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3

①

spectr. Ten

focus.....

spectr. Ten

Exp. Mat.

pectr. Temp. Dome Temp./Hum. Transparency Conditions 4

focus

Spectr. Temp. Dome Temp./Hum.

[illegible]

#1 5

mon/Tues

Date 1997 MAY 26/27 Observers WxL (Lu) / 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		Exp. Mir.
								Type/Filter	Exp.	
CC456 ^{93/94}	Inboard/out Board							FeAr NO 3	4/6	1000/ no filter
95	BIAS(4)			20 36						
96	Comp							1,	45	
97	HD 125488	14 19 38	2000 105 53 48	20 50 55					420	1070
98	Comp			20 58 14					420	992
99	"			21 05 45					420	1390
700	"			21 13 12					420	1320
01	Comp							"	45	
02	HD 125488			21 22 29					420	1380
03	"			21 30 00					42	1300
04	"			21 37 33					420	1783
05	"			21 44 54					420	1475
06	Comp							"	45	
07	BIAS(4)			21 53						
08	HD 125488			21 55 31					420	1490

CCD
Spectr. Temp. -100.6°C Dome Temp./Hum. $+12.7^{\circ}\text{C}$ 4268H Transparency Conditions ... Fine ... TO part cloudy..6
Focus ... 6.8.1 90c gain
Spectr. Temp. Dome Temp./Hum. ... 390 050 1024 4 1: CCDFMT (~ MAX HCU)

Exp.	Exp. Mtr.	Seeing	Ph. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000V	no filter				CASCCD	1800/Inten	300u	5784A	3/4	focus test		
					Tgrating →	46.9			1		~ 3.206	
									5			
1070	3.4	8.1	F2						6	DRL	~ 2 90/1 S/N some cloud	-6K
992									7			
1390									8			
1320									9			
									10			
1380									11			
1300									12			
1283									13			
1475									14			
									15			
									1		~ 3.304	
1490									16			

^{CCD}
Spectr. Temp. -100.6°C

Dome Temp./Hum. $11.1^{\circ}\text{C}/46.2\%$

Transparency Conditions *fine, some clouds*.....8.

Focus 6.81

Spectr. Temp.

Dome Temp./Hum.

Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1510	1550	3"-4"	8.1	F2	CCD CASS	1800 46.9	300 μ	5184	17	DRL		
1520	1596								18			
1530	1570								19			
1540									20			
1550	1530								21			
1560	1575								22			
1570	1480								23			
1580	1600								24			
1590									25			
1600									1		on 3-128	
1610	1920	3"-5"							26			
1620	1450								27		cloud at start	
1630	1790								28			
1640	1085								29			
1650									30			

#3 9

Date 1997 May 26/27

Observers

Lu/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.	Exp. Nr.
CC45724	HD125488	14 19 38	05 53 48	23 34 11					600	500
25	"	"	"	23 44 39					600	1000
26	"	"	"	23 55 11					420	1066
27	Comp							FeAr ND#3	45	
28	Bias (4)			00 04						
29	HD125488	"	"	00 05 21					428	1610
30	"	"	"	00 12 59					430	1400
31	"	"	"	00 20 36					420	1270
32	"	"	"	00 28 06					429	1390
33	Comp							"	43	
34	HD125488			00 37 31					420	1530
35	"			00 44 57					477	1827
36	"			00 53 17					420	1480
37	"			01 00 52					420	1450
38	Comp							FeAr ND#3	45	
39	Bias (4)			01 09						

CCD
Spectr. Temp. -100.5°C Dome Temp./Hum. $+10.2^{\circ}\text{C} / 47.9\%$ Transparency Conditions ... *cloudy - Thin/ice* ... 10

Focus ... 6.81

Spectr. Temp.

Dome Temp./Hum. $+09.3^{\circ}\text{C} / 50.0\%$

~ MAX 1404

Exp.	Exp. Mtr.	Seeing	Av. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
600	500		8.1	F2	CASS CCD	1800 λ /mm 46.9	306 μ	5184	6		cloudy	
200	1000								7		"	
400	1066	5"							8		"	
300									9			
									1		$\sigma = 3.261$	
200	1610								10		clear	
400	1400	6"							11			
400	1270								12			
600	1390								13			
300									14			
400	1550								15			
400	1827								16			
400	1480	4'							17		100/1 5/4	930
400	1450	3.4'							18			
300									19			2.9K
									1		$\sigma = 3.411$	

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Emulsion Batches:

Date 1997 May 26/27 Observers L.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		Exp. Mtr.
		2000						Type/Filter	Exp.	1900 V
CC45740	HD125488	14 19 38	+05 53 18	01 11 17					499	no Filter 1800
41	"			01 20 06					430	1375
42	"			01 27 40					420	1280
43	Comp							Fe/Br ND3	45	
44	comp							1	43	
45	HD136202	15 14 12	02 08 37	01 40 11					157	5K
46	Comp							"	4	
47	Comp							"	4	
48	HD 144579	16 01 30	39 24 00	01 52 23					391	4.4K
49	Comp							"	4	
50	B/H S(4)			02 00						
51	Comp			02 09 49				1	45	
52	MSV 7457	16 06 02	15 01 12	02 09 49					720	443
53	"			02 22 21					722	411
54	"			02 34 53					720	360

Spectr. Temp. Dome Temp./Hum. Transparency Conditions *o.k.* 12.

Focus *6.81*

Spectr. Temp. Dome Temp./Hum.

Exp. Mtr. <i>1000 V</i>	Seeing	P. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>no filter</i> 1800	3"			CASS	1800 46.9	306	5784A	20ci			
1375								21			
1280								22			
								23			
								24			
5K	3"	508	F8II-V					25	std vel		2.8 K
								26			
								27			
4.4K	2-3"	6.6	d48					28	std vel		3.2 K
								29			
								1		<i>~ 3.642</i>	
								5			
443	2-3"	9.5	40					6	ORL		
411								7			
360								8			

#5 13

Date 1997 May 26/27

Observers

$$L_u / T_n$$

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.
cc45935	comp			02 49 58				FeAr ND #3	45
56	NSV 7457	16 06 02	50 11 12	02 49 55					721
57	NSV 7457	"	"	03 02 17					722
58	"	"	"	03 14 49					720
59	Comp			03 28				"	4
60	BTAS (4)			03 28					
61	Comp							"	4
62	SV Equ	20 57 19	+05 48 52	03 33 18					722
63	Comp							"	4
64/65	Inb/out B								4/6
66/72	Flats								
73	BTAS (4)			03 52					

#1 15 Tues / Wed

Date 1947 May 27/28... Observers Lu / 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.	Exp. Mtr.
CC457 ^{74/} 75	Inboard / out Board					0	+41°	Fetr ND3	4/6	120V No. 5/16
76	BIHS(A)			20 27						
77	Comp							Fetr ND3	45	
78	HD 102870	11 45 29 ¹⁴⁰⁰	70 21 42	20 34 55					51	88K
79	Comp							"	45	
80	comp							"	45	
81	U2 Leo	10 40 33 ²⁰⁰⁰	13 34 00	20 54 44					900	900
82	"	"	"	21 10 10					900	880
83	Comp							"	45	
84	BIHS(A)			21 27						
85	comp							"	45	
86	X2 Leo	10 02 34 ²⁰⁰⁰	17 02 46	21 33 31					921	722
87	Comp							"	45	
88	Comp							"	45	
89	V2 Lib	15 31 53	-15 41 06	21 56 46					900	773

CCD Spectr. Temp. -102.0°C

Dome Temp./Hum. $+13.3^{\circ}\text{C}$ 426211

Transparency Conditions ... Fine ts/ly hly. 7624 16

Focus 6.78

CCD Spectr. Temp. -100.7°C

Dome Temp./Hum.

390 0 50 1074 4 1 CCD Fmt

Exp.	Exp. Mtr.	Seeing	P.M. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4	1000V no filter	Did	mirror	-	1st try for this to match inb/outb exp strengths		300u	5184A	3/4	focus test		
									1	Aug 133.850	$\sigma = 3.328$	
5									5			6K
5	78K	3"	361	F9V					6	std br/		5.7K
3									7			
3									8			
9	900	2.3	9.8	F2					9	DRL		
9	880								10			
3									11			
									1	Aug 133.946	$\sigma = 3.282$	
3									12			
9	722	2"	10.6	A5					13	DRL		480
3									14			
3									15			
9	373		10.1	F5					16	DRL		

Date 1997 May 27/28

Observers

$$L_{ee}/T_n$$

Emulsion Batches:

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[illegible]

Transparency Conditions Fine + slightly lazy 18

Exp. Mtr.	Seeing	Flt. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
100	355		10.1	FS	CASS CCD	1800 $\frac{1}{mm}$ 46.9	306 μ	5184	17	DRL	
45									18		
									1		
100	319								19		
100	306								20		
45									21		
100	303	2'							22		
45	310								23		
45									24		
45									2		11.6K
									1	Aug 132.717 $\sim$ 3.30	
									25		
100	4K		6.66 4.46	d48 d48					26	std vel	

p9#3 19

Tues/Wed

Emulsion Batches:

Date ..1997... MAY.27/28 Observers ..L.G./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.
CG0868/4	HD144 579	16 01 30	+39 24 00	All, at default centering of 160x				4x	67ms
72/75	PARK x4			and with same Intensified setting				4x	67ms
76/77	PARK x2							2x	133ms
78/79	HD144579	"	"					2x	133ms
CC45810/11	Tab / on Board HARTMAN							FEAR ND4	4/5
12	Comp	2000						FEAR ND5	4s
13	V361 Lgr	19 02 29	+65 58 42	02 02 51					1500
14	Comp							"	4s
15	BIAS (4)			2:30					
16	V 361 Lgr	"	"	02 31 36					1510
17	Comp							FEAR ND5	4
18	V361 Lgr	"	"	02 59 32					1500
19	comp								
20	comp	1900							4L
21	HD182572	19 20 12	11 43 49	03 32 54					50

Spectr. T.

Focus

Spectr. T.

Exp. Mtr.

+16

1000V

100 f/16

94

93

88

73

50

Spectr. Temp. Dome Temp./Hum. $+12.1^{\circ}\text{C}$ 42F8H Transparency Conditions Fine 20
 Focus 6.78
 Spectr. Temp. Dome Temp./Hum.
 256 0 50 1024 4 1 CCD FMT

Exp. Mtr.	Seeing	Pk. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	1.2"	6.66	d68		Above 36k slit					Seeing Test, ALT 83°02', No wind at all Dome west No Funs tonight,	
	$+12.0^{\circ}\text{C}$	F=6.81		CASSED	831 in/in	36k	6265A	1/2		Note. upon grating changed MAX	
	1000V			Tgrating	now @	33.46		3		The grating tilt mount became jammed and clump had to	36k
	94	1.4?	136	K?	FOROR SAME centering			4		Be removed and re bolted	
					as 33.40 gave			5		on to free grating.	
					PREVIOUS 831 in night						
					CCD FMT windowing "Y origin"			1		avg 132.087 σ 3.398	
					some what different too.			6			
								7			
								8			
								9			
								10			
	2.3										
	5K	1"	5.16	47IV					std vel		

Date 1997 May 27/28

Observers

$$L_a / T_n$$

Emulsion Batches:

[illegible]

#1 23 Wed 1/Thurs

Wen Lu that is.

Date 1997 MAY 28/29 Observers WXL (LH) / J.N....

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.
CC458 ^{32/} 33	In board / out board	HARTMANN						FEAR NO 3	4/7
34	BIAS(4)			20 28					
35	Comp							FEAR NO 3	15
36	GR Vir	14 45 20	-06 44 06	20 32 12					480
37	"	"	"	20 40 32					480
38	"	"	"	20 49 08					480
39	comp							"	45
40	GR Vir	"	"	20 59 56					480
41	"	"	"	21 08 20					480
42	"	"	"	21 16 47					480
43	"	"	"	21 25 33					480
44	comp							"	45
45	BIAS(4)			21 35					
46	GR Vir	"	"	21 36 25					480
47	comp							"	45
48	COMP								

COP
Spectr.

Focus..

Spectr.

Exp. Mtr.

1000 V

110 f/14

980

620

570

696

380

380

187

351

Spectf. Temp. ^{COD} -100.7 °C Dome Temp./Hum. 115.0 °C 40.0% H Transparency Conditions Part Cloudy 24

Focus 6.75

Spectr. Temp. Dome Temp./Hum. 396 0 50 1024

Exp. Mtr.	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000 V no filter				C 455 CCD Typing →	1800 In 46.9	306	5789A	3/4	Focus test		
								1		136032 0 3138	
								5			3K
980	2.3'	8.5	40					6	DRL		
620								7			
532								8			
								9			
696								10			
380								11			
380								12			
387								13			
								14			
								15			
351								16			
								16			

Pg#2 25 Wed / Thurs

Date 1997 MAY 28/29 Observers WXL/T.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.
CC45849	NSV 7457	16 0602	+50 1112	21 5945					900
50	"	"	"	22 15 35					900
51	comp							FeAr ND3	4s
52	BIAS(4)			22 32					4s
53	NSV 7457	"	"	22 34 57					900
54	"			22 50 29					900
55	Comp							FeAr ND3	4s
56	NSV 7457	"	"	23 09 21					420
57	comp							"	4s
58	Comp							"	4s
59	HD 144579	16 0130	+39 2400	23 3507					416
60	comp							"	4s
CG80880/84	HD 144579	"	"					4v	67ms
85/89	DARK							"	"
90/91	"							2x	133ms
92/93	HD 144579					005E		"	"

Spectr. T

Focus...

Spectr. T

Exp. Mr.

1000/1

155

212

205

187

138

200

Spectr. Temp. Dome Temp./Hum. $+13.3^{\circ}\text{C}$ 42.4% Transparency Conditions *increasing... cloud... 2.6*

Focus *6.75*

Spectr. Temp. Dome Temp./Hum. *396 0 50 1024 4 1 CCD Faint*

Exp. Mtr.	Seeing	PV Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>1000V</i> 155	1.2'	9.5	GO	<i>CAS CCD</i> <i>grating -></i>	<i>1800m</i> <i>46.9</i>	<i>306</i>	<i>5184</i>	<i>17</i>			
212								18			
								19			
								1		<i>134.568 or 3.106</i>	
205	1.5'							20		<i>cloudy here</i>	
182								21			
								22			2.7K
138								23			
								24			
								25			7K
200	2"	6.66	dG8					26	<i>std vel</i>		
								27			
	1.2'			<i>H11 with same ints setting</i>					<i>Seeing test</i>	<i>ALT 85°</i>	

P4#3 27

Emulsion Batches:

Date 1997 MAY 28/29 Observers WxL/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.
CC45861	B1A5(4)			2349					
62	Comp							FEA ND3	45s
63	NSV 7457	160602	1501112	235659					720
64	"	"	"	000927					730
65	comp							"	45
66	comp							"	45
67	HD136202	151412	020837	003038					276
68	comp							"	45
69	comp								
70	HD172167	183333	+384126	00					35
71	"	"	"	004744					32
72	Comp								
	Comp								
	SV Equ	205719	+054652	005958					1104
73/79	FLATS X7					3 20E	+6°	JUNG ND3	75

Spectr. T.

Focus...

CCD
Spectr. T.

Exp. Mtr.

190

49

2.9K

1/4K

1/2K

Spectr. Temp. Dome Temp./Hum. $+12.3^{\circ}\text{C}$ 45.0% Transparency Conditions *P.A.T. Cloudy* 28...
 Focus 6.75
 Spectr. Temp. ^{CCP} -100.6°C Dome Temp./Hum. $+12.1^{\circ}\text{C}$ 43.9%
-7 Mostly so.

Exp. Mtr.	Seeing	Pk. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS Tyrdening	1800ln 46.9	306u	518AP	1			
								28			
190	2'	9.5	GO					29	DRL		
149								30	DRL	cloudy very low counts.	
								31			
		5.06	P8II-IV					5			
2.9 K								6			2.4
								7			
								8			
~14K			0 AOV					9			13K
~12K								10			14K
								11			
								12			
								13		Too cloudy.	
								2			11.4K

Date 1997 May 28/29

Observers

$$L_u / T_n$$

Emulsion Batches:

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[illegible]

^{CCD}
Spectr. Temp. ... -100.5 °C

Dome Temp./Hum. ... 12.0 °C / 43.8 %

Transparency Conditions ... medium cloud ... 30

Focus ... 6.75

Spectr. Temp.

Dome Temp./Hum. ... 11.5 °C 46.9 %

396 050 1024 4 1 CCDfMT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 / mm 46.9	300u	5184	15			
402	2'43"	9.0	A0					16		clouds in	
								17			
								1			
								18			
215		10.1	A6V					19			
211								20			
								21			
								22			
1850	2-3	5.11	F8					23			
								24			
								1			

#1 31 Tues/Wed

Emulsion Batches:

Date .. 1997. June 3/4. Observers .. M.K.I. / J.N. t. P.r. = SARA POIRIER

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 45892/93	Inboard / outboard								
94	B1A5(4)			20 55					
95	Comp							FeAr ND4	4s
96	HD 87901	10 0303	+122722	21 0059					13s
97	Comp							"	4s
98	Comp							"	4s
99	HD 171232	182830	+252500	21 1648					34s
45900	Comp								
01	B1A5(4)								
02/07	FLATS x 6					04 30E	+25 29	TUNG ND5	4s
08	Comp							FeAr ND4	4s
09	S92 NGC6819	19 4103	+40 1100	21 5114					162s
10	Comp								4s
11	S92 NGC6819	19 4103	+40 1100	22 2410					88s
12	Comp								4s
13	B1A5(4)			22 42					

CCP
Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

No 4/12

6K

1.4K

123

50

Spectr. Temp. ^{CCD} -120.5°C. Dome Temp./Hum. +17.0°C 108H Transparency Conditions ... Fine ... then some haze

Focus 6.78

Spectr. Temp.

Dome Temp./Hum. 15.5°C 109H

CCD FWHM 385 0 50 1024 4 1

32

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter					1200L 4200 41.96	306	16520A ± 10A	3/4			MAX H04
								1		Using Fear. bat and Star. bat	
								5			2.4
6K								6	Telluric Std.		11.7K
								7			
								10			
1.4K		7.73	G8 III					11	std. vel	$\Delta \alpha -00 00 01$ $\Delta \alpha +00 01 15$	5.2K
								12			
								1			
								2		Aug 41.260 → 2.660	11.13K
								7			
123	2.3"	15.1						9		$\Delta \alpha 00 00 00$ $\Delta \alpha 00 01 03$	
								10			
60	2"							13		[Slit view Ideal] 2624 focusH	
								14		[2580 focus comp view]	
								1			

#2 33

Tues/Wed

Emulsion Batches:

Date 1997... June 3/4.... Observers ... M.K. / P.T. / 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.
CC45914	S92 NGC6819	194103	²⁰⁰⁰ +40 1100	22 49 10				Fel	1825
15	Comp							Fel ND4	4s
16	S92 NGC6819	"	"	23 24 18					1829
17	Comp								4s
18	BIAS(4)			23 57					
19	S92 NGC6819	"	"	00 00 01					1846
20	Comp							x	4
21	Comp							"	4
22	S92 NGC6819	"	"	00 56 22					1824
23	Comp							"	4s
24	BIAS(4)			01 32					
25	S92 NGC6819	"	"	01 35 42					1803
26	Comp							"	4
27	S92 NGC6819	"	"	02 10 02					1850
28	Comp.							"	4
29	S92 NGC6819			02 45 13					

Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

195

195

Exp. Mtr.

104

96

100

83

80

Spectr. Temp. Dome Temp./Hum. $\pm 15.3^{\circ}\text{C}$ 40284 Transparency Conditions ... improving 34.

Focus 6.78

Spectr. Temp. Dome Temp./Hum. 355 0 50 1024 4 1 CCD FMT

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
no filter 195	1-2"	151		CASSCO Tgating	1200/n 41.96	306	~6500	150		some haze	
Exp meter was in				Good Balance. No adjustment needed.				16		DS-00 0003 AS-00 0115	
109	1.2"							17		(2622 idal focus)	
								18			
								1			
96	1.0"							19		haze again	
~100?	1.2"							20		(Break for filming)	
								21		(Wawa Networks)	
								22			
								23			
								1		136762 ~2.917	
83								24			
								25			
~80								26			
								27			
								28			

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions ... *Part 1 Only* 36

Focus.....6.78.....

Spec. Temp. -100.7°C .

Dome Temp./Hum. $+14.0^{\circ}\text{C}$ 41.7%RH

53

pg#1 37 Wed Thurs

Date 1997 June 4/5... Observers M.Ki./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.
CC45947/48	Inboard / outboard								4/7
CC45949	BIAS(4)			20 14					
50	Comp							FeAr ND4	45
51	HD 87901	10 03 03	+12 27 03	20 32 19					11
52	Comp							v	45
53	Comp							"	45
54	HD 102 870	11 45 29	+02 19 42	20 42 45					42
55	Comp							"	45
56	BIAS(4)								-
CG80895/99	HD 120 245							4x	67ms
CG80900/902	DARK							4x	67ms
904/05	DARK							2x	133
06/07	HD 120 245							2x	133
CC45957	Comp							FeAr ND4	45
58	HD 171232	18 28 30	+25 25 00	21 20 10				-	488
59	Comp							"	45

COP
Spectr. Temp. -100.5°C

Dome Temp./Hum. 7198° 3607A

Transparency Conditions ... P.A.T. Only 38.

Focus ... G.74

Spectr. Temp.

Dome Temp./Hum.

C 2 955 0 50 1024 4 / CCD FMT

Exp. Mtr.	Seeing	Pl ⁺ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10 f. 1122 1020V				CASS Typing	1200 l/m 41.96	306u	6520A	3/4	Focus test		
								1		AUG 14, 584 0 2.747	
								5			
6K		1.35	B7V					6	Telluric Std.		12K
								7			12K
								8			
6.8K		3.61	F9V					9	std vel	Tranted: 2 peaked profile	10.7K
								10			
								1		1.17 84°	
					ABae	306u	slit		seeing test		
										AIT 84°	
										Dome WSW	
								11			
10.7K	2"	7.73	G8IV					12	std vel		
								13			

pyd 2 39 Wed 1 Times

Emulsion Batches:

Date 1997 June 4/5 Observers M.K.I. / 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.
CC45960/69	FLATS x10							TUNG ND 5	45
70	Comp							REAR ND 4	45
71	S92 NGC 6819	19 41 03	+40 11 00	21 45 48					158
72	Comp							"	45
73	S92 NGC 6819	"	"	22 18 17					138
74	Comp							"	45
75	BIAS(4)			22 49					
76	S92 NGC 6819	"	"	22 51 20					1801
77	Comp.							"	45
78	S92 NGC 6819	"	"	23:25:16					1803
79	Comp							"	45
80	S92 NGC 6819	"	"	23 57 26					1840
81	Comp							"	45
82	BIAS(4)			00 30					
83	S92 NGC 6819	"	"	00 31 43					1800
84	Comp							"	45

Spectr. Temp. Dome Temp./Hum. $+13.8^{\circ}\text{C}$ 3808/H Transparency Conditions ... Part Cloudy ... 40
 Focus 6.74
 Spectr. Temp. Dome Temp./Hum. $+16.0^{\circ}\text{C}$ 4248/H

Exp. Mtr.	Seeing	Pr. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				C455	1200 H 41.96	306	6520A	32			11K
								11			
158	12"	15.1						13		hazy 1.72 A.R. mag	
								14		Δ 000001	
138								15		Δ 000006	
								16			
								1			
123								17			
								18			
122	12"							19			
								20			
112	12"	15.1						21			
								22			
								1		avg 139313 ~ 2.840	
105	1"							23			
								24			

Pg #3 41 Wed 17 June

Emulsion Batches:

Date 1997 June 4/5 Observers M.T.I. / T.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.
CC45985	S92	19 41 03	+40 11 00	01 24 10					188
86	Comp.							EA ND4	
87	S92			01 40 28					184
88	Comp							"	45
89	BIAS (4)			02 10					
90	S92			02 14 11					1808
91	Comp							"	45
92	S92			02 46 10					184
93	Comp							"	45
94	Comp							"	45
95	HD 187 891	19 00 19 46 14	+10 07 55	03 22 26					127
96	Comp							"	45
97	BIAS (4)			03 26					
98/99	Inb / out								4/7

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions ...

Hazy

42

Focus ... 6.74

Spectr. Temp. ... -100.6°C

Dome Temp./Hum. ... +15.0°C 43.4% H

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
110		151		CASS	1200 In 41.96	306	6520A	26			
								27			
110	1.2"							28			
								29			
								2			
107	2"							2		thin cloud	
								5			
110	2.3"							6			
								7			
								8			
43K		511	F8V					9	std def		
								10			
								1			
								3/4	focus		

Spectr. Temp. 100.6°C Dome Temp./Hum. ... $+18.4^{\circ}\text{C}$ 49.8% Transparency Conditions ... *Hazy* *44*
 Focus *6.70*
 Spectr. Temp. Dome Temp./Hum. ... $+15.5^{\circ}\text{C}$ 56.5% *90c gain*
390 050 1024 4 1 CCD FWH

Exp.	Exp. Mtr.	Seeing	Ph. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>1/4</i>	<i>1000V</i> <i>1051/100</i>				<i>CASS CCD</i> <i>1800/4</i> <i>Tgrating</i>	<i>1800/4</i> <i>7 47.72</i>	<i>306</i>	<i>5290A</i>	<i>3/4</i>	<i>focus Test</i>		
									<i>1</i>	<i>Aug 142.143</i>	<i>0.2.745</i>	
<i>3</i>									<i>5</i>			<i>5.2K</i>
<i>7</i>	<i>1390</i>	<i>4.6"</i>	<i>748</i>	<i>M2</i>					<i>8</i>	<i>SKy</i> <i>DIARcy std</i>	<i>Too Bright for fainter stars still</i>	<i>1900</i>
<i>8</i>									<i>9</i>			<i>5.6K</i>
<i>8</i>									<i>6</i>			
<i>7</i>	<i>440</i>	<i>3.5"</i>	<i>105</i>	<i>M0</i>					<i>7</i>	<i>Vys 640</i>	<i>~ 200 406</i> <i>Hare Ries</i>	
<i>3</i>									<i>10</i>			<i>5.7K</i>
<i>3</i>									<i>11</i>			
<i>1</i>	<i>255</i>	<i>3"</i>	<i>11.5</i>	<i>M</i>					<i>12</i>	<i>Vys 138</i>		
<i>3</i>									<i>13</i>			
<i>3</i>									<i>1</i>	<i>Aug 139.163</i>	<i>~ 2.726</i>	
<i>3</i>									<i>14</i>			
<i>1</i>	<i>278</i>	<i>3"</i>	<i>11.3</i>	<i>M2</i>					<i>15</i>	<i>Vys 44</i>		
<i>3</i>									<i>16</i>			

pg#2 45

Thurs/Fri

Date ... 1997 June 5/6 Observers ... E. V. S. J. / T. 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.
CC46016	Comp							FeNo ND5	3s
17	HD144579	16 0130	+392400	23 0810					375
18	Comp							"	3s
CG80908/11	HD144579	"	"					4x 67mm	
12/15	DARKs			De fault	Box and			4x 67mm	
16/17	"			no Intensifier charge				2x 133mm	
18/20	HD144579							3x 133mm	
CC46019	Comp							FeNo ND5	3s
20	HD119850	13 40 36	+152700	23 4350					765
21	Comp							FeNo ND5	3s
22	B/H/S (4)			00 01					
23/29	FLA15X8					3W	+15°	TMAG ND4	1/5
30/31	Inb / out Board					"	"	FeNo ND4	6/4

Spectr.

Focus..
CD
Spectr.Exp. Mir.
100V
10 1/2 / 100

14K

Spectr. Temp. Dome Temp./Hum. Transparency Conditions . Part. Cloudy 46

Focus 6.70

Spectr. Temp. -101.7°C

Dome Temp./Hum. +14.7°C 58.7% H

MAXADK

Exp. Mtr. 1000 V	Seeing	Pr. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASSCO	1800 L 47-72	306	5298A	17			
1.7K	3"	666	d68					18	stdvel	Reg. ha IAU one	109K
								19			
					ABare	306	SLIT		Seeing test	ALT +85°	
		666	d68							No wind, some WSW	
								20			
1.4K	3.4"	848	M1					21	magy stdvel		900
								22			
								1			
								2			14.9K
								3/4	Focus	R.g. 40 on	

pg#1 47 Sun/Mon

Date 1997 June 8/9 Observers W x L / 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.
CC460 ^{31/33}	Inboard / out BOARD							REAR ND 3	4 1/2
34	Comp							REAR ND 3	4s
35	HD161096	17 38 32	+09 36 32	233541					163
36	comp							n	4s
37	BIDS (4)			2340					
CG809 ^{21/24}	HD144579	16 01 30	+39 24 00	000 00				4x	67ms
25/26	DARKS							4x	67ms
24/30	DARKS x2							2x	133
31/32	HD144579					201W	ALT 80°	2x	133
CC46038	Comp							REAR ND 3	4s
39	HD144579	16 01 30	+39 24 00	001209					210
40	Comp							n	4s
41	Comp							n	4s
42	SV Equ	²⁰⁰⁰ 20 57 19	05 48 52	0024 06					960
43	"			00 41 34				REAR	999
44	Comp								4s

COP
Spectr.

Focus

Spectr.

Exp. Mtr.
100 V

100 f/100

1710

1800

356

523

Spectr. Temp. ... 100.5°C ... Dome Temp./Hum. $+17.5^{\circ}\text{C}$ 73.2% Transparency Conditions ... *Clouding partially* ... 48
 Focus ... 6.70 ... $+166^{\circ}\text{C}$ @ 23:30
 Spectr. Temp. ... Dome Temp./Hum. $+16.2^{\circ}\text{C}$ 74.8%

390 0 50 1074 4 1 CC0 FWT

Ex	Exp. Mtr. 1000 V	Seeing	Pk. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4/2	no filter				CHS 000 Tyrating →	1800m 4706	306	5182A	3/4	Focus		
4/3									5			
4/3	1710	2.77	K2 III	CN 0.5					5	stellar	Beta Oph	
4/3									7			
4/3									1		AUG 139.791 ~ 2.979	
4/3		6.66	d68	ABare	3064 slit					Seeing Test	mostly cloudy	
4/3										Dome west,	Light NE wind.	
4/3												
4/3											now clearer,	
4/3									8			
4/3	1800	2	666	d68					9	stellar		
4/3									10			
4/3									11			
4/3	356	9.0	A0						12		through clouds	
4/3	523								13			n 500
4/3									14			

Spectr. Temp. Dome Temp./Hum. 715.9°C 75.6% H Transparency Conditions ... Mostly Clear 50

Focus 6.70

Spectr. Temp. -100.6°C

Dome Temp./Hum.

Exp. Mtr.	Seeing	P ₁ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
1000V				C455CCD	1800 μ 17.06	30 μ	5782 $\text{\AA}$	1			
644	2"	9.0	A0					15			
582								16			
								17			
								18			
251	1-2"	10.3	A6V					19			
238								20		Frequent encoder logs for KK Encoder study	
								21			
								1			
259	1-2"							22			
								23			
								24			
514		8.7	F8V					25			
495	2-3"							26			
								27			

Date 1997 June 8/9 Observers Lu/Tn

Emulsion Batches:

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[illegible]

Pg#1 53 Mon/Tues

Emulsion Batches:

Date 1997 June 9/10. Observers WxL/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.	
CC460 ^{72/82}	BIAS(4)			2017					
73/84	Inboard / outboard							FeAr NO3	4/7
75/81	Comp FLATS x 7					01 46W	+01 47	FeAr NO3	7s
82	Comp							FeAr NO3	4s
83	H0102870	11 4529	+021942	20 4325					161
84	Comp							"	4s
85	BIAS(4)			20 55					
86	Comp							"	4s
87	XZ Leo	10 0234	+170246	21 0113					900
88	"	"	"	21 17 44					800
89	comp							"	4s
90	XZ Leo	"	"	21 33 22					992
91	Comp							"	7s
92	Comp							"	4s
93	GK Boo	14 35 03	+090654	21 5451					720

CCD
Spectr. Temp. -100.5°C

Dome Temp./Hum. ... +21.6°C 52.9% H

Transparency Conditions Hazy 54

Focus 6.70

Spectr. Temp.

Dome Temp./Hum. ... +20.2°C 57.0% H

90 c/gain as usual
390 0 50 1024 4 1 CCDFWT

Exp. Mtr.	Seeing	M. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
HO f.1100				CHSS CCD "Type 1" →	1800 1/4/mm 47.06	306	5182A	1			
								3/4	focus test		
								2			11.2K
								5			
4.7K	2"	3.61	F9V					7	std vel	sky still slightly bright	
								8			2.6K
								1		Avg 146284 σ 2.705	
								9			
480	2"	10.6	A5					10	bright sky	Encoder Dec error a bit OUTJ +00.0054	
282								11		should be negative	
								12		Field checks out OK	
317	2.3"	"	"					13			
								14			
								15			
552	1.3"	9.8	F8					16			~ 500

pg #2 55 Mon/Tues

Date 1997 June 9/10 Observers Na (W.L.) / 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.
cc46094	CK Boo	14 35 03	09 06 54	22 07 20					720
95	"	"	"	22 19 45					720
96	comp							FeAr ND#3	4c
97	BIAS(4)			22 33					0
98	Comp							"	4c
99	HD144579	16 01 30	139 24 00	22 38 25				"	4c
100	Comp							"	4c
CG809336	HD144579	"	"	22 48				4x	67ms
37/40	DARKS x 4			All with default Box (windowing) And same Intensifier setting.				4x	67ms
41/42	DARKS x 2							2x	133ms
43/45	HD144579	"	"			0 16 E		2x	133ms
CC46101	Comp							FeAr ND3	4c
02	V839 Oph	18 09 21	09 09 04	22 58 27					720
03	"	"	"	23 11 25					720
04	comp							"	4c

Spectr. T.
Focus...
Spectr. T.

Exp. Mr.
NA V
no FeAr

536

542

238

440

459

Spectr. Temp. Dome Temp./Hum. $+19.7^{\circ}\text{C}$ 59.48°H Transparency Conditions Hazy 56
 Focus 6.70 22°EST Pearson Airport Wind NW 6 Kms/hr Rising Pressure
 Spectr. Temp. Dome Temp./Hum. 39.0 0.50 1024 41 CCD PMT 102011 Kpescops

Exp. Mtr. No. 60/100	Seeing	P. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
536	2"	9.8	F8	CASS CCD Tyro May $\rightarrow$	18.00h 47.06	306u	51828	17			
542								18			
								19			
								20		Avg 14.969 ~ 2.815	
235	2"	6.66	d68					21	Std Vel		1.74
								22			
				ALT: 84° Above		306u	Slit			Seeing test Done WSW	
				$\sim$ MAX 9						No furs, NW wind 6 Kms/hr	
				$\sim$ MAX 10						(Feels like light breeze)	
# 44	saturated										
								23			
440	8.9	8.7	F8V					24			
459	2.4							25			
								26			

#3 57 Mon/Tues

Date 1997 June 9/10

Observers

Lu/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.
CC46105	BIAS(4)		(2000)	23 25					
06	V839 Oph	18 09 21	09 09 04	23 26 58					720
07	"	"	"	23 39 33					721
08	comp							FeAr ND3	4s
09	V839 Oph	"	"	23 53 36					733
10	"	"	"	00 06 37					720
11	comp							"	4s
12	V839 Oph	"	"	00 20 29					780
13	"	"	"	00 34 03					900
14	comp							"	4s
15	BIAS(4)			00 50					0s
16	V839 Oph	"	"	00 51 51					794
17	"	"	"	01 05 38					800
18	comp							"	4s
19	V839 Oph	"	"	01 20 40					755
20	comp							"	4s

CCD
Spectr. T.Focus
Spectr. T.

Exp. Mtr.

458

451

466

364

354

286

304

290

475

CCD -100.5°C
Spectr. Temp.

Dome Temp./Hum. 19.0°C/62.2%

Transparency Conditions Hazy 58

Focus 6.70
Spectr. Temp.

Dome Temp./Hum. 18.5°C/57.5% H

increasing cloud

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CCD CASS	1800 ^{1/4} 47.06	306 _μ	5182	1			
458	3'-4"	8.7	F8V					27			
451								28			
								29			
466	3'							30			
364								8		some clouds	
								9			
354								10			
286								11		cloudy very low signal	
								12			
								1			
304								13			
290								14			
	3'							15			
425	3'-4"							16			
								17			

CCD
 Spectr. Temp. -100.6°C Dome Temp./Hum. $+18.6^{\circ}\text{C}/56.8\%$ Transparency Conditions Hazy, but better 60
 Focus 6.7
 Spectr. Temp. -100.7°C Dome Temp./Hum. $+18.3/54.5\%$

Exp	Exp. Mtr.	Seeing	Pls. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4 _s	1000 V no filter				CASS CCD	1800 /mm 47.06	306 μ	5182	18			
1200	580	2.4"	9.0	AD					19			
4 _s									20			
									1			
4 _s									21			
900	167	2"	10.5	Ab					22			
900	160								23			
4 _s									24			
900	205								25			
900	225	2"							25			
4 _s									26			
									1			
4 _s									27			
15	4580		5.11	F9V					28			
4 _s									29			

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Tues / wed

Emulsion Batches:

Date ... 1997. June 10/11. Observers L.H./T.H.

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.
CC46 ¹³⁶ / ₃₇	Inboard / outboard	Hartmann						FEAR ND3	4/7
38	BIAS (4)			20 43					
39/46	FLATS x 7					0200W	+2°	TUNG ND3	7s
48	Comp							FEAR ND3	4s
47	HD 102870	11 4529	+02 19 42	20 49 21					6s
49	"	"	"	20 51 05					63
50	Comp							"	4s
51	Comp							"	1s
52	XZ Leo	10 02 34	+17 02 46	21 03 28					900
53	"	"	"	21 19 02					900
54	"	"	"	21 34 17					900
55	Comp							"	4s
56	BIAS (4)			21 50					
57	Comp							"	4s
58	FO Vir	13 29 47	+01 05 48	21 54 48					666
59	comp							"	4s

CCO
Spectr. I

Focus..

Spectr. I

Exp. Mtr.

No. f/No.

+22

75K

65K

482

325

47K

CCD Spectr. Temp. -100.5 °C Dome Temp./Hum. +22.6°C 41.7% H Transparency Conditions ... mostly clear 62

Focus 6.67

Spectr. Temp. Dome Temp./Hum. +21.2°C 43.1% H

390 0501024 41 CCD ENT 2 MAX

Exp. Mtr. 1000 V	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter +22.3°C				CASS CCD Tgrating shift	1800 lines/mm 47.06	306	5182R	3/4	focus test		
								1			
								2			11.3K
								5			
7.5K		361	F9V					6	stalled		8.3K
6.5K								6	+		
								7			
								8			
482	2"	106	A5					9	bright sky		
328	2'3"	"	"					10			
								11			
								12			
								1		Avg 148.238 σ 2.431	
								13			
4.7K	2.4"	6.7	A2					14		~200/1 S/N	4K
								15			

pg# 2 ⁶³ Tues/Wed

Date 1997 June 10/11... Observers Lu / 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.
CC46160	FO Vir	13 29 47	01 05 48	22 07 32					632
61	Comp							FeAr H103	4
62	Comp							"	4
63	HT Vir * ^{NOT 2000}	13 46 07	10 50 57	22 24 31					300
64	Comp							"	4
65	Comp							"	4
66	HD 144579	16 01 30	13 9 24 00	22 37 05					451
67	Comp							"	4
68	B/H S (4)			22 47					0
CG 80946/50	HD 144579	"	"	22 46				* Bx	67ms
51/54	DARKS x 4							4x	67ms
55/57	DARK x 3							3x	133
58/59	HD 144579							2x	133
CC46169	COMP							FeAr H103	
70	V 839 Oph	18 09 21	09 09 04	23 00 03					720

Spectr.

Focus..

Spectr.

Exp. Mtr.

44k

12/2

42k

1st

581

Spectr. Temp. Dome Temp./Hum. $+21.0^{\circ}\text{C}$ $+34.8\%$ Transparency Conditions ... Hazy...slightly...64
 Focus 6.67
 Spectr. Temp. Dome Temp./Hum.
 Reason wind W 6 km/hr 101.76 Kpaels
 @ 22 EST und falling

Exp. Mtr.	Seeing	P.K. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000V											
44K	23"	6.7	A2	CAS CCD Tyranny →	1800 In/deg 47.06	30μ	5182A	16.1			
								17			
								18			
1270	3-2"	7.16	40					19		For constellation	
								20			
								21			
4.2K	6.66	6.8						22	std Vel		
	6.66	6.8						23			
								1			
* 1st one Blank				Above	306μ slit				Seeing test	Dome WSW ALT 840 NE FAN ON	
								24			
581	2-3"	8.7	F8V					25			

#3 65 Tues/Wed
Date 1997 June 10/11

Observers Lu/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.
cc46171	V839 Oph	18 09 21	09 09 04	23 12 49					720
72	comp							FeAr ND #3	4s
73	V839 Oph	"	"	23 26 55					720
74	"	"	"	23 39 23					720
75	comp							"	4s
76	B1A5 (4)			23 53					
77	V839 Oph	"	"	23 54 37					720
78	"	"	"	00 07 06					731
79	Comp							"	4s
80	V839 Oph	"	"	00 21 49					721
81	"	"	"	00 34 10					728
82	Comp							"	4s
83	V839 Oph	"	"	00 49 17					720
84	"	"	"	01 01 53					720
85	comp							"	4s

CC
Spectr. I.
Focus..
Spectr. I.

Exp. Mtr.

656

673

738

774

820

770

787

779

737

CCD
 Spectr. Temp. -100.5°C Dome Temp./Hum. $20.3^{\circ}\text{C}/45.4\%$ Transparency Conditions clear 66.
 Focus 6.67
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
720	656	2"-3"	8.7	F8V	CASS CCD	1800 $\frac{1}{\text{mm}}$ 47.06	306 μ	5182 Å	26		
720								27			
720	673							28			
720	778							29			
720								30			
720								1			
720	774							5			
720	820							6			
720								7			
720	770	2"-4"						8			700
720	787							9			
720								10			
720	779	2"						11			
720	737							12			
720								13			

#4 67

Date 1997 June 10/11

Observers Le / T_n

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.
cc46186	BIAS (4)			01 16					0 _s
87	V839 Oph	18 09 21	09 09 04	01 17 38					720
88	"	"	"	01 30 19					720
89	comp							FeAr ND #3	4s
90	V839 Oph	"	"	01 44 30					720
91	"	"	"	01 57 09					732
92	comp							"	4s
93	BIAS (4)			02 11					0 _s
94	Comp							"	4s
95	RZ Dra	18 23 06	158 54 18	02 18 26					1000
96	"	"	"	02 35 33					1000
97	comp							"	4s
98	RZ Dra	"	"	02 54 26					1000
99	comp							"	4s
20									

CCD
Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

697

620

488

469

300

277

326

70

Focus 6.67

Spectr. Temp.

Exp.	Exp. Mtr.	Secing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emission	P.H.	Program	Remarks	Quality
4					CIS	180°	306	5182A	25			
7	4.4K	5"	5.11	F9V					26	std vel		
8									27			
									1			

#1 71

Sun/Mon

Emulsion Batches:

Date 1997 June 15/16 Observers Lu/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.
CC462 ^{04/05}	Inboard/Outboard	HEATMANN						FeAr ND3	4 1/2
06	Comp							FeAr ND3	4s
07	HD 102870	714529	+021942	20 54 54					
08	Comp								
09	B115(4)			20 58					
10	Comp							FeAr ND3	4s
11	HD 125488	14 19 38	05 53 48	21 03 07					420
12	"	"	"	21 10 59					420
13	"	"	"	21 18 22					420
14	"	"	"	21 25 49					420
15	Comp							"	4s
16	HD 125488	"	"	21 34 56					480
17	"	"	"	21 43 25					420
18	"	"	"	21 50 54					420
19	"	"	"	21 58 21					420
20	Comp							"	4s

 CCD
Spectr.
Focus..
Spectr.

 Exp. Mtr.
1000
100 f/16

59K

1390

1170

1430

1240

730

800

1430

1580

CCD Spectr. Temp. -100.7°C Dome Temp./Hum. $+16.6^{\circ}\text{C}$ 5078H Transparency Conditions *Part cloudy* 72.

Focus ~~6.68~~ 6.68

Spectr. Temp. Dome Temp./Hum.

390 0 50 1024 4 1 CCD FMT

Exp. Mtr. 1000 V	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion 5182	P.H.	Program	Remarks	Quality
120 F/1.6				CAS CCD	1800A/nm	306 μ	5182 5182	3/4	focus test		
				T grating $\rightarrow$	47.06			5			5.7K
				Actual Angle $\sim$	47.1						
5.9K		3.61	F9V					6	std vel		5.7K
								7			
								1		14.492 $\sim$ 2.110	
								8			
1590								9	PRL		
1170								10			
1430								11			
1240								12			
								13			
730								14		through clouds	
800								15			
1430								16			
1580								17			
								18			

#2 73

Sun/Mon

Emulsion Batches:

Date 1997 June 15/16

Observers

Lu/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.
CC46221	BIAS(4)		2000	22 06					
22	HD125488	14 19 38	05 53 48	22 08 16					420
23	"	"	"	22 15 40					480
24	"	"	"	22 24 10					420
25	"	"	"	22 31 38					420
26	comp							FeAr ND#3	4s
27	HD125488	"	"	22 40 32					420
28	"	"	"	22 48 08					420
29	"	"	"	22 55 43					420
30	"	"	"	23 03 10					420
31	comp							"	4s
32	BIAS(4)			23 11					0
33	HD125488	"	"	23 13 05					481
34	"	"	"	23 21 38					482
35	"	"	"	23 29 07					543
36	"	"	"	23 38 34					420

CCD

Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

1370

750

1450

1130

1300

1320

1340

1130

920

838

888

CCD

Spectr. Temp. -100.5°C Dome Temp./Hum. $15.3^{\circ}\text{C}/54.5\%$ Transparency Conditions $\dots\dots$ fine $\rightarrow$ cloudy 74 Focus 6.68 Spectr. Temp. $\dots\dots$ Dome Temp./Hum. $\dots\dots$ 22 $\sim$ max ADU

Exp. Mtr.	Seeing	☒ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 $\frac{1}{\text{mm}}$ 47.06	30 μm	5182	1			
1370	2"-3"	8.1	F2					19	DRL		
750								20	DRL	through clouds	
1450								21			
1130								22			
								23			
1300	2.4"							24			
1320								25			
1340								26			
1130								27			
								28			
								1			
920								29			
—	2.3"							6			
838								7		cloud again	680
888								8			

Spectr. Temp. ^{CCD}... -101.0°C... Dome Temp./Hum. +135°C 6308H Transparency Conditions... PART Cloudy... 76

Focus... 668

Spectr. Temp. Dome Temp./Hum. 390 0 50 1024 4 1 CCDFMT

Exp. Mtr.	Secing	W. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASCCD	1800/1mm	306	5182A	9			3K
978	3.4	8.1	F2					10			
910								11			
770								12			
1000								13			
								14			
								1			
								15			
270	2.5	9.5	GO					16			
270								17			
								18			
								19			
678		9.6	A0					20			
								21			
								22			

Sp94 77 Sun/man

Emulsion Batches:

Date 1997 June 15/16. Observers L.J. / J.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.
CC46252	HD 187691	19 4614	+10 09 55	01 20 11					132
53	Comp								45
54	BIAS(4)			61 24					
CG809 ⁶⁰ / ₆₃	HD 176844	18 57 03	+40 32 36					4x	67
64/67	DARKS x4		All default Box & SAME Intensifier setting					4x	67
66/69	" x2							2x	133
70/71	HD 176844							2x	133
CC46255	Comp							Febr ND 3	45
56	CN And	2000 00 20 30	+40 13 36	01 49 30					900
57	"	"	"	02 05 39					900
58	Comp							"	45
59	BIAS(4)			02 22					
60	CN And	2000 00 20 30	+40 13 36	02 23 16					963
61	"	"	"	02 39 44					900
62	Comp							"	45

Spectr. Temp. Dome Temp./Hum. $+13.5^{\circ}C$ $64.5\%H$ Transparency Conditions ... *PART. Cloudy* 78.

Focus 6.68

Spectr. Temp. Dome Temp./Hum. *C2*

Exp. Mtr.	Seeing	PA. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
44K	.	5.11	F9V	C 1755 CCD	1800 In 47.06	306	5182A	23	std/vel		
								24			
								1			
	3'	6.65	M2 III	HAT 86-87		1800 306u slit			Seeing Test Done W		
										Light SSE wind	~ 85
											~ 90
								25ci			4+
338	4.5"	B- 10	B5					26			
350								27			
								28			3+
								29			
260	3.5"							29		Aug 136.84 or 2.554	
305								6		cloud again at end	
								7			

79 pg 5 Sun / Mon

Sun / Mon

Date 1997 June 15/16 Observers L.H. / T.H.

Emulsion Batches:

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Plate No.	Object	R.A. 1900 2000	Declination +1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC46263	CN And	00 20 30	+40 13 36	02 56 34				FeAr ND #3	900 4
64	comp							"	4
65	comp							"	4
66	HD 204867	21 26 18	+06 00 40	03 17 40					70
67	Comp								
68/74	FLATS x 7					~ 30E	-6°	TUNG ND 3	75
75	BIAS (4)			03 23					
76/77	Inboard / Out Board					00	~ 35°	FeAr ND 3	4/7

81

Tues / wed

Engineering

Date 1997 June 17/18 Observers Shen / Tn

Emulsion Batches:

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[illegible]

pg #1 83 Tues / wed

Date 1997 June 24/25. Observers .. Gld./In. # ... Karr = Jennika

Att = ATTARD

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.
CC462 ⁷⁸ /89	In board / out board HARTMANN					0	+46°	FEAR ND3	4/7
80	Comp							n	4
81	HD 125162	14 12 35	+46 32 51	20 59 03					100
82	Comp							n	4
83	Comp							n	4
84	HD 177724	19 00 49	+13 42 53	21 09 36					550
85	Comp							n	4
86	BHS (A)			21 20					0
87	Comp							n	4
88	BD+49 2317	14 40 17	+8 42 30	21 28 03					1800
89	Comp							n	4
90	BD+49 2317	"	"	22 0200					900
91	Comp							n	4
91	BD+49 2317	"	"	22 014.08					900
92	Comp							n	4

CCD
Spec. 10
Focus...
Spectr. 10
Exp. Mr.
no. 4/19
1000
After A
106K
1080
1020
915

Spectr. Temp. -110.7°C Dome Temp./Hum. $+19.6^{\circ}\text{C}$ 81.5% H

Transparency Conditions ... Part Cloudy ... 84

Focus 6.67

Spectr. Temp.

Dome Temp./Hum.

390 0 50 1024 41 CCDENT

Exp. Mtr.	Seeing	Plu. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000 After Aose Hay		HV		Tyring	51-58	200	5895 $\pm 5A$	3/4	focus test		
$\downarrow$								5			6K
5"	4.8 AOP							6			
								7			
								8			
10.6K	5"	299 AOV ₂						9	Telluric std (1.92 AIRMASS)		7.6K
								10		cloudy	
								1			
								11			
1060	5"-10"							12		7 70/1 S/N	
								13		Lightning in the west	
								14		will it show?	
1020	4"-6"							15		fast comp 15" W?	
915	4"-6"							16		over after	
								16			

Pg 40 85 Tues/Wed

Emulsion Batches:

Date 1997 June 24/25 Observers Gld. c. company / 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.
CC46293	BD+492317	14 40 17	2000 +48 42 30	22 37 34					1200
94	Comp							R/R H03	5
95	"		2000					"	4
96	BD+521826	14 45 57	+51 37 30	23 02 46					1800
97	Comp							"	5
98	BD+521826	"	"	23 35 17					1800
99	Comp							"	4s
446800	Bras (41)								0
301	Comp							"	4s
302	HD 151809	16 44 36	1900 +56 33 00	00 13 13					1800
303	Comp							"	4s
304	HD 151809	"	"	00 46 20					1600
305	comp							"	4s
	HD 151801	16 58 12	1900 +56 36 00						1
306	comp								
307	HD 154081	16 58 12	56 36 00	01 22 19					1000

CO
Spectr. T.

Focus

Spectr. T.

Exp. Mtr.

100%
90%

813

896

583

344

726

CCD
Spectr. Temp. -100.7°C....

Dome Temp./Hum. 7.19.0°C 84.6% H

Transparency Conditions ... Part. Clear ... Haze 86

Focus ... 6.6.7.....

Spectr. Temp.

Dome Temp./Hum.

390 0 50 1024 41 CCD FMT

Expt. Mtr.	Seeing	W. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000 V 904	3.5"	7.7	F0	Tygrating	1800 L 51.58	250	5895A	14	H1 claul pgm		
								15			
								16			
813	4.7"	8.7	A2					17		Ad = -00 00 10 Ab = +00 00 48	
								18			
896	3.6"	"	A2					19			
								20			
								1			
								21			
583	3.6"	9.5	B7?					22			
								23			
344	5.1"							24		cloudy M	
								25			
								26			
								26			
1726	6.6	A7						27		clouds	

PG #3 87

TUE/WED

Date 1997 JUNE 24/25... Observers Gld./Ta./Att./Kar..

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.
CC46308	COMP							FeAr #3	45
309	HD154081	16 58 12	58 36 00	02 41 05					9025
310	COMP							"	215
311	HD154081	"	"	02 58 13					7115
312	COMP							"	45
313	COMP	19 00 49	13 42 53					"	45
314	HD177724	19 00 49	13 42 53	02 15 50					135
315	"	"	"	02 18 49					126
	HD 196504	20 32 49	26 06 50						
316	COMP							"	45
317	Bias (4)								0
	HD 196504	20 32 49	26 06 50						
318	COMP							"	45
319	HD 196504	20 32 49	26 06 50						3005
320	COMP							"	45

CCD

Spectr. T.

Focus

Spectr. T.

Exp. Mtr.

1722

1743

10 090

10 010

2480

CCD Spectr. Temp. -100.7°C ... Dome Temp./Hum. $+18.2^{\circ}\text{C}$ 88.9% Transparency Conditions $\dots$ Hazy $\dots$ BB.

Focus $\dots$ 6.67 $\dots$

Spectr. Temp. $\dots$ Dome Temp./Hum. $\dots$

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
								28			
1722		6.8	43					29	HI cloud		
								11			
1743								12			
								13			
								14			
10090		2.99	A0V _n					15	Telluric Std	1.19 Air mass	
10080		"	"					16	"		
								17			
								17			
								1			
								18			
								18			
2480	4"	5.59	B9V					19	TELLURIC STD		
								20			

Pg #1 91 Wed/Thurs

Tec = Tracy Clark

Emulsion Batches:

Date 1997 June 25/26.... Observers G.I.d./Tec./Tr.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC463 40/41	Inboard / OUTBOARD	HARTMANN TEST						YEAR ND 3	4/7
42	BIDS (A)			21 03					
43	Comp							ND 5	4s
44	HD 149 757	16 31 39	+02 53	21 17 56					218s
45	"			21 24 05					334
46	"			21 30 48					190
47	"			21 35 21					93s
48	COMP							"	4s
49	COMP							"	4s
50	HD 177724	19 00 49	+13 42 53	21 42 12					58
51	Comp								
52	BIDS (A)			21 46					
53/58	FLATS x 6							Ferry ND 5	11s
59/60	Inb / OUTBOARD							FE 4n ND 3	4/7
61	Comp							FE 4n ND 5	4

C&D
Spectr.

Focus

Spectr.

Exp. Mtr.

1000V

No filter

1000

Sik

10/6K

10/6K

13K

CCD Spectr. Temp. $-$ e Dome Temp./Hum. $+24.8^{\circ}\text{C}$ 6228H Transparency Conditions Part Cloudy 92.
 Focus 0.65
 Spectr. Temp. Dome Temp./Hum. 390 0 50 1024 41 CCD Faint

Exp.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
47	1000V no filter				Cass CCD Typical $\rightarrow$	1800 1/4 in 56 FD	306u	6615A I 5A	3/4 1	Focus Test		
28	1000		2	0					5			
34	5.1k	3"							6		thru clouds	
34	10.6k								7		getting better	3.8k max
38	10.5k								8			
41									9			
41									10			
41									11			
53	13k		2.99	AQIR					12			6-5k
									13			
									1			
									2			13k
									3/4			
									1/4			4k

93 P92

Wed Thurs

Date 1997 June 25/26 Observers Gld/Tec/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.	
CC96362	HD177724								
63	Comp							FeA ND5	45
64	Comp							"	"
65	HD149757			22 1735					
66	Comp "								
67	Comp							"	45
68/73	FLATIS x 6							TUNG ND3	75
74	Comp							FeA ND3	45
75	HD149757	16 31 39	-10 21 53	22 2927					
76	"			22 3107					
77	Comp								
78	Comp								
79	HD177724			22 3712					
80	Comp								
81	BIHS(4)								
82/87	FLATIS x 6							TUNG ND3	1150

Spectr. Temp. Dome Temp./Hum. Transparency Conditions 94.

Focus

Spectr. Temp. Dome Temp./Hum.

STILL 390 050 102441 (CCDRT)

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
6.4k		6.70 focus	tyndall		600/10 26-10	25	4600	15			10K max
								16			
								17			11.2k (max)
12k		2.5						18		trailed	
8k								19		trailed.	9.2k
								20			
								21			
		6.70 focus set			600/12 27/6	25	5184	22			
6.8k							5184	23		"	13K max
5.9k								24		"	10.7K
								25			
5.8k								26		"	10K
5k								27		"	10k
								27			
								1			
								2			13.6K

95 p4 #3 well/Taurus

Date 1997 June 25/26 Observers Gid/Tec/T₂

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.
cc463 ⁸⁶ /89	Inb/outBOARD							FEA ND3	4/7
90	Comp							"	4s
91	BD +48 2229	14 40 36	2000 +48 05 38	23 11 22					1600s
92	comp							"	4s
93	BD +48 2229	"	"	23 42 18					1600s
94	Comp							"	4s
95	BIAS(4)			00 15					4s
96	Comp							"	4s
97	HD 151809	16 44 36	1900 +56 33 00	00 20 04					1800s
98	comp							"	4s
99	HD 151809	"	"	00 52 00					1800s
100	comp							"	4s
101	HD 151809	"	"	01 38 00					700s
102	Comp							"	4s
103	BIAS(4) comp			01 48					0

Spectr. T

Focus...

con

Spectr. T

Exp. Mir.

1200 ✓

No filter

325

287

1270

1290

540

390 0 50 1024 4 1 CCD $\sqrt{2\pi}$

Exp.	Mir.	Seeing	H.K. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000	✓				CASS	1800nm	250μ	5894Å	3/4	focus test		
					Tgrating	51.58			5			
325		2"-3"	11.1	A2					6			
287		3"-4"							6			
									7			
									8			
									9			
1270		3"	9.5	B72					9			
1290									10			
940									11			
									12			
									13			
									14			
									15			
									16			

97 pg4

Date 1997 June 25/26 Observers Gld./Tec./Tup.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination +900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC46404	HIPP 43 - miles	16 50 24 None Set.	+57 25 18	01:49 36					65h
05	Comp							PEAR ND3	4s
06	Comp							"	"
07	HD 177724	19 00 49	+13 42 53	02 06 39					256
08	"	"	"	02 11 45					20s
09	Comp								
CG 809 72/19	HD 195047 x 4			All same box					67m
76/79	DARKS x 4								67ms
80/81	" v 2								133ms
82/83	HD 195047 x 2			(Had to Lower Intensity for Set)	00 02W				133ms
CC46410	Comp							PEAR ND3	4s
11	Hipp 43	16 50 24	+57 25 18	02 36 00					260
12	Comp							"	4s
13/22	FLATS x 10							TUNG ND4	7s
23	BIDS (4)			03 26					

Spectr. Te.

Focus...

CC

Spectr. Te.

Exp. Mtr.

70

7K

93K

277

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions *Foggy, cloudy* 98

Focus 6.6.3

Spectr. Temp. *100.5°C*Dome Temp./Hum. *120.3°C 77.28 H*

Exp. Mtr.	Seeing	Pl. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
70		12			1800/51.58	280	589A	3		Clouds	
								4			
								5			
7K		299	10V _n					6	Telluric std		6-6A
9.3K								7			
								8			
	2"	7.9	G5IV	Above		250u slit				seeing test	
								10			
277	2"3"	12	B9?					11		clear again	
								12			
								13			14K
								1			

99

Pg#1 Thurs / Fri

Date 1997 Jan 26/27

Observers ... Kar / Tec / T.n. / L.f.b. = LUIS FELIPE BARRIENTOS

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.
c CC464 ²⁴ / ₂₅	Inboard / Outboard					00:07 ⁴⁴ + 46°	REAR ND3	4/7	1200/ no 4/1/1/2
26	B/H/S(4)			20 38					
27	Comp						REAR ND3	4s	
28	HD177724	19 00 49	+13 42 53	20 48 26					70s 9.7K
29	Comp						"	4s	
30	Comp						"	4s	
31	BD+47 2064	13 3000 ²⁰⁰⁰	+46 30 06	21 12 28				1800	427
32	Comp						"	4s	
33	BD+47 2064	"	"	21 44 48				1800	356
34	Comp						"	4s	
35	B/H/S(4)			22 15				0	
36	BD+47 2064	"	"	22 18 06				1800	320
37	Comp						"	4s	
38	Comp						"	4s	
39	BD+48 2229	14 40 36	48 05 38	22:55:15				1800	284

CCD Spectr. Temp. Dome Temp./Hum. $+21.0^{\circ}\text{C}$ 44% H Transparency Conditions ... Clear 100

Focus 6.65

Spectr. Temp.

Dome Temp./Hum. $+21.0^{\circ}\text{C}$ 44% H

(390 0 50 1024 4 1 CCD) MAXIMUM

Exp. Mtr.	Secing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000V no filter				CASSED Telescope	1800 lines/mm 51.55	294	589A	3/4	focused	CLEAR NIGHT	
								1		PHOTOMETRIC	
								5		GAIN 90	6.5K
9.7K		2.99	AOV _n					6	Telluric Std.		7K
								7			
								8			
427	3.4*	10.92	A2					9	H 1 pgm		
								10			
356								12			
								13			
								1			
320								14			
								15			
								16			
284								17			

Pg. #2 101

Tues / Fri

Date 1997 Jan 26/27... Observers K. I. T. n. / L. S. b....

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.
CC464 40	Comp		2000					FeAr NDS	4s
41	BIAS (4)								0
42	BD +40 2229	14 40 36	+48 05 33	23 28 41					1801
43	Comp							FeAr NDS	4s
44	Comp							FeAr	4s
45	HIPP 43	16 50 24	2000 57 25 18	00:05:37					1930
46	Comp							"	4s
47	BIAS			00 39					0
48	HIPP 43	"	"	00 40					2000
49	Comp							"	4s
50	Hipp 43	"	"	01 15 43					2032
51	Comp							"	4s
52	Bias			01 51					0
53	Hipp 43	"	"	01 52					2214
54	Comp							"	4s

Ccd
Spectr. T.

Focus

Spectr. T.

Exp. Mr.

262

170

158

164

181

Spectr. Temp. -101.7°C Dome Temp./Hum. 718.0°C 53% H Transparency Conditions Fine 102
 Focus 665
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Plg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASSCD	1800L 51.58	250	5844A	18			
								1			
262	3							19			
								20			
								21			
170		12	B9?					22		CLEAR.	
								23			
								1			
158	3"							24			
								25			
164								26			
								27			
								1			
181	3.4"							6		MOVE GUIDER WITH READING IMAGE	
								7			

Spectr. Temp.

Focus 6:65

Spectr. Temp.

Spectr. Temp.

[illegible]

Pg*1 105 Fri/Sat

Emulsion Batches:

Date 1997 June 27/28 Observers Mrs. = MARCIN SAWICKI / Lfb / 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.
CC464 70/71	In b / OUTBOARD					0 0	45	FAH ND3	4/7
72	BIAS (4)			20 43					0
73	Comp							" 45	②
74	HD 177724	19 00 49	+13 42 53	20 57 02					57
75	Comp			20 57 02				"	45
76	Comp							"	45
77	BD + 47 2064	13 ²⁰⁰⁰ 30 00	+46 30 06	21 14 02					1500
78	Comp							"	45
79	BD + 47 2064	"	"	21 46 44					
80	Comp							"	45
81	Comp Bias (4)							FAH	45
82	Comp							"	45
83	BD + 52 18 26	14 45 57	51 37 30	22 26 18					921
84	"	"	"	22 42 00					916
85	Comp							"	45

CCD
Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

11K

565

2000

1900

CCD Spectr. Temp. Dome Temp./Hum. $+22.2^{\circ}\text{C}$ 60% H Transparency Conditions ... Fine 106.

Focus 6.65

Spectr. Temp. Dome Temp./Hum. 390 0 50 1024 41 CCD FWHM

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
17				CASS CCD	1800h 51-58	250	5894A	3/4			
0								1			
9								5			
11K		2.99	A0Vn					6	Telluric Std		8+
4								7			
4								8		clear, good transp.	
100	565	2"	109	A2				9			
4								10			
4								11			
4								12			
4								1			
4								13			
1000	2	8.6	A2					14			
1900								15			
4								16			

pg#2 107 FRI/SAT

Date 1997 June 27/28 Observers Lfbl. Mj's / Tn. ... E.H.13 pgm

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.	Exp. Mir. 100 V 10 f/16
CC46486	Comp							RA ND3	4s	
87	BD+482229	14 40 36 ²⁰⁰⁰	48 05 38	23 04 00					1820	368
88	COMP							"	4s	
89	BD+482229	"	"	23 3646					1833	328
90	Comp							"	4s	
91	BIAS(4)			00 08						
92	Comp							"	4s	
93	HD136849	15 1748 ¹⁹⁰⁰	+331730	00 1242					191	534
94	Comp							"	4s	
95	Comp							"	4s	
96	BD+601703	16 4737 ²⁰⁰⁰	+601242	00 2105					1210	777
97	"	"	"	00 4150					1255	725
98	BIAS(4)	Comp		01 04					4s	
499	60s	BIAS(4)		01 04					0	
500	BD+601703	"	"	01 1138					12	580

Spectr. Temp. Dome Temp./Hum. Transparency Conditions 108.

Focus 6.65

Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000V No F/low				C 455 CCD	1800/4 51.58	250	584A	17			
368	2"	11.9	A2					18			
								19			
328								20			
								21			
								1			
								22			
53K		5.37	B9.5h					23	Telluric		
								24			
								25			
777	2.3"	9.6	B-V=					26			
725			0.38					27			
								28			
								1			
580								29		computer crashed, exposure OK	

^{CD}
 Spectr. Temp. ... -100.7°C ... Dome Temp./Hum. $+19.4^{\circ}\text{C}$ $64.5\% \text{H}$ Transparency Conditions Fine 110 .
 Focus 6.65
 Spectr. Temp. Dome Temp./Hum. $+18.8^{\circ}\text{C}$ $59.5\% \text{H}$

Exp. Mtr. 1000V	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
636	3"	9.6		C455 CD	1800 μ 51-58	250 μ	58947	8c	H1		
								9			
								10			
820	3"	9.4	B-V=0.57					11		NE of Pair, Sept 1.5'	
800								12			
805								13			
								14			
								1			
	732	1000	H1200		250 μ	slit			Seeing test		
								15			
11K								16	Telluric std.		
				+ BIAS (9)	CC46522			17			

pg#1 111 SAT/SUN

Date 1997 June 28/29 Observers {H.I.}/Tn. & Cas. = Mike Casey
BT = Burns

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.
465 23/24	Inboard / outboard							FEAR ND3	7/7
25/34	FLATS x10							TURK ND4	7s
35	Comp							FEAR ND3	7s
36	HD 177724	19 00 49	13 42 53	20 46 48					10s
37	Comp							"	4s
38	B/A S(A)								0
39	Comp							"	4s
40	BD +47 2064	13 30 00	+46 30 06	21 10 00					1807
41	Comp							"	4s
42	BD +47 2064	"	"	21 42 09					1800
43	Comp							"	4s
44	Comp							"	4s
45	HD 20315	13 43 36	+49 48 45	22 16 40					27s
46	"	"	"	22 19 02					32s
47	Comp								4s
48	B/A S(A)			22 21					

Spectr. Temp. ^{CD} — 100.7°C.

Dome Temp./Hum. 22.5°C 53%

Transparency Conditions 1/4 x 1/4 11.2

Focus 6.65

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	☒ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10 f/11 1000V61/2						250	584A	8/4	focus test		
											15K
								7			
10K		2.57	B0V _n					80			
								9			
								1			
								10			
443	2*	109	A2					11			
								12			
3/2								13			
								14			
								15			
		1.86	B3V					16			
12K								17			
								18			
								1			

113 P9#2

Emulsion Batches:

Date 1997 June 28/29 Observers {H.I.}/T.A. E. Gid. group

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.
46 549	Comp		1900					FeAr ND3	4s
50	MD154081	16 5812	+58 3600	22 3328					508
51	"	"	"	22 4228					517
52	Comp							"	4s
53	Comp							"	4s
54	BD+581685	16 5846	+57 5350	22 5612					1800
55	Comp							"	4s
56	BD+581685	"	"	23 2812					1969
57	Comp							"	4s
58	BTHS(4)			00 02					
59	Comp		2000					"	4s
60	Hipp 43	16 5024	+57 2518	00 0809					2072
61	Comp							"	4s
62	Hipp 43	"	"	00 4447					
63	Comp							"	4s
64	B145(4)			01 22					

Spectr. T.

Focus

Spectr. T.

Exp. Mtr.

1000V

23K

3K

632

718

247

240

Spectr. Temp. Dome Temp./Hum. 121.6°C 620% H Transparency Conditions ... Slightly hazy ... 114
 Focus 6.5
 Spectr. Temp. Dome Temp./Hum. 119.9°C 677% H

Exp. Mtr.	Seeing	Pl [✓] Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000V		6.8	A3	Tyroling	1800 L _h 51.58	250	5894A	19			
23K	23"	6.8	A3					20		22 + 100 0005 25 + 100 00 48	3A15
3K								21			
								22			
								23			
632	23"	10.15	B-V 0.040					24		multiple system Brightest of 3 within 1' diameter	
								25			
768								26			
								27			
								1			
								5			
247	2" 12		B9P					6			
								7			
240	12" 12							8			
								9			
								1			

CCD
Spectr. Temp. -100.7°C ...

Dome Temp./Hum.

Transparency Conditions .Slightly hazy..... 116..

Focus ... G:6.5.....

Spectr. Temp.

Dome Temp./Hum. ... 718.3°C 70%RH

Exp. Mtr.	Seeing	Ph Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5				CASCO	1800h 51.58	250	5848	10			
380	2"	11						11		Faint close companion seen TO SE at 250000	
340								12		1119 Air mass	
								10			
								11			
297	3.4"							12			
								13			
								1			
		7.32	100W		1800h	050m	slit		Seeing test	V Light frag/wind	
12K									Telluric Std		

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Sun/moon

Emulsion Batches:

Date 1997 June 29/30 Observers ~~HB~~ Br. AH/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.
CC46577/8	Inboard MONTBOURN		HARTMAN			0	+30°	FeAr ND3	4/7
79/88	FLATS x 10							TUNG ND4	7s
89	BISQ)			2038					0
90	Comp							FeAr ND3	4s
91	HD 177724	19 00 49	+13 42 53	20 44 08					99
92	Comp							"	4s
93	Comp							"	4s
94	HD 120315	13 43 36	+49 18 45	20 56 53					23
95	Comp							"	4s
96	Comp								4
97	HD 144579	16 01 30	+39 25 36	21 04 26					179
98	Comp								4
CG81008/11	HD 144579	16 01 30	+39 25 36					4x	67ms
12/15	DARKS x			No Intensifier change needed,					4x 67ms
16/17	DARKS x2							2x	133
18/19	HD 144579							2x	133

C40
Spectr. T.

Focus

Spectr. T.

Exp. Mtr.

12K

12K

1.7K

390 0 50 1029 A 1 CONFERT ² MAXARDU

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/2				C15SCCD	1800w 51.58	250	5894A	3/4	Focus test		
3								5			14.8K
8								1			
8								6			6K
19	12K							7	Telluric std.		10K
4								8			
4								9			
23	12K	1.89	B32					10	for Telluric std use		
4								11			
4								12			
17	1.7K							13	std vel		
4								14			
13		1.2	G66	G8V	480w	250u	slit		Seeing test		

5 P_g #2 119 Sun/moon

Date 1997 JUNE 29/30 Observers {HI}/Br/Att/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.
CC46599	Comp		1400					F ₀ A ₀ ND 3	4s
600	HD 132561	14 54 42	52 20 00	21 20 14					120s
601	"	"	"	21 40 35					1213
602	Comp							"	4s
603	BIAS (4)			22 02 00					0
604	Comp		2000					"	4s
605	BD+48 2229	14 40 35	+48 05 30	22 06 29					1803
606	Comp							"	4s
607	Comp							"	4s
608	HD 238631	16 55 48	57 05 00	22 43 32					1800
609	Comp			3				"	4s
610	HD 238631	"	"	23 15 18					1808
611	Comp							"	4s
612	BIAS (4)			23 46					0
613	Comp							"	4s

Spectr. T.

Focus..

Spectr. T.

Exp. Mtr.

1000V

no filter

13K

1166

354

936

906

Spectr. Temp. Dome Temp./Hum. 123.5°C 5768H Transparency Conditions Hazy 120Focus 6:6.5

Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	No. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10000 no filter				CAS CCD	1800h 54.58	250	58948	15			
1.3K	1-2"	8-96						16	HI Clad		
1166								17			
								18			
								1			
								19			
354	2"	11.01						20		Δ dec -00 01 00 Is this Right Star? (Probably OK) noted Later	
								21			
								22			
936	2.5"	9.60						23		Δ dec +00 01 00 and OK.	
								24			
								25			
406	"	"						26			
								1			
								27			

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Sun / Mon

Emulsion Batches:

Date .1997... June 29/30 Observers .S.H.S./B.L.H.H./T.L....

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 46 614	HD 238 628	16 55 06	57 18 00	23 50 33					1358
615	"	"	"	00 13 33					1208
616	Comp							Fea NO 3	4s
617	Comp							"	4s
618	HD 238 610	16 45 24	+57 51 00	00 58 11					1200
619	"	"	"	00 59 05					1201
620	Comp							"	4s
621	BINS (4)			01 20					0
622	Comp							"	4s
623	TYC 4190 2042	16 44 50 ²⁰⁰⁰	60 29 45	01 26 07					2402
624	Comp							"	4s
625	Comp							"	4s
626	* HD 151 554	16 43 00	61 09 00	02 13 59					685
627	Comp								

CQ
Spectr. T

Focus...

Spectr. T

Exp. Mtr.

833

684

650

595

346

240

CCD Spectr. Temp. -100.9°C

Dome Temp./Hum. $+21.0^{\circ}\text{C}$ 77.7% H

Transparency Conditions *Hazy* 122

Focus 6.65

Spectr. Temp.

Dome Temp./Hum. 22

Exp. Mir.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
833	2"-3"	9.27		CASSIOPEA Tyndall	1800h 51.58	25u	5894A	28	HI Cloud		
684	"	"						29			
								30			
								9			
650	"	9.45						10			
595	"	"						11			
								12			
								1			
								13			
346	"	11.03						14			
								15			
								16			
264	"	7.89						17		CLOUDY OVER	
								18			

125

pyl Mon/Tues

July 1

Date ... 1997 June 30 / Observers ... L. ... J. T. n.

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.
CC466 ^{31/32}	Inb / out-board	HARTMANN						RA ND3	4/7
33	BIDS(4)			20 44					
34	Comp							"	4s
35	HD 1355 30	15 10 33	+42 32 38	20 47 34					182
36	Comp							"	4s
37	Comp							"	4s
38	FO Vir	13 29 47	01 05 48	20 57 49					600
39	comp							"	4s
40	Comp							"	4s
41	HT Vir	13 46 07	+05 06 57	21 13 33					900
42	Comp								4s
43	Comp							"	4s
44	HD 144 5 79	16 01 30	+39 24 00	21 36 40					536
45	Comp							"	4s
46	BIDS(4)			21 48					0

Exp. Mtr.

1000 V

2K

2380

2450

1.4K

CCD
Spectr. Temp. -100.8°C

Dome Temp./Hum. 12.4°C 71.6% H

Transparency Conditions ... Partly cloudy 12.6!

Focus 6.65

Spectr. Temp.

Dome Temp./Hum.

C2

390 0 50 1024 41 CCD FWHM

Exp. Mtr.	Seeing	✓ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4/1 no filter 1000V				CASS CCD	47.06	306	5189A	1/4	focus test	~ MAX	
								1			
								5			
2K	2"	6.13	M2	ITA				6		NORMALIZATION STAR	1K
								7			
								8			
2380	2"	A7V	6.7					9	DRL		
								10			
								11			
2150	3"	7.16	EO					12	DRL		
								13			
								14			
1.7K	2.3"	6.66	G8V					15	std vel		
								16			
								1			

127

42 Mon/Tues

Date June 30/July 1 Observers Lu, J.L.

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 810 ^{90/} 23	HD 144579	16 01 30	+39 24 00					4x 67ms	
24/27	DARKS x 4							4x 67ms	
28/29	DARKS x 2							2x 133ms	
30/31	HD 144579	"	"					2x 133ms	
CC 4667	Comp							FeAr ND3	4s
48	HD 125111	14 12 20	40 12 30	21 56 43					420
49	comp							"	4s
50	comp							"	4s
51	HD 128167	14 30 20	+30 10 46	22 09 21					183
52	"	"	"	22 13 26					275
53	Comp							"	4s
54	Comp flat							JUNG ND3	7s
60	HD 167858 flat 18mm			22 25 58					
61	BIAS (4)			22 36					
62	comp							FeAr 4	4s
63	HD 167858	18 12 00	00 58 16	22 45 02					960

COP
Spectr. 1

Focus...

Spectr. 1

Exp. Mir.

2190

5000

7100

2100

CCD
 Spectr. Temp. -100.7°C Dome Temp./Hum. $+22.6^{\circ}\text{C}$ 74084 Transparency Conditions ... *very hazy* 120
 Focus 6.65
 Spectr. Temp. Dome Temp./Hum.
no wind at all

Ex.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
17			666	G8V		Above	306 μ	slit		Seeing test	ALT 85°	
17										Pome	WSW semi cloudy	
32												
32												
4					CASS CCD	1800 μ 4706	306 μ	5184A	17	"std" vel		
42	2190	2"	624	F2V					18			
42									19			
42									20			
42	5000		4.45	F2V					21	"std" vel		3.5
42	7100								22			5.5 5.5
42									23			
42									24			
42			6.48	F1V					25			
42									1			
42									25			
42	2100		6.48	F1V					26	"std" vel		

129 #3 Mon/Tues

Date 1997 June 30/July 1

Observers Lu/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 46664	comp							FeAr ND #3	4s
65	comp							"	
66	SV Egu	20 57 19	05 48 52	23 37 58					1200
67	comp							"	4s
68	BIAS(4)			23 59					
69	comp							"	4s
70	HD 185395	19 33 46	49 59 22	00 22 25					319
71	"	"	"	00 28 29					375
72	Comp							"	4s
73	HD 187691	19 46 14	+10 09 55	00 47 31				"	4s
74	HD 187691	19 46 14	+10 09 55	00 47 31					4/5
75	Comp							"	4s
76	Comp							"	4s
77	HD 186791	19 41 30	+10 22 10	00 59 55					102
78	Comp							"	4s
79/90	BIAS(4) x2			01 03	01 39				0

Cep Spectr. T

Focus...

Spectr. T

Exp. Mtr.

1000V

10-11/12

514

6150

6400

5.4K

9.3K

^{CCD}
Spectr. Temp. -100.7°C

Dome Temp./Hum. ... 121.7°C 80.0% H

Transparency Conditions .. Very. Hazy. & cloudy 130

Focus ... 6.65

Spectr. Temp. -100.7°C

Dome Temp./Hum. ... 121.1°C 82.0% H

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 h/mm 47.06	306	5184A	27			
								28			
514	2"	9.0	A0					29	DRL	through clouds	
								30			
								1			
								5			
6150	23	4.48	F4V					6	"std" vel		4 K
6400								7			
								8			
								10			
414K	2"	5.11	F8V					11	std vel		3.7K
								12			
								13			
913K	2.73	K30						14	std vel		
								15			
								1			

131 #1 Tues/wed

Emulsion Batches:

Date .1997..July.1.2..... Observers ..Lu./In.....

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.
CC466 81/82	Inb / OUTBOARD	HAZIMAH	Test					Film ND3	4/7
83	Bias(4)			22 05					
84	Comp	2000						"	4s
85	NSV 7457	16 0602	+50 11 12	22 10 56					800
86	Comp							"	4s
87	Comp	2000						"	4s
88	FO Vir	13 29 47	+01 05 48	22 35 27					900
89	comp							"	4s
90	comp	2000						"	4s
91	HI Vir	13 46 07	+05 06 57	22 54 25					918
92	Comp							"	4s
93	B/H S(4)			23 11					0
94	Comp							"	4s
95	DK Cyg	21 35 02	+34 35 42	23 17 04					960
96	Comp			23 33 32					1000
97	Comp							"	4s

CCO
Spectr. Te

Focus...

Spectr. Te

Exp. Mtr.
1000

1000

258

1582

1040

240

250

CCD Spectr. Temp. -100.7°C .. Dome Temp./Hum. +22.8°C .. 73.12/11 Transparency Conditions ... Partly cloudy 132
 Focus 6.65 90c gain as usual
 Spectr. Temp. Dome Temp./Hum. CD 340 0 50 1024 41 CCD FWH

Exp. Mtr. 1000V	Seeing	PV Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
110 filter				CHSS CCD Tyrating	180046 47.06	300u	5184A	3/4	focus	unchanged	
								1			
								6			
258	2"	9.5	G0					7		clouds in	
								8			
								10			
1582	3-4"	6.7	A7					11			
								12			
								13			
1040	4"	7.16	G0					14			
								15			
								1			
								16			
240	1.2"	10.3	A6V					17			
250								18			
								19			

133#2

Date 1997 July 1/2 Observers Lu / 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.
CC46698	DK Cyg	21 35 02	²⁰⁰⁰ 34 35 42	23 52 22					1028
89	Comp							FeA ND3	4s
700	DK Cyg	"	"	00 11 17					1000
01	comp							"	4s
02	BIAS (4)			00 29					0
03	Comp							"	
04	GSC 519800659	21 21 25	-03 09 35	00 36 04					900
05	comp							"	4s
06	Comp							"	4s
07	HD 187691	19 46 14	+10 09 55	01 01 07					271
08	Comp							"	4s
CG 81032/35	HD 187120							4x	67
36/39	DARKS x4							4x	67
40/41	x2							2x	133
42/43	HD 187120							0x	133
CC46709	BIAS (4)			01 20					

CCD
Spectr. Tr.

Focus...

Spectr. Tr.

Exp. Mtr.

250

250

316

AK

Spectr. Temp.

Dome Temp./Hum. 52

Importation	Unit	Exp
53		
45		
1000		
45		
0		
10		
45		
45		
97		
73		
65		
57		
70		
77		

135
#3

Tues/wed

Date 1997 July 1/2... Observers L4/J4.....

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.
C046710	Comp							PEAR ND3	4s
11	HD177724	19 00 49	+13 42 53	01 30 23					63s
12	Comp							"	4s
13	comp							"	4s
14	HD167858	18 12 00	00 58 16	01 38 32					720
15	comp							"	4s
16	Comp							"	4s
17	HD185395	19 33 46	+49 59 22	01 55 23 23 17 04					180s
18	"	"	"	01 58 58					180s
19	Comp							"	4s
20	Comp							"	4s
21	CN Hnd	(2000) 00 20 30	40 13 36	02 06 09					900
22	"	"	"	02 23 34					900
23	comp							"	4s
24	BIAS(4)			02 40					0

Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

57k

2380

78k

75k

280

270

Spectr. Temp. -100.6°C ...

Dome Temp./Hum. 120.5°C 83.6% H

Transparency Conditions . Hazy 13.6

Focus 6.6.5

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						30a	5184A	10			
5.7K		289	BO					11			
								12			
								13			
2380		648	FIV					14			
								15			
								16			
7.8K	2"	448	F+V					17			b3K
7.5K								18			
								19			
								20			
280	2"	10.0	FS					21			
270								22			
								23			
								1			

137 #4

Date 1997 July 1/2 Observers Lu/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.
cc46725	CN And	00 20 30	40 13 36	02 41 26					960
26	comp							FeAr ND #3	4s
27	Comp							"	4s
28	HD222368	23 34 48	1900 +05 05 03	03 03 44					2/4
29	Comp							"	4
30/36	FLATS x 7							TUNG ND3	7s
37	BIAS(4)			<u>03 12</u>	Yes, it exists T_1				

CCD

Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

[illegible]

139 p. #1

Mon / Tues

Date 1997 July 7/8... Observers E.H.S./A.H./Kar/Cas/. 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.
CC46738	BIAS (4)			20 38					0
39/40	Inboard / outboard							RA- ND3	4/6
41	Comp								45
42	HD 17724	19 00 49	13 42 53	21 42 00					
43	Comp							RA- ND3	45
44	Comp							"	45
45	HD 120315	13 43 36	14 48 45	21 11 39					225
46	Comp							"	45
47	Comp							"	45
48	TYC 347613	14 35 45	14 10 03	21 22 29					1804
49	Comp							"	45
50	TYC 347613	"	"	21 57 07					1803
51	Comp							"	45
52	BIAS (4)			22 29 00					0
53	TYC 347613	"	"	22 31 31					1801
54	Comp							"	45

CCD
Spectr. T

Focus...

Spectr. T

Exp. Mtr.

12K

10K

11/12

147

154

CCD Spectr. Temp. -101.1°C Dome Temp./Hum. $+18.2^{\circ}\text{C}$ 51.58H Transparency Conditions mostly clear..... 140!

Focus..... 6.73.....

Spectr. Temp. Dome Temp./Hum. 390 0 50 1024 4 1 CCD FWH

Exp. Mtr.	Seeing	Nb. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CHBS CCD	1900 W/m	250	589A	1			
								3/4	focus test		
								8			
12K		2.97	B0V					9		teluric standard	6K
								10			
								11			
10K		1.89	B3V					12		"	7K
								13			
								14			
~172	3"	11.67	B-V 293					15			
								16			
147	"	"	"					17			
								18			
								1			
154	"	"	"					19			
								20			

141pg 42

Mon/Tues

Emulsion Batches:

Date 1997 July 7/8... Observers E.H.S. and company J.Ten

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 46755	TYC 3476131	14 35 45	+49 10 03	23 03 59					1825
56	Comp							Felt ND3	4s
57	comp			23 41 24				"	4s
58	TYC 4193 691	16 42 31	+64 21 37	23 43 56					1802
59	Comp							"	4s
60	BIAS (4)			00 16					0
61	TYC 4193 691	"	"	00 17 31					1800
62	comp							"	4s
63	comp							"	4s
64	TYC 4190 126	16 32 00	61 57 11	00 56 42					1800
65	comp							"	4s
66	TYC 4190 126	"	"	01 30 13					1807
67	COMP							"	4s
68 ⁷	FLATS X10							TUNG #4	7s
78	BIAS (4)			02 11					0

Spectr. Temp. Dome Temp./Hum. $+14.1^{\circ}\text{C}$ 5682H Transparency Conditions *PART. Cloudy* 142

Focus 6.73

Spectr. Temp. Dome Temp./Hum. *CD* 390 0 50 1024 * 1 CCD FMT

Exp	Exp. Mtr.	Seeing	Mag. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
315	149	3"	11.67	B-V 0.293	CASS CCD	18006 5658	250	5894A	21	HI Clouds		
4									22			
5									23			
110	273	2-3"	11.4	B-V 0.182					24			
6									25			
0									1			
110	253	"	"	"					26			
4									27			
4									28			
110	216	"	11.38	B-V 0.181					29			
3									30			
110	203	"	"	"					31		CLOUDY PART OF THE TIME	
4									6			
7									2			
0									1			

143 p₂H₃Date 1997 July 7/8..... Observers H.I. p₂H₃ / J₂.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900 2000	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC 46779	Comp							FeAr ND3	4/5
80	TYC 4190 126	14 32 00	61 57 11	02 16 13					1804
81	Comp							"	45
82	TYC 4190 126	"	"	02 48 47					1804
83	Comp							"	45
84	Comp							"	45
85	HD 177724	19 00 49	13 42 53	03 24 38					575
86	"	"	"						775
87	Comp							"	45
88	BIAS 4								0
89	Comp							"	45
90	HD 120315	13 43 36	49 48 45	03 40 09					1485
91	Comp							"	45
92-98	FLATS x7							tung #4	75

Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

10000

20-10-10

26

22

0.40

100

10.12

14.4

6.73

Dome Temp./Hum.

Exp	Exp. Mtr. 1200 V	Seeing	No. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1	no filter				CHESCO	1800h 51-58	25u	589A	8		Telescop E ₃ /side	
1	263	2.5"	11.38	B-V 0.181					9			
1									10			
1	224	"	"	"					11			
1									13			
1									14			
1	1040		2.99	B ₀ V					15	TELLURIC		
1	12K		"	"					15	"		
1									16			
1									1			
1									18			
1	1072								19	Telluric	slit 4.52	
1									20		HIR moss	
1									22			

145
Pg#1

Wed / Thurs

Date 1977 July 9/10 Observers Mki. / 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.
CC 46 ⁹⁹ 800	Inboard/outboard							FEAR ND4	4/7
801	BIAS(4)			20 50					0
802	Comp							FEAR ND4	4s
803	HD 177724	19 00 49	+13 42 53	20 52 31					37
804	"	"	"	20 54 49					33
805	Comp							"	4s
806	Comp							"	4s
807	HD 187691	19 46 14	+10 09 55	21 02 14					197
808	Comp								4s
809	BIAS (4)			21 07					0
810	Comp							"	4s
811	S 92 NGC 6819	19 41 03	+40 11 00	21 16 33					1600
12	Comp							"	4s
13	S 92	"	"	21 50 03					1803
14	Comp							"	4
15	BIAS (4)			22 20					0

COP
Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

no. f/line

~6K

64K

143⁺

CCD Spectr. Temp. — °C Dome Temp./Hum. 117.0°C 68.2% Transparency Conditions Fine 146

Focus 6.81

Spectr. Temp. — Dome Temp./Hum. —

390 0 50 1024 4 1 CCD FMT ~ 1104 MAX

Exp. Mtr. 1000 V	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASS CCD Tgrating	1200 Å/mm 41.96	306	6520 Å	3/4	focus test		
								1			
								5			12.9
~6K	2.99	B						6	Telluric std		6.9K
6.4K								7	" "		
								8			12.9
								9			
	5.11	F8V						10	sld vel		10K
								11			
								1			
								12			
143*	2.8	15.1						13		* sky slightly bright still	
								14			
150??								15			
								16			
								1			

147
pg 142

Emulsion Batches:

Date 1997 July 9/10... Observers MK: L.T.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
		2000						Type/Filter	Exp.
CC46816	S92 NGC 6819	19 41 03	+40 11 00	22 24 16					1804
17	Comp							FeAr NO4	4s
18	S92	"	"	22 57 36					1814
19	Comp							"	4s
20	S92	"	"	23 32 08					1838
21	Comp							"	4s
22	BIAS (4)			00 06					0
23	S92	"	"	00 06 59					1811
24	Comp							"	4s
25	S92	"	"	00 38 23					1804
26	Comp							"	4s
27	BIAS (4)			01 11					0
28	S92	"	"	01 13 12					1800
29	Comp							"	4s
30	S92	"	"	01 45 13					1804
31	Comp							"	4s

Spectr. Te

Focus

Spectr. Te

Exp. Mtr.

FeAr

NO4

4s

1814

95

4s

1838

78

4s

0

1811

79

4s

1804

76

4s

0

1800

71

4s

1804

73

4s

Spectr. Temp. Dome Temp./Hum. $+15.3^{\circ}\text{C}$ 71.02H Transparency Conditions *Fine* 148

Focus 6.41

Spectr. Temp. Dome Temp./Hum. $+13.8^{\circ}\text{C}$ 76.78H

~ m4x

Exp. Mir.	Seeing	P. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>no F/100</i> 7120	2"	15.1		C APS CCD	12006 41.96°	30μ	6520A	17			
								18			
95	2-3"							19			
								20			
78	2"							21			
								22			
								23			
79								24			
76	2"							25		Crossed medium	
								26			
								1			
71	2-3"							28			
								29			
73								30			
								9			

149 p943

Emulsion Batches:

Date ... 1997 July 9/10 ... Observers Miki / 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.
CC46832	BIAS(4)			0216					0
33	S92 NGC 6819	19 4103	+40 1100	021816					1753
34	Comp							K&A 1104	4s
35	S92 NGC 6819	"	"	024932					1811
36	Comp							"	4s
37	Comp							"	↑
38	HD 222 368	23 3448	+050503	03 2544					69
39	Comp							"	4
40	Comp							"	4
41	HD 177724	19 0049	+134253	03 3331					
42	Comp							"	4
43	BIAS(9)			0337					6
44/53	FLATS X 10							JUN 16 1105	4s

Spectr. Te

Focus...

Cap

Spectr. Te

Exp. Mtr.

1000
40 to 100

70

78

48K

6.7K

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions .. *Fine* 190

Focus 6.81

Specr. Temp. 106.6 °C

Dome Temp./Hum. 41.34° 81.22/H

Exp.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0	1000 no filter				CASSIO				1			
53	70	23"	15.1			1200 in 41.96	300	6520A	10			
4									11			
54	78	2"							12			
5									13			
4									14			
59	4.8K		4.13	F7V					15	std vel		
4									16			
4									17			
7	6.7K		2.99	BOVn					18	Telluric SH.		
5									19			
5									1			
5									2			10.5K

151

pg#1 Thurs / FA1

Date ... 1997 July 10 / 11. Observers ... M.Ki. / G.W. / K.G. / T.G.

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 468	54/65 In b / out B 120							BAR MP 3	4/7
56	Comp								
57	HD 177724	19 00 49	+13 42 53	20 56 42					78
58	Comp								
59	Ext. Arm BIAS (4)								0
60	Comp								4
61	HD 120315	13 43 36	+49 48 15	21 09 53					188
62	Comp							"	4s
63	Comp							"	4s
64	TYC 3480 245	14 45 09	+52 09 54	21 16 22					1200
65	Comp							"	4s
66	TYC 3480 245	"	"	21 38 17					1200
67	Comp							"	4s
68	TYC 3480 245	"	"	22 00 16					1201
69	Comp								4s
70	BIAS (4)			22 21					

COI
Spectr. 1Focus
Spectr. 1Exp. Mtr.
1201-1204

1205

1206

1207

1208

1209

CCD
Spectr. Temp. ... -100.5°C ...

Dome Temp./Hum. ... +20.0°C ... 5860

Transparency Conditions ... mostly clear ... 152

Focus ... 6.71 ...

Spectr. Temp. ...

Dome Temp./Hum. ... +18.4°C ... 6018H

390 0 50 1029 41 CCD-MT

Exp.	Exp. Mtr.	Seeing	P. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
47	100V no filter				CHSS CCD	1800 In 51.58	250	529A	3/4	focus test		
									6		Telescope East Side	
70	~10K		2.99	BOV					7		Regular Telluric Standard	
									8			
0									1		$\Delta\alpha = -30^s$ $\Delta\delta = -1^m 22''$	
4									9			
8	~12K		1.89						10		Telluric standard 430	
									11			
4									12			
100	220		2.4	11.					13			
3									14			
100	220								15			
4									16			
100	190		2.4						17			
4									18			
									1			

153 pg #2

Thurs / Fri:

Date 1997 July 10/11... Observers M.H. / J.L......

Emulsion Batches:

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[illegible]

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions .. *some clouds* 154

Focus 6.71

Spectr. Temp.

Dome Temp./Hum. 17.4°C 59.9%
e2

390 0 50 1024 9 1 CCD FMT

Exp. Mtr. 1000 V	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
175				C955 CCD	1800/1 51.58	250u	589A	19			
								26			
166	11.49							21		Δ-000029 ΔS - 0001 21	
								22			
								23			
210	11.02							24			
								25			
205								26			
								28			
								1			
								29			
176	3" 11.76							30			
								31			
								6			
252	2"							7			
								8			

R#3 Tues / Fri
155

Date 1997 July 10/11... Observers mki / Tn / Gld / Kar

Emulsion Batches:

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Plate No.	Object	R.A. 1900 2000	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
CC46887	BD+64 1134	16 27 57	+63 57 41	01 03 23					1201
88	Comp							FeAr ND3	4s
89	BIAS(4)			01 25					0
90/99	FeAr TS x 10							FeAr ND4	7s
900	Comp							FeAr ND5	4s
901	S 92 in NGC 6819	19 41 03	+46 11 00	01 57 50					1200
902	Comp							"	4s
903	S 92 in NGC 6819	"	"	02 30 09					1076
904	Comp							"	4s
905	BIAS(4)			02 49					0
906	Comp								
907-910	MO 172167	18 33 33	+58 41 26					"	4s
911	Comp								4s
912	BIAS(4)			02 59					
913	Comp								4

Spectr. T

Focus

Spectr. I

Exp. Mtr.

246

100

114

5k

Spectr. Temp. Dome Temp./Hum.

Transparency Conditions 156.

Focus 6.71 678 for 600m setup

Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	P.V. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
246	2"			CHSS CCD Tgrating →	1800 l./in. 51.58°	350	5894A	9		132 → 00 00 35 65 → 00 00 51	
								10			
								1			
								2			
				CHSS CCD Tgrating →	600 l./in. 25.15	470u	4100A	5		CCD FMT 440 050 1024 41	14K
100		15.1						6			
								7			
114	2.3"							9		guilted Some cloud	
								10			
								1			
			A					11.			
~Sk			AOV					12/13		Vega ~ 10k max	
								17			
								1			
								28			

Transparency Conditions . . . *cloudy* 158

Exp	Exp. Mtr.	Seeing	Proj. Mag.	Sp.	Inst.	Gratings/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
23	4.3K		3.77	FSV	CHSS	6006 25/150	470 μ	4/1000	17	mk std		2.1K
153	10K								18			76K
33	11K								18			7.5K
3									19			
3									20			
11.7			4.19	FOV					21	mk std		
78	12K								21			7.7K
3									22			
4									1			
4									23			
55	43		622	AIV					24	mk std??	multiple system	6.5
4									25			
2.52									2			1.1K
-0									1			

159
pg #1

Tues / wed

Date 1997 July 15/16 Observers L. A. / 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		Exp. Mtr. 1000/ 1000/100
								Type/Filter	Exp.	
CC 469 ^{37/}	38 in board							FeAr NO 3	4/7	
39	BIAS (4)								0	
40	Comp							FeAr NO 3	4s	
41	HD 144 579	16 01 30	+39 24 00	20 48 28					347	3600
42	comp							"	4	
43	comp							"	4	
44	FO Vir	13 29 47	21 05 48	21 01 13					660	4238
45	comp							"	4	
46	n							"	4	
47	HD 125485	14 19 38	+05 53 48	21 19 06					713	1850
48	comp							"	4	
49	ADS 9019 B	edit ✓	"	21 33 43					1378	447
50	Comp	edit ✓						"	1378	447
51	HD 125452	"	"	21 59 23					900	185
52	Comp							"	4s	
53	Bias (4)			22 16						

CCD
Spectr. Temp. -100.8°C

Dome Temp./Hum. $+25.0^{\circ}\text{C}$ 64.8%

Transparency Conditions ... Fine ... some cloud ... 160

Focus ... 6.69

90c gain

Spectr. Temp.

Dome Temp./Hum.

390 0 50 1024 41 CCOUNT 2 MAX

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
notifier				CHSS CCD Tigrating	1500 1/2 in 47.06	306	5184A	3/4	focus test		
								1			
								5			
3600	2"	6.66	d65					6	std vel		34K
								7			
								8			
4275	3"	6.7	A7V					9			38K
								10			
								11			
1850	3"	8.1	F2					12		Brighter of pair @ WSW of pair	
		8.1						13			
477		8.1						14		Faint one NEE of pair	
477		9	K					15			
185		9	K					16		Star 4 arc mins SW of H ₂ II	
								17		HD 125488	
								11			

161 p42 Tues/Wed

Date 1997 July 15/16 Observers L.A. / T.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.
CC46954	Comp		1900					RA NO3	4s
55	HD187691	19 46 14	+10 09 55	22 21 16					157
56	Comp							"	4s
57	comp							"	4s
58	RZ Dra	18 23 06	58 54 18	22 45 57					1200
59	er	"	"	23 07 05					1200
60	comp							"	4s
61	BIAS(4)			23 28					
62	RZ Dra	"	"	23 30 13					1200
63	comp							"	
64	comp							"	
65	DK Cyg	21 35 02	34 35 42	00 00 16					1000
66	"	"	"	00 17 32					1000
67	comp							"	4s
68	BIAS(4)			00 36					0

Spectr. T.

Focus

Spectr. T.

Exp. Mtr.

10/1/1997

54K

423

428

425

425

425

425

425

425

425

425

425

425

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425

425

425

425

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425

425

425

Spectr. Temp. Dome Temp./Hum. ... $+23.0^{\circ}\text{C}$ 72764 Transparency Conditions ... Fine 162

Focus 6.69

Spectr. Temp. Dome Temp./Hum. 20°C

Exp.	Exp. Mtr.	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
45	12 f. 1 R2				C155 CCD	18001 47.06	306	5184A	18			
157	5.4K		5.11	F8V					19	std vel		7.6K
3									20			
15									21			
120	427		10.0	A5					22	DRL		
120	428		"	"					23			
45									24			
									1			
207	425		"	"					25			
									26			
									27			
1000	274	2"-3"	10.3	A6V					28			
1000	289								29			
45									30			
0									1			

163 #3

Date July 15/16, 97 Observers Lu / T_n

Emulsion Batches:

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Plate No.	Object	R.A. 1900- 2000	Declination 1900- 2000	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
CC46969	DK Cyg	21 35 02	34 35 42	00 38 00					1600	330
70	"	"	"	00 55 13					1061	320
71	Comp							FeA ND3	45	
72	DK Cyg	"	"	01 13 47					1073	331
73	"	"	"	01 32 05					1053	322
74	Comp							"	45	
75	BHIS(4)			01 32						
76/82	FLATS x 7									
CC46983	Comp	2000						FeA ND4	45	
84	Cepheus X-4	21 39 30.6	+56 59 12.9	02 18 00					900	42
85	"	"	"	02 33 46					900	41
86	"	"	"	02 49 43					908	42
87	Comp							"	45	
88	SKY	"	"	02 07 31					548	45
89	Cepheus x 4	"	"	03 19 38					1073	45
90	Comp			03 40				"	4	

Spectr. Temp. ^{CCD} -100.5°C Dome Temp./Hum. $21.3^{\circ}\text{C}/78.7\%$ Transparency Conditions *fine* 164
 Focus *6.69*
 Spectr. Temp. Dome Temp./Hum. *340 0 50 1024 + 1 CCD exp ~ MAX*

Exp. Mtr.	Seeing	P. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
330	2"-3"	10.3	A6V	CASS CCD	1800 $\frac{1}{\text{mm}}$ 47-06	306 μ	5184	5	DRL		900
320								6			
								7			
331								29			
322								29			
								8			
								1			
								2			
					12006 41.96	306 μ	6520A	1		CCD FWHM Same 390 050 1024 41	11K
42	<2"	14.2	B0? Be					5		H α em ~ 50 μ y abae	
41								6		Background	
42								7		~ <20A FWHM @ H α	
								8			
25								9	SKY 1 arc min N of Cap X-4		
65								10			
								11			

165 p44

Tues/wed

Emulsion Batches:

Date 1997 July 15/16 Observers Lu/Tr

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
cc469 91	B/H/S(4)			03 40					0
92	Comp							Feat NO4	4s
93	HP 209833	22 0103	+28 2841	03 4436					162
94	Comp							"	4s
95	Comp							"	4s
96	HD 222368	23 3448	+05 0503	03 5125					76s
97	Comp							"	4s
98/	FLATIS X 7							JUNG NO5	4s
cc47004									
cc47005	B/H/S(4)			03 57					

Spectr. T.

Focus...

CCD

Spectr. T.

Exp. Mtr.

38K

51K

Specif. Temp. -170.5°C

Dome Temp./Hum. ... +20.0°C 85.2%RH

16.6

[illegible]

Spectr. Temp.

Dome Temp./Hum. x

390 0 50 1024 41 CIDFMT

Exp.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
47	150 V 100 f/ke				C455 CCD Teletype →	1800 h/line 47.06	306	578A	3/4	focus		
									1			
									14			
48	969 < 2"	666	DG5						15	s/d vel		
									16			
									2			10K

169 pg #1

Thurs / Fri

Emulsion Batches:

Date . 1997 July 17/18. Observers . A.H. / C.A.S. / B.R. / T.A. {HI} rym

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.
CC470 ¹⁹ / ₂₀	Inboard / Outboard							FEAr 1105	4/6
21	BIAS(4)			20 42				"	0
22	Comp							"	4s
23	HD151809	16 4436	+56 33 00	20 52 12					1200
24	"	"	"	21 12 32					1200
25	"	"	"	21 33 07					1230
26	Comp							"	4s
27	BIAS(4)			21 55					0
28	Comp							"	4s
29	TYC 3882 548	16 50 24	+57 25 18	22 00 00					1600
30	"			22 30 21					1800
31	Comp							"	4s
32	BIAS(4)			23 01					0
33	TYC 3882 548	"	"	23 02 57				4s	1901
34	"	"	"	23 34 59					1801
35	Comp							"	4

CO
Spectr. T

Focus ...

Spectr. T

Exp. Mtr.

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

1200 / 1800

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1200 / 1800

1200 / 1800

1200 / 1800

Exp. Mtr. Temp. ^{CCD} — °C

Dome Temp./Hum. +25.4°C 71%^H

Transparency Conditions ^{part cloudy} 170

Focus 6.61

Spectr. Temp.

Dome Temp./Hum. +23.1°C 78%^H

* HAT WITH MASK in ANGLE
390 0 50 1024 4 1 CCDPMT

Exp. Mtr.	Seeing	Pr. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
not filter				CASS CCD	600/15 25.15	470u	4100A	3/4	focus		
								1			
								15		Telescope East side	1.3K
1685	2.3"	9.49	B-V -0.158					12		2100/1 S/N	1.4K
1030	"	"	"					13		sky still slightly bright	
1583								14		cloud	
								15			
								1			
								16		1200 photons above background	
424	2"	12.04	B-V -0.121 0.3					17		0x 00 00 25	
400								18		05 00 00 21	
								19			1.5K
								1			
418								20			
365	2.3"							21			
								22			

Spectr. Temp. Dome Temp./Hum. Transparency Conditions *Fine* 172

Focus 6.67

Spectr. Temp. Dome Temp./Hum. *** Last page*

Exp.	Exp. Mtr.	Seeing	H _e Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0					CASS CCD	600h/yr 25.15	470u	4100A	1			
4									23			
200	447		10.92	B-V -0.67					24		Footamp 4050 to SE	
110	416		"	"					25		seen,	
100	376	3'-4"	"	"					26			
4									27			
0									1			
200	371	3.5"	"	"					28			
100	354	"	"	"					29			
not	353		"	"					30			
0									1			
4									5			
100	313		12.04	B-V -0.121 0.97					6			
100	314		"	"					6			
									7			

173 #3

Thurs / Fri

Date . 1997 July 17/18... Observers {H.I} p.m. ... / T.m.

Emulsion Batches:

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[illegible]

Dome Temp./Hum.

** HARTMANN Musk was in "OUT BOARD" position All night,

17594#1

Fri/Sat

Gmo = Gabriela

Emulsion Batches:

Date 1997 July 18/19...

Observers

{HIS/mjs/Gmo...}

Mallen-Drogs

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.
cc47069	Comp				Hmask H	Exp		FeAr NDS	45
70/71	FLATS x2				Hmask H			TUNG NDS	75
72/73	" "				Hmask	Outboard		"	145
74	HD142373	15 49 13	+42 43 53	20 28	"	"			47
75	HD142373	"	"		Hmask	Home			30B
76	Comp							FeAr NDS	45
77	BIAS (4)			20 36					0
78/79	Inboard / Outboard							FeAr NDS	4/7
80	Comp							"	45
81	HD 120315	13 43 36	+49 48 45						22
82	"	"	"						25
83	Comp		1					"	45
84	Comp		2000					"	45
85	TYC 3476 57	14 33 39	+49 56 29	21 06 01					1300
86	Comp								45
87	BIAS (4)			21 30 40					0

Spectr. I

Focus

Spectr. I

Exp. Mir.

53K

8/15

11K

256

Spectr. Temp. Dome Temp./Hum. $+22.0^{\circ}\text{C}$ 62-58 Transparency Conditions 176

Focus 6.69

Spectr. Temp. Dome Temp./Hum.

390 0 50 1024 4 1 CCD FWH

Exp	Exp. Mtr.	Seeing	PA Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4						600nm 2515	4R	4100R	5		Tests to check	3K
75									6		against last night's	
13									6		ill faked "OUTBOARD"	10K
42	53k			P85					7	Test	Observations,	5K ^{2k}
36	8525k			P85					8			22K
4									9			
0									1			
47						1800nm 51.53	254	5894A	3/4	Focus		
4									5			6K
22									6			5K
25	11K			1.89 B3V					7			
43									8			
43									9			
130	256								10			
4									11			
0									1			

177 P4 #2

Fri/Sat

Emulsion Batches:

Date 1997 Aug. 18/19... Observers H.L.S. Gabriel & Marcia / Tu

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.
CC47088	Comp							REAR ND3	4s
89	TYC 3860482	14 45 11	52 57 03	21 35 43					1800 220
90	Comp							"	4s
91	TYC 3860482	"	"	22 08 30					1814 220
92	Comp							"	4s
93	BIHS(4)			~22 43					0
94/103	FLHTS x 10							TUNG ND4	7s
104	Comp							REAR ND3	4s
105	TYC 3476118	14 37 14	49 23 47	22 53 06					1823 243
106	Comp							"	4s
107	TYC 3476118	"	"	23 25 56					2069 287
108	Comp							"	4s
109	TYC 3476118	"	"	00 02 51					1800 240
110	Comp							"	4s
111	BIHS(4)			00 34					

Spectr. Temp. Dome Temp./Hum. $+19.9^{\circ}\text{C}$ $65\% \text{RH}$ Transparency Conditions ... *Fine* 178
 Focus 6.69
 Spectr. Temp. Dome Temp./Hum. $+17.6^{\circ}\text{C}$ $68\% \text{RH}$ $390 \ 0 \ 50 \ 1024 \ 4 \ 1 \ \text{CCD FMT}$

Exp. Mtr.	Seeing	P.V. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				C HSCD	1800/14 51.58	20u		12			
220	3-4"	11.78	B-V 0.29					13		$\Delta x = 0000 \ 29$ $\Delta y = 0000 \ 39$	
								14			
220								15			
								16			
								1			
								17			
								18			
243		11.6	B-V = 0.4					19			
								20			
287								21			
								22			
260	4"							23			
								24			
								1			

1179

Pg #3

Emulsion Batches:

Date .. 1997 July 18/19 ... Observers [H.I.] p.g.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.
CC47112	Comp							FeAr ND3	4s
13	TYC 3478 761	14 29 43	+50 39 10	00 41 08					1800
14	Comp							"	4s
15	Comp							"	4s
16	TYC 3882 601	16 49 44	+57 07 28	01 17 17					1804
17	Comp							"	4s
18	TYC 3882 601	"	"	01 50 27					1800
19	Comp			02 27 55				"	4s
20	TYC 3882 601	"	"	02 27 55					0
21	Comp			03 16				"	4s
22	TYC 3882 601	16 49 44	+57 07 28	03 20 14					1800
23	Comp							"	4s
24	Comp							"	4s
25	HD 171724	19 00 44	+13 42 53	03 54 55					94
26	"	"	"	03 57 08					103

Spectr. Temp. Dome Temp./Hum. Transparency Conditions ... *Fine, But with* ... 180
 Focus ... *6.69* ...
 Spectr. Temp. Dome Temp./Hum. ... *+13.5°C 66.0% H* ... *Full moon*

Exp. Mtr.	Seeing	H _v Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4s				C455 CCD	1800h/n 51.58	252 _u	5894H	25c			
100	321	11.1	B-V .13					26		~ 100 ADU above Background	
4s								27			
4s								5			
130	310	10.9	B-V .07					6			
4s								7			
180	320	"	"					8		↓ Noise ??? NO - Power CCD warming up Must Have forgotten to top up at sundown.	
4s								9			
0		"	"					10			
4s								10			
150	362	5"	"					11			
4s								12			
4s								13			
7-1		5"	299 B0V					14			515K
13								15			

pg 4

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Spectr. Tex
Focus....
Spectr. Te

Exp. Mtr.

182

6.69.

67.184

Dome Temp./Hum. *+13.0°C...67.1%RH*

[illegible]

183 SAT/Sun 2 Large TOURS 1st Half of night M13 viewed
pg #1

Date 1997 July 19/20. Observers {H. I. J. p.m. / K. R. / Br. / 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.
CC 4713 ^{9/20}	Inboard / Outboard							Febr ND3	4/7
38	B1A5(4)			22 50					0
41	Comp							"	4s
42	HD 120315	13 4336	+49 48 45	22 47 51					29s
43	Comp							"	4s
44	Comp							"	4s
45	TYC 3882601	16 4944	57 07 28	22 5802					1818
46	Comp							"	4s
47	Comp							"	4s
48	TYC 3478761	14 2948	+50 39 10	23 4941					1800
49	Comp							"	4s
50	TYC 3478761	"	"	00 2221					1818
51	Comp							"	4s
52	B1A5(4)			00 54					0
53	Comp							"	4s

CCD
Spectr. Temp. -100.7°C... Dome Temp./Hum. $\pm 14.3^{\circ}\text{C}$ 66.8H Transparency Conditions Thin cloud 184
Focus 6.75
Spectr. Temp. Dome Temp./Hum. 390 0 50 1024 41 CCOFMT

Exp. Mtr.	Seeing	P.V. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/2				CASSCO	1800	250	5894A	3/4			
0								1		Telescope East Side	
4s								7			
4s	~11K	3.4	1.89	B3V				8	Telluric Std		~5K
4s								9			
4s								10			
4s	373	3.4	10.9	B-V .07				11			
4s								12			
4s								13			
4s	340	3.4	11.1	B-V .13				14		Δ 00 00 34 Δ 00 00 02	
4s								15			
4s	353							16			
4s								17			
0								1			
4s								18			

185 p₄ #2

Emulsion Batches:

Date 1997 July 19/20... Observers [HTS./Kar./Br./Jag...]

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison		Exp. Mtr.
		2000						Type/Filter	Exp.	
CC47154	TYC4194 218	16 4944	+640417	01 05 23					1804	298
55	Comp							FA ND 3	4s	
56	TYC 4194 218	"	"	01 37 36						
57	Comp							"	4s	
58	TYC4194 218	"	"	02 09 55					1808	290
59	Comp							"	4s	
60	BIAS(4)			02 41					0	
61	Comp							"	4s	
62	TYC4193 112	16 27 57	63 57 40	02 46 10					1500	300
63	Comp							"	4s	
64	TYC 4193 112			03 12 51					1500	307
65	Comp							"	4s	
66	Comp							"	4s	
67	HD177724	19 00 49	+134253	03 43 07					235	147
68	HD177724			03 47 44					220	135

Spectr. Temp. Dome Temp./Hum. *114.2°C 66.8% H* Transparency Conditions *Final* *186*
 Focus *6.75*
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pl [✓] Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<i>184</i> <i>298</i>	<i>3"</i>	<i>11.4</i>	<i>B-V</i> <i>12</i>	<i>CASSCO</i>	<i>1800h</i> <i>51.58°</i>	<i>250u</i>	<i>589A</i>	<i>19</i>			
<i>2</i>								<i>20</i>			
								<i>21</i>			
<i>3</i>								<i>22</i>			
<i>290</i>								<i>23</i>			
<i>4</i>								<i>24</i>			
<i>0</i>								<i>1</i>			
<i>4</i>								<i>25</i>			
<i>50</i> <i>300</i>	<i>3"</i>	<i>11.4</i>	<i>B-V</i> <i>104</i>					<i>26</i>			
<i>4</i>								<i>27</i>			
<i>50</i> <i>307</i>								<i>28</i>			
<i>4</i>								<i>29</i>			
<i>4</i>								<i>5</i>			
<i>23</i> <i>17.7</i>								<i>6</i>	<i>Telluric Std.</i>		<i>10K</i>
<i>20</i> <i>13.5</i>								<i>7</i>			<i>9K</i>

187 p₄₃ 1 SAT/SUN

Date ... 1947 ... July 19/20 Observers ... H.I. p₄₃

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.
647169	Comp							FeAr ND3	75
	70/79 FLATS x 10							TUNG ND4	7
	80 B115 (4)			0356					
	Cloudy Night Tests sun/moon Tu								
	July 20/21	Grating Zeroth order projection position determination							
Not written		CCD FMT for Y camera info				390 050 1024 41	+ND102	FeAr ND5	1 sec
						4550 50 1024 41	"	FeAr ND5	1 sec
	600J grating is a tight fit in Grating mount					385 0 50 1024 41	"	FeAr ND3	1 sec
						280 0 50 1024 41	"	"	"
						390 0 50 1024 41	"	"	"
						405 0 50 1024 41	"	"	"

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions .. *Part C only* 188

Focus 6.75

Spectr. Temp.

Dome Temp./Hum. +130°C 73.2%RH

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2.5					1500 Å 51.58	250 μ	5894 Å				
2.7											
Zeroth order Row 762 for 18° gratings " " 678 for 17.90 "											
∴ for 512 → 17.70 Zero order image position											
5/50					(F grating) 1800 l/mm	250 μ	T grating		17.722 → 17.723	exactly on Row 512 ± 1 pixel	
1/50					600 Å ~17.7°	250 μ	"		17.723	exactly on Row 511	
1/50					600 Å 17.8°	"	"		17.801	exactly on Row 511	
					D grating 831 l/mm 17.8°	"			17.757	" " Row 512	
					A grating 150 l/mm 17.8°	"			17.757	unchanged " " 511	
					E grating 1200 l/mm	"			17.733	" " 511	

689#1

Mon/Tues

Date 1997 July 21/22

Observers

Lu/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.
CC4718 1/2	Inboard/outboard								
83	Bras (4)			21 16					
84	comp							FeAr #3	4s
85	FO Vir	13 29 47	01 05 48	21 19 09					920
86	comp							"	4s
87	comp							"	4s
88	HT Vir	13 46 07	05 06 57	21 41 52					900
89	comp							"	4s
90	H136202 comp							"	4
91	HD 136202	15 14 12	02 48 37	22 05 32					185
92	comp							"	4
93/99	FLATS x 7							JUNG ND3	7s
CC47200	B/AS (4)			22 18 10					0
01	Comp							FeAr ND3	4s
02	T2 Lyr	18 15 50	41 06 42	22 40 25					1200
03	comp							"	4s

CCD
Spectr. T

Focus...

Spectr. T

Exp. Mtr.

1660

1650

4840

710

CCD
 Spectr. Temp. ... 100.5°C. Dome Temp./Hum. ... 16.9/83.6% Transparency Conditions ... cloudy ... 190.
 Focus ... 6.75.
 Spectr. Temp. ... Dome Temp./Hum. ...

Exp. Mtr.	Seeing	P. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm	3.6 u	5184	3/4			
								1			
								5			
970	1660	6.7	A7					6			
								7			
								8			
900	1650	4"	7.16	G0				9			
								10			
								11			
1350	4840		5.06	F8II-2				12	std vel		
								13			
75								14			10K
0								1			
								15			
1200	310	2-3	10.4	FS				16		Brighter south end of close pair	

191 P4#2 Mon/Tues

Date 1997 July 21/22 Observers Lu.../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.
CG81044/47	HD 176844	185703	+03236					4x	67ms
48/51	DARKS x 4							4x	67ms
52/53	DARKS x 2							2x	133ms
54/55	HD 176844 x2							2x	133ms
CC47204	Comp	2000						REAR 403	4s
05	CN And	00 20 30	+01336	01 22 03					900
06	"	"	"	01 37 59					900
07	comp							"	4s
08	BIAS(4)			01 54					
09	CN And	"	"	01 56 13					900
10	"	"	"	02 11 40					900
11	comp							"	4s
12	CN And	"	"	02 28 35					900
13	"	"	"	02 44 17					900
14	comp							"	4s
15	BIAS(4)			03 01					

Spectr. T

Focus...

Spectr. I

Exp. Mtr.

1000 V

536

550

570

638

645

663

Spectr. Temp.

Transparency Conditions *Part C bonds* 192

Focus 6.75

Dome Temp./Hum.

[illegible]

193 #3

Date 1997 July 21/22

Observers Lu / Tn

Emulsion Batches:

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Spectr. T

Focus...

Spectr. T

[illegible]

Exp. Mtr.

195 pg#1

Sun / moon

Emulsion Batches:

Date 1997 July 27/28 Observers E. V. S. S. / T. G. / L. u.

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.
CC47225/26	Inboard / outboard		HURTMAIR					KNE N/D 5	4/3
27	B/H 5 (4)			26 49					
28	Comp		1900					"	35
29	HD 11 9850	13 40 36	H 52700	20 5548					961 1.4K
30	Comp							"	25
31	Comp							"	25
32	BD-02 20892	14 01 03	-02 39 12	21 24 32					549 1.42
33	Comp							"	25
34	Comp							"	25
35	Vys 887 B	16 55 00	H 730 00	21 45 23					1867 500
36	Comp							"	25
37	VYS 887 A	"	"	22 19 25					1294
38	Comp							"	25
39	VYS 887 B	"	"	22 44 03					1408 55K
40	Comp							"	25
41	B/H 5 (4)			23 10					

Spectr. Temp. ^{CD} - 100.8 °C

Dome Temp./Hum. +23.2°C 77.9% H

Transparency Conditions some cloud 196

Focus 6.46

Spectr. Temp.

Dome Temp./Hum. +21.6°C 81.6% H

390 0 50 1024 4 1 CCD FMT

Exp. Mtr.	Seeing	✓ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASS CCD Tigrating →	18004/mm 47.75	306u	52988 ± 1A	3/4 1			
								5			5K
1-4K	2"	8.48	M1					6	Vys 308	Primary std. vel	
								7			OK
								8			10K
192	2.3"	9.43	M0					9	Vys 705	✓	
								10			
								11			
500	1.2"	11.2	K8					12	Vys 887B	✓ ENE faint + close companion Too cloudy	
								13			
	1.3"	~9	~K8					14	Vys 887A	Bright component 1 confirmed	
								12			
354	1.2"	11.2	K8					12	Vys 887B	clear now	
								15			
								-1			

1977 #2

Sun / Mon

Date 1977 July 27/28

Observers

{Vys} / Tn / Lu

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.
CC47242/5	Comp							FeNe ND5	2
43	Vys 840 AB	22 18 56	31 57 15	23 21 01					1800
44	comp							"	2
45	comp							"	2
46	HD 186799	19 41 30 22 51 48	1900 +10 22 10 16 02 00	00 35 34 00 01 45					230 145
47	Comp							"	2
48	B/A 5(4)			00 41 44					0
49/57	FLATS x 9					01 10W + 10°		TUNG ND3	75
58	Comp							FeNe ND5	25
59	HD 216 899	22 51 48	1900 +16 02 00	00 57 33					403
60	comp							"	25

CeD
Spectr. T

Focus...

Spectr. I

Exp. Mir.

No. 1/2

402

5k

120

C&P
 Spectr. Temp. -100.8°C Dome Temp./Hum. $+21.5^{\circ}\text{C}/82^{\circ}$ Transparency Conditions Part. Cloudy 198
 Focus 6.16
 Spectr. Temp. Dome Temp./Hum. $+21.0^{\circ}\text{C}/84.5\text{H}$ m/h

Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2	No filter				CASS ECO	1800 $\frac{1}{\text{mm}}$ 47.25	36 μ	5298	16			
1600	402		10.7	M0 ₂					17	✓	not well separated. cloudy in	
2									18			
2									19			
230	5K		8.72	K3 II					20	std vel/	cloudy	→ 5K
2									22			
0									1			
75									2			12.7K
25									23			
43	120	3'	8.66	M2					20	maggy std	B RA error -0000 H should be ~ +0000 03	
2									24			

199
Pg#1 Mon/Tues

Emulsion Batches:

Date 1997 July 28/29 Observers KK/WxL/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.
CF01715	test flat								30sec
1716	bias								
1717	Hartmann (n rr. switch)							FeNe	2sec
1718	Out							"	.
1719	Comparison							FeNe/5	2sec
1720	standard flat (but with both lamps)							FeNe/1	45sec
Note that these should be CF series Aluminum To be edited to CF later <u>Box 1</u>									
CF01719	BIAS(4)			20 25					0
20	Comp		1900					FeNe NO 5	2sec
21	HD186791	194130	+102210	20 3356					348
22	"	"	"	20 4150					489
23	Comp							"	2s
24	HD187691	194614	+100955	20 5944					3574
25	Comp							"	2s
26	BIAS(4)			22 01					0

Spectr. T

Focus...

Spectr. T

Exp. Mtr.

We did

JUST CAS

37K

50K

37K

90 again

Exp. Mtr.	Seeing	Pos. Mag.	Sp.	Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Echelle Fiber/	600 5795	Fiber	6300A			7x50μ bundle	
				(18x000 Echelle grating)						F = .238 forced to write as <u>CC</u> max 11775 max ~ 5000	
										max ~ 5000	MAX X
				CCD Temp	-100° @ 20:15					and Top-up done then	
				We did not enter instrument room after initial Top-up.				1			
				JUST CASS Exposure meter.				2			
37K				272 K3II				3			500
50K								3		extracted mode 6000 e-	
								2			
37 K	3.5"	5.11		F8V				4			500
	2.5"							2			13 K
								1			

201 A#2

Mon/Tues

Emulsion Batches:

Date 1997 July 28/29 Observers [KK]/WGL/TG.....

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.
CF01727	HD187691	19 46 1A	10 09 55	22 05 59					3742
28	Comp							FeNe NDS	2s
29	HD187691	"	"	23 11 46	23 11 46				3600
30	comp							"	2s
31	BIAS (4)			00 14					0
32	HD186791	19 41 30	+10 22 10	00 20 17					519
33	HD187691	19 46 14	10 09 55	00 34 36					4075
34	Comp							"	2s
35	BIAS (4)			01 46					0
36	HD187691	19 46 14	+10 09 55	01 49 52					3931
37	Comp							"	2s
38	HD187691	"	"	02 58 10					3883
39	Comp							"	2s
40	BIAS (4) - written after FLATS			04 05					0
40/45	FLATS x 6			Both sources appear on				TUNG ND1	455

Spectr. T.

Focus

c.c.o.

Spectr. T.

Exp. Mir.

51K

37K

39.2K

33.3K

Spectr. Temp. Dome Temp./Hum. $+19.8^{\circ}\text{C}$ 66%RH Transparency Conditions *Sunny clear* 202
 Focus 238
 CCD Spectr. Temp. Not checking IT, Since $\frac{1}{2}$ in instrument room Note IT + 27°C in Warm Room.
 Dome Temp./Hum. $+14.9^{\circ}\text{C}$ 67%RH 0 0 512 1024 21 CCD Full

Exp.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ X Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
21	37K	4.5"	5.11	F8V	e. 10/e 18.00	800 h/m .5745	F. 600 H. 1000	6300A	1c;			
22									2c;		4500 e ⁻	13K
23	37K								4			
24									2			
25									1			
26	51K	2.3"	272	K3II					3		extracted mode = 60000 e ⁻	
27	37K	2.5"	5.11	F8V					4		x 55000 e ⁻	
28									3c;			
29									1			
30	29.2K								4			
31									3			62.9K
32	23.3K	4.5"							4		At west Limit,	
33									3			
34									1			
35									2			5K

203

Tues/wed

Emulsion Batches:

Date 1997 July 29/30 Observers ... K.K. / 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.
CF01748	BIAS(4)			2032					0
49	Comp							FeNe 14D5	2
50	HD183912	192641	+274458	204504					730
51	Comp	"	"	205330	BIAS(4) 2114			"	840
52	Comp							FeNe 14D5	2s
53	HD183912	"	"	212240					856
54	FLAT			Both SOURCES				TUNG ND1	455
55	Comp							FeNe 14D5	2s
56	HD186791	194130	+102210	214638					1037
57	Comp							"	2s
58	HD1871691	194614	+100955	221018					3681
59	Comp							"	2s
60	BIAS(4)			2314					0
61	HD186791	194130	+102210	231955					690
62	Comp							"	2s

Spectr. Temp. set to $\rightarrow -100^{\circ}\text{C}$ Dome Temp./Hum. $+19.1^{\circ}\text{C}$ 51.48H Transparency Conditions Fine 204

Focus

Spectr. Temp.

Dome Temp./Hum. $+16.7^{\circ}\text{C}$ 61.48H 90C gain

0 0 512 1024 21 CCOUNT

Exp.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0	JUST CHSS Exp meter				Echelle Fiber Opt	300 lines .5820	Fiber Head	6300A	1	$\rightarrow$ changed	From last night in setup and CD	MAX A04
1					18.60				3			
20	60K	2"	3.24	K5D? + B?					2		$\sim$ 500 ABOVE BIAS	
21	72K				Went to check HARTMANN mask				2		stellar lost	
22					SAHRE MAX 45 UFO1749				3	After checking HARTMANN mask	switched Both deprossed down	
23	78K	2'-3'	3.24	K5II + B					2		$\sim$ 700 ABOVE	
24									4		<u>37K</u>	
25									3			
26	117K	23	272	K3II					4			1.3K
27									3			78K
28	46K	2'-5"	5.11	F8V					4		seeing getting poor	$\sim$ 500 MAX
29									3			8.3K
30									1			
31	88K		272	K3II					2			
32									3			

205A1

Tues/Wed

Date

1997 Aug 5/6

Observers

HIS/Lu/Tn/Ces/VnK/Pvr

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.
C-47261	BIAS (4)								0
62/63	Inboard Felt / OUTBOARD							FEAR NDS	4/6
64	Comp							"	4c
65	BD+64 1134	16 27 57	63 57 41	21 06 45					1800
66	"	"	"	(21 38 00)	24 51 58				840
67	comp							"	4s
68	BIAS (4)								0
69	BD+64 1134	"	"	22 02 51					1800
70	"	"	"	22 33 20					1800
71	Comp							"	4
72	BIAS (4)			23 05					0
73	comp							"	4
74	TYC+19421881	16 49 45	64 07 17	23 10 46					1800
75	"	"	"	23 41 24					1823
76	comp							"	4

Exp. Mtr.

LED
Spectr. T.

Focus

Spectr. T.

512

354(?)

506

484

417

430

Spectr. Temp. ⁴⁰⁰...100.8°C.Dome Temp./Hum. ^{16°/61.4%}Transparency Conditions ^{fine}.....206.Focus ^{6.80}.....

Spectr. Temp.

Dome Temp./Hum.

^{C bank} 410 0 50 1024 4 1 CCDMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				C455000	600nm/25.15	470	* 4080A	1		* probably same exact coating as July 17/97	
								3/4	focus test		
								5			3.4
512		11.36	B-V 6.044					6			
350(?)		"	"					7			
								8			
								1			
506		"	"					9			
484		"	"					10			
								11			
								1			
								12			
417		11.14	B-V 0.121					13			
430		"	"					14			
								15			

#2 207

Date 1997 Aug 5/6

Tues/wed

Observers

{HIZ/Lu/Tn/Cas/Vnk/Pr

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.
CC47277	BIAS(4)	2000		00 13					0
78	TYC419421881	16 49 45	64 07 17	00 15 15					1800
79	"	"	"	00 45 34					1800
80	comp							FeAr ND5	4
81	BIAS(4)			01 18					0
82	comp							"	4
83	TYC419012631	16 32 00	61 57 11	01 23 31					1800
84	"	"	"	01 54 05					1810
85	comp							"	4s
86	BIAS(4)			02 26					
87	TYC419012631	"	"	02 27 28					1800
88	comp							"	4s
89	TYC419012631	"	"	03 01 11					1800
90	comp							"	4s
91	BIAS(4)			03 33					0

LCO
Spectr. T.

Focus...

Spectr. T.

Exp. Mir.

382

367

383

394

364

351

LEO
Spectr. Temp. -100.8°C

Dome Temp./Hum. $14.1^{\circ}\text{C}/64.5\%$

Transparency Conditions *fine* 208

Focus 6.80

Spectr. Temp.

Dome Temp./Hum.

Exp	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0					CDSS CCD	600						
180	382	4.5	11.14	B-V		25, 15	47 $^{\circ}$	4080	1			
180	367								16			
4									17			
0									18			
4									1			
180	383	4.38	11.38	B-V					19			
180	394			0.181					20			
4									21	Some clouds		
180									22			
4									1			
180	364								23			
4									24			
180	351								25			
4									26			
0									1			

#3 209

Tues/Wed

↓ SUR4

Date ... 1997. Aug 5/6. Observers {HIS/. Cas / ~~Am~~ T.p.

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.
CC47292	Comp							FeAr ND5	4s
CC47293	HD 170073	18 22 27	58 44 34	03 41 55					174
CC47294	Comp							FeAr	4s
CG81054/55									
CC47295	HD 6314	0 58 59	39 27 18					4x	.067
59/61	DARKS							3x	.067
62/63	"							2x	.133
64/65	HD 6314							2x	.133
CC47295	Comp							FeAr	4s
CC47296	HD 210027	22 02 21	24 51 24	04 13 28					53s
97	Comp							"	4s
98	Comp							"	4s
99	HD 11636	01 49 07	20 19 09	04 20 17					65s
300	Comp							"	4s
301/307	flat							Tung ND #13	5s
308	BIAS(4)				04 32				

Spectr. T.

Focus...

Spectr. T.

Exp. Mir.

62K

6400

6500

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions ... *Some Cloud* ... 210.

Focus

Spectr. Temp.

Dome Temp./Hum. ... *412.6°C 64.5% H* ...*Light NNW winds*

Exp. Mtr.	Seeing	☒ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					620/1/4m	470a	4080	27			
6.2K	5"	499	A1 <u>V</u>					28	Mk Standard	AKA b Dra	<i>max</i> ~ 6.6
								29			
					ABOVE 470a	Slit			Seeing Test	Seeing Test	
No change of window OR Integrator Level was Lu did this set, with Ty advising.											
								5			
8,400		3.77	F5I					6	Mk Standard	AKA (Ari) (Ari) i Peg	<i>max</i> 10 K
								7			
								8			
8,200		2.67	A5V					9	Mk Standard	AKA β Ari	
								10			
								2			
								1			

211
pg#1 Wetthru

Date 1997 Aug 6/7

Observers

Hml/Tn/Vnk/Lu (ZHS)

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.
CC4730410	Inboard/Outboard							FeAr NDS	8 0
11	Bias(4)								
12	comp							FeAr NDS	4s
13	HD 123299	14 ^h 01 ^m 41 ^s	64°51'14"	20:30:55					36s
14	comp "	"	"	20:32:08					30s
15	comp							FeAr	4s
16	comp							FeAr	4s
17	HD 130109	14 ^h 41 ^m 12 ^s	02°18'51"						30s
18	"	"	"	20:45:00					30s
19	comp							FeAr	4s
20	comp							FeAr	4s
21	HD 128167	14 ^h 30 ^m 20 ^s	30°10'46"	20:52:13					60s
22	"			20:53:34					60s
23	comp							FeAr	4s
24	comp							FeAr	4s
25	HD 127162	14 ^h 38 ^m 05 ^s	38°44'44"	20:00					20s

CCD
Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

8.7K

6.9K

4.7K

4.5K

5.5K

5.8K

7.9K

Spectr. Temp. ... ^{CSO} -101.7°C...

Dome Temp./Hum. 18.5°/53.7%

Transparency Conditions .. Fine..... 212

Focus 6.80

Spectr. Temp.

Dome Temp./Hum. 17.8°/56%

Exp. Mtr.	Seeing	P.A. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Case CCO	600 L/m 25.15	470	4080A ⁰	3/4	SHI3	Focus test	
								4/1	SHI3		
								5			
8.7K		3.65	A0III					6	15K	A0III (α Pa) ^{mk}	standard
6.9K								7		"	
								8			
								9			
4.7K		3.74	A0V					10		109Vr → mk std.	
4.5K								11		"	
								12			
								13			
5.5K		4.46	F2V					14		σ Boo mk std.	
5.8K								15			
								16			
		3.00	A7III					17		σ Boo mk std.	
7.9K		3.00	A7III					18		σ Boo mk std.	

pg #2 Wed/Thurs

213

Date 1997 Aug 6/7

Observers Hml/Th/Lu/Vnk EHI3

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.
CC478	26 HD 127762	14 ^h 28 ^m 03 ^s	38° 44' 44"	21:01:07	21:01:07				20s
	27 Comp							FeAr	4s
	28 Comp							FeAr	4s
	29 HD 140159	15 ^h 37 ^m 03 ^s	19° 59' 30"	21:04:03					60s
	30 "	"	"	21:10:53					67s
	31 Comp							FeAr	4s
	32 Comp							FeAr	4s
	33 HD 134083	15 ^h 02 ^m 55 ^s	25° 15' 31"	21:16:35					103s
	34 "	"	"	21:18:53				FeAr	4s
	35 Comp							FeAr	4s
	36 Bias(4)			21:22					0
	37 Comp							"	4s
	38 TYC 4193 6911	16 ^h 42 ^m 31 ^s (epoch 2000)	64° 21' 37"	21:31:20					1800
	39 "	"	"	22 02 48					1800
	40 Comp			21				FeAr	4s
	41 TYC 4193 6911			22:34:32					1800

Spectr. Te

Focus...

Spectr. Te

Exp. Mtr.

8.8K

6.2K

7.2K

6.3K

6.5K

6.7K

6.9K

7.1K

7.3K

7.5K

7.7K

7.9K

8.1K

8.3K

8.5K

8.7K

8.9K

9.1K

Spectr. Temp. -101.7 Dome Temp./Hum. $17.8^{\circ}/56\%$ Transparency Conditions Fine 214Focus 6.80

Spectr. Temp.

Dome Temp./Hum. $+17.6^{\circ}/57\%$

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion & filter	PA ST	Program	Remarks	Quality
8.8K		3.00	A VII	Cass CCD	600nm 25.15	470	4080A	19		mk std X Boo	
								20			
								21			
6.2K		4.51	A IV					22	8.3K max	mk std i Sep	
7.2K								23	10 K max		
								24			
								25			
6.3K		4.93	F V					26	6.6K max	45c Boo mk std.	
6.3K								27	7.4K max		
6.2K 76K								28	7.8K		
								1			
								5			
654	1.2"	11.38	?					6ci		G90.0+38.8 dual program star	
651								7			
								8ci			
636		"						9ci			

Pg #3 wed / Thurs

215

Date 1997 Aug 6/7..... Observers Hm / Ta / Lu / Vnt.....

The EHS program

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.
cc47342	comp		(2000)					FeAr NO 3	4s
43	TYC 4193 6911	16 ^h 42 ^m 31 ^s	64°21'37"	23:01:03					1800
44	Comp							"	4s
45	B/H S(4)			23 39					
46	Comp		(2000)					"	4s
47	S92 NGC 6819	19 41 03	40 11 00	23 52 44					1800
48	comp							"	4s
49	S92 NGC 6819			00 25 23					1800
50	Comp							"	4s
51	S92 NGC 6819			00 59 19					1800
52	Comp								4s
53	B/H S(4)			01 30 52					0
54	comp							FeAr	4s
55	H0176437	18 ^h 55 ^m 12 ^s	32°33'08"	01 36 04					34s
56	"			01 37 35					"
57	comp								4

LED
Spectr. T

Focus...

Spectr. T

Exp. Mir.
1000V
10 Filter

1200V

1650

1027

8950

7K

CCD
 Spectr. Temp. -100.8°C ... Dome Temp./Hum. $17.6^{\circ}/57.5\%$ Transparency Conditions fine ... 216
 Focus $6-80$...
 Spectr. Temp. Dome Temp./Hum. $15.1^{\circ}/65.3\%$

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Gratings/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000K no filter				CASS CCD	600 Vmm 25.15	470 24	4080	10			
627	1.2"	11.38	7.					11c		HI program G90.0+38.8 clal	
								12			
								1			
1320V								12			
1650	1"	15.1	?					13		Stefan's program	
								14			
								15			
								16			
1627								17			
								18			
								1			
								19			
8950		13.25	B ^{III}					20	11.3K max	HI program 8Lyn mxstd	
7K								20			
								21			

page 4

217 Date 1997 Aug 6/7 Observers Hnl/Ha/Lu/Vnk

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.
CC47358	comp							FeAr	4s
59	H 18688a	14 ^h 41 ^m 51 ^s	44 53 12	01 42 58					22s
60	"			01 44 18					22s
61	comp							FeAr	4s
62	comp							"	4s
63	H 195215	20 ^h 25 ^m 19 ^s	30 02 65	01 50 18					
64	"			01 53 05					75s
65/66	comp							FeAr	4s
67	comp							"	"
69/70	H 196867	20 34 60	15 33 33	01 58 55					50s
69	"			02:00 26					50s
70	comp							FeAr	4s
71	comp							"	"
72	H 196379	20 31 56	51 30 32	2:08 04					360s
73	"			2:14:44					360s
74	comp							FeAr	4s

Spectr. Te

Focus

Spectr. Te

Exp. Mir.

885

9130

1000

3000

1000

2100

2500

Spectr. Temp. Dome Temp./Hum. *+15.0°C 64.5% H* Transparency Conditions *Fine* *2.18*
 Focus *6.80*
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Cass CCD	6002/mm 25.15	470 μ	4080	22	EHI3		
8850		2.87	BA5II					23	13.2K _{max}	6Lg MKstd.	
9130								23	14K _{max}		
								24			
								25		4	
		4.01	FSII					26		41 Lg MKstd.	
10000								26			
								27		(2 copies of this one)	
								27			
8000		3.71	BAIV					28	11K _{max}	2 Del MKstd.	
9000								28			
								28 29			
								5			
8100		6.13	APII					6ci		mkstd	
8500								7ci			
								8ci			

page 5

219

Date

1997 Aug 6/7

Observers

Hrd/Th/Lu/Vnk.....

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.
CC47375	comp BIAS(4)							FeAr NOS	4/5
76	comp							FeAr	4s
77	H0199470	20 5227	47 02 03	02 27 53					208
78	"	"	"	02 32 03					214
79	Comp							"	8s
80	comp							"	"
81	H0198183	20 43 31	36 07 23	02 42 07					70s
82	"			02:43 58					70s
83	comp							FeAr	4s
84	comp								
85	H0202850	21 13 29	38 58 32	02 50 14					65s
86	"								75s
87	comp							FeAr	4s
88	comp							"	"
89	H0214923	22 36 28	10 10 33	02:59 35					33s
90	"			03:00 46					30

Spectr. To

Focus...

Spectr. To

Exp. Mr.

84K

85K

89K

80K

8.5K

8.5K

8.5K

9.0K

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions P-10 220.

Focus 6000

Spectr. Temp.

Dome Temp./Hum. 15°/59.9%

Exp. Mtr.	Secing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Cass CED	6002/mm 25.15		4080A	1	SHI3		
								9			
8.4K		5.66	B82a					10		mk std.	
8.5K								10			7/15
								11			
								12			
8.8K		4.53	B5V					13		mk std	
8.0K								13		X Cyg	
								14			
								15			
8.5K		4.23	B9ab					16			
8.5K								16			
								17			
								18			
8.6K		3.40	B8V					19		Zeta Peg	mk std
9.0K								20			

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Date 1997 Aug 6/7 Observers Hnd/Tn/Lu/Lnk

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.
cc47391	comp							FeAr	4s
92	comp								
93	H10211336	22 11 21	56 32 41	03 10 03					55s
94	"			03:1140					59
95	comp							FeAr	4s
96	comp							"	"
97	H10210221	22 03 43	52 49 07	03 16 27					301s
98	"			03 22 06					400s
99	comp							FeAr	4s
cc47400	BIAS (H)								
CG 81066/69	HD 3765	00 35 13	+39 40	Wen Lu mainly doing this set				4x	67ms
70/73	Darks	x 4						"	"
71/75	"	x 2						2x	133ms
76/77	HD 3765	"	"					2x	133ms

Spectr. Temp.
 Focus -6.8D
 Spectr. Temp.

Dome Temp./Hum. 15°/59.99%
 Dome Temp./Hum. 14.4°/60.9%

Transparency Conditions Fine 222

410 050 1024 41 CCDFAST

Exp. Mtr.	Seeing	P/V Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Cass CCD	600nm 25.15	470u	4080A	20			
								21			
55s	8.1k	4.19	FON					22	10kmx	mk std G Cep	
59	7.2k							23	13kmx		
								24			
								24			
7.3k		6.14	A3Sub					25		mkstd. 9.2kmx	
8.4k			11					25			
								26			
								1			
3"	7.36k	15		ARE		470u	slit			seeing test. Dome East	
										A Rare seeing Test when Telescope is	
										East side of pier.	

223 p#7

Date ... 1997 Aug 6/7 ... Observers ... HIZ And/Tn/Lu ...

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.
cc47401	comp							FeAr	4s
02	HD 571	00 05 07	45 30 57	03 ^h 52 39					750s
03	"			03 ^h 55 34					180s
04	comp							FeAr	4s
05	comp							"	"
06	HD 1280	00 ^h 11 52	38° 07 35	04 ^h 03 29					100s
07	"			04 ^h 05 48					120s
08	comp							FeAr	4s
09	"							"	"
10	HD 6130	00 57 27	60 32 15	04 ^h 13 35					318s
11	"			04 ^h 14 14					411s
12	comp							FeAr	4s
13	Bias (4)								
cc47414/23	Flats (x10)			1430				ring	5s

Spectr. Temp. Dome Temp./Hum. $14.4^{\circ}/160.9\%$ Transparency Conditions *Fine* 224
 Focus
 Spectr. Temp. Dome Temp./Hum. $14.3^{\circ}/11.4$

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Cass CCD	$600\lambda/\text{mm}$ 25.15	470	4080A	5ci	ETHS		
8.7K		5.04	F21					6ci		mk std 22 And	6.9K max
10.1K								6ci			
								7ci			
								8ci			
8.7K		4.61	A2V					9ci	8.8K max	mk std 6460+ And.	
10.1K								9ci			
								10ci			
								11ci			
7700		5.92	F21					12ci	5K max	mk std	
10300								12ci	9.3K max		
<u>Note</u> - At end of night, I found that gleting Handle was still up and blocking some of our potential photos. It likely was up all night.								13ci			
								14ci			
								2ci			

225^{PS} #1

Date Aug 7/8/1997 Thurs/Fri

Observers Cas/Kar/Unk/LU

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.
CC47424/25	Inboard/outboard							FeAr ND#3	4/7
26	Bias (4)			20 18					0
27	comp								4s
28	HD 177724	1900419	134253	20:30:29	20:30:				
29	comp							FeAr	4s
30	comp							"	4
31	TYC 3866 21	1656 44	(2000) +52 33 46	20 59 46					1800
32	comp							FeAr	4s
33	TYC 3866 221	1656 44	+52 33 46	21 31 25					1840
34	comp							FeAr	
35	Bias (4)			22:07					0
36	comp							FeAr	
37	TYC 3879 9281	1643 13	+53 01 19	22 11 39					1800
38	comp							FeAr	4
39	TYC 3879 9281	"	"	22 46 17					180

CCD
Spectr. Temp. ... -100.8°C ...

Dome Temp./Hum. 21.0/55.2

Transparency Conditions ... 448y ... 226

Focus ... 6.71 ...

Spectr. Temp.

Dome Temp./Hum.

CCD FWHM
40
50
24
4
0

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
74				CCD CASS	1800 51.58	250u	5894	3/4		{HI}	
								1			
								5			
		299	BOV					6		Telloric Standard	
								7.			
								8			
745		10.39						9			
626								10			
676								11			
								12			
								1			
								13			
237	1"-2"	11.66						14		Faint Star to the side	
								15			
215								16			

pg #12

227 1997 Aug 7/8

Thurs/Fri.

Date

Observers

{H.I.}/Cas/Kar/Vnk/Lu

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.
CC47440	comp							F2Ar ND#3	4s
41	TYC 3879 9281	16 43 13	53 04 19	23 18 56					1821
42	comp							"	4s
43	BIAS(4)			23 52					
44	comp							"	4s
45	TYC 3887 1381	17 10 57	53 21 10	23 58 22				ND#3	1800
46	comp							"	4s
47	TYC 3887 1381	"	"	00 31 04					1760
48	comp							"	4s
49	BIAS(4)			01 02					
50	comp							"	4s
51	TYC 4190 2437 1	16 37 55	40 02 09	01 19 47					1600
52	comp							"	4s
53	TYC 4190 2437 1	"	"	01 49 47					1200
54	"	"	"	02 10 21					1200
55	comp							"	4

CCD
Spectr. Te.

Focus.....

Spectr. Te.

Exp. Mtr.

214

378

365

292

216

194

CCD
Spectr. Temp. -100.8°C

Dome Temp./Hum. $19.1^{\circ}\text{C}/59.4\%$

Transparency Conditions *hazy* 228

Focus 6.71

Spectr. Temp.

Dome Temp./Hum. $17.7^{\circ}\text{C}/64.5\%$

CCDFMT 410 0 56 1024 4 1

Exp. Mir.	Seeing	Exp. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 51.58	250	5894	17			
214		11.66						18			
								19			
								1			
								20			
378	1"-2"	10.92						21			
								22			
365		10.92						23			
								24			
								1			
								25			
292		10.83						26			
								27			
216		10.83						28			
194	2-3							29			
								30			

pg #3
229

Date 1997 Aug 7/8

Observers {HI}/Cas/Kar/Vnk/Lu

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.
cc47456	BIAS(4)			02 32					
57	comp	(2000)						FeAr	45
58	tyc41919361	17 06 31	+60 39 13	02:39 16					1800
59	comp							FeAr	
60	TYC 41919363	"	"	03 12 41					1800
61	comp							FeAr	4
62	BIAS(4)			03 44					
63	comp	(1900)						FeAr	4
64	HD 176437	18 55 12	32 33 08	03 53 23					160
65	"	"	"	03 57 02					160
66	comp							FeAr	4
67	comp							FeAr	4
68	HD 186882	19 41 51	44 53 12	04 06 08					60
69	"			04 07 43					63
70	comp							FeAr	4

Spectr. Temp. -100.7°C Dome Temp./Hum. $17.5/66.1\%$ Transparency Conditions hazy 230Focus 6.71

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Secing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	$1800 \frac{1}{\text{mm}}$ 51.58	250 μ	5894	1		{HI}	
								5			
207	2-3	1156						6			
								7			
195		"						8			
								9			
								1			
								10			
10.2 K		3.25	B9II					11			
10 K		"	"					11			
								12			
								13			
10 K		2.87	B9.5II					14			
10.7 K		"	"					14			
								15			

231
Date 1997 Aug 7/8 Observers SHI3 Cas/Kar/Vnk/Lw

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[illegible]

Pg #1

233

Date 1997 Aug 8/9

Observers

Vnk/Lu

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.
CC47485/6	Inboard/outboard							FeAr ND #3	4/7
87	B1A5(4)			20 35					0
88	comp			20 49 12				"	4s
89	HD154417	17 00 11	00 50 58	20 49 12					300
90	comp							"	4
91	comp							"	
92	HD177724	19 00 49	13 42 53	21 04 30					60
93	comp							"	
94	comp							"	
95	HD187183	19 43 30	09 05 00	21 14 26					900
96	comp							"	4s
97	HD187183	"	"	21 32 49					900
98	comp							"	
99	B1A5(4)			21 49					0
500	comp							"	4s

LCP

Spectr. Tr.

Focus...

Spectr. Tr.

Exp. Mir.

2530

93K

634

643

CCD
Spectr. Temp. -100.8°C

Dome Temp./Hum. $22.5/62.7$

Transparency Conditions *Very Hazy* 234

Focus 6.65

Spectr. Temp.

Dome Temp./Hum.

400 0 50 1024 41 CCDPMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 $1/\text{mm}$ 56.35	306	6600	3/4			
								1			
								5			
2530		6.01	GOV					6	std vel		
								7			
								8			
60	9.3K	2.99	BOZ					9	telluric std		
								10			
								11			
600	634	9.5	G5V					12	contact Binary (V_{HK})		
								13			
900	643	"	"					14			
								15			
								1			
								16			

pg #3

235 1997

Aug 8/9

Date

Observers

Vnk / Lu

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.
CL47501	HD197433	20 38 36	75 14 00	22 10 43	22 18 43				480
02	"			22 20 03					480
03	comp							FeAr ND#3	45
04	comp							"	45
05	HD199497	20 52 30	19 15 00	22 36 54					600
06	"			22 48 14					600
07	comp							"	4
08	BIAS(4)			23 00					0
09	comp							"	4
10	HD199465	20 52 18	05 27 00	23 06 17					900
11	"			23 22 23					900
12	comp							"	45
13	BIAS(4)			23 39					0
14/20	flat							Tung ND#5	4

OCD
Specr. T.

Focus

Specr. T.

Exp. Mtr.

1720

1800

638

660

795

608

Speed. Temp. ^{CCD} -100.8

Dome Temp./Hum. 21.7/66.1%

Transparency Conditions ^{Very Hazy} 236

Focus 6.65

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
450	1720	7.4	K02	Cass CCD	1800/mm 56.35	306	6600	17	Vnk CB	$\Delta\alpha = 47^s$, $\Delta\delta = 1'24''$	
450	1800							18			
45								19			
45								20			
600	638	8.7	45					21	Vnk CB		
600	660							22			
4								23			
4								1			
4								24			
900	595	2"-3"	9.3	A0				25	Vnk CB		
900	608							26			
45								27			
0								1			
4								2			

pg #3

237 1997 Aug 8/9

Date

Observers

[Kok]/Vnk/Lu

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.
CL47521/22	Inboard/outboard							FeAr clear	20/30
23	BIAS(4)								0
24	comp							"	60
25	HD 204848	21 26 12	-10 11 00	00 11 11					1800
26	comp							"	60
27	comp							"	60
28	HD 207687	21 45 42	-10 31 00	00 53 22					2000
29	comp							"	60
30	BIAS(4)								0
31	comp							"	60
32	HD 197989	20 42 10	33 35 44	01 40 22					36
33	comp							"	60
34/38	flat								60
39	BIAS(4)			01 55					

CCD
Spectr. T

Focus...

Spectr. I

Exp. Mtr.

3530

3870

12K

Specfr. Temp. $-1.24.8^{\circ}\text{C}$ DOME Temp./Hum. $20.6/69.5$

Dome Temp./Hum. 20.6 / 69.5

Transparency Conditions *Very Hazy* 238

Focus

Spectr. Temp. Dome Temp./Hum.

400 = 50 1024 4 1 ccdFMT

Aperture mm Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
20/30					CASS CCD	1800 1/mm 41.74	306μ	4303	3/4			
0									1			
60			8	KOII					5	KOK		
1800	3530	3"-4"	8	KOIII					6	KOK Pgm		
60									7			
60									8			
2000	3870		7.88	KOIII					9	KOK Pgm		
60									10			
0									1			
60									11			
36	12 K								12	KOK stel		
60									13			
60									2			
									1			

Pg #1

Mon/Tues

239 1997 Aug. 11/12

Date

Observers

Vnk/Lu

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.
cc47540/41	Inboard/outboard							FeAr ND#3	4/7
42	Bias(4)			20 59					
43	comp							"	45
44	HD186791	19 41 30	10 22 10	21 07 50					270
45	comp							"	45
46	comp							"	45
47	HD187691	19 46 14	10 09 55	21 18 43					640
48	comp								
49	BIAS(4)			21 31					
50/56	flats							Tung ND#5	4
57	BIAS(4)			22 32					
58	comp							FeAr ND#3	
59	HD187691	19 46 14	10 09 55	22 36 07					245
60	comp							"	4
61	comp							"	4
62	HD177441	18 59 36	01 09 00	22 52 14					900

Spectr. Te

Focus...

Spectr. Te

Exp. Mr.

2000

611

6X

7X

Spectr. Temp. -100.7°C Dome Temp./Hum. $16.3/68.4\%$ Transparency Conditions $\text{cloudy} \rightarrow \text{clear}$ 240Focus 6.69

Spectr. Temp.

Dome Temp./Hum. $14.8/79.0\%$

400 0 50 1024 4 1 CCDMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 $\frac{1}{\text{mm}}$ 56.35	206	6600	3/4			
								1			
								5			
2000		2.7	K3II					6	std vel		
								7			
								8			
611		5.11	F8V					9	std vel		
								10			
								1			
								2			
								1			
								11			
6K	4"-5"	5.11	F8V					12	std vel		
								13			
								14			
775		8.5	K2I-II					15	V _n K Cep		

pg#2 Mon/Tues
24) 1997 Aug 11/12

Date Observers Vnk/Lu

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.
cc47563	comp							FEAR ND#3	4s
64	comp							"	4s
65	HD 178359	19 03 12	01 09 00	23 16 22					900
66	comp							"	4s
67	B145(4)			23 33					0
68	comp							"	4s
69	HD 229680	18 45 54	15 49 00	23 41 31					2400
70	comp							"	4s
71	comp							"	4s
72	HD 187921	19 47 24	27 12 00	00 30 21					600
73	comp							"	4s
74	B145(4)			00 42					0
75	comp							"	4s
76	HD 227463	20 00 36	33 50 00	00 48 27					900
77	comp								

CCD
Spectr. T
Focus...
Spectr. T

Exp. Mir.

2970

574

2048

494

CCD Spectr. Temp. -100.7°C Dome Temp./Hum. $14.8^{\circ}\text{C}/70\%$ Transparency Conditions $\text{fine + some clouds}$
 Focus 6.69 Spectr. Temp. Dome Temp./Hum. $13.4^{\circ}\text{C}/77.6\%$ in S 242

Exp.	Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4s					CASS CCD	1800 $\frac{1}{\text{mm}}$ 56.35	300 μ	6600	16			
4s									17			
700	2970	4"-5"	7	F5Ia					18	Vnk CEP		
4s									19			
4s									1			
4s									20			
2000	574		11	F2I					21	"		
4s									22			
4s									23			
600	2048		7	G2I					24	"		
4s									25			
0									1			
4s									26		more clouds	
400	494		9	F8Ib					27	"		
									28			

pg #3
243

Date 1997 Aug 11/12 Observers Vnk/Lu

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.
CC47578	comp	(2000)						TeAr ND#3	4s
79	BD+44 3571	20 46 00	45 18 30	01 14 16					1800 677
80	comp							"	4s
81	comp	(1700)						"	4s
82	HO 196018	20 29 36	46 16 00	01 53 40					1200 713
83	comp							"	4s
84	BIAS(4)			02 15					
85	comp							"	4s
86	BD+39 4379	(2000) 20 57 21	40 10 39	02 22 45					1000 489
87	comp							"	4s
→ 88	comp	(2000)						"	
89	BD+42 3935	21 00 06	42 35 51	02 48 02					960 520
90	comp							"	4s
91	BIAS(4)			03 06					0
92	comp							"	4s

CCD
 Spectr. Temp. ... -100.7°C ... Dome Temp./Hum. ... 13.3°C / 78% ... Transparency Conditions ... patches → cleanup
 Focus ... 6.69 ... 244
 Spectr. Temp. ... Dome Temp./Hum. ... 12.5°C / 80.3% ... 400 0 50 1024 4 1 CCD/NT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm	306	6600	5			
677		10.3	F8I _b					6	Vnk Cep		
								7			
								8			
713		9.4	F8I _b					9	"		
								10			
								11			
489		10	F5I _b					12	"		
								13			
								14			
520		9	F5I _b					15	"		
								16			
								17			

→ [410 0 50 1024 4, 1]

CCD format charged here!!!

P8 #4

245

Date 1997 Aug 11/12... Observers ... Vok / Lu

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.
CC47593	HD 214975	22 36 54	56 19 00	03 12 56					613
94	comp							EAR ND#3	4s
95	comp							"	4s
96	HD 221491	23 27 29	34 24 02	03 30 51					320
→ 97	comp							"	4
98	comp							"	4s
	IX Cas	00 04 51	50 14 01	03 49 45					
	comp								
	BIAS(4)								
98	BIAS(4)								
99	BIAS(4)								
CC47600/ 06	flat							Tung ND#5	4

LED

Spectr. Te

Focus ...

Spectr. Te

Exp. Mtr.

670

2550

CCD
 Spectr. Temp. -100.7°C Dome Temp./Hum. $12.5^{\circ}\text{C}/80.5\%$ Transparency Conditions $\text{some clouds in } 246$
 Focus 6.69 lower sig
 Spectr. Temp. Dome Temp./Hum. $460 \ 0 \ 50 \ 1024 \ 4 \ 1 \ \text{CCDFMT}$

Exposure No. Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
613	670		8	F6I	CASS CCD	1800 V/mm 56.35	306 μ	6600	18	Vnk Cep		
615									19			
616									20			
620	2550		665	B8V					21	Telluric Std		
621									22			
622									23			
623									24			
624									25			
625									26			
626									27			
627									28			
628									29			
629									30			
630									31			
631									32			
632									33			
633									34			
634									35			
635									36			
636									37			
637									38			
638									39			
639									40			
640									41			
641									42			
642									43			
643									44			
644									45			
645									46			
646									47			
647									48			
648									49			
649									50			
650									51			
651									52			
652									53			
653									54			
654									55			
655									56			
656									57			
657									58			
658									59			
659									60			
660									61			
661									62			
662									63			
663									64			
664									65			
665									66			
666									67			
667									68			
668									69			
669									70			
670									71			
671									72			
672									73			
673									74			
674									75			
675									76			
676									77			
677									78			
678									79			
679									80			
680									81			
681									82			
682									83			
683									84			
684									85			
685									86			
686									87			
687									88			
688									89			
689									90			
690									91			
691									92			
692									93			
693									94			
694									95			
695									96			
696									97			
697									98			
698									99			
699									100			

Pg #1
247

Date

1997 13/14 Aug.

Observers

Wed/Thur

Vok / Lu / Ksz

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.
CC47607/8	Inboard/outboard							EAR ND43	4/7
09	BIAS(4)			21 29					0
10	comp			20 29 29				"	4
11	HD186791	19 41 30	10 22 10	21 42 46					20
12	comp							"	4
13	comp							"	4
14	HD203024	21 14 36	68 29 00	21 59 14					1200
15	comp							"	4
16	comp							"	4s
17	HD203854	21 19 42	71 55 00	22 27 14					1200
18	comp							"	4s
19	BIAS(4)			22 49					
20	comp	(2000)						"	4s
21	GSC 4461, 133	21 17 40	68 55 09	22 54 23					1800
22	comp								

CCD
 Spectr. Temp. -100.7°C Dome Temp./Hum. $16.4^{\circ}\text{C}/76.4\%$ Transparency Conditions *clear* 248.
 Focus 6.69
 Spectr. Temp. Dome Temp./Hum. $14.5^{\circ}\text{C}/75.9\%$ 410 0 50 1024 4 1 CCD FMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Gratings/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 $\frac{1}{\text{mm}}$ 56.35	306	6600	3/4			
								1			
								6			
6K9 6K9		2.72	K3II					7	std Vel		
								8			
								9			
1200	1364	3"-4"	8	B9.5				10	IRAS Pgm		
								11			
								12			
1200	974		9	A2				13	"		
								14			
								1			
								15			
150	710	9.69	A0					16	"		
								17			

Pg #2

Wed/Thurs

249 1997 Aug 13/14

Date 1997 Aug 13/14 Observers Vnk/Ksz/Lu

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.
c47623	comp		(2000)					F2 Ar ND #3	4s
24	SAO 19953	22 13 48	70 02 41	23 34 18					1200
25	comp							"	4s
26	comp							"	4s
27	GSC 4467.083	22 16 31	70 02 40	00 10 00					1800
28	comp							"	4s
29	BIAS(4)			00 43				-	
30	comp							"	4s
31	SAO 20054	22 24 42	69 41 17	00 50 44					1200
32	comp							"	4s
33	comp							"	4s
34	HD 216486	22 48 12	76 32 00	01 16 03					1200
35	comp							"	4s
36	comp							"	4s
37	SAO 10593	23 02 16	72 43 40	01 41 37					1200
38	comp							"	4s

CCD
Spectr. Te

Focus...

Spectr. Te

Exp. Nr.

928

306

985

1080

2550

CCD
Spectr. Temp. ... 100.7°C...

Dome Temp./Hum. ... 14.52/75.8%

Transparency Conditions ... clear ... 250

Focus ... 6.69

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4s				CASS CCD	1800/mm 56.35	306μ	6600	18			
1200	928	4-5"	9.1	A0				19	IRAS pgm		
4s								20			
4s								21			
1800	306		10	K2				22	"		
4s								23			
								1			
4s								24			
1200	985		8.8	A0				25	"		
4s								26			
4s								27			
1200	1080		8.8	A3				28	"		
4s								29			
4s								30			
1200	2550		7.9	A5				7	"		
4s								8			

Pg# 3

Wed/Thur

251 1997 Aug 13/14

Date

Observers

Vnk/Ksg/Lu

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.
CC47639	BIAS(4)			02 03					
40	comp							F2Ar ND#3	4s
41	SAO 10726	23 23 49	77 04 09	02 02 38					900
42	SAO 10726	23 23 49	77 04 09	02 28 41					900
43	comp							"	4s
44	comp							"	4s
45	HD 221491	23 27 29	34 24 02	02 52 20					300
46	comp							"	4s
47	BIAS(4)			02 58					0
48	comp							"	4s
49	HD 216598	22 49 06	37 23 00	03 06 18					600
50	comp							"	4s
51	comp							"	4s
52	BD+36 5017	23 11 32	36 53 38	03 23 38					600
53	comp							"	4s

CCD

Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

808

505

2500

576

282

CCD
Spectr. Temp. - 100.72 Dome Temp./Hum. 13.5°C / 70.5% Transparency Conditions clear 252
Focus 6.4
Spectr. Temp. Dome Temp./Hum. 410 0 50 1024 4 1 CCDPMT

Exp.	Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					CASS CCD	1800/mm 56.75	306 _u	6600	1			
									9			
628	5"-6"	9.9!	A0						10	IRAS P8 ⁺		
525		9.9!	A0						11		E ← O N	
									12			
									13			
2500	4"	6.6	B8V						14	Telluric std		
									15			
									1			
									16			
576	5"-6"	9	K0						17	Vnk CB		
									18			
									19			
282		9.9	G5						20	"		
									21			

pg #4 Wed/Thurs
253 1997 Aug 13/14 Date Obs

253 Date 1997 Aug 13/14

Observers Vnk / Lu

Emulsion Batches:

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[illegible]

255

Date 1997 Aug. 14/15 Observers Vnk/Ksz/Lu

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.
CG47668/9	Inboard/outboard							FeAr ND#3	4/7
70	BIAS(4)			20 14					
71	comp							"	4s
72	HD15501 HD15501	16 03 34	17 18 48	20 24 03					90 4.3 K
73	comp							"	4s
74	comp							"	4s
75	HD157741	17 20 03	15 41 49	20 36 02					300 4.4 K
76	comp							"	4
77	comp							"	
78	HD171232	18 28 30	25 25 00	20 49 43					600 2400
79	comp							"	4
80	BIAS(4)			21 03					0
81/87	flat3							Tung ND#5	4
88	HD197441	18 59 36	01 09 00	22 08 52					900 2400 744
88	comp							FeAr ND#3	4
90	comp								4

CCD
Spectr. Temp. $-1.82 \pm 0.8^\circ\text{C}$...

Dome Temp./Hum. $16.7^\circ\text{C}/61.7\%$

Transparency Conditions *Fine with clouds 256
in the lower sky*

Focus

Spectr. Temp.

Dome Temp./Hum. $14.7^\circ\text{C}/66.9\%$

Exp	Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/2					CASS CCD	1800/mm 56.35	306 μ	6600	3/4			
									1			
1/2									6			
70	4.3 K		5.0	G5III					7	std vel		
1/2									8			
1/2									9			
300	4.4 K		6.35	B9V					10	Telluric std		
1/2									11		more clouds	
									12			
600	2400		7.7	G8					13	std vel		
1/2									14			
0									1			
1/2									5			
90	H α 740		8.5	K2					16	Vnk CEP	cloudy	
1/2									15	$\Delta\Delta$		
1/2									17			

Specr. Temp. -109.8°C Dome Temp./Hum. $148^{\circ}\text{C}/67.6\%$

Transparency Conditions *cloudy* 258

Spectr. Temp.

Dome Temp./Hum.

[illegible]

Pg #1

259

1997 Aug 18/19

Date

Observers

Gld/Att/Prr/Lu

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.
CC47693/3	Inboard/outboard							FeAr ND#U	4/7
94	BIAS (4)			21 09					0
95	comp							FeAr	4
~	PG 16347332	16 34 30	70 21 30	21 22 10					
96	CV Cyg	19 54 22	38 02 30	21 54 19					1200
97	comp							FeAr ND#U	4
98	comp							"	4
99	HD 187691	19 46 14	10 09 55	22 24 28					30
700	"	"	"	22 26 30					60
01	comp							"	4
02	BIAS (4)			22 31					0
03	comp								4
04	HD 184606	19 30 11	19 33 18	22 36 47					120
05	comp							4	4
06	comp							4	4

CCD

Spectr. Te

Focus....

Spectr. Te

Exp. Mtr.

CCD
 Spectr. Temp. -100.8°C ... Dome Temp./Hum. $16.3^{\circ}\text{C}/51.4\%$ Transparency Conditions fine ... 260
 Focus 6.76 ...
 Spectr. Temp. Dome Temp./Hum. 365 0 50 1024 4 1 COFMT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1200/mm #2.07	306 μ	6540	3/4			
								1			
								6			
								7			
?		11.	F8					7	Vnx CB	EXP MTR Does not work	
								8			
								9			
		5.11	F8V	BSTn				10	std 421		
								11	"		
								12			
								1			
								13			
		5.00	BSTn					14	std telluric		
								15			
								16			

Pg #2

261 Date 1997 Aug 18/19

Observers

Gld/At/Prr/Lu

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.
CC47707	S92-ngc6819	19 41 03	40 11 00	22 57 49					1800
08	comp							F2Ar NB#4	4
09	BIAS(4)			23 30					
10	comp							"	4
11	NGC6826	19 44.48	56 31 50	23 33 56					200
12	" comp			23 37 42					207
13	"								600
14	comp							"	4
15	comp							"	4
16	NGC7469	23 03 17	08 52 40	00 14 24					240s
17	"	"	11	00 20 54					120s
18	comp							"	4s
19	BIAS(4)			00 42					4
20	comp							"	4
21	S92-NGC6819	19 41 03	40 11 00	00 59 16					180s
22	comp							"	4

CCD

Spectr. Te

Focus....

Spectr. Te

Exp. Mtr.

CCD
 Spectr. Temp. -100.8°C Dome Temp./Hum. $15.4^{\circ}\text{C}/53.2\%$ Transparency Conditions fine 262
 Focus 6.76
 Spectr. Temp. Dome Temp./Hum. 365

Exposure Time Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
300			14.3	AO?	CASS CCD	1200 V/mm 42.07	306 μ	6540	17	$\{M_{\text{Kj/Gd}}\}$		
↓									18			
↓									1			
↓									19			
300			9.8	PN					20	AST J25 data.		
250			"	PN					21			
100			"	"					21			
↓									22			
↓									23			
250			11.3	Sc					24	$\{H\text{I}\}$	Hx visible near 1310n	
200									25		bright moon!	
↓									26			
↓									1			
↓									27			
150			14.3	AO					28			
↓									29			

263 pg #3

Date 1997 Aug 18/19 Observers Gld/A#/Rrr/Lu

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.
CC47723	S92-NGC6819	19 41 03	40 11 00	01 21 25					180
24	comp							EAR ND#4	4s
25	BIAS(4)								
26	comp							"	4s
27	CV Cyg	19 54 22	38 02 30	01 58 30					120s
28	comp							"	4s
29/38	flats							Tung ND#5	25s
39	BIAS(4)			02 25					0
40	NGC0488	01 21 48	05 15 00	03 45 36					900
41	comp							EAR ND#5	1s
42	slightly near NGC0488			04:04					600s
43	comp							"	1s
44	BIAS(4)								
45/49	flats							Tung ND#6	4s

CCD
Spectr. T
Focus...
Spectr.

Exp. Mtr.

04560

CCD
Spectr. Temp: -100.8°C

Dome Temp./Hum. $14.0^{\circ}\text{C}/63.7\%$

Transparency Conditions $f=10$ sky bright 064

Focus 6.76

Spectr. Temp.

Dome Temp./Hum.

365 0 50 1024 4 1 CCD FMT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		14.3	A0?	CASS CCD	1200 μmm 42.07	306 μ	6540	30			
								31			
								1			
								6			
		11.	F8					9			
								10			
								5			
								1			
					150 μmm 23.64	47 μ	7000	9	450 0 50 1024 4 1 CCD FMT		
09560								7		sky very bright	
								8			
								9			
								10			
								1			
								5			

pg #1

265 1997 Aug. 19/20

Date

Observers

Att/Prr/Lu

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.
Cc47750/	Inboard/outboard							FeAr ND45	4/7
52	BIAS(4)			20 55					
53	comp							"	45
54	HD147394	16 46 44	46 33 05	21 06 02					30
55	"	"	"	21 07 35					30
56	comp							"	45
57	HD 159561	17 30 18	12 37 58					"	"
58	HD 159561	17 30 18	12 37 58						20s
59	"	"	"	21 18 16					14s
60	comp							"	45
61	comp							"	"
62	HD 172167	18 33 33	38 41 26	21 28 28					5
63	"			21 29 21					4
64	comp							"	45
65	BIAS(4)			21 32					
66	comp							"	45

CCD
Spectr. Temp. -100.7°C

Dome Temp./Hum. $17.1^{\circ}\text{C}/59.5\%$

Transparency Conditions *fairly cloudy full moon*

Focus 6.79

266

Spectr. Temp.

Dome Temp./Hum.

440 0 50 1024 4 1 CCD FMT

Exp.	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4/7					EASS CCD	600 μm 25.15	470	4080	3/4	8/4		
									1			
4									6			
2	4.2 K	2"	3.9	B5 IV					7	HI		
3	4.3 K	"	"	"					7			
4									8			
									9			
20	7.5 K	2.1	A5 III						10			
10	7.3 K								10			
4									11			
									12			
5	5.4 K	0	A0 V						13			
8	5.9 K	0	"						13			
6									14			
									15			

pg # 2 Tues/Wed
267. 1997 Aug. 19/20

Date Observers AH/Prr/Lu

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 477 67	HD 159561	17 30 18	12 37 58	21 36 37					20 s
68	"	"	"	21 38 07					21 s
69	comp							FeAr No. 5	4 s
70	"							"	"
71	HD 184930	19 31 33	-01 30 30	21 46 25					61 s
72	"	"	"	21 49 54					70 s
73	comp							"	4 s
74	BIAS (4)			22 10					0
75	comp							"	4 s
76	BD + 641134	⁽²⁰⁰⁰⁾ 16 27 57	+63 57 41	22 20 16					1800
77	comp							"	4 s
78	comp							"	"
79	TYC 41944 881	⁽²⁰⁰⁰⁾ 16 49 45	+64 07 17	23 02 46					1800
80	comp							"	4 s
81	BIAS (4)			23 34 43				"	0
82	comp							"	4 s

LED
Spectr. 1

Focus..

Spectr. 1

Exp. Mtr.

9.7K

9.0K

4.7K

4.8K

580

552

^{LED}
 Spectr. Temp. -100.7°C Dome Temp./Hum. $15.9^{\circ}\text{C}/63.7\%$ Transparency Conditions $\text{thin clouds full moon}$
 Focus 6.79
 Spectr. Temp. Dome Temp./Hum. $440050102441\text{ CCD PMT}$ 268

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5.7 K		2.1	A5 III	CASS CCD	600/mm 25.15	470 μ	4080	16			
9.0 K		"	"					16			
								17			
								17			
4.7 K		4.4	65 III					18			
4.8 K		"	"					18			
								19			
								1			
								20			
580	2"	11.36	?					21		$\Delta\alpha - 42^{\circ}$ $\Delta\delta - 1'42''$	
								22			
								23			
552		11.14	?					24			
								25			
								1			
								26			

PG #3

TUE/WED

269

Date 1977 Aug 19/20 Observers Att / Prr / Lu

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.
CC477 83	TYC 4190 1263	(2000) 16 32 00	+61 57 11	23 43 11					1800s
84	comp							FeAr #5	4s
85	comp							"	4s
86	TYC 4193 641 1	(2000) 16 42 31	+64 21 37	00 29 06					1800s
87	comp							"	4s
88	BIAS(4)			01 00					0
89	comp							"	4s
90	HD 6961	01 05 01	+54 37 05	01 08 20					60s
91	"	"	"	01 10 17					60s
92	comp							"	4s
93	comp								
94	HD 11636	01 49 07	+20 19 09	01 18 04				"	16s 7100
95	HD 11636	"	"	01 19 53				"	14s
96	comp							FeAr	4s
97	comp							"	11
98	HD 19807	03 06 06	+36 45 00	33 53 01 26 58					1800s

Exp. Mtr.

538

577

7.0K

7.1K

7.1K

7.4K

2776

CCD Spectr. Temp. -100.7°C Dome Temp./Hum. $15.2^{\circ}\text{C}/66.1\%$ Transparency Conditions THIN CLOUDS, FULL MOON 270

Focus 6.79

Spectr. Temp. Dome Temp./Hum.

440 0 50 1024 41 CCD FMT

Exp. Mtr.	Seeing	No. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
538		11.38	?	CASS CCD	6008 25.15	470 μ	4080	27		DA - 36 ^s DB - 1'33"	
								28			
								29			
577		11.38	?					30		DA - 38 ^s DB - 27"	
								31			
								1			
								6			
7.0 K		4.33	A7 V					7		DA 9 ^s DB 0	
7.1 K		"	"					7			
								8			
								9			
7.1 K		2.16	A5 V					10			
7.4 K		"	"					10			
								11			
								12			
2776		8.1	B9.5 V					13			

271
pg # 4

Tues/Wed

Date 1997 Aug. 19/20

Observers

A#/Prr/Lu

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 47799	HD 19807	03 06 06	+ 36 45 00	02 05 16					1800 _s
47800	comp							Fe Ar #5	4s
801	BIAS (4)			02 36					0
802	HD comp								4s
803	HD 8538	1 19 16	59 42 56	02 45 17					14s
804	HD 8538	"	"	02 46 31					17s
805	comp								4s
806 807	comp HD 13161	02 03 35	+ 34 30 52	02 55 20				4s	4s
808	HD 13161			02 56 27					19
809	comp							Fe Ar	4s
810	comp							Fe Ar	4s
811	HD 17918	02 47 38	16 04 31	03 02 53					
812	"	"	"	03 10 36				Fe Ar	20s
813	comp							Fe Ar	4s
814	comp								
815	HD 23585	03 41 12	23 42 00	03 24 00					1000

CCP
Spectr. T.

Focus

Spectr. T.

Exp. Mtr.

2800

7.2 k

7.3 k

7.2 k

7.3 k

7.2

7.9

7.24

CCD
Spectr. Temp. -100.7°C ... Dome Temp./Hum. $14.6/62.4\%$
Focus 6.79
Spectr. Temp. Dome Temp./Hum.

Transparency Conditions *fine clouds in the south* 272

440 0 50 1024 4 1 CCDPMT

Exp	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1	2900		8.1	D15 ^V	CASS CCD	600 μm 25.15	47 μ	4080	13			
2									14			
3									1			
4									15			
5	7.2 k	2.68	AS III-IV						16			
6	7.3 k	2.68	"						17 16			
7									17			
8	7.2 k	3.0	AS III						18 19			
9	7.3 k	3.0	"						19			
10									20			
11									21			
12	7.2	6.3	F5 II						22			
13	7.9	"	"						22			
14									23			
15									24			
16	3024	8.0	F0 V						25			

273

Thes/weel

Date ... 1997 Aug. 19/20 Observers

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 47816	HD 2358 8 5	03 41 12	23 42 00	03 42 02					1000 s
17	COMP							Fear #5	43
18	BIAS (4)			03 59 66					
19	COMP							"	"
20	HD 21071	03 18 51	+48 46 05	04 05 04					300 s
21	"	"	"	04 10 51					300 s
22	COMP							"	43
23	COMP							"	"
24	HD 23288	03 38 51	+23 58 30	04 22 13					150 s
25	"	"	"	04 25 24					210 s
26 27	COMP COMP							" "	45 45
28	HD 17584	02 44 16	+37 54 25	04 33 48					60 s
29	HD 17584	"	"	04 35 18					60 s
30	COMP							"	43
31	BIAS (4)			04 37 21				Tung #	
32-41	FLATS (X10)							Tung #3	5 s

Spectr. Temp. -100.7

Dome Temp./Hum.

Transparency Conditions *Clouds, lens cleaned* 274

Focus 0.79

Spectr. Temp.

Dome Temp./Hum. $13.8^{\circ}\text{C}/62.4\%$

Exp. Mtr.	Seeing	☒ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2625		8.0	F0V		600 $\frac{1}{\text{mm}}$ 25.15	470 μ	4080	26			
								27			
								1			
		8						28			
3028		6.1	B7V					29		cloudy	
4370		"	"					30		"	
								31			
								6			
4378		5.5	B7II					7			
3360		"	"					8		cloudy	
								9/10			
5.1K		4.2	F2III					11		cloudy	
5.8K		"	"					12			
								15			
								1			
								5			

95 #1

275

1997 Aug. 25/26

Date

Observers

Vnk/K₂₃/Lu

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.
cc47842/3	Inboard/outboard							F2/Avr ND#3	4/7
44	BIAS (4)			19 48					
45	comp	xx						"	4
46	HD 159139	17 27 54	28 28 47	20 32 14					270
47	comp							"	4
48	comp							"	4
49	HD 15417	17 00 11	00 50 58	20 43 32					500
50	comp			-				"	4
51	BIAS (4)			20 54				xx	0
52	comp							"	4
53	HD 204038	21 20 48	33 16 00	21 07 01					1801
54	comp							"	4
55	comp							"	
56	HD 187183	19 43 30	09 05 00	21 56 45					1200
57	comp			22 18				"	4
58	BIAS (4)			22 18					

CCD

Spectr. Te.

Focus.....

Spectr. Te.

Exp. Mir.

6000

6078

4351

868

CCD
 Spectr. Temp. -100.8°C ... Dome Temp./Hum. $17.4^{\circ}\text{C}/68.7\%$ Transparency Conditions $a \text{ little haze}$ 276
 Focus 6.71 ...
 Spectr. Temp. Dome Temp./Hum. $16.3^{\circ}\text{C}/77.1\%$ 400 0 50 1024 4 1 CCD/MT

Exp. Mir.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	$1800/\text{mm}$ 56.35	36 μ	6600	3/4			
								1			
								6			
6000	2-3"	5.62	ADV					7	Telluric std		
								8			
								9			
6078		6.01	GOV					10	Vel std		
								11			
								12			
4350		8.40	FIV					13	Ks7 CB		
								14			
								15			
868		9.6	G5V					16	"		
								17			
								1			

Pg # 2

277 1997 Aug 25/26

Date

Observers

V. K. ~~153~~ / Lu

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.
CC47859	comp	20 38 36	25 14 00	22 35 37				F2A7 ND #3	
60	HD 197433	20 38 36	75 14 00	22 35 37					600
61	comp							"	4
62	comp							"	4
63	HD 199497	20 52 30	19 15 00	22 56 16					900
64	comp							"	4
65	BIAS(4)			23 13					
66	comp							"	4
67	AB And	23 11 32	36 53 38	23 20 02					900
68	comp							"	4
69	comp							"	4
70	DK Cyg	21 35 07	34 35 07	23 50 32					1500
71	comp							"	4
72	BIAS(4)								0
73	comp							"	4
74	HD 199485	20 52 18	05 27 00	00 24 36					493

Spectr. Te

Focus....

Spectr. Te

Exp. Mtr.

2800

1120

545

436

93

Spectr. Temp. -100.5°C Dome Temp./Hum. $16.3^{\circ}\text{C}/76.7\%$ Transparency Conditions $\text{haze} - \text{fry} - 278$ Focus 6.71

Spectr. Temp.

Dome Temp./Hum. $15.6^{\circ}\text{C}/89.3\%$

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/1mm 56.35	306 μm	6600	18			
2800		7.5	KOV _r					19	K53 CB		
								20			
								21			
1120		8.7	G5					22	"		
								23			
								1			
								24			
545		9.9	G5					25	"		
								26			
								27			
436		10.5	ABV					28	"	clouds coming from NW	
								29			
								7			
								30			
93		9.4	A0					31			

279P2#3

Date Aug. 25/26, 97

Observers

$$V_{OK}/K_{S8}/Lu$$

Emulsion Batches:

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[illegible]

Spectr. Temp.

Dome Temp./Hum.

Transparency Conditions *fgy* 280

400 0 50 1024 41 CCDFMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 λ/mm	306 μ	b600	6			
								5			
								1			

Pg #1

Tues/Wed

281

1997 Aug 26/27

Vnk/Ksz/Lu

Date

Observers

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.
C47884/5	Inboard/outboard							FeAr ND#3	4/7
86	BIAS(4)			20 04					0
87	comp							"	4
88	HD 159139	17 27 54	28 28 47	20 11 17					600
89	comp							"	4
90	comp							"	4
91	HD 154417	17 00 11	00 50 58	20 27 26					600
92	comp							"	4
93	comp							"	4
94	HD 178359	19 03 12	01 09 00	20 45 11					1800
95	comp							"	4
96	BIAS(4)			21 17					0
97	comp							"	4
98	HD 187921	19 47 24	27 12 00	21 22 32					872
99	comp							"	4

Spectr. Te

Focus ...

Spectr. Te

Exp. Mtr.

6970

4270

5350

4180

Spectr. Temp. -100.8°C Dome Temp./Hum. $18.5^{\circ}\text{C}/64.4\%$ Transparency Conditions *very Hazy*

282

Focus 6.71

Spectr. Temp.

Dome Temp./Hum. 400 0 50 1024 4 1 CCD/FMT

Exp. Mtr.	Secing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 $\frac{1}{\text{mm}}$ 56.35	306 μ	6600	3/4			
								1			
								6			
6770	3"	5.62	AIV					7	Telluric std		
								8			
								9			
4270		6.1	GOV					10	Vel std		
								11			
								12			
5350	2"-3"	7.	FSI					13	Vnk cep		
								14			
								15			
4180		7.	G2I					16	"		
								17			

283

283 Date 1997 Aug 26/27

Date _____

Observers

$$V_{NK} / K_{S3} / Lu$$

Emulsion Batches:

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[illegible]

Pg #1
285
Date 1997 27/28
Aug. Wed/Thur

Observers

Vnk/Ksg/Lu

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.
CC47908/9	Inboard/outboard							F2Ar ND43	4/7
10	BIAS(4)			20 10					0
11	HD172187 comp							"	4
12	HD172187	18 53 42	43 08 12	20 16 58					420
13	comp							"	4
14	comp							"	4
15	HD 167370	18 09 45	38 44 44	20 29 38					523
16	comp							"	4
17	comp							"	4
18	HD 144519	16 01 30	39 24 00	20 50 16					900
19	comp							"	4
20	BIAS(4)			21 07					0
21	comp							"	4
22	HD 187183	19 43 30	09 05 00	21 39 08					1500
23	Comp							"	4

CCD
 Spectr. Temp. -100.8°C ... Dome Temp./Hum. $20.4^{\circ}\text{C}/74.7\%$ Transparency Conditions *OK, clouds in the south*
 Focus 6.69
 Spectr. Temp. Dome Temp./Hum. $400\ 0\ 50\ 1024\ 4\ 1\ \text{CCDFMT}$ 286

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 $\frac{1}{\text{mm}}$ 56.35	306 μ	6600	3/4			
								1			
								6			
420	4870	6.26	FOV					7	B/n		
								8			
								9			
523	8000	6.4	B9II _n					10	Telluric std		
								11			
								12			
900	8340	6.66	d48					13			
								14			
								1			
								15			
1500	763	3.4"	9.5	GSV				16	KSE CB		
								17			

Pg #2

287

Date 1997 Aug 27/28

Observers

Vnk/K33/Lu

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.
CL47924	comp	(2000)						FeAr ND#3	4
25	BD+33 4304	21 35 02	34 35 45	22 15 35					1500
26	comp							"	4
27	BIAS(4)			22 42					0
28/34	flat3							Tung ND#5	4
35	comp							FeAr ND#3	4
36	HD 199497	20 52 30	19 15 00	23 23 40					900
37	comp							"	4
38	BIAS(4)			23 40					0
39	comp							"	4
40	HD 212943	22 22 48	04 11 39	23 54 31					230
41	comp							"	4
42	comp							"	4
43	HD 204867	21 26 18	-06 00 40	00 05 38					30
44	comp							"	4

CCD
 Spectr. Temp. ... 100.7°C ... Dome Temp./Hum. ... 19.4°C / 76.4% ... Transparency Conditions ... clouds in the north, 288
 Focus ... 6.67 ...
 Spectr. Temp. ... Dome Temp./Hum. ...

Exp.	Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4					CASS CCD	1500 V/mm	306 _u	6600	18			
50	379		10.7	AGU					19			
4									20			
0									1			
4									5			
4									21			
700	610		8.65	65					22			
4									23			
0									1			
4									24			
23	8.7K		4.8	KOIII					25	Vel std		
6									26			
4	6K								27			
70	8.7K		2.9	GOI					28	Vel std		
4									29			

289
pg #3

Wed/Thur

Date 1997 Aug. 27/28 Observers Vnk/K53/Lu

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.
cc47945	comp							FeAr No. 13	4
cc47946	BD+15°4915	23 57 59	15 57 12	00 17 07					1200
47	BD+15°4915	"	"	00 40 08					1200
48	comp							"	4
49	BIAS (4)			01 01					0
50	BD+15°4915	"	"	01 04 17					1200
51	"	"	"	01 24 50					1200
52	comp							"	4
53	comp							"	4
54	HD 224930	23 56 57	26 33 10	01 50 52					
55	comp							"	4
56	comp							"	4
57	V778 Cas	01 53 23	70 02 33	02 11 17					600
58	comp							"	4
59	BIAS (4)			02 23					0

CCO

Spectr. T.

Focus...

Spectr. T.

Exp. Mtr.

749

730

719

680

565

CCD
Spectr. Temp. -100.8°
Focus 6.69
Spectr. Temp.

Dome Temp./Hum. 18.0°/75.9%

Transparency Conditions OK. Some clouds 290 in the South

Dome Temp./Hum.

Exp.	Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4					CASS CCD	1800 / mm 56.35	306 u	6600	6			
1700	749		10	G2V					7			
1200	730								8			
4									9			
0									1			
1200	719	3"-4"							10			
1200	680								11			
4									12			
4									13			
4									14			
4									15			
4									16			
600	565	5"	9	F0					17		$\Delta X + 1.5''$ $\Delta Y - 1.6''$	
4									18			
0									1			

291Pg #4

Emulsion Batches:

Date 1977 Aug 27/28

Observers Vnk/Ksz/Lu

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.
CC47960	comp							FeAR ND#3	4
61	BD+04 5012	23 27 47	04 51 12	02 33 31					1500
62	comp							"	4
63	comp							"	4
64	HD 3765	00 35 18	39 40 00	03 05 18					600
65	comp							"	4
66	BIAS (4)			03 16					
67	comp							"	4
68	BD+36° 5017	23 11 32	36 53 38	03 22 33					900
69	comp							"	4
70	BD+36° 5017	"	"	03 40 13					900
71	comp							"	4
72	comp							"	4
73	HD 5612	00 52 40	13 09 19	04 01 48					
74	comp							"	4

Spectr. Temp. ^{CCD} -100.8°C...

Dome Temp./Hum. 17.8°C / 70.4%

Transparency Conditions fine 292

Focus 6.69

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 Y/mm 56.35	300 μ	6600	19			
1500	395	10.3	K5					20			
								21			
								22			
600	2880	7.3	K5					23	Vel std		
								24			
								1			
								25			
900	485	10	G5					26			
								27			
900	513	"	"					28			
								29			
								30			
3.4 K	3"	6.3	G5 III					31			
								30			

pg #5

293 1977 Aug. 27/28

Date

Observers

Vnk/Ksz/Lu

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.
cc47925	comp	.						Fair 10#3	4
76	HD 20315	03 11 03	43 39 27	04 12 30					300
77	comp							"	4
78	BIAS(4)			04 19					0
79	comp							"	4
80	HD 20418	03 12 00	49 43 47	04 26 53					200
81	comp							"	4
82	comp							"	4
83	HD 26793	04 09 08	09 45 32	04 38 42					340
84	comp							"	4
85	comp							"	4
86	HD 27638	04 16 30	25 23 27	04 48 50					337
87	comp							"	4
88	BIAS(4)			04 55					0

 CCD
 Spectr. Te.
 Focus....
 Spectr. Te.

Exp. Mtr.

10K

9.7K

9.7K

9.7K

CCD
Spectr. Temp. -100.7°C
Focus 6.69
Spectr. Temp.

Dome Temp./Hum. 17.5°C/66.1%
Dome Temp./Hum.

Transparency Conditions fine 294
400 0 50 1024 4 1 CCDPMT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 58.35	306 μ	6600	6			
10 K		5.5	B8V					7	Telluric Std		
								8			
								1			
								9			
9.7 K		5.0	B5V					10			
								11			
								12			
9.9 K		5.2	B9V					13			
								14			
								15			
9.9 K		5.4	B9V					16			
								17			
								1			

PG #1 Thur/Fri
 295 1997 Aug 28/29 Observers Vnk/Ksz/Lu

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.
CC47989/90	Inboard/outboard							FeAr ND#3	4/2
91	BIAS (4)			20 09					
92	comp							"	4
93	HD 169598	18 20 13	05 01 46	20 18 12					1012
94	comp							"	4
95	comp							"	4
96	HD 176707	18 56 30	50 40 12	20 42 01					464
97	comp							"	4
98	comp							"	4
99	HD 199497	20 52 30	19 15 00	20 58 15					1200
CC48000	comp							"	4
01	BIAS (4)			21 20					
02	comp							"	4
03	HD 187183	19 43 30	09 05 00	21 24 56					1500
04	comp							"	4

CCO
 Spectr. T.
 Focus...
 Spectr. T.

Exp. Mtr.

8K

6K

1554

1074

CCD
 Spectr. Temp. -100.8°C ... Dome Temp./Hum. $17.5/71.2\%$ Transparency Conditions $\dots$ fine $\dots$ 296
 Focus $\dots$ 6.69 $\dots$
 Spectr. Temp. $\dots$ Dome Temp./Hum. $\dots$ 400 0 50 1024 4 1 CCDPMT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/2				CASS CCD	1800/mm 56.35	306 μ	6600	3/4			
								1			
								6			
1/2	8K	2.7	6.7	B9V				7	Telluric std		
								8			
								9			
4/4	6K		6.2	G5				10	K33 CB		
								11			
								12			
1200	1559		8.7	G5				13			
								14			
								1			
								15			
500	1039		9.7	G5V				16			
								17			

297.

Date _____

1997 Aug. 28/29

Observers

VnK/KS3/Lu

Emulsion Batches:

[illegible]

Spectr. Temp. $\approx 100,000^\circ \text{C.}$

Focus 6.69

Spectr. Temp.

Dome Temp./Hum. 16.4°/77.2% Transparency Conditions fine 298

Dome Temp./Hum..... 400 0 50 1024 4 1 CCDFMT

[illegible]

PG #1 Fri/Sat,
299 1997 Aug 29/30
Date

Observers

VnK/KsB/Lu

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.
CL48020/21	Inboard/outboard							FeAr ND#3	4/7
22	BIAS(4)			19:48					
23	comp							"	4
24	HD177724	19 00 49	13 42 53	19 57 02					60
25	comp							"	4
26	comp							"	4
27	HD145001	16 03 34	17 18 48	20 06 50					273
28	comp							"	4
29	comp							"	4
30	HD187183	19 43 30	09 05 00	20 20 05					1500
31	comp							"	4
32	BIAS(4)			20 47					0
33	HD187183	"	"	20 48 28					1500
34	comp							"	4
35	HD187183	"	"	21 16 34					1500
36	comp							"	4

CCD
Spectr. T.
Focus...
Spectr. I.

Exp. Mir.

10K

81K

813

853

943

CCD
 Spectr. Temp. -100.8°C Dome Temp./Hum. $17.8^{\circ}\text{C}/72.4\%$ Transparency Conditions *Fine* 300
 Focus 6.70
 Spectr. Temp. Dome Temp./Hum. 400 0 50 1024 4 1 CCDFHT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 56.35	306 μ	6600	3/4	KSZ CB		
								1			
								6			
10 K	2"-3"	2.99	40Vn					7			
								8			
								9			
8.1 K		5.0	G5m					10			
								11			
								12			
813		955	65V					13			
								14			
								1			
853								15			
								16			
943								17			
								18			

PG # 2 Fri/Sat.
 301 1997 Aug. 29/30
 Date 1997 Aug. 29/30 Observers Vnk/Ksz/Lu

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.
C48037	HD187183	19 43 30	09 05 00	21 44 33					1500
38	comp			22 11				FeAr ND#3	4
39	BIAS(4)			22 11					
40	HD187183	11	1	22 12 27					1500
41	comp							"	4
42	- comp							"	4
43	HD199629	20 53 27	40 46 55	22 44 25					98
44	comp							"	4
45	comp							"	4
46	HD 209750	22 00 39	-00 48 21	22 54 45					47
47	comp							"	4
48	BIAS(4)			22 58					0
49	comp	(2000)						"	4
50	BD+36 5017	23 11 32	36 53 38	23 05 17					1000
51	comp							"	4

CCD
 Spectr. Te.
 Focus...
 Spectr. Te.

Exp. Mtr.

935

944

10 K

8.5 K

5 K

CCD
 Spectr. Temp. -100.7°C Dome Temp./Hum. $16^{\circ}\text{C}/78\%$ Transparency Conditions *slight haze* 302
 Focus 6.7°
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1500	935	2-3	9.55	G5V	CASS CCD	1800/mm 56.35	306	6600	19		
								20			
								1			
1500	944							21			
								22			
								23			
98	10 K		4.0	AOV				24			
								25		← H α in emission	
								26			
42	8.5 K		2.93	G22b				27			
								28			
								1			
								29			
1000	515							30			
								31			

PG # 3 Fri/Sat.

303 1997 Aug. 29/30

Date Observers Vnk/Ksz/Lu.....

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.
048052	comp							FeAr 12#3	4
53	HD 199497	20 52 30	19 15 00	23 28 55					1100
54	comp							"	4
55	comp							"	4
56	HD 172167	18 37 33	38 41 26	23 54 38					9
57	comp							"	4
58	BIAS(4)			23 59					0
59	comp							"	4
60	HD 186791	19 41 30	10 22 10	00 10 20					43
61	comp							"	4
62	comp							"	4
63	HD 187691	19 46 14	10 09 55	00 16 43					342
64	comp							"	4
65	comp							"	4
66	BD+33 4304	21 35 02	34 35 40	00 35 54					1500
67	comp								

CCD
Specif. Ten
Focus.....
Spectr. Ten

Exp. Mu.

10X

8.3K

8K

435

CCD
Spectr. Temp. -100.8°C
Focus 6.70
Spectr. Temp.

Dome Temp./Hum. $15.3^{\circ}\text{C} / 81.4\%$

Transparency Conditions OK Clouds in the east
and in the south, 304

Dome Temp./Hum. $400 \circ 50 \ 1024 \ 4 \ 1 \ \text{CCDFMT}$

Exp. Mtr.	Seeing	Phg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4								6			
1157		8 ⁶⁵	GS					7		clouds in the field	
								8			
								9			
10K		0	A0V					10			
								11			
								1			
								12			
8,3K		2.7	K2II					13			
								14			
								15			
8K		5.11	F8V					16			
								17			
								18			
435	2-3"	197	A6V					19			
								20			

PG #4 Fri/Sat.
305 1997 Aug. 29/30
Date

Observers

$$V_{nk}/K_{S3}/f_u$$

Emulsion Batches:

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[illegible]

CCD
Spectr. Temp. 100.8 °C ... Dome Temp./Hum. 14.9 °C / 84.7 % Transparency Conditions some thin clouds 306
Focus 6.72 — fairly cloudy
Spectr. Temp. Dome Temp./Hum.

PG# 1

3071997 Sept. 1/2

Date

Mon/Tues

Observers

Vnk/Ksz/Lu

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.
CC48083/84	Inboard/Outboard							FeAr ND#3	#7
85	BIAS(4)			2005					
86	comp							"	4
87	HD177724	19 00 49	13 42 53	20 15 19					51
88	comp							"	4
89	comp							"	4
90	HD145001	16 03 34	17 18 48	20 22 01					291
91	comp							"	4
92	comp							"	4
93	BD+382803	16 35 57	37 58 02	20 43 00					1802
94	comp							"	4
95	comp							"	4
96	HD163506	17 51 23	26 03 57	21 21 57					314
97	comp			21				"	4
98	BIAS(4)			21 28					0

LCD
Spectr. Te

Focus....

Spectr. Te

Exp. Mir.

10 K

8 K

1414

61 K

CCD
Spectr. Temp. -100.7 °C.....

Dome Temp./Hum. 20.2°/64.8

Transparency Conditions 408e 308

Focus 6.69.....

Spectr. Temp.

Dome Temp./Hum.

400 0 50 1024 4 1 CCD FMT

Exp. Mir.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	15001/mm 56.35	306 μ	6600	3/4			
								1			
								6			
51	10 K	2"	2.89	AOV _n				7	Telluric std		
								8			
								9			
29	8 K	2"	5.0	95III				10	Vel std		
								11			
								12			
180	1414	2"	9.0	G				13	Vnk cep		
								14			
								15			
30	61K		5.5	GI				16			
								17			
								1			

PG #2

Mon/Tues

309 1997 Sept. 1/2

Date

Observers

Vnk/Ksz/Lu

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.
cc48099	comp							FeAr VPH3	4
100	HD229680	18 45 54	15 49 00	20 43 54					2000
01	comp							"	4
02	comp							"	4
03	HD177441	18 59 36	01 09 00	22 22 47					1200
04	comp							"	4
05	B1A5(4)			22 44					
06	comp							"	4
07	HD178359	19 03 12	01 09 00	22 47 52					600
08	comp							"	4
09	comp							"	4
10	HD187129	19 47 23	00 44 56	23 06 32					1317
11	comp							"	4
12	comp							"	4
13	HD187921	19 47 24	27 12 00	23 17 13					600
14	comp								

CCD

Spectr. Te

Focus

Spectr. Te

Exp. Mu.

617

924

1980

61K

6390

CCD
 Spectr. Temp. -100.7° Dome Temp./Hum. $18.5^{\circ}/73.2\%$ Transparency Conditions haze 310
 Focus 69
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 56.35'	306 μ	6600	18			
617	1"-2"	11.	F2II _b					19			
								20			
								21			
974		8.5	K2I					22			
								23			
								24			
								24			
1980	2	7.0	FSI					25			
								26			
								27			
81K		4.	FSI					28			
								29			
								30			
4090		7	G2I					31			
								632			

PG #3

311 1997 ^{Sept} ~~Aug~~ 1/2

Date

Observers

Vnk/Ks3/Lu

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.
cc48115	comp							FeAr ND#3	4
16	HD188727	19 51 29	16 22 11	23 32 21					312
17	comp							"	4
18	BIAS(4)			23 39					0
19	comp							"	4
20	HD227463	20 00 36	33 50 00	23 44 10					1200
21	comp							"	4
22	comp							"	4
23	HD196018	20 29 36	46 16 00	00 16 39					1500
24	comp							"	4
25	BIAS(4)			00 44					0
26	comp							"	4
27	BD+03 4437	20 50 13	03 29 08	00 50 12					1800
28	comp							"	4
29	comp							"	4
30	BD+39 4379	20 57 21	40 10 39	01 30 10					1200

CCD
 Spectr. Temp. -100.7°C Dome Temp./Hum. $17.8/81.2\%$ Transparency Conditions haze 3.12
 Focus 6.67
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 56.35	306 μ	6600	6			
6K	2-3	5.8	G					7			
								8			
								1			
								9			
990		8.7	F8I					10			
								11			
								12			
940		9.5	F8I					13			
								14			
								1			
								15			
817		9	F8I					16			
								17			
								18			
436	1"-2"	10	F5I					19		some clouds in the field	

PG #4
313 Date 1997 Sept. 1/2

Observers Vnk/Ksz/Lu

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CCD
~~Spectr. T~~
Focus...
Spectr. T
Exp. Mtr.

Spectr. Temp. $\approx 100,1^{\circ}\text{C}$

Focus 6, 9

Spectr. Temp.

Dome Temp./Hum. ... 57/80 ...

Transparency Conditions 3.14

420 0 50 1024 4 1 CCD EMT

Exp.	Exp. Mir.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
3					CASC CCD	1800 Vmm 5435	306 μ	6600	20			
↓									21			
54	6K	2"	4.1	F7V					22	vel std		
4									23			
↓									24			
63	4069		7.4	K5III					25	vel std		
4									26			
0									1			
↓									27			
28	1180		8.3	F6I					28	Vnk CB		
4									29			
0									1			
4									5			
0												
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PG #1

Tues/Wed

315 Date 1997 Sept 2/3

Observers

Vnk/K38/Lu

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.
CC48150/	Inboard/outboard							FeAr ND#3	4/7
52	BIAS(4)			19 49					
53	comp							"	4
54	HD159139	17 27 54	28 28 47	19 55 58					590
55	comp							"	4
56	comp							"	4
57	HD196504	20 32 49	26 06 50	20 11 19					590
58	comp							"	4
59	comp							"	4
60	HD154417	17 00 11	00 50 58	20 27 26					531
61	comp							"	4
62	comp							"	4
63	HD171232	18 28 30	25 25 00	20 42 16					710
64	comp							"	"
65	BIAS(4)			26 55					

CCD
Spectr. T.
Focus...
Spectr. T.

Exp. Mtr.

9.2K

9.4K

5.4K

2170

CCD -100.8°C
Spectr. Temp.

Dome Temp./Hum. 16.4°C/64.5%

Transparency Conditions partly cloudy 316

Focus 6.72

Spectr. Temp.

Dome Temp./Hum.

400 0 50 1024 4 1 CCDPHT clear

Exp.	Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
3 1/2					CASS CCD	1800/mm 56.35	306μ	6600	3/4			
									1			
4									6			
570	9.2K	4"-6"	5.6	AIV					7	Telluric Std		
									8			
									9			
570	9.2K	4"-8"	5.6	B9V					10	Telluric Std		
									11			
									12			
53	5K		6.0	G0V					13	Vel std	-clear up.	
									14			
									15			
2170			7.7	G8IV					16	Vel std		
									17			
									18			

PR #2

Tues/Wed

317 1997 Sept. 2/3

Date Observers Vmk/Ksz/Lu

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.
cc48166	comp							FEAr ND#3	4
67	HD163506	17 51 23	26 03 57	20 59 46					315
68	comp							"	4
69	comp	18 45						"	4
70	HD229680	18 45 54	15 49 00	21 12 06					2103
71	comp							"	4
72	BIAS(4)			21 49					0
73	comp							"	4
74	HD177441	18 59 36	01 09 00	21 56 26					1200
75	comp							"	4
76	comp							"	4
77	HD178359	19 03 12	01 09 00	22 20 57					600
78	comp							"	4
79	comp							"	4
80	HD187929	19 47 23	00 44 56	22 35 31					112
81	comp							"	4

CCD
Spectr. Te.
Focus
Spectr. Te.
Exp. Mtr.

6.4K

48P

89P

205P

6.1K

CCD
 Spectr. Temp. -100.5°C... Dome Temp./Hum. 15.12/68.4% Transparency Conditions clear 318
 Focus 6.72
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 56.35	306μ	6600	18			
6.4K		5.5	FGI					19	VnK CEP		
								20			
								21			
487	4"	11	F2I _B					22	"		
								23			
								24			
								25			
897	8"	8.5	K2I					26	"		
								27			
2055	8"	7.0	FSI					28	"		
								29			
								30			
6.12K		4	FSI					31			

PG #3

319 1997 Sept 2/3

Vnr/K₃/Lu

Date

Observers

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.
ec48182	comp							FeAr ND#3	4
83	HD187921	19 47 24	27 12 00	22 42 44					546
84	comp							"	4
85	BIAS(4)			22 53					0
86	comp							"	4
87	HD188727	19 51 29	16 22 11	23 01 34					319
88	comp							"	4
89/95	flats							Tung ND#5	4
96	BIAS(4)								0
97	BIAS(4)			01 41					0
98	comp							FeAr ND#3	4
99	BD+17°4572	21 19 21	17 51 00	02 46 04					800
cc48200	comp							"	4
01	BIAS(4)			02 41					0
02	comp							"	4
03	BD+36 5017	23 11 32	36 53 38	02 47 11					1040

CCD
Spectr. Te

Focus...

Spectr. Te

Exp. Mtr.

2929

1820

536

457

CCD
Spectr. Temp. -100.52...

Dome Temp./Hum. 14.0°C / 60.6%

Transparency Conditions clear 320

Focus 6.72

Spectr. Temp.

Dome Temp./Hum. 400 0 50 1024 4 1 CCD FHT clear

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Gratings/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CAS CCD	1800/mm 56.55	306 _H	6600	6			
2929		7.	G2I					7	Vnk CEP		
								8			
								1			
								9			
1820		5.8	G					10			
								11			
								5			
								1			
								1			
								6		was slit took out.	
536	6"	9	F8					7		then put in again	
								8			
								1			
								9			
457	6"	9.911	G5					10			

PG #1
323 1997 Sept 3/4

Date Observers Vnx/Ksz/Lu

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.
cc48213	Inboard/outboard							EA ND#3	4/7
14	BIAS(4)			19 39					4
15	comp							"	4
16	HD 167376	18 09 45	38 44 44	19 51 05					452
17	comp							"	4
18	comp							"	4
19	HD 145122	16 04 16	17 28 16	20 04 55					639
20	comp							"	4
21	comp							"	4
22	HD 163075	17 49 15	46 40 10	20 21 18					522
23	comp							"	4
24	comp							"	4
25	HD 161193	17 39 04	51 51 59	20 35 34					360
26	comp							"	4
27	BIAS(4)			20 43					0
28	comp							"	4
29	HD 216598	22 49 06	37 23 00	21 07 20					900

CCD
Spectr. Ten
Focus.....
Spectr. Ten

Exp. Mtr.

9K

4.2K

6K

6K

1015

Spectr. Temp. ... 100.5°C ...Dome Temp./Hum. ... 13.5°C / 45.3% ...Transparency Conditions ... fine ... 324Focus ... 6.75 ...

Spectr. Temp.

Dome Temp./Hum. 400 0 50 1024 4 1 CCD/FMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASD CCD	1800 Y/mm 56.35	306 μ	6600	3/4			
9K	2"	6.4	B9III _n					1/6 7	Telluric std		
								8			
								9			
9.2K		6.14	AOV _{nn}					10	Telluric std		
								11			
								12			
6K		6.4	K0					13			
								14			
								15			
6K		5.88	8K0					16			
								17			
								1			
								18			
1015		8.95	K0V					19			

PG #2
325 1997 Sept 3/4

Date Observers Vnk/Ksz/Lu

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.
CL48230	HD 216598	22 49 06	37 23 00	21 22 47					900
31	comp							FeAr VD#3	4
32	BIAS(4)			21 39					
33	HD 216598	"	"	21 40 58					900
34	"	"	"	21 56 18					900
35	comp							"	4
36	comp							"	4
37	HD 204038	21 20 48	33 16 00	22 19 32					1800
38	comp							"	4
39	BIAS(4)			22 51					
40	comp							"	4
41	HD 216598	22 49 06	37 23 00	22 58 01					900
42	"	"	"	23 13 26					900
43	comp								
44	HD 216598	"	"	23 30 28					900
45	"			23 46 03					702

CCD
Spectr. Ten
Focus.....
Spectr. Ten

Exp. Mir.

973

829

750

7062

797

878

942

415

CCD
 Spectr. Temp. -100.5°C Dome Temp./Hum. $12.0^{\circ}\text{E}/49.9\%$ Transparency Conditions *fine* 326
 Focus 6.75
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
973	3"	8.95	KOV	CASS CCD	1800 λ mm 56.35	306 μ	6600	20			
								21			
								1			
829		"	"					22			
750:		"	"					23			
								24			
								25			
3062		8.42	FIV					26			
								27			
								1			
								28			
797		8.95	KOV					29			
878		"	"					30			
								31			
942								7			
415								8		cloudy	

PG# 3

327 1997 Sept 3/4

Date

Observers

Vnk/KS8/Lu

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.
cc48246	comp							FeAr ND#3	4
cc48247	BIAS(4)			23 59					
48	comp							"	4
49	HD 216598	22 49 06	37 23 00	00 43 14					900 1084
50	"	"	"	00 58 43					900 1150
51	comp							"	4
52	BIAS(4)			01 15					
53	HD 216598	"	"	01 16 20					950 990
54	"	"	"	01 32 00					900 852
55	comp							"	4
56	comp							"	4
57	HD 199497	20 52 30	19 15 00	01 56 09					1100 1129
58	comp							"	4
59	BIAS(4)			02 16					
60	comp							"	4
61	BD +36 5017	23 11 32	36 53 38	02 22 47					1000 581

CCD
Spectr. Temp. -100.7°C Dome Temp./Hum. $10.6^{\circ}\text{C} / 59.2\%$ Transparency Conditions *some clouds* 328
Focus 6.75
Spectr. Temp. Dome Temp./Hum. 400 0 50 1024 4 1 CCDFMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 56.35	306 μ	6600				
								6			
1084		8.95	KOV					7			
1150		"	"					8		clear, some clouds in the south	
								9			
								1			
990		"	"					10			
852								11			
								12			
								13			
1129		8.69	45					14			
								15			
								1			
								15			
581		9.01	45					16			

PG # 4
329 1997 Sept 3/4
Date

Observers

Vnk/Ks8/Lu

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.
CC48262	comp							FeAr ND#3	4
63	comp							"	4
64	HD 216598	22 49 06	37 23 00	02 45 39					900
65	"	"	"	03 01 13					900
66	comp							"	4
67	BIAS(4)			03 18					0
68	HD 216598	"	"	03 19 44					900
69	"	"	"	03 35 38					900
70	comp							"	4
71	HD 216598	"	"	03 52 40					900
72	"	"	"	04 08 21					900
73	comp							"	4
74	HD 216598	"	"	04 25 35					900
75	comp							"	4
76	BIAS(4)			04 41					0

CCO
Spectr. Ten
Focus.....
Spectr. Ten
Exp. Mir.

795
884
1005
1059
186
1184
1086

CCD
 Spectr. Temp. -100.7°C Dome Temp./Hum. $100^{\circ}\text{C}/50.7\%$ Transparency Conditions *clear* 330
 Focus 6.75
 Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CAS CCD	1800/mm 56.35	306 μ	6600	17			
								18			
795	2-3"	8.75	KOV					19			
884	"	"	"					20			
								21			
								1			
1005	"	"	"					22			
1059	"	"	"					23			
								24			
1186	"	"	"					25			
1186	"	"	"					26			
								27			
1086	"	"	"					28			
								29			
								1			

PG#5

331
Date 1997 Sept 3/4

$$V_{nk}/Ks_8/Lu$$

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CCD
Spectr. Ten
Focus....
Spectr. Ten
Exp. Mtr.

PG #1

333 1997 Sept 4/5

Date Observers Vnk/Ks3/Lu

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.
CC48288/89	Inboard/outboard							2Ar ND#3	4/7
90	BIAS(4)			19 42					
91	comp							"	4
92	HD 177724	19 00 49	13 42 53	19 52 55					80
93	comp							"	4
94	comp							"	4
95	HD 145001	16 03 34	17 18 48	20 01 48					119
96	comp							"	4
97	comp							"	4
98	HD 163506	17 51 23	26 03 59	22 08 15					148
99	comp							"	4
300	comp							"	4
01	HD 178359	19 03 12	01 09 00	20 16 08					600
02	comp							"	4
03	comp								
04	HD 229680	18 45 54	15 49 00	20 32 01					420

 C4D
Spectr. Ter
Focus....
Spectr. Ter

Exp. Mtr.

10 K

5K

5K

2780

440

CCD Spectr. Temp. -100.8°C

Dome Temp./Hum. $15.3^{\circ}\text{C}/44.8\%$

Transparency Conditions *fine with some clouds*

Focus 6.73

Spectr. Temp.

Dome Temp./Hum. $400.0, 50, 1024, 4.1$ CCD FMT

334

Exp. Mtr.	Secing	Pig. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 56.35	306 μ	660	3/4			
								1			
								6			
10 K	2"	3.	A0V					7			
								8			
								9			
5 K	2"	5.0	G5III					10			
								11			
								12			
5 K	2"	6.4	K0					13			
								14			
								15			
2780		7.	F5I					16			
								17			
								18			
440		10.7	F2I					19			

PG # 2

335
Date 1997 Sept 4/5

$$V_{\text{irk}}/K_{S_8}/L_u$$

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CLD
Spectr. Ten
Focus
Spectr. Ten

Exp. Mtr.

Spectr. Temp. -100.7°C ... Dome Temp./Hum. $13.8^{\circ}\text{C}/47.7\%$ Transparency Conditions *fine* 336

Focus 6.33

Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 56.35	306 μ	6600	20			
								21			
4820	2"	7.	G2I					22			
								23			
								1			
								24			
840		9	F8II					25			
								26			
								27			
502		10.5	A6					28			
								29			
								1			
								29			
1420	2-4"	8.69	G5					30			
								31			

Pg #3

337 1997 Sept 4/5

Date Observers Vnk/KSB/Lu

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 48320	HD 199497	20 52 30	19 15 00	22 39 36					1100
21	comp							FeAr NO #3	
22	HD 199497	"	"	23 00 47					1100
23	comp							"	4
24	BIAS(4)			23 20					0
25	HD 199497	"	"	23 22 22					1100
26	comp							"	4
27	BIAS(4)			00 51					0
28	comp							"	4
29	BD +39 4379	20 57 21	40 10 39	00 55 41					1800
30	comp							"	4
31	comp							"	4
32	BD +42° 3935	21 00 06	42 35 51	01 30 38					1500
33	comp							"	4
34	BIAS(4)			01 57					0

CCD
Spectr. Ter
Focus....
Spectr. Ter

Exp. Mtr.

1390

745

965

738

732

CCD
Spectr. Temp. -100.6 °C

Focus 6.73

Spectr. Temp.

Dome Temp./Hum. 12.3 °C / 55.2% Transparency Conditions ... fine (some clouds passing by)

Dome Temp./Hum.

338

Exp. Mir.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1390		8.69	G5	CASS CCD	1800/mm 56.35	306 μ	bb00	7			
								8			
745		"	"					9		— clouds in the field	
								10			
								1			
965								11			
								12			
								1			
								14			
738		10	F5I					15			
								16			
								16			
732		9.4	F5I					17			
								18			
								1			

PG# 4

339

Date 1997 Sept 4/5

Observers

Vnk/Ksb/Lu

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
CL48335	comp							FeAr ND#3	4
36	HD 214975	22 36 54	56 19 00	02 07 03					1200
37	comp							"	4
38	comp							"	4
39	IX Cas	00 04 51	50 14 06	02 34 21					2400
40	comp			02 35				"	4
41	BIAS(4)			03 16					0
42	comp							"	4
43	HD 22544 = HIP 17042	03 32 30	40 58 00	03 22 30					600
44	comp							"	4
45	comp							"	4
46	HD 23874 = HIP 17826	03 43 24	11 24 00	03 40 41					810
47	comp							"	4
48	comp							"	4
49	HD 22484	0		03 58 52					112
50	comp							"	4
51	BIAS(4)								0
5/58	flat3							Tung ND#5	

LED

Spectr. Temp

Focus.....

Spectr. Temp

Exp. Mir.

1800

1504

63K

^{LCD}
 Spectr. Temp. -100.7°C ... Dome Temp./Hum. $10.8^{\circ}/64.5\%$ Transparency Conditions *fairly cloudy* 340
 Focus 6.73 ...
 Spectr. Temp. ... Dome Temp./Hum. $10.1^{\circ}/68.7\%$ *clear*

Exp. Mtr.	Seeing	Prg. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	$1800^{\circ}/\text{mm}$ 8.35	306μ	6600	6			
2300		8	F6I					7			
								8			
								8			
258		11.5	F7					9			
								10			
								1			
								10			
1800		8.0	A0					11			
								12			
								12			
1504		F0	8.6					13			
								14			
6.3 K		4.3	F9IV					15			
								16			
								1			
								5			

PG #1

341

Sun/Mon

Emulsion Batches:

Date .. 1997.. Sept. 7/8.. Observers .. Lu./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
CL48359/60	Inboard/Outboard							FeAr ND3	4/8
61	BIAS(4)			20 34					
62	comp								
63	HD154225	16 59 06	40 12 00	20 31 22					627
64	comp								
65/71	flats							Tung ND#4	5
72	BIAS(4)			21 03					0
73	BIAS(4)			00 10					0
74	comp							FeAr ND3	4
75	HD212584	22 20 18	40 48 00	00 15 19					865
76	comp							"	4
77	comp							"	4
78	HD218396	23 02 33	20 35 41	00 35 46					283
79	comp							"	4
80	comp							"	4
81	HD220237	23 17 06	76 31 00	00 49 07					455
82	"			00 59 01					447

Spectr. Temp. -100.5°C

Dome Temp./Hum. $+15.4^{\circ}\text{C}$ 70% H

Transparency Conditions *Part. Cloudy* 342

Focus 6.76

Spectr. Temp.

Dome Temp./Hum. 2.2

400 0 50 1024 4 1 CCD FMT

Exp. Mtr.	Seeing	Pig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 in/mm	3064	5184	3/4			
				Tyrating	-47.06			8		sharp lines	
490		8.1	AS					9		HIP 83370 puls	
								5			max 14K
								1			
								1			
								10			
900	4"-8"	8.2	AO					11		HIP 110622 almost no lines	100 lines weak
								12			
								12			
2100		6	AS					13		HIP 114169 lines are sharp	
								14			
								14			
1100		7.74	F2					15		HIP 115262 S-E broaden lines	
600								16		N-W very sharp lines	

343 P942 sub/mon

Emulsion Batches:

Date 1997 Sept 7/8 Observers L. V. J. T. 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.
CC48383	comp							FLAR ND 3	4
84	"							"	45
85	HD 222900	23 3936	45 4900	01 11 45					533
86	Comp							"	45
87	B1A5(4)			01 23					
88	comp							"	4
89	HD 3765	00 35 18	39 40 00	01 29 31					381
90	comp							"	4
CG 8102/05	HD 3765	00 35 18	+39 40 00					4x	67ms
CG 8106/09	DARKS x4							4x	67ms
10/11	x2							2x	133
12/13	HD 3765							2x	133
CC48391	comp							FLAR/ND 4	4
92	TT Cer	01 46 57	-09 45 06	01 53 24					1203
93	TT Cet			02 13 47					
94	comp							"	45

Spectr. Ter

Focus

Spectr. Ter

Exp. Mtr.

1/4" f/11

1/4" f/11

1/4" f/11

1/4" f/11

1/4" f/11

1/4" f/11

1/4" f/11

1/4" f/11

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1/4" f/11

1/4" f/11

1/4" f/11

1/4" f/11

1/4" f/11

Spectr. Temp. Dome Temp./Hum. 72.0°C 75.24Transparency Conditions .. Part Cloudy 344Focus 6.7.6

Spectr. Temp. Dome Temp./Hum.

406 0 50 1024 4 1 CCH FWT

Exp. Mtr. 1000 V	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
<u>no filter</u>				<u>CBSCD</u>		<u>306u</u>		<u>17</u>			
								<u>17</u>			
<u>1670</u>	<u>5"</u>	<u>7.6</u>	<u>A0</u>					<u>18</u>	<u>HIP 11711</u>	<u>no lines! bordering</u> <u>faint companion also</u>	<u>✓</u>
								<u>19</u>		<u>on slit</u>	
								<u>1</u>			
								<u>20</u>			
<u>1320</u>		<u>7.6</u>	<u>dKS</u>					<u>21</u>			
								<u>22</u>			
	<u>4.8"</u>			<u>ALTitude 56°</u>	<u>Abac</u>	<u>306u slit</u>			<u>Seeing test.</u>	<u>Light NE breeze</u>	
	<u>RV</u>			<u>with same window</u>	<u>and Int setting</u>					<u>Dome west.</u>	
								<u>23</u>			
<u>158</u>	<u>4.6"</u>	<u>10.0</u>	<u>A</u>					<u>24</u>			
<u>159</u>								<u>25</u>			
								<u>26</u>			

395 P4#3 Sun/Mon

Emulsion Batches:

Date 1997 Sept 7/8... Observers L. J. / T. J.

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.
CC48395	BIAS(4)			02 36					0
96	Comp							FeAr ND3	45
97	AA Cet	01 59 00	22 53 12	02 40 49					688
98	"	"	"	02 53 23					714
99	Comp							"	"
CC48400	Comp							FeAr ND3	45
01	AO Cam	04 28 13	53 02 42	03 13 14					900
02	"	"	"	03 29 29					901
03	comp							"	4
04	BIAS(4)			03 45					0
05	AO Cam	"	"	03 48 37					900
06	"	"	"	04 04 04					900
07	comp							"	4
08	AO Cam	"	"	04 21 16					910
09	comp							"	4

Spectr. Temp. -100.7°C

Dome Temp./Hum. $+11.2^{\circ}\text{C}$ 75.64

Transparency Conditions *mainly clear* 346

Focus 6.76

Spectr. Temp.

Dome Temp./Hum.

Exp. Mtr.	Seeing	File Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CBS CCD	1800 Ymm 47.06	306	5184A	1			
								27			
1510	5"	G7	A7					28		SE of close pair. MAX 1K	
1510			A8 F					29		11W of pair.	
								30			
								8			
151		9.5	?					7			
163		"	"					8			
								9			
								1			
192		"	"					10			
192		"	"					11			
								12			
205	4-6	"	"					13			
								14			

349
pg#1

Mon / Tues

Date ..1997. Sept 8/9.... Observers ..Tn./Lu.....

Emulsion Batches:

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Plate No.	Object	R.A. 1980	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison	
								Type/Filter	Exp.
CC484 ^{17/}	Inboard / out board							FEAR NO3	4/8
19	BIAS(4)			19 22					0
20	comp							"	4
21	RZ Dra	18 23 06	58 54 18	19 35 36					1200
22	"	"	"	19 56 06					1200
23	comp							"	4
24	BIAS(4)			20 17					
25	RZ Dra	"	"	20 18 33					1201
26	"			20 39 03					1235
27	Comp							"	4s
28	RZ Dra	"	"	21 01 23					1200
29	"	"	"	21 21 48					1200
30	comp							"	4
31	BIAS(4)			21 43					
32	RZ Dra	"	"	21 44 31					1200
33	"	"	"	22 04 58					1365

CCD
Spectr. Te
Focus...
Spectr. TeExp. Mir.
Inco V
No. 1/2500
490545
490498
529560
572

CCD Spectr. Temp. -100.7°C Dome Temp./Hum. 716.2°C 63-78H Transparency Conditions *Fine* 350

Focus 6.76

Spectr. Temp. Dome Temp./Hum. *CD*

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1000 V no filter				CASS CCD grating $\rightarrow$	1800 h/mm 77.06	306 μ	5184A	3/4	focus test	15.5°C put in ladder	
								1	note		
								6			
500	1"	10.0	AS					7			
490	"	"	"					8			
								9			
								1			
545	"	"	"					10			
490	"	"	"					11			
								12			
498	"	"	"					13			
529	"	"	"					14			
								15			
								1			
560	"	"	"					16			
572	2"	"	"					17			

351PG #2

Mon/Tues

Date

1997 Sept 8/9

Observers

Lu/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 48434	comp							F2 Ar ND #3	15
35	BIAS(4)			22 29					0
36	RZ Dra	18 23 06	2000 158 54 18	22 30 42					1221
37	"	"	"	22 51 38					1250
38	comp							"	4
39	RZ Dra	"	"	23 14 37					1400
40	comp							"	4
41	BIAS(4)			23 40					
42	comp							"	4
43	CN And	00 20 30	40 13 36	23 48 32					900
44	"	"	"	00 04 33					900
45	comp							"	4
46	CN And	"	"	00 21 49					900
47	CN And	"	"	00 37 14					900
48	comp							"	4
49	BIAS(4)			00 54					0

CCD
Spectr. Te
Focus....
Spectr. Te

Exp. Mtr.

435

452

490

578

548

502

462

CCD Spectr. Temp. -100.7°C Dome Temp./Hum. $+13.6^{\circ}\text{C}$ 748/4 Transparency Conditions *mainly clear* 352

Focus 6.76

Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Pl. Mag.	Sp.	Inst.	Grating/Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800/mm 47.06	306u	5784	18			
								1			
435	2"	10.0	A5					19			
452	"	"	"					20			
								21			
490								22			
								23			
								1			
								24			
578		10.0	FS					25			
548		"	"					26			
								27			
502	2"	"	"					28			
462								29			
								30			
								1			

Pg 43
353

Mon/Tues

Date 1997 Sept 8/9 Observers L4/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.
CC48450	Comp							FeA ND3	4s
51	HD222368	233448	+05 05 03	00 59 04					60s
52	Comp								4s
53	Comp	(2000)						"	4
54	UX Eri	03 09 52	-06 53 24	01 07 34					1200
55	"	"	"	01 28 03					1200
56	comp							"	4
57	UX Eri	"	"	01 50 06					1200
58	"	"	"	02 10 37					1200
59	comp							"	4
60	BIAS(4)			02 32					0
61	UX Eri	"	"	02 33 54					1200
62	comp							"	4
63	Comp							"	4s
64	HA Cet	01 59 00	-22 55 12	02 57 38					600
65	Comp							"	4s

Spectr. Te

Focus...

Spectr. Te

Exp. Mir.

3K

300

305

294

292

263

495

Spectr. Temp. -100.6°C Dome Temp./Hum. $+12.3^{\circ}\text{C}$ 74.5%
20Transparency Conditions *Hazy* 354Focus 6.76

Spectr. Temp.

Dome Temp./Hum. 11.9°C 75.8%
20

Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD T-grating	1800 lines 47.06	306u	5189R				
5K		413	F7J					7	std/vel		
								8			
								9			
300	233"	10.6	F8					10			
305	"	"	"					11			
								12			
294	"	"	"					13			
292	"	"	"					14			
								15			
								1			
263	"	"	"					16			
								17			
								18			
1496	5"	6.7	A7					19			
								20		SE on 1005/6/10	

pg#4

355

Mon / Tues

Emulsion Batches:

Date 1997 Sept 8/9 Observers Lu / 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 48466	Comp	2000						FeAr ND3	45
67	BD+59 289	01 37 34	160 36 15	03 17 53					1200
68	comp							"	45
69	Comp	1900						"	45
70	HD 240 94	03 45 12	153 12 00	03 43 34					851
71	comp							"	4
72	comp							"	4
73	HD 24771	03 51 12	15 14 00	04 07 40					934
74	comp							"	4
75	comp							"	4
76	HD 30600	04 43 54	71 56 00	04 29 29				"	708
77	comp							"	4
78	comp							"	4
79	HD 52484	03 31 46	00 05 04	04 46 17					108
80	comp							"	4
81	BIAS(4)			04 49					0
82/88	flats x 7							TUNG ND5	5.2k

Note For Focus Test Analysis, This was the 1st night since ³⁵⁶
 before Tn vacation, that Temperature in focus Headers was the actual
 Temp at Time of Test. Wen told (LWXL) had been putting estimated temp
 for the particular focus setting in Header, not Actual temp. as is
standard practice

Special request for MKI's Gld

563 Vinux 10.1 SpAm note Sept 19 - 82 of ~~the~~ night was ^{very narrow lined}
 as 400 001 as found in Encoder
 as -00 0115 Log.

1510 8.4 B8 HIP 18157 all most no lines EW,

1000 8.9 F0 HIP 18474 puls? line broadened.

800 8.3 A5 HIP 22326 line broadened

5.2 K 4.28 F9 II-II std vel

14 K max

