$\langle \Sigma \rangle$

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... (4).

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
										LOG BOOK 71	
				DAVID		DUNLAP			OBSERVATORY		
					74"	LOG	BOOK				
					VOL-	71					
					PLATE	NO.	8774	—	CEO	5282	
					· July	1992	—	Oct	1992	— C	

(3) Wed-Thurs #1

Date ..July.15/16-92... Observers ..Hdy./F.Fbr.....

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	Comparison Exp.	Exp. Mtr.
8774	Focus (Comp)									
8775	Focus (Stel)									
8776	Bias (4)									
8777	Comp							Fehr clear	60s	
8778	Flat							Tung A=1/2	10	
8779	Bias (4)			21 56 36						
8780	H0155937	17 09 30	16 29 00	22 04 26					600	957
8781	——"——			22 14 35						811
8782	——"——			22 24 54						830
8783	——"——			22 35 12						760
8784	——"——			22 45 31						850
8785	——"——			22 55 49						760
8786	Bias (4)									
8787	Flat							Tung A=1/2	10s	
8788	Comp							Fehr clear	90s	

Spectr. Temp. ..... Dome Temp./Hum. 19.6°C/68.7% Transparency Conditions ..... CLEAR ..... (6)

Focus ..... 6.62 ..... (2030)

Spectr. Temp. ..... Dome Temp./Hum. .....

[redacted] 90 Cgain FANS OFF.

Comparison Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						CASS CCD	G=6020 1800 ~~7000~~ μ	200μ	λ=6563Å	5ci	4.3	1180 050 1024 41	4.3 SHELF
										6ci	3.25	SHELF IN BACKGROUND SIGNAL SEEN	3.25 SHELF
						* DUE TO SET-UP PROBLEMS, NO NORMALIZATION OR SEEING TEST DONE.						START UP - PROBLEMS	
	65s									4ci	0.5	SHELF GONE NO, SADH	
	10									8ci			
	600	957	1"	V 8.29 8.77	F8					5ci 7ci	Hdy PAM	Dome T = 18.8°C Hum = 68.8% 5.0	SHELF
		811											
		830											
		760											
		850											
		760	2"							9ci		3.0	SHELF
	10s												
	90s												

(7) #2

Emulsion Batches:

Date ..July 15/16-92. Observers ..Hdy./Fbr./Bhr.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	Comparison Exp.	Exp. Mtr.
cc8789	HD155937	17 09 30	+ 16 29	23 17 05					600	680
8790	—" —			23 38 03					600	560
8791	—" —			23 38 21					600	645
8792	—" —			23 48 40					600	600
8793	—" —			23 58 59					600	545
8794	—" —			00 09 17					600 s	545
8795	Bias (4)									
8796	Comp							FeAr Clear	90s	
8797	FLAT							Tung A=1/2	10s	
8798	HD155937			00 26 23					600s	490
8799	—" —			00 36 42					600s	517
8800	—" —			00 47 00					600s	524
8801	—" —			00 57 18					600s	533
8802	—" —			01 07 38					600s	565
8803	—" —			01 17 57	01 27 57				600s	516

Spectr. Temp. ..... Dome Temp./Hum. 17.4°C / 74.1% Transparency Conditions ..... CLEAR ..... (8)

Focus ..... 6.62 ..... (2313)

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
680		V 8.29 8.77	F8	CASS CCD	a=6020 1800	200 μ	6563Å	10ci	Hdy Pgm	386 crashed during obs but data obtained safely	2.5 SHELF
560	2"										
645										DOME T = 16.8°C HUM = 74%	
600											
545											
545								11ci			1.8 SHELF
										15695 ADUMAX	
400								5ci		DOME IN WAY AT END AND PROBABLY THROUGHOUT NOT	
517											
524											
533											
565											
516											

(9) #3

Date . July 15/16-92 . Observers . . . Hdy/FOE . . . . . .

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	Comparison Exp.	Exp. Mtr.
8804	FLAT							Tung A-1/2	8sec	
8805	COMP							FeAr Clear	90sec	
8806	BIAS(4)									
8807	HD155937	17 09 30	+16 29	01 34 50					600s	516
8808	—"—			01 45 09					600s	530
8809	—"—			01 55 28					600s	445
8810	—"—			02 05 47					600s	508
8811	—"—			02 16 05					600s	470
8812	—"—			02 26 23						450
8813	BIAS(4)									
8814	COMP							FeAr Clear	90s	
8815	FLAT							Tung A: 1/2	8sec	
8816	HD155937	17 09 30	+16 29	02 45 16					600s	406
8817	—"—			02 55 35					600s	375
8818	—"—			03 05 54					600s	360

Spectr. Te
Focus ....
Spectr. Te

Spectr. Temp. ..... Dome Temp./Hum. 16.7°C/73.2% Transparency Conditions ..... CLEAR ..... (10)

Focus ..... 6.62 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
										~~12364~~ 12364	
										SHELF WEAK STILL PRESENT	
516		8.29 8.77	F8	CASS CCD	1800 α=6020	200 μ	λ=6563Å		Hdy Pgm	HEADER NAME IS BIAS(4) - INCORRECT	
530											
445											
508											
470											
450											
										SHELF GONE PROBABLY	
										11,295 Max	
406											
375										AIRMASS = 1.5820	
360											

(11) #4

Date ...July 15/16 '92... Observers ..Hdy (24")/Fb.....

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	Comparison Exp.
8819	HD155937	17 09 30	+16 29	03 16 13		05 32 W			600s
8820	BIAS (4)								
8821	FLAT							Tung 0-1/2	8s
8822	COMP (HD155937)							Fe/Ar Clear	90s
8823	COMP (HD177724)								
8824	HD177724	19 00 49	13 43 00	03 45 21					20K
8825	HD177724	19 06 49	13 43 00	03 48 31					20K
[illegible]									
[illegible]									
[illegible]									
8826	COMP							Fe/Ar Clear	90s
8827	FLAT							Tung 0-1/2	8s
8828	FLAT							"	8s
8829	FLAT							"	8s
8830	BIAS (4)								

Spectr. Temp. ..... Dome Temp./Hum. 16.6°C / 73.2% (0245) Transparency Conditions ..... CLEAR ..... (12)

Focus ..... 6.62 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
600	280	2"-3"	V = 8.29 8.72	F8	CASS CCD	1800 G-6020	200 μ	λ_c = 6563Å		Hdy	Dome T = 16.6°C Humidity = 72.4%	
8s											10,782.	
90s												
	20 K									Telluric Std		
	20 K									Telluric Std		
90s												
8s											11,544	
8s											11,365	
8s											11,260	
					ALL TO PERSEUS & WORM.							

(12)

Date July 16/17, 1992 Observers Hdy/Tn/Fbr

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	Comparison Exp.
8831	BIAS(1) SM								
8832	BIAS(4)			22 23 06					
8833	BIAS(1)			22 24 18					
8834	DARK			22 25 03	22 26 03				60sec
8835	DARK			22 29 25	22 30 25				60sec
8836	DARK			22 33 03	22 34 03				60sec
8837	DARK			22 35 07	22 45 07				600sec
8838	DARK			22 46 01	22 56 01				600sec
8839	BIAS(4)			22 58 30					
8840	DARK			22 59 04	23 09 04				600sec
8841	DARK			23 11 47	23 12 47				60sec
8842	DARK			23 14 19	23 24 19				600sec
8843	DARK			23 25 34	23 35 34				600sec
8844	BIAS(4)			23 38 48	[illegible]				
8845	DARK			00 07 29	00 17 29				600sec
8846	BIAS(4)			00 28 28					

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... (14) ...

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
											SATURATED AT ONE END	
									1c;			
									3c;			
60sec									4c;		LIGHTS ON SHELF BEEN IN DARK	
60sec									5c;		LIGHTS OFF	
60sec									6c;		LIGHTS OFF	
600sec									7c;		"	
600sec									8c;		-101.75 °C = T_{CCD}	
600sec									9c;		SHELF [redacted]G GETTING SMALLER	
60sec									10c;			
600sec									11c;			
600sec									12c;			
											T_{CCD} = -100.5 °C	
600sec									13c;		T_{CCD} → -49.3 → -100.7, expose	
		All to Persons & WORM									-100.5	

(15) pg #1 Sun - Mon

Date 1992 July 19/20 Observers W.x.L/T.L

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	Comparison Exp.
8847	SKY diffuse	(Dome opened = 1 foot)		~1355		0 0	-34°		
48	SKY "	" "	"	1357		0 0	"		
49	Comp					"	"		
50	BIAS (4)					"	"		
51	SKY			192945		"	"		
52	Comp					"	"		
53	FLAT					"	"	TUNG Clear	15sec
54	SKY MIRRORS uncovered					0 0	~+35°		
55	Comp								
56 57	Focus	Comp / Stellar Hartmann posns						FeAr Clear	60/60
FM000464 ABCDEF	HD144579	16 01 30	+39 25 36	Also Tel Normalizatn STAR		~0000	+3910	"N" mode	
8858	Comp								60sec
8859	HD144579	16 01 30	+39 25 36	20 32 25		00 10 W			99 sec
8860	Comp							FeHr Clear	60sec
8861	BIAS (4)								

Spectr. Temp. ..... Dome Temp./Hum. +21.4 63%/1H Transparency Conditions ... Fine ... some thin cloud ...

Focus ... 6:62 ..... @ 20:30 No FANS Tonight (16)

Spectr. Temp. ..... Dome Temp./Hum. +21.3°C .. 63.7% 90CGain

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks 480 c 50 1024 1 1 ccd Expt	Quality
4000				CHSS CCD	G=4900 1800/m/mm	200µ Full	5010	4		CCDT = -116°C	
17,300								5			
								5ci			
								1c			
17,600								6			
								7			
								8			
22,900								9		CCDT = -100°C	
								10			
								11ci		Stellar UU SI Red	
		✓			200µ Slit Head			12ci		No wind at all	
39x39 pixels		6·66	dG8	[6 frames	4x 67msec + 2x 133msecs]					Dome WSW	
								13ci			
4300								14ci	Std Vel		
								15ci			
								1ci			

(17) Pg #2

Emulsion Batches: .....

Date 1992 JULY 19/20..... Observers .W. x L. / .. Tq.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Spectr. Te / Focus... / Spectr. Te Exp. Mtr.
CC08862	Comp							FeAr Clear	60sec	
8863	BD+41 2447	13 54 58	+41 18 19	20 57 13					720s	316
8864	"			21 04 35					780	330
8865	"			21 18 33		03 06W			720	280
8866	Comp							FeAr Clear	60sec	
8867	BD+41 2447			21 34 18					800s	145
8868	Comp							FeAr Clear	60sec	
8869	Comp							"	"	
8870	HD126053	14 18 06	+01 43	21 55 39		03 23W			900s	1078
8871	Comp							FeAr Clear	60sec	
8872	BIAS(4)					03 26W				
8873 → 8875	FLATS x 3							TUNG A Clear	15sec	
8876	Comp							FeAr Clear	60secs	
8877	IE 1919+0427	19 16 50	04 22 09	22 30 10					1676	148
8878	Comp							FeAr Clear	60sec	

Spectr. Temp. ..... Dome Temp./Hum. +21.0°C. 70% H Transparency Conditions .. Clouding in .....

Focus ... 6.62 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... CLHMRDA

(18)

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
60sec					CASS CCD	G=4900 1800/mm/mm	200μ FULL	5010Å	16ci			
720sec	316	2"	9m.48 V						17ci	WxL pgm	≃ 400 ADU above bkgnd	
780	330			FD					18ci			
720	280								19ci			
60sec									~~20ci~~			
800sec	145								~~21~~ci		Clouding in.	
60sec									~~22~~ci			
1									22ci			
900s	1078	2"4"	6.27 V	G2V					23ci	Std vel	Cloudy (dampened)	
660sec									~~23ci~~			
15sec									23ci		MAX = 10K ADU	
60sec									24ci			
1170sec	148		10.	G5V					25ci		Cloud again & end	
60sec									26cc			

(19) Pg #3

Date 1992 July 19/20 Observers WxL/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	Comparison Exp.
CCD8879	1E 1919+0427	19 16 50	04 22 09	23 02 49					1500
8880	comp							FeAr Clear	60sec
8881	1E 1919+0427	19 16 50	04 22 09	23 30 52		00 07W			1342
8882	comp							FeAr Clear	60sec
8883	BIAS(4)								
→8884 8886	FLATS x 3					00 17W		TUNG Clear	15sec

Spectr. Temp. ..... Dome Temp./Hum. +20°C 74.8% Transparency Conditions ... PART. Cloudy .....

Focus ... 6.62 ..... → Completely Cloudy (20)

Spectr. Temp. ..... Dome Temp./Hum. +19.8°C 74.0% .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
257	2"	V 10.0	G5V	CASS CCD	1800 l/mm	200u	5010R	27 c;	W x L pgm	FOR 4 cols. 200 10u scan Avg 4 bare bias	
								~~28 cc~~			
200								29 cc			
								28 c;			
								1 c;			
								30 c;		MAX 12.4 K ADU	
						#11	To Parsons & Work				

comparison
lter Exp.
15sec
60sec
135sec
60sec
15sec

(2) Pg 41 [Fe]

Date 1992 JULY 20/21.. Observers [Rin]....T.u../.F.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	Comparison Exp.
CC08887	BIAS(4)								
8888	Comp							FeAr Clear	60sec
8889	HD171232	18 28.5	+75 25	22 06 25					1423
8890	Comp	Tel also	normalized	on this STAR	(1992.5 epoch)			FeAr Clear	60sec
ABCDEFF FM000465	HD171232			~22 30		00 20E		"N" mate	
8891	BIAS(4)								
8892	Comp							FeAr Clear	60sec
8893	~~HD~~ U U Her	16 3227	+38 1016	22 42 37		02 12W			1500
8894	Comp							FeAr Clear	60sec
8895 8897 →	FLATS x 3					02 17W	+38°	TUNG Clear	15sec
8898	Comp							FeAr Clear	60s
8899	HD162714	17 4717	+06 07 12	23 21 36		01 18 W			~1500
8900	Comp							FeAr Clear	60sec
8901 8903	FLATS x 3					01 22W	-6 08	TUNG A=1/2	10sec
8904	Comp FOR HD 203156							FeAr Clear	60sec

Spectr. Temp. ..... Dome Temp./Hum. +17.8°C. 64.6% Transparency Conditions ..PART. cloudy ....pg. 41....

Focus ....6.62.....

Spectr. Temp. ..... Dome Temp./Hum. .....

90 CGAIN as usual (22)

CCDT => -100°C FANS ON

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						CASS CCD	G4900 1800 l/mm	200u FULL	5010Å	1ci			
	60sec									10ci			
	1423	700	3"-4"	V 7.73	G6III					16ci	std vel	700 ADUs sum AVG above Bias too cloudy now	
	60sec									12ci			
	ale	47x47 pixels		V 7.73	G6II	4x67msec Int; +2x133msec		200u Had Lower Right		6 Frames	Seeing Test	Dome SW Thin cloud Med → Strong NW wind	
										1ci		Pdome T = +15.7°C	
	60sec									13ci		Dome Hum = 71.7%	
	1500	850	3"-4"	V 8.9	F8I					14ci	Fe pgm		
	60sec									15ci			
	150sec								5010Å	16ci		12.8 K ADU max	
	600						G=5930 1800 l/mm		6450Å	17ci			
	1537	≈1500	4"	V 6.15						18ci	Rm pgm		
	60sec									19ci			
	100sec									20ci		10 K max ADU	
	60sec									21ci			

(17) Pg #2

Date 1992 JULY 20/21.. Observers [R.m.]..F.Hr./J.q.....

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	Comparison Exp.	Exp. Mtr.
CCD 8905	HD 203156	21 15 23	+37 49	23 47 15		01 43 E			600s	4200
8906	Comp							Feat Clear	60sec	
8907	BIAS (4)					01 42 E	+38°13			
8908	Comp							Feat Clear	60sec	
8909	HD 214975	22 36 55	+56 18 24	00 06 11		02 41 E			840	500
8910	Comp							Feat Clear	60sec	
8911	Comp							"	"	
8912	HD 198726	20 47 13	+27 32 30	00 32 27		00 32 E			449	2650
8913	Comp							Feat Clear	60sec	
8914	Comp							"	"	
8915	HD 187691	19 46 12	+10 10 00	00 47 15		00 48 W			720	1760
8916	Comp							Feat Clear	60sec	
8917	Comp							"	"	
8918	HD 177724	19 00 49	+13 43	01 06 51		01 46 W			327s	2400
8919	Comp							Feat Clear	60s	
8920	BIAS									
8921-23	FLATS x3							TUNG A=1/2	10s	

Spectr. Temp. ..... Dome Temp./Hum. +14.7°C 71.7% Transparency Conditions ..PART. Cloudy.... pg #2...

Focus ...6.62.....

Spectr. Temp. ..... Dome Temp./Hum. +14.3°C 78%

(24)

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	600s	4200	3"-4"	V 5.8 -5.9	F2	CASS CCD	G=5430 1800ln/mm	200x Full L	6450Å	22c	Rm pgm	7000 ADUsum AVG Top priority	
	60sec									23c			
										1c			
	60sec									24c			
	840	500	4"	V 8.40	GOIb					25c	Rm pgm	1000 ADUsum AVG above bias Some cloud again (5 cols)	
	60sec									26c			
	4									27c			
	1149	2050	3"-4"	V 5.75	GOIb					28c	Rm pgm	Dome Hum = 76.4% cloud.	
	60sec									29c			
	1									30c			
	720	1760	3"	V 5.11	F8V					31c	Std. Vel		
	60sec									32c			
	1									33c			
	327 60s	24000		V 2.99	A0					14c 15c	Telluric Std	1.266 AIRMASS	
	10s									16c		IR MAX ADU/pixel	

(b) pg 1 Tues Wed

Date July 21/22 Observers HIW/FBr

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	Comparison Exp.	Exp. Mtr.
cd-8924	Focus (steel)			~20:40						
8925	Focus (Comp)									
8926	Bias (4)									
8927	Comp							FeNe Clear	20 sec	24333
8928	HD124897	14 11 06	19 42 30	21:10:26	21:10:35				9 sec	14000
8929	Comp							"	20 s	
8930	Comp							"	"	
8931	HD123782	14 04 36	49 56 00	21:23:20	21:24:20				60 sec	2500
8932	Comp							"	20 sec	
8933-8935	Fast x 3							Try 1/4	33s	
8936	Comp							FeNe Clear	20 sec	17926
8937	Bias (4)									
8939	AC+76 5308	15 43 12	76 20 00	21:56:52		~3 W			952 sec.	950
8938	Comp for AC+62 26749							"	20 sec	
8940	AC+62 26749	17 34 30	61 45 00	22:59:56					649 sec	
8941	Comp							"	20 s	

Spectr. Temp. ..... Dome Temp./Hum. 15.6°C / 61.7% Transparency Conditions Clear. (26)

Focus 6.6.2

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF

Format: 480 0 50 1024 4 1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~ CLAMBDA	P.H.	Program	Remarks	Quality
				Cass CCD	1800 ℓ/mm G=4990	30μ. triple s Tilt	5140 Å				
								1ci			
24333								3ci			
14000		O.V	K					4ci	Std. Velocity		
								3ci			
								3ci			
2500		5.25 V	M2III ab					5ci	Std Velocity		
								3ci			
								6ci			
17926								3ci			
								1ci		Dome Temp 13.1°C	
~~V~~ ~40?		13.0 P	M4					7ci	KK Program	Encoder deltas: 0 0 15 / 0 1 12 readout early due to crash	
								3ci			
		9.95 V	M1 Ve					8ci	KK Pgm.	Readout early due to	
								5ci		sudden cloud.	

Pg 2

Date July 21/22 Observers HIW/FBr

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	Comparison Exp.
8942	Comp							FeNe Clear	20 sec
8943	AC+65 6955	20:29:00	65:06:00	00:22:46	01:22:46	0:35 W	+65		3600
8944	Comp							"	20s
8945	Bias (4)								
8946	Comp							"	20s
8947	AC+75 8347	21 57 36	75 08 00	01:35:05	02:35:05				3600 sec
8948	Comp							"	20 sec
8949	Comp							"	"
8950	BD+57 2735	23 19 54	57 20 00	02:51:28	03:41:28				3000 sec
8951	Comp							"	20 sec
8952	Bias (4)								
8953 -8958	FLAT x 6.								

Spectr. Temp. .... Dome Temp./Hum. 12.3°C/64.0 % Transparency Conditions Scattered Clouds.

Focus .... (28)

Spectr. Temp. .... Dome Temp./Hum. ....

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
20 sec									3ci			
3600	1023		10.4 ✓	M3					9ci			
20s									3ci			
									1ci		Dome Temp 11,5°C	
20s			10.5 ✓	M0					3ci			
3600 sec	669								10ci			
20 sec									3ci			
"									3ci			
3000 sec	640		10.05	M2e					11ci		Sunrise	
20 sec	24670											

[illegible]

(M)

Date July 22/23 1992 Observers Hdy/Fbt

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	Comparison Exp.
CCD8959.Fts	BIAS(4)			22 03 56					
8960	"FLAT"			22 06 19		00h05m W	-27° 15'		356sec
8961	"FLAT"			22 13 52		"	"		903sec
8962	"FLAT"			22 33 13		"	"		2587sec
8963	BIAS(4)			23 18 08					
8964	DARK			23 22 07					600sec
8965	BIAS(4)			23 33 33					

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

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD		200μ			Hdy tests		
50K					1800 G=6020		6563Å	3Ci		SECONDARY MIRROR COVER FLAT WITH FLASHLIGHT	4700 ADU
120K								4Ci		WITH FLASHLIGHT	12000 ADU
125K	T_{CCD} = -100.3 - -95.0							5Ci		WITHOUT FLASHLIGHT	12000 ADU
	T_{CCD} = -95.0										
	T_{CCD} = -94.8 - -93.1			DEWAR STARTING TO			WARM UP	6Ci			
	T_{CCD} = -93.0°C										
							ALL TO		PERSEUS AND	WORM	

(5) 8941 Thurs./Fri

Date 1992 July 23/24... Observers . [Fe]. [Rm]... F.Br./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	Comparison Exp.	Exp. Mtr.
CCO 8966 8967	Focus Test	Comp/stellar Hz BTmHn Posn				00 07W	+39°	FeAr Clear	15/15	
8968	BIAS(4)			2025						
FM00 ABCDEF 0046	HD144579	16 01 30	+39 25 36		(4×67msec Int + 2×133msec)			'N' make		
8969	Comp							FeAr Clear	60sec	
8970	HD144579	16 01 30	+39 25 36	20 35 59		00 27W			306s	2400
8971	Comp							FeAr Clear	60sec	
8972	Comp							"	60sec	
8973	U U Her	16 32 27	+38 10 16	20 48 48		00 30 W			1600s	1390
8974	Comp							FeAr Clear	60s	
8975 8977	FLATS x 3							Tung Clear	15sec	
8978	Comp			21 34 15				FeAr Clear	60sec	
8979	HD144579	16 01 30	+39 25 36	21 34 15		01 27W			288	2760
8980	Comp							FeAr Clear	60sec	
8981	BIAS(4)									
8982	Comp for HD203156 ~~dest plate~~							FeAr Clear	60sec	

Spectr. Temp. ..... Dome Temp./Hum. +17.3°C 74% Transparency Conditions ...Fine..... pg #1

Focus ....6:66.....

Spectr. Temp. ..... Dome Temp./Hum. .....

(32)

40 C Gain 10 EANS

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
15/15					CHSS CCD	G=4900 1800 l/mm	200u Full	5010Å	3ci 4ci	Focus Test	360° 12 1024 40 1 Right On CCD FTIII	
											Dome T = +17.4°C	
1e		1-2"	V 6.66	dG8	Dome WSW (no wind)		200u Lower Right of SLIT			Seeing Test	Also Tel normalized star	
60se									3ci	Std vel		
30es	2400	1"	V 6.66						4ci	"	≈ 2500 ADU Sum Avg Above bias (5 cols)	
60se									5ci			
60se									6ci		"	
1600s	1390	1-2"	V 8-9	F8I					7ci	Fe pgm	1500 ADU Sum Avg above Bias	
60s									8ci			
15se						G=4900		5010Å	9ci		12.4K max ADU/pixel	
60se						G=5430 1800 l/mm		6450Å	10			
288	2460	1-2"	V 6.66	dG8					11ci	Std vel		
60se									12ci			
											Dome T = 16.6°C	
60se									13ci			

pg #2

Date 1992 July 23/24 Observers [Rn] ... Fbr./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	Comparison Exp.	Exp. Mtr.
CCD8983	HD203156	21 15 23	+37 49	21 53 36		0327E			482	5900
8984	Comp							FeAr Clear	60sec	
8985	Comp							"	"	
8986	HD162714	17 47 17	-06 07	22 10 14		0018W			564	6600
8987	Comp							FeAr Clear	60sec	
8988	Comp							"	"	
8989	HD173297	18 39 20	-20 45	22 26 57		00 10W			2242	3570
8990	Comp							FeAr Clear	60sec	
8991	BIAS (14)									
8992	Comp							FeAr Clear	60s	
8993	HD198726	20 47 13	+27 52 30	23 12 50		01 39E			519	6400
8994	Comp							FeAr Clear	60s	
8995	Comp							"	"	
8996	HD214975	22 36 55	+56 18 24	23 30 56		02 49E			1800	3100
8997	Comp							FeAr Clear	60s	

Spectr. Temp. ..... Dome Temp./Hum. 16.4°C ... 80.7% Transparency Conditions ... Fine ..... pg. 42

Focus ... 6.66 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

(34)

CCD T ≈ −101°C

480 0 50 1024 ~~4~~ 1 CCDFMT

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
482	5900	1-2"	V 5.8 5.9	F2	CASS CCD	G=5430 1800l/mm	200μ Full L	6450Å	14ci	Rm pgm	15 000 ADU Sum AVG above Top Priority	
60sec									15ci			
A									16ci			
569	6600	1-2"	V 6.15	GOIb					17ci	Rm pgm	18000 ADU Sum AVG above bias.	
60sec									18ci			
4									19ci			
2242	3530	2"	V 7.48	GOIb					20ci	Rm pgm		
60sec									21ci			
									1ci		Dome T=+15.3°C	
60s									22ci			
519	6900	2"	V 5.75	GOIb					23ci	Rm pgm	Hum=87.2%	
60s									24ci			
4									25ci			
1800	3100	1-2"	V 8.40	GOIb					26ci	Rm pgm	7K ADU Sum Avg	
60s									~~27ci~~			

(25) PJ #3

Date 1992 July 23/24 Observers [Rm] Fbr / Tm

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	Comparison Exp.
CC08498	Comp							FeAr clear	60sec
8999	HD154417	17 00 12	+00 51	00 13 46					450
9000	Comp							FeAr Clear	60sec
9001	Comp							"	"
9002	HD187691	19 40 12	+10 10	00 31 32					273.
9003	Comp							FeAr Clear	60sec
9004	Comp							"	"
9005	HD203156	21 15 23	+37 49	00 45 14					482
9006	Comp							FeAr Clear	60sec
9007	BIAS(4)								
9008 9010	FLATS x3					00 27E	+38°	TUNG A=1/2	10sec

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr
~400
8450
7940

Spectr. Temp. ..... Dome Temp./Hum. +15.0°C 87.7% Transparency Conditions ... Fine ... pg #3 (36)

Focus .... 6.62 .....

Spectr. Temp. ..... Dome Temp./Hum. +14.5°C 89%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	G=5930 1800l/mm	200u Full	645A	27ci			
~4000	2"-3"	V 6.01	GOV					28ci	Std vel		
								"		Hum = 87.7% T = 14.9°C	
								29ci			
8400	2"	V 5.11	F8V					30	Std vel		
								31ci			
								32ci			
7940	1"-2"	V 5.8 5.9	F2					33ci	Rm pgm	Top priority 2nd exp	
								34ci			
								1ci		H 87.7% +14.8°C	
								35ci		MAX 2.0 f K AOM	
				All To Perseus = WORN						Humidity Prob.	

(37) pg 1.

Date July 24/25 Observers [K.K.] HIW/Tn/Fbr

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	Comparison Exp.	Exp. Mtr.
ce@4681	Hartman inboard }	Focus pair		20:47				ThAr	5s	1300
4682	Hartman outboard }							ThAr	5s	
4683	Comp			21:40				ThAr	3 sec	
4684	HD 137909	15:23:42	+29:27	21:42:33			+29		1084 sec.	1450
4685	Comp							"	3 sec	
4686	Bias (4)									
4687	HD 137909	15:23:42	+29:27	22:08:01					1330 second	1570
4688	Comp							ThAr	3 sec	938
4689	Comp							ThAr	4 sec	
4690	HD 8890	1:22:36	88:46	22:48:01					621 seconds	2160
4691	Comp							ThAr	4 sec	
4692	HD 8890	1:22:36	88:46	23:02:17					465 sec	2140
4693	Comp							ThAr	4 sec	
4694	BIAS (4)									
4695	Comp at HD 3712 posn							ThAr	4 sec	

Spectr. Temp. ..... Dome Temp./Hum. 18.3°C / 74% Transparency Conditions ..... Fine .....

Focus ... 240 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Format: 0 0 256 1024 4 1 (38)

90 Gain CCD T - +100°C

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		1300				Echelle CCD	.4540	.277 .205	width 60µ 600µ Height	Echelle Tilt 1892		600 ℓ/mm Telescope focus 2141 (Blue → Red gradient)	
												OUTBOARD sl Red shifted 0-.5 pixel	
										1ci		4480Å center of 4th complete ORDER FROM TOP	
	984 sec.	1450		3.66	F_p					2ci	KK		
	3sec									3ci			
										1ci			
	1330 second	1570		3.66	F_p					4ci		~ 91% Humidity ~5000 sum Av. dark bias	
	3sec	938								5ci			
	4sec									5ci			
	621 seconds	2160		2.5	F8 1b					6ci		~10000 ADU 4481 Å	
	4sec									7ci		MAX 10K ADU	
	4s	2140		2.5	F8 1b					~~8ci~~ 4ci		HJD = 2448828.6690	
	sec 4sec									~~5ci~~		Dome T = +16.2°C	
										1ci			
	4sec									3ci			

(89) pg#2

Date 1992 JULY 24/25. Observers [K.K]..H.W...F.B...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	Comparison Exp.	Spectr. T / Focus... / Spectr. T / Exp. Mtr.
CCD 4696	HD 3712	00 34 48	+55 59	23 27 14		E			539 seconds	2090
4697	Comp							Th Ar	4 sec	
4698	HD 3712	00 34 48	55 59	23:38:42					614 sec	2260
4699	Comp							Th Ar	4 sec	
4700	Comp							"	4 sec	
4701	HD 186791	19 41 30	+10 22	23:59:32	00:07:32	0:16 W			480 sec	1540
4702	Comp							"	4 sec	
4703	Bias (4)									
4704	Flat					03 W	+20	Tung	15 sec	
4705	Flat (9)	Average of 9 using		FLAT9.15s Batch						
4706 4707	FLATS x2							TUNG	33s	
4708	BIAS(4)									
		Note FLATS 4706,07 & BIAS 4708 may not be								
		quite valid; as CCD Temp was probably adjusted for.								Cobes

Spectr. Temp. ..... Dome Temp./Hum. +16.1°C 91.8%H Transparency Conditions ... PART. Cloudy & wet Then Cloudy (40)

Focus .. 124.0 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2090		V 2.23	KOIIIa	Echelle CCD	.4540	60u width 600u height .205		~~4ci~~	Stdvel		
								3ci			
2260		V= 2.23	KOIIIa					4ci			
								5ci			
		~~2.72~~	~~K3II~~								
1540		2.72	K3II					6ci	stdvel		
								7ci		Dome Temp 15.8°C	
						60u width 800u Height=.185		~~8ci~~		Max ADU 7723	
								~~9ci~~		Max ADU ~6600	
								2c.		MAX = 14K ADU	
								1ci		Dome T = +16.3°C	

coldest setting after ce 4705 completed, but before last bias. ie CCD Temp Prob ~ −110°C

pg 1 ~~SAT Sun~~ July 26/27 sun-mon

Date ~~1992 July 25/26~~ Observers [KK].H.W.L.T.O.L.~~[illegible]~~..

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	Comparison Exp.	Exp. Mtr.
Ce0470	BIAS(4)									
	~~Comp~~							ThAr	4sec	
4710	Comp							ThAr	4sec	613
4711	HD8890	01 22 36	+88 46 00	21:27:11		8:30 E	+89:20		5 11s	1995
4712	Comp							"	4s	
4713	HD8890	01 22 36	+88 46 00	21:38:48		8:30 E	+89:20		500s	2005
4714	Comp							"	4s	
4715	Comp								4s	
4716	HD137909	15 23 42	+29 27 00	21:55:33		2:52 W	+29		1330 sec	532
4717	Comp							"	4s	910
4718	HD137909	15 23 42	+29 27 00	22:20:12					1101 sec.	468
4719	Comp							"	4s	
4720	Bias (4)									
4721	Comp							"	4s	
4722	HD186791	19 41 30	+10 22 00	22:48:30		0:27 E			1618	2128
4723	Comp							"	4s	

Spectr. Temp. ..... Dome Temp./Hum. ~~.....~~ +19.3°C 94.3% Transparency Conditions ... PART. Cloudy & Hazy ~~2 Large Satellite Tracks~~ (42)

Focus ....1240.....

Spectr. Temp. ..... Dome Temp./Hum. ..... 90CGain · CCDT = -100°C

Comparison filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks 0 0 256 1024 4 1 CCD FMT	Quality
					Echelle CCD	.4540 600 l/mm	60u		1ci		CCDT = -101°C	
45s							60u width = .277 600u Height = .205		4ci	~~Cloud of Hz~~		
4xl	613								3ci			
5 11s	1995	2"	2.5 ✓	F816					4ci	KK pgm	> 10K ADU Sum AVG above Bias for 6 Cds	
4s									5ci			
500s	2005	2"	2.5 ✓	F816					6ci	KK	Tel Focus #2163	
4s									7ci			
4s									3ci			
1330 sec	1532	3"-5"	3.66 ✓	F_p					4ci	KK pgm	~6,000 (10,000) Sum ADU abv. Bias for central order	
45	910								5ci		MAX ADU 8147	
1101 sec.	1468		3.66 ✓	F_p					6ci	KK		
4s									7ci			
									1ci			
4s									3ci			
1618	2128	3"-5"	2.6 ✓	K3 II					4ci	KK & Std. Vel	~10,000 Sum Avg. ADU above Bias 4480Å order	
4s									5ci			

(W) pg 2

Date July 26/27 Observers [KK] HIW/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	Comparison Exp.
ce ϕ 4724	Comp							ThAr	4 sec
4725	HD183912	19 26 41	+27 45 00	23:24:13		0:10 W	+28		830 s
4726	Comp							"	4 sec
4727	Comp							"	"
~~4728~~ 4728	HD20209	21 08 41	+29 49 00	23:47:12		0:59 E	+30		1409 sec.
4729	Comp							"	4 sec
4730	Bias (4)								
4731	Comp							"	"
4732	HD215182	22 38 19	+29 42 00	00:17:28		2:02 E			1190
4733	Comp							"	4 s
4734	Comp							"	4 s
4735	HD204867	21 26 18	-06 01 00	00:42:54		0:24 E			1252 sec.
4736	Comp							"	4 s
4737	Comp								4 s
4738	HD3712	00 34 48	+55 59 00	01:18:07		3:12 E	+56		400 s
4739	Comp							"	4 s

Spectr. Te
Focus ....
Spectr. Te

Exp. Mtr.
2160
1861
725
2171
646
2190
1795
2080

Spectr. Temp. ..... Dome Temp./Hum. 18.1°C / 87.2% Transparency Conditions .... Partialy cloudy .... (44)

Focus ..... 240 .....

Spectr. Temp. ..... Dome Temp./Hum. 16.1°C / 77.5%

Windy now FROM NW much Dryer Air now too.

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4 sec					Echelle CCD				5ci			
830s	2160	~3"	3.24	K5II? +B?					6ci	Kk Pgm	~7000+ Sum ADU above bias	
4 sec	861								3ci			
	725								5ci			
1409 sec.	2171		3.2	G8II					7ci	Kk Pgm.		
4 sec	646								3ci			
									1ci		Dome Temp = 16.9°C CCD Temp -100.5°C	
"									5ci			
1190	2190	5"	3.0	G8II? +F?					2ci	Kk pgm		
4 s									3ci			
4 s									3ci			
1252 sec.	1795		2.91	G0Ib					4ci	Std. Vel.		
4 s									5ci		Max ADU 6515	
4 s									3ci			
400 s	2080		2.23	K0III					6ci	Std. Vel		
4 s									3ci			

(4) Pg 3

Date July 26/27 Observers [KK] HIW/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	Comparison Exp.	Exp. Mtr.
4740	Bias (4)									
4741	Comp							ThAr	4s	
4742	HD 8890	01 22 36	+88 46 00	01:37:20		4:50 E			480s	2420
4743	Comp							"	4	407
4744	HD 8890	01 22 36	+88 46 00	01:46:53					529	300
4745	Comp							"	4s	
4746	Comp							"	4s	
4747	HD209790	22 00 54	64 08 00	02:03:46		0:36 W			1992s	1013
4748	Comp							"	4s	
4749	Bias (4)									
4750	Comp							"	4s	
4751	HD34029	05 09 18	45 54 00	02:49:09					400s	3180
4752	Comp							"	4s.	
4753	HD 34029	05 09 18	45 54 00	02:57:37		6:08 E			330 sec.	3800
4754	Comp								4s	

Spectr. Temp. ..... Dome Temp./Hum. 15.9°C / 76.4% Transparency Conditions ... Clear, windy, scattered clouds (46)

Focus ... 1240 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					Echelle CCD				1ci		Dome Temp 15.9°C	
4s									3ci			
480s	2420		V 2.5	F8 Ib					7ci	KK		
4	407								5ci			
529	~~3000~~		V 2.5	F8 Ib					4ci	KK		
4s									3ci			
4s									3ci			
1912s	1013	4"	B= 4.63	A3m					6ci	KK	5600 ADU Sum Avg at 4480Å	
4s									3ci			
									1ci			
4s									5ci			
400s	3180		V .08	G6 III + G2 III					7ci	KK		
4s									3ci			
330 sec	3800		V = .08	G6 III + G2 III					4ci	KK	Header is wrong (start time) (Poor ~~Avg~~ 96 Th)	
4s												

(47) pg 4

Date July 26/27 Observers [KK] HIW/TH

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
~~CCO~~ 4755	Comp							ThAr	4s
4756	HD12929	02 01 30	22 59 00	03:14:20			+23:20		740
4757	Comp							"	4sec
4758	Bias (4)								
4759 4760	FLATS x2					HRL 0 0	+30°	TUNG	30s
4761	FLAT using	FLAT 9.155 Batch.		ie' Average of 4 flats		"	"		15 sec each.

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
2200

Spectr. Temp. ..... Dome Temp./Hum. +14°C 82.3% Transparency Conditions ..... Clear, some scattered cloud

Focus ..... 2.40 .....

Spectr. Temp. ..... Dome Temp./Hum. +14.9°C 86%

(48)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		V		Echelle CCD		60μ width 600μ Height		3ci			
2200	~5"	2.00	K2IIIab					2ci	Std. Vel.		
~~2200~~								5ci			
						800μ Height = .185		~~1ci~~		MAX = 12K ADU / pixel	
						4	4	1ci		MAX = 6.3K ADU / pixel	
					All To Perseus & WORM.						

(49) pg#1 ~~Mon~~-Tues - Wed

Date 1.4.4 2.6/2.9.... Observers [illegible] H.W. T.H.....

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC 0901/ 0902	Focus Test					0 0	+39°	FeNe Clear	10/10
	~~Bills~~								
				~~20 18 42~~		0 0	~~-26 56°~~	FeNe Clear	20s
				~~20 32 03~~					

Spectr. Ter
Focus.....
Spectr. Ter
Exp. Mtr.
480 02
480 05

Spectr. Temp. ..... Dome Temp./Hum. 19.5°C 70.8%H Transparency Conditions ..... P.A.T. Cloudy .....

Focus ..... ~~6.62~~ 6.70 .. — completely cloudy

Spectr. Temp. ..... Dome Temp./Hum. .....

(8)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
480 020	1024	10 1	CCD FMT	CASS CCD	G=4990 1800/1/mm	310u		3cs 4ci		stellar posn 2.2 pixel Red	
480 050	1024	4 1	CCD FMT					1ci			
								5ci			

Py #1 Wed - Thurs

Date 1992 July 29/30 Observers J.w./T.S.

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	Comparison Exp.
CCO 9013 9014	Focus Test	Comp/Stellar	Hartman focus			7 0 0	~+40°	FeNe Clear	10/15
9015	BIAS (4)								
9016	Comp			(6 FRAMES)				FeNe Clear	20s
FM00467	HD144579 seeing Test +00 s Tel			Normalizatn STAR 'N' mode		Int [4x67msec	Times 2x133msec]		
CCO 9017	HD144579	16 01 30	+392536	20 21 32					754
CCO 9018	Comp							FeNe Clear	20s
CCO 9019	Comp							FeAr Clear	60s
CCO 9020	HD189687	19 56 15	+3646	21 04 39		02 20E			1200
9021	Comp							FeAr Clear	60s
9022	BIAS (4)								
9023	HD189687	19 56 15	+36 46	21 31 01		01 54 30E			1200
9024	Comp							FeAr Clear	60s
9025	HD189687			21 54 07					1200
9026	Comp							FeAr Clear	60s
9027	HD189687			22 17 00					1200
9028	Comp							FeAr Clear	60s

Spectr. Temp. ..... Dome Temp./Hum. 16°C 60% Transparency Conditions ... Some thin clouds

Focus ... 6.70 ...

Spectr. Temp. ..... Dome Temp./Hum. .....

No FANS tonight

90CGHin CCDT -> -100°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
"				CASS CCD	G4486 1800 l/mm	200u Full	4390Å	3ci 4ci		360 0 10 1024 4 0 1 CCDFMT Stellar 2.3 pixel Red	
								1ci		480 0 50 1024 4 1 CCDFMT	
Fm 00467 A,B,C,D,E,F,F+S					G4483 1800 l/mm			5ci		DOME WSW FOR Seeing Light NW wind TEST	
3700	2"	6.66 V	d68		G4483 1800 l/mm			6ci	Stdvel		
					G4483 1800 l/mm			7ci			
					G4495 1800 l/mm			10ci		2301 S/N 3400 MAX ADU SUM AVG of 10 CCDS	
21,940	3"-4"							11ci		>12K ADU above Bias	
								12ci			
								1ci		PDMOT = +15.0°C	
27,500	3"							13ci			
								14ci			
28,700								15ci			
								~~16ci~~ ~~17ci~~			
28,500	2"-3"							17ci			
								18ci			

(9) pg#2 Wed-Thurs

Date 1.9.92. July 29/30 Observers J.w. I.T.

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	Comparison Exp.	Exp. Mtr.
CCO9029	BIAS(4)									
9030	HD189687	19 56 15	+36 46	22 41 18						8500
9031	Comp							FeAr Clear	60s	
9032 9033 9034	FLATS x3	[while still on HD189687]						TUNG CLEAR	45s	
CCO9035	HD189687			23 15 02					1200s	25,200
9036	Comp							FeAr Clear	60s.	
9037	HD189687			23 39 25					1500s	30,000
9038	Comp							FeAr Clear	60s.	
9039	HD189687			00 08 41					1500s	15,500
9040	~~BIAS(4)~~ Comp							FeAr Clear	60s	
9041	BIAS(4)									
9042	HD 189687			00 38 55					555.	12.5
9043	Comp							FeAr Clear	60s	
→ 9044 9046	FLATS x3	[while on HD189687]						TUNG Clear	45s	
9047	HD189687			00 58 58						24,000

Spectr. Temp. ..... Dome Temp./Hum. +13.6°C ... 60.0%H Transparency Conditions . P.C.A.T. ... Cloudy ..... (59.)

Focus .... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. +11.8°C ... 68.5%H

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						CASS CCD	G=4495 1800l/mm	200u FULL	4390Å	1ci			
		27,500	3"	5.19	B3IVe					19ci	Fy pgm		
	60s									20ci			
	45s									21ci 22 23		MAX = 84 KADU/pixel	
	120s	25,700								24ci			
	60s	~~DK 25,500~~								25ci			
	150s	20,000								26ci			
	60s									27ci			
	150s	15,500								28ci		cloudy & fad	
	60s									29ci			
										~~30~~ 1ci		Dome T = +11.9°C	
	55s	1265								30ci		Cloud	
	60s									31ci			
	45s									32ci		7.7K ADU max	
		23600								33ci		Thin Cloud	

(5) Pg #3 Wed-Thurs

Date 1992 July 29/30 Observers J.W.M./J.T.H.

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	Comparison Exp.
cc9048	Comp							FeAr Clear	60s.
9049	HD 189687	19 56 15	+36 46	01 22 30		01 57W			120s
9050	comp							FeAr Clear	60s.
9051	Bias (4)								
9052	HD189687			01 47 06					1200
9053	Comp							FeAr Clear	60s
9054	HD189687			02 11 17		02 46 30W			2100s
9055	Comp							FeAr Clear	60s
9056	HD189687			02 33 55	done ✓				1200s
9057	Comp							FeAr Clear	60sec
9058	HD189687			02 57 56					1600s
9059	Comp							FeAr Clear	60secs
9060 9061	FLATS x 3			03 32				Tung Clear	45sec
9063	BIAS(4)								
9064 9065	Focus Test					03 55	+37°	FeAr Clear	20/27

Spectr. Temp. ..... Dome Temp./Hum. +11.6°C 69.0% Transparency Conditions ..Clearing again.... (56)

Focus ... 6.70 ..... cloud by dawn

Spectr. Temp. ..... Dome Temp./Hum. +10.9°C 72.7% CJH 8DA

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	G 4495 1800 l/mm	200μ Full Length	4390Å	34ci			
33700	3"	V 5.19	B3 like					35ci	Pyppgm		
								14ci			
								1ci		Dome T = +11.7°C	
34,000								15ci		≈20k ADU above bias for 10 cols	
								16ci			
30000	3"							17ci			
								18ci			
18000								17ci		Wrong cache. Start time will have to be edited.	
								18ci			
12600	3"							24ci		Cloud again	
								25ci			
								21ci + 22ci, 23ci			
								1ci			
								3ci 4ci		Dome T = 10.8°C	
All to Persons sworn Tn									Stellar	vs/ Blue <2 pixels	

(5) p1

Date . Aug. 4/5 - 92 ..... Observers .. Ri/Fos. (SERVICE) .

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	Comparison Exp.
cc 9066	Focus (Comp)								
9067	Focus (Spec) .								
FM00469	HD144579		(367ms x4)(133ms x2)						
9068	~~Flat~~ Bias(4)								
9069.	Comp							Fe/Ar Clear	90s
9070	HD144579	16 01 30	+ 39 25 36	20 33 31	20 43 31	01 16 W			600
9071.	Comp						Fe/Ar Clear		60s
9072	Comp							Fe/Ar Clear	60s
9073	2U Her	16 32 27	+ 38 10 16	20 55 44					2400s
9074	Comp							Fe/Ar Clear	60s
9075 9076 9078	Flat x3							Orng Clear	15s
9077	Comp		NOTE 'λ' CHANGE TO 4554Å					Fe/Ar Clear	25s.
9079	HD204848	21 26 12	-10 11 06	22 25 44	01 37 E				3000s
9080	Comp							Fe/Ar Clear	25s
9081	Comp							Fe/Ar Clear	25s

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
1950
867
1537

Spectr. Temp. ..... Dome Temp./Hum. 14.9°c/86.9% Transparency Conditions ..... CLEAR ..... (58)

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. 14.0°c/84.5% (2230) FANS ON

480 0 50 1024 4 1 90 cgcm

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						CASS CCD		200 μ			FOCUS TEST	O.K.	
											FOCUS TEST	DOM WSW	
							(LOWER RIGHT OF SLIT)				SEEING TST.	(ALSO NORMALIZATION).	
										1 ci			
	90s									3 ci		AIRMASS = 1.0193	
	600	1950	1"-2"	V 6.66	68V	CASS CCD	1800 G = 4900	200 μ	5010Å	4 ci	STD. VEL	2400 ~~3600~~ DOM SUM Avg.	
	60s RGG												
	60s											COMP MAY BE WEAK	
	2400s	867	1"-2"	V 8-9	F8I.		1800 G = 4900	200 μ	5010Å	5 ci	Fe PROGRAM.	1200 Σ avg above bkgrd.	
	60s						↓		↓				
	15s											10K max	
	85s						1800 G = 4614	200 μ	4554Å	8 ci	rG Pgm.	T = 14.1°c Hum: 84.7%	
	3000s	2537		V 7.4	G0V	CASS CCD	1800 G = 4614	200 μ	4554Å	10 ci	rG Pgm	480 0 200 1024 1 1 ccdfmt [redacted]	
	25s						↓	↓	↓	9 ci	↓	3600 Σ avg NO BINNING!	
	25s												

(5) p^2

Date Aug 4/5-92 Observers Ri/Flor (Service)

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	Comparison Exp.
9082	HD197913 (EC$_{xg}$)	20 42 10	33 36 00	22 58 55					89.
9083	Comp							Fe/Ar Clear	25s
9084	Bias (4)								
9085 9086 9087	Flat x3							Tung Clear	180s
9088	Bias (4)								
9089	Bias(4) (@6450Å)		NOTE "λ" CHANGE TO 6450Å						
9090	Comp							Fe/Ar Clear	60 sec
9091	HD203156	21 15 23	+37 49	00 41 48					619
9092	Comp							Fe/Ar Clear	60s
9093	Comp							Fe/Ar Clear	60s
9094	HD187691	19 46 12	+10 10 00	01 05 01		02 06 ω			704
9095	Comp							Fe/Ar Clear	60s
9096	Comp							Fe/Ar Clear	60s
9097	HD 198726	20 47 13	+27 52 30	01 25 40					1200
9098	Comp							Fe/Ar Clear	60s
9099	Bias(4)								

Spectr. Te
Focus ....
Spectr. Te
Exp. Mtr.
12 f.
5000
5000
6454

Spectr. Temp. ..... Dome Temp./Hum. 13.4°C/81.2% Transparency Conditions ..... CLEAR ..... (60) ....

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. 12.7°C/79.9% (20138) FANS ON!

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
89	12K.		V 2.4	KO III	CASS CCD	1800 α=4614	200 μ	4554Å		rG Pgm.	480 0 200 1024 ↓↑ 13K Sun avg above bgrnd. NO BINNING	
25s						↓		↓		↓		
180s												
						1800 α=5930	200 μ	λ=6450Å		Rm Pgm.	T=12.7°C Hum=81.2% AIRMASS=1.0049.	
60sec											480 0 50 1024 41	ccdfmt
6M	5000	≈2"	V 5.8 5.9	F2	CASS CCD	1800 α=5930	200 μ	6450Å	4ci	Rm Pgm	TOP PRIORITY SMAR	
60s												
60s												
70s	8000		V 5.11	F8V				6450Å		STD. VEL.	T=12.9°C Hum=79.9% 18K Sun Avg Above bkgnd.	
60s												
60s												
1200	6454		V 5.75	G0Ib	CASS CCD	1800 α=5930	200 μ	6450Å		Rm Pgm.	AIRMASS=1.0284 16K Sun Avg Above bkgrnd.	
60s												

(61) p3

Date . Aug. 4/5 - 92 ... Observers ... E.Rm.J.Ri/F.Br .....

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	Comparison Exp.
9100	Comp							FeAr Clear	60s
9101	HD214975	22 36 55	+56 18 24	02 03 28	~~01 02W~~	01 02W			3600s
9102	Comp							FeAr Clear	
9103	Comp							FeAr Clear	
9104	HD203156	21 15 23	+37 49	03 11 26		02 42W			650
9105	Comp							FeAr Clear	60s
9106	Bias (4)								
9107	Comp							FeAr Clear	60s
9108	HD223094	23 41 23	+28 08 54	03 31 56		00 49W			1450
9109	Comp							FeAr Clear	60s
9110 9111 9112	Flats x 3 (at HD223094 pos'n)							Tung $\Delta = 1/2$	10 sec
9113	Comparison for slit rotation test							FeNe	2s
9114	bias								

Spectr. Te
Focus...
Spectr. Te

Exp. Mtr.

2872

6000

5500

Spectr. Temp. ..... Dome Temp./Hum. 12.9°C / 79.9% Transparency Conditions ... CLEAR ... (62)

Focus ..... 6..70 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... (90 cgain) 480 0 50 1024 4 1 ccdfmt

FANS ON!

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	60s					CASS CCD	1800 G = 5930	200 μ	CENTRED @ 6450 Å				
	3600s	2872	>2"	V 8.40	CO16	↓	↓	↓	6450 Å	4Ci	Rm Pgm.	(7 LAC)* NOT SURE OF FIELD MAY NOT BE STAR	
												VERY POOR OBSERVING.	
												* SEEING IS QUITE BAD.	
												* DOME SWEATING	
												OUTSIDE HUMIDITY ≈ 95%	
	650	6000	1"-2"	V 5.8 5.9	F2	CASS CCD	1800 G = 5930	200 μ	6450 Å	4Ci	Rm Pgm.	TOP PRIORITY - 2ND EXPOSURE	
	60s												
	60s											DOME T = 12.6°C / HUM = 80.4%	
	1450	5500		V 7.45	KS III	CASS CCD	1800 G = 5930	200 μ	6450 Å		STD. VEL.	14K SUM AVG ABOVE BKG.	
	60s												
	10sec											> 10,000	
		ALL TO PERSEUS & WORM											
	2s						1200 5480	2DE	8700 Å?			NEW 250μ SLIT	

(83) P#1

Date . Aug 6-92 Observers . Ri/Fbr (SERVICE)

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	Comparison Exp.	Exp. Mtr.
cc09115	Focus (Comp)									
9116	Focus (Steel)									
FM00470	HD144579	16 01 30	+39 25 36							
~~B~~	~~HD144579~~									
9117	Bias (4)									
9118	Comp							FeAr Clear	60s	
9119	HD144579	16 01 30	+39 25 36	20 28 35		01 12W			350	2800
9120	HD144579	16 01 30	+39 25 36	20 35 50					638	5000
9121	Comp							FeAr Clear	60s	
9122	Comp							FeAr Clear	60s	
9123	HD162714	17 47 17	-06 07 12	21 00 19					901	6000
9124	Comp							FeAr Clear	60s	
9125	Flat							Tung n=1/2		
9126	Flat	at HD162714 position						Tung n=1/2		
9127	Flat							Tung n=1/2		
9128	Bias (4)									

Spectr. Te
Focus....
Spectr. Te

Spectr. Temp. ..... Dome Temp./Hum. ...18°C./61.5% (@2030) Transparency Conditions ..... CLEAR ..... (64)..

Focus .....6..64.....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF! (90 GAIN)

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					CASS CCD	1800 G=5930	200 μ	λ=6450Å			480 0 50 1024 41	
			V 6.66	dG8		(4×67ms)(2×133ms)				DOME SW	NORMALIZATION AND SEEING TEST	
60s											AIRMASS 1.0271	
350	2800		V 6.66	dG8	CASS CCD	1800 G=5930	200 μ	λ=6450Å	4ci	STD. VEL.	[redacted] 6K Σ any above bkg.	
638	5000		V 6.66	dG8	CASS CCD	1800 G=5930	200 μ	6450 Å	4ci	STD. VEL.	1ST EXPOSURE LOW.	
60s												
60s												
401	6000	~1"	V 6.15	G0Ib	CASS CCD	1800 G=5930	200 μ	λ=6450Å	5ci	RM PGM.	Y Oph (CEPHID VARIABLE)	
60s												

P #2

Date .. Aug. 5/6-92 .... Observers .. R. J. Fbr. (SERVICE)

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	Comparison Exp.	Spectr. Te / Focus / Spectr. Te / Exp. Mtr.
cc Ø 9129	COMP		NOTE: CHANGE IN λ TO 5010 Å					FeAr CLEAR	75sec	
9130	HD148283 (4414)	16 32 27	+38 10 16	21 30 34					2600s	2400
9131	COMP							FeAr Clear	75sec	
9132	BIAS (4)									
9133	COMP							FeAr Clear	75s	
9134	HD171232	18 28 30	+25 25 00	22 24 19					700s	2515
9135	COMP							FeAr Clear	75sec	
9136	FLAT							Tung Clear	15s	
9137	FLAT	AT HD171232 POSITION						Tung Clear	15s	
9138	FLAT							Tung Clear.	15s	
			NOTE: CHANGE IN λ TO 4554Å							
9139	BIAS (4)									
9140	COMP							FeAr Clear	45s	
9141	HD197913 (EC Yg)	20 42 10	33 36 00	23 09 21 [illegible]					75s	20,000
9142	HD197913	20 42 10	33 36 00	23 11 24		00 51 E			108s	50,000
9143	COMP							FeAr Clear	45s	

Spectr. Temp. ..... Dome Temp./Hum. 17.3°C / 62.5% Transparency Conditions .... CLEAR .... (66) ...

Focus ..... 6.64 ..... (2122)

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 α=4900	200 μ	λ=5010Å			90 Gain 480 0 50 1024 4 1	ccdfmt
2400	~1"	V 8-9	F8I	CASS CCD	1800 α=4900	200 μ	5010Å	7ci	Fe Pgm	AIRMASS = 1.0624 2K Above Background. Sum.	
2515	1"-2"	V 7.73	G8III	CASS CCD	1800 α=4900	200 μ	5010Å	8ci	STD. VEL.	AIRMASS = 1.0622 T = 16.8°C Hum = 63.8%	
										} 12.5 K ADU.	
										NOTE: NO BINNING!	
										480 0 200 1024 1 1	ccdfmt
20,000		V 2.4	KO III	CASS CCD	1800 α=4614	200 μ	4554Å	4ci	rG Pam.	15 K Sum Avg above blg.	
35,000		V 2.4	KO III	CASS CCD	1800 α=4614	200 μ	4554Å	4ci	rG Pam	⇓	

(2) P#3

Date Aug 5/6-92 Observers Ri/Fbr (SERVICE)

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	Comparison Exp.	Exp. Mtr.
CCØ9144	COMP							Fe/Ar Clear	45s	
9145	HD204848	21 26 12	-10 11 06	23 22 36	[illegible]	044 E			2404	5000
9146	COMP							Fe/Ar Clear	45s	
9147	FLAT		Ø0					Tung Clear	180s	
9148	FLAT							"	"	
9149	FLAT	AT HD204848 POSITION						"	"	
9150	FLAT							"	"	
9151	FLAT							"	"	
		NOTE CHANGE TO λ = 6450Å AT CCØ 9156								
9152	BIAS (4)									
9153	COMP							Fe/Ar Clear	60s	
9154	HD203156	21 15 23	37 49 00	00 34 07		00 08 W			600s	5108
9155	COMP									
9156	COMP							Fe/Ar Clear	60s	
9157	HD187691	19 46 12	+10 10 00	00 57 17		02 03 W			784	20K
9158	COMP							Fe/Ar Clear	60	

Spectr. Temp. ..... Dome Temp./Hum. 16.2°C/64.0% (2315) Transparency Conditions .....CLEAR.....

Focus .....6.64.....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
r	45s					CASS CCD	1800 a=4614	200 μ	λ=4554Å	3ci		AIRMASS = 1.7895 480 0 200 1024 1 1 ccdfmt	
	2x4	5000	~1"	V 7.4	GOI	CASS CCD	1800 a=4614	200 μ	λ=4554Å	5ci	rG PAM	2K above background (Sum Avg)	
r	45s												
g	180s												
	"											SEEING IS MUCH	
	4											BETTER THAN LAST	
	4											EVENING	
	"												
						CASS CCD	1800 a=5930	200 μ				480 0 50 1024 4 1 ccdfmt	
r	60s								λ=4554				
	600s	8108		V 5.8-5.9	F2	CASS CCD	1800 a=5930	200 μ	λ=4554	4ci	RM PAM.	TOP PRIORITY. (5K MAX)	
									λ=4554				
Ar	60s						1800 a=5930	*	λ=6450Å			NEW WAVELENGTH	
	789	20 K		V 5.7	F8 V	CASS CCD		200 μ	6450Å	1	STD. VEL	DOME T= 14.9°C / H= 69.3%	
Ar	60												

p#4

Date Aug. 5/6-92 Observers R. | For (Service)

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	Comparison Exp.
cc@9159	BIAS(4)								
9160	COMP	21 15 23	+37 49 00					FCAT CLEAR	60S
9161	HD203156	2115 23	+37 49 00	01 18 16		01 02 W			1200
			NOTE: cc@9161 IS SLIGHTLY				SATURATED!		
9162	HD 203156	21 15 23	+37 4900	01 40 31		01 14 W			60S
9163	COMP							FCAT CLEAR	60S
9164	COMP								
9165	HD198726	20 47 13	+27 52 30	01 58 47		02 05W			92S
9166	COMP							FCAT CLEAR	60S
9167	FLAT							TUNG $\Delta=1/2$	10S
9168	FLAT	NT HD198726 POSITION						TUNG $\Delta=1/2$	10S
9169	FLAT							TUNG $\Delta=1/2$	10S
9170	COMP							FCAT CLEAR	60S
9171	HD214975	22 36 55	56 18 24	02 31 09	03 31 09	01 33W			3600
9172	COMP							FCAT CLEAR	60S

Spectr. Ter
Focus....
Spectr. Ter

Exp. Mtr.	
20300	
10K	
12K	
4042	

Spectr. Temp. ..... Dome Temp./Hum. 14.5°C/69.5% (0100) Transparency Conditions ..... CLEAR ..... (70) ..

Focus ..... 6.64 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... Fans OFF

480 0 50 1024 4 1

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						CASS CCD	1800 G=5930	200 μ	λ=6450				
	60s												
	1200	20,300		V 5.8 - 5.9	F2	CASS CCD	1800 G=5930	200 μ	λ=6450Å	6ci	Rm PAM	TOP PRIORITY ! (SATURATE)	
	600	10K		V 5.8 - 5.9	F2	CASS CCD	1800 G=5930	200 μ	6450Å	6ci	Rm PAM	TOP PRIORITY 16K SUM AVG. AIRMAS = 1.1119	
	60s												
	925	12K		V 5.75	G0Ib	CASS CCD	1800 G=5930	200 μ	6450Å	7ci	Rm PAM	T Vul 20K SUM AVG.	
	60s												
	10s												
	10s												
	10s												
	60s												
	3600	4042		V 8.40	G0Ib	CASS CCD	1800 G=5930	200 μ	6450Å	8ci	Rm PAM.	ζ Lac 5K SUM AVG. Done T=14.7°C Hum=67.1%	
	60s												

p#5

Date Aug 5/6-92 Observers Ri/Fbr (SERVICE)

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	Comparison Exp.	Exp. Mtr.
cc@9173	BIAS(4)									
9174	COMP							FeAr Clear	60s	
9175	HD203156	21 15 23	+37 49	03 39 17		0316W			787	10K
9176	COMP							FeAr Clear	60s	
9177	COMP							FeAr Clear	60s	
9178	HD9138	012457	+05 38	04 00 11		0042E			293	10K
9179	COMP							FeAr Clear	60s	
9180	FLAT							TUNG A=1/2	10s	
9181	FLAT	AT HD9138 POSITION						TUNG A=1/2	10s	
9182	FLAT							TUNG A=1/2	10s	

Spectr. Temp. ..... Dome Temp./Hum. 14.9°C/66.1% Transparency Conditions ..... CLEAR ..... 7.2 ...

Focus ..... 6.64 .....

Spectr. Temp. ..... Dome Temp./Hum. 14.8°C/66.8% (0030) FANS OFF!

CCD TEMP ~ -100.4°C

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						CASS CCD	1800 G=5930	200 μ	λ=6450Å			480 0 50 1024 41	
	60s											Airmass = 1.2035	
	787	10K	<1"	V 5.8-5.9	F2	CASS CCD	1800 G=5930	200 μ	λ=6450Å	9ci	RM Pgm.	TOP PRIORITY (2ND EXPOSURE)	
	60s											13K Sum Aug	
	60s												
	293	10K		V 4.84	K4 III	CASS CCD	1800 G=5930	200 μ	6450Å	10ci	STD. VEL.	25K Sum background	
	60s												
	10s												
	10s												
	10s												
							ALL TO PERSEUS & WORM						

Dp#1

Date Aug 6/7 92 Observers IKKJ/Ri/Fbr (SERVICE)

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	Comparison Exp.
ccd9183	Focus (Comp)								
9184	Focus (Steel)								
EM00471	HD144579	16 01 30	39 25 36						
9185	Bias (4)								
9186	Comp (7300Å)							Fcbr Clear	12s
9187	HD172167	18 33 33	38 41 00	20 41 10	(7300Å)				10s
9188	——— " ———			20 42 30					10s
9189	——— " ———			20 43 31					10s
9190	Comp							Fcbr Clear	12s
9191	Comp							Fcbr Clear	12s
9192	HD187642	19 45 54	08 36 00	20 52 37	(7300Å)				20s
9193	——— " ———	"	"	20 54 01					20s
9194	——— " ———	"	"	20 55 14					20s
9195	Comp							Fcbr Clear	12s
9196 9197 9198	Flat (x3)							Fcbr Clear Twilight	10s

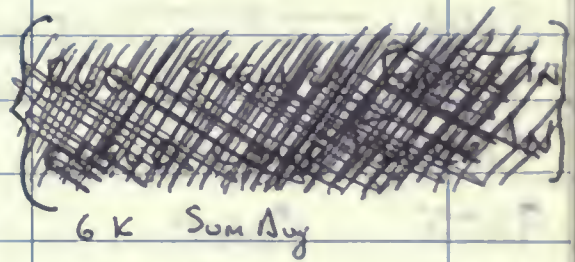
Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
46
80K
60K

Spectr. Temp. ..... Dome Temp./Hum. 20°C/56.8% Transparency Conditions ..... CLEAR ..... 74 ....

Focus ..... 6.6.4 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS ON. (30 GAIN)

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
									λ=7300Å			FORMAT. 450 0 200 1024 1 1	
								MID DEKKR					
				V 6.66	dG8	CASS CCD	1200 a=4825	250 μ	λ=7300Å			NORMALIZATION AND SEEING TEST	
	12s												
	10s			V 0.04	AØV		1200 a=4825	250 μ	λ=7300Å	4ci	KK Pam		
	10s			—"—	"		"	"	"	"	KK Pam	6K Sum Avg	
	10s			—"—	"		"	"	"	"	KK Pam		
	12s												
	12s												
	20s	40		V 0.77	A7V		1200 a=4825	250 μ	λ=7300Å	5ci	KK Pam		
	20s	80K		"	"		"	"	"	"	KK Pam		
	20s	60K		"	"		"	"	"	"	KK Pam		
	12s												
	10s					NO DEKKER FOR FLATS							

p#2

Date Aug 6/7-92 Observers IKK)/R.|Fbr.(SERVICE)

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	Comparison Exp.
cc@9199	BIAS(4)(8100Å)								
9200	COMP							FeNe clear	45s
9201	HD187642	19 45 54	08 36 00	21 16 53	(8100Å)				45s
9202	——"——	"	"	21 18 56	(8100Å)				45s
9203	——"——	"	"	21 20 26	(8100Å)	1.43 E			45s
9204	COMP							FeNe clear	45s
9205	COMP							FeNe clear	45s
9206	HD172167	18 33 33	38 41 00	-					30s
9207	——"——	"	"	-					"
9208	——"——	"	"	-		0.17 E			"
9209	COMP								
9210	BIAS (4)								
9211	FLAT	AT HD172167 POSITION						Tung clear	14s
9212	FLAT							Tung clear	14s
9213	FLAT							Tung clear	14s

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
120K
117K
106K
100K
99K
85K.

Spectr. Temp. ..... Dome Temp./Hum. 19.4°C/57.1% Transparency Conditions .... CLEAR ..... 76 .....

Focus ..... 6.64 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS ON ; 30 cgain

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1200 G=5200	250 μ	λ=8100Å			450 0 200 1024	11
										(NO BINNING).	
120 K		V 0.77	A7V	CASS CCD	1200 G=5200	250 μ	8100Å	5ci	KK pgm	30K Sum Avg.	
117 K		"	"		"	"	"	"	KK pgm	35K Sum Avg	
106 K		"	"		"	"	"	"	KK pgm		
										AIRMASS = 1.0876	
100K		V 0.04	AØV	CASS CCD	1200 G=5200	250 μ	8100Å	4ci	KK pgm	60K } Σ avg above	
99K		"	"		"	"	"	"		60K }	
85K.		"	"		"	"	"	"		60K }	

NO DEKKER FOR FLATS

#3

Date ... Aug 6/7-92 Observers ... [illegible]/Ri/Fbr (SERVICE)

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	Comparison Exp.
cc@9214	BIAS (4) (8400Å)			21 49 27					
9215	COMP							FeNe Clear	8s
9216	HD172167	18 33 33	38 41 00	—	(8400Å)				20s
9217	"	"	"	—					"
9218	"	"	"	22 05 10					"
9219	COMP	"	"					FeNe Clear	8s
9220	COMP							FeNe Clear	8s
9221	HD187642	19 45 54	08 36 00	22 18 06					63s
9222	"	"	"	22 20 04					63s
9223	"	"	"	22 22 01					63s
9224	COMP							FeNe Clear	8s
9225	BIAS (4)								
9226	FLAT							Tung Clear	16s
9227	FLAT AT	HD187642 POSITION						Tung Clear	16s
9228	FLAT							Tung Clear	16s

Spectr. Te
Focus ....
Spectr. Te
Exp. Mtr.
53K
140 K
133 K.
133 K

Spectr. Temp. ..... Dome Temp./Hum. 18.8°C/61.5% (2150) Transparency Conditions ... CLEAR ..... 78 .....

Focus ..... 6.64 .....

FANS ON - 30 gain

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1200 G=5342	250 μ	λ=8400			450 0 200 1024	1 1
8s										AIRMASS = 1.254	
20s		V 0.04	AΦV	CASS CCD	1200 G=5342	250 μ	λ=8400	4ci	KK Pgm	40K Σ AVG ABOVE BKGD.	
53K		"	"	"	"	"	"	"	KK Pgm		
"		"	"	"	"	"	"	"	KK Pgm	35K.	
8s										GREAT SEEING!	
8s											
63s		V		CASS	1200	250					
140K		0.77	A7V	CCD	G=5342	μ	λ=8400	5ci	KK Pgm	20K Σ AVG	
63s		"	"	"	"	"	"	"	KK Pgm		
133K.		"	"	"	"	"	"	"	KK Pgm	50K	
63s		"	"	"	"	"	"	"	KK Pgm		
133K		"	"	"	"	"	"	"	KK Pgm	50K	
8s											
16s											
16s				NO DEKKER FOR FLATS						} >10K	
16s											

#4

Date ... Aug. 6/7-92 ... Observers [KKS]/Ri/Fbr (SERVICE)

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	Comparison Exp.
~~9228~~	~~BIAS (4) (8700Å)~~								
	NOTE: UP TO THIS POINT, THE STELLAR							FILTER	
9229	BIAS (4) (8700Å)		(FILTERS	ARE	NOW	IN)			
9230	Comp							FeNe Clear	15s
9231	HD187642	19 45 54	08 36 00						70s
9232	"	"	"						"
9233	"	"	"	22 54 30					"
9234	Comp							FeNe Clear	15s
9235	Comp							FeNe Clear	15s
9236	HD172167	18 33 33	38 41 00	23 04 15					20s
9237	"	"	"	23 05 55					20s
9238	"	"	"	23 06 59.					20s
9239	Comp							FeNe Clear	15s
9240 9241 9242	FLATS x 3							Tung Clear	18s

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
HA
44K
50K
46K
34K
31K
31K

Spectr. Temp. ..... Dome Temp./Hum. . 18.6°C/62.2% (@2230) Transparency Conditions ..... CLEAR .....

Focus ..... 6.64 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS ON -30 again

80

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
HAS NOT BEEN IN. - Fbr.											
				CASS CCD	1200 G=5480	250 μ	λ=8700Å				
44K		V 0.77	A7 V				8700Å	Sci	KK	20K Σ avg above bkg.	
50K		"	"				"	"	KK	40K	
46K		"	"				"	"	KK	40K.	
34K		V 0.04	AØ V	CASS CCD	1200 G=5480	250 μ	8700Å	4Ci	KK	23K Σ avg above bkgrnd.	
31K		"	"	"	"	"	"	4Ci	KK	26K —— " ——	
31K		"	"	"	"	"	"	4Ci	KK	27K —— " ——	
				NO DEKKER FOR FLATS							

#5

Date ...Aug 6/7-92... Observers [KK]/Ri/Fbr (SERVICE)

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	Comparison Exp.
cc9243	Bins(4)(8400Å)								
9244	Comp							FeNe Clear	8s
9245	HD172167	18 33 33	38 41 00	23 25 08					20s
9246	"	"	"	23 26 23					"
9247	"	"	"	23 27 31					"
9248	Comp							FeNe Clear	8s
9249	Comp			23:34:24				FeNe Clear	8s
9250	HD187642	19 45 54	08 3600	23:41:06					63s
9251	"			23:43:23					63s
9252	"			23:45:39					63s
9253	Comp			23:49:29				FeNe Clear	8s
9254	FLAT								16s
9255	FLAT	AT HD187642 Position							16s
9256	FLAT								16s
9257	Bins(4)(8400Å)								

Spectr. Ter
Focus....
Spectr. Ter
Exp. Mtr.

Spectr. Temp. ..... Dome Temp./Hum. 18.4°C/60.7% (2310) Transparency Conditions ..... CLEAR .....

Focus ..... 6.64 ..... FANS ON - 30 again (SLIGHT HAZE) 82

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1200 a=5342	250 μ	λ=8400Å			450 0 200 .1024 1 1 ccdfmt	
8s											
20s 40K		V 0.04	AØV		1200 a=5342	250 μ	8400Å	4ci	KK Pgm	25K Σ AVG ABOVE BKD.	
" 40K.		"	"		"	"	"	"	KK Pgm	24K ——— " ———	
" 40K		"	"		"	"	"	"	KK Pgm	35K ——— " ———	
8s											
8s											
63s 45K		V 0.77	A7V		1200 a=5342	250 μ	8400Å	5ci	KK Pgm		
68s 44K		"	"		"	"	"	"	"		
63s 47K		"	"		"	"	"	"	"		
9s											
16s											
16s											
16s											

{NO DEKKER FOR FLATS} >10K.

p #6

Date Aug. 6/7-92 Observers IKK3/RI/Fbr

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	Comparison Exp.
cc9258	BIAS (4) (8100 Å)								
9259	COMP							FeNe Clear	45s
9260	HD 187642	19 45 54	08 36 00	00 00 20					45s
9261	"	"	"						"
9262	"	"	"	00 04 38					"
9263	COMP							FeNe Clear	45s
9264	COMP							FeNe Clear	45s
9265	HD 172167	18 33 33	38 41 00	00 12 56					30s
9266	"	"	"	00 14 41					30s
9267	"	"	"	00 16 20					
9268	COMP							FeNe Clear	45s
9269	FLAT	AT HD 172167 POS'N						"	
9270	FLAT							Tung Clear	14s
9271	FLAT							"	"
9272	BIAS (4)							"	"

Spectr. Temp. ..... Dome Temp./Hum. 17.9°C/63.2% Transparency Conditions .... SLIGHT HAZE .....

Focus .... 6.6.4 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS ON -30 cgain

84

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				COSS CCD	1200 a=5200	250 μ	λ=8100			450 0200 1024 11 ccdfmt	
										AIRMASS = 1.2542	
32K		V 0.77	AFV				8100Å	Sci	KK Pgm	90 K Sum Adu.	
32K		"	"				"		KK Pgm	28 K Sum Avg.	
32K		"	"				"		KK Pgm		
		V 0.04	AFV		1200 a=5200	250 μ	8100	Sci	KK	40 K Σ Avg above bkg	
42K		"	"		"	"	"		KK	>40 K Σ Avg above bkg.	
90 K.		"	"		"	"	"		KK	40 K.	
										NO DEKKER FOR FLATS	

Date .. Aug. 6/7-92 .... Observers . [KK] / Ri / Fbr .....

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	Comparison Exp.	Exp. Mtr.
~~9273~~	Bias(4)(7300Å)									
9274	Comp							FeSr Clear	12s	
9275	HD172167	18 33 33	+ 38 41 00	00 28 49					12s	20K.
9276	"	"	"	00 29 52					"	20K.
9277	"	"	"	00 30 39					"	20K
9278	Comp							FeSr Clear	12s	
9279	Comp									
9280	HD187642	19 ~~05~~ 54	08 36 00	00 37 49					22s	20K
9281	"	"	"	00 38 58					22s	20K
9282	"	"	"	00 39 51		01 35 W			22s	20K
9283	Comp							FeSr Clear	12s	
9284	Flat							Tung Clear	10s	
9285	Flat	AT HD187642 Pos'n						"	"	
9286	Flat							"	"	
9287	Bias(4)									

Spectr. Temp. ..... Dome Temp./Hum. 17.5°C/64% Transparency Conditions ....Clear (Haze).....
(0043)

Focus .....6.6.4.....

FANS ON - 30 gain 86

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						CASS CCD	1200 G=4825	250 μ	λ=7300Å			450 0 200 1024	11
	12s	20K.		V 0.04	AΦV		1200 G=4825	250 μ	7300Å	4ci	KK	8K Σ avg	
	"	20K.		"	"		"	"	"	"	KK		
	"	20K		"	"		"	"	"	"	KK		
	12s												
	22s	20K		V 0.77	A7V		1200 G=4825	250 μ	7300Å	5ci	KK	30K Σ avg above bkg.	
	22s	20K		"	"		"	"	"	"	KK		
	22s	20K		"	"		"	"	"	"	KK		
	12s												
	10s												
	"												
	"												

#8

Date Aug. 6/7-92 Observers Ri.|.Fbr.(SERVICE)

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	Comparison Exp.	
cc9288	BIAS(4)									
9289	Comp							FeAr Clear	60s	
9290	HD203156	21 15 23	+37 49 00	01 19 24		00 53W			300s	6638
9291	Comp							FeAr Clear	60s	
9292	HD203156	21 15 23	+37 49 00	01 28 15					480s	10900
9293	Comp							Fe Ar Clear	60s	
9294	Comp							FeAr Clear	60s	
9295	HD198726	20 47 13	+27 52 30	01 44 41					339s	10K
9296	Comp							FeAr Clear	60s	
9297	Comp							FeAr Clear	60s	
9298	HD223094	23 41 23	+28 08 54	01 58 43						10,100
9299	Comp							FeAr Clear	60s	
FM00TSTx,y,z,v*	GUIDER MAGNITUDE	LIMIT TEST	ON	PLEIADES						
9300	Comp							FeAr Clear	60s	
9301	HD214975	22 36 55	+56 18 24	03 11 21		02 11W			2800s	3249
									3200s	

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

Spectr. Temp. ..... Dome Temp./Hum. 17.2°C/64.8% Transparency Conditions VERY CLEAR ..... 88 ....

Focus ..... 6.64 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS ON - 90 cgain

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 G=5930	200 μ	6450Å			480 0 50 1024 41 ccdfbt	
										GREAT SEEING!	
6638		V 5.8-5.9	F2	CASS CCD	1800 G=5930	200 μ	6450Å	4ci	[Rm] Pgm	TOP PRIORITY	
10,900		V 5.8 -5.9	F2	CASS CCD	1800 G=5930	200 μ	6450Å	4ci	Rm - (TOP	PRIORITY) - EXPOSURE #2	20K
										DOME T=16.9°C/H=66.2%	
										AIRMASS = 1.1075	
10K		V 5.75	G0Ib	CASS CCD	1800 G=5930	200 μ	6450Å	5ci	Rm Pgm	T Vul (16K Sum Avg)	
10,100		V 7.45	K5 III	CASS CCD	1800 G=5930	200 μ	6450Å	6ci	STD. VEL	25K Σ AVG.	
										T=15.3°C Hum=74.8%	
3249		V 8.40	G0Ib	CASS CCD	1800 G=5930	200 μ	6450Å	7ci	Rm Pgm	Z Lac.	

Grp #9

Date Aug. 6/7-92 Observers Ri/Flor (SERVICE)

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	Comparison Exp.
cc@9302	COMP							FLAT CLR	60s.
9303	BIAS (4)								
9304	FLAT							TUNG A=1/2	10s
9305	FLAT	AT HD214975 POSITION						TUNG A=1/2	10s
9306	FLAT							TUNG A=1/2	10s

Spectr. Temp. ..... Dome Temp./Hum. 15.6°C/72.7% Transparency Conditions CLEAR 90..
(0345)
Focus 6.64.....
Spectr. Temp. ..... Dome Temp./Hum. 15.3°C/74.8% FANS ON -90 again
(0354)

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	60s					CASS CCD	1800 G=5930	200 μ	λ=6450Å			480 0 50 1024 4 1	
						↓	↓	↓	↓				
	10s												
	10s												
	10s												

ALL TO PERSEUS AND WORM & Exabyte KK
for.

pg 1

Date Aug 10/11 '92 Observers HIW/KK/Fbr

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	Comparison Exp.
ce 4762	Bias (4)								
4763	Comp								
4764	Comp							ThAr	10sec
4765	HD 8890	01 22 36	+88:46	03:46:12	03:58:12				600sec
4766	Comp							ThAr	10s
4767	HD 8890	01 22 36	+88 46	04:01:27					660sec
4768	Comp							ThAr	10sec
4769	Bias (4)								
4770	Flats (Aqua)								
4771								ThAr	10sec
4772									11

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
nil

Spectr. Temp. ..... Dome Temp./Hum. 18.4°C / 66.2% Transparency Conditions ..... Scattered Clouds. 92

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS ON.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Echelle CCD	.4540 600 l/mm	60μ width 600μ height		1ci		Dome Temp - 18.4°C	
								3ci		CCD warmed to -8°C, so second top up done.	
								3ci			
nil		V=2.5	F8 1b					4ci		Starting time is wrong in header, right in logbook	
								3ci		(weak, due to inability to find slit.) Focus=2248	
								4ci			
										Tried different focus (Guider camera was moved) Tel. Focus = 2142	
										Fmt: 00 128 1024 8 1	
										Temp: 19.8°C	

pg 1

Date Aug 11/12 '92 Tue/Wed Observers Hlw/Fbr [KK]

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	Comparison Exp.
ce 4773	Bias (4)								
4774	Comp							ThAr.	10 sec
4775	HD144576	16 01 30	39 25 36	20:00:43			+39		1203s
4776	Comp							"	10s
4777	Comp							"	10s
4778	HD137909	15 23 42	29 27 00	20:29:00		~2:30 W	+29		1535s
4779	Comp							"	10s.
4780	HD137909	15 23 42	29 27 00	20:57:19			+29		1807s
4781	Comp							"	10s
4782	Comp							"	10s
4783	Bias(4)								
4784	HD 8890	01 22 36	88 46 00	21:43:01		7:40 E	+89		520s
4785	Comp							"	10s
4786	HD 8890	01 22 36	88 46 00	21:54:48		7:20 E	+89		580s
4787	Comp							"	10s
4788	Flat (9)							Tung	15s

Spectr. Temp. ..... Dome Temp./Hum. 17.0°c / 66.9% Transparency Conditions ..... Clear ..... gs ....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF Format: 0 0 256 1024 41

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	2"			Echelle CCD	.4540 600ℓ/mm	400μ=height, .225 460μ=width		1ci .277		CLAMBDA = 4480 Å Focus = 0.2535	
								3ci			
85		V= 6.66	G8 V					4ci	Std. Velocity	-60 +/- 0.3 km/sec. Start time in header is wrong.	
								3ci			
								3ci			
1492		V= 2.6	K3 II					5ci	KK		
								3ci			
1709		V= 2.6	K3 II					6ci	KK		
								3ci			
								3ci			
								1ci			
2084		V= 2.5	F8 Ib					7ci	KK		
342 c.								3ci			
2727		V= 2.5	F8 Ib					4ci	KK	Alt to Perseus & Worm	
								3ci		dec motor broke.	
						800μ = height .185		1ci		Aug of 9 Flats.	

pg #1 [redacted], Aug 13/14 92

Date [redacted] Observers HIW/[KK]/Fbr

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	Comparison Exp.	Exp. Mtr.
ce ϕ 4789	Bias (4)									
4790	Comp							ThAr	10 sec	
4791	HD8890	01 22 36	88 46 00	21:52:14		7:20 E	+89		720 sec	2400
4792	Comp							"	10 s	
4793	HD 8890	01 22 36	88 46 00	22:06:27		7:04	+89		770 s	2705
4794	Comp							"	10 s	
4795	Comp							"	"	
4796	HD137909	15 23 42	29 27 00	22:29:52		4:38 W	+29		1320 s	1320
4797	Comp							Ther	10 s	
4798	HD137909	15 23 42	29 27 00	22 53 54		5:08 W	+29		1700 s	1380
4799	Comp							"	10 s	
4800	Bias (4)									
4801	Comp							"	10 s	
4802	HD204867	21 26 18	-06 01 00	23:32:52		0:15 E	-6		1691 s	2002
4803	Comp							"	10 s	
4804	Comp							"	"	

Spectr. Te
Focus ....
Spectr. Te

Spectr. Temp. ..... Dome Temp./Hum. 13.8°C/82.0% Transparency Conditions ..... Scattered Clouds to clear. 96

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

FORMAT: 0 0 256 1024 4 1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Echelle CCD	.4540 600 l/mm	400 μ 60 μ	=.225 width =.277 height	1 ci		CLAMBDA = 4480 FOCUS = .2535	
								3ci		Focus test done, good.	
2400	2'	V=2.5	F8 1b						KK		
2705		V=2.5	F8 1b						KK		
1320		V= 3.66	Fp						KK	Hum = 83.2 @ 22:32	
1380		V= 3.66	Fp						KK	Setting over Richmond Hill.	
2002		V= 2.91	GOIb						Std. Vel.	Lot's of Moonlight.	

pg 2 Thur Friday.

Date Aug 13/14 92 Observers HIW/Fbr/[KK]

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	Comparison Exp.	Spectr. Te / Focus / Spectr. Te Exp. Mtr.
Ce 4805	HD183912	19 26 41	27 45 00	00:10:24		2:08 W	+28		860s	2256
4806	Comp							Thtr	10s	
4807	Comp							"	"	
4808	HD186791	19 41 30	10 22 00	00:31:48					670s	2380
4809	Comp							"	10s	
4810	Comp							"	"	
4811	HD202109	21 08 41	29 49 00	00:56:20		1:17 W	+30		1208s	2130
4812	Comp for both ½							"	10s	
4813	HD215182	22 38 19	29 42 00	01:21:58		0:10 W	+30		1000s	2 25
4814	Comp							"	10s	
4815	Comp							"	10s	
4816	HD8890	01 22 36	88 46 00	01:50:33		3:22 E	+89		593	2430
4817	Comp							"	10s	
4818	HD8890	01 22 36	81 46 00	02:03:05			+89		627	2800
4819	Comp.							"	10s	
4820	Comp							"	"	

Spectr. Temp. ..... Dome Temp./Hum. 12.0°C / 83.1% Transparency Conditions ..... Clear .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Trans OFF -90 cgain
CCD Temp = -100.6°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2256	2"	V= 3.24	K5 II + B?	Echelle CCD					KK		
2380		V= 2.6	K3 II						KK & Sth. Vel.	Two, two, two programs in one!!	
2130		V= 3.2	G8 II						KK		
										Taken at posn of HD215182	
2125		V= 3.0	G8 II + F?						KK		
2430		V= 2.5	F8 Ib						KK		
2800		V= 2.5	F8 Ib						KK		

pg 3.

Date Aug. 13/14 92 Observers Hlw/Fbr/[KK]

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	Comparison Exp.	Exp. Mtr.
4821	HD 3712	00 34 48	55 59 00	2:20:52		0:57 E	+56	[illegible]	44s	240
4822	Comp							ThAr	10s	
4823	Comp							"	"	
4824	HD 34029	05 09 18	45 54 00	02:37:34		5:23 E	+46		75s	2000
4825	Comp							"	10s	
4826	HD 34029	05 09 18	45 54 00	02:40:19		5:19 E	+46		109s	3100
4827	Comp							"	10s	
4828	Bias (4)									
4829	FLAT							Tung	25s	
4830	Flat							Tung	25s	
4831	Flat							Tung	25s	

Spectr. Temp. ..... Dome Temp./Hum. 11.5°C / 85.3% Transparency Conditions Clear as glass

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

160

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	4s	2240		V= 2.23	K0IIIa	Echelle CCD					Std. Vel.		
Ar	10s												
	75s	2000		V= 0.08	G6III +G2III						KK		
	10s												
	09s	3100		V= 0.08	G6III +G2III						KK		
	10s												
g	25s											max ADU 14748	
ng	25s											ditto	
g	25s											ditto	
						ALL TO PERSEUS; WORM						CLOSE & TOO HUMID	

Pg 1

Fri Sat

Date Aug 14/15 92 Observers HIW/[KK]/Fbr

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	Comparison Exp.	Exp. Mtr.
ce∅4832	Bias (4)									
4833	Comp							ThAr	10s	
4834	HD8890	01 22 36	88 46 00	20:15:46		9 E	+89		385	2315
4835	Comp							"	10s	
4836	HD8890	01 22 36	88 46 00	20:25:05		8:45 E	+89		645	2560
4837	Comp							"	10s	
4838	Comp							"	"	
4839	HD137909	15 23 42	29 27 00	21:27:25			+29		1200s	516
4840	Comp							"	10s	
4841	HD137909	15 23 42	29 27 00	21:50:37			+29		1200s	370
4842	Comp							"	10s	
4843	Bias (4)									
4844	Comp							"	"	
4845	HD204867	21 26 18	-06 01 00	23:13:29			-6		1600	483
4846	Comp									
4847	Bias (4)									

Spectr. Temp. ..... Dome Temp./Hum. 16.6°C/64.8% Transparency Conditions ... PARTLY CLOUDY ..... TOZ

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS ON ccdtap = -100.7°C

Format = 0 0 256 1024 4 1

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
			4"			Echelle CCD	.4540 600 l/mm	400μ = .225 height 60μ = .277 height				central λ = 4480 Focus = .2535	
Ar	10s												
	385	2315		V= 2.5	F8Ib						KK	Polaris	
	10s												
	645	2560		V= 2.5	F8Ib						KK	Polaris	
	10s											Focus Test done, it looks fine.	
	"											T = 14.9°C Hum = 68.5% Airmass = 1.3140	
	120s	1516		V= 3.66	F_p					βCBr	KK	Accidentally wrote over 1st exposure with comp. Hw	
	16s												
	120s	1370		V= 3.66	F_p					βCBr	KK	T=14.3°C Hum = 70.4%	
	10s												
	1600	1483		V= 2.91	GOIb						Std. Vel.	Small mass of cloud passed overhead, then it cleared. Hum = 70.9%	

Pg 2

Date Aug. 14/15 92 (Fri Sat) Observers Hlw/[KK]/Fbr

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	Comparison Exp.	Exp. Mtr.
4848	Comp							ThAr	10s	
4849	HD222368	23 34 48	05 05 00	23:48:30		1:52 E	+5:30		2512s	964
4850	Comp.							"	10s	391
4851	Comp							"	"	
4852	HD8890	01 22 36	88 46 00	00:39:16		4:30 E	+89		500s	2417
4853	Comp.							"	10s	
4854	HD8890	01 22 36	88 46 00	00:49:14		4:20 E	+89		520s	2300
4855	Comp							"	10s	
4856	Comp							"	"	
4857	HD3712	00 34 48	55 59 00	01:04:22		2:10 E	+56.5		402	2500
4858	Comp							"	10s	
4859	Bias (4)									
4860	Comp							"	"	
4861	HD186791	19 41 30	10 22 00	01:21:08		3:05 W	+11		830s	2220
4862	Comp							"	10s	
4863	Comp							"	"	

Spectr. Temp. ..... Dome Temp./Hum. 13.8°C/71.6% Transparency Conditions ... Scattered Clouds

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	3-4"	[illegible]	[illegible]	Echelle CCD							
964		V= 4.83	F7V						Std. Vel.	Hum= 72.4% @ 00:07	
391										74.9% @ 00:40	
2417		V= 2.5	F8Ib						KK	Polaris	
2300		V= 2.5	F8Ib						KK	Polaris	
										75.6% @ 01:00	
										76.4% @ 01:10	
2500		V= 2.23	K0IIIa						Std. Vel	77.2% @ 01:20	
										Dome Temp = 13.4°C	
2420		V =2.6	K3II						KK & Std. Vel	γ Aql	

pg 3

Date Aug 14 (Fri) / 15 (Sat) 92 Observers Hlw/[KK]/Fbr

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	Comparison Exp.	Exp. Mtr.
4864	HD183912	19 26 41	27 45 00	01:39:31		3:40 W	+28		978s	2050
4865	Comp							ThAr	10s	
4866	Comp							"	"	
4867	HD202109	21 08 41	29 49 00	02:00:09		2:20 W	+30		900s	2300
4868	Comp							"	10s	
4869	Comp							"	"	
4870	HD215182	22 38 19	29 42 00	02:19:52			+30		600s	2100
4871	Comp							"	10s	
4872	Comp							"	"	
4873	HD209790	22 00 54	64 08 00	02:36:20		2:10 W	+64		1200s	870
4874	Comp								10s	
4875	Comp							"	10s	
4876	HD34029	05 09 18	45 54 00	03:04:44		4:50 E	+46		74s	2500
4877	Comp							"	10s	
4878	HD34029	05 09 18	45 54 00	03:08:50		4:50 E	+46		81s	2500
4879	Comp							"	10s	

Spectr. Temp. ..... Dome Temp./Hum. 13.1°C / 78.0% Transparency Conditions ..... clear 100

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2050	5"	V =3.24	K5 II +B?	Echelle CCD					KK	Albirio A (Brighter one)	
2300		V =3.2	G8 II						KK	ζ Cyg	
2100		V =3.0	G8 II +F?						KK	ζ Peg	
870		B= +.63	A3m						KK	Brighter of pair	
2500		V= 0.08	G6 III +G2 III						KK	Capella	
2500s		V= 0.08	G6 III +G2 III						KK	Capella	

pg 4

Date Aug 14 (Fri) / 15 (Sat) 92 Observers HIW/[KK]/Fbr

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	Comparison Exp.
4880	Bias (4)								
4881	COMP							ThAr	10s
4882	HD 8890	01 22 36	88 46 00	03:16:25		1:53 E	+89		500s
4883	Comp							"	10s
4884	HD 8890	01 22 36	88 46 00	03:26:06		1:45 E	+89		520s
4885	Comp							"	10s
4886	Flat							Tung	25s
4887	"						—	"	"
4888	"							"	"

Spectr. Te
Focus....
Spectr. Te

Exp. Mtr.	
2276	
2320	

Spectr. Temp. ..... Dome Temp./Hum. 12.8°C/77.2% Transparency Conditions ..... clear ..... 108..

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	4"			Echelle CCD							
2276		V=2.5	F8 1b							Polaris	
										← Check headers for exp. time.	
2320		V=2.5	F8 1b							Polaris	
						800μ	height = .185				

109

Date Aug 15/16 92 Observers H.Iw/[KK]/Fh-

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	Comparison Exp.
ce4889	Comp							ThAr	10s
ce4890	HD8890	01 22 36	88 46 00	23:15:38		5:45E	+89		600s
4891	Comp							"	10s
4892	HD8890	01 22 36	88 46 00	23:27:06					422s
4893	Comp → 4894 : Bias (4)							"	10s
4895	HD8890	01 22 36	88 46 00	23:37:18					689s
4896	Comp							"	10s
4897 4898	Flat ×3							Tung	35s

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
2045
1357
068

Spectr. Temp. ..... Dome Temp./Hum. 16.3°C / 74.0% Transparency Conditions ..... Cloudy .....110...

Focus ..... FANS OFF

Spectr. Temp. ..... Dome Temp./Hum. ..... FMT: 0 0 256 1024 4 1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2095		V= 2.5	F8 1b	Echelle CCD	.4540 600 ℓ/mm	400μ = .225 height 60μ = .277 width				CLAMBDA = 4480 Å Focus = .2535 some clouds passed over during 1st exposure	
2357											
1068										Clouded out	

pg1 Thurs. Friday

Date Aug. 20/21 '92 Observers HIW/[KK]/Fbr

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	Comparison Exp.	Exp. Mtr.
~~9307~~ 9308	Focus Test (Comp Posn') Focus Test (Stellar Posn')			19:30				FeNe	20s	
FM00472 ABCDEF	HD171232	18 28 30	25 25 00	19:58		#0:51E	+25:27			
9309	Bias (4)									
9310	Comp							FeNe	20s	21092
9311	HD171232	18 28 30	25 25 00	20:04:12	20:14:12				600s	2782
9312	Comp							"	20s	
9313	Comp							"	"	
9314	HD161096	17 38 30	04 37 00	20:30:45		0:30 W			39s	13000
9315	Comp							"	20s	
9316	Bias (4)									
9317	Comp							"	"	
9318	AC +62 26749	17 34 30	61 45 00	20:49:05	21:19:05	1 W	+62		1800s	380
9319	Comp								20s	
9320	Comp							"	20s	
9321	BD +71 851	17 40 06	71 22 00	21:25:55	21:45:55	1:30W	+71		1200	1592
9322	Comp							"	20s	

Spectr. Temp. ..... Dome Temp./Hum. 59.99% / +17.6°C Transparency Conditions ..... Clear ..... 1.12 ....

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS ON

480 0 50 1024 4 1 ccd/int

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~ CLAMBDA	P.H.	Program	Remarks	Quality
				CASS CCD	1800ℓ/mm G=4990	310μ	5140Å	1ci 2ci			
	~2"	V= 7.73	G8 III							Seeing test.	
								1ci			
21092		[redacted]	[redacted]					3ci	[redacted]	.	
2782		V= 7.73	G8 III					4ci	Std Vel.		
								3ci			
								3ci			
13000		V =2.77	K2 III					5ci	Std Vel.		
1380		V =9.95	M1 Ve					6ci	KK		
1592		V= 9.1	K4					7ci	KK	Faint companion noted to SW. ~8" (too late to take spectrum)	

pg 2

Date Aug. 20 (Thu) / 21 (Fri) '92 Observers Hlw / [KK] / Fbr

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	Comparison Exp.
9323,4,5	Flat ×3							Tung	20s
9326	Bias(4)								
9327	Comp							½ Aperature FeNe	20s
9328	BD+76 785	20 13 54	76 55 00	21:08:05		0	+77		1400s
9329	Comp								20
9330	Comp								20
9331	AC+65 6955	20 29 00	65 06 00	21:40:58	22:40:58	0	+65		3600s
9332	Comp								20
9333	Comp								20
9334	LHS 494	20 31 43	61 23 48	23:54:01		2 W	+61		3600s
9335	Comp								20
9336	Comp								20
9337	LHS 3693	21 31 24	51 04 49	01:05:29		2 W	+51		1544
9338	Comp								20
9,40,41	Flat ×3								
342	Bias(4)								

Spectr. Temp. ..... Dome Temp./Hum. +15.3°C / +69.3% Transparency Conditions ..... Clear .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
20s					CASS CCD				7, 8, 9 Ci			
									1 Ci			
20s									3 Ci		Shutter at ½ Aperature	
1400	1946	~3"	V =9.3	M0					8 Ci		~1400 Sum ADU Above Bkg.	
20												
20												
3600	1689		V =10.4	M3					9 Ci		~1350 Sum Ag ADU above bkgd.	
20												
20												
3600	441		V =12.5	m					8 Ci		some wispy high clouds drifted by ~200 s ADU A B	
20												
20												
1542	150		V =11.8	M3.5					7 Ci		71.9% @ 01:14 73.5% @ 01:18	
20												
											Clouded in	

pg 1

Date Aug 21/22 92 (Fri / Sat) Observers HIW/Fbr/Bhm

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	Comparison Exp.	Exp. Mtr.
cc 9343	Bias (4)									
9344	Comp							FeNe clear	20s	
9345	HD171232	18 28 30	25 25 00	20:06:12		0:30	+25		400s	2920
9346	Comp								20s	
9347	Comp								20s	
9348	HD161096	17 38 30	04 37 00	20:22:05					10s	5200
9349	Comp								20s	
9350	Comp								20s	
9351	BD+71° 851 (*)	17 40 06	71 22 00	20:42:32			+71		356s	267
9352	Comp								20s	
9353	→ Bias Comp								20s	
9354	→ LHS 3693	21:31:24	51:04:49	22:03:43		0:44 E			3660s	690
9355	→ Comp								20s	
9356 / 9357	Comp								20s	
9358	BD+76° 785	20:13:54	76:55:00	23:20:46	1:15 W	+77			1431s	2160
9359	Comp								20s	

Spectr. Temp
Focus
Spectr. Tem

Spectr. Temp. ..... Dome Temp./Hum. 63.8%/19.4°C (2000) Transparency Conditions ..... Clear 116

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Fans OFF -90cgain

Comparison/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~ CLAMBDA	P.H.	Program	Remarks	Quality
					CASS CCD	1800 ℓ/mm G=4990	310μ triple slit	5140Å			480 0 50 1024 41	
Ve 20s												
400s	2920	~2"	V =7.73	G8III						Std. Vel	less time, more counts than yesterday.	
20s												
20s												
10s	5200		V =2.77	K2III						Std. Vel	Hum = 68.8% @ 20:44 70.1% @ 20:52 71.7% @ 21:01 72.4% @ 21:10 73.5% @ 21:18	
20s												
20s												
356	267		?	?					6ci	KK	Faint Companion! -tracking to right-hand side of slit to avoid light of brighter star. -note - Brighter Star light may slightly penetrate the right slit:  	
20s												
20s												
360	690		V =11.8	M3.5						KK		
20s												
20s												
143	2160		V =9.3	M0						KK	74.3 @ 21:26 75.1 @ 21:45 75.6 @ 22:01 76.7 @ 22:28	
20s												

117 pg 2.

Date Aug 21/22 92 Observers Hlw/Fbr/Bhrm/[KK]

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	Comparison Exp.	Exp. Mtr.
9360 9361, 9362	Flats x3						½ ap.	Tung	15s	
9363	Comp							FeNe clear	20,	
9364	BD+71 851	17 40 06	71 22 00	00:17:44		4 56 W			184	2500
9365	Comp							FeNe clear	20s	
9366	Bias (4)									
9367	Comp								20s	
9368	Ross 226	22 50 30	60 28 00	01:42:32		1:30 W	+61		3630s	340c
9369	Comp								20s	
9370, 1, 2	Flats x3							Tung ½	10s	
9373	Bias									
9374	Comp							FeNe Clear	20s	
9375	Ross 226	22 50 30	60 28 00	02:53:57		2:30 W	+61		3600s	350c
9376	Comp.									

Spectr. Temp. ..... Dome Temp./Hum. 16.9°c / 74.1% Transparency Conditions ..... Clear

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

118

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2500		V=9.1	K4						KK	6K $\sum$ avg.	
340c		V=13.2	M4						KK		
350c		V=13.2	M4						KK ←	Forgot to import name & coordinates : header says LHS1176 J.H. 25/07/93	

edited ID in Header 9605 Tn

119 pg1 ~~Sat Sun~~

Date Aug 22/23 92 Observers HIW/FBr

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	Comparison Exp.	
cc9377	Bias (4)									
9378	Comp							FeNe	20s	
9379	HD186791	19:41:30	10 22 00	23 08 25					8s	2500
9380	Comp								20	
9381	Comp								20	
9382	AC+75 8347	21 57 36	75 08 00	23 32 21		0:23 W	+75		3600s	1771
9383	Bias (4)								-	
9384	Comp (in LHS 535 posn')								20	
9385	LHS 535	23:03:42	68 07 32	00:49:47	01:49:47		+68		3600s	407c
9386	Comp								20	
9387	LHS 535	23 03 42	68 07 32	01:52:47	02:52:47	1:30 W	+68		3600s	400c
9388	Comp								20s	
9389	Comp								20s	
9390	LHS 1176	00 55 11	60 49 52	03:17:13			+61		3000s	364c
9391	Comp									
4392 - 9400	FLST x9							TWA 4 = 1/2	1ss	

Spectr. Temp. ..... Dome Temp./Hum. 17.8°C / 62.2% Transparency Conditions ..... Clear Clear Clear (126)
(Arora Borealis to North and above)

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	G=4990	3				Hum= 64% @ 23:39	
										69.3% @ 00:48	
2500	~3"	V =2.72	K3II						Std. Vel	Hum = 75.9% @ 0200	
1771		V= 10.5	M0						KK		
										Telescope wasn't moved much, perhaps comp can be used for AC+75 8347 as well	
407c		V =12.45	m?						KK	Hum = 79.9% @ 0245	
										Hum = 83.7% @ 0315	
~400c	~4"	V =12.45	m?						KK		
1064c	~5"?	V =10.8	M2						KK	Seeing is in toilet	

21 4594

Date Aug. 23/24 1992 Observers Hdy / Fbr

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	Comparison Exp.
9401 -9404	BIAS(1)			19 03 11					
9405 -9408	BIAS(1)			19 06 20					
9409	BIAS(4)			19 09 01					
9410	BIAS(4)			19 10 32					
9411	BIAS(4)			19 11 19					
9412	BIAS(1)			19 12 16					
9413	BIAS(1)			19 13 05					
9414	DARK			19 15 28					
9415	BIAS(1)			19 27 37					
9416	BIAS(4)								
9417	Focus (Comp)	NOT AT 5880Å							
9418	Focus (Star).								
9419	BIAS (4)								
9420	Comp			22 50 13				Fbr Clear	205
9421	HD 17724	19 00 49	13 43 00	[redacted]		1 49 W		594	[redacted]
9422	Comp							Fbr Clear	205

Spectr. Temp. ..... Dome Temp./Hum. 21°C / 71.9% Transparency Conditions ..... HAZE .....

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... 480 050 1024 4 1 FANS OFF!

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 5530 G=~~4800~~	200μ NO OKK	λ=5880		Hdy	5 sec - pause between each	
										NO PAUSE BETWEEN EACH	
										COSMIC RAY	
										2 COSMIC RAYS	
										LIGHTS ON	
										Hum: 74.8 / T=20.7°C (2125)	
										75.6 % @ 2131	
										81.3 % @ 2150	
										} FOCUS TEST NOT IN REGION BUT O.K.	
~~NOAO~~ 20K.		V 2.99	AOL		G=5530			4ci	TELLURIC STD	No TRAILING	
										HUM = 88.6%	

Date . Aug. 23/24/92 Observers . Hdy/Fbr

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	Comparison Exp.
9423	HO 177724	19 00 49	13 43 00	23 03 50		W		2 58s	
9424	Comp							FeAr Clear	20s
9425	Flat							Tung n=1/2	15s
9426	Flat							"	15s
9427	Flat							"	15s
9428	Comp							FeAr Clear	20s
9429	Bias (4)								
9430	HO 197433	20 38 36	75 14	23 33 32					400s
9431	"			23 40 29					"
9432	"			23 47 27					"
9433	"			23 54 25					"
9434	"			00 01 22					"
9435	"			00 08 20					"
9436	"			00 15 17					"
9437	"			00 22 15					"

Spectr. Temp. ..... Dome Temp./Hum. T=19.1°C/87% Transparency Conditions ... VERY HAZY AND HUMID 124

Focus ..... 60.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
20K	3"-4"	V 2.99	AO V	CASS CCD	1800 G= 5530	200 μ	λ=5880	4ci	TEMERIC STD	NO TRAILING	
20s											
15s											
15s											
15s											
20s											
400s	SUM OF 2									USE SSTAR 8m. BAT.	
" 819										DEFINITE WAVES OF HAZE.	
" 447											
" 520											
" 450											
" 300											
" 280											
" 300											

125

Date 23/24/92 Observers Hdy/Flr

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	Comparison Exp.	Spectr. Te / Focus / Spectr. Te Exp. Mtr.
~~9438~~	COMP							FeAr Lea	20s	
9439	FLAT							TUNG A=1/2	15s	
9440	BIAS (4)									
9441	COMP (AFTER ROLL TO W. SIDE)									
9442	HD197433	20 38 36	75 14	00 41 07					400s	411
9443	"			00 48 05					"	480
9444	"			00 55 03					"	191
9445	"	CHECK HEADER		01 02 01					"	350
9446	"			01 08 00					"	619
9447	"			01 15 56					"	294
9448	"			01 22 54					"	341
9449	"			01 29 51					"	300
9450	FLAT							TUNG A=1/2	15s	
9451	COMP							FeAr Lea	20s	
9452	BIAS (4)									

Spectr. Temp. ..... Dome Temp./Hum. 18.6°C/88.6% Transparency Conditions ..... QUITE HAZY 12-

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
										12 K MAX	
										(MOVE TO E. SIDE	
										OF PIER)	
411									Hdy		
480											
191											
350											
639											
294										BAD SEEING. STAR	
341										MAY NOT BE CENTRED	
300										ON SLIT.	

12/8 4

Date .. Aug 23/24.92. Observers .... Hdy. Fbr.....

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	Comparison Exp.
9453	HD197433	20 38 36	+75 14	01 43 16					400s
9454	"			01 50 14					"
9455	"			01 57 12					"
9456	"	CHECK		02 04 10					"
9457	"	HEADER		02 11 08					"
9458	"			02 18 06					"
9459	"			02 25 53					"
9460	"			02 32 51					"
9461	COMP							FeNr Clear	20s
9462	FLAT							Trng n=1/2	15s
9463	BIAS(4)								
9464	COMP (AFTER BREAK)			03 17 41				FeNr Clear	20s
9465	FLAT							Trng n=1/2	15s
9466	HD197433	20 38 36	75 14	03 21 01					400s
9467	"			03 27 58		4 52 W			"

Spectr. Temp. ..... Dome Temp./Hum. 18.5/87.2 (0140) Transparency Conditions ..... HAZE 1.28
Focus ..... 6.70 ..... VERY HUMID
Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
600					18000 α 5530		λ=5880		Hdy	AIRMASS = 1.2633	
300	CLOUD				5530					THROUGH CLOUD.	
140											
480										HUM 87.2 - DOME WET.	
590											
345											
540											
625											
500										BACK FROM 20min break.	
490											

1991

Date ..Aug.23/24.-92. Observers ....Hdy./Fbr.....

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	Comparison Exp.
9468	HD 197433	20 38 36	75 14	03 34 56					400s
9469	"			03 41 54					"
9470	"			03 48 52					"
9471	"			03 55 50					"
9472	"			04 02 47					"
9473	"			04 09 45					"
9474	FLAT							TUNG A=½	15s
9475	BIAS(4)								
9476	COMP			04 19				FeNe CuAr	20s

Spectr. Ter
Focus....
Spectr. Ter

Exp. Mtr.
225
180
370
445
215
180

Spectr. Temp. ..... Dome Temp./Hum. 18.5°C / 84.5% (0330) Transparency Conditions .... HAZE ..... 1.30..

Focus .... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF - 90 cgain

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
225 ~~300~~	4"			CASS CCO	1800 λ=5530		λ=5880		Hdy	SOME CLOUD.	
188										TERRIBLE SEEING.	
370											
445										AIRMASS = 1.4008	
215											
180										LIGHT CLOUDS	
										16K.	
					ALL	TO	PERSEUS	AND	WORM (FOR)		

~~21 38 pcds~~

Date .Aug 24/25 -92.. Observers .... Hdg (24") / Fbs....

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	Comparison Exp
9477	Focus (Comp)								
9478	Focus (Stel)								
9479	Bias (4)								
9480	Dark (600s)			20 40 59		0 8 16 W			
9481	Bias (4)								
9482	Comp							FeAr Clear	90s
9483	HD177724	19 00 49	13 43	21 29 04					13|s
9484	HD177724	"	"	21 32 17		0 26 W			16|s
9485	Comp							FeAr Clear	90s
9486	Flat							TUNG A = 1/2	10s
9487	Flat							TUNG A = 1/2	10s
9488	Flat							TUNG A = 1/2	10s
9489	Bias (4)								
	(MOVE TO HD197433)								

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

Exp. Mtr.

20K

Spectr. Temp. ..... Dome Temp./Hum. 22.6°C/81.6% Transparency Conditions ... OVERCAST 13.2

Focus ..... 6.6.4 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

NORMALIZE ON HD171232

CCD Temp = -101.8°C FANS ON!

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 α=6020	250 μ	λ=6563			480 0 50 1024 4 1 ccdfast	
										90 cgain	
		V 2.99	AOV								
20K								4C2	TELLURIC	TRAILING ON	
20K									"	TRAILING ON	
										} > 14K.	

3rpg2

Date ..Aug 24/25 -92.. Observers ....Hdy(24")/Fbr.....

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	Comparison Exp.	Exp. Mtr.
9490	Comp (@ HD197433)							FeSr Clear	90s	
9491	Flat									
9492	HD197433	20 38 36	75 14	22 01 23					400s	645
9493	"			22 08 20					"	1000
9494	"			22 15 18					"	970
9495	"			22 22 15					"	1137
9496	"			22 29 13					"	1158
9497	"			22 36 11					"	1266
9498	"			22 43 09					"	1300
9499	"			22 50 06					"	1200
9500	Comp							FeSr Clear	90s	
9501	Flat							Turq $\Delta=\frac{1}{2}$	10s	
9502	Bias(4)									
9503	HD197433	20 38 36	75 14	023 10 22		0° 38 W			400s	1320
9504	"			23 17 20					"	1400

Spectr. Temp. ..... Dome Temp./Hum. 22.3°C/82.8% Transparency Conditions ... HAZE ..... 134.

Focus ..... 6.64 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... Fans on!

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	90s					CCSS CCD	1800 G=6020	250 μ					
	400s	645								6cc	Hdy	Use SSTAR8M.bat.	
	"	1000									"	HUM=84.5% T=22.2°C	
	"	970									"		
	"	1137									"		
	"	1158									"		
	"	1266									"		
	"	1300	2"								"		
	"	1200									"		
	90s												
	10s												
												HUM=85.6 T=22.0°C	
	400s	1320	3"									AIRMASS=1.1772	
	"	1400											
	"												

Date ..Aug. 24/25-92.... Observers ...Hdy. / Fbr.....

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	Comparison Exp.	Exp. Mtr.
9505	HD197433	20 38 36	75 14	23 24 18					400s	1400
9506	"	"	"	23 31 16					"	1450
9507	"	"	"	23 38 14					"	1400
9508	"	"	"	2345 12					"	1400
9509	"	"	"	23 52 09					"	1500
951D	"	"	"	23 59 07					"	1333
9511	Comp							FeAr Clear	90s	
9512	Flat							TONG A=1/2	10s	
9513	Bias (4)									
9514	HD197433	20 38 36	75 14	00 14 04						1160
9515	"	"	"	00 21 02						1200
9516	"	"	"	00 28 00						950
9517	"	"	"	00 34 57						800
9518	"	"	"							600
9519	"	"	"	00 48 53						300

Spectr. Temp. ..... Dome Temp./Hum. 21.9°C / 87% Transparency Conditions ... VERY HAZY & HUMID ...
(2322)

Focus ..... 6.64 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS ON

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1400				CASS CCD	1800 G=6020	250 μ	λ=6563		Hdy	RATHER HUMID !	
1450											
1400											
1400											
1500										HUM = 87.8% / T = 21.6° AIRMASS = 1.1913	
1333											
1160								7ci	Hdy		
1000											
980										T = 21.5 / HUM = 88.6% (0028) AIRMASS = 1.2036	
800										CLOUD	
890										H = 90.2% (0053)	
800											

13XP4

Date ... Aug. 24/25. 92. Observers ... Hdy. / Fbr.

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	Comparison Exp.	Exp. Mtr.
9520	HD197433	20 38 36	75 14	00 55 51					400s	821
9521	"	"	"	01 02 49		2 29 W			"	690
~~9522~~	~~Comp (Bad Plate)~~									
	FLAT									
~~9523~~	~~Bias (4)~~									
9522	Comp							Red Cell	90s.	
9523	FLAT									

Spectr. Temp. ..... Dome Temp./Hum. 21.2°C/90.2% Transparency Conditions .... HAZE & HUMID.....

Focus .....6.64..... (00 58 138

Spectr. Temp. ..... Dome Temp./Hum. ..... Fans ON

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
821				CASS CCD	1800 a=6020	250 μ	λ=6563		Hdy	H_α	
690										Hum @ 0110 = 91.1%	
										LOST SPEC. CONTROLLER	
										CLOSE => HUMIDITY AND COMPUTER PROBS	

39#1

Date ... Aug. 25/26-92 ... Observers ... Hdy. (24") / Fbr ...

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	Comparison Exp.
9524	Focus (Comp)								
9525	Focus (Steel)								
9526	Dark								
9527	Bias (4)								
9528	~~Comp~~ Bias(4)							Fe/Ar Clear	35s
9529	~~Flat~~ Comp							↓	↓
9530	Flat							Twy 1/2 ND	10s
9531	H0177724	19 00 19	13 43 00	21 31 08		0 33 W			359
9532	"	"	"	21 37 52					
9533	Comp							Fe/Ar Clear	35s
9534	Flat								
9535	Flat								
9536	Flat								
9537	Comp							Fe/Ar Clear	35s
9538	Bias (4)								

Spectr. Temp. ..... Dome Temp./Hum. 23.7°C/82.2% Transparency Conditions ..... HAZE 140

Focus ..... 6.60 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF - NO SEEING TEST

90cgear

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD.	1800 G=5530	250 μ			λ=5880	480 0 50 1024 4 1	ccdfmt
										FAIRCHILD CAMERA IN	
35s										HUM=87.2% T=23.1°C	
〃											
10s											
359	20 K		V 2.99	AO IV					TELLURIC	POOR SEEING	
									TELLURIC	THIN CLOUD?	
35s											
										H=89.3% T=22.7°C AIRMASS: 1.1773	
35s											

141 #2

Date ...Aug. 25/26.-92. Observers ...Hdy.(24") / Fbr.....

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	Comparison Exp.	Exp. Mtr.
9539	HD197433	20 38 36	75 14	22 14 50					400s	415
9540	"	"	"	22 21 48					"	410
9541	"	"	"	22 28 45					"	577
9542	"	"	"	22 35 43					"	430
9543	"	"	"	22 42 40					"	480
9544	"	"	"	22 49 38					"	467
9545	"	"	"	22 56 36					"	545
9546	"	"	"	23 03 34					"	540
9547	Comp							FcAr Cla	35s	
9548	FLAT							TUNG A=1/2	10s	
9549	BIAS(4)									
9550	HD197433	20 38 36	75 14	23 15 47					400s	480
9551	"	"	"	23 22 44					"	520
9552	"	"	"	23 29 42					"	520
9553	"	"	"	23 36 40					"	520
9554	"	"	"	23 43 37					"	480

Spectr. Temp. ..... Dome Temp./Hum. ~~89~~ 22.72/89.5 (2211) Transparency Conditions ... V.E.R.Y ... HAZY ... HUMID

Focus ... 6.60 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF — NO NORMALIZATION! 142

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
415				cass ccd	1800 c=5930	250 μ	λ=5880 Å		Hdy	AWFUL SEEING	
410											
577											
430											
480											
467										AIRMASS = 1.1760 T=22.3°C / HUM=91.39%	
545											
540										(23 32) T=22°C/H=91.9%	
										AIRMASS = 1.832	
										MAY BE MOISTURE ON SECONDARY MIRROR	
480									Hdy		
520										POSSIBLY THIN CLOUD?	
520											
520										HUM @ 2348 = 92.7%	
480											

14³ 3

Date ... Aug 25/26-97 .... Observers .. Hdy (24") / Fbr .....

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	Comparison Exp.
9555	H0197433	20 28 36	75 14	02 35 05					400s
9556	"	"	"	23 57 33					"
9557	"	"	"	00 04 30					"
~~9558~~	~~Comp~~								
~~9559~~	~~Blank~~								
~~9560~~	~~Bias (4)~~								
9558	Bias (4)								
					ALL TO PERSEUS AND WORM.				

Spectr. Te
Focus ....
Spectr. Te

Exp. Mtr.
435
430
300

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .... HAZE / HUM. IR .....

Focus .... 6.6.0 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF

144

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
435				CASS CCD	1800 λ=5530	250 μ	λ=5880		Hdy		
430										SHUTTERS DRIPPING.	
300										93.1% HUM @ 0005	
										CLOSE	

145

Date Aug 27/28 '92 Observers Hdy/Fbr

Emulsion Batches:
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.....

Spectr. Te
Focus....
Spectr. Te

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
cc09559	BIAS									
9560	BIAS(4)									
9561	BIAS									
9562	BIAS(4)									
9563	BIAS									
9564	BIAS(4)									
9565	BIAS									
9566	BIAS(4)									
9567	BIAS									
9568	BIAS(4)									
	ALL TO PERSEUS AND WORM									

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

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

'96

$T_{CCD} = -100$ C

480 0 50 1024 4 1 ccd fmt

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

147 #1

FeAr(4) 35s
Tung 10s

Emulsion Batches:
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Date ..Aug31/Sept1-92 Observers ..Hdy(24")./Fbr.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc9569	Bias(4)								
9570	Comp							FeAr Con	35s
9571	HD177724	19 00 49	13 43 00	20 34 04					114s
9572	HD177724			20 36 45					129s
9573	Comp							FeAr Con	35s
[illegible]	[illegible]							[illegible]	
[illegible]	[illegible]							[illegible]	
[illegible]	[illegible]							[illegible]	
9574	FLAT							TUNG A=?	4s

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

Exp. Mtr.
20K
22K

Spectr. Temp. ..... Dome Temp./Hum. 59.1%/16.°C Transparency Conditions ... Some Cloud ..... 148.

Focus ..... 6.6.0 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

90cgain - Panasonic Camera
480 0 50 1024 41 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				cass ccd	1800 a=5530	250 μ	λ=5880				
										Comp/Flat - Done Manually	
20K		V 2.99	AOV						Telluric Std.	Tracking ON (weak)	
22K										No Tracking	
										T=14.6°C / H=64% (2038)	
				Equipment Failure. Power Down.							

comparison filter Exp.
355
1145
1295
35
45

1991

Date ...Sept 12/92... Observers ...Hdy. (24") / Fbr.....

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	Comparison Exp.
cc09575	BIAS (4)								
9576	DARK			19 25 49	19 35 49				10 min.
9577	BIAS (4)			19 36 24					

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

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... Some Cloud 150

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 α=5530	250 μ	λ=5880				
										LIGHTS ON	

Comparison Filter Exp.

10 min.

S #1

Date ..Sept.12..... Observers ..Hdy (24")/Fbr.....

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	Comparison Exp.	Exp. Mtr.
	~~BD+74°876~~	J2000	J2000							
9578	TEST SAO 9829	20 37 26	+75 29 01 To June 96	21 26 14					203s	
9579	Bias (4)									
9580	Comp							FeAr Lamp	35s	
9581	HD197433	203836	7514	22 08 32					400s	1240
9582	"			22 15 29					"	1600
9583	"			22 22 27					"	700
9584	"			22 29 24					"	200
9585	"			22 36 22					"	503
9586	"			22 43 19					"	500
9587	"			22 50 17					"	300
9588	"			2257 14					"	433
9589	Flat REVERSE?							Tung $\Delta = 1/2$	10s	
9590	Bias (4)									
9591	Comp							FeAr Lamp		

Spectr. Temp. ..... Dome Temp./Hum. 13.3°C / 65.3% Transparency Conditions ..... CLEAR 152

Focus .... 6.60 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 5530	250 μ	λ-5580			OBSERVING BYE EYE!	
1240									Hdy		
1600											
1700											
1700											
1503											
1500											
1300									}	WAY OFF TO ONE SIDE.	
1232									}		

2 57

Date ..Sept. 11 2..... Observers ..Hdy. (24") / Fbr.....

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	Comparison Exp.
9592	HD197433	20 38 36	75 14	23 44 05					400s
9593	"			23 51 03					"
9594	"			23 58 01					"
9595	"			00 04 57					"
9596	"			00 11 55					"
9597	"			00 18 53					"
9598	"			00 25 51					"
9599	"			00 32 48					"
9600	BIAS (4)								
9601	COMP							Rdr Cu	35s
9602	FLAT							Dry n=1.42	10s
9603	HD197433			00 49 18					400s
9604	"		NO STAR						"
9605	"			01 03 13	(NO STAR)				"
9606	"			01 10 11					"
9607	"			01 17 08					"

Spectr. Ter
Focus....
Spectr. Ter

Exp. Mtr.
1820
1860
2060
1800
2045
600
200
7
7
7

Spectr. Temp. ..... Dome Temp./Hum. 12.2°/.64:6.70 Transparency Conditions .... CLEAR ..... 154...

Focus .... 6.60 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
400s	1820									Hdy.	BAO - END OF SLIT	
"	1860											
"	2060											
"	1800											
"	2045											
"	1600											
"	1200											
"	[illegible]										LOST THE STAR!	
355												
105												
400	?										No Exposure! Keep Losing	
	?										Star And Rack	
"	?										Misbehaving!	
"	600										This Is Awful!	
	2050											

3 15

Date .....SEPT/2..92.... Observers ...Hdy(24")/F.Or.....

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	Comparison Exp.	Exp. Mtr.
9608	HD 197433	20 38 36	75 14	01 24 06					400s	3100
9609	"			01 31 04					"	700
9610	"			01 38 02					"	1300
9611	Bias									
9612	Flat							FeAr then TUNG $n=1/2$	35s	
9613	Comp								10s.	
9614	HD197433	20 38 36	75 14	01 51 08					400s	1800
9615	"			01 58 06					"	1200
9616	"			02 05 03					"	1250
9617	"			02 12 01					"	1300
9618	"			02 18 59					"	600
9619	"			02 25 56					"	970
9620	"			02 32 ~~54~~					"	TOTAL
9621	"			02 39 52	02 46 32				"	3374
9622	Bias(4)									
9623	Comp							FeAr Ca	35s	

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

Focus .....6.6.0.....

Spectr. Temp. ..... Dome Temp./Hum. .....

156

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2100											
1700											
1300											
1800											
1200											
1250											
1300											
600										CLOUDS	
970											
TOTAL 374										DEC FUSE BLOWN NOTHING.	

4 57

Date ..... Sept 1/2 -92 ... Observers ... Hdy. Fbr .....

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	Comparison Exp.
9624	FLAT								
9625	HD 197433	20 38 36	+ 75 14	02 58 18					400s
9626	"			03 05 16					"
9627	"			03 12 13					"
9628	"			03 19 31					"
9629	"			03 26 29					"
9630	"			03 33 27					"
9631	BIAS (4)								
9632	COMP							FeAr Clear	35sec
9633	FLAT							Tung A=1/2	10sec
9634	COMP							FeAr Clear	35 sec
9635	HD 5394			03 55 53					
9636	"			03 57 54					
9637	COMP								
9638	FLAT								
9639	FLAT								

Spectr. Te
Focus ....
Spectr. Te

Exp. Mtr.

1330
1218
770
1963
700
7932
6454
20K
22K

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..CLOUD..... 158

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1320										PUSHING THROUGH CLOUDS WITH THE EYEPIECE!	
1218										"	
770										"	
1563										"	
										"	
700										"	
7532											
										14608 ADU MAX	
6454											
20K									TELLURIC		
22K									TELLURIC		

55

Date ... Sept. 1.|2-92 ... Observers ... Hdy.|Pp ...

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	Comparison Exp.
9640	Comp							FeAr Cl	35s
9641	Bias								
9642	HD 22928	03 35 48	47 28						82s
9643	"	"	"	04 20 58					
9644	Comp							FeAr Clear	35s
9645	Flat							Tung A=1/2	8s
9646	Flat							"	"
9647	Flat							"	"
9648	Bias (a).								

Spectr. Te
Focus ....
Spectr. Te
Exp. Mtr.
22K
21K.

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

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

160

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
22K									TELLURIC		
21K,									"		
										12177 ADH	

Comparison Exp.: 35s | 80s | 35s | 80s | "

Pg #L Fri - Sat

Date ...SEPT. 4/5 -92... Observers .Hdy./.T.n/.Fbr.....

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	Comparison Exp.
9649	BIAS(4)								
9650	Comp							FeAr Clear	90sec
9651	HD177724	19 00 49	13 43 00	20 55 26					78s
9652	"			20 58 02					96s
9653	"			21 00 08					95s
9654	FLAT							TUNG A = 1/2	8sec
9655	FLAT							TUNG A = 1/2	"
9656	FLAT							TUNG A = 1/2	"
9657	~~FLAT~~							TUNG A = 1/2	"
9658	Comp							FeAr Clear	90s
9659	BIAS(4)								
9660	Comp								
9661	FLAT							TUNG A = 1/2	7secs
9662	HD197433	20 38 36	75 14	21 25 51					400s
63	"								"
64	"			21 39 46					"

Spectr. Te
Focus....
Spectr. Te

Exp. Mtr.

20 K
20K
20K

1280
250
1355

Spectr. Temp. ..... Dome Temp./Hum. 17.6°C/51.5% (2030) Transparency Conditions .....CLEAR.....

Focus .....6.6.0.....

Spectr. Temp. ..... Dome Temp./Hum. ..... CLAMBDA 90 CG4in 480 0 50 1024 1 CCD FIXIT

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					CASS CCD	G=6050 1800	250E FULL	6600Å				
90sec									3ci			
78s	20 K		V 2.99	AOV?nn						TELLURIC		
96s	20K											
95s	20K											
8sec											MAX 14,200	
1												
7												
7												
90s									3ci			
7sec		~~2n~~										
400s	1280	2n	V 7.3 -7.7	G5V +K0V +K5V					6ci	Hdy pgm	MAX=13,220ADU	
n	1250											
n	1355											

Mpg #2

Date ... Sept 4/5 -93 ... Observers ... Hdg (24") Tn / Flor

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	Comparison Exp.	Exp. Mtr.
9665	HD197433			~~2~~ 21 46 45					400s	1560
9666	"			21 53 42						1780
9667	"			22 00 40						1860
9668	"			22 07 38						1950
9669	"			22 14 36						1980
9670	BIAS (4)									
9671	Comp							FeAr Clear	~~170~~ ~~40s~~	
9672	FLAT							TUNG A-Y2	7sec	
9673	HD197433			~~2~~ 22 ~~33~~ 30					400s	720
9674	"			22 37 09						1870
9675	"			22 44 07						1640
9676	"			22 51 05						1460
9677	"			22 58 02						[sum of 2 2800]
9678	"			23 05 00						
9679	"			23 11 58						2080
9680	"			23 18 56						

Spectr. Temp. ..... Dome Temp./Hum. +16°C ..... 60.5% Transparency Conditions ..... Clear 164

Focus ..... G.G.8 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... central Lambda

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1560				CASS CCD	G=6050 1800 l/mm	250E	6600ff	6ci	Hdy pgm	All using i batch	
1980										r	
1860	2"										
1950											
1940											
								1ci			
								7ci		MAX ≈ 7K ADU	
								8ci		MAX 13.7K ADU	
720								9ci	** Actual start exp (Stop on slit)	ie 22 28 48 nominal START	
1870	<2"										
1640											
1760											
[sum of 2 2800]											
2080											

#3

Date ... Sept 9/5 92 ... Observers ... Hdy. (24") Tn./For...

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	Comparison Exp.	Exp. Mtr.
9681	BIAS (4)									
9682	FLAT							For Clear	90s	
9683	Comp							Tung A=1/2	7s	
9684	HD197433	20 38 36	+75 14	23 32 06					400	1840s
9685	"			23 39 04						240
9686	"			23 46 02						2150
9687	"			23 53 00						4300
9688	"			23 59 58						2140
9689	"			00 06 55						1910
9690	"			00 13 53						1690
9691	"			00 20 51						1600
9692	BIAS (4)									
9693	Comp							For Clear	90secs	
9694	FLAT							TUNG A=1/2	7secs	
9695	HD197433			00 35 03						1510

Spectr. Temp. ..... Dome Temp./Hum. 15°C/68.5% Transparency Conditions ..... CLEAR .....

Focus .... 6.60 .....

Spectr. Temp. ..... Dome Temp./Hum. 15.1°C 66.4%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 6=6050	250E M	λ=6600Å				
1840s		V= 7.3 -7.7	G5V +KOV +K5V							Hdy	
2140											
2150											
2300											
2140											
1960	1-2"										
1690											
1600										(@ 2700 ADU SUM AVG above Backgnd 31-33 cols)	
										Dome T = +15.5°C	
								10c;			
								11c1		14.3K ADU max	
1500								12c;			

16 #4

Date 1992 Sep 4/5 Observers Hdy./Jn./Fbr.

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	Comparison Exp.	Spectr. Te / Exp. Mtr.
CC09696	HD197433	20 38 36	+75 14	00 42 04					40 s	1550
9697	"			00 49 18					"	
9698	"			00 56 14					"	3185
9699	"			01 03 12					"	1820
9700	"			01 10 10					"	2050
9701	"			01 17 08					"	2020
9702	"			01 24 06					"	1850
9703	Bias									
9704	Flat							Tung n=1/2	7 s	
9705	Comp							Fe/x clear	90 s	
9706	HD197433	20 38 36	75 14	01 36 32					40 s	2000
9707	"			01 43 30					"	1970
9708	"			01 50 28					"	1970
9709	"			01 57 26					"	3150
9710	"			02 04 24					"	2090
9711	"			02 11 22					"	3180

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ... Fine - sl haze .....

Focus .... 6:60 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

169

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40Cs	1550				CASS CCD		250	6600Å	13i	Hdy pgm		
"									14i		Repeat x6	
"	3185	Σ of 2										
"	1820											
"	2050											
"	2020											
"	1850								14i			
7s												
10s												
40Cs	2000								6i	Hdy.		
"	1970											
"	1970											
"	2150											
"	2090											
"	2180											

#5

Date ..92-Sept 4/5..... Observers ..Hdy(24")Tn/Feb.....

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	Comparison Exp.	Exp. Mtr.
9712	HD197433	20 38 36	75 14	021820					400s	1850
9713	"			022518					"	1665
9714	BIAS									
9715	COMP							Fe-Ar Clear	90sec	
9716	FLAT							TUNG H=½	7sec	
9717	HD197433			023828					400sec	Sum of 2
9718	"			024526		0457W			"	4000
9719	"			025224					"	1830
9720	"			025922					"	1730
9721	"			030620					"	1850
9722	"			031318					"	1820
9723	"			032016					"	1570
9724	"			032713					"	1610
9725	BIAS (4)									
9726	FLAT							TUNG A=½	7sec	
9727	COMP							FE-Ar Clear	90sec	

Spectr. Temp. ..... Dome Temp./Hum. 7145°C 65.3% Transparency Conditions .... Fine .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

170

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1850											
1665								6 c;			
								15 c;			
								16 c;			
Sum of 2								17 c;		Repeat of 8 exp	
4000	2"										
1830											
1730											
1850											
1820											
1570											
1610								17 c;		2.5K Add Sum AVG of 5 cols above Backgnd.	
								1 c;			
								18 c;		13.3K MAX	
								19 c;			

17" #6

Date 1992 Sept. 4/5 ..... Observers Hdy ... Fbr. 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	Comparison Exp.	Exp. Mtr.
CC09728	HD197433	20 38 36	+75 14	03 40 09		05 52 W			400s	1480
29				03 47 20					"	1280
30				03 54 26					"	1315
31				04 02 20					"	1270
32				04 09 18					"	1300
33				04 16 16					"	Sun 1/2
34				04 23 13					"	2500
35	BIAS(4)									
36	Comp							FeAr Clamp TUNG	90sec	
37	FLAT							A=1/2	7sec	
38	HD197433			04 37 55					400s	1330
39	"			04 44 51					"	1125
40	"			04 51 50		07 03 W			"	1310
41	BIAS									
42	FLAT									
43	COMP									

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

Focus ..... 6.60 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... +13°C 70%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1480								20i			
1280								21i			
1315								22i			
1270								23i	Repeat x4	ΔRA@ -00 00 55	
1300								1i		Mars spectrum up	
Sum of 2								4		Rel to ΔRA=-00 01 00	
2500								23i		≈ 2 cols / ΔRA sec	
										Dome T = +13.5°C	
								24i			
								25i		127 km AM	
1330								26i	Repeat x3		
1125											
1310								26i			

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Date 1992 Sept 5/6 Observers Hdy / 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	Comparison Exp.
CCD 9744 45	COMPARISON STELLAR FOCUS TEST					0 0	+43°	FeAr Clear	10/10
9746	BIAS(4)			19 22 46					
9747	DARK			19 23 41					600s.
9748	BIAS(4)								
9749	HD177724	19 00 48	+13 43	19 46 23		00 23E			70 1s
9750	COMP							FeAr Clear	70s
9751	FLAT							Tung A=1/2	10s
9752	COMP							FeAr Clear	60s
9753	FLAT							Tung A=1/2	10s
9754	HD 197433			20 18 23					400s
9755	"			25 21					"
9756	"			32 18					"
9757	HD 197433			20 39 23					"
9758	"			[illegible]					"
9759	"			53 18					"
9760	"			21 00 35					"

Spectr. Te
Focus ..6
Spectr. Te

Exp. Mtr.

Set 6

11/400

597
333
390
405
609
360

Spectr. Temp. ..... Dome Temp./Hum. +18.3°C/67.7% Transparency Conditions .Hazy...clouding in.....

Focus ..6.65....changed from G60 Tel normalized on BS6791 All normal 174

Spectr. Temp. ..... Dome Temp./Hum. ..... CLAMBDA

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Set 665		~1.85°C		CHSS CCD	1800 l/mm G=5505	250µ	5900Å	3c; 4c;	Focus Test	360 0 12 1024 40 1 CCDFOCT Righton or Stelkon (WWSI Red)	
					1800 l/mm G=5535	Full Length		1c;			
								5c;			
								1c;			
11,400	1"-2"	V 2.99	AOV? nn					6c;	Telluric Std	Semi cloudy	
								7c;			
								8c;		15273	
								9c;			
								10c;		13976	
597		V 7.3 -7.7	G					11c;		ΔRA = +46.5s	
333											
390											
405											
?											
609											
360											

175 pg #2 SAT sun

Date 1992 Sep. 5/6 ..... Observers . Hdy. / I.T. .....

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CCD 9761	HD 197433	20 38 36	+75 14	21 07 36		00 39 E			400s
9762	FLAT							Tung A=1/2	10sec
9763	Comp							FeAr Clear	60sec
9764	BIAS (4)								
9765	HD 197433			.....?					400s
9766	HD 197433			21 28 21					400s
9767	HD 197433			21 44 36					457s
9768	"			21 55 35					400
9769	Comp							FeAr Clear	60s
9770	Flat							Tung A=1/2	10s
9771	Bias (4)								
9772	DARK			22 12 05					225s
9773	DARK			22 17 27					600s
9774	BIAS (4)								
9775	BIAS (1)								
9776	BIAS (1)								
9777	FLAT	PLATFORM						Tung A=1/2	14s
9778	COMP							Comp Clear	600s
9779	DARK								600s
9780-1	BIAS (1) x2								

Spectr. Te
Focus ...
Spectr. Te

Exp. Mtr.
420
290
90
280
150
269

Spectr. Temp. ..... Dome Temp./Hum. +18½°C ... 72.4% Transparency Conditions ... V. Hazy .....

Focus ... 6.65 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... note Hr ∠ Limit for CCD Box @ +75°30' is 0207W

176

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
420	2"					250E Full 2	5900B	12c;	Hdy pgm		
								13c;		1.3.5 K MAX ADU	
								14c;			
								1c;		Dome T = +18.1°C	
290								~~15c;~~			
90								15c;		≃ ~~400~~ ADU sum HUG above pkgnd.	
280								15c;		medium thick cloud	
150								16c;		∴ ≃ 40/1 S/N ??	
								17c;			
								18c;		12602	
								1c;			
								19c;		LIGHTS ON T_{CCD} = −101.8°C	
								19c;			
								~~1c;~~			
			0 0 256 1024 4	1 ccd fmt				~~20~~ 20c;			
								21c;		~~1250~~ 1720	
126538								20c;		13168	
								20c1 22c1		T_{CCD} = −100.5	

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Date 1992 Sept 6/7 Observers Hdy/I.T.n

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	Comparison Exp.
CC 09782 9783	COMP STELL FOCUS TEST					0 0	+43°		
9784	BIAS(4)								
9785	COMP							FeAr Clear	60s
9786	FLAT							Tung A=1/2	10s
9787-8	HD 177724	19 00 48	+13° 43'	19 20 21 ~ 281 secs exp 19 33 44		00 28E			947 947
9789 9790	FLAT COMP							Tung A=1/2 FeAr Clear	10s 50s
9791	BIAS(4)			19 53 49					
9792	~~COMP~~ DARK 750 secs.							~~FeAr Clear 50s~~	
9793	~~FLAT~~ BIAS(4)							~~Tung A=1/2 10s~~	
9794	COMP							FeAr	
9795	FLAT							Clear	60sec
9796	BIAS(4)								
9797	HD 197433	20 38 36	+75 14	23 49 40		02 08W			400+
9798	HD 197433			23 57 37					400
9799	"			00 04 34					"
9800	"			00 11 32					"
9801	"			00 18 29					"
9802	Bias(4)							Tung	
9803	FLAT							A=1/2	10s
9804	COMP							FeAr Clear	60s

Spectr. Temp. ..... Dome Temp./Hum. +20.8°C / 85.4% Transparency Conditions haze → cloudy ... 178.

Focus ... 6:65 ..... Clearing by 23 30

Spectr. Temp. ..... Dome Temp./Hum. ..... ~~1.77~~. www brought in & updated mkIII ~~wrong~~ incorrectly.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		V		CASS CCD	1800 l/mm G=5535	250 E Full	5900 Å			Stellar ≈ .3 pixels Rel	
									Tel Normalized	* [www Time out 1 min] on BS 6791 again	
								5c; 6c;		13384 MAX FOR FLAT	
30,000 ~~300~~		V 2.99	AOI?, mm					7c;		Rapid cloud in	
								8c; 9c;			
								1c;			
								~~10c;~~ ~~11c;~~			
(10 sec Flat A=1/2)								18c; 19c;			
								1c;		Dome T = +20.0°C Δ RH = -00 00 44	
750		V 7.3 – 7.7		HEADER SCREWED UP (Times)				~~5~~ 6c;	Hdy gym	Tel on East Side	
690								5c;			
700	2"							"			
520								"			
265								"			
										MAX FOR FLAT	

Mon-Tues

Date 1992 Sept 7/8 Observers F.Ha./J.T.

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	Comparison Exp.
CEφ~~49~~φφ	HD210839	22 0807	+58 55	20 47 05	21:07:00	-2:12 E			1200 ~~18~~ 54
49φ1	Th-Ar			~~21 12 15~~				Th Ar	7s
49φ2	HD 210839			21 12 II	21.32:11	-1.47 E			1215s
49φ3	Th Ar								7s
49φ4-φ6	3 x Flat Field			21.50	21:53				20s
	CLOSED at 21:42 due to high humidity.								
49φ7	Bias (4)			21:53					
4908 4909	HARTMAN focus inboard/outboard			00 00		0240W	+14°	Th A	5/5

180

Spectr. Temp. .... Dome Temp./Hum. +19.8°C 91.3% @ 20 48 Transparency Conditions .. Hazy ⇒ cloudy ....

Focus ... .230 ..... .250 for final focus Test < .2 pixel Red for OUTBOARD

Spectr. Temp. .230 showed OUTBOARD Red by ≈ 1 pixel Dome Temp./Hum. .... central ORDER 90C GAin CCD T ⇒ -100°C

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Ech Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	1200 ~~#~~ 3s	184				Echelle CCD	18.25	W = 60 μ H = 600μ	4600 Å	4ci	Sl H = .205 Slit w = .277	X grating e .454 Test Exp.	
	7s									5ci			
	1215s	184								6ci			
	7s									7ci			
	21s							W = 60μ H = 800μ		3ci	~~Slit~~ H = .185	Max = 10,300 ADU	
								#7 .					
	5/5		T = +19.5°C	Set = .250				w = 60μ H = 600μ		8ci 9ci	Focus Test	OUT < .2 pixels Red (.253 for 120μ Slit width) ≈ 5 pixel width when in perfect focus	

gg #2 Tues / Wed

Date 1992 Sept 8/9 Observers Fln. H.n.

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	Comparison Exp.	Exp. Mtr.
ce04910 ce04912	FLATS x3					0 0	+43°	THG	12sec	
4913	Bias x4									
4914	Comp							ThAr clear	4sec	
4915	HD210839	22 08 07		19 47 49		03 02 E			1807	490
4916	Comp							ThAr	4sec	
4917	HD210839			20 16 30		02 28 E			1810[s]	439
4918	Comp			20 48 20				ThAr	4secs	
4919	HD 210839			20:49:40					1806	63
4920	Bias x4			21:20:45						
4921	Comp			21:22:16				ThAr	4[s]	
4922	HD 210839			21:23:28					1835	660
4923	Comp							ThAr	45	
4924	HD 210839			21 55 57		0 48 E			1854	736
4925	Comp			22 31 01				ThAr	4s	
4926	Bias x4			22 33 19						
4927	HD 210839			22 35 59					1806	550

Spectr. Ter
Focus ...
Spectr. Ter

Spectr. Temp. ..... Dome Temp./Hum. +18C ... 67% Transparency Conditions ... FINE ... 18.2

Focus ... 250 ... BS 6791 Tel Normalization Star

Spectr. Temp. ..... Dome Temp./Hum. ..... 90 CG/Hin CCDT - -100°C

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Ech Grating/ Tilt	Slit	Emulsion CLAMBDA	P.H.	Program	Remarks	Quality
12sec					echelle CCD	17.97	120u		3ci	X tilt=.454	MAX 12K ADU	
						H=	800u	set 185				
						W=	120u	set .253	1ci			
						H=	600u	set 205				
45sec									4ci			
1807	490	4 4/6"	V 5.0	06I	(n)f				5ci	Flm pgm	≈ 5600 ADU SATURATING above bkgnd for 10 cols VSini = 214 Kms @ 4686A	
450sec									4ci			
1810s	439								6ci			
4secs									4ci			
1806	618								7ci			
									1ci			
4s									4ci			
1335	660	3"5							2ci	* clock header		
45									4ci			
1854	738	4"5"							6ci	"wfits" command issued before "readout" data same as CE#4917		
45									4ci	This exp is fine.		
									2ci			
1806	5'50								2ci		≈ 5000 ADU Stray Aug ≈ 1 10 cols above bkgnd.	

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Date 1992. Sept. 8/9 Observers F/n. / 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	Comparison Exp.	Exp. Mtr.
CC04928	Comp							Th Ar	4sec	
4929	HD210839			23 08 20					1801	710
4930	Comp							Th Ar	4sec	
4931	BIAS (4)									
4932	HD210839			23 42 59		0h 57m W			1800	928
4933	Comp.			00 14 32				Th Ar	4 sec	
4934	HD 210839			00 16 27 ~~00 14 32~~		1h 31m W			1801	1009
4935	Comp			00 47 43				Th Ar		
4936	Bias (4)									
4937-39	Flats x 3		59° 23′			1h 41m W		TUNG	12s	
4940	HD 210839			00 58 04		2h 13m W			1801s	1081
4941	Comp			01 29 40				Th Ar	4sec	
4942	HD 210839			01 31 02		2h 47m W			1803s	1019
4943	Bias (4)									
4944	Comp			02 15 19						

Spectr. Temp. ..... Dome Temp./Hum. 13.5°C 73.3% Transparency Conditions .. Fine 184

Focus .... 250 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				echelle CCD	W=1200 H=600						
710	3"-4"	5.0	061	(w)f				7ci	Flux pgm		
								1ci			
928								6ci			
								4ci			
1009								7ci			
								4ci		(no streaks in sight)	
										OK 1st Flat noted to be reverse	
					note Slit Height Still 600μ not changed for Flats.			3ci	Start of "Streak" problem	Neglected to heighten slit.	
1081								6ci	9 ADU sum Aug	~4658Å above bkgnd for 10 cols	
								4ci		(streaks in sight)	
1069								7ci			
								1ci		Initial Bias had peculiar pattern.	
								4ci		Peculiar "bleeding" to right from strongest Thar emission line.	

Pg #3

18 Aug

Date 1992 Sept 8/9 Observers Fla/Tu

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	Comparison Exp.
CE04945	HD 210839			2:24:29		3h 40m W			1813s
46	Bias (4)			3:04:11					
47	Comp			3:07:45					
4948-50	Flats x 3		+59° 23'	3:29:22		4h 12m W			15s
	CLOSED @	3:45 EST	⇒ High	humidity (dome dripping)		+ CCD	peculiarities		

Spectr. Te
Focus....
Spectr. Te

Exp. Mtr.
10s

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

Focus ..... .250 .....

Spectr. Temp. ..... Dome Temp./Hum. +12°C ..... 78% CCD T −100.5 @ 0230

Comparison Iter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	1515s	1028				Echelle CCD	H= 600 m	120μ		6ci			
										2ci		Residual spectrum present	
										1ci		Still "streaking" to right.	
	10s						H= 800 m	120μ		3ci		(Max, Min) ~ (607, 14735) Evidence for "rotating" 10 prow vs 900 prow	
						All to Perseus & work							

Box #1

Date ... SEPT. 10/11 - 92 Observers ... FLN | FBR

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	Comparison Exp.
e04951	BIAS (4)			~~89~~ 39 43					
4952	FLAT							TUNG	13s
4953	FLAT								13s
4954	FLAT								13s
4955	BIAS (4)								
4956.	COMP							ThAr	4s
4957	HD 210 839	22 08 07	58 55 00	20 27 10					1800s
4958	COMP							ThAr	4s
4959	HD210839	22 08 07	58 55 00	21 00 22					1800
4960	COMP							ThAr	4s
4961	BIAS (4)								
4962	COMP							ThAr	4s
4963	HD 210 839	22 08 07	58 55 00	21 59 10	22 31 10				1926
4964	COMP								
4965	HD 210 839	22 08 07	58 5500	22 33 35					1800

Spectr. Temp. ..... Dome Temp./Hum. 16.6°C / 56.1% Transparency Conditions ... P.TLY. CLOUDY.....

Focus ..... 0.250 .....

188

Spectr. Temp. ..... Dome Temp./Hum. ..... 90 Cyan 0 0 256 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				ECHELLE CCD	w = 120μ → 0.253 H = 600μ → .205						
					w = 120μ H = 800 → .185						
800	2"	V 5.04						5<i	FLN	POOR SEEING AIRMASS = 1.1379	
								3c?		HUM = 59.2% / T = 15.7C	
610									THICK CLOUD.	HUM 59.2 T = 15.0	
										CLOUDY FOR	
1000	4-6"									~30 min.	
										AIRMASS = 1.0461 HUM: 62.2	
~800											

1992

Date ...Sept. 10/11-92... Observers ....Flm./Fbr.....

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	Comparison Exp.
4966	Comp							ThAr	4s
4967	Bias(4)								
4968	Comp							ThAr	4s
4969	HD 210 839	22 08 07	58 55 00	23 10 18					1800
4970	Comp							ThAr	4s
4971	HD210839	220807	585500	234318					1800
4972	Comp							ThAr	4s
4973	Bias(4)								
4974	Comp							ThAr	4s
4975	HD210839	220807	585500	00 18 09					1800
4976	Comp							ThAr	4s
4977	HD210839	22 08 07	58 55 00	01 00 25					1829
4978	Comp							ThAr	4s
4979	Bias(4)								
4980	Comp							ThAr	4s

Spectr. Te
Focus...
Spectr. Te

Exp. Mtr.
800
950
600
836

Spectr. Temp. ..... Dome Temp./Hum. 14.1°C/64.6% Transparency Conditions ... P.TLY. CLOUD .....
(2308)

Focus .....0.250.....

Spectr. Temp. ..... Dome Temp./Hum. .....

120

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Echelle CCD	w = 120μ → .253 H = 600μ → .205						
800		V 5.04							Flw		
										POOR SEEING	
950									Flw	AIRMASS = 1.043	
600										CLOUD! (THICK).	
836											

12#3

Date ....Sept. 10/11-92 Observers ...Flm./Fbr.....

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	Comparison Exp.
4981	HD210839	22 0807	58 5500	01 37 10					
4982	Comp			02 12 03				Thar	45
4983	HD 210839	220807	585500	02 13 16					
4984	Comp							Th/Ar	45
4985	Bias(4)								
4986	Flat Field								14s
4987	Flat Field								14s
4988	Flat Field								14s
	Closed @ 3:10 EST		due to high humidity		and cloud				
4989	Bias			03:03:55					

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

Spectr. Temp. ..... Dome Temp./Hum. T= 12.1°C/H=75.6% Transparency Conditions ....P.TLY..C.LOUDY.....

Focus .....0.250.....

Spectr. Temp. ..... Dome Temp./Hum. ..... 90 C gain

192

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		V 5.04		Echelle CCD					FLm		
										CLOUD for part of exp. AIRMASS = 1.1643	
							H=800 = 0.185			MAX MIN = 12377, 635	
					All PERSEUS CLUSTER - TO Exabyte Sep 12/92 JH						

Comparison Exp.
45
45
18s
17s
17s

(2nd) Fri.-Sat. pg#1

Date Sept. 11/12, 1992 Observers ....F.N./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	Comparison Exp.
CE04990	BIAS(4)			19:05:30					
4991-4995	Flat Field x 5							TUNG	15s
4996	Comp (ThAr)			19:25:48		-3h37m E		ThAr	4s
4997	HD 210839	22h 08m 07s	+58° 55'	19:27:22		0306E		~~Flat~~	1805s
4998	Comp							ThAr	4s
4999	Bias (4)								
5000	HD 210839			20128					1800s
5001	Comp			20 32 15				ThAr	4s
5002	HD 210839			20 33 47					1800
5003	Comp							ThAr	4s
5004	BIAS(4)								
5005	HD 210839			21 0840					1804s
5006	Comp							ThAr	
5007	HD 210839			21 41 18					1801s
5008	Comp			22 12 27				ThAr	4s
5009	Bias (4)			22 13 37					

Spectr. Te
Focus ...
Spectr. Te

Exp. Mtr.
1090
1102
1037
120
57

Spectr. Temp. ..... Dome Temp./Hum. +12.1/55.5 Transparency Conditions .. Fine 194

Focus ... 0,240 .....

Spectr. Temp. ..... Dome Temp./Hum +8.3°C 65% ELHIMBDH

CCD FORMAT
0 0 256 1024 4 1
90CGAin CCDT ≤ -100°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Ech Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	xgrat ty = 454			echelle CCD	1797	120μ	4600Å	1ci	BS6791 Tel	Normalization STAR	
						W 120μ H = 800μ = 185 sec		3ci	Add title to W, 92, 93	(Max, Min) = (12,604, 658)	
						W 120μ H 600μ		4ci			
1090	4"	V 5.0	06I					5ci	Fluo pgm	8K ADU SUM AVG above FOR 7 cols	bkgnd
								4ci			
								1ci			
1102								6ci		δ RA Δδ 00 00 12 −00 01 00	
								4c			
1037	5"							7ci			
								4ci			
								1ci		Dome T = +8.9°C	
1120	4½"							2ci			
								4ci			
1157								5ci			
								4ci			
								1ci			

25 Fri.–Sat. pg #2

Date Sept. 11/12, 1992. Observers Fln / 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	Comparison Exp.	Exp. Mtr.
5010	HD 210839	22h08m07s	+58°55'	22 17 24					1800s	1227
5011	Comp			22 48 07				ThAr	4s	
5012	HD 210839			22 49 16					1805s	1208
5013	Comp							ThAr	4s	
5014	Bias (4)									
5015	HD210839			23 2446					1802s	1225
5016	Comp.			23 55 56				ThAr	4s	
5017	HD 210839			23 57 40					1800s	1304
5018	Comp			0 28 35				ThAr	4s	
5019	Bias (4)			0 29 45						
5020	HD 210839			0 33 36					1802s	533
5021	Comp			1 04 35				ThAr	4s	
5022	HD 210839			1 05 44		0233W				520
5023	Comp			01 36 26				ThAr	4sec	
5024	BIAS (4)									

Spectr. Temp. ..... Dome Temp./Hum. +8.4°C H=66% Transparency Conditions Fine ..... 19.6...

Focus ..... +240 .....

Spectr. Temp. ..... Dome Temp./Hum. +7.6°C H=69.3%

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	1800s	1229								6ci			
hr	4s									4ci			
	1805s	1208								7ci			
hr	4s									4ci			
										1ci		Dome T = +8.4°C	
	1802s	1225	3"-4"							2ci			
hr	4s									4ci			
	1800s	1364								5ci		(Max, Min) = (16,383, 181)	
hr	4s									4ci			
										1ci			
	1802s	1533								6ci			
hr	4s									4ci			
		1520	2"-3"							7ci		IIKIIO4 sum 4UG @ 4686Å above 2040Å background.	
hr	4s									4ci			
												∴ √440 × 10 S/N	
												√4.4 yr20 > 200/1 S/N	

RV pg#3
Fri Sat

Date 1.9.92 Sep 11 12 ..... Observers ..Fhn./J.T.H.....

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
ce05025	HD210839			01 40 55					1806^s	1370
5026	Comp			02 11 41				ThAr	4^s	
5027	HD 210839			02 13 37					1823^s	1227
5028	Comp			02 44 45				ThAr	4^s	
5029	Bias(4)			02 45 56						
5030	HD 210839			02 47 59					1800^s	1160
5031	Comp			03 18 48				ThAr	4^s	
5032	Bias(4)			03 25 15		$-1^h 24^m E$				
5033	Comp			03 27 08				ThAr	4^s	
5034	HD 24912	$3^h 52^m 28^s$	$+35° 30'$	03 28 26					1200^s	2370
5035	comp			03 49 13				ThAr	4^s	
5036	HD 24912			03 50 51					1226^s	2630
5037	Comp			04 12 03				ThAr	4^s	
5038	HD 24912			04 13 08					1202^s	2918
5039	Comp			04 33 51				ThAr	4^s	

Spectr. Temp. ..... Dome Temp./Hum. +7.6°C..69.4% Transparency Conditions .....98.....

Focus .....240.....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	1305	1370					W H	120μ 600μ	4600Å	5ci			
Ar	4s									4ci			
	1825	1227								6ci			
Ar	4s									4ci			
										7ci			
	1805	1160								7ci			
Ar	4s									4ci			
										1ci			
Ar	4s									4ci			
	1205	2560	4"	V= 4.04	O7.5III					5ci			
Ar	4s									4ci			
	1225	2630								6ci			
Ar	4s									4ci			
	1205	2918								7ci		header contains [illegible]	
Ar	4s									4ci			

Page #4

Fri / Sat.

Date 1992 Sept. 11/12 Observers Flw / Tm

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	Comparison Exp.
CE0504	BIAS (4)			04 34 48					
5041	HD 24912			04 37 43					1200s
5042	Comp			04:58:28				ThAr	4s
5043-47	Flat Field x5			05:04:10					15s
5048	BIAS (4)			05:11:46					
5049	DARK			05:17:21					600s

Spectr. Temp. ..... Dome Temp./Hum. +6.9°C / 74.1% Transparency Conditions .... Fine ..... 280 ....

Focus ..... 0.240 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... Tel focus at end = 2230

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						Echelle CCD.	W 120μ → H 600μ →		4000Å	ki			
	120s	2732								5ci			
r	4s									4ci			
	15s						W 120μ H 800μ			3ci	√√√√√	(Max, Min) = (16,393, 881)	
										1ci			
	600s									5ci		During tip-up dewar CCD T = −101.8 °C	
							H/K to Perseus & worm + Fln dbl copy on his exabyte.						

Pg #1 SAT SUN

Date 1992 Sep 12/13. Observers ..T.a..T.r.l...for.F.l.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	Comparison Exp.	Exp. Mtr.
·ce05050	BIAS(4)			2231						
·ce05051 – ·5055	FLATS x5			2237		00 30W	+58°	TUNG	12s	
·5056	DARK 10min									
·5057	Comp							ThAr	4sec	
·5058	HD210839	22 0807	+58 55	232334					1800	2234
·5059	Comp							ThAr	4sec	
·5060	BIAS(4)									
·5061	HD210839			23 58 12					1800	2236
·5062	Comp							ThAr	4sec	
·5063	HD210839			00 32 04					1801	234
·5064	Comp							ThAr	4 sec	
·5065	BIAS(4)									
·5066	HD210839			01 05 35		02 37W			1800	2,31
·5067	Comp							ThAr	4 sec	
·5068	HD 210839			01 37 45						
·5069	Comp							ThAr	4sec	

Spectr. Temp. ..... Dome Temp./Hum. +12°C 68.7% @ 2240 Transparency Conditions .. PART. cloudy 102

Focus .. 2.40 .....

RASC sat night TOUR Saturn OK good seeing

Spectr. Temp. ..... Dome Temp./Hum. 90CGAin CCDT-101 6C

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						echelle CCD	17.97		4600Å	1c;		x grating .454	
								W 120µ H 800µ	set .253 set: .185	3c;		MAX = 12K/ADU	
										5c;			
								120µ 600µ	set .205	4c;			
	1800	2234	<2"	5.0	06I					6c;	Fln Pgm	Cloud at end	
										4c;			
										1c;			
	1500	2436								2c;		18000 ADU sum AVG above Bkgnd for 10 cols.	
			~~1"~~							4c;		72K photons 250/1 S/N	
	1801	1834	1-2"							5c1			
										4 c1			
										1ci		Dome T = +11.2°C	
	1500	2131	1-2"							7ci		thin cloud	
										4ci			
		2100	1"							2ci			
										4ci			

Pg#2

SAT / SUN

Date 1992 Sep 12/13 Observers T.n. T.r.l. (24" mostly)

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	Comparison Exp.
ce05070	BIAS (4)								
5071	HD 210839	22 08 07	+58 55	02 11 32		03 42 W			1506
5072	Comp							ThAr	4sec
5073	HD 210 839			02 38 35					1500
5074	Comp							ThAr	4s
5075	HD 210 839			03 05 06		04 26 W			1200s
5076	Comp							ThAr	4s
5077	BIAS (4)								
5078	Comp for HD 24912							ThAr	4s
5079	HD 24912	03 52 20	+35 30	03 33 00		00 52 E			1200s
5080	Comp								4s
5081	HD 24912			03 54 38					1209
5082	Comp							ThAr	4s
5083	BIAS (4)								
5084 5088	FLATS x5			04 30		02 30 W	+32°		

Spectr. Temp. ..... Dome Temp./Hum. +10.9°C 74.8% Transparency Conditions . Hazy..to..PART. Cloudy...

Focus ...2.40.....

Spectr. Temp. ..... Dome Temp./Hum. +10.4°C 83.2% getting too humid & hazy

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Ech	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				echelle CCD	17.97	520u H600u		1ci			
≈1500	1½"	5.0	061				4600Å	5ci;	Fln pgm		
								4ci			
1340	2-3"							6ci			
1100	2"							7ci			
~~1420~~								4ci			
										Dome T = +10.2C	
4,200	2"	4.04	075 MT					2ci	Fln std		
4140								6ci			
						120u width 800u slit H		3ci		12K MAX now	
							All normal & To			Perseus	

Comparison Filter	Exp.
	150s
	45
	120s
	45
	120s
	45
	120s
	45
	120s
	45

25 A1.

Date ..~~Sept~~ 13/14-92.... Observers ...Fbr (Tdl 24") for Flu

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	Comparison Exp.	Exp. Mtr.
ce05089	BIAS(4)									
5090 -5094	FLAT x 5							TUNG	12s	
5095	COMP							THAR	4s	
5096	HD210839	22 08 07	+ 58 55	20 22 34					1800	700
5097	COMP							THAR	4s	
5098	HD210839			20 55 46					1800	580
5099	COMP							THAR	4s	
5100	BIAS(4)									
5101	COMP							THAR	4s	
5102	HD210839	22 08 07	58 55	21 31 23					1800	640
5103	COMP							THAR	4s	
5104	HD210839			22 04 30					1800	1300
5105	COMP									
5106	BIAS(4)									
5107 – 5111	FLAT x 5							TUNG	12s	

Spectr. Temp. ..... Dome Temp./Hum. 15.9°/67.1% Transparency Conditions ..... clear 206

Focus ..... 0.240 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

0 0 256 1024 4 1 90 cgain.

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					Echelle CCD	17.97		4600Å			Hum = 77.2% @ 1952	
12s							120μ 800μ } FOR FLATS		4ci			
45									3ci			
1800	1700	1"	V 5.0	061			120μ 600μ		5ci	Fln	H = 79.6% @ 2057	
45												
1800	1580										Light Cloud	
45												
45											Thin Cloud	
1800	1640										Airmass: 1.0648	
45												
1800	1300										Hum = 81.3% T = 13.9°C (2210)	
											Hum = 83.7% (2225)	
											86.1% (2236)	
12s						All to Burn Worm					Too Humid.	

22 Fri Sat Temp expected to drop fast tonight

Date 1992 Sep 18/19 Observers T.n [K.K] → checking byphone

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	Comparison Exp.
ce05112 5113	Focus Test		in Board / out Board			03 25W	+7°05	ThAr	6/4
5114	BIAS (4)			22 07		02 18W	+12°		
5115 – 5117	FLATS x 3			22 13		02 24W	"	TUNG	20sec
5118	Comp							ThAr	5sec
5119	HD182572	19 20 12	+11 44	22 24 38		03 05W			1802s
5120	Comp							ThAr	5sec
5121	Comp							"	"
5122	HD186791	19 41 30	+10 22	23 01 50		03 05W			810s
5123	Comp							ThAr	5sec
5124	BIAS (4)			23 19		03 10W			
5125 5127	FLATS x 3			23 22		03 11W	+10°39	TUNG	20sec

Spectr. Temp 2523 ..... Dome Temp./Hum. +18.0°C . 74% @ 19 EST Transparency Conditions . Cloudy . . . clearing ? . .

Focus . . . ~~3523~~ untouched +16.1°C ; 76% @ 22 EST

Spectr. Temp. ..... Dome Temp./Hum. . +14.2°C . 75% H

CCD FMT for Focus

280 0 30 1024 8 1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	90CGAin Remarks	Quality
	3 pixel FWHM			echelle CCD	1893	W 60μ H 400μ	* 4481Å	1ci 0ci	Focus Test	* Xgrating = .4540 4th complete ORDER Down	
Dome T now +16.1°C								1ci		xgrating → .4553	
					W = 60μ H 600μ		for FLATS	3ci		MAX = 9K ADU	
					W = 66μ H = 400μ			4ci	[0 0 256 1024 4 1 CCD FMT for OBS starting CCD 5114		
205	>5" OR	5.17 Full Slit Length ++	G8 IV		5004DU Above Background	Sum Avg of 3 cols		5ci	KK pgm stdvel		
								6ci		CCDT = -101.5°C	
								2ci			
960	5"	2.62	K3 II					7ci	KK stdvel		
	5"							4ci			
								1ci		✓	
					H = 600μ		for FLATS	3ci	All to Perseus & warm.		

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Emulsion Batches:

Date 1992 Sep 19/20 Observers K.K. / I.T.

CCD Te −101.9°C and Topup complete By 1410 Nothing altered Between 5128–5139

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CCD 5128	BIAS(4)			1424		0 0	−21 20°		
5129	FLAT					0 0	"	TUNG	25s
5130	Comp					"	"	ThAr	5s
5131	SKY			14342		"	"		130s
5132	Comp	afternoon				"	"		
5133	BIAS(4)	Sundown		≈1806		"	"		
5134	Comp					"	"		5s
5135	SKY			18 1036		"	"		976s
5136	Comp					"	"	ThAr	5s
→ 5137 5139	FLATS x3			18 31 47		"	"	TUNG	25s
5140	BIAS(4)	CCD Left −100°C FOR TOUR		22 07 38		2 20W	+12°		
5141	Comp							ThAr	5sec
5142	HD 182572	19 20 12	+11 44	22 08 55		2 54W			1800
5143	Comp							ThAr	5sec
5144	Comp FOR	HD 186791						"	"

Spectr. Temp. ..... Dome Temp./Hum. +15.1°C 18EST Transparency Conditions . MOSTLY Cloudy - PART...

Focus ...2523... ~~unchanged~~ > .2460 @22EST +16 @14EST H=60% @18EST @1430 MOSTLY clear @18EST

Spectr. Temp. ..... Dome Temp./Hum. ..... CLAMBDA 2 TOURS Looked at 1115 (20)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Ech Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Echelle CCD	1893	W 60u H 600u	4481Å	1ci		X tilt = .4553	
								3ci		12.4K ADU MAX	
						H 400u		4ci		[Righton with 5132 or close]	
3300								5ci		Dome Shutters 1/2 open	
								6ci		[Dome Shutters centered with Switch Box directly over doorway]	
								1ci		Dome T = +15.1°C	
								1ci	A	(Righton with 5136)	
950								7ci		[SHUTTERS Dome opened FULLY The only diff between this set and Hfter set except exp length]	
								2ci			
						W 600u H 600u		3ci			
				CAMERA		W 60u H 400u		1ci	Then Topup @19 EST		
				Dome T = +10.3°C Focus → .246 now				2ci		≈ 3.5 pixel FWHM	
	~~2.3~~	~~5.17~~	~~G81V~~								
375	2.3"	5.17	G81V					3ci	Kk std val pgm	getting cloudy	
								~~4ci~~			
								4ci			

211 pg#2 SAT/SUN

Date 1992 Sep 19/20 Observers [K.K.] 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	Comparison Exp	Exp. Mtr.
CCO 5145	HD186791	19 41 30	+10 22	22 46 51		2 57 W			993	140
5146	Comp							ThAr	5sec	
5147	BIAS(4)									
5148	Comp							ThAr	5sec	
5149	HD 204867	21 26 18	-06 01	23 12 55		01 52 W			1842	260
5150	Comp			23 44 24				ThAr	5sec	
5151	Comp			23 51 12				"	5sec	
5152	HD 222368	23 34 48	+05 05	23 52 26		00 08 W			930	44*
5153	Comp							ThAr	5sec	
5154	BIAS(4)			00 11 19		00 10 W	+5°			
5155 5157	FLATS x 3			00 22				TUNG	25	
5158	Focus Test	inboard						ThAr	5s	
5159	Focus "	outboard						"	5s	

Spectr. Temp. ..... Dome Temp./Hum. +10.2°C ..... 74.8% H Transparency Conditions .. PART. cloudy (thin) ...

Focus .. 2460 ..... ~ VERY cloudy (212)

Spectr. Temp. ..... Dome Temp./Hum. +10.1°C 76% CLIMBDA

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	993	1470	3"	V 262	K3III	echelle CCD	18.97	60μ 400μ	4481Å	5ci	KK stdvel	-2.1 ± 0.2 km/sec IAU vel	3k ADU sum AVG of 0 cols at 4481Å above background
4r	5sec									4ci			
										1ci			
4r	5sec									2ci			
	1842	260	3"	V 2.89	G0Ib					3ci	KK stdvel	IAU vel = +6.7 ± 1 fairly cloudy now	
4r	5sec									4ci			
	5sec									6ci		~~(no streaking)~~ *	
	930	44*	2"	V 4.13	F7V					7ci	KK stdvel	cloudy not that bad	
4r	5sec									6ci		no streaking	
										1ci		Plates may have streaking	
11G	25						W = 60μ still H = 600μ = .205			2ci		MAX 13 K ADU/pixel	
4r	5s		Dome T = 10.4°C set. 2460					60μ 600μ		8ci		27 30 pcols 578 587 xplot for 4481Å comp	
	5s		0 0 64 1024 16 1 CCDFMT							9ci		OUTBOARD 1.4 pixel Red shifted	
		Streaking (shutter problem) solved by Restarting CS 386											
		All to Perseus & WORK											

pg 3 *

SAT / SUN

Date 1992 Sept 19/20 Observers [kh] T.n

Emulsion Batches:

* Complete Reopening including Resetting ccd T back to -100°C

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
CE05160	BIAS(4) after Resetting to ccdT→-100C			0214						
5161	Comp			021531				ThAr	5sec	
5162	HD8890	01 22 33	+88 46	021640		0028E			602	3500
5163	Comp							ThAr	5sec	
5164	HD8890			022943					580	3000
5165	Comp							ThAr	5sec	
5166	Comp							"	4	
5167	HD3712	00 34 50	+55 59	025235		0201W			502	3300
5168	Comp							ThAr	5sec	
5169	HD3712			030333		0212W			531	3475
5170	Comp							ThAr	5s	
5171	BIAS(4)					0216W	+56			
5172	Comp							ThAr	5sec	
5173	HD222368	23 34 48	+05 05	032446		0340W			880s	660
5174	Comp							ThAr	5s	
5175 – 5177	FLATS x3			FOR FLATS		0222	+36	TUNG	2s	

Spectr. Ten
Focus ...!
Spectr. Ten

Spectr. Temp. ..... Dome Temp./Hum. +10.3°C 74% Transparency Conditions .. Fair...again..... (44)

Focus ... 12460.....

Spectr. Temp. ..... Dome Temp./Hum. 90CGAIN 0 0 256 1024 4 1 CCDFIN1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				echelle CCD	18.93 W H	60u 400u	4481Å	1ci			
								3ci		no streaking effect	
602	2800	3"	1.9	F8J6				4ci	kk pgm	star off slit before readout	
								5ci		[also for rest of stellar OBS]	
580	3000							6ci	kk pgm	5k ADU ≈ max ADU	
								~~2ci~~			
								2ci			
502	3300	3"	2.24	KOIIIa				3ci	kk stdvel	≈ 4k ADU max	
								~~5ci~~			
531	3475							5ci			
53								3ci			
										Dome T = +10.4°C	
								2ci			
8505	660	2-3"	4.13	F7V				4ci	kk stdvel		
55								3ci			
73								2ci		11 k max ADU	

25 pg#1 sun/mon

some frames reduced

Date 1992 Sep 20/21 Observers [K.K.] T.A.

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	Comparison Exp.	Exp. Mtr.
ce05178	BIAS(4)			1928		≃0 0	+39			
5179	Comp			1931				ThAr	5sec	
5180	HD182572	19 20 12	+11 44	193240		00 21 W			1800	450
5181	Comp							ThAr	5sec	
5182	Comp	comp times changed to		200649 3secs 5secs s/strong ⇒ some saturatn.				ThAr	3sec	
5183	HD 186791	19 41 30	+10 22	200809		0021 W			955	390
5184	Comp							ThAr	3s	
5185	Comp							"	3s	
5186	HD204867	21 26 18	−06 01	203017		0057E			1248	770
5187	Comp							ThAr	3s	
5188	BIAS (4)					0056E	−6°			
5189	Comp							ThAr	3s	
5190	HD222368	23 34 48	+05 05	210131					655	18
5191	Comp							ThAr	3sec	
5192	HD222368			211912		0207E			1800	325

Spectr. Temp. ..... Dome Temp./Hum. +14.4°C 66.9% Transparency Conditions. PART cloudy.....

Focus ..... 2460 Tel encoder NORMALIZATN STHR BS7298 19 13 30 +39 07 58 1992.5ep

Spectr. Temp. ..... Dome Temp./Hum. ..... C LAMBDA 90GAIN CCDT -> -100°C

216

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Ech Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks (5000Å BLAZE)	Quality
						echelle CCD	18.93	60μ 400μ	4481Å	1ci	[600l/mm	X grating .4553]	
r	5sec									3ci			
	1800	450	1-2"	V 5.17	G8IV					4ci	kk stdvel	≈ 2K ADU sum AVG of 10 cols @ 4481Å above bkgnd. (290/1 S/N)	
-	5sec									5ci			
+	3sec		·	V ~~2.62~~	~~K3II~~					5ci			
	955	1890	·	V 2.62	K3II					6ci	kk stdvel	[≈ 6K ADU sum AVG of 10 cols above bkgnd at 4481Å	
r	3s									2ci			
	3s									3ci			
	1248	720	2"	V 2.89	G0Ib					3ci	stdvel kk	cloud increasing	
r	3s									7ci			
										1ci		Dome T = +14.0°C	
r	3s									2ci			
	655	* 18	<2"	V 4.13	F7V					5ci	stdvel	FOR CHALLENGE Reductn But cloudy CURTAILED BUT KEPT * ≈ 20/1 S/N	
r	3sec									7ci			
	1800	325	<2"							3ci	stdvel	[2K sum AVG Visible on guider anyway	

2/7 pg#2

Emulsion Batches: .....

Date 1992 Sep 20/21 .... Observers [K.H] T.n ... Hdy checking But too cloudy for Him! .....

.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce05193	Comp for previous STAR							ThAr	3sec
5194	HD222368	233448	+0505	215216		0144E			1200s
5195	Comp							ThAr	3sec
5196	BIAS(4)								
5197	Comp							ThAr	3sec
5198	HD 3712	003450	+5559	222048	232 30 **	027E			539
5199	Comp							ThAr	3sec
5200 5204	FLATS x5					0000	+0335	TUNG	25s
5205	BIAS(4)					"	"		

Spectr. Te
Focus ...
Spectr. Te
Exp. Mtr.
170
938

Spectr. Temp. ..... Dome Temp./Hum. +13.7°C 72.0%H Transparency Conditions . Hazy To cloudy.....

Focus ....2460.....

Spectr. Temp. ..... Dome Temp./Hum. +13.8°C 76.3% Thick cloud AT 22 30

218

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Ech Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				echelle CCD	18.93	60μ 400μ	4481Å	7ci		600 ln/mm CROSS 4553.	
170	<2"	V 4.13	F7 V					4ci	KX std/vel	3rd ~~exp~~ cloud again	
								~~7~~ci		comp OK still (no streaks)	
								1ci	Dome T = +13.2°C H = +74.0%		
								2ci		H=74.8% Comp OK still	
938	<2"	V 2:24	K0 III a					3ci	KX std/vel	H=75.1% @ 2226 ** switch clunked too	
								7ci	Comp OK	~~6~~ after all	
						W 60μ H=600μ		7ci		13K MAX ADU	
								1ci			
			All To Perseus, WORM, & exabyte								

219 Wed

Date 1992 Sept 23. Observers KK

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	Comparison Exp.
CE 5206	Hartmann IN		+30°			2W		ThA	5s
5207	Hartmann OUT							"	
5208	Hartmann IN		+65°			1W		"	5s
5209	Hartmann OUT							"	
5210	comparison		+65°			1W		ThA	10
5211	sky		"	12 16		"			74s
5212	comparison							ThA	10s
5213	bias 4X								
5214	Comparison								
5215	sky								
5216	comparison								
5217	sky								
5218	comparison								
5219	sky								
5220	Comparison								

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

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

0 0 256 1024 4 1 220

− 100°C

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5s						18.93	60μ			9.6C		
						.4554					shift −0.16 pixel	81
5s												training on three
											shift −0.19 pixel	
10										std vel		
74s	1000											
10s												

Date 1992 Sept 23 cont Observers KK

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	Comparison Exp.
CE5221	sky					1h W			120s
5222	comparison							ThA	10s
5223	sky								120s
5224	comparison							ThA	10s
5225	sky								120s
5226	comparison							ThA	10s
5227	sky	12 03 30 (1992.8)	−00 21 00	18 37 36		1h W			203s
5228	comparison							ThA	10s
5229-33	flats								

dark-e1, e2, e3 (1h darks at −120°C) dark-eϕ bias

Spectr. Temp. ..... Dome Temp./Hum. +10°.2C ... +43.2% Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

222

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
120s										std vel		
10s												
120s												
10s												
120s												
10s												
203s	3000										max 8500 ADU	
10s							60 x 400					
							60 x 600					

23 #1

Date ..Sept. 23/24 -92.. Observers .Fbr. (Bhrm.).....

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	Comparison Exp.
ceo 5234	Bias (4)								
5235	Comp							ThAr	3s
5236	HD 186791	19 41 30	10 22	20 12 29		044 W			1351
5237	Comp							ThAr	3s
5238	Comp							ThAr	3s
5239	HD 204867	21 26 18	-06 01	204557		028 E			1299
5240	Comp							ThAr	3s
5241	Comp							ThAr	3s
5242	HD 222368	23 34 48	05 05	212403		153 E			1713
5243	Comp							ThAr	3s
5244	Bias (4)								
5245	Comp							ThAr	3s
5246	HD 3712	00 34 50	55 59 00	221725					189
5247	Comp								
5248	Comp							ThAr	3s

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
1900
900
700
200

Spectr. Temp. ..... Dome Temp./Hum. 8.5°C/52-57% Transparency Conditions ..... CLEAR (AND COLD!)

Focus ..... 0.24.51 ..... (1930)

Spectr. Temp. ..... Dome Temp./Hum. .....

90cgain ccdT → -100°C 224

NORMALIZE BS7298 0 0 256 1024 4 1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				ECHELLE CCD	18.93 .4554	60μ→W=.277 400μ→H=.225			λ=4481Å	WHERE IS HD 182 572	
3s								3ci		POOR SEEING.	
1351	1900	2"-3"	V 2.62	K3II				4ci	STD VEL (KK)	AIRMASS=1.2015 6K ΣAVG.	
3s								3ci			
3s								3ci			
1299	900		V 2.89	?				5ci	KK (STD)	5600 ΣAVG	
3s								3ci			
3s								3ci		T=6.3°C H=58.4% (2115) AIRMASS=1.5002	
1713	400		V 4.13					6ci	KK (STD)		
3s								3ci			
								1ci			
3s								3ci			
189	1000		V 2.24					7ci	KK (STD)		
3s											

2nd 2 (92-09)

Date Sept 23/24-92 Observers Fbr (Bhrm)

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	Comparison Exp.
5249	HD 3712	00 34 50	55 59	23 01 30		01 40E			259
5250	Comp							ThAr	3s
5251	Bias (4)								
~~5252~~	~~Comp~~							ThAr	3s
~~HD 8896~~	~~00 22 23~~	~~8896~~							
5252	Flat							Tung	25s
5253	Flat							"	"
5254	Flat							"	"
5255	Flat							"	"
5256	Flat							"	"

Spectr. Ter
Focus....
Spectr. Ter

Exp. Mtr.
1200

Spectr. Temp. ..... Dome Temp./Hum. ...5.9°C/57% Transparency Conditions .....CLEAR.....2½..
(2300)

Focus .....0.245!.....

Spectr. Temp. ..... Dome Temp./Hum. ..... Bhrm left a ~2300 (T=6.1°C)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1200	2"	V 2.24		ECHELLE CCD	18.93 .4554	60μ	λ=4481 Å	7c;	KK (STD.)	AIRMASS = 1.0667 5600 Σ AVG	

TRIED FOR POLARIS.

LOST ENCODERS! (NO BACKUP.)

[H = 600μ = 0.205
W = 60μ = 0.277]

FLAT MAX > 13K

ALL TO PERSEUS AND COORM

22 ✓ Thurs Fri

Date 1992 Sept 24/25. Observers [Fe] Tn/Fbr

Emulsion Batches: .....

.....

OBS PC Time was 3 min behind at start. Reset before 1st 9809.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
CC9805	Bills(4)			1852		0 0	+39°		5	
9806 9807	Tows Tsts					0 0	+39°	FeAr Clear	5/5	
9808	Comp							"	60sec	
9809	HD 148283	16 3277	+38 1016	19 2602		03 02W			761	164
9810	Comp							FeAr Clear	60sec	
9811	HD 148 283			19 49 26		03 56W			25165	F1000
9812	Comp							FeAr Clear	60sec	
9813 – 9815	FLAT x 3					04 02W	+38°	Tung Clear	15sec	
9816	Bills(4)					"	"			
9817	Comp							Fe Ar Clear	90sec	
9818	HD 203156	21523	+37 49'	20 0126		0009E			600s	5980
9819	Comp							FeAr Clear	90sec	
9820	"							"	"	
9821	HD 198726	20 4713	+37 5230	21 3207		0047W			444	7470
9822	Comp							FeAr Clear	90s	

Spectr. Temp. ..... Dome Temp./Hum. +104°C 58% Transparency Conditions ... Fine ... 28

Focus ... 6.81 ... Note All guiding at Visitors Eyepiece

Spectr. Temp. ..... Dome Temp./Hum. ..... Tel Normalized on Vega CCDT → -100°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~ CLAMBDA	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=4900 Full Length	200μ	5010Å	1c:		480 0 50 1024 4 1	CCDFUNT
								3c:	Stellar V.S.I	860 0 12 1024 40 1	CCDFUNT
								4c:	Red shifted.	10.3°C Set 6.81	
								5c:			
164	2"	V 8-9	F8T					6c:	Fe pgm	150 ADU Sum Avg above bkgnd. Lost Star eyepiece view difficult.	
≈1000								7c:			
								8c:	Fe pgm		
								9c:		Image Lowin Y on CCD	
								10c:		MAX 14.8K ADU	
								1c:		Room T = +88°C	
					1800 l/mm G=5930Å		6450Å	12c:			
5980	2"	V 5.8 -5.9	F2					13c:	Rm pgm	GO K photons in 10 cols 14K ADU Sum Avg above bkgnd.	
								~~14c~~			
								14c:			
7470	2"	V 5.75	GOTb					15c:	Rm pgm	16K Sum Avg ADU 5 cols	
								16c:			

229 pg#2

Date 1992 Sep 24/25 Observers [Rm] Tn / Fbr

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	Comparison Exp.
CCD 9823	BIAS(4)								
9824	Comp							FeAr Clear	90s
9825	HD214975	223655	56 1824	215520					2103
9826	Comp							FeAr Clear	90s
9827	BIAS(4)								
9828	Comp			224156				FeAr Clear	90s
9829	HD3712	00 3450	+55 59 00	224545					32
9830	Comp							FeAr Clear	90s
9831	Comp							"	90s
9832	HD182572	19 2012	+11 44	23 1155		0350W			201s
9833	Comp							FeAr Clear	90s
9834	Comp							"	"
9835	HD186791	19 4130	+10 22	232545					46s
9836	Comp							FeAr Clear	90s
9837	Comp							"	"

Spectr. Temp. ..... Dome Temp./Hum. 18.2°C 69.3% Transparency Conditions ... Fine 2330

Focus ... 6.81 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... C LAMBDA

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800k/mm G=5930	200u Full	6450Å	1Ci			
								17Ci			
4080	2"	V 8.4	G0Ib					18Ci	RM PGM	T=8.1°C / HUM = 70%	
								19Ci			
								1Ci		Dome T = +8.1°C	
								20Ci			
5290	2	V 9:24	K0 IIIa					21Ci	Std vel	MAX 9K ADU	
								22Ci	grating wheel disabled in order To do Reset of Sp Controller		
3600	3"	V 5:17	G8 IV					23Ci	Std Vel		
								24Ci			
								25Ci			
7730		V 2.62	K3 II					26Ci	std vel	16K MAX ADU	
								27Ci			
								28Ci			

231 pg #3

Date 1992 Sept 24/25 Observers [Rm] ... Fbr / 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	Comparison Exp.
cco9838	HD204867	21 26 18	-06 01	233721		0206 W			69
9839	Comp							FeAr Clear	90s
9840	BIAS (4)			234048		"			
9841	Comp							FeAr Clear	90s
9842	HD222368	23 34 48	+05 05	235649					200
9843	Comp							FeAr Clear	90s
9844	BIAS (4)								
9845 9849	FLATS x5			00 16		03 W	+38°	TUNG A=1/2	
9850	Comp							FeAr Clear	90s
9851	HD203156	21 15 23	+37 49	00 24 59		03 16 W			617
9852	Comp							FeAr Clear	90s
9853	BIAS (4)								

Spectr. Temp. ..... Dome Temp./Hum. 17.8°C 72% Transparency Conditions FINE 232

Focus 6.81 All But stars taken off slit before Readout: Actually Hll Exps were.

Spectr. Temp. ..... Dome Temp./Hum. 17.7°C 77% CLAMBOX

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	69	8220		✓ 2.89	GOII	CASS CCD	1800 l/mm	200μ FULL	6450Å	29ci	Std vel	Also, All exposure started before star Right on SLIT	
	90s									30ci			
										Ki			
	90s									31ci			
	200	10000		✓ 4.13	F7V					32xi	Std vel	H=73.890 (2354) T=7.85 5200 MAX ADU	
	90s									33xi			
											Dome	T=+8.0°C	
										34ci		MAX ADU 12.6K 104	
	90s									35ci			
	617	6070	2"							36ci	Rm pgm	11K SOM ADU	
	90s						Hll to worm &			37ci Perseus			
										1ci			

Fri-Sat

Date ..Sept.25/26.-92... Observers ...Tn./F.br.../.....Service).

Emulsion Batches:

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FRI-SAT

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
9854	B.ss (4)			Note Comp & FLAT		Source Aperture Stop		noticed to	
cc09855	Comp							Fe Ar Clear	90s
9856	HD162714	17 47 17	-06 07 12	19 08 33		01 29 W			603s
9857	Comp							Fe Ar Clear	90s
9858	Comp							"	"
9859	HD173297	18 39 20	-20 45	19 31 44		01 22 W			1924
9860	Comp							Fe Ar Clear	90s
9861	~~HD20315~~ Comp							"	"
9862	HD 203156	21 15 23	+37 49	20 16 34		00 47 E			766
9863	Comp							Fe Ar Clear	90sec
9864	Comp							"	"
9865	HD177724	19 00 49	+13 43	20 44 19		1 45 W			153
9866	Comp							Fe Ar Clear	90sec
9867	Comp							"	"
9868	HD182572	19 20 12	11 44 00	20 56 56					206
9869	Comp							Fe Ar Clear	90s

Spectr. Temp. ..... Dome Temp./Hum. T=11.4°/H=64.6% Transparency Conditions ... SI Cloudy ... 23.4

Focus ... 6.8.1 ... (1930)

Spectr. Temp. ..... Dome Temp./Hum. ..... CHIMBLY Still Visual Guiding CCD T = -100°C 90 cgain

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Be "OUT" next night) Th Sept 27				CHSS CCD	1800 α=5930 Full Length	200μ	6450g				
								5ci			
3500	2-3"	V 6.15	GoIb					6ci	Rm pgm	12K Σ Hug → over 10 cells	
								7ci			
								8ci			
1494		V 7.48	GoIb					9ci	Rm Pgm	4200⟨Σ⟩ (Sum Avg)	
								10ci			
								11ci		T=10.7°C HUM=67.2% AIRMASS=1.0248	
6277	2"	V 5.8-SA	F2					12ci	Rm Pgm		
								13ci			
								14ci			
9700		V 2.99	AOK nn					15ci	Telluric Std	~3K Max AOH.	
								16ci			
								17ci			
2315		V 5.17	K3 III					18ci			
								19ci			

5
#2 Fri-Sat

Date ..~~Sept 25/26-92~~.... Observers ...Tn/Pbr (Service)..

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	Comparison Exp.	Exp. Mtr.
9870 – 9874	FLATS X5	19 20 12	11 40					TUNG λ=1/2	10s	
		* WAVELENGTH CHANGE TO λ=6563Å								
9875	BIAS (4)									
9876	Comp							Fe/Ar Coor.	60s	
9877	Nova Cyg 92	202743	521739	212522		0106W			440s	175
9878	Comp							Fe/Ar coor	60s	
9879	Nova Cyg 92	20 2743	52 1739	213748					1347	414
9880	Comp							Fe/Ar Clear	60s	
9881	~~Comp~~ BIAS (4)							〃	〃	
9882	~~HD177724~~ Comp	~~19 00 49~~	~~+13 43~~	~~22~~				Fe/Ar Clear	60s	
9883	HD177724	19 00 49	+13 43	222652					735s	204
9884	Comp							Fe/Ar Clear	60s	
9885	Comp							〃	60s	
9886	HD182917	192154	5002	224904		0331W			200	240
9887	Comp							Fe/Ar Clear	60s	

Spectr. Temp. ..... Dome Temp./Hum. 10°C / 70.1% (2100) Transparency Conditions .... PTLY CLOUDY 236

Focus ..... 6.81 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

CCD T = -100°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 a=5930	200 μ	λ=6450Å	20ci			
					1800 a=6020	200 μ	λ=6563				
								21ci		CLOUD MOVING IN...	
175				CASS CCD	1800 a=6020	200 μ	λ=6563	22ci	NOVA PAM	AIRMASS = 1.0220	
								23ci		2400 ADU MAX e HL	
414	2"-3"	~9						24ci	NOVA PAM	cloudy	
								25ci			
								~~26ci~~ 1ci		Dome T = 4104°C	
		~~2.99 ADU/mm~~						~~26ci~~ 27ci	~~Telluric Std~~	Cloudy	
20K	4"	2.99	140U/mm					27ci	Telluric Std	4600 ADU MAX	
								28ci			
640	2"	7.4-9.1	NO					29ci	CH CYG Obs pgm	MAX 3000 ADU	
								30ci			

#3 Fri - Sat

Date 1992 Sep 25/26 Observers ... T. J. Fbr.

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	Comparison Exp.
~~CC09888~~	~~HD182917~~	~~19 21 54~~	~~+50 02~~	~~22~~					
CC09888 9892	FLATS x 5					03 45W	+5016	Tung H=1/2	10s
9893	BIAS(4)								
9894	Comp for PU Vul							Fe Ar Clear	60s
9895	PU Vul	20 16 48	+21 15	23 52 30		03 49 W			860
9896	Comp							Fe Ar Clear	60s
9897	Comp							"	"
9898	BM Cas ~~BD+63 101~~	00 48 36	+ 63 33	00 16 43		0027E			450
9899	Comp							Fe Ar Clear	60s
9900	BM Cas	00 48 36	+63 33	00 29 37					1400
9901	Comp							Fe Ar Clear	60s
9902	BIAS(4)						+64°		
9903	Comp							Fe Ar Clear	60s
9904	HD203156	21 15 23	+37 49	01 04 24		0353W			
9905	Comp							Fe Ar Clear	60s

Spectr. Temp. ..... Dome Temp./Hum. +10.5°C 72% Transparency Conditions ... Mostly Cloudy .....

Focus ..... G:8.1 .....

Spectr. Temp. ..... Dome Temp./Hum. +10.1°C 80%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	2"	29	Mb	CHSS CCD	1800 G 6020	200μ Full	6563Å		CHCYG	cloudy	
										MAX 12K ADU/pixel	
										Dome T = +10.5°C	
								33ci			
88		VV Faint						37ci	Em object	A challenge! PARTCLY got it 4000 ADU MAX MASSIVE Hα em	
								5ci		(0015) T = 10.3°C/H = 76.5%	
350	2"	~~8.9~~ V						~~6ci~~	BM Cas	MAX 1500 ADU	
								7ci			
875	2"	8.8 V -9						6ci			
								8ci			
								1ci		T = 10.1°C	
								10ci			
2900	2"-3	8.5 V -5.9	F2					9ci	Rm pgm		

237 #4

Date 1992 Sept 25/26 Observers F.Br. T.L.

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	Comparison Exp.	Exp. Mtr.
CC09906	Comp							FeAr Clear	60s	
9907	HD 217675	22 57 19	+41 47	01 19 09		02 23 W			100	1610
9908	Comp							FeAr Clear	60s	
9909	Comp							"	"	
9910	HD 14306	02 14 18	-03 26	01 30 53					250	2360
9911	Comp							FeAr Clear	60s	
9912	Comp							"	"	
9913	HD 23862	03 43 18	+23 51	~~01 50 35~~ 02 04 13		01 39E			100s	2450
9915	Comp	(Out of ORDER writing by + 01)						FeAr Clear	60s	
9914	Comp							"	"	
9916	HD 222368	23 34 48	+05 05	02 18 45					155s	1930
9917	Comp							FeAr Clear	60s	
9918	BIAS (4)									
9919-9923	FLAT x 5	at HD 222368 pos						A=1 Twilight	10s	

Spectr. Temp. ..... Dome Temp./Hum. +10.1°C ... 80.5% Transparency Conditions .. P.A.R.T. Cloudy .....

Focus .... G & L .....

Spectr. Temp. ..... Dome Temp./Hum. +10.0°C .. 86% 240

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=6020	200μ Full	6563Å				
14610		V 3.63	B6p B					12c;	⊙ And	5800 MAX ADU.	
								13c;			
								14c;			
4260			M5.5IIIe-M9IIIe					15c;	MiRA	Cloudy 11K ADU max	
								16c;			
								17c;		Hum ÷ 84%	
4650	<2"	V 5.09	B8Vpe					18c;	Pleiane	9K MAX @ Hα	
								19c;			
								21c;			
7930		V 4.13	F7V					25c;	Std vel		
					All to Rosen + WORM					MAX 11K ADU	

241

SAT Sun

Date 1.49?..Sep.26/27.. Observers ..J.n.....T.e.s.t.s.....

Emulsion Batches:

.....

.....

Comp stability in Pasa. Tests...(not much shift seen)

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC09924 9925	Focus Test			21 43		0 0	-16 04	FeNe A=1/2	8/8
9926	BIAS(4)			21 40					
9927	Comp			21 51				FeNe A=1/4	8
9928	Comp			22 20 43	ST of start 22 27 40	0 0		"	"
9929	"			22 55 48		"		"	"
9930	"			23 26 04				"	"
9931	"			00 11 44				"	"
9932	"			00 48 03				"	"
9933	"			01 26 38				"	"
9934	"			01 52 45				"	"
9935	"			01 57 04		0 0	+27 00	"	"

Spectr. Temp. .... Dome Temp./Hum. +13.9°C 90% Transparency Conditions 242

Focus .... 6:7.0 ....

Spectr. Temp. .... Dome Temp./Hum. +13.7°C ... 90%

CCD T at Bottom ≈ -120°C

575 0 30 1024 1 1 CCDFMT

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
8/8					CASS CCD	G-5950 1800 l/mm	pinhole	6470Å	3/4		Stellar vus/Red shift.	
									1ci			
8									5ci		13 15 pcols. 249. 308 xplot	
"									6ci			
"									7ci		~~going East slightly~~ going blue slightly	
"									8ci			
"									9ci			
"									10ci			
"									11ci			
"									12ci			
"									13ci		~~After [illegible]~~ ~~Before Taping Start~~ ~~ONLY [illegible] 12ci~~	

Note nothing moved OR Touched during this set, only Tu in Dome.

I noticed that source Aperture Stop was out when closing.

MAY have been OUT previous night too

242p 1 Sun/Mon

Date 1992 Sept 27/28 Observers Hdy / 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	Comparison Exp.	Exp. Mtr.
cc09936	BIAS(4)			184103		00	+39°			
9937										
9938	Focus.	Comp/Stellar HARTMAN Posn				"	+39°			
9939	Comp							FeHr Clear	60s	
9940	HD216598	22 49 06	+37 23	19 08 22,					513	360
9941	"	"	"	19 18 31					460s	300
9942	"			19 26 38					462s	270
9943	"			19 35 14					460	270
9944	"			19 43 13					"	255
9945	"			19 51 11					"	180
9946	BIAS(4)									
9947	Comp			20 00 19		02 42W	+37 53	FeHr Clear	60s	
9948	FLAT							TUNG A=1/2	10sec	
9949	FLAT at HD 177724 posn							"	"	
9950	Comp							FeHr Clear	60sec	
9951	HD177724	19 00 49	+13 43	20 10 27					133s	
9952	Comp							FeHr Clear	60s	

Spectr. Temp. ..... Dome Temp./Hum. +14.9°C 62% Transparency Conditions Fine - sl hazy 24.4

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Tel Normalized on Vega, but had to Renormalize*

536 0 26 1024 4 1 ccdfmt 90CGAIN

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 G=5525	250μ POINTER	5890 Å	1		NOW USING POINTER DEKKER SLIT IS SLIGHTLY SHORTER	
Set = 6.70 T = 15.0°C								3/4	vv SI Req for stellar posn.		
		v						5			
360	3"	8.51 - 9.39	G8V					6	Hdy pgm	1000 ADU sum AVG of 5 cds a bare bkgnd.	
300								7			
270								8		* Renormalized Telescop to this STHR	
270								~~9ci~~	'	Repeat STHR 460s x3	
255								~~9~~			
180								9c			
								1ci		Pcmo T = +14.2°C	
								10ci			
								11ci		MAX ADU/pixel = 12.4 K	
								12ci			
								~~13ci~~			
26 K		v 2.99	AOV mn		guided			14ci	Telluric std	9 K MAX ADU	
								13ci			

245 pg #2 Sun mon

Date 1992 Sept 27/28 Observers Hdy. 24" / J.T.s

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	Comparison Exp.	Exp. Mtr.
CC09953	Comp							FeAr Clear	60sec	
9954	HD 216598	22 4906	+37 2300	20 2249					483	250
9955	"			20 3131					460	225
9956	"			20 3930						370
9957	"			20 4728						275
9958	"			20 5527						420
9959	"			21 0326		01 40E				235
9960	"			21 1124						450
9961	BIAS(4)									
9962	Comp							FeAr Clear	60sec	
9963	FLAT							Tung A=1/2	10sec	
9964	BIAS(4)									
9965	Comp						A=1/2	FeAr ~~Clear~~	60sec	
9966	HD 177724	19 00 49	+13 43	21 3150					126	
9967	"			21 3441				FeAr Clear		
9968	Comp								60s	

Spectr. Temp. ..... Dome Temp./Hum. +13.7°C 67.7% Transparency Conditions ... Fine 24

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... CLimBDH

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		✓		CHSS CCD	1800 l/mm G=5525	250µ Pointed	5890Å	15c;			
250	2"	8.51 -9.39	G8V					16c;	Hdy pyn		
325								17c;		Repeat STHR460S.EAT x6	
370								.			
375	3"							.			
420	.							.			
435								.			
450								17c;			
								1c;		Dome T = 12.6°C	
								18c;			
								19c;			
								1c;		Dome T = 12.6°C	
								20c;			
21K		✓ 2.99	AOV					21c;	Telluric Std	12.4K MAX ADU	
24K								22c;	"		
								23c;			

242 pg#3

Date 1992 Sept 27/28 Observers Hoag ... T.G. ... mkt ... briefly

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	Comparison Exp.	Exp. Mtr.
cc09969 9971	FLATS x 3	at HD177724 posn						Tung H=1/2	10s	
9972	BIAS(4)									
9973	FLAT at HD216598 posn							Tung H=1/2	10s	
9974	BIAS(4)									
9975	Comp							Fe Ar Clear	60s	
9976	HD216598	22 49 06	+37 23 00	21 58 06		00 37E			462	400
9977				22 07 08					460	500
9978				22 15 06					~~460~~ 460	500
79				22 23 04					460	510
80				22 31 04					"	450
81				22 39 02					"	495
82				22 47 01					"	450
83	~~B~~ BIAS(4)									
84	Comp							Fe Ar Clear	60s	
85	FLAT							Tung H=1/2	10s	

Spectr. Temp. ..... Dome Temp./Hum. +12.7°C 70% Transparency Conditions ... Fine 248

Focus ... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. +11.7°C 73%

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10s					CAS CCD	G 5525	250μ	5890Å	24i		12K max ADU	
									1ci			
10s									25ci		12.4K ADU max	
									1ci		Dome T = 12.4°	
60s									26ci			
462	400	3"-4"	✓ 8.51 – 9.39	G8V					27ci	Hdg pgm		
460	500								28ci		STAR 460S, BAT x 6	
450	500											
450	510											
"	450											
"	495	3-5"										
"	450								28ci			
									1ci			
60s									29ci			
10s									30ci			

249 pg#4

Date 1992 Sept 27/28 Observers Hdy/Jn + MKi

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	Comparison Exp.	Exp. Mtr.
cc09986	HD216598	22 49 06	+37 23 00	22 59 21		00 24W			460	490
87				23 08 02					460	410
88				16:00					"	360
89				23:58					"	310
90				31:57					"	248
91				39:56					"	263
cc09992				47:54		01 14W			"	277
93	BIAS(4)									
94	FLAT							TUNG A=1/2	10sec	
95	Comp							FEAT CLEAR	60sec	
96	HD216598	22 49 06	+37 23 00	00 05 31		01 31W			460	315
97				00 13 44					"	315
98				00 21 43					"	380
99				00 29 41					"	460
cc10000				00 37 40					"	450
01				00 45 39					"	395

Spectr. Ter
Focus ....
Spectr. Ter

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..FINE..... 2.0...

Focus ....6.70.....

Spectr. Temp. ..... Dome Temp./Hum. 11.3°C H= 70.8% C 24m BDA

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40	400	3"		G8V	CASS CCD	1800 l/mm G=5525	250u	5890	31ci	Hdy pym	* add H lines	
460	410								32ci	"	Repeat x6	
"	300									"	for the 6	
"	310									x		
"	248									"		
"	263									x		
"	277								32ci		Hdy lar OK	
									~~33~~ci			
									33ci			
									34ci			
460	315								35ci			
"	315								36ci		Repeat x6	
"	380								"			
"	450								"			
"	400								"			
"	395								"			

21 Pg #5

Date 1992 Sep 27/28 Observers Hdy Jm Mki

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	Comparison Exp.
cc10002	HD216598	224906	+3723	00: 53:38					460
03	BIAS(4)								
04	Comp							FeAr Clear	60s
05	FLAT							TUNG A=1/2	10s
06	HD216598			01 06 37					460.
07	"			01: 14:36					
08	"			22:35					
09	"			30:33					
10	"			38:32					
11	"			46 31					
12	"			01 54 29		03 20W			
cc10013	BIAS(4)								
14	FLAT							TUNG A=1/2	10s
15	Comp							FeAr Clear	60s
16	HD216598			02 06 35					505
17	"			02 15 34					460

Spectr. Te
Focus....
Spectr. Te

Exp. Mtr.

470
456
508
480
530
490
Sum of 2
1110
550
518

Spectr. Temp. ..... Dome Temp./Hum. +11.1°C ..... 76% Transparency Conditions ... Fine .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40	470								36ci			
60s									15ci			
10s									12ci		MAX = 11K ADU	
60s	456								16ci		Repeat x 7	
	508											
	484											
	530											
	480											
	Sum of 2											
	1110	2"							16ci			
									1ci		Dome T = +10.4°C	
10s									19ci		11K ADU/pixel	
60s									18ci			
35	550								17ci			
60	518								20ci		Repeat x 6	

Pg #6

Date 1992 Sep 27/28 Observers Hdg... T.H.

→ 24"

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	Comparison Exp.	Exp. Mtr.
CC 0018	HD216598			02 23 37		03 50W			460s	570
19				31 36						570
20				39 35						495
21				02 47 34						475
22				02 55 32		04 22W				460
23	BIAS(4) Average of 4 Bias									
24	Comp							FeAr Clear	60s	
25	FLAT							TUNG H=1/2	10s	
26	HD216598	22 49 06	+37 23	03 08 41					460	360
27				03 16 55						on of 2
28				03 24 53		04 51W				600
29				03 32 52						250
30				03 40 51						280
31				03 48 49		05 16W				590
32				03 56 48						345
33	BIAS(4)									

Spectr. Temp. ..... Dome Temp./Hum. +10.1°C ..... 75% Transparency Conditions .. Fine ..... 25.4..

Focus .... 6.70 ... still .....

Spectr. Temp. ..... Dome Temp./Hum. ~~82~~ .....

5360 26 1024 4 1 CCOFMT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
570									Hdg pgm		
570											
495											
475											
460	2.3"							20c i			
								1c i			
								23c i		Fine	
								24c i			
360	2"							21c i			
sum of 2								25c i		Repeat x6	
600										CCDT -10.8°C	
260										1.734 AIRMASS	
280											
290											
345											

Sep 47

58 ep

Date 1992 Sep 27/28 Observers Hdy T.S.

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	Comparison Exp.
CC10034	FLAT							Tung H=1/2	10s
35	Comp							FeAr Clear	60s
36	HD 216598			040923		05 37			46
37				041732					460
38				042530					"
39				043329					"
40	BIAS(4)								
41	Comp	Drive off now				06 00	+37 55 51	FeAr Clean	60s
42	FLAT							Tung H=1/2	12s
→ 43 46	FLATS x4	at α Leo pos'n						"	13s
47	Comp							FeAr Clear	60s
48	BIAS(4)								
49	HD87901	10 03 03	+12 27	050550					10s
50	"	"	"	051036					108
51	"	"	"	051437					147
52	comp							FeAr Clear	60s
53	BIAS(4)								

Spectr. Te
Focus....
Spectr. Te

Exp. Mtr.

340
370
360
360

20K

Spectr. Temp. ..... Dome Temp./Hum. +9.5°C 78.5% Transparency Conditions ... Fine 25%

Focus ... 6:70 .....

Spectr. Temp. ..... Dome Temp./Hum. +8.7°C 82.9%

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10s								5890Å	30ci			
60s									2ci		11K MAX ADU	
46	340								~~27ci~~			
480	370								~~17i~~	Hdy pgm	2.075 AIRMASS	
"	360	2-3"										
"	360								27ci		2.250 AIRMASS	
											Dome T = +9.5°C	
60s									10ci			
12s		This Flat 12secs to get = same Level as OTHERS							11ci		12.4K ADU	
13s		" " 13secs " " " "						"	12ci		12.4K	
60s									13ci			
									1ci		5K ADU MAX	
10s	30K								16ci	Telluric Std	2.850 AIRMASS	
108	50K								17ci	"	9K ADU	
HA	58K								~~37~~ci	"	2.55 AIRMASS AT end.	
60s									~~38~~ci	Comp		
									1ci	13 HS		

Log #1 mon - Tues

Date 1992 sept 28/29 Observers ... Hdg Jm

Emulsion Batches:

reset CSS TIME was OUT 1 min

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc10054	BIAS(4)								
55	Comp							FeAr Clear	90sec
56	HD177724	19 00 49	+13 43	185543					130
57	"			185848					194
58	"			190554					204
59	BIAS(4)								
60	Comp							FeAr Clear	90s
61 64	FLATS x4							TUNG A=1/4	24s
65	FLAT at HD216598 posn			192648				"	24s
66	BIAS(4)								
67	Comp							FeAr Clear	90s
68	HD216598	22 49 06	+37 23	193538		02 55 30E			460
69	"			194405					460
70	"			195225					"
71	"			200027					"
~~72~~	~~"~~			~~200820~~					~~"~~

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
27K
40K
44K
370
342
510
560

Spectr. Temp. ..... Dome Temp./Hum. 12°C 60% Transparency Conditions ..Part. Cloudy.....258

Focus ..... 6:70 ..... Complete Cloudy by 2010

Spectr. Temp. ..... Dome Temp./Hum. +11.2°C 64% CLIMBDA 90 CG Hin

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm	250	6563Å	1c;		CCD FMT 536 0 26 1024 4	1
								3c;			
27K								4	Telluric Std	MAX 6K	
40K								5	"	" 8K	
44K								6	"	" 8K	
								1			
								.			
								7		12K MAX 4DC	
										Dome T = +11.6°C	
								3c;			
370	3"	8.01 -9.39	G8V					4c;	Hdy pgm	650ADU E AVG of 5 cols above bkgnd	
412								8c;			
510								9c;		Repeat x 3	
260								—			
								9c;	CAH His + shutter open Dark (Dome Closed)		

pg # 2 Mon - Tues

Date 1992 Sept 28/29 Observers Hdg - T.n

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	Comparison Exp.
CC10072 ~~CC10073~~	~~DARKS x 2~~	Comp		20 17 16				FeAr Clear	~~60s~~
CC10073		FLAT.						TUNG A=1/24	24s
10074		BIAS (4)							
10075 10076	DARKS x 2			20 24 34 20 35 34					600s
10077	BIAS (4)			21 09 40					
10078	FLAT			.				TUNG A=1/24	24s
10079	Comp			.				FeAr Clear	90s
10080	HD216598	22 49 06	+37 23	21 23 02					460
10081	"			21 31 12					462
10082	"			21 40 29					489
10083	"			21 49 49					460
10084	"			21 58 00					460
10085	"			22 06 18					460
10086	Comp							FeAr Clear	90s
10087	Flat							Tung A=1/4	24s
10088	BIAS (4)								

Spectr. Ten
Focus
Spectr. Ten

Exp. Mtr.
447
325
470
493
466
360
0150
303

Spectr. Temp. ..... Dome Temp./Hum. +11.3 61.9 Transparency Conditions ... Cloudy ..... 260...

Focus .... 6.70 ..... Clear again SORT OF

Spectr. Temp. ..... Dome Temp./Hum. ..... High winds

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						250 dekker	6563Å	9ci			
								~~10ci~~			
								1ci			
								~~11ci~~ 12ci			
								1ci		Dome closed Temp = +11.7°	
								10ci			
								~~13~~ 13ci			
447								14ci	Holy pgm	1.035 AIR MASS	
325	3-4"		G8V					15ci		500 ADU Σ AVG	
470								16ci		1000 ADU Σ TRAILED	
493								~~17ci~~			
466								~~17ci~~			
360								17ci			
10150								18ci			
11303 ADU											

261 pg #3 Mon - Tues

Date .1992..Sept.28.29. Observers ....Hdg.-.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	Comparison Exp.
CC10089	HD216598	22 49 06	+37 23	22 19 56					351s
CC10090									
91	Comp / Stellar posn Hartmann Test			22 39		0 0	+30	FeAr Clear	40/40
92									
93	"	"	" "	22 50		"	"	"	"
94	BIAS(4)			23 25					
95	Comp			23 27 49				FeAr Clear	90s
96	FLAT							TUNG A=1/4	24s
97	HD216598	22 49 06	+37 23	23 35 21					460
98				23 43 28					"
99	Comp							FeAr Clear	90
CC10100	BIAS(4)								
101	HD216598			00 01 01					460
102	"			00 09 16					460
10103	"			00 17 17					460
10104	"			00 25 26					460
10105	FLAT							TUNG A=1/2	24s 10s

Spectr. Temp. ..... Dome Temp./Hum. +9.1°C ... 59% Transparency Conditions . PART Cloudy ... 26V

Focus ... 6.70 ... 6.77 odd Light Blue Aurora ? snow?

Spectr. Temp. ..... Dome Temp./Hum. ..... Yes, Aurora

Exp. Mtr.	Seeing	~~Pig.~~ V Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
200?	3"	8.51 -9.38	G8V	CASS CCD	1800/mm G	250µ slitless	6563Å	19ci	Hdy pgm	CURTAILED, OVERCAST RAIN? TOPPED UP 22:42 EST	
						n		42 43	Focus Test	T=+9.7°C Set 6.70 ½ < .2 Pixel Blue.	
	T=9.5°C				6.77	n		n	n		
	T=9.1°C							1c			
								~~32c~~ 20c;			
								21c;			
417	4"							22c;	Hdy pgm		
295								23c;			
								24c;		cloud again	
										Dome T = +8.1°C	
500								25c;			
320								~~26c;~~			
517								~~26c;~~			
473								26c;			
								27c;		15,951 ADU MAX	

263 pg #4

Date 1992 Sept 28/29... Observers Hdy. I.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	Comparison Exp.
CC10106	Comp							FeAr Clear	90s
107	BIAS(4)								
10108	HD 216598	22 49 06	+37 23	00 41 49					460s
10109	"			00 49 46					460s
10110	Comp							FeAr Clear	60s
10111	FLAT							Tung A=112	9s
10112	BIAS(4)								
10113	DARK								1200s

Spectr. Te
Focus...
Spectr. Te
Exp. Mtr.
344
313
368

Spectr. Temp. ..... Dome Temp./Hum. +7.5°C 63% Transparency Conditions ..1/2.. cloudy .....2.6.4....

Focus ... 6.77 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Iter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	90s					CASS CCD	G=6020	25u pointer dekker	6563Å	28ci			
										1ci			
	460s	444								~~29ci~~			
	480s	313								29ci			
	60s	7868								30ci			
2	9s									31ci		14415 ADH MAT	
										1ci			
	1200s												
									All to	WORM & Perseus			

24 Tues / Wed

Date 1992 Sept. 29/30. Observers Hdg. + Tm

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	Comparison Exp.
CC 10114 15	Focus Test					0 0	+38°	FeAr Clear	40/40
16	BIAS(4)								
10117 8 9	FLAT FLAT FLAT							TUNG A=1/2	7 sec
10120	Comp							FeAr Clear	60s
10121	HD177724	19 00 49	+13 43	18 49 24		00 06W			208
10122	"			18 53 44					
10123	Comp							FeAr Clear	60s
10124	BIAS(4)								
10125	COMP			19 04 14				FeAr clear	60s
10126	FLAT							Tung A=1/2	7s
10127	HD 216598			19 10 44					460s
10128	DARK								600s
10129	DARK								700s
10130	BIAS(4)			19 49 10					
10131 10132	Focus Test	comp/stellar posns				01 23E	+38°		

Spectr. Temp. ..... Dome Temp./Hum. 7.7°C 56% Transparency Conditions ... PART Cloudy ... 2.6
Focus ... 6.77 — MOSTLY cloudy
Spectr. Temp. ..... Dome Temp./Hum. +7.1°C 60%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Set 677 T = 7.7°C				CASS CCD	1800 l/mm G=6020	250u dekker pointed	6563Å	42 43	Focus/CCDFMT	sl Red = 14 pixels shift 520.0 12 1024 10 1	
									OBS CCDFMT	536 0 26 1024 41	
								3c;		13431	
								4c;			
28K		V 2.99	A0V mu					5c;	Telluric Std		
40.6K								6c;	"	11660 ADU	
								7c;			
										Dome T +6.6°C	
7082								8c;			
			NOMED RACK IN BETWEEN							13410	
180		V 8.51 -9.36	G8V					10c;		NO GOOD	
								11c;			
Set Still 677A T=+7.1°C								42/43	Reversed Tel Focus Test	Stellar vsl Red 622 - 630 xplot vsl mode shifted @ pixel #100 sl Red	

Comparison Iter	Exp.
	4/45
1/2	7sec
	60s
	208
R	60s
r	60s
ng 1/2	7s
	4.60s
	600s
	700s

2 of 3 pg 41

Wed / Thurs

Date 1992 Sep 30/Oct 1 Observers H.Hdg. / T.Tu.....

No Encoders

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	Comparison Exp.
cc10133	BIAS(4)	(Tel at East Side)				≈0 0	+14°		
134	Comp							FeAr Clear	60s
135	HD177724	19 00 49	+13 43	18 51 02					20I
136	"			18 56 05					220
137	Comp							FeAr Clear	60s
138 139 140	FLATS X3							Tung A=1/2	8s
141	BIAS(4)								
142 143	Focus Test	Comp/Stellar	Hartman	21 11 passing	Tel East Side	≈3 hrs East	+38°	FeAr clear	40/40

Spectr. Te
Focus...
Spectr. Te
Exp. Mtr.
ZIK
33K

Spectr. Temp. ..... Dome Temp./Hum. 6.9°C ..... 64.8% Transparency Conditions ..... Fine ..... 26.8 .....

Focus ... 6.77 .....

Then cloud again

Spectr. Temp. ..... Dome Temp./Hum. ..... CLAIMBOA

536 0 26 1024 4 1 CCDFUNT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1200 l/mm G6020	250μ dekker	6563Å	1c;			
								2c;			
37K		V 2.99	A0 I nn					3c;	Telluric Std		
33K								3c;	"	MAX 10K 10μ	
								4c;			
								5c;		13845, 13662	
										Dome T= 46.5°C	
4790 Comp 4828 Stell		T= 7.0°C		Set 6.77				42/43	wvl shift Rel @ 620 pixel	.3 pixel Rel at 480 pixel	
					TO RCRSaus & WORM						

pg#1 Thurs/Fri

Emulsion Batches:

Date 1992 Oct 1/2 Observers Hdg./Tq./Fbr

Note Still guiding visually "occasionally"

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 10144	BIAS(4)			1825		00 19W	+39°		
145									
146	Focus Comp/Stellar HARTMAN			1825		"	"		40/40
10147	Comp							FEAT Clear	60s
10148	BIAS(4)								
149	HD177724	19 00 49	+13 43	185517		0 20 W			220s
150	HD177724	19 00 49	+13 43	190204		0 25 W			154s
151	Comp							FEAT clear	60s
152–154	FLAT x 3	19 00 49	+3 43	19 08 34		031 W		TUNG A=1/2	8s
155	BIAS(4)			19:14				"	
156	Comp							FEAT clear	60s
157	FLAT	22 49 06	37 2300	19 18 36				TUNG A=1/2	8s
158	HD216598	22 49 06	37 2300	[illegible]					460s
159	"	"		19 30 31					460s
160	"	"		19 38 29					"
161	"	"		1946 28					"
162	"	"		19 54 27					"

Spectr. Temp. ..... Dome Temp./Hum. +12.5°C 63% Transparency Conditions ..... Fine 27.0.

Focus .... 6.7.7. .....

Spectr. Temp. ..... Dome Temp./Hum. ..... c LAMBDA FORMAT → 536 0 26 1024 1 | CCDT → 100°C

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					CASS CCD	1 s00 l/mm G=6020	250u dekker	6563Å	1ci		Tel EastSide	
40/40									47/43		Stellar .3 pixel Rad.	
60s									3ci			
									1ci		Reset T +12.3°C	
220s	37,300		V 2.99	Ao V					4ci	Telluric Std.	TRACKING ON	
154s	29K		V 2.99	Ao V					5ci	TELLURIC STD	TRACKING ON	
60s									6ci			
8s											14 K MAX A.D.U.	
60s									6ci			
8s			V 8.51-9.39	G8 V								
460s										Hdy		
460s	1000	Σ of 2								"		
"	148									"	OFF SLIT?	
"	380									"	Not Quite Centred.	
"	300									"	Airmass = 1.1340	

#2 Thurs-Fri.

27

Date ..Oct/2-92..... Observers ..Hdg./Fbr./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	Comparison Exp.	Spectr. Te / Focus / Spectr. Te Exp. Mtr.
163	HD216598	224906	372300	200225					460s	227
164	"			201024					"	500
165	Comp							FeAr Com	60s	
166	Flat							TUNG A=1/4	8s	
167	Bias (4)									
168	HD216598	224906	372300	202505					460s	580
169	"			203303					"	130
170	"			204102					"	195
171	"			204900					"	775
172	"			205659					"	760
173	"			210457					"	670
174	"			211256					"	435
175	BIAS(4)									
176	FLAT							TUNG A=1/2	8s	
177	Comp							FeAr Comp	60s	

Spectr. Temp. ..... Dome Temp./Hum. +12°C 64% Transparency Conditions ..... CLEAR 27.2

Focus ..... 6.77 .....

Spectr. Temp. ..... Dome Temp./Hum. +10.7°C 66%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
227		V 8.51-9.31	C8 I	CASS CCD	1200 G=6020	250μ 0.11 mm	6563Å		Hdy		
500									"		
								9ci			
								10ci		14K MAX	
580	2.2"	V 8.51-9.31	C8 I					11ci	Hdy	Repeat x7	
630									"		
695									"		
775									"		
700									"		
870									"		
695								11ci	"		
								12ci			
								13ci		14K max	
								14ci			

2nd pg #3

Date 1992 Oct 1/2 Observers Hdg / Fbr / 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	Comparison Exp.
cc 0178	HP216598	224906	+3723	212819		00 51E			
179				213617					
180				214416					
181				215214					
182				220013					
183				220811					
184				221610					
185	BIAS(4)								
186	Comp							FeAr Clear Tung A=1/2	60s
187	FLAT								8s
188	HD216598	224906	+3723	223030					
189	"			223828					
190	"			224627					
191	"			225426					
192	"			230223					
193	"			231023					

Spectr. Te
Focus ..6
Spectr. Te

Exp. Mtr.
730
860
875
Sunset
1800
950
360
500
850
870
771
740
700

Spectr. Temp. ..... Dome Temp./Hum. +10.9°C. 66% Transparency Conditions ... Fine .....

Focus .. 6:77 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

274

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
730	1"-2"	8.51 -9.39		CASS CCD	G=6020	250μ	6563Å	15ci	Hdy pyn	Repeat x7	
860											
875											
sum of 2											
1800											
950											
860											
								16ci		2 meridian passage	
								17ci			
800								18ci		Repeat x7	
850	1"										
890											
771	1"										
740											
700											

225 pg #4

Date 1992 Oct 1/2 Observers [24"] Hdy/I.Ts./I.Fbr.

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	Comparison Exp.	Sp. Mtr.
CC10194	HD216598	22 4906	+37 23	23 18 22						
195	BIAS(4)									
196	FLAT							TUNG A=1/2	6s	
197	Comp							Fe+ CLEAR		
198	HD216598	224906	+37 23	23 33 11					46C	357
199	"			23 41 09					"	560
200	"			23 49 08					"	510
201	"			23 57 07					"	783
202	"			00 05 05		01 46W			"	515
203	"			00 13 04					"	580
204	"			00 21 02					"	606
205	BIAS(4)									
206	Comp							FE+ CLEAR	60s	
207	FLAT							TUNG A=1/2	6s	
208	HD216598	224906	+37 23	00 35 13					465	630

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ... FINE ..... 27.6 ...

Focus ... 6.77 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		✓ 8.51 – 9.39						18c;	Hdg		
		↓						1c;			
								19c;			
								20c;			
357		V						21c;		Repeat x 7	
560		8.51 – 9.39									
510		↓									
483	1"-2"										
565											
580											
606		V									
										111 – 112 Bias ADU Level Dome T = +9.9°C	
								22c;			
								23c;			
630								24c;	Hdg pgm	900 ADU Σ Avg above Background.	

27 pg #5

Date 1992 Oct 1/2 Observers Hdg Fbr Tq

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	Comparison Exp.	Exp. Mtr.
CC10209	HD 216 598	22 4906	+37 23	00 4330					480	670
210	"	"	"	00 5216					"	630
211	"	"	"	010014					"	530
212	"	"	"	010813					"	610
213	"	"	"	011612					"	545
214	"	"	"	012410					"	500
215	Bias (4)									
216	Flat							Tung $\lambda = 1/2$	6s	
217	Comp							Refr Cor	60s	
218	HD 216598	224906	+3723	013718					460s	350
219	"	"	"	014517					"	520
220	"	"	"	015316					"	550
221	"	"	"	020114		0343W			"	550
222	"	"	"	020943					"	510
223	"	"	"	021740					466	730
224	"	"	"	022624					496	530

Spectr. Temp. ..... Dome Temp./Hum. +9.7°C 74% Transparency Conditions Fine ... Slhazy ... 2/6

Focus ... 6.77 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... — No Camera —

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	480	620		8.51-9.39	GS II	CASS CCD		250	6563Å	25c	Hdy.		
	"	620								26c		Repeat x5	
	"	530											
	"	610	10"										
	"	445											
	"	500											
	60s									27c			
	60s									28c			
	46CS	350		N 8.51 9.39	GS V					29c	Hdy	Airmass: 1.2304	
	"	520											
	"	550											
	"	550	2-3"										
	"	510								30c			
486		520								"			
496		530								31c			

22 Pg #C

Date 1992 Oct 1/2 Observers [Holy 24"] Tu / Flat

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	Comparison Exp.
CC10225	BIAS(4)								
226	Comp							FeAr Clear	60s
227	FLAT							TUNG A=1/2	6s
228	HD216598	22 49 06	+37 23	02 41					460s
229	"	"	"	02 49 01					"
230	"	"	"	02 57 00					"
231	"	"	"	03 04 58					"
232	"	"	"	03 12 57					"
233	"	"	"	03 20 55					"
234	"	"	"	03 28 54.		05 00W			"
235	BIAS(4)								
236	FLAT							TUNG A=1/2	"
237	Comp							FeAr Clear	
238	HD216598			03 51 33					496
239	COMP							FeAr Clear	60s.

Spectr. Temp. ..... Dome Temp./Hum. +9.9°C 74% Transparency Conditions Fine 280
Focus 6.77 incr thin cloud
Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
								31ci			
								~~32ci~~		12K MAX	
400		V 8.51 – 9.39	G8V					32ci	Hdy pgm		
360									"		
380									"		
393									"		
330									"		
265									"		
300									"		
								~~33ci~~			
								~~33ci~~			
								33ci			
135								34ci			

291 #7

Date 92-OCT 1/2 Observers Hdy./Tn/Flor

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	Comparison Exp.
cc10 240.fts	FLAT	224906	37 23						
241	BIAS (4)								
242	COMP							FeAr Clear	60s
243	HD87901	10 0303	12 27	04 17 13					
~~—~~	~~HD87901~~	~~10 0303~~	~~12 27~~						
244	~~FLAT~~ COMP							FeAr Clear	60s
245	FLAT							TUNG A=1/2	
~~246~~	~~FLAT~~							TUNG A=1/2	
~~246~~	~~BIAS~~							TUNG A=1/2	
246	BIAS (4)								

Spectr. Temp. ..... Dome Temp./Hum. 9.9°C/78.8% Transparency Conditions NOT CLEAR. I 282

Focus 6.77

Spectr. Temp. ..... Dome Temp./Hum. +10.0°C 79%

Comparison Iter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	60s												
		2100									TELLURIC		
											— " —		
	60s												
												CLOUD.	
						ALL ABSENCE; WORK ~							

Night #1

Date Oct 2/92 Observers HLW/FBr

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	Comparison Exp.
cc 10247	Bias (4)								
248	Comp							FeNe	20s
249	HD 194071	20 18 30	27 55	21 57 46		2 17 W			677
250	Comp							FeNe	20s
251	Comp							FeNe	20s
252	AC+75 8347	21 57 36	+ 75 08	22 35 02		2 08 W			3600
253	Comp							FeNe	20s
254	Comp							FeNe	20s
255	BD+57 2735	23 19 54	57 20	23 47 44		1 56 W			3677
256	Comp							FeNe	20s
257	Bias (4)								
258	Comp							FeNe Cu	20s
259	HD 3765	00 35 18	39 40 00	01 02 41		1 08 W			858
260	Comp							FeNe	20s
261-269	Flat x 9							TUNG Clear	15s

Spectr. Temp. ..... Dome Temp./Hum. 16.2°C / 72.5% (2144) Transparency Conditions ..... Haze ..... 28.4 .....

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

480 0 50 1024 4 1 ccd fmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 a=4990	310 μ	λ = 5140Å				
850 ~~~~		V 8.13	G8 III	CASS CCD	1800 G=4990	310 μ	λ=5140Å		STD VEL.		
	5"									VERY, VERY WINDY.	
590		V 10.5	M0	CASS CCD	1800 a=4990	310 μ	λ=5140Å		Hlw Pgm		
~~590~~											
991		V 10.05	M2e	CASS CCD	1800 a=4990	310 μ	λ=5140Å		Hlw Pgm	THIN CLOUD	
2500		V 7.36	dK1	CASS CCD	1800 a=4990	310 μ	λ=5140Å		STD. VEL		
										CLOUD, WIND,	

Date Oct 3/4 92 Observers HIW/Fbr

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	Comparison Exp.
cc10270	Bias (4)								
271	Comp							FeNe clear	20s
272	HD213947	22 29 54	+ 26 05	22 01 15					328
273	Comp							FeNe clear	20s
274	Comp							FeNe clear	20s
275	AC +62 26749	17 34 30	+ 61 45	22 25 46	23 25 46	6:25 W	+61		3600s
276	Comp							FeNe clear	20s
277	Comp							FeNe clear	20s
278	BD +76 785	20 13 54	+ 76 55	23 37 50		4:40 W	+76		2200
279	Comp							FeNe clear	20s
280	Comp							FeNe clear	20s.
281	BD +57 2735	23 19 54	+ 57 20	00 32 27					3600
282	Comp							FeNe Clear	20s
283	Bias (4)								
284	Comp							FeNe clear	20s

Spectr. Temp. ..... Dome Temp./Hum. 11.4/63.0% Transparency Conditions ..... Clear ..... 786 .....

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

* Normalized HO 213947
480 0 50 1024 4 1 ccdfmt,

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 G=4990	310 μ	5140 Å	1,2ci		⟨130 ADU⟩	
2000		V 7.53	K4 III	CASS CCD	1800 G=4990	310 μ	λ=5140Å	4ci	STD. VEL.		
1156		V 9.95	MIV$_e$					5ci	Hlw Pgm	VERY POOR SEEING.	
1925	3-4"	V 9.3	MO					6ci	Hlw Pgm	T=9.5°C / H=70.1% (0039)	
1170		V 10.05	MV$_e$						Hlw Pgm		
										Miss Guide Camera very much.	

dz

Emulsion Batches:

Date .. Oct. 3/4 -92 .... Observers ... H/w./ F.D.C. .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
285	LHS1176	00 55 11	+60 49 52	01 50 16					3600s
286	Comp							FeNe CLEAR	20s
287	FLAT							TUNG	
288	FLAT							TUNG	
289	FLAT							TUNG	
290	FLAT							TUNG	
291	FLAT							TUNG	
292	FLAT							TUNG	
293	FLAT							TUNG	
294	FLAT							TUNG	
295	FLAT							TUNG	

Spectr. Te
Focus ...
Spectr. Te
Exp. Mtr.
37

Spectr. Temp. .... Dome Temp./Hum. 9.1°C/73.3% (946) Transparency Conditions ..... CLEAR ...... 288 ....

Focus ..... 6.70 ....

Spectr. Temp. .... Dome Temp./Hum. ....

480 0 50 1024 4 1 ccdfmt

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	3600s	372	3"–4"	V 10.8	M2	CASS CCD	1800 a=4490	310 μ	λ=5140Å		H/w Pgm	DOME SWEATING SHUTTERS DRIPPING.	
	20s					↓	↓	↓				Bad spectrum: wrong star? H/w 25/10/15	
												HIGH HUMIDITY	

All to Pessman and KWORM.

* 1 29

Date ..... OCT 4/5-92 ..... Observers ... Hdy./Fbr. .....

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	Comparison Exp.
cc10296	DARK			[redacted]18 2119					600s
297	BIAS(4)								
298	COMP							FeAr clear	60s
299	HD177724	19 00 49	+13 43	18 58 38					108s
300	HD177724	19 00 49	+13 43	19 01 54					129s
301	COMP							FeAr Clear	60s
302-304	FLAT x 3	19 00 49	+13 43					TUNG A=Y2	8s
305	BIAS(4)								
306	COMP							FeAr clear	60s
307	FLAT							TUNG A=1/2	8s
308	HD216598	22 49 06	37 23	19 44 37		02 22 E			460s
309	"			19 52 36		02 14 E			"
310	"			20 00 35		02 20 E			"
311	"			20 08 34		01 58 E			"
312	"			20 16 33		01 50 E			"
313	"			20 24 32					"

Spectr. Temp. ..... Dome Temp./Hum. 11.7°C / 49.2% (18:13) Transparency Conditions ..... CLEAR ..... 290..

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

VISUAL GUIDING

536 0 26 1024 4 1 ccd fmt

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	600s					CASS CCD	1800 a=4490	250 μ	λ=5880Å			LIGHTS ON	
										1/2ci			
	60s									3ci			
	108s	25K		V 2.99	AO V					4ci	TELLURIC	SMALL TRACKING	
	129s	27K		V 2.99	AO V					4ci	TELLURIC	NO TRACKING.	
	60s									3ci			
	8s									5ci			
												TELESCOPE REVERSED	
	60s												
	65												
	460s	486		V 9.39	G8 V					6ci	Hdy	T=8.8°C / HUM = 54.5% (2029)	
		410										AIRMASS = 1.2227	
		278											
		368											
		327											
		156											

29 #2

Date ....Oct. 4/5-92..... Observers ..Hdy./Fbr.....

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	Comparison Exp	Exp. Mtr.
cc10 ~~314~~	HD216598	224906	+37 23	20 3231					460s	360
315	Bias									
316	Flat							~~Red~~ ~~Wratten~~	60s Bs	
317	Comp							TUNG A = ½	12s ~~Bs~~	
318	HD216598	224906	+37 23	204606					160	400
319	"	"	"	205405					"	
320	"	"	"	210204					"	160
321	"	"	"	21 10 03					"	310
322	"	"	"	21 18 01					"	350
323	"	"	"	212600					"	280
324	"	"	"	213359					"	200
325	Bias									
326	Comp							Red Clear	60s	
327	Flat							Tung ½	12s	

Spectr. Te
Focus....
Spectr. Te

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... CLEAR 292

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... VISUAL GUIDING (YAHOO...)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
360	2"	V 8.51 9.31	GEI	CASS CCD	1800 α = 5530	250 μ	5880Å		Hdy.		
400		V 8.51 9.31	GBI						Hdy		
		"	"						"		
160		"	"						"		
210		"	"						"		
350		"	"						"		
280		"	"						"		
300		"	"						"		
		"	"								

293#3

Date ..OCT 4/5-92..... Observers ...Hdy./Fbr.....

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	Comparison Exp.	Exp. Mtr.
cc10328	HD216598	22 49 06	+37 23	21 47 57					460s	450
329	"	"	"	21 55 56					"	456
330	"	"	"	220355					"	430
331	"	"	"	22 11 53					"	450
332	"	"	"	22 19 52					"	548
333	"	"	"	22 27 51					"	510
334	"	"	"	22 35 49					"	370
335	BIAS(4)									
336	FLAT							TUNG A=1m Filt CC	9s 20	
337	COMP								60s	
338	HD216598	22 49 06	+37 23	22 56 30					460s	480
339	"	"	"						"	519
340	"	"	"	23:12:27					"	435
341	"	"	"	23:20:26					"	460
342	"	"	"	23:28:24					"	600

Spectr. Temp. ..... Dome Temp./Hum. 8.0°/52.4% Transparency Conditions ..... CLEAR ..... 294...

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

CCD T = -100°C / 90 cgain

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	460s	450		V 8.51 - 9.39	2.0 I	OSS CCD	1800 a = 5330	250 μ	5880Å		Hdy		
	"	456									"		
	"	430									"	A LITTLE OFF SLIT	
	"	450									"		
	"	548									"		
	"	510									"		
	"	370									"		
	60s												
	460s	480											
	"	519											
	"	495										SLIGHT RAIN?	
	"	460											
	"	500											

#4

Date Oct 4/5-92 Observers Hdy/Fbr (Mka for lunch)

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	Comparison Exp.	Exp. Mtr.
cc10 343	HD216598	224906	+37 23	23:36:23					460s	441
344	"	"	"	23:44:22					"	485
345	Bias (4)									
346	Comp							FeAr Clear	60s	
347	Flat							Tung A=1/2	8s.	
348	HD216598	224906	+37 23	23 57 08					460s	455
349	"			23 05 06					"	450
350	"			23 13 05					"	425
351	"			23 21 04					"	420
352	"			23 29 02					"	370
353	"			23 37 01					"	330
354	"			23 44 59					"	290
355	Bias (4)									
356	Flat							Tung A=1/2	8s	
357	Comp							FeAr Clear	60s	

Spectr. Temp. ..... Dome Temp./Hum. 6.7°C/56.8% Transparency Conditions .... CLEAR ..... 296 .....

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	40s	441				CASS CCD	1800 G=5530	250 μ	λ=5880Å		Hdy	T=5.7°/H=60.9%	(2350)
	"	485											
	60s												
	80s												
	40s	455		V 8.51-9.39	G8 V								
	"	450		"	"								
	"	425		"	"							SEEING IS RATHER POOR.	
	"	420		"	"								
	"	370		"	"								
	"	330		"	"								
	"	290		"	"								
	80s												
	60s												

#5

Date Oct. 4/5-92 Observers Hdy. | Fbr.

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	Comparison Exp.
cc10358	HD216598	22 49 06	37 23	00 57 19					C/60s
359	"	"	"	01 05 18					"
360	"	"	"	01 13 16					"
361	"	"	"	01 21 15					"
362	"	"	"	01 29 13					"
363	"	"	"	01 37 12					"
364	"	"	"	01 45 11					"
365	BIAS(4)								
366	COMP							FeNe COMP	60s
367	FLAT							TUNG λ=½	8s
368	HD216598	224906	37 23	02 00 45					460s
369	"			02 08 44					"
370	"			02 16 43					"
371	"			? ~ 02 22 ?					"
372	"			02 32 40					"
373	"			02 40 39					"

Spectr. Ter
Focus....
Spectr. Ter

Exp. Mr.	
465	SUM
225	
239	
145	
400	
300	
310	
350	
360	
360	
130	

Spectr. Temp. ..... Dome Temp./Hum. 5°C/62.2% Transparency Conditions ..... Haze ..... ~~Zero~~ ...
(0058)

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... 536 0 26 1024 4 1 ccdfmt

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	4603		4"(?)	V 8.51 - 9.39	G8IL	CASS CCD	1800 G=5530	250 μ	λ=5880Å		Hdy		
"		465 (SUM OF 2)									"		
"		225									"		
"		239									"		
"		145									"	OFF SLIT?	
"		400									"		
"		200									"	LOST STAR?	
												LOSS OF STAR ON SLIT MAY BE RELATED TO A POSSIBLE PROB. WITH DRIVE MOTOR (TROUBLE REPORT FILED).	
	60S												
	8S												
	4603	310									Hdy		
"		350											
"		260											
"												LOSING STAR QUITE OFTEN NOW.	
"		360 } SUM OF 2											
"		190											

#6

Date Oct 4/5-92 Observers Hdy/Fbr

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	Comparison Exp.	Exp. Mtr.
374	HD216598	224906	+37 23	024837					460s	280
375	Bias(4)									
376	Flat							TUNG ½	8s	
377	Comp							Refer Obs	60s.	
378	HD216598	224906	+37 23	030423	?				469	200
379	"	"	"	032021	?				"	400
380	"	"	"						"	
381	"	"	"						"	
382	Bias(4)									
383	Comp									
384	Flat									
385	Comp									
386	Flat									
387	HD87901	10 03 03	+12 27							28%
388	HD8701	10 03 03	+12 27	040349					112	05%

Spectr. Temp. ..... Dome Temp./Hum. 2.9°/67.7% cudrising' Transparency Conditions ..... CLEAR ..... 300 .....

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
460S	280				CASS CCD	1800 G=5530	250 μ	λ=5880Å		Hdy	QUITE HARD TO KEEP STAR ON SLIT. SEEING IS ALSO QUITE POOR.	
8S												
60S												
460	200											
1	400	"?" (BAD)									ONLY BATCH OF 4. COULD	
4	} 300 COMBINED.										LOSE STAR ANYTIME.	
4											GUIDING BY "EAR".	
											- POOR SPECTRA.	
	28K										TELESCOPE ALMOST TOUCHING	
H2	25K										PLATFORM	

30/#7

Date ..Oct 4/5 -92..... Observers ..Hdy / Fbr.....

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	Comparison Exp.
389	FLAT							TUNG 1/2	13s
390	FLAT							TUNG 1/2	13s
391	FLAT							TUNG 1/2	13s
392.	BIAS (4)								
393	BIAS								
394	COMP							FBR Clear	60s
395	FLAT	(2000)	(2000)					TUNG 1/2	10s
396	JUNO	06 17 54	07 47	05 06 31					352
397	JUNO	06 17 54	07 47	05 13 24					993
398	FLAT							TUNG 1/2	10s
399	COMP							FBR Clear	60s
400	BIAS (4)								

Spectr. Temp. ..... Dome Temp./Hum. H..... Transparency Conditions ..... CLEAR..... 30.2
(cold!)

Focus ..... 6..70.....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
13s												
13s												
13s												
					ALL TO PERSEUS AND WORM.							
60s												
10s												
352	200											
993	600											
10s												
60s												

Mon

Date 07617-92 Observers Hdy/Fbr

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	Comparison Exp.
10401	BIAS(4) (00 1024 1024 11)			18 30 33					
402	DARK (00 1024 1024 11)			18 31 31					600s
403	COMP			18 45 29				FeAr Clear	60s
404	FLAT							TUNG n=½	10s
405	HD177724	19 00 49	13 43	[illegible]	19 02 59				58 [illegible]
406	"	"	"	[illegible]	19 05 16				50s [illegible]
407	COMP							FeAr Clear	60s
408	FLAT	19 00 49	13 43					TUNG ½	10s
409	FLAT	"	"					TUNG ½	10s
410	FLAT	"	"					TUNG ½	10s
411	FLAT	22 49 06	37 23 00	19 33 17 [illegible]				TUNG ½	10s
412	COMP							FeAr Clear	60s.
413	BIAS(4)								
414	HD216598	22 49 06	37 23	19 40 48					460s
415	"	"		19 48 47					"

Spectr. Temp. ..... Dome Temp./Hum. 11.4°C / 59.1% Transparency Conditions ..... CLEAR ..... 2304.
(1803)

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

536 0 26 [redacted] 1024 4 1 ccdfast
CCDT = -100.5°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 c=5550	250 μ	λ=5880Å				
600s										LIGHTS ON FOR PART	
60s								3c½			
10s								4c½			
58 [redacted] K		V 2.99	AOP						TELLURIC	NO TRACKING	
50 [redacted] K		"	"						"	HAD TO DO TWICE, SOMEHOW	
60s										386 LOST CORRECT FORMAT.	
10s											
10s											
10s											
10s											
60s.											
460s	460										
"	356								Hdy		

307 #2

Date ..OCT6/7-92..... Observers ....Hdy.|.Fbr.....

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	Comparison Exp.	Exp. Mtr.
416	HD216598	224906	37 23		19 56 48				460	540
417	"	"	"		200444				"	400
418	"	"	"		201243				"	360
419	"	"	"		202041				"	80
420	"	"	"		202848				"	260
421	BIAS (4)									
422	COMP									
423	FLAT									
424	HD216598	224906	3723		204130				460	39
425	"				204929				"	
426	"				205727				"	
427	"				210526				"	350
428	"				211325				"	285
429	"				212123				"	270
430	"				212922				"	235

Spectr. Temp. ..... Dome Temp./Hum. 9.5°C/62% Transparency Conditions ..... CLEAR .....

Focus ..... 6.70 ..... (1942) 306

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
540				CASS CCD	1800 α=5530	250 μ	λ=5880		Hdy		
"	~~400~~ 400								"		
"	360								"		
"	480								"		
"	260								"		
460	439								Hdy		
"	~~360~~ } 400 Σ OF 2								"		
"	~~770~~ }								"	OFF SLIT FOR AWHILE	
"	850								"		
"	785								"		
"	770									DOME T = 7.8°C/H = 70.8% (2131)	
"	925										

#3

Date Oct 6/7-92 Observers Hdy/Fbr

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	Comparison Exp.	Spectr. Ten / Focus / Spectr. Ten / Exp. Mtr.
cc10431	BIAS(4)									
432	FLAT									
433	COMP									
434	HD216598	224906	+3723	21 45 02					460	810
435	"			21 53 00					"	855
436	"			22 00 59					"	730
437	"			22 08 58					"	550
438	"			22 16 57					"	980
439	"			22 24 55					"	
440	"			22 32 55					"	
441	BIAS(4)									
442	COMP							FLAT CAL ONLY	60S	
443	FLAT								10S	
444	HD216598	224906	+3723	22 46 30					460S	460
445	"			22 54 32					"	505
	"			23: 02:31					"	445

Spectr. Temp. ..... Dome Temp./Hum. 7.9°c / 71.1 Transparency Conditions ..... Clear ..... 308...

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						CASS CCD	1800 a = 5530	250 μ					
	460	810									Hdy		
	"	855									"		
	"	730									"		
	"	550									"		
	"	[redacted] 980									"		
	"	[redacted]									"		
	"	[redacted]									"		
	605												
	105												
	4605	2600											
	"	505											
	"	425											

#4

Date . Oct. 6/7-92 ..... Observers . Hdy / Ebr .....

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	Comparison Exp.
CCD 646.FTS	HD216598			23:10:30	X				
447.FTS	"								
CCD 448.FTS	Bias x4.			23:38:22					
449	Comp							Rotor Clear	60s.
450	FLAT							TUNG 1/2	85
451	HD216598	22 49 06	+37 23	235356					460s
452	"			000154					"
453	"			000953					"
454	"			001752					"
455	"			002551					"
456	"			003350					"
457	"			004149					"
458	BIAS (4)								
459	Comp							Rotor Clear	60s
460	FLAT							TUNG 1/2	

Spectr. Temp. ..... Dome Temp./Hum. 7.3 / 71.8% Transparency Conditions ..... CLEAR + HUMID .....

Focus ..... 6.70 ..... 310°

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 G=5530	250 μ	λ=5880Å		Hdy	SYSTEM CRASH	
									"		
										RESET SYSTEM O.K.	
710									Hdy	T=6.7°C / H=76.4%	
745									"		
640									"	DOME SWEATING SHUTTERS BEGINNING TO DRIP	
520									"	T=6.8°C / H=77.2% (∞23)	
618									"	AIRMASS: 1.116 A=64°	
950									"	SLIGHT WIND - H=97% (ABOVE)	
760									"		

3/1 #5

Date Oct 6/7-92 Observers Hdy/Fbr

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	Comparison Exp.	Exp. Mtr.
*461	HO216598	22 49 06	+37 23	005503	(CHECK OUT THE SPECTRUM!)				460s	880
462	"	"	"	010307					"	780
463	"	"	"	011106					"	1050
464	"	"	"	011905					"	960
465	BIAS(4)									
466	FLAT	22 49 06	+37 23					TUNG 1/2	8s	
467	COMP							FeAr CuA	10s	
468	BIAS(4)									

Spectr. Temp. ..... Dome Temp./Hum. 7.1°/77.5% (0051) Transparency Conditions ... CLEAR / HUMID .....

Focus .....6.70..... 3V

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
880	BIG COSMIC		RAY!	CASS - CCD	1800 G=5530	250 μ	λ=5880		Hdy	ONLY DID 4 EXPOSURES WORRIED ABOUT HUMIDITY	BIG COSMIC RAY
780									"	H= 78.3% (0054)	
1050 (wow!)									"		
960			(NOTE: CHECK FILE #461!)						"		
										TOO WET - CLOSE (80% IN	
										T= 6.9°C (98% OUT)	
				ALL TO PERSEUS AND COORM							

3/3 Wed-Thurs

Date 1992 Oct 7/8 1..... Observers ..Hdy...Tn...Fbr.....

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	Comparison Exp.	Exp. Mtr.
CC10469	BIAS(4)				~2138					
470	Comp			213944				FeAr Clear	6s	
471	~~HD216598~~ FLAT			21				Tung A=1/2	6 sec	
472	HD216598			215818					460sec	405
473	"			220616+17					460sec	465
474	"			221415					460sec	365
475	"			222213					"	420
476	"			223011					"	595
477	"			223810					"	520
478	"			224609					"	565
479	BIAS(4)									
480	COMP							FAr Clear	60	
481	FLAT							TUNG 1/2	6s	
482	[redacted] BIAS(4)									
483-484	DARK								1200s	
485	BIAS(4)									

Spectr. Temp. ..... Dome Temp./Hum. 4.9.5°C. 73% Transparency Conditions ..Clearing by 21 EST...

Focus ...6.70..... 314

Spectr. Temp. ..... Dome Temp./Hum. ..... CCDT = -100°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						250μ decker	6563A	1c:			
								3c:			
								4c:		12428 APU MAX	
405								5c:	Hdy pgm	STAR460S.BAT	
465											
365										PROBLEMS WITH GUIDE MOTORS	
420											
505											
520											
565											
										11749 APU MAX	

35 pg. 1 Thurs Fri

Date 1992 Oct 8/9 .... Observers ..Hdg./..T.n./.Fbr.....

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	Comparison Exp.
CC10486	BIAS(4)								
487	FLAT							Tung A=1/2	6s
488	Comp							FeAr clear	60s
489	HD 216598	22 49 06	37 23						
10487	BIAS(4)								
10488	BIAS(4)			19 01 35					
10489	BIAS(4)								
10490	BIAS(4)								
10491	BIAS(4)								
10492	BIAS(4)								
	BREAK BIAS								
10493	FLAT							Tung A=1/2	6s
10494	COMP			19 19 36				FeAr clear	60s
10495	BIAS(4)								
10496	HD 216598	22 49 06	37 23	19 23 51					460s
10497	"	"		19 35 24					460s
10498	"			19 43 51					460s

Spectr. Temp. ..... Dome Temp./Hum 12.5°C ... 67% Transparency Conditions ... PART. Cloudy .....

Focus ... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. 11.9°C 70.9%

316

536 0 26 1024 4 1 CCDFIST

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					1400 ℓ/mm G=6020		6563Å	~~tel~~			
										IA ~~AB~~ MAX ADU	
6731											
										-100.65°C LIGHTS ON	
										JUST BEFORE TDP-UP LIGHTS ON	
										8-25 LIGHTS ON SEC AFTER START OF TDP-UP	
										44-69 LIGHTS ON SEC AFTR	"
										300-319	
					TDP-UP ENDED		1911 EST			7:24-7:46	
										130 18 ADU MAX	
5995											
150								5ci		70.9% hum +12.1°C CLOUDS	
>400	2"							6ci		OUT OF CLOUD	
570								7ci			

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Date 1992 Oct 8|9 Observers Hdy / Th

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 10499	HD 216598			19 51 52					460s
10500	"			19 59 52					"
10501	"			20 07 53					"
10502	"			20 16 04					"
10503	"			20 24 08		01 27E			"
10504	Comp							FeAr Clear	60s
10505	FLAT							Tung A=1/2	6s
10506	BIAS(4)								
10507	Comp			20 38 17				FeAr Clear	60s
10508	HD 20418			20 43 36					948s
10509	Comp							FeAr Clear	50s
10510	FLAT							Tung A=1/2	
10511	FLAT								
10512	BIAS(4)			21 03 32					
10513	FLAT							Tung A=1/2	6s
10514	COMP							FeAr Clear	60s

Spectr. Te
Focus....
Spectr. Te

Exp. Mtr.
560
590
525
485
>450
6119
6420
9400

Spectr. Temp. ..... Dome Temp./Hum. .11.8....70.9% Transparency Conditions .clear...hole.....

Focus ....6.70.....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
56P	2"	V 8.51 -9.39	G8V	CASS CCD	1800 l/mm 250 Å G6020 w-decker			7c;	Hdy pgm		
590								"			
525								"			
485								"			
>450										1.834 AIR MASS	
6119								8c;			
								9c;			
								1c;			
6420								10c;		AT HD 2048 POS'N	
9400		5,03	B5 V					11c;	Telluric vsini = 298 km/s		
								12c;			
								13c;		11 H MAY	
								1c;			
								14c;		12899	
								15c;			

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Date 1992 Oct 8/9 Observers Hdy/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	Comparison Exp.
cc10515,fits	HD 216598			21 12 00-01?					460s
516	"			21 20 01					"
517	"			21 28 01					"
518	"			21 36 01		00 15E			"
519	"			21 44 02					"
520	"			21 52 10			-		"
521	"			22 00 10					"
10522	COMP							FeAr clear	60s
523	FLAT							Tung A=1/2	6s
524	BIAS(4)								
525	HD 216598			22 11 57					460s
526	"			22 19 57					"
527	"			22 27 57					"
528	"			22 35 58					"
529	"			22 44 19					"
530	"			22 52 19					"

Spectr. Te
Focus...
Spectr. Te

Exp. Mtr.
385
65
250
207
327
400
6640
455
335
460
450
500
205

Spectr. Temp. ..... Dome Temp./Hum. +10.8°C ... 74% Transparency Conditions ... Cloud at Times .....

Focus ... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. +10.5°C ... 74.8%

320

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
440s	385	3"			CHSS CCD	1800 l/mm G=6020	250μ	6563Å	16ci	Hdg pgm	IN ECLIPSE	
"	} 655											
"												
"	250	3"										
"	207										CLOUD	
"	327										OUT OF CLOUD	
"	400								16ci			
60s	6640								17ci			
6s									18ci		12415	
									1ci			
440s	455	3-4"							19ci			
"	335								"		IN CLOUD	
"	460								"			
"	450								"			
"	500								"			
"	203								"		THICK CLOUD	

32 pg #4

Date 1992 Oct 8/9 Observers Hdy / 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	Comparison Exp.
CC10531	FLAT ↑							TUNG H=1/2	6 s
532	Comp ↓							FeAr Clear	60s
533	BIAS (4)			23 03 21					
534	DARK			23 10 26					600s
535	BIAS(4)								
536				23 50				FeAr	
537	Focus Test	Comp / Stellar	HARTMAN POSNS			00 00	+25 29	Clear	30/30

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

Spectr. Temp. ..... Dome Temp./Hum. +10.4°C 74.8% Transparency Conditions Clouding in 32?

Focus 6.70

Spectr. Temp. ..... Dome Temp./Hum. +10.7°C 76%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800l/mm G=6020		6563Å	21ci		11 640 nm	
								22ci			
								23ci		-102.0°C	
								1ci			
	Set	6.70	T= 10.5°C					27ci 28ci	Pixel # 270	Rightons Pixel # 900 stellar Bkgnd 6 pixel 470 0 10 1024 20 T CCDFmtT	
					All to Perseus & worm						

C323 Fri SAT

Date 1992 Oct 9/10 Observers Hdy/T.n

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	Comparison Exp
FIT 60920	FLAT 2Hrs during Afternoon by HK						ND 2.0	TUNG Clear	720s
921	Comp while moving Telescope				21 53		no ND	FeAr Clear	633s
FIT STIG 922	HD216598	22 49 06	+37 23	22 03	22 47				2580s
FIT 923	HD 20418	03 12 00	+49 43 47	22 55 45	23 35		no ND in Beam		2352s
Fit 924	Comp	"	"	23 36 56	2349			FeAr Clear	774s
Fit 925	DARK			00 02 36				A=1/2	3600s
Fit 926	FLAT 2hrs			01 35 ~~57~~ 10		mostly platform		Tung ND 2.0	7200s

Spectr. Temp. ..... Dome Temp./Hum. +12.4°C 56.8% Transparency Conditions ... Clearing ... 22.4

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. +10.5°C 65%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
A churned				PTS FIBER Fed	1800 63.5		Hα				
100-400		8.51 9.39	G8V	TAG	25,20,081 FRAMES				Hdy pgm	for TAG LIMITS [900 → 3000] [Last image # 2210] (FOR 2 BIAS) CLOUDED OUT	
1500-3500	~~3.6~~	5.03	B5V	NO TAG	1 FRAME = .001024 sec				Telluric Std	AIRMASS = 1.88	
70-90											
3-14				~~TAG's FIT~~							
~~3700~~ 1300-1400											

TAG's FITS TO N:\TIMETAG's WORK to FIT 00925. not Last one Yet.

SAT SUN

Date 1992 Oct 10/11 Observers Hdy/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	Comparison Exp
F:tD0927.fts	FLAT			OCT 10 1992 15 00 14				Tung ND2.0 A-1/2	7200s
928	DARK			18 28 27					4153s
929	FeNe COMP			~19 46	~19 58			FeNe ND2.0 A-1/8	720s
930	DARK ??			01 34 41					1711

Spectr. Tem
Focus
Spectr. Tem

Exp. Mtr.
250-1400
3-12
7-30
15-40

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

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. +12.5°C H-80% @ 02 EST

326

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1250 – 1400				PTS	1800 63°5	7 Fibres 50μ simulated slit				PARTLY DURING CCD TOP UP MOSTLY IN DARK ON PLATFORM	
3–12						From 400μ Fibre	2¼ DIA			CAP OVER FIBRE LIGHTS OUT	
7–30		37.2 μA ⇒		36μA 39.5μA -25 to -30°C		6.25μ/pixel same as last night				CHANNEL A WAS ZAPPED ON FRIDAY BY FeNe, WANTED TO TEST	
4. 30–80 / B 15–40		I noticed high signals Note ·				0 – 60 pixels	(0 spikes)		Test.	Not much light.	

327 SUN MON

Date 1992 Oct 11/12 Observers Hdy / 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	Comparison Exp.
Fit00931.fts	Comp		ZENITH	13 22 56				FeAr Clear	1613s
932	Sky (solar)		PLATFORM	14 07 43					1465s
933	Comp		PLATFORM		15 02			FeAr Clear	1126s
Fit00934.fts tag.hdy	Dark		11	15 09 35					12900
935	FLAT		VAR	19 09 10				Tung ND 2.0 A=1/2	7200

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions 328

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
54-82				PTS	1800 63,5						
800-2000										primary & secondary capped shutter open 1/2 metre	OVERCAST
57-90											
1-7											
1360-1480										LIGHTS ON PARTLY	

mon & Tues

38

Date 1992 Oct 12/13 Observers Hdy/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	Comparison Exp.
Fit 00936	FLAT			19 22 07				ND 2.0 A=1/2	7200
937	DARK				22 55				4795
938	COMP			00 47 52	01 02			FeAr Clear	
tag Fit 00939	HD 197433	20 38 36	75 14	01 38	02 13	06 47 W			2103
tag Fit 940	"			02 14					2032
941	FeAr COMP			02 51 08				FeAr Clear	938
942	FLAT Left Running				(2)	OHL platform	ND 2.0	TUNG A=1/2	7200
	Oct 15/16 Cloudy night TEST								
tag Fit 943	DARK [Tagged from pixel 1-4095]			20 41	22 01	0 0	platform		4800

Spectr. Temp. ..... Dome Temp./Hum. +5.0°C ... 73% Transparency Conditions .. Clearing .. finally .. maybe. Then cloudy 330

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. +4.2°C .. 76% Tel NORMALIZED on BS603 BRT comp of OBJ

omparison ilter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
0 2 7200	1355-1513				PCS TimeTAG	1800/635°	400µ 750x7	6563Å				
4795											(in c/ SIMULTAG) To Perseus only	
r r	67-115		✓									
2103	240-510	*8"	7.4 7.7	G(3-5)	2,054,093 FRAMES					Hdy pgm	Tel East Side of Piers Seeing vv Bad	
2032	200-390 575										2:31:20 EST HUMIDITY 2:46:20 RELAY CLUNK	
r r 9385	60-100							All To Perseus c WORM			To this exp.	
7200	1400/40											
4803	0-17 cnts		Tag size 238 K bytes							Hdy test	All now to Perseus c WORM & To Floppy	

331

FRI / SAT

Date 1992 Oct 16/17 Observers Hdy / 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	Comparison Exp.
Fit 00944.fits	FLAT			OCT 16 16 58 08	18 58			Tung ND 2.0 A-V2	7200
Fit tag 945	COMP			19 31				FeAr Clear	1160s
Fit TAG 946	HD 20418	03 12 00	+49 44	20 08	21 31	E			4954s
Fit 947	COMP			21 40 19	21 55 49			FeAr Clear	900s
Fit 948	DARK			22 00 57	00 01 18	0 0	-21°		7200
Fit 949	FLAT (SHORT)			00 35 21				Tung ND 2.0 A-V2	2760
950	COMP			01 23 07	01 33 19			FeAr Clear	612s
Fit tag 951	HD 197433	20 38 36	+75 14	01 37	05 28				13801s
" 952	"	"	"	05 28	05 42	10 33W			801s
953	ELECTRICAL NOISE DURING FeAr		PROBABLY	CAUSED BY	DOME MOVEMENT STARTING				
954	COMP SOME ELECTRICAL NOISE			05 50 39				FeAr Clear	910s
955	FLAT			06 35 45		0 0	platform	Tung ND 2.0 A-V2	7200s

Spectr. Temp. .... Dome Temp./Hum. ~~55~~ +6°C 55% Transparency Conditions Clearing
GUSTY WINDY 332✓
Focus ....
Spectr. Temp. .... Dome Temp./Hum. +3°C 70%
Tel NORMALIZED on BS 8086 SE of PAIR

Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
7200	1286 -1489				PCS PTS	1800 63°5	400μ Fiber*	6563Å	IA		* 400μ Fiber TO 7×50μ Slit Bundle	
1160s	72-112											
4954s	700-~~3000~~	6"	✓ 5.03	B5V	SK415	4865		6563Å		Telluric Std	X ~ 1.65 9.7 MB CLOUDED OUT	
900s	73-126										LONG PERIODS OFF FIBRE	
7200	1-11 AVE=	5.5-9.3 A COUNTS 3.4-5.5 B									CAP OVER FIBRE Mostly cloudy now	
~~1000~~ 2760	1253-1466										CLEARING UP! WIND DIED DOWN	
612s	60-90										CLEAR MOSTLY	
1380	300- 320-711 -837	4" -920	✓ 7.4 7.7 -1041	G3			TEMP RELAY CLICKED 01:43:45 EST OFF FIBRE FOR SEVERAL MINUTES ~3:30-5				-00 00 57 } coolers 0: +65% hum 00 01 57 }	
801s	200-800									Hdy pgm	STARTING TO SEE TWILIGHT AT START	
	700 A 300 B											
910s	71-108											
7200s	1305-1426										ΔRA -00 00 54 +00 01 54	

33

Date 1992 Oct 17/18 Observers Hdy/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	Comparison Exp.
956	DARK			15 05 11					3600s
957	FLAT			16 06 44			ND=2.0	Tung A=1/2	7200s
958	DARK			18 16 12					4[illegible]s
959	COMP			18 23 55				FeAr Clear	930s
TAG FIT 960	HD 197433	20 38 36	75 14	18 50 22		00 10E			700
TAG FIT 961	11			19 04 35					3875
962	Comp							FeAr Clear	900s
TAG FIT 963	HD 197433				20 42				810s
964	FLAT			20 49 53	~~20 49 53~~	09 E	+183° (Telescope other side of Pier)		
965	Comp			01 12 16				FeAr Clear	670s
TAG FIT 966	HD 197433	20 38 36	+75 14	01 35 57	05 39				14610s
TAG FIT 967	11			05 39 43					600s
968	COMP			06 05 04				FeAr Clear	900s
969	FLAT			06 36 28			ND=1.8	Tung A=1/2	7200s

Spectr. Temp. ..... Dome Temp./Hum. +5.7°C 50% Transparency Conditions ..... PART. cloudy 3.34

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. +1.1°C 70.8% CLAMBDA Tel NORMALIZED westside on BS8023

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
?				PCS	1800/635	400u Fiber	6563Å				
1222-1409											
6-17											
56-105											
600-1300	3"	V 7.4 7.7	G3	TAG 1050-2430					Hdy pgm	Tel East Side	
600-1200 -1495	3"-4"	"	"	1200-2630					"	NRA-000035 some cloud 0 Dec 100 01 18 at End	
60-100											
398-881											
1330-1450										All Fit to Floppy = Perseus	
55-103											
1200-1100 400-800	3"-4"	V 7.4 -7.7	G3				12.6 MB		Hdy pgm	A BIT HAZY AT TIMES	
200-500										DAWN	
47-81											
1327-1448											

23 pg #1

Date 1992 Oct 19/20 Observers J.Z.K./T.n./...Bl.n.g.t START too

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	Comparison Exp.
CC10538 539	Focus Test	Comp / Stellar Hartman			1930	Oct 19/20	+3230	Feltr Clear	20/2
540	Comp							Feltr Clear	60s
541	HD3712	00 4005	+56 2947	22 22 13		0039E			50s
542	Comp.							Feltr Clear	60s
543	BIAS (4).							"	"
544	Comp								60sec
545	Nova Cyg 92*	202743	+521739	22 40 10		352 W			252s
546	" *			22 45 32.		3			1552s
547.	Comp.							Fe Ar. Clear	60s
548 549 550	Flats x3							Tung Ap=1/2	7sec
551	BIAS(4)								
552	Nova Cyg 92	202743	+521739	23 35 08					1124
553	Comp							Fe Ar Clear	60s
554	Comp							"	"
555	HD20418	03 12 00	+49 44 00	00 10 51					565

Spectr. Temp. ..... Dome Temp./Hum. +2°C ...60% Transparency Conditions ... Clearing slowly ... 336

Focus ... 6.82 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... CLAIMBDA 90 CGAIN CCDT -> -100°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
+2°C	set 6.82			CASS CCD	1800 G=6020	250μ dekker	6563Å	3c: 4c:	Focus	vvsl Red for stellar	
[*Note	FeNe saturatn @ ≈ 22 EST]							5c:	480 0	50 10244 1 CCD PNT ↓	
	next page explained							6c:	Std vel	(Also Tel NORM stdR)	
								7c:			
								1c:		Dome T=0°C	
								8c:			
60		EV=94		Hα Emmission	[FeNe Saturatn seen]			9ci		MAX 500 ADU	
352.								10ci		1700 ADU	
								13ci		12000 ADU.	
										-00.5° Dome T	
543.	3"-5"							14ci		3000 ADU MAX.	
								15ci			
								16ci			
20 000	3"									7000 ADU MAX.	

d pg#2

Date 1992 Oct 19/20 Observers J.z. K/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	Comparison Exp.
556.	Comp.							Fe Ar Clear	
557	Bias (4).								
558 .563	Flats x 6.								
CC10564	DARK *	shows weak FeNe		00 50 54		0 0	platform		1200s
CC10565 66	Focus Test	Comp/	Stellar Hartmann		01 ~~46~~	0 0	+28°		

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

Spectr. Temp. ..... Dome Temp./Hum. -1.5°C 65% Transparency Conditions Clear 338..

Focus 6.82 ..... starting to cloud in a bit

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
							6563R				
								Mci	~~20ci~~	CCD T = -102°C	
								2ci		Note presence of weak FeNe saturation	
	Set	6.82	T = -10°C					3ci 4ci	470 0 10	1024 20 1 CCDFMT	Right On
					* @ ~ 22EST, accidental FeNe, 60secs, Clear Aperture						
					caused saturation/streaking effect, visible only in weak						
					continuum or DARKs. Decreasing in Time.						
					All To Perseus & WORM						

337 pg #1

Date ... Oct 22/23 -92 Observers ... Tn/Fbr [Rm]
Thur-Fri

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	Comparison Exp
cc10567 68	Focus				1750	030W	+3547		
569	Bias (4)								
570	Comp							FeAr clear	60s
571	HD177724	190049	+13 43	180844					
572	Comp							FeAr clear	60s
573	"							"	"
574	Nova Cyg 92	202743	+52 17 39	18 2416		0034W			1130
575	Comp							FeAr clear	60s
576	Nova Cyg 92	202743	+52 17 39	18 4859		0025W			1044
577	Comp							FeAr clear	60s
578	Bills (4)								
579	Comp							FeAr clear	60s
580	HD177724	190049	+13 43	19 2812					115
581	Comp							FeAr clear	60s
582 → 584	FLATS x3							Tung Apl/2	7 sec

Spectr. Ter
Focus ....
Spectr. Ter

Exp. Mtr.
27K
619
30
2K

Spectr. Temp. ..... Dome Temp./Hum. 5.1°C / 83.1% (1744) Transparency Conditions ..... CLEAR 3.40

Focus ..... 6.82 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

480 0 50 1024 4 1 ccd fmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	T=+5.0°C			CASS CCD	1800 l/mm G=6020	250μ decker	6563	3ci 4ci		Stellar .2 pixels Rad.	
								1ci			
								5ci			
27 K	Fine	V 2099	AOL nm					6ci	Telluric Std	14 K max	
								7ci			
	2"							8ci			
619	2"	V ≈ 9.5						9ci	Nova Pgm	max 3700 104	
								10ci			
630								11ci	Nova pgm		
								12ci			
								1ci	(Accident)	Dome T=+4.4°C	
					* G=6020			13ci	* Note, Grating moved, Then Returned to 6020		
20 K		V 2099	AOL nm					14ci	Telluric Std	Air mass 1.33	
								15ci		(12 pixel shift	
								16ci	Note Again, That Grating had moved and was moved back to 6020 pos'n		

341 pg #2

Date 1992 Oct 22/23. Observers [Rm] ... Fbr ... ITy .....

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	Comparison Exp.
CC10585	Comp							FeAr Clear	90s
586	HD177724	19 00 49	+13 43	19 41 09		02 27 W			
587	Comp			[CC10588 Comp Before 588 HD203156]				FeAr Clear	90s 60s
589	HD203156	21 15 23	+ 37 49	19 53 47		00 32 W			
590	Comp							FeAr Clear	60s
591	Comp							"	"
592	HD198726	20 47 13	+27 52 30	20 10 15					357s
593	Comp							FeAr Clear	60s
594	HD198726	20 47 13	+ 27 52 30	20 20 49					618
595	Comp							FeAr Clear	60s
596	Bias (4)								
597	Comp							FeAr Clear	60s
CC10598	HD214975	22 36 55	+ 56 18	20 43 55		0 32 W			234s
599	Comp							FeAr Clear	60s
600	Comp							"	"
601	HD3765	00 35 18	39 40	21 38 47		01 03 E			57

Spectr. Temp. ..... Dome Temp./Hum. +39°C ... 85.5% Transparency Conditions .. 5/. Hazy ..... 34.V..

Focus .... 6.82 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

480 0 50 1024 41 ccd fmt

CCDT = -100.5°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=5430	250μ decker	6450Å	17			
25K	Fine	V 2.99	A0 V nm					18	Telluric Std		
								19			
7100	<2"	V 5.8-5.9	F2					20	Rm Pgm	T = 3.8°C [5K ADU max] Hum = 86.3% (1953)	
								22			
								23			
1100s		V 5.75	G0 Ib					24c:	Rm pgm	Radout early due to loss of image	
								25c:			
10000	<2"							26c:	Rm pgm		
										Dome Starting To Drip Water	
								27c:			
2405	<2"	V 8.40	G0 Ib					28c:	Rm Pgm	7700 Sum Ava Above Bkg.	
								30c:			
2450		V 2.33	K0 IIIa					30a			
								31c:	Std. Vel.	8000 Sum Avg Above Bkgnd.	

343 Pg#3

Date 1992 Oct 22/23 Observers E.R.M. Fbr/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	Comparison Exp.
CC10602	Comp							Fe Ar Clear	60s
603	Comp							"	"
604	HD222368	23 34 48	05 05	21 57 52					175s
605	Comp							Fe Ar Clear	60s
606-611	FLAT x 6					00 16W		Tung A=1/2	6s
612.	~~FLAT~~ BIAS(4)								

Spectr. Ter
Focus....
Spectr. Ter

Exp. Mtr.

12 KX

Note

Spectr. Temp. ..... Dome Temp./Hum. 3.3°C/88.5% Transparency Conditions ..... HAZE/FOG ..... 34.5.

Focus ..... 6.82 .....

Spectr. Temp. ..... Dome Temp./Hum. +3.3°C 90%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS - CCD	1800 a = 5930	250μ	λ = 6450	7ci			
								8ci			
F2 KX	<	V 4.13	F7 I					9ci	STD. VEL.		
								10ci			
								11ci		11K ADU MAX	
Note ✓ CCDFMT in Headers of CC10598 Thru CC10601 ARE incorrect. To late to edit WORM Backup done. ✓ Edited for CDRoms APR 30/96 TM ✓ All to Perseus & WORM										Dome Dripping Heavily - Close -	

Comparison Filter	Exp.
	60s
	4
	175s
	60s
	6s

344 Sun, Mon

Date Oct 25/26 92 Observers Hlw / Fbr

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	Comparison Exp.
cc10613	Bias (4)								
614	Comp							FeNe clear	20 sec
615	HD223094	23 41 30	28 09 00	21:32:05		-0:05 E	+29°		395s
616	Comp							FeNe clear	20 sec
617	Comp							"	"
618	HD199305	20 51 16	61 47 07	22:03:50		3:39 W	+62		1500
619	Comp							FeNe clear	20 sec
620	Bias (4)								
621	Comp							"	"
622	BD+57 2735	23 19 54	57 20 00	22:50:24			+58		3600
623	Comp							"	20s
624	Bias (4)								
625	Comp							"	20s
626	AC+71 532	00 55 26	+71 0849	00 39 23		2:24 W	+72		2648
627	Comp.							"	20s
628 - 633	FLATx6							Twilight clear	7s.

Spectr. Ten
Focus
Spectr. Ten
Exp. Mtr.
944
22k
738
210

Spectr. Temp. ..... Dome Temp./Hum. 1.9°C/65.5% Transparency Conditions Clear, some scattered cloud.

Focus 6.82

Spectr. Temp. ..... Dome Temp./Hum. ..... Fmt: 480 0 50 1024 4 1 346

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	G=4990	310μ	cλ=5140Å	1 ci			
								3			
2195		7.45	K5II					4	Std Vel.		
								3			
								3			
1944		8.5	M2II					5	H/W Program,		
22k								3			
								1			
								3			
1488		10.05	M2e					6	H/W Prg.		
								3			
								1			
								3			
1260		10.06	dM4e					7	H/W Prg.		

342

Date ... Oct 26/27 92 ... Observers .... Fbr .....

MON - TUE

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	Comparison Exp.	Exp. Mtr.
cc10634	BIAS (4)									
635	COMP							FBr Clear	60s	
636	HD177724	190049	13 43	20 08 27					141s	26K
637	HD177724	"	"	20 11 41		0315W			154s	26K
638	COMP							FBr Clear	60s	
639	FLATS							TUNE $\Delta = \frac{1}{2}$	7s.	
639	BIAS									
640-645	FLATS									

Spectr. Temp. ..... Dome Temp./Hum. 5.2°C/82.2% (1947) Transparency Conditions ... PTLY. CLOUDY / HAZE ....

Focus ..... 6.82 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

348

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 a=6020	250 μ	λ=6563Å				
60s											
26K		V 2.99	AO II						TELLURIC	TRACKING (GUIDING)	
26K		"							TELLURIC	NO GUIDING	
										HUGE CLOUD - LONG	
										WAIT BEFORE NOVA.	
										MORE CLOUD, HUMIDITY > 85%	

349 #1

Date Oct 27/28-92 Observers ...Fbr (Tty backup)

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	Comparison Exp.
cc10646	BIAS (4)								
647	COMP							FeBr Cleo	60s
648	HD177724	19 00 49	13 43	20 23 45		3 31 W			187s
649	HD177724	19 00 49	13 43	20 28 03		3 33 W			150s
650	COMP							FeBr Cleo	60s
651	COMP							FeBr Cleo	60s
652	NOVA CYG 92	20 27 43	52 17 39	21 24 46		3 13 W			598
	~~XXXXXX~~ COMPS NOT		POSSIBLE!					FeBr Cleo	60s
653	NOVA CYG 92	20 27 43	52 17 39	21 41 14					687
654	NOVA CYG 92	20 27 43	52 17 39	21 57 33		3 50 W			829
655	COMP							FeBr Cleo	60s
656	NOVA CYG 92	20 27 43	52 17 39	22 17 45					1042
657	COMP							FeBr Cleo	60s
658	BIAS (4)								
659	NOVA CYG 92	20 27 43	52 17 39	22 41 07 ~~XXXXXXX~~		4 37 W			957
660	NOVA CYG 92	"	"	23 02 30		4 37 W		956	957

Spectr. Temp. ..... Dome Temp./Hum. 4.6°C/62.2% Transparency Conditions ..... CLEAR 350

Focus ..... 6.82 ..... (2021)

Spectr. Temp. ..... Dome Temp./Hum. .....

480 0 50 1024 41 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 α=6020	250 μ	λ=6563Å			ENCODERS WAY OFF	
										∴ LATE START	
25K	5"(?)	V 2.99	AOV							TERRIBLE SEEING	
26K	"	"	"							NO TRACKING (GUIDING).	
										LONG WAIT TO EXPOSURE	
400		V ≈9.5							NOVA PAM.	PROB. WITH RACK. WILL	
										NOT GO TO 31750 pos'n	
550									NOVA PAM.		
550									NOVA PAM.		
560									NOVA PAM		
										RACK WORKING OK NOW.	
588									NOVA PAM		
~~598777~~									NOVA PAM		

#2

Date ... Oct 27/28 92 ... Observers .. FDr / TLy (backup)

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	Comparison Exp.
661	Comp								
662	NovaCyg92	20 27 43	52 17 39	23 19 21					10 11
663	Comp							FDr Clear	60s
664	NovaCyg92			23 41 40					9 47
665	Comp							FDr Clear	60s
666	Bias (4)								
667 670	Flat x4							U,N,G n=1/2	7s
671	Comp							FDr Clear	60s
672	HD12929	02 01 30	22 59	00 15 31					38s
673	"	"	"	00 16 37					54s
		Pack Unable To Get To Comp. Position							

Spectr. Ter
Focus ....
Spectr. Ter

Exp. Mtr.
550
550
20K
2K

Spectr. Temp. ..... Dome Temp./Hum. 3.8°C/64% Transparency Conditions ... PTLY. CLOUDY. .....
(2241)

Focus ..... 6.80 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

352

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 G=6020	250 μ	λ=6563Å				
550	5"							7	NOVA PAM		
550											
20K		2.00	K2 III						STD. VEL.		
22K											

All to Rosemead WORM

Pg #1

Date 1992 Oct 28/29 Observers [illegible]

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	Comparison Exp.
CE05257 5258	HARTMAN FOCUS	Test	IN BOARD/OUT BOARD		≈1805	≈03	≈+30°	ThAr	10/10
5259	BIAS(4)				20 02				
5260	Comp				20 2840			ThAr	4s
5261	HD198084	20 42 54	+57 13 00	20 32 46	20 59 16	0227W			1591
5262	Comp							ThAr	4s
5263	Comp							"	"
5264	HD202109	21 08 42	+29 49	21 08 55		0223W			800
5265	Comp							ThAr	4s
5266	Comp	21 26 18	-06 01	~~21 28 42~~				"	4s
5267	HD204867	21 26 18	-06 01	21 28 17					1200
5268	Comp							ThAr	4s
5269	Comp							"	"
5270	HD8990	01 22 36	88 46	22 02 27		0215E			547
5271	Comp							ThAr	4s
5272	Comp							ThAr	4s
5273	HD34029	05 09 10	45 54	22 21 35		0439E			1025

Spectr. Temp. ..... Dome Temp./Hum. 7.7°C 66% H Transparency Conditions ... PART - incr cloudy .....

Focus ... 12.46 ..... Then Clearing again 354

Spectr. Temp. ..... Dome Temp./Hum. .....

Echelle CLAMBDA 90C GAIN CCDT => -100°C

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	✱Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
J dome = +7.6C				echelle CCD	1893 W = 60u H = 400u		4481 A	3ci 4ci	X grating .4653	½ .2 pixels OUTBOARD vvsl Red shifted	
										Noise pattern seen VERTICAL stripes	
								1ci		Dome T = +6.8°C	
								3ci	Tel encoders	Normalized to BS8585	
1100	<2"	V 4.5	F8 IV	[F8 IV-V G0 IV]				4ci	MK std	3k Sum Avg of 6 cols @ 4481 A	
								5ci			
1600	2"	V 3.4	G8 II					~~6ci~~	MK std	Tel Focus = 2241	
1343	3"	V 2.91	G0 I					6ci	STD. VEL.		
								5ci			
2500	2"	V 2	F								
3040		V 0.08	G6: III + G2: III					4ci	KK pgm		

pg #2

Date 1992 Oct 28/29 Observers [illegible] / Tn / Fkr

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	Comparison Ex
ce05274	HD 34029	05 09 18	+45 54	22 24 15					1635
5275	Comp							ThAr	45
5276	Comp							"	"
	~~H2H20~~	~~03 19 24~~	~~08 41~~	~~22 43 47~~		NO COUNTS - CLOUD			
5277	Flat								
5278	Flat							Tung	20s
5279	Flat	Set Leigh = 600μ.		10K ADUMAX		0 0	+20°	~~[illegible]~~	"
5280	Flat								"
5281	Flat				23 EST				"
5282	Bias(4)		Dome T = +6.0°C	H = 75%					

5500

5500

4ci