

311

Intensified Reticon

TO CAM1

Spectrograph ECHELLE

Log Sheet

RAW/RET 10

Grating 300L

Observer RPS

Telescope Wyeth

Date 3/1-2/86

Disk ORO 917

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1	Th-Ar		↓	90s	
		2	G15319	φ8:40:42	φ9:44:18	8m	9.7 M-star
		3	Th-Ar		↑	90s	
		4	Th-Ar		↓	90s	
		5	G15334	φ9:φ4:19	-φ8:36:24	7m	9.5 M-star
		6	Th-Ar		↑	90s	
		7	Th-Ar		↓	90s	
		8	H92588	φ:38:52	-φ1:28:42	2m	6.3 IAU standard
		9	Th-Ar		↑	90s	
		10	Th-Ar		↓	90s	
		11	(1)	11:φ5:φ6	24:14:φ6	2m	Asteroid
		12	Th-Ar		↑	90s	
		13	Th-Ar		↓	90s	
		14	+222411	11:48:59	22:23:36	12m	9.3/56 HALOS
		15	Th-Ar		↑	90s	
		16	Th-Ar		↓	90s	↓
		17	G123-9	12:φ8:25	44:16:54	8m	10.5/2φ
		18	Th-Ar		↑	90s	
		19	Th-Ar		↓	90s	
		20	G121-56	12:φ3:4φ	27:46:36	4m	10.0/15
		21	Th-Ar		↑	90s	
		22	Th-Ar		↓	90s	
		23	H97916	11:13:19	φ2:21:36	13m	9.3/100
		24	Th-Ar		↑	90s	
		25	Th-Ar		↓	90s	
		26	G10-26	11:26:25	φ1:22:12	6m	9.8/15
		27	Th-Ar		↑	90s	
		28	Th-Ar		↓	90s	
		29	-φ12582	11:51:φ4	-φ1:43:45	8m	9.7/30
		30	Th-Ar		↑	90s	
		31	/				
		32	/				

3/1
TO CAM

Intensified Reticon

Spectrograph ECHELLE

Log Sheet

RAW RET 10

Grating 300L

Observer RPS

Telescope Wyeth

Date 3/1-2/86

Disk ORO 918

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		Th-Ar			↓	90s	
	G59-32		12:37:37	21:05:12		9m	9.0/60 HALOS
		Th-Ar			↑	90s	
		Th-Ar			↓	90s	↓
	G60-47		12:52:44	08:06:12		9m	9.9/30
		Th-Ar			↑	90s	
		Th-Ar			↓	90s	SA-57
	W11450		13:08:51	31:05:32		17m	7.0/100 ↓
		Th-Ar			↑	90s	
	W11449		13:08:51	31:05:34		9m	9.3/15
		Th-Ar			↑	90s	
		Th-Ar			↓	90s	
	W12971		13:11:12	30:28:28		13m	11.3/15
		Th-Ar			↑	90s	
	W12966		13:11:04	30:28:38		20m	11.9/15
		Th-Ar			↑	90s	
	W12966		"	"		5m	
		Th-Ar			↑	90s	
		Th-Ar			↓	90s	
	W13784		13:11:20	30:04:58		2m	7.2/15
		Th-Ar			↑	90s	
	W13781		13:11:23	30:03:52		7m	10.7/15
		Th-Ar			↑	90s	
	W13777		13:11:19	30:02:42		2 1/2 m	8.5/20
		Th-Ar			↑	90s	
		Th-Ar			↓	90s	
	W21939		13:04:52	31:03:24		12m	10.4/50
		Th-Ar			↑	90s	
		Th-Ar			↓	90s	
	W22389		13:07:07	30:42:04		10m	9.0/100
		Th-Ar			↑	90s	
	/						

Intensified Reticon

TO CAM 3/2
RAW/RET 10

Spectrograph ECHELLE

Log Sheet

Grating 300 L

Observer RPS

Telescope Wyeth

Date 3/1-2/86

Disk ORO 919

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90s	
	N31281	2	12:57:14	31:17:23		9m	10.7/20 Seeing 8-10
		3			↑	90s	
		4			↓	90s	
	N40903	5	13:09:07	29:08:01		9m	8.8/100
		6			↑	90s	
		7			↓	90s	
	G14-54	8	13:25:44	00:54:30		2m	7.4/20 HALOS
		9			↑	90s	
		10			↓	90s	
	H182890	11	14:29:53	17:38:12		7m	9.8/30
		12			↑	90s	
		13			↓	90s	
	G141-47	14	18:50:55	10:33:48		15m	10.5/30 Sky coming up fast
		15			↑	90s	
		16			↓	90s	
	H136202	17	15:16:45	01:57:12		2m	IAU standard
		18			↑	90s	
		19			↓	90s	
	SKY-DWN	20	slow			5m	
		21			↑	90s	
	INCA10	22				120	
	"	23				"	
	"	24				"	
	"	25				"	
3/2-3/86	INCA10	26				80	
	THAR	27			↓	90s	
	SKY EVE	28				5m	
	TH-AR	29			↑	90s	
	TH-AR	30			↓	90s	
	S129112	31	02 12 04	-01 26		4m	
	TH-AR	32			↑	90s	

3 Mar 86

Spectrograph ECHELLE Intensified Reticon TO CAM
 Grating 3000 Log Sheet RAWRET 10
 Telescope SH Date 3/2-3/76 Observer TM
 Disk ORD 920

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1	Th-AR		↓	90s	5127A 200
		2	g 37-26	03:05:28	26:09:06	4"	10/3.1 HALO
		3	Th-AR		↑	90s	
		4	Th-AR		↓		
		5	g 95-57A	03:43:36	41:17:25		HALO
		6	Th-AR		↓		
		7	g 95-57B	03:43:37	41:17:25	5"	10/3.8 HALO
		8	Th-AR		↑		
		9	Th-AR		↓		
		10	S 130860	03:56:24	-05:36	1"	100/6.0 M STARS
		11	Th-AR		↓		
		12	g/s 156	03:56:09	-06:58	5"	25/7.0
		13	Th-AR		↑		
		14	Th-AR		↓		
		15	g/s 154	03:43:19	26:03:42	5"	20/9.6 M STARS
		16	Th-AR		↓		
		17	S 076226	03:45:07	24:50:08	2"	250/6.8 M STARS
		18	Th-AR		↑		
		19	Th-AR		↓		
		20	S 076388	04:20:44	22:51	1"	60/7.2 M STARS
		21	Th-AR		↓		
		22	g/s 169	04:26:02	21:48	3"	45/8.3 M STARS
		23	Th-AR		↑		
		24	Th-AR		↓		
		25	g/s 176	04:40:00	18:52	7"	21/9.9
		26	Th-AR		↑		
		27	Th-AR		↓		
		28	G 89-14	07:19:48	+08:55	10"	55/10.4 HALO No finding chart. Is that the right star?
		29	Th-AR		↑		
		30					
		31					
		32					

3 Mar 86

Spectrograph ECHELLE Intensified Reticon TO CAM
 Log Sheet RAW/RET 10
 Grating _____ Observer MZEIT
 Telescope Wyett Date 2/3 MAR 86 Disk ORO 921

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓		
		2	G87-47	07:32:15 +36:03:54		8 ^M	10.34/30 HALO TL
		3	Th-Ar		↑		
		4	Th-Ar		↓		
		5	Gk 268			18 ^M	11.5/18 +1 STARS
		6	Th-Ar		↑		
		7	Th-Ar		↓		
		8	G43-3	09:46:12 +13:59:13		3 ^M	75/18.3 HALO
		9	Th-Ar		↑		
		10	Th-Ar		↓		
		11	W11450	13:08:51 +31:05		10 ^M	80/14 SAS7
		12	Th-Ar		↑		
		13	W11449	13:08:50 31:05:34	↑	10 ^M	20/10.5(?) SAS7
		14	Th-Ar		↑		
		15	Th-Ar		↓		
		16	W11233	13:09:53 30:14:20		2 ^M	30/8.4 SAS7
		17	Th-Ar		↑		
		18	Th-Ar		↓		
		19	W41153	13:08:27 28:55:13		9 ^M	40/10.1 SAS7
		20	Th-Ar		↑		
		21	W50670	13:04:27 28:52:05		11 ^M	20/10.6 SAS7
		22	Th-Ar		↑		
		23	W50671	13:04:27.4 28:51:48		8 ^M	1/10.5 SAS7
		24	Th-Ar		↑		
		25	W50769	13:05:45 28:03:20		4 ^M	20/10.1 SAS7
		26	Th-Ar		↑		
		27	W61774	13:01:15 28:43:08		8 ^M	100/9.1 SAS7
		28	Th-Ar		↑		
		29					
		30					
		31					
		32					

3 Mar 86

Intensified Reticon TO CAM
 Spectrograph ECHELLE Log Sheet RAWRET 10
 Grating _____ Observer MAZEIT
 Telescope _____ Date 2/3 MAR 86 Disk DR0 922

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓		
		2	Gls 338A	9:10:57	52:53	3 ^M	70/7.6 M STARS
		3	Th-Ar		↑		
		4	Gls 338B	9:10:54	52:53	2 ^M	50/7.7 M STARS
		5	Th-Ar		↑		
		6	Th-Ar		↓		
		7	043285	10:16:21	49:38	1 ^M	150/6.1 M STARS
		8	Th-Ar		↑		
		9	Gls 380	10:09:3		1 ^M	90/6.6 M STARS
		10	Th-Ar		↑		
		11	Th-Ar		↓		
		12	S043396	10:32:32	+45:57	2 ^M	120/7.5 M STARS
		13	Th-Ar		↑		
		14	Gls 397	10:29:25	+45:47	4 ^M	40/8.9 M STARS
		15	Th-Ar		↑		
		16	Th-Ar		↓		
		17	G147-3	11:14:34	29:50:36	3 ^M	30/9.3 HALOS
		18	Th-Ar		↑		
		19	Th-Ar		↓		
		20	059-32	12:37:37	21:05	5 ^M	60/9.0 HALOS
		21	Th-Ar		↑		
		22	Th-Ar		↓		
		23	S04362	11:06:51	-43:28	2 ^M	300/6.0 M STARS
		24	Th-Ar		↑		
		25	Gls 412A	11:02:43	-43:47	4 ^M	45/8.8 M STARS
		26	Th-Ar		↑		
		27	Th-Ar		↓		
		28	S139010	12:49:38	-00:39	2 ^M	50/7.8 M STARS
		29	Th-Ar		↑		
		30	Gls 488	12:48:10	-00:29	4 ^M	18.5 M STARS
		31	Th-Ar		↑		
		32					

3 March 84
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TO CAM

Spectrograph ECHELLE Intensified Reticon
 Log Sheet RAW/RET 10
 Grating 300 Observer MAZEIK
 Telescope Wyett 61" Date 2/3 MAR 86 Disk PRO 924

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓		IGNORF
		2			↓		
		3	G203-29	19:30:32	19:28	10M	200/8.5 ← HALO
		4			↑		(5-10% sky !!)
		5			↓		
		6				4M	
		7			↑		
		8				120	
		9				120	
MAR 3-4		10			↓	90s	5187A 80M SLIT
		11				5 MIN	CLEAR (1285)
		12			↑	90s	
		13			↓	90s	
		14	H26163	04:06:14	19:28:43	2 MIN	(5.5) 1 AU STAND.
		15			↑	90s	
		16			↓	90s	
		17	PMS 72	5 40 49	9 15 47	5m	
		18			↑	90s	
		19			↓	90s	
		20	PMS 78	5 43 47	8 57 40	12m	
		21			↑	90s	
		22			↓	90s	
		23	PMS 19	4 16 24.0	17 07 50	25m	
		24			↑	90s	
		25			↓	90s	
		26	PMS 56	4 28 35.0	16 59 20	30m	
		27			↑	90s	
		28			↓	90s	
		29	67-978	8 48 37.4	11 56 41	3m	
		30			↑	90s	
		31	67-989	8 48 37.5	11 57 25		
		32					

3/3 March 86 *RM*

Spectrograph ECHELLE
 Grating 200
 Telescope Uyck 01
 Intensified Reticon
 Log Sheet
 Date 3/4 Mar 86

TO CAM
RAWRET 10
 Observer Pat Weir
 Disk 000 925

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1	R-Ar		↓	90s	
		2	67-1277	8 48 47.7	12 05 2	5m	
		3	R-Ar		↓	90s	
		4	67-1040	8 48 59.7	12 01 08	10m	Again, a delay in ...
		5	R-Ar		↓	90s	
		6	R-Ar		↓	90s	
		7	67-1084	8 48 42.0	12 05 10	5m	Done coverage again!
		8	R-Ar		↓	90s	
		9	67-1316	8 48 59.7	12 05 01	5m	
		10	R-Ar		↓	90s	
		11	67-1479	8 49 15.9	12 06 23	5m	
		12	R-Ar		↓	90s	
		13	67-1258	8 48 55.2	12 02 41	8m	
		14	R-Ar		↓	90s	
		15	67-1277	8 48 58.5	12 01 26	10m	
		16	R-Ar		↓	90s	
		17	67-978	8 48 33.7	11 56 41	5m	
		18	R-Ar		↓	90s	
		19	67-1259	8 49 01.1	11 57 05	10m	
		20	R-Ar		↓	90s	
		21	67-1572	8 49 34.7	11 53 46	5m	
		22	R-Ar		↓	90s	
		23	67-1010	8 48 58.7	11 59 21	5m	
		24	R-Ar		↓	90s	
		25	67-1054	8 48 56.9	12 02 05	8m	
		26	R-Ar		↓	90s	
		27	67-1074	8 48 28.3	12 04 00	8m	
		28	R-Ar		↓	90s	
		29	67-986	8 48 39.0	11 57 10	50m	
		30	R-Ar		↓	90s	
		31	67-978	8 48 33.7	11 56 41	8m	
		32					

Spectrograph ECHELLE Intensified Reticon
 Log Sheet

TO CAM 3/4
 RAWRET 10

Grating 300C

Observer GS

Telescope Walth 61"

Date 1/11/76

Disk 000 926

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments	
		1			↓	90s		
		2	67-999	8 48 34.6	11 58 21		20 MIN	6187A 80% slit
		3	TH-AR			↑	90s	
		4	67-999	"	"		20 MIN	
		5	TH-AR			↑	90s	
		6	TH-AR			↓	90s	SA 57
		7	W11450	13:08:51	31:05:32		8 MIN	7.0/100
		8	TH-AR			↑	90s	
		9	W11449	13:08:50	31:05:34		5 MIN	9.3/15
		10	TH-AR			↑	90s	
		11	TH-AR			↓	90s	
		12	W23301	13:05:35	30:31:41		6 MIN	11.7/30 (THIS EXP. TOO SHORT)
		13	TH-AR			↑	90s	ADD
		14	W23301	"	"		8 MIN	" THIS
		15	TH-AR			↑	90s	
		16	W33433	12:59:37	30:20:03		11 MIN	11.4/30
		17	TH-AR			↑	90s	
		18	W33435	12:59:49	30:18:35		4 MIN	11.2/15
		19	TH-AR			↑	90s	
		20	W33436	12:59:48	30:17:44		8 MIN	11.7/20
		21	TH-AR			↑	90s	
		22	W41124	13:08:25	28:48:39		4 MIN	9.7/50
		23	TH-AR			↑	90s	
		24	W41387	13:10:45	28:54:02		8 MIN	10.7/50
		25	TH-AR			↑	90s	
		26	W60957	2:57:37	28:47:31		7 MIN	11.7/15
		27	TH-AR			↑	90s	
		28	W25391	3:02:47	29:31:56		8 MIN	11.4/15
		29	TH-AR			↑	90s	
		30	W25209	3:04:17	29:31:34		5 MIN	11.3/15
		31	TH-AR			↑	90s	
		32						

Spectrograph ECHELLE Intensified Reticon
 Grating 300 Log Sheet
 Telescope 6" WYETH Date MAR 3-4 1986

TO CAM 3/4
 RAWRET 10

Observer GS
 Disk ORO 927

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1	TH-AR		↓	90 ^s	5187A 80μ SLIT SA 57
	W33078	2	12:59:57	30:37:32		6 MIN	7.9/500
		3	TH-AR		⊕	90 ^s	
	W51212	4	13:04:36	28:43:45		5 MIN	11.2/15
		5	TH-AR		⊕	90 ^s	
	W51547	6	13:05:44	28:29:08		3 MIN	10.6/20
		7	TH-AR		↑	90 ^s	
		8	TH-AR		↓	90 ^s	
	W52091	9	13:04:07	28:20:29		6 MIN	9.3/100
		10	TH-AR		⊕	90 ^s	
	W52193	11	13:03:03	28:09:49		10 MIN	11.0/50
		12	TH-AR		⊕	90 ^s	
	W52245	13	13:03:56	27:58:26		7 MIN	11.5/20
		14	TH-AR		↑	90 ^s	
		15	TH-AR		↓	90 ^s	HALUS
	G59-32	16	2:37:37	21:05:12		4 MIN	9.0/60
		17	TH-AR		↑	90 ^s	
		18	TH-AR		↓	90 ^s	
	G180-56	19	16:37:47	34:22:30		5 MIN	11.0/20
		20	TH-AR		↑	90 ^s	
		21	TH-AR		↓	90 ^s	
	G227-37	22	18:34:48	63:39:18		2 MIN	8.0/20
		23	TH-AR		↑	90 ^s	
		24	TH-AR		↓	90 ^s	
	G230-45	25	20:38:54	54:02:18		10 MIN	11.4/20
		26	TH-AR		↑	90 ^s	
		27	TH-AR		↓	90 ^s	6563A 80μ SLIT (H-alpha)
	FKCOM	28	3:29:25	4:29:25		10 MIN	8.2/
		29	TH-AR		↑	90 ^s	
		30					
		31					
		32					

Intensified Reticon
 Spectrograph ECHELLE
 Grating 300l
 Telescope 61" WYETH

TO CAM 3/4
 RAW RET 10

Log Sheet
 Observer GS
 Date MAR 3-4 1986
 Disk ORO 928

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
	1	TH-AR			↓	90°	6563A 80μ H ALPHA
	2	V CUEN	13:17:17	45:47:22		4 min	6.5/500
	3	TH-AR			↑	90°	
	4	TH-AR			↓	90°	5187A 80μ SLIT HALOS
	5	G178-56	14:53:12	43:13:42		9 min	11.9/15
	6	TH-AR			↑	90°	
	7	TH-AR			↓	90°	
	8	G209-35	20:31:05	41:43:24		2 min	7.0/30
	9	TH-AR			↑	90°	
	10	TH-AR			↓	90°	
	11	G210-46	20:58:01	40:03:42		2 min	6.5/300
	12	TH-AR			↑	90°	
	13	TH-AR			↓	90°	
	14	H182502	19:22:35	11:50:10		2 min	1 AU STANDARD STAR
	15	TH-AR			↑	90°	
	16	TH-AR			↓	90°	
	17	SKY DAWN				4 min	
	18	TH-AR			↑	90°	
	19	INCANDS				120 min	
	20	INCAND				120 min	
	21	INCAND				62 min	
MAR 4/5	22	TH-AR			↓	90°	5187A 80μ SLIT
	23	SKY EVE				5 min	(1755) THIN CURR.
	24	TH-AR			↑	90°	
	25	TH-AR			↓	90°	
	26	H26162	04:06:14	19:28:43		3 min	1 AU STANDARD
	27	TH-AR			↑	90°	
	28	TH-AR			↓	90°	
	29	(2)	05:52:32	-14:16:19		5 min	8.6/ ASTEROID STANDARD
	30	TH-AR			↑	90°	
	31						
	32						

Spectrograph ECHELLE Intensified Reticon
 Log Sheet
 Grating 300
 Telescope 61" WYETH Date MAR 4-5 1986

TO CAM 3/5
RAW RET 10

Observer GS/num
 Disk ORO 929

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90 ^s	5187A 80μ SLIT
		2	L 081	4 32 41	13 08	20 ^m	HYADES
		3			↑	90 ^s	
		4			↓	90 ^s	
		5	(2)	5 52 35	-14 16	5 ^m	
		6			↑	90 ^s	
		7			↓	90 ^s	
		8	U 077	4 17 55	48 13	5 ^m	
		9			↑	90 ^s	
		10			↓	90 ^s	
		11	U 082	4 33 44	52 47	3 ^m	
		12			↑	90 ^s	
		13			↓	90 ^s	
		14	U 088	4 55 00	49 46	7 ^m	
		15			↑	90 ^s	
		16			↓	90 ^s	
		17	U 094	5 12 59	45 57	2 ^m	NO = 2 FILTER (m = 0.2)
		18			↑↓	90 ^s	
		19	U 095	5 13 42	45 48	10 ^m	
		20			↑	90 ^s	
		21			↓	90 ^s	
		22	U 113	6 08 28	-21 51	4 ^m	
		23			↑	90 ^s	
		24			↓	90 ^s	
		25	U 115	6 16 03	-13 51	14 ^m	
		26			↑	90 ^s	
		27			↓	90 ^s	
		28	U 109	5 50 34	-6 00	11 ^m	
		29			↑	90 ^s	
		30			↓	90 ^s	
		31	U 126	6 56 07	-12 55	7 ^m	
		32			↑	90 ^s	

Intensified Reticon

TO CAM 3/6

Spectrograph ECHELLE

Log Sheet

RAW RET 10

Grating 300/300L

Observer ALM

Telescope CH

Date 3/4-5/86

Disk ORO 930

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1				90s	5177A 80V
		2	W128	7 05 46 -09 53		4 1/2 m	
		3			↓	90s	
		4	W129	7 05 48 -09 52		20 m	
		5			↑	90s	
		6			↓	90s	
		7	W127	7 28 18 14 43		3 m	
		8			↑	90s	
		9			↓	90s	
		10	W155	8 20 32 22 02		5 m	ISS AND ISI? CANT SHARPEN
		11			↑	90s	
		12			↓	90s	
		13	W173	7 55 46 26 44		4 m	
		14			↑	90s	
		15			↓	90s	
		16	W174	7 58 31 15 28		5 m	
		17			↑	90s	
		18	W175	7 58 31 15 28		5 1/2 m	
		19			↑	90s	
		20			↓	90s	
		21	W1450	13 08 51 31 06		8 m	
		22			↑	90s	
		23	W1449	13 08 51 31 06		4 1/2 m	CLOSED BY CAMS
		24			↑	90s	
		25				120 m	
		26				120	
		27				120	
		28				120	
		29					
		30					
		31					
		32					

Intensified Reticon
TO CAM 276

Spectrograph ECHELLE Log Sheet RAW/RET 10

Grating 300L Observer GS

Telescope 61" WYETH Date MAR 5-6 1986 Disk 020 931

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			90° ↓	90°	5187 A. 50 μSLIT
		2			90° ↓	5 min	1718 (HY CLOS)
		3			90° ↑		
		4			90° ↓		
		5	H26162	04:06:14 19:28:43		4 min	5.5/ 1AU STANDARD (HY CLOS)
		6			90° ↑		
		7			90° ↓		
		8	H0283572	418 52.5 24 11 07		25m	PM3 candidates
		9			90° ↑		
		10			90° ↓		
		11	S94002	4 30 39.0 17 54 46		4m	
		12			90° ↑		
		13			90° ↓		
		14	Tau 1	43136.0 24 54 48		15m	
		15			90° ↑		
		16			90° ↓		
		17	67-978	8 48 33.4 11 56 41		4m	
		18			90° ↑		
		19			90° ↓		
		20	67-1138	8 49 31.9 11 55 46		7m	
		21			90° ↑		
		22	67-258	8 46 51.0 12 02 45		4m	
		23			90° ↑		computer crash
		24			90° ↓		
		25	67-1264	8 48 46.2 12 00 15		17'	Double binary resolved
		26			90° ↑		Lost Roll on moving drive??
		27			90° ↓		lost beyond shift
		28	67-999	8 48 38.6 11 58 21		20m	
		29			90° ↑		
		30				20m	
		31			90° ↑		
		32				6m	
		32			90° ↑		

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Intensified Reticon TO CAM
 Spectrograph ECHELLE Log Sheet RAWRET 10
 Grating 300L Observer _____
 Telescope 61" Wyeth Date MW 5-6 1986 Disk ORO 972

Change....	File	ID	1950.0 RA	Dec	L/R +/-	Exposure	Comments
		1			↓	90s	SIRIA 80N
		2	H092779	8 32 27	19 46		3" SALIUMAS GIANTS
		3	TH-AR			↑	10s
		4	TH-AR			↓	90s
		5	H073598	8 36 59	19 43		5" ↓
		6	TH-AR			↑	90s
		7	H093665	8 37 14	20 11		3" ↓
		8	TH-AR			↓	90s
		9	H093910	8 39 30	19 51		2" ↓
		10	TH-AR			↑	90s
		11	H093974	8 38 58	20 03		3" ↓
		12	TH-AR			↑	90s
		13	TH-AR			↓	90s
		14	H082543	9 30 06	02 05		2" ↓
		15	TH-AR			↑	90s
		16	TH-AR			*	90s
		17	V11450	13 08 51	31 06		18" ↓
		18	TH-AR			↑	90s
		19	W11449	13 08 51	31 06		10" ↓
		20	TH-AR			↑	90s
		21	TH-AR			↓	90s
		22	U176	9 04 20	-8 37		5 1/2" SPACE MOTIONS
		23	TH-AR			↑	90s
		24	TH-AR			↓	90s
		25	U184	9:49:36	3:27:25		4" 9.9/
		26	TH-AR			↑	90s
		27	TH-AR			↓	90s
		28	TH-AR U184	10:04:18	03:13:24	1	5 1/2" 9.9/
		29	TH-AR			↑	90s
		30					
		31					
		32					

Intensified Reticon TO CAM 3/6

Spectrograph ECHELLE Log Sheet RAW RET 10

Grating 300L Observer GS

Telescope 61" WYETH Date MAR 5-6 1986 Disk ORU 933

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1	TH-AR		↓	90 ^s	5187A 80μ SLIT
		2	U 196	10:26:23	01:06:24	4 ^{MIN}	9.6/85 SPACE MOTIONS
		3	TH-AR		↑	90 ^s	
		4	TH-AR		↓	90 ^s	
		5	U 207	11:05:53	16:02:36	3 1/2 ^{MIN}	9.8/
		6	TH-AR		↑	90 ^s	
		7	TH-AR		↓	90 ^s	
		8	U 219	11:39:31	26:59:42	7 ^{MIN}	10.7/
		9	TH-AR		↑	90 ^s	
		10	TH-AR		↓	90 ^s	
		11	U 234	12:16:56	28:29:30	6 ^{MIN}	10.6/
		12	TH-AR		↑	90 ^s	
		13	TH-AR		↓	90 ^s	
		14	U 237	12:27:49	1:16:12	2 ^{MIN}	9.1/
		15	TH-AR		↑	90 ^s	
		16	TH-AR		↓	90 ^s	
		17	U 243	12:39:43	26:28:00	3 ^{MIN}	9.3/
		18	TH-AR		↑	90 ^s	
		19	TH-AR		↓	90 ^s	
		20	HD 126868	14:25:37	-02:00:18	2 ^{MIN}	5.0/100 GIANTS
		21	TH-AR		↑	90 ^s	
		22	TH-AR		↓	90 ^s	
		23	HD 141714	15:47:30	26:13:13	3 ^{MIN}	4.6/100 ND 1.0 FILTER
		24	TH-AR		↑	90 ^s	
		25	TH-AR		↓	90 ^s	
		26	HD 154619	17:03:51	10:31:12	2 ^{MIN}	6.4/100
		27	TH-AR		↑	90 ^s	
		28	TH-AR		↓	90 ^s	
		29	HD 156697	17:16:26	06:08:11	6 ^{MIN}	6.3/100 (FAINT LINES)
		30	TH-AR		↑	90 ^s	
		31					
		32					

Intensified Reticon TO CAM 3/6

Spectrograph ECHELLE Log Sheet RAWRET 10

Grating 300L Observer G^s

Telescope 61" WYETH Date MAR 5-6 1986 Disk ORO 934

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90 ^s	5187 A. 80μ SLIT
		2	HD 160365	17:36:40	13:21:20	5 ^{MIN}	6.2/100 GIANTS FAINT LINES
		3			↑	90 ^s	
		4			↓	90 ^s	
		5	G227-37	18:34:48	63:39:18	2 ^{MIN}	8.0/20 HAZO
		6			↑	90 ^s	
		7			↓	90 ^s	
		8	HD 175535	18:51:59	50:38:42	3 1/2 ^{MIN}	4.8/100 1. ND FILTER GIANTS
		9			↑	90 ^s	
		10			↓	90 ^s	
		11	HD 159026	17:29:00	38:55:07	3 ^{MIN}	6.1/100 FAINT LINES
		12			↑	90 ^s	
		13			↓	90 ^s	
		14	HD 164136	17:56:35	30:11:32	2 ^{MIN}	1.4/ 1. ND FILTER
		15			↑	90 ^s	
		16			↓	90 ^s	
		17	HD 161149	17:41:05	14:18:57	5 ^{MIN}	6.1/ FAINT LINES
		18			↑	90 ^s	
		19			↓	90 ^s	
		20	HD 144608	16:04:28	-20:44:06	6 ^{MIN}	4.3/ 1. ND FILTER
		21			↑	90 ^s	
		22			↓	90 ^s	
		23	HD 178449	19:05:32	32:25:18	4 ^{MIN}	5.0/ FAINT LINES
		24			↑	90 ^s	
		25			↓	90 ^s	
		26	HD 186155	19:39:18	45:24:19	4 ^{MIN}	5.0/ FEW LINES
		27			↑	90 ^s	
		28			↓	90 ^s	
		29	HD 197101	20:37:43	55:49:41	4 ^{MIN}	6.5/ FAINT LINES
		30			↑	90 ^s	
		31					
		32					

3/6

TO CAM

Intensified Reticon

Spectrograph ECHELLE

Log Sheet

RAW/RET 10

Grating 300L

Observer GS

Telescope 61" WYETH

Date MAR 5/6 1986

Disk ORU 935

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90 ^s	SIRTA 80μ SLIT
	HD200733A	2	21:02:00	41:25:47		4 MIN	6.2/100 FAINT LINES
	TH-AR	3			↑	90 ^s	
	TH-AR	4			↓	90 ^s	
	U321	5	15:18:55	25:44:18		9 MIN	10.8/15 SPIRE MOTIONS
	TH-AR	6			↕	90 ^s	
	U322	7	15:19:00	25:44:48		2 MIN	8.9/
	TH-AR	8			↑	90 ^s	
	TH-AR	9			↓	90 ^s	
	U360	10	17:02:27	04:59:00		3 MIN	7.9/ TOO MUCH CREEPING PAWN?
	TH-AR	11			↑	90 ^s	
	TH-AR	12			↓	90 ^s	
	SKY DAW	13				5 MIN	
	TH-AR	14			↑	90 ^s	
	INCANDS	15				120 MIN	
	INCANDS	16				120	
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					

Intensified Reticon

TO CAM 3/7

Spectrograph ECHELLE Log Sheet RAW RET 10

Grating 300L Observer _____

Telescope SH Date 3/7-8/86 Disk CRD 936

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90 ^s	5187A 8u
		2				5m	
		3			↑	90 ^s	
		4			↓	90 ^s	
		5	HD 3546	00 35 54 29 02		2m	
		6			↑	90 ^s	
		7			↓	90 ^s	
		8	HD 4957	00 47 12 27 26		8m	
		9			↑	90 ^s	
		10			↓	90 ^s	
		11	HD 6103	01 07 07 19 24		5m	
		12			↑	90 ^s	
		13			↓	90 ^s	
		14	HD 16161	02 32 15 05 23		2m	
		15			↑	90 ^s	
		16			↓	90 ^s	
		17	HD 13174	02 06 34 25 42		4m	
		18			↑	90 ^s	
		19			↓	90 ^s	
		20	HD 24555	03 51 47 -03 06		2 1/2 m	
		21			↑	90 ^s	
		22			↓	90 ^s	
		23	HD 21120	03 22 07 07 51		9m	
		24			↑	90 ^s	
		25			↓	90 ^s	
		26	HD 26722	04 11 13 09 08		3m	
		27			↑	90 ^s	
		28			↓	90 ^s	
		29	HD 27371	04 16 57 15 30		2m	
		30			↑	90 ^s	
		31					
		32					

Intensified Reticon TO CAM 3/8

Spectrograph ECHELLE Log Sheet RAW RET 10

Grating 300L Observer na

Telescope SM Date 3/7-8/75 Disk CRU 937

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments	
		1			↓	90 ^s	704 5187	
		2	HD14479	02 12 51	55 37		90 ^s	
		3	TH-AR			↑	90 ^s	
		4	TH-AR			↓	90 ^s	
		5	HD17474	02 46 19	37 07		13 ^m	STOPPED BY CLOS
		6	TH-AR			↑	90 ^s	
		7	TH-AR			↓	90 ^s	
		8	HD27697	04 20 03	17 26		2 2 ^m	
		9	TH-AR			↑	90 ^s	
		10	TH-AR			↓	90 ^s	
		11	HD28307	04 25 43	15 51		2 ^m	
		12	TH-AR			↑	90 ^s	
		13	TH-AR			↓	90 ^s	
		14	HD28305	04 25 42	17 04		1 ^m	
		15	TH-AR			↑	90 ^s	
		16	TH-AR			↓	90 ^s	6563A 904
		17	HD28305	"	"		2 2 ^m	
		18	TH-AR			↑	90 ^s	
		19	TH-AR			↓	90 ^s	
		20	HD28307	04 25 43	15 51		10 ^m	CLOSED BY CLOS
		21	TH-AR			↑	90 ^s	
		22	TH-AR			↓	90 ^s	
		23	HD57727	07 20 26	25 09		10 ^m	
		24	TH-AR			↑	90 ^s	
		25	TH-AR			↓	90 ^s	
		26	HD27777	08 32 27	17 46		12 ^m	
		27	TH-AR			↑	90 ^s	
		28	HD93598	08 36 59	19 43		12 ^m	
		29	TH-AR			↑	90 ^s	
		30	HD93665	02 37 14	20 11		7 ^m	
		31	TH-AR			↑	90 ^s	
		32						

Intensified Reticon TO CAM 3/8

Spectrograph ECHELLE Log Sheet RAW/RET 10

Grating 300L Observer mm/65

Telescope 61" WYETH Date MAR 7-8 1986 Disk ORO 938

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1	TH-AR		↓	10 ^s	6563 80A GIANTS
		2	HD73710	08 37 30	19 50 53	8 ^m	
		3	TH-AR		↑	10 ^s	
		4	HD73714	08 38 58	20 04	17 ^{MIN}	6.9/450
		5	TH-AR		↑	90 ^s	
		6	TH-AR		↓	90 ^s	6563A 120 μ SLIT
		7	HD8254	09:30 06	02 05 11	9 ^{MIN}	6.1/
		8	TH-AR		↑	90 ^s	
		9	TH-AR		↓	90 ^s	
		10	HD71369	08:26:08	60:53:15	9 ^{MIN}	3.3/500 ND 1.0 FILTER
		11	TH-AR		↑	90 ^s	
		12	TH-AR		↓	90 ^s	5187A 120 μ SLIT
		13	HD71369	08:26:08	60:53:15	4.0 ^{MIN}	3.3/100 ND 1.0 FILTER
		14	TH-AR		↑	90 ^s	
		15	TH-AR		↓	90 ^s	6563A 120 μ SLIT
		16	HD126868	14:25:37	-2:00:18	4 ^{MIN}	5.0/500
		17	TH-AR		↑	90 ^s	
		18	TH-AR		↓	90 ^s	
		19	HD 141714	15:47:30	26:13:13	3 ^{MIN}	4.6/500
		20	TH-AR		↑	90 ^s	
		21	TH-AR		↓	90 ^s	
		22	HD15461	17:03:51	10:31:12	12 ^{MIN}	6.3/500
		23	TH-AR		↑	90 ^s	
		24	TH-AR		↓	90 ^s	
		25	HD15669	17:16:26	06:08:11	11 ^{MIN}	6.3/500 STOPPED CLD ^S WK LINES
		26	TH-AR		↑	90 ^s	
		27	TH-AR		↓	90 ^s	
		28	HD16036	17:36:40	13:21:20	15 ^{MIN}	6.2/ WK LINES
		29	TH-AR		↑	90 ^s	
		30					
		31					
		32					

Intensified Reticon

TO CAMI ³/7

Spectrograph ECHELLE

Log Sheet

RAWRET 10

Grating 300L

Observer GS

Telescope 61" WYETH

Date MAR 7-8 1986 Disk ORO 939

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments	
		1			↓	90 ^s	6563A 120μ SLIT	
		2	HD 161149	17:41:05	14:18:59	↓	19 MIN 6.1/500	GIANTS
		3			↑	90 ^s		
		4			↓	90 ^s		
		5	HD 164136	17:56:35	30:11:32	↓	3 MIN 4.5/500	
		6			↑	90 ^s		
		7			↓	90 ^s		
		8	HD 159026	17:29:00	38:55:07	↓	11 MIN 6.3/500	
		9			↑	90 ^s		
		10			↓	90 ^s		
		11	HD 175539	18:51:59	50:38:42	↓	5 MIN 4.8/500	
		12			↑	90 ^s		
		13			↓	90 ^s		
		14	HD 178449	19:05:32	32:25:18	↓	8 MIN 5.0/500	
		15			↑	90 ^s		
		16			↓	90 ^s		
		17	HD 186155	19:39:18	45:24:19	↓	8 MIN 5.0/500	
		18			↑	90 ^s		
		19			↓	90 ^s		
		20	HD 197101	20:37:43	55:49:41	↓	20 MIN 6.4/500	
		21			↑	90 ^s		
		22		21:02:00	41:25:47	↓	90 ^s 6.2/500	
		23	HD 200723A	21:02:00	41:25:47	↓	18 MIN 6.2/500	
		24			↑	90 ^s		
		25			↓	90 ^s		
		26	HD 144608	16:04:28	-20:44:06	↓	3 MIN 4.5/500	
		27			↑	90 ^s		
		28				120		
		29				120		
		30				120		
		31						
		32						

TO CAM 3/17

Intensified Reticon

Spectrograph ECHELLE Log Sheet RAWRET II

Grating 300L Observer ORO 990

Telescope 61" SH Date MAR 17-18 1986 Disk ORO 990

Change....	File	ID	1950.0 RA	Dec	L/R +/-	Exposure	Comments
		1	TH-AR		↓	90 ^s	5187A 80μ slit
		2	SKY-EVE			5 ^m	MAIN CLDS (1810)
		3	TH-AR		↑	90 ^s	
		4	TH-AR		↓	90 ^s	
		5	H26162	04 06 15	19 29	3 ^m	IAU RV STANDARD
		6	TH-AR		↑	90 ^s	
		7	TH-AR		↓	90 ^s	
		8	(2)	06 09 53	-09 46	5 ^m	ASTEROID STANDARD
		9	TH-AR		↑	90 ^s	
		10	TH-AR		↓	90 ^s	
		11	EG AND	00 41 53	+40 24	3 ^m	
		12	TH-AR		↑	90 ^s	
		13	TH-AR		↓	90 ^s	
		14	AX PER	01 33 06	59 00	16 ^m	CLOSED CLDS
		15	TH-AR		↑	90 ^s	
		16	TH-AR		↓	90 ^s	
		17	UV AUR	05 12 33	32 28	5 ^m	
		18	TH-AR		↑	90 ^s	
		19	TH-AR		↓	120 ^s	6563A ^o 80μ
		20	α ORI	05 52 28	07 24	5 ^m	
		21	TH-AR		↑	120 ^s	
		22	TH-AR		↓	120 ^s	
		23	β ORI	05 12 16	-02 16	5 ^m	CLDS + ND = 1 FILTER
		24	TH-AR		↓	120 ^s	
		25	λ ERI	05 06 45	-08 49	4 ^{1/2} m	
		26	TH-AR		↑	120 ^s	
		27	TH-AR		↓	120 ^s	
		28	ω ORI	05 36 33	04 06	25 ^m	
		29	TH-AR		↑	120 ^s	
		30	TH-AR		↓	90 ^s	5187 80μ
		31	U123	06 52 59	40 09	4 ^m	
		32	TH-AR		↓	90 ^s	

Intensified Reticon

TO CAM 3/18

Spectrograph ECHELLE Log Sheet

Grating 300L Observer Raw Ret 11

Telescope SH 61" Date 3/17-18/86 Disk ORO 941

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90 ^s	5187A 80V
		2	U124	06 52 59	40 10	14 ^h	CLS IN CLDS
		3	TH-AR		↑	90 ^s	
		4	TH-AR		↓	90 ^s	
		5	U119	06 43 24	58 42	9 ^h	
		6	TH-AR		↑	90 ^s	
		7	U121	06 45 27	60 23	3 ^h	
		8	TH-AR		↑	90 ^s	
		9	U122	06 46 50	60 22	4 ^h	
		10	TH-AR		↑	90 ^s	
		11	TH-AR		↓	90 ^s	
		12	U132	07 16 16	32 56	7 ^h	
		13	TH-AR		↑	90 ^s	
		14	TH-AR		↓	90 ^s	
		15	U133	07 29 37	46 15	10 ^h	
		16	TH-AR		↑	90 ^s	
		17	U134	07 19 40	46 11	20 ^h	
		18	TH-AR		↑	90 ^s	
		19	TH-AR		↓	90 ^s	
		20	W11449	13:08:50	31:05:34	10 ^{MIN}	9.3/ 5A 57
		21	TH-AR		↑	90 ^s	
		22	W11450	13:08:51	31:05:32	4 ^{MIN}	7.0/
		23	TH-AR		↑	90 ^s	
		24	TH-AR		↓	90 ^s	
		25	TXC Vorn	12:42:18	37:02:15	7 ^{MIN}	9.0/ SYMBIOTIC INCREASE CLDS
		26	TH-AR		↑	90 ^s	
		27	TH-AR		↓	90 ^s	
		28	U226	11:49:02	34:28:06	4 ^{MIN}	9.6/ SPACE MOTION
		29	TH-AR		↑	90 ^s	
		30					
		31					
		32					

Intensified Reticon TO CAM 3/18

Spectrograph ECHELLE Log Sheet RAW RET 11

Grating 300L Observer CS

Telescope 61" SH Date MAR 17-18 1986 Disk ORO 942

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90°	5187A 80μ SLIT
		2	12:19:23	42:25:18		4 MIN	9.5/ SPACE MOTIONS
		3			↑	90°	
		4			↓	90°	
		5	12:38:36	15:39:24		3 MIN	7.9/ HY CLOS
		6			↑	90°	
		7			↓	90°	
		8	12:58:19	12:38:42		7 MIN	9.8/
		9			↑	90°	
		10			↓	90°	
		11	13:42:39	18:03:42		7 MIN	9.7/ RIGHT STAR? NOT ON TV SCREEN!
		12			↑	90°	
		13			↓	90°	
		14	13:49:44	26:42:30		10 MIN	10.8/
		15			↑	90°	
		16			↓	90°	
		17	14:59:09	16:04:06		3 MIN	9.1/
		18			↑	90°	
		19			↓	90°	
		20	19:23:14	50:08:31		8 MIN	7.0/ SYMBIOTIC
		21			↑	90°	(300 OVERCAST)
		22			↓	90°	
		23				7 MIN	OVERCAST (0530)
		24			↑	90°	
		25				120 MIN	
		26				"	
		27				"	SLIT POS CROSS
		28					MAR 17-18 .25 1.1745
		29					MAR 18-19 .30 1.1775
		30					WHY???
		31					
		32					

Intensified Reticon

TO CAM 3/18

Spectrograph ECHELLE Log Sheet

Grating 300L Observer rum/cs

Telescope 61" 511 Date MAR 18-19 1986 Disk ORO 943

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90°	5187A 80 μ SLIT
		2				5 MIN	CLEAR (1810)
		3			↑	90°	
		4			↓	90°	
		5	H 26162	04:06:14	19:28:43	2 MIN	5.5/ 1 AU STANDARD
		6			↑	90°	
		7			↓	90°	
		8	(2)	06:08:10	-9:25:47	5 MIN	8.8/ ASTEROID
		9			↑	90°	
		10			↓	90°	
		11	U 086	04 40 06	18 37	5 MIN	RIGHT STAR?
		12			↑	90°	
		13			↓	90°	
		14	U 084	04 39 56	18 38	2 MIN	
		15			↑	90°	
		16			↓	90°	
		17	U 089	04 56 59	01 43	8 MIN	
		18			↑	90°	
		19			↓	90°	
		20	U 101	05 25 56	-03 32	2 MIN	
		21			↑	90°	
		22			↓	90°	
		23	U 105	05 33 44	11 18	3 MIN	
		24			↑	90°	
		25			↓	90°	
		26	U 111	06 04 51	04 31	12 MIN	RIGHT STAR ? CLUSTERS
		27			↑	90°	
		28			↓	90°	
		29	U 118	06 38 12	24 00	2 MIN	
		30			↑	90°	
		31					
		32					

Intensified Reticon TO CAM 3/20

Spectrograph ECHELLE Log Sheet RAW RET 11

Grating 300L Observer AG

Telescope SM Date 2/18-19/86 Disk ORD 944

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90 ^s	5127 <u>20A</u>
		2	643-3	09 46 13		3 ^m	
		3			↑	90 ^s	
		4			↓	90 ^s	
		5	G147-36	11 14 34		2 ^m	
		6			↑	90 ^s	
		7			↓	90 ^s	
		8	G59-5	12 10 56		2 ^m	
		9			↑	90 ^s	
		10			↓	90 ^s	
		11	S63020	12 26 38		2 ^m	
		12			↑	90 ^s	
		13			↑	90 ^s	
		14	G60-47	12 52 44		12 ^m	
		15			↑	90 ^s	
		16			↓	90 ^s	
		17	W11450	13 08 51		14 ^s	END IN CLDS
		18			↑	90 ^s	
		19			↓	90 ^s	
		20	W11449	13 08 51		12 ^{1/2}	END IN CLDS
		21			↑	90 ^s	
		22			↓	90 ^s	
		23	W2576	13 02 30		12 ^m	
		24			↓	90 ^s	
		25	N 40903	13 09 07		10 ^{min}	END IN OVERCAST (0000)
		26			↑	90 ^s	
		27				120 ^{min}	
		28				120	
		29				120	
		30				120	
		31				87 ^{min}	
		32					

Intensified Reticon

TO CAM 3/20

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer mm/69

Telescope 61" SH

Date MAR 19-20 1986 Disk ORO 945

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90°	5187A 80μ SLIT
		2				5 MIN	RAINING - BOTH MIRRORS WET
		3			↑	90°	
		4			↓	90°	
		5	G147-36	11 14 34		5 MIN	
		6			↑	90°	
		7			↓	90°	
		8	G14-54	13:25:44		2 MIN	7.4/15
		9			↑	90°	
		10			↓	90°	
		11	G122-51	11:50:06		2 MIN	6.4/15
		12			↑	90°	
		13			↓	90°	
		14	G149-10	12:46:08		4 MIN	8.8/15
		15			↑	90°	
		16			↓	90°	
		17	H106 5/16	12:12:36		2 MIN	6.1/20
		18			↑	90°	
		19			↓	90°	
		20	S119 5/8	12:42:46		6 MIN	9.0/20
		21			↑	90°	
		22			↓	90°	
		23	G62-44	13:29:07		3 MIN	7.3/20
		24			↑	90°	
		25			↓	90°	
		26	G63-51	13:41:10		2 MIN	6.9/20
		27			↑	90°	
		28			↓	90°	
		29	G66-5	14:31:08		5 MIN	8.8/15
		30			↑	90°	
		31					
		32					

Intensified Reticon

TO CAM 3/20

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer G^s

Telescope 61" SH

Date MAR 19-20 1986

Disk ORD 946

Change.... File ID RA 1950.0 Dec L/R +/+ Exposure Comments

Change....	File	ID	RA	1950.0	Dec	L/R	+/+	Exposure	Comments
		1	TH-AR			↓		90 ^s	5187A 80 μ SLIT
		2	S101380	15:05:06	17:38:30			12 MIN	9.2/20
		3	TH-AR			↑		90 ^s	
		4	TH-AR			↓		90 ^s	
		5	H140283	15:40:23	10:46:18			14 MIN	7.2/200 PTLY CLOUDY (OVERCAST)
		6	TH-AR			↑		90 ^s	
		7	TH-AR			↓		90 ^s	
		8	SKY DAWN					6 MIN	(0528) OVERCAST
		9	TH-AR			↑		90 ^s	
		10	INCAND					120 MIN	
		11	II					"	
		12	II					"	
		13	INCAND					32 ^m	
MAR 20/21		14	TH-AR			↓		90 ^s	5187A 80 μ SLIT
		15	SKY EVE					5 MIN	PTLY CLOUDY (1815)
		16	TH-AR			↑		90 ^s	
		17	TH-AR			↓		90 ^s	
		18	H66141	07 59 40	02 28			2 ^m	
		19	TH-AR			↑		90 ^s	
		20	TH-AR			↓		90 ^s	
		21	G147-36	11 14 34	29 51			4 1/2 ^m	
		22	TH-AR			↑		90 ^s	
		23	S57912	06 12 36	37 45	↓		90 ^s	
		24	S57912	06 12 36	35 45			3 ^m	
		25	TH-AR			↑		90 ^s	
		26	TH-AR			↓		90 ^s	
		27	G103-57	06 43 09	35 56			9 ^m	
		28	TH-AR			↑		90 ^s	
		29	TH-AR			↓		90 ^s	
		30	G90-25	07 50 22	30 46			6 ^m	
		31	TH-AR			↑		90 ^s	
		32							

Intensified Reticon

TO CAM 3/21

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer RL 163

Telescope 8 1/2" 6"

Date 3/20-21/86

Disk ORO 947

Change.... File ID RA 1950.0 Dec L/R +/+ Exposure Comments

Change....	File	ID	RA	1950.0	Dec	L/R	+/+	Exposure	Comments
		1	TH-AR			↓		90 ^s	5187A 8W
		2	G58-25	10 47 48	20 33			3 ^m	
		3	TH-AR			↑		90 ^s	
		4	TH-AR			↓		90 ^s	
		5	+362165	11 10 00	36 01			18 ^m	
		6	TH-AR			↑		90 ^s	
		7	TH-AR			↓		90 ^s	
		8	+222411	11 48 59	22 24			20 ^{MIN}	9.3/50 ROTTEN SEEING
		9	TH-AR			↑		90 ^s	
		10	TH-AR			↓		90 ^s	
		11	G59-38	12:44:24	22:45:36			6 ^{MIN}	9.5/25
		12	TH-AR			↑		90 ^s	
		13	TH-AR			↓		90 ^s	
		14	G60-66	13:05:41	04:02:36			7 ^{MIN}	9.6/15
		15	TH-AR			↑		90 ^s	
		16	TH-AR			↓		90 ^s	
		17	G63-46	13:37:32	12:50:42			8 ^{MIN}	9.4/20
		18	TH-AR			↑		90 ^s	
		19	TH-AR			↓		90 ^s	
		20	G66-33	14:49:07	07:56:54			9 ^{MIN}	9.5/20
		21	TH-AR			↑		90 ^s	
		22	TH-AR			↓		90 ^s	
		23	5101380	15:05:06	17:38:30			12 ^{MIN}	9.2/20
		24	TH-AR			↑		90 ^s	
		25	TH-AR			↓		90 ^s	
		26	H135148	15:10:55	12:38:36			8 ⁰⁶	9.5/15
		27	TH-AR			↑		90 ^s	
		28	TH-AR			↓		90 ^s	
		29	+192890	14:29:53	17:38:12			15 ^{MIN}	9.8/30
		30	TH-AR			↑		90 ^s	
		31							
		32							

Intensified Reticon

TO CAM 3/21

Spectrograph ECHELLE

Log Sheet

RAW/RET 11

Grating 300L

Observer GS

Telescope SH WYETH

Date MAR 20-21 1986

Disk ORD 948

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90°	5187A 80μ SLIT
		2	566051	17:24:50	31:07:03	5 MIN	8.5/30
		3			↑	90°	
		4			↓	90°	
		5	G209-35	20:31:05	41:43:29	2 MIN	7.0/30
		6			↑	90°	
		7			↓	90°	
		8	G209-20	20:10:30	46:08:48	6 MIN	9.1/20
		9			↑	90°	
		10			↓	90°	
		11	G210-46	20:58:01	40:03:42	10 MIN	6.5/300
		12			↑	90°	
		13			↓	90°	6563A 80μ SLIT Ha
		14	P CYG	20:15:57	37:52:36	5 MIN	4.8/
		15			↑	90°	
		16			↓	90°	
		17	HD19890	20:49:59	26:54:32	4 MIN	4.8/500
		18			↑	90°	
		19			↓	90°	
		20	HD196755	20:36:42	09:54:35	9 MIN	5.0/500
		21			↑	90°	
		22			↓	90°	
		23	HD210459	22:07:40	32:55:50	3 MIN	4.3/500
		24			↑	90°	
		25			↓	90°	
		26	HD205455	21:32:06	45:22:00	2 MIN	4.0/500
		27			↑	90°	
		28			↓	90°	
		29	HD210460	22:07:56	19:22:17	15 MIN	4.9/500 ← 1 PEGAS FAINTER
		30			↑	90°	
		31					
		32					

Intensified Reticon
 TO CAM 3/21
 Spectrograph ECHELLE Log Sheet RAWRET 11
 Grating 300L Observer GS
 Telescope 61" W/ETH Date MAR 20-21 1986 Disk ORO 949

Change....	File	ID	RA	Dec	1950.0 L/R ↑/↓	Exposure	Comments	
		1			TH-AR	↓	90°	6563A 80μ SLIT
		2	H0209166	21:58:39	12:52:47		11 MIN	5.7/500 GIANTS
		3			TH-AR	↑	90°	
		4			TH-AR	↓	90°	5187A 80μ SLIT
		5			SKY DAWN		5 MIN	CLEAR
		6			TH-AR	↑	90°	
		7			INCANDS		120 MIN	
		8			"		"	
		9			"		"	
		10			INCANDS		25 MIN	
MAR 21/22		11			TH-AR	↓	90°	5187 A 80μ SLIT
		12			SKY-EVE		5 MIN	(1912) CLEAR
		13			TH-AR	↑	90°	
		14			TH-AR	↓	90°	
		15	H26162	04:06:14	19:28:43		2 MIN	5.5 1 AU STAND
		16			TH-AR	↑	90°	
		17			TH-AR	↓	90°	
		18	G95-57A	03 43 36	41 17 25		2 MIN	
		19			TH-AR	↑	90°	
		20	G95-57B	03 43 37	41 17 25		2 1/2 MIN	
		21			TH-AR	↑	90°	
		22			TH-AR	↓	90°	
		23	H25329	03 57 53	35 09		2 MIN	
		24			TH-AR	↑	90°	
		25			TH-AR	↓	90°	
		26	G7-20	04 02 47	10 55		13 MIN	
		27	G7-AR	04 02 47			90°	
		28			TH-AR	↓	90°	
		29	G87-9	04 42 43	03 53		14 MIN	
		30			TH-AR	↑	90°	
		31						
		32						

Intensified Reticon TO CAM 3/21

Spectrograph ECHELLE Log Sheet RAW RET 11

Grating 300L Observer Dea

Telescope SH Date 3/21-22/86 Disk CR0 950

Change.... File ID RA Dec L/R Exposure Comments

Change....	File	ID	RA	Dec	L/R	Exposure	Comments
1	TH-AR				↓	90 ^s	
2	S95110	26 00 15	19 22			3 1/2	
3	TH-AR				↑	90 ^s	
4	TH-AR				↓	90 ^s	
5	G191-55	5 53 04	57 40			10 ^m	
6	TH-AR				↑	90 ^s	
7	TH-AR				↑	90 ^s	
8	G220-130	2 31 47	59 34			2 1/2 ^m	
9	TH-AR				↑	90 ^s	
10	TH-AR				↑	90 ^s	
11	R114-26	08 56 39	-03 50			8 ^m	
12	TH-AR				↑	90 ^s	
13	G114-48	09 11 12	-03 41			5 1/2 ^m	
14	TH-AR				↑	90 ^s	
15	TH-AR				↓	90 ^s	
16	G161-59	09 28 09	-04 03			20 ^m	
17	TH-AR				↑	90 ^s	
18	TH-AR				↓	90 ^s	
19	G147-36	11 14 34	-03 51			2 ^m	
20	TH-AR				↑	90 ^s	
21	TH-AR				↓	90 ^s	
22	G178-56	14 53 12	13 14			13 ^m	
23	TH-AR				↑	90 ^s	
24	G178-56	"	"			11 ^m	
25	TH-AR				↑	90 ^s	
26	TH-AR	13 59 16	09 10		↓	90^s	
27	G65-22	13 59 16	09 10			16 ^m	
28	TH-AR				↑	90 ^s	
29	TH-AR				↓	90 ^s	
30	W11450	13 08 51	31 06			15 ^m	
31	TH-AR				↑		
32							

Intensified Reticon

TO CAM 3/22

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer Jan / GS

Telescope SH WYETH Date 3/21-22/76

Disk OR 0951

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments	
		1	W11449	13:08:51	31:06		9 ^m	5187A 20x SA 57
		2	TH-AR			↓↑	90 ^s	
		3	W2576	13:08:30	29:37		2 ^{1/2}	
		4	TH-AR			↑↓	90 ^s	
		5	W40903	13:09:07	29:08		7 ^m	
		6	TH-AR			↓↑	90 ^s	
		7	W31281	12:57:14	31:17:23		8 ^{MIN}	10.8/20 (OS)
		8	TH-AR			↓↑	90 ^s	
		9	W21939	13:04:52	31:03:24		12 ^{MIN}	10.4/50
		10	TH-AR			↓↑	90 ^s	
		11	W13233	13:09:52	30:14:29		3 ^{MIN}	8.4/30
		12	TH-AR			↑↓	90 ^s	
		13	W13777	13:11:18	30:02:42		2 ^{MIN}	8.6/20
		14	TH-AR			↑↓	90 ^s	
		15	W12971	13:11:12	30:28:28		10 ^{MIN}	11.4/15
		16	TH-AR			↑↓	90 ^s	
		17	W13781	13:11:22	30:03:52		6 ^{MIN}	10.7/15
		18	TH-AR			↑↓	90 ^s	
		19	W13784	13:11:20	30:04:58		2 ^{MIN}	7.3/15
		20	TH-AR			↑↓	90 ^s	
		21	W13796	13:11:54	30:08:51		8 ^{1/2} MIN	11.2/15
		22	TH-AR			↑↓	90 ^s	
		23	W22389	13:07:06	30:42:04		18 ^{MIN}	9.0/100
		24	TH-AR			↑↓	90	
		25	W23083	13:02:33	30:26:51		9 ^{MIN}	11.3/15 WEST STAR OF PAIR
		26	TH-AR			↑↓	90 ^s	
		27	W25209	13:04:17	29:31:24		11 ^{MIN}	11.4/15
		28	TH-AR			↑↓	90 ^s	
		29	W32007	13:01:28	31:01:30		3 ^{1/2} MIN	8.5/50
		30	TH-AR			↑	90 ^s	
		31						
		32						

Intensified Reticon

TO CAM 3/22

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer GS

Telescope 61" WYETH

Date MAR 21-22 1986

Disk ORD 952

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1	TH-AR		↓	90°	5187A 80 μ slit
	W33078	2	12:59:57	30:37:32		18 MIN	7.9/500 SA 57
		3	TH-AR		↕	90°	
	W33111	4	13:00:15	30:32:57		2 1/2 MIN	9.2/15
		5	TH-AR		↕	90°	
	W34282	6	13:00:04	30:00:20		14 MIN	11.4/20
		7	TH-AR		↕	90°	
	W41099	8	13:07:41	28:51:21		16 MIN	11.3/15
		9	TH-AR		↕	90°	
	W41124	10	13:08:25	28:48:39		10 MIN	9.7/50
		11	TH-AR		↕	90°	
	W41153	12	13:08:27	28:55:58		12 MIN	10.1/40
		13	TH-AR		↕	90°	
	W44447	14	13:09:32	28:07:52		2 MIN	4.3/100
		15	TH-AR		↕	90°	
	W44591	16	13:09:04	27:50:52		5 MIN	9.7/20
		17	TH-AR		↕	90°	
	W50652	18	13:04:46	28:58:46		2 MIN	8.4/20
		19	TH-AR		↕	90°	
	W50769	20	13:05:45	29:03:20		5 MIN	10.1/15
		21	TH-AR		↑	90°	
		22	TH-AR		↓	90°	
	W51547	23	13:05:44	28:29:08		9 MIN	10.6/20
		24	TH-AR		↕	90°	
	W52091	25	13:04:07	28:20:27		17 MIN	9.4/100
		26	TH-AR		↕	90°	
	W60243	27	12:59:40	29:15:37		2 MIN	8.9/20
		28	TH-AR		↕	90°	
	W61955	29	12:58:17	28:46:45		4 MIN	9.8/20
		30	TH-AR		↑	90°	
		31					
		32					

Intensified Reticon

TO CAM 3/22

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer GS

Telescope 61" WYETH

Date MAR 21-22 1986

Disk DR0 953

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90 ^s	5187A SENSIT
		2	14:39:41	16:37:36		10 ^{MIN}	11.0/ SYMBIOTIC
		3			↑	90 ^s	
		4			↓	90 ^s	
		5	101646	19:55:20 39:41:30		6 ^{MIN}	11.0/
		6			↑	90 ^s	
		7			↓	90 ^s	
		8	H182572	19:22:35 11:50:10		2 ^{MIN}	5.2/ 1 AU STANDARD
		9			↑	90 ^s	
		10			↓	90 ^s	
		11	SKY-DAWN			6 ^{MIN}	
		12			↑	90 ^s	
		13	INCAND			120 ^{MIN}	
		14	INCAND			120	
		15	INCAND			120	
		16			↓	90 ^s	5187A 804 SUT
		17	SKY EVE			5 ^{MIN}	
		18			↑	90 ^s	
		19	Th Ar		↓	90 ^s	
		20	H26162	04:06:49 19:28:43		2 ^m	IAU Standard Star
		21	Th Ar		↑	90 ^s	
		22	Th Ar		↓	90 ^s	
		23	G112-54	07:52:02 -01:16:54		2 ^m	Halo Binaries ↓
		24	Th Ar		↑	90 ^s	
		25	Th Ar		↓	90 ^s	
		26	H51754	06:56:06 -00:24:00		2 ^m	
		27	Th Ar		↑	90 ^s	
		28	Th Ar		↓	90 ^s	
		29	G82-5	04:12:29 -5:45:24		6 ^{1/2} ^m	
		30	Th Ar		↑	90 ^s	
		31					
		32					

MAR 22-23
RJD

TO CAM 3/22

Intensified Reticon

Spectrograph ECHELLE

Log Sheet

RAWRET 11

Grating 300L

Observer RJD

Telescope 61" Wyeth

Date 3/22-23/86

Disk OR0954

Change.... File ID RA Dec L/R Exposure Comments Hal. Binaries

Change....	File	ID	RA	Dec	L/R	Exposure	Comments
		1			↓	90 ^s	
		2	G99-31W	05:42:11	09:13:42		9 ^m
		3	ThAr		↑	90 ^s	
		4	ThAr		↓	90 ^s	
		5	G88-5	07:03:12	18:42:54		3 ^m
		6	ThAr		↑	90 ^s	
		7	ThAr		↓	90 ^s	
		8	H74000	08:38:31	-16:09:35		9 ^m
		9	ThAr		↑	90 ^s	
		10	ThAr		↓	90 ^s	Asteroid
		11	(1)	10:47:44.7	25:26:30		2 ^m ←
		12	ThAr		↑	90 ^s	
		13	ThAr		↓	90 ^s	
		14	+251981	08:41:27.9	24:59:00		6 ^m
		15	ThAr		↑	90 ^s	
		16	ThAr		↓	90 ^s	
		17	G1s301	08:10:50	-13:45:48		5 ^m Mazeh: M Binaries
		18	ThAr		↑	90 ^s	
		19	ThAr		↓	90 ^s	
		20	G1s319	08:40:02	09:44:48		5 ^m Mazeh: M Binaries
		21	ThAr		↑↓	90 ^s	
		22	G1s319C	08:40:09	09:44:06		12 ^m Mazeh: M Binaries
		23	ThAr		↑	90 ^s	
		24	ThAr		↓	90 ^s	
		25	G1s268	07:06:37	38:36:48		12 ^m Mazeh: M Binaries
		26	ThAr		↑	90 ^s	
		27	ThAr		↓	90 ^s	
		28	H97916	11:13:19	02:21:36		8 ^m Hal. Binaries
		29	ThAr		↑	90 ^s	
		30	ThAr		↓	90 ^s	
		31	G147-36	11:14:34	29:50:36		5 ^m
		32	ThAr		↑	90 ^s	

Intensified Reticon

TO CAM 3/22

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer RJD

Telescope 61" Wyeth

Date 3/22-23/86

Disk ORO 956

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments	
		1	W44437	13:09:54.3	28:06:23		11 1/2 m	
		2	ThAr			↑↓	90°	
		3	W50670	13:04:26.8	28:52:05		7 1/2 m	
		4	ThAr			↑↓	90°	
		5	W50671	13:04:27.4	28:51:48		5 m	
		6	ThAr			↑↓	90°	
		7	W51212	13:04:46.3	28:43:45		7 m	
		8	ThAr			↑↓	90°	
		9	W52483	13:07:08.5	27:57:53		4 1/2 m	
		10	ThAr			↑↓	90°	
		11	W60039	13:02:43.7	29:18:58		7 m	
		12	ThAr			↑↓	90°	
		13	W61447	13:00:51.2	28:52:41		3 m	
		14	ThAr			↑↓	90°	
		15	W61735	13:02:50.1	28:39:41		2 1/2 m	
		16	ThAr			↑	90°	SA 57↑
		17	ThAr			↓	90°	
		18	G227-37	18:34:48	63:39:18		2 1/2 m	Italo Binaries ↓
		19	ThAr			↑↓	90°	
		20	G227-38	18:34:49	63:39:18		5 1/2 m	
		21	ThAr			↑	90°	
		22	ThAr			↓	90°	
		23	G180-66	16:37:47	34:22:30		6 1/2 m	
		24	ThAr			↑	90°	
		25	ThAr			↓	90°	TAU RV std
		26	H136202	15:16:45.4	01:57:12		2 m	←
		27	ThAr			↑	90°	
		28	ThAr			↓	90°	
		29	W62620	13:01:18.4	28:23:33		7 1/2 m	SA 57
		30	ThAr			↑↓	90°	
		31	W62717	13:01:54.1	28:22:31		4 m	
		32						

Intensified Reticon TO CAM 3/23

Spectrograph ECHELLE Log Sheet RAW RET 11

Grating 300L Observer RJD

Telescope 61" Wyeth Date 3/22-23/86 Disk ORO 957

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↑↓	90 ^s	
		2	W64390	13:01:46.4	27:59:35	10 ^m	S A S 7
		3			↑↓	90 ^s	
		4	W25140	13:05:16.4	29:42:53	2 ^m	
		5			↑	90 ^s	
		6			↓	90 ^s	
		7	G15644A	16:52:46	-8:15:17	8 ^{1/2} ^m	M Binaries
		8			↑↓	90 ^s	
		9	G15643	16:52:43	-8:14:30	21 ^m	
		10			↑	90 ^s	
		11			↓	90 ^s	
		12	G208-29	19:30:32	48:28:54	8 ^m	Italo Binaries
		13			↑	90 ^s	
		14			↓	90 ^s	
		15	G230-45	20:38:54	54:02:18	6 ^m	
		16			↑	90 ^s	
		17			↓	90 ^s	
		18	G230-45	"	"	7 ^m	
		19			↑	90 ^s	
		20			↓	90 ^s	
		21	H182572	19:22:35.1	11:50:10	2 ^m	IAU RV STD
		22			↑	90 ^s	
		23			↓	90 ^s	
		24				6 ^m	
		25			↑	90 ^s	
		26				120 ^m	
		27				120 ^m	
		28					
		29					
		30					
		31					
		32					

Intensified Reticon

TO CAM 3/23

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer RJD

Telescope 61" WYETH

Date MAR 23-24 1986 Disk ORO 958

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90 ^s	5187A. 80μSLIT
		2				5 ^m IN	
		3			↑	90 ^s	
		4			↓	90 ^s	
		5	H66141	07:59:39 02:28:34		2 ^m	IAU R.V. Std
		6			↑	90 ^s	
		7			↓	90 ^s	
		8	G43-3	09:46:12 13:59:18		3 ^m	Italo Binaries ↓
		9			↑	90 ^s	
		10			↓	90 ^s	
		11	G37-26	03:05:28 26:09:06		4 ³ / ₂ ^m	
		12			↑	90 ^s	
		13			↓	90 ^s	
		14	G41-34	09:20:06 11:29:06		5 ^m	
		15			↑	90 ^s	
		16			↓	90 ^s	(Somewhat underexposed
		17	G53-30	10:09:56 -00:23:12		4 ¹ / ₂ ^m	Exposure Interrupted by clouds.
		18			↑	90 ^s	Some Moonlight contamination
		19			↓	90 ^s	
		20	G102-20	05:37:21 12:09:12		3 ¹ / ₂ ^m	
		21			↑	90 ^s	
		22			↓	90 ^s	
		23	G81-8	04:09:02 41:51:54		8 ¹ / ₂ ^m	
		24			↑	90 ^s	
		25			↓	90 ^s	
		26	G192-23	06:11:57 56:57:18		2 ^m	
		27			↑	90 ^s	
		28			↓	90 ^s	
		29	G95-57A	03:43:36 41:17:25		2 ^m	
		30			↑↓	90 ^s	
		31	G95-57B	03:43:37 41:17:25		4 ^m	
		32			↑	90 ^s	

Intensified Reticon

TO CAM 3/23

Spectrograph ECHELLE

Log Sheet

RAW RET 11

Grating 300L

Observer RJD

Telescope 61" Wyeth

Date 3/23-24/86

Disk ORO 960

Change.... File ID 1950.0 RA Dec L/R ↑/↓ Exposure Comments

Change....	File	ID	1950.0 RA	Dec	L/R	↑/↓	Exposure	Comments
		THAr				↑↓	90 ^s	
	W14901		13:09:28.3	29:46:49			5 ^m	SA 57
		THAr				↑↓	90 ^s	
	W14250		13:12:31.2	30:00:49			5 ^{1/2} ^m	
		THAr				↑↓	90 ^s	
	W12469		13:11:24.2	30:38:39			5 ^m	
		THAr				↑	90 ^s	
		THAr				↓	90 ^s	
	G13-50P		12:36:09	-5:03:06			2 ^m	Halo Binaries
		THAr				↑↓	90 ^s	
	G13-50F		12:36:10	-5:03:12			3 ^m	
		THAr				↑↓	90 ^s	
	S138815		12:27:09.6	-3:02:57			2 ^m	
		THAr				↑↓	90 ^s	
	S138910		2:38:29.8	-00:20:46			2 ^m	
		THAr				↑	90 ^s	
		THAr				↓	90 ^s	
	G14-22		12:58:44	-8:10:18			2 ^m	
		THAr				↑↓	90 ^s	
	G14-26		13:00:36	-5:51:12			4 ^{1/2} ^m	
		THAr				↑	90 ^s	
		THAr				↓	90 ^s	
	S1001#6		12:25:45	12:37:18			3 ^m	
		THAr				↑	90 ^s	
		THAr				↓	90 ^s	
	+122547		13:01:24	11:41:00			3 ^m	
		THAr				↑	90 ^s	
		THAr				↓	90 ^s	
	+182757		13:34:07	18:24:24			3 ^m	
		THAr				↑↓	90 ^s	
	S100675		13:41:01	15:49:36			5 ^{1/2} ^m	
		THAr				↑	90 ^s	

Intensified Reticon

TO CAM 3/23

Spectrograph ECHELLE

Log Sheet

RAWRET 11

Grating 300L

Observer RVD

Telescope 61" Wyeth

Date 3/23-24/86

Disk ORO 961

Change.... File ID 1950.0 RA Dec L/R Exposure Comments

Change....	File	ID	1950.0 RA	Dec	L/R	Exposure	Comments
					↓	90 ^s	
	G135-16		14:01:42	22:46:00		4 ^m	Italo Binaries
					↑	90 ^s	
					↓	90 ^s	
	+082860		14:10:48	08:51:00		7 ^m	
					↑↓	90 ^s	
	+082856		14:21:30	08:15:12		4 ^m	
					↑	90 ^s	
					↓	90 ^s	
	S182556		14:24:10	-22:01:12		17 ^m	
					↑	90 ^s	
					↓	90 ^s	
	-204124		14:54:25	-21:22:00		8 ^m	
					↑↓	90 ^s	
	S183072		14:56:58.1	-21:48:27		2 ^m	
					↑	90 ^s	
					↓	90 ^s	
	H134440		15:07:28.0	-16:13:29		4 1/2 ^m	
					↑↓	90 ^s	
	H134439		15:07:29	-16:08:27		3 ^m	
					↑	90 ^s	
					↓	90 ^s	
	H140283		15:40:23	-10:46:18		4 1/2 ^m	
					↑	90 ^s	
					↓	90 ^s	
	G15644A		16:52:46	-8:15:17		9 1/2 ^m	M Binaries (Mazeh)
					↑↓	90 ^s	
	G15643		16:52:43	-8:14:30		22 ^m	
					↑	90 ^s	
					↓	90 ^s	
	11-1223		18:48:19	-6:18:30		13 ^m	Mathieu M11



Intensified Reticon

3/29
TO CAM

Spectrograph ECHELLE

Log Sheet

RAW RET //

Grating 300L

Observer RPS

Telescope 61" Wyeth

Date 3/29-30/86

Disk ORO 963

Change.... File ID 1950.0 RA Dec L/R Exposure Comments
↑/↓

Change....	File	ID	1950.0 RA	Dec	L/R	Exposure	Comments
					↑/↓		
		1			↓	90s	
		2	W25209	13:04:17	29:31:24	12m	11.4/15
		3			↑	90s	
		4			↓	90s	
		5	W40903	13:09:06	29:48:01	9m	8.9/100
		6			↑	90s	
		7			↓	90s	
		8	W13233	13:09:53	30:14:29	6m	8.5/30
		9			↑	90s	
		10			↓	90s	
		11	W13025	13:10:20	30:26:58	9m	11.4/15
		12			↑	90s	
		13			↓	90s	
		14	W12828	13:13:42	30:31:35	9m	11.0/20
		15			↑	90s	
		16			↓	90s	
		17	W22389	13:47:07	30:42:04	10m	9.0/100
		18			↑	90s	
		19			↓	90s	
		20	W33111	13:00:15	30:32:57	2m	9.2/15
		21			↑	90s	
		22			↓	90s	
		23	W33078	12:59:58	30:37:32	21m	7.9/500
		24			↑	90s	
		25			↓	90s	
		26	W31281	12:57:14	31:17:23	8m	10.8/20
		27			↑	90s	
		28			↓	90s	
		29	W32007	13:01:29	31:01:30	5 1/2 m	8.5/50
		30			↑	90s	
		31	/				
		32	/				

Intensified Reticon TO CAM 3/30

Spectrograph ECHELLE Log Sheet RAW/RET 11

Grating 300L Observer RPS

Telescope 61" Wyeth Date 3/29-30/86 Disk ORO 964

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90s	HALOS
		2	G169-13	30:27:49	30:48:06		4m 10.2/15
		3	Th-Ar		↑	90s	
		4	Th-Ar		↓	90s	
		5	G169-18	16:34:30	31:02:48		2 1/2 m 7.1/20
		6	Th-Ar		↑	90s	
		7	Th-Ar		↓	90s	
		8	G138-57	16:39:31	13:14:48		2m 8.0/15
		9	Th-Ar		↑	90s	
		10	Th-Ar		↓	90s	
		11	G139-6	16:59:05	13:53:48		6 1/2 m 10.1/15
		12	Th-Ar		↑	90s	
		13	Th-Ar		↓	90s	
		14	G169-37	16:55:35	26:58:48		4m 9.6/15
		15	Th-Ar		↑	90s	
		16	Th-Ar		↓	90s	
		17	G170-38	17:25:35	26:49:54		2m 7.7/20
		18	Th-Ar		↑	90s	
		19	Th-Ar		↓	90s	
		20	SKY-DWN	stow	position		5m
		21	Th-Ar		↑	90s	
		22	INCRND				12 MIN
		23	INCRND				62 MIN
		24	TH-AR		↓	90s	
		25	SKY-EVE				5m
		26	TH-AR		↑	90s	
		27	H20152	04 06 15	19 29	↓	90s
		28	H26162	"	"	↑	3" 90s
		29	TH-AR		↑	90s	
		30	TH-AR		↓	90s	
		31	(2)	06 24 48	-05 39		6 1/2 m
		32	TH-AR		↑	90s	

3/30-31/86
WRUNG
DATE

Intensified Reticon TO CAM

Spectrograph ECHELLE Log Sheet RAW RET 11

Grating 300L Observer T/M

Telescope S+I Date 3/30-31/86 Disk OKO 965

3/31/86

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90s	
	S 133	40	06:51:57	-02:02:05		3 MIN	
		3			↓	90s	
		4			↓	90s	
	Gk 234		01:26:52	-02:46			11.1/6
		6			↑		
		7			↓		
	Gk 268		7:06:37	+48:36:13		16 MIN	11.5/7
		9					IGNORE
		10			↑	90s	
		11			↓		
	Gk 301		08:10:50	-13:45:48			
		13			↑		
		14			↓		
	Gk 319		08:40:02	09:44:18		13 MIN	9.7/40
		16			↓	90s	
	Gk 319C		08:40:09	09:44:06			11.8/6
		18			↑	90s	
		19			↓		
	Gk 334		09:04:19	-08:36			
		21			↑		
		22					IGNORE
		23			↓		
	S043 285		10:16:21	48:38:52			16.1
		25			↑↓		
	Gk 380		10:08:13	49:42:09			
		27			↑		
		28			↓		
	S043 396		10:32:32	45:54:46		2 MIN	100/7.5
		30			↑↓		
	Gk 397		10:28:25	45:47		5 MIN	45/18.9
		32					

Intensified Reticon
 TO CAM 3/31

Spectrograph ECHELLE Log Sheet RAW RET 11

Grating 300L Observer MAZELL

Telescope Wyeth Date 30/31 MARCH 1986 Disk 967

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓		
		2				2 MIN	250/6.3 MSTAR
		3			↓		
		4				2 MIN	40/8.1 MSTARs
		5			↑		
		6			↓		
		7				6 MIN	
		8			↑		
		9				120 MIN	
		10				40 MIN	
MAR 31/APR 1		11			↓	90°	5187A 80 μSCIT
		12				5 MIN	
		13			↑	90°	
		14			↓	90°	
		15	04:06:94	19:28:43		3 MIN	5.5 1 AU STANDARD
		16			↑	90	
		17			↓	90	
		18				9 MIN	
		19	04:24:50	24:10	↑	90	GS-36
		20			↓	90	
		21	06:19:00	-19:10:06		7	
		22			↑	90	
		23			↓	90	
		24	11:14:34	09:50:50		3 MIN	
		25			↑	90	
		26			↓	90	
		27	13:59:16	9:10:18		20 MIN	
		28			↑	90	
		29	13:59:16	9:10:18		15 MIN	
		30			↓	90	
		31					
		32					

Intensified Reticon TO CAM 4/1

Spectrograph ECHELLE Log Sheet RAW RET 11

Grating 300L Observer rum

Telescope 6" WYETH Date MAR 31 APR 1 1976 Disk ORD 968

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90	
		2	G61-11	12:42:23	13:45:48	↓	3 MIN
		3			↑	90	
		4			↓	90	
		5	G102498	12:56:47	9:30:42	↓	9 MIN
		6			↑	90	
		7			↓	90	
		8	G14-38	13:08:44	4:33:42	↓	15 MIN
		9			↑	90	
		10			↓	90	
		11	G14-25	12:58:55	-9:11:12	↓	6 MIN
		12			↑	90 ^s	
		13			↓	90 ^s	
		14	G14-33	13:06:14	-3:40:24	↓	
		15			↑	90 ^s	
		16			↓	90 ^s	
		17	G63-9	13:08:53	9:53:18	↓	2 MIN
		18			↑	90 ^s	
		19			↓	90 ^s	
		20	G61-49	13:13:15	12:09:30	↓	3 MIN
		21			↑	90 ^s	
		22			↓	90 ^s	
		23	G022786	13:27:24	03:00:54	↓	5 MIN
		24			↑	90 ^s	
		25			↓	90 ^s	
		26	G14-41	13:13:32	-3:05:41	↓	4 MIN
		27			↑	90 ^s	
		28			↓	90 ^s	
		29	G150-11	13:31:01	26:22:30	↓	3 MIN
		30			↑	90 ^s	
		31			↓	90 ^s	
		32			↓	90 ^s	

Intensified Reticon TO CAM 4/1

Spectrograph ECHELLE Log Sheet RAW/RET 11

Grating 300L Observer G

Telescope 61" Date MAR 31 - APR 1 1986 Disk 0A0 969

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1			↓	90"	5187A 80μs
		2	G164-56	13:13:52	36:09:00		2 1/2 MIN 8.3/20 HALO BINARIES
		3			↑	90"	
		4			↓	90"	
		5	G63-44	13:25:36	19:24:10		2 1/2 MIN 8.8/20
		6			↑	90"	
		7			↓	90"	
		8	G65-13	13:51:42	10:29:48		2 1/2 MIN 9.0/15 APR FOOL HEH HEH PRANKSTER
		9			↑	90"	
		10			↓	90"	
		11	G100-55	13:51:01	02:56:29		4 MIN 9.4/20
		12			↑	90"	
		13			↓	90"	
		14	G158-436	14:10:40	-11:55:29		4 MIN 9.5/20
		15			↑	90"	
		16			↓	90"	
		17	G158-333	14:02:31	-14:37:00		2 MIN 7.2/30
		18			↑	90"	
		19			↓	90"	
		20	G158-018	13:31:59	-16:04:00		2 1/2 MIN 8.9/20
		21			↑	90"	
		22			↓	90"	
		23	W11450	13:08:51	31:05:32		12 MIN 7.0/100 SA 57
		24			↑↓	90"	
		25	W11449	13:08:50	31:05:34		8 MIN 9.3/15
		26			↑	90"	
		27			↓	90"	
		28	G165-68	14:18:15	38:11:00		4 1/2 MIN 10.4/15 HALO BINARIES
		29			↑	90"	
		30					
		31					
		32					

Intensified Reticon TO CAM 4/1

Spectrograph ECHELLE Log Sheet RAWRET 11

Grating 300L Observer GS

Telescope 61" WYETH Date MAR 31 - APR 1 1986 Disk ORD 971

Change....	File	ID	1950.0 RA	Dec	L/R ↑/↓	Exposure	Comments
		1	TH-AR		↓	90°	5187A 80μ SLIT
	5102213	2	16:27:55	11:06:24		3 MIN	9.1/20
		3	TH-AR		↑	90°	
		4	TH-AR		↓	90°	
	+093223	5	16:31:13	09:12:42		4 MIN	9.3/30
		6	TH-AR		↑	90°	
		7	TH-AR		↓	90°	6563A 80μ SLIT 11 ALPHA
	LAMAND	8	2335:06	46:11:14		12 MIN	3.9/ ND 1. FILTER
		9	TH-AR		↑	90°	
		10	TH-AR		↓	90°	
	ALPHAQR	11	22:03:13	-00:33:49		7 MIN	2.9/ ND 1. FILTER
		12	TH-AR		↑	90°	
		13	TH-AR		↓	90°	5187A 80μ SLIT
	SKY DAWN	14				4 MIN	
		15	TH-AR		↑	90°	
	INCANDS	16				120 MIN	
	INCANDS	17				60 MIN	
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					