

60 inch Telescope Log		Spectrograph: <u>FAST</u>		Page: <u>6882</u>		
Observer: <u>P Berlin</u>		Grating: <u>300L, 3" 517</u>				
PI: <u>ATI</u>		Date: <u>1/13/99</u>				
Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	DARK				15s	
11-20	BSPS				0s	
21-30	FLAT				6s	<i>CIRrus</i>
31-40	BSPS				0s	
41-50	FLAT				12s	
51-55	sky	Zenith		57	2s	
56	COMP			↑	5s	
57-59	HD 144	00:06	+64:11	57	4s	
60	COMP			↑		
61-63	HD 225095	00:03	+56:33	57	6s	
64	COMP			↑		
65-67	HD 698	00:11	+58:12	57	4s	
68	COMP			↑		
69-71	HD 225095	00:03	+56:33	57	6s	
72	COMP			↑		
73-75	HD 236349	00:14	+56:15	57	4s	
76	COMP			↑		
77-79	HD 217086	22:54	+62:27	56	4s	
80	COMP			↑		
81-82	BD 25424	21:48	+28:57	56	40s	
83	COMP			↑		
84-5	M32	00:40	+16:35	57	30s	
86	COMP			↑		
87	MAR 335	00:03	+19:55	56	3m	
88	COMP			↑		
89	ISSm 213	00:43	+14:07	57	5m	
90	COMP			↑		
91-93	HD 11623	07:02	+62:56	57	4s	
94	COMP			↑		

chip gain calculation slightly low for this night (~ 7.8 + 1.1 rather than 8.6 + 1.2)

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Page: <u>6883</u>
Observer: <u>PB</u>				Grating: <u>300L</u>		
PI: <u>Kenny</u>				Date: <u>1/13/99</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
95	022142p570528	02:21	+57:05	83	30s	great seeing! a few thin clouds
96	022143p570729	02:21	+57:07	83	15s	
97	COMP			↓		
98	022143p570731	02:21	+57:07	83	8m	N + ⁵⁰
99	022146p570725	02:21	+57:07	83	30s	
100	COMP			↑		attempt for SN98cy
101	022144p570822	02:21	+57:08	83	1m	too faint @ a mass = 200
102	022144p571020	02:21	+57:10	83	30s	
103	COMP			↑		
104	022145p570455	02:21	+57:04	83	2m	
105	022144p570407	02:21	+57:04	83	3m	
106	022147p570738	02:21	+57:03	83	30s	
107	COMP			↑		
108	022148p570741	02:21	+57:01	83	1m	
109	022149p570503	02:21	+57:07	83	30s	
110	022149p570648	02:21	+57:06	83	8m	
111	COMP			↑		
112	022151p570130	02:21	+57:04	83	2m	SW +
113	022151p570137	02:21	+57:04	83	3m	NE + fainter + to W
114	COMP			↑		
115	022149p570816	02:21	+57:08	83	2m	
116	022151p570631	02:21	+57:06	83	8m	
117	COMP			↑		
118	022154p570655	02:21	+57:06	83	6m	NU +
119	022155p570555	02:21	+57:05	83	7m	SE +
120	COMP			↑		
121	022155p570555	02:21	+57:05	83	30s	
122	022157p570655	02:21	+57:07	83	10s	
123	022157p570922	02:21	+57:08	83	1m	
124	COMP			↑		

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>6884</u>	
Observer: <u>PB</u>			Grating: <u>300R</u>			
PI: <u>Kenyon</u>			Date: <u>1/13/99</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
125	022157p570539	02-21	+57-05	83	90s	
126	022157p57054	02-21	+57-07	83	90s	
127	022158p5706	02-21	+57-0	87	8m	
128	OMP			↑		
129	022159p570657	rows: 81-83		83	20m	PA = -44 3 stars
130	OMP			↑		
	(022158p570710)	rows: 93-95				
	(022200p570648)	rows: 68-70				
131	022200p570710	02-22	+57-07	83	15m	PA = 44
132	OMP			↑		
133	022159p570706	02-21	+57-07	83	15m	PA = 48 2 stars
134		→ rows 84-86		↑		022200p570710 → rows 90-92
135	022200p570731	02-22	+57-07	83	45s	
136	022200p570612	02-22	+57-06	87	10s	
137	OMP			↓		
138	022200p570811	02-22	+57-08	83	4s	
139	022202p570822	02-22	+57-06	83	30s	
140	022202p570802	02-22	+57-06	83	90s	
141	OMP			↑		
142	022200p5707	02-22	+57-07	83	6m	
143	OMP			↑		
144	022202p570917	02-22	+57-09	83	60s	
145	022202p570850	02-22	+57-06	83	3m	
146	022203p570705	02-22	+57-07	83	6m	
147	OMP			↑		
148	021921p5645	0219-24.9	+56-45-36.9	68	12m	
149	OMP			↑		

0128 022200 p 570648 0134 022200 p 570710
 0129 022159 p 570657 0133 022159 p 570706
 0130 022158 p 570710

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Comments
Observer: <u>PB</u>		Grating: <u>300L</u>		Page: <u>6885</u>		
PI: <u>Kenyon</u>		Date: <u>1/13/99</u>				
Number	Object	R.A.	Dec.	L/R	Exp	
150	022203p570844	02:22	+57:08	83	6m	
151	022203p570909	02:22	+57:09	83	45s	
152	OMP			↓		
153	022204p570886	02:22	+57:08	83	5m	
154	022204p571086	02:22	+57:10	83	50s	
155	OMP			↑		
156	022205p570115	02:22	+57:07	83	5m	
157	022206p570523	02:22	+57:05	83	5s	Be pec.
158	OMP			↑		
159	6 stars	02:22	+57:05	83	20m	PA-1 6 stars in slit!!
159	no comp			↑		
283	022211p570633	rows: 105-108				
282	022211p570622	rows: 97-99				file 285
160	(201) 022210p570611	rows: 87-89				file 284
159	(199) 022212p570600	rows: 74-75				file 283
	(196) 022210p570544	rows: 64-65				file 282
	(195) 022211p570531	rows: 54-55				file 160
161	4 stars			83	20m	PA-2 4 stars in slit!
162	OMP			↑		
287	(200) 022209p570666	rows: 94-95				file 287
286	(198) 022209p570557	rows: 85-87				file 286
162	(197) 022209p570545	rows: 76-77	Ext. reds			file 162
161	(194) 022209p570535	rows: 67-68				file 161
163, 166	022208p570726	02:20	+57:07	83	4s	157 N XL
164	022209p570658	02:20	+57:06	83	4s	154 M
165	022207p570639	02:20	+57:06	83	4s	153 S
167	OMP			↑		

283 3 (201)
 282 4 (199)
 160 5 (196)
 159 6 (195)

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>6886</u>	
Observer: <u>PB</u>			Grating: <u>300R</u>		Date: <u>1/12/99</u>	
PI: <u>Huchra</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
168	APM080045755	08:31	+52:45	G	11m	
169	COMP			T		
170	ZM081910.6	08:19	+70:16	G8	4m	
171	COMP			T		
172	ZM081756.8	08:17	+19:09	G8	4m	
173	COMP			T		
174	ZM082707.8	08:27	+17:58	G8	3m	
175	COMP			T		
176	ZM082706.3	08:27	+22:39	G8	3m	
177	COMP			T		
178	ZM082058.6	08:20	+21:15	G8	3m	
179	COMP			T		
180	ZM082556.1	08:25	+17:51	G8	4m	
181	COMP			T		
182-4	CICan	04:19	+55:59	107	2, 20, 90s	
183	COMP			T		
186	ZM070751.1	07:07	+24:52	G8	2m	* to W * to E NOT W
187	COMP			T		
188	ZM070137.4	07:01	+27:09	G8	6m	* to E; bin by 2
189	COMP			T		(out of slit)
190	ZM080215.8	08:02	+18:24	G8	4m	
191	COMP			T		
192	ZM081242.7	08:12	+16:57	G8	15m	
193	COMP			T		
194	ZM082718.6	08:23	+10:14	G8	3m	bin by 2; sup. * *
195	COMP			T		
196	ZM083004.1	08:30	+12:57	G8	5m	
197	COMP			T		
198	ZM082611.1	08:26	+17:50	G8	12m	
199	COMP			T		

194 cannot separate well from star - ~~check~~ check cz?

60 inch Telescope Log

Observer: PB

PI: Huchra

Spectrograph: FAST

Grating: 300R

Date: 1/13/99

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
200	ZM083642.8	08:26	+12:05	68	5m	bm by 2 2 champs
201	COMP			↑		
202	ZM082206.8	08:22	+15:35	68	3m	
203	COMP			↑		
204	ZM082641.3	08:26	+12:01	68	4m	
205	COMP			↑		
206	ZM080358.7	08:03	+19:21	68	4m	
207	COMP			↑		
208	ZM080955.1	08:09	+19:45	68	5m	
209	COMP			↑		
210	ZM080712.2	08:07	+17:39	68	6m	to 6E
211	COMP			↑		
212	ZM083451.1	08:34	+14:26	68	5m	
213	COMP			↑		
214	ZM082017.9	08:20	+17:45	68	7m	
215	COMP			↑		
216	ZM083116.2	08:31	+08:27	68	5m	clouds.
217	COMP			↑		lots of thin
218	Mkn 2059	10:30	-03:10	35	6m	
219	COMP			↑		
220	-060	10:27	-03:10	35	15m	
221	COMP			↑		
222	-068	10:26	-02:48	35	15m	
223	COMP			↑		
224	-067	10:25	-03:49	35	7m	
225	COMP			↑		
226	-063	10:29	-04:06	35	11m	
227	COMP			↑		
228	-064	10:25	-03:23	35	15m	
229	COMP			↑		

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Observer: <u>PB</u>		Grating: <u>300Q</u>		Date: <u>1/13/99</u>		
PI: <u>Dan Huchra</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
230	mkw2.071	10:29	-02:48	35	15m	seeing much worse
231	OMP			↑		
232	-072	10:27	-02:40	35	15m	
233	OMP			↑		
234	-074	10:26	-02:40	35	15m	
235	OMP			↑		
236	ZM114952.6	11:49	+12:11	68	5m	
237	OMP			↑		
238	ZM115651.3	11:56	+13:41	68	5m	
239	OMP			↑		
240	ZM111749.7	11:47	+12:06	68	5m	
241	OMP			↑		
242	ZM115253.1	11:52	+11:11	68	5m	
243	OMP			↑		
244	ZM115721.7	11:20	+12:57	68	6m	
245	OMP			↑		
246	ZM114717.7	11:47	+12:40	68	5m	
247	OMP			↑		
248	ZM114708.0	11:47	+16:14	68	5m	
249	OMP			↑		
250	ZM115923.0	11:59	+13:17	68	4m	
251	OMP			↑		
252	ZM115056.9	11:50	+15:31	68	12m	
253	OMP			↑		
254	ZM114958.0	11:49	+20:57	68	4m	
255	OMP			↑		
256	ZM123953.5	12:39	+13:20	68	5m	
257	OMP			↑		
258	ZM123935.9	12:39	+15:02	68	5m	
259	OMP			↑		



60 inch Telescope Log

Observer: PB

PI: Huchra

Spectrograph: FAST

Grating: 3000

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
260	ZM1241245	12:41	+12:10	68	5m	continued poor seeing
261	WMP			T		
262	ZM1246136	12:46	+12:10	68	6m	
263	WMP			T		
264	ZM1256520	12:56	+12:21	68	5m	
265	WMP			T		windy
266	ZM1239219	12:39	+12:11	68	7m	
267	WMP			T		
268	ZM1249120	12:49	+12:14	68	7m	
269	WMP			T		
270	ZM1252195	12:52	+12:21	68	6m	to to W
271	WMP			T		
272	ZM1211211	12:11	+12:11	68	6m	
273	WMP			T		
274	MRK421	11:04	+12:28	6	4m	
275	WMP			T		
276	MRK279	12:51	+69:33	6	3m	
277	WMP			T		
278	NSS48	14:15	+25:22	6	3m	
279	WMP			T		windy!
280-281	H241	13:26	+36	56	2m	
282	WMP			T		
283-292	UBAS				03	clear & dark
293-302	FLAT				65	
303-312	UBAS				03	
313-322	FLAT				125	
323-332	DARK				20m	
332						