

60 inch Telescope Log			Spectrograph: <u>FAST</u>			
Observer: <u>PBerlind</u>			Grating: <u>300L, 3" slit, binog 4</u>		Page: <u>4331</u>	
PI: <u>Geller</u>			Date: <u>1/23/96</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	Cirrus around
11-20	FLAT			0	6s	Steve Amato adjusted
21-25	sky			0	2s	FAST cool electronics
26	COMP			↑	5s	today; no noticeable
27-31	sigJet	02:19:18	-02:59:00	0	2s	changes
32	COMP			↑		
33-36	RTr:	02:37:00	+34:16:00	0	5s	
37	COMP			↑		
38-42	HD217086	22:54	+62:27	0	5s	
43	COMP			↑		
44-46	M32	00:39	+40:35	0	30s	
47	COMP			↑		Seeing 2"++
48	MRK335	00:03	+49:55	6	90s	
49	COMP			↑		
50	IES2344p514	23:47:05	+51:42:16	99	5m	Weekes/Buckley
51				↑		
52	46S.011857	00:44	+10:34	3	10m	H α et al + absorption features
53	COMP			↑		
54	46S.011919	00:35	+10:36	3	10m	
55	COMP			↑		
56	46S.013747	00:42	+10:44	3	10m	H α
57	COMP			↑		
58	46S.014616	00:43	+10:48	3	10m	H α
59	COMP			↑		
60	46S.016545	00:43	+10:58	3	9m	H α
61	COMP			↑		
62	46S.016580	00:34	+11:00	3	12m	H α
63	COMP			↑		
64	46S.016774	00:43	+10:59	3	9m	
65	COMP			↑		

Moon 23:30 +0

nd noise 8.91

gain 1.17

P.02

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>4332</u>	
Observer: <u>PB</u>			Grating: <u>3002</u>			
PI: <u>Geller & Barton</u>			Date: <u>1/23/96</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
66	470.046825	02:49	+12:42	3	10m	H _α
67	COMP			↑		
68	470.046826	02:20	+12:43	3	10m	* on slit
69	COMP			↑		
70	470.046955	02:30:47	+12:44:51	3	10m	* poor seeing on slit
71	COMP			↑		
72	470.046886	02:30:44	+12:44:31	3	10m	H _α
73	COMP			↑		
74	470.047240	02:29	+12:46	3	12m	
75	COMP			↑		
76	470.048490	02:40	+12:50	3	10m	
77	COMP			↑		
78	470.048800	02:23	+12:52	3	10m	H _α
79	COMP			↑		blasted by bright headlights - γ-ray
80	470.049438	02:39	+12:54	3	10m	
81	COMP			↑		
82	470.049701	02:38	+12:56	3	10m	main set
83	COMP			↑		
84	470.049847	02:26	+12:57	3	15m	H _α
85	COMP			↑		
86	470.049894	02:22	+12:57	3	10m	H _α
87	COMP			↑		seems improving
88	470.050678	02:49	+12:59	3	10m	H _α
89	COMP			↑		jump the planet.
90	gr5341-gr103	09:11:07	+22:43	33	10m	
91	COMP			↑		
92	gr5341-gr104	09:10	+22:44	33	12m	H _α
93	COMP			↑		
94	gr5341-gr108	09:09	+22:23	33	15m	
95	COMP			↑		

60 inch Telescope Log		Spectrograph: <u>FAST</u>				
Observer: <u>PB</u>		Grating: <u>3002</u>		Page: <u>4333</u>		
PI: <u>Barton & Geller</u>		Date: <u>1/23/66</u>				
Number	Object	R.A.	Dec.	L/R	Exp	Comments
96	gr5341gal109	09:09	+22:39	33	9m	
97	COMP			↑		
98	gr5341gal110	09:08	+22:42	33	15m	nice strong emission lines
99	COMP			↑		
100	gr5341gal111	09:11	+22:37	33	14m	H α
101	COMP			↑		
102	gr5341gal112	09:11	+22:55	33	9m	blue + lines
103	COMP			↑		
104	gr5341gal113	09:12	+22:56	33	15m	H α pix 2170
105	COMP			↑		
106	gr5341gal114	09:11	+22:57	33	9m	H α et al
107	COMP			↑		
108	gr5341gal115	09:08	+23:05	33	9m	H α pix 2198
109	COMP			↑		
110	gr5341gal116	09:09	+23:17	33	8m	LH
111	COMP			↑		
112	gr5341gal117	09:11	+22:47	33	1m	stars - K
113	COMP			↑		
114	gr5341gal118	09:11	+22:34	33	7m	H α
115	COMP			↑		
116	gr5341gal119	09:08	+22:48	33	10m	blue + lines
117	COMP			↑		
118	gr5341gal120	09:10	+22:27	33	15m	H α
119	COMP			↑		
120	gr5341gal123	09:11	+22:47	33	10m	H α
121	COMP			↑		
122	316.061240	10:24	+31:06	3	6m	H α
123	COMP			↑		
124	316.061356	10:31	+20:51	3	7m	
125	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>4334</u>	
Observer: <u>PB</u>			Grating: <u>3001</u>			
PI: <u>Geller</u>			Date: <u>1/23/96</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
126	316.060417	10:41:41.6	+30:44	3	10m	finishes the plate! (list 3)
127	COMP			↑		
128	317.006571	10:47	+26:26	3	15m	huge+very LSB
129	COMP			↑		↳ garbage
130	317.016235	11:11	+27:11	3	5m	
131	COMP			↑		
132	317.016925	11:02	+27:18	3	5m	
133	COMP			↑		
134	317.017892	11:09	+27:20	3	5m	
135	COMP			↑		
136	317.018316	11:00	+27:25	3	6m	
137	COMP			↑		
138	317.019173	10:57	+27:29	3	4m	
139	COMP			↑		
140	317.019699	11:12	+27:28	3	4m	
141	COMP			↑		
142,146	317.020012	11:12	+27:30	3	5m	10m reduce *146 x2
143,147	COMP			↑		
144	317.020240	11:10	+27:32	3	6m	
145	COMP			↑		
148	317.020767	11:12	+27:34	3	5m	
149	COMP			↑		
150	317.020921	10:45	+27:37	3	3m	H _α
151	COMP			↑		
152	317.021451	11:12	+27:37	3	3m	
153	COMP			↑		
154	317.021477	11:12	+27:37	3	4m	
155	COMP			↑		
156	317.021994	11:12	+27:40	3	5m	
157	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>			
Observer: <u>PB</u>			Grating: <u>300L</u>		Page: <u>4335</u>	
PI: <u>Geller/Wilkes</u>			Date: <u>1/23/96</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
158	317.022156	11:04	+27:43	3	15m	relative humidity = 7%
159	COMP			↑		H _α p12040
160	317.023001	11:00	+27:48	3	4m	
161	COMP			↑		
162	317.023448	10:45	+27:49	3	15m	LSB H _α
163	COMP			↑		
164	317.024094	11:12	+27:50	3	6m	interesting line shapes
165	COMP			↑		H _α ; O II; H _β broadened
166	317.026953	11:10	+28:05	3	5m	
167	COMP			↑		
168	317.029121	11:02	+28:11	3	10m	H _α
169	COMP			↑		
170	317.028994	10:58	+28:15	3	5m	
171	COMP			↑		nice seeing
172	317.028172	11:10	+28:13	3	6m	
173	COMP			↑		
174	321.078186	12:54:47	+30:22:40	3	12m	H _α
175	COMP			↑		
176	PG1402p261	14:02	+26:06	45	3m	1.5" slit
177	COMP			↑	8s	
178	PG1440p356	14:40	+35:36	45	3m	
179	COMP			↑	8s	
180	PG1402p261	14:02	+26	45	3m	5" slit
181	COMP			↑	3s	clear
182	PG1440p356	14:40	+35	45	3m	
183	COMP			↑	5s	
184-185	Ferac 98	14:36	+27:42	0	1m	
186	COMP			↑		
187-188	H244	13:21	+76:23	0	1m	
189	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>			
Observer: <u>PB</u>		Grating: <u>300R</u>		Page: <u>4336</u>		
PI: <u>Geller/Wilkes</u>		Date: <u>1/23/96</u>				
Number	Object	R.A.	Dec.	L/R	Exp	Comments
190	320.005580	12:21	+27:23	3	7m	3" slit
191	COMP			↑		
192	320.014000	12:16	+27:05	3	6m	
193	COMP			↑		
194	N4151	12:09	+37:41	6	30s	
195	COMP			↑		
196	MRK279	13:51	+69:33	6	90s	
197	COMP			↑		
198	N 5548	14:15	+25:22	6	2m	
199	COMP			↑		
200-201	N4406B	12:28	+12:46	0	3m	
202	COMP			↑		
203-204	Fdge66	12:34	+75:20	0	30s	
205	COMP			↑		clear @ dawn
206-207	RLR13	15:48	+29:09	0	30s	
208				↑		
209-218	BIAS			0	0s	
219-228	FLAT			0	6s	3" slit
229-238	FLAT			45	12s	1.5" slit
239-248	FLAT			45	3s	5" slit