

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Page: <u>6809</u>
Observer: <u>CALKINS</u>				Grating: <u>500L</u>		
PI: <u>ALL, Hehra, Kirschner, Arton</u>				Date: <u>12/24/98</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-5	DARK				15m	
6-15	BIAS				0s	
16-25	FLAT				6s	
26-35	FLAT				20s	1.1"
36-45	BIAS				0s	
46-55	FLAT				12s	
56-60	sky			#57	3s	
61	comp			↑		
62	Feige 110	23 19	-5 10	#56	3m	
63	comp			↑		
64	ms1	00 42	41 16	#57	70s	
65	comp			↑		
66	NR469	23 03	08 52	#6	3m	object to the east
67	comp			↑		
68	NRK 335	00 06	20 12	#6	3.5m	
69	comp			↑		
70	2M010714	01 07	13 57	#68	12m	object to the west
71	comp			↑		
72-74	sn1998ey	21 30	26 43	#2	20m	sn not visible to eye
75	comp			↑		object to the west
76	sn1998es	01 37	05 53	#2	15m	tilt = 595.0
77	comp			↑		
78	Feige 25	2 38	5 28	#56	2m	tilt = 595.0
79	comp			↑		
80	Feige 25	2 38	5 28	#56	2m	tilt = 610.0
81	comp			↑		
82	logal-292	23 36	02 09	#73	20m	redo from 12/23/98
83	comp			↑		(proximity to moon)
84	swin 7-9.001	03 03	40 48	#56	20m	redo from 12-11
85	comp			↑		* PA = 80°

2 forgot to update comment

84 - *

is this correct object? P.01

60 inch Telescope Log			Spectrograph: <u>FAST</u>			
Observer: <u>Calvin</u>			Grating: <u>500L</u>		Page: <u>6810</u>	
PI: <u>Koranyi, Geller, Garcia, McIntosh</u>			Date: <u>12/24/98</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
86	gum 7-4.002	03 02	40 54	#35F	20m	PA = 75° redo-12/11
87	comp			↑		
88	gum 7-4.027	2 45	41 15	#35F	20m	
89	comp			↑		
90	gum 2-4.031	2 45	41 44	#35F	17m	
91	comp			↑		
92	gum 7-4.032	2 45	41 44	#35F	20m	bright object to the east, one object west
93	comp			↑		
94	051356p03	5 13	01 08	#64	20m	redo - 12/9/98
95	comp			↑		
96	051852p07	5 18	07 03	#64	17m	redo - 12/20/98
97	comp			↑		
98	051738p06	5 17	6 32	#64	20m	PA = 100°
99	comp			↑		
100	051743p04	5 17	4 06	#64	20m	PA = 100°
101	comp			↑		
102	051749p05	5 17	5 48	#64	10m	PA = 100°
103	comp			↑		
104	051653p06	5 16	6 34	#64	20m	bright object west
105	comp			↑		
106	051435p05	5 19	5 06	#64	20m	-weak, should've skipped
107	comp			↑		
108	051553p02	05 15	02 18	#64	20m	
109	comp			↑		
110-112	CICam	04 19	55 59	#107	3,20,90	
113	comp			↑		
114	comp			↓		
115, 116	A0535p26	5 38	26 18	#104	30s	
117	comp			↑		
118, 119	HD39478	5 53	26 25	#104	10s	

92 - poor but G

60 inch Telescope Log				Spectrograph: <u>FAST</u>		
Observer: <u>CALKINS</u>				Grating: <u>300L</u>		Page: <u>6811</u>
PI: <u>Kenyon, Huchra</u>				Date: <u>12/24/98</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
120	comp			↑		
121	BGGem	6 03	27 41	#68	5m	
122	comp			↑		
123	2M071924.2p	7 19	3 33	#68	17m	bright star east
124	comp			↑		
125	2M070349	7 03	27 25	#68	5m	
126	comp			↑		
127	2M071019	7 10	17 10	#68	12m	stellar?
128	comp			↑		
129	2M070701	7 07	13 06	#68	4m	
130	comp			↑		
131	2M072346	7 23	15 33	#68	7m	
132	comp			↑		
133	2M074740	7 47	18 28	#68	6m	
134	comp			↑		
135	2M074811	7 48	18 30	#68	5m	
136	comp			↑		
137	2M075121	7 51	22 30	#68	5m	
138	comp			↑		
139	2M073800	7 38	23 59	#68	10m	object east
140	comp			↑		
141	2M074851	7 48	18 06	#68	2.5m	
142	comp			↑		
143	2M073539	7 35	25 10	#68	4m	
144	comp			↑		
145	2M100513.4p	10 05	21 28	#68	12m	
146	comp			↑		
147	2M102119	10 22	22 25	#68	5m	PA = 69°
148	comp			↑		
149	2M102613	10 26	21 21	#68	4m	

60 inch Telescope Log
 Observer: Calkins
 PI: Muehtra
 Spectrograph: FAST
 Grating: 3006
 Date: 12/24/98
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Number	Object	R.A.	Dec.	L/R	Exp	Comments
150	comp			↑		
151	ZM102700	10 26	17 49	#68	3.5m	
152	comp			↑		
153	ZM103545	10 35	20 03	#68	3.5m	
154	comp			↑		
155	ZM101237	10 12	22 18	#68	2.5m	
156	comp			↑		
157	ZM101552	10 15	18 23	#68	2.5m	
158	comp			↑		
159	ZM103305	10 33	13 20	#68	10m	
160	comp			↑		
161	ZM102206	10 22	21 20	#68	4m	
162	comp			↑		
163	ZM102805	10 28	20 46	#68	5m	
164	comp			↑		
165	ZM102335	10 23	20 17	#68	3m	?A=90°
166	comp			↑		
167	ZM102136	10 21	23 59	#68	4m	
168	comp			↑		
169	ZM105736	10 57	23 52	#68	3.5m	
170	comp			↑		
171	ZM105752	10 57	23 51	#68	3.5m	
172	comp			↑		
173	ZM101905	10 19	19 20	#68	3m	
174	comp			↑		
175	ZM102153	10 21	23 50	#68	7m	
176	comp			↑		
177	ZM102355	10 23	22 39	#68	8m	
178	comp			↑		
179	ZM100316	10 03	23 48	#68	3m	

60 inch Telescope Log Observer: <u>Calkins</u> PI: <u>Huchra, All</u>	Spectrograph: <u>FAST</u> Grating: <u>500L</u> Date: <u>12/24/98</u>
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Number	Object	R.A.	Dec.	L/R	Exp	Comments
180	comp			↑		
181	ZM101550	10 15	20 39	#68	5m	
182	comp			↑		
183	ZM102408	10 24	20 37	#68	4.5m	
184	comp			↑		
185	ZM102600	10 26	19 59	#68	3m	
186	comp			↑		
187	ZM100551	10 05	20 48	#68	3.5m	
188	comp			↑		
189	ZM102639	10 26	21 48	#68	3.5m	
190	comp			↑		
191	ZM102942	10 29	15 31	#68	5m	
192	comp			↑		
193	ZM102717	10 27	16 28	#68	3.5m	
194	comp			↑		
195	ZM134415	13 44	19 34	#68	3m	
196	comp			↑		
197	ZM132357	13 23	12 02	#68	3.5m	
198	comp			↑		
199	ZM134512	13 45	23 15	#68	3m	
200	comp			↑		
201	ZM134541	13 45	22 02	#68	4m	
202	comp			↑		
203	ZM134438	13 44	21 05	#68	4m	
204	comp			↑		
205	N4258	12 18	47 18	#6	2.5m	
206	comp			↑		
207	N3377	10 47	13 58	#57	90s	
208	comp			↑		
209	Feige34	10 39	43 06	#56	2m	

60 inch Telescope Log

Spectrograph: FAST

Observer: CALVIN

Grating: 300L

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PI: A11

Date: 12/24/98

Number	Object	R.A.	Dec.	L/R	Exp	Comments
210	comp			↑		
211-220	BIAS				0s	
221-230	FLAT				6s	
231-240	BIAS				0s	
241-250	FLAT				12s	
251-260	DARK				15m	