60 inch Telescope Log
Observer: P.Berlind
PI: Kenyon/JeffM

Spectrograph: FAST
Grating: 300l;3"
Date: 3/1/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-5	DARK				15m	
6-10	DARK				20m	bin by 2
11-20	BIAS				0s	
21-30	FLAT				6s	
31-40	BIAS				0s	bin by 2
41-50	FLAT				12s	
51-60	FLAT				20s	bin by 4; 1.1" slit
61-65	sky	zenith		57	2s	3" slit
66	COMP			↑	6s	
67-68	BLWhr	5	+30	12	5s, 30s	cirrus clouds
69				↑		extensive to N+W
70-71	AXPer	1	+54	12	4s, 7s	
72				↑		
73-74	DR Tau	4	+16	12	12s, 60s	
75				↑		
76-77	DG Tau	4	+26	12	12, 40s	
78				↑		
79-80	DL Tau	4	+25	12	30, 4m	
81				↑		
82-83	HD52971	6	+30	56	5s	
84	COMP			↑		
85-86	HD245770	05	+30	77	35	1.1" slit ↓
87				↑	85	
88-89	HD34078	05:53	+26:25	77	35	"
90				↑		
91	HZ14	01:11	+10:59	56	6m	3" slit ↓
92	COMP			↑		
93	nrgb 001.36	08:41	+25:14	59	3m	em
94	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Andi

Spectrograph: FAST

Grating: 300l; 3"51.7

Date: 3/1/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
95	nrg b004.35	08:40	+25:40	59	4m	
96	COMP			↑		
97	004.37	08:41	+25:27	59	4m	
98	COMP			↑		
99	2M0856467	08:56	+16:08	68	10m	em
100	COMP			↑		
101	2M0856483	08:56	+17:39	68	20m	clouds
102	COMP			↑		
103	2M0857022	08:57	+16:41	68	10m	* to E
104	COMP			↑		
105	2M0857041	08:57	+16:52	68	12m	em
106	COMP			↑		
107	2M0857057	08:57	+17:33	68	15m	
108	COMP			↑		
109	2M0857061	08:57	+16:44	68	14m	
110	COMP			↑		
111	2M0857123	08:57	+14:43	68	15m	SW
112	COMP			↑		
113	2M0857154	08:57	+14:43	68	15m	69 NE
114	COMP			↑		
115	2M0857140	08:57	+15:40	68	12m	
116	COMP			↑		
117	2M0857151	08:57	+15:12	68	15m	* to E
118	COMP			↑		seeing worse
119	2M0857173	08:57	+17:57	68	15m	
120	COMP			↑		
121	2M0857181	08:57	+16:48	68	15m	
122	COMP			↑		
123	2M0857210	08:57	+16:42	68	12m	S comp
124	COMP			↑		

60 Inch Telescope Log
Observer: PB
PI: Huchra & Andi

Spectrograph: FAST
Grating: 300l
Date: 3/1/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
125	2M0857211	08:57	+16:43	68	12m	N comp
126	COMP			↑		
127	2M0857254	08:57	+17:55	68	9m	em
128	COMP			↑		
129	2M0857266,9	08:57	+15:01	68	9m	
130	COMP			↑		
131	2M0857277	08:57	+16:42	68	9m	
132	COMP			↑		
133	2M0857734	08:57	+15:02	68	10m	
134	COMP			↑		
135	2M0857347	08:57	+17:52	68	10m	* to W
136	COMP			↑		
137	2M0857328	08:57	+12:29	68	7m	em+
138	COMP			↑		
139	2M0857387	08:57	+15:54	68	7m	83
140	COMP			↑		
141	2M0857454	08:57	+17:02	68	7m	84 em+
142	COMP			↑		
143	2M0857470	08:57	+11:55	68	7m	85
144	COMP			↑		
145	Feige34	10:36	+43:21	56	2m	
146	COMP			↑		
147	rgh049.20	12:05	+28:46	59	8m	em
148	COMP			↑		
149	049.23	12:09	+29:16	59	10m	em+
150	COMP			↑		
151	054.01	12:04	+31:10	59	90s	AGN
152	COMP			↑		
153	054.02	12:01	+31:11	59	3tm	
154	COMP			↑		

60 inch Telescope Log
Observer: PB
PI: Andi & Dan

Spectrograph: FAST
Grating: 300
Date: 3/1/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
155	rqh054.03	12:04	+31:09	59	5m	em
156	comp			↑		
157	054.05	12:05	+31:03	59	5m	em
158	comp			↑		
159	054.07	12:05	+31:21	59	5m	
160	comp			↑		
161	054.08	12:06	+31:58	59	4m	
162	comp			↑		
163	054.10	12:06	+30:52	59	5m	215 em
164	comp			↑		
165	054.11	12:07	+32:01	59	90s	216
166	comp			↑		
167	054.12	12:07	+31:20	59	3½m	
168	comp			↑		
169	054.13	12:09	+31:34	59	90s	
170	comp			↑		
171	054.15	12:10	+31:39	59	3m	
172	comp			↑		
173	057.23	12:18	+29.49	59	15m	finishes notebook
174	comp			↑		
175	mKW4-49	12:04	+01:36	35	12m	
176	comp			↑		
177	-50	12:04	+01:22	35	10m	cmt
178	comp			↑		
179	-51	12:04	+01:56	35	9m	
180	comp			↑		
181	-52	12:04	+01:46	35	12m	
182	comp			↑		
183	-53	12:05	+01:56	35	10m	
184	comp			↑		

60 inch Telescope Log

Observer: PB

PI: Huchra & Kirshner & Mahdavi

Spectrograph: FAST

Grating: 300 3"x5"

Date: 3/1/98

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Number	Object	R.A.	Dec	I/R	Exp	Comments
185	970602.19.1786	11:44	+20:10	68	20m	also obs 2/22/98 * 208 pec
186	COMP			T		
187	970611.253502	12:58	+23:29	68	15m	+950 Velocity forced
188	COMP			T		
189	SN1997cq	13:11	+23:55	2	15m	nice
190	COMP			T		clear
191	HZ44	13:21	+36	56	90s	(7.) V. thin clouds @ dawn
192	COMP			T		
193-4	HZ44 wideslit	13:21	+36	56	2m.	5" slit 1.02
195	COMP			T		194 picked out a little
196	N4486B	12:30	+12:29	57	3m	
197	COMP			T		
198	N4151	12:08	+39.41	6	30s	5
199	COMP			T		
200	N4258	12:16	+47:34	6	2m	6
201	COMP			T		
202	nrgb244.013	13:23	+13:58	59	9m	em
203	COMP			T		
204	244.014	13:23	+13:09	59	9m	em
205	COMP			T		
206	244.017	13:23	+13:41	59	7m	
207	COMP			T		
208	244.019	13:23	+14:22	59	3m	
209	COMP			T		
210	244.020	13:23	+14:19	59	10m	em
211	COMP			T		
212	244.021	13:23	+14:53	59	6m	em; pec see file 224
213	COMP			T		
214	244.023	13:24	+13:56	59	5m	bright * to W
215	COMP			T		

9765 IIpec

60 inch Telescope Log
Observer: PB
PI: Andi

Spectrograph: FAST
Grating: 300
Date: 3/1/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
216	rgh.085.BR.04	13:31	+34:41	SG	3m	
217	COMP			r		
218	BR.05	13:33	+34:32	SG	3m	
219	COMP			r		
220	BR.06	13:34	+34:51	SG	3m	
221	COMP			r		
222	BR.07	13:34	+33:56	SG	5m	wk good em
223	COMP			r		
224	nrg6246021.sn.cent	1323	+14:53	2	15m	binby2 New SN??
225	COMP			r		
226	NSSR8	14:15	+25:22	6	3m	
227	COMP			r		Wow awesome missile
228	MRK279	13:51	+69:33	6	3m	contrail in E sky!
229	COMP			r		100 mi up; bright white
230	MRK501	16:53	+39:45	6	4m	pre dawn.
231	COMP			r		Gallup ⇒ White Sands missile
232-4	AGDRa	16:01	+66:48	12	20s, 2s	
235	COMP			r		thin cirrus @ dawn
236-245	BIAS			0	0s	~
246-255	FLAT			0	6s	
256-265	BIAS			0	0s	
266-275	FLAT			0	12s	
276-285	FLAT			6		5" slit

60 Inch Telescope Log
Observer: P. Berlind
PI: Kenyon 4 All

Spectrograph: FAST
Grating: 300
Date: 3/2/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
45	DARK				15m	
6-15	BIAS				0s	
16-25	FLAT				6s	
26-35	BIAS				0s	bin by 2
36-45	FLAT				12s	bin by 2
46-50	Sky			57	2s	
51				↑		lots of cirrus - yuck
52-53	RWAur	05:07	+30:24	12	5s, 30s	
54				↑		
5556	RXAur	04:36	+54:15	12	45, 75s	
57				↑		
58-59	DRTau	04	+16	12	12s, 80s	
60				↑		
61-62	DGTau	04	+26	12	15, 90s	
63				↑		clouds
64-65	DLTau	04	+25	12	30s, 3m	
66				↑		
67	AKsP20	05	-40	6	4m	
68	COMP			r		
69	NGC1960	05:34	-04:36	57	4m	
70	COMP			↑		
71-75	HD52971	07s	+27	57	5s	
76	COMP			r		
77-81	AGK2p14783	07			5s	
82	COMP					
83-87	HD53683	07:24	+27:23	57	6s	
88	COMP			↑		
89	2M0558+27	08:58	+12:53	68	10m	em, thankfully
90	COMP			r		
						N7

3 11

60 inch Telescope Log

Observer: PB

PI: Huchra

Spectrograph: FAST

Grating: 300g

Date: 3/2/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
91	2M0858M.0	08:58	+17:47	68	10m	
92	comp			↑		
93	2M0858l6.3	08:58	+17:20	68	15m	
94	comp			↑		
95	2M0858l4.6	08:58	+14:36	68	10m	sky getting better!
96	comp			↑		
97	2M0858l6.4	08:58	+17:33	68	15m	
98	comp			↑		
99	2M0858M.3	08:58	+16:05	68	12m	but
100	comp			↑		still lots of clouds in
101	2M0858438	08:58	+17:09	68	12m	N + W
102	comp			↑		
103	2M0858l4.8	08:58	+17:22	68	9m	
104	comp			↑		
105	2M0858M7.6	08:58	+17:08	68	8m	em+
106	comp			↑		
107	2M0858548.9	08:58	+17:34	68	9m	
108	comp			↑		
109	2M0858651.2	08:58	+17:14	68	11m	em
110	comp			↑		
111	2M0857749.7	08:57	+15:23	68	12m	to E
112	comp			↑		
113	2M0857541.0	08:57	+16:04	68	15m	
114	comp			↑		
115	2M0858l0.9	08:58	+17:35	68	12m	em
116	comp			↑		
117	2M0858804.0	08:58	+16:07	68	15m	huge cosmic ray em
118	comp			↑		
119	2M0858543.3	08:58	+17:42	68	12m	
120	comp			↑		

60 inch Telescope Log
Observer: PB
PI: Huchra & Geller

Spectrograph: FAST
Grating: 300l
Date: 3/2/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
121	2M08585S.9	08:58	+14:47	68	15m	on still clouds
122	COMP			↓		
123	2M08588S.5	08:58	+14:45	68	12m	
124	COMP			↑		
125	a1367.103.1042	11:39	+23:09	64	4½m	
126	COMP			↑		
127	.1050	11:41	+23:05	64	7m	wk, good Hδ/k
128	COMP			↑		
129	.1060	11:43	+23:00	64	8m	
130	COMP			↑		
131	.1075	11:51	+23:01	64	7m	em
132	COMP			↓		
133	.1147	11:45	+22:38	64	7m	em
134	COMP			↑		
135	.1151	11:50	+22:42	64	9m	pretty clear
136	COMP			↑		
137	.1204	11:55	+22:27	64	6m	
138	COMP			↑		
139	.1205	11:55	+22:32	64	6m	
140	COMP			↑		
141	.1213	11:37	+22:49	64	7m	
142	COMP			↓		
143	.1215	11:38	+22:14	64	5m	
144	COMP			↑		
145	.1220	11:41	+22:09	64	5m	
146	COMP			↑		
147	.1259	11:57	+22:11	64	7m	em
148	COMP			↑		
149	.1275	11:39	+22:07	64	5m	em+
150	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Geller

Spectrograph: FAST

Grating: 300l

Date: 3/2/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
151	G1367.103.1286	11:47	+22:08	64	4m	
152	COMP			↑		
153	.1291	11:48	+22:04	64	5m	wk ok
154	COMP			↑		
155	.1314	11:54	+22:06	64	5m	
156	COMP			↑		
157	.1331	11:36	+21:50	64	4m	
158	COMP			↑		
159	.1378	11:36	+21:42	64	5m	em
160	COMP			↑		
161	.1460	11:41	+21:30	64	5m	
162	COMP			↑		
163	.1464	11:50	+21:27	64	5m	
164	COMP			↑		
165	.1475	11:52	+21:30	64	5m	
166	COMP			↑		
167	.1478	11:53	+21:22	64	7m	
168	COMP			↑		
169	.1485	11:57	+21:24	64	5m	
170	COMP			↑		
171	.1494	11:56	+21:17	64	5m	seems worse
172	COMP			↑		
173	.1519	11:46	+21:13	64	10m	em
174	COMP			↑		
175	.1525	11:48	+21:17	64	8m	em
176	COMP			↑		
177	.1526	11:48	+21:18	64	8m	em
176	COMP			↑		
179	.1570	11:38	+20:58	64	4m	whoa emt
180	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Geller

Spectrograph: FAST

Grating: 300R

Date: 3/2/98

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Number	Object	R.A.	Dec	L/R	Exp	Comments
181	a1367.103.1583	11:42	+21:40	64	5m	
182	comp			↑		
183	.1590	11:48	+21:40	64	9m	em
184	comp			↑		
185	.1624	11:59	+21:05	64	8m	em
186	comp			↑		
187	.1654	11:47	+20:55	64	5m	em
188	comp			↑		
189	.1682	11:57	+20:44	64	6m	high cz!
190	comp			↑		
191	.1710	11:45	+20:40	64	7m	wk
192	comp			↑		
193	.1718	11:50	+20:33	64	7m	stellar velocities from xcsao pec possible emission line - looks like a gal on PSS
194	comp			↑		
195	.1725	11:52	+20:36	64	4m	
196	comp			↑		
197	.1733	11:53	+20:33	64	6m	em
198	comp			↑		
199	.1736	11:55	+20:34	64	6m	em
200	comp			↑		
201	.1774	11:43	+20:21	64	6m	pec
202	comp			↑		
203	.1776	11:43	+20:22	64	5m	
204	comp			↑		
205	SN.cand	13:23:57	+14:53:38	2	20m	binby2;2"slit ; AGN
206	comp			↑	15	
207	rghoss.BR.10	13:34	+34:03	59	5m	3" slit em
208	comp			↑		
209	.12	13:35	+3540	55	900	
210	comp			↑		

193. correlation velocities are all stellar
possible emission line - if Ha cz = 6921 ???
looks like a gal on PSS
REDO
superpose star ??

60 inch Telescope Log

Observer: PB

PI: Andi Gardner

Spectrograph: FAST

Grating: 300

Date: 3/2/98

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Number	Object	R.A.	Dec	L/R	Exp	Comments
211	rgh085 BR.13	13:35	+33:43	59	3m	
212	Comp			↑		
213	.14	13:35	+31:59	59	3m	
214	Comp			↑		
215	.16	13:36	+34:44	59	100s	
216	Comp			↑		
217	.17	13:36	+33:34	59	8m	em
218	Comp			↑		
219	N4051	12:00	+44:48	6	2m	
220	Comp			↑		
221-2	H244	13:21	+36:23	56	90s	1.12
223	Comp			↑		
224	MRK274	13:51	+69:33	6	3m	
225	Comp			↑		
226	N5548	14:15	+25:22	6	3m	
227	Comp			↑		
228	Z011681	12:51	+27:26	75	3m	
229	Comp			↑		
230	B000012	12:51	+31:21	75	5m	em
231	Comp			↑		
232	NGC2959	12:52	+27:35	75	100s	
233	Comp			↑		
234	Z011682	12:52	+27:01	75	3m	em
235	Comp			↑		
236	Z013940	12:52	+26:28	75	90s	
237	Comp			↑		
238	Z010033	12:52	+27:24	75	3m	em
239	Comp			↑		
240	Z003010	12:52	+26:22	75	100s	em
241	Comp			↑		

60 inch Telescope Log

Observer: PB

PI: Carter

Spectrograph: FAST

Grating: 300

Date: 3/2/98

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Number	Object	R.A.	Dec	L/R	Exp	Comments
242	Z004607	12:53	+32.04	75	600s	
243	COMP			T		
244	A000319	12:53	+27.05	75	2m	
245	COMP			T		
246	A0.00320	12:53	+26.76	75	2m	
247	COMP			T		
248	N000109	12:54	+27.04	75	90s	
249	COMP			T		
250	BD+33 2647	15:50	+33.03	54	1m	1.01
252	COMP			T		
253-254	AGDRa	16:01	+66 48	12	20s, 2s	
255	COMP			T		clear & dawn
256-265	BIAS				0	~
266-275	FLAT				6s	
276-285	BIAS				0s	
286-295	FLAT				20s	2" SHT

60 inch Telescope Log

Observer: Huchra
PI: Arc, Kenyon, McLeod

Spectrograph: FAST
Grating: 300l
Date: 3/3/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			—		1-35 binned in an odd way - spatial direction became 108 rather than 81 or 161
11-15	DARK			—	15m	
16-25	BIAS			—		
26-35	FLAT			—	6s	
36-45	FLAT			—	12s	bin x 2
46-55	BIAS			—	—	bin x 2
56-65	FLAT			—	20s	bin x 4, 1.″1 slit
66-70	Sky			—	10-15s	slit 3.″0
71	Comp			↑	↑	
72-80	BIAS			—	—	
81-2	AX PISR			12	4, 75	
83	Comp			↑		
84-5	RW Aur			12	5, 30	
86	Comp			↑		
87-88	DR Tau			12	12, 80	
89	Comp			↑		
90-91	DG Tau			12	12, 90	
92	Comp			↑		
93-94	DL Tau			12	30, 240	
95	Comp			↑		
96	HZ 14			56 ○	5m	
97	Comp			↑		
98	HZ 14			56 ○	7m	1.″1 ~~Dome problem set by hand.~~
99	Comp			↑		
100	BIAS			—		
101-2	HD 245770	05 38	+26 18	77	30s	1.″1 slit
103	Comp			↑		
104-5	HD 39478	05 53	+26 25	77	25s	
106	Comp			↑		
107	2MX0516+1712	05 16	+17 12	68		3″ slit

60 inch Telescope Log
Observer: Huchra
PI: Huchra

Spectrograph: FAST
Grating: 300
Date: 3/3/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
108	Comp			↑		
109	2m0516+1712	0516	+17 12	68	900s	
110	comp			↑		
14	2m0859+1156	08 59 02	+11 56 27	68	240s	A sec
112	Comp			↑		
113	2m0859+1731	0859 30	+17 31 10	68	430s	
114	Comp			↑		
115	2m0859+1643	08 59 04	+16 43 36	68	600	
116	Comp			↑		
117	2m0859+1426	0859 37	+14 26 50	68	600	
118	comp			↑		
119	2m0900+1649	09 00 00	+16 49 00	68	300	Hz at 0960 5 lines don't li up c other on lin
120	Comp			↑		
121	2m0900+1729	0900 27	+17 29 00	68	600	Hz at 0840
122	Comp			↑		
123	2m0901+1611	09 01 09	+16 11 32	68	600	
124	comp			↑		
125	2m0901+1311	09 01 09	+13 11 45	68	420	Hz at 6400
126	Comp			↑		
127	2m0902+1735	09 02 35	+17 35 20	68	420	Hz at 6400
128	Comp			↑		
129	2m0902+1306	09 02 41	+13 06 28	68	600	strong emission
130	Comp			↑		
131	2m0902+1614	09 02 41	+16 14 23	68	480	Hz at 6400
132	Comp			↑		
133	2m0902+1426	0902 53	+14 26 01	68	480	
134	comp			↑		
135	2m0902+1339	09 02 55	+13 39 38	68	720	Hz at 6750
136	Comp			↑		
137	2m0902+1339	0902 55	+13 39 38	68	600	

60 inch Telescope Log
Observer: Hutchraft
PI: Conv, Geller

Spectrograph: FAST
Grating: 300 e
Date: 3/3/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
138	Comp			↑		
139	Z 011666	11h37	+30 09	75	600s	
140	Comp			↑		
141	Z 003471	11 37 31	+31 21 46	75	480s	
142	Comp			↑		
143	Z 013730	11 38 14	+31 38 23	75	300	
144	Comp			↑		
145	Z 004599	11 39 03	+26 21 42	75	300	
146	Comp			↑		
147	Z 008564	11 39 29	+26 18 33	75	300	
148	Comp			↑		
149	Z 000938	11 39 42	+31 54 34	75	240	Seyfert 2 NGC627?
150	Comp			↑		
151	Z 00 3004	11 40 24	+28 22 26	75	300	
152	Comp			↑		
153	Z 007329	11 41 25	+27 51 36	75	240	
154	Comp			↑		
155	Z 00 6246	11 42 02	+32 00 03	75	600	
156	Comp			↑		
157	Z 013731	11 42 18	+30 13 48	75	600	
158	Comp			↑		
159	A 000 132	11h42 32	+26 29 20	75	180	
160	Comp			↑		
161	Z 005392	11 43 00	+27 23 [illegible]	75	240	
162	Comp			↑		
163	A1367, 103, 1784	11 46 09.1	+20 20 50	64	600	Hα
164	Comp			↑		
165	A1367, 103, 1803	11 52 49	+20 29 31	64	600	
166				↑		
167	103 1803	11	11	64	600	

149: 4958 stronger than 5007
155: 4958 almost as strong as 5007

60 inch Telescope Log
Observer: Huchra
PI: Geller, Kurtz, Huchra, Wilkes

Spectrograph: FAST
Grating: 300
Date: 3/6/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
168	Comp			↑		
169	A-1367, 103, 1807	11 53 28	+20 29 07	64	720	
170	Comp			↑		
171	103.1826	11 41 52	+20 14 56	64	480	
172	comp			↑		
173	SN 1998 D	14 02 54	+34 44 54	2	1200	B.i x2
174	Comp			↑		
175	H Z 44	13 23	+36 07	0	90s	570 SZ B.i x2
176	Comp			↑		
177	2M 1255 +26 35	12 55 42	+26 35	68	480	B.i x 4
178	comp			↑		
179	2M 13000 8+2753	13 00 08	+27 35 50	68	720	
180	Comp			↑		
181	2M 12580 1+2717	12 58 01	+27 17 51	68	600	
182	comp			↑		
183	2M 12570 3+3005	12 57 03	+30 05 22	68	600	
184	Comp			↑		
185	770424.94	14 02 51	+26 81 17	68	900	450 z = 0.187
186	Comp			↑		
187	970622.150	14 54 12	29 44 18	68	240	6*
188	comp			↑		
189	970615.142	15 16 53	+19 00 48	68	300	450 z = .1898
190	comp			↑		
191	970531.57	14 28 34	+21 30 11	68	600	450 z = .285
192	Comp			↑		
193	970614.45	15 06 36	+21 01 19	68	780	Hα at 7172 z = 0.093
194	Comp			↑		
195	N4051	12 00	+44 48	0	120	
196	Comp			↑		
197	N4151	12 08	+39 41	0	30	

60 inch Telescope Log
Observer: Hughes
PI: Wilkes, Ali, Hooper, Carter

Spectrograph: FAST
Grating: 300
Date: 3/3/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
198	comp			↑		
199	N4258	12 16 29	+47 34 51	6	120	
200	comp			↑		
201	MK 279	13 51 53	+69 33	6	180	
202	comp			↑		
203	N5548	14 15 43	+25 22	6	180	
204	comp			↑		
205	H844	13 21 19	36 23	0	90	
206	comp			↑		
207	F 93	14 36 04	+27 42	0	120	
208	comp			↑		
209,10	AG Dra	16 01	+66 48	12	2,20	
212	comp			↑		
213	Z 010056	14 12 41	+30 51 18	75	240	
214	comp			↑		
215	Z 006264	14 11 56	+27 06 49	75	180	
216	Comp			↑		
217	N 000422	14 52 14	+29 30 43	75	240	
218	Comp			↑		
219	N 000880	14 49 27	+27 46 50	75	240	
220	comp			↑		
221	A 000948	14 49 30	+27 52 3	75	240	
222	comp			↑		
223	N 000362	14 52 30	+29 48 26	75	180	
224	comp			↑		
225	N5866			57	240	Tempht
226	comp			↑		
227-236	BIAS			—	—	
237-246	FLAT			—	6s	
247-256	FLAT			—	20s	1.1 51.7
257-266	BIAS			—	—	1.1 51.7
267 – 270	DARK					

60 inch Telescope Log

Observer: Hughes

PI: Henyey, Wilhelm, Hughes

Spectrograph: FAST

Grating: 300 e

Date: 3/4/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			—	—	Bi x 4, 3" slit
11-15	DARK			—	900	
16-25	FLAT			—	6s	
26-30	BIAS			—	—	
31-40	FLAT			—	12s	Bi by 2 for SN
41-50	BIAS			—	"	" "
51-56	Cuy			0	2s	Bw x 4
57	Comp			↑		
58-67	BIAS			—		
68-9	RW AUR			12	5,30	
70	COMP			↑		
71-2	AX PER			12	4,75	
73	COMP			↑		
74-5	DG TAU			12	12,90	
76	COMP			↑		
77-78	DL TAU			12	30,240	
79	COMP			↑		
80-1	DR TAU			12	12,80	
82	COMP			↑		
83	HILTNER 600	06 42	+02	56	45s	STD star
84	COMP			↑		
85	HILTNER 600			56	45	STD star
86	ANN 120	05 13	-00 12	6	200s	moon
87	COMP			↑		
88	ZM0501+5155A	05 01	+51 55	68	420	star A K star
89	COMP			↑		
90	ZM0501+4604A	05 01 53	+46 04	68	600	star A
91	COMP			↑		
92	ZM0501+4604A	"	"	68	600	"
93	COMP			↑		

60 inch Telescope Log
Observer: Hutchin + Collins
PI: Hutchin + Barton

Spectrograph: FAST
Grating: 300
Date: 3/4/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
94	2m 0524+0820A	05 24 30	+08 20 07	68	900	Gal A Clouds
95	Comp			↑		=
96	2m 0524+0820A	"	"	68	900	
97	Comp			↑		Clouds!
98	2m 0649+1801	06 49 23	+18 01	68	700	
99	Comp			↑		
100	Nogal-003	08 06 52	+18 44 16	73	920	
101	Comp			↑		
102	Nogal-004	08 07 06	+18 45 48	73	900	
103	Comp			↑		Clouds
104	Nogal-023	08 49 21	+19 04 28	73	450	
105	Comp			↑		
106	Nogal-024	08 49 24	+19 04 26	73	600	
107	Comp			↑		
108	Nogal-036	09 05 21	18 18 48	73	360	
109	Nogal-036	09 05 21	18 18 48	73	900	
110	Comp			↑		
111	Nogal-037	09 05 32	+18 13 41	73	600	
112	Comp			↑		
113	E-103:1834	11 43 00	20 12 30	64	600	
114	Comp			↑		
115	E-103:1843	11 44 05	20 14 53	64	480	
116	Comp			↑		
117	103.1847	11 44 32	20 06 23	64	480	
118	Comp			↑		
119	103.1865	11 51 05	20 08 48	64	360	
120	Comp			↑		
121	103.1853	11 45 56	20 18 10	64	480	
122	Comp			↑		
123	103.1874	11 54 36	20 10 28	64		

60 inch Telescope Log
Observer: Hudra + Calkins
PI: Geller, Kirshner, Willner

Spectrograph: Fast
Grating: 300
Date: 3/4/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
124	Comp/103.1874	11 54 36	20 10 28	69		
125	PSMW3690	11 28 33	58 33 42	2	300	Bin by 2
126	Comp			↑		
127	SN 19985	1146 06	47 29 00	2	600	Bin by 2
128	Comp			↑		
129	Feige 34	10 39 35	43 06 06	56		Bin by 2
130	Comp			↑		
131	Feige 34	10 39 35	43 06 06	56		Bin by 4
132	Comp			↑		
133	MRK 21	11 04 24	38 12 25	6	240	
134	Comp			↑		
135	1259 28 p 271336	13 01 50	26 57 33	68	720	z ≈ 0.2
136	Comp			↑		
137	125834 p 295342	13 00 56	29 37 49	68	420	Hα at 7120 Å
138	Comp			↑		
139	1259 15 p 260103	13 01 37	25 44 57	68	720	
140	Comp			↑		
141	125657 p 261744	1259 22	26 01 34	68	480	
142	Comp			↑		
143	1259 38 p 270557	13 02 03	26 49 50	68	720	possibly Hα @ 7180 Å
144	Comp			↑		
145	125938 p 270557	13 02 03	26 49 50	68	720	
146	Comp			↑		
147	1254 52 p 254451	12 57 19	25 28 34	68	720	H-K @ 4300 Hα @ 7070
148	Comp			↑		
149	125858 p 296430	13 01 23	29 20 41	68	720	
150	Comp			↑		
151	130024 p 293355	13 02 50	29 07 39	68	720	
152	Comp			↑		
153	130024 p 293355	13 02 50	29 07 39	68	600	

60 inch Telescope Log
Observer: Huchra & Calkins
PI: Huchra, Wilkes, Kenyon, Carter

Spectrograph: Fast
Grating: 300
Date: 3/4/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
154	Comp 130624.2923555	13 02 50	29 07 39	68		
155	125808.2555411	13 00 35	25 37 58	68	720	
156	Comp			↑		
157	130259.0.2822215	13 02 15	28 06 19	68	720	
158	Comp			↑		
159	970614.19.619	14 54 26	18 29 56	68	720	
160	Comp			↑		
161	970614.19.619	14 54 36	18 29 56	68	600	
162	Comp			↑		
163	970611.20.5990	16 51 20	21 53 56	68	600	
164	Comp			↑		
165	MRK 279	13 53 13	69 18 16	6	180	
166	Comp			↑		
167	SBS1425P606	14 27 01	60 25 42	6	600	
168	Comp			↑		
169	N5548	14 18 11	40 05 45	6	180	
170	Comp			↑		
171	Feige 98	14 38 18	27 29 43	56	120	
172	Comp			↑		
173-4	AG Dra	16 01	+66 48	12	2,20	
175	Comp			↑		
176	2005413	13 49 50	29 18 34	75	240	
177	Comp			↑		
178	N001763	14 33 43	28 03 19	75	240	
179	Comp			↑		
180	2008602	14 34 11	27 56 46	75	240	
181	Comp			↑		
182	2005014	14 32 41	31 40 24	75	300	
183	Comp			↑		
184	N5846	15 06 33	01 36 19	57	300	

60 inch Telescope Log
Observer: Hucha & Calkins
PI: _____

Spectrograph: Fast
Grating: 300
Date: 3/4/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
185	Comp/NGC5846	15 04 33	01 36 19	57		
186	N0006099	14 36 19	29 54 26	75	180	
187	Comp			"		
188-197	BIAS			—	—	bin by 4
198-207	FLATS			ⓑ	6s	bin by 2
208-217	FLATS			ⓞ	12s	"
218-227	BIAS			—	—	bin by 4 Computer crash
228-232	BIAS			—	—	
233-5	DARK			ⓞ	900	

60 Inch Telescope Log

Observer: DIAGRANYI/S.CALKINS

PI: KIRSHNER/WILKES/

Spectrograph: FAST

Grating: 300

Date: 3/18/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0s	START of FAST RUN
11	COMP				6s	CUMULUS EVERYWHERE
12-18	FOCUS				10s	Focus 940
19-23	DARK				900s	
24-33	FLAT				6s	CLEARING...? 3" SLIT
34-43	FLAT				20s	11" SLIT
44	SN1998S	11:46:06.18	+47:28:55.5	2	10m	BIN x2 - SN E EAST of SLIT
45	COMP			↑	12s	[ON @ 12:36] CENTER. [IOW 115]
46	SN1998S	11:46:06	+47:28:55	2	10m	SN centered on slit, now.
47	COMP			↑	12s	
48	SN1998S	11:46:06	+47:28:55	2	10m	
49	COMP			↑	12s	
50	SN1998W	09:58:54.8	+14:25:25.7	2	20m	CAN'T SEE IT ON TV - USING
51	COMP			↑	12s	OFFSETS.
52	N244	13:21:19	36:23:39	2	180s	(BINx2)
53	COMP			↑	12s	
54,55	N744	13:21:19	36:23:39	56	90s	BIN x4 ┐ CLEAR
56	COMP			↑	6s	↓
57,58	FNCE 98	14:36:04	27:42:28	56	120s	
59	COMP			↑	6s	
60,61	N5846	15:03:56	+01:47:53	57	5m	
62	COMP			↑	6s	
63	N4258	12:16:29.8	+47:34:57	6	2m	
64	COMP			↑	6s	
65	MRK 279	13:51:53	+69:37:13	6	3m	
66	COMP			↑		
67	N5549	14:15:43	+25:22:01	6	3m	
68	COMP			↑		
69	Z002339	12:54:55	+27:24:44	75	7m	
70	COMP			↑	6s	

NO BIASES FOR BIN BY 2 SO BIN BY 2 OBJECTS ARE NOT BIAS SUBTRACTED

60 inch Telescope Log

Observer: D.Kasen/M Calkins

PI: Carter / Kirshner

Spectrograph: FAST

Grating: 300l

Date: 3/18/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
71	Z007679	12:55:29.1	27:3?:16	75	7m	
72	comp			↑	6s	
73	Z=100036	12:55:22.8	27:39:21	75	7m	
74	comp			↑	6s	
75	Z004611	12:56:13	27:44:51	75	6m	
76	comp			↑	6s	
77	Z013747	12:56:21	27:45:09	75	7m	
78	comp			↑	6s	
79	Z008577	12:56:19	26:21:22	75	7m	
80	comp			↑	6s	
81	Z004610	12:55:41	25:15:02	75	7m	
82	comp			↑	6s	
83	Z001656	12:56:29	26:59:06	75	7m	
84	comp			↑	6s	
85	Z011685	12:56:14	28:01:18	75	7m	
86	comp			↑	6s	
87	Z001874	12:56:42	27:10:57	75	6m	
88	comp			↑	6s	
89	Z006252	12:56:38	26:57:24	75	7m	
90	comp			↑	6s	
91	Z007358	12:56:57	26:57:55	75	8m	
92	comp			↑	6s	
93	Z001074	12:57:25	27:29:53	75	5m	
94	comp			↑	6s	
95	SN 1998V	12:22:37.4	+15:47:26.4	2	15m	} 3BIN x2
96	comp			↑	12s	
97	Z000943	12:57:32	+28:29:36	75	4m	
98	comp			↑	6s	
99	Z004613	12:57:33	+27:36:36	75	4m	
100	comp			↑	6s	

60 inch Telescope Log

Observer: KORANYI/CALKINS

PI: CARTER/KENYON

Spectrograph: FAST

Grating: 300-l

Date: 3/18/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
101	Z003011	12:58:12.9	26:23:49	75	4m	
102	COMP			↑	6s	
103	Z002071	12:58:05.7	28:04:31.9	75	6m	
104	COMP			↑	6s	
105	Z001875	13:01:53.7	29:37:07.5	75	4m	
106	COMP			↑	6s	
107,108	AG-Dra	16:01:41	66:48:10	12	2s,20s	
109	COMP			↑	6s	
110,111	BD+33 2642	15:52:03	33:05:49	56	1m	
112	COMP			↑	6s	
113,114	PG-1708+602	17:08:35.3	60:13:52	56	2m	
115	COMP			↑	6s	
116-120	SKY				20s	BIN×4
121-125	SKY				30s	BIN×2
126-135	BIAS				0s	BIN×4
136-145	FLAT				6s	BIN×4
146-155	FLAT				12s	BIN×2

60 inch Telescope Log

Observer: KORANYI

PI: KINYON/WILKES

Spectrograph: FAST

Grating: 300-2

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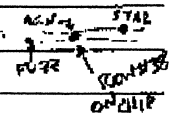
Date: 3/19/98

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	BIN x4 3" SLIT
11-20	BIAS			0	0s	BIN x2
21-25	DARK			0	15m	BIN x2
26-35	FLAT			0	6s	BIN x4
36-45	FLAT			0	12s	BIN x2
46-55	FLAT			0	20s	BIN x4 1.1" SLIT
56-60	DARK			0	15m	BIN x4 3" SLIT
61-65	BIAS			0	2s	BIN x2
66	COMP			1	12s	
67-71	BIAS			0	2s	BIN x4
72	COMP			1	6s	
73,74	HILTNER 600	06:42:32.2	22:11:25	56	45s	BEAUTIFUL WEATHER!
75	COMP			1	6s	
76,77	N1700	04:54:28	-04:56:30	57	4m	
78	COMP			1	6s	
79,80	HD52721	06:57:51	+22:17:42	57	5s	
81	COMP			1	6s	
82,83	AGK2p147883	08:13:48	+14:59:38	57	5s	
84	COMP			1	6s	
85,86	DG Tau	04:27:05	+26:06:16	12	12s,90s	
87	COMP			1	6s	
88,89	DL Tau	04:33:39	+25:20:39	12	30s,240s	
90	COMP			1	6s	
91,92	DR Tau	04:47:05	+16:58:37	12	12s,80s	
93	COMP			1	6s	
94,95	RW Aur	05:07:49	+30:24:06	12	53,30s	
96	COMP			1	6s	
97	Alw120	05:13:38	-00:12:25	6	3m	STAR ON SLIT FOR W: 
98	COMP			1		

60 Inch Telescope Log

Observer: KORANYI

PI: MCCLINTOCK/BARTON/KORANYI

Spectrograph: FAST

Grating: 300l

Date: 3/19/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
99,100	HD245770	05:38:54.5	26:18:57.1	77	30s,30s	
101	COMP			↑	8s	
102,103	HD39478	05:53:59.8	26:25:21.2	77	25s,25s	1.1" SLIT
104	COMP			↑	8s	
105,106	PG0823+546	08:23:01.0	54:37:58	56	4m,4m	STD STAR
107	COMP			↑	6s	
108	nogal_007	08:11:13.6	+25:17:23.5	73	8m	FACE-ON SPIRAL
109	COMP			↑	6s	
110	nogal_008	08:11:16.0	+25:10:45.4	73	8m	
111	COMP			↑	6s	
112	nogal_014	08:19:46.4	22:21:53.4	73	8m	
113	COMP			↑	6s	
114	nogal_018	08:38:11.0	+24:53:47	73	8m	
115	COMP			↑	6s	
116	nogal_011	08:18:47.2	+21:17:05.2	73	20m	HELIOCRATE GUIDING
117	COMP			↑	6s	
118	nogal_012	08:19:01.9	+21:11:07.5	73	20m	
119	COMP			↑	6s	
120	nogal_013	08:19:41.3	+22:08:31.1	73	18m	
121	COMP			↑	6s	
122	nogal_017	08:36:07.1	+24:53:05	78	15m	
123	COMP			↑	6s	
124	mkw1_041	09:59:47	-03:37:16.9	35	15m	
125	COMP			↑	6s	
126	mkw1_043	09:59:24.3	-02.50:47.4	35	20m	
127	COMP			↑	6s	
128	mkw4_54	12:04:32.3	+02:27:03	56	18m	
129	COMP			↑	6s	
130	mkw4_55	12:04:30.0	+02:26:57.3	35	20m	V. FAINT! yes, but has some good lines
131	COMP			↑	6s	

60 inch Telescope Log

Observer: D. Kocevski

PI: Kocevski/Modjaz/Wilkes/Lehner

Spectrograph: FAST

Grating: 300-1

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Date: 3/19/98

Number	Object	R.A.	Dec.	L/R	Exp	Comments
132	mbw4_56	12:04:02.2	+01:26:39.4	35	12m	
133	comp			†	6s	
134	mbw4_57	12:05:20.2	+01:16:41.2	35	15m	
135	comp			†	6s	
136	mbw4_62	12:06:22.9	+01:28:17.1	35	15m	
137	comp			†	6s	
138	mbw4_65	12:07:55.4	+01:28.5.8	35	15m	
139	comp			†	6s	
140,141,142	SN1998S	11:46:06.2	+47:25.55	2	3x5m	BIN x2
143	comp			†	12s	
144	H244	13:21:19.3	36:23:39	2	3m	
145	comp			†	12s	
146	MRK421	11:01:40.6	38:26:43	6	4m	BIN x4
147	comp			†	6s	
148	N4051	12:00:36.4	44:48:35	6	9m	
149	comp			†	6s	
150	N4151	12:08:01	39:41:01	6	30s	
151	comp			†	6s	
152	MRK279	13:51:53.6	69:33:13	6	3m	
153	comp			†	6s	
154	SBS1425+606	14:25:33	60:38:16	6	10m	
155	comp			†	6s	
156	N5548	14:15:43.5	25:22:01	6	3m	
157	comp			†	6s	
158	SN1997eg	13:11:36.7	22:55:29.4	2	15m	BIN x2 RON SLIT TOE: STAR SN
159	comp			†	12s	
160	mark2_51	12:15:43.0	29:00:15.5	35	15m	BIN x4
161	comp			†	6s	MOON UP.
162	a1367,1353.3+2	11:35:42.8	22:49:07.1	64	8m	
163	comp			†	6s	

60 inch Telescope Log

Observer: J. KORNY

PI: GEIGER/MAHDAVI

Spectrograph: FAST

Grating: 300-R

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Date: 3/19/98

Number	Object	R.A.	Dec.	L/R	Exp	Comments
164	a1367.1353.340	11:35:26.2	22:28:15.4	64	8m	
165	COMP			†	6s	
166	" " .341	11:35:29.2	22:29:42.8	64	5m	
167	COMP			†	6s	
168	.443	11:34:13.4	21:40:01.9	64	7m	
169	COMP			†	6s	
170	.466	11:36:29.4	21:25:57.6	64	6m	
171	COMP			†	6s	
172	.525	11:35:54.5	21:11:40.7	64	5m	
173	COMP			†	6s	
174	.552	11:28:59.7	21:02:37.4	64	5m	
175	COMP			†	6s	
176	a1367.1436.2541	11:39:59.0	20:09:35.2	64	4m	
177	COMP			†	6s	
178	.2545	11:41:52.4	20:14:58.5	64	5m	
179	COMP			†	6s	
180	.2561	11:44:25.7	20:14:58.1	64	5m	
181	COMP			†	4	
182	nrgb244.026	13:24:51.3	13:31:49.0	59	6m	
183	COMP			†	6s	
184	nrgb244.027	13:24:57.3	14:04:37	59	8m	extracted peak
185	COMP			†	6s	
186	nrgb244.028	13:24:56.9	13:34:23	59	8m	
187	COMP			†	6s	
188	nrgb244.029	13:25:14.4	13:33:58	59	5m	
189	COMP			†	6s	
190	nrgb244.030	13:25:16.0	14:28:22	59	11m	THIN CLOUDS DURING EXP.
191	COMP			†	6s	
192	nrgb244.031	13:25:26.9	13:54:12.0	59	11m	
193	COMP			†	6s	

60 inch Telescope Log

Observer: D. KORANYI

PI: MALDAVI/CARTER/WURSHNER/KENYON

Spectrograph: FAST

Grating: 300-LINE

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Date: 3/19/98

Number	Object	R.A.	Dec.	L/R	Exp	Comments
194	nrgb244.032	13:25:34.1	15:04:08	59	8m	
195	COMP			P	6s	
196	2006268	17:58:06.1	26:25:21.3	75	8m	CLOUDS DURING EXPOSURE
197	COMP			†	6s	
198	SN1998V	18:22:37.4	15.42:08.4	2	15m	CLOUDS DRIFTING THROUGH DURING EXP.
199	COMP			†	12s	BIN=2 ;; COMMENTS WRONG!!
200	N002964	13:57:34.2	30:05:31.2	75	10m	BIN=4
201	COMP			†	6s	
202	N001759	13:59:39.3	28:03:39.1	75	9m	
203	COMP			†	6s	
204	N001065	14:17:20.9	26:51:28.8	75	4m	INCREASING CIRRUS
205	COMP			†	6s	
206	N5646	15:05:56.9	01:47:53	57	5m	CLOUDS - † SIGNIFICANTLY
207	COMP			†	6s	
208,209	AG-Dra	16:01:41	66:46:10	12	2s,20s	
210	COMP			†	6s	
211,212	BDp332642	15:50:03	33:05:49	56	1m	
213	COMP			†	6s	
214	PG1708+602			56	3m	
215	COMP			†	6s	
216-225	BIAS			0	0s	BIN=4
226-235	FLAT			0	6s	BIN=4
236-245	BIAS			0	0s	BIN=2
246-255	FLAT			0	12s	BIN=2

60 inch Telescope Log

Observer: D. KORANYI

PI: KENTON / KORANYI

Spectrograph: FAST

Grating: 300 + 1200

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Date: 3/20/98

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	BIN x4 LATE START DUE
11-20	FLAT			0	6s	BIN x4 TO ROTATOR TROBS..
21-30	BIAS			0	0s	BIN x2
31-40	FLAT			0	12s	BIN x2
41-50	FLAT			35	15s	BIN x4 ← 1200-L GRATING
51-55	SKY			30	10s	BIN x4 300L MICROMETER 421
56-60	SKY			0	25s	BIN x2 300L GRATING WAVE STILL
61	COMP			↑	12s	BIN x2
62	COMP			↓	6s	BIN x4 (oops)
63,64	HILTNER 600	06:42:33.2	02:11:25	56	45s	WEATHER IS GREAT!
65	COMP			↑	6s	
66,67	PG-0823+546	08:26:07.9	54:56:25	56	4m	
68	COMP			↑	6s	
69,70	HD52971	06:57:50	29:13:42	57	5s	
71	COMP			↑	6s	
72,73	AGK2p14783	07:17:47	14:59:38	57	5s	
74	COMP			↑	6s	
75,76	N1900	04:54:28	-04:56:30	57	4m	
77	COMP			↑	6s	
78,79	DG Tau	04:27:05	26:06:16	12	12s, 90s	
80	COMP			↑	6s	
81,82	DL Tau	04:33:39	25:20:39	12	30s, 240s	
83	COMP			↑	6s	
84,85	DR Tau	04:47:05	16:56:37	12	12s, 90s	
86	COMP			↑	6s	
87,88	RW Aur	05:07:49	30:24:06	12	55, 30s	
89	COMP			↑	6s	
90	MWIS-004956	9:20:02.1	01:32:16.8	35	30m	1200 line / BIN x4 / PA = 12°
91	COMP			↑	15s	1200-L

60 inch Telescope Log

Observer: D. KORANYI

PI: KORANYI/KIRSHNER/WILKES/HUCHRA

Spectrograph: FAST

Grating: 1200+300

Date: 3/20/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
92	MKW1s_004956	9:20:32.1	01:02:16.8	35	30m	1200-LINE / BIN×4 / PA=12°
93	COMP			↑	10s	
94	MKW1_N3090	10:00:30.2	-02:58:06.2	35	30m	" " 71°
95	COMP			↑	10s	
96	MKW1_N3090	10:00:30.2	-02:58:06.2	35	30m	" " " CLOUDS?
97	COMP			↑	10s	1200-L. →
98-100	SN1998S	11:46:06.2	+43:28:55.5	2	3×5m	300-LINE / BIN×2 / PA=90° →
101	COMP			↑	12s	
102	N744	13:21:19.6	-12:23:39	2	3m	AIRMASS 1.24
103	COMP			↑	12s	
104	N4258	12:17:29.8	47:34:57	6	2m	BIN×4 →
105	COMP			↑	6s	
106	MRK279	13:51:53.6	69:33:13	6	3m	AIRMASS 1.46
107	COMP			↑	6s	
108	1124+3535	11:17:25.2	35:52:30	68	4m	
109	COMP			↑	6s	
110	1125+0421E	11:17:22.4	04:21:29	68	4m	HAZE
111	COMP			↑	6s	
112	1139+2022	11:39:38.8	20:22:31	68	6m	LOW COUNTS
113	COMP			↑	6s	
114	1141+2022W	11:41:49.5	20:23:09	68	4m	
115	COMP			↑	6s	
116	1141+2022S	11:40:50.4	20:22:50	68	7m	
117	COMP			↑	6s	
118	1135+2004W	11:43:76.3	20:03:53	68	5m	
119	COMP			↑	6s	
120	1148+2019	11:48:15.9	20:19:37	68	4m	
121	COMP			↑	6s	
122	1158+1059W	12:00:24.5	10:59:09	68	4m	STAR on SLIT TO E
123	COMP			↑	6s	STAR 6.8

60 inch Telescope Log

Observer: D. KORANYI

PI: KORANYI/WILKES/KIRSHNER/KENYON

Spectrograph: EAST

Grating: 1200+300

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Date: 3/21/98

Number	Object	R.A.	Dec.	L/R	Exp	Comments
124	MRK4_N4373	12:30:27.0	01:53:45.0	35	30m	1200L/TEK421/BIN4/PA=.79
125	COMP			↑	10s	GUIDE STAR HAZY AMS
126	MRK4_N4373	12:09:27.0	01:53:45.0	35	30m	OFFSET/AUTOGUIDE. PA=-79
127	COMP			↑	10s	
128	MRK17_N5747	14:02:55.7	02:25:14.3	35	30m	M.AXIS/AUTOGUIDE/P.A. -64.0
129	COMP			↑	10s	
130	MRK17_N5747	14:02:55.7	02:25:14.3	35	30m	OFFSET PA=-64
131	COMP			↑	10s	
132	RUM3_N5629	14:28:16.5	20:50:55.6	35	30m	{P.A. IS WRONG IN COMMENT; READS -64; SHOULD BE -35} MAJOR AXIS
133	COMP			↑	10s	
134	RUM3_N5629	14:28:16.5	20:50:55.6	35	30m	PA=-64 / OFFSET
135	COMP			↑	10s	
136	N5548	14:15:43.5	25:22:01	6	3m	300-LINE GRATING →
137	COMP			↑	6s	
138	SN1998S	14:03:00	34:44:54	2	20m	BRIGHT STAR ON SLIT TOE. STAR SN
139	COMP			↑	12s	
140	SN1998V	18:22:37.4	15:47:08.4	2	15m	BIN=2
141	COMP			↑	12s	
142	MRK501	16:55:52.1	39:45:36	6	5m	BIN=4 → STAR ON SLIT TO EAST STAR AGN
143	COMP			↑	6s	
144, 145	ALPHA	16:01:41	66:48:12	12	8s, 20s	
146	COMP			↑	6s	
147	162536m241544	16:25:36.8	-24:15:44.8	74	5m	SKY IS BRIGHT - MOON
148	COMP			↑	6s	VERY RED STAR!
149	162557m243032	16:25:57.6	-24:30:32.5	74	6m	
150	COMP			↑	6s	
151	162603m242557	16:26:03.01	-24:33:57.9	74	5m	
152	COMP			↑	6s	
153	162623m242101	16:26:23.34	-24:21:01.8	74	5m	
154	COMP			↑	6s	

60 inch Telescope Log

Observer: D. KOMANY

PI: KENYON

Spectrograph: FAST

Grating: 300 + 1200 CAL B. Page: 6122

Date: 3/20/98

Number	Object	R.A.	Dec.	L/R	Exp	Comments
155	162623+244311	16:26:23.84	+24:43:11.8	74	5m	
156	COMP			†	6s	
157,158	BD+332642	15:50:03	33:05:49	56	1m	CLEAR & DARK
159	COMP			†	6s	
160-164	SKY			35	30s	1200-LINE
165	COMP			†	10s	" Continuum
166-175	FLAT			35	6s	" BIN×4
176-185	FLAT			0	6s	300-LINE → BIN×4
186-195	BIAS			0	0s	BIN×4
196-205	FLAT			0	12s	BIN×2
206-215	BIAS			0	0s	BIN×2
216-220	DARK			0	15m	BIN×4

60 inch Telescope Log
Observer: Caldwell / Dendy
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3-21-1998

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-20	BIAS				0	
21-40	FLAT				10	
41	HD57669	7 20 41	40 46 14		1	seeing ~ 3"
42	HD57669	7 20 41	40 46 14		1	mistake!
43	HD57669	7 20 41	40 46 14		1	
44	COMP				6	
45	Hiltner600	6 45 13.3	2 08 14.1		300	
46	COMP				6	
47	N2950	9 42 38	58 51 34		1800	
48	COMP				6	
49	N2950	9 42 38	58 51 34		1800	restarted guiding
50	COMP				6	
51	N3266	10 33 16	64 45 32		1800	seeing better
52	COMP				6	
53	N3266	10 33 16	64 45 32		1800	
54	COMP				6	
55	N3648	11 22 32	39 52 37		1800	PA not changed, manual guide
56	Comp				6	
57	N3648	11 22 32	39 52 37		1800	
58	Comp				6	
59	N4296	12 21 28	6 39 15		1800	
60	Comp				6	
61	N4296	12 21 28	6 39 15		1800	
62	Comp				6	
63	SN1998S	11 46 11	47 31 27		900	Man. guide
64	Comp				6	
65	VCC781	12 22 43	12 59 30		1800	
66	Comp				6	
67	VCC781	12 22 43	12 59 30		1800	
68	Comp				6	

60 inch Telescope Log
Observer: Caldwell / Dendy
PI: N. Caldwell

Spectrograph: FAST
Grating: 60
Date: 3/21/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
69	VCC781	12 22 43	12 59 30		1800	Rotated spectrograph to 50°
70	comp				6	
71	VCC781	12 22 43	12 59 30		1800	sec z > 1.3
72	comp				6	
73	N6017	15 57 15	5 59 54		1800	
74	comp				6	
75	N6017	15 57 15	5 59 54		1800	
76	comp				6	
77	N6017	15 57 15	5 59 54		1800	
78	comp				6	
79	PG1708+602	17 08 36	60 13 52		300	
80	comp				6	
81	HD161096	17 43 28	4 34 02		0.1	
82	comp				6	
83	HD154278	17 03 58	13 34 3		2	
84	HD154278	17 03 58	13 34 3		10	slid off slit
85	HD154278	17 03 58	13 34 3		10	overexposed
86	HD154278	17 03 58	13 34 3		3	
87	Comp				6	
88	HD 157214	17 18 47	32 31 51		4	
89	comp				6	
90	HD159332	17 31 12	19 17 29		2	
91	Comp				6	
92-111	BIAS				0	
112-121	FLAT				15	
122-132	DARK				900	

60 inch Telescope Log
Observer: Caldwell/Dendy
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/22/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1	unnamed					
3-11	BIAS				0	
12-22	FLAT				15	
23-28	DARK				900	
29	HD66141	8 02 16	2 20 04		1	
30	comp				6	
31	HD44478	6 22 58	22 30 49		1	overexposed
32	HD44478	6 22 58	22 30 49		0.1	
33	comp				6	
34	HD45282	6 24 3	3 27 24		3	
35	comp				6	
36	HD47105	6 37 43	16 23 57		0.1	
37	comp				6	
38	HD51530	6 55 43	28 08 55		3	
39	comp				6	
40	HD52711	7 00 20	29 05 28		3	
41	comp				6	
42	HD55280	7 11 33	59 43 45		3	
43	comp				6	
44	Hiltner600	6 42 37	2 11 25		300	
45	comp				6	
46	I2382	8 28 46	22 3 15		1800	
47	comp				6	
48	I2382	8 28 46	22 03 15		1800	
49	comp				6	
50	I2382	8 28 46	22 03 15		1800	
51	comp				6	
52	N3193	10 18 25	21 53 34		1800	
53	comp				6	
54	N3193	10 18 25	21 53 34		1800	

60 inch Telescope Log
Observer: Caldwell / Dendy
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/22/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
55	comp				6	
56	N3489	11 00 18	13 54 08		1800	guide star on far edge of field
57	comp				6	
58	N3489	11 00 18	13 54 08		1800	
59	comp				6	
60	VCC1912	12 39 38	12 52 18		1800	
61	comp				6	
62	VCC1912	12 39 38	12 52 18		1800	
63	comp				6	
64	VCC781star	12 22 43	12 59 30		300	
65	comp				6	
66	VCC1912	12 39 38	12 52 18		1800	
67	comp				6	
68	VCC1912	12 39 38	12 52 18		1800	
69	Comp				6	
70	N5576	14 21 04	3 16 13		1800	
71	Comp				6	
72	N5576	14 21 04	3 16 13		1800	
73	comp				6	
74	N5865	15 09 49	0 28 13		1800	
75	comp				6	
76	N5865	15 09 49	0 28 13		1800	
77	comp				6	
78	N5865	15 09 49	0 28 13		1800	
79	comp				6	
80	PG1708+602	17 8 36	60 13 52		360	
81	comp				6	
82	HD161096	17 43 28	4 34 02		0.1	
83	comp				6	
84	HD157089	17 18 35	1 29 16		3	

60 inch Telescope Log
Observer: Caldwell / Dendy
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/22/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
85	comp				6	
86	HD161797	17 44 30	27 44 55		2	overexposed
87	comp				6	
88	HD161797	17 44 30	27 44 55		.5	
89	comp				6	
90	HD161096	17 41 0	04 35 12		0.1	
91	comp				6	
92	HD155358	17 07 44	33 25 15		4	wrong star
93	comp				6	
94	HD155358	17 07 44	33 25 15		4	
95	comp				6	
96	HD157910	17 22 43	36 59 43		4	
97	comp				6	
98	HD163989	17 51 41	76 58 15		3	
99	comp				6	
100-109	BIAS				0	
110-119	FLAT				15	
120-123	DARK				900	

60 inch Telescope Log
Observer: K. Dendy / M. Calkins
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/23/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0	
11-20	FLAT				15	Don't use! No good.
21-26	DARK				900	
27	HD51440	6 55 39	38 07 23		5	
28	comp				6	
29	HD54719	7 7 58	30 19 45		3	overexposed
30	HD54719	7 7 58	30 19 45		1	
31	comp				6	
32	HD58207	7 22 37	27 53 57		0.5	
33	comp				6	
34	HD58551	7 23 53	21 38 14		4	
35	comp				6	
36	HD57727	7 20 26	25 08 54		1	
37	comp				6	
38	HD60179	7 34 36	31 53 18		.1	overexposed
39	HD60179				.01	
40	comp				6	
41	HD66141	8 2 16	2 20 4		1	
42	comp				6	
43	Hiltner600	6 42 37	2 11 25		300	
44	comp				6	
45	N2954	9 40 24	14 55 22		1800	
46	comp				6	
47	N2954	9 40 24	14 15 22		1800	
48	comp				6	
49	A10025p59	10 05 57	58 48 23		1800	
50	comp				6	
51	A10025p59	10 05 57	58 48 23		1800	
52	comp				6	
53	A10025p59	10 05 57	58 48 23		1800	

60 inch Telescope Log
Observer: Dendy / Calkins
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/23/1998

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
54	comp				6	
55	SN1998S	11 46 06	47 28 55		900	
56	comp				6	
57	VCC1949	12 40 27	12 33 36		1800	v. faint
58	comp				6	
59	VCC1949	12 40 27	12 33 36		1800	
60	comp				6	
61	VCC1949	12 40 27	12 33 36		1800	
62	comp				6	
63	VCC1949	12 40 27	12 33 36		1800	
64	comp				6	
65	N5342	13 51 26	59 51 55		1800	wrong object, pointing bad
66	comp				6	
67	N5342	13 51 26	59 51 55		1800	aborted, wrong object
68	N5342	13 51 26	59 51 55		1800	
69	comp				6	
70	N5342	13 51 26	59 51 55		1800	
71	comp				6	
72	N5342	13 51 26	59 51 55		1800	
73	comp				6	
74	N5813	15 01 11	1 42 8		1800	
75	comp				6	
76	N5813	15 01 11	1 42 8		1800	
77	comp				6	
78	SN1998V	18 22 37	15 42 8		900	
79	Comp				6	
80	PG1708+602	17 08 36	60 13 52		300	
81	comp				6	
82	HD161096	17 43 28	4 34 02		0.1	bad spectrum
83	comp				6	

60 inch Telescope Log
Observer: Dendy/Calkins
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/23/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
84	HD102555	17 48 26	29 20 3			bad spectrum
85	comp					
86	HD163993	17 55 49	29 15 7			overexposed
87	comp					
88	HD165401	18 03 9	4 39 23			
89	comp					
90-99	BIAS					
100-109	FLAT					No good.
110-115	DARK					

60 inch Telescope Log
Observer: K. Dendy / M. Calkins
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/24/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0	
11-20	FLAT				15	
21-22	DARK				900	
23-29	DARK				2	DONT USE. Software hungup.
30	HD44537	6 24 54	49 17 17		3	
31	Comp				6	
32	HD45412	6 25 21	30 31 33		3	
33	comp				6	
34	HD47731	6 38 12	28 14 40		3	
35	comp				6	
36	HD50420	6 55 18	43 54 36		3	
37	comp				6	
38	HD55575	7 12 8	47 19 51		3	
39	comp				6	
40	HD59881	7 32 6	1 54 52		2	
41	comp				6	
42	HD66141	8 2 15	2 20 04		0.1	underexposed
43	comp				6	
44	HD66141	8 2 15	2 20 04		1	
45	comp				6	
46	Hiltner600	6 42 37	2 11 25		300	
47	comp				6	
48	I2382	8 28 46	22 3 15		1800	
49	comp				6	
50	I555	9 41 57	12 17 43		1800	
51	comp				6	
52	I555	9 41 57	12 17 43		1800	
53	comp				6	
54	N3872	11 45 49	13 45 58		1800	
55	comp				6	

60 inch Telescope Log
Observer: K.Dendy / M.Calkins
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/24/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
56	N3872	11 45 49	13 45 58		1800	
57	comp				6	
58	SN1998S	11 46 06	47 28 55		900	
59	comp				6	
60	VCC1614	12 32 55	13 1 30		1800	
61	comp				6	
62	VCC1614	12 32 55	13 1 30		1800	
63	Comp				6	
64	VCC1614	12 32 55	13 1 30		1800	
65	comp				6	
66	VCC1614	12 32 55	13 1 30		1800	
67	comp				6	
68	VCC140	12 12 40	14 42 48		1800	
69	Comp				6	
70	VCC140	12 12 40	14 42 48		1800	
71	comp				6	
72	N5481	14 6 42	50 43 34		1800	
73	comp				6	
74	N5481	14 6 42	50 43 34		1800	
75	comp				6	
76	N5770	14 53 15	3 57 37		1800	v. windy, image drifting
77	comp				6	
78	N5770star	14 53 15	3 57 37		900	Windy!
79	comp				6	
80	N5770	14 53 15	3 57 37		1800	
81	comp				6	
82	HD161096	17 43 28	4 34 2		0.1	
83	comp				6	
84	HD150680	16 41 17	31 36 11		2	
85	Comp				6	

60 inch Telescope Log
Observer: K. Dendy / M. Calkins
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/24/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
86	HD150997	16 41 11	39 00 58		2	
87	comp				6	
88	HD152792	16 15 57	42 64 35		4	
89	comp				6	
90	HD157881	17 23 16	2 10 14		5	
91	comp				6	
92	HD160693	17 37 56	37 13 14		5	
93	comp				6	
94-103	BIAS				0	
104-113	FLAT				15	
114-119	DARK				900	
						Very windy for last few hours. Hard to keep images on slit.

60 inch Telescope Log
Observer: K. Dendy
PI: N. Caldwell

Spectrograph: FAST
Grating: 600
Date: 3/25/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-12	BIAS				0	
13-22	FLAT				15	
23-28	DARK				900	
29	HD46687	6 36 33	38 26 43		5	
30	comp				6	
31	HD48433	6 41 10	13 16 48		4	
32	HD48433	6 41 10	13 16 48		5	
33	comp				6	
34	HD48781	6 43 51	48 50 41		4	
35	comp				6	
36	HD46703	6 33 49	53 33 38		7	
37	comp				6	
38	HD57264	7 18 42	36 61 23		4	
39	comp				6	
40	HD61295	7 36 42	32 7 34		3	
41	comp				6	
42	HD66141	8 2 16	2 20 4		1	
43	comp				6	
44	HiHner600	6 42 37	2 11 25		300	
45	comp				6	
46	N3071	9 58 53	31 37 13		1800	
47	comp				6	
48	N3071	9 58 53	31 37 13		1800	
49	comp				6	
50	N3071	9 58 53	31 37 13		1800	some clouds during exp.
51	Comp				6	
52	N3599	11 15 27	18 6 46		1800	clouds drifting thru
	— power outage	—	—			exp. aborted

60 inch Telescope Log

Observer: J. MADER

PI: KENYON, WILKES, MCCLINTOCK

Spectrograph: FAST

Grating: 300 ℓ

Date: 03/27/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			–	–	BIN x 4
11-20	BIAS			–	–	BIN x 2
21-30	FLAT			–	12	BIN x 2
31-40	FLAT			–	6	BIN x 4
41-50	FLAT			–	20	1.1" SLIT
51-53	DARK			–	900	3" SLIT BIN x 4
54-56	DARK			–	900	BIN x 2
57-59	SKY			–	2	1.1" SLIT
60	COMP			↑		
61-63	SKY			–	2	3" SLIT
64	COMP			↑		
65-66	DL Tau	04:33:39	25:20:39	12	30/240	WRONG ONE, SORRY did not ardwire reduce FITS
67	COMP			↑		
68-69	DR Tau	04:47:05	16:58:37	12	12/80	
70	COMP			↑		
71-72	DG Tau	04:27:05	26.06:16	12	12/90	
73	COMP			↑		
74-75	DL Tau	04:33:39	25:20:39	12	30/240	REDO FROM ABOVE
76	COMP			↑		
77-78	[redacted] RW Aur	05:07:49	30:24:06	12	5/30	
79	COMP			↑		
80 [redacted]	Akn 120	05:13:38	-00:12:15	6	180	
81	COMP			↑		
82-83	HILTNER 600	06:42:37	02:11:25	56	45	
84	COMP			↑		
85-86	HILTNER 600	06:42:37	02:11:25	56	45	1.1" SLIT
87	COMP			↑		
88-89	HD 245770	05:38:55	26:18:56	77	30	
90	COMP			↑		

60 inch Telescope Log

Observer: S. MADER

PI: MCCLINTOCK, HUCHRA, BARTON, KIRSHNER

Spectrograph: FAST

Grating: 300 ℓ

Date: 03/27/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
91-92	HD 39478	05:53:59	26:25:20	77	25	1.1" SLIT
93	COMP			↑		
94	051424.2p244463	05:14:24	24:46:39	68	240	3" SLIT * correct object ?type
95	COMP			↑		
96	051640.5p274311	05:16:40	27:43:11	68	900	FAINT *? needs more
97	COMP			↑		
98	nogal-019	08:38:10	19:43:31	73	780	
99	COMP			↑		
100	nogal_021	08:48:27	19:01:10	73	720	
101	COMP			↑		
102	nogal_022	08:48:30	19:02:37	73	900	
103	COMP			↑		
104	nogal_027	08:54:22	32:40:51	73	900	
105	COMP			↑		
106	nogal_033	09:03:59	21:54:23	73	600	
107	COMP			↑		
108	084906p081640	08:49:06	08:16:40	68	900	FAINT
109	COMP			↑		
110	084911p071907	08:49:11	07:19:07	68	900	
111	COMP			↑		
112	084947p055034	08:49:47	05:50:34	68	900	
113	COMP			↑		
114	085003p063731	08:50:03	06:37:31	68	900	
115	COMP			↑		
116	SN1998S	11:46:06	47:28:56	2	300	BINx2
117	COMP			↑		
118	SN1998S	11:46:06	47:28:56	2	300	
119	COMP			↑		
120	SN1998S	11:46:06	47:28:56	2	300	
121	COMP			↑		

60 inch Telescope Log
Observer: S. MADER
PI: KIRSHNER, KELLER, CARTER

Spectrograph: FAST
Grating: 300 ℓ
Date: 03/27/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
122	SN 1997eg	13:11:37	22:55:29	2	900	BIN X 2
123	COMP			↑		
						CLOSING @ MIDNIGHT
						HIGH HUMIDITY, SOME FOG
124	Feige 98	14:36:04	27:42:28	55	120	BIN X 2
125	COMP			↑		
126	E-103-1039	11:36:44	22:59:31	64	300	BIN X 4
127	COMP			↑		
128	E-103-1135	11:37:48	22:41:29	64	240	
129	COMP			↑		
130	E-103-1081	11:53:24	23:04:15	64	300	
131	COMP			↑		
132	E-103-1371	11:59:02	21:48:29	64	300	
133	COMP			↑		
134	E-103-1360	11:51:21	21:53:20	64	300	
135	COMP			↑		
136	Z000309	11:49:09	27:01:19	75	180	
137	COMP			↑		
138	Z008567	11:54:53	28:15:45	75	300	
139	COMP			↑		
140	Z001471	11:55:36	29:59:45	75	240	
141	COMP			↑		
142-151	BIAS			—	—	CLOSING AGAIN
152-161	FLAT			—	6	
162-171	FLAT			—	12	BIN X 2
172-181	BIAS			—	—	BIN X 2

60 inch Telescope Log
Observer: J. MADER
PI: KENYON, WILKES, MCCLINTOCK

Spectrograph: FAST
Grating: 300ℓ
Date: 03/30/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			—	—	BIN x 2
11-20	FLAT			—	12	"
21-30	FLAT			—	6	BIN x 4
31-40	BIAS			—	—	
41-50	FLAT			—	20	1.1" SLIT
51-54	DARK			—	900	3" SLIT
55-58	DARK			—	900	BIN x 2
59-61	SKY			—	5	BIN x 4
62	COMP			↑		
63-64	DG Tau	04:27:05	26:06:16	12	12/90	SOME CLOUDS, SEEING NOT
65	COMP			↑		VERY GOOD
66-67	DL Tau	04:33:39	25:20:37	12	30/240	
68	COMP			↑		
69-70	DR Tau	04:47:06	16:58:43	12	12/80	
71	COMP			↑		
72-73	RW Aur	05:07:53	30:27:13	12	5/30	
74	COMP			↕		
75	RW Aur	05:07:53	30:27:13	12	5	
76	Alb 120	05:13:38	-00:12:15	6	180	
77	COMP			↑		
78	HILTNER 600	06:42:37	02:11:25	56	45	
79	COMP			↑		
80	HILTNER 600	06:42:37	02:11:25	56	45	1.1" SLIT
81	COMP			↑		
82-83	HD245770	05:38:55	26:18:56	77	30	
84	COMP			↑		
85-86	HD39478	05:53:59	26:25:20	77	25	
87				↑		

60 inch Telescope Log
Observer: S. MADER
PI: BARTON, KIRSHNER, GELLER, HUCHRA

Spectrograph: FAST
Grating: 300 ℓ
Date: 03/30/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
88	nogal_043	09:13:39	29:59:34	73	360	3" SLIT
89	COMP			↑		
90	nogal_048	09:16:44	18:57:16	73	600	
91	COMP			↑		
92	nogal_049	09:16:41	18:57:48	73	720	
93	COMP			↑		
94	nogal_064	09:25:42	11:25:54	73	480	CLOUDS IN AND OUT
95	COMP			↑		
96	nogal_065	09:25:47	11:25:28	73	600	
97	COMP			↑		
98	sn1998S	11:46:06	47:28:55	2	300	CLOUDS, THAT'S IT FOR NOW
99	COMP			↑		BIN x 2
100	sn1998S	11:46:06	47:28:55	2	300	CLOUDS KEEP FLYING BY
101	COMP			↑		
102	sn1998S	11:46:06	47:28:55	2	300	
103	COMP			↑		
104	GD 140	11:34:28	30:04:27	56	[illegible] 60	BIN x 2
105	COMP			↑		
106	a1367.103.1269	11:37:44	22:00:35	64	720	BIN x 4
107	COMP			↑		
108	a1367.103.1271	11:37:49	22:01:33	64	720	
109	COMP			↑		
110	11184p6934	11:18:24	69:34:00	68	720	Hα @ ~6860 Å
111	COMP			↑		
112	11180p6944	11:18:00	69:44:00	68	900	
113	COMP			↑		
114	11330p6346	11:33:00	63:46:00	68	600	
115	COMP			↑		
116	11335p6323	11:33:30	63:06:24	68	300	
117	COMP			↑		

60 inch Telescope Log
Observer: J. MADER
PI: HUCHRA, GELLER, WILKES

Spectrograph: FAST
Grating: 300 ℓ
Date: 03/30/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
118	11210p5805	11:21:00	58:05:00	68	480	CLEAR NOW ???
119	COMP			↑		
120	N3379	10:45:11	12:50:48	57	180	
121	COMP			↑		
122	a1367.103.1308	11:51:28	22:01:35	64	300	
123	COMP			↑		
124	a1367.103.1257	11:57:51	22:15:27	64	300	
125	COMP			↑		
126	a1367.103.1467	11:51:38	21:27:47	64	480	
127	COMP			↑		
128	a1367.103.1530	11:49:59	21:20:04	64	360	
129	COMP			↑		
130	2M121322p165728	12:13:22	16:57:28	68	480	
131	COMP			↑		
132	2M121349p122125	12:13:49	12:21:25	68	480	
133	COMP			↑		
134	MRK421	11:01:41	38:28:43	6	240	
135	COMP			↑		
136	N4051	12:00:36	44:48:35	6	120	
137	COMP			↑		
138	N4151	12:08:01	39:41:01	6	30	
139	COMP			↑		
140	N4258	12:16:30	47:34:51	6	120	
141	COMP			↑		
142	MRK 279	13:51:54	69:33:13	6	180	
143	COMP			↑		
144	HZ 44	13:21:19	36:23:39	56	90	
145	COMP			↑		
146	2M121419p174746	12:14:10	17:47:46	68	600	
147	COMP			↑		

60 inch Telescope Log

Observer: S. MADER

PI: HUCHRA, KORANYI, MAHDAVI, WILKES, KENYON

Spectrograph: FAST

Grating: 300@

Date: 03/30/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
148	2M122135p155900	12:21:35	15:59:00	68	720	
149	COMP			↑		
150	2M12[illegible]M40p14138	12:14:40	14:11:38	68	3600	
151	COMP			↑		
152	2M1214012pM1107	12:M:01	14:11:07	68	420	
153	COMP			↑		
154	mkw4_58	12:03:40	02:19:52	35	720	FAINT
155	COMP			↑		
156	mkw4-64	12:02:08	02:28:16	35	900	FAINT
157	COMP			↑		
158	12101p1018	12:10:05	10:18:29	68	300	
159	COMP			↑		
160	nrgb244.033	13:25:54	13:17:49	59	420	
161	COMP			↑		
162	nrgb244.034	13:26:33	14:25:11	59	480	
163	COMP.			↑		
164	nrgb244.040	13:26:38	11:52:07	59	300	
165	COMP			↑		
166	nrgb244.042	13:27:23	12:21:13	59	480	
167	COMP			↑		
168	SBS1425p6006	14:25:33	60:39:16	6	600	
169	COMP			↑		
170	N5548	14:15:44	25:22:01	6	180	
171	COMP			↑		
172	15049p0050	15:04:54	00:50:00	68	300	
173	COMP			↑		
174	162646m241203	16:26:46	-24:12:04	74	240	
175	COMP			↑		
176	162710m241914	16:27:10	-24:19:14	74	240	
177	COMP			↑		

60 Inch Telescope Log
Observer: S. HADER
PI: CENYON, KIRSHNER, KARANYI, WILKES

Spectrograph: FAST
Grating: 300 ℓ
Date: 03/30/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
178	162658m244529	16:26:58	24:45:29	74	240	
179	COMP			↑		
180	162749m242540	16:27:49	-24:25:40	74	240	
181	COMP			↑		
182	162739m243914	16:27:39	-24:39:14	74	480	
183	COMP			↑		
184	162735m243894	16:27:35	-24:38:34	74	600	
185	COMP			↑		
186-187	AG Dra	16:01:41	66:48:10	6	2/20	
188	COMP			↑		
189	sn1998V	18:22:37	15:42:08	2	900	BIN x 2
190	COMP			↑		
191	awm4_51	16:05:10	23:36:57	35	720	BIN x 4 STAR
192	COMP			↑		
193	awm4_45	16:06:08	24:07:59	35	900	VERY FAINT
194	COMP			↑		
195	HRK501	16:53:52	39:45:36	6	300	
196	COMP			↑		
197-198	BDp332642	15:50:03	33:05:49	56	60	
199	COMP			↑		
200-209	BIAS			-	-	
210-219	FLAT			-	6	
220-229	FLAT			-	12	BIN x 2
230-239	BIAS			-	-	"

60 inch Telescope Log
Observer: PBerlind/MCalkins
PI: Bacon

Spectrograph: FAST
Grating: 300
Date: 3/31/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0s	bin by 4; 3" slit; standard setup
11-20	FLAT				6s	"
21-30	BIAS				0s	bin by 2
31-40	FLAT				12s	"
41-45	Sky	Zenith		57	2s	
46	Comp			↑	6s	clear skies!
47-50	R.W.Ar					
51	Comp					
52-54	DGTau	04:27	+26:06	12	12s, 90s	
55	Comp			↑		
56-57	DRTau	04:47	+16:58	12	12s, 80s	
58	Comp			↑		
59-60	DETau	04	+16	12	30s, 4m	
61	Comp			↑		
62-63	Hiltner 600	06:42	+02	56	40s	
64	Comp			↑		
65	nogal 34	09:04	+21:58	73	8m	
66	Comp			↑		
67	nogal 35	09:04	+22:03	73	15m	* to W
68	Comp			↑		
69	nogal-28	08:54	+32:36	73	15m	
70	Comp			↑		
71	nogal 42	09:13	+29:59	73	12m	gal to W in slit
72	Comp			↑		
73	1108+p4828	11:08	+48:26	68	10m	
74	Comp			↑		
75	TWQSO	09:57:57.3	+56:08:23	99	20m	bin by 2; PA=-9
76	Comp			↑		2 comps in slit
77	a1367, RB 1053	11:41	+23:02	64	5m	
78	Comp			↑		

file 75 TWQSO 75 → ← 76

extracted 75 @ 61.98 (0075_TWQSO_ms)
extracted 76 @ 62.02 -9
(called 0076.TWQSOb.ms)

75 is B (Rudy)

60 inch Telescope Log

Observer: PB MC

PI: Gneller

Spectrograph: FAST

Grating: 300

Date: 3/31/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
79	a1367.103.1056	11:42	+23:07	64 ↑	5m	em
80	COMP					
81	.1057	11:43	+23:00	64 ↑	4m	em
82	COMP					
83	.1144	11:43	+22:43	64 ↑	7m	extended gal; em
84	COMP					
85	.1175	11:37	+22:23	64 ↑	5m	em
86	COMP					
87	.1520	11:46	+21:16	64 ↑	3+m	
88	COMP					
89	.1536	11:50	+21:08	64 ↑	4m	em
90	COMP					
91	.1562	11:56	+21:14	64 ↑	3m	
92	COMP					
93	.1564	11:59	+21:14	64 ↑	3m	
94	COMP					
95	.1569	11:36	+21:10	64 ↑	3m	
96	COMP					
97	.1587	11:45	+21:01	64 ↑	2+m	
98	COMP					
99	.1592	11:49	+21:02	64 ↑	3m	
100	COMP					
103	.1606	11:51	+21:00	64 ↑	2m	101=1604
104	COMP					
105	.1608	11:52	+2146	64 ↑	2m	
106	COMP					
107	.1610	11:52	+20:59	64 ↑	90s	
108	COMP					
109	.1612	11:53	+21:01	64 ↑	3+m	
110	COMP					

← 101 = a1367.103.1604 11:51 +21:00 64 ↑ 3m em } Sorry Susan Out of Order

102 = COMP

60 inch Telescope Log
Observer: PB MC
PI: Geller

Spectrograph: FAST
Grating: 300
Date: 3/31/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
111	a1367.103.1635	11:38	+20:44	64	9m	LSB ; Ha @ pix 2085 jextended
112	comp			↑		
113	.1645	11:45	+20:48	64	2m	
114	comp			↑		
115	.1664	11:51	+20:48	64	3m	
116	comp			↑		
117	.1669	11:53	+20:45	64	2m	em
118	comp			↑		
119	.1676	11:53	+20:52	64	90s	
120	comp			↑		
121	.1693	11:38	+20:31	64	10s	
122	comp			↑		
123	.1711	11:45	+20:37	64	5m	em
124	comp			↑		
125	.1719	11:46	+20:40	64	2m	
126	comp			↑		
127	.1723	11:52	20:37	64	2m	
128	comp			↑		
129	.1724	11:52	20:37	64	75s	
130	comp			↑		
131	.1730	11:53	20:39	64	3m	
132	comp			↑		
133	.1739	11:53	20:34	64	3m	
134	comp			↑		
135	.1767	11:39	+20:27	64	90s	
136	comp			↑		
137	.1765	11:40	+20:20	64	90s	
138	comp			↑		
139	.1781	11:45	+20:26	64	2m	
140	comp			↑		

60 inch Telescope Log
Observer: PB · ML
PI: Geller

Spectrograph: FAST
Grating: 300l
Date: 3/21/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
141	g1367.103.1782	11:45	+20·19	64	2m	
142	comp			↑		
143	g1367.103.1785	11:46	+20·23	64	90s	
144	comp			↑		
145	.1787	11:50	+20·29	64	2m	
146	comp			↑		
147	.1796	11:51	+20·23	64	5m	em
148	comp			↑		
149	.1804	11:52	+20·26	69	2+m	
150	comp			↑		
151	.1823	11:41	+20·06	64	90s	
152	comp			↑		
153	.1838	11:43	+20·16	64	2?m	
154	comp			↑		
155	.1841	11:43	+20·11	64	8m	
156	comp			↑		
157	.1848	11:44	+20·07	69	3m	
158	comp			↑		
159	g1367.1353.273	11:35	+23·60	64	3m	
160	comp			↑		
161	.274	11:36	+22·59	64	2m	
162	COMP			↑		
163	.342	11:36	+22·25	64	3.m	
164	comp			↑		
165	.371	11:39	+22·18	64	5m	
166	comp			↑		
167	.450	11:36	+21·35	64	3m	bin by 2; double nucleus galaxy!. Sy1+ em gal!
168	comp			↑		
169	.474	11:29	+21·35	64	2+m	
170	comp			↑		

60 inch Telescope Log

Observer: PB MC

PI: Geller/Kirshner/Carter

Spectrograph: FAST

Grating: 300

Date: 3/31/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
171	G1367.1353.513	11:31	+21:16	64 ↑	5m	
172	comp					
173	.1516	11:33	+21:22	64 ↑	3½m	
174	comp					
175	.550	11:28	+21:00	64 ↑	2m	
176	comp					
177	.601	11:28	+20:44	64 ↑	5m	
178	comp					
179	.628	11:29	+20:35	64 ↑	8m	em.; v. blue
180	comp					
181	.636	11:31	+20:24	64 ↑	4m	
182	comp					
183	.640	11:32	+20:26	64 ↑	5m	Strong em
184	comp					
185	.646	11:32	+20:31	64 ↑	2½m	
186	comp					
187	.661	11:31	+20:14	64 ↑	4m	em
188	comp					
189	.698	11:32	+20:09	64 ↑	5m	em
190	comp					
191	comp			2 ↓	5m	6m by 2
192,193,194	SN1998S	11:46	+47:28			
195	comp					
196-197	HZ44	13:21	+36	56 ↑	90s	"
198	comp					
199	EG7382	12:25	+30:37	75 ↑	4m	
200	comp					
201	A000412	12:26	+27:52	75 ↑	3m	
202	comp					

60 inch Telescope Log

Observer: PB/mc

PI: Carter & Hughes

Spectrograph: Fast

Grating: 300/

Date: 3/31/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
203	Z013737	12.26	+26.50	75	3m	
204	Comp			↑		
205	N001752	12.27	20.55	75	5m	
206	Comp			↑		
207	Z002677	12.27	50.32	75	3m	
208	Comp			↑		
209	Z003476	12.29	27.14	75	4m	
210	Comp			↑		
211	Z001872	12.33	32.05	75	4m	
212	Comp			↑		
213	Z004004	12.29	27.46	75	4m	
214	Comp			↑		
215	Z000526	12.33	51.06	75	4m	
216	Comp			↑		
217	Z007383	12.35	29.44	75	2.5m	
218	Comp			↑		
219	Z002678	12.35	26.54	75	2m	
220	Comp			↑		
221	15328p0718	15:35	+07.07	68	8m	
222	Comp			↑		
223	N6047	16.02	+17.51	68	2+m	
224	Comp			↑		
225	15558p0135	15:55	+01.35	68	10m	
226	Comp			↑		
227	16282p0608	16:30	+06.01	68	10m	
228	Comp			↑		
229	162803m242	16:28	-24.26	74	4m	
230	Comp			↑		
231	HBC256	16:31	-26.12	74	4m	
232	Comp			↑		

60 inch Telescope Log
Observer: PB MC
PI: Kenyon

Spectrograph: FAST
Grating: 300
Date: 3/31/98

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
233	HBC257	16:25	-23:19	74	90s	
234	comp			↑		
235	HBC258	16:25	-24:29	74	2m	
236	HBC258B	16:25	-24:29	74	2m	SW of "A"
237	comp			↑		
238	HBC259	16:25	-24:20	74	2m	
239	comp			↑		
240	HBC260	16:26	-23:43	74	90s	
241	HBC261	16:26	-23:14	74	90s	
242	comp			↑		
243	HBC262S	16:26	-24:45	74	2m	
244	HBC262N	16:27	-24:41	74	4m	
245	comp			↑		
246	HBC263	16:27	-24:41	74	90s	
247	comp			↑		
248	HBC264	16:27	-24:22	74	30s	
249	HBC265	16:27	-24:26	74	2m	
250	comp			↑		
251	HBC266	16:28	-24:28	74	2m	
252	HBC267	16:31	-24:09	74	2.5m	
253	comp			↑		
254	HBC268	16:31	-24:27	74	90s	
255	comp			↑		
256	HBC270	16:49	-14:22	74	20s	
257	comp			↑		
258	HBC272	17:10	-27:16	74	30s	
259	HBC273	17:10	-27:15	74	2m	
260	comp			↑		
261	HBC274	17:10	-27:40	74	2m	
262	comp			↑		

60 inch Telescope Log
Observer: PB ML
PI: Kenyon/Kirshner

Spectrograph: FAST
Grating: 300
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Number	Object	R.A.	Dec.	L/R	Exp	Comments
263	HBC275E	17:11	-27:22	74	25m	SE
264	HBC275 NW	17:11	-27:22	74	3m	
265	COMP			↑		
266	HBC276	17:12	-27:20	74	3m	
267	COMP			↑		
268	SN1998V	14:22	+15:42	2	15m	6m by 2
269	COMP			↑		
270	HBC649	16:34	-15:48	74	90s	
271	COMP			↑		
272,274	HBC650	16:34	-15:47	74	90s, 3m	2
273	COMP			↑		
275	HBC651	16:46	-15:14	74	90s	good arc
276	COMP			↑		
277	HBC652	16:48	-14:11	74	90s	
278	HBC653	16:48	-14:16	74	90s	
279	COMP			↑		
280	HBC654	16:49	-14:17	74	3m	
281	COMP			↑		
282-3	HBC655	17:10	-27:38	74	90s, 10s	
284	COMP			↑		
285	HBC657	17:08	-27:42	74	90s	
286	COMP			↑		
287-88	AGDRa	16:01	+66:48	12	20s, 2s	
289	COMP			↑		
290-291	BD+53 2642	15:50	+53:05	56	1m	
292	COMP			↑		
293-302	BIAS				0s	
307-312	FLAT				60s	
313-322	BIAS				0s	
323-332	FLAT				12s	
333-340	DARKS				15m	