

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5087</u>	
Observer: <u>A Berlin</u>			Grating: <u>300R + 600R</u>			
PI: <u>All</u>			Date: <u>12/17/96</u>			
Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	
11-20	FLAT600			54	50s	6000g; 1.5" slit; filter = 425 (2-440)
21-31	BIAS			0	0s	
31-40	FLAT			0	6s	
41-50	BIAS			0	0s	baby 2
51-60	FLAT			0	12s	baby 2
61-65	sky	Z		0	2s	
66	COMP			↑	5s	
67-69	HD 210027	22:06	+55:20	0	1s	clear
70	COMP			↑		windy
71-73	HD 211376	22:14	+57:02	0	1s	cold
74	COMP			↑		terrible seeing
75-77	HD 213706	22:09	+58:24	0	2s	
78	COMP			↑		
79-81	HD 210939	22:11	+59:24	0	2s	
82				↑		
83-85	HD 210809	22:11	+52:25	0	3s	
86	COMP			↑		
87-89	HD 211564	22:16	+55:37	0	30s	
90	COMP			↑		
91-93	HD 42281	20:10	+40:07	56	5s	
94	COMP			↑		
95-98	CICcy	19:50	+73:41	12	2, 2s, 2m, 2m	
99	COMP			↑		
100-101	ZAnd	23:33	+48:49	12	4, 90s	
102	COMP			↑		
103-104	AXPer	07:36	+54:15	12	5, 120s	
105	COMP			↑		← bad Comp (stellar image)
106	3C 390.3	18:45	+79:43	6	7m	reduce > 40 pix column
107	COMP			↑		

My program did not pick up problem in 105. - 1 faint line down center
used Comp file 102 for file 103-104

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5088</u>	
Observer: <u>PB</u>			Grating: <u>302R</u>		Date: <u>12/17/96</u>	
PI: <u>Geller et al</u>						
Number	Object	R. A.	Dec.	L/R	Exp	Comments
108	MRK335	00:03	+19:55	6	3m	VERY BRIGHT BACKGROUND
109	COMP			↑		seeing 3-5" +
110	N7469	2303	+06:52	6	2.5m	
111	COMP			↑		
112	MRK509	20:41	-10:54	6	3m	2.3
113	COMP			↑		
114,116	SNN7300	22:30	+13:59	2	15m	bin by 2
115,117	COMP			↑		
118-120	M31	00:40	+40:59	0	2m	
121	COMP			↑		
122-124	M32	00:39	+40:35	0	2m	
125	COMP			↑		
126	M31sky			0	2m	
127	COMP			↑		
128-129	225m280	00:41	+41:05	57	8m	
130	COMP			↑		delay @ 48"
131	471.093264	02:57	+13:26	3	20m	ISR red
132	COMP			↑		
133	S31.001035	02:49	+03:31	55	15m	
134	COMP			↑		
135	S31.001065	02:51	+03:31	55	10m	em
136	COMP			↑		delay @ 48"
137	S31.001080	03:01	+03:31	55	10m	em
138	COMP			↑		
139	S31.001210	03:05	+03:31	55	10m	em
140	COMP			↑		
141	S31.004293	02:54	+03:46	55	10m	
142	COMP			↑		
143	S31.004350	02:55	+03:46	55	10m	
144	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5089</u>	
Observer: <u>PB</u>			Grating: <u>300L; 600R</u>			
PI: <u>Geller et al / Prosser</u>			Date: <u>12/17/96</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
145	S31.004810	02:55	+03:48	SS	10m	
146	COMP			↑		
147	S31.004945	02:50	+03:49	SS	5m	
148	COMP			↑		
149	S31.005684	02:58	+03:52	SS	10m	
150	COMP			↑		
151	S31.011978	03:07	+04:23	SS	12m	
152	COMP			↑		
153	S31.012325	03:07	+04:25	SS	7m	
154	COMP			↑		
155-156	DLTan	04:37	+25:20	12	20s, 3m	
157	COMP			↑		
158-159	DRTan	04:47	+16:58	12	10s, 2m	
160	COMP			↑		
161	GM113213	05:01	+52:45	S6	2m	
162	COMP			↑		
163	SN1996by	05:58	+68:27	Z	17m	binby 2
164	COMP			↑		
165	COMP			—	15s	600R g; 1.5" slit ↓
166	SA076231	03:49	+23:53	S4	90s	FOC = 900
167	COMP			↑	15s	TV camera died!
168	HR1279	04:07	+15:10	S4	20s	delay to fix
169	COMP			↑		comp act relay
170	SA093936	04:26	+16:44	S4	90s	
171	COMP			↑		
172	F2Na	06:27	-04:30	S4	20m	
173	COMP			↑		
174	F2M	06:27	-04:28	S4	20m	
175	COMP			↑		
176	F1Ma	06:28	-04:44	S4	20m	

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5090</u>	
Observer: <u>PB</u>			Grating: <u>600L; 300L</u>			
PI: <u>Prosser & Geller</u>			Date: <u>12/17/96</u>			
Number	Object	R. A.	Dec.	L/R	Exp	Comments
177	COMP			↑	15s	600L; 15" slit ↓
178	FIC	06:27	-04:39	S4	15m	
179	COMP			↑		variable seeing
180	FIT	06:28	-04:72	S4	20m	mostly poor
181	COMP			↑		
182	FIX	06:28	-04:42	S4	20m	
183	COMP			↑		
184	FIX	06:28	-04:45	S4	15m	
185	COMP			↑		
186	FIZ	06:28	-04:49	S4	20m	
187	COMP			↑		
188	FZE	06:26	-04:39	S4	15m	
189	COMP			↑		seeing blowing up
190	FZR	06:25	-04:28	S4	20m	
191	COMP			↑		
192	Hiltner 600	06:42	-00:42	S4	4m	
193	COMP			↑		
194	HR 4112	10:30	+55:59	S4	10s	
195	COMP			↑		
196	COMP			-		300L; 3" slit ↓
197	Hiltner 600	06:42	-00:42	S4	1m	1.3
198	COMP			↑		
199	317.003040	10:51	+26:16	3	20m	redo from 6/7/96
200	COMP			↑		
201	317.004872	11:05	+26:42	3	17m	
202	COMP			↑		
203	317.012533	10:48	+26:56	3	20m	em+1
204	COMP			↑		
205	317.014087	10:55	+27:04	3	20m	WK em ~6700 Å
206	COMP			↑		

60 inch Telescope Log

Observer: PBPI: Geller et alSpectrograph: FASTGrating: 300LPage: 5091Date: 12/17/96

Number	Object	R.A.	Dec.	L/R	Exp	Comments
207	317.017256	10:59	+29:53	3	20m	seeing $\geq 5''$
208	COMP			↑		
209	317.056300	10:44	+30:39	3	20m	em
210	COMP			↑		
211	SNN3510	11:03	+28:54	2	20m	bin by 2
212	COMP			↑		
213	317.058534	11:05	+30:52	3	15m	
214	COMP			↑		
215	N4051	12:00	+44:48	6	2.5m	
216	COMP			↑		
217	N4151	12:08	+59:41	6	45s	
218	COMP			↑		
219	H244	13:21	+28:23	56	2.5	
220	COMP			↑		
221	N5548	14:15	+25:22	6	4m	
222	COMP			↑		
223	MRK279	13:51	+65:33	6	3m	
224	COMP			↑		
225	N4214	12:15	+38:20	57	2m	
226	COMP			↑		
227-228	HD93521	10:48	+37:34	57	6s	
230	COMP			↑		
231-233	HD95735	11:03	+26:02	57	5s	
234	COMP			↑		
235-244	BTAS			0	0s	
245-254	FLAT			0	6s	
255-264	BTAS			0	0s	bin by 2
265-274	FLAT			0	12s	bin by 2
275-278	DARK			0	15m	bin by 4

TOTAL P.06