

1, 3

Spectr.

Focus.

Spectr.

Exp. Mtr

Spectr. Temp. Dome Temp./Hum.

Transparency Conditions 4

Focus

Spectr. Temp. Dome Temp./Hum.

[illegible]

pg #5

Date 1995 September 11/12 Observers [KK]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
	... continued from previous logbook (81)								
ce09811	COMP (Lost) not written on time							ThAr	4
ce09811	ADS17149A HD 224635	23 54 24	+33 10 12	2 36 06		2 01 W			1111
12	COMP							ThAr	4
13	ADS17149B HD 224636	"	"	2 57 34		2 23 W			1144
14	COMP							"	4
15	ADS17149A HD 224635	"	"	3 18 40		2 42 W			995
16	Comp							"	4
17	BIAS(4)								
18	ADS17149B HD 224636	"	"	3 39 21		3 00 W			833
19	Comp							ThAr	4
20	COMP							"	4
21	HD 29139	4 30 11	+16 18 30	4 01 31 3 59 48		1 28 E			30
22	COMP							ThAr	4
23-29	FLAT X 7					3 ⁿ W	+9°	Tung	2
30/31	INBOARD/OUTBOARD	HARTMANN				"	"	ThAr	

Transparency Conditions *hazy, full moon* (4)

0 0 256 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	V _{log} Mag.	Sp.	CCD Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				ECHELLE 18.51	•5540	600W 400H	6300 Å				
								3			
63	3"-4"	6.50	GOV					4	KK Vis Bin	sl. brighter and SE difficult to separate	1.4K
								3			
80	3"-4"	6.70	GOV	PSC				5	kk Vis Bin	sl. fainter and new still tough to separate.	1.5K
								3			
70	2"-4"	6.50	GOV					4	"	SE one well separated this time	1.9K
								3			
								1			
58		6.50	GOV					5	"		
								3			
								3			
500		0.85	K5 ⁺ _{III}					4	Std. Vel	done quite wet new 2 Tar	
								3			
								2		Done closed. sp flats got stronger.	14.2K → 14.3K
								7/8		0 0 128 1024 81	

CP 9^{#1} Wed / Thurs

Emulsion Batches:

Date 1995. Sep 13/14... Observers [K.K.] T.A. / S.W.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC098 ³² 33	Inboard outboard			19 10		2 32W		TA Ar	4/4
34	BIAS			19 15					
35	Comp							TA Ar	45
36	HD137909	15 23 42	+29 27 01	20 13 44		4 06W			431
37	Comp							TA Ar	45
38	HD137909	"	"	20 22 24		4 14W			393
39	Comp							"	45
40	HD137909	"	"	20 30 31		4 22W			382
41	Comp							"	45
42	BIAS(4)								—
43	COMP							"	4
44	ADS14270 A	20 41 36	+15 32	20 49 12		0 16 E			1647
45	Comp							"	4
46	ADS14270 B	20 41 36	+15 32	21 20 13		0 16 W			1740
47	Comp							"	4

Spectr. Temp. ^{SEP} 99.8°C... Dome Temp./Hum. ^{70.0/20.0} 20.0°C... Transparency Conditions... ^{PARTIAL} clearing..... 8..
 Focus...: ^{2.49} 2.49... (^{2.47} in haulers thought for focus test)
 Spectr. Temp. Dome Temp./Hum. ^{50.0/15.0} 50.0°C... MAX
ADU

Exp. Mtr.	Seeing	P. Mag.	Sp.	Inst. Echelle	X Gratings/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.51	3004/ma .5540	60u W AODH	6300A	7/8	focus test	0 0 128 1024 8 1 CCDINT set for slightly cooler.	
								1/2		0 0 256 1024 4 1 CCDINT	
								3			
200	5"	3.66	Fp					4	KK ppm	PCBr	3K
								3			
200	"	"	"					5	"		
								3			
140	"	"	"					4	"		
								3			
								1			
								3			
11	3-4"	7.50	K0					4	KK Vis Bin	dbl lines 2 nights ago and tonight south and brighter one	
								3			
0	3"	8.20	?					5	"	N and further.	350 above 6/g
								3			

Spectr. Temp. Dome Temp./Hum. $19.9^{\circ}\text{C} / 72.4\%$ Transparency Conditions *hazy + increasing cloud.*Focus *249*Spectr. Temp. Dome Temp./Hum. $19.3^{\circ}\text{C} / 75.0\%$

10

0 0 256 1024 4 1 ccd flat

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	CCP Inst. ECHELLE	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality	
101	2	3"	7.50	K0?	18.51	300 λ/mm .5540	600 μm 400 μH	6300 $\text{\AA}$	4	Kk Vis Bin	Brighter & S not as strong 57 air sep of DBI Lines	
									3			
									1			
									3			
110	3"	4.50	K1 II						2	Kk Vis Bin	Brighter East side	3.6 K
									3			
140	100	3.4"	5.50	F1 V					4	"	fainter and W	
									3			
150	110		4.50	K1 II					2	"		
									3			
									3			
170	120	3"	5.22	K5 V					4	Kk Vis Bin	Brighter and no RTH	3.8 K
									3			
170	62	3"	6.04	K7 V					6	Kk Vis Bin	cloudy	2.4 K
									3			

11 pg # 3

Wed / Thurs

Emulsion Batches:

Date 1995. Sep 13/14. Observers [Kk] T. J. / S. M.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter Exp.	Spectr. Focus Spectr.
ce 09863	110201091 ADS 14636A	21 0224	+38 1514	234515		02 10 W		1082	148
64	Comp						ThAr	4s	
65	Bias(4)			0 05					
66 - 72	FLAT x 7					3 00 W		Tung 2s	
73	Comp						ThAr	4s	
74	HD 222368	23 3448	+50 503	01 1813		1 05 W		786	140
75	Comp						"	4	
76	Bias(4)								
77	Comp						"	4	
78	HD 8890	1 22 34	+88 46 26	1 42 32		1 42 E		180	207
79	Comp						"	4	
80	HD 8890			1 46 55		1 37 E		176	268
81	Comp						"	4	
82	HD 8890			1 51 06		1 33 E		151	155
83	Comp								
84/85	INBOARD/OUTBOARD HARTMANN						ThAr	4/4s	

Spectr. Temp. $\pm 100 \pm 0.0^\circ\text{C}$... Dome Temp./Hum. 117.32°F 75.28% Transparency Conditions $\text{Part. Cloudy} \rightarrow \text{mostly cloudy.}$ Focus $\dots 249 \dots$ Spectr. Temp. $\dots$ Dome Temp./Hum. $\dots$ $c. \text{ cloudy}$

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Exp. Mtr.	Seeing	IV. Mag.	Sp.	Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality	
12	148	4"	522	KSV	18.51	300 in/mm .5540	60m W 100m H	G300A	4c	Hk Vis Bin	Brighten NW core	
4									3			
									1/2		clouds rolling in	
2s							60m W 600m H		3		RAIN, dome closed.	14.8K
4							60m W 400m H		3		cleared and dried up open again	→ 14.9K
78	140	5"	413	F7V					4	Std vel		3.5K
4									3			
									1/2			
									3			
10	207	5"	2	F8Ib					2	Kti ppm	very fast moving thick clouds.	4K
4									3			
7	268		"	"					2	"		
4									3			
	155	5"	"	"					2	"	more cloud on this one cut short due to cloud.	
									3			
4			0	0 128 1024 8 1	cd Ant				7/8	FOCUS TEST	closed again. still right in focus	

29 #1

Date 1995 September 14/15 Observers [KK]/Tn/Smt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CE09886/87	Inboard fount board					02 44 W	25°	ThAr	4/4
88	B/AS(4)			22 16					—
89	COMP							ThAr	4
90	ADS14270 A	20 41 36	+15 32	22 35 09		1 35 W			1705
91	COMP							"	4
92	ADS14270 B			23 05 10		2 07 W			1840
93	COMP							"	4
94	ADS14270 A			23 37 17		2 38 W			1738
95	COMP							"	4
96	B/AS(4)								
97	Comp ADS15600A							"	4
98	HD209791	22 0054	+64 0826	00 1452		1 40 W			720
99	Comp							"	4
CE09900	Comp Extra Comp due to Time Gap							"	4
01	ADS15600B HD209791			0 38 11		2 34 W			2513
02	COMP							"	4

^{CCD}
 Spectr. Temp. $\sim 100^\circ\text{P.}^\circ\text{C}$ Dome Temp./Hum. $13^\circ\text{C}/61.02\text{H}$ Transparency Conditions *Clearing Fast*
 Focus 239 *@ focus test* 14
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Vis. Mag.	Sp.	CCD Inst.	X Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Max Quantity
				ECHELLE							ADG
				18.51	300 L/mm .5540	6300 Å		1/2	FOCUS TEST	0 0 128 1024 8 1	
								1/2		0 0 256 1024 4 1	
								3			
1	5"-7"	7.50	K0					4	KK Vis Bin	brighter and S poor separation of pair	2200 above bkg
								3			
0	5"-6"	8.20	?					5	"	fainter and N, just barely separable	>100 above bkg
								3			
0	4"-6"	7.50	K0					4	"	brighter and S	
								3			
								1/2			
								3			
67	6"-8"	4.80	A3m					2	KK Vis Bin	some cloud near the end. check HD #s for this pair	1K
								3			
66	~7"	5.30	dF7					5	"	fainter and W - was off 5.6" for a while. probably some of A as well. seeing is quite bad.	
								3			

Spectr. Temp. Dome Temp./Hum. $8.5^{\circ}\text{C}/71.6\%$ Transparency Conditions *partly cloudy*Focus $\bullet 2.39$ Spectr. Temp. Dome Temp./Hum. λ ζ 0 0 256 1024 4 1 cell/m

Exp. Mtr.	Seeing	P ₀ Mag.	Sp.	CCD Inst. ECKELLE	X Grating/ Tilt	Slit	Emission	R.H.	Program	Remarks	Quality
120	6"	4.80	A3m	18.51	300 λ/mm .5540	60 μm W 400 μm H	6300 Å	2	kk Vis Bin		
								3			
								1			
								3			
400		2	F816					4	kk ppm		6.0K
								3			
420		"	"					4	"		
								3			
425	5"	"	"					4	"		6.2K
								3			
								3			
322	5"	2.23	k0 Ma					5	Std. Vel.	same sp. as the d61 line star	5K
								3			
370	5"	"	"					5	"		
								3			

CCD Spectr. Temp. -100.7°C Dome Temp./Hum. $7.9^{\circ}\text{C}/70.2\%$ Transparency Conditions clear 18

Focus 239

Spectr. Temp. Dome Temp./Hum. $7.9^{\circ}\text{C}/70.2\%$

0 0 256 1024 4 1 CCD AT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	CCD Inst. ECHELLE	X Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.51	300 21mm .5540	60 μ W 400 μ H	6300A	3			MAX
100	5"	$\sqrt{}$ 5.2?	G5V					6	KK Asm/Sp	bright and nearby cosmic rays ~ H α	1.3K
100		"	"					3			
								6	"		
								3			
								1/2			
								3			
200	5-7"	4.33	A7V					2	KK Asm Sp		1.5K
								3			
180	4-5"	"	"					2	"	Air mass	
								3			
								3			
0	5-7"	5.63	K0V	Late broad band (dbl?)				4	* (Just KK Asm Sp	SSR actually SOUTH HD 10780 30" WRONG STAR (doesn't look bright enough in guide view? (Finder view seems OK.)	500bae bgnd
75	5"	5.63	K0V					5	KK Asm Sp	The correct star	1.1K
								3			

PA 10 1994

Emulsion Batches:

Date 1995. Sept 14/15. Observers [F.H.] / K.A. / Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce C009934	BIAS (4)			04 09					
35	Comp							THA	4
36	HD 222 368	23 34 48	+5 05 03	04 15 16		4 12 W			1004 1
37	Comp							THA	4
38	Comp								1 9
39	Moon - Mösting CRATER	1995.7 4 18 30	7 17 39	04 40 15		0 17 W			365
40	Comp							"	"
41	COMP							"	+
42	HD 62509	7 39 12	+28 16 04	04 53 43		3 31 E			585
43	Comp							"	4
44	Comp							"	"
45	HD 34029	5 09 18	+45 53 47	04 04 39		0 53 E			39 490
46	COMP								
47	FLATS x 9					W		TUNG	2
56/57	Inboard / outboard					"	"	THA	4/4
58	BIAS (4)								

Temp. -100.5°C Dome Temp./Hum. 170°C 71.6% Transparency Conditions Flare 20

FOCUS 23.9

Spectr. Temp. -100.7°C Dome Temp./Hum. 165°C 72.4%
at 1000 Hz

174x

Exp. Mtr.	Seeing	Fl. Mag.	Sp.	Inst.	Grating/ X Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				estella	300h/min	600 W	6300A	1/2			
				1851	.5540	max H		3			
?	6"	413	F7V					2	std vel	A bit Far West	2.8K
								3			
								3			
355	NA	?	reflected G2V					5	std vel	or sp. std.	6.8K
								3			
								3			
525		1.14	K0 IIIb					6	std vel		15.1K
								3			
								3			
490		0.08	G5 IVc + G0 III					4	KK	Capella	10K
								3			
						600 W		5			15.6
						400 W		7/8	focus test	Now set for slight	
								1/2		too warm.	

21 P4#1

Fri/SAT

Date 1995 Sep 15/16..... Observers V.K. I.T.

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 354 ⁹³	Inboard					0°	+43°	FA	60/60
95	Comp					0 29E			60
96	HD177724	19 00 49	+13 42 53	19 14 28		0 29E			58
97	Comp							Fair	60
98	BHS (4)								
99	Comp							"	60
CC 35500	CV Cyg	19 54 21 ²⁰⁰⁰	+36 02 42	20 03 55		00 02W			1900
01	Comp							"	60
02	Comp							"	60
03	HD 229680	18 45 54	+15 49	20 46 05		01 57W			2449
04	Comp							"	60
05	BHS (4)								
06	Comp							"	60
07	HD 187691	19 46 14	+10 09 55	21 35 22		W			225
08	Comp							"	60

^{CCD}
Spectr. Temp. $\sim 101.7^\circ\text{C} \dots\dots$

Dome Temp./Hum. $+120^{\circ}$ 57.5% Transparency Conditions thin cloud best fine

Focus . . . 6.76

Spectr. Temp.

Dome Temp./Hum. *48.9°C 68.5% 90 cguin*

420 0 50 1024 4 1 CCDF_{INT}

Exp. Mtr.	Seeing	V. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter Actually OG 560 filter (Mighty)				CNSS 40	1800 lines	306"	6603A	3/4	focus test	set V sl for cooler	MAX ADV
But actually, no filter for this program					G-6100*			5		G & presumed same as led Cass observing	
5000	1.3"	2.99	A0Vn					6	Telluric Std		10K
								7			
								1/2			
								8			
250		5.110 F8						9	Vnk.	70/1 S/N	
		2" or better (Frank)						10			
								11			
330	2"-3"	10.2						12	Cepheid Vnk	AP Her	
		-11.2						13			
								1/2			
								14			
3500		5.11	F8Y					15	Std vel		6.6K
								16			

M pg#2

Fri / Sat

Emulsion Batches:

Date 1995... Sep 15/16... Observers V.K. / T.n.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC35509	Comp							FEAR clear	60s
10	HD 356404	19 5248	+10 46	21 4818		01 42W			1800
11	Comp							FEAR clear	6s
12	Comp							"	"
13	V572 Aql	19 5727	00 25	22 2926		02 28W			2417
14	Comp							"	6s
15	BIAS(4)								
16	Comp							"	60s
17	V383 Cyg	20 2503	+33 48	23 2818		02 52W			1839
18	Comp							"	6s
19	Comp							"	"
20	HD 22368	23 3148	+5 0503	00 1150		00 03E			194
21	Comp							"	"
22/24	FLATS x 6					00 06W -5°		lung Ap 1/4	8s
28	BIAS(4)								

^{CCD}
Spectr. Temp. -101.6°C

Dome Temp./Hum.

Transparency Conditions ... *Fine* 24

Focus ... 6.76

^{CCD}
Spectr. Temp. -101.6°C

Dome Temp./Hum. $+8.3^{\circ}\text{C}$ 72.48H
c. 10m/ky

→ increasing haze
→ increasing cloud

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter 06560				CHESS CCD	1820 l/m. G=6100	306u	6603A	17			
360	3-3"	9.7 -10.2						18	Cepheid V _h K	<100/1 S/N	
								19			
								20			
200	3-5"	11.0 -11.4						21	Cepheid V _h K	<60/1 S/N	
								22			
								1/2		T = -100.6°C	
								23			
300	<3"	10.6 -11.2						24	Cepheid V _h K		
								25			
								26			
1500			413	F7V				27	std vel	cloudy	
								28			
								2			14K
								1/2			

Dome Temp./Hum. $+87^{\circ}\text{C}$ 76% *Handley* Then completely so.

[illegible]

Appt#1

Sun / Mon

Emulsion Batches:

Date 1995 Sep 17/18..... Observers Vnk./Ta.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc 355 ^{35/36}	Inboard / Outboard HARTMAN					00 15E	+41°	Fear Clear	60/60
37	BIAS(4)								
38	Comp							Fear Clear	60
39	HD177424	19 00 49	+13 1253	19 1504		00 21 E			35
40	Comp							"	60
41	Comp							"	60
42	HD162714	17 47 17	-06 07 09	19 26 26		01 09 W			400
43	Comp							"	60
44	Comp							"	60
45	HD 2296 80	18 45 54	+15 49 00	19 43 27		00 55 W			2020
46	Comp							"	60
47	BIAS(4)			220 20					
48	Comp							"	60
49	HD 3545 11	19 56 35	+15 31 00	20 30 37		00 18 W			1200
50	Comp							"	60

Specr. Temp. ^{CCD} -100°C

Dome Temp./Hum. +14.3°C 66/94

Transparency Conditions Clearing Fast 28

Focus 6.76

90C gain

Specr. Temp. ^{ESP} -100.1°C

Dome Temp./Hum.

420 0 50 1024 4 1 CCD Fast MAX

Exp.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	No filter				C4SS CCD	1824/nm G=6100	306	6603A	3/4	Focus		
									1/2.			
									5			
5	6000		299	A0Vn					6	Telluric STD	AiA MASS= 1:16	4K
									7			
									8			
40	4600	4.5	618	F8Iob					9	Rm Cepheid.		6K
									10			
									11			
22	372	5"	10.2 -11.2	A					12	Cepheid Vuk AP Her		
									13			
									1/2.			
									14			
12	440		9.8 -10.6						15	Cepheid Vuk		
									16			

pg #2

Sun / mon

Emulsion Batches:

Date .. 1995. Sept. 7/18... Observers .. Vn.K. L.T.
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC35551	Comp							Fair clear	60s
52	HD187691	19 46 14	+10 09 55	21 01 19		00 43 W			249
53	Comp							"	60
54	BIAS(4)								
55	Comp							"	60
56	BD+17 4572	21 19 21	+17 51 00	21 14 34		00 13 E			160/
57	Comp							"	60
58	Comp							"	60
59	V383 Cyg	20 25 03	+23 48	21 51 21		01 27 W			2000
60	Comp							"	60
61	BIAS(4)								
62	Comp							"	60
63	BD Cas	00 04 39	+60 57 00	22.40 09		E			2407
64	Comp							"	60
65	BIAS(4)								

Spectr. Temp. Dome Temp./Hum. $+17.0^{\circ}\text{C}$ 67.7% Transparency Conditions .. Part. Cloudy 30...
 Focus 6.76
 Spectr. Temp. Dome Temp./Hum.

ADU
MAX

Exp. Mtr.	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASSIO	1800h/m G=6100	30m	6603A	17			
5,500	peak	5.11	F8V					18	Std Vel		
								19			
								1/2			
								20			
1100	4.6	8.9 -9.5						21	Cepheid Vnk	120/1 S/N	
								22			
								23			
460		10.6 -11.2						24	Cepheid Vnk	75/1 S/N	660
								25			
								1/2			
								26			
455	4.5	10.8 -11.2						27	Cepheid Vnk	LS RA +000011 S/N AS -000015 75/1	3.2K
								28			

99#3

Sun/Mon

Emulsion Batches:

Date 1995 Sep. 17/18... Observers Vnk. / Tt.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc35566	Comp							FeAr Clear	60s
67	IX Cas	23 5942	+49 41	23 35 01		00 20 E			2400
68	Comp							"	60
69	BIAS(4)								
70	Comp							"	60
71	DQ And	00 5354	+14 52	00 25 22		00 24 E			2400
72	Comp							"	60
73	BIAS(4)							FeAr	60s
74	Comp								
75	Nova Cas 95	01 04 55	+53 59	01 27 16					
76	Comp							FeAr	60s
77	Comp							"	60
78	HDE 235679	21 5500	+54 0000	01 54 02		W			900
79	Comp							FeAr	60
80	Comp BIAS(4)			02 15				"	60
81	Comp							FeAr	60s

1995.7 Actual

Spectr. Temp. Dome Temp./Hum. $7.7.5^{\circ}\text{C}$... 70284 Transparency Conditions ... Fine 32

Focus ... 6.76

Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulston	P.H.	Program	Remarks	Quality
no filter				CHSS	1800 Wren	306x	6603A	5			
250	3.5"	11.2 -11.8		CD	G-6100			6	Cepheid Vnk	> 50/1 S/N	
								7			
								1/2			
								8			
220	3.4"	11.2 -12.0						9	Cepheid Vnk		
								10			
								10			
	5"							12			7.2K
								13			
								14			
790		8.86	B2.5 Ia					15	Bin program (Sph bin)	AIRMASS 2.118	8.2K
								16			
								1/2			
Had strange Sp control problem. Hartman mask May have been in comp. pos'n.								1.7		(should be 3.2K) MXX	2K

33

pg 4 Sun/mar

Date 1995 Sep 17/18.. Observers V.H.K./Tn.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc 35582	BM Cas	00 48 36	+63 33	02 26 59		01 18 W			
83	Comp							febr clean	60
84	Comp							"	"
85	M31 Right on central core	2000 00 42 42	41 16 00	03 05 24		02 20 W			1648 333
86	Comp							"	60
87	BIAS(4)								
88/93	FLATS x 6					02 28 W	+41 14	Tung Ap 1/4	85
94	Comp							febr clean	60
95	HD 222 368	23 34 46	+5 05 03	03 49 58		W			
96	Comp							"	60
97	Comp							"	60
98	HD 21211	22 10 32	+42 27 28	03 59 40		05 19 W			258
99	Comp							"	60
cc 35600	Comp							"	60
01	HD 29587	04 34 30	+41 57	04 15 17		00 45 E			
02	Comp							"	60

Spectr.

Focus.

Spectr.

Exp. Mu

No. A/E

850

290

3700

Spectr. Temp. Dome Temp./Hum. $+80^{\circ}\text{C}$ 718 Transparency Conditions ... Fine 34

Focus 6.76

Spectr. Temp. Dome Temp./Hum. $+65^{\circ}\text{C}$ 76384
C Linné

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
110 f/10 850	6"	8.8 -7.33		C 115500	18004/m G=6100	306	6603A	18	MT 12	Symmetrical H α Fm	3K
								19			3.6K
								20			
290		13 ⁺						21	Galaxy	Small stellar like core easily seen.	
								22			
								1/2			
								2			13K
								23			
		4.13	F7V					24	std vel		
								25			
								26			
3700		5.68	A2V _m					27	Telluric Std.	1.73 Air mass	
								28			
								5			
		7.29	dG2					6	std vel		
								7			

MP 5

Sun / Mon

Date 1995 Sep 17/18..... Observers Vuk. / Tm.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CG801 ³⁵ / ₃₈	HD 29587	04 3430				200 30 E		4 x 67ms	
CG801 ³⁹ / ₄₀	"							2 x 133ms	
CC35603	Comp							febr clean	60s
04	HD 14386	021418	-032554	044728					125
05	HD 14386	"	"			205W		u	255 60
06	Comp							reA clean	60
07	Comp							u	60
08	HD 22484	03 3146	000504	050418		0 39 W			92
09	Comp							u	60
10	Comp							u	60
11	HD 18884	03 4151	03 4151	051225		0141W			38
12	Comp							u	60
13	BIAS(4)								
14/15	Inboard / outboard					0 0	+25	u	60/60

Spectr. Temp.

Transparency Conditions... *Fine*

Find 36

Spectr. Temp. ^{CCP} -98.5°C X

Dome Temp./Hum. 15.8C 79% H

max

* $CCl_4 @ 0545 = -95.0^\circ C$

July 11 Mon / Tues

Date 1995 Sep 18/19.... Observers V.K. / T.M.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 356 16/17	Inboard / Outboard					00 00	+12°	F4r Clear	60/65
18	BIAS (4)								
19	Comp							F4r Clear	60
20	HD 177724	19 0049	+13 4253	19 0807		00 25E			33
21	Comp							"	60
22	Comp							"	60
23	HD 204867	21 2618	-06 0040	19 1657		02 41E			45
24	Comp							"	60
25	"							"	60
26	HD 212943	22 2248	+4 1139	19 2806		03 24E			135
27	Comp							"	60
28	Comp							"	60
29	BD +17 4572	21 1921	+17 51	19 3852		01 48 E			1500
30	Comp							"	60
31	BIAS (4)			20 09					

^{CCD}
 Spectr. Temp. -100.6°C Dome Temp./Hum. $+13.8^{\circ}\text{C}$ 5620 Transparency Conditions ... Fine 28
 Focus 6.76 unchanged 90 gain
 Spectr. Temp. Dome Temp./Hum. $+12.5^{\circ}\text{C}$ 61424 420 0 50 1024 4 1 CCD ANT max 424

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CN55CCD	18000/low G=6100	306	6603A	3/4	focus	set for slightly cooler	
								1/2			
								5			3.5K
8000	2.99	A02						6	Telluric Std.	1.16 Air mass	65K
								7			
								8			
8,700	2.91	G0J6						9	std vel		14K
								10			
								11			
6,400	4.79	K0 III-IV						12	std vel		138
								13			
								14			
1370	2.4	8.9 -9.5						15	Cepheid	V.K. 1.26 Air mass	
								16			
								1/2			

Ap9 #2

Mon/Tues

Emulsion Batches:

Date 1995 Sep 18/19.... Observers Vuk/Ta.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC35632	Comp							Fed Comp Clear	60s
33	HD 197433	20 38 36	+75 14	20 22 59		00 33 E		FAR	480s
34	HD 197433	"	"	20 38 59	21 12 approx	00 09 W		4x	480
CC35635-38	HD 197433	"	"					Fed Clear	60s
CC35639	Comp							Fed Clear	60s
40	HD 197433	20 38 36	+75 14	21 15 54					
41	HD 197433	20 38 36	+75 14	21 17 12	21 50	W		4x	480
45	Comp							Fed Clear	60
46	HD 197433	"	"	21 55 01	22 13 00			4x	480
50	Comp							"	60
51	BIAS (4)								
52	HD 197433	"	"	22 34 01	23 07	02 03 W		4x	480
56	Comp								60
57	HD 197433	"	"	23 10 49				4x	480
61	Comp							Fed Clear	60s
62	BIAS (4)								

Spectr. Temp. Dome Temp./Hum. $+121^{\circ}\text{C}$ 62% $\pm 5\text{H}$ Transparency Conditions ... Fine 40...

Focus ... 6:76

increasing cloud

Spectr. Temp. Dome Temp./Hum. $\pm 20\text{H}$

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CHSS- CCD	1800 lines G=6100	300 μ	6603A	17		Telescope East side now	
2,120	2-3"	7.5	KOV _{var}					18		2170/1 S/N	
2,1570		7.9	K					19			
		K	4					20	Contact Bin	ppm using [Repeat Vucg. bat 4]	
								21			
								1/2			
9,250	2-3"	7.5	KOV _{var}					22	Contact Bin	[Repeat Vucg. bat 4]	
		7.9						23			
*N/A	2"	"	"					24	"	* spectr control failed	
								25		Repeat Vucg. bat 4	
1500											
1600	42"	"	"					26	"	Repeat of 4	
1600								27			
1700								28			
								29			
								1/2			

W Pg#3

Emulsion Batches:

Date 1995 Sep 18/19... Observers V.A./T.A.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC 356 ^{63/66}	HD 197433	20 38 36	+75 14	00 15 28		03 20 W		4x 480	
CC 356 ^{67/70}	HD 197433	"	"	00 50 28	00 59	03 55 W	4x 480s	FeAr clean	60
71	Comp							FeAr clean	60
72	BIAS(4)								
^{73/76}	HD 197433	"	"	01 03 11		W		4x 480	
^{73/80}	"	"	"	01 37 23		05 07 W		4x 480	
CC 356 81	Comp							FeAr clean	60s
86	BIAS(4)	written after	CC 356 85	02 13					
^{87/85}	HD 197433	"	"	02 14 48		W		4x 480	
^{87/90}	"			02 51 07		06 21 W		4x 480	
91	Comp								
92	BIAS(4)			03 27					
^{93/700}	FLATS X 8					03 00 W	+75 35	Tung Ap/4	8s
CC 357 01	Comp							FeAr clean	60
02	IX Cas	23 59 42	+19 41	03 42 24		03 44 W			1947

CCD Spectr. Temp. -101.9 2.25 Dome Temp./Hum. 11.1 66% Transparency Conditions Fine Slight haze

Focus 6.76

Spectr. Temp. Dome Temp./Hum. 62

Exp. Mtr.	Seeing	W. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter		7.5	KO2	CAISS CCD	1800 in/in	306	6603A	6	Contact Bin	near max light	
2200	3"	-7.9	var		G=6100			6		Repeat of 4 again	
2000								7			35K
1849								1/2			
1440								8	"	Repeat 4	
0000								9	"	" "	
								10			35K
								1/2			
Typical	2"	"	"					11	"	Repeat of 4	
1820	2.2"	"	"					12		BR4-00 00 44 Δ Dec 00 00 18	
								13			
2000								1/2			
2000	2"	"	"					2	Tel	still East side	14K
2300	2"	"	"					14	"		
								15	Cepheid Var	Δ R11-00 00 33 - 00 00 51	5/K 60/1

37 p944

Emulsion Batches:

Date 1945.. Sep. 18/19..... Observers Vuk./Ta.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 35703	Comp FORIX Cas							Fair clear	60
04	Comp							"	60
05	BD Cas	00 04 39	+60 57	04 23 40		4 18 W			1832
06	Comp							"	60
07	BIAS (4)								
	HD 29587								
CG 801 ^{41/44}	HD 29587	04 34 30	+41 57					4v	67m
CG 801 ^{45/46}	"					00		2v	133m
CC 35708	Comp							Fair clear	60
09	HD 29587	04 34 30	+41 57 00	05 12 26		00 12 W	exp secs	Fair clear	60
10	Comp								
11/12	Inboard / Outboard HARTMAN					00 13 W	42°	Fair clear	60/60

Spectr. Temp. Dome Temp./Hum. 19.9°C 69.2% H Transparency Conditions FIR

Focus ... 6.76

Specr. Temp. -106.6°C

Dome Temp./Hum. +9.4°C 72%RH

44

Exp.	Exp. Mtr.	Seeing	M. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					C 100 CCD	1500 lines	306u	6603A	16'			
									17			
82	360	22"	10.8 -11.2						18	Cepheid Vnk		
									19			
									1/2			
											Telescope west side now	
		3"	7.2	DG2	1100	306u	split			Seeing test	No Wind.	
										" "		
									19			
	2270	2.3"	7.2	DG2					20	Std vel		30K
		7.4"							3/4	Focus test		

Spq #1

Fri SAT

Emulsion Batches:

Date 1945 September 22/23 Observers [Bln] / T.n. / Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC35713/14	Inboard/outboard Hartmann							Fe Ar clear	40/70
15	BIAS(4)			19 10					—
16	COMP							"	60
17	HD172187	18 33 42	+43 08 12	19 13 31		00 44 W			1157
18	COMP							"	60
19	COMP							"	"
20	HD138629	15 28 12	+41 14 19	19 40 39		4 12 W			900
21	COMP							"	60
22	BIAS(4)			19 59					—
23	Comp							"	60s
24	HD148283	16 21 50	+37 37 18	20 04 03		3 55 W			1680
25	Comp							"	60s
26	Comp							"	60s
27	HD152614	16 49 17	+10 19 48	20 39 04		3 44 W			631
28	Comp								60

^{CCD}
Spectr. Temp. -100°C

Dome Temp./Hum. $9.5^{\circ}\text{C}/62.4\%$
@ focus test

Transparency Conditions. mostly clear now..... 46..

Focus..... 6:80.....

FANS ON

Spectr. Temp.

Dome Temp./Hum.

430 0 50 1024 4 1 ccd test

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality ADU
				CAS5 CCD	1800 2/mm G=4585	30 μm	4466A	3/4	Focus test	in focus now.	
								1			
no filter, exps.								5			
10.1K	5-6"	B 6.40	FOV					6	Blh SB	($\leq 200/1$ S/N) norm'd on it, 35" W centred on col 21 - not a bit	2K
								7			13K
BG 39 FILTER								8			
12.1K	5"	B 5.09	ASV					9	Blh Ashell*	($\sim 250/1$ S/N) centred on col 22 - must mark off centre of slit.	4.0K
								10			
								1		-101.6 $^{\circ}\text{C}$ CCD Temp	
								11			1.5K
1/3, 300	5-7"	N 5.52	ASV					12	Blh Ashell*	approx <u>$\sim 300/1$ S/N</u>	
								13			
								14			
14.3K	6"	B 4.30	B8V					15	SB Blh	d/b/line?	5.2K
								16			

42pg #2 Fri/Sat

Date 1995 September 22/23 Observers [Blm]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC35729	COMP							Fear clear	60
30	HD158352	17 23 44	+0 24 42	20 56 47		3 42 W			1500
31	COMP							"	60
32	BIAS(4)			21 24					-
33	COMP							Fear clear	60
34	HD164577	17 56 41	+1 18 27	21 2915		3 28 W		Fear clear	730
35	Comp							"	60
36	Comp							"	60
37	HD164852	17 58 07	+20 50 00	21 48 58		3 53 W			1069
38	Comp							"	60
39	Comp							"	60
40	HD180316	19 11.0	+27 46 00	22 13 26		3 28 W			2439
41	Comp							"	60
CG80A ^{1/2}	HD214946	22 36 42	+44 29					4x	67ms
CG80 ^{15/16}	"					0 10 W		2x	133ms
CC35742	BIAS(4)			23 05					

Specr. Temp. ^{CCD} 100.1 °C

Dome Temp./Hum. 7.3 °C / 63.0 %

Transparency Conditions clear, some cloud to NW (48)

Focus 6.80

Specr. Temp. ^{CCD} -100.4 °C

Dome Temp./Hum. 6.1 °C 69.5 %

FANS on, only NE are now
430 0 50 1024 4 1 ccd fit

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39 Filter				CAS CCD	1800 R/m	306µ	4966A	17			
10.2K	5.6"	5.66	A8V					18	Blu A8ell*		3.3K
								19			
								1			
								20			
14.2K	6"	4.46	A1V					21	Blu SB	dbl lined? not dbl tonight	8.
								22			
								23			
21.4K	6"	6.19	B3IV					24	SB Blu		4.4K
								25			
								26			
G, 500	4-8"	6.69	B8					27	SB Blu	some cloud at end	2.3K
								28			
poor	7.26	8	A5	Above	306µ	Slit			Seeing test	Medium ^{WEST} wind some cloud	
									" "		
								1/0			

W9 pg#3

Fri/Sat

Date 1995 Sep 22/23... Observers [Bln]/Tal/Sant.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC 35743	Comp							Felt Clear	60s
44	HD214946	22 36 42	+44 29 00	23 08 34		01 06 W			2630
45	Comp							Felt Clear	60s
46	BIAS(4)			0 03					—
47	COMP							"	60
48	HD192518	20 10 08	+28 23 30	0 07 00		4 07 W			1515
49	COMP							"	60
50	COMP							"	"
51	HD210459	22 05 33	+32 41 15	0 39 57		2 28 W			550
52	COMP							"	60
53	BIAS(4)			0 53					—
54	Comp							"	60s
55	HD154528	17 00 54	+77 48	1 02 02		8 39 W			2586
56	Comp							"	60s
57	BIAS(4)								

Spectr

Focus

Spectr

Exp. M

B63

F1/4

590

16.4

16.5

7500

Spectr. Temp. Dome Temp./Hum. $6.0^{\circ}\text{C}/10.7\%$ Transparency Conditions ... Mostly clear ①.

Focus 6.80

Spectr. Temp. Dome Temp./Hum. 5.6°C 76.5% 4300 0 50 1024 4 1 red MAX ADU

Exp. Mir.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39 F.Hex				CHSS CCD	1800 1/2 in G=4585	306	4466A	29c			1.3K
5900	6"	7.26	A5					6	SB Blu	centered on cols 28-29. Screw closed	2.0K
								7		re-centered dec tangent arm on the screw.	
								1			
								8			
16.4	6"	5.36	A7II					9	Blu A-sell*	on col 25	6.0K
								10			
								11			
16.5	6"	4.75	FSIII					12	Blu A-sell/*	on col 27 again	7.0K
								13			
								1			
								14	Blu SB	Telescope East Side	
7500	6"-7"	6.66	A0					15	↓		3.5K
								16			
								'			

9414

FM / Sat

Emulsion Batches:

Date 1995 Sep 22/23. Observers [Bib.] / Tm / Sat.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparator Type/Filter	Exp. No.
F CC 35758	Comp							Fair Clear	60
CC 59	HD 3712	00 34 50	+55 59 20	01 56 03		01 07 W		"	146
60	Comp							"	60
61-80	FLAT x 20					01 11 W	+56 31	Tung Clear	22
81	BIAS(4)			Z 26					
82/83	INBOARD/OUTBOARD					"	"	Fair Clear	40/70
84/85	Inboard/OUTBOARD							Fair Clear	10/20
86	BIAS(4)			3 00					
87	COMP							"	10
88	HD 14633	2 16 42	+41 02	3 00 45		01 04 W			2200
89	COMP							"	10
90	Comp							"	10
91	HD 15137			03 43 48		01 51 W			2754
92	COMP							"	10
93	BIAS(4)			4 31					

Spectr. Temp. Dome Temp./Hum. 15.9°C $75\% \text{RH}$ Transparency Conditions OK 52

Focus 6.80 / 6.92

Spectr. Temp. $CG=455$ @ $G=2679$

Dome Temp./Hum. 22.2°C $60\% \text{RH}$ $430 \ 0 \ 50 \ 1024 \ 4 \ 1 \ \text{ccd} \ \text{fast}$

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39 F1/K2				CASS CCD	1800 Å G=4585	34 μm	4466 Å	17			
22K	6"	✓ 2.23	K0 IIIa					18	Std. Vel	triled a bit	7.8K
								19			
								2			14.7K → 13.5K
								1			
								3/4	FOCUS TEST	end of pgm T=5.7°C	
SH11 BG 39 Filter				CASS CCD	600 Å/mm G=2679	250 μm	4298 Å	3/4	focus test	in focus 475 0 50 1024 4 1 ccd fast	
							4298 Å	1			
								5			
4100	5"	B 7.26	ON 8 V					6	Bln O-star	S/N ~ 360:1	7.5K
								7			
								8			
3000	5"	B 7.72	O9.5 II (n)					9	Bln O*	S/N ~ 260/1	
								10			
								1			

5) Pg #5 Fri/Sat

Date ²⁰ 1995. . Sep. 27/23.

Date 1995 Sep 22/23. Observers [Bln] / Tr. / Sent

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC3579A	Comp							Feko clear	10s
95	HD 346 56	05 14	+37 20	04 35 27		0 34 E			1292
96	Comp							"	10s
97	COMP							"	10
98	HD 22484	3 31 46	+0 05 04	5 04 53		1 22W			247
99	COMP							"	10
CC35800	Comp							"	10
01	HD 37022 C	5 30 22	-5 22 20	5 14 34		0 24 E			406
02	COMP							"	10
03	BIAS(4)			5 31					-
04-13	FLAT x 10					0 0	+30°	Tung clear	6
04/15	Inboard / outboard	Flatman		5 42				Feko clear	20/40

CCD
 Spectr. Temp. -100°C Dome Temp./Hum. $\pm 5.1^\circ\text{C}$ 80.38H Transparency Conditions . Fine Sy.....
 Focus ... 6.92
 Spectr. Temp. Dome Temp./Hum. $\pm 60^\circ\text{C}$ 4750 50 1024 4 1 MAX

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2639				CASSCO	600h/min G=2679	250u	4298B	11			
3980	6*	.8 6.24	07II f					12	Bln-O*		77K
								13			
								14			
4870		✓ 4.28	F9II-V					15	Std Vel.		
								16			
								17			
4500		B 5.15	O6c p ^(?)					18	Bln-O*	sky getting brighter	77K
								19			
								1			
								1			15.9K →
	5.0°C		Set 6.92					3/4	focus test. set in focus -		

589#1

Sun / Mon

Date 1995 Sep 24/25... Observers [Bl.] / T. / ~~Ant~~ Smt.

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CG 80153/56	HD 176844	18 57 03	+40 32 36	17 SAT	Sep 23 before Tour.			4x 67ms	
CG 80157/159	"	"	"					20 133ms	
CC 35816/17	Inboard / Outboard Hartmann			Sept 24/25		0 0	+40°	Fene Clear	20/40
18	BIAS(4)								
19	Comp							Fene Clear	30s
20	HD 172187	18 33 42	+43 08 12	18 54 edit header	00 25 W				720
21	Comp							Fene Clear	30s
clock reset 22	Comp								30s
23	HD 187691	19 46 14	+10 09 55	19 14 49		00 37 E			150s
24	Comp							"	30s
25	Comp							"	30
26	HD 186601	19 47.54	+18 25	19 25 57		0 15 E			9/8
27	Comp							"	30
28	BIAS(4)			19 24 44					—
29	Comp							"	30

Specif. Temp. ... -100°C Dome Temp./Hum. 11.2°C $63\% \text{ RH}$ Transparency Conditions ... Partly Cloudy ... S...

Focus ... 6.88

Spectr. Temp.

Dome Temp./Hum.

90 c/gain

C Lambda

475 0 50 1024 + 1 CCD

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39 F.110	OK	V 6.65	M	CMS500 Holo 250m slit	600A/mm 250m slit	250m slit	4298A			Note Seeing test CG80157 back saturated.	
Tour Looked at Alberio and Saturn, then Really cloudy Part Cloudy, No wind, Dome WSW											
								3/4	focus test		
								1/2			
								5			2.7K
4500	4"	V 6.26	FOV					6	Blk pgn (was normalization step)	10K	
								7	not usually done at this grating setup		
2000								8			
2000	4"	V 5.11	F8V					9	still vel	5K	
								10			
								11			
4200	3"-4"	B 6.24	075Iaf					12	Blk 0* pgn > 300/1 slit	11K	
								13	narrow odd emission @ $\leq 4508\text{\AA}$	4484 ^A	
								1		and 4484 ^A	
								14		±15A	

HP #2

Sun / Mon

Emulsion Batches:

Date 1995 Sep 24/25

Observers [Bln.] / T.n. / Smt.....

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Companion Type/Filter	Exp.
CC 35830	HD 226868	19 57 36	34 56 00	19 51 14		00 41 W			312
31	Comp							Fe No Clear	30
32	BIAS (4)								—
33	Comp							"	30
34	HD 186980	19 42 24	+ 31 52	20 52 49		1 45 W			2509
35	COMP							"	30
36	COMP							"	30
37	HD 193322 AB	20 14 34	+ 40 25 13	21 42 23		1 49 W			1733
38	COMP							"	30
39	BIAS (4)			22 15					
40	Comp							"	30
41	HD 199579	20 53 03	+ 44 32 24	22 22 11		1 34 W			715
42	COMP							"	30
43	COMP							"	"
44	HD 206267	21 35 51	+ 57 02 12	22 42 51		1 20 W			1150
45	COMP							"	30

Spectr. Temp. -101.2°C Dome Temp./Hum. $+9.9^{\circ}\text{C}$ 68-50/11 Transparency Conditions ... PART Cloudy 58 ...

Focus ... 6.88

Spectr. Temp. Dome Temp./Hum. 415 0 50 1024 4 1 ccd/fnt

Exp. Mtr. FILTER	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
900	3.4"	7.74	09.7	Iub	600 h/m G 2679	250	4298A	15c	SBRh	Cyg X-1 7100/1 S/N	
								16	+ 0.5th		
								1		-100.4 E ccd/fnt	
								18			
2160	4-5"	7.53	07.5III	(F1)				19	Blh - 0*	Some cloud here $\rightarrow$ increasing	4K
								20			
								21			
3960	4-5"	5.94	09V	(n1)				22	Blh - 0*	FAINT companion to SW very close. Is this C? or B? PART Cloudy	7.5 2.5K
								23			
								1/2			
								24			
4300	3-4"	5.965	06V					25	Blh - 0*		10K
								26			
								27			
2060	3-4"	5.83	06.5II					28	Blh - 0*	Some cloud $\rightarrow$ increasing cut short due to clouds	4.7K
								29			

9

Date 1995 Sep 24/25 Observers LBH J In / Sm F

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[illegible]

CCD Spectr. Temp. -100.1°C

Dome Temp./Hum. 8.7°C/75.8%
@ end.

Transparency Conditions . . . *Cloudy - low cloud* . . .

Focus . . . 6.88

Spectr. Temp.

Dome Temp./Hum.

[illegible]

Q PG#1

Mon/Tues

Date 1995... Sept 25/26. Observers Vnk / Jm

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 357/41	Inboard/outboard					0 0	+40°	Fair Clear	60/60
72	BIAS(4)								
73	Comp							Fair Clear	60s
74	BD+17 4572	21 19 21	+17 51 00	21 03 26		00 01 W			1200
75	Comp							"	60s
76	Comp							"	60s
77	HD 177724	19 00 49	+13 42 53	21 33 56		02 30 W			
78	Comp							"	60s
79	Comp							"	60
80	HD 204 867	21 26 18	-06 00 40	21 44 49		00 17 W			238
81	Comp							"	60s
82	BIAS(4)								
83/88	FLATS x 6					00 24 W	-5 36	T406 Ap 1/4	8s
89	BIAS(4)								

^{CCD}
 Spectr. Temp. ... -100.7°C ... Dome Temp./Hum. 7/20°C 82%^H Transparency Conditions ... Part clearing ...
 Focus ... 6.78 ... 90 gain increasing fog & Humidity 62
^{CCD}
 Spectr. Temp. ... -100.7°C ... Dome Temp./Hum. ... +10.7°C 90%
 c lambda 420 0 50 1024 4 1 CCD FMT

Exp. Mtr.	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10 filter				CASS CCD	1800A/mm G-6100	308-	6603A	3/4	Focus test		
								6			3.5K
570	3"	9.0						7	Cephoid Var	7641 S/H AIR MASS 1.11	10K
								8			
								9			
10 K		2.99	40In					10	Telluric Std	AIR MASS = 1.38	9.6K
								11			
								12			
7.5 K		2.91	GOIb					13	std vel	some cloud / 1st 2 mins	11K
								14			
								1/2			
								15			13.5K
								1/2			

294#1

Tues / Wed

Date 1995 Sep 26/27 Observers V.K. / T.

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc35890/91	Inboard / outboard [done after time]			01 42		00 35 W	+61 29		60/60
92	BIAS(4)			[done after BD+17 452] 01 38 26					
93	Comp							Red Clear	60s
94	BD+17 452	21 19 21	+17 51 00	01 04 45		04 16 W			1825
95	Comp			01 36 51				"	60s
96	Comp							"	60s
97	BD Cas	00 04 39	+60 57	01 52 14		02 25 W			2250
98	Comp							"	60s
99	BIAS(4)								
cc35900	Comp							"	60s
01	IX Cas	23 59 42	+49 41 00	02 42 15		03 16 W			2000
02	Comp							"	60s
03	BIAS(4)								
04	Comp							"	60s
05	DQ And	00 53 54	+44 52 00	03 25 38		03 12 W			2440
06	Comp							"	60s

CCD Spectr. Temp. -100.3°C Dome Temp./Hum. $+12.4^{\circ}\text{C}$ 77.2% Transparency Conditions Partly Cloudy 64

Focus 6.73

90C gain

Spectr. Temp.

Dome Temp./Hum.

4 20 0 50 1024 4 1 CCD Fast

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 W/mm	306	6603A	3/4	Focus	NO PMSLization on 1106811	max
					G=6100			1/2		nice H α emm (as expected for BTV.e)	
900	3.4	9.0						7	Vnk Cepheid	120/1 S/N	
								8			
								9			37K
350	2.3	10.8 -11.2						10	Vnk Cepheid	70/1 S/N	
								11			
								1/2			
								12			
230	2.3	11.2 -11.8						13	Vnk Cepheid	(sl < 50/1 S/N)	
								14			
								1/2			
								15			
300	2.3	11.2 -12.0						16	Vnk Cepheid	50/1 S/N	
								17			

7p9#2

Tues/Wed

Date 1995 Sep 26/27 Observers Vnk/Tn

Emulsion Batches:

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[illegible]

CCD Spectr. Temp. -100.5°C Dome Temp./Hum. $+10.6^{\circ}\text{C}$ 79.86% Transparency Conditions .. getting quite clear.....

Focus 6.73

CCD Spectr. Temp. -100.6°C Dome Temp./Hum. $+9.9^{\circ}\text{C}$ 83% H
C. Lambdin

MAX

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 Intra	306u	6603A	1/2			
								18			3.7A
750	2.4"	9.39	A7					19	Cepheid VAK		
								20			
		7.29	dG2			Have 306u slit			Seeing test - NE Fan on with slit.		
									" " Some cloud.		
								21			
2360	2.3"	7.29	dG2					22	Std/Vel		
								23			

* Note, Flats forgotten, but previous and next night should be Reasonable, even though slit moved out and in and CCD temp reset each night.

* F Focus not changed for next night.

88921 Wed/Thurs

Emulsion Batches:

Date ..1995.. Sep. 27/28 Observers ..V.n.k..I.Tn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC359 ¹⁵ / ₁₆	Inboard/outboard					00 10E	+43°	FeAr clear	60/60
17	BIAS(4)			} Times & Date wrong					
18 26	FLATS x 9								
27	Comp			Time edited.	21847 ✓			Tung Ap 1/4	85
28	HD177724	19 00 49	+13 42 53	18 49 ✓		00 00		FeAr clear	60s
29	Comp (clock reset)			18 56				"	60s
30	Comp							"	60s
31	HD 162714	17 47 17	-06 07 09	19 03 01		01 24W			300
32	Comp							"	60s
33	BIAS(4)			19 14					60s
34	Comp							"	60s
35	HD 347827	17 56 49	+19 15 00	19 19 34		02 02W			2136
36	Comp							"	60s
37	Comp							"	60s
38	HD 229414	18 41 18	+12 14 00	20 04 32		01 53W			1871
39	Comp							"	60

CCP Spectr. Temp. -101.7°C Dome Temp./Hum. $+160^{\circ}\text{C}$ 610% Transparency Conditions FINE 28

Focus $6.7.3$ unchanged from previous night 90 c gain

CCP Spectr. Temp. -100.9°C Dome Temp./Hum. $+13.8^{\circ}\text{C}$ 550% 420 0 50 1024 4 1 CCD FWH

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASSED	1800 h/low G=6100	306	6603A	3/4	focus	Right on @ Blue end	max ADCL
								1/2			
								2	best to use with previous		13K
								5	night as well.		
29K		299	A0Vn					6	Telluric Std		6K
								7			
								8			
4000	4"	618	F8Iob					9	Rm captured 1.665 Am mass		7K
								10			
								11/2			
								11			37K
785	2.4"	310	2.4"					12	Cepheid VnK (90/1 S/N)		
								13			
								14			
715	2.3"	9.7	-10.4					15	Cepheid VnK (95/1 S/N)		
								16			

98 p952 Wed/Thurs

Emulsion Batches:

Date 1995 Sep 27/28.. Observers V.K./Jn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC35940	BIAS(4)								
41	Comp							FeHr Clear	60s
42	HD 229680	18 4554	15 4900	20 4427		02 34 W			1884
43	Comp							"	60s
44	Comp							"	60s
45	HD 356404	19 5248	+10 46 00	21 2734		01 53 W			1200
46	Comp							"	60s
47	BIAS(4)								
48	Comp							"	60s
49	V 572 Agl	19 5727	00 2500	21 5553		02 37 W			2062
50	Comp							"	60s
51	BIAS(4)								1884
52	Comp							"	60s
53	HD 3545W	19 5635	+15 31 00	22 4115		03 20 W			1885
54	Comp							"	60
55	BIAS(4)								

Spectr. Temp. Dome Temp./Hum. Transparency Conditions *Slightly hazy* 70Focus ... *6.73*Spectr. Temp. Dome Temp./Hum. *+11.7°C 69.5% H*

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>no filter</i>				<i>CASS CCD</i>	<i>1800 h/min G-6100</i>	<i>306</i>	<i>6603A</i>	<i>1/2</i>			
								<i>17</i>			
<i>500</i>	<i>3-4"</i>	<i>2 10.5</i>						<i>18</i>	<i>Cepheid</i>	<i>Vnk AP Her</i>	
								<i>19</i>			
								<i>20</i>			<i>39K</i>
<i>500</i>	<i>3-3"</i>	<i>9.7 -10.2</i>						<i>21</i>	<i>Cepheid</i>	<i>Vnk</i>	
								<i>22</i>			
								<i>1/2</i>			
								<i>23</i>			
<i>400</i>	<i>3-4"</i>	<i>11.0 -11.4</i>						<i>24</i>	<i>Cepheid</i>	<i>Vnk</i>	
								<i>25</i>			
								<i>1/2</i>			
								<i>26</i>			
<i>511</i>	<i>3-5"</i>	<i>9.8 -10.9</i>						<i>27</i>	<i>Cepheid</i>	<i>Vnk</i>	
								<i>28</i>			
								<i>1/2</i>			

Pg#3

Wed / Thurs

Emulsion Batches:

Date 1995 Sep. 27/28. Observers V.N.K./Tn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC35956	Comp							Fedn Clear	60
57	V383 Cyg	20 25 03	+33 48 00	23 22 21		03 41 W			2319
58	Comp							"	60
59	Comp							"	60
60	BD+03 44 37	20 50 13	+03 39 08	00 08 43		03 43 W			944
61	Comp							"	60s
62	B1A5(4)								
63	Comp							"	60s
64	BD+17 45 72	21 19 21	+17 51 00	00 49 38		03 59 W			1500
65	Comp							"	60s
66	Comp							"	60s
67	IX Cas	23 59 42	+49 41 00	01 26 27		02 10 W			2415
68	Comp							"	60s
69	B1A5(4)								
70	Comp	for BD Cas						"	60

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions *OK*Focus *6:7.3*^{CCD}
Spectr. Temp. *-100.5°C*Dome Temp./Hum. *+11.2°C 84.9% H**72*

Exp. Mtr.	Seeing	P [✓] Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>no filter</i>				<i>CASS CCD</i>	<i>1300 1/4 mm</i>	<i>306u</i>	<i>6603A</i>	<i>5</i>			
<i>566</i>	<i>3"</i>	<i>106</i> <i>-11.2</i>			<i>G = 6100</i>			<i>6</i>	<i>Cepheid</i>	<i>Vnk</i>	
								<i>7</i>			
								<i>8</i>			
<i>700</i>	<i>4.6"</i>	<i>8.85</i>	<i>F8</i>					<i>9</i>	<i>Cepheid</i>	<i>Vnk 80/1 S/N</i>	
								<i>10</i>			
								<i>11/2</i>		<i>CCOT = -100.5°C</i>	
								<i>11</i>			
<i>1200</i>	<i>5"</i>	<i>8.9</i> <i>-9.5</i>						<i>12</i>	<i>Cepheid</i>	<i>Vnk</i>	
								<i>13</i>			
								<i>14</i>			
<i>310</i>	<i>2.3"</i>	<i>11.2</i> <i>-11.8</i>						<i>15</i>	<i>Ceph</i>	<i>Vnk</i>	
								<i>16</i>			
								<i>11/2</i>			
								<i>17</i>			

ppg#4 Wed/Thurs

Date 1995... Sep. 27/28 Observers V.K./J.A.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc35971	BD Cas	00 0439	+60 5700	02 1830		02 51W			2000
72	Comp							FeAr Clear	60s
73	BIAS(4)								
74	Comp							"	60s
75	DQ And	00 5354	+44 5200	03 00 56		02 50W			2400
76	Comp							"	60s
77	Comp								60s
78	Nova Cas 95	01 0455	+53 59	03 4937		03 01W			459
79	Comp							"	60s
80	BIAS(4)								
81	Comp							"	60s
82	BD+03 601	04 2433	+04 0724	04 0726		00 13W			1200
83	Comp							"	60s
CG80 66/69	HD 29587	4 3430	+41 57	04 38				4x	67ms
CG80 70/71	"					00 07W		2x	133ms

1995.7 mag correct COORAS Tn

Spectr.

Focus

Spectr.

Exp. Mu

ppg#4

500

260

500

800

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions ... OK 74

Focus ... 6.7.3.....

Dome Temp./Hum. $+9.9^{\circ}\text{C}$ 85.3%RH

Light variable direction wind.
No Fung tonight

Spectr. Temp.

Dome Temp./Hum. 49.9°C 85%

Exp.	Mtr.	Seeing	No. Mag.	Sp.	Inst.	Gratings/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
260	No Filter 500	2.3"	10.8 -11.2		CASSCO	1800 lines/mm G=6100	306	6603A	18	Cephoid	Vnk (80/1 S/N)	
									19			
									1/2		CCT = -100.6°C	
									20			
260			11.2 -12.0						21	Cephoid	Vnk	
									22			
									23			
500	3"								24			44K
									25			
									1/2			
									26			
800	4"	9.39	A7						27	Cephoid Vnk		
									28			
		3.5"	7.29	1G2		Above	306 slit			Seeing Test	No wind now	

pg#5 wed/Thurs

Date 1995 Sep 27/28 Observers Vn K/Tn

Emulsion Batches:

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[illegible]

APG #1

Date 1995 September 28/29 Observers Vnk / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC35993/94	INBOARD/OUTBOARD							FeAr clear	60/70
95	BIAS(4)			20 24					—
96	COMP							"	60
97	HD 356404	19 52 48	+10 46	20 34 56				"	1820
98	COMP							"	60
99	BIAS(4)			21 22					—
CC36000	COMP							"	60
01	V572 Aql	19 57 27	+0 25	21 30 03		2 20 W			2400
02	COMP							"	60
03	BIAS(4)			22 17					—
04	COMP							"	60
05	HD 354511	19 56 35	+15 31	22 20 35		3 02 W			1800
06	COMP							"	60
07	COMP							"	"
08	BD+03 4437	20 50 13	^{2000.0} +3 39 08	23 00 14		2 43 W			1200
09	COMP							"	60

Spectr. Temp. -100°C Dome Temp./Hum. $8.2^{\circ}\text{C}/68.4\%$ Transparency Conditions *clear!* *78*
 Focus *6.73* @ *V512 A8*
 Spectr. Temp. Dome Temp./Hum. *420 0 50 1024 4 1 ccdint*

Exp. Mtr.	Seeing	✓ Mag.	Sp.	Inst.	Grating/ Tilt	Slit 300 μm	Dispersion $\text{\AA}/\text{mm}$	Program	Remarks	Quality
<i>no filter</i>				<i>CASS</i>	<i>1800 lines</i>	<i>300 μm</i>	<i>6601 $\text{\AA}$</i>	<i>3/4</i>	<i>FOCUS TEST</i>	<i>T=9.3 in focus</i>
				<i>CCD</i>	<i>6100</i>			<i>1</i>		
								<i>5</i>		
<i>610</i>	<i>4"</i>	<i>9.73</i> <i>-10.16</i>						<i>6</i>	<i>Vnk Cepheid</i>	<i>V733 A8</i>
								<i>7</i>		
								<i>1</i>		
								<i>8</i>		
<i>410</i>	<i>4"</i>	<i>11.00</i> <i>11.44</i>						<i>9</i>	<i>Vnk Cepheid</i>	<i>200 km above b/g</i>
								<i>10</i>		
								<i>1</i>		
								<i>11</i>		
<i>500</i>	<i>4"-5"</i>	<i>9.82</i> <i>10.54</i>						<i>12</i>	<i>Vnk Cepheid</i>	<i>KL A8</i>
								<i>13</i>		<i>350 above b/g</i>
								<i>14</i>		
<i>1000</i>	<i>5"</i>	<i>8.85</i>	<i>F8</i>					<i>15</i>	<i>Vnk Cepheid</i>	<i>TX Del</i>
								<i>16</i>		

Apog #2

Date 1995 September 28/29 Observers Vuk / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 36010	BIAS(4)			23 23					
11	COMP							FeAr clear	60
12	V383 Cyg	20 25 03	+33 48	23 30 53		3 49 W			2082
13	COMP							"	60
14	COMP							"	"
15	BD+17 4572	21 19 21	+17 51	0 13 53		3 26 W			1401
16	COMP							"	60
17	BD+17 4572			0 44 50		3 54 W			1218
18	COMP							"	60
19	BIAS(4)								—
20	COMP			1 08				"	60
21	DQ And	00 53 54	+44 52	1 16 55		1 13 W			2564
22	COMP							"	60
23	BIAS(4)			2 03					—
24	COMP							"	60

Spectr. Temp. Dome Temp./Hum. ... 1.3°C / 72.4% Transparency Conditions ... some cloud. (arr. / low vapour) (trans. too)

Focus 6.73

FANS ON

88

Spectr. Temp. Dome Temp./Hum.

420 0 50 1024 4 1 ccd fast

Exp. Mtr.	Seeing	V _{mag} . Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Exposure	P.H.	Program	Remarks	Quality
				CASS CCD	1800 Å G=6100	30µm	6601 Å	1			
								17			
415	4"	10.60- 11.17						18	Vuk Pop II Cepheid		
								19			
								20			
770	4"	8.98- 9.47						21	Vuk Pop II Cepheid	AU Peg, He is very shallow strong emission	630 above b/g
								22			
700	4"	"						23	Vuk Pop II Cepheid	He is still shallow 2nd time	
								24			
								1			
								25			
320		11.23 = 12.00						26	Vuk Pop II Cepheid	lots of cosmic rays in spectrum. weak!!	200 above b/g
								27			
								1			
								28			

Pg #3

Date 1995 September 28/29 Observers Vnk / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CG36025	IX Cas	23 59 42	+49 41	2 13 48		~3 ^h W			2419
26	COMP			3 16*				"	60
27	BIAS(4)			3 18					
28	COMP							"	60
29	BD Cas	0 04 39	+60 57	3 27		4 04 W			2000
30	COMP							"	60
31	COMP							"	"
32	HD29587	4 34 30	+41 57	4 08 31		0 14 E			362
33	COMP							"	60
34	BIAS(4)			4 17					
CG80172	HD29587 x 4	4 34 30	+41 57						.067
176/177	" x 2				4 22	0 05 E	88° Act		.133
35	COMP							FcAn clear	60
36	BD+03 601	4 24 33 ^{2000.0}	+4 07 24	4 30 41		0 43 W			1400
37	COMP							"	60

CCD
 Spectr. Temp. -104.9°C Dome Temp./Hum. $7.1^{\circ}\text{C}/78.0\%$ Transparency Conditions *clear* 8.2
 Focus 6.13 FANS ON (N ONLY)
 Spectr. Temp. Dome Temp./Hum. $7.4^{\circ}\text{C}/82.8\%$ @ seeing test 420 0 50 1074 4 1 contrast

Exp.	Exp. Mtr.	Seeing	Pkg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
247	70 filter	4"	11.19 - 11.77		CASS CCD	1800 Å/min G=6100	30 μm	6601A	29	Vnk ^{Pop II} Cepheid.	spec. controller failed badly	
60									30		a little late	
									1			
									5			
250	445	4"	10.84 - 11.21						6	Vnk ^{Pop II} Cepheid.		
60									7			
									8			
262	2000	4"	7.29	d62					9	Std. Vel.		
60									10			
									1			
267	one of those is a bit faint - saved accidentally	7.29	d62		EEV CCD TV GUIDER		above 30 μm		-	SEEING TEST	Dome W, light wind variable direction clear with haze on horizon,	
273		"	"						-	"	95% on east wall	
60					CASS CCD	same as top...			11			
270	570	4"	9.39	A7					12	Vnk ^{Pop II} Cepheid	SW Tan	
60									13			

pg #4 (calibrations)

Date 1995 September 28/29 Observers Vnk / Jmt

Emulsion Batches:

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[illegible]

pg #1

Date 1995 September 29/30 Observers Vuk / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36047/48	INBOARD/ OUTBOARD							FeAr clear	60% 165
49	BIAS(4)			19 00					
50	COMP							"	60
51	HD162714	17 47 17	-6 07 09	19 09 44		1 40 W			260 4100
52	COMP							"	60
53	COMP							"	"
54	HD347827	17 56 49	+19 15	19 25 24		2 00 W			1200 600
55	COMP							"	60
56	BIAS(4)			19 53					
57	COMP							"	60
58	BD+17 4572	21 19 21	+17 51	19 57 29		0 47 E			1400 1300
59	COMP							"	60
60	COMP							"	"
61	HD229680	28 45 54	+15 49	20 30 00		2 30 W			2404 1214
62	COMP							"	60

Spectr. Temp. ... -100.5°C

Dome Temp./Hum. 14.6°C/66.1%

Transparency Conditions thin clouds, 46...

Focus 6.73

@ 80ph.

FANS OFF

Spectr. Temp.

Dome Temp./Hum.

420 0 50 1024 4 1 ccdint

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS	1500 Å	30 Å	602A	3/4	FALUS TEST	T = 15.3°C, set a bit cool intentionally	
				CCD	G = 6100			1			
								5			
4100	3"-4"	6.18	F8Ib					6	Vnk/Rm	80ph really noisy	
								7			
								8			
600	3"	9.70- 10.62	F0-F0II-IV					9	Vnk Pop II Cepheid	BL Her really noisy	
								10			
								1			
								11			
1300	3"-4"	9.9 9.5						12	Vnk "	huge emission spike AU Peg just red side of H α	1.1 continuous 1.3K
								13			
								14			
121 mirror 600s	3"-4"	11.2- 11.2						15	Vnk "	AP Her spec. controller failed mid exposure ∴ lost exp. mtr.	
								16			

pg #2
27

Date 1995 September 29/30 Observers Vnk / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36063	BIAS(4)			21 14					—
64	COMP							Fe Ar clear	60
65	V512 Aql	19 57 29	00 25	21 19 11		~ 2 20 W			2400
66	COMP							"	60
67	BIAS(4)			22 03					—
68	COMP							"	60
69	HD 356404	19 52 48	+10 46	22 19 27		3 08 W			1800
70	COMP							"	60
71	BIAS(4)			22 54					—
72	COMP							"	60
73	HD 354511	19 56 35	+15 31	22 58 00		3 36 W			7337
74	COMP							"	60
75	COMP							"	"
76	BD+03 4437	20 50 13	^{2000.0} +3 39 08	23 27 07		3 15 W			1236
77	COMP							"	60

Spectr.

Focus.

Spectr.

Exp. Mu

600

440

785

Spectr. Temp. Dome Temp./Hum. 13.6°C / 70.3% Transparency Conditions hazy, some clouds in Agl ...

Focus 6.73

FANS OFF

88

Spectr. Temp. Dome Temp./Hum.

420 0 50 1024 4 1 CCD

Exp. Mtr.	Seeing	V _{mag} Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1000/n G=6100	300u	G6021	1			
								17			
465	2-3"	11.00- 11.44						18	Vuk ^{Pg II} Capteid.		
								19			
								1			
								20			
600		9.7- 10.2						21	Vuk "	V733 Agl same thin cloud	500 above 465
								22			
								23			
								23			
490		9.82- 10.56						24	Vuk "	KL Agl same thin cloud.	
								25			
								26			
785	3-4"	8.85	F8					27	Vuk "	TX Del hazy here.	good.
								28			

Spectr. Temp. Dome Temp./Hum. 12.7°C / 74.0% Transparency Conditions hazy 20 ...
 Focus 6.73 FANS OFF
 Spectr. Temp. Dome Temp./Hum. 470 0 50 1024 4 1 ccd fast

Exp.	Exp. Mtr.	Seeing	✓ Star Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
-					CASS CED	1800 L/mm G = 6100	306μ	660A°	1			
60									29			
545			10.6 - 11.2						30	Vnk Pop II Cepheid	pretty far west nothing exciting even @ max mag.	Fine.
60									31			
									5			
1250			8.9 - 9.5						6	Vnk "	AU Peg 2nd time tonight very hazy here!	
									7			
									1			
									8			
344			11.2 - 11.8						9	Vnk "	very hazy, weak	~200 above 11.9
									10			
									1			
									11			
380	2"-3"		10.8 - 11.2						12	Vnk "	hazy, normal spectrum	Fine
									13			

pg #4

Date 1995. September 29/30 Observers Vnk./Smt.

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc36093	COMP							F ₄₅ clear	60
94	DQ And	0 53 54	+44 52	2 52 47		2 50 W			2400
95	COMP							"	60
96	BIAS(4)			3 36					—
CG80178 →181	HD25022 x4	3 53 24	+39 44 00						.067
182/183	" x2				3 46	0 03 W	86° Alt		.133
cc36097	COMP							F ₄₅ clear	60
98	HD23169	3 37 54	+25 25	3 55 50		0 41 W			684
99	COMP							"	60
cc36100	COMP							"	"
101	BD+03 601	4 24 33 ^{2000.0}	+4 02 24	4 14 53		0 50 W			1447
102	COMP							"	60
103	BIAS(4)			4 42					—
104-109	FLAT x 6					1 ^h W	+4°	Tung 4 ^h Ap	8
110/111	INBOARD/OUTBOARD					0 ^h	~30°	F ₄₅ clear	60/65

Specr. Temp. -100.4°C

Focus 6.73

Spectr. Temp.

Dome Temp./Hum. 12.9°C / 80.7%

Transparency Conditions very hazy, some cloud

FANS OFF

Exp.	Exp. Mtr.	Seeing	V. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
60					CAS	1800 lines	30μm	6602A	14			
364	2"	11.2 - 12.0			CED	G = 6100			15	Vnk ^{Pop II} Cepheid	very faint, not much above dly sky, poor guiding	
									16			
									1			
	2"	6.84	AU V		CEV CED		above 30μm		—	SEEING TEST	Dense SW, no wind, partly cloudy	
	maybe even < 2"				TV GUIDER				—	"	but clear here, good seeing	
					CAS				17			
260	2"	8.75	G2 V		CED...				18	Std Vel.	Full band spectra ^{exp. parts}	
									19			
									20			
675	2"-3"	9.34	A7						21	Vnk ^{Pop II} Cepheid.	SW Tau, hazy here.	
									22			
									1			
									2			13.5K → ?
									3/4	FOCUS TEST	end of night	

pg #1

(Sat/Sun)

27 Date 1995 September 30 / October 1 Observers Vnk / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 36112/113	INBOARD/OUTBOARD							Fair clear	60/16
14	BIAS(4)			23 17				"	—
15	COMP							"	60
16	BD+17 4572	21 19 21	+17 51	23 20 50		~ 2 30 W			1801
17	COMP							"	60
18	COMP							"	"
19	BD+03 4437	20 50 13 ^{2000.0}	+3 39 08	0 03 18		3 50 W			906
20	COMP							"	60
21	BIAS(4)			0 24					—
22	COMP							"	60
23	BD+17 4572	21 19 21	+17 51	0 26 59		3 53 W			1800
24	COMP							"	60
25	COMP							"	"
26	IX Cas	23 59 42	+49 41	1 05 44					2400
27	COMP							"	60

CCD
Spectr. Temp. -100.9°C
Focus 6.73
Spectr. Temp.

Dome Temp./Hum. 13.2°C / 85.2% and ↑
@ focus test

Transparency Conditions . clear... but... hazy on horizon. 94

FANS ON (N ONLY ACTUALLY)

Dome Temp./Hum. 13.4°C / 86.1% and stable.
@ 2nd AU Peg

420 0 50 1024 4 1 ccdint

Exp. Mir.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Alter				1800L CASS CCD	1800L/mm G = 6100	306μm	6602A	3/4			
								1		95% R/H on catwalk but	
								5		still dry enough to be open.	
1300	3"	8.9- 9.5						6	Vuk Pop II reph. II	AU Peg	
								7			
								8			
170	3"	8.85	F8					9	Vuk "	TX Del. close to platform spec. controls failed. weak	
								10			
								11			
1195		8.9- 9.5						12	Vuk "	AU Peg again.	
								13			
								14			
384	3"	11.2- 11.8						15	Vuk "		
								16			

89#2

Date 1995 Sept 30/Oct 1 Observers Vuk/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36128	BIAS(4)			1 48					—
29	COMP							Feb clear	60
30	BD Cas	0 04 39	+60 57	1 56 34					1864
31	COMP							"	60
32	COMP							"	"
33	DQ And	0 53 54	+44 52	2 38 52		2 40 W			2400
34	COMP							"	60
35	BIAS(4)			3 22					—
36	COMP							"	60
37	star to SW of HD 23169	3 37 54	+25 25	3 28 00		0 15 W			600
38	COMP							"	60
38	star to SW of HD 23169			3 28 00					
39	COMP							"	60
40	HD 23169	3 37 54	+25 25	3 55 21		0 43 W			600
41	COMP							"	60

Spectr.

Focus.

Spectr.

Exp. Mtr.

412

271

975

737

Spectr. Temp. Dome Temp./Hum. 13.1°C / 83.7%
 Focus 6.73
 Spectr. Temp. Dome Temp./Hum.

Transparency Conditions . Clear 9.6 ..
 N FAN ON
 420 0 50 1024 4 1 ccd/h

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 lines G=6100	306µm	6602A	16			
								17			
412		10.8- 11.2						18	Vnk ^{Py II} Cepheid		
								19			
								20			
271		11.2- 12.0						21	Vnk "		
								22			
								1			
								23			
975	3"	8.75	62V					24	Std. Vel.	dbl lined spectrum! (what time is that?) -105 ap ra and +2" in dec away from HD 23169	>1K
								25			
								26			
								27			
1237	3"	8.75	62V					28	Std. Vel		
								29			

pg #3

Date 1995 Sep 30 / Oct 1 Observers Vuk / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc36142	BIAS(4)			4 08					—
43	COMP							FcA clear	60
44	HD 29587	4 34 30	+41 57	4 16 18		0 02 W			323
45	COMP							"	60
CG80184	HD 29587 x 4	4 34 30	+41 57						.067
88/89	" x 2				4 27	0 07 W	88° Alt		.133
cc36146	COMP							FcA clear	60
47	BD+03 601	^{2000.0} 4 24 33	+4 07 24	4 34 38		0 52 W			1254
48	COMP							"	60
49	COMP							"	"
50	NOVA Cas 95	^{74° RA (1995.75) 74° DEC} 1 04 50	+53 58 36	5 07 43		4 34 W			627
51	COMP							"	60
52	BIAS(4)			5 21					—
53-58	FLAT x 6					0 0 5 W	+29°	Tung Ku Ap	8
59/60	INBOARD / OUTBOARD							FcA clear	60/64

 C.C.D.
Spectr.
Focus.
Spectr.

Exp. Mtr.

2080

910

180

CCD
 Spectr. Temp. -100.9°C Dome Temp./Hum. $13.1^{\circ}\text{C}/84.4\%$ Transparency Conditions *clear* 98...
 Focus 6.73 N FAN ON
 Spectr. Temp. Dome Temp./Hum. $12.9^{\circ}\text{C}/84.5\%$
 @ SEEING TEST 420 0 50 1024 4 1 red font

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800.2mm G=6100	306 μ m	6602A	1		spec. cont. failed.	
								5			
2080	3"	7.29	AG2					6	Std. Vel		
								7			
	3"	7.29	dG2	EEV CCD		above 306 μ m		-	SEEING TEST	Dome W, no wind, CLEAR,	
	7.2"			TV GUIDAR				-	"	dome wet in places, 92% catwalk	
				CASS CCD...				8			
910	2.3"	9.39	A7					9	Vnk Cepheid	SW Tau ^{for comparison}	
								10			
								11			
580	3-4"	~9	e					12	Vnk Nova	card'm ~ 400 ADU $\rightarrow$ 1K above b/g	4K
								13			
								1		sky getting bright	
								2			
								3/4	FOCUS TEST	T=12.0	13. OK $\rightarrow$

pg #1

(Sun/Mon)

Emulsion Batches:

Date 1995 Oct 1/2

Observers

Mki/Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 361 61/62	INBOARD/OUTBOARD							Fedn clear	60/64
63	BIAS(4)			2 58				"	—
64	COMP							"	60
65	BD+16 516	3 44 43	+16 57 06	3 06 23		0 01 E			1090
66	"			3 24 16		0 16 W		900	590
67	"			3 41 38					900
68	"			3 56 59		0 47 W			900
69	COMP							Fedn clear	60
70-72	FLAT x 3							Tung 4 Ap.	8
73	BIAS(4)			4 17					—
74	COMP							Fedn clear	60
75	BD+16 516	3 44 43	+16 57 06	4 20 21					900
76	"			4 35 43		1 26 W			900
77	"			4 51 05		1 41 W			900
78	"			5 06 26					900
79	COMP							Fedn clear	60

Spectr. Temp. $\sim 100^{\circ}\text{C}$ Dome Temp./Hum. $16.4^{\circ}\text{C}/70.0\%$
with dome just opened

Transparency Conditions clear, windy, 1.02..

Focus 6.73

FANS OFF

Spectr. Temp.

Dome Temp./Hum. $14.9^{\circ}\text{C}/72.4\%$

425 0 50 1024 4 1 cool fan

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 ℓ / G = 6100	30 μ	6602A	3/4	FOCUS TEST	still cooling from -90° . T = 15.0°C in focus.	
								1			
								5			
743	4"	9.40 - 9.71	0.65* K02 + W					6	Mki	1st series. V471 Tau, poor guiding	
590								7	"	" better guiding	
598								7	"	"	
610								7	"	"	
								8			
								9			13.0K → 12.5K
								1			
								10			
focus + this = 1220	4"	9.40 - 9.71	0.65* K02 + W					11	Mki	2nd series guided further V471 Tau away from hot pixel	
		"	"					11	"	"	
522		"	"					11	"	"	
	4"	"	"					11	"	"	
								12			

pg # 2

Emulsion Batches:

Date 1995 Oct 1/2 Observers Mki / Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc36180 -82	FLAT x 3					2 02 W	+17°	Tung X4p	8
83	BIAS (4)			5 27					—
84	COMP							Fed clear	60
85	HD87901	10 03 03	+12 27 22	5 36 33					10
86	BIAS 11			5 38 14		4 03 E			15
87	COMP							Fed clear	60
88-90	FLAT x 3					↑	↑	Tung X4p	8
91	BIAS (4)			5 44		4 ^h E	+12°		—
92/93	INBOARD/OUTBOARD					0 ^h 00 ^m	+38°	Fed clear	60/64
cc36194	Bias (4)	Oct 7/8	Tests						
95/96	Inboard/outboard	Oct 7/8		22 52		0 0	+29°	Fed clear	60/64
97	Comp. no HARTMAN mask ie normal					"	"	"	60s
98	FLAT					"	"	Tung Ap 1/8	8s
99	FLAT FOD 1200ln/mm			23 23		Note GG 385 B1 In source beam	"	"	8s
cc36200	Comp					"	"	Fed clear	60sq
01/02	INBOARD/OUTBOARD					"	"	"	60/75

CCD
 Spectr. Temp. -100°C Dome Temp./Hum. $13.3^{\circ}\text{C}/78.2\%$ Transparency Conditions *clear* 10.2
 Focus 6.73 *FANS OFF*
 Spectr. Temp. Dome Temp./Hum. *425 0 50 1024 4 1 ccd/mnt*

Exp. Mir.	Seeing	V. Pr. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Filter				C955 CCD	1800 $\text{\AA}/\text{mm}$ G=6100	30 μm	6602 $\text{\AA}$	13			13.0 $\rightarrow$ 12.8K
								1			
								14			
12K	1.36	B7V						15	Telluric Std.	Regulus. bright sky	3K
15K	"	"						16	"	"	4K
								17			
								18			12.5K $\rightarrow$ 13.3K
								1			
								3/4	FOCUS TEST		
T = 12.4°C Set 677				CO T = -101.0°C	1800 $\text{\AA}/\text{mm}$ G=6100	30 μm	6602 $\text{\AA}$	3/4	focus test	out of focus - 15 pix at 6604 $\text{\AA}$ CCD limit 425 0 50 1024 4 1	4.1 KX
Max strength of 6604.85 $\text{\AA}$ = 460 $\text{\AA}$				ADU		"	"	5		at 6671 $\text{\AA}$ $\rightarrow$	3.7K
						"	"	6		MAX at H α = 3.3 K	4.1 KX
T = 12.3°C Set 677 still					1200 $\text{\AA}/\text{mm}$ G=4520	"	Hot pin at 6551 $\text{\AA}$ 1 $\text{\AA}$	8	Hot pin at Col 31	400 0 50 1024 4 1 Max at H α = 6.6 K	
MAX strength of 6604.85 $\text{\AA}$ = 500 ADU				ADU		"	"	7		at 6671 $\text{\AA}$ $\rightarrow$	3.6 K
12.2 $^{\circ}\text{C}$ Set 677						"	"	9/10	focus test	out of focus + 20 pix at 6604 $\text{\AA}$	

10/9 #1

Date 1995 October 9/10 Observers [Rm] Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36203/104	INBOARD/OUTBOARD			18 40				Felt clear	50/60
05	BIAS(4)			?					—
06	COMP							"	60
07	HD180583	19 11 59	+27 44 59	19 45 23		1 31 W			400
08	COMP							"	60
09	BIAS(4)			19 55					—
10	COMP							"	60
11	HD187691	19 46 14	+10 09 55	20 01 38		1 13 W			400
12	COMP							"	60
13	HD187691			20 11 32		1 19 W			180
14	COMP							"	60
15	COMP							"	"
16	HD203156	21 15 23	+37 48 55	20 23 45		0 06 W			400
17	COMP							"	60
18	BIAS(4)			20 35					—

CCD
 Spectr. Temp. -100.4°C
 Focus 6.77
 Spectr. Temp.

Dome Temp./Hum. $11.8^{\circ}\text{C}/?$
 @ FOCUS TEST
 Dome Temp./Hum. $11.5^{\circ}\text{C}/74.2\%$
 @ HPIS 121

Transparency Conditions *partly cloudy, patchy 10%*
 FANS ON UNTIL observing $\therefore$ done closed
 for a week beforehand.
 412 0 50 1024 4 1 ccdAnt

Exp. Mir.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Exposition	P.H.	Program	Remarks	Quality
exp. no filter				CASS CCD	1800 L/m G = 5945	30 μ	6400 $\text{\AA}$ 31 $\text{\AA}$	3/4 1	FOCUS TEST	in focus, maybe sl. cool. $\therefore$ good. 1 hour cloud break.	
								5		hot pixel @ col 29	
3090	4"	<V> 6.19	F6I-IIb					6	Rm	some cloud here V473 Lyr on and off. centered on col 1	3.8K
								7			
								1			
560 FILTER								8		banks of patchy clouds running from SW to NE of sky, mostly ~WSW.	
1060		5.11	F8V					9	Std. Vel.	more cloud than star timewise, some sky lines	2.2K
								10			
2700	4"	5.11	F8V					11	Std. Vel	clear patch. MUCH better exp.	7.0K
								12			
								13			
2750	3'-4'	5.8- 5.9	F2					14	Rm	VI334 Cyg. pretty much clear here.	6.3K
								15			
								1			

Pg #2
105

Date 1995 October 9/10 Observers [Rm.] Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36219	COMP							FeAr clear	60
20	HD331970	20 08 27	+32 34 16	20 38 38		1 55 W			2000
21	COMP							"	60
22	COMP							"	"
23	HD214975	22 36 54	+56 19	21 24 05		0 05 E			965
24	COMP							"	60
25	BIAS(4)			21 43					—
26	COMP							"	60
27	HD215159	22 38 15	+53 23 08	21 47 55		0 04 W			200
28	COMP							"	60
29	COMP							"	"
30	VY Per	2 20 19	+58 28 04	22 08 01		2 34 E			3000
31	COMP							"	60
32	BIAS(4)			23 01					—
33-38	FLAT x 6					2 26 E	+59°	Tung K4 Ap	8
39/40	INBOARD/OUTBOARD							FeAr clear	50/60

LED
Spectr.

Focus.

Spectr.

Exp. Mir.

28 560
FILTER

985

1390

2200

422

CCD Spectr. Temp. -100.5°C

Dome Temp./Hum. $10.2^{\circ}\text{C}/75.6\%$

Transparency Conditions *clear and up, full moon rising!*

Focus 6.77

Dome Temp./Hum. $9.8^{\circ}\text{C}/78.0\%$ @ FOCUS TEST

FANS OFF

Spectr. Temp.

412 0 50 1024 4 1 ccd fnt

Exp. Mtr.	Seeing	Mag. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
560 FILTER				CASS CCD	1800 Å/mm 6=5945	306 μ	6400 Å	16			
985		9.1 -9.8	F8- 62 Ib					17	Rm	some sky lines MW Cyg	1.6 K
								18			
								19			
1390	3"	<V> 8.40	~60 Ib					20	Rm	cosmic ray in strongest Z Lac column (25)	3.5 K
								21			
								1			
								22			
2200	3"	6.19	K2					23	Rm	Z Lac vel. comparison (not Cygnoid)	6.4 K
								24			
								25			
422	3"	10.8- 11.66	F5- F9					26	Rm	acc = $+16^{\circ}$ tough to find. $\Delta\theta = -57^{\circ}$ sky lines & cosmic rays	340 above blg
								27			
								1		clouding in fast	
								2		closed done after flats.	13.5 K $\rightarrow$ 12.8 K
								28/29	FOCUS TEST	sl. warm if anything went through focus tonight	

102

Tues/wed

Date 1995 Oct 10/11... Observers T.n..... Tests only after all

Emulsion Batches:

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[illegible]

Pg #1

Date 1995 October 11/12 Observers Mki/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc36259/51	INBOARD/ OUTBOARD							PCAR clear	50/50
52	BIAS (4)			19 10				"	60
53	COMP							"	60
54	HD177724	19 00 49	+13 42 53	19 22 07		~ 1 30 W		"	36
55	COMP							"	60
56	COMP							"	"
57	BM Cas	0 48 36	+63 33	19 36 59		4 10 E		"	350
58	COMP							"	60
59	BM Cas			19 46 51		3 50 E		"	900
60	COMP							"	60
61	BIAS (4)			20 05				"	—
62	COMP							"	60
63	HD3712	0 34 50	+55 59 20	20		3 23 E		"	30
64	COMP							"	60
65	COMP							"	"

CCD Spectr. Temp. -100.4°C Dome Temp./Hum. $16.2^{\circ}\text{C}/62.9\%$ Transparency Conditions *clear* 110
 Focus 6.74 FANS OFF
 Spectr. Temp. Dome Temp./Hum. 408 0 50 1024 4 1 ccdmat

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
" filter				CASS CCD	1800 L/mm G=6100	30 μ m	6604 Å	3/4	FOCUS TEST	good focus now.	
								1			
								5			
11.5K		2.99	A08 _W					6	Telluric Std.	trailed.	4.8K
								7			
								8			
~600		8.82 -9.33	? e					9	Mki	dbl peaked emission @ Ha with deep test exposure absorption lines	1.0K confusion 2.4K Ha
								10			
1237	3"	"	? e					11	Mki	longer exposure nicer.	7.0K
								12			
								1			
								13			
20K		2.23	K0 III _a					14	Std. Vel.	trailed again.	
								15			
								16			

Pg #2

Date 1995 October 11/12 Observers Mki./Smt. + [Vnk]

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
cc 36266	^{NOT} NOVA (AS 95	1 04 50	+53 58.36	20 40 21		3 15 E			700
67	COMP							Fed clear	60
68	COMP			21 49				"	60
69	BD+17 4572	21 19 21	+17 51	21 50 58		1 51 W			1205
70	COMP							"	60
71	BIAS(4)			22 19					—
72	COMP							"	60
73	HD187691	19 46 14	+10 09 55	22 22 54		3 39 W			200
74	COMP							"	60
75-80	FLAT x 6					0 53 W	+38°	Tung K. Ap	8
81	BIAS(4)			22 54					—
82	COMP							Fed clear	60
83	HD216598	22 49 06	+37 23	22 57 57		1 19 W			540
84	"			23 09 09					540 865
85	"			23 18 29					540 870

CCD
Spectr. Temp. -100.5°C

Dome Temp./Hum. 15.3°C/61.7% Transparency Conditions clear 112

Focus 6.74

FANS OFF

^{exp}
Spectr. Temp. -101.7°C

Dome Temp./Hum.

408 0 50 1024 4 1 credit

Exp	Exp. Mtr. no filter	Seeing	V. Mag. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
700	1000	3"	~8.9	LATE TYPE.	CASS CCD	1800 $\frac{21}{mm}$ G = 6100	30 μm	66041	17 18	Vnk	time gap before previous comp because set on wrong obj. initially, right V mag, counted right, no others in field, really.	
60									18		chip warmed to -50°C with cisc running, then cooled to -100°C	
125	1240	3-4"	8.98 -9.47	F-G					19	Vnk	AU Peg	1.5K
60									20			
-									1			
60									21			
100	5.5K	3-4"	5.11	F8V					22	Std. Vel		7.4K
60									23			
8									24		set on SW Lac, actually.	13.5K → 12.8K
-									1			
60									25			
500	1K	3"	8.51 -9.39	G8Vp+ G8Vp					26	Mki/Hdy	1st series SW Lac not much the absorption	1.2K
60	865								26	"		
80	870								26	"		

pg # 3

Date 1945 October 11/12

Observers

Mki./Smt + [Hdy]

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
86	HD216598	22 49 06	+37 23	23 27 49					540 802
87	"			23 37 09					540 700
88	"			23 46 24		2 06 W			540
89	COMP							Fc Ar clear	60
90-92	FLAT x 3						+38°	Tung 1/4 Ap	8
93	BIAS(4)			00 00					—
94	COMP							Fc Ar clear	60
95	HD216598	22 49 06	+37 23	0 04 41				540	540
96	"			0 14 01					540
97	"			0 23 21					540
98	"			0 32 41					540
99	"			0 42 01					540
036300	"			0 51 21		3 11 W			540
01	COMP							Fc Ar clear	60
02-04	FLAT x 3							Tung 1/4 Ap	8

Spectr. Temp. Dome Temp./Hum. $13.8^{\circ}\text{C}/66.1\%$ Transparency Conditions *clear, just past full moon is high*Focus 6.74

FANS OFF

114

Spectr. Temp. Dome Temp./Hum.

408 0 50 1024 4 1 credit

Exp. Mir. Filter	Seeing	✓ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Fluorstone	P.H.	Program	Remarks	Quality
802	3"-4"	8.51 -9.39	G8 Sp + G8 Sp	CAES red	1800 R/m G=6100	306m	lib604 A	26	Mki / Hdy	1st series SW Lac	
710								26	"		
710								26	"		
								27			
								28			13K → 12.8K
								1			
								29			
614	3"	"	"					30	Mki / Hdy	SW Lac 2nd series.	
500.								30	"		
410.								30	"		
400.								30	"		
394								30	"		
458								30	"		
								31			650 ADU
								32			13.4K → 12.8K

pg #4

Date 1995 October 11/12... Observers Mki./[Hdg]/Smt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
C36305	BIAS(4)			1 06					✓
06	COMP							FcAr clear	60
07	HD216598	22 49 06	+37 23	1 10 17					540
08	"			1 19 37					"
09	"			1 28 57					"
10	"			1 38 17					"
11	"			1 47 37					"
12	"			1 56 57		4 17 W			"
13	COMP							FcAr clear	60
14-16	FLAT x3							Tung 440	8
17	BIAS(4)			2 11					—
18	COMP							FcAr clear	60
19	HD216598	22 49 06	+37 23	2 15 39					540
20	"			2 24 59					"
21	"			2 34 19					"

Spectr. Temp. Dome Temp./Hum. 13.2°C / 62.1% Transparency Conditions clear, full moon... up... 116.
 Focus 6.74 FANS OFF getting windy
 Spectr. Temp. Dome Temp./Hum. 408 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 2mm G=6100	306μ	6604A	1			
								5			
515	4"	8.51 -9.34	688p +688p					6	Mki/Hdy	SW Lac 3 rd series.	
570								6	"		
563								6	"		
642								6	"		
670								6	"		
619								6	"		
								7			
								8			13.5K →12.9K
								1			
								13			
589	4"	8.51 -9.34	688p +688p					14	Mki/Hdy	SW Lac 4 th series	
								"	"		
								"	"		

Spectr. Temp.

Dome Temp./Hum.

[illegible]

pg #1
1/9

Emulsion Batches:

Date 1995 October 13/14 Observers ~~MT~~/Smt + [Vnk] (iks as backup)

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 36330/31	INBOARD/OUTBOARD							Fetr clear	50/55
32	BIAS(4)							"	—
33	COMP							"	60
34	HD177724	19 00 49	+13 42 53	18 49 29		0 57 W		"	60
35	COMP							"	60
36	COMP							"	"
37	HD187691	19 46 14	+10 09 55	19 02 23		0 24 W		"	120
38	COMP							"	60
39	COMP							"	60
40	BD+17 4572	21 19 21	+17 51	19 14 46		0 43 E		"	900
41	COMP							"	60
42	BIAS(4)			19 33				"	—
43-48	FLAT x 6					0 30 E	+18°	Tung 4 Ap	8
CG80190-93	HD201750 x4	21 06 30	+36 24						
94/95	" x2				19 57	0 01 E	83° Alt		

CCD
Spectr. Temp. -100°C
Focus 6.68
Spectr. Temp.

Dome Temp./Hum. $19.2^{\circ}\text{C}/58.5\%$
@ focus test
Dome Temp./Hum. $28.7^{\circ}\text{C}/59.1\%$
@ seeing test

Transparency Conditions $\text{clear, little hazy}$ 120

FANS OFF

406 0 50 1024 4 1 ccd font

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
5/55	Alter			CASS CCD	ROO 2/m G=6100	306u	6604A	3/4	FOCUS TEST	good focus.	
								1			
								5			
60	20K	2.99	A0Vn					6	Telluric Std.	tracked for $\frac{1}{2}$ of exp time	12.5K
60								7			
								8			
10	5.3K	2"	5.11	F8V				9	Std. Vel		8.4K
10								10			
60								11			
900	945	2-3	8.98 -9.47					12	Vnk ^{top off} Capitoid.	nothing much here, the maybe shallow	1.6K
60								13			
								1			
								14		cont'm ~ 13K hotpixed $\rightarrow$	14.5K
	2"	7.60	F2V	EDV CCD TV GUIDER		above 306u		-	SEEING TEST	Dome SW, no wind. record high T earliertoday 65% RH. on catwalk	

Ag #2
12/1

Emulsion Batches:

Date 1995 October 13/14 Observers Mki / Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36349/50	INBOARD/ OUTBOARD					0 31 W	+37°	FedAr clear	50/60
51	BIAS(4)			20 51				"	—
52	COMP							"	60
53	HD216598	22 49 06	+37 23	20 57 39		0 37 E			420
54	"			21 06 13					"
55	"			21 13 32					"
56	"			21 20 51					"
57	"			21 28 11					"
58	"			21 35 30					"
59	"			21 42 49					"
60	"			21 50 09		0 15 W			"
61	COMP							FedAr clear	60
62-64	FLAT x 3							Tung 4 Ap	9
65	BIAS(4)			22 05					—
66	COMP							FedAr clear	60

CCD Spectr. Temp. -101.7°C

Dome Temp./Hum. $18.4^{\circ}\text{C}/59.1\%$
@ focus test

Transparency Conditions clear, kind of hazy... 12W

Focus 6.71

FANS OFF

Spectr. Temp.

Dome Temp./Hum.

408 0 50 1024 4 1 ccdArt

Exp.	Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
50/60	no filter	very nice focus			CASS CCD	1800 $\text{\AA}/\text{mm}$ <u>G=5567</u>	30 μm	5892 $\text{\AA}$ <u>+1 $\text{\AA}$</u>	3/4	FOCUS TEST	during top up with ccdT held @ -100°C / final version on what top up.	
60									1	Vnk/Mki		
70									5			
720	795	2"-3"	8.51 - 682p 9.39 + 688p						6	Mki/Hdy	1st series. SW Lac SN ~ 100:1	
	740								8"			
	730								"			
	715								"		AUTOGUIDED BY SBIG ST-4 NW	
	700								"			
	580								"		refocused image, star was off slit for a bit.	
	530 ^{rect 30" into exp}								"			
	540								"		a bit < 90:1 SN	
60									7			
9									8			13K → 12.2K
									1			
60									9			

123 pg #3

Date 1995 October 13/14 Observers Mki / [Hdy] / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36367	HD216598	22 49 06	+37 23	22 11 19					420
68	"			22 18 38					"
69	"			22 25 57					"
70	"			22 33 16					"
71	"			22 40 26					"
72	"			22 47 55					"
73	"			22 55 14					"
74	"			23 02 33		1 28 W			"
75	COMP							Felt clear	60
76-78	FLAT x3					1 32 W	+38°	Felt clear 24 Ap	9
79	BIAS(4)			23 15					-
80	COMP							Felt clear	60
81	HD216598	22 49 06	+37 23	23 19 11					420
82	"			23 26 30					"
83	"			23 33 49					"
84	"			23 41 08					"

Spectr. Temp. Dome Temp./Hum. *16.9°C / 64.0%* Transparency Conditions *clear with a bit of haze.*
 Focus *6.71* *FANS OFF* *124*
 Spectr. Temp. Dome Temp./Hum. *408 0 50 1024 4 1 ccdfmt*

Exp. Mir. no Filter	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
448	3"	8.51- 9.39	G88p +G88p	CASS CCD	1800.8/100 G=5867	30μm	5892A ^o	10	Mki / Hdy	1st of 2nd series. SW Lac	
440								"			
400								"			
364								"			
342								"			
314								"			
312								"			
320								"		sky line and sky big getting brighter as signal drops.	
								11			
								12			12.5K →12.1K
								1			
								13			
375	3.4"	8.51- 9.39	G88p +G88p					14	Mki / Hdy	3rd series. SW Lac	seeing deteriorating
403								"			
442								"			
412								"		focused abit	

Pg #4

Date 1995 October 13/14 Observers Mki / [Hdy] / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 36385	HD216598	22 49 06	+37 23	23 48 28					420
86	"			23 55 47					"
87	"			0 03 06					"
88	"			0 10 25		2 35 W			"
89	COMP							F4r clear	60
90-92	FLAT x 3					2 41 W	+38°	Tung 1/4 Ap	9
93	BIAS (4)			0 23					—
94	COMP							F4r clear	60
95	HD216598	22 49 06	+37 23	0 27 16					420
96	"			0 34 35					"
97	"			0 41 55					"
98	"			0 49 14					"
99	"			0 56 34					"
CC 36400	"			1 03 53					"
01	"			1 11 13					"
02	"			1 18 32		3 44 W			"

CCD
Spectr. Temp. -101.6°C

Dome Temp./Hum. $15.3^{\circ}\text{C}/71.6\%$

Transparency Conditions $\text{hazy, wanting to moon}$

Focus 6.71

FANS OFF

rising 126'

Spectr. Temp.

Dome Temp./Hum.

408 0 50 1024 4 1 ccd/fnt

Exp. Mtr. 70 ft	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
440	3"-4"	8.51 -9.37	688P +688P	CASS CCD	1800 R/m G=5567	300 μ	5892A	14	Mki/Hdy	3rd series SW Tac	
420								"			
535	3"							"			
580	3"							"		S/N ~ 60:1	
								15			
								16			11.8K → 11.2K
								1			
								17			
494	3"	8.51 -9.37	688P +688P					18	Mki/Hdy	4th series. SW Tac	
495								"			
295								"		Poorer seeing.	
480								"			
326								"		Fuzzy	
197								"		Clouds	
303								"			
406	4"-5"							"		S/N < 60:1	

pg #5

Date 1995 October 13/14 Observers Mki / [Hdg] / Smt.....

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC 3640 3	COMP							FeAr clear	60
04-06	FLAT x 3							Tung 1/4 Ap	10
07	BIAS (4)			1 35					—
08	COMP							FeAr clear	60
09	HD 216598	22 49 06	+37 23	1 40 15					420
10	"			1 47 34					"
11	"			1 54 53					"
12	but mostly sky & solar			2 02 13		4 30 W			"
13	COMP							FeAr clear Tung 1/4 Ap	60
14-16	FLAT x 3								10
17	BIAS (4)			2 21					—
18/19	INBOARD OUTBOARD					(platform)	+38°	FeAr clear	50/60
20	COMP							"	60
21	HD 29139	4 30 11	+16 18 30	3 22 16		0 01 W			120
22	COMP							"	60
23	BIAS (4)			3 47					—

CCD
 Spectr. Temp. -101.6°C Dome Temp./Hum. $14.1^{\circ}\text{C}/75.0\%$ Transparency Conditions *partly cloudy $\rightarrow$ increasing*
 Focus 6.71 Dome Temp./Hum. $13.9^{\circ}\text{C}/78.8\%$ 128
 Spectr. Temp. *FOCUS TEST* 408 0 50 1024 4 1cc/dant

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 L/min G=5567	30 μm	5892A	19			
								20			~13K
								1			
								21			
322	4"	8.57 -9.39	682p +682p					22	Mki/Hdg	5th series SW Lac	
305								"			
254	if that many							"		clouds	
105 *								"		* thick clouds - all sky lines. 8 solar spectrum	
								23		killed CCD3 window & rebooted ACOR(x2) before this comp.	
								24			125K
								1			
								5/6	FOCUS TEST	still very good. end of night, almost.	
								7			
1870	6"	0.85	K5 III					8	Std. Vel	α Tau through cloud/fog, 2K	
								9		(can actually see redshift from Na D lines (* vs. sky))	
								1			

All to M. and D. \ -

10 p9#1

Mon/Tues

Date 1995 Oct 16/17... Observers [Blm/Vnk] Tm/Snt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36424/25	Inboard/outboard HARTMANN					00 18W		FeAr clear	60/65
26	BIAS(4)								
27	Comp							FeAr clear	60s
28	HD177724	19 00 49	+13 42 53	182047		0 40 W			88
29	Comp							"	60s
30	COMP							"	60
31	HD187691	19 46 14	+10 09 55	18 3012		0 07 W			300
32	Comp							"	60
33	Comp							"	60
34	HD186205	19 37 54	+8 59 00	18 44 46		0 55 W			1772
35	Comp							"	60
36	BIAS(4)			19 17					-
37	Comp							"	60
38	BD+17 4572	21 19 21	+17 51 00	19 2613		0015 E			
39	Comp							"	60

CCD
Spectr. Temp. -101.8 °C

Dome Temp./Hum. 7.8 °C 567% H

Transparency Conditions ... Mostly clear 130

Focus ... 6.80

@ focus test

FANS ON ~~HE~~ → mostly cloudy

Spectr. Temp.

Dome Temp./Hum.

c. 10 min

only NE Fan by 18:30

404 MAX

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Exposure	P.H.	Program	Remarks	Quality
OG 560 Filtered				CASS CCD	1800 l/min G=6102	306	exactly 6604A	3/4	FOCUS TEST	408 0 50 1024 4 1 readout	
								1/2		412 0 50 1024 4 1 readout	
								5		[Hot pixel on col 28 tonight with this CCD/FMT]	3.5K
6900	5-6"	2.99	A0V _n					6	Telluric Std	Air mass 1.16, trailed.	8K
								7			
								8			
3.7K	6"	5.11	B2V					9	Std Vel	Air mass 1.20 [7300/1 S/N]	7.5K
								10			
								11			
1105	4"?	8.43	B2V					12	Blk He star	Air mass 1.22 S/N ~ 150:1	~2K
								13			
								14		CCD Temp -100.3 °C	
500	5"	8.98 -9.47						15	Cepheid V _n K	some cloud Air mass = 1.12	3.5K
								16		[7100/1 S/N]	

5) Pg#2

Emulsion Batches:

Date 1995 Oct 16/17... Observers [Blm/VaK]... Tm / Smt....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
'CC364 ^{10/59}	FLATS x 20					00 00	-12°	Tung 4p1/4	8sec
CG801 ⁹⁶⁹	HD 207754	21 46 12	+43 25	20 20				4x	67ms
CG802 ⁰⁰¹	"				20 23	00 05 E	89° Alt	2x	133ms
CC36460	Comp							Fear Clear	60s
61	BD+03 4437	20 45 11	+3 17	20 33 46		1 40 W			2000
62	Comp							"	60s
63	BIAS(4)			20 30*					—
64	COMP							"	60
65	HD 235679	21 55 00	+54 00	21 25 43		1 14 W			1400
66	COMP							"	60
67	BIAS(4)			21 53					—
68	COMP							"	60
69	IX CAS	23 59 42	+49 41	22 13 18		0 21 W			2940
70	COMP							"	60
71	BIAS(4)			23 05					—

CCD
 Spectr. Temp. -101.8°C Dome Temp./Hum. $+65.2^{\circ}\text{C}$ 62/184 Transparency Conditions ... Mostly cloudy ... 132
 Focus 680 @ seeing test
 Spectr. Temp. Dome Temp./Hum. 4120 50 1024 4 1 CCD MAX ADU

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
				CASS CCD	1800 λ/mm	36	660A	17ci			14K
	4.5"	7.32	K0 III	EOS CCD TV GUIDER	Above	30% slit			Seeing test	NEFAHON, DOME WEST part cloudy medium gusty NW wind	
								17			
994	6"	8.84 -9.59	G0- G5					18	Cepheid Vnk TX Del		1.5K
								19			
								1		* taken before TX Del. and forgotten.	
								20			
614	5-6"	8.86	B2.5Jb					21	Bln Sp. Bin.	S/N ~ 110:1 @ conf. in H α emission 3x continuum ↑ 1.04 across an end.	3.0K H α
								22			
								1			
		11.2 -11.5	F7					23		cloudy break beforehand	
190		11.2 -11.8	F7					24	Vnk Pop II Cepheid.	seems perhaps too faint. But well identified in field	
								25			
								1			

pg #3

Emulsion Batches:

Date 1995 October 16/17 Observers [Bln/Vnk] Tn/Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CG802 ⁰² 765	HD 3765 x 4	00 35 18	+39 40						.067
CG802 02 107	" x 2				23 22	0 05 W	86° Alt		.133
CC36472	Comp							FeAr clear	60
73	HD 3765	0 35 18	+39 40	23 25 37		60 21 W			760
74	COMP							"	60
75	Comp							"	60
76	Nova Cas 95	01 04 55	+53 59	23 48 27		00 24 W			1035
77	Comp							"	60
78	B1A5(4)			00 15					
79	Comp							"	60
80	Hebe	02 14 58	+15 10 29	00 18 37		00 11 E			1309
81	Comp							"	60
82	Comp							"	60
83	Iris	04 42 21	+27 24 42	00 50 27		02 01 E			1620
84	Comp							"	60
85	B1A5(4)								

CCD
Spectr. Temp. -100.0°C

Focus 6.80

Spectr. Temp.

Dome Temp./Hum. $4.9^{\circ}\text{C}/68.7\%$
(a) Seeing test

Dome Temp./Hum.

Transparency Conditions $\text{clear now, calming down}$

N FAN ON

134

412 0 50 1024 4 1 ccd fnt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	4.5"	7.36	dk5	CCD TV GUIDER		above 30 μm		—	SEEING TEST	Dome W, light NW wind calming down, now	
				"				—			
065605H2				C455 CCD	1800 l/mm	30 μm	6604A	26			
					$\phi = 6102$						
1730	5"	7.36	dk5					27	Std Vel.		3.5K
								28			
								29			
535	6"	7.8-9	e					6	what's em @ 6520Å? FOR Vnk's student	e H α	10.7K
								7			
								1/2			
								8			
1700	10"	7.8	G2V					9	Minor Planet for Std Vel		2K
								10	Right on magstar field.		
								11	Field drawn too		
											3.5K
2065		8.0	G2V					12	minor Planet for Std Vel		
								17	note. It is actually @ 041236	not quite where magstar predicted	

135 pg #4

Date 1995 Oct. 16/17.... Observers [Blk/Mark]... T.w./Sergt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc36486	COMP							Fear clear	60
87	BD+03 601	4 19 17	+3 54	1 27 33		0 53 E			2100
88	COMP							"	60
89	BIAS(4)								—
90/91	Inboard/outboard HURTMMAN					00 02W	+37 27		60/65
92/93	Inboard/outboard HURTMMAN					00 10W	+37 27		20/40
94	Comp							Fear clear	20s
95	HD 34656	5 14 00	+37 20 00	03 08 51		00 24 E			1415
96	Comp							"	20s
97	BIAS(4)								—
98	Comp							"	20s
99	HD 37023D	05 30 23	-05 27 14	03 47 33		00 26W			296
cc36500	Comp							"	20s
01	COMP							"	"
02	HD 37022 C	5 30 22	-5 27 20	4 52 40		00 49 W			429
03	COMP							"	20

Spectr. Temp. Dome Temp./Hum. $+36^{\circ}\text{C} / 71.6\% \text{H}$ Transparency Conditions .. *clear* $+36^{\circ}$
 Focus $680 / 6.95$
 Spectr. Temp. Dome Temp./Hum. $412050102441 \text{ cd/fat}$

Exp. Mtr.	Seeing	☒ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
06 560 FILTER				C455CCD	1800 h/m/m G=6102	30 μ m	6604R	1A			
800	4"-5"	9.33 -10.2	A7					15	Vnk ^{Pep #} Cepheid.	SW Tau	1.5K
								16			
								1			
								3/4	focus test Right on @ Pix #300		
B639 F:1K2		Bmag		C1455CCD	600 h/m/m @ 250 μ G=2680		4300A	3/4	" "	465050102441 cd/fat	
T = $+27^{\circ}\text{C}$		Set 6.95						5			
4370	5"-8"	6.81	07II (F)					15c.	Bln O star	($>300/1 \text{ SN}$) seeing variables Bad	
								16			680
								17			
								17			
2000	5"-10"	6.78	09.5 $\checkmark$					18	Bln O star		3K
								19			
								20			
4500	5"-8"	5.13	Ucep (?)					21	Bln O-star		6K
								22			

Spectr. Temp. ... -100.4°C ...

Dome Temp./Hum.

Transparency Conditions.....Five

Focus 6.95

FANS OFF NOW.

Spectr. Temp.

Dome Temp./Hum.

465 0 50 1024 4 1 ccdm t

Exp.	Exp. Mtr.	Seeing	B ^{1/2} Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
-	BG 39 FILTER				CASS CCD	600 μ / 10° G=2680	250 μ	4300A	1			
20									23			
25	4200	6" 8'	6.36	09.71b					24	Bln O-star		6.7K
30									25			
35									26			
40	3800	6" 8'	6.33	07V					27	Bln O star		
45									28			
50									28			
55	4200	5" ^V	4.39	K2 III b	F2-0.5				29	Std vel		6.8K
60									30?			
65									2			15.7K → 14.4K
70									1			
75									3/4	FOCUS TEST		

13th p9#1

Tues/Wed

Emulsion Batches:

Date 1995 Oct 17/18. Observers M.K.I. / T.N. / MARK Visosky

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC365 ^{37/38}	In board / outboard	Hurtman		17 54				Fair Clear	50/60
39	BIAS(4)								
40	Comp							Fair Clear	60s
41	HD177724	19 00 49	+13 42 53	18 33 20		00 55W			30s
42	Comp							"	60s
43/45	FLATS x 3			At SW Lac position				Tung Ap 1/4	9sec
46	BIAS(4) after (Resetting) Restarting Hecaton								
47	Comp							Fair Clear	60s
48	HD216 598	22 49 06	+37 23	18 57 26					420s
CC365 ^{49/51}	HD216 598	"	"	19 06 46	→ 19:50:23			6x	420s
55	Comp							Fair Clear	60s
56/58	FLATS x 3							Tung Ap 1/4	9sec
59	BIAS(4)								
60/66	HD216 598	22 49 06	+37 23	19 57 43	→ 20 48 40	00 37E		7x	420s
67	Comp							Fair Clear	60s

Spectr. Temp. -100.5°C

Dome Temp./Hum. +10.0°C 60.0%RH

Transparency Conditions *mostly clear* 140.

Focus . . . 6:83

to gradual clouding in.

Specif. Temp. $-102.0^{\circ}\text{C} \dots$

Dome Temp./Hum. c Lombardy

412 050

max
HOC

Exp. Mtr.	Seeing	Ph. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CHSSCO	1500 W/m G = 5567	306	5889A @ 100512	3/4	focus test		
											840
= 4600		2.99	AOV _m						Telluric Std.		
										Restat at 11/ because of typo in using "Repeat" command.	10.8K
							5889A	1/2			
380	3"	8.51	G8V _R						SWLAC		
353, 360		-9.39	+G8V _R					4	contact bin mki/Hely		
30, 346, 360, 390	3.4"	"	"					5	" " <u>Repeat SWLAC x 6</u>		
								6			
								7			10.3K
								1/2			
450, 490,								8	contact Brgy	Repeat SWLAC x 7	
573, 590								9		cloud at end	
620, 1400											
390										cloudy for last one	

14th PY#2

Tues/Wed

Date 1995 Oct 17/18... Observers MKI./Ta.....+Mark...

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36568	B1A5(4)								
69/71	FLATS x 3							TUNG Ap 1/4	9sec
72/75	HD 216598	22 49 06	+37 23	20 57 37	21 26 35	00 02	W	4x	420s
76/78	"	"	"	21 29 03	21 50 42	00 24	W	3x	420s
79	Comp							F4 clap	60s
80	B1A5(4)						+37 54		
81/83	FLATS x 3							TUNG Ap 1/4	9sec
84/87	HD 216598	22 49 06	+37 23	21 57 57	22 27	01 00	W	4x	420
88/90	"	"	"	22 28 26				3x	420
91	Comp							F4 clap	60s
92	B1A5(4)								
93/95	FLATS x 3							TUNG Ap 1/4	9s
96/99	HD 216598	"	"	22 56 34	23 26			4x	420s
CC36609/82	"	"	"	23 26 32	23 48 40			3x	420s
03	Comp								
04	B1A5(4)								

ccd
Spectr. Temp. — 102.0 °C... Dome Temp./Hum. +100° 64.5% H Transparency Conditions . P.P.A.T. ... Cloudy ... 14.2

Focus ... 6:83

Spectr. Temp. Dome Temp./Hum.

getting gusty
gate warnings out max
10.4

C Landdy

Exp. Mtr.	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CAS CCD	1800/1000 G=5567	306	5889A	1/2			
								10			
728, 700		8.51	G8IP					11	Cont/primary	Repeat x 4	clear now
600, 440	3.5"	9.39	+G8IP					12			
320, 300	4.6"	"	"					13			780
400								1/2		-102.0 °C CCD Temp	
								14			10.3K
320, 500, 400	4.5"							15		Donner seemy.	
440, 1								16			
332, 358	4.8"							17			800
300								1/2			
								18			10K
160, 230								19			
220, 260	5-10"							20		65/1 S/N for	
440, 500								21		CC 36602	

3
Pg# 3 Tues/Wed

Emulsion Batches:

Date 1995 Oct 17/18... Observers Mki / Tn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc366 05/07	FLATS x 3								
08/11	HD 216598	22 4906	+37 2300	23 5641				4x 420s	
12/14	"	"	"	00 2633				3x 420	
15	Comp							FeAr Clear	60s
16	BIAS(4)								
17/19	FLATS x 3							TUNG Ap 1/4	9s
20/23	HD 216598	"	"	00 5533	01 2430			4x 420s	
24/26	"	"	"	01 2525	01 47			3x 420s	
27	Comp							FeAr Clear	60s
28	BIAS(4)								
29/31	FLATS x 3							TUNG Ap 1/4	9s
32/34	HD 216598	"	"	01 5412	02 16	4 50W		3x 420s	
35	Comp							FeAr Clear	60s
36	BIAS(4)								
37/39	FLATS x 3							TUNG Ap 1/4	9s

Spectr. Temp. -101.0°CDome Temp./Hum. $+11.1^{\circ}\text{C}$ 540%^H.....Transparency Conditions *clearing again*..... 144

Focus 683

To increasing cloud

Spectr. Temp.

Dome Temp./Hum.

412 0 50 1024 4 1 CCOFMT

Exp. Mtr.	Secing	PV Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CAS CCD	1800 λ/mm	306 μ	5889 Å	21			96K
300, 250	approx 8.57				G = 5887			22	contact binary		
250, 200	4-7" -9.39							23			
278, 300								24			840
290								1/2			
								25			96K
57, 179	4-5"							26		Thick cloud..	
300, 285								27			
180, 230	4-7"							28			
227								1/2			
								29			10K
180, 165								30		1.70 Air mass	
110								5			
								2			95K

145
pg #4

Tues/Wed

Date 1995 Oct 7/18 Observers mki/Th

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36640	Comp							Fe ^r Clear	60s
41	HD 29587	04 3430	+41 5700	02 2719		00 31 E			908
42	Comp							"	60s
CG802 ^{08/11}	HD 29587	"	"				86° ALT	4x	67ms
CG802 ^{12/13}	"	"	"			00 18 E		2x	133ms
43	Comp							Fe ^r Clear	60s
44	HD 4180	00 3909	+74 14	03 0712		3 55 W			233
45	Comp							"	60s
46	BIAS (A)								
47	Comp							"	60s
48	BM Cas	00 4836	+63 33	03 1949		4 00 W			400
49	Comp							"	60s
50	Comp							Fe ^r Clear	60c
51	BM Cas	00 4836	"	03 3402		4 20 W			738
52	Comp							"	60s

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Pg 15

Emulsion Batches:

Date 1995 Oct 17/18 Observers M.K. / Tm

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc36653	Comp							Fear clear	60c
54	Nov 4 Cus 95	010455	+53 59	03 53.39		4 24 W		"	60c
55	Comp							"	60c
56	Comp							"	60c
57	HD 4185 HD 87901	10 03 03	+12 27	04 18 15		4 20 E			70
58	Comp							"	60c
59	BIA S(4)								
60/68	FLATS x 9					0 0	-21°	TWC A 1/4	9c
69/70	In board / out board					0 0	+	Fear clear	60/65
71	BIA S(4)								

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions .. *P.A.S.T. cloudy* .. *118*Focus *6.83* ..Spectr. Temp. *101.9°C* ..Dome Temp./Hum. *411.5°C 600% H* ..

Exp. Mtr.	Seeing	✓ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>no filter</i>				<i>C455</i>	<i>18004</i>	<i>306</i>	<i>6600A</i>	<i>7</i>			
<i>155</i>		<i>9</i>		<i>CCD</i>	<i>G=6140</i>			<i>8</i>			
								<i>9</i>			
								<i>13</i>			
<i>5000</i>								<i>..</i>	<i>Telluric Std.</i>	<i>225 Air mass</i>	
								<i>17</i>			
								<i>1/2</i>			
								<i>2</i>			<i>156x</i>
<i>111.4</i>				<i>683 set</i>				<i>25/28</i>	<i>focused</i>		
								<i>1/2</i>			
									<i>All to Perseus and D:1 CDROM</i>		

149 p947

Wed / Thurs

Emulsion Batches:

Date 1995 Oct 18/19 Observers [Bh. V. K.] T. n.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC366 ^{72/73}	Inboard / outboard			17 58		00 09 E	+42 28	Fair Clear	60/60
74	BIAS(4)			18 03					
78	Comp → (Note, written later)							Fair Clear	60s
75	HD177724	19 00 49	+13 42 53	18 10 57		00 37 W			37
76 ^v	Comp							"	60s
77 ^v	Comp							"	60s
79	HD187691	19 46 14	+10 09 56	18 18 48		00 03 W			298
80	Comp							"	60c
81	BIAS(4)								
82	Comp							"	60s
83	HD186205	19 37 54	+08 59 00	18 39 48		00 59 W			1872
84	Comp							"	60s
85	BIAS(4)			21 9 15					
86	Comp							"	60
87	BD + 03 4437	20 45 11	+03 17 00	19 19 45		00 34 W			2001
88	Comp							"	60

CCD
 Spectr. Temp. ... 101.2°C ... Dome Temp./Hum. ... 13.5°C 61.0%
 Focus ... 6.75 ... Transparency Conditions ... Part cloudy ... 150'
 Spectr. Temp. ... Dome Temp./Hum. ...
 412 0 50 1024 4 1 CCD FWHM

Exp.	Exp. Mtr.	Seeing	Phot. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2	no filter				CHSS CCD	1800 h/m	306	6600 Å	9/10	focus test		MAX AD4
						G-6100			1/2			
									11			3.5K
37	7000		2.99	A0V					12	Telluric Std	AIR MASS = 1.166	4.2K
									13			
									14			
70	4,650	3"	5.11	F8V					15	std vel		5.5K
									16			
									1/2			
									17			
152	1950	3"	8.43	B2V					18	Blm He star	7150/1 S/N some cloud	
									19			
									1/2			
									20			
1550	3.4" - 8.85 9.59			F8					21	Cepheid VAK	S.B.C. Autoguided TX Del [2200/1 S/N]	
									22			

18 pg#2 Wed/Thurs

Date 1995 Oct 18/19..... Observers [B.W./V.G.]... T.G.....

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc 36689	Comp							FEAR CLEAR	60s
90	BD+17 4572	21 19 21	+17 51 00	20 00 32		00 37 W			1787
91	Comp							"	60s
92	BIAS(4)			20 33					
93	Comp							"	60s
94	HD 214946	22 36 42	+44 29 00	20 39 51		00 20 E			598
95	Comp							"	60s
CG802 17/17	HD 214946	"	"				ALT=87°	4x	67ms
CG802 18/19	"	"	"			00 15 E		2x	133ms
cc 36696	Comp							FEAR CLEAR	60s
97	IX Cas	23 59 42	+49 41 00	21 10 27		00 35 E			2902
98	Comp							"	60s
99	BINS(4)			22 02					
cc 36700	Comp							"	60s
01	HD 182917	19 21 9	+50 02	22 14 50		04 27 W			335
02	Comp							"	60

CCD
Spectr. Temp. — 100.5 °C

Dome Temp./Hum. 710.7°C 63.8% Transparency Conditions ... Mostly clear 15.2

Focus ... 6.75

Weak Aurora seen in Far NORTH

Spectr. Temp.

Dome Temp./Hum.

MAX
APU

Exp. Mir.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CAS CCD	1800 nm/mm G=6100	30um	6600A	23			
1500	3"	8.98 -9.47						24	Cepheid Vrk	4U Peg	
								25			
								1/2			
								26			3.2K
3600	2.4"	B 7.26	A5					27	SB Blk -	normal (the one seen) in model telescope 4463A	3.4K
								28		(But also a seeing test)	
		B 7.26	A5				ABOVE 300.51+		seeing test	Dome WNW,	3.4K
		"	"			"	"		"	medium SE wind	
								29			3.2K
375	2.4"	11.2 -11.9	F7					12	Cepheid Vrk	Positively identified	
								13	SBIG 2.7	sec integration very effective	
								1/2	SBIG lost it	when seeing worsened.	
								14			
0000	6"	28	MB					15	CH Cgg	dbl peaked H ₂ em Air mass 1.39	5.5K
								16			

57 pg#3 wed / Thurs

Date 1895 Oct 18, 19. Observers [Bh/Vn.K] J.T.

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36703	Comp							EAR clear	60s
04	HD267076	21 4124	-02 4000	22 3009		02 19 W			
05	Comp							"	60s
06	Comp							"	60s
07	HD235679	21 5500	+14 0000	22 4321		02 32 W			956
08	Comp							"	60s
09	Comp							"	60s
10	HD222368	23 34 18	+05 0503	23 0915		01 05 W			119
11	Comp							"	60s
12	Comp							"	60s
13	Hebe	02 13 31	-15 2803	23 2530		00 55 E			1298
14	Comp							"	60s
15	BIAS (4)			23 50					
16	Comp							"	60s
17	Iris	04 42 55	+27 2509	23 5720		02 59 E			927
18	Comp							"	60s

Spectr. Temp. -100.5°C

Dome Temp./Hum. 77.0°C 69% H

Transparency Conditions .. Some cloudier. SUN 184

Focus ... 6.75

Spectr. Temp.

Dome Temp./Hum. 77.9°C 74% H

Aurora getting stronger

MAX

Exp. Mtr.	Seeing	P.A. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CH55CCD	1800nm/mm	306	6600A	17			
5600	5"	6.37	M71IT		G=6100			18	Std for CHCyg		5.7K
								19			
								20			
700	4.8"	8.86	B2.5 Ib					21	5 Bin Bm	A.R. mass = 1.098	2.2K
								22			
								23			
7,600								24	Std vel		4.8K
								25			
								13			3.7K
1600	6"	7.8	G2 V					15	Minor planet	(Right on magnitude predicted)	1.3K
								16			
								11/2			
								17			
1550	5"	8.0	G2 V					18	Minor planet	(Only 2.5 sec time west of predicted)	
										Last time it was East of predicted.	

pg #4

wed / Thurs

Date 1995 Oct 18/19 Observers Bh/vrk/Ten

Emulsion Batches:

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[illegible]

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions ... *PERT cloudy* 156.

Focus 6.75

Dome Temp./Hum. 77.8°C... 77.9%RH

To completely so.

Spectr. Temp.

Dome Temp./Hum. 77.8°C... 77.9%RH

max

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASSCO	1st order G=6100	306	6600A	20			37
850	5"	9.33 -10.2	A7					21	Cepheid Vnk	($\approx 70/1$ S/N) SW Tau cloudy	t ₂
								22			
								23			15.4t
								1/2			
								30/31	Focus test		
				All to Persicus and				D.1	CDP041 95101 CASS		

Spy #1

Date 1995 October 19/20 Observers [Bln]/Smt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36745/46	INBOARD/OUTBOARD							Fair Clear	40/70
47	BIAS(4)			18 46				"	—
48	COMP							"	60
49	HD138629	15 28 12	+41 14 19	18 59 09		5 27 W			1500
50	COMP							"	60
51	COMP							"	"
52	HD148283	16 21 50	+37 37 18	19 32 46		5 02 W			1200
53	COMP							"	60
54	BIAS(4)			19 56					—
55	COMP							"	60
56	HD164577	17 56 41	+1 18 27	20 02 54		3 53 W			1030
57	COMP							"	60
58	COMP							"	"
59	HD164852	17 58 07	+20 50 00	20 28 24		4 21 W			1200
60	COMP							"	60

Spectr. Temp. 140.4°C Dome Temp./Hum. $10.9^{\circ}\text{C}/69.2\%$

Transparency Conditions mostly cloudy, thin & over.

Focus 6.88

@ FOCUS TEST

FANS OFF medium $\Rightarrow$ strong & wind.
 $\rightarrow$ thinning late in page. 158

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39 FILTER	4.0			CASS CCD	1800 λ/mm G=458S	30 μm	4462 Å $\pm 1 \text{ Å}$ or less	3/4 1 5	FOCUS TEST	4120 S0 1024 & 1 ccd test in focus now 4220 S0 1024 41 ccd test	Sorry Jim.
3343	5.9"	B 5.09	A5V			S/N ~ 130:1		6 7 8	Bln A-shell	some cloud came here $\rightarrow$ very thick. very slow counts (relatively) most counts in 2nd $\frac{1}{2}$ of exposure.	1.2K
3215	5.9"	V 5.52	A5V			S/N ~ 125:1		9 10 11	Bln A-shell	slow counting, due to the cloud, seeing & refraction.	1.2K
2722	6-8" $\rightarrow 10"$	B 4.46	A1V			S/N ~ 115:1		12 13 14	Bln dbl line SB	seeing got awful, as telescope approached platform - partly obstructed by dome at end. increasing cloud here.	1.0K
4990	6-8"	B 5.19	B3IV			S/N ~ 160:1		15 16	Bln SB4	some cloud for a bit better transp. & seeing at end lost much of signal so cut short. Deep absorption lines? (3)	1.8K

pg #2
159

Date 1995 October 19/20 Observers [Blm]/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc36761	BIAS(4)			20 54					—
62	COMP							Fed clear	60
63	HD172187	18 33 42	+43 08 12	21 01 08		4 29 W			1800
64	COMP							"	60
65	COMP							"	"
66	HD180316	19 11 00	+27 46 00	21 42 35		4 18 W			904
67	COMP							"	60
68	HD180316	19 11 00	+27 46 00	22 01 40		4 55 W			2000
69	COMP							"	60
70	BIAS(4)			22 37					—
71	COMP							"	60
72	HD192518	20 10 08	+28 23 30	22 47 05		4 28 W			1200
73	COMP							"	60
74	COMP							"	"
75	HD210459	22 05 33	+32 41 15	23 15 24		3 03 W			1300
76	COMP							"	60

Spectr. Temp. -1.....

Dome Temp./Hum. 10.5°C/73.2%

Transparency Conditions. thin cloud haze is clearing 160
and coming back.

Focus 6.88.....

FANS OFF Strong E wind now? no wonder seeing is

Spectr. Temp.

Dome Temp./Hum.

422 0 50 1024 4 1 ccd not autol.

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B6 39 FILTER				CASS CCD	1800 22mm G=4585	30μ	4462A	1			
								17			
3300	6" 4" B 6.40		FOX		S/N ~ 130:1			18	Bln SB2	some cloud nearer to evl at exposure, seeing expected for 1.5K	
								19			
								20			
497	8" 12" B 6.64		B8		S/N ~ 40:1			21	Bln SB	long period SB (relatively) cloudy & very windy - cut short	
								22			
1710	8" 12" " "		"		S/N ~ 105:1			23	Bln SB	2nd exposure once cloud left 400 to increase S/N total. along ag	
								24			
								1			
								25			
5100	6" 8" B 5.36		A7II		S/N ~ 170:1			26	Bln A-shell *	seeing better up here. 1.6 arc mass	1.7K
								27			
								28			
4480	6" 4" B 4.75		F5III		S/N ~ 310:1			29	Bln A-shell *	seeing & transparency much improved but still bad.	4.4K
								30			

pg #3

Date 1995 October 19/20 Observers [Bln] / Smt

Emulsion Batches:

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[illegible]

pg #1

169 Date 1995 October 21/22 Observers [KK]/Smt

Emulsion Batches:

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[illegible]

Transparency Conditions (rainy)...skitty & cloudy...!69

Dome Temp./Hum. $6.1^{\circ}\text{C} / 81.1\%$ @ 1st 408890 xp.

Dome Temp./Hum. 6.6°C / 81.1% @ 15 H08890 xy.

	Exp. Mir.	Seeing	Ptg. Mag.	Sp.	CCD Inst. ECCLE	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
34					18.51	300.2/um .580	60um W 900um H	6900A	1/2	FOCUS TEST	0 0 128 1024 8 1 T=14.4 F=.239	1N FOCUS.
33					"	"	"	"	1/2	"	0 0 128 1024 8 1 T=7.5 F=.227	
2									1		0 0 256 1024 4 1	
2									3		cloudy in S now. (AD815711)	
35	444		2.0	F8T6					4	KK		5.8K
2									3			
36	14		2.0	F8T6					4	KK	some cloud now. clouded out.	200 above biopsy
2									3			
-									1		Pore closed.	
-									1		raining.	
2							60um W 600um H	c. 205	5			15.4K

167 p²¹

Sun/Mon

Emulsion Batches:

Date 1995 Oct 22/23... Observers [K.K.] T_u / S_ust.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
74/ CC099/75	Inboard / outboard HARTMANN Test					02 W	+38 51	ThAr	3/2
76	BIAS(4)								—
77	Comp							ThAr	2s
78	ADS 14363A HD 201091	21 02 25	+38 15 27	20 01 42		0 59 W			1074
79	COMP							ThAr	2
80	ADS 14363B HD 201092	21 02 26	+38 15 14	20 21 37		0 32 W			1865
81	COMP							"	2
82	ADS 14363A HD 201091	21 02 25	+38 15 27	20 55 10		1 45 W			600
83	COMP							"	2
84	BIAS(4)			21 07					—
85	COMP							"	2
86	ADS 15600A HD 209790	22 00 54	+64 08 26	21 21 03		1 09 W			343
87	COMP							"	2
88	ADS 15600B HD 209791	22 00 54	+64 08 00	21 28 23		1 38 W			1608
89	Comp							"	2

CCD
Specr. Temp. -100.4°C Dome Temp./Hum. $+8.5^{\circ}\text{C}$ 73% H Transparency Conditions ... Clearing ... 166.1

Focus ... 238

Specr. Temp. ... Dome Temp./Hum. $+8.8^{\circ}\text{C}$ 66% H

max
A04

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
32				Eckel CCD 18.51111	300h/1m 580	60u W 100u H (5.225)	6300A	11/2	focus test	0 0 128 1024 81 CCD FMT	
1								1/2		0 0 256 1024 41 CCD FMT	
25								3			
192	24"	5.22 4.00	K5V A3m					4	Kk Vis. Bin.		
2								3			
121	4.5"	6.04	K7V					4	"		3.3K
2								3			
100	5"	5.22	K5V					5	"		3.2K
2								3			
1								1			
2	5	4.80	A5m					3			
156	5"	4.80	A3m					2	Kk Vis Bin	SN ~ 160:1 w one brighter	2.0K
2								3			
105	5.4"	5.30	AF7					6	"		1.5K
2								3			

167 pg #2

Sun/moon

Emulsion Batches:

Date 1995 Oct 22/23..... Observers [K.H.] T.H./Sent.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce09990	^{ADS 15600A} HD 209 790	22 00 54	16 40 26	21 56 38		01 45 W			334
91	Comp							THA	25
92	COMP							"	25
93	HD 222 368	23 34 48	+05 05 03	22 08 41		00 26 W			612
94	Comp							"	25
95	BIAS(4)								—
96	Comp							"	25
97	^{ADS 16666A} HD 219 916	23 14 31	+67 33 52	22 29 56		1 11 W			795
98	COMP							"	2
99	ADS 16666B	"	"	22 45 33		1 53 W			2285
ce10000	Comp							"	25
01	^{ADS 16666A} HD 219 916	"	"	23 26 36		2 06 W			624
02	COMP							"	2
03	BIAS(4)			23 39					—
04	COMP							"	2

Spectr. Temp.

Focus 238.

Spectr. Temp.

MAX
404

	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
74	160	4"	4.80	A3m	echelle CCD 18.5" x 14"	300 $\frac{1}{2}$ " / 14" 1580	60um 400um	H 6300A	2	KK Vis Bin		20K
									3			
									3			
12	200	5"	4.13	F7V					4	Std/Vel		2.7H
									3			
									1/2			
									3			
15	163	5"	4.86	G8III					5	KK Vis Bin	much brighter and NE	3K
									3			
25	68	4'-5"	7.13	F6V					2	"	SW faint. Hard To separate pair	
									3			
35	134	4'-5'	4.86	G8III					5	"	much brighter and NE	
									3			
									1			
									3			

pg #3

Date 1995 October 22/23 Observers [KK]/Tn/Smt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10005	HD8890	1 22 34	+88 46 26	23 45 52		1 01 E			332
06	COMP							ThAr	2
07	HD8890			23 52 44		0 53 E			361
08	COMP							"	2
09	HD8890			0 00 15		0 46 E			322
10	COMP							"	2
11	COMP							"	"
12	^{ADS 48A} HD38 (HD38A)	0 00 18	+45 16	0 12 50		2 26 W			1860
13	COMP							"	2
14	^{HD38B?} ADS48B	"	"	0 48 13		3 01 W			1858
15	COMP							"	2
16	^{ADS48A} HD38A	"	"	1 21 36		3 35 W			1853
17	Comp							"	2
18	B1A5(4)			1 54					—
19	COMP							"	2

ccD
Spectr.Focus.
ccD
Spectr.

Exp. Mir

800

965

745

2

5

5

CCD
Spectr. Temp. -100.0°C

Dome Temp./Hum. $8.7^{\circ}\text{C}/63.7\%$

Transparency Conditions *clear* 170

Focus $+2.38$

CCD
Spectr. Temp. -101.7°C

Dome Temp./Hum.

0 0 256 1024 4 1 ccdint

Exp.	Exp. Mtr.	Seeing	Pig. Mag.	Sp.	CCD Inst. ECHOLLE	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	APU Quality bias
332	800	5"	2.0	F8Jb	18.51	300 R/mm .580	60µN 40µM	6300 Å	2	KK		13.3K
2									3			
332	965	4"-5"	2.0	F8Jb					2	KK		15.7K
2									3			
332	795	"	"						2	KK		12.6K
2									3			
									3			
2	2	4"	8.94	dk6					4	KK Vis Bin	well separated (6") N one.	200 above bias
2									3			
332	5	4"	9.04	dmo					5	"	well separated, windy though. S one.	300 above bias
2									5			
332	5	4"	8.94	dk6					4	"	N one again	200 above bias
									3			
									1/2			
									3			

pg #4

Date 1995 October 22/23 Observers [KK]/Tn/Smt...

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
Ce10020	ADS 2122A HD 17332A	02 41 48	+18 59	2 01 19		01 35 W			1997
21	Comp							ThAr	2s
22	(HD 17332B?) ADS 2122B	"	"	02 36 49		02 12 W			2088
23	Comp							ThAr	2s
24	HD 17332A	"	"	03 14 02		02 41 W			1553
25	Comp							ThAr	2s
26	BIAS (4)			03 41					
27	Comp							"	2s
28	IRIS	@ J050013.847 04 43 32	+27 17 43	03 48 46		01 19 W			1551
29	Comp							"	2s
30	Comp							"	2s
31	ADS 5559A HD 50635	06 49 00	+13 18 18	04 20 44		00 37 E			519
32	Comp							"	2s
33	HD 50635B ADS 5559B	"	"	04 31 06		0 01 E			2070
34	Comp							"	2s
	BIAS (4)								

CCD Spectr. Temp. -100.4°C Dome Temp./Hum. $7.6^{\circ}\text{C}/65.6\%$ Transparency Conditions *clear, haze on horizon*

Focus 238

Spectr. Temp. Dome Temp./Hum.

172
 $0\ 0\ 256\ 1024\ 4\ 1\ \text{ccd}\ \text{bit}$

Exp.	Exp. Mtr.	Seeing	V. Mag. Mag.	Sp.	CCD Inst. ECHERLE	X Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
14	40	3"-4"	7.40	dF9	18.51	300 μm 580	60 μm W 400 μm H	6300A	2	KK Vis Bin	brighter and SE	650 above bias
									3			
14	14	3-4	8.20						6	"	slightly hard to separate	7300 above bias
									3			
18	18	4'-6"	7.40	dF9					2	"	seeing getting very poor	350 above
									3			
									1/2			
									3			
10	10	4'-6"	7.9	G2V					2	Minor Planet for Std. use		7300 above
									5			
									3			
160	160	4"	4.74	FOV _p					4	KK Vis Bin Brighter NW one		
									3			
17	17	3"-4"	7.68	G6V					5	"		
									3			

129 p445

Sun/Mon

Emulsion Batches:

Date 1995... Oct 22/23... Observers [R.H.] / T.H. / Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10035	AD5559A AD50635	06 49 00	+13 18 18	5 08 06		0 10 W			505
36	COMP							ThAr	2
37	BIAS(4)			5 18					—
38	COMP							"	2
39	HD62509	07 39 12	+28 16 04	05 29 ¹⁷ 33		0 28 E			57 57
40	Comp							"	2
41	COMP							"	2
42	AD56650 AB HD68257 2	8 06 29	+17 56 58	5 49 36		0 27 E			422
43	COMP							"	2
44	AD56650 AC HD68255 2	"	"	5 58 04		0 13 E			646
45	COMP							"	2
46	AD56650 AB HD68257 2	"	"	6 10 11		0 07 E			371
47	COMP							"	2
48	BIAS(4)			6 18					—
49-55	FLAT x 7					2 00 W	+18°	Tung	2
56/57	Inboard 10 at BOARD					"	"	ThAr	3 1/2

CD
Spectr. Temp. -100.5°C

Dome Temp./Hum. $7.1^{\circ}\text{C}/75.6\%$

Transparency Conditions *clear*.....17.4...

Focus 298

Spectr. Temp.

Dome Temp./Hum.

0 0 256 1024 4 1 ccd hat

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ X Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
168	3"-4"	4.74	Fov _p	etake 18.51	300nm .580	60nm 400	6300A	4	KK Vis Bin	brighter & NW again.	2.8K
								3			
								1			
								3			
540	3"-4"	1.14	KOTE _b					2	Std. Vel	β Gem ^{saturated 1st 2 attempts}	15.6K
								3	Dance started	to moon. -94°C @ 05:34	
								3		Topped up before hand.	
86	3'	5.15	F8V from OSC					4	KK Vis Bin	brighter and W can't separate AB	2K
								3			
<80	3'	6.20	G0V					5	KK Vis Bin	H068256 almost peak of the other 2. weak. fainter & E	1.5K
								3			
70	3"	5.15	?					4	"	brighter again. Sun coming up soon	
								3			
								1			
								2			15.8K
$+6.8^{\circ}\text{C}$						60nm 600nm 400nm		7/8	focus test	0 0 128 1024 8 1 ccd hat	

pg 1 Mon/Tues

Date 1995 October 23/24 Observers [KK]/Tn/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10058/59	INBOARD/OUTBOARD			= 1735		2 28W	11 12	ThAr	3/2
60	BIAS(4)								—
61	COMP							ThAr	2
62	ADS11046A HD165341A	18 00 24	+2 31 22	18 11 04		2 07 W			663
63	COMP							"	2
64	ADS11046B HD165341B			18 23 37		2 39 W			1840
65	COMP				23 5535			"	2
66	ADS11046A HD165341A			18 56 39	23 56 39	2 52 W			630
67	COMP				00 06 31			"	2
68	BIAS(4)			19 09					—
69	COMP							"	2
70	ADS13256A	19 56 42	+10 28	19 18 12		1 38 W			1815
71	COMP							"	2
72	ADS13256B			19 50 59		2 12 W			1889
73	Comp							"	2

wrong time?

^{CO}
Spectr. Temp. ... -100.2°C.....

Dome Temp./Hum. +12.1°C / ... 7008/4 Transparency Conditions ... clear ... → ... hazy ... 17.6:

Focus 238

^{CO}
Spectr. Temp. ... -100.7°C.....

Dome Temp./Hum. 10.8°C / ... 70.090 @ 10070

Exp. Mtr.	Seeing	Mag.	Sp.	CCD Inst. EHELE	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	pretty stable.			18.51	3002/mm .580	30μm	6300Å	7/8	Focus TEST	0 0 128 1024 8 1 ccdint	
								1		0 0 256 1024 4 1 ccdint	
								3			
184	3'	4.20	K0V					5	KK Vis Bin	brighter and N	3.5K
								3			
48	3"	5.99	K4V					4	"	fainter and S	3.0K!
								3			
132	4"	4.20	K0V					5	"	brighter and N again	2.5K
								3			
								1			
								3			
12	3"	7.60	F2					2	KK Vis Bin	sl. brighter and S easily separable.	600 above blg
								3			
15	3-4'	7.80	7 easily					6	"	sl. fainter and N still well separated.	300 above blg
								3			

17X pg#2 Mon/Tues

Date 1995 October 23/24

Observers [KK] Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
ce10074	ADS13256A	19 56 42	+10 28	20 23 49		02 44W			1860
75	COMP							ThAr	2s
76	BIAS(4)			20 56					
77	Comp							"	2s
78	HD197913A ^{ADS14270A}	20 41 36	+15 33 00	21 01 31		02 32W			1561
79	Comp							"	2s
80	ADS14270B			21 29 01		03 03W			1765
81	Comp							"	2s
82	HD197913A ^{ADS14270A}			21 59 57		03 30W			1528
83	Comp							"	2s
84	BIAS(4)								
85	Comp							"	2s
86	HD197964 ^{ADS14279A}	20 42 01	+15 45 50	22 32 57		03 45W			458
87	Comp							"	2s
88	HD197963 ^{ADS14279B}	20 42 00	+15 45 49	22 42 00		04 08 W			1229

Spectr. Temp. ^{CCD} -100.7°C Dome Temp./Hum. $10.2^{\circ}\text{C}/72.4\%$ Transparency Conditions *clear to hazy* 17.8 ..

Focus 238 ..

Spectr. Temp. Dome Temp./Hum. $22^{\circ}\text{C}/61\%$ $0\ 0\ 256\ 1024\ 4\ 1\ \text{ccdfmt}$

Exp. Mtr.	Seeing	Mag.	Sp.	CCD Inst. ECCHELLE	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
180	70	3-4"	7.60	FZ	18.51	300 L/m .580	60. W 70. H	6300A	2	KK Vis Bin	
21								3			
								1/2			
								3			
156	13	<3"	7.50	KO				4	KK Vis Bin	400 Above BIAS level (7 Pixel separation) Is this on the ddt line SB? Yes great separation sure is to any way	
								3			
175	5		8:20					5	KK Vis Bin		300 Above
								3			
168	13		7.50	KO				4			
								3			
								1/2			
								3			
143	120	5"	4.50	K1E				2	KK Vis Bin	brighter & w huge separation even with the 2.6K	
23		3						3		odd seeing.	
131	131	5"	5.50	F7V				5	"	fainter & E	2.6K

pg #3

Date 1995 October 23/24 Observers [KK]/Tu/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10089	Comp							ThAr	2
90	AD514279A HD 197964	20 42 01	+15 45 50	23 03 52		4 16 W			478
91	Comp							"	2
92	BIAS(4)			23 13					—
93	COMP							"	2
94	HD 206778	21 39 16	+9 24 59	23 19 59		3 30 W			186
95	COMP							"	2
96	HD 206778			23 24 17		3 38 W			361
97	COMP							"	2
98	HD 206778			23 31 53		3 43 W			240
99	COMP							"	2
ce10100	Comp							"	"
01	HD 222368	23 34 48	5 37 09	23 40 32		2 00 W			470
02	COMP							"	2
03	COMP for HD 8810							"	"

Spectr.
Focus..
Spectr.

Exp. Mtr.

100

380

565

304

133

Spectr. Temp. ... -100 Dome Temp./Hum. 9.2°C / 77.2% Transparency Conditions .. clear / hazy 180

Focus 238

Spectr. Temp. Dome Temp./Hum.

0 0 256 1024 4 1 cd/fnt

Exp. Mir.	Seeing	✓ Mag.	Sp.	CCD Inst. EHELE	X Grating/ Tilt	Slit	Exposure	P.H.	Program	Remarks	Quality
2				18.51	300 $\frac{21}{min}$.580	60 μ W 40 μ W	6300 Å	3			
18	100	5"	4.50	K1V				2	KK Vis Bin	brighter and w again.	
2								3	Note HD213052 checked and		
1								1	Found too difficult to separate		
2								3	Tonight.		
18	380	4'5"	2.39	K2V-II				6	KK/Std. Vel		10.2K
1								3			
2	565	"	"					6	"	a bit long, exp.	14.4K
2								3			
18	304	"	"					6	"	counts slowed @ end	7.8K
2								3			
								3			
4	133	4.13	F7V					4	Std. Vel.		2K
1								3			
								3			

pg # 4

Date 1995 October 23/24 Observers [KK]/Tn/Sm+

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10004	HD8890	1 22 34	+88 46 26	23 54 03		0 49 E			300
105	COMP							ThAr	2
06	HD8890			00 00 21					273
07	COMP							"	2
08	HD8890			00 06 13		0 37 E			288
09	Comp							"	2
10	BIAS (4)			0 14					—
11	COMP							"	2
12	AD5671A HD4614A	0 43 03	+57 17 06	0 19 11		1 25 W			240
13	COMP							"	2
14	AD5671A HD4614B	"	"	0 24 45		1 56 W			1740
15	COMP							"	2
16	AD5671A HD4614A	"	"	0 55 38		2 02 W			265
17	COMP							"	2
18	COMP for HD20902							"	"

CCD
 Spectr. Temp. -101.7°C Dome Temp./Hum. $9.0^{\circ}\text{C}/78.9\%$ Transparency Conditions *hazy* 182
 Focus 238
 Spectr. Temp. Dome Temp./Hum. 0 0 256 1024 4 1 cd/ft²

Exp. Mir.	Seeing	Pig. Mag.	Sp.	CCO Inst. ECHELLE	X Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
656	$\sim 4''$	2.0	F8Ib	18.51	300 λ m -580	69. W 400 m	6300 Å	5	KK		10.5K
								3			
670	"	"	"					5	"		9.4K
								3			
680	"	"	"					5	"	saturated cosmic ray between orders.	10 K
								3			
								1			
								3			
220	4"	3.45	G0V					2	KK Vis Bin	much brighter and SE 3.4K ADU max	hot pin 5.7K
								3			
22	3-4"	7.51	K7V					6	"	much fainter and NW	1.2K
								3			
208	4"	3.45	G0V					2	"		2.7K
								3			
								3			

pg # 5

199

Date 1995 October 23/24 Observers

[KK]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10119	HD20902	3 17 11	+49 30 19	1 07 14		0 24 E			120
20	COMP							ThAr	2
21	HD20902			1 10 49		0 19 E			180
22	COMP							"	2
23	HD20902			1 14 57		0 15 E			170
24	COMP							"	2
25	BIAS(4)			1 19					-
26	COMP							"	2
27	ADS 2081A HD16895A	02 37 22	+48 48 20	01 24 01		00 36 W			293
28	Comp							"	2
29	HD16895B ADS 2081B			01 31 47		01 09 W			1797
30	Comp							"	2
31	ADS 2081A HD16895A			02 05 47		01 20 W			432
32	Comp							"	2
33	BIAS(4)			02 14					

CED
Spectr. Temp. -102.0°C

Dome Temp./Hum. $8.7^{\circ}\text{C}/81.2\%$

Transparency Conditions $\text{clear} \rightarrow \text{hazy, some thin...}$
clouds every once in a while

Focus 238

Spectr. Temp.

Dome Temp./Hum.

184
0 0 256 1024 4 1 ccd fast.

Exp. Mtr.	Seeing	✓ Mag.	Sp.	CCD Inst. ECCLE	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
630	3"	1.79	FS1b	18.51	300 L/m .580	600 W 400 H	6300 Å	4	KK	α Per, var?	8.5K
								3			
910		"	"					4	KK	α Per	11.4K
								3			
1008		"	"					4	KK	α Per	13.8K
								3			
								1			
								3			
210	3.4"	4.13	F7V					5	KK Vis B _n	Brighter SE of pair	3K
								3			
0	2.3"	9.87	M1V					6	"	good separation	150 Å
								3	Almost? looks	like a faint object 6" SSE	Alone
									of Faint Star.	maybe scattering	
240	4"	4.13	F7V					5	"	From Bright component.	3.2K
								3			
								1/2			

67946

Mon/Tues

Emulsion Batches:

Date 1995 Oct. 23/24 Observers [K.H.]/T.M./S.M.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CE10134	Comp							THr	2s
35	HD22484	03 31 46	+00 05 04	02 26 37		00 54 W			752
36	Comp							"	2s
37	Comp							"	2s
38	HD22468A ADS 2644A	03 31 39	+00 15 41	02 44 16		01 17 W			1063
39	Comp							"	2s
40	HD22468B ADS 2644B			03 03 41		01 49 W			1800
41	Comp							"	2s
42	HD22468A ADS 2644A			3 35 51		2 11 W			1200
43	COMP							"	2
44	BIAS(4)			4 02					—
45	COMP							"	2
46	HD56986A ADS 5983A	7 14 09	+22 10 00	4 13 36		1 11 E			211
47	COMP							"	2
48	HD56986B ADS 5983B			4 18 46		0 37 E			1940

60
Spectr. Temp. -100.6°C

Dome Temp./Hum. $+8.5^{\circ}\text{C} / 82.0\% \text{H}$

Transparency Conditions slightly hazy 186

Focus..... 238

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	No. Mag.	Sp.	Inst.	Grating/ X Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CCD eckell/c 18.51	300h 1.580	60- W 100- H	6300A	3	Note HD 25893 checked & Found Too difficult to separate.		
200	5"	4.28	F9 IV					2	std vel		3K
								3			
								3			
55	3.5"	5.78	G9 V					4	KK Vis Bin		
								3			
0	3.4"	8.73	K6 V					5	"	tough to keep A off slit. perhaps some contamination from A level	200h bias level
								3			
34	5"	5.78	G9 V					4	"	brighter & E seeing is worse now.	1.2K
* Note: next night - I see that file ce10143 is small, 25600, Ks no good Tn								3	* GP18 errors prevented this from happening right away. Reset 486 CLK & 51200 after comp win 2 w/ tip of Bias due after resets broke down some comp above.		
								1			
								3	Note HD 37013 checked and found to be completely necessary for N-S eckell slit.		
260	4.5"	3.55	F0 IV					4	KK Vis Bin	much brighter and SE NE	3.5K
								3			
0	4"	8.18	K3 V					5	"	MDLH flunder and SW	600 above bias

Date 1995 October 23/24 Observers [KK]/Tn/S not

Emulsion Batches:

[illegible]

COO
Spectr. Temp. ... 99.2°C ... Dome Temp./Hum. ... +80°C 81.2% H Transparency Conditions ... still clear ... 188 ...
Focus ... 238 ... @ top of page
Spectr. Temp. ... Dome Temp./Hum. ... & focus test.

160

Wed/Tues

[KK]

Emulsion Batches:

Date Oct ~~24~~ 25/26 Observers ~~KK~~ / Tn / Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
Ce10167/68	INBOARD/OUTBOARD							ThAr	3/2
69	BIAS(4)								
70	Comp — didn't get written							ThAr	2s
71	HD146361	16 10 56	+34 06 42	18 46 40		4 37 W			2s
72	Comp							"	2s
73	HD146362			18 55 18 18 39 37		4 53 W			830
74	COMP							"	2s
75	HD146361			19 11 43		5 01 W			356
76	Comp							"	2s
77	Comp							"	2s
78	HD173607	18 41 06	+39 30 29	19 24 55		2 46 W			430
79	Comp							"	2s
80	HD173608	"	"	19 33 37		2 57 W			554
81	Comp							"	2s
82	HD173607			19 44 37		3 06 W			460
83	COMP							"	2

CCD
Speeder

Focus
Spectr.

Exp. Mtr

28

32

68

87

75

CCD Spectr. Temp. -100.6°C Dome Temp./Hum. $7.8^{\circ}\text{C}/64.7\%$ Transparency Conditions *clearing* 190..
 Focus 23.8 SLIT N/S Tonight
 Spectr. Temp. Dome Temp./Hum. *C. Lampyris*

Exp. Mtr.	Seeing	Mag.	Sp.	CCD Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.51	300 L/mm .580	60u W 40u H	6300A	1/2		CCD FMT 0 0 128 1024 8 1	
								1/2		CCD FMT 0 0 256 1024 4 1	
								3			
28	3"	5.58	GOV					4	KK Vis Bin	NE brighter one.	~1K max
								3			
28	3"	6.59	G1V					5	"	SW fainter one	same as A
								3			
32		5.58	GOV					4	"	NE brighter again	
								3			
								3			
68	2.3"	5.23	A8Vn					6	KK Vis Bin	well separated west of pair summed and order over	max 1.5K 1 column
								3			
87	2"	5.47	F0Vn					5	"	East one great separation	same as A
								3			
75	2"	5.23	A8Vn					6	"	West one	same as A & B
								3			

pg #2

Wed/Thurs

Emulsion Batches:

Date 1995 October 25/26 Observers [KK]/Tn/Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10184	BIAS(4)			20					—
85	COMP							ThAr	2
86	ADS11632A HD173740	18 41 42	+59 29	20 09 13		3 47 W			1300
87	COMP							ThAr	2
88	ADS11632B HD173740	18 41 42	+59 29	20 34 03		4 25 W			2100
89	COMP							"	2
90	ADS11632A HD173739			21 10 52		4 40 W			787
91	COMP							"	2
92	BIAS(4)			21 26					
93	COMP							"	25
94	ADS15600AB HD 209790	22 00 54	+64 08 26	21 32 34		1 33 W			343
95	COMP							"	25
96	ADS15600C HD 209791	"	"	21 39 47		W			1284
97	COMP							"	25
98	ADS15600AB HD 209790	"	"	22 02 53		2 04 W			359
99	COMP							"	2

CCD Spectr. Temp. -100.3°C

Dome Temp./Hum. $6.8^{\circ}\text{C}/68.4\%$

Transparency Conditions *partly cloudy, mostly to the S.*

Focus 238

Spectr. Temp.

Dome Temp./Hum.

0 0 256 1024 4 1 ccd font.

192

Exp.	Exp. Mtr.	Seeing	Pig. Mag.	Sp.	CCD Inst.	X Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
-					ECHOLE	300 μm		6300A	1			
2					tilt 18.5A	.580			3			
13		2-3"	8.90	DM4					4	KK Vis Bin	N and slightly W AND definitely brighter, than the previous info.	500,000 sum 8 cols on middle order.
13		2-3"	9.69	DM5					2	"	S and slightly E and FAINTER.	400,000 sum 8 cols on middle order.
5		2-3"	8.90	DM4					4	"	N and brighter again. Ended by limit West	1/2 strip of B.
90		3"	4.80	A3m					5	KK Vis Bin	Bright Epsilon	MAX 1.5K
63		2-3"	5.30	DF7					2	"		1.1K
102			4.80	A3m					5	"		

pg # 3

1995

Date 1995 October 25/26

Observers

[KK]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10200	Comp							THA	25
01	ADS15270A HD206826A	21 39 40	+28 17 27	22 16 23		2 36 W			284
02	Comp							"	2
03	ADS15270B HD206826B			22 24 42		2 50 W			644
04	Comp							"	2
05	ADS15270A HD206826B			22 37 01		2 57 W			336
06	Comp							"	2
07	BIAS(4)			22 44					-
08	Comp							"	2
09	HD206778	21 39 16	+09 24 59	22 51 32		3 09 W			180
10	Comp							"	2
11	HD206778			22 56 07		3 14 W			182
12	Comp							"	2
13	HD206778			23 00 46		3 18 W			160
14	Comp							"	2

Spectr. Temp. Dome Temp./Hum. *5.8°C / 74.7%* Transparency Conditions *bit. hazy* 199
 Focus *238*
 Spectr. Temp. Dome Temp./Hum. *0 0 256 1024 4 1 ccd/fat.*

Exp. Mtr.	Seeing	Mag. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality ADO
							6300 Å	3			
55	2"	4.78	F7V					4	KK Vis Bin	~2" separation - bright but possible. brighter and SE	4000 sun over 8 cuts in middle order.
								3			
54	2-3"	6.09	?					5	"	challenging more lines than faint NW the F7V.	same as above.
								3			
55	2-3"	4.78	F7V					4	"	brighter SE again.	same as above.
								3			
								1			
								3			
255	3"	2.39	K2J6-D					6	KK pgm	Std vel, too	90K max.
								3			
277	3"	"	"					6	"	Std. vel, too	H. 5K max.
								3			
263	3"	"	"					6	"	Std. vel too.	
								3			

125 p9#4

Wed/Thurs

Emulsion Batches:

Date 1995 Oct. 25/26.. Observers [MK] / Tu / Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
'ce 10215	Comp							T/str	2s
16	HD 222368	23 34 48	+05 05 03	23 08 37		01 37 W			558
17	Comp							"	2s
18	Comp							"	2s
19	AD 51615A HD 12447A	1 56 52	+2 16 51	23 23 43		0 35 E			267
20	COMP							"	2
21	AD 51615B HD 12447B			23 30 33		0 24 E			500
22	COMP							"	2
23	AD 51615A HD 12447A			23 40 36		0 18 E			245
24	COMP							"	2
25	BIAS (4)			23 45					-
26	COMP							"	2
27	AD 51860A HD 15089A	2 20 49	+66 57 11	23 56 40		0 26 E			440
28	COMP							"	2
29	AD 51860B HD 15089B			00 06 45		0 08 E			940

CCD
 Spectr. Temp. -99.8°C Dome Temp./Hum. 5.3°C 78.7% Transparency Conditions *Slightly hazy* 196
 Focus 238
 Spectr. Temp. Dome Temp./Hum.
 0 0 256 1024 4 1 CCD *Amix*

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ x Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
23				2clw/ke 18.51	3006/mon 1580	60um W 40um H	6300A	3			
53	150	2"	4.13	F7V				2	std Vel		3.7A
71								3			
73	2"-3"	4.18	A0p					3			
74	3"	5.21	A3m					4	KK Vis Bin	brighter and E	4800 sun over 8 cols in middle order
83	3"	4.18	A0p					3			
83	3"	4.18	A0p					5	"	tough to separate. faint & W, sometimes 2 are as one.	~ 5.6K sum over same 8 cols
83	3"	4.18	A0p					3			
83	3"	4.18	A0p					4	"	brighter and E	same as B
83	3"	4.18	A0p					3			
83	3"	4.18	A0p					1			
83	3"	4.18	A0p					3			
40	3"	4.64	A3Vp					6	KK Vis Bin	close 2"-3" separation - brighter and NE one. 3rd star (c?) to SE ~ 5" away.	3.5K sum over 10 cols in middle order
40		6.89	F5					3			
40		6.89	F5					2	"	fainter SW of 2 close. sl. stronger exp. than A pretty close in # of lines. contained in	~ 3.8K sum over same

Spectr. Temp. Dome Temp./Hum. $5.3^{\circ}\text{C}/81.4\%$ Transparency Conditions *hazy* 198
 Focus 238
 Spectr. Temp. Dome Temp./Hum. $+5.0^{\circ}\text{C}$ 82284
 0 0 256 1024 4 1 ccd fnt

Exp.	Exp. Mtr.	Seeing	Plg. Mag.	Sp.	CCD Inst. ECHELLE tilt 18.51	Grating/ Tilt 300 R/mm .580	Slit 60μW 40μH	Emulsion 6300A	P.H.	Program	Remarks	Quality
2									3			
36	75	3"	4.64	A3I _p					6	Kk Vis Bin	brighter NE again. counted faster!	stronger than other 2
2									3			
4	<i>photo interface stopped rising and no counts as a result</i>	3"-2" ~ 8?		late type.					4	"	~5" SE of AB close pair just in case.	1/3 strength of others
2									3			
-									1		Very noisy	
2									3		Telescope East + Side now	
2	470	2"-3"	2.57	F8I _b					5	KK		max 9.5K
2									3			
20	560		"	"					5	KK		10.5K
2									3			
20	497		"	"					5	KK		9.7K
2									3			
45	71								5	Kk Vis Bin	Intended weaker to go with exposure of H08840B	1.8K
2									3			

100/ 8946

Wed / Thurs

Emulsion Batches:

Date 1945 Oct 25/26 Observers [kk] Tn / smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10245	HD8890B	1 22 34	+88 46 26	1 36 38		1 39 W			142
46	Comp							ThH	2s
47	HD8890A			02 03 32					48
48	Comp							"	2s
49	Comp							"	2s
50	HD20902	03 17 11	+49 30 19	02 10 48		0 48 W			121
51	Comp							"	2s
52	HD20902	"	"	02 14 24					105
53	Comp							"	2
54	HD20902	"	"	02 17 24					113
55	Comp							"	2
56	Comp							"	2
57	HD62509	07 39 12	+28 16 04	02 27 10		3 17 E			113
58	Comp							"	2
59	HD62509	"	"	02 34 10				"	125
60	comp							"	2

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions ... *Sl. Hazy* ... 200...Focus ... *235* ...*N/S slit tonight of course.*

Spectr. Temp.

Dome Temp./Hum.

c. 1000 h

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0	52" 3"	9	<i>earlier 18.51</i>	<i>ecid/b</i>	<i>300h/m</i>	<i>60h</i>	<i>6300A</i>	6	KK Vis Bn.	<i>ended when seeing got poor</i>	<i>450 sum above 6h strongest in visible order</i>
								3			
68		1.9	F815					5	"		
								3			
								3			
326	34"	1.79	F516					4	KK Std	<i>Tel also East side</i>	
								3			
320								4	"		7K
								3			
280		"	"					4	"		
								3			
								3			
510		1.14	K0115					2	Std Vel	<i>β Gem</i>	14K
								3			
300	4"		"					2	"		9K
								3			

201 P947

Emulsion Batches:

Date 1995 Oct 25/26... Observers [AK] Tn./Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CE10261	HD 62509	07 39 12	+28 16 44	02 36 34		03 08 W			84
62	Comp							Th Ar	25
63	BIAS(4)			2 40					—
64	COMP							"	2
65	HD 22484	3 31 46	+0 05 04	2 47 35		1 20 W			600
66	COMP							"	2
67	COMP							"	"
68	^{AD52644A} HD 22468A	3 31 39	+0 15 41	3 01 49		1 38 W			823
69	COMP							"	2
70	^{AD52644B} HD 22468B			3 17 45		2 21 W			2400
71	COMP							"	2
72	^{AD52644A} HD 22468A			3 59 19		2 34 W			720
73	COMP							"	2
74	BIAS(4)			4 20					—
75	COMP							"	2

Spectr. Temp. Dome Temp./Hum. $+1.6^{\circ}\text{C}$ 84.5% Transparency Conditions *hazy, done getting wet* ...
 Focus *1.238*
 Spectr. Temp. *100.6^{\circ}* Dome Temp./Hum. *202*

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	ADU Quality
330		1.14	K0016	<i>ecole</i>	3004/m	60x 400x H	W 63108	2	sl/vel	β Gem	
								3			
								1/2			
								3			
131	3"	4.28	F9V	<i>-V</i>				5	KK SL. Vel.		<i>max</i> 9.8K
								3			
								3			
31	3"-2"	5.78	G9V					4	KK Vis Bin	brighter & E $\left[\begin{array}{l} 3K \text{ sum} \\ \text{over 8 cols} \end{array} \right]$	
								3			
0	3"	8.73	K6V					5	"	fainter & due W	800 sum above 4 over 8 cols
								3			
20	3"	5.78	G9V					4	"	brighter & E	bit less than A last time
								3			
								1			
								3			

pg #8
203

Date 1995 October 25/26 Observers [KK]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cel0276	ADS4200A HD37013A	5 30 24	+21 56	4 27 54		1 14 W			1356
77	COMP							ThAr	2
78	ADS4200B HD37013B	"	"	4 52 01		1 49 W			2025
79	COMP							"	2
80	ADS4200A HD37013A	"	"	5 27 26		2 04 W			779
81	Comp							"	2
82	BIAS(4)			5 42					—
83	COMP							"	2
84	ADS6993A HD74874A	8 41 29	+6 47 09	5 48 15		0 57 E			70
85	COMP							"	2
86	ADS6993B HD74874B	"	"	5 50 49		0 47 E			518
87	COMP							"	2
88	ADS6993A HD74874A	"	"	6 08 37		0 44 E			126
89	COMP							"	2
90-96	FLAT x 7					3 00 W	+12°	Tung	2
97/98	INBOARD/OUTBOARD					"	"	ThAr	3/2

CCD
 Spectr. Temp. ... -100.3°C Dome Temp./Hum. 4.9°C / 82.8% Transparency Conditions ... hazy, ... bit of W. wind now...
 Focus 238
 Spectr. Temp. Dome Temp./Hum.

0 0 256 1024 4 1 ccd/hit.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	2D Inst. ECHelle	X Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
7	2"	7.20	F8	HK 18.51	300 l/mm .580	60μW 400μH	6300 Å	2	KK Vis Bin	brighter & E great separation tonight	2.5K sum above b/g over 8 cols
								3			
2	2"	7.80	?F8?					4	"	fainter & W same sp. type as A	0.5K sum over 8 cols
								3			
6	2"	7.20	F8					2	"	brighter & E, at times the seeing looked < 2".	only 1/2 as strong as A or B. Weird.
								3			
								1/2			
								3			
45	3'-4"	3.40	?					2	KK Vis Bin	much brighter & SE.	4K sum over 8 cols
								3			
36	3"	6.80	df7					4	"	fainter & NW 2.5" separation possible contamination from A?	
								3		chip T = 79.4°C	
452	3"	3.40	pretty close to B's					2	"		
								3			
						60μW 400μH		3			10.2K → 10.2K
						60μW 400μH		7/8	FOCUS TEST	end of night.	

pg #1

Mon/Tues

Emulsion Batches:

Date Oct 30/95/Oct/31 Observers Harold/Tn

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
Ce 10299/300	Focus test							ThAr 2/2	
301	Bias(4)							ThAr	
302	Comp							ThAr	2
303	HD 26462	4 ^h 06 ^m 09 ^s	05° 15' 46"	23:11:13		2 ^h 21 ^m E			8305
304	Comp							ThAr	2
305	HD 26462			23:26:35		1 ^h 55 ^m E			1846
306	Comp							ThAr	2
307 307	AD 26462			00:00:00 23:59:59		1 ^h 22 ^m E			1830
308 308	Comp							ThAr	2
309	Bias(4)			03:47:17 ^s					
310	AD 26462			00:36:40 ^s		0 ^h 45 ^m E			1801
311	comp							ThAr	2
312	HD 26462			00 ^h 08 ^m 40 ^s		0 ^h 15 ^m E			18005
313	Comp							ThAr	2
314	Bias(4)			01:40					

CCD
Spectr. Temp. -100 °C

Dome Temp./Hum. 68.4% 68.4%

Transparency Conditions *Partially Cloudy* 208

Focus 0.234

Spectr. Temp.

Dome Temp./Hum.

00 256 1024 2, 1

Exp. Mtr.	Seeing	Pin. Mag.	Sp.	Inst. Echo	Grating/ X Tilt	Slit	Amplitude Clamp	Ref.	Program	Remarks	Quality
				18.00	300 lines 0.5685	60um 400um	6520A	1/2	Hand (VBH)	00 128 1024 81	
								1/2		00 256 1024 41	
								3			
								4		clouds 20adu above background. S/N ~ 20	
								3			
								5		much cloud 100adu above bkgd. S/N ~ 40	
								3			
								4		much cloud. S/N ~ 55 85adu above bkgd.	
								3			
								1/2		CCD T = -100.4 °C	
								2		Still patchy high altitude cirrus S/N ~ 50/1	
								3			
								6		S/N ~ 80/1	
								3		medium thick cloud	350 Above Bias
								1/2			

Spectr. Temp. Dome Temp./Hum. $+4.1^{\circ}\text{C}$ ~~$+3.7^{\circ}\text{C}$~~ 66.0% H Transparency Conditions .. Medium. Lit. 4. Cloud ..
Focus 2.38
Spectr. Temp. Dome Temp./Hum. $+3.7^{\circ}\text{C}$ 66.8% H $\rightarrow$ Complete Cloud. 208

Exp.	Exp. Mtr.	Seeing	Hg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2	2	4"	5.73	F4V	18.00	300 h/turn 0.5685	60u W 400u H	6520A	2c _i		medium thick cloud - 70 degrees above background.	
									3c _i			
									1/2			
							600u H = .205		3c _i		max B. 496 KA011	

Pg #1
209

Sun / Mon

Date 1945 November 5/6... Observers *Tn / Smt + [Bln]*

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36807/108	INBOARD/OUTBOARD							Fair Clear	40/70
09	BIAS (4)								—
10	COMP							"	60
11	HD188001	19 47 54	+18 24 53	18 04 59					850
12	COMP							"	60
13	COMP BIAS (4)			18 23					—
14	Comp			"				"	60
15	HD187691	19 46 14	+10 09 55	18 28 11		01 26 W			453
16	Comp							"	60
17/26	FLATS x10					01 34 W	+10 24	Tung Clear	223
21	COMP							Fair Clear	60
28	HD187691	19 46 14	+10 09 55	18 54 42		1 51 W			320
29	COMP							"	60
30	COMP							"	"
31	HD172187	18 33 42	+43 08 12	19 13 30		3 35 W			1005
32	COMP							"	60

cd Spectr.

Focus.

Spectr.

Exp. Mtr.

BG33
Filter

10.6K

9500

1/2 59
Filter

10.6K

10.2K

Spectr. Temp. ^{CCD} 100.6°C.....Dome Temp./Hum. 2.1°C/50.8%
(@ focus test)

Transparency Conditions .clear, windy..... 21.D..

Focus 6.90.....

FANS OFF

Spectr. Temp.

Dome Temp./Hum.

420 0 50 1024 4 1 ccd fnt

MAX
ADJ

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39 Filter				CASS CCD	1800 ℓ /mm G=4625	306 μ	4520A	3/4	focus test		
								1			
								5			
10.6K	3"-4"	6.22	08f					6	Bagnuolo pgm?		max ADJ 6.1K
								7			
								1			
								8			
9500		5.11	F8I					9	std vel		
								10			
								11			15.6K
BG39 FILTER				CASS CCD	1800 ℓ /mm G=4586	306 μ	4461A	12			
6.6K	4"	5.11	F8I					13	std vel	S/N ~ 200:1	3.4K
								14			
								15			
10.2K	3"	6.40	F8I					16	Blk SB2	S/N ~ 270:1	6.4K
								17			

pg # 2

Date 1995 November 5/6. Observers [Bin]/Tn/Smt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC36833	BIAS(4)			19 34					—
34	COMP							FeA clear	60
35	HD180316	19 11 00	+27 46	19 41 32		3 42 W			2000
36	COMP							"	60
37	COMP							"	"
38	HD192518	20 10 08	+28 23 30	20 21 26		3 01 W			700
39	COMP							"	60
40	BIAS(4)			20 35					—
41	COMP							"	60
42	HD210459	22 05 33	+32 41 15	20 40 40		1 17 W			300
43	COMP							"	60
44	COMP							"	"
45	HD214946	22 36 42	+44 29	20 55 12		1 40 W			2638
46	COMP							"	60
47	BIAS(4)			21 43					

Spectr. Temp. Dome Temp./Hum. $+0.9^{\circ}\text{C}/54.6\%$ Transparency Conditions . clear, bright moon rising (full?)
 Focus 6.90 FANS OFF 212
 Spectr. Temp. Dome Temp./Hum. 420 0 50 1024 4 1 ccd fnt

Exposure Exp.	Exp. Mtr.	Seeing	Plg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
-	BG 39 FILTER				CAS CCD	1800 λ/mm G=4586	30 μm	4461 Å	1			
0									18			
200	10.2K	3"-4"	^B 6.64	B8					19	Bln SB	s/n ~ 260:1	4.7K
0									20			
"									21			
700	15.3K	3"-4"	^B 5.36	ATIX					22	Bln A-shell*	s/n ~ 320:1	7.8K
0									23			
-									1			
0									24			
300	17.1K	3"	^B 4.75	FSIII					22	Bln A-shell*	wrote in wrong cache edit start time. s/n ~ 325:1	10.2K
0									24			
									25			
200	11.2K	3"	^B 7.26	AS					26	Bln SB2	s/n ~ 270:1	1.8K
0									27			1.2K
									1/2			

217 P4#3

Sun/Mon

Emulsion Batches:

Date 1995 Nov. 5/6... Observers [Bl.] / J. v. / S. m. t.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC368 ^{18/} 67	FLATS x 20					01 55W	+45°	T40C Clear	22
CC368 ^{68/} 69	INBOARD/OUTBOARD							FeAr clear	20/40
70	BIAS (4)			23 03*					—
71	COMP							"	20
72	HD226868	19 54 36	+34 56	22 40 43		5 45 W			1222
73	COMP							"	20
74	COMP							"	"
75	HD218915	23 06 42	+52 31	23 08 32		3 30 W			3016
76	COMP							"	20
77	BIAS (4)			00 01					
78	Comp			00		W		"	20
79	HD 146 33	02 16 42	+41 02 00	00 17 14		0 55W			1094
80	Comp							"	20
81	Comp							"	20
82	HD 15 137	02 21 12	+52 06 00	00 45 36		1 28 W			1630
83	comp							"	20

A 9.1 mag "NOVISTAR" 2' SSE of HD218915

Spectr. Temp. -100.4°C Dome Temp./Hum. -100.2°C $59.0\% \text{H}$ Transparency Conditions *Slightly hazy & Full Moon*
 Focus $G=90$ for 1800Å $G=4586$ - Focus for 600Å $G=2680 = 7.03$
 Spectr. Temp. Dome Temp./Hum.

24

MAX

Exp.	Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
22	BG 39 Filter				CHSS CCD	1800Å/m $G=4586$	306 μ	4461A	28		420 0 50 1024 4 1 cal	13K
24					CHSS CCD	600Å/m $G=2685$	250 μ	4300A $\pm 5A$	3/4	FOCUS TEST	485 0 50 1024 4 1 cal set a bit cool.	
									1.		* done after Cyg X-1	
20									5			
22	448	4"	B 9.74	09.11ab		Star 60:1 at midchip.			6	Blu-0* Cyg X-1	very faint comparison to NW inches off the platform @ end.	
20									7			
									8			
20	1800	4"	B 7.20	09.51ab*		* looks like late-type (G+K)			9	Blu-0*	* Note Probably not right star Too Late too 200/1 S/N	
20									10		probably star just to S of correct one.	
									1/2			
2						* Reset to $G=2685$			11	* Note - Grating went "Home" upon spectr control failure. But wave length reestablished closely.		
24	425 K		B 7.26	09.8V					12	Blu-0*	330/1 S/N	12.5 K
20									14	(Field checks out well)		600 MAX
20									15			
20	3510		B 7.72	09.5 II-III (n)					16	Blu-0*		
20									17			

Wpg#4

Emulsion Batches:

Date 1995 November 5/6. Observers [Blair]/Tn/Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc 36884	BIAS(4)			1 15					—
85	COMP							Fed clear	20
86	HD17505	2 43 24	+60 01	1 23 42		1 38 W			1336
87	COMP							"	20
CG80226 → 29	HD29587 x4	4 34 30	+41 57					4x	.067s
30/31	" X2				2 02	0 04 W	88° Alt	2x	.133s
cc 36888	BIAS(4)			2 03					—
89	COMP							Fed clear	20
90	HD29587	4 34 30	+41 57	2 06 39		0 18 W			610
91	COMP							"	20
92	Comp							"	20
93	HD 37022D	05 30 23	-5 27 14	02 29 02		00 13 E			622
94	Comp							"	20
95	HP 371022C	05 30 02	-05 27 20	02 42 25		00 06 E			249
96	Comp								

Spectr. Temp. Dome Temp./Hum. $-0.9^{\circ}\text{C}/63.7\%$ Transparency Conditions *clear, full moon*
 Focus ... *7.03*
 Spectr. Temp. Dome Temp./Hum. $-1.0^{\circ}\text{C}/64.5\%$ @ *focus tested* **FANS OFF** *46*
485 0 50 1024 4 1 ccd

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Exposure	P.H.	Program	Remarks	Quality
BG39 Filter				CASS CCD	600 l/mm (c) G=2685	250 μ	4300Å	1			
								18			
4.2 K	3 ^v	B 7.47	06.5V(F)					19	Bln O-star*	pair? E-W along slit, brighter on E. 3-4" separation. field checks out perfectly.	10.0K
								20			
	3 ^v	V 7.26	dG2	EEV CCD TV GUIDER		above 250 μ		-	SEEING TEST	Done W, full moon, clear, S.W. WIND - medium	
								-	"		
				CASS CCD again				1			
								21			
1760	2-3 ^v	V 7.26	dG2					22	Std Vel		
								23			580
								24			
3060	4 ^v	B 6.86	09.5V?					25	Bln O*	mistaken #0370220 instead of 14037023D	5.7K
								26			
5000		B 5.17	06ep(?)					27	"	South one of TRAPezium	12.4K
								28			

779#5

Emulsion Batches:

Date 1995 Nov. 5/6..... Observers [Bln]/Tn/Snt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 36897	Comp							Felt clear	203
98	HD 37043	05 30.5	-05 59	02 52 55					37
99	Comp							"	20
CC 36900	Comp							"	20
01	HD 37366	05 33 00	+30 50 00	03 01 10		0 29 W			1400
02	Comp							"	20
03	BINS (4)			3 27					-
04	COMP							"	20
05	HD 34656	5 14 00	+ 37 20	3 31 39		1 07 W			680
06	COMP							"	20
CG 802-34	HD 37023 x3	5 30 23	-5 27 14	all labelled incorrectly in headers.					133
CC 36907	COMP							Felt clear	20
08	HD 37023 A	5 30 23	-5 27 14	4 05 56		1 17 W			220
09	COMP							"	20
10	HD 37023 D	05 30 23	-05 27 14	04 19 34		2 17 W			2987

Spectr. Temp. Dome Temp./Hum. -1.1°C 67.824 Transparency Conditions *clear, full moon... 2/6*
 Focus *7.03*
 Spectr. Temp. Dome Temp./Hum. -1.5°C 67.84
some cloud by 5 AM

Exp.	Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
23	8639 F11K				CASSED	600 h/min G=2685	250 μ	4300	29			
24	5,300								6	B _h 0*		11 K
25									7			
26									8			
27	3730	4"	7.67	09.5V					9	B _h 0*	>300/1 S/N	9 K
28									10			
29									1/2			
30									11			
31	4,120	4"	6.81	07.11(F)					12	B _h - 0*		10 K
32									13			
33			4?	?	REV CCD TV 4U10R		none		-	field 1D	Have mirror, 3 Pranes to mirroric. 1) W field, 2) middle, 3) E field (A is brightest) (G is bright) (R is brightest)	
34									14			
35	4550	4"	4	very early.					15	B _h - 0*	brightest of 3 in a line W most of 3	6.8K
36									18			
37	2400	4.6"	6.86	09.5V					19	B _h - 0*	a bit late. 5' Field DRAWN [200/1 S/N] brightest E of 3 in a line	

CC p9#6

sun/moon

Emulsion Batches:

Date 1995 Nov 5/6.... Observers [Bln]/Tn/Sm.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 36911	Comp							Fair clear	20
12	BIAS(4)								
13	Comp							"	20
14	HD 37742	05 35 43	-01 59	05 15 43		2 19 W			30
15	Comp							"	20
16	Comp							"	20
17	HD 47432	06 33 27	+1 42 03	05 28 17		2 03 W			1820
18	Comp							"	20
19	BIAS(4)			1 02					-
20	COMP							"	20
21	HD 47839	6 35 28	+9 59 18	6 04 28		2 11 W			250
22	COMP							"	20
23-42	FLAT x 20					0 ^h 00 ^m	+20° 58'	Fair clear	6
43/44	INBOARD/OUTBOARD					"	"	Fair clear	20/40

CCD
Spectr. Temp. -100.3° Dome Temp./Hum. $-1.8^{\circ}\text{C}/69.2\%$ Transparency Conditions $\dots$ Thin cloud coming in...Focus $\dots 7.03$ Spectr. Temp. $\dots$ Dome Temp./Hum. $\dots$

220

C. Lambdin

Exp.	Exp. Mir.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
20	B639 K1/4K				CH55CCD	600 $\mu\text{m}/\text{mm}$ G=2685	250 μ	4300A	20			
									1/2			
									21			
30	44K	6"	1.54	09.5J6					22	Bln 0*	cloud	
									23			
									24			
20	3.8K	5-8"	6.36	09.7J6					25	Bln 0*	cloud, sky lines.	5.2K
									26			
									1			
									28			
20	3.9K	5"	4.40	07I((f))					29	Bln-0*	first companion to SE. really fainter stars all around VERY BROAD PROFILE (Covers ~10 cols.)	5.0K
									30		chip just starting to warm	13.9K
									31		-99.5°C at start	→ 12.8K
									3/4		-97.7°C at end	

pg #1

am

Mon/Tues

Date 1995 November 6/7 Observers [Blm]/Tn/Smt....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
136945/46	INBOARD/OUTBOARD							Fair clear	20/40
47	BIAS(4)			19 47				"	20
48	COMP							"	20
49	HD226868	19 54 36	+34 56	19 53 37		3 21 W			2400
50	COMP							"	20
51	HD226868			20 36 18		4 04 W			2400
52	COMP							"	20
53	BIAS(4)			21 19					—
54	COMP							"	20
55	HD188001	19 47 54	+18 24 53	21 22 30		4 25 W			500
56	COMP							"	20
57	COMP							"	"
58	HD218915	23 06 42	+52 31	21 40 39		1 30 W			865
59	COMP							"	"
60	Comp							"	205

Ccd
Spectr.

Focus.

Spectr.

Exp. Mtr

Bl 39

r/40

1035

1657

210K

43K

CCD Spectr. Temp. -100.7°C

Dome Temp./Hum. 3.6°C / 64.4%

Transparency Conditions j.k.st. cleared completely...

Focus 6.99

@ focus test

FANS on

in

Spectr. Temp.

Dome Temp./Hum.

485 0501024 41 redht.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
186 39 filter				CAS CCD	600 L/mm G = 2685	250μ	4300 Å	3/4	FOCUS TEST	set a bit cool, dome closed still.	
					[unchanged From last night]			1			
								5			
1635	2-3"	9.74	09.7 Iab					6	Blh - 0*	Cyg X-1 S/N ~ 150:1	3.2K
								7			
1657								8	Blh - 0*	Cyg X-1 again to best S/N	3.1K
								9			
								1			
								10			
3.6K	4"	6.29	07.5 Iaf					11	Blh - 0*	done last night with 1800 L/mm centered @ 4520 Å	7.5K
								12			
								13			
4.3K	<2-3"	1.20	09.5 Iab					14	Blh - 0*	Field Drawn	12.5K
								15			580
								16			

Pg #2

Mon / Tues

Emulsion Batches:

W Date . 1995 Nov. 6 / 7 Observers [Bln] / Tn / Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 36961	HD 210809	22 07 54	+51 56 00	22 0216		02 56 W			1160
62	Comp							FeAr Clear	20 sec
63	BIHSCA)			22 24					
64	Comp							"	20s
65	HD 103	00 00 54	+63 07 00	22 28 62		01 37 W			1729
66	Comp							"	20s
67	Comp							"	20s
68	HD 209975	22 02 04	+61 47 36	23 02 41		03 48 W			262
69	Comp							"	20s
70	Comp							"	20s
71	HD 5005	00 47 00	+56 05 00	23 13 07		1 48 W			2500
72	Comp							"	20s
73	BIAS (4)			23 58					-
74	Comp							"	20s
75	HD 42088	06 03 42	+20 31	00 09 16		2-39 E			2122

CCD
Spectr. Temp. -100.4°C

Dome Temp./Hum. $+3.0^{\circ}\text{C}$ 70.7%

Transparency Conditions *Mostly clear* 224

Focus 5.88

CCD
Spectr. Temp. -100.6°C

Dome Temp./Hum. $+3.1^{\circ}\text{C}$ 70.7%

To Increasingly Cloudy

FULL moon tonight MAX
APC4

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BC 39 Filter <u>3.7K</u>	2-3"	7.59	09 Ib	C115 CCD	600h/mm C.2685	252u	4300A	17	B/h 0*	(300/1 S/N)	11K 590
								18			
								1/2			
								19			
3.3K	3"	7.58	06 f?pe					20	B/h 0*	increasing cloud	
								21			
								22			
3.9K	3"	5.9	09.5 Ib					23	B/h 0*		11K
								24			600
								25			
3355	2"	7.85	06.5 V					26	B/h 0*	[There is A ?? Very close East Companion] A close & some altogether	8.5K
								27		[270/1 S/N]	
								1			
								28			
1850	2"	7.61	06.5 V					29	B/h 0*	PART cloudy ($< 200/1$ S/N)	

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions *H₂/F Cloudy*

Focus6:29.....

Dome Temp./Hum. +3.2°C... 71.8H

To completely so ∇
medium ESE wind increasing

CCD
Spectr. Temp.

Dome Temp./Hum. +3.2°... 71%

medium ESE wind increasing

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39				CASSOP	600ln/mm G = 2685	25u	4300A	5			
								2c:			17K
								1/2			
								7c:			
1800	2-3"	761	06.5					14c:	Bln 0 ⁺	Repeat - part cloudy cut short due to cloud cover.	
								15c:			
								3/4	focus test		

pg #1 Tues/wed
 Date 1995 Nov 7/8.... Observers [R.m.] / J. To. / Smt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC3700 ^{3/4}	Inboard / outboard HURTINANN							Fear CLEAR	60/60
05	BIAS(9)			18 52				"	—
06	COMP							"	60
07	HD180583	19 11 59	+ 27 44 59	18 57 49		2 40 W		"	500
08	COMP							"	60
09	COMP							"	"
10	HD331920	20 08 27	+ 32 34 16	19 14 06		2 25 W		"	2040
11	COMP							"	60
12	BIAS(4)			19 51				"	—
13	COMP							"	60
14	HD187691	19 46 14	+ 10 09 55	19 55 17		2 58 W		"	220
15	COMP							"	60
16	COMP							"	"
17	HD203156	21 15 23	+ 37 48 55	20 06 21		1 46 W		"	563
18	Comp							"	60

cep
Spectr.
Focus.
Spectr.

Exp. Mtr.

06560
Filter

3480

1350

3750

4620

CCD
 Spectr. Temp. -101.8°C Dome Temp./Hum. $+1.1^{\circ}\text{C} / 68.38\%$ Transparency Conditions ... *Clearing... despite forecast*
 Focus ... *after focus Test set to 6.85* FANS OFF *full moon 228*
 Spectr. Temp. ... Dome Temp./Hum. $+3.4^{\circ}\text{C} / 66.07\%$ 420 0 50 1024 4 1 codunit

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
06560 Filter				C455 CCD	1800nm G=5945	306u	6397A	3/4	Focus Test	done @ 6.83 & 4.0°C, still too warm and T dropping so changed to 6.85 before observing	
								1			
								5			
3980	5"	✓ 6.19	F6J-IIb					6	Rm Cepheid	V473 Lyr	8.7K
								7			
								8			
1350	3"-4"	✓ 9.1-9.8	F8- G2Ib					9	Rm Cepheid	MW Cyg, star hot pixels strongest color	2.5K
								10			
								1			
								11			
3750	4"	✓ 5.11	F1V					12	Std. Vel.	300/1 S/N	7.0K
								13			
								14			
4620	4"-6"	✓ 5.8-5.9	F2					15	Rm Cepheid	V1334 Cyg, some cloud.	8K
								16			1.8K

p9#2

Tues/Wed

Emulsion Batches:

Date 1995 Nov 7/8.... Observers [Rm]/Tr/Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37019	Comp							Fed Clear	60s
20	HD 214975	22 36 54	+56 19 00	20 25 59		1 19 W		"	2669
21	Comp							"	60s
22	BIAS(4)			21 14					—
23	COMP							"	60s
24	HD 215159	22 38 15	+53 23 08	21 19 12		1 32 W			345
25	Comp							"	60s
26 → 35	FLAT x 10					1 42 W	+54°	Tung 44p	8
CG80235 → 36	HD 3765 x 4	0 35 18	+39 40						.067
39/40	" x 2				21 48	2 50 W	+86° Alt		.133
CC37036	COMP							Fed Clear	60
37	HD 3765	0 35 18	+39 40	21 52 40		0 14 W			715
38	COMP							"	60
39	BIAS(4)			22 10					—
40	COMP							"	60

Spectr. Temp. Dome Temp./Hum. $+2.4^{\circ}\text{C}$ 69.1% H Transparency Conditions *PART. Cloudy* 280
 Focus 6.85 FANS OFF
 Spectr. Temp. Dome Temp./Hum. 1.8°C 71.8% H *@ seeing test*
5 Lambda 420 0 50 1024 4 1 CCD *fast*

Exp. Mtr.	Seeing	P. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
06560 Filter				CASSED	1800 l/m	306 μ	6397A	16			
2075	6"-8"	8.40	RG016					17	Rm Cepheid	2 Lac	S/N 7200:1
								18			
								19			
2230	4"-6"	6.19	K2					20	Rm Cepheid	bit off cloud, quite a bit	4.7k
								21		2 Lac velocity comparison star	
								22		cloudy stretch.	11.3k → 10.7k
	4"	7.36	dk5	CCD TV		above 306 μ		—	SEEING TEST	Dine W, light WNW wind, cloud bank just passed over,	
	3"			GUIDER				—		i. clear, improving now that bank has gone past.	
				CASSED	...			23			
2380	3"	7.36	dk5					24	Std. Vel.	clear now.	
								25		cloud at end.	
								1			
								26			

Pg #3

Tues/Wed

Date 1995 November 2/8 Observers [Rm]/[Tr]/[Smt] + [Bin]

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37041	HD25361	3 56 42	+58 23	22 15 51		2 41 E			1042
42	COMP							FeAr clear	60
43	HD25361	"	"	22 42 56		2 ¹² 11 E			1200
44	COMP							"	60
45	BIAS(4)			23 05 27	FeR BIAS(4)			"	60
46	Comp							"	60
47	HD 30282	4 41 06	+36 32 00	23 11 50		2 14 E			
48	Comp							"	60s
49	Comp							"	60s
50	HD 44 990	6 19 49	+07 08 25	23 54 08		3 26 E			884
51	Comp							"	60s
52	BIAS(4)								
53/54	INBOARD/OUTBOARD							FeAr clear	60/60
55/56	Inboard/OUTBOARD HARTMAN					0 0	+34 26	FeAr clear	40/40
57	BIAS(4)			2 25					—
58	COMP							"	60

CCD
Spectr. Temp. -100.1°C Dome Temp./Hum. $+1.6^{\circ}\text{C}/73.3\%$ Transparency Conditions *partly cloudy* 23.2
Focus $6.85/6.91$ 4461 Å To completely so.
Spectr. Temp. Dome Temp./Hum. $+1.4^{\circ}\text{C}/78.2\%$ 420 0 50 1024 4 1 CCD *not max*

CCD Exp. Filter	Seeing	V _{max} Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
1133*	3.4"	7.38 -8.07	F6Ib -G2Ib	CASS (CD)	1800 Å/mm G=5945	30µm	6397 Å	27	Rm Cepheid	*in cloud - hole disappeared. and came back and gone 1.6K	
								28		RX Cam lots of sky & solar S/N > 100:1	
2478	4.5"		*					29	Rm Cepheid.	bit of clear but not much. 5.2K bit of gap between comp and exp. stat	
								305 5	1-AR BIASCAL		
4000	4"	7.9 -8.8	F6 -G1					6	Rm Cepheid	half cloudy	5.2K
								7			1.5K
								8			
3750	3.5"	6.5 -8.0	F7Iab -K1Iab					9	Rm Cepheid	T mon	5.8K
								10			
								1		cloud & snow - closed.	
								3/4	FOCUS TEST	T=1.7°C Focus 6.85 sun top up.	
BG 39 FILTER				CASS (CD)	1800 Å/mm G=4580	30µm	4461 Å	3/4	" "	T=1.8°C focus = 6.91 perfect!	
								1			
								11			

pg 4

²³
 Date 1995. November 7/8 Observers [Bln]/Tn/Smt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37059	HD37017	5 30 25	-4 33 36	2 31 10		0 40 W			3160
60	Comp							FeAr clear	60
61	BIAS(4)			3 26					
62	Comp							"	60
63	HD 37468	5 33 44	-02 39 28	3 39 34		0 58 W			363
64	Comp							"	60s
65	ADS 4241 D	5 33 42	-2 39 12	3 51 18		1 10 W			379
66	Comp							"	60
67	Comp (test)							TiNe clear	60
68	Comp							FeAr clear	60
69	ADS 4241 D	5 33 42	-2 39 12	4 19 12		1 41 W			555
70	Comp							FeAr clear	60
71	BIAS(4)			4 35					—
72-81	FLAT x 10								
82	Comp(test) still waited for ^{4 33} Plate 537071 Though							FeAr clear	60s

CCD
Spec. Temp. ... -100.2°C

Dome Temp./Hum. ... +1.4°C / 75.7%

Transparency Conditions ²³⁴ partly cloudy, some ice crystals.
illuminated by full moon.
pretty hazy all over @ 3:10

Focus ... 6.91

Spectr. Temp.

Dome Temp./Hum.

420 0 50 1024 4 1 CCD (Ex)

Exp.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
230	B639 7230	4.6"	6.42	B2V	CASS CCD	1800 Blm G=4586	306m	4461A	12	Blh He-rich	a bit of haze/cloud here. was better just before exposure. improved slightly	3.4K
60									13		20/1 S/N	
343	13,500	5"	V381 B=307	09.5V					16			
69									17	Blh pgm	or ori AB	5.5K
37	1840		6.3	B2V					18			
8									19	Blh pgm	60/1, S/N guided to keep AB	
60									20		OFF slit cloud at end	
11									30		just a test - Blh used to wait Ti source.	
555	1290		63	B2V					21			
8									29	Blh pgm	slw ~ 75:1	
									23			
									1			
									2			12.5
15									30		almost no lines on red 1/2	

755 pg #1

Thurs / Fri

Date 1995 November 16/17 Observers [KK] / Tn / Sant

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10328/29	INBOARD/OUTBOARD							ThAr	3/2
30	BIAS (4)			22 33					—
31	COMP							ThAr	2
32	HD 201091	21 02 25	+38 15 27	17 36 22		W			618'
33	Comp							"	2
34	HD 201092	21 02 26	+38 15 14	17 48 30		0 27 W			1232
35	Comp							"	2
36	HD 201091	21 02 25	+38 15 27	18 10 55		0 41 W			757
37	Comp							"	2
38	BIAS (4)			18 24					
39	Comp							"	2
40	HD 217014	22 52 33	+20 13 57	18 31 27		0 41 E			1205
41	Comp							"	2
42	HD 217014	"	"	18 53 00		0 23 E			1001
43	Comp							"	2

CCP
Spectr. Temp. ... 100.4°C

Dome Temp./Hum. 0.3°C/67.6%

Transparency Conditions . Clear. 5/19/14 4929. 236

Focus 230

Spectr. Temp. ... 100.8°C

Dome Temp./Hum.

MAX

Exp. Mtr.	Seeing	Mag.	Sp.	CCD Inst.	X Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
3/2				CCD Inst. ECHOLE							
				till: 18.42	300 L/mm	6300 Å	1/2		FOCUS TEST	0 0 128 1024 8 1 ccd	17K
					5745	6300 Å	1			0 0 256 1024 4 1 ccd	17K
						6300 Å	3				
70	3"	5.22	K5V				4		Vis Bin KH	Also encoder normalization Brighter NW star	17K
							3				
67	3.4"	6.04	K7V				5		"	fainter SE.	20K
							3				
69	3.4"	5.22	K5V				4		"		
							3				
							1				
							3				
							6			18 EST Pearson Airport Rd WSW 11 km/hr. P 10:1884	
40	3.4"	5.53	G5V				3			That planet star	20K
							2			200/1 5/11	
40	4"	5.53	G5V				3				17K

989#2

Thurs / Fri

Emulsion Batches:

Date 1995 Nov. 16/17... Observers [J.H.] / T.A. / Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10344	Comp							ThAr	2
45	HD206778	21 39 16	+09 24 59	19 14 50		0 59 W			203
46	Comp							ThAr	2
47	HD206778	"	"	19 20 26		1 05 W			208
48	Comp							"	2
49	Comp							"	2
50	HD197913A ^{ADS14270A}	20 41 36	+15 33 00	19 29 11		2 38 W			1805
51	Comp							"	2
52	^{ADS14270B} HD197913B			20 02 00		3 34 W			3150
53	COMP							"	2
54	^{ADS14270A} HD197913A			20 56 26		4 07 W			1880
55	COMP							"	2
56	BIAS(4)			21 30					-
57	COMP							"	2
58	^{ADS14279A} HD197964	20 42 01	+15 45 50	21 37 47		4 25 W			500

Spectr. Temp. Dome Temp./Hum. -10°C 73384 Transparency Conditions ... slightly hazy ... 225
 Focus ... 230 ... (very light WNW breeze) max
 Spectr. Temp. Dome Temp./Hum. ... *Climbly*

Exp. Mtr.	Seeing	Pl [✓] Mag.	Sp.	Inst.	X Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
				echelle	3001/nm .5795	604 W 4004 H	6300 Å	3			
23	136	3"	2.39	K2 Ib-II				4	th ^{or} stel vel		8.8K
								3			
23	150	"	"	"				4	"	ex - stel vel	9K
								3			
								3			
5	0	3"-5"	7.50	K0				5	KK Vis Plg	dbl lines south Brighter N ^{more}	72000 40V sun mid blaze.
								3			
34	0		8.20	?				4	"	fainter north one	
								3			
16	0	3"-5"	7.50	K0				5	"	dbl lines brighter south one.	
								3			
								1			
								3			
39	3"	4.50	K1 IV					2	"	brighter east one. Some cloud, oh no, no it's gone now.	1.5K

Pg #3

Thurs / Fri

Emulsion Batches:

Date 1995 November 16/17 Observers [KJ]/Tn/Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
60359	COMP							ThAr	2
60	^{AD514279B} HD197963	20 42 00	+15 45 47	21 47 51		4 41 W			860
61	COMP							"	2
62	^{AD514279A} HD197964	20 42 01	+15 45 50	22 03 16		4 47 W			290
63	COMP							"	2
64	COMP							"	"
65	HD222368	23 34 48	+05 05 03	22 16 53		2 16 W			400
66	Comp							"	2
67	HD222368			22 25 19		2 17 W			372
68	COMP							"	2
69	BIAS(4)			22 33					-
70	Comp							"	2
71	HD20902	3 17 11	+49 30 19	22 42 25		01 14 E			175
72	comp							"	2
73	HD20902	"	"	22 46 47		1 10 E			157
74	COMP							"	2

Spectr. Temp. Dome Temp./Hum. $-2.4^{\circ}\text{C}/81.9\%$ Transparency Conditions *partly cloudy* 240
 Focus 230
 Spectr. Temp. Dome Temp./Hum.
 0 0 256 1024 4 1 ccd/fnt

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	CCD Inst. ECCHELLE	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2				tilt 18.42	300 lines 5795	60 μm 400 μm	6300A	3			
27	5"-6"	5.50	F7II					4	KK Vis Bin	fainter W one	
2								3			
11	"	4.50	K1IV					2	"	bright E one again getting very close to platform, more cloud	
2								3		clock drive off for comp.	
88	4"	4.13	F7II					3			
88								5	Std/vel		2K max
2								3			
37								5	"	clouded out here.	
2								3			
2								1			
2								3			
290		1.79	F5IIb					2	Std KK	some cloud	4.7K
2								3			
390		1.79	F5IIb					2	" "		
2								3			

गुप्यम्

Thurs / Fri

Date . 1995 . Nov . 16/17 .

Observers

[KK]/In/Sm.

Emulsion Batches:

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[illegible]

Spectr. Temp. Dome Temp./Hum. -2.5°C 82084 Transparency Conditions *Part Cloudy* 2.4.2
 Focus *1230*
 Spectr. Temp. Dome Temp./Hum. *CLawhla* *Light WNW wind* *MAX 404*

Exp. Mtr.	Seeing	Mag.	Sp.	Inst. <i>eckelle</i>	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2				<i>1.1x</i> <i>18.42</i>	<i>300 m/mm</i> <i>.5795</i>	<i>60 m W</i> <i>100 m</i>	<i>6300A</i>	<i>3c</i>			
140	<i>310</i>	<i>2</i>	<i>F816</i>					<i>5c</i>	<i>Kt pgn</i>	<i>Telescope west side</i>	<i>4 K</i>
2								<i>3</i>			
7	<i>335</i>							<i>5c</i>	<i>"</i>		<i>3.9K</i>
2								<i>3</i>			
140	<i>390</i>							<i>5</i>			<i>5.2K</i>
2								<i>3</i>			
2								<i>3</i>			
100	<i>31</i>	<i>5.53</i>	<i>G5V</i>					<i>4</i>			
3								<i>3</i>			
92	<i>17</i>	<i>4"</i>	<i>"</i>	<i>"</i>				<i>4</i>			
2								<i>3</i>			
								<i>1</i>			

AT23EST [wind *WSW 15 Kms*]
AIRPORT Pearson
Pressure 102.09K pascals & steady
2nd set tonight

[*Half cloudy for last 5 mins*]

[*CO -97.5C warming?*]
Denver Toppalup now



24³ 89#5

Thurs / Fri

Emulsion Batches:

Date .. 1995. Nov. 16/17..

Observers

[KK]/Tn/Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce 10388	Comp							Thr	2
89	HD217014	22 5233	+20 1357	00 12 39		4 56 W			876
90	Comp							"	2
91	BIAS (4)			0 29					—
92	Comp							"	2
93	HD4614A ADS 671A	00 4303	+57 17 06	0 36 27		3 14 W			57
94	Comp							"	2
95	HD4614B ADS 671B			0 38 54		4 06 W			300
96	Comp							"	2
97	HD4614A ADS 671A			1 31 03		4 20 W			705
98	Comp							"	2
99	HD4614A ADS 671A			1 44 53					500
ce 10400	Comp							"	2
	BIAS (4)								
01	HD4614A			1 54 50		4 45 W			775
02	Comp							"	2

COO Spectr. Temp. -101.0°C Dome Temp./Hum. -28°E 82784 Transparency Conditions. Mostly cloudy 24.4
 Focus
 Spectr. Temp. Dome Temp./Hum.
 Denver Topup done by 00:10

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	CCD Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				ECHERLE							
18				tilt 18.42	300 lines .5795	60x 400x	6300A	3		Another shot at it. Only clear spot at time.	
								4c			
								3			
								1			
								3			
49		3.45	G0V					2	KK Vis Bin	much brighter SE	1.0K
								3			
0	4-5"	7.51	K7V					5	"	a bit of cloud to get to 4 magnitude difference.	1.8K a 50.
								3			
2		3.45	G0V					2	"	bit of cloud $\rightarrow$ lots of thick cloud! aut shot	~ 300
								3			
1		"	"					2	"	an attempt to get an exposure to match strength of B exposure.	
								3			
73								2	"	finally a long-lasting hole in cloud cover.	
								3			

pg # 6

Date 1995 November 16/17 Observers [KK]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10403	BIAS(4)			2 09					—
04	COMP							ThAr	2
05	HD22484	3 31 46	+0 05 04	2 16 11		2 14 W			505
06	COMP							"	2
07	Comp							"	2
08	HD22468A ^{AOS 2644A}	3 31 39	+00 15 41	2 30 32		2 29 W			534
09	Comp							"	2
10	HD22468B ^{AOS 2644B}	"	"	2 41 00		8 03 W			1984
11	Comp							"	2
12	HD22468A	"	"	3 15 41		3 15 W			590
13	Comp							"	2
14	BIAS(4)			3 27					
15	Comp							"	2
16	Iris	04 32 31	1995-9 +25 32 37	3 32 54		2 48 W			1305
17	Comp							"	2

(cd)
Spectr.
FOCUS
ccd
Spectr.

Exp. Mir.

77

1

0

1

1305

Exp. Mir.

(C/D) Spectr. Temp. -100.4°C Dome Temp./Hum. $-2.6^{\circ}\text{C}/81.9\%$ Transparency Conditions mostly cloudy - clear again
 Focus 230
 (C/D) Spectr. Temp. -100.5°C Dome Temp./Hum.
 At PONDSON
 @ 2 AM WSW 11 Kms/hr 246
 P = 102.18 Kms/hr

Exp.	Mtr.	Seeing	Mag.	Sp.	CCD Inst. FCHILL	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
-					tilt = 18.42	300.21m/ 5795	60m W 400m H	6300 Å	1			
2									3			
56	77		4.28	F9IV-X					6	Std. Vel		22K
2									3			
2									3			
54	1	4.5"	5.78	G9V					4	Vis Bin KK		2 100 ABOVE BIAS
2									3			
172	0	5"	8.73	K6V G9V					5	Vis Bin KK	(slightly poor separation)	2 70 NOV ABOVE BIAS
2									3			
511	1	6"	5.78	G9V					4	Vis Bin		
2									3			
									1		wind WNW 4 @ 3 Am	
2									3		Pressure 102.23 102.23 ↑	
135	10 in 300s after 7	4"	7	G2V					6	std vel	minoa Planet	100 ref 3.5K sam P outline
2	x exp meter balance adjusted counts in secs								3		no wind felt	

pg 7

Thurs / Fri

Emulsion Batches:

24x

Date 1995. Nov. 16/17... Observers [K.K.] / Jn. / Smt.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
ce10418	COMP							ThAr	2
19	AD56650AB HD68257	8 06 29	+17 56 58	4 03 14		0 30 E			730
20	COMP							"	2
21	AD56650C HD68255			4 17 47		0 04 E			1450
22	COMP							"	2
23	AD56650AB HD68257			4 43 36		0 11 W			774
24	COMP							"	2
25	BIAS(4)			4 58					-
26	Comp							"	2
27	HD62509	7 39 12	+28 16 04	5 05 28		0 48 W			90
28	Comp							"	2
29	HD62509			5 08 24		0 51 W			103
30	COMP							"	2
31	Comp							"	2
32	AD57251A HD79210	9 07 42	+53 07	5 17 53		0 13 E			967
33	Comp							"	2

Spectr. Temp. Dome Temp./Hum. $-3.1^{\circ}\text{C} / 83.52$ Transparency Conditions *clear, cloud to far S*

Focus 230

Spectr. Temp. Dome Temp./Hum.

248

Exp. Mtr. <i>rebalanced</i>	Seeing	Ptg. Mag.	Sp.	CCD Inst. <i>echelle</i>	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.42	300 in/mm 5795	60u	6300P	3		bright WSW.	
100	5"	5.05	?					4	KK Vis Bin	unable to separate AB itself, but easily separated from C	1.8K
								3			
100		6.20	60X					5	"	fant ENE	very well matched with A
								3			
113		5.05	?					4	"	bright WSW	a bit stronger.
								3			
								1			
								3			
660		1.14	KOIIIb					2	Std. Vel	β Gem.	12.5K max
								3			
600								2	"	"	12.8K max
								3			
								3			
33		7.64	MOV					4	KK Vis Bin	W ne, not much mag difference	
								3			

pg #8

Date 1995 November 16/17 Observers [KK]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
Ce10434	ADS 7251 B HD 79211	9 07 42	+53 07	5 36 11		0 04 W			933
35	COMP							ThAr	2
36	ADS 7251 A HD 79210			5 53 11		0 20 W			858
37	Comp							"	2
38	BIAS (4)			6 08					
39	Comp							"	2
40	HD 89484	10 14 28	+20 20 51	6 15 42		0 36 E			148
41	Comp							"	2
42	HD 89485	"	"	6 18 52		0 29 E			306
43	Comp							"	2
44	HD 89484	"	"	6 25 29		0 25 E			164
45	Comp							"	2
46-55	FLATS x 10					3 ⁿ W		TUNG	25
56	BIAS (4)			6 43					-
57/58	INBOARD / OUTBOARD							ThAr	3/2

Spectr.

Focus.

Spectr.

Exp. Mtr.

35

33

140

140

130

Spectr. Temp. Dome Temp./Hum. $-2.8^{\circ}\text{C}/81.9\%$ Transparency Conditions *clear* 250

Focus 230

Spectr. Temp. Dome Temp./Hum. $-3.3^{\circ}\text{C}/82.1\%$ @ focus test

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	CCD Inst. <i>SCHEUE</i>	X Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
35	4"-5"	7.74	MOI	18.42	300 L/min .5795	600 W 400 μH	6300 Å	5	KK Vis Bin	E on, thinner 1 guess	
								3			
33								4	"	W on, brighter 1 guess	
								3			
								1			
								3			
140	4"-5"	2.22	KI III					2	KK Vis Bin	some cloud	2.4K
								3			
140		3.47	G7 III					6	"		
								3			
130		2.22	KI III					2	"		3.5K
								3			
								3			
							600 W 400 μH	1			
								7/8	FOCUS TEST	0 0 128 1124 81 ccd hit	

✓
p4 ± 1

Fri / Sat

Emulsion Batches:

Date 1995 Nov 17/18... Observers Hml / Tn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CE104 ⁵⁹ / ₁₀	In BOARD 104T BOARD					203 W	+30°		2/2
-61	BIAS (4)			18 00					
62	Comp							THr	25
63	HD177724	19 0649	+13 4353	18 1027		02 37W			214
64	Comp							"	25
65	Comp							"	152
66	HD272368	23 3448	+05 0503	18 2131		01 44E			310
67	Comp							"	1
68	Comp							"	1
69	HD217014	22 5233	+20 1357	18 3151		0 49E			463
70	Comp							"	1
71	HD217014	"	"	18 4107		0 39E			493
72	Comp							"	15
73	Bias (4)			18 5206					
74	Comp							"	15

CCD
Spectr. Temp. -100.2°CDome Temp./Hum. $+11.3^{\circ}\text{C}$ 7302H

Transparency Conditions ... PaAT Cloudy..... 252

Focus 22.5.....

Spectr. Temp.

Dome Temp./Hum.

increasing haze
 MAX ADU
 1800 [Wind ~~15~~ 55 km P=102.46 steady]

Exp.	Exp. Mtr.	Seeing	PA Mag.	Sp.	Inst. eche/le	Grating/ x Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
32					18'00	320 l/mm Filt. 5645	60 W 100 H	6520A	7/8	CCDFUTD	0 128 1024 8 1	
									1	CCDFUTD	0 256 1024 4 1	
3									3			
34	240	3"	2.99	A					4	Telluric Std.	H _A mass = 1.403	3.7K
3									3		some THAr lines saturated	
12									3			
30	68	<3"	4.13	F7V					5	Std Vel		3K
									3			
1									3			
33	46	<3"	5.53	G8V					6	Planet search?		2K
1									3			
43	50								5		AIR mass = 1.104	
									3			
									1			
									2	2ci?		

23 pg #2

Emulsion Batches:

Date Nov. 17/18... 1995... Observers Amb/Tn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
ce10475	HD 22368	23 ^h 48 ^m 48 ^s	+05 05 03	18:57:51		1 01 E			327
76	comp							ThAr	1s
ce10477	HD 26462 (?)	4 ^h 01 ^m 5 ^s	+05 15 46	19 23 30		4 ^h 48 12 E			1800
78	comp							ThAr	1s
79	Bias (4)			19 59					
80	HD 26462	4 ^h 06 ^m 01 ^s	+05 15 46	20 00		4 ^h 11 20 E			1800
81	comp			20 30				"	1s
82	HD 26462	"	"	20 33 39		3 ^h 42 E			1571
83	comp			20 40				"	1s
84	BIAS (4)			21 02		21 07			
85	HD 26462	"	"	21 04		3 ^h 07 E			1800
86	comp			21 34				"	1s
ce10487/96	FLATS x10			00 01		3 W +30°		Tung	2s
97	BIAS (4)								

Spectr. Temp.

Dome Temp./Hum. 0.8 / 74.7%

Transparency Conditions *High Cirrus, Hazy*..... 259

Focus 0.225

Spectr. Temp. $\therefore 101.2^{\circ}\text{C}.$

Dome Temp./Hum. 0°C 80% H

Solid Cloud by 22 EST

[illegible]

249
p9#1

Mon / Tues

Emulsion Batches:

Date 1995 Nov 20/21... Observers Mki./Ta.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC370834	Inboard					0 0	+45°	FeAr clear	60/60
85	BIAS(4)								
86	Comp								40
87	HD214946	22 36 12	+44 29 00	18 15 50		0 40 E			165
88	Comp								40
244/47	40214946							1x	67ms
48/49	"					0 19 E		2x	133ms
89	Comp							FeAr clear	40s
90	HD177724	19 00 49	H34253	18 50 15		3 27 W			55s
91	Comp							"	40s
92	Comp							"	40s
93	HD222368	23 05 03	+5 05 03	19 00 50		0 56 E			54
94	Comp							"	40
95	BIAS(4)								
96	Comp	At V 471	Position	19 13				"	40

Spectr. Temp. ^{CCD} -100.4E Dome Temp./Hum. 12.6°C 86-78A Transparency Conditions slightly hazy 25.6...

Focus 6.8.5.

Spectr. Temp. Dome Temp./Hum.

CCD FWHM for stellar work ADU
460 0 7 1024 8 1 MAX

Exp. Mtr.	Seeing	IV. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
CG580 Filter				CASS CCD	1800 Intra G=6100	306u	6600A	1/2	Focus	for Focus test 420 0 50 1024 4 1	
								1			
		B						3			3K
540	7.2	A5	(71° AZ 86° Alt) for Seeing Test have 306u slit					4	Seeing	(stellar in 5th col out of 7)	1.8K
	3'	7.2						5			
									Seeing Test		
								6			
3.8K		2.99	A0Vn					7	Telluric Std	1.67 Air MASS	1.43
								8			
								9			
2.5K		4.13	F7V					10	Std Vel		1.1K
								11			
								1			
								12			

94#2 Mon/Tues

Emulsion Batches:

Date 1995 Nov 20/21 Observers M.K. J.T.

Time note (A.C.E.) 1-2 secs Behind Astra clock.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc37097	FLAT							TUNG Ap1/4	4s
98	V471 Tau	03 44 43	+16 57.1	19 17 30		4 51 E			60s
99	Comp								40
[cc37100/08]	V471 Tau			Repeat x 9 19 27 11	19 37 52	4 31.5 E			57s
cc37109/17	"			Repeat x 9 19 42 36	19 53 09	4 16.4 E			57s
118/23	"			19 55 09	20 01 30				57s
cc37124	Comp							FC Ar clear	40s
25	BIAS(4) FLAT							TUNG Ap1/4	4s
26	FLAT BIAS(4)							TUNG Ap1/4	
	BIAS(4) changed CCD FMT to (420 0 50 1024 41) now								100
	Comp								
	V471 Tau								
cc37127/28	J n board / out board			07 08		0 0	+32	FC Ar clear	60/60
cc37129	BIAS(4)								

Dome Temp./Hum. 89.5% 460 0 7 1024 8 1 174X

	Exp.	Mir.	Seeing	P. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4 _s						CSS CCD	1800 h/m G=6100	306μ	6600A	13			1/6K
6 _S			9.4	-7.71	O.65	+ KOI + wd				14		4th col 50 ADU ABOVE Background	
10 _S										15			
5 _S	4, 22, 25	4"								16		Repeat 9 Using exp 57.BAT	
5 _S	27, 26, 30					Roughly lights on 3711 O exp seen on guide star;				17		some cloud "no reference report"	
5 _S			3-5"							17		more cloud	
4 _S										18			
4 _S										19			
										1			
	6 _B					Too Cloudy to continue:				1			
										T/B		CCD FONT 4.70 C 5C 1024 4 1	
						T+1.6°C set 6.85				1 1/2			
										1			

Pg #1

Date 1995 November 21/22 Observers Mki / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37130/31	INBOARD/ OUTBOARD							FeAr clear	60/60
32	BIAS(4)								—
33	COMP								60
34	BD+16 516	3 44 43	+16 57 06	1 41 02		1 52 W			911
35	"			1 56 51		2 09 W			908
36	"			2 13 12					900
37	"			2 28 34		2 40 W			900
38	COMP							FeAr clear	60
39-41	FLAT x 3							Tung K4 Ap	7
42	BIAS(4)			2 51					—
43	COMP							FeAr clear	60
44	HD21686	3 24 56	+10 59 37	2 58 24		3 19 W			360
45	COMP							"	60
46	COMP							"	"
47	HD26162	4 03 20	+19 20 42	3 11 22		2 55 W			420
48	COMP							"	60

CCD
Spectr.

Focus
CCD
Spectr.

Exp. Mtr.

On 30
in TexInst 10
238

218

260

222

100

650

CCD Spectr. Temp. -100.4°C

Focus 6.85

CCD Spectr. Temp. -100.2°C

Dome Temp./Hum. $+0.2^{\circ}\text{C}/68.6\%$

Dome Temp./Hum. $-0.7^{\circ}\text{C}/67.1\%$

Transparency Conditions $\text{partly cloudy} \dots \text{S20}$

FANS OFF

420 0 50 1024 * 1 CCD Fnt.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emission	P.H.	Program	Remarks	max ADU Quality
CCD SLO FIL TER				CASS CCD	1800 λmm G=6100	30 μm	6600 $\text{\AA}$	3/4	focus test	in focus - close enough	
								1			
								5			
best 10 μm 230 μm	4"-5"	9.40 -9.71	0.65+ KOI and			S/N ~ 70:1		6	Mhi	***exposure meter on the filter for a while. Fire after 1 $\times$ 5 μm above V471 Tau, 1st series	300 above big
218	"	"	"			S/N ~ 40:1		7	"	a bit of cloud. thin cloud all over	100 above big
260								7	"	Increasing cloud, some holes	
222								7	"	2 cosmic rays in spectrum more cloud - a hole to end	
								8			
								9			11.1K → 10.8K
								1			
								10		vsini = 236 ↓	
1100	5"-6"	5.14 ↓	AOV μ ↓					11	Telluric Std.	cloud here, better attend.	1.5K
								12			
								13			
1050	5"-6"	5.50	KII					14	Std. Vel.		2.0K
								15			

CCD
Spectr. Temp. -100.7°C

Focus 6.85

Spectr. Temp.

Dome Temp./Hum. $-0.8^{\circ}\text{C}/67.1\%$ Transparency Conditions *cloudy... but some thin* ²⁶²

1 FANS OFF SATB

Dome Temp./Hum. $-0.1^{\circ}\text{C}/67.6\%$ 432 0 50 1034 4 1 5000 ft

Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	max Quality ADU
1	05 560 FILTER				CASS LCD	1800 $\frac{21}{100}$ G=6100	30 μ m	6600 Å	1			
2	198*	9.40- 9.71	0.65* K2V+red						16 17 18 19			
7									20/21	focus test	cloud here *sky counts to * V471 Tau, 2nd series <50% of top much cloud to bottom any more. snow expected.	

267

pg#1

Tues/Wed

Date 1995 Nov 28/29 Observers mki. / Tn.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 371 ^{58/}	Inboard / Outboard HARTMAN			17 44		0 0	+35°	F&A CLEAR	60/60
160	BIAS(4)								
161	Comp							F&A CLEAR	60
162	HD214946	22 36 42	+14 29 00	17 58 49		0 17E			756
163	Comp							"	60
CG 80 ^{250/} 1253				18 20		0 06E		4x	67ms
CG 80254 ^{1/55}	HD214946	"	"					2x	133ms
CC 37164	Comp							"	60
65	HD177724	19 00 49	+13 42 53	18 35 28		3 45W			
66	Comp							"	60
67	Comp							"	60
68	HD187691	19 46 14	+10 04 55	18 51 16		3 20W			449
69	Comp							"	60
70	BIAS(4)			19 02					
71	Comp							"	60

CCO
Spectr. Temp. 100.2°C

Dome Temp./Hum. -5.2°C 76% Transparency Conditions Part cloudy 264

Focus 6-90

increasingly thick

Spectr. Temp.

Dome Temp./Hum. y.

420 050 1024 41 CCOFMT ADU

	Exp. Mtr.	Seeing	P [✓] . Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
46	T-5.2 OG560 FILTER	-5.9 by 18 EST			CASS CCD * G=6100	1800x1800	306	6600A	3/4	focus Test		
					Presumably unchanged since Nov 21/22.	Grating			1/2	Still disabled too.		
78	S03	4-7' 7.26	A5	B					5		3 or 4 day period	3K
									6	Blk Sp Bin -	Also Telescope encased	400 ABOVE BIAS
									7		NORMALIZATION star	
		56"	"	"		88° A Z I	62° A Z			Seeing Test	1.0009 Air mass	
											NEFT Mon, Prime west, no wind, 1st day after storm.	
	2700				299 AO In				8			
									9	Telluric Std	1.79 Air mass	
									10			
									11			
47	2500	6"	5.11	F8V					12	Std Vel	50 K photons (7200/1) S/N	3.5K
									13			

20#2

Tues 1/26/2

some [Blu] observations

Date . 1995. Nov. 28/29... Observers . MKJ. / T. J.

Emulsion Batches:

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.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc 37 172	Pu Vul	20 16 48	+21 15 00	19 17 52		3 23 W			832
73	Comp							fet clear	60
74	Comp							"	60
75	HDE 235679	21 55 00	+54 00 00	19 40 28		2 18 W			1409
76	Comp							"	60
77	Comp							"	60
78	BM Cas	00 48 36	+63 33	20 11 58		0 10 E			1218
79	Comp							"	60
80	BIAS (4)								
81	Comp							"	60
82	Nova Cas 95	01 04 55	+53 59	20 44 51		0 01 E			460
83	Comp							"	60
84/85	FLATS x12							TUNG Ap1/A	8s
96	BIAS (4)								
97	Comp BIAS (4)			02 25					

CCD
Spectr.
Focus.
exp
Spectr.

Exp. Mtr
100-500

450

380

144

^{CCD}
Spectr. Temp. -100.7°C

Dome Temp./Hum. -6.5°C 77.28%

Transparency Conditions . Part. Cloudy 266

Focus 6.90

^{CCD}
Spectr. Temp. -101.5°C

Dome Temp./Hum. -6.8°C 77.56%

To Very Cloudy

MAX
404

Exp. Mtr. CG 560	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
150	7"	210		CASS CCD	1800 h/m G=6100	306.	6600A	14	mtk pgn	1.44 AIR MASS	85K
								15			
								16			
450	5"	8.96	B2.5 Ib					17	Blu pgn	AIR MASS 1.075	1.3K
								18			
								19			
380	6"	8.82 -9.33						20	mtk pgn	Cloudy	
								21			
								1/2			
								22			
144		29						23			
								24			
								25			
								1/2	Topup e	01 EST	

H & 300
AD4
H & 400
B/H S

13K

20 p9#3

Tues/wed

Emulsion Batches:

Date 1995 Nov 28/29.. Observers mtr/Tn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37198	Comp							Fehr clear	60s
199	BD+16 516	0344 43	+16 57 06	02 39 17		W			900
37200	Comp ⁿ	"	"	02 54 39				--- 80s	900
01	"	"	"	03 10 05					963
02	"	"	"	03 26 37					900
03	Comp							Fehr clear	60
04	FLAT							Tung Ap/14	8s
05	BIAS(4)								
06	BD+16 516	03 44 43	+16 57 06	03 46 30		4 25 W			901
07	"	"	"	04 01 54					507
08	Comp							Fehr clear	60
09	FLAT							Tung Ap/14	8
10	Comp							Fehr clear	60
11	HD 62509	7 39 12	+28 16 04	04 23 26		00 54 W			61
12	Comp							"	60
13/14	Inb/out 00900					01 W +22°		"	60/60

Spectr. Temp. -100.3°C Dome Temp./Hum. -7.2°C 71.5% H Transparency Conditions *Partial Clearing*

Focus 6.90

Spectr. Temp. -8.1°C 6.90

Dome Temp./Hum. -8.2°C 74.2% H

268
MAX
NO4

Exp. Mtr.	Seeing	Pl. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
06560	5.7			CASS CCD	1800 h/mm G=6100	30 μ	6600A	26			
345	4.6"	9.40 -9.71	KO $\bar{K}$ +wd					27	V471 Tau	7 70/1 SIN	440 HABE B/AS
290	4.5							28		Pearcloudy 70/1 SIN	
370	3.5"							29			
370	"							6			
								7			
								8			1206K
								1			
375								9			
165	3.5							10		ended by some some cloud	
								11			
								2			
								5			
708K		144	KO $\bar{K}$ 6					6	Star Vel		
-8.1°C	6.90							7			
								30/31	focus Test		

269
#1 Mon/Tues

Date 1995 Dec 4/5..... Observers Dby./Jn.....

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 372 ^{15/16}	Inboard / Outboard HURT WADN			17 32		0 25E	+45°	FeAr Clear	60/90
17	BIH5(4)								
18	Comp							"	60
19	HD 214946	22 36 42	+44 29	17 40 01		0 13E			7/1
CC 3720	Comp							"	60
GC 80256/51	HD 214946	22 36 42	+44 29	17 55				4x	.067 _{ms}
GC 8066/61	"	"	"					2x	.133 _{ms}
CC 37221	Comp							FeAr Clear	60
22	HD 222368			18:09:47		0 50E			24
23	Comp							"	60
24	"							"	60
25	HD 6397	00 59 49	+14 24 30	18:26:28		-1 44E	14° 55 9		
26	Comp							FeAr Clear	60
27	HD 6397	00 59 49	+14 24 30	18:48:34		-1 23 8E	14° 55 9		992s
28	Comp							FeAr Clear	.60

Spectr. Temp. ^{CCD} - 100.3°C

Dome Temp./Hum. +00.5°C 49.5% H

Transparency Conditions mostly c/car 2.70

Focus 6.95

90cgm as usual

AIR Pressure 1023 P

Spectr. Temp.

Dome Temp./Hum.

420 050 1024 4 1 CCD FMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
8634 Filter				C455 CCD	18006/ma G=9450	306	4310A	3/4	Focus	Set a bit too cool, but temp dropping fast.	MAX HDL
				G=4480				1/2			
								5			
2215	3"	B 7.26	SB2	ALT=89° (Hole 306 slit)				4	Sp. Bin Bl.	7100/1 S/N Tel normalization Light WNW wind Done focusing west	1K
				ALT=89°	Above 306 slit			7c.	Spring Test	Only NE Fan on now	
								8			
11,000	4"	4.6A	F7V					9	Std vel	2200/1 S/N	3.5K
								10			
								11			
10,050		B 6.09	F4II-II					12	Dbg	7,200/1 S/N	5K
								13			
10,092		B 6.09	F4II-III					14	Dbg		4.7K
								15			1K max

#1 Mon/Tues.

Emulsion Batches:

Date 1995 Dec 4/5 Observers Dby./Tn

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37229	HD6397	00 59 49	H4 24 34	19:08:17		-1 6 50 E	14 55 12		779s
30	Comp							FeAr Clear	60s
31	Bias(4)			19 24					
32	HD204867 Comp							FeAr Clear	60s
33	HD204867	21 26 18	-06 00 40	19:31:49		2 37 49 W 5 36 6	-5 36 6		114s
34	HD204867	21 26 18	-06 00 40	19:34:07		2 39 50 W	-5 36 6		116
35	HD204867	"	"	19:36:20		2 41 35 W	-5 36 6		123
36	Comp							FeAr Clear	60s
37	Comp							FeAr Clear	60s
38	HD216131	22 45 11	24 04 25	19:45:34		1 32 49 W	24 34 45 N		130s
39	HD216131	"	"	19:48:02		1 35 53 W	24 34 45		137s
40	HD216131	"	"	19:50:44		1 37 23 W	24 34 45		122s
41	Comp							FeAr Clear	60s
42	"							"	"
43	HD10494	1 37 18	61 21 00	20:01:14		-0 36 11 E	61 50 15		178s

CCD
 Spectr. Temp. -100.3 Dome Temp./Hum. $+0.5^{\circ}\text{C}/42.3\%$ Transparency Conditions *Mostly Clear* 222
 Focus 6.95
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 34 FINE 10219	3"	^B 6.09	F4II-III	CASS CD	1800 λ/mm G-4480	306 μ	4310F	16	Dby		MAX ABU
								17			
								1/2			
								18			
10100	5"	^B 3.74	G0Ib					19	Dby/Std.		2.9K
10100		^B 3.74	G0Ib					20 19	"		
11296		"	"					19	"		
								20			
								21			1.2K
10056		^B 4.41	G8III					22	Dby/Std.		4K
11000		"	"					22	"		
10300		"	"					22	"		
								23			
								24			0.9K
3576		^B 8.52	F5Ia					25	Dby/Std	$\sim 100/1$ SN	1.2K

#3 Mon/Tues.

223

Date 1995 Dec. 4/5..... Observers Dby./Tn.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC372 44	Comp HD10494	1 37 18	61 21 00	20:31:40		-0 2 42E	61 50 21		1790
45	Comp							FeAr Clear	60s
46	Bias (4)			21:04:16					
47	Comp							FeAr Clear	60s
48	HD8890	1 22 34	88 46 26	21:11:10		-0 45 17E	89 14 15N		166s
49	HD8890	"	"	21:14:49		-0 42 57E	89 14 15N		143s
50	"	"	"	21:17:31		-0 39 39E	89 14 21N		191s
51	Comp							FeAr Clear	60s
52	Comp							FeAr Clear	60s
53	HD20902	3 17 11	49 30 19	21:31:44		-1 13 29E	49 51 54N		137s
54	"	"	"	21:34:16		-1 10 24E	49 51 57N		181s
55	"	"	"	21:37:43		-1 7 16E	49 52 0N		168s
56	Comp							FeAr Clear	60s
57	Comp							FeAr Clear	60s
58	HD45947	6 25 17	73 46 22	21:51:41		-3 39 29E	73 43 6N		1800s

CCD
Spectr.

Focus.

Spectr.

Exp. Mir.

3163

166s

143s

191s

60s

60s

137s

181s

168s

60s

60s

1800s

58 29

CCD
Spectr. Temp. -100.3.....

Dome Temp./Hum. -16°C/42.2

Transparency Conditions Clear - Increasing cloud...

Focus6.95.....

Spectr. Temp.

Dome Temp./Hum.

C Lambda

276

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
3163		B 8.52	F5 Ia	Cass CCD	1800/n/mm G:4480	300	4310A	25	Dby/Std		Max Adn
								26			
								1/2			
								5			1K
10391		B 2.62	F7 Ib IIv					6	Dby		5K
10368		"	"					6	"		
10543		"	"					6	"		4.1K
								7			1K
								8			
13766		B 2.27	F5 Ib					9	Dby/Std		6.6K
13830		"	"					9	"		
13601		"	"					9	"		
								10			
								10			
5829		B 6.62	F2					11	Dby		2.6K

285

#4 Mon/Tues.

Emulsion Batches:

Date 1995 Dec. 4/5 Observers Dby./Tn.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp. Mtr.
CC 37259	Comp							FeAr Clear	60s
60	HD 45947	6 25 17	73 46 22	22:25:22		3 06 E			1800
61	Comp							"	60s
62	HD 45947	"	"	22 58 17		-2 32 38 E	73 43 3N		1800s
63	Comp							"	60s
64	B/A SC4)								
65	Comp							FeAr Clear	60s
66	HD 65301	7 52 58	59 19 08	23:36:48		-3 17 22 E	59 3 45N		1800s
67	Comp							FeAr Clear	60s
68	HD 65301	7 52 58	59 19 08	00:09:50		-2 48 14 E	59 3 45N		1555s
69	Comp							FeAr Clear	60s
70	HD 65301	7 52 58	59 19 08	00:39:44		10 25 17 E			1484s
71	Comp							FeAr Clear	60s
72	Bias (4)			01 07					
73	Comp							FeAr Clear	60s

Dome Temp./Hum. C Lambda

[illegible]

228

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Dbg / Tn

CCD
Spectr.
Focus.
CCP
Spectr.

5990

4757

10100

1050

10028

Spec. Temp. ^{CCD} -100.5 Dome Temp./Hum. -2.2/+70.2% Transparency Conditions Clouding over 278

Focus 6.95
 Speed Temp. -101.4°C Dome Temp./Hum. -3.4°C 72%
 2.12.1984

Dome Temp./Hum. -3.4°C 72%

[illegible]

pg #1

Wed/Thurs

Emulsion Batches:

Date 1995 December 6/7 Observers [Bin]/Tn/Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37296/98	INBOARD/OUTBOARD					20 0	+45°	F&A clear	40/70
98	BIAS(4)			17 53	not written				—
99	Comp							"	60s
CC37300	HD214946	22 3642	+44 2900	20 3525		3 09 W			1854
01	Comp							"	60s
02	BIAS(4)			21 09					—
03	Comp							"	60s
04	HD210459	22 0533	+32 4115	21 1421		3 56 W			392
05	Comp							"	60
06	Comp							"	60
07	HD154528	17 0054	+77 48	21 3113		10 00 W			2400
08	Comp							"	60
09	BIAS(4)			22 16					—
10	Comp							"	60
11	HD37017	05 3025	-09 3336	22 2948		01 57 E			1446
12	Comp							"	60

Spectr. Temp. ~ 100 °C...Dome Temp./Hum. $-3.1^{\circ}\text{C}/44.8\%$ Transparency Conditions clearing - cloudy etc.Focus 6.95

Spectr. Temp.

Dome Temp./Hum. $-5.0^{\circ}\text{C}/56.5\%$

420 0 50 1024 4 1 ccd int 280

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	MAX Quality 400
BG 39 Filter				CASS CCD	1800 Å G = 4586	30 μm	4464 Å	3/4	focus test	set just a bit cool, cooling overnight, then clouded in & snow.	MAX 1000
								1/2			
								5			1.3K
7400	3"-4"	726	A5					6	Blk SpBin	> 200/1 S/N	3.7K
								7			
								1/2		C CDT = -100.5°	
								8			
21 K		7.75	F5 III					9	A-shall Bln	> 300/1 S/N	9+K
								10			
								11			
12.6 K	8"	6.66	A0					12	SB 2 Blk	stream col is 27, hot on 26 Telescope East side	7.2K
								13		> 300/1 S/N	
								1			
								14		Full moon 20° N of ori	
10820	5"	6.42	B2 IV					15	He Rich Blk		
								16			1.3K

Exp #2

Wed/Thurs

Emulsion Batches:

Date 1995 Dec 6/7... Observers [Bh.] / Tn. / Smt.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc37313	Comp							Fair clear	60
14	HD 37468	5 3344	-02 3928	23 0113		1 49 E			307
15	Comp							"	60
16	ADS 42410	5 3342	-02 3912	23 0659		1 22 E			1524
17	Comp							"	60
18	HD 37468	5 3344	-02 39 28	23 3650		1 14 E			
19	Comp							"	60
20	BIAS(4)								
CG 80267	HD 29587	4 3430	+41 5700	23 50				4x	67ms
CG 8026 /	"				23 52	0 04 E	88° Alt.	2x	133ms
cc37321	COMP							Fair clear	60
22	HD 29587	4 3430	+41 57	23 56 04		0 26 W			1620
23	COMP							"	60
24	BIAS(4)			0 26					—
25-44	FLAT x 20					0 03 E	-14°	Turns clear	22
45/46	IN BOARD / OVERBOARD					0 03 E	+32°	Fair clear	40/70

CCD
Spectr.
Focus.
Spectr.

Exp. Mtr.

BG 3P

14K

13K

14K

530

CCD
Spectr. Temp. - 1004 °C

Dome Temp./Hum. - 49°C 57.6% Transparency Conditions Mostly clear 282

Focus 6.95

Dome Temp./Hum. - 5.3°C / 59.8% @ seeing N FAN ON

Spectr. Temp.

4.20 0 50 1024 4 1 CCD Filter

Exp. Mtr.	Seeing	Prg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Max ADU Quality
BC39				CASS CCD	1800 L/mm G = 1586	306	4464A	17			
14K	4"	^B 3.57	09.5V					18	Bh pgm	= 300/1 S/N	5K
								19			
13K	4.5"	^B 6.3	B2V					20	Bh pgm	2250/1 S/N guided with H037468	5K
								21		off Westad FS/it	
14K		^B 3.57	09.5V					18			
								22			
								1/2			
	3-4"	^V 7.29	d62	KEV CCD TV GUIDE		above 306		-	Seeing test	clouding in with medium W wind	
								-			
				CASS CCD				23			
3330	3"	^V 7.29	d62					24	Std. Vel	through cloud.	1.5K
								25			
								1			
								26		dome closed now - cloud too 5K drop from max thick	14.1K → 12.8K
								3/4	focus test	1 to row 1024, 4K @ end	

#3

Wed/Thurs

Emulsion Batches:

Date 1995 December 6/7 Observers [Blm]/Tn/Smt.....

changed X region

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37347/48	INBOARD/OUTBOARD							FeA clear	20/40
49	BIAS (4)			1 55				"	—
50	COMP							"	20
51	HD 29587	4 34 30	+41 57	1 58 11		2 14 W			707
52	COMP							"	20
53	Comp							"	20
54	HD 37022C	5 30 22	-05 27 20	2 17 11		1 34 W			442
55	Comp							"	20
56	Comp							"	20
57	HD 37043	5 30 32	-05 58 32	2 29 06		1 42 W			167
58	Comp							"	20
59	Comp							"	20
60	HD 37742	5 35 43	-01 59 43	2 38 20		1 43 W			31
61	comp							"	20
62	Comp							"	20

CCD
Spectr. Temp. -100.3°C

Focus 7.07

Spectr. Temp.

Dome Temp./Hum. $-5.1^{\circ}\text{C}/59.0\%$
(a focus test)

Dome Temp./Hum. $-5.9^{\circ}\text{C}/62.0\%$

Transparency Conditions $\dots$ mostly cloudy, clearing... ^{28.4}

N FAN ON

470'050 1024 4 1 crd/fmt ^{ADU} _{max}

Exp. Mtr.	Seeing	Prg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39 FILTER				CASS CCD	600 λ mm (C) G=2683	250 μ	4300 $\text{\AA}$ $\pm 1 \text{\AA}$	3/4 1 5	focus test	in focus now.	
1400	4"	^V 7.24	162					6 7 8	Std. Vel	$\approx 160/\text{hr}$ 5/1X same one as earlier tonight	3.3A
2570	5"	^B 5.15	06ep?					9 10 11	Blu-0 star	some cloud	5.5X
5,200	5"	^B 2.53	09.11					12 13 14	Blu-0 star	cloudy	15K <u>670</u>
5,700		1.54	09.5TB					15 16 17			15K

pg #4 wed/Thurs

Emulsion Batches:

Date 1995 Dec. 6/7... Observers [B.L.] / T.H. / S.W.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc37363	HD47432	06 33 ³⁰	+01 42 03	02 43 50		0 39 W			536
64	Comp							E4 Clear	20s
65	Comp							"	20s
66	HD52266	6 55 24	-05 40 00	02 57 51		0 59 W			970
67	Comp							"	20s
68	BIAS(4)			3 16					—
69	COMP							"	20
70	HD48099	6 36 37	+06 26 25	3 20 29		1 34 W			600
71	COMP							"	20
72	COMP							"	20
73	HD46966	6 31 06	+6 10	3 36 29		2 02 W			950
74	COMP							"	20
75	COMP							"	"
76	HD52533	6 56 30	+2 59	3 59 48		2 15 W			1830
77	COMP							"	20

Spectr. Temp.

Dome Temp./Hum. 76.0% / 61.3%

Transparency Conditions *Mostly cloudy. → clearish*Focus *7.07**But we don't care.*

Spectr. Temp.

Dome Temp./Hum.

470 0 50 1024 4 1 *cd*

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2930	4"	6.36	09-716	<i>CHSS CCD</i>	600C G=2683	250u	4300A	18	Bln 0 star		8K
								19			
								19			
2425		7.20	09 IVn					20	Bln 0 star	<i>clear here</i>	5.0K
								21			
								1			
								22			
3200	4"	6.33	07I					23	Bln 0-star	<i>a bit of cloud here.</i>	
								25			
								27			
2940		6.84	08V					28	Bln 0-star	<i>clear at start but some cloud soon afterwards</i>	6.8K
								29.			
								5			
2775	5-6"	7.61	08.5V					6	Bln 0-star	<i>brighter spark star of a NS pair</i>	5.8K
		7.61	08.5V					7			

pg #4

Date 1995 December 6/7 Observers [B.L.] / Tn / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc373878	COMP							FeAr CLEAR	20
79	HD46241	6 27 01	+4 55 40	4 37 40		~ 3 ^h W			406
80	COMP							"	20
81	COMP							"	20
82	HD46223	6 27 00	+04 53 00	05 02 38		~ 3 45 W			1530
83	Comp							"	20
84	BIAS(4)			05 30					
85	Comp							"	20
86	HD46150	6 26 36	+5 00	5 33 56		4 01 W			821
87	Comp							"	20s
88	COMP							"	20
89	HD47839	6 35 28	+9 59 18	5 52 11		4 03 W			333
90	COMP							"	20
91	BIAS COMP							"	"
92	HD89449	16 14 18	+19 58 42	6 03 12		0 33 W			210
93	COMP							"	20

Spectr. Temp. Dome Temp./Hum. $-6.6^{\circ}\text{C} / 60.8\%$ Transparency Conditions ... clearish, partly cloudy 88
 Focus 7.07
 Spectr. Temp. $-1.02 \pm 0.0^{\circ}\text{C}$ CCD Dome Temp./Hum.

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
				CASS CCD	600 lines (E) G=2683	250 μ	4300Å	8			
		B 6.63	KOM					9	no one's	intended to do HD 46223 accidentally done, field wrong?	
								10			
								12			
2000	5"	B 7.47	04V (f)					13	Bln O-star	field corrected.	6.6K
								14			
								1			
								14			
1450	5"	B 6.86	05V (f)					15	Bln O-star	same field as HD 46223 partially obstructed by dome/platform & then cloned.	4.8K
								16			
								17			
4990	6-7"	B 4.40	07V (f)					18	Bln O-star	close to platform	15.1K
								19			
								20			
3390	5"	V 4.71	F6IV					23	Bln O-star	Std. Vel.	15 K
								24			

Emulsion Batches:

Date 1995 December 6/7 Observers [Blm]/Tn/Smt

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[illegible]

219#1

Thurs / Fri

Emulsion Batches:

Date 1995 December 7/8 Observers [Bin] / Tn / Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
CC 374 ¹⁷ / ₁₈	Inboard / Outboard					00	+40	Fear Clear	20/40
19	B145(4)			17 22					
20	Comp							Felt Clear	20
21	HD193322AB	20 14 34	+10 25 13	17 27 35		2 05 W			450
22	Comp							"	20
23	Comp							"	20
24	HDE 226868	19 54 36	+34 56 00	17 40 28		3 15 W			2721
25	Comp							"	20
26	Comp							"	20
27	HD190429A	19 59 48	+35 45 00	18 31 41		3 28 W			715
28	Comp							"	20
29	B145(4)			18 45					—
30	COMP							"	20
31	HD190864A	20 01 54	+35 19	18 49 04		3 56 W			3150
32	COMP							"	20

Spectr. Temp. ... -101.5°C. Dome Temp./Hum. ... -4.1°C 57.7% Transparency Conditions ... PART CLEAR ... 292

Focus ... 7.0 F. still

Spectr. Temp.

Dome Temp./Hum. ... -6.3°C 68.4%
C X

FANS OFF

470 0 50 1024 4 1 CCD UNIT

MAX
404

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 34 Filter				C1455 CCD	600 l/m G 2683	250	4300A	3/4			
								1/2			
								5			
3100	4"	5.94	09V (en)					6	Bln O star	Faint companion seen to SW 7300/1 S/N 5' separation	8.0K
								7			
								8			
1295	4"	9.74	09.7 Ia b					9	0-star b SB Bln	Cyg X-1	2.3K
								10			
								11			6.10
3000	5"	7.28	04 I ft					12	Bln O-star		6.1K
								13			
								1			
								14			
3150	4.5"	7.96	06.5 III (f)					15	Bln O-star		7.5K
								16			

83 pg #2

Thurs / Fri

Emulsion Batches:

Date 1995 Dec 7/8 Observers [Blm] / Tm / Sent

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC37433	Comp							F4n clear	20s
34	HD192281	20 0900	+39 5800	19 22 28		4 17 W			1153
35	Comp							"	20s
36	BIAS(4)			19 44					
37	Comp							"	20s
38	HD195592	20 2712	+43 5900	19 5219		4 29 W			1130
39	Comp							"	20s
40	COMP							"	"
41	HD199579	20 53 03	+44 32 29	20 16 28		4 13 W			300
42	COMP							"	20
43	COMP							"	"
44	HD 206183	21 35 18	+56 32	20 27 56		3 53 W			932
45	COMP							"	20
46	BIAS (4)			20 45					—
47	COMP							"	20

CCD
Spectr.

Focus..

Spectr.

Exp. Mir.

8639

2945

3020

3380

3050

CCD Spectr. Temp. -102.1°C ... Dome Temp./Hum. $-6.5^{\circ}\text{C}/69.1\%$ Transparency Conditions... OK... dry

Focus... 7.07

Spectr. Temp. Dome Temp./Hum.

FANS OFF

470 0 50 1024 4 1 ccd/ht.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B639.				CASCO	600 W/m	250u	4300A	17			
2945	3"	7.73	05V	n(c-f)p	G-2683			18	Bln O star	Field Drawn	6.7K
								19			
								1/2			
								20			
3030	3"	7.95	09.7I ₄					21	Bln O star		5.5K
								22			
								23			
3380	3"-4"	5.965	06V					24	Bln O-star		8.6K
								25			
								26			
3050	4"	7.54	09.5V					27	Bln O-star	a couple of very faint "companions"	6.7K
								28			
								1			
								29			

gpg # 3

Date 1995 December 7/8 Observers [Bln]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 37448	HD 206267	21 3557	+57 02 12	20 50 07		4 03 W			224
49	Comp							FA Clear	20
50	Comp							"	4
51	HD 207198	21 42 08	+61 59 59	20 59 52		4 08 W			300
52	Comp							"	20
53	COMP							"	"
54	HD 209975	22 02 04	+61 47 36	21 10 29		3 56 W			120
55	COMP							"	20
56	COMP							"	"
57	HD 207538	21 44 36	+59 14	21 17 39		4 36 W			1035
58	COMP							"	20
59	BIAS(4)			21 39					—
60	COMP							"	20
61	HD 210809	22 07 54	+51 56	21 41 54		4 41 W			1360
62	COMP								

CCD
Spectr. Temp. -102.4°C

Dome Temp./Hum. $-6.4^{\circ}\text{C}/69.1\%$ Transparency Conditions clear 296

Focus 7.07

Spectr. Temp.

Dome Temp./Hum. $-6.9^{\circ}\text{C}/71.5\%$

FANS OFF

470 0 50 1024 4 1 CCD

Exp. Mir.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39 3,400	3"	5.83	065V	CASS CCD	600 R1 (6) G = 2683	25 μ	4300A	30	Bln 0*		8.7K
								5			
								18			
3200		6.27	091A II					12	Bln 0 star	close to N pier	9.0K
								13			
								14			
3300	3"-4"	5.19	09.5Ib					15	Bln 0-star		9.6K
								16			
								17			
3050	3"-4"	7.64	09.0V					18	Bln 0-star	close to N pier	6.2K
								19			
								1			
								20			
2895	3"-4" → 8"	7.59	09Ib					21	Bln 0-star	seeing exploded after 15" of exposure - cloud coming and passing through	6.3K
								22			

Date 1995 December 7/8 Observers [Bin]/Tn/Smt

Emulsion Batches:

[illegible]

Spectr. Temp. -101.7°C ...Dome Temp./Hum. $-7.0^{\circ}\text{C}/71.5\%$ Transparency Conditions ... some cloud, then snowFocus 7.07

FANS OFF

Spectr. Temp.

Dome Temp./Hum. $-6.1^{\circ}\text{C}/72.0\%$ ^{dome closed} 470 0 50 1024 4 1 credit

Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
25	B639 FILTER				CAS CCD	600 lines G2 2683	250u	4300A	23			
20	2500	5"	7.58	06:47 ^{pe}					24	Bln O-star	very close to S pier some light around slit from S pier lights.	5.8K
20									25			
14	2560	4"	7.20	09.5 Tab					26			
20									27	Bln O-star	cut short by impenetrable cloud.	6.1K
—									28			
20									1			
3	3620	?	0.85	K5 ⁺ III					29			
20									30 6	Sld. Vel.	EXTREMELY THICK CLOUD cosmic rays in spectrum spectrum heavily sloped.	~9K
6									7			
									2		Dome closed.	14K
	F → G.1 F → 70Z								3/4		Right on @ Row 215 snow in air but sort of clear except for snow haze	

SS

Mon/Tues pg#1

Emulsion Batches:

Date 1995 Dec 11/12 Observers [Bla.] Tn

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC374 95/46	Inboard / outboard Heart midline			17 50		0 11W	+31	FEH Clear	60/60
97	BIAS(4)			18 02					
98	Comp							"	60
99	HD217675	22 5719	+41 4719	18 08 51		0 11 W			61
CC37500	Comp							"	60
01	Comp							"	60
02	HD186205	19 3754	+08 59	18 23 13		4 19W			2123
03	Comp							"	60
04	BIAS(4)			19 01 41					
05	Comp							"	60
06	HD184606	19 3011	+19 3318	19 07 58		4 45W			484
07	Comp							"	60
08	Comp							"	60
09	HD235679	21 5500	+54 00 00	19 29 44		3 06W			1866
10	Comp							"	60
11	BIAS(4)			20 10					

C4D
Spectr.
Focus
CCD
Spectr.

0658
Filter

1408

1085

350/6

1140

CCD Spectr. Temp. -101.9°C ... Dome Temp./Hum. -81°C 54.2% Transparency Conditions *clear, a bit gusty*
 Focus 6.94 ... 90 equm as usual 300
 CCD Spectr. Temp. -102.3°C ... Dome Temp./Hum. -120°C 67.5%
 426 0 50 1024 A 1 CCD/FIT

Exp. Mtr.	Seeing	IV. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
06580 Fulcrum				CASS CCD	1800/14mm G=61028	306u	* @ 512 6604.8 <u>exactly</u>	3/4	focus test		
								1/2			
								5			
1408	6"	362	B6					6	Telescope encoder mean = 174 from star	200/1 S/N	2.3K
								7			
								8			3.4K
1085	6"-10"	8.43	B2V	exposed in the Balance check (looks good) no adjustment needed.				9	He star Bin	Air mass = 2.02	1.1K
								10			
								1/2			
								11			3.7K
3850 (6"-10")	5.00	B6 Bin						12	Telluric Std	Air mass 2.12	4.7K
								13			
								14			
1140	6"	8.86	B2.5 Ib					15	Sp Bin Bin	Air mass 1.15	CH2 5K
								16			
								1			

301 1942 Mon/Tues

Emulsion Batches:

Date 1995 Dec 11/12 Observers [Bla.] T.G.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CG 802 ^{68x}	HD 6314	00 58 59	+39 27 18					4x	67ms
72/73	"	"	"			0 16W		2x	133ms
CC 37512	Comp							Feet Clear	60s
13	HD 6314	00 58 59	+39 27 18	20 19 53		0 36W			1019
14	Comp							"	60s
15	Comp							"	60s
16	BM Cas	00 48 36	+63 33 00	20 44 42		1 08 W			873
17	Comp							"	60s
18	Comp							"	60s
19	Nov 95 Cas 95	1995-5 01 04 55	+53 59	21 07 00		01 17 W			
20	Comp							"	60s
21	BIASCA			01 22					
22	Comp								
23	HD 14386	02 14 18	-03 25 54	21 29 45		0 19 W			258
24	Comp								

CCD
Spectr. Temp. ... -100.5°C

Dome Temp./Hum. ... -12.0°C 68.9%

Transparency Conditions ... mostly clear ... 30%

Focus ... 6.9A

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	ALT = 86°			CASS CCD	1800nm G = 6108	30%	6609.8A			Seeing Test Dome WSW very cold, strong WNW wind	
* Software problem, prevented Import to Header.											
06560 Filter								17			
3540	4.5"		657	FOV _n				18	Telluric Std	Airmass = 1.005	5.8K
								19			
								20			
770	5"	8.82 -9.33		H&K em				21	Mk. pgn		H&K em 64K
								22			
								23			
990	5.8"							24	Mk. pgn		7.8K
								25			
								1/2			
								26			
2100								27	Rg pgn	Although H pole preferred	2.2K
								28		Only slightly brighter Then next by field star	

893 Pg#3 Mon/Tues

Date ...1995. Dec. 11/12 Observers [Blk]...Tn.....

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc 37525	Comp							Felt clay	60s
26	HD 18884	2 57 03	+03 41 51	21 ^{44 09} 50		0 14 E			27s
27	Comp							"	60s
28	Comp							"	60
29	HD 22484	3 31 46	+00 05 04	21 57 02		0 14 E			124
30	Comp							"	60
31	Comp							"	60
32	Iris	1995.9 04 10 07	+22 32 19	22 12 50		0 44 E			557
33	Comp							"	60
34	BIAS(4)			22 04 28					
35	Comp							"	60
36	HD 34759	5 14 44	+14 21 17	22 29 13		1 39 E			570
37	Comp							"	60
38	FLATS x 20					1 30 E	+42	Tung Ap 1/4	8s
58	BIAS(4)								

Spectr. Temp.

Dome Temp./Hum. -12.3°C 67.3% Transparency Conditions ... 51.5.1.16. 1.4.2.4. 300

Focus ... 6.94

Spectr. Temp.

Dome Temp./Hum.

MAX
404

Exp. Mtr.	Seeing	✓ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
06566 Filter				CASS CCD	1800 h/m G=610%	306	66048R	5			
		2.53	M1.5 IIIq					5	std vel	fast guided	7.7K
								7			
				F9 IV-V				8	std vel		
3300		4.28	F9 IV-V					9	std vel		5.8K
								10			
								11			
1200	5"	7.2	72 G2V					12	minor planet for std vel use		2.2K
								13			
								1/2			
								14			
5650	6"	5.09	B5V					15	Blk pgm		9K
								16			3.2
								29			12.3
								1/2			

Date 1995 Dec 11/12 ... Observers Bh. / T. L.

Emulsion Batches:

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[illegible]

Spectr. Temp.

Dome Temp./Hum. -12.2°C.

Transparency Conditions ... *Part C. Claudy* ... 308

Focus ... 6.94

Spect. Temp. $\dots 10.3 \dots ^\circ \text{C.}$

Dome Temp./Hum. -12.3°C...

-12.3° & 70.574

177A*

[illegible]

Pg #1

Tue/Wed.

Emulsion Batches:

Date 1945 December 12/13 Observers [Bin.] / smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
CC 37567/68	INBOARD/ OUTBOARD							Fe4 clear	60/60
69	BIAS(4)			17 34					—
70	COMP							"	60
71	HD 186205	19 37 54	+8 59	17 43 52		3 50 W			2445 2120
72	COMP							"	60
73	BIAS(4)			18 31					—
74	COMP							"	60
75	HD 184606	19 30 11	+19 33 18	18 35 14		4 13 W			300 1550
76	COMP							"	60
77	COMP							"	60
78	HD 235679	21 55 00	+54 00	18 49 15		2 32 W			2010 1100
79	COMP							"	60
80	BIAS(4)			19 27					—
81	COMP							"	60
82	HD 211211	22 10 32	+42 27 28	19 36 15		2 34 W			300 3030
83	COMP							"	60

Spectr. Temp. -100.1°C Dome Temp./Hum. $-7.3^{\circ}\text{C}/64.6\%$ Transparency Conditions *clear, a few clouds* 308
 Focus 6.94 @ focus test
 Spectr. Temp. 90.69°C Dome Temp./Hum. $-8.5^{\circ}\text{C}/67.5\%$ FANS ON
 @ Telluric Std. 412 0 50 1024 4 1 cd at

Exp. Mtr.	Seeing	V Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	max AVU Quality
06560 FILTER				CASS CCD	1800 2/m G=6108	30 μm	6605Å	3/4	focus test	set a bit cool, T dropping	
								1			
								5			
2120	5"	8.43	B2V					6	Bln He-star		3.5K
								7			
								1			
								8			
6550	5"	5.00	B8III _n					9	Telluric Std.		11K
								10			
								11			
1600	3"	8.96	B2.5Ib					12	Bln SB	dbl peaked H α emission 3-4 times continuum, redder peak is stronger.	3K continuum 10.3K H α emission
								13			
								1			
								14			
3030	4"	5.68	A2I _{nn}					15	Telluric Std.	same air mass as HD 235679. ~ 1.12	7.5K
								16			

pg #2

Date 1995 December 12/13 Observers [B.L.T.] / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CG 80274 → 77	HD 3765 x 4	0 35 18	+39 40						.067
78/79	" x 2				19 50	0 17 W	85° Alt		.133
CC 37584	COMP							Fair clear	60"
85	HD 3765	0 35 18	+39 40	19 55 56		0 29 W			400
86	COMP							"	60
587-606	FLAT x 20							Turn 440	7
CC 37607/8	INBOARD / OUTBOARD					0 34 W	+ 40°	Fair clear	40/70
09	BIAS (4)			21 11 20 57					—
10	COMP							"	60
11	HD 210459	22 05 33	+32 41 15	21 14 23		4 19 W			385
12	COMP							"	60
13	COMP							"	"
14	HD 214946	22 36 42	+44 29	21 29 44		4 32 W			2100
15	COMP							"	60
16	BIAS (4)			22 07					—

Spectr. Temp. -100.3°C Focus $6.94/7.05$

Spectr. Temp.

Dome Temp./Hum. $-9.1^{\circ}\text{C}/67.7\%$

① seeing test

Dome Temp./Hum. $-9.5^{\circ}\text{C}/67.7\%$

② focus test

Transparency Conditions. clear, a few clouds 310

N FAN ON ONLY

412 0 50 1024 4 1 ccd link

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	4"	7.36	4K5	EZV CCD TV 61022		none 30 μm		—	seeing test	Dome W, no wind, clear 55% on catwalk	
	"			"				—	"	1st 2 done off-centre of slit.	
OG 560 FILTER				CASS CCO	1800 μm G=6168	30 μm	6605A	17			
1400	4"-5"	7.36	4K5					18	Std. Vel	done while writing down seeing test info.	3.0K
								19			
								20			11.4 710.3K
B6 39 FILTER								3/4	focus test	set a bit cool. $T = -9.5^{\circ}\text{C}$ $F = 7.05$	
								1		GP16 error & re-sets. focus test redone, two.	
								5			
13.7K	5"	4.75	FSIII					6	Bln A shell	a bit of cloud.	5.5K 1.5K
								7			
								8			
5.7K	4"	7.26	AS					9	Bln SB2	some more cloud then clear	2.6K
								10			
								1			

pg #3

9th Date 1995 December 12/13 Observers [Bin] / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc37617	COMP							Fehr clear	60
18	HD222368	23 34 48	+5 05 03	22 14 52		4 30 W			400
19	COMP							"	60
20	COMP							"	"
—	HD37017	5 30 25	-4 33 36	22 31 04		1 24 E			1920
—	COMP							"	60
20	BIAS(4)			23 13					
21	COMP							Fehr clear	60
22	HD37017	5 30 25	-4 33 36	23 20 43		0 36 E			1800
23	COMP							"	60
24	COMP							"	"
25	HD37468 } AB ADS4241	5 33 44	-2 39 28	0 01 19		0 25 E			205
26	COMP							"	60
27	HD37468 } D ADS4241	"	"	0 08 23		0 08 W			1800
28	COMP							"	60

C60
Spectr. Temp. -102.4°C Focus 7.05

Spectr. Temp.

Dome Temp./Hum. $-9.8^{\circ}\text{C}/70.1\%$ Dome Temp./Hum. $-11.4^{\circ}\text{C}/73.0\%$
at end of H23 71699Transparency Conditions A ... few clouds..... 312

N FAN ON

412 0 50 1024 4 1 ccd/bnt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39 FILTER				CASS CCD	1800 Blm G=4592	306 μ	4465 $\text{\AA}$	11			
13.6K	4.6"	4.13 ^B	F7V					12	Std. Vel.	close to platform.	4.7K
								13			
								14			
11.8K	6"	6.42 ^B	B2V _p					15	He-rich	LOST due to GPIB failure and necessary resets !!!	
								16			
								1			
								3			
12.5K	4.5"	6.42 ^B	B2V _p					4	He ^{Bl} -rich		6.4K
								5			
								6			
14.5K	4.5"	3.57 ^B	O9.5V					7	Bl _n dbl star	tried to guide on slit centre and with D off slit.	7.2K
								8			
11.3K	5"	6.3 ^B	B2V					9	Bl _n dbl star.	7 guided with AB off of slit, centred on column 39	5.2K
	$\rightarrow 7$ Seeing blew up at 1100's mark. $\rightarrow 1300's$							10		There is a little bump in profile from column 40-42, most likely stray light from AB.	

pg # 4

9/9 Date 1995 December 12/13 Observers [Bin]/smt

Emulsion Batches:

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[illegible]

CCD
Spectr. Temp. -101.9 °C

Dome Temp./Hum. -11.3°C/73.0%

Transparency Conditions a few clouds 3/4...

Focus 7.05

N FAN ON

Spectr. Temp.

Dome Temp./Hum.

412 0 50 1024 4 1 cred/hour.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B639 FILTER				CASS CCD	1800-2/1mm G=4592	30µm	4465 Å	1		a cosmic ray on top row.	
								11			
15.2K	5"	^V 2.84	GSTIII					12	Std. Vel	β Lep.	6.3K
								13			
								14			
7.8K	4"	^V 6.66	A0					15	Bln SB2	delta's very close to zero! no other stars close, but spectrum looks late.	
								16		no time to search for others	
								1			
								17		backup running out @ 2:00 EST	

Emulsion Batches:

[illegible]

7th pg # Sun/Mon

Date Dec 17/18 Observers Hml/Tr

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10503/4	Inboard foot board					2 ^h 50W			
505	bias (4)			17:11					
506	comp							ThAr	1
507	H0218470	230313	48°45'04"	17:24:19		01324 W			1800
508/301	Comp (2)							ThAr	1
510	H0222368	233448	050503	18:01:49		019 W			1800
511	Comp							ThAr	1
512	H0222368	"	"	18:35:10		052 W			1800
513	Comp							ThAr	1
514	bias (4)			19:07:48					
515	H0222368	"	"	19:10:50		128 W			1800
516/17	Comp (2)							ThAr	18
ce10518	H0222368	"	"	20:15:56		2 011 W			1800
19	Comp							ThAr	1800
20	Bias (4)								

Spectr. Temp. -100.5 Dome Temp./Hum. $-20.7^{\circ}\text{C}/70.7\%$

Transparency Conditions Good, some cirrus... 318...

Focus $0:22.5$ Spectr. Temp. 90°deg Dome Temp./Hum. $-50^{\circ}\text{C}/78.1\%$

increasing haze

CCD 00128102481

Exp. Mtr.	Seeing	✓ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	F.H.	Program	Remarks	Quality
				Echelle	X300/5685 1800 f/14	660W 400W	6520A	1/2 1/2	Hnd.		111A Hnd
								3		CCD 0246102441	
								3			
88	3.5"	5.7	FSV					4		HR 8805 (Zenith)	1.8K
								3		(2 comps)	
75		4.13	FN					5	Std Vel	HR 5969	4.7K
								3		[300/1 S/N]	
50	3"	4.13	F7V					6		3.6K	
								3		7280 S/N	
								1/2			
59		4.13	F7V					5		3.9K	
								3		S/N 7285	
77	3-4"	4.13	F7V					6		S/N 7310	4.7K
								3		S/N 73	
								1/2			

MP9 #2 Sun/Mon

Date 1995 Dec 17/18.... Observers Hm/Th.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10521	Comp							ThAr	1
22	HD20462	A 0601	05 15 46	20:55:14		133 E			900s
23	Comp							ThAr	1
24	HD26462	"	"	21:13:38		100 E			1800s
25	Comp							ThAr	1
26	BIAS(4)			21:16					
27	HD20462	"	"	21:48:02		025 E			1800s
28	Comp							ThAr	1s
29	HD26462	"	"	22:21:09		007 W			1800s
30	Comp							ThAr	1s
31	BIAS(4)								
32	HD26462	"	"	22:56:15		043 W			1800s
33	Comp							ThAr	1s
34	HD26462	"	"	23:02:16		115 W			1800s
35	Comp							ThAr	1s

CCD
Spectr. T
Focus...
Spectr. T

Exp. Mtr.

0

6

8

6

9

CCD
Spectr. Temp. -101.0°C

Dome Temp./Hum. $-4.8^{\circ}/77.9\%$

Transparency Conditions $\text{hazy} \rightarrow \text{cloudy} \dots 320$

Focus 0.225

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. <i>e. l. e. l. e</i>	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				<i>7.15</i> <i>18:00</i>	<i>300/5885</i>	<i>600 W</i> <i>400 H</i>	<i>6520H</i>	3	<i>Hnd</i>		
0		5.73	F4V					4		V314 S/N 7100	0.7K
								3			
6		"	"					5		S/N 1200 ~ 180	1.5K
								3			
								1/2			
8	4.5"		"					6		S/N ~ 160	1.2K
								3			
6		"	"					4		S/N ~ 150	1.2K
								3			
								3 1/2			
		"	"					5		S/N ~ 150	1.2K
								3		S/N ~ 150	
9	4"							6		S/N S/N ~ 160	1.3K
								3			

pg 43
321

Sun/Mon

Date 1945 Dec 17/18

Observers H. A. T. M. H.

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
Cebs 36	Bias (A)			00 00					
37	HD 26462	4 06 01	05 15 46	00 01 47		1 49 W			1800
38	Comp							THAr	1 sec
39	HD 26462	"	"	00 33 14		2 20 W			1800
40	Comp							THAr	1 sec
41	Bias (C4)								
42/51	Flatten X 10			01 15		2 26 W	+5 29	THAr	2.5
52/53	Inboard / outboard H. A. T. M. H.					2 32 W	"		1/1

Spectr. Temp. -109.7°CDome Temp./Hum. -6.9° 81.1% H

Transparency Conditions . Increasing cloud 322

MAX
ADY

Exp. Mtr.	Seeing	W. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				cd 15 1200	300/505	600 μ W 400 μ W		1/2	Adl		
2	4"	5.73	F4V					4		S/N ~ 100 part cloudy	750
								3		Exposure meter Rebalanced	
0		5.73	F4V					5		Too cloudy $\Rightarrow$ just noise	200
								1/3			
								1/2			
						600 μ W = .277 600 μ W = .205		1/2			15K
								1	7/8 focus	CCDFMT 0 0128 1029 8 1	
All to Perssons & F drive							CC 200 Controller then Reset				

27
P9#1

Mon/Tues

Date 1995 Dec 18/19..... Observers KK/Tm.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
CE1055A	Hartmann - inboard							ThAr	15
10535	Hartmann - outboard							ThAr	15
10556	bias (4)								
10557	bias (4)			17 0032					
10538	comp							ThAr	15
10559	HD 217014	22 5233	20 1357	17 22:08:31	17 22:22:30				832 ^s
10560	Comp							ThAr	15
10561	HD 217014			17 2603	17:37:20	0 12 W			668 ^s
10562	Comp							ThAr	15
63	Bias (4)			17 39					
64	Comp							ThAr	1
65	HD 8890	01 2234	+88 4626	17 4856		3 19 E			90
66	Comp							ThAr	1
67	HD 8890	"	"	17 5236		3 16 E			90s
68	Comp							ThAr	1

Spectr. Temp.

Dome Temp./Hum

Transparency Conditions

3.24.

Focus .. Q.225

Spectr. Temp.

Dome Temp./Hum.

00 256 1024 41

-100°C

Exp. Mtr.	Seeing	Obj. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				achelle 18.43	300/ 0.5800	60μ	6300A			001281024 8 1 T = -125°	
								3			
40	3"	5.53	G5V					4	51 Peg		
								3			
46		5.53	G5V					5			
250		2.0	F8 Ib					5	hh pgm.		
240								5			

Emulsion Batches:

Date 1995 Dec 18/19 Observers KK/Th

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[illegible]

27/3 Mon/Tues

Date 1995 Dec 18/19... Observers KK/TU.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CE10584	HD 6582	1:01:37	54:25:47	19:25:01	19:31:20				374
85	Comp							ThAr	1
86	Comp							"	1
87	HD 4614 A	0 43 03	+57 17 06	19 38 22		0 21 W			54
88	Comp							ThAr	1s
89	HD 4614 B	e "	"	19 40 30		0 36 W			316 316
90	Comp							ThAr	1s
91	HD 4614 A	"	"	19 56 06		0 39 W			80
92	Comp							ThAr	1s
93	Comp							"	1
94	HD 16895	2 37 22	+48 48 20	20 02 58		1 01 E			525
95	Comp							"	1s
96	HD 16895 B			20 13 18		0 19 E			2426
97	Comp							"	1s
98	HD 16895			20 56 04					117
99	Comp								

Spectr. Temp. Dome Temp./Hum. $-5.9^{\circ}C$ 68% $38^{\circ}H$ Transparency Conditions $P.G.A.T. CLEAR$ 328

Focus 225

Spectr. Temp. Dome Temp./Hum. $e 2$

Exp. Mtr.	Seeing	☒ Mag.	Sp.	Inst.	Grating/ x Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
80				edale 1843	edale 1843 15800	60u 100u	G300A				
								3			
								3			
42		3.45	GOV					4		ADS 671A	
								3			
40	4"	7.51	K7V					5		ADS 671B	
								3			
80		3.45	GOV					6			
								3			
								3			
30		4.13	F7V					4		ADS 2081A Brighter one.	
								3			
40	3-4"	9.87	M1V					5		ADS 2081B mostly cloudy	
								3			
42								4			760

MAX
ONLY FOR
ABOVE
BIAS

3p4 Mon/Tues

Emulsion Batches:

Date 1995 Dec 18/19..... Observers KK/Tn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
ce10609	Comp							ThAr	1
601	HD 20902	3 1711	+19 30 19	21 0811		0 45E			65
602	Comp							ThAr	1
603	HD 20902			21 0913					93
604	Comp							ThAr	1
605	HD 20902			21 1236		0 39E			97
606	Comp							ThAr	1
607	B115 (4)								
608	Comp								
* 608	HD 10780B	1:48:31	+63:21:32	21:26:53		1 48W			2202
610	Comp							ThAr	1
611	HD 10780	1 4831	+63 21 32	22 0730		1 57W			344
12	Comp							ThAr	1
13	HD 10780	1 4831	+63 21 32	22 1839		2 06W			234
14	Comp	Not written						ThAr	1

Spectr. Temp. Dome Temp./Hum. -70°C 72.3/4 Transparency Conditions ... Mostly clear again 330' ...
 Focus 225
 Spectr. Temp. Dome Temp./Hum. MAX

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				ectelle	300/ .5800	60u W/ 100u H	6300A	3			
370	34'	1.79	F516					6			7.8K
								3			
320								6			
								3			
475								6			5.8K
								3			
								1/2			
								3			
40		2.8						2.5		South 1" from HD 10780	
								3		faint comp by mistake	
60		5.63	KOV					2			
								3			
42								2			
								3			

7/1 P5 Mon/Tues

Date 1995 Dec 18/19 Observers KK/Tn

Emulsion Batches:

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[illegible]

CCD Spectr. Temp. -101.8°C ...

Dome Temp./Hum.

Transparency Conditions . . . *Part Cloudy* . . . *332*

Focus 225

Dome Temp./Hum. 7.6°C 70.1% H

Spectr. Temp.

	Exp.	Mtr.	Seeing	F _v Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
								60μ 400 μ H=.225		1/2			
										3			
		68								4	sld vel		
										3			
51		44								4			
										3			
										3			
		10								5	sld vel	Could get good minor plane!	
										3		Field drawn check it out! ??	
								600 μ H=.205		1			9K
		All to Persons c F DRIVE											

Tues/Wed.

Emulsion Batches:

Date 1995 Dec. 19/20... Observers Day/Tn.....

[illegible]

CCD
Spectr. Temp. -100.3.....
Focus 7.05
Spectr. Temp.

Dome Temp./Hum. -10:3°C/62.8

Transparency Conditions... Very Cloudy..... 33%

Did you use a grating? ☒/A

C Lambda

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
13639 Filter				Cass CCD	1800 λ/mm G = 4475	306	4300A	3/4	Focus		MAX ADU
				G = 4475				1/2			
								5			
11800	8"	20	F8T6					6	Obj		4.4K
11400								7	"		6.3K
11300								8	"		4.8K
								9			
			F5Ib					10	Obj		
10064		B 227	F5Ib					11	Obj/std.		4.4
10120			"					12	"		
10200			"					13	"		
								14			
								15			15K-125K
								1/2			
								16			

22⁵
#2 Tues/Wed.

Emulsion Batches:

Date 1995 Dec. 19/20 Observers Dby/Tn

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 37672	HD 65301	7 52 58	59 19 08	22:20:03	-	-3 36 45 E	59 3 36 N		1600s
73	Comp			22:48:19				FeAr Clear	60s
74	HD 65301	7 52 58	59 19 08	22:50:35					1167s
75	Comp							FeAr Clear	60s
76	HD 65301	7 52 58	59 19 08	23:15:12					1275s
77	Comp							"	60s
78	BIAS(4)								
79	Comp							FeAr Clear	60s
80	HD 60335	7 28 54	43 15 03	23:47:13		-1 32 04 E	48 2 6 N		2160s
81	Comp							FeAr Clear	60s
82	HD 60335	7 28 54	43 15 03	00:26:29					2040s
83	Comp							FeAr Clear	60s
84	HD 60335	7 28 54	43 15 03	01:03:53					2476s
85	Comp							FeAr Clear	60s
86	Bias(4)								

CCD
Spectr. Temp. -100.4

Dome Temp./Hum. -11.6/65-22

Transparency Conditions Cloudy/Cold 336

Focus 7.05

Spectr. Temp.

Dome Temp./Hum.

C Lambda

MAX

AP4

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
10508		B 6.16	F2V	CASS CCD	G 4475	306μ	4300Å	17	Dby		1
								18			
10155		B 6.16	F2V					19	Dby	(170/1 S/N)	3.4K
								20			
10133	6-10							21	Pby		3K
								22			
								1/2			
								23			
10097		B 6.33	F0					24	Dby		3K
								25			1K
10065		B 6.33	F0					26	Dby		
								27			3.2K
10043		B 6.33	F0					28	Dby		
								5			
								1/2			

#19 Wed/Thur.

Emulsion Batches:

Date 1995 Dec. 20/21 Observers Dby./Tn.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CG80280/83	HD 13013	02 02 18	+13 59 07					4x 67ms	B639
CG80284/85	"					00 28 W	85° Alt	2x 133ms	F11
CC37694/95	In b / outboard HATMAN					00 10 W	+44	60/90	T=
96	B1A5(4)			21 00 56					
97	Comp							FeAr	60s
98	HD6397	0 59 49	+14 24 30	21 10 31		02 27 W	14 55 N		2167s 10100
99	Comp							FeAr	60s
CC37700	HD6397	0 59 49	+14 24 30	21 50 07		02 45 W	14 55 N		1220s 10200
01	Comp							FeAr Clear	60s
02	HD6397	0 59 49	+14 24 30	22 14 07		03 30 W			2400s 5703
03	Comp							FeAr Clear	60s
04	Bias (4)			22 56					
05	Comp							"	60s
06	HD20902	3 17 11	+49 30 19	23:03:06		01 19 W			56 02368
07	"	"	"	23:04:16		01 21 W			61 0418
08	"	"	"	23:05:31		01 22 W			72 0400

CCD Spectr. Temp. -100.3°C Dome Temp./Hum. $-9.6^{\circ}\text{F} \dots 68.3\% \text{H}$ Transparency Conditions *PART. clear* *340*
 Focus *7.08* *90 gain of course* *12140*
 Spectr. Temp. Dome Temp./Hum.
Clamada *420 0 50 1024 4 1 CCD FMT*

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39 F114R	4"	V 6.40R	G8III	CASS CCD EEV CCD guider	1200/n/mm G=4475	1200/n/mm 306 = 51.1"			Seeing Test	ALT = 85° Dome NW Light NW wind ONLY NE Fan on now	Max Adm.
T = -9.6°C	F=708					306	4300A	3/4	focus Test	set for slightly cooler.	
								1/2			
								5			
10100	4.5"	B 6.09	F4II-III					6	Dby p9m	counts slowed by clouds	3.4K
								7			
10200		B 6.09	F4II-III					8			
								9			
5703	5"	B 6.09	F4II-III					10		(180/1 S/N)	
								11			
								1/2			
								12			
12968		B 2.27	F5IB					13	Dby/std		7K
3418		"	"					"	"		
3400		"	"					"	"		

491 Date 1995 Dec. 20/21. Observers Day/Tn.....

Emulsion Batches:

[illegible]

343P9#1

Tues/Wed

Emulsion Batches:

Date 1995 Dec 26/27. Observers [B.H.] / J.T.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc 377 24/25	Inboard / outboard HARTMANN			17 56		00 14W	+46°	FeAr clear	50/75
26	BIAS (4)			17 59					
27	Comp							FeAr clear	60s
28	HD 192518	20 10 08	+28 23 30	18 07 31		4 16W			1200
29	Comp							FeAr clear	60s
30	Comp							FeAr clear	60s
31	HD 210459	22 05 33	+32 41 15	18 35 17		2 37W			541
32	Comp							FeAr clear	60s
33	Comp							FeAr clear	60s
34	HD 214946	22 36 42	+44 29 00	18 52 01		3 03W			2964
35	Comp							FeAr clear	60s
36	BIAS (4)			18 44					
37/45	FLATS x 9					3 10W	+45°	TUNG Ap=clear	22s
46	Comp							FeAr clear	60s
47	HD 34759	5 14 44	+41 42 17	20 02 47		3 01E			913
48	Comp							FeAr clear	60s

^{CCD}
Spectr. Temp. -100.2°C

Dome Temp./Hum. -8.2°C 70%RH

Transparency Conditions *Fine*..... 344

Focus 7.0f

90C gain

Spectr. Temp. -107.0°C

Dome Temp./Hum.

46 0 50 1024 41 CCD FMT

Exp. Mir.	Seeing	Prg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39 Filter				C155CCD	180014/hm G=4542	38	4465A I 1A	3/4	focus test	set for slightly cooler	MAX AD4
								1/2			
								5			
14,800	8"	5.36	A7IV _n					6	A shell Bln	The Hot Pixel 601 d27	1.3K A.7K
								7			
								8			
15,750	6-10"	4.75	F5III					9	A shell Bln		5.3K
								10			
								11			
7000	5-8"	7.26	A5					12	SB2 Bln	7 200/1 S/N	
								13			
								1/2			
								14			13K
								15			11K
15,700	6-8"	^V 5.09	B5V					16	Bln pyrm	OFF center, center 1" in 32 column	11K
								17			

27p942 Tues/Wed

Emulsion Batches:

Date 1995 Dec 26/27 Observers [S.M.] / T.K.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc 37749	HD 37459	5 1444	+41 4217	20 242		2 41 E			820
50	Comp							FeAr clear	60s
51	B1115 (4)			20 42					
52	Comp							FeAr clear	60s
53	HD 37468	5 3344	-02 3928	20 5010		2 40 E			323
54	Comp							"	60s
55	ADS 4241 D	"	"	20 5919		1 55 E			2475
56	Comp							FeAr clear	60s
57	HD 37468	"	"	21 4553		1 45 E			292
58	Comp							"	60s
59	B1115 (4)			21 53					"
60	Comp							FeAr clear	60s
61	HD 37617	5 3025	-04 3336	21 5941		1 12 E			1247
62	Comp							"	60s
63/64	In board / out BOARD Hartmann			01		0 0	+33	FeAr clear	50/75

Spectr. Temp. ^{CCD} -100.2 °C

Dome Temp./Hum. -7.9°C 73.0% Transparency Conditions ... slightly hazy ... 346.

Focus . . . 7.04

Dome Temp./Hum. -10.7°C 73.5%RH

Some cloud moving in.

Spectr. Temp.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
8G 39 F11K2 15,500	6"	✓ 5.09	B5V	CASSCOO	1800 μ /mm G-4592	306 μ	445A	16	Blu pgr	Repacked to center better	
								18			
								1/2			
								18			1.1K
17,150	5-7"	B 3.57	095V					19	Blu pgr	σ on AB	66K
								20			
10,000	6"	B 6.3	B2V					21		guided with AB off west end of slit	3K
								22			1.1K
16,200		B 3.57	025V					23			
								24			
								1/2			
								25			
A 400	6-8"	6.42	B2Vp					26		cloud at end	
								27			
T = -9.5°C				Set F = 7.04				28/29	focus	right on utrip point	

94^A pg#1

Wed/Thurs

Emulsion Batches:

Date . 1995. Dec 27/28. Observers . Mki. / Tm.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC377 ⁶⁵ / ₆₆	Inboard/out Board					0 10W	+40	F4r clear	60/60
67	BIAS			00 25					
68	Comp							F4r clear	60s
69	HD 50 384	06 47 53.8	+45 57 09	00 29 52		0 13E			357
70	Comp							"	60s
71	Comp							"	60s
72	Nova Cas 95	01 04 55 ^{1995.5}	+53 59	00 49 03		5 55W			190
73	Comp							"	60s
74	Nova Cas 95	"	"	00 56 30		6 07W			395
75	Comp							"	60s
76	BIAS (4)			01 07					
77	Comp							"	60s
78	Bm Cas	00 48 36	163 33 00	01 25 27		6 44W			318
79	Comp							"	60s
80	Bm Cas	"	"	01 34 17		7 06W			1112
81	Comp							"	60s

CC
Spectr.
Focus.
Spectr.

Exp. Mtr.

T=

06 58.9
F4r

2400

164

335

245

820

CCD
Spectr. Temp. ... -100.2°C ... Dome Temp./Hum. ... -8.0°C 70.1% Transparency Conditions ... Clearing mostly ... 348
Focus ... 6.99 ... 90 cc gain
Spectr. Temp. ... Dome Temp./Hum. ... -9.9°C 71.6%
420 0 50 1024 41 CCD FMT

Exp. Mtr.	Seeing	IV. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				C455 CCD	1800 Å/mm G=6100	306	66008	11/2			MAX HDL
								3/4			
								5			32K
2400			634	KO III-IV				6	Just the encoder normalization		
								7		STAR	
								8		Telescope East side now	
164	5.6"	* 7.5			From magnetar field, it is probably in 8th mag.			9		Sky clear here.	7K
								10			
335	4.6"							11		* Field for mag comparison drawn.	15K
								12			
								11/2			
								14		* Intensity needed to be slightly higher than for H ₂ 95	
245	4.6"	(8.8-9.3)						15		Δ RH -00 0035 is dec -00 0048 (same approx as H ₂ 95)	10.5K
								16			
820								17			5K
								18			3.2K

349 #2

Wed/Thurs

some [Bln] service

Emulsion Batches:

Date 1995 Dec 27/28 Observers In miki clacking

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc37782	Comp						Tel Enclon	FeAr clear	60s
83	AC +80 7	00 0753	+80 0631	02 1143		8 32 W	+80 39		1514
84	Comp							"	60s
85	BIAS(4)								
86	Comp							FeAr clear	60s
87	HD18411	2 5222	+39 1545	02 5949		6 13 W			233
88	Comp							"	60s
89	Comp							"	60s
90	HD 34759	5 1444	+41 4217	03 1125		4 06 W			430
91	Comp							"	60s
792 811	FLATS x 20			Tel Still Eastside		4 10 W	41 50	TUNG Ap V4	8s
812	BIAS(4)			Tel Now west side				FeAr clear	60s
813	HD 120315	13 4336	+49 4845	03 4135		3 56 E			56s
14	Comp							"	60s
15/16	In board/out Board			H & R machine		3 50 E	+50°	"	60/60
17	BIAS(4)								

Spectr.

Focus.

Spectr.

Exp. Mir.

06 56

714

300

4002

5300

600

T

Spectr. Temp. Dome Temp./Hum. -9.4°C 71.5% Transparency Conditions Mostly clear 3.50 ...

Focus 6.94

 $\rightarrow$ clouding inSpectr. Temp. Dome Temp./Hum. -9.7°C 72.5%

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
06580 71149				CASSED	150014/mu G=6100	306	66008	18		Telescope still east side.	
300	5.8"	10.7	M0	No H α em seen (Looks like an M)			19	Vys H α pgm	Using same offsets 95 for H α 3440, on 82 Dec A RA -20 01 25 Star. S Dec +00 00 21		
Fainter star near 3' south of observed star								20			
								1/2			
								21		Telescope still east side.	
4000	8"	7.70	A2Vn				22	Bln Telluric std	2.40 Air mass	7.4K	
								23		Cloud at times	
								24			
5,300	3'-5"	5.09	B5V				25	Bln pgm	1.36 Air mass	10K	
								26			
								27			12K
								1/2 2800			
6000		1.86	B3V				29		Thick Cloud	10K	
								30		1.31 Air mass	
T -9.7°C F=72.3°F H								3/4	Focus test		
								1/2			

Spectr. Temp.

Transparency Conditions

cloudy.

352

Focus 6.94

^{CCD}
Spectr. Temp. -101.2°C

Dome Temp./Hum.

[illegible]

Thurs / Fri

Date 1995 Dec 28/29 Observers B/n / then mti

Emulsion Batches:

[illegible]

Spectr. Temp. ^{CCD} -102.0°C

Dome Temp./Hum. -4.7°C 68.5% H

Transparency Conditions Fine... suddenly cloudy

Focus 6.94

Spectr. Temp.

Dome Temp./Hum.

Actual control 2-6592A, no T6600P
* Grating tilt unchanged from previous nightMAX
ADU

Exp. Mtr.	Seeing	IV. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
OG-560 = 112	T = -4.7			CASS CCD	1800 h/mm G = 6100*	306	* 6592A ± 2A	3/4	focus	High/center Blue end	
								1/2			
								5			
5000	43"	3.62	B6 Upe + A2p					6	Tel. encalae star. Just + test spectra	while setting up encoder?	
								7			
								26			
5000	3"	2.99	AQV _n					21	Telluric Std	2.40 AIR MASS	
								22			
								23c			12K
								1/2			
								23			

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5

[illegible]

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