

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>6934</u>	
Observer: <u>CALKINS</u>			Grating: <u>100L</u>		Date: <u>1/22/99</u>	
PI: <u>All, Huchra</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	DARK				15m	
11-20	BIAS				0s	
21-30	FLAT				6s	
31-40	BIAS				0s	
41-50	FLAT				12s	
51-55	sky			#57	2s	
56	comp			↑		
57	PG0205p134	2 08	13 36	#56	4m	
58	comp			↑		
59	M31	00 42	41 16	#57	1m	
60	comp			↑		
61	Akn564	22 42	29 43	#6	5m	bright star to the west, PA = 71.0°
62	comp			↑		
63	N7469	23 03	8 51	#6	2.5m	PA = 56°
64	comp			↑		
65	MRK335	00 06	20 12	#6	3m	PA = 64°, object east
66	comp			↑		
67	2M015018.2p	1 50	40 02	#68	12m	
68	comp			↑		
69	2M015444.1p	1 54	33 32	#68	12m	
70	comp			↑		
71	2M015022.9p	1 50	33 06	#68	17m	
72	comp			↑		
73	2M015057.9p	1 51	22 27	#68	12m	
74	comp			↑		
75	2M014651.5p	1 46	13 10	#68	12m	
76	comp			↑		
77	2M015450.8p	1 54	32 41	#68	12m	
78	comp			↑		
79	2M015114.8p	1 51	32 49	#68	15m	objects west + east

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Page: <u>6935</u>
Observer: <u>Callins</u>				Grating: <u>300L</u>		
PI: <u>Huchra, Garcia, Keaton, Rind</u>				Date: <u>1/11/99</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
80	comp			↑		
81	2M014756.8p	1 47	33 22	#68	15m	
82	comp			↑		
83	2M014830.9p	1 48	32 30	#68	15m	
84	comp			↑		
85	2M015136.4p	1 51	32 47	#68	10m	
86	comp			↑		
87	2M015449.8p	1 54	33 38	#68	17m	
88	comp			↑		
89	2M015115.4p	1 51	30 32	#68	20m	
90	comp			↑		
91	2M015159.9p	1 52	33 15	#68	17m	
92	comp			↑		
93	2M014605.2p	1 46	39 31	#68	7m	
94	comp			↑		
95	2M015113.0p	1 51	33 03	#68	7m	
96	comp			↑		
97	2M014807.8p	1 48	32 58	#68	17m	
98	comp			↑		
99	2M014634.3p	1 46	32 55	#68	20m	
100	comp			↑		
101-103	C.I. Cam	4 19	55 59	#107	2, 20, 90	
104	comp			↑		
105	BGGem	6 03	27 40	#100	6m	
106	comp			↑		
107	0576-196	7 32	52 30	#64	12m	
108	comp			↑		
109	0576-197	6 58	53 56	#64	20m	object west
110	comp			↑		
111	0576-199	7 19	57 23	#64	20m	

60 inch Telescope Log				Spectrograph: FAST		Page: 6936
Observer: <u>Calkins</u>				Grating: <u>300L</u>		
PI: <u>Fine, All, Kishner</u>				Date: <u>1/22/99</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
112	comp			↑		
113	AS76-214	7 27	52 52	F64	15m	bright object east
114	comp			↑		
115	AS76-215	7 27	59 23	F64	17m	beautiful spectrum
116	comp			↑		
117	AS76-216	7 38	55 39	F64	12m	
118	comp			↑		
119	AS76-241	7 23	57 13	F64	12m	
120	comp			↑		
121	MRK421	11 04	38 11	F6	4m	
122	comp			↑		
123-125	sn1998S	11 46	47 29	F2	20m	seeing deteriorating
126	comp			↑		
127	sn5395	13 58	32 25	F2	15m	No supernova
128	comp			↑		
129	sn1999E	13 17	-18 32	F2	15m	
130	comp			↑		ccd shutter dead!! Unable to revive!!