2-2-2	Puma "76"	800/31	sky still bit at begin? 19 28.9 28.1 -0.3 *slit for 41137 may be 7.5	Fine Hx OK
		checked out	Vul	(Too faint & slow)			-seeing bad, source				Fine
42 B		0 19 E	+29 27	→10"	3.53	F6 IV	no filter 7-8-7	SB Lg	40/87	UV out) RHS Box #1 01514 52A+1.0	fine
										RHS Box #1 Some cloud	
3 C		1 46 E	-8° 42.4	>10"	4.07	B2 IV	no filter 7-6-6	SB Bln	80/125	RHS some cloud 05 080 8.0 00	fine ydng
27 B		1 09 E	-2 37.6	"	3.51	09.5 V	6-6-6	"	80/124	RHS 05 378 37A 0.2	Fine
24 E		0 27 W	-8 47.9	8"	4.07	B2 IV	6-6-6	"	80/105	some cloud	Fine
36 C		3 08 W	+50 50	4-6"	5.5	B2 IV	filter in 8-8-8	SB2 Lne	200/90	more cloud LHS	Fine
								very cloudy		LHS	
				III 25			4 1/2"				
				098			4 1/2"	D19 68°F			
				II 20			10"				

292

Dome Temp. *coll*

Transparency Conditions *Bad*

Focus *100-B*

Dome Temp.

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
59		0 18 W		2.3	407	B2 V	^{no 4:77 a} 46 46 46	SB-L16	80/95	RHS	Fine sky
2		0 49 W		"			"		80/143	RHS	Fine
5		1 12 W		3"			46-6-2		80/50	LHS cloud and is approx	sl wk sky
										RHS snow	
										LHS	
							4" D19 610P				

Dome Temp. 60% H warm

Transparency Conditions

Cloud from NW

248

Focus 80-R

Dome Temp.

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
18	A	0 08 W	+67 17	3-4	473	A5	8-16	Wat, Celestron	200/80	sl. str.
55	B	W		7.23	F5	8-16	-11-	400/20	disrupted out	1 wk
									Note put in box anyway	
									"unnumbered" throwout	
									if nothing is interesting	

Dome Temp. 95%

Focus 92R

Dome Temp.

Transparency Conditions good at top
poor near

252

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		1 51 W	+51° 35'	4-5	644	45	8-8-8	Close Bin - Wet	800/300	true readings 06:02:30 console 06:02:56	fine ii
											fine
		1 43 W	-02° 25'	3-4	657	FD	8-8-8	-1-	800/320		fine
		45 15	+45° 15'		690	80	8-8-8	-1-	800/300	cover to grating the cable came off at the designing of the exposure so had to cap it and put it back or and star became faded forming an secondary source	fine compression doubled!
				10"	D19	65° P					

Dome Temp. -7°C H=9078

Focus $0-R$

Dome Temp. -11°C 90%
 90%

Transparency Conditions

Excellent by 22:30

snow blowing though,
 so staying Low.

258

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
55	A	1 23 W	-2 32.6	3 ⁺ 5'	6.32	B ² p	7-7-6	Rp-Bln	900/135		Fine
				10.5 min	D19 @	68°F		previous night included with filter			
48	D	2 16 W	-2 32.7	4 ⁺ 5'	3.51	09.5 V	5-5-5	SB Bln	200/350	RHS Chocbox	Fook v str
				5 min	D19 @	65°F				" " "	
										Too much snow blowing is getting	

Dome Temp. -12°C $H=8070$

Focus $0-K$

Dome Temp. -15°C

Transparency Conditions

Clear by 22:30 again

260

ng Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Console reading Δ HFL	Quality
356	A	1 07 W	-8 48.3	3 ⁵ 4"	4.07	B2 IV	^{no. 4. Per} 5-5-5	SB B _{1/2}	80/130	Tv Failed	1.0 W	
33	B	1 13 W	-2 37	3"	3.51	095 V	5-5-5	SB B _{1/2}	80/105		still \rightarrow 1.0 W	very noisy
16	C	2 27 W	-8 48.1	4"	4.0	B2 IV	5-5-5	"	80/70	cloud	now \rightarrow 1.2 W	
										snow cloud		
						4 ^m D19	68 ^o F					

261

T-O-C 2815 - 19126
O-C-E 03075 - 13126Date 30/31 DECEMBER '76 TH/ATJ Observer B_h-T_n/T_n Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41165	HD 14633	02 ^h 16 ^m 7	+41° 32'	G12	IIa-OE	13/5	12°F	17:29	20:03	A	
41165 T	Strip calc for	41165, 67-74			"	90sec					
41166	HD 37A68	05 33.7	-2 39	G12	IIIa-e	13/5		20 09	20 44	B	2 33
41166 T	Strip calc for	41166.			IIIa-e	180sec					
41167	HD 34626	05 ^h 13 ^m 8	+36° 32'	G43	IIa-OE	13/1.3+		20 50	22 02	C	0 56
41168	"	"	"	"	"	"		22 03	22 58	A	0 01
41169	"	"	"	"	"	"		22 59	23 50	B	0 33
41170	"	"	"	"	"	"		23 51	00 42	C	0 45
41171	"	"	"	"	"	"	+6°F	00 43	01 44	A	02 46
41172	"	"	"	"	"	"		01 45	02 52	B	03 55
41173	"	"	"	"	"	"		02 52	04 04	C	05 07
41174	HD 88021/2	10 03.8	+20 49	G12	"	13/5	+5°F	04 14	05 55	A	02 09
					IIIaJ	1 ^m D19	60°F				
					IIaO	10 ^m "	"				
					A1174	4 ^m "	"				

Dome Temp. -12°C H=6070

Transparency Conditions

Excellent some cloud by 262

Focus 90-B

Dome Temp. -19°C H=9070

* Kool
One plate broken

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 02 W	$+41^{\circ} 23'$	4"	7.26	082	7-7-7	Sp. B. B. M.	400/150		fine
2 33 E	$-2 36.5$	4"	3.51	095	5-5-5 ^{no filter}	Sp. B. B. M.	80/100	cloud 5 28.2	fine
0 56 E	$+36^{\circ} 37'$	5-10	8.2	137.5	2-2-2	P ₁ *	300/63	console multi error 00°40E	fine
0 01 W	$+36 37$	3-5	"	"	2-2-2	"	800/65	RA read 2m 10m 7.00 East	
00 53 W	$+37 32.0$	3"	"	"	2-2-2	"	800/65	00 08E 2m E	
01 45 W	$+36 37.0$	"	"	"	2-2-2	"	900/68	2m 10m 5" 190"	
02 46 W	$+36 37.1$	"	"	"	2-2-2	"	800/65	* broken Dpc equal	
03 55 W	$+36 37.2$	"	"	"	2-2-2	"	800/63		
05 07 W	$+36 37.5$	3-5	"	"	2-2-2	"	800/62		
02 09 W	$+20 26.6$	3"	7.20	365 +42	6-7-7	V B Bly	400/145	cloud	OVERDEVELOP, THIS SHOULD HAVE BEEN 230 counts 2m
<p>* Kool - IF the 13/12/8 trials are too foggy & we have ample supply then perhaps go ahead & replace them with fresh. a 1/2 hr before in vacuum.</p> <p>T₁</p>									

267

Date IR / SAT JAN 7/9 Observer W. R. / M. R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41184	HD 17536	3 ^h 01. ^m 7	+40°34'	616	127-05E	9/5	24°F	17:36	17:50	A	2 ^h 22'
41185								17:52	18:06	B	2 ^h 07'
41186								18:07	18:25	C	2 ^h 47'
41187								18:26	18:45	A	1 ^h 32'
41188								18:46	19:04	B	1 ^h 10'
41189								19:05	19:20	C	0 ^h 55'
41190								19:21	19:36	A	0 ^h 32'
41191								19:36	19:53	B	0 ^h 20'
41192								19:53	20:09	C	0 ^h 04'
41193								20:10	20:28	A	0 ^h 15'
41194								20:29	20:46	C	0 ^h 33'
41194a	and also made by plate 41194-41194b				127-05E	15mm	at 7.5 V	5:00	5:50	Ad	
41195								20:47	21:01	A	0 ^h 48'
41196								21:02	21:24	B	1 ^h 11'
41197								21:55	22:21	C	2 ^h 09'
41198					127-05			22:22	23:05	A	2 ^h 52'

Dome Temp. -9°C 70%Focus *OR*

Dome Temp.

Transparency Conditions *good*

268

log Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
50	A	2 ^h :22E	+40°52'	3	2.2V	88I	8-7-7	Zd-Algol	80/89	UV Filter in T.H. 0.7 B/	ust w/ 8mm
38		2 ^h :07E					8-7-7		80/84		ust w/
25		2 ^h :47E					8-7-7		90/84	hard to find the	ust w/
45		1 ^h :38E					8-7-7		90/87	apart ^{meter} at the wires	"
04	B	1 ^h :10E					8-7-7		90/86	gain to I give all	"
20		2 ^h :55E					8-7-7		90/87	the plate's the required	"
36	B	2 ^h :38E					8-7-7		90/87	expose plate underlap	"
58		2 ^h :20E					8-7-7		40/89		"
39	G	2 ^h :04E					8-7-7		40/90		"
28	A	2 ^h :15W					8-7-7		40/86		ust w/
46	C	2 ^h :33W					8-7-7		40/90		ust w/
01	A	2 ^h :48W					8-7-7		40/85		ust w/
24	B	1 ^h :11W					8-7-7		40/84	clouds at 21:13	"
21	C	2 ^h :09W					8-7-7		40/85		ust w/
05	L	2 ^h :52W					8-8		40/151	I return to 2ho	"

Dome Temp. -12°C H=80%

Focus 90-B

Dome Temp. -17°C H=92% Temp reached -19°C then warmed up

Transparency Conditions *cloudy & clear*

then Excellent but slightly

272

Time ST.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02	A	1 07 W	+	2-3	2.2- 3.5	B8V	no filter 7-7-7	Algol-2d	40/81	Tilt .7B UV filtering	All Fine
05	A	3 11 W	+	2-3	2.2- 3.5	B8V	7-7-7	Algol-2d	40/80		
26	B	3 32 W		"	"	"	7-7-7	"	40/80		
48	C	3 54 W		"	"	"	7-7-7	"	40/87		
58	A	4 13 W		"	"	"	7-7-7	"	40/80		
31	C	4 35 W		"	"	"	7-7-7	"	40/80		
54	A	5 04 W	+40 52	"	"	"	7-7-7	"	40/79		
20	B	5 25 W		"	"	"	7-7-7	"	40/80		
47	C	5 53 W		3"	"	"	7-7-7	"	40/85		
32	A	1 38 W	+20 30	2-3	7.20	965+ 42	filtering 7-7-7	VRB 1/3	40/230		Fine *
07	B	3 06 W	+13 01	3"	649	46 _n	7-7-7	SRB 1/3	400/145	Thin cloud Cloudy Dawn	Fine *
			IIa0	11 ^m	} D19 67 ^m			* Both have same edge, corresponding to RHS off slit on TV screen looking too ragged - bad guiding.			
			127	5 1/2 ^m		Make sure image gets enough on RHS of TV slit.					

275

Il-0-e-2815-31126

Date ^{Jan} Sun-Mon 16-17/77 Observer Kik-TM Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41216	HD6582	1 1.6	+54 26	G12	Il-0-e	13/7		19 45	20 56	A

Dome Temp
Focus
Dome Temp

Hour Angle
End

3/7

277

II₀₀-e 28115-31126
 II₀₀-e* 28115-14017

Date Mon - Tues Jan 17-18/77 Observer But-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41217	HD 51418	06 52.2	+42 26	G12	II ₀₀ -e	9/5	+3°F	01 55	05 31	A
41217T	Strip Cal'n for 41217-19				"	90sec				
41218	HD 112014	12 48.3	+83 58	G12	"	13/5		05 39	06 26	B
41219	HD 132742	14 59	-08 23	"	"	9/5		06 40	07 12	C
	Following Test Done Jan 18	22" - 0"	λ Filter	Dia			Dome Temp -14°C	Time	Voltage	
41219T1	Spot Plate Cal'n		4300Å	2	II ₀₀ -e*			48 min	17.5V	
			4300Å	3	"			12 min	17.5V	
41219T2	Strip Cal'n	15 sec			"		-14°C	180 sec	(metronome)*	
T3	"	"			"			180 sec	"	
T4	"	"			"			180 sec	"	
T5	Strip Cal'n	45 sec			"			45 sec	"	
T6	"	"			"			45 sec	"	
T7	"	"			"			45 sec	"	
not numbered T8	Spot Plate Cal'n (3 exp)		4300Å	4	"			180 sec	17.5 volts	
T9	"	3 exps	4300Å	4		4 pr. fogged		45 sec	22.5 V	
								fg		

Dome Temp. -14°C $H=87\%$

Transparency Conditions *Very Good*

Focus *80-B*

Dome Temp. -25°C $H=576$ *prob frozen*

Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality	
6 07 W	+42 23	5-10"	6.61	A0	7-7 F	Ap MR	400/112			
6 10 W	+83 33	6"	5.81	A0	7-6-6	SB B14	200/38	? Evaporator stopped	"	
6 12 E	-08 23	4-6"	4.9	A0	8-12	S. B. N - BW	200/140	??	"	
			10	D19	67 F					
								^{XY} Note After T1 done Voltage had jumped to $185 \pm .5\text{V}$ (Left it the same for T8)		
* Measure count		159 counts in 60 sec by clock before enough								
Used Metronome & no way to exactly calibrate timer to 180 sec without > 15 sec error										
If this is fogged, than all others in Box 14017 are as well										
L 11 00 W 90 37 58 F										

279 Note #41222 skipped
non-existent

batch no? 127-05e -19017
IIIaJ-E 03075 -21017

Date Wed 4th Jan 19-20/77 Observer Zd-Tn/Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41220	HD 19536	03 01.7	+40 34	G16	127-05e	9/5	20°F	22 47	23 10	C	3 44
41221	"	"	"		"			23 11	23 32	A	4 06
41223	"	"	"		"			23 33	23 53	B	4 27
41223T	Colo step wedge for 41220-				"	15 min	@7.5V	D4 5100	D3 5450	D2 Hd	
41224	HD 19536	03 01.7	+40 34	G16	"	9/5		23 54	00 14	C	4 48
41225	"	"	"	"	"	"		00 15	00 35	A	5 09
41226	"	"	"	"	"	"		00 44	01 2	C	5 36
Following Tests done		<u>Jan 25</u>		19 ⁿ → 22 ⁿ EST		Very high Humidity		→ 100%			
				λ Filter		Diaphragm		Time	voltage		
41226T1	SPOT TEST Colns		4300 Å	3x	IIIaJ-E	D4	-3°C	20 min	10V ± .5V		
41226T2,3,4	STRIP Coln Tests			3y	"		-3°C	20 min			
41226T5	SPOT TEST Colns		4300 Å	3y	"	D4	-4°C	60 sec	20V		
41226T6,7	Strip Coln Tests			2x (non-are)	"		-4°C	60 sec			
41226T8	SPOT Coln Test		4300 Å	1x each	"	D3 D2 D1		D3 D2 D1 4 min 16 min 60 min	20V		
41226T9	SPOT TEST Colns (Agard 171)		4300 Å	3x	"	D4	-5°C	20 min	10V		

Dome Temp. -7°C H=957

Transparency Conditions Clear by 22^h Very good 280

Focus 70-B

Dome Temp. -8°C H=997

Some cloud by 0^h.30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3 44 W	+40 52	2-3	2.2-3.5V	B8V	no filter 7-7-7	2d-align	40/80	uv-filter in	wh
4 06 W	"	"	"	"	7-7-7	"	40/80		"
4 27 W	"	"	"	"	7-7-7	"	40/80		"
4 48 W	"	2"	2.2-3.5V	B8V	7-7-7	2d-align	40/80		"
5 09 W	"	"	"	"	6-7-6	"	40/60	cloud	"
5 36 W	"	1-2	"	"	7-7-6	"	40/50	hole / Telescope colliding	"
- [warmed up at 10 volt for 1 hr]							A	cloud -	
* 1/2 broken but should be OK on 3									
Spot Timer used for 20 min			5 ^m D19 67°F		how long were these in vacuum? → About 6 hrs - P. to Vac at 17 ^h				
Each of strips timed & done at same time with Each of 41226 T1 Spot Tests									
Metronome Timed									
Metronome Timed at same time as 41226 T5 exps.									
Spot Timer used for all 3 exps.									
Spot Timer used. Note. * Timing for comparison with T2, T3, T4, won't be as exact as T1 (broken one) since they won't be done together. Time reset to 20.									

287

MaJc 03075-06017

Ma-o 28115-31126

Date Fri-SAT JAN 21/22 Observer W & T.M. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
H1227	HD33328	05 ^h 04 ^m .4	-08°53	G12	IIIaJ-E	13/.7	20°F	17:53	19 11	A
41227T	Calc strip for 41227-29				"	180sec				
H1228	HD33328	05 ^h 04 ^m .4	"	"	"	13/.7		19:12	20:00	B
41229	"	"	"	"	"	"		20:01	20:59	A
41230	HD 88021/2	10 ^h 03 ^m .8	20°49'	G12	IIa-o	13/.5	10°F	01:25	04:42	B
41230T	Strip Calc for 41230				"	90sec				

Dome Temp. -7°C $H=7276$

Focus $90-B$

Dome Temp. -15°C

Transparency Conditions

Very Good then sl. cloudy

Sudden clearing after 1^h - then very long cloud from nowhere?

282

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
11	2:09E	-8 45.8	2-4	4.07	B2V	hop. filter 5-6-5	Sp. Bin. - Blm	200/305	2/1977 C. 10 Blue Box 05 80 05 7.5	
12:00	1 20E	-8 46.1	2-3'	"	"	5-5-5	"	80/137	05 7.8	
1:59	0 21E	-8 46.3	"	"	"	5-5-5	"	80/132	cloud 05 8.7	
1:42	2 22W	+20 27.7	3-5	7.20	965 +A2	filter in 77-6	V6-Blm	800/392	thru cloud - very good	

283

IIIaV-e 0307508017

IIaO-e 28115-14017

IIaO-e* 28115-22017

Date Sat-Sun Jan 22/23 1977 Observer Ly-Tn / Blh - Ty Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41231	HD 33328	05 04.4	-8 53	G12	IIIaV-e	13/1.7	+10°F	17:51	19:00	A
41231T	Strip caln for	41231, 34-35, 40.			"	180sec				
41232	HD 10260	01 35.3	+60 32	G12	IIaO-e	13/1.5		19 09	20 50	B
41232T	Strip caln for	41232-33, 36-37.			"	90sec				
41233	HD 10260	01 35.3	+60 32	G12	IIaO-e	13/1.5		20 52	22 17	C
41234	HD 33328	15 04.4	-8 53	G12	IIIaV-e	13/1.7		22 28	23 16	A
41235	HD 33328	"	"	"	"	"		23 18	0 4	C
41236	HD 98021/2	10 03.8	+20 49	G12	IIaO-e	13/1.5		00 10	02 41	B
41237	HD 112014	12 48.3	+83 58	G12	IIaO-e	13/1.5		02 48	03 40	C
41238	HD 112028	12 48.3	+83 58	G12	IIaO-e*	13/1.5		03 41	04 41	A
41238T	Coll step step for	41238-39.			"					
41239	ν Boo	19 11.1	+19 42	G12	"			04 47	04 49	B
41240	HD 139892	15 35.6	+36 58	G12	IIa-JE	13/1.5		04 55	05 42	C

Dome Temp. -12°C H=83 $\frac{2}{3}$

Transparency Conditions

Very good - s/haze

289

Focus 80-B

Dome Temp.

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2	17 E	-8 440	3-5'	4.07	B2V	no filter 5-5-	SB Blu	80/140	RHS	
									RHS	
50 B	3 OW	+60 573	4-7'	5.58	B7V	6-7-6	SB Ly	400/147	21977 1° 40.5 81977+60 55	fine
17 C	4 29W	+60 574	3-5'	5.58	B7V	6-6-6	SB Ly	400/137		fine
16 A	2 00W			4.07	B2V	no filter 5-5-5	SB Blu	80/140	RHS	
4 C	2 48W	-8 43.6	2-3'	4.07	B2V	5-5-5	"	80/140	RHS	fine
41 E	00 25W	+20 31	"	7.20	365+ A2	6-6-6	VB-Blu	800/458		fine
40 C	01 20 E	+83 35	2"	5.81	A0	6-6-6	SB-Blu	200/75		fine
41 A	00 16 E	+83 35		5.2	shell	6-6-6	shell-Blu	200/82		fine
49 B	1 33 E		1-2"	0	K20P	9-9	std. Vel.	40/20		fine
42 C	2 03 E	+36 45.8	1-2"	4.95	B7V	no filter 5-5-5	SB-Blu/Ly	80/123		
		Il 20 9"	} 219	8.8 F						
		III 4 1/2"				fn				

285
 * Gal Spd tests
 on 19/20 of Jan 19/20

127-04-E 00095-18017

Date 27/29 JAN 1977 THU/FRI Observer Blu-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41241	HD19536	03 ^h 01 ^m .7	+40°39'	G8	127-04	9/5		21:55	22:20	A
41242	HD19536	03 ^h 01 ^m .7	+40°39'	G8	127-04	9/5	100F	22:21	22:48	B
41243	HD19536	03 ^h 01 ^m .7	+40°39'	G8	127-04	9/5		22:49	23:22	C
41244	HD 19536	03 ^h 01 ^m .7	+40°39'	G8	127-04	9/5		23:24	00:03	A
41245	HD 19536	03 ^h 01 ^m .7	+40°39'	G8	127-04	9/5		00:04	00:35	B
4124571	cal slip wedge	for plate	41241-45	G	127-04		15mm at 75V			

L89
Pg #1

127-05-E 00095-27017
127-05-E* 00095-02027

Date Feb 3-4 Thurs-Fri 77 Observer Bls-Tn/ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	
41257	HD 19536	03 01.7	+40 34	G16	127-05-E	9/5		19 09	19 36	A	
41258	HD 19536	03 01.7	+40 31	G16	127-05-E	9/5		19 37	20 07	B	
41259	HD 19536	"	"	"	"	9/5		20 13	20 39	C	
41259T	Coll. Step wedge for plates 41257-59				"			D415V 4810A	D37V 5450A	D27V Hd	15min
41260	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		20 46	21 09	A	
41261	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		21 10	21 30	B	
41262	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		21 31	21 47	C	
41262T	Coll. step wedge for plates 41260-71							D27V Hd	D37V 5450	D415V 4810	
41263	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		21 48	22 04	A	
41264	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		22 05	22 20	B	
41265	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		22 29	22 40	A	
41266	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		22 45	23 00	B	
41267	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		23 02	23 17	C	
41268	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		23 19	23 34	A	
41269	HD 19536	03 01.7	+40 34	G16	127-05-E*	9/5		23 35	23 56	B	
41270	"	"	"	"	"	9/5		23 57	00 16	C	

Dome Temp. -5°C $H=85\%$

Transparency Conditions

Good - some threatening cloud
gusty

290

Focus 90-B

Dome Temp.

g Time S.T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
56	A	01 08 W		2"	2.2- 3.5	B8V	4-10-7	Zd-Algol	40/81	UV Filter in	vsl. strong
07	E	01 39 W	+40 51.3		2.2- 3.5	B8V	7-7-7	Zd-Algol	40/80	cloud coming fast	
39	C	02 11 W			"	"	7-7-7	"	40/80	sl cloud	
9	A	02 41 W			2.2- 3.5	B8V	7-7-7	Zd-Algol	40/78		fine
30	E	03 02 W			2.2- 3.5	B8V	7-7-7	Zd-Algol	40/79		
47	C	03 19 W			2.2- 3.5	B8V	7-7-7	Zd-Algol	40/80		
54	A	03 36 W			2.2- 3.5	B8V	7-7-7	Zd-Algol	40/81		
20	E	03 52 W	+40 52		2.2- 3.5	B8V	7-7-7	Zd-Algol	40/81		
90	A	04 12 W			2.2- 3.5	B8V	7-7-7	Zd-Algol	40/81	Cloud	
00	B	04 32 W			2.2- 3.5	B8V	7-7-7	Zd-Algol	40/82	Cloud	
17	C	04 49 W			"	"	7-7-7	Zd-Algol	40/80		
34	A	06 W			2.2- 3.5	B8V	7-7-7	"	40/80	Tot osc in 5'17W-5'22	
56	B	28 W			2.2- 3.5	B8V	7-7-7	"	40/80	some cloud	
16	C	48 W			"	"	7-7-7	"	40/78		

122
299
#2

75 hrs
II-o-e 28115-22017
Date

Date Feb 3-4 cont. Observer Th Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41271	HD 19536	03 01.7	+40 34	G16	12705-E	9/1.5	20°F	00 16	0 38	A
41272	HD 88021/2	10 03.8	+20 49	G12	II-o-E	13/1.5		00 57	3 31	A
41272T	Strip coll for 41272				"	90sec				
41273	HD 112014	12 48.3	+83 58	G12	"	13/1.5		3 39	4 27	B
41274	HD 112028	"	"	"	"	"	19°F	4 28	5 07	C
41275	HD 139892	15 35.6	+36 58	"	II-o-E	"		5 18	5 57	A

Dome Temp
Focus
Dome Temp

Hour Angle
End

6 11 V
2 02 W
0 16 V
0 56 W
1 2 E

Dome Temp.

Transparency Conditions *SI cloudy*

29/2

Focus

Dome Temp. *-10°C*

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
38	6 11 W	+40 53	3"	2.2- 3.7	B8V	^{no filter} 7-7-7	Zd - Algol	40/80	UV Filter	fine
31	2 02 W	+20 27.4	1-2"	7.20	965 +A2	^{Filter in} 7-6-6	VB Bln	400/230	cloud & near Full moon	fine
										satisfactory
27	0 16 W	+83 31.1	2"	5.81	A0	6-6-6	SB Bln	200/70	thin cloud	fine
07	0 56 W	+83 30.9		5.2	shell	6-6-6	Shell-Bln	200/78		v sl strong
57	1 2 E	+36 42.2	2-3	4.95	B7V	^{no filter} 5-10	SB Bln/Ly	200/40	cloud (obscuring part of star)	we, overexposed
				120, 127	11.5V	10 ^m	D19	68°F		
						5 ^m	" "			

293

127-05-E 00095-04027

IIoO-e 28115-22017

IIIaJ-e 03075-06017

Date Feb 5-6 Sat-Sun 1977 Observer Tn / Bln-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41276	HD19536	03 01.7	+40 34	G16	127-05-E	9/1.5	11°F	18 15	18 41	A	021
41277	"	"	"	"	"	"		18 42	19 13	B	053
41277T	Coln strip wedge for 41276-82.				"	15 min		D415V 4810A	D37V 5450	D27V H2	
41278	HD19536	03 01.7	+40 34	G16	"	9/1.5		19 43	20 13	C	153
41279	"	"	"	"	"	9/1.5		23 11	23 50	A	521
41280	HD19536	03 01.7	+40 34	G16	"	9/1.5		23 51	00 38	B	0619
41281	HD19536	03 01.7	+40 34	G16	"	9/1.5		00 39	01 45	A	0726
41282	HD112014	12 48.3	+83 58	G12	IIoO-e	13/1.5		02 01	03 22	B	004
41282T1	Strip Coln for 41282, 84.				"	180sec		mistake Ignoss			
41282T2	Strip Coln for 41282, 84.				"	90sec		Labelled T2			
41283	HD139892	15 35.6	+36 58	G12	IIIaJ-e	13/1.5		03 29	06 23	C	020
41283T	Strip Coln for 41283.				"	180sec					
41284	HD132742	14 55.6	-8 05	G12	IIoO-E	13/1.5		06 27	07 00	A	057

Dome Temp. -16°C $H=76\%$

Transparency Conditions

Good - very gusty

29/4

Focus 90-8

Dome Temp. -20°F $H=85\%$

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
41	0 21 W	+40 49.8	4-6"	2.2- 3.5	B8V	no filter 9-9-9	Zd-Algol	40/80	UV filter, T.H. 7B	v sl wh clear
13	0 53 W	"	"	"	"	9-9-9	"	40/78	thin cloud	v sl wh clear
						Dome shutters closed			snow blowing or something	completely light sludgy
13	1 53 W	+40 50.0		2.2- 3.5	B8V	9-9-9	Zd-Algol	40/76		
50	5 31 W	+40 45	2-3"	"	"	9-9-9	"	40/80	Tel reversed	
38	06 19 W		4"	2.2- 3.5	B8V	7-9-9	Zd-Algol	40/79		
4	07 26 W		4-6"	2.2- 3.5	B8V	9-9-9	Zd-Algol	40/80		
22	00 91 E	+83 29	3"	5.81	A0	7-7-7	Sp. B.a. 131n	200/70		
										fine
23	0 20 E	+36 40	3"	4.95	B7V	no filter 7-4-5	SB-B1/Ly	200/350	RHS	v sl sta
									RHS	fine
00	0 57 W	-8 27	3"	4.91	A0V	6-6-6	SB-B1/Ly	200/65		fine
			127	5 ^m	D9	689F				
			IIa 0	10 ^m						
			III d 5	4 ^m			for up			

Dome Temp. -13°C # 630127 batch. 04027 discarded —

Transparency Conditions *Excellent - 140m high cloud* 298

Focus *90-B*

light smudge one edge

Dome Temp. *-15* *90%*

Hour	Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
26	4 22 W	+59 32	1.2"	7.85	A0	7-7-7	$A_m - MR$	400/160	cloud by 20:30	fine
44 B	2 42 W	+42 23	2"	6.61	A0	7-7-8	$A_p MR$	400/180	some cloud	fine
13 A	0 51 W	+54 09.3	1.3"	5.02	A	8-8-8	$A_m - MR$	200/74		fine
41 A	1 19 E	+06 48	2"	4.8	A	8-8-8	$A_m MR$	200/73		fine
C	0 15 E	+12 35	2"	6.52	A	8-8-8	$A_m MR$	400/152	thin cloud	fine

9^m Dao D19 68°F

299

127-05 00095-05027

Date FEB 15/16 TUE/WED 77 Observer But - In Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41292	HD 19536	03 01.7	+40 34	G 16	127-05E	9/5	19°F	18:15	18 52	A
41293	"	"	"	"	"	"		18:54	19 31	B
41294	"	"	"	"	"	"		19:34	20 09	C
41295	"	"	"	"	"	"		20 12	20 44	A
41295T	Cal Spot Plate for 41292-95					15 ^m		D4 15V 14810	D3 7V 15450	D2 7V Hex

Dome Temp. -12°C 14-70%

Transparency Conditions Good - cloudy 300

Focus 90-B

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 10 W	+40 53.9	3 ^{1/5}	2.2 -3.5	B8V	no filter 9-9 9	Zd Algol	40/79	UV in Tilt 0.7B	fine
01 50 W	"	"	"	"	9-9-9	"	40/80		fine
02 28 W	"	"	"	"	9-9-9	"	40/81		fine
03 04 W	"	3"	"	"	9-9-9	"	40/80	cloud & snow	fine

5^m D19 68°F

New D19

Entered by Blu on 18 FEB 177
after talk w/ Tn

301

** 03025-15027

* 00095-05027

** 28115-22017

Date 17/18 FEBRUARY 1977 THURSDAY Observer B. - R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41296	HD 19536	03 01.7	+40 34	G-16	127-05E	9/7		18:40	18:56	A	21:21
41297	HD 19536	03 01.7	+40 34	G-16	127-05E	9/7		18:57	19:15	B	01:43
41298	HD 19536	03 01.7	+40 34	G-16	127-05F	9/7		19:18	19:37	C	02:03
41299	HD 19536	03 01.7	+40 34	G-16	127-05E	9/7	20°F	19:40	20:00	A	02:21
41300	HD 19536	03 01.7	+40 34	G-16	127-05F	9/7		20:05	20:23	B	
41301	HD 37468 HD-37479 x	05 33.7	-02 39	G-12	ITA 5-E	13/5		20:32	21:07	C	21:03
41302	HD 19536	03 01.7	+40 34	G-16	127-05E	9/5		21:16	21:40	A	04:26
41303	HD 19536	03 01.7	+40 39	G-16	127-05C	9/5		21:41	22:00	B	04:26
41304	HD 19536	03 01.7	+40 34	G-16	127-05E	9/5		22:02	22:31	C	05:00
41305	catalogue entry for plates 41296-300, 412302-						15 min	04:15U 4810	03:40 5150	-02:40 H	
41305	HD 19536	03 01.7	+40 34	G-16	127-05F	9/5		22:34	23:09	A	05:37
41306	HD 88021/2	10 02.9	+30 49	G-12	ITA 5-E	13/5		23:23		B	
41305T1	catalogue entry for plate 41301				ITA 7-E		180 min				

Dome Temp. -09°C 60%

Focus 9.03

Dome Temp.

Transparency Conditions

g Time ST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
54	01 22 W	+40 52	2-3	2.2- 3.5	B8V	N.F. Filter 9-9-9	Zd-Algol	40/112	UV Filter in	fine
55	01 43 W			2.2- 3.5	B8V	9-9-9	Zd-Algol	40/112		"
57	02 05 W			2.2 3.5	B8V	9-9-9	Zd-Algol	40/110	BROKEN 1/2" missing	fine
58	02 29 W			2.2 3.5	B8V	9-9-9	Zd-Algol	40/112		"
123				2.2 3.5	B8V	9-9-9	Zd-Algol	40/108		"
92	01 03 W	-2° 36'	1"	3.51	09.52	5-5-5 w filter	Sp B ₂ -BC ₂	40/98	UV Filter out RMS 8 Box Cloud	"
90	09 06 W	+40 54'	1"	2.2 3.5	B8V	9-9-9 w filter	Zd-Algol	40/80	UV Filter in	"
90	09 21 W			2.2- 3.5	B8V	9-9-9	Zd-Algol	40/81		fine
31	05 00 W	+40 55	1"	2.2- 3.5	B8V	9-9-9	Zd-Algol	40/82		"
										fine
9	05 37 W	+40 55'		2.2 3.5	B8V	9-9-9	Zd-Algol	40/51	Cloud!	"
		+20° 28		7.20	12+ 985	7	VD-B ₂	400/		
									RMS 8 Box	
					5 ^m D19	68.3 F	fog III & J	0.35		
								127	0.22	

Dome Temp. -05°C 80%

Focus 90R

Dome Temp. -10°C 96%Transparency Conditions *very hazy and scattered clouds*

304

g Time ST.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
20	A	01455W	+40 53.5	2-3	2.2 3.5	B8V	9-9-9	2d- Algol	40/80	UV Filter in .73	
42	B	02416W			2.2 3.5	B8V	9-9-9	2d- Algol	40/82		
52	C	05 06W	+25 12'	2-3	6.3	F3IV	7-7-7	Vis. Prim Wd	400/120		vslade
54	D	02 20W	-020 23'		6.6	F0	7-7-7	Vis. Prim Wd	400/150		
5	E	0 02E	+18° 33'		6.6	F7V	7-7-7	-11-	400/200		fine
		1 50W	+50° 39'		6.9	F2V	7-7-7	-11-	400/200		fine
20	F	01 04W	+01° 54'		5.6	F8V	7-7-7	-11-	400/170	DOWN	fine
next page for dev. times											

305

12705 00095-17027

098-01 04266-13027

Ti20 28115-08027

Date Sun/Mon Feb 20/21 1977 Observer BB-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41313	HD19536	3 ^h 01.7	+44°34'	G16	127-05E	9/5	21°F	19:54	20:15	A	
41314	HD19536	3 ^h 01.7	+40°34'	G16	127-05E	9/5		20:18	20:44	E	3:24
41315	HD19536	3 ^h 01.7	+40°34'	G16	127-05E	9/5		20:47	21:15	C	3:50
4131571	cal step wedge	for plates 41313-15		15	127-05E	D415V 4810		D3 7V 5450	D2 7V Hd		
41316	HD93033 (TX & M)	10 ^h 39.5	+46°05'	G65	098-01E	12/4		23:07	23:40	A	
41317	HD93033	10 ^h 39.5	+46°05'	G24	098-01E	13/4		23:48	0:58	B	
4131771	cal step wedge	for plates 41316-41319			098-01E	15mm	D5 15V 4810	D2 7V 5450	D1 7V Hd		
41318	HD136175 (U105)	15 ^h 14.1	+32°01'	G24	098-01E	12/4		01:18	3:55	C	1:00
41319	HD139319 (TW10)	15 ^h 22.4	+6°14'	G24	098-01E	12/4		4:04	5:06	A	1:00
41320	HD152742 (G116)	14 ^h 55.6	-8°07'	G12	Ti20E	13/5	12°F	5:19	6:11	B	1:00
4132071	cal step wedge	for plate 41320			Ti20E	90mm					
* This must be the second best candidate for a black hole - last seen going into eclipse.											

Dome Temp. -10°C 80%
 Focus 90R
 Dome Temp. -15°C 88%

Transparency Conditions *Cloudy then partial clearing
 poor seeing*

306

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:55 W	+40:54'		22-35	B8II	9-9-9	ZI-Algol	40/80	uv filter in	
3:24 W			22-35	B8II	9-9-9	Zd-Algol	40/80	"	
3:55 W			22-35	B8II	9-9-9	ZI-Algol	40/80	" <i>onion planets</i>	
1:16 E	+45:16'	8"	71-88	B85	1-2-1	BRedip bin	800/15	uv filter in R.H.S. 6 exposed boxes * to the seeing	exp good strange spec
0:01 W	+45:44'	"	"	"	2-2-2	"	800/120	uv filter in R.H.S. exposed boxes Tilt = 0.875B	sl wke 4810 sl. str. Others fine
1:33 E	+31:25'	8"	77-88	B5	2-2-2	"	800/120	uv filter in Flux ~ 3-4 R.H.S Tilt = 0.875B	sl wke
0:31 E	+68:50'		75-78	A6	2-2-2	"	800/25*	uv filter in R.H.S Tilt = 0.875B ←	fine
0:51 W	-12:23'		49-59	Ac	7-7-7	"	400/160	uv filter out Tilt = 0.49B	fine
					Df 09			* apparently there are interference fringes from glass sandwich filter	
	II 0	10 ^m	68°	D19	.26				
	098	} 5 ^m			.38				
	127				.18				
	# 41319	10 ^m							

Dome Temp. -9°C 65%

Transparency Conditions GOOD - Thin Cloud

308

Focus 0

Dome Temp.

Hour	Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01	46W	+40 54	1-2	2.2-3.5	08V	9-9-9	Zd Algal	40/81	FILTER OUT, UV IN, TILT .7	slit width changed
01	54W		"	"	"	9-9-9	"	40/119		fine, dust
02	18W		"	"	"	9-9-9	"	40/110		fine, dust
02	52W		"	"	"	9-9-9	"	40/110	curius clouds	guiding
			5 ^m D19 68°F							

Dome Temp. -2°C H=756

Focus 0

Dome Temp. -7°C

Transparency Conditions *cloudy* *Windy*

Very Clear by 23 30 in NW

310

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04 13W	+40 54	3"	2.2- 3.5	B8V	^{no filter} 9-9-9	Algol-2d	200/371	UV filter in 7/10 0.7B	fine
								Revised Too	
05 32W	+40 54	2"-5"	2.2- 3.5	B8V	9-9-9	Algol-2d	200/402	TELESCOPE OSCILLATING IN AIR HA = 4° 30' W - 4° 40' W	fine
06 13W			"	"	9-9-9	"	200/400		"
08 46W			"	"	9-9-9	"	40/80		"
07 31W			"	"	9-9-9	Algol-2d	70/75	cloud at end	fine
01 56E	+55 03.5		+1.7	A5V	^{filter in} 9-8-8	Am-MR	200/75	(plate holder loose when unloading)	fine
05 9E	+25 46.2	3-4"	6.67	B9V	8-8-8	Ap MR	400/160	stars & limits!	fine
05 1E	+25 50	2-3	7.04	A1	7-7-7	Am MR	400/175	cloud	fine
			120	9 ^m					
			127	5 ^m	219 600F				

311

II-o-e 28115-08027

127-05-E 00095-02037

098-01E 04266-13027

Date wed Thurs Mar 2-3/77 Observer 2d-Sha-Tn/BB Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41333	HD 37479	05 33.7	-2 39	G12	II-o-e	13/1.7	30°F	18 46	20:43	A
41333T	Strip Calc for 41333				"	90sec			4:00:00	
41334	HD 19536	03 01.7	+40 34	G16	127-05c	9/1.5		20 57	21 16	B
41335	"	"	"	"	"	"		21 24	21 42	A
41336	"	"	"	"	"	"		21 52	22 16	B
41337	"	"	"	"	"	"		22 19	22 47	C
41338	"	"	"	"	"	"		22 49	23 29	A
41339	"	"	"	"	"	"		23 31	00:22	B
41339T	Calc step wedge for 41334-39				"	15min @				
41340T	Calc step wedge for 41340-43				098-1E	15min @				
41340	HD 115898	13 ^h 18.3	+45 40	G21	098-1E	13/1.4	30°F	00 36	02 04	A
41341	HD 93033	10 ^h 39.5	+46 ^m 05'	G24	098-01E	13/1.4		02:14	03:20	B
41342	HD 93033	"	"	"	"	"		03:21	4:35	C
41343	HD 139319	15 ^h 32.4	+64 ^m 14'	"	"	"		04 40	6:09	B

4810 @ 15V	5450 @ 7V	Ha @ 7V
D4	D3	D2
Ha @ 7V	43 10V	4810 10V
D1	D3	D3

Dome Temp. -2 °C H: 66%

Focus 90-R

Dome Temp. -5 °C H: 88%

Transparency Conditions Very good

372

Karl - More 127s need to be cut & evacuated.
Put back in too.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3 30 W	-2 35.7	2"	632	B3p	7-9-5	HeSi-Sho	200/100	perhaps sl/cosmos from AB	fine
								KK	
4 36 W	+40 54.3	2"	var. 2,2-3.5	B8V	no filter 7-11-8	Algol 2d	40/110	* All 6 127 strips at one	vsl wh
5 02 W	"	"	"	"	10-10-10	"	40/118	side of Red box.	"
5 36 W	"	"	"	"	10-10-10	"	40/114	098 strips on other side	fine
6 07 W	"	"	"	"	10-10-10	"	40/108	Dev is same anyway, <u>Right</u> .	"
6 48 W	"	3	"	"	10-10-10	"	40/113		
7 41 W	"	3-4"	"	"	10-10-10	"	40/99		Very fine
								not Labelled	
								Labelled "40" (Next to strip plates)	
0 48 E	+95 38	2-3	var 8.5	M6e	no filter 2-2-3	SRVar	800/110	Tilt 0.6B UV filter in	red fine blue wh
3 03 W	+45 41	2"	7/4	B8.5	2-2-2	BB eclipsing km	400/80	" "	vsl wh
4 18 W	"	2-3"	"	"	2-2-2	"	400/80	" "	"
1:02 W	+65° 58	2-3	75v	A5	2-2-2	"	400/72	" " (Close Vis Bin)	fine
		120	9"						
		098	4"	Diy 6PF					
		127	5"	high one (?) fou - 127					

Dome Temp. -2°C H=8870

Focus 80-R

Dome Temp. -4°C H=9970

Transparency Conditions Sudden clearing by 20' 15" 394

(Green) started at $\approx +25^{\circ}$ Alt.
Saw Fireball for 2.5 sec to NW horizon at $\approx 20^{\circ} 25'$ T₄

ing Time S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
11	A	04 19 W	+27 55.6	2" 3-4"	7.26	A3	7-7-7	Am MR	400/180		fine
										Good meteor @ 027-SE \rightarrow NW	"
51	B	01 31 E	+19 8.9	2"	6.24	A?	8-8-8	Am MR	400/180		"
47	C	00 26 W	+12 42.5	2"	7.24	A7	7-7-7	Ap MR	400/180		fine
58	A	00 58 E	+14 33.7		6.07	Am	7-7-7	Ecl/B. B ₁	400/160		fine
10	B	00 47 E	+4 43.6	2-3	3.93	K214	11-10	St/Vel	40/25		fine

Dome Temp. $+4^{\circ}\text{C}$ $H=73\%$ Focus $70-R$

Dome Temp.

Transparency Conditions Hazy - cloudy

316

ing Time L.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03	A	0245W	+40 503	1"	B8V	2.2- 3.5	no filter 5-3-9	Algo/ 2d	40/79	UV Filter in / Tild 0.7B	sl. wk
23	B	0305W	"	1-2	"	"	9-9-9	"	40/80		"
51	C	0333W	'	1-2	"	"	9-9-9	"	40/81		"
18	S	0400W			"	"	9-9-9	"	40/79		"
35	C	0517W					9-9-9		40/59	cloudy	weak
702	H2										

5^m D19 680apparently 24^h in vacuum insufficient for full speedwhy weren't the plates examined 02037 and first?

Dome Temp. 10°C 70%

Transparency Conditions Cloud → clearing

378

Focus 50R

Dome Temp.

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
25											
24	A	2:27E	+45°40.8	3-4	7.1v	B8.5	1-2-1	BB eclips. bin.	800/60	Grating rot. = 0.4408 Wr4 Filter inside spectrograph	out of focus
14	B	1:36E	"		7.1v	B8.5	1-2-1	"	800/60	Refocused to 50R before start of exp	fine 4810 wh
10	C	0:40E	"		7.1v	B8.5	1-2-1	"	800/60	Very poor transparency	fine
50	A	01°37W	+20°30' (from circle)		3.2	g651A2	7-14	VB Blh	800/138	starts in overdevelopment phase	wh.
				098	4"						
				IL30	10"		D19	60°F			

379
Visitors ~ 30 people
looked at Saturn
1/2 hr.

Tr20-E-28115-07037 127-05-E* 00095-02037
127-05-E** 00095-07037

Date Thurs Fri Mar 10-11 1979 Observer Bl-Ri / Rm-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41358	HD 19536	03 01.7	+40° 34'	G-16	127-05*	9/5	51°F	18:48	19:01	A
41359	HD 19536	03 01.7	+40° 39'	G-16	127-05*	9/7		19:02	19:20	B
41360	HD 19536	03 01.7	+40° 39'	G-16	127-05*	9/7		19:21	19:38	C
41361	HD 19536	03 01.7	+40° 39'	G-16	127-05*	9/7		19:39	19:57	A
41362	HD 19536	03 01.7	+40° 34'	G-16	127-05*	9/7		19:58	20:17	B
41362T1	cal step wedge in plates 41358-41362				127-05*	15mm	D415U 4810	D37U 5450	D27U HX	
41363	HD 19536	03 01.7	+40° 34'	G-16	127-05**	9/7		20:18	20:37	C
41364	HD 19536	03 01.7	+40° 39'	G-16	127-05**	9/7		21:07	21:33	A
41365	HD 19536	03 01.7	+40° 34'	G-16	127-05**	9/7		21:38	22:44	B
41366	HD 88001/2	10 ^h 03.8	+20° 49'	G-12	Tr20-E	13/5		22:55	01:51	C
41366T1	cal step wedge in plates 41363-41365				127-05*	15mm	D415U 4810	D37U 5450	D27U HX	
41367	HD 97937	11 ^h 10.8	+13° 23'	G-12	Tr20-E	13/5		02:09	03:25	A
41368	HD 186688	19 ^h 40.8	+29° 01'	G-12	Tr20-E	20/3		03:35	05:16	B
41368T1	cal step wedge in plates 41366-41369				Tr20-E	90mm				
41369	HD 188209	19 ^h 49.0	+46° 46'	G-12	Tr20-E	9/5	48°F	05:24	06:06	C

Dome Temp. 11°C 64%

Transparency Conditions

poor

320

Focus 50R

Dome Temp. 08°C 82%

g Time S.T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01	C	02 51W		1-2	2.2 3.5	B8V	9-9-9	Zd-Algol	40/80	UV Filter, 7B	fine
02	C	03 10W	+40° 54'	1-2	2.2- 3.5	B8V	9-9-9	Zd-Algol	40/106		v sl str
03	C	03 28W			2.2- 3.5	B8V	9-9-9	Zd-Algol	40/109		"
04	A	03 47W			2.2- 3.5	B8V	9-9-9	Zd-Algol	40/110		"
05	B	04 06W			2.2- 3.5	B8V	9-9-9	Zd-Algol	40/106		"
06	C										fine
07	C	04 28W			2.2 3.5	B8V	9-9-9	Zd-Algol	40/107		fine
08	A	05 25W	+40° 54'		2.2- 3.5	B8V	9-9-9	Zd-Algol	40/105	tile reversed	v sl wk
09	B	06 35W			2.2 3.5	B8V	9-9-9	Zd-Algol	40/110	Cloud	v sl wk
10	C	02 41W	+20° 30'	1-2	7.20	985+ AZ	7-7-7	VB-Bln	40/231	<u>BROKEN</u> 4PIECES	
11	C										fine
12	A	02 49W	+15° 00'	2	6.49	M6n	7-7-7	SpBn - Bl	40/101	cloud at end	fine
13	B	03 28W	+29° 14'	2	6.8-7.7	FO-G16	6-6-6	Ceph-Evans	800/273	thin cloud	fine
14	C										
15	C	02 46E	+46° 59'	1-2	5.54	0951.67	7-7-7	SpBn - Bl	40/120	clouds	fine
					1100 127	9m 5m	D19	68°F		DAWN	

Dome Temp. 10°C 70%

Transparency Conditions

azy

322

Focus 40R

Dome Temp. 05°C 95%

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
05		1:52 W	+33° 47'	2-3	5.82 -6.49	Ap	7-77	Ecl. Bin - Bin	400/150		fine
07		2:23 W	+19° 40'		6.38	Am	7-7-7	Sp. Bin - Bin	400/160		fine
40		01:34 W	+20° 28'		7.20	⁹⁶⁵ A2	7-14	VB - Bin.	500/180	Clouds from SW. at 0:05 cloudy at 01:30 sun in clouds to the	sl wk fine
					8 ^m D19	68°F					

323

IIa-B 28115-07037

Date MON-TUES MAR 14/15 77 Observer But-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41373	HD 43496	6 11.4	+15 53	G12	IIaOE	13/5	50°F	19 01	22 16	A
41374	HD 51418	06 ^h 52.2	+42°26'	G-12	IIaO-E	9/5		22 22	01 26	B
41375	HD 96003	10 ^h 59.3	+13°12'	G-12	IIaO-E	9/5		01 31	03 35	C
41375T1	cal step wedge for plates 41373, 74, 76				IIaO-E	90 sec				
41376	HD 137182	15 19.5	+10 54	G12	IIaOE	13/5	42°F	03:40	05 54	A
41376T1	cal step wedge for plate 41375				IIaO-E	80 sec				

325

T₂₀-E - 28115-15037

098-01E - 02266-09037

Date Wed. Thurs Ma 16-17 1977 Observer BB/Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41377	HD 73731	08 ^h 34 ^m 43 ^s	+19° 54'	G-12	T ₂₀ -E	13/15	40°F	20:10	21:56	A
41378	HD 93033 (IX UMa)	10 ^h 39.5	+46° 05'	G65	098-01-E	13/14		22:06	22:33	B
41379	HD 117555 (FK Com)	13 ^h 26 ^m .1	+24° 44'	G65	098-01E	13/14		22:40	00:49	C
41379T1	cal slip wedge for plate 41378-				098 15 ^m	D3 15V 4810	D2 7V 5450		13:49 Hx	
41380	HD 136175 (UCr B)	15 ^h 14.1	+32° 01'	G65	098-01E	13/14		00 54	01.51	A
41380T1	cal slip wedge for plate 41377				T ₂₀ -E	900 μ				
	Mon 17 1977									
	minutes look at Saturn 1 hr									
41380T2	cal slip wedge				T ₂₀ -E		180 μ			

Dome Temp. 0°C 80%

Transparency Conditions good but very windy

326

Focus 70R

Dome Temp. -1°C 80%

who runs off with T.V. system

ing Time EST.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
56	01 ^h 38 ^m ^X	+19° 38		6.38	Am	7-77	Sp 8u - Bl	400/160	clouds	
33		+145° 41.5		7.1V	88.5	1-2-1	BB-eclipse bin	800/60	With W4 Filter	
49	01 ^h 19E	+24° 22.1		V= 7.9V	9 ^h -e	1-2-1	Bl- " "	800/60	"	
51	00 ^h 05E	+31° 45	3-4	7.65 8.8	8.5+ 13.9	1-2-1	BB-eclipse bin	800/60	"	
									dead over	
				11.0	8 ^m					
				0.98	4 ^m	D19 69°F				
			A138072		4 ^m	D19 68°F	no background fog			

327

127-05

00095-07037

127-05

28115-15036?

Date Sat Sun Mar 19-20/77 Observer Zd Gore/Blu Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41381	HD-19536	03 01.7	+40°34	G16	127-05e	9/1.5	32°F	20:00	20:17 30	A
41382	HD19536	03 01.7	+40°34	"	"	"		20:24	20:46	B
41383	HD19536	03 01.7	+40°34	"	"	"		21:14	21:30	B
41384	HD19536	03:01.7	+40°34	"	"	"		21:40	21:59	B
41385	HD19536	03:01.7	+40°34	"	"	"		22:03	22:24	C
41386	HD19536	03:01.7	+40°34	"	"	"		22:32	23:07	B
41386T	Spt. calibration				127-05E	(3)	4810	15" D4	15V	(2)
41387	HD 88021/2	10 03.8	+20°49	G12	127-05	13/1.5		23:34	03:10	
41387T	Calibration step wedge				127-05E		90 sec			

67

Dome Temp.

Transparency Conditions

clear

328

Focus 90 R

Dome Temp. 26°F H=100%

log Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10:30	A	04 ^w 45	+40:52		2.2 3.5V	B8II	7-11-9	2d-Algal	40/80	UV filter in 17B	
46	B	05 ^w 11	" "		"	"	9-9-9	"	40/82		
30	B	05 ^w 56	" "		"	"	9-9-9	"	40/82	film reversed	wk
50	B	06 ^w 25	" "		"	"	9-9-9	"	40/80		center
20	C	06:54	"		"	"	9-9-9	"	40/80	-some haze	
10	B	07 33	"		"	"	9-9-9	"	40/80		
1	②	50 D3	7.5V ①	Hx 15 ^m	D2	7.5V				unlabelled	only pa. ① ② show
		04 36W	+20° 31		7.2	g65A27-7-7	SpBin-Blm		400/222		guide Strong
					127 } 120 }	8 ^m D19	68°F				

Grating 700
800 lines/mm

Dome Temp. 200F

Transparency Conditions Clearing

330

Focus 80R

Dome Temp. 250F, H=99%

ng Time S.S.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2	0:13 E	+45°45.7	2"	7.1v	B8.5	1-2-1	BB-eclip. bin	800/121	With Wr4 Filter Focus = 80R R.H.S. of Release Box	fine
3	0:04 E	+24°26'		V=7.7v	g6e	1-2-1	BB-eclip. bin	800/120	" " " "	Strong
53	1:02 E	+64°02'		V=7.5v	A6	1-2-1	BB-eclip. bin	800/120	" " " "	fine
44	1:04 W	+31°48'		V=7.65v	B5	1-2-1	BB-eclip. bin	800/120	also do " " " "	fine
									front of Release Box	4800 sl str.

4" D19 68°F

337 visitors looked at Saturn about an hour

Trans 28115-15037

Date TUES/WED MAR 22/23 77 Observer *Burt - Ri* Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41392	HD 96003	10 59.3	+13 12	G12	IId0-E	9/5	33°F	23:08		A
41392	40111133	12 ^h 42.0	+6° 30'	G-12	IIa0-E	9/5		01:16	05:14	A
4139271	red step wedge for plate 41392				IIa0-E	9/5				=?
41393	HD 156014	17 10.1	+14.30	G12	IId0-E	9/5		05:21		B

Dome Temp
Focus
Dome Temp

Hour Angle
End

04 13

Dome Temp. -01C 90%

Transparency Conditions HAZY - SOME CLOUD

332

Focus 80 R

Dome Temp. -05C 83%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	172 47		675	Ap 8		Ap MR	400/ -	SNOW BLOWING OFF THE SHUTTERS	
04 13W	+06° 07.4	8"-10"	630	Ap	8-8.8	Ap MR	400/180		fine
			4.4	M5 II	8	B.M. Std. Vel.	40/		
			8"	D19	68°F				

333

IIaJ-E

IIoO-E 28115 - 15038

Date Thurs-Fri MAR 24-25/77 Observer Blm-Tn/Rm-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41393	HD 33328	05 04.4	-8 53	G12	IIaJ-E	13/7	22°F	19 08	20 30	A
41393T	Strip Col for	41393			"	120sec				
41394	HD 88021/2	16 03.8	+20 49	G12	IIaO-E	13/15		20 46		B
41394	α Boo ^{HD 129217}	14 ⁿ 11.1	+19°42'	G12	IIaO-E	13/15		01:57	01:59	B
41395	SVCyg HD186688	19 40.6	+29°01.4	G12	IIaO-E	25/.5		02:20	05:36	A
41395T	Strip Col for	41394-95			IIaO-E	90sec				
<u>whole night blown in dark room</u>										

Dome Temp. -4°C H=60%

Transparency Conditions *Very Good*

336

Focus 0

Dome Temp. -6°C H=80%

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
23	A	3:12 W	-8 45.5	2"	4.07	B2 IV	AD 7/1905 5-5-5	Sp. Bin - Bln	40/71	RHS	fine
										RHS	fine
33	C	1 22 W	+20 28	2-3"	7.20	9G5 +A2	Filter in 8-8-8	VB - Bln	400/230	LHS	fogged in plate holder
										LHS	
02	A	6 22 E	+71 20		4.18	Aps	9-10-10	Sp. Bin - Lne	40/15	LHS	fine
18	S	0:24 W	+83 32.8	2-4"	5.81	A0	8-8-8	Sp Bin - Bln	200/70	LHS getting gusty	fine
59	C	1:05 W	+83 32.5	"	5.28	A2	8-8-8	"	200/60	LHS	fair quality
17	A	1:31 E	-15 36	3'-5"	6.19	A3	6-6-6	Ecl Bin - Bln	200/47	LHS	
10	C	0:38 E	"	2-4"	"	"	6-6-6	"	200/50	LHS	
21	C	0:11 W	"	"	"	"	6-6-5	"	200/53	"	fair quality
25	A	1:00 E	+71 21.7		4.18	Aps	10-9-10	Sp Bin - Lne	40/15	"	fair quality
							Mag 5"	} Dig 6"	0.10		
							Mag 8"		0.24		
all the AOS light streaks on the edge											

Dome Temp. +1°C H=5270
 Focus 80-R
 Dome Temp. -2°C H=9578

Transparency Conditions *Very good*

log Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
28 A	4 21 W	+40 55	1.2	2.2- 3.5	88V	9-9-9	Algol-2d	40/80	Tilt 0.7B UVE Filter in	sl. str
47 B	4 40 W	"	2.3"	"	"	9-9-9	"	40/90		sl. str
40 C	1 13 W	-2 24	2"	6.57	F0	8-8-8	Close Print	400/200	Waterline US Bic	sl. str
20 A	0 55 W	+31 45	1"	6.60	F5	8-8-8	"	400/200	sl. str	sl. str
26 B	1 01 E	+50 38	1"	6.9	F8V	8-8-8	US Bic	400/200		sl. str
28 C	1 06 E	+51 59	1.2"	4.60	A8	8-8-8	"	400/160	some cloud	sl. str
29 A	1 17 W	"	2"	6.61	F0	8-8-8	"	400/180	thin cloud / [plate holder was loose on ...]	sl. str
55 C	0 38 E	+52 58.9	1.2'	5.56	A2	8-8-8	"	400/160	Fired Plate holder clamp	sl. str
26 A	0 07 E	+52 58.1	"	5.60	A0	8-8-8	"	200/80		sl. str
56 B	0 02 W	+35 59.2		5.71	A5	8-8-8	"	200/80		sl. str
20 C	0 22 E	27 45		4.20	85V	8-8-8	"	200/100		sl. str
				127	5 ^m		} D19 68°F 0.20 0.23			
				120	8 ^m					

Dome Temp. +15°C H=5070

Transparency Conditions Good - sl haze

340

Focus 30-R

Dome Temp. +13°C H=6070

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03 54 W	+42 24	3-5"	6.61	H0	8-8-8	Ap MR	400/160		fine
01 53 W	+12 51	3-5"	6.75	Ap	8-8	Ap MR	400/77	clouds Push MHS Push MHS	vsl wk
					13	8" D17 68°F	0.22		
					14	12"	0.27		

347

IIa0-E 2515 25037

Date Thurs Eve Mar 31 April 11977 Observer Bla-Ri/Rm-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41415	HD 47105 8. GEM	06 ^h 36.0 ¹⁹⁷⁰	+16° 26'	G12	IIa0-E	9/9	44°F	19:19	19:44	A
41416	HD 47105	06 ^h 31.9 ¹⁹⁰⁰	+16 29	41	"	"	"	19 45	19 59	B
41417	HD 47105	06 31.9	+16 29	"	"	"	"	20 00	20 07	C
41418	HD 47105	06 31.9	+16 29	"	"	"	"	20:08	20:12	A
41419	HD 88021/2	10 ^h 03.8	+20° 49'	G12	IIa0-E	13/5	"	20:17	01:40	B
41420	HD 181639-SUG	19 ^h 40.8	+23° 01'	G12	IIa0-E	25/5	34°F	01:54	04:50	C
4142071	cal step wedge for plates	41415-20			IIa0-E	9000				
	looked at new like object looked like to about 9 mag	18 ^h 37	-23° 20'							

Dome Temp. +03°C 65%

Focus 60R

Dome Temp. -02°C 90%

Transparency Conditions *good*

seeing not to hot

342

ing Time EST.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
44	A	01 27W	+16° 28'	4"	1.93	A0 II	9-9-9	std Star	40/104		str
59	C	01 42W		"	"	"	9-9-9	"	40/52		s/str
007	C	01 50W		"	"	"	9-9-9	"	40/26		vst str
12	A	01 56W		"	"	"	14-14	"	40/131		vst wire
14	C	03 53W	+20° 28.2'	4-8	7.20	⁹⁹⁵ A2	7-7-7	VB-72	80/460		not good to exp
18	C	03 32E	+29° 15'	4-5	7.6	G1	5-5-5	Ceph-Evans	800/360		fine

8" Dig 6" F



field for run

Dome Temp. 18°C, 450%

Transparency Conditions good

346

Focus FOR

Dome Temp. -02°C 68%

ing Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
26		2 ^h 32 ^m W	+15° 44'	4"	8.5V	A2+K2	1-1-1	BB eclips. bin.	800/60	Flux = 0.2 Some cloud	fine
27		0 ^h 12 E	+45° 43'		7.1V	BB5	1-2-1	" " "	800/60	Flux = 0.7	fine
27		1 ^h 50 E	+24° 22'		7.9V	gGe	1-1-1	Blu " "	800/43	Flux = 0.3 Some cloud	fine
33		3 ^h 07 E	+163° 59'		7.5V	A6+G5	1-1-1	BB " "	800/60	Flux = 0.6 TV stopped working.	fine
34		0 ^h 2 ^h 27 E	"		"	"	1-1-1	"	800/60		fine
											fine
06		01 ^h 53 E	+63° 59'		7.5V	A6+G5	1-1-1	"	800/60		fine
44		01 ^h 15 E	"		"	"	1-1-1	"	800/60	clouds coming up from S.W.	fine

4th Dig 68°F

emulsion peeling on several strips
not due to temp. < 69°F on wash

347

098-01E 26046 -06047
IIa0-E 74017 -04017 Apr 1

Date Wed-Thurs Apr 6-7 1977 Observer BB-Tn/Rm-Tn Julian Day 2443240.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
41428	HD93633 (TXU In)	10 ^h 39.5	+46° 05'	G65	098-01E	20/4	32°F	19:37	19:56	A
41429	HD44521 (RX Gem)	6 ^h 43.7	+33° 21'	G65	098-01E	20/4		20:09	22:36	B
41429T	Spot Colln for 41428-31, 34				098-01E	15 min @		D3 15V 4810	D27V 54:50	D17V Hd
41430	HD117555 (FK Cen)	13 ^h 26.1	+24° 44'	G65	098-01E	20/4		22:43	23:41	C
41431	HD139319 (TU Dra)	15 ^h 32.4	+64° 14'	G65	098-01E	20/4		23:52	00:32	A
41432	HD 170000	18 ^h 22.2	+71° 17'	G12	IIa0-E	9/5	26°F	0:50	01:15	C
41433	HD 186618 SW	19 ^h 46.8	+29° 01'	G12	IIa0-E	20/5		1:17	03:31	A
41433T	Strip Colln for 41432, 33, 35.				"	90 sec				
41434	Sgr Nova	18 ^h 32.2	-23° 25'	G65	098-01E	20/4		03:51	04:56	A
41435	HD 170000	18 ^h 22.2	+71° 17'	G12	IIa0-E	9/5	23°F	05:05	05:23	B

Dome Temp. -2°C $H=65\%$

Focus $85R$

Dome Temp. -7°C $H=95\%$

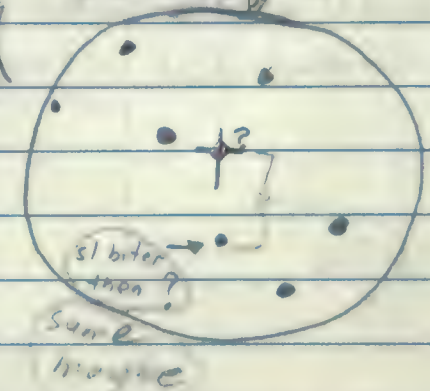
Transparency Conditions Fine - Photometric

348

Gusty

Dawn cloud

ing Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
56	A	2 05 E	+45 44	3"-5"	7.1v	B8.5	1-1-1	BB-eclip bin.	800/62	W/ 4 Filter in Ti H Son - 0.512	comp. v. weak
36	B	4 32 W	+33 18	"	9.2v	A4	1-1-1	"	800/59	Flux ~ 0.1-0.15 Some cloud	on all 098
41	C	1 02 E	+24 02'	"	7.9v	gGe	1-1-1	Bin edip. bin.	800/43	Flux ~ 0.2-0.3 Some cloud	
2		2 17 E	+63 09'	"	7.5v	Ag+65	1-1-1	BB " "	800/63	Flux ~ 0.4 TV Failed	
4		4 32 E	+71 20	2"	4.18	ApSi	8-8-9	Line SB	40/15		fine (gny)
3		3 25 E	+29 14.4	2"	6.8-7.6	F0.6-16.6	6-6-6	Cepheid/5000	400/200	TV OK now	Fine sl. str.
0	A	0 56 E	-23 21	3"	V _{9.5}		1-1-2	Novae ?	800/25	cloud come up to much background light (Moon City)	tot approx Ha strong comp on v. wk.
0	B	0 12 E	+71 20.8	2"-3"	4.18	ApSi	9-8-8	Line SB	40/14	cloud by dawn	Fine
<p>(Kar) More 098 needed for BB's next run</p> <p>IIAO 8" } DA 68°F 0.17 098 4" } 0.25</p>											



3401

$\Pi\alpha 0-E$ 14017 - Apr 1
 $\text{W}\alpha 1-E$ 01126 - 06047

Date FRI/SAT April 8/9 1977 Observer W.H. T.H. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
414 ?	HD 47105 GEM.	06 ^h 31 ^m .9	+16° 29'	G12	$\Pi\alpha 0-E$	9/9	25°F	19:51	20:13	C
41436	HD 47105	06 ^h 31.9	+16° 29'	"	"	"		20:14	20:27	B
4143	HD 47105	06 ^h 31.9	+16° 29'	"	"	"		20:28	—	A
41437	HD 47105	06 31.9	+16° 29'	"	"	"		20:33	20:57	B
41438	HD 47105	06 31.9	+16 29	"	"	"		20:57	21:05	C
41439	HD 47105	06 31.9	+16 29	"	"	"		21:06	21:10	A
41440	HD 88021/2	10 ^h 03.8	+20° 49'	G12	$\Pi\alpha 0-E$	13/5		21:20	01:08	B
41439T	Strip Co. for 41436-40				"	90sec				
41441	HD 137892	15 ^h 35 ^m .6	+36° 58'	G12	$\text{W}\alpha 1-E$	13/5		01:22	03:14	C
41441T	Strip Co. for 41441				$\text{W}\alpha 1-E$	180sec				
41442	HD 161321	17^h 39^m.7	+14° 27'	G12	$\Pi\alpha 0-E$	13/5		03:21		B

Dome Temp. -6° 70⁷⁰.

Transparency Conditions *Very good*

350

Focus 100R

Dome Temp. -8° 87⁷

ing Time S.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0:3		02 27W	+16 27.7	2-3"	1.93	A0 IV	9-9-9	std. star	40/106	Labeled? Probable dB/Exp	
0:27		02 41W			"	"	9-9-9	"	40/51		vs/str.
		ended because of dB/Exp suspicion			"	"	9-9	"	40/-	should be a blank plate in box	
0:57	B	03 11 W			1.93		8-8-9	"	40/99		str.
0:55	C	03 19 W			1.93		9-9-9	"	40/27		
0:19	P	03:24 W			1.93		9-18	"	40/12.		
0:08	E	03:53 W	+20 29.8	1-2"	7.20	⁹⁶⁵ +A2	7-7-7	VB Bin	400/205		fine
0:14	C	0 27W	+35 45.3	3"	4.95	^{Not fitted} B7 V	5-5-5	SB-Bin/ly	200/360	glue / Prism on, UK	RHS
										(*Note 2 cols done, one may have been upside down)	RHS
			+14 274		6.07	A m	7	Ecl. Bin-Bin	200/-	Cloud no good	
						U20	7"	Di	WF	0.17	
						U25	5"			0.09	

37

Dome Temp. $+1^{\circ}\text{C}$ H=60%

Focus 80R

Dome Temp.

Transparency Conditions *Excellent - sl haze by 1:30* 352

ing Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
052	A	120W	-2 258	2"	6.57	FO	^{Filling} 7-8-8	Close Bin - V _{at}	400/180		fine/v sl str
											sl str
2:05	B	100W	+31 45	1-2"	6.60	F5	8-8-8	Close P _{ria} - V _{at}	400/180		fine/v sl str
2:15	C	056E	+21 24	"	5.85	KO	8-8-8	"	200/100		fine/v sl str
2:35	A	201E	+51 54	"	4.60	A4	8-8-8	"	400/145		v sl str
44	B	035E	"	1"	6.61	FO	8-8-8	"	400/180		fine/v sl str
55	C	240W	+48 39.9	1-2"	8.7	K2IT	8-6-6	Wide Bin, V _{at}	800/405	cloud mostly	fine
							7 ^m 019	68°F	0.18		

357

Do-e 14017 - Apr 1
 098-01e 26046 - 09047
 Do-e 14017 - 09047

Date Sun/Mon. Apr 10/11 1977 Observer BB-Tw/T₂ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
41448	HD47105 (y Co.)	6 ^h 31.9	+16°29'	G12	Do-e	9/1.9	44°F	19:32	19:52	B	2 14V
41449	"	"	"	"	"	"		19:52	20:04	C	2 25V
41450	"	"	"	"	"	"		20:06	20:14	B	2 35V
41451	"	"	"	"	"	"		20:15	20:20	A	2 42V
41452	"	"	"	"	"	"		20:21	20:23	C	2 47V
41452 T	Strip Coll. for	41448-52			"	90sec					
41453	HD93038 (TX Linn)	12 ^h 32.5	+46°05'	G65	098-01E	20/1.4		20:47	21:18	A	2 52V
41454	HD117555 (FK Com)	13 ^h 26.1	+24°44'	G65	"	"		21:25	23:25	B	3 02V
41454 T1	Spot Coll. for	41453-56			"	15 min @		03:15V 01:30V 02:30V 4810 H ₂ 5-50			
41454 T2	Strip Coll. for	41453-56			"	90sec					
41455	HD136175 (U.L.B)	15 ^h 14.1	+32°01'	G65	"	20/1.4		23:29	00:36	C	01 42E
41456	HD139319	15 32.4	+69 14	"	"	"	40°F	00:42	01:31	A	01 34E
41457	HD 170000	18 22.2	+71 17	G12	Do-e*	9/1.5		01:44	02:11	B	02 11E
41458	HD 186680	19 40.8	+29 01	"	"	25/1.5		02:18	04:14	C	02 30E
41458 T	Strip Coll. for	41457-59			"	90sec		?			
41459	HD 170000	18 22.2	+71 17	G12	"	9/1.5		04:30	05:02	A	0 19E

Dome Temp. +6°C H=5270

Focus 60-R

Dome Temp. +3°C H=8070

Transparency Conditions Horiz. - some cloud

354

g Time ST.	pp.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
52	E	2 14W	+16 27.4	2-3"	1.93	AO IV	9-9-9	Std Star-Bln	40/100		str.
04	C	2 26W			"	"	9-9-9	"	40/50		str.
14	F	2 36W			"	"	13-13	"	40/25	cloud - slow	fine
20	A	2 42W			"	"	13-13	"	40/12		str.
23	C	2 45W					13-13		40/6		str.
15	C	0 27E	+45°40'		7.1v	BS5	8-8-8	BB eclips. bin	800/62	Yellow Wratten Filter in	
35	F	1 04E	+24°21'	4"	7.9v	g6e	8-8-8	Blu " "	800/43	some cloud → lots of clouds!	
36	C	01 42E	131° 45.3	2-4'	7.7v	BS	8-8-8	BB eclips. bin	800/65	Flux ~ 0.5-0.6 cloud	
31	A	01 04E	+63 59	3-5"	7.5v	HB+ G5	8-8-8	"	800/60	some cloud	
11	L	03 11E	+71 19	"	4.18	Ap:1	9-9-9	Spln-Lne	200/70		fine
19	C	02 30E	+29 12.5	3-5"	6.8-7.66	FO-G1	6-5-5	Ceph-Rm	200/400	* All II's in Exp box #3	fine
								Both Nova Vul & Nova 7 Sgr are very faint (> 9th mag)			
02	A	0 19E	+71 20	8-sec	4.18	Ap:1	9-9-9	Spln-Lne	200/70	over	fine

356

356

ending Time
E.S.T.

P.E.

357

B
B
B
C
F
H
L
M
M
M

T: H

BB = Barrow Baldwin
 Bln = Tom Bolton
 But = Stewart Button
 CM = Cathy Martin "Waterloo"

Fgi = Dot Fraguelli

Hu = Roel Hurkins

~~KK~~ = Kurt Kampier

Ly = Ron Lyons

McW = Mac Waters

Mor = Steve Morris

MR = Obviously Dr MacRae

Ri = Archie Ridder

Rm = Nancy Evans

Tms = Dave Toms.

Tn = Jim Thomson

Wtn = Mike Workeatin

Zd = Donna Zubrod

Tilt G8 - G16 grating (one turn below OB)
 G16 - " " 0.7 B

