

60 inch Telescope Log				Spectrograph: <u>FAST</u>		
Observer: <u>D. KORANYI</u>				Grating: <u>300-L</u>		Page: <u>5745</u>
PI: <u>HUCHRA / KIRSHNER</u>				Date: <u>11/1/97</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
148	SN 1996 DO	07:26:42	47:05:36	2	10m	BIN x 2 / STAR ON SLIT TO EAST
149	COMP			↑	12s	"
150-152	Hiltner 600	06:42:37	02:11:25	2,56	60s	" STD. STAR FOR SN OBS
153	COMP			↑	12s	"
154	C0557p06	05:57:40.2	06:27:24	43	15m	BIN x 4 → / FAINT! / STAR ON SLIT
155	COMP			↑	6s	
156	C0559p28	05:59:09	28:43:25	43	15m	FAINT / STAR ON SLIT TO W.
157	COMP			↑	6s	↳ $\frac{0.677.0}{\dots}$
158	C0602p10	06:02:44	12:58:05	43	15m	FAINT!
159	COMP			↑	6s	
160	C0614p26	06:14:14	28:08:35	43	15m	
161	COMP			↑	6s	
162	C0640p13	06:40:31	13:30:12	43	15m	FAINT! STAR ON SLIT TO W
163	COMP			↑	6s	
164	C0647p24	06:47:27	24:55:33	43	15m	FAINT! STAR ON SLIT (?) TO W.
165	COMP			↑	6s	↳ SKY BRIGHTENING...
166-168	HILTNER 600	06:42:37	02:11:25	56	30s	
169	COMP			↑	6s	
170-177	BIAS					
180-189	FLAT					
190-197	BIAS					BIN x 2
200-209	FLAT					BIN x 2

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5742</u>	
Observer: <u>D. KODANYI</u>			Grating: <u>300-R</u>		Date: <u>11/1/97</u>	
PI: <u>KANYON/WILKES/MANDAVI</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-8	DARK			0	15m	
9-18	BIAS			0	05	BIN x4
19-28	FLAT			0	65	BIN x4
29-38	BIAS			0	05	BIN x2
39-48	FLAT			0	125	BIN x2
49	SKY			0	55	BIN x4 →
50-53	SKY			0	85	
54	COMP			↑	65	
55-58	H7 192291	20:10:46	40:07:01	56	55	CLEAR & CALM
59	COMP			↑	65	
60-61	CX Cyg	19:50:12	35:41:04	12	15,305	
62	COMP			↑	60	
63-64	3 And	23:33:40	48:49:06	12	0.5, 125	
65	COMP			↑	65	
66-68	H7 331	22:34:46	34:09:43	57	75m	
69	COMP			↑	65	
70	H7 469	23:03:15	08:52:25	6	2.5m	STAR ON SLIT TO THE EAST
71	COMP			↑	65	
72	srGb 016.11	22:57:23.1	26:09:17	59	15m	STAR ON SLIT TO THE EAST.
73	COMP			↑	65	↳ 9 foot picks star, w/ 90°
74	srGb 016.15	22:57:45	25:57:02	59	12m	
75	COMP			↑	65	
76	srGb 016.29	22:58:26.2	26:14:57	59	10m	
77	COMP			↑	65	
78	srGb 016.30	22:58:22	25:37:01	59	15m	FAINT!
79	COMP			↑	65	
80	srGb 016.32	22:58:43	26:10:38	59	10m	
81	COMP			↑	65	
82	srGb 016.33	22:58:52	26:01:09	59	12m	
83	COMP			↑	65	

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Page: <u>5743</u>
Observer: <u>D. KORANYI</u>				Grating: <u>300-R</u>		
PI: <u>ORIGIN</u>				Date: <u>11/1/97</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
84	00571p1745	00:57:10	17:44:19	42	15m	BURN-IN
85	COMP			↑	6s	
86	00587p0035	00:58:33	00:35:20	42	20m	BURN-IN
87	COMP			↑	6s	
88	01016p1826	01:01:38	18:25:42	42	20m	BURN-IN
89	COMP			↑	6s	
90	01040p1016	01:03:58	10:15:15	42	20m	BURN-IN - STAR ON SLIT TO EAST
91	COMP			↑	6s	
92	N463	01:16:18	16:03:47	42	18m	BURN-IN
93	COMP			↑	6s	
94	N476	01:17:39	15:45:29	42	10m	BURN-IN
95	COMP			↑	6s	
96	01193p1531	01:19:18	15:32:01	42	20m	BURN-IN : BRIGHT STAR JUST SOUTH OF SLIT, (LOW COUNTS FROM NEARBY)
97	COMP			↑	6s	
98	I107	01:22:10	11:31:48	42	10m	BURN-IN = 0 BOTH LOOK LIKE STARS...
99	COMP			↑	6s	
100	01243p1543	01:24:19	15:43:19	42	15m	BURN-IN
101	COMP			↑	6s	
102	01244p1420	01:24:23	14:20:22	42	15m	BURN-IN
103	COMP			↑	6s	
104	I1706	01:24:29	14:31:00	42	15m	BURN-IN
105	COMP			↑	6s	
106	01248p1425	01:24:50	14:32:38	42	20m	BURN-IN
107	COMP			↑	6s	
108	01267p1331	01:26:13	13:32:07	42	20m	BURN-IN
109	COMP			↑	6s	
110	01271p1640	01:27:04	16:40:06	42	15m	BURN-IN
111	COMP			↑	6s	
112	01336p1734	01:33:37	17:33:40	42	20m	BURN-IN
113	COMP			↑	6s	

60 inch Telescope Log				Spectrograph: FAST		
Observer: D. KOLANYI				Grating: 300-L		Page: 5744
PI: GREGG/KENYON/MARGAL/GARTON				Date: 11/1/97		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
114	014028p1408	01:40:50	14:08:45	42	20m	BURN-IN
115	COMP			↑	6s	
116	01448p1152	01:44:49	11:51:17	42	20m	BURN-IN
117	COMP			↑	6s	
118	01455p1430	01:45:29	14:30:01	42	20m	BURN-IN
119	COMP			↑	6s	
120-121	AX Per	01:36:23	54:15:02	12	30,70s	
122	COMP			↑	6s	
123	sgb 119.26	01:54:41	06:02:00	59	15m	FAINT!
124	COMP			↑	6s	
125	sgb 119.27	01:54:42	05:25:28	59	15m	FAINT!
126	COMP			↑	6s	
127	sgb 119.28	01:54:49.5	05:57:55	59	10m	
128	COMP			↑	6s	
129	sgb 119.29	01:55:07	05:22:17	59	12m	
130	COMP			↑	6s	
131	sgal-184	02:37:25	21:06:02	60	5m	
132	COMP			↑	6s	
133	sgal-185	02:37:28	21:08:30	60	8m	
134	COMP			↑	6s	
135	sgal-192	02:45:09	32:59:21	60	5m	
136	COMP			↑	6s	
137	sgal-193	02:45:12	32:38:41	60	10m	THIS BINDER IS DONE!
138	COMP			↑	6s	
139-140	DB Tau	04:27:05	26:06:16	12	100,90s	
141	COMP			↑	6s	
142-143	DL Tau	04:33:39	25:20:39	12	100,150s	
144	COMP			↑	6s	
145-146	DRTau	04:47:05	16:58:33	12	100,75s	
147	COMP			↑	6s	

60 inch Telescope Log
 Observer: D. KORANYI
 PI: MAHDAVI / KEUYEN
 Spectrograph: FAST
 Grating: 300-L
 Date: 11/2/97
 Page: 5746

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-8	DARK			0	15m	SKY
9-18	BIAS			0	0s	"
19-28	FLAT			0	6s	"
29-38	BIAS			0	0s	SKY X 2
39-48	FLAT			0	12s	SKY X 2
49-53	SKY			0	3s	SKY X 4
54	COMP			↑	6s	
55-58	HD 192281	20:10:46	40:07:01	56	5s	
59	COMP			↑	6s	
60	HR 509	20:41:26	10:54:18	6	3m	
61	COMP			↑	6s	
62-63	CE Cyg	19:50:12	35:41:04	12	15, 30s	
64	COMP			↑	6s	
65-66	ε And	23:33:40	48:49:06	12	0.5s, 12s	
67	COMP			↑	6s	
68-70	HT 531	22:34:46	34:09:43	57	3m	
71	COMP			↑	6s	
72	σ Cyg 016.35	22:59:07	26:19:27	59	5m	
73	COMP			↑	6s	
74	σ Cyg 016.36	22:59:04	26:17:59	59	15m	FAINT
75	COMP			↑	6s	
76	σ Cyg 016.34	22:58:58	26:22:02	59	15m	FAINT / STAR ON SLIT TO E.
77	COMP			↑	6s	NOT MUCH SIGNAL
78	σ Cyg 016.37	22:59:09	26:11:34	59	15m	
79	COMP			↑	6s	
80	σ Cyg 016.38	22:59:09	26:12:56	59	12m	
81	COMP			↑	6s	
82	σ Cyg 016.39	22:59:18	26:15:52	59	6m	
83	COMP			↑	6s	

60 inch Telescope Log
 Observer: D. KIRBY
 PI: MALHOTRA
 Spectrograph: FAST
 Grating: 300-L
 Date: 11/2/97
 Page: 5747

Number	Object	R. A.	Dec.	L/R	Exp	Comments
84	srj6016.40	22:59:20	21:53:01	S	15m	
85	COMP			↑	6s	
86	srj6016.41	22:59:22	21:54:56	S	12m	
87	COMP			↑	6s	
88	srj6016.42	22:59:22	21:54:52	S	12m	
89	COMP			↑	6s	
90	srj6016.43	22:59:22	21:52:15	S	5m	
91	COMP			↑	6s	
92	srj6016.44	22:59:22	21:54:00	S	15m	Faint source on slit to W.
93	COMP			↑	6s	
94	srj6016.45	22:59:22	21:51:02	S	5m	
95	COMP			↑	6s	
96	srj6016.46	22:59:22	21:52:02	S	6m	
97	COMP			↑	6s	
98	srj6016.47	22:59:22	21:50:44	S	12m	
99	COMP			↑	6s	
100	srj6016.48	22:59:22	21:55:52	S	15m	Fuzz..
101	COMP			↑	6s	
102	srj6016.49	22:59:22	21:57:22	S	7m	
103	COMP			↑	6s	
104	srj6016.50	22:59:22	21:58:31	S	15m	
105	COMP			↑	6s	
106	srj6016.51	22:59:22	21:54:52	S	15m	obj on slit to the west
107	COMP			↑	6s	
108	srj6016.52	22:59:22	21:54:02	S	6m	
109	COMP			↑	6s	
110	srj6016.53	22:59:22	21:58:52	S	15m	
111	COMP			↑	6s	
112	srj6016.54	22:59:22	21:54:47	S	7m	
113	COMP			↑	6s	

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Comments
Observer: <u>D. KORANYI</u>			Grating: <u>300-A</u>		
PI: <u>BRGIN/KENTON</u>			Date: <u>11/2/97</u>		
114	527171510	17:15:10			
115	COMP			+	65
116	527171510	17:15:10	14:38:44	42	20m
117	COMP			+	65
118	I1700	14:22:10	14:38:16	42	15m
119	COMP			+	65
120	I1698	14:22:10	14:34:43	42	15m
121	COMP			+	65
122	01535p1033	01:53:30	10:23:06	42	15m
123	COMP			+	65
124	250137020	02:02:15	10:16:34	42	15m
125	COMP			+	65
126-127	AX Per	01:36:23	04:51:02	12	35, 70s
128	COMP			+	65
129-130	DR Tau	04:22:40	07:49:02	12	10s, 90s
131	COMP			+	65
132-133	DR Tau	04:33:39	08:02:52	12	10s, 150s
134	COMP			+	65
135-136	DR Tau	04:47:05	08:58:37	12	10s, 35s
137	COMP			+	65
138	I1076	01:17:50	15:48:36	42	14m
139	COMP			+	65
140	I1076	01:22:26	15:43:54	42	12m
141	COMP			+	65
142	I1076	01:22:26	15:43:54	42	15m
143	COMP			+	65
144	254217500	02:25:00	17:43:11	42	12m
145	COMP			+	65
146	527171510	17:15:10	06:30:38	65	4m
147	COMP			+	65

Comments

THIS IS A RED; ON 11/1/97 (0000) I
HAD A STAR W/ THIS NAME.

BURN-IN - NOTE! CONFUSING OBJECT

FIELD IN WHICH I FOUND; SAYS I1698
LOCATION NOT I1698

BURN-IN

BURN-IN

60 inch Telescope Log
 Observer: D. KORANTY
 PI: MANDAVI/KINSHAFER/HUCHRA

Spectrograph: FRST
 Grating: 300-L
 Date: 11/2/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
148	src 6119.31	01:56:21	05:57:30	59	4m	
149	COMP			↑	6s	
150	src 6119.32	01:56:25	05:46:12	59	6m	
151	COMP			↑	6s	
152	src 6119.33	01:56:11	06:44:39	59	4m	
153	COMP			↑	6s	
154	src 6119.34	01:56:14	05:57:18	59	8m	STAR → ● ← OBJECT
155	COMP			↑	6s	
156	src 6119.35	01:56:17	07:38:47	59	12m	
157	COMP			↑	6s	
158	src 6119.36	01:56:18	07:24:33	59	5m	
159	COMP			↑	6s	
160	src 6119.37	01:56:19	05:39:25	59	4m	SEC 2 = 1.71
161	COMP			↑	6s	
162	SH 1997 00	09:26:42	47:05:36	2	10m	BIN 2 / STAR ON SLIT TO E.
163	COMP			↑	12s	BIN 2
164-166	G 191 B2B	05:01:51	52:45:52	2/56	120s	BIN 2
167	COMP			↑	12s	BIN 2
168	C 0616 p 29	06:19:29	23:20:42	43	15m	BIN 4 → / BARELY VISIBLE FIRST! V. LITTLE SIGNAL
169	COMP			↑		
170-179	BIAS			0	0s	BIN 4 DOHE IS STUCK! ~4AM
180-189	FLAT			0	6s	BIN 4 CANNOT REWIND
190-199	BIAS			0	0s	BIN 2 STOPPING EARLY
200-209	FLAT			0	12s	BIN 2 ~4:40 AM

60 inch Telescope Log

Observer: D. KOPRANYI

PI: KENYON/SR-LIN/MANORVI

Spectrograph: FAST

Grating: 300-L

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Date: 11/3/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	03	STARTING PHASES 7:55 PM
11-20	FLAT			0	65	DUE TO WORK ON SLIT ROTATOR.
21-23	ESW 110	23:17:23.5	-05:26:27	56	2m	- SOME CIRCUS THIS AFTERNOON
24	COMP			+	75	- BIN x4
25-27	N7331	22:37:46	34:07:43	57	5m	
28	COMP			+	75	
29,30	CC Cyg	19:50:12	35:41:04	12	15,30s	
31	COMP			+	75	
32-33	2 And	23:33:40	48:49:06	12	053,12s	
34	COMP			+	75	
35-36	AX Per	01:36:23	54:15:02	12	35,70s	
37	COMP			+	75	
	PROBLEMS W/TV	REBOOT GUIDE	OK @ SLIT	ROTATOR	STOPPED OFF	PULLS CABLES, ETC.
	CALL WATUP BACK	UP THE MOUNT	TO FIX TRAIN	6-5	OK ON	SKY @ 11:45 PM
38	22554 p 2548 f2	22:55:21	05:25:47	42	15m	THESE ARE BIN x2 BY ACCIDENT!
39	COMP			+	75	
40	N7509 f2	22:09:45	14:19:52	42	12m	2 OBJECTS SLIT v. CLOSE TO
41	COMP			+	75	EACH OTHER: ^{THE COMP} OK
42	00055 p 0726 f2	00:05:14	09:25:55	42	12m	
43	COMP			+	75	NO GOOD
44	00059 p 0956 f1	00:05:52	09:56:05	42	10m	
45	COMP			+	75	NO GOOD
46	5ng 6119.38	01:56:24	05:39:33	59	10m	CIRCUS..
47	COMP			+	75	NO GOOD
48,49	DL Tau	04:17:25	26:06:16	12	105, 90s	CLOUDY TO THE W. - MOUNT CLOSED.
50	COMP			+	75	
51-52	DL Tau	04:33:39	25:20:39	12	101, 150s	
53	COMP			+	75	
54-55	DL Tau	04:42:05	16:58:37	12	103, 75s	
56	COMP			+	75	

PROBLEMS WITH COMPS

43, 45, 47, 80

43, 45, & 47 look
as though shutter did
not open for comp P.02
80 looks as
though still or
shy

60 inch Telescope log

Observer: D. KORANYI

PI: HVCURA

Spectrograph: FAST

Grating: 300R

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Date: 11/2/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
57	AFS135	08:10:40	20:17:16	43	15m	INCR. CLOUDS / V. FAINT BUT ANYWAY
58	COMP			†	7s	CLOUDY END OF EXPOSURE. NO SIGNAL.
59	C0653p14	06:53:41	14:29:10	43	15m	[STOWED FOR N. 1.5hr]
60	COMP			†	7s	OBJ. ON SLIT, TO W.
61	C0651p19	06:51:56	19:07:10	43	12m	
62	COMP			†	7s	
63	C0651p14	06:51:24	14:28:14	43	15m	STAR NEAR BLK OF SLIT, TO W.
64	COMP			†	7s	FAST PICKS THE STAR...
65	C0649:20	06:49:56	20:45:14	43	15m	CLEARED UP...
66	COMP			†	7s	
67	C0649p16	06:49:45	16:36:27	43	15m	
68	COMP			†	7s	
69	C0647p10	06:49:00	10:46:04	43	15m	
70	COMP			†	7s	
71	C0648:25B	06:48:23	25:31:08	43	15m	
72	COMP			†	7s	
73	C0627p24	06:27:36	24:12:54	43	15m	
74	COMP			†	7s	
75-77	Wilmers 600	06:42:37	02:11:25	56	30s	GETTING LIGHT
78	COMP			†	7s	
79	Alk 120	05:13:38	-00:12:15	0	3m	
80	COMP			†	7s	NO GOOD
81-85	SKY			0	3s	
86	COMP			†	7s	
87-96	BIAS				0s	BIN x 4
97-106	FLAT				6s	BIN x 4
107-116	BIAS				0s	BIN x 2
117-126	FLAT				12s	BIN x 2
127-134	DARK				15m	BIN x 4

60 inch Telescope Log			Spectrograph: <u>FAST</u>			
Observer: <u>D. KOPRANYI</u>			Grating: <u>300-L</u>		Page: <u>5752</u>	
PI: <u>KENYON/CROBIN/MANORAI</u>			Date: <u>11/4/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-8	DARK				15m	BIN 24 CLOUDY TODAY...
9-18	BIAS				0s	BIN 24 SOME CLOUDS @ 2050
19-28	FLAT				6s	BIN 24
29-38	BIAS				0s	BIN 24
39-48	FLAT				12s	BIN 24
49-50	FLAT			0	20s	BIN 24 - 4 OFF LINE DARK!
51-54	FLAT			0	60s	
55	COMP			+	7s	
56-58	H01822891	20:10:46	45:07:01	85	10s	
59	COMP			+	7s	
60-62	N7331	22:34:46	34:59:43	57	3m	
63	COMP			+	7s	
64	N7469	23:03:15	08:25:30	6	2.5m	CLOUDS DURING EXP.
65	COMP			+	7s	
66-67	IC Cyg	17:50:12	10:14:55	12	15, 30s	
68	COMP			+	7s	
69-70	E And	23:33:40	48:49:06	12	25, 12s	
71	COMP			+	7s	
72	N75052	23:09:53	14:16:28	42	12m	
73	COMP			+	7s	
74	IC 5063	23:25:21	18:11:51	42	12m	
75	COMP			+	7s	
76	IC 5063	23:05:32	10:55:24	42	15m	
77	COMP			+	7s	
78	IC 5063	00:57:20	17:47:47	42	15m	
79	COMP			+	7s	
80	IC 5063	23:00:50	25:12:52	85	12m	
81	COMP			+	7s	
82	IC 5063	22:10:52	65:11:02	65	10m	
83	COMP			+	7s	

unable to reduce files after 125/126 because compress
are NO GOOD

60 inch Telescope Log

Spectrograph: FAST

Observer: D. KOLNYI

Grating: 300-L

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PI: MAHARAJ/GALLER

Date: 11/4/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
84	sr96016.57	23:01:32	20:39:48	59	12m	
85	COMP			↑	7s	
86	sr96016.58	23:02:08	20:40:02	59	12m	STAR - W SLIT TO W
87	COMP			↑	7s	
88	sr96016.59	23:20:32	20:42:13	59	12m	
89	COMP			↑	7s	
90	II107goud	01:27:37	14:36:44	42	20m	THIS IS A COPY of 11/2/97 #116(p.5748)
91	COMP			↑	7s	
92	01016p1826	01:01:08	14:25:42	42	20m	copy of 11/1/97: 5745/88
93	COMP			↑	7s	
94	01017p1725	01:51:47	14:25:44	42	20m	copy of 11/2/97: 5748/114
95	COMP			↑	7s	
96	00550p1448	00:55:03	14:47:54	42	20m	V. FAINT!
97	COMP			↑	7s	
98	sr96062.25	00:55:55	20:04:22	59	8m	
99	COMP			↑	7s	
100	sr96062.26	00:18:00	20:20:54	59	15m	
101	COMP			↑	7s	
102	sr96062.27	00:16:24	20:35:42	59	7m	
103	COMP			↑	7s	
104	sr96062.28	00:16:15	20:22:22	59	5m	
105	COMP			↑	7s	
106	sr96062.29	00:16:26	20:15:42	59	15m	
107	COMP			↑	7s	
108	sr96062.30	00:16:26	20:14:13	59	10m	
109	COMP			↑	7s	
110	229210.28	00:01:10	04:44:01	55	15m	BIT OF TRANSIT, TO E.
111	COMP			↑	7s	
112	456210.225	01:00:10	04:44:40	55	12m	
113	COMP			↑	7s	

60 inch Telescope Log

Observer: D. KOPPEL

PI: KENTON/GELLER

Spectrograph: FAST

Grating: 300-L

Page: 5754

Date: 11/4/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
114-115	AX Per	01:36:23	54:15:02	12	35,70s	
116	COMP			↑	7s	
117	526.014895	00:47:34	01:17:17	55	15m	
118	COMP			↑	7s	
119	526.015180	00:44:00	01:51:50	55	15m	
120	COMP			↑	7s	
121	526.021568	01:03:29	05:28:45	55	12m	
122	COMP			↑	7s	
123	526.023970	00:54:41.9	02:46:24	55	5m	
124	COMP			↑	7s	
125	526.024508	00:44:40	05:49:39	55	15m	
126	COMP			↑	7s	
127	526.026409	01:28:00	01:00:07	55	12m	
128	COMP			↑	7s	
129	526.027003	00:25:39	06:20:58	55	15m	
130	COMP			↑	7s	
131	526.028875	01:00:10	01:11:40	55	12m	
132	COMP			↑	7s	
133	529.002498	01:57:34	02:42:27	55	15m	HIGH ABUNDANCE...
134	COMP			↑	7s	
135	529.007971	01:22:36	01:07:03	55	15m	
136	COMP			↑	7s	
137	529.021116	02:16:05	05:08:27	55	15m	
138	COMP			↑	7s	
141-142	DL Tau	01:22:05	26:06:16	12	100,70s	
141	COMP			↑	7s	
142-143	DL Tau	01:33:39	25:20:39	12	100,150s	
144	COMP			↑	7s	
145-146	DR Tau	01:44:05	16:35:19	12	100,75s	
147	COMP			↑	7s	

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5755</u>	
Observer: <u>D. KORNBY</u>			Grating: <u>300-L</u>		Date: <u>11/4/97</u>	
PI: <u>HUCHNA</u>						
Number	Object	R. A.	Dec.	L/R	Exp	Comments
148	FC22	07:20:26	55:25:55	43	8m	
149	COMP			↑	7s	
150	07124 p 7037	07:12:17	70:36:22	43	15m	
151	COMP			↑	7s	
152	07164 p 546	07:16:27	61:46:19	43	8m	
153	COMP			↑	7s	
154	8055 p 1710	07:17:00	00:30:55	43	10m	
155	COMP			↑	7s	
156	07180 p 5375	07:18:00	56:35:00	43	9m	
157	COMP			↑	7s	
158	07173 p 335	07:17:43	63:33:39	43	12m	
159	COMP			↑	7s	
160	07177 p 447	07:17:40	73:40:01	43	8m	
161	COMP			↑	7s	
162	07220 p 5432	07:22:00	54:32:00	43	7m	
163	COMP			↑	7s	
164	07278 p 7344	07:27:48	73:45:14	43	7m	
165	COMP			↑	7s	
166	07320 p 2515	07:32:00	51:25:15	43	9m	
167	COMP			↑	7s	
168	07334 p 333	07:33:24	25:33:00	43	9m	
169	COMP			↑	7s	
170	07361 p 546	07:36:06	55:05:00	43	11m	
171	COMP			↑	7s	
172	07395 p 6211	07:39:06	62:11:27	43	10m	SKY COMING UP...
173	COMP			↑	7s	
174-176	HILTIER COO	06:42:37	00:11:25	56	30s	
177	COMP					
178-187	BIAS				0s	BIAS
188-197	FLAT				6s	FLAT

60 inch Telescope Log		Spectrograph: <u>FAST</u>		Page: <u>5756</u>		
Observer: <u>P. Berlino</u>		Crating: <u>3002</u>				
PI: <u>Huchra</u>		Date: <u>11/5/97</u>				
Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	BDS			0	0s	
11-20	FLAT			0	6s	
21-30	BDS			0	0s	late start - computer
31-40	FLAT			0	12s	problems - no new sky's
41-43	HD192281				4s	
44	COMP					CIRrus all over
45-46	CIC 29	19:50	+75:41	12	1s, 30s	
47	COMP			r		
48-49	BDp 284211	21:48	+28:37	56	30s	
50	COMP			r		
51, 52	ZAD	23:37	+48:49	12	0.5s, 12s	
53	COMP			r		
54	N7331	22:34	+34:09	57	3m	
55	COMP			r		clouds.
56	N7489	22:03	+08:52	6	4m	
57	COMP			r		
58	MRK509	20:41	+10:54	6	4m	
59	COMP			r		
60	17549p 2905	17:51	+28:05	43	4m	
61	COMP			r		
62	17553p 0437	17:55	+04:37	43	5m	2*'s to W
63	COMP			r		
64	17554p 1333	17:55	+13:33	43	6m	em
65	COMP			r		
66	17559p 3149	17:55	+31:49	43	6m	clouds; wken
67	COMP			r		
68	17566p 1325 NE	17:56	+13:25	43	6m	
69	17566p 1325 SW	17:56	+13:25	43	7m	
70	COMP			r		
71	17571p 4156	17:57	+41:56	43	4m	

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Page: <u>S757</u>	
Observer: <u>PB</u>				Grating: <u>3002</u>			
PI: <u>Geller</u>				Date: <u>11/5/97</u>			
Number	Object	R. A.	Dec.	L/R	Exp	Comments	
72	COMP			↑			
73	175752718	17:57	+27:48	43	6m	em; stopped by clouds	
74	COMP			↑			
75	S82.090386	23:11	+09:33	55	4m		
76	COMP			↑			
77	S82.084432	23:09	+09:29	55	5m		
78	COMP			↑			
79	S82.084289	23:19	+09:29	55	6m		
80	COMP			↑			
81	S82.090211	23:28	+09:32	55	10m		
82	COMP			↑			
83	S82.094262	23:46	+09:47	55	6m	em	
84	COMP			↑		waves of clouds	
85	S82.094057	23:17	+09:46	55	6m		
86	COMP			↑			
87	S82.093522	23:23	+09:44	55	6m		
88	COMP			↑			
89	S82.087932	23:14	+09:24	55	5m		
90	COMP			↑			
91	S82.087534	23:18	+09:23	55	4m		
92	COMP			↑			
93	S82.086865	23:27	+09:20	55	5m		
94	COMP			↑			
95	S82.087336	23:29	+09:22	55	6m		
96	COMP			↑			
97	S82.000859	23:16	+09:42	55	6m	extended	
98	COMP			↑			
99	S82.007006	23:18	+09:11	55	6m	more clouds...	
100	COMP			↑			
101	S82.007485	23:22	+09:13	55	5m		

60 inch Telescope Log

Observer: PB
 PI: Greller

Spectrograph: FAST

Grating: 300R

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Date: 11/5/97

Number	Object	R. A.	Dec.	L/R	Exp	Comments
102	COMP			r		
103	S82.020769	23:15	+06:10	SS	6m	
104	COMP			r		
105	S82.031761	23:16	+06:54	SS	8m	
106	COMP			r		
107	S82.041556	23:14	+06:32	SS	6m	
108	COMP			r		
109	S82.042721	23:16	+06:57	SS	5m	
110	COMP			r		
111	S82.044685	23:25	+06:45	SS	6m	
112	COMP			r		
113	S82.049487	23:18	+07:01	SS	7m	
114	COMP			r		clearing ok.
115	S82.049495	23:27	+08:01	SS	6m	
116	COMP			r		
117	S82.051712	23:23	+07:13	SS	6m	
118	COMP			r		
119	S82.055864	23:21	+07:28	SS	6m	
120	COMP			r		
121	S82.055917	23:08	+07:28	SS	5m	
122	COMP			r		
123	S82.057227	23:10	+07:34	SS	5m	
124	COMP			r		
125	S82.059744	23:20	+07:43	SS	9m	OK
126	COMP			r		
127	S82.062808	23:21	+07:51	SS	6m	
128	COMP			r		
129	MRK335	00:03	+19:55	G	3m	
130	COMP			r		
131	225m240	00:41	+4:05	SG	4m	

60 inch Telescope Log

Observer: PB

PI: Andi

Spectrograph: FAST

Grating: 300

Date: 11/5/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
132	COMP			r		
134/131	Axfer	01:26	+29:13	12	3s, 70s	
135	COMP			r		
136	sr g b 062.31	00:16	+29:55	59	7m	H ₂ wk
137	COMP			r		
138	062.32	00:16	+30:20	59	3tan	
139	COMP			r		
140	062.33	00:16	+30:26	59	6m	em
141	COMP			r		
142	062.34	00:16	+29:37	59	2m	
143	COMP			r		
144	062.35	00:16	+30:40	59	7m	
145	COMP			r		
146	062.36	00:17	+29:56	59	2m	
147	COMP			r		
148	062.37	00:17	+29:28	59	10m	
149	COMP			r		
150	062.38	00:17	+28:52	59	8m	
151	COMP			r		
152	062.39	00:17	+30:12	59	5m	
153	COMP			r		
154	062.40	00:17	+29:50	59	8m	
155	COMP			r		
156	062.42	00:17	+30:12	59	6m	
157	COMP			r		
158	062.43	00:17	+30:10	59	7m	em
159	COMP			r		
160	062.44	00:17	+29:51	59	10m	
161	COMP			r		
162	062.45	00:17	+30:09	59	6m	

60 inch Telescope Log

Observer: PB

PI: Geller/Huchra

Spectrograph: FAST

Grating: 3000

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Date: 11/5/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
163	CMP			r		here come the clouds
164	S29.005988	02:03	+04:17	SS	10m	again
165	CMP			r		clouds
166	S29.01241	01:56	+04:23	SS	10m	↓
167	CMP			r		
168	S29.015510	02:07	+04:43	SS	12m	
169	CMP			r		
170	S29.020956	02:01	+05:07	SS	12m	
171	CMP			r		
172	S29.021420	02:13	+05:10	SS	12m	
173	CMP			r		
174	S29.028178	02:03	+05:29	SS	5m	
175	CMP			r		
176	S29.029006	01:56	+05:42	SS	10m	wk
177	CMP			r		
178	S29.029818	01:56	+05:46	SS	12m	
179	CMP			r		
180	AP5133	03:16	+20:21	43	12m	
181	CMP			r		
182	AP5134	03:10	+20:15	43	15m	
183	CMP			r		
184	AP5141	03:50	+21:02	43	15m	
185	CMP			r		
186	AP5139	03:51	+21:15	43	12m	
187	CMP			r		
188	AP5148	03:34	+20:26	43	12m	
189	CMP			r		
190	AP5144	03:40	+20:47	43	15m	emp pix 2172
191	CMP			r		
192	AP5152	03:33	+20:08	43	11m	wk ↓ wk em 2400

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Page: <u>5761</u>
Observer: <u>PJB</u>		Grating: <u>300L</u>		Date: <u>11/5/97</u>		
PI: <u>Huchra & Kirshner</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
193	COMP			↑		
196	C0523p38	05:23	+28:25	43	15m	
197	C0523p385	05:23	+28:28	43	6m	crystal nebulosity S of #196
198				↑		100% H α et al lower
199	C0530p314W	05:30	+34:20	43	90s	stars
200	COMP			↑		
201	C0600p31	06:00	+34:30	43	3m	extended H α cm @ 6562...
202	COMP			↑		H α 's
203	C0611p07	06:11	+7:35	43	3M	extended em only
204	COMP			↑		
205	C0621p14	06:21	+14:32	43	3m	to w/ H α
206	COMP			↑		clouds ↑↑ / -thick
207	SN1972a	07:26	+47:05	2	20m	
208	COMP			↑		
209	07144p5917EJ	07:14	+51:17	43	20m	E W pair; bin by 2
210	COMP			↑		
211,212	DR Tan	04:27	+26:06	12	15s, 3m	
213	COMP			↑		
214-215	DR Tan	04:33	+25:20	12	45s, 5m	
216	COMP			↑		
217,218	DR Tan	04:47	+16:55	12	45s, 5m	
219	COMP			↑		Stopped by clouds
220-221	Flitner/6W	06:42	+02:11	56	1m	
222	COMP			↑		
223-232	BIAS			0	0s	
233-242	FLAT			0	6s	
243-252	BIAS			0	0s	
253-262	FLAT			0	12s	
263-267	DARK				15m	bin by 4

60 inch Telescope Log		Spectrograph: <u>FAST</u>		Page: <u>5762</u>		
Observer: <u>P. Berland</u>		Grating: <u>300</u>				
PI: <u>All</u>		Date: <u>11/6/97</u>				
Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-5	DARK			0	15m	bin by 4
6-10	DARK			0	15m	bin by 2
11-20	BITS			0	0s	
21-30	FLAT			0	6s	
31-40	BITS			0	0s	
41-50	FLAT			0	12s	clouds all over
51-55	sky			56	2s	
56	COMP			↑		
57-62	HD 190918 Nas	20:05	+35:47	57	3s	
63	COMP			↑		
64-66	HD 191139	20:07	+36:24	57	3s	
67	COMP			↑		
68-70	HD 227757	20:07	+76:21	57	3s	
71	COMP			↑		
72-74	HD 191201	20:07	+75:13	57	3s	
75	COMP			↑		
76-78	HD 191226	20:07	+76:27	57	3s	
79	COMP	20:10:48	40:07:01	↑		
80-82	HD 192281	20:10	+110	57	3s	
83	COMP			↑		
84-85	CFEgy	19:50	+35:41	12	1.5, 40s	
86				↑		
87-88	BDp 28211	21:48	+28:37	56	40s	
89	COMP			↑		quad sucker hole
90-91	ZAND	23:33	+48:49	12	1/2, 15s	
92	COMP			↑		
93-94	N 7331	22:31	+34:09	56	4m	
95	COMP			↑		
96	N 7469	23:05	+06:52	6	2m	stopped by clouds
97	COMP			↑		close.

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5763</u>	
Observer: <u>PB</u>			Grating: <u>3002</u>			
PI: <u>Geller</u>			Date: <u>11/6/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
98	582.069540	23:19	+08:15	SS	10m	open again @ 10 pm
99	COMP			↑		clearing...
100	582.067475	23:21	+08:10	SS	10m	HA
101	COMP			↑		
102	582.063212	23:20	+07:55	SS	10m	
103	COMP			↑		
104	582.063112	23:07	+07:55	SS	8m	
105	COMP			↑		
106	582.070518	23:20	+08:21	SS	6m	
107	COMP			↑		
108	582.072741	23:07	+08:29	SS	5m	
109	COMP			↑		
110	582.073724	23:18	+08:23	SS	5m	
111	COMP			↑		
112	582.074760	23:24	+08:26	SS	4m	
113	COMP			↑		
114	582.077141	23:27	+08:45	SS	4m	
115	COMP			↑		
116	582.077485	23:31	+08:46	SS	5m	
117	COMP			↑		
118	582.079520	23:26	+08:47	SS	15m	more clouds ; HA pil 2005
119	COMP			↑		many big cosmic rays too
120	582.080716	23:24	+08:59	SS	12m	emf; + to W
121	COMP			↑		
122	582.083091	23:11	+09:07	SS	5m	
123	COMP			↑		
124	582.083624	23:10	+09:08	SS	5m	
125	COMP			↑		
126	582.085652	23:22	+09:16	SS	8m	
127	COMP			↑		

60 inch Telescope Log

Observer: PB
 PI: Greller

Spectrograph: FAST

Grating: 302

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
128	S82.066806	25:21	+04:20	SS	10m	wkcm
129	CMP			↑		
130	S29.02482	02:16	+05:11	SS	8m	
131	CMP			↑		
132	S29.023578	02:10	+05:21	SS	8m	
133	CMP			↑		
134	S29.026232	01:59	+05:30	SS	8m	
135	CMP			↑		
136	S29.026835	02:18	+05:33	SS	9m	
137	CMP			↑		
138	S29.035821	02:10	+06:10	SS	9m	
139	CMP			↑		
140	S29.036310	02:14	+06:18	SS	9m	
141	CMP			↑		
142	S29.040275	02:04	+06:38	SS	7m	emt
143	CMP			↑		
144	S29.040593	02:09	+06:39	SS	9m	
145	CMP			↑		
146	S29.042041	01:57	+06:46	SS	9m	
147	CMP			↑		
148	S29.053548	01:56	+07:14	SS	9m	
149	CMP			↑		
150	S29.059865	01:57	+07:18	SS	9m	
151	CMP			↑		
152	S29.054399	02:19	+07:49	SS	9m	
153	CMP			↑		
154	S29.055076	02:18	+07:52	SS	9m	
155	CMP			↑		
156	S29.08426	02:15	+07:55	SS	10m	
157	CMP			↑		

60 inch Telescope Log				Spectrograph: <u>FAST</u>		
Observer: <u>PB</u>				Grating: <u>30R</u>		Page: <u>5765</u>
PI: <u>Huckra et al</u>				Date: <u>11/6/97</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
158	SZ9261180	02:18	+08:25	55	10m	
159	COMP			f		
160-161	AXPer	01:24	+54:15	f2	3, 70s	
162	COMP			f		
163	AP5127	03:07	+20:12	43	20m	empix 2160!! wk
164	COMP			f		
165	AP5132	03:15	+20:20	43	20m	em
166	COMP			f		
167	AP5136	03:11	+20:17	43	20M	wk empix 2340
168	COMP			f		
169	AP5137	03:11	+20:18	43	20m	em 2400
170	COMP			f		
171	AP5143	03:36	+20:32	43	17m	em
172	COMP			f		
173	AP5142	03:54	+20:50	43	15m	wk but good em @ pix 2200
174	COMP			f		
175	AP5151	03:53	+20:19	43	15m	em wk em H ₂ 200
176	COMP			f		
177	SN1997do	07:26	+17:05	2	15m	bmbp 2
178	COMP			f		
179	07070p649	07:07	+86:19	43	15m	large LSBga! em chky
180	COMP			f		
181	07220p6485	07:22	+64:55	43	10m	em
182	COMP			f		
183, 184	DGTan	04:27	+76	12	10, 90	
185	COMP			f		
186-187	DLTan	04:33	+75	12	10, 150	
188	COMP			f		
189-190	DRTan	04:47	+76	12	10, 75	
191	COMP			f		

60 inch Telescope Log

Observer: PB
 PI: A11

Spectrograph: FAST
 Grating: 30R
 Date: 11/6/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
192	SN1997dq	11:40	+11:28	2	9m	bunby 2
193	COMP			↑		
194-195	N4151	12:06	+39:41	6	30s	used
196	COMP			↑		
197-199	For 34	10:36	+43:21	56	90s	
200	COMP			↑		
201-203	HD 75959	08:36	+64	57	2s	scattered clouds
201	COMP			↑		→ dawn
205-207	HD 82635	09:34	+76	57	0.5s	
208	COMP			↑		
209-211	HD 67228	08:07	+71	57	1s	
212	COMP			↑		
213-212	BIAS			0	0s	
213-232	FLAT			0	6s	
233-242	BIAS			0	0s	bunby 2
243-252	FLAT			0	12s	bunby?
						End of FAST Run
						~

★ Start of FAST Run ★

60 inch Telescope Log
 Observer: P Berlin, Joanna Kuraszki, Belinda Wilkes
 PI: Joanna
 Spectrograph: FAST
 Grating: 3000
 Date: 11/21/97
 Page: 5791

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-15	fastfire					CCD has new UV-flood
16-25	BIAS			0	0s	DARKS show structure #25
26-35	fastfire					5 higher than other not used
38-47	FLAT	2"	Slit!			2" slit
47-51	FLAT	3"				3" slit clean slits
52-58	FLAT	2"				2" slit =
59-61	MD192281	20:10	+40	56	10s	
62	COMP			↑		lots of cirrus
63-65	BDp284211	21:48		56	90s	airmass 1.0
66	COMP			↑		
67	Q220p315	22:03	+31:45	69	20m	
68	COMP			↑		
69	Q1928p738	19:29	+73:58	69	20m	
70	COMP			↑		bad comp ✓
71	N7331	22:39	+34:09		4m	
72	COMP					
73	M32	00:39	+40:35		60s	
74	COMP					
75	Q 0050+124	00:53	+12:41		15m	
76	COMP					
77	Q 0050+124	00:53	+12:41		15m	
78	COMP					
79	BDp284211	21:48			90s	airmass 1.2
80	COMP					
81	Q 2344+032				20m	
82	COMP					
83	Q 2344+032				20m	
84	COMP					
85	Q 2251+158	22:53	16:08		20m	
86	COMP					

NO BIN BY 2 DARKS!

Line list changed slightly with this run (added & removed)

where did you change to a 3" slit?

60 inch Telescope Log

Observer: PB/JSK
 PI: Geller

Spectrograph: FAST
 Grating: 300R
 Date: 11/21/97

Page: 5792

Number	Object	R.A.	Dec.	L/R	Exp	Comments
87	Q 2251+158	22:55	16:08		20m	clouds
88	COMP					
89	BD, 284211	21:48	28:32		90s	
90	COMP					bad comp
91	Feige 110	23:17	-05:26		150s	
92	COMP					bad comp
93	Z005925	00:00	00:00	60	4m	
94	Z001853 Z014956	+28:24	+28:14	60	6m	Wgal = Z014956
95	COMP			↑		Egal = Z002853 3"
96	Z010613	00:00	-06:45	60	5m	
97	COMP			↑		
98	Z004214	00:01	+06:14	60	4m	
99	COMP			↑		
100	Z010690	00:01	+04:32	60	10m	
101	COMP			↑		
102	Z005791	00:46	+29:57	60	5m	
103	COMP			↑		
104	Z012592	01:00	+19:50		4m	
105	COMP					
106	Z004947	01:06	+10:31		5m	
107	COMP					
108	Z005832	01:09	+32:24		5m	
109	COMP					
110	Z001770	01:20	-28:41		5m	
111	COMP					
112	N003291	01:24	+21:06		15m	wk; em
113	COMP			↑		
114	N000391	01:53	+16:57	60	3m	
	COMP			↑		

89 + 91 - bin by 2 or by 3 ???
 can't tell - no comps
 all files have 2"
 in header but they aren't
 all 2"

ASSUMED 2" slit
 for 88 + 91 (NO IDEA REALLY)
 USED 2" COMP (FILE 88)

60 inch Telescope Log

Observer: PBJJK

PI: _____

Spectrograph: FAST

Grating: 3009

Date: 11/21/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
116	Z014975	01:43	+30:76	60	7m	
117	COMP			↑		
118	Z009243	01:46	+28:45	60	6m	
119	COMP			↑		
120	Z000810	01:50	+35:17	60	3m	
121	COMP			↑		3" slit
122	Q0105m123	01:01	-12:11	69	15m	2" slit
123	COMP			↑		3" slit more clouds
124-5	D6Tay	04:27	+26:06	12	100, 10s	3" slit
126	COMP			↑		3" slit
127-128	DREin	04:33	+25:20	12	2m, 10s	
129	COMP			↑		
130-131	DREin	04:37	+16:58	12	80s, 10s	
132	COMP			↑		
133	021118 32p10100	02:11	+12:02	68	10m	
134	COMP			↑		
135	024145 22p151036	02:41	15:10	68	12m	
136	COMP			↑		
137	024205 13p155750	02:42	15:17	68	10m	
138	COMP			↓		
139	024304 90p140006	02:43	14:00	68	15m	use COMP * 138
140	COMP			↑		bad comp
141	Q0624 p691	06:30	+69:03	69	15m	2" slit
142	COMP			↑		2" slit stopped by clouds
143	SN 195720	07:26	+47:00	2	9m	not 20m. bin by 2
144	COMP			↑		3" slit im-returned from + top
145	06163p35103	06:16	+36:03	43	10m	bin by 2; bright & nearby
146	COMP			↑		nice em!! psl 2104
147	06191p4678	06:19	+46:38	43	5m	
148	COMP			↑		

60 inch Telescope Log

Observer: PBJJK

PI: PBJJK Hucha

Spectrograph: FAST

Grating: JWL

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Date: 11/21/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
149	06388 p4606	06:38	+46:06	43	5m	nice sky!
150	COMP			↑		
151	06410 p4756	06:41	+47:52	43	7m	
152	COMP			↑		
153	06478 p4912	06:47	+48:12	43	7m	
154	COMP			↑		
155	SN1997do	07:26	+47:05	2	15m	bm by 2
156	COMP			↑		
157	07391 p5505 B	07:39	55:05	43	5m	
158	p5505A	"	"	43	5m	em
159	p5505C	"	"	43	7m	
160	COMP			↑		
161	07409 p6553	07:40	+65:53	43	8m	em
162	COMP			↑		
163	07435 p6703	07:43	+67:03	43	7m	
164	COMP			↑		
165	07437 p5120	07:47	-51:20	43	8m	
166	COMP			↑		
167	SN1997dg	11:40	+11:28	2	20m	bright man nearby
168	COMP			↑		
169	07438 p6528	07:45	65:28	43	4.5m	
170	COMP			↑		scattered clouds @ dawn
171	07440 p6619	07:45	66:19	43	3m	
172	COMP			↑		
173	07440 p4820	07:44	48:20	43	6m	dawn -
174	COMP			↑		
175	07455 p5248	07:45	52:48	43	3m	
176	COMP			↑		
177-186	BIAS			0	0s	
187-196	FLAT			0	6s	3" slit
197-206	BIAS			0	0s	bm by 2
207-216	FLAT			0s	12s	" "
217-226	FLAT2			0s	9s	bm by 4, 2" slit
227-236	DARK				15m	

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5795</u>	
Observer: <u>PBerland/Jeanm KucaszKewse</u>			Grating: <u>3000; 3" Slit</u>			
PI: <u>Kempen/Kirsher/W.Kes/Kur.</u>			Date: <u>11/22/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-5	DARK			0	15m	bin by 4
6-10	DARK			0	15m	bin by 2
11-20	FLAT 2			69	9s	bin by 4; 2" Slit
21-30	BIAS			0	0s	
31-40	FLAT			0	6s	3" Slit
41-50	BIAS			0	0s	
51-60	FLAT			0	12s	
61-65	SKY			57	2s	clouds.
66	COMP			↑		
67-69	HD 92251	20:40	+40:07	56	4s	
70	COMP			↑		
71-72	CIC 77	19:50	+75:11	12	1/2, 30s	
73	COMP			↑		
74-75	DD 284211	21:48	+28:37	56	30s	
76	COMP			↑		
77-78	ZAD	23:33	+48:49	12	0.5s, 10s	
79	COMP			↑		
80	N 7469	23:03	+06:52	6	21m	
81	COMP			↑		
82	MRK 557	20:41	-10	6	3m	
83	COMP			↑		
84	N 7331	22:31	+74:09	57	3m	
85	COMP			↑		
86	XC 390.3	18:45	+71:43	6	12m	
87	COMP			↑		
88	Q 1928 p 738	19:27	+73:58	69	20m	2" Slit
89	COMP			↑		
90	SN 1977ds	22:24	-07:29	2	20m	
91	COMP			↑		clouds
92	Feyello	23:17	-05:26	56	4m	

60 inch Telescope Log

Observer: PBSJK

PI: _____

Spectrograph: FAST

Grating: 3002

Date: 11/22/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
93	COMP			↑		
94	M32	00:39	+40:35	57	6 min	clouds ↓
95	COMP			↑		
96	M32	00:39	+40:35	57	1 min	
97	COMP			↑		
98	158m 213	00:40	+40:50	57	5 min	
99	COMP			↑		
100	sr gb 062.47	00:17	+29:41	59	10m	redo yes redo
101	COMP			↑		
102	sr gb 062.48	00:17	+29:28	59	10m	clouds redo
103	COMP			↑		
104	sr gb 062.51	00:18	+30:03	59	12m	huge cosmic ray
105	COMP			↑		
106	sr gb 062.52	00:18	+29:57	59	10m	clearing nicely
107	COMP			↑		
108	MRK335	00:03	+19:55	6	3m	
109	COMP			↑		
110	SN1997dt	23:40	+15:59	2	15m	
111	COMP			↑		
112	S82.007006	23:18	+04:11	55	11m	redo from 11/5/97 (#99)
113	COMP			↑		
114	00227p643.big	00:25	+06:09	42	20m	for Norm = 25 burn-in
115	COMP			↑		
116	S26.026409	00:52	+06:40	55	9m	redo from 11/4/97
117	COMP			↑		
118	S26.027003	00:52	+06:02	55	10m	redo from 11/4
119	COMP			↑		
120	S26.028895	01:06	+06:11	55	4m	redo from 11/4 wk; em
121	COMP			↑		
122	S26.031097	00:59	+06:24	55	12m	

60 inch Telescope Log				Spectrograph: <u>FAST</u>		
Observer: <u>PKJK</u>				Grating: <u>3002</u>		Page: <u>5797</u>
PI: <u>Geller</u>				Date: <u>11/22/97</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
123	COMP			↑		
124	S26.051242	01:03	+06:24	SS	6m	
125	COMP			↑		
126	S26.031757	01:06	+06:27	SS	10m	em
127	COMP			↑		
128	S29.002498	01:57	+03:42	SS	5m	redo from 11/4 em
129	COMP			↑		
130	S29.007971	02:02:36	+04:07	SS	4m	redo from 11/4 em
131	COMP			↑		
132	S29.021116	02:16	+05:08	SS	4m	redo from 11/4 em
133	COMP			↑		
134	S29.061694	02:01	+04:29	SS	5m	
135	COMP			↑		
136	S29.061989	02:02	+04:30	SS	5m	
137	COMP			↑		
138	S29.062213	02:05	+04:31	SS	6m	
139	COMP			↑		
140	S29.062098	01:55	+04:25	SS	6m	
141	COMP			↑		
142	S29.070448	02:06	+04:13	SS	4m	
143	COMP			↑		
144	S29.071173	01:58	+04:17	SS	6m	
145	COMP			↑		
146	S29.073583	02:12	+04:29	SS	6m	
147	COMP			↑		
148	S29.074520	02:15	+04:32	SS	6m	em
149	COMP			↑		
150	S29.075213	02:13	+04:36	SS	6m	
151	COMP			↑		
152	S29.076199	02:11	+04:40	SS	7m	

60 inch Telescope Log

Observer: POJJK

PI: Huchra

Spectrograph: FAST

Grating: 300R

Date: 11/22/97

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
153	WMP			↑		
154	AKR	01:36	+15:45	12	3s, 70s	
156	WMP			↑		
157	2MJ024044	02:40	+15:46	68	8m	
158	WMP			↑		
159	2MJ024050	02:40	+14:42	68	6m	
160	WMP			↑		
161	2MJ024057	02:40	+12:04	68	5m	
162	WMP			↑		
163	2MJ024102	02:41	+16:15	68	6m	
164	WMP			↑		
165	2MJ024230	02:42	+13:57	68	5m	S part, wk but nice abs lines
166	WMP			↑		
167	2MJ02424	02:42	+17:42	68	5m	
168	WMP			↑		
169	2MJ0242	02:42	+13:14	68	6m	
170	WMP			↑		
171	2MJ24311	02:43	+17:29	68	6m	
172	WMP			↑		
173	2MJ24324	02:43	+16:09	68	4m	
174	WMP			↑		
175	2MJ24324	02:43	+16:11	68	4m	
176	WMP			↑		
177	AP5154, star	03:54	+20:18	43	3m	2 stars w/ nebula nearby
178	WMP			↑		
179	AP5154	03:54	+20:18	43	15m	redo faint - redo? or weak?
180	WMP			↑		
181	07164p5046	07:16	+50:46	43	3m	em redo from 11/4
182	WMP			↑		
183	07171p5506	07:17	+55:06	43	6m	

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5499</u>	
Observer: <u>PBSJK</u>			Grating: <u>JWR</u>			
PI: <u>Huchra</u>			Date: <u>11/22/97</u>			
Number	Object	R. A.	Dec.	L/R	Exp	Comments
184	COMP			↑		
185	07180 p 5635	07:18	56:35	43	3m	redo 11/4
186	COMP			↑		
187	07205 p 5440 W	07:20	54:40	43	7m	
188	07205 p 5440 M	--" --	--" --		5m	
189	07205 p 5440 E	--" --	--" --		4m	
190	COMP			↑		
191	07235 p 5332	07:21	+53:32	43	3m	redo 11/4
192	COMP			↑		
193	07260 p 5132	07:26	+51:32	43	4m	redo 11/4
194	COMP			↑		
195	07320 p 5152	07:22	+51:52	43	3m	em redo 11/4
196	COMP			↑		
197	07361 p 5246	07:26	+52:46	43	3m	em redo 11/4
198	COMP			↑		
199	07395 p 624	07:39	+62:04	43	2m	redo 11/4
200	COMP			↑		
201	07424 p 7057	07:42	+70:57	43	5m	HL pix 2055! redo 11/4
202	COMP			↑		see 11/4 file for strong cap
203	± 2174	07:42	+71:23	43	4 ¹ m	
204	COMP			↑		
205	07247 p 7344	07:24	+73:44	43	3m	
206	COMP			↑		
207	07278 p 7345	07:27	+73:45	43	3m	
208	COMP			↑		
209	07331 p 7533	07:33	+75:33	43	4m	
210	COMP			↑		
211	07480 p 7432	07:48	+74:32	43	1m	
212	COMP			↑		
213	07473 p 7216	07:47	+72:16	43	5m	

60 inch Telescope Log

Observer: PB
 PI: Hucha

Spectrograph: FAST

Grating: 300L

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Date: 11/22/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
214	COMP			↑		
215	07478p 5513	07.47	+55.13	43	10m	L50 wk emp p 2102; wk
216	COMP			↑		larger 1000? 4000s
217	DRTan	04	+76	12	10,90	
219	COMP			↑		
220	DRtan	04	+75	12	10,80	
222	COMP			↑		
223	DRtan	04	+76	12	10,75	
225	COMP			↑		
226	Hiltner 600	06.42	-02	56	40s	
228	COMP			↑		
229	07508p 0640	07.50	+06.40	43	10m	*to W; emp pix 216s
230	COMP			↑		
231	07493p 1115	07.49	+11.15	43	10m	
232	COMP			↑		
233	07489p 1118	07.48	+11.18	43	8m	
234	COMP			↑		
235	07486p 1106	07.48	+11.06	43	10m	
236	COMP			↑		
237	07482p 0943N	07.48	+09.43	43	5m	
238	07482p 0943S	07.48	+09.43	43	5m	
239	COMP			↑		
240	07448p 1022	07.44	+10.22	43	7m	E
241	COMP			↑		
242	07463p 5601	07.46	+56.01	43	7m	
243	COMP			↑		
244	07492p 5310	07.49	+53.10	43	7m	
245	COMP			↑		
246	07498p 5156	07.49	+51.56	43	3m	36
247	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5801</u>	
Observer: <u>PB</u>		Grating: <u>3WL</u>		Date: <u>11/22/97</u>		
PI: <u>Huckra</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
248	07510p7355	07.51	+73.55	43	2m	
249	COMP			↑		
250	07510p4419	07.51	+44.19	43	4m	
251	COMP			↑		
252	07515p4337	07.51	+43.37	43	90m	em
253	COMP			↑		
254	07513p4348	07.51	+43.48	43	4m	
255	COMP			↑		
256	N2461	07.52	+56.49	43	3m	
257	COMP			↑		
258	07531p5840	07.53	+58.40	43	5m	
259	COMP			↑		
260	07537p5250	07.53	+52.50	43	4m	clear skies @ dawn
261	COMP			↑		
262	07569p5541	07.56	+55.41	43	4m	
263	COMP			↑		
264	N4151	12.08	+35.41	6	30s	6:10
265	COMP			↑		
266-268	Feige 34	10.76	+43.21	56	90s/1m	
269	COMP			↑		
270-271	BINS			0	0s	
280-281	FLAT			0	6s	
290-291	BINS			0	0s	bin by 2
300-301	FLAT			0	12s	↑
310-319	DARK			0	15m	bin by 4

60 inch Telescope Log

Observer: PBerlin; Jason Kurasekiewicz

PI: Kenneth Kirshner's Geller

Spectrograph: FAST

Grating: 3000, 3154

Date: 11/23/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-5	DARK			0	15m	bin by 4
6-9	DARK			0	15m	bin by 2
10-19	BIAS			0	05	bin by 4
20-29	FLAT			0	6s	"
30-39	BIAS			0	05	
40-49	FLAT			0	12s	
50-54	sky	Zenith		57	25	
55	COMP			↑		
56-58	HDF2281	20:40	+140	56	4s	clouds all over
59	COMP			↑		
60-61	CE Cyg	19:50	+3541	12	15, 30m	
62	COMP			↑		
63-64	BDP284211	21:48		56	40s	
65	COMP			↑		
66-67	Z And	23:33	+4549	12	0.5, 1.5	
68				↑		
69	N7469	23:03	+0852	56	2m	
70	COMP			↑		
71	Ferze 32	23:19	-05:26	56	2m	
72	COMP			↑		
73	N7331	22:34	+3409	57	3m	
74	COMP			↑		
75	SN1997dt	23:00	+15:59	2	20m	bin by 2
76	COMP			↑		
77	Z014762	22:04	+17:58	60	5m	
78	COMP			↑		
79	N006574	22:11	+10:06	60	5m	
80	COMP			↑		
81	N002486	22:20	+09:09	60	6m	
82	COMP			↑		

60 inch Telescope Log

Observer: PD, Joanna K.

PI: Geller

Spectrograph: FAST

Grating: 300L 3" slit

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Date: 11/23/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
83	2012644	22:27	+31:30	60	5m	thin cirrus ↓
84	COMP			↑		
85	A000657	22:34	+32:11	60	5m	
86	COMP			↑		
87	2004246	22:41	+23:24	60	4m	
88	COMP			↑		
89	A000144	22:47	+39:52	60	4m	
90	COMP			↑		
91	2005820	22:54	+32:15	60	4m	
92	COMP			↑		
93	N001902	22:58	20:17	60	7m	
94	COMP			↑		
95	2012374	23:03	+01:50	60	4m	
96	COMP			↑		
97	2014822	23:08	+17:15	60	2m	
98	COMP			↑		
99	464.007202	00:11	+10:07	55	5m	
100	COMP			↑		
101	464.013074	23:56	+10:27	55	5m	
102	COMP			↑		
103	464.083260	23:56	+17:52	55	5m	to do for W em
104	COMP			↑		
105	464.084264	23:56	+17:54	55	5m	
106	COMP			↑		
107	464.081985	00:11	+13:48	55	7m	
108	COMP			↑		
109	464.078131	00:14	+13:37	55	6m	
110	COMP			↑		
111	464.087974	00:15	+14:04	55	6m	
112	COMP			↑		

60 inch Telescope Log		Spectrograph: <u>FAST</u>		Page: <u>5804</u>		
Observer: <u>RB</u>		Grating: <u>3000</u>		Date: <u>11/23/97</u>		
PI: _____						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
113	464.104252	00:08	+14:50	SS	6m	broad em
114	COMP			r		
115	464.104581	01:10	+14:50	SS	5m	clearing some
116	COMP			r		
117	MRK335	00:03	+19:55	6	3m	
118	COMP			r		
119	526.033743	01:06	+06:38	SS	5m	
120	COMP			r		
121	526.034641	01:02	+06:43	SS	6m	
122	COMP			r		
123	526.034868	00:52	+06:46	SS	6m	
124	COMP			r		
125	526.037012	00:44	+06:38	SS	6m	
126	COMP			r		
127	526.040006	00:43	+07:15	SS	7m	
128	COMP			r		
129	526.040170	00:57	+07:15	SS	6m	
130	COMP			r		
131	526.040306	01:01	+07:15	SS	6m	
132	COMP			r		
133	526.040903	01:06	+07:18	SS	6m	
134	COMP			r		
135	526.040983	01:05	+07:18	SS	5m	
136	COMP			r		
137	526.041032	01:03	+07:19	SS	5m	
138	COMP			r		
139	526.041592	01:02	+07:22	SS	4m	
140	COMP			r		
141	526.042643	01:03	+07:28	SS	6m	
142	COMP			r		

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Page: <u>5805</u>
Observer: <u>PB</u>				Grating: <u>300L</u>		
PI: <u>Greller</u>				Date: <u>11/23/97</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
143	526.017420	01:05	+07:52	SS	6m	same clouds
144	COMP			↑		
145	526.017519	01:06	+07:52	SS	5m	* to E
146	COMP			↑		
147	526.017673	00:56	+07:34	SS	5m	
148	COMP			↑		
149	526.018805	00:51	+07:41	SS	10m	faint; em
150	COMP			↑		
151	526.018481	01:06	+07:43	SS	6m	*'s on slit
152	COMP			↑		
153	468.003697	01:45	+09:51	SS	10m	em
154	COMP			↑		
155	468.003156	01:44	+10:20	SS	5m	
156	COMP			↑		
157	468.003165	01:41	+10:21	SS	6m	
158	COMP			↑		
159	468.010490	01:45	+10:26	SS	7m	
160	COMP			↑		
161	468.062664	01:48	+13:43	SS	7m	
162	COMP			↑		
163	468.062789	01:53	+13:43	SS	7m	more clouds
164	COMP			↑		
165	468.064760	01:49	+13:50	SS	7m	7m stopped by clouds - redo
166	COMP			↑		ok.
167	N000946	06:27	+25:32	GO	10m	
168	COMP			↑		
169	A000519	02:27	+41:07	GO	4m	
170	COMP			↑		
171	Z000387	02:20	+42:13	GO	2m	
172	COMP			↑		

60 inch Telescope Log
 Observer: PB
 PI: Hucha
 Spectrograph: FAST
 Grating: 302
 Date: 11/22/97
 Page: 5806

Number	Object	R. A.	Dec.	L/R	Exp	Comments
173	2006873	02:19	+131:	60	3m	clearing nearby
174	WMP			↑		
175	AK Per	01:32	+5443	12	35,70s	
177	WMP			↑		
178	468.067985	01:48	+13:47	55	8m	
179	WMP			↑		
180	468.068595	01:49	+14:03	55	5m	
181	WMP			↑		
182	468.071437	01:47	+14:13	55	8m	
183	WMP			↑		
184	468.08560	01:52	+14:27	55	8m	
185	WMP			↑		
186	469.094767	01:57	+14:50	55	8m	
187	WMP			↑		
188	469.092368	01:57	+14:42	55	6m	
189	WMP			↑		
190	469.085219	02:11	+14:18	55	4m	
191	WMP			↑		
192	AKn 120	05:13	-10:12	6	3m	
193	WMP			↑		
194	06486p4703	06:48	+47:03	43	4m	
195	WMP			↑		
196	06490p4711	06:49	+47:11	43	4m	
197	WMP			↑		
198	06914p4719	06:54	+47:19	43	6m	
199	WMP			↑		
200	07004p3237	07:00	+72:32	43	6m	
201	WMP			↑		
202	07053p2998	07:05	+72:58	43	3m	
203	WMP			↑		

60 inch Telescope Log

Observer: PB
 PI: Huchra & Kiryan & Krushner

Spectrograph: FAST

Grating: 300L

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Date: 11/23/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
204	07060p2847	07-06	+28-47	43	10m	to W; LSB; emp. 2000
205	WMP			↑		HA
206	07063p4233	07-06	+42-33	43	10m	em
207	WMP			↑		
208	07116p3525	07-11	+35-25	43	5m	to E
209	WMP			↑		
210	07152p3250	07-15	+32-50	43	6m	clear skies!
211	WMP			↑		
212	07171p3228	07-17	+32-28	43	4m	
213	WMP			↑		
214	07178p2327	07-17	+23-27	43	4m	
215	WMP			↑		
216	07179p3051	07-17	+30-51	43	9m	LSB, em
217	WMP			↑		
218-219	Hiltner 600	06-42	+02	56	40s	
220	WMP			↑		
221-222	DR-Ten	04-27	+26	12	10,90	
223	WMP			↑		
224-225	DR-Ten	04-33	+25	12	10,150	
226	WMP			↑		
227-228	DR-Ten	04-47	+15	12	10,75s	
229	WMP			↑		
230	SN1997do	07-26	+47-05	2	15m	bin by 2
231	WMP			↑		
232	07197p3251	07-19	+32-51	43	7m	
233	WMP			↑		
234	07226p3237	07-22	+32-37	43	7m	
235	WMP			↑		
236	07238p3334	07-28	+33-34	43	7m	
237	WMP			↑		

60 inch Telescope Log

Observer: PB
 PI: Hucha

Spectrograph: FAST
 Grating: 3002
 Date: 11/23/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
238	0730Sp3707	07:30	+37:07	43	8m	pretty spiral
239	COMP			↑		
240	07402p341	07:40	+31:41	43	8m	
241	COMP			↑		
242	07560p386	07:56	+38:56	43	8m	
243	COMP			↑		
244	07571p2650	07:57	+26:50	43	6m	
245	COMP			↑		
246	07572p4000	07:57	+40:00	43	4m	
247	COMP			↑		
248	07580p2656W	07:58	+26:56	43	12m	*+W:em
249	COMP			↑		
250	07580p2656E	07:58	+26:56	43	8m	em
251	COMP			↑		
252	07550p5039	07:55	+50:39	43	6m	
253	COMP			↑		
254	07560p5530E	07:56	+55:30	43	5m	
255	07560p5530W	07:56	+55:30	43	4m	
256	COMP			↑		
257	07563p4223	07:56	+42:23	43	9m	
258	COMP			↑		
259	07572p5553	07:57	+55:53	43	4m	NW comp
260	07573p5552	07:57	+55:52	43	6m	SE
261	COMP			↑		
262	07590p5613	07:59	+56:13	43	6m	WKen
263	COMP			↑		
264	MRK421	11:01	+39:28	6	5m	
265	COMP			↑		
266	N4051	12:00	+14:46	6	2m	
267	COMP			↑		

60 inch Telescope Log

Observer: PB
 PI: All

Spectrograph: FAST

Grating: 3000

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Date: 11/23/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
268	N4158	12:16	+17:34	6	21m	
269	COMP			↑		
270-271	Kep34	10:36	+14:21	56	1m	
272	COMP			↑		
273	N3377	10:45	+14:14	57	21m	
274	COMP			↑		
275-277	HD62733	07:49	-19	57	4s	
278	COMP			↑		
279-281	HD 64332	07:53	-11	57	4s	
282	COMP			↑		clear @ dawn!
283-285	HD 69243	08:16	+11	57	2s	
286	COMP			↑		
287-289	HD 88809	10:09	+18	57	2s	
290	COMP			↑		
291-293	HD 89055	10:16	+25	57	2s	
294	COMP			↑		
295-297	HD 52971	06:57	+27:13	57	4s	
298	COMP			↑		
299-308	BINS			0	0s	
309-318	FLAT			0	6s	
319-328	BINS			0	0s	bin by 2
329-328	FLAT			0	12s	bin by 2
339-348	DARK			0	15m	bin by 4
349	DARK					

60 inch Telescope Log

Observer: ABerlind

PI: Huchra

Spectrograph: FAST

Grating: 300R

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-5	DARK				15s	bin by 4
6-9	DARK				15s	bin by 2
10-19	BTAS				0s	bin by 4
20-29	FLAT				6s	"
30-39	BTAS				0s	bin by 2
40-49	FLAT				17s	"
50-54	sky	Zenith			2s	scattered clouds etc
55	COMP				6s	some controller is broken
56-58	HD 92291	20:10	+40	S6	4s	must max manually tonight
59	COMP			↑		
60-61	CSC 78	19:50	+3541	12	1s, 30s	
62	COMP			↑		
63	BDP 25424	21:46	+2637	S6	40s	
64	COMP			↑		
65-66	ZAD	23:33	+45:45	12	0.5s, 1.5s	
67	COMP			↑		
68	M 7469	23:03	+48:52	6	2hr	
69	COMP			↑		
70	2M J183930	18:39	+13:16	68	7m	em; extended em to E
71	COMP			↑		
72	2M J183921	18:39	+14:19	68	10m	em! wk pr 2002
73	COMP			↑		
74	2M J184008	18:40	+15:13	68	12m	supr em & off slit
75	COMP			↑		* 5m slit; highly reddened;
76	2M J184011	18:40	+15:20	68	12m	wk but a few obs features *'s
77	COMP			↑		
78	SN 1997dt	23:20	+15:59	2	20m	
79	COMP			↑		
80	Forgello	23:17	-06:26	S6	90s	
81	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Andi

Spectrograph: FAST

Grating: 2002

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Date: 11/24/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
82	5196062-50	00:16	+29:52	S9	17m	removed cosmetics from sensitive plates
83	COMP			r		
84	62.46	00:17	+29:57	S9	10m	
85	COMP			r		
86	62.47	00:17	+30:41	S9	12m	redo from 11/22 4:00
87	COMP			r		
88	62.48	00:17	+30:38	S9	10m	
89	COMP			r		
90	62.53	00:16	+30:03	S9	9m	
91	COMP			r		
92	62.54	00:18	+29:54	S9	10m	
93	COMP			r		
94	62.55	00:18	+29:58	S9	15m	* to E em
95	COMP			r		
96	62.56	00:18	+29:41	S9	9m	
97	COMP			r		
98	62.57	00:18	+30:04	S9	21m	
99	62.60	00:18	+30:04	S9	21m	
100	COMP			r		
101	62.58	00:18	+29:51	S9	15m	
102	COMP			r		
103	62.59	00:18	+30:02	S9	4m	
104	62.63	00:18	+30:02	S9	3m	increasing clouds passing through
105	COMP			r		
106	62.64	00:18	+30:03	S9	21m	
107	62.66	00:18	+30:02	S9	21m	* to E
108	COMP			r		
109	62.62	00:18	+29:17	S9	9m	
110	COMP			r		
111	62.64	00:18	+29:17	S9	14m	

60 inch Telescope Log
 Observer: PD
 PI: Andy Geller

Spectrograph: FAST
 Grating: 300L
 Date: 11/24/97

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Number	Object	R. A.	Dec	L/R	Exp	Comments
112	COMP			↑		
113	5966062.65	00:18	+29:50	S9	14m	clearing ok
114	COMP			↑		
115	62.68	00:18	+29:55	S9	15m	
116	COMP			↑		
117	62.67	00:18	+29:46	S9	8m	
118	COMP			↑		
119	62.76	00:19	+29:52	S9	14m	
120	COMP			↑		
121	MRK335	00:03	+19:55	6	3m	
122	COMP			↑		
123	468.07987	01:31	+14:42	S5	9m	
124	COMP			↑		
125	468.080539	01:31	+14:44	S5	7m	
126	COMP			↑		
127	468.083198	01:56	+14:54	S5	5m	emitt
128	COMP			↑		
129	469.078852	01:54	+13:52	S5	4m	
130	COMP			↑		
131	469.000491	2:13	+09:36	S5	5m	
132	COMP			↑		
133	469.009505	02:09	+10:08	S5	4m	
134	COMP			↑		
135	469.078407	02:12	+13:55	S5	9m	
136	COMP			↑		
137	469.085778	02:16	+14:17	S5	9m	wk
138	COMP			↑		
139	469.087467	02:01	+14:26	S5	9m	
140	COMP			↑		
141	469.088656	02:11	+14:30	S5	9m	

60 inch Telescope Log			Spectrograph: <u>FAST</u>			
Observer: <u>PB</u>			Grating: <u>300L</u>		Page: <u>58/13</u>	
PI: <u>Kenny Geller & Kirshner</u>			Date: <u>11/24/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
142	COMP			↑		
143-4	AXPer	01:36	+51:15	12	3s, 70s	
145	COMP			↑		
146	5196119.39	01:56	+05:48	59	4m	
147	COMP			↑		
148	119.40	01:56	+01:06	59	15m	
149	COMP			↑		
150	ZW02192	02:33	+09:36	60	2m	
151	COMP			↑		
152	Z00779	02:36	+10:25	60	10m	extended decent; wk, wkem you hot weak
153	COMP			↑		
154	ZW0782	02:38	+10:13	60	6m	wkem
155	COMP			↑		comp weak; used engway
156	ZW01091	02:42	+12:34	60	1m	
157	COMP			↑		
158	N003305	02:46	+12:02	60	7m	em
159	COMP			↑		
160	N000557	02:49	+11:27	60	2m	
161	COMP			↑		
162	Z005682	02:51	+11:31	60	2m	
163	COMP			↑		
164	SN1997do	07:26	+47:05	2	15m	bin by 2
165	COMP			↑		
166	ZW04822	04:47	+12:51	60	10m	good em; wk cont
167	COMP			↑		another band of clouds
168	Z012257	04:58	+16:07	60	4m	running through
169	COMP			↑		close for 45-min
170-171	DG Tan	04:27	+26:06	12	10s, 10s	
172	COMP			↑		NO GOOD
173-174	DL Tan	04:33	+25:10	12	10s, 10s	

used Comp in file 178 for 170, 171, 173 + 174

60 inch Telescope Log

Observer: PB

PI: Huchra

Spectrograph: FAST

Grating: 3WE

Date: 11/24/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
175	COMP			↑		NO GOOD
176-177	DRT _{com}	04:47	+16:58	12	10s, 75s	
178	COMP			↑		
179	Hiltner 60	06:42	+02	56	45s	
180	COMP			↑		
181	Z00782	05:08	-00:38	60	3m	
182	COMP			↑		
183	ZW6644	05:25	+10:25	60	2hr	
184	COMP			↑		sky is better than overall night!
185	C0703p14	07:03	+14:56	43	15m	em
186	COMP			↑		
187	C0653p16	06:53	+16:52	43	8m	bin by 2; sept to E - close
188	COMP			↑		good em galaxy
189	C0634p24	06:34	+14:27	43	15m	oh boy - no em - redshift ok
190	COMP			↑		
191	C0635p10	06:35	+10:17	43	5m	star w/ blue D ₄₁
192	COMP			↑		major extended emission!
193	C0636p26A	06:36	+16:36	43	15m	500 ems cont.; 10,000 ems the good part
194	COMP			↑		
195	C0648p25A	06:48	+15:46	43	10m	galaxy, em
196	COMP			↑		more cirrus
197	C0710p06A	07:10	+06:58	43	8m	
198	COMP			↑		
199	07575p5543	07:57	+55:43	43	4m	
200	COMP			↑		
201	07581p5509E	07:58	+55:09	43	9m	em - med.
202	07581p5509W	07:58	+55:09	43	8m	nice one
203	COMP			↑		
204	07579p4419	07:57	+14:19	43	4hr	
205	COMP			↑		

<p>60 inch Telescope Log</p> <p>Observer: <u>PD</u></p> <p>PI: <u>Geller & Kirshner</u></p>	<p>Spectrograph: <u>FAST</u></p> <p>Grating: <u>300R</u></p> <p>Date: <u>11/24/97</u></p> <p style="text-align: right;">Page: <u>5815</u></p>
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Number	Object	R.A.	Dec.	L/R	Exp	Comments
206	N001839	06:15	+66:50	60	8m	
207	COMP			↑		
208	Z007596	06:34	+52:07	60	2m	
209	COMP			↑		
210	Z011997	06:46	+46:24	60	5m	* low
211	COMP			↑		
212	SN1997dg	11:40	+11:28	2	15m	
213	COMP			↑		
214	Z011476	06:58	+75:01	60	3m	* low
215	COMP			↑		
216	Z009977	06:52	+31:17	60	2m	
217	COMP			↑		clouds
218	Z008449	07:15	+26:05	60	6m	
219	COMP			↑		
220	Z001115	07:02	+67:50	60	4m	3m stopped short - clouds but ok
221	COMP			↑		
222	HDA30	08:46	+18:07	57	4m	
223	COMP			↑		
224	N3379	10:45	+12:50	57	2m	lots of clouds
225	COMP			↑		NO GOOD @ dawn
226	N4151	12:00	+37:11	6	30s	
227	COMP			↑		
228-229	Fog 34	10:34	+43:21	56	1m	
230	COMP			↑		
24-240	BEPS			0	0s	
241-250	FLAT			0	6s	
251-260	BEPS			0	0s	bin by 2
261-270	FLAT			0	12s	bin by 2
271-280	DARK			0	15m	bin by 4

60 inch Telescope Log

Observer: PBerlin

PI: Geller/Kirchner

Spectrograph: FAST

Grating: 300L

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Date: 11/25/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS					
11-20	FLAT					
21-30	BIAS					solid clouds @ sunset
31-40	FLAT					
41-45	DARK				15m	
46-47	CIC 47	19:50	+38	12	30s/1s	early sucker hole
48	COMP			↑		
49	BDP 28124	21:48	+28:37	52	30s	
50	COMP			↑		tonight: dome controller
51-52	ZAND	23:33	+08:49	12	0.5s/2s	is broken and auto-
53	COMP			↑		guider is broken too
54	M7469	23:03	+08:52	6	21m	charts control room
55	COMP			↑		trashed - messy
56	M2K509	20:41	+08:54	6	3m	
57	COMP			↑		
58	SNIP 77 dt	23:00	+15:59	2	20m	bimby 2
59	COMP			↑		
60	Fogel 10	23:17	+08:26	56	90s	
61	COMP			↑		
62	S26.04531	00:46	+07:45	55	6m	
63	COMP			↑		
64	S26.046025	00:52	+07:48	55	10m	
65	COMP			↑		
66	S26.04676	00:57	+07:51	55	10m	v. wk. wk, but I gave
67	COMP			↑		it a 2
68	S26.045317	01:01	+08:01	55	11m	
69	COMP			↑		
70	S26.045915	00:59	+08:01	55	12m	
71	COMP			↑		
72	S26.045022	00:57	+08:03	55	10m	

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5817</u>	
Observer: <u>PB</u>			Grating: <u>300L</u>		Date: <u>11/25/97</u>	
PI: <u>Gretchen Kishner</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
73	CMP			?		
74	SG. 052358	00:45	+08:26	SS	7m	
75	CMP			↑		
76	SG. 053458	00:45	+08:33	SS	6m	
77	CMP			↑		
78	SG. 053558	01:03	+08:34	SS	8m	
79	CMP			↑		
80	SG. 054029	00:44	+08:36	SS	12m	
81	CMP			↑		
82	SG. 054259	01:03	+08:36	SS	11m	
83	CMP			↑		
84	SG. 055555	01:03	+08:49	SS	8m	Sm stopped by clouds ; ok
85	CMP			↑		
86-87	M32	00:39	+40:35	57	1m	
88	CMP			↑		
89-90	ARPer	01:36	+34:15	12	10x10s	close due to clouds
91	CMP			↑		
92-95	DARK				20m	bin by 2
96	ZW5062	03:00	+39:29	60	1/2m	open again @ 1:15, emt
97	CMP			↑		2 balmer abs + emission
98	Z012733	03:19	+40:28	60	1/2m	
99	CMP			↑		
100	SN 19720	07:26	+47:05	2	20m	bin by 2
101	CMP			↑		
102	SN UGC 4107	07:59	+49:41	2	20m	" gorgeous face-on spiral
103	CMP			↑		weird sn.
104	ZW 1738	03:12	+01:42	60	10m	more clouds
105	CMP			↑		
106	Z01 0639	03:05	+01:05	60	12m	em + cosmic Y
107	CMP			↑		stopped; close 2:40

60 inch Telescope Log
 Observer: PB
 PI: Kanyon
 Spectrograph: FAST
 Grating: 300R
 Date: 11/25/97
 Page: 58/18

Number	Object	R.A.	Dec.	L/R	Exp	Comments
108-109	DARK			0	15m	bmbg 4
110-111	DGTan	04:27	+26:06	12	12s, 10s	open again!
112	COMP			↑		
113-114	DLTan	04:33	+25:20	12	12s, 10s	
115	COMP			↑		
116-117	DRtan	04:47	+16:58	12	12s, 3m	
118	COMP			↑		
119	ZO10281	07:21	+16:50	60	10m	wk-reds
120	COMP			↑		stopped again - close
121-130	BIAS			0	6s	
131-140	FLAT			0	6s	
141-150	BIAS			0	0s	
151-160	FLAT			0	12s	
161-170	DARK			0	15m	bmbg 4

60 inch Telescope Log
 Observer: P. Berlind
 PI: Geller
 Spectrograph: FAST
 Grating: 3002
 Date: 11/24/97
 Page: S819

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-5	DARK			0	15m	bin by 4
5-10	DARK			0	15m	by 2
11-20	BIAS			0	0,	by 4
21-30	FLAT			0	6s	"
31-40	BIAS			0	0,	by 2
41-50	FLAT			0	12s	"
51-55	DARK				15m	bin by 4
56-60	DARK				20m	by 2
61-62	ZAND	23:30	+18	12	30s, 2m	Solid clouds @ sunset
63	WMP			↑		clearing ~ 11:15
64	Z009225	23:55	+30:12	60	7m	Wow!
65	WMP			↑		
66	Z005015	00:10	+28:51	60	3m	poor seeing
67	WMP			↑		clouds
68	Z01099	00:01	+34:31	60	3m	
69	WMP			↑		
70	Z012695	01:38	+36:56	60	6m	* to E
71	WMP			↑		
72	Z009265	01:55	+38:31	60	5m	
73	WMP			↑		
74	Z004920	01:58	+21:21	60	5m	
75	WMP			↑		
76	A 000145	02:01	+50:30	60	4m	
77	WMP			↑		
78	Z001026	02:03	+38:15	60	4m	
79	WMP			↑		
80	Z010630	02:02	+10:31	60	7m	
81	WMP			↑		
82	N000213	02:13	+04:06	60	5m	entire obj by
83	WMP			↑		balmer abs + em

60 inch Telescope Log

Observer: P. Berlin

PI: Kenyon

Spectrograph: FAST

Grating: 300l, 3" slit

Date: 11/27/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0s	* HAPPY THANKSGIVING !! *
11-20	FLAT				6	
21-30	BIAS				0s	UPS for 60"/18" disc
31-40	FLAT				12s	Large transformer
41-46	sky				2s	burned out.
47	COMP				6s	Running on "dirty" power
48-49	CICUTY	19:50	+35	12	1/3, 20s	
50				↑		clearing @ sunset
51-53	HD 192201	20:10	+40	56	4s	
54	COMP			↑		
55-56	BD 284211	21:48	+28:57	56	35s	poor seeing - 2-3"
57	COMP			↑		
58-59	ZAND	23:53	+48:19	12	0.5s, 1/6s	
60	COMP			↑		
61	Ferjello	23:07	-08:26	56	90s	
62	COMP			↑		
63	N7409	23:08	+08:52	6	2m	
64	COMP	22 36 17	+2 51 29	↑		telescope moved during amp used anyway
65	Mrk 509	20:41	-10:54	6	3m	
66	COMP			↑		
67	Mrk 335	00:03	+19:55	6	3m	
68	COMP			↑		
69	205m 200	00:41	+41:05	57	4m	
70	COMP			↑		
71	V1515 Cyg	20:23	+42:12	12	3m	
72	COMP			↑		
73	V1057 Cyg	20:57	+44:03	12	3m	
74	COMP			↑		
75	S18. 607159	21:36	+09:19	55	3m	
76	COMP			↑		

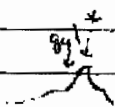
file 46 is a comp
NO BIN-BY-2 DARKS FOR THIS NIGHT

60 inch Telescope Log

Observer: PB
 PI: Geller

Spectrograph: FAST
 Grating: 300L
 Date: 11/27/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
77	S18.168036	23:30	+13:59	SS	5m	
78	CMP			↑		poor seeing
79	Z014883	23:13	+25:26	60	3m	
80	CMP			↑		
81	Z001011	23:20	+24:53	60	2m	
82	CMP			↑		
83	Z007906	23:28	+22:09	60	3m	
84	CMP			↑		
85	Z003776	23:40	+29:11	60	3m	
86	CMP			↑		
87	Z014653	23:45	+29:03	60	5m	
88	CMP			↑		
89	Z014826	23:23	+17:30	60	5m	
90	CMP			↑		
91	Z010735	23:32	+14:48	60	7m	bl by Z; sup* to E
92	CMP			↑		extended emission; prior
93	Z014695	23:50	+08:40	60	6m	
94	CMP			↑		
95	Z006657	23:17	+08:09	60	5m	
96	CMP			↑		
97	Z012379	23:26	-01:53	60	3m	
98	CMP			↑		
99	S83.000204	23:51	+03:46	SS	6m	
100	CMP			↑		
101	S83.005769	23:30	+03:59	SS	7m	* to E
102	CMP			↑		
103	S83.006261	23:41	+04:01	SS	4m	
104	CMP			↑		
105	S83.013141	23:38	+04:25	SS	4m	
106	CMP			↑		

60 inch Telescope Log

Observer: PB
 PI: Geller

Spectrograph: FAST
 Grating: 300L
 Date: 11/27/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
107	S83.016022	23:40	+04:35	SS	2m	
108	COMP			↑		
109	S83.021152	23:37	+04:52	SS	4m	
110	COMP			↑		
111	S83.021155	23:39	+04:53	SS	4m	
112	COMP			↑		
113	S83.021524	23:43	+04:54	SS	7m	
114	COMP			↑		
115	S83.025352	23:40	+05:07	SS	6m	
116	COMP			↑		
117	S83.027197	23:52	+05:14	SS	7m	wk
118	COMP			↑		
119	S83.031232	23:39	+05:29	SS	6m	
120	COMP			↑		
121	S83.033312	23:48	+05:35	SS	5m	
122	COMP			↑		
123	S83.035346	23:49	+05:43	SS	7m	
124	COMP			↑		
125	S83.037545EW	23:32	+05:50	SS	9m	bin by 2 5 th 2 gaps
126	COMP			↑		W is wk; both em
127	S83.037647	23:53	+05:50	SS	6m	
128	COMP			↑		
129	S83.041161	23:50	+06:06	SS	6m	
130	COMP			↑		
131	S83.042307N	23:41	+06:10	SS	6m	N
132	S83.042307S	23:41	+06:09	SS	6m	S
133	COMP			↑		
134	S83.043324	23:49	+06:12	SS	7m	
135	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Geller

Spectrograph: FAST

Grating: 300R

Date: 11/27/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
136	S83.043830	23:40	+06:14	SS	4m	poor seeing mostly clear
137	COMP			r		
138	S26.059317	00:44	+08:58	SS	9m	em
139	COMP			r		
140	S26.058877	00:46	+09:04	SS	8m	
141	COMP			r		
142	S26.064507	00:49	+09:35	SS	6m	
143	COMP			r		
144	S26.066668	00:57	+09:45	SS	7m	
145	COMP			r		
146	S26.067126	01:02	+09:47	SS	7m	
147	COMP			r		
148	S26.066079	01:06	+09:41	SS	6m	
149	COMP			r		
150	Z-004878	00:40	-00:19	60	5m	
151	COMP			r		
152	A001015	00:50	-01:57	60	4m	emf
153	COMP			r		
154	Z010679	00:55	-01:55	60	4m	
155	COMP			r		seeing improving
156	Z001131	01:12	-01:13	60	90s	
157	COMP			r		
158	Z01551	01:15	+05:10	60	90s	
159	COMP			r		
160	Z044706	01:22	+05:25	60	7m	
161	COMP			r		
162	Z001707	01:28	-01:33	60	90s	
163	COMP			r		
164	Z-006607	01:33	+03:04	60	7m	LSO em
165	COMP			r		

60 inch Telescope Log

Observer: PB

PI: Geller & Andi

Spectrograph: FAST

Grating: 3000

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Date: 11/27/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
166	Z006752	01:26	+17:15	60	4m	
169	COMP			↑		
168-69	AXPer	01:36	+54:15	12	3s, 7s	
170	COMP			↑		
171	srqb 119.50	01:59	+07:08	59	12m	wk ; em pix 2396!
172	COMP			↑		
173	119.51	01:59	+08:11	59	12m	
174	COMP			↑		
175	119.52	01:59	+07:01	59	12m	wk em pix 2415? wk
176	COMP			↑		Faint gal to W; em 2350
177	119.54	01:59	+06:57	59	10m	em pix 2100; also cosmic
178	COMP			↑		
179	119.58	02:00	+06:25	59	9m	wk ok
180	COMP			↑		Jane runs away
181	119.60	02:01	+06:31	59	4m	
182	COMP			↑		
183	119.62	02:01	+06:27	59	10m	
184	COMP			↑		
185	119.63	02:01	+06:37	59	11m	
186	COMP			↑		
187	119.64	02:01	+06:54	59	11m	wk em pix 2100
188	COMP			↑		
189	Z014633	03:27	+02:36	60	8m	em
190	COMP			↑		
191	Z007794	03:42	+01:05	60	6m	
192	COMP			↑		
193	Z014730	03:54	+06:45	60	5m	
194	COMP			↑		
195	Z012434	04:13	+01:41	60	5m	
196	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Kenny Geller

Spectrograph: EAST

Grating: 300R


Date: 11/27/97

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
197	Z014641	04:29	-60:15	60	8m	em
198	COMP			↑		
199	AKn 120	05:43	-60	6	3m	poor seeing
200	COMP			↑		
201-202	Hiltner 602	06:42	+02:11	56	50s	
203	COMP			↑		
204-205	DE Tau	04:27	+76:06	12	10s, 10s	
206	COMP			↑		
207-208	DE Tau	04:33	+75:20	12	10s, 10s	
209	COMP			↑		
210-211	DE Tau	04:47	+16:58	12	10s, 90s	
212	COMP			↑		
213-214	FLUORE	05:45	+09:04	12	20s	
215	COMP			↑		
216	N003023	07:09	+40:19	60	12m	+ to E em
217	COMP			↑		
218	N003024	07:11	+39:33	60	9m	em
219	COMP			↑		
220	Z010281	07:21	+46:50	60	8m	100s from 11/25 #119
221	COMP			↑		
222	Z010282	07:33	+49:17	60	6m	Sy 1
223	COMP			↑		
224	Z008349	07:28	+18:24	60	4m	
225	COMP			↑		
226	Z010908	07:41	+02:41	60	7m	em + to E
227	COMP			↑		
228	N00106	07:56	+07:28	60	90s	nice Balmer absorption
229	COMP			↑		
230	N001255	08:01	+05:48	60	6m	
231	COMP			↑		

60 inch Telescope Log

Observer: PBPI: Geller & KushnerSpectrograph: FASTGrating: 300RPage: 5827Date: 11/27/97

Number	Object	R. A.	Dec.	L/R	Exp	Comments
232	N000467	08:09	+00:16	60	3m	* to far W left tv; brighter between sky subtraction
233	COMP			↑		
234	N000685	07:53	+21:02	60	6m	em + cosmetics
235	COMP			↑		
236	Z0001543	07:59	+23:23	60	4m	still poor seeing
237	COMP			↑		clear
238	Z0009886	07:37	+27:02	60	4m	
239	COMP			↑		
240	Z010061	07:46	+26:44	60	7m	em+
241	COMP			↑		
242	Z003612	07:51	+56:54	60	3m	
243	COMP			↑		
244	Z000406	07:30	+79:52	60	4m	large gal  extended em!
245	COMP			↑		
246	SN1997D0	07:26	+47:05	2	20m	bmby 2
247	COMP			↑		
248	Z013676	08:02	+31:11	60	4m	
249	COMP			↑		
250	Z007431	08:13	+76:55	60	4m	
251	COMP			↑		
252	Z000955	08:07	+79:11	60	4m	
253	COMP			↑		
254	Z004677	08:21	+39:15	60	3m	a few mtr cloud forming!
255	COMP			↑		
256	Z005593	08:18	+58:15	60	2m	redo - star
257	COMP			↑		
258	SN1997D0	07:57	+19:33	2	20m	poor seeing - worse than ever
259	COMP			↑		
260	Z003141	08:34	+76:09	60	6m	
261	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>F15T</u>		Page: <u>5829</u>	
Observer: <u>P. Berlin</u>			Grating: <u>3002</u>			
PI: <u>All</u>			Date: <u>11/28/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-3	DARK				20m	bin by 2
4-8	DARK				15m	bin by 4
9-18	BIAS				0s	"
19-28	FLAT				6s	bin by 4
29-38	BIAS				0s	bin by 2
39-48	FLAT				12s	"
49-51	sky	zenith		S7	2s	
55	COMP			↑		clear skies
56-58	HD 212593	22:24	+49	S7	1s	
59	COMP			↑		
60-62	HD 207496	21:44	+62	S7	2s	
63	COMP			↑		
64-66	HD 208949 NW	21:57	+66	S7	2s	
67-69	HD 208949 SE	21:57	+66	S7	1s	
70	COMP			↑		
71-73	HD 210221	22:07	+53	S7	2s	
74	COMP			↑		
75-77	HD 212466	22:23	+55	S7	2s	
78	COMP			↑		
79-81	HD 216411	22:51	+59	S7	2s	
82	COMP			↑		
83-85	HD 213534	22:23	+29	S7	3s	
86	COMP			↑		
87-89	HD 212534	22:23	+50	S7	15s	
90	COMP			↑		
91-93	HD 192261	20:10	+40	S7	4s	
94	COMP			↑		
95-96	CFEys	19:50	+35	12	1/4 30s	
97	COMP			↑		
98-99	BDP 284211	21:48	+28:57	S6	30s	

60 inch Telescope Log

Observer: PB
 PI: Geller/Kirshner

Spectrograph: FAST
 Grating: 3002
 Date: 11/28/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
100	COMP			↑		
101-102	2And	23:33	+49:49	12	0.5s, 12s	
103	COMP			↑		
104	Forn 110	23:37	+05:26	56	90s	rt system crash
105	COMP			↑		
106	M7469	23:03	+08:52	6	2m	
107	COMP			↑		
108	M2K335	00:00	+19:55	6	3m	
109	COMP			↑		
110/112	2M3184012	18:40	+17:49	68	8m	10m + 2wk; no's in orbit? 2 objects + star
111/13	COMP			↑		
114	SN1997dt	23:10	+15:59	2	20m	6m by 2
115	COMP			↑		
116	S83.016875	23:49	+06:26	55	7m	
117	COMP			↑		
118	S83.016936	23:51	+06:26	55	6m	
119	COMP			↑		
120	S83.052817	23:32	+06:51	55	3m	
121	COMP			↑		
122	S83.051325	23:50	+06:49	55	8m	
123	COMP			↑		
124	S83.056167	23:17	+07:01	55	7m	
125	COMP			↑		
126	S83.061478	23:47	+07:26	55	6m	
127	COMP			↑		
128	S83.064092	23:49	+07:37	55	7m	
129	COMP			↑		
130	S83.061806	23:54	+07:27	55	7m	
131	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5831</u>	
Observer: <u>RB</u>			Grating: <u>300L</u>			
PI: <u>Geller</u>			Date: <u>11/28/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
132	583.065115	23:38	+07:59	SS	7m	
133	COMP			↑		
134	583.071001	23:53	+08:07	SS	4m	
135	COMP			↑		
136	583.067534	23:53	+07:51	SS	3m	
137	COMP			↑		
138	583.067868	23:54	+07:53	SS	7m	
139	COMP			↑		
140	583.071321	23:53	+08:08	SS	10m	em
141	COMP			↑		
142	583.074489	23:54	+08:22	SS	8m	
143	COMP			↑		
144	583.075797	23:42	+08:29	SS	8m	cosmic on Ho-
145	COMP			↑		
146	583.078862	23:43	+08:42	SS	6m	
147	COMP			↑		
148	583.081577	23:36	+08:34	SS	5m	
149	COMP			↑		
150	583.080465	23:44	+08:49	SS	5m	
151	COMP			↑		
152	583.082182	23:46	+08:57	SS	5m	
153	COMP			↑		
154	583.083546	23:45	+09:03	SS	5m	
155	COMP			↑		
156	583.021289	23:39	+08:03	SS	8m	? - plate flaw; not on 2 nd gen DSS; not on sky
157	COMP			↑		
158	583.085788N	23:41	+09:01	GS	10m	em
159	COMP			↑		
160	583.085788C	23:41	+09:01	SS	8m	
161	583.085788W	23:41	+09:01	SS	10m	

156 - nothing on 2d - but looked at picture in 1st DSS + saw 2 bright interacting galaxies - NOTE TO PERRY

60 inch Telescope Log
 Observer: PB
 PI: Geller/Arch
 Spectrograph: FAST
 Grating: 300L
 Date: 11/28/97
 Page: 5832

Number	Object	R.A.	Dec.	L/R	Exp	Comments
162	COMP			↑		clear skies!
163	S83.085309	23:37	+09:11	SS	8m	
164	COMP			↑		
165	S83.084824	23:47	+09:08	SS	8m	
166	COMP			↑		
167	S83.08503E	23:44	+09:09	SS	7m	
168	S83.085003W	23:44	+09:09	SS	7m	
169	COMP			↑		
170	S83.08594	23:39	+09:42	SS	6m	
171	COMP			↑		
172	S83.085720	23:37	+09:13	SS	5m	
173	COMP			↑		
174	S83.087327	23:37	+09:20	SS	6m	
175	COMP			↑		
176	S83.092326	23:34	+09:42	SS	7m	
177	COMP			↑		
178	S83.088820	23:35	+09:27	SS	5m	
179	COMP			↑		
180	S83.090838	23:35	+09:36	SS	5m	
181	COMP			↑		
182	S83.091141	23:41	+09:37	SS	7m	
183	COMP			↑		
184	S83.095593	23:45	+09:12	SS	8m	
185	COMP			↑		
186	Srgbl19.59	02:10	+06:26	SS	20m	high z
187	COMP			↑		
188	15527	02:48	-01:01	SS 59	20m	very faint - got it - em! 1529, 2100 w/comp like COMP NO GOOD
189	COMP			↑		
190a	AXPer	01:36	+94:45	12	3.75s	very bright
192	COMP			↑		

used comp 187 for file 188 = this is not a good or normal thing to do. Using it only because to show galaxy is outside of group - don't trust velocity

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5833</u>	
Observer: <u>PB</u>			Grating: <u>30R</u>			
PI: <u>Huchra, Betz, Krisher, Wilkes</u>			Date: <u>11/28/97</u>			
Number	Object	R. A.	Dec.	L/R	Exp	Comments
193	AP5154	03:54	+10:18	43	20m	also obs 11/22/97 #179
194	COMP			↑		looks good
195	C0609p32	06:09	+32:33	43	20m	FOGC BR 20580; still ? W/ extended em. input 2206
196	COMP			↑		
197	C0611p33	06:11	+33:35	43	20m	* to E ; good em
198	COMP			↑		
199-200	DR1m	04:27	+16	12	10, 90s	
201	COMP			↑		
202-203	DR1m	04:33	+25	12	10, 150s	
204	COMP			↑		
205-206	DR1m	04:47	+16	12	10, 175s	
207	COMP			↑		
208	soqal 201	03:19	+41:34	60	8m	
209	COMP			↑		
210	soqal 206	03:31	+39:35	60	20m	*'s on slit - many
211	COMP			↑		burn-in
212-213	Hiltner 60	06:42	+102	56	40s	
214	COMP			↑		
215	Z005593	08:18	+58:15	60	5m	redo from 11/27, em
216	COMP			↑		
217	SN.UGC4107	07:57	+49:33	2	20m	bin by 2 - very unusual sn.
218	COMP			↑		
219	noqal.001	08:04	+24:30	60	15m	
220	COMP			↑		COMP NO GOOD
221	noqal.002	08:04	+24:30	60	5m	
222	COMP			↑		COMP NO GOOD
223	noqal.005	08:10	+24:55	60	6m	
224	COMP			↑		COMP NO GOOD
225	Q0923p119	09:23	+12:44	64	20m	2" slit 1.1
226	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5834</u>	
Observer: <u>P.B</u>			Grating: <u>300R</u>			
PI: <u>Wilkes & Kirshner</u>			Date: <u>11/18/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
227	Q0953p414	09:56	+41:15	66/69	17m	2" slit 11
228	COMP			↑		COMP NO GOOD
229	Q0953p414	09:56	+41:15	66/69	5m	5" slit
230	COMP			↑		COMP NO GOOD
231	Q6923p129	09:23	+12:44	66	4m	5" slit #22
232	COMP			↑		↳ extended fuzz
233-234	Ferg34	10:36	+43:21	56	1m	5" slit
235	COMP			↑		
236	Q1001p291	10:01	+28:55	69	5m	5" slit
237	COMP			↑		
238	Q1001p291	10:04	+28:55	69	15m	2" slit
239	COMP			↑		
240	G1001p054	10:04	+08:13	69	20m	2" * to E
241	COMP			↑		
242	G1001p054	10:04	+08:13	69	6m	5" * to E
243	COMP			↑		
244-245	Ferg34	10:36	+43:21	56	1m	5"
246	COMP			↑		
247	SN1997dg	11:40	11:28	2	15m	3" slit
248	COMP			↑		
249	SN1997db	07:26	+47:05	2	12m	radial light is amazing! really bright; following eclipse up to zenith
250	COMP			↑		
251	M0421	11:01	+38:28	6	3m	
252	COMP			↑		
253	N4051	12:10	+44:48	6	3m	
254	COMP			↑		
255	N4258	12:16	+47:34	6	2m	
256	COMP			↑		
257	N4151	12:06	+39:41	6	30s	
258	COMP			↑		

USED COMP, FILE 239, FOR FILE 227

USED COMP, FILE 235, FOR FILE 229

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5836</u>	
Observer: <u>A Mahari</u>			Grating: <u>300</u>		Date: <u>Nov 29 1997</u>	
PI: _____						
Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-4	DARK					BIN BY 4
5	COMP					Test
6-15	FLAT				6s	Bin by 4.
16-25	BIAS					"
26-35	FLAT				12s	Bin by 2.
36-45	BIAS					"
46	JUNK					Who would want this?
47-51	SKYBY2				2s	Skies binned by 2.
52-56	SKY				2s	bin by 4.
57	COMP				↑	"
58	MIRK335	00:03:46	19:55:27	6	3m	Clear Skies.
59	COMP				↑	Slit Rotator Not
60	N7469	23:07:15.3	8:52:25	6	2.5m	Working.
61	COMP				↑	
62	MIRK509	20:41:26.0	-10:59:18	6	3m	
63	COMP				↑	
64	FEIGE110	23:17:23.5	-5:26:22	56	2m	
65	COMP				↑	
66	CTCY6	14:50:12	35:41:04	12	30s	
67	COMP				↑	
68	CTCY6	↓	↓	12	1s	
69	COMP				↑	
70	ZAND	23:33:40	48:49:06	12	0.5s	
71	COMP					
72	ZAND	↓	↓	12	12s	
73	COMP				↑	
74	AXPer	1:36:23	54:15:02	12	3s	
75	COMP				↑	BAD COMP
76	AXPer	↓	↓	12	70s	
77	COMP				↑	BAD COMP

used comp from file 79 for files 74-76

60 inch Telescope Log				Spectrograph: <u>FAST</u>		
Observer: <u>A Mahdavi</u>				Grating: <u>300</u>		Page: <u>5837</u>
PI: _____				Date: <u>Nov 29 1997</u>		
Number	Object	R. A.	Dec.	L/R	Exp	Comments
78	M31	00:42:44	40:51:15	57	60s	
79	COMP			↑	↑	
80	srgb062.69	00:18:47.7	30:03:39	59	14m	Beautiful Dark Night.
81	COMP			↑		
82	srgb062.70	00:19:12.2	30:00:48	59	10m	
83	COMP			↑		
84	srgb062.70	00:18:50.4	29:05:20	59	15m	
85	COMP			↑		
86	srgb062.71	00:18:55.4	30:30:16	59	15m	
87	COMP			↑		
88	srgb062.73	00:19:19.9	30:05:26	59	7m	
89	COMP			↑		
90	srgb062.74	00:19:22.5	29:09:30	59	8m	
91	COMP			↑		
92	srgb062.77	00:19:36.0	28:56:55	59	12m	
93	COMP			↑		
94	srgb062.78	00:19:38.0	30:15:26	59	12m	
95	COMP			↑		
96	srgb062.79	00:19:38.1	29:55:59.0	59	4m	
97	COMP			↑		
98	srgb062.80	00:19:40.5	29:49:77	59	8m	
99	COMP			↑		
100	srgb062.81	00:19:43.2	29:56:04	59	8m	Bright galaxy to E.
101	COMP			↑		
102	srgb062.82	00:19:47.8	29:00:30	59	10m	
103	COMP			↑		
104	srgb062.83	00:19:48.8	30:43:42	59	12m	
105	COMP			↑		
106	srgb062.84	00:20:03	28:41:57	59	15m	
107	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5838</u>	
Observer: <u>A. Mahdavi</u>			Grating: <u>300</u>		Date: <u>Nov 29, 1997</u>	
PI: _____						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
108	DGTau	4:27:04.7	26:06:15.9	12	10s	
109	COMP	↓	↓	↑		
110	DGTau	↓	↓	12	90s	
111	COMP			↑		
112	DELTAU	4:33:39.1	25:20:37.9	12	10s	
113	COMP	↓	↓	↑		
114	DELTAU	↓	↓	12	150s	
115	COMP			↑		
116	DRTAU	4:47:06	16:58:45	12	10s	
117	COMP	↓	↓	↑		
118	DRTAU	↓	↓	12	75s	
119	COMP			↑		
120	HZ14	4:41:01.3	10:59:00.4	56	3m	
121	COMP			↑		
122	WGC 1700	4:56:56.2	-4:52:31.2	57	3m	
123	COMP			↑		
124	SN1997do	7:26:47.0	47:05:36	2	15m	Bin by 2 can't seem to extract SN
125	COMP			↑	11s	"
126	UGG4107	7:57:03	49:33:10	2	20m	"
127	COMP			↑	14s	"
128	HZ 14	4:41:01.3	10:59:00.4	56	5m	"
129	COMP			↑	14s	"
130	no gal_009	8:11:25.6	8:53:38	60	10m	Bin by 4
131	COMP			↑		
132	no gal_010	8:11:25.3	8:56:27	60	15m	
133	COMP			↑		
134	no gal_029	8:00:15.9	35:43:14	60	10m	
135	COMP			↑		
136	no gal_030	9:00:17.7	35:43:09	60	8m	
137	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FACT</u>		Page: <u>5819</u>	
Observer: <u>A. Mahdavi</u>			Grating: <u>300</u>		Date: <u>11/29/97</u>	
PI: _____						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
138	nagal-031	9:02:38.6	25:56:03	60	5m	
139	COMP			↑		
140	nagal-032	9:02:41.4	25:56:16	60	10m	
141	COMP			↑		
142	nagal-052	9:19:41.3	33:44:17	60	10m	
143	COMP			↑		
144	nagal-054	9:19:45.4	33:44:42	60	8m	
145	COMP			↑		
146	nagal-055	9:19:46.9	33:45:00	60	4m	
147	COMP			↑		
148	nagal-072	9:33:58.8	10:01:44	60	10m	
149	COMP			↑		
150	nagal-073	9:34:02.7	10:06:29	60	4m	
151	COMP			↑		
152	nagal-080	9:53:03.3	19:26:33.3	60	10m	
153	COMP			↑		
154	nagal ATN120	5:16:15	-0:8:54	6	3m	
155	COMP			↑		
156	nagal-081	9:53:05	19:25:55	60	4m	
157	COMP			↑		
158	nagal-082	9:46:50.1	22:00:48	60	3m	
159	COMP			↑		
160	nagal-083	9:46:47.9	22:00:47	60	10m	Spiral galaxy to W (bright)
161	COMP			↑		
162	nagal-089	9:59:00.3	17:49:01	60	12m	
163	COMP			↑		
164	nagal-090	9:59:05.2	17:49:16	60	12m	
165	COMP			↑		
166	nagal-091	10:05:23	19:16:48	60	12m	
167	COMP			↑		

TO
EAST
(not used)

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5840</u>	
Observer: <u>A. Mahdavi</u>			Grating: <u>300</u>		Date: <u>Nov 29 1997</u>	
PI: _____						
Number	Object	R. A.	Dec.	L/R	Exp	Comments
168	rg1001.03	8:48:12.4	36:46:51	59	12	
169	Comp			↑		
170	rg1001.05	8:48:46.1	37:12:37	59	12	
171	Comp			↑		
172	rg1001.06	8:49:16.4	36:07:11	59	10	
173	Comp			↑		
174	rg1001.07	8:49:27.5	36:42:37	59	8	
175	Comp			↑		
176	rg1001.08	8:50:34.8	36:28:03	59	10	
177	Comp			↑		
178	rg1001.09	8:50:56.6	36:28:06	59	10m	
179	Comp			↑		
180	rg1008.14	9:13:39.4	29:59:31	59	5m	
181	Comp			↑		
182	Feige 34	10:56:41.2	15:21:50	56	1m	
183	Comp			↑		
184	N3377	10:45:02.6	17:14:51	57	3m	
185	Comp			↑		
186-195	FLAT				65	
196-205	BIAS					
206-215	FLAT				125	Bin by 2
216-225	BIAS					
226-229	DARK					

60 inch Telescope Log		Spectrograph: <u>EAST</u>		Page: <u>5841</u>		
Observer: <u>A Mahdavi</u>		Grating: <u>300</u>		Date: <u>11/30/97</u>		
PI: _____						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-4	DARK			D	15m	Bin by 4
5-14	FLAT				6s	Overcast at sunset.
15-24	BIAS					
25-34	BIAS					Bin by 2
35-44	FLAT					"
45	COMP					Bin by 4
46	CI Cyg	19:50.12	35:41:04	12	15	Cleared up 7PM.
47	COMP	↓	↓	↑		Cloud moving E. some
48	CI Cyg	↓	↓	12	30s	thin high clouds.
49	COMP			↑		Seeing 2"
50	ZAnd	23:33:40	48:49:06	12	1/2 s	
51	COMP	↓	↓	↑		
52	ZAnd	↓	↓	12	12s	
53	COMP			↑		
54	Feige 110	23:17:235	-5:26:22	56	2m	
55	COMP			↑		
56	N 7331	27:34:47	34:09:43	57	4m	
57	COMP			↑		
58	AxPer	1:36:23	54:15:02	12	3s	
59	COMP	↓	↓	↑		
60	AxPer	↓	↓	12	70s	
61	COMP			↑		
62	xe528.002961	1:36:25.0	3:46:41	55	15m	
63	COMP			↑		
64	xe528.004939	1:41:37.0	3:53:46	55	10m	
65	COMP			↑		
66	xe528.006373	1:50:12.3	4:00:47	55	10m	
67	COMP			↑		
68	xe528.005995	1:50:19.2	4:03:20	55	10m	
69	COMP			↑		

60 inch Telescope Log		Spectrograph: <u>FACT</u>				
Observer: <u>A Mahdavi</u>		Grating: <u>300</u>		Page: <u>842</u>		
PI: _____		Date: <u>Nov 30 97</u>				
Number	Object	R. A.	Dec.	L/R	Exp	Comments
70	xc528.007046	1:50:49.7	4:03:17	55	7m	
71	COMP			↑		
72	xc528.009578	1:35:13.8	4:14:42	55	10m	
73	COMP			↑		
74	xc528.012508	1:31:38.0	4:26:48	55	12m	
75	COMP			↑		
76	xc528.025411	1:52:20.6	5:14:12	55	15m	
77	COMP			↑		
78	xc528.029480	1:54:24.1	5:25:14.2	55	8m	
79	COMP			↑		
80	xc528.033143	1:48:20.8	5:37:58	55	12m	
81	COMP			↑		
82	sr6062.89	0:20:29.7	29:32:24	59	15m	
83	COMP			↑		
84	sr6062.90	0:20:32.2	30:02:59	59	15m	
85	COMP			↑		
86	2MASS	0:30:41.1	14:16:49	68	15m	
87	COMP			↑		
88	2MASS	0:30:32.9	14:56:34.5	68	15m	
89	COMP			↑		
90	2MASS	0:30:28.9	12:48:55.5	68	8m	
91	COMP			↑		
92	2MASS	0:29:57	11:54:06	68	15m	
93	COMP			↑		
94	DGTau	4:27:05	26:06:16	12	10s	
95	COMP			↑		
96	DGTau	↓	↓	12	90s	
97	COMP			↑		
98	DLTau	4:33:39	25:20:39	12	10s	
99	COMP			↑		

60 inch Telescope Log		Spectrograph: <u>FAST</u>		Page: <u>5843</u>		
Observer: <u>A Mahdavi</u>		Grating: <u>300</u>		Date: <u>Nov 30 1997</u>		
PI: _____						
101	COMP			↑		
102	DR Tau	4:47:05	16:56:37	12	10s	
103	COMP	↓	↓	↑		
104	DR Tau			12	75s	
105	COMP			↑		
106	HZ14	4:41:008	10:59:44	56	3m	
107	COMP			↑		
108	NGC1700	4:54:28	-4:56:30	57	4m	
109	COMP			↑		
110	SN1997do	7:26:425	47:05:26	2	15m	Binby 2
111	COMP			↑	14s	"
112	UGC4107	7:57:028	49:33:40	2	20m	"
113	COMP			↑	14s	" Bad weather at 1 AM
114	G191B2B	5:01:315	57:45:52	56	5m	" Closing Dome! Thick
115	COMP			↑	14s	" Clouds suddenly!
116-125	BIAS					Binby 2
126-135	FLAT				12s	" Giving up at 3 AM.
136-145	FLAT				6s	Binby 4
146-155	BIAS					"
156-159	DARK				15m	Bin by 2