

60 inch Telescope Log

Observer: A. Mahdavi
 PI: et. al.

Spectrograph: FAST

Grating: 300

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Date: 6/1/1997

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1	COMP				7s	Test
2-11	BIAS					Bin by 4
12-21	FLAT				6s	Bin by 4
22-31	FLAT				12s	Bin by 2
32-41	BIAS					Bin by 2
42-46	SKY				2s	Bin by 4
47	COMP			↑	7s	
48	Feige 66	12:54:54.7	25:20:31	56	1m	Clear skies for now
49	COMP			↑	7s	
50	N4151	12:08:00.1	29:41:01	6	30s	Seeing 2"-3"
51	COMP			↑	7s	
52	N4258	12:16:29.8	47:34:51	6	2m	
53	COMP			↑	7s	
54	N5548	14:15:42.5	25:22:01	6	3m	
55	COMP			↑	7s	
56	MRK 279	13:51:53.6	69:33:13	6	2m	
57	COMP			↑	7s	Comp taken at correct RA/DEC but 30 min late.
58	infall-a.24	12:54:23.0	26:01:29	64	20m	
59	COMP			↑	7s	
60	SN1997br	13:20:47.4	-22:02:22	2	15m	Bin by 2
61	COMP			↑	14s	
62	SN1997br			2	15m	
63	COMP			↑	14s	
64	infall-a.27	13:00:15.0	24:28:01	64	15m	Bin by 4
65	COMP			↑	7s	
66	infall-a.23	12:59:16.2	23:48:29	64	15m	
67	COMP			↑	7s	
68	infall-a.25	17:58:29.0	25:02:18	64	15m	
69	COMP			↑	7s	
70	infall-a.26	12:54:45.4	25:56:30	64	15m	

60 inch Telescope Log

Observer: A Mahdevi

PI: et. al.

Spectrograph: FAST

Grating: 300

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Date: 6/1/1997

Number	Object	R.A.	Dec.	L/R	Exp	Comments
71	COMP			↑	7s	
72	infall-a.28	13:00:15.9	24:26:09	64	20 ^m	
73	COMP			↑	7s	
74	infall-a.30	13:00:23.6	24:13:05	64	15 ^m	
75	COMP			↑	7s	
76	infall-a.32	13:00:32.0	25:46:49	64	20 ^m	
77	COMP			↑	7s	
78	infall-a.33	13:00:34.2	25:37:58	64	15 ^m	Crisp night.
79	COMP			↑	7s	
80	infall-a.37	13:01:46.5	25:44:53	64	15 ^m	Improved seeing ≈ 2"
81	COMP			↑	7s	
82	infall-a.39	13:02:23.4	24:01:43	64	10 ^m	
83	COMP			↑	7s	
84	SN1997cn	14:09:57.8	17:32:32	2	15 ^m	Bin by 2
85	COMP	↓	↓	↑	14s	↓
86	SN1997cn	↓	↓	2	15 ^m	↓
87	COMP	↓	↓	↑	14s	↓
88	awm3-48	14:28:43.0	26:23:44	35	20 ^m	Bin by 4
89	COMP	↓	↓	↑	7s	
90	awm3-48	↓	↓	35	15 ^m	
91	COMP	↓	↓	↑	7s	
92	awm3-53	14:29:27.5	25:26:26	35	12 ^m	
93	COMP			↑	7s	
94	N6299	17:04:36	62:31:00	43	5 ^m	
95	COMP			↑	7s	
96	N6503	17:05:18	68:53:00	43	3 ^m	
97	COMP			↑	7s	
98	F713p6441	17:11:18	69:41:00	43	10 ^m	
99	COMP			↑	7s	
100	F7129p 7239	17:12:54	78:39:00	43	12 ^m	

60 inch Telescope Log

Observer: A MahdaviPI: et alSpectrograph: FASTGrating: 300Page: 5462Date: 6/1/1997

Number	Object	R.A.	Dec.	L/R	Exp	Comments
101	COMP			↑	7s	
102	17153p7116NE	17:15:18	21:16:00	43	5 ^m	
103	COMP	↓	↓	↑	2s	
104	17153p7116SW	↓	↓	43	10 ^m	
105	COMP	↓	↓	↑	7s	
106	17154p6125	17:15:24	61:25:00	43	15 ^m	
107	COMP			↑	7s	
108	N 6248	17:17:06	69:28:06	43	10 ^m	
109	COMP			↑	7s	
110	CICY6	19:50:12	35:41:04	12	2s	
111	↓	↓	↓	12	20s	
112	↓	↓	↓	12	120s	
113	COMP			↑	7s	
114	MRK 509	20:41:26	40:54:48	6	2 ^m	
115	COMP			↑	7s	
116	N 7469	23:03:15	08:52:25	6	2 ^m	
117	COMP			↑	7s	
118	2And	23:33:40	48:49:06	12	3s	
119	↓	↓	↓	12	90s	
120	COMP			↑	7s	
121	N 7331	22:34:46.9	34:09:43	57	4 ^m	
122	COMP			↑	7s	
123	BDP 284211	21:48:53.1	28:37:48	56	1 ^m	
124	COMP			↑	7s	
125-134	FLAT			6	6s	
135-144	BIAS					

60 inch Telescope Log

Observer: P. Berling

PI: Wilkes

Spectrograph: FAST

Grating: 300L, 3" slit, bmbg4

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Date: 4/2/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	6s	
11-20	FLAT			0	6s	
21-30	BIAS			0	0s	bmbg2
31-40	FLAT			0	12s	bmbg2
41-45	sky			57	5s	
46	COMP			↑		circus clouds...
47-49	HD102212	11:45	+66:31	57	0.5s	
50	COMP			↑		
51-53	HD102870	11:50	+01:46	57	0.5s	
54	COMP			↑		
55-57	HD97778	11:15	+23:05	57	0.5s	
58	COMP			↑		→ Wk STAR IN COMP
59-61	HD86728	10:01	+71:55	57	1s	
62	COMP			↑		
63-64	Fc1766	12:37	+25:01	56	1m	
65	COMP			↑		
66	N4151	12:08	+39:41	6	30s	
67	COMP			↑		
68	N4051	12:00	+44:48	6	2m	
69	COMP			↑		
70	N4258	12:16	+47:34	6	2m	clouds
71	COMP			↑		
72	MRK279	13:51	+68:33	6	2m	
73	COMP			↑		
74	N5548	14:15	+25:22	6	3m	
75	COMP			↑		
76-77	N4853	12:58	+27:35	57	4m	
78	COMP			↑		
79	12449 p0502	12:47	+04:46	42	4m	
80	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Grogan/Krishner/Mahdavi

Spectrograph: FAST

Grating: 300R

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Date: 6/2/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
81	1245Sp0458	12:47	+04:41	42	5m	wk
82	COMP			↑		
83	12432p0636	12:43	+06:36	42	8m	
84	COMP			↑		
85,87	SN 1996cb	11:03	+28:54	2	20m	2x2cm bin by 2
86,88	COMP			↑		
89	H244	13:21	+36:23	56	2m	
90	COMP			↑		
91,93	SN 1997cn	14:09	+17:32	2	15m	2x15m thin clouds
92,94	COMP			↑		
95	12479p0705	12:47	+07:05	42	10m	
96	COMP			↑		
97	12518p0532	12:51	+05:32	42	5m	nice seeing
98	COMP			↑		
99	12346p0542	12:34	+06:42	42	12m	
100	COMP			↑		
101	12444m0117	12:47	-01:17	42	12m	em pix 2018 wk
102	COMP			↑		
103	12544m0255	12:57	-03:10	42	12m	wk em
104	COMP			↑		
105	13064m0325	13:06	+03:25	42	10m	
106	COMP			↑		
107	r096.Ct.04	14:09	+35:06	59	4m	
108	COMP			↑		
109	r096.Ct.06	14:08	+36:29	59	15m	wk em
110	COMP			↑		
111	r096.Ct.07	14:08	+35:44	59	15m	CZ=50, wk em, nice 2 objects
112	COMP			↑		
113	r096.Ct.08	14:09	+36:19	59	10m	em
114	COMP			↑		

60 inch Telescope Log

Observer: PB
 PI: Mahadevi / Huchra

Spectrograph: FAST

Grating: 300R

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Date: 6/2/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
115	r096.ft.09	14:09	+36:00	S9	12m	thin clouds
116	COMP			↑		
117	r096.ft.11	14:09	+35:09	S9	7m	
118	COMP			↑		
119	r096.ft.12	14:09	+36:14	S9	11m	
120	COMP			↑		
121	r096.ft.14	14:10	+36:02	S9	10m	
122	COMP			↑		
123	r096.ft.15	14:10	+35:10	S9	8m	
124	COMP			↑		
125	r096.ft.19	14:12	+35:43	S9	12m	
126	COMP			↑		
127	r096.ft.20	14:12	+35:50	S9	10m	em
128	COMP			↑		
129	r096.ft.21	14:12	+35:32	S9	11m	
130	COMP			↑		
131	r096.ft.22	14:13	+35:43	S9	10m	
132	COMP			↑		
133	1719p6038	17:19	+60:38	43	6m	em
134	COMP			↑		
135	17192p6172	17:19	+61:22	43	10m	em
136	COMP			↑		
137	17220p5955	17:22	+59:55	43	6m	
138	COMP			↑		
139	17220p6004	17:22	+60:04	43	10m	em
140	COMP			↑		
141	17222p6111E	17:22	+60:11	43	10m	E+W comps; em
142	COMP			↑		→ Wk different z's
143	17223p6213S	17:22	+62:13	43	5m	
144	17223p6213N	17:22	+62:13	43	6m	

60 inch Telescope Log

Observer: PBSpectrograph: FASTGrating: 300RPage: 5466PI: HuchraDate: 6/2/97

Number	Object	R. A.	Dec.	L/R	Exp	Comments
145	COMP			↑		
146	17228p6358	17:22	+63:58	43	5m	em
147	COMP			↑		
148	17247p6004	17:24	+60:04	43	4m	
149	COMP			↑		
150	17251p5940	17:25	+59:40	43	5m	
151	COMP			↑		
152	17252p7212	17:25	+72:12	43	8m	
153	COMP			↑		
154	I1261E	17:24	+71:18	43	4m	
155	I1261W	17:24	+71:18	43	4m	
156	COMP			↑		
157	17257p6853	17:25	+68:53	43	6m	em
158	COMP			↑		
159	17267p5942N	17:26	+59:42	43	4m	
160	17267p5942S	17:26	+59:42	43	8m	em!!
161	COMP			↑		
162	17269p7318	17:26	+73:18	43	6m	em
163	COMP			↑		
164	N6395	17:26	+71:05	43	4m	em
165	COMP			↑		
166	N7469	23:03	+68:52	6	2m	scattered clouds
167	COMP			↑		→ dawn
168-170	CIC 88	19:50	+35:11	12	2m, 2s, 2s	
171	COMP			↑		
172-174	HDK 2201	20:10	+40:07	56	5s	
175	COMP			↑		
188-197	BIAS			0	0s	
198-207	FLAT			0	6s	
208-217	BIAS			0	0s	bimby 2
218-227	FLAT			0	12s	bimby 2

60 inch Telescope Log		Spectrograph: <u>FAST</u>		Page: <u>5467</u>		
Observer: <u>P. Barlow</u>		Grating: <u>300R</u>		Date: <u>6/3/97</u>		
PI: <u>Huchra</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	
11-20	FLAT			0	6s	
21-30	BIAS			0	0s	
31-40	FLAT			0	12s	
41-49	SKY			57	2s	red cloud
50	COMP			↑		
51-53	HD100029	11:31	+69:19	57	0.5s	
54	COMP			↑		
55-57	HD107950	12:24	+51:23	57	0.5s	
58	COMP			↑		
59-61	HD94705	10:54	+06:11	57	1s	
62	COMP			↑		* in comp
63-65	HD108849	12:30	+01:25	57	5s	
66	COMP			↑		lots of clouds
67-68	Ferje66	12:37	+25:04	56	45s	
69	COMP			↑		
70	N4151	12:08	+39:41	6	45s	
71	COMP			↑		
72	N5548	14:15	+25:22	6	3m	
73	COMP			↑		
74	MRK219	13:51	+69:33	6	3m	
75	COMP			↑		
76	11180p7305N	11:18	+73:05	1	5m	Nonly (N-S pair)
77	11183p7306S	11:18	+73:06	1	5m	Sonly (N-S pair)
78	COMP			↑		
79	11347p7302	11:34	+71:02	1	5m	
80	COMP			↑		
81	1136lp6850S	11:36	+68:50	1	5m	em
82	1136lp6850N	11:36	+68:50	1	5m	
83	COMP			↑		

937070K

60 inch Telescope Log

Observer: PBPI: Kirstner/GallarSpectrograph: FASTGrating: 300LDate: 6/3/97Page: 5468

Number	Object	R.A.	Dec.	L/R	Exp	Comments
84	11381 p4649	11:38	+46:49	1	3m	
85	COMP			↑		Circus
86	12029 p6326	12:02	+63:26	1	5m	em
87	COMP			↑		
88	12055 p6712	12:08	+67:11	1	5m	redo Dec 4/4/97 file 62
89	COMP			↑		
90, 92	SNP976p	12:46	+1:38	2	15m	
91, 93	COMP			↑		
94	17244	13:21	+2:41	56	2m	
95	COMP			↑		
96	infall. c. 45	13:03	+24:47	64	10m	
97	COMP			↑		
98	infall. c. 47	13:04	+25:50	64	10m	
99	COMP			↑		
100	infall. c. 46	13:04	+25:58	64	9m	
101	COMP			↑		
102	infall. c. 48	13:04	+24:07	64	7m	em
103	COMP			↑		
104	infall. c. 42	13:03	+25:28	64	12m	em +
105	COMP			↑		
106	infall. c. 06	13:05	+25:27	64	9m	em +
107	COMP			↑		
108	infall. c. 09 08	13:06	+26:10	64	12m	object also in slit tow
109	COMP			↑	FWK	= infall. c. 08
110	infall. c. 11	13:06	+25:25	64	12m	increasing clouds
111	COMP			↑		look em!
112	awm 3.54	14:26	+25:27	35	5m	stopped short - em
113	COMP			↑		delay of cloud

60 inch Telescope Log

Observer: PBPI: Hochstadt/KoranyiSpectrograph: FASTGrating: 300Page: 5469Date: 6/3/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
114	17273p6009	17:27	+60:09	43	7m	
115	COMP			↑		
116	N6288	16:57	+68:34	43	5m	
117	N6287	16:58	+68:35	43	8m	- err - clouds following me
118	COMP			↑		
119	mkw12.1	14:02	+09:26	35	5m	em
120	COMP			↑		
121	mkw12.2	14:02	+09:25	35	3m	
122	COMP			↑		
123	mkw12.3	14:02	+09:20	35	2m	
124	COMP			↑		
125	mkw12.4	14:03	+09:26	35	7m	LK em
126	mkw12.8	14:03	+09:28	38	5m	em
127	COMP			↑		
128	mkw12.5	14:01	+08:36	36	2m	
129	COMP			↑		
130	mkw12.6	14:02	+09:55	35	2m	em†
131	COMP			↑		
132	mkw12.7	14:03	+09:36	35	3m	
133	COMP			↑		
134	mkw12.9	14:02	+09:04	35	6m	em
135	COMP			↑		
136	mkw12.10	14:03	09:34	35	2m	
137	mkw12.11	14:03	09:21	35	5m	
138	COMP			↑		
139	mkw12.12	14:01	+09:52	35	3m	
140	COMP			↑		
141	mkw12.13	14:03	09:31	35	3m	
142	mkw12.16	14:03	09:29	35	3m	
143	COMP			↑		

60 inch Telescope Log

Observer: PBPI: Koranyi/HuchraSpectrograph. FASTGrating: 3000Date: 6/3/97Page: 5470

Number	Object	R.A.	Dec.	L/R	Exp	Comments
144	mkw12-14	14:03	+08:53	35	2 ⁺ m	
145	mkw12-15	14:03	+09:13	35	3 ⁺ m	
146	COMP			↑		em
147	mkw12-17	14:03	+08:56	35	3 ⁺ m	em
148	mkw12-18	14:01	+08:47	35	4m	em
149	COMP			↑		
150	mkw12-19	14:02	+09:20	35	3 ⁺ m	increasing clouds again
151	mkw12-20	14:02	+08:07	35	8m	wk em!
152	COMP			↑		
153	alm3-56	14:26	+26:12	35	15m	
154	COMP			↑		
155	17280p6826	17:28	+68:26	43	6m	em
156	COMP			↑		
157	17284p6007	17:28	+60:07	43	10m	em
158	COMP			↑		
159	17287p7045	17:28	+70:45	43	5m	
160	COMP			↑		
161	17304p6702	17:30	+67:22	43	4m	em
162	COMP			↑		
163	17310p7122E	17:31	+71:22	43	8m	E+W (faint) em
164	COMP			↑		both
165	17306p5932	17:30	+59:32	43	7m	em
166	COMP			↑		
167	17312p5930	17:31	+59:30	43	12m	clouds
168	COMP			↑		
169	17316p5955	17:31	+59:55	43	9m	
170	COMP			↑		
171	17327p7153	17:32	+71:53	43	9m	
172	COMP			↑		
173	17334p7354	17:33	+73:54	43	10m	
174	COMP			↑		

60 inch Telescope Log

Observer: PB
 PI: Huchra

Spectrograph: FAST

Grating: 300R

Date: 6/3/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
175	17329p6923	17:32	+69:23	43	15m	wk em!
176	COMP			↑		
177	17338p7048	17:33	+70:48	43	7m	rough seeing
178	17342p7052	17:34	+70:52	43	7m	
179	COMP			↑		
180	17346p7300	17:34	+73:00	43	8m	
181	COMP			↑		
182	17355p6507	17:35	+68:07	43	5m	stopped by clouds
183	COMP			↑		
184	177469	23:03	+06:52	6	2m	
185	COMP			↑		
186-188	CEL 34	19:50	+35:41	12	2m, 20s, 2s	
189	COMP			↑		
190-192	HDK 2281	20:10	+40:07	56	5s	clouds all over
193	COMP			↑		⊙ down
194-203	BIAS			0	0s	
204-213	FLAT			0	6s	
214-223	BIAS			0	0s	
224-233	FLAT			0	12s	

*FAX
2
pg 1 of 4
to Susan Toft*

60 inch Telescope Log
 Observer: P Berlin
 PI: Wikos/Huchra/Bandt
 Spectrograph: FAST
 Grating: 3000
 Date: 6/4/97
 Page: 5472

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0	
11-20	FLAT			0	6s	
21-30	BIAS			0	0s	
31-40	FLAT			0	12s	
41-45	sky			57	2s	clear skies!
46	COMP			↑		
47-48	For 66	12:37	+25:01	56	45s	
49	COMP			↑		
50	N4151	12:08	+39:41	6	30s	
51	COMP			↑		
52	N4051	12:00	+44:48	6	2m	
53	COMP			↑		
54	N4258	12:16	+47:34	6	2m	
55	COMP			↑		
56	N5548	14:15	+25:22	6	3m	
57	COMP			↑		trace of rings in Comp
58	MRK279	13:51	+69:33	6	3m	
59	COMP			↑		
60	12088p7506	12:08	+75:06	1	5m	wk, wk em (pix 2033)
61	COMP			↑		
62	12085p6712	12:04	+67:12	1	6m	
63	COMP			↑		
64	12024p7626N	12:02	+76:26	1	4m	A
65	12024p7626S	12:02	+76:26	1	5m	B emt
66	COMP			↑		
67	1116p215	11:19	+21:19	66	15m	2" Slit 1.17
68	COMP			↑		
69	1116p215	11:19	+21:19	66	4m	5" Slit 1.2
70	COMP			↑		
71	EG81	11:34	+14:26	56	3m	5"

60 inch Telescope Log

Observer: PB

PI: Brandt/Krishner/Mahdavi

Spectrograph: FAST

Grating: 3000

Date: 6/4/77

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
72	COMP			T		
73	1351p236	13:54	+23:25	66	5m	5" slit
74	COMP			T		
75	1354p213	13:56	+21:03	66	5m	5"
76	COMP			T		
77	H244	13:21	+36:23	56	2m	5" 102
78	COMP			T		
79,81	1351p236	13:54	+23:25	66	15m	2x15m 2" slit 102
80,82	COMP			T		
83,85	1354p213	13:56	+21:03	66	15m	2"
84,86	COMP			T		
87,89	1415p451	14:17	+44:56	66	15m	2"
88,90	COMP			T		
91	1415p451	14:17	+44:56	66	5m	5"
92	COMP			T		
93	Ferg 92	14:09	+50:21	56	90s	5"
94	COMP			T		
95	H244	13:21	+36:23	56	2m	5"
96	COMP			T		
97-98	130p332642	15:50	+33:05	56	1m	5"
99	COMP			T		
100,102	SN 197cn	14:09	+17:32	2	15m	bm by 2 3" slit
101,103	COMP			T		
104	r096 ct 01	14:04	+35:36	59	12m	em
105	COMP			T		
106	r096 ct 02	14:05	+35:58	59	9m	
107	COMP			T		
108	r096 ct 04	14:06	+35:16	59	10m	em
109	COMP			T		

60 inch Telescope Log

Observer: PB

PI: Karungy Krishnaiah Huchra

Spectrograph: FAST

Grating: 300R

Date: 6/4/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
110	GW3-SZ	14:27	+25:55	3S	12m	em
111	COMP			↑		
112	GW3-SS	14:26	+26:22	3S	12m	
113	COMP			↑		
114	SNa2199.com	16:29	+79:45	2	20m	Wow - 19 th mag; type II SN
115	COMP			↑		
116	160916p16721	16:07	+16:22	2S	6m	
117	COMP			↑		
118	160101p174607	16:01	+17:16	2S	6m	
119	COMP			↑		
120	160139p151210	16:01	+15:12	2S	10m	seeing getting worse
121	COMP			↑		
122	159952p175759	15:59	+17:57	2S	10m	
123	COMP			↑		
124	160130p180323	16:01	+18:03	2S	10m	
125	COMP			↑		
126	160211p180723	16:02	+18:07	2S	8m	
127	COMP			↑		
128	MRK501	16:53	+39:45	6	5m	
129	COMP			↑		
130	15209 p1911EW	15:22	+17:41	1	5m	EW pair bin by 2
131	COMP			↑		em both comps
132	3C390.3	18:45	+77:43	6	7m	
133	COMP			↑		
134	17344p6230EW	17:34	+67:30	43	8m	EW comps em both
135	COMP			↑		
136	17348p6326	17:34	+67:20	43	7m	Wk em
137	COMP			↑		
138	17373p7057	17:37	+70:57	43	6m	em
139	COMP			↑		

60 inch Telescope Log

Observer: PB

PT: Huchra

Spectrograph: FAST

Grating: 300L

Date: 6/14/97

Page: 5475

Number	Object	R. A.	Dec.	L/R	Exp	Comments
140	17385 p7000	17:38	+70:00	43	5m	
141	COMP			↑		
142	17385 p6803	17:38	+68:03	43	4m	
143	COMP			↑		
144	17391 p5919	17:39	+59:19	43	4m	
145	COMP			↑		
146	17366 p6528	17:36	+60:28	43	10m	em
147	COMP			↑		
148	17404 p6237	17:40	+62:37	43	5m	em
149	COMP			↑		
150	N6461	17:38	+77:32	43	6m	
151	COMP			↑		
152	17406 p6829	17:40	+68:29	43	4m	
153	COMP			↑		
154	N7331	22:34	+34:09	57	3m	
155	COMP			↑		
156	MRK509	20:41	+0:54	6	3m	
157	COMP			↑		a few clouds
158	N7469	23:03	+08:52	6	2m	starting to
159	COMP			↑		move in from
160-162	CT C ₄₂	19:50	+35:11	12	90, 70, 2s	the south of down
163	COMP			↑		
164-166	HD192251	20:40	+40:07	56	5s	
167	COMP			↑		
168-177	BIAS			0	0s	
178-187	FLAT			0	6s	
188-197	BIAS			0	0s	bin by 2
198-207	FLAT			0	12s	bin by 2
208-217	FLAT 2			66	8s	2" slit; bin by 4
218-227	FLAT 5			66	3s	5" slit

Fax
to Susan Tokarz
Pr 1.64

60 inch Telescope Log
 Observer: PB
 PI: W. K. Kishner/Grogin
 Spectrograph: FAST
 Grating: 300R
 Date: 6/5/97
 Page: 5176

Number	Object	R. A.	Dec.	L/R	Exp	Comments
110	BIAS			0	0s	
11-20	FLAT			0	6s	
21-30	BIAS			0	0s	clouds all over
31-40	FLAT			0	12s	
41-45	SKY			57	2s	SKYS ARE BIN BY 2 here <i>york</i>
46	COMP			↑	7s	
47-48	Ferg66	12:34	+25:20	56	1m	
49	COMP			↑		
50	N4151	12:08	+29:41	6	45s	
51	COMP			↑		
52	N5518	14:15	+25:22	6	4m	
53	COMP			↑		clearing some
54-55	N4853	12:58	+27:35	67	4m	pair seeing
56	COMP			↑		
57	MRK421	11:01	+38:28	6	5m	
58	COMP			↑		
59	MRK279	13:51	+69:33	6	3m	
60	COMP			↑		
61,63	SNR9716g	10:17	+73:23	2	15m	
62,64	COMP			↑		
65	H244	13:21	+36	56	2m	
66	COMP			↑		
67	13020 p06155	13:02	+06:15	42	10m	em
68	COMP			↑		
69	13120 m0302	13:12	-03:02	42	10m	em more clouds
70	COMP			↑		
71	11315 m0319C	11:31	-03:19	42	4m	^{reds} SE Comp bimby 2
72	11315 m0319A	11:31	-03:19	42	6m	SW Comp wk em pr 2750
73	11315 m0319B	11:31	-03:19	42	10m	N Comp wk em 2024
74	COMP			↑		

64 TOTAL

60 inch Telescope Log

Observer: PB

PI: Geller/Horanyi/Huchra

Spectrograph: FAST

Grating: 302L

Date: 6/5/97

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Number	Object	R.A.	Dec.	C/R	Exp	Comments
75	infall.c.13	13:08	+25:18	64	15m	clouds all over
76	COMP			↑		
77	infall.c.18	13:09	+25:42	64	12m	
78	COMP			↑		
79	infall.c.19	13:09	+24:34	64	5m	em +
80	COMP			↑		
81	infall.c.20	13:10	+24:50	64	12m	
82	COMP			↑		
83	infall.c.21	13:10	+24:51	64	12m	wk em
84	COMP			↑		
85	infall.c.23	13:11	+24:40	64	15m	
86	COMP			↑		
87	infall.c.24	13:11	+25:19	64	15m	wrong data type - fixed
88	COMP			↑		
89	gwm3-61	14:29	+25:21	35	15m	grr - more clouds wk
90	COMP			↑		
91	I4503	14:44	+16:21	1	4m	
92	COMP			↑		
93	I4494	14:42	+15:45	1	8m	
94	COMP			↑		
95	NS780	14:52	+29:09	1	5m	em
96	COMP			↑		
97	14494p0334	14:49	+03:34	1	7m	em
98	COMP			↑		
99	15030p0317	15:03	+03:17	1	8m	extended em
100	COMP			↑		
101	1519Sp1326	15:19	+13:26	1	7m	
102	COMP			↑		
103	15203p0854	15:20	+08:54	1	5m	
104	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Huchra

Spectrograph: FAST

Grating: 300L

Date: 6/5/77

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
105	15206 p0657	15:20	+08:57	1	5m	
106	COMP			↑		
107	15281 p2718	15:28	+27:18	1	5m	poor seeing
108	COMP			↑		
109	I1130	15:35	+17:25	1	8m	
110	COMP			↑		
111	I4575	15:40	+23:59	1	5m	* to E
112	COMP			↑		
113	I4577	15:40	+23:59	1	7m	
114	COMP			↑		
115	15551 p2558	15:55	+25:58	1	5m	- bin by 2 close pair
116	COMP			↑		un-resolved
117	15408 p1555	15:40	+15:55	1	4m	
118	COMP			↑		
119	15464 p0856	15:46	+08:56	1	7m	LSB em!
120	COMP			↑		
121	15571 p0958	15:57	+09:58	1	8m	em
122	COMP			↑		
123	16509 p0419	16:50	+04:19	1	6m	em
124	COMP			↑		
125	160046 p161129	16:00	+16:11	25	12m	
126	COMP			↑		
127	155951 p152118a	15:59	+15:21	25	8m	bin by 2 E+W W=*
128	COMP			↑		E=orig target
129	160351 p155513	16:03	+15:55	25	7m	
130	COMP			↑		
131	160053 p155640	16:00	+15:56	25	12m	
132	COMP			↑		
133	160210 p160853	16:02	+16:08	25	12m	
134	COMP			↑		

60 inch Telescope Log

Observer: RB

PI: Huchra

Spectrograph: FAST

Grating: 302

Date: 6/5/97

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
135	16024/p164086	16:02	+16:40	25	10m	
136	COMP			↑		
137	16040sp175518	16:04	+17:55	25	9m	clouds!
138	COMP			↑		
139	17412p7403	17:41	+14:03	43	6m	
140	COMP			↑		
141	17430p643	17:43	+69:43	43	5m	
142	COMP			↑		
143	17435p6846	17:43	+68:46	43	5m	em poor seeing
144	COMP			↑		
145	17452p5522	17:45	+59:22	43	10m	
146	COMP			↑		
147	N6464	17:45	+60:55	43	7m	em
148	COMP			↑		
149	17454p6447	17:45	+64:47	43	5m	
150	COMP			↑		
151	N7469	20:07	+08:52	6	2m	
152	COMP			↑		
153-155	CIC ₂₈	19:50	+35:41	12	2m, 20s, 2s	
156	COMP			↑		
157-159	HDF2281	20:10	+40:07	5L	5s	clouds around
160	COMP			↑		o disk
161-170	ISIS			0	0s	
171-180	FLAT			0	6s	
181-190	ISIS			0	0s	
191-200	FLAT			0	12s	

60 inch Telescope Log

Observer: J. Peters

PI: et.al

Spectrograph: Fast

Grating: 300

Page: 5480

Date: 6/6/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1	Comp	TEST	TEST		7 ^s	TEST
2-11	Bias	Bin	By 4			
12-21	Flat	Bin	By 4		6 ^s	
22-31	Bias	Bin	By 2			
32-41	Flat	Bin	By 4		12 ^s	clouds To west
42-46	SKY			Ø	2 ^s	
47	Comp			↑	7 ^s	
48	Feige 66	12 34 54	25 20 31	56	1 ^m	
49	Comp			↑		
50	N4151	12 08 01	39 41 01	6	30 ^s	
51	Comp			↑		
52	N4158	12 16 29	47 34 51	6	2 ^m	
53	Comp			↑		
54	MRK 279	12 51 53	69 33 13	6	8 ^m	
55	Comp			↑		
56	N5548	14 15 43	25 22 01	6	3 ^m	
57	Comp			↑		
58	N4853	12 58 35	27 35 47	57	5 ^m	RUSTO
59	Comp			↑		
60	SN1997CN	14 09 57	17 32 32	2	15 ^m	Dawn faint ≈ 18v
61	Comp	↓	↓	↓	14 ^s	
62	SN1997CN	↓	↓	2	15 ^m	Seeing ≈ 2"-3"
63	Comp			↑	14	
64	NGC 6030	15 37 08	22 24 16	?	20 ^m	N. Caldwell Object
65	Comp			↑		Seeing ≈ 3" clouds
66	IC 0337 P 162812	16 03 37	16 28 13	25	15 ^m	To West
67	Comp			↑		
68	IC 0047 P 192049	16 00 47	19 20 49	25	7 ^m	
69	Comp			↑		
70	IC 0327 P 182931	16 03 27	18 29 31	25	10 ^m	

60 inch Telescope Log

Observer: J. PetersSpectrograph: FastPI: e.t.alGrating: 300Page: 5481Date: 6/6/97

Number	Object	R.A.	Dec	L/R	Exp	Comments
71	Comp			↑		
72	160204 P173430	16 02 05	17 34 30	25	15m	
73	Comp			↑		
74	160025 P180839	16 00 25	18 08 40	25	15m	
75	Comp			↑		
76	160118 P170536	16 01 18	17 05 37	25	6m	
77	Comp			↑		
78	160238 P163919	16 02 38	16 39 19	25	10m	
79	Comp			↑		
80	160238 P201252	16 02 38	20 12 53	25	20m	
81	Comp			↑		
82	160319 P200406	16 03 19	20 04 06	25	10m	Delay Locked UP IRAF, Hell of Time getting OUT!
83	Comp			↑		
84	160303 P155220	16 03 03	15 52 20	25		
85	Comp			↑		
86	160322 P154334	16 03 22	15 43 34	25	6m	
87	Comp			↑		
88	160041 P170207	16 00 41	17 02 07	25	10m	
89	Comp			↑		
90	160112 P160936	16 01 12	16 09 36	25	12m	
91	Comp			↑		
92	infall.c.25	13 11 28	25 12 11	64	15m	
93	Comp			↑		
94	160303 P160153	16 03 02	16 01 53	25	15m	
95	Comp			↑		
96	160233 P163333	16 02 33	16 33 33	25	20m	Thin Clouds
97	Comp			↑		
98	160357 P154655	16 03 57	15 46 55	25	10m	
99	Comp			↑		
100	160047 P154643	16 00 47	15 46 43	25	10m	

60 inch Telescope Log			Spectrograph: <u>Fast</u>		Page: <u>5483</u>	
Observer: <u>J. Peters</u>			Grating: <u>300</u>		Date: <u>6/7/92</u>	
PI: <u>CT.OL</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	Bias	Bin By	4			Cloudy
11-30	Flat	Bin By	4		6 ^s	
21-30	Bias	Bin By	2			
31-40	Flat	Bin By	2		12 ^s	
41-45	SKY				2 ^s	Low Clouds
46	Comp			↑		
47	Wfalk.C.26	13 11 33	25 12 41	64	6 ^m	In Hole
48	Comp			↑		
49	NGC 6030	15 57 08	22 24 16	P.	20 ^m	In out & Thru clouds
50	Comp			↑		
51	SN 1997CN	14 09 57	17 32 32	2	15 ^m	Bin By 2, Broken Clouds
52	Comp	↓	↓	↑	14 ^s	
53	SN 1997CN	↓	↓	2	15 ^m	
54	Comp			↑	14 ^s	
55	awm 3.57	14 28 06	25 37 59	35	20 ^m	Looks clear?
56	Comp			↑		
57	awm 3.58	14 30 34	25 25 49	35	20 ^m	
58	Comp			↑		
59	awm 3.59	14 26 27	25 36 22	35	20 ^m	
60	Comp			↑		
61	awm 3.60	14 29 32	25 14 04	35	20 ^m	
62	Comp			↑		
63	awm 4-41	16 04 32	23 56 37	35	20 ^m	
64	Comp			↑		
65	awm 4-42	16 05 29	24 12 19	35	20 ^m	At 3:05 AM The CCD
66	Comp			↑		alarm went off. All
67	awm 4-44	16 05 00	23 56 11	35	20 ^m	leds lite up and Flashing
68	Comp			↑		Stopped, Added N ₂ , Let
69-78	Bias					it calm down, Then
79-88	Flat				6 ^s	Found The dewar was
89-92	Dark				15 ^m	leaking N ₂ out bottom fill
						hole. Tightened The inner
						seal, Leak stopped.

60 inch Telescope Log

Spectrograph: FASTObserver: J. PetersGrating: 300Page: 5484PI: et. al.Date: 6/8/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	Bras	Bin By	4			
11-20	Flat	Bin By	4		6 ^s	
21-30	Bras	Bin	By 2			
31-40	Flat	Bin	By 2		12 ^s	
41-45	SKY				2 ^s	
46	Comp			↑		
47	Feige 66	12 34 54	25 20 31	56	1 ^m	
48	Comp			↑		
49	N4853	12 58 35	27 35 47	57	5 ^m	Dewer Almost 5 leds Lite
50	Comp			↑		Tightned. Main Vac Valve
51	N4051	12 00 36	44 48 35	6	2 ^m	on CCD may help??
52	Comp			↑		
53	N4151	12 08 01	39 41 01	6	30 ^s	Very Thin Clouds
54	Comp			↑		Around.
55	N4258	12 16 29	47 34 51	6	2 ^m	
56	Comp			↑		
57	MRA 279	13 51 53	69 33 13	6	2 ^m	
58	Comp			↑		
59	N5548	14 12 43	25 22 01	6	3 ^m	
60	Comp			↑		
61	SN1997BR	13 20 42	-22 02 12	2	15 ^m	Bin By 2
62	Comp	↓	↓	↓	14 ^s	↓
63	SN1997BR	↓	↓	2	15 ^m	↓
64	Comp			↑	14 ^s	
65	SN1997CN	14 09 57	17 32 32	2	15 ^m	ITs Almost Gone Bin By 2
66	Comp	↓	↓	↓	14 ^s	3 bars Temp.
67	SN1997CN	↓	↓	2	15 ^m	↓
68	Comp			↑		
69	N6030	15 57 08	22 24 16	?	20 ^m	No Led ^s Lite. HA = -1.06'
70	Comp			↑		

60 inch Telescope Log

Observer: J. Peters

PI: et.al

Spectrograph: FAST

Grating: 300

Page: 5485

Date: 6/8/97

Number	Object	R. A.	Dec.	L/R	Exp	Comments
71	infall.C. 27	13 11 54	25 01 49	G4	15M	
72	Comp			↑		
73	infall.C. 29	13 12 01	25 49 49	G4	10M	
74	Comp			↑		
75	infall.C. 30	13 13 01	25 56 43	G4	15M	
76	Comp			↑		
77	infall.C. 31	13 13 38	25 57 00	G4	20M	
78	Comp			↑		
79	infall.C. 32	13 14 11	26 09 56	G4	6M	
80	Comp			↑		
81	infall.C. 33	13 14 37	26 07 23	G4	6M	
82	Comp			↑		
83	infall.C. 34	13 14 57	26 06 31	G4	20M	
84	Comp			↑		
85	awm 46	16 04 46	24 05 51	35	20M	
86	Comp			↑		
87	awm 47	16 04 44	23 36 42	35	20M	
88	Comp			↑		
89	awm 48	16 04 52	23 56 27	35	20M	
90	Comp			↑		
91	awm 49	16 05 57	23 59 07	35	20M	
92	Comp			↑		
93	awm 50	16 05 00	23 52 44	35	20M	
94	Comp			↑		
95	awm 55	16 06 04	24 02 32	35	20M	
96	Comp			↑		
97	HD 192281	20 10 46	40 07 01	56	55	
98	Comp			↑		
99	3C 390.3	18 45 37	79 49 07	6	6M	
100	Comp			↑		

Fax
to Susan Tokarz
pg 1 of 5

60 inch Telescope Log

Observer: P. BerlindPI: WilkesSpectrograph: FASTGrating: 3000, 3" slit, bin by 4Page: 5487Date: 6/9/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	
11-20	FLAT			0	6s	
21-30	BIAS			0	0s	bin by 2
31-40	FLAT			0	12s	bin by 2
41-50	FLAT2			66	8s	2" slit
51-60	FLAT5			66	3s	5" slit
61-65	sky			57	2s	
66	COMP			↑	5s	clear skies
67-69	HD 112442	12:54	-09:32	57	1s	
70	COMP			↑		
71-73	HD 120469	13:49	-22:06	57	5s	
74	COMP			↑		
75-77	HD 119850	13:45	+14:54	57	5s	
78	COMP			↑		
79-82	HD 108819	12:30	+04:25	57	5s	
83	COMP			↑		
84-85	For366	12:57	+25:04	56	45s	
86	COMP			↑		
87	N4151	12:06	+39:41	6	30s	
88	COMP			↑		
89	N4258	12:18	+47:18	6	2m	
90	COMP			↑		
91	NSS48	14:15	+25:22	6	3m	
92	COMP			↑		
93	MRK279	13:51	+69:33	6	3m	
94	COMP			↑		
95	11479 p6447N	11:42	+64:47	1	4m	N
96	11479 p6447S	11:42	+64:47	1	4m	S
97	COMP			↑		

60 inch Telescope Log

Observer: PBPI: Huchra/Kirshner/BrandtSpectrograph: FASTGrating: 30RPage: 5488Date: 6/9/97

Number	Object	R. A.	Dec	L/R	Exp	Comments
98	11422p6600	11:42	+66:40	1	6m	em
99	COMP			↑		
100	11418p6149N	11:41	+66:49	1	3m	N only pec em
101	COMP			↑		
102	11421p5810	11:42	+58:10	1	7m	WK
103	COMP			↑		
104	11510p5554	11:54	+55:54	1	8m	em!
105	COMP			↑		
106,108	SN 1977bp	12:46	-11:38	2	15m	photometric sky
107,109	COMP			↑		
110	H244	13:21	+76	56	2m	104 ↓
111	COMP			↑		
112	H244	13:21	+36:	56	2m	5" slit
113	COMP			↑		
114	1404p226	14:06	+22:23	66	5m	5" slit
115	COMP			↑		
116	1402p261	14:05	+25:55	66	5m	5"
117	COMP			↑		
118,120	1402p261	14:05	+25:55	66	15m	2" slit
119,121	COMP			↑		
122,124	1404p226	14:06	+22:23	66	15m	2"
123,125	COMP			↑	9s	
126,127	150332642	15:50	+33:05	56	1m	5" 1.00
128	COMP			↑		
129	H244	13:21	+36:23	56	2m	5" 1.2
130	COMP			↑	5s	
131	1543p489	15:45	+48:46	66	6m	5"
132	COMP			↑		
133	1535p547	15:36	+54:33	66	5m	5"
134	COMP			↑		

60 inch Telescope Log				Spectrograph: <u>FAST</u>		Page: <u>5489</u>
Observer: <u>PB</u>				Grating: <u>300L</u>		
PI: <u>Brandt/Huchra</u>				Date: <u>6/9/97</u>		
Number	Object	R.A.	Dec.	L/R	Exp	Comments
135,137	1535p547	15:36	+54:33	66	11m	2" slit
136,138	COMP			↑	9s	seeing a little worse
139,141	1543p489	16:45	+48:46	66	18m	2" 1500
140,142	COMP			↑		
143,145	1612p261	16:14	+26:01	66	17m	2" 4215
144,146	COMP			↑		
147	1612p261	16:14	+26:04	66	6m	5" slit
148	COMP			↑		
149,150	BDp332642	15:50	+33:05	56	1m	5" 115 seeing worse
151	COMP			↑		
152	NGC6020	15:57	+22:24	99	20m	3" slit ↓
153	COMP			↑		
154	A1603p2004A	16:03	+20:04	25	3m	
155	COMP			↑		
156	A1603p1814	16:03	+18:44	25	3m	
157	COMP			↑		
158	A1603p1802	16:03	+18:02	25	5m	
159	COMP			↑		poor seeing
160	A1603p182A	16:03	+18:12	25	7m	
161	COMP			↑		
162	A1601p1502	16:01	+15:02	25	4m	
163	COMP			↑		
164	A1601p2025	16:01	+20:25	25	3m	
165	COMP			↑		
166	A1600p1955	16:00	+19:55	25	4m	
167	COMP			↑		
168	A1601p1459	16:01	+14:59	25	4m	
169	COMP			↑		
170	A1600p1815	16:00	+18:15	25	11m	wk on pix 2282
171	COMP			↑		

60 inch Telescope Log

Observer: PB
 PI: Huchra/Geller

Spectrograph: FAST
 Grating: 300R
 Date: 6/9/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
172	A1602p2027	16:02	+20:27	2S	5m	
173	COMP			↑		
174	A1603p168A	16:03	+16:18	2S	7m	
175	COMP			↑		
176	A1602p1757	16:02	+17:57	2S	5m	
177	COMP			↑		
178	Z003419N	16:15	+19:27	60	3m	
179	Z003419S	16:15	+19:27	60	3m	
180	COMP			↑		
181	Z010168	16:17	+34:52	60	3m	
182	Z00404S	16:17	+34:54	60	3m	
183	COMP			↑		
184	Z011849E	16:17	+35:08	60	3m	
185	Z011849W	16:17	+35:08	60	3m	
186	COMP			↑		
187	Z008744EW	16:16	+42:23	60	4m	bin by 2; close pair
188	COMP			↑		em both comps
189	Z014049N	16:31	+39:10	60	4m	
190	Z014049S	16:31	+39:12	60	4m	
191	COMP			↑		
192	Z013815E	16:52	+30:42	60	4m	
193	COMP			↑		
194	Z013815W	16:52	+30:42	60	4m	bin by 2; + 3" W of gal
195	COMP			↑		
196	Z004706S	16:57	+40:42	60	3m	
197	Z004706N	16:57	+40:42	60	3m	
198	Z004706W	16:57	+40:42	60	3m	em
199	COMP			↑		
200	Z013818S	16:58	+27:55	60	5m	
201	Z013818M	16:58	+27:55	60	5m	em

60 inch Telescope Log

Observer: PB

PI: All

Spectrograph: FAST

Grating: 300R

Date: 6/9/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
202	Z013818N	16:58	+27:55	60	3m	
203	COMP			↑		
204	NT469	23:03	+08:52	6	2m	
205	COMP			↑		
206-208	CIC 881	19:50	+35:41	12	90, 20s, 2s	
209	COMP			↑		
210-212	HD192261	20:10	+40:67	56	5s	
213	COMP			↑		
214-216	HD172175	18:79	-07:21	57	8s	clear @ dawn
217	COMP			↑		
218-220	HD172275	18:43	-07:20	57	8s	
221	COMP			↑		
222-224	HD173010	18:43	-05:19	57	8s	
225	COMP			↑		
226-228	BIAS			0	0s	
229-231	FLAT			0	6s	
232-234	BIAS			0	0s	
235-237	FLAT			0	12s	

FAT
to
Susan Takariz
pg 1 of 5

60 inch Telescope Log

Observer: PBarInd

PI: Wilkes

Spectrograph: FAST

Grating: 300R; 3" slit

Page: 5492

Date: 6/10/97

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-6	DARK			0	15m	
7-16	BIAS			0	0s	
17-26	FLAT			0	6s	
27-36	BIAS			0	0s	binby 2
37-46	FLAT			0	12s	binby 2
47-56	FLAT 2			66	8s	2" slit
57-66	FLAT B			66	3s	5" slit
67-71	sky			57	2s	
72	COMP			↑	7s	clear skies!
73-75	HD 94705	10:52	+06:11	57	1s	
76	COMP			↑		
77-79	HD 88639	10:13	+27:08	57	2s	
80	COMP			↑		
81-83	HD 105844	12:29	+58:28	57	2s	
84	COMP			↑		
85-88	HD 110914	12:45	+45:26	57	2s	
89	COMP			↑		
90-91	F01266	12:34	+75:20	56	45s	
92	COMP			↑		
93	N4151	12:07	+39:41	6	30s	
94	COMP			↑		
95	N4051	12:00	+44:48	6	2m	
96	COMP			↑		
97	N4258	12:16	+47:34	6	2m	
98	COMP			↑		
99	N5548	14:45	+25:22	6	3m	
100	COMP			↑		
101	MRK 279	13:51	+69:33	6	3m	
102	COMP			↑		
103	12024 p0325	12:02	+63:25	1	5m	

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60 inch Telescope Log

Observer: PB

PI: Huchard/Geller/Kirchner/Brandt

Spectrograph: FAST

Grating: 300R

Page: 5493

Date: 6/10/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
104	COMP			↑		
105	11572 p7632	11:57	+76:32	1	5m	em
106	COMP			↑		
107	12018 p7942N	12:01	+79:42	1	4m	UGC 7059 N em
108	12018 p7942S	12:01	+79:42	1	6m	UGC 7058 S em
109	COMP			↑		
110	11524 p7943 W	11:52	+79:43	1	4m	em
111	11524 p7943 E	11:52	+79:43	1	4m	em extended em
112	COMP			↑		
113	11577 p7706	11:54	+77:06	1	5m	LSB em
114	COMP			↑		
115	2011272N	13:29	+11:47	60	4m	em
116	2011272S	13:29	+11:47	60	31m	
117	COMP			↑		
118	2005066	13:29	+11:37	60	3m	
119	2005250	13:29	+11:44	60	3m	
120	COMP			↑		
121	2012872	13:30	+10:30	60	5m	
122	COMP			↑		
123	2011828N	13:29	+33:20	60	3m	Hk em pix 2183 wk
124	2011828S	13:29	+33:20	60	3m ⁺	+SII
125	COMP			↑		
126,128	SN1997em	14:05	+17:32	2	15m	
127,129	COMP			↑		
130,132	H27p180	14:29	+47:47	66	20m	4550 2" slit
131,133	COMP			↑		
134	H27p180	14:29	+47:47	66	7m	5" slit
135	COMP			↑		
136	H244	13:21	+36:23	56	2m	5"
137	COMP			↑		

60 inch Telescope Log

Observer: PBPI: Brandt/HuchraSpectrograph: FASTGrating: 300Page: 5994Date: 6/10/97

Number	Object	R. A.	Dec.	L/R	Exp	Comments
138-139	BDp33264Z	15:50	+33:05	56	7m	Photometric sky
140	COMP			↑		6" slit
141	1519p226	15:21	+22:27	66	7m	5" 4237
142	COMP			↑		
143,145	1519p226	15:21	+22:27	66	20m	2" slit
144,146	COMP			↑		
147,149	1552p085	15:54	+08:22	66	20m	2" 4120
148,150	COMP			↑		
151	1552p085	15:54	+08:22	66	7m	5"
152	COMP			↑		
153	PG1545p035	15:45	+03:32	56	6m	5"
154	COMP			↑		
156-156	BDp33264Z	15:50	+33:05	56	7m	5"
157	COMP			↑		
158	A1603p1555A	16:03	+15:55	25	8m	3" slit ↓ em
159	COMP			↑		
160	A1603p2016	16:03	+20:16	25	4m	
161	COMP			↑		
162	A1604p1548	16:04	+15:48	25	6m	em
163	COMP			↑		
164	A1559p1603S	15:59	+16:03	25	4m	bin by 2; *W of gal
165	A1559p1603N	15:59	+16:03	25	4m	
166	COMP			↑		
167	1602p1758	16:02	+17:58	25	7m	
168	COMP			↑		
169	A1559p1609A	15:59	+16:09	25	5m	
170	A1559p1556	15:59	+15:50	25	5m	
171	COMP			↑		
172	A1602p1733	16:02	+17:33	25	5m	bin by 2 ok
173	COMP			↑		

60 inch Telescope Log

Observer: PBPI: Huchra/GellerSpectrograph: FASTGrating: 3WLDate: 6/19/97Page: 5495

Number	Object	R.A.	Dec.	L/R	Exp	Comments
174	A1602p1747	16:02	+17:49	25	6m	
175	A1602p1746A	16:02	+17:46	25	7m	
176	COMP			↑		
177	16021p19318	16:01	+17:31	25	5m	
178	COMP			↑		
179	16022Sp175643	16:02	+17:56	25	10m	em
180	COMP			↑		
181	160230p16912	16:02	+16:19	25	5m	
182	COMP			↑		
183	155553p180206	15:59	+18:02	25	8m	
184	COMP			↑		
185	N002818	16:29	+08:27	60	2m	
186	COMP			↑		
187	A000513N	16:29	+08:05	60	3m	
188	A000513S	16:29	+08:05	60	4m	
189	COMP			↑		
190	Z011338N	17:00	+10:16	60	4m	em close pair
191	Z011338S	17:00	+10:16	60	6m	em! same
192	COMP			↑		
193	A000974W	16:29	+40:51	60	5m	wk em
194	A000974E	16:29	+40:51	60	3m	
195	COMP			↑		
196	Z008749E	16:30	+40:32	60	10m	em
197	Z008749W	16:30	+40:32	60	3m	
198	COMP			↑		
199	Z014048W	16:30	+39:50	60	3m	
200	Z014048E	16:30	+39:50	60	4m	
201	COMP			↑		
202	Z005506W	16:25	+40:29	60	6m	em
203	Z005506E	16:25	+40:29	60	2m	

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60 inch Telescope Log		Spectrograph: <u>FAST</u>		Page: <u>5496</u>		
Observer: <u>PB</u>		Grating: <u>ZWL</u>		Date: <u>6/10/97</u>		
PI: <u>AH</u>						
Number	Object	R.A.	Dec.	I/R	Exp	Comments
204	COMP			↑		
205	ZO11912	16:25	+39:36	60	3m	
206	COMP			↑		
207	NT469	23:03	+08:52	6	2m	
208	COMP			↑		
209	BDp28421	21:48	+28:51	56	1m	
210	COMP			↑		
211-213	CTC ₈₈	19:50	+35:41	12	100, 20, 25	
214	COMP			↑		
215-217	HD17281	20:10	+40:07	56	8s	
218	COMP			↑		
219-221	HD17285	18:39	-07:21	57	8s	
222	COMP			↑		
223-225	HD17052	18:33	+2:15	57	8s	
226	COMP			↑		clear @ dawn
227-229	HD17198	18:36	-11:06	57	8s	~
230	COMP			↑		
231-233	HD17358	18:44	+3:12	57	8s	
234	COMP			↑		
235-244	BIAS			0	0s	
245-254	FLAT			0	6s	
255-264	BIAS			0	0s	bin by 2
265-271	FLAT			0	12s	bin by 2

60 inch Telescope Log

Observer: Jim Petur

PI: _____

Spectrograph: FAST

Grating: 300

Date: 6/11/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	Bias	Bin By	4			
11-20	FLAT	Bin By	4		6 ^s	
21-30	Bias	Bin By	2			Broken Clouds
31-40	FLAT	Bin By	2		12 ^s	Clouded out TILL 12:00 AM
41-45	SKY				2 ^s	
46	Comp P			↑		There are clouds
47	MARK501	16 53 52	39 45 36	6	5 ^m	around. Obj Thru Clouds
48	Comp P					
49	A000579S	16 05 01	17 49 52	60	5 ^m	South Obj
50	Comp P	↓	↓	↑		
51	A000579N	↓	↓	60	5 ^m	North Obj
52	Comp P			↑		
53	Z009861N	16 05 22	16 11 53	60	5 ^m	North Obj
54	Comp P	↓	↓	↑		Thru Clouds ↓
55	Z009861S	↓	↓	60	6 ^m	South Obj
56	Comp P			↑		
57	Z011457W	16 05 26	16 26 33	60	5 ^m	West Obj
58	Comp P	↓	↓	↑		
59	Z011457E	↓	↓	60	5 ^m	East Obj
60	Comp P			↑		
61	Z011844W	16 04 45	34 37 12	60	5 ^m	W Object
62	Comp P	↓	↓	↑		
63	Z011844N	↓	↓	60	5 ^m	N object
64	Comp P			↑		
65	Z011944S	↓	↓	60	5 ^m	Clouded Out.
66	Comp P			↑		Stopped Cloud forming?
67-76	Bias					↗ To East ↘ To South
77-86	FLAT				6 ^s	
87						
88						A Truly Rotten Night!

60 inch Telescope Log

Observer: J. PetersPI: et. alSpectrograph: FASTGrating: 300Page: 5498Date: 6/12/97

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	Bias	Bin By	4			
11-20	FLAT	Bin By	4		6 ^s	LOTS Broken Clouds
21-30	Bias	Bin By	2			
31-40	FLAT	Bin By	2		12 ^s	
41-45	SKY				2 ^s	
46	Comp			↑		Clear @ 1:30 AM
47	MRS09	20 41 26	-10 54 18	6	2M	Some clouds around
49	Comp					
49	N7331	22 54 46	34 09 43	57	5M	
50	Comp			↑		
51	H0192281	20 10 46	40 07 01	56	5 ^s	Seeing Bad ~ 2-3"
52	Comp			↑		
53	160234P162026	16 02 36	16 20 26	25	15M	→ Susaw This is Repeat From 5/23/97
54	Comp			↑		
55	160006P160803	16 00 06	16 08 03	25	15M	→ Repeat
56	Comp			↑		
57	160322P155406	16 03 22	15 54 06	25	15M	→ Repeat
58	Comp			↑		
59	160337P162813	16 03 37	16 28 13	25	15M	→ Repeat
60	Comp			↑		
61	CICyg	19 30 12	35 41 04	12	2 ^s	
62	CICyg	↓	↓	12	20 ^s	
63	CICyg	↓	↓	12	90 ^s	
64	Comp			↑		
65	N7469	23 03 15	08 52 25	6	2M	
66	Comp			↑		
67	518.024198	23 41 09	11 01 37	3	20M	████ *
68	Comp			↑		
69-78	Bias					
79-88	FLAT				6 ^s	

** Start of FAST run **

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5531</u>	
Observer: <u>P. Berlind</u>			Grating: <u>300R; 3" slit</u>			
PI: <u>Wilkes/Huchra</u>			Date: <u>6/27/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
				0	15m	
1-6	DARK			0	0s	
7-16	BIAS			0	6s	
17-26	FLAT			0	0s	bm by 2
27-36	BIAS			0	12s	bm by 2
37-46	FLAT			57	3s	
47-51	sky			↑		
52	COMP			↑		
53-54	Fcige66	12:34	+25:20	56	45s	some high clouds
55	COMP			↑		
56	N4151	12:08	+39:41	6	35s	
57	COMP			↑		
58	N4051	12:40	+44:48	6	2m	
59	COMP			↑		poor seeing
60	N4258	12:16	+47:24	6	2m	
61	COMP			↑		
62	N5548	14:15	+25:22	6	3m	
63	COMP			↑		
64	MRK 271	13:51	+69:33	6	3m	
65	COMP			↑		
66	12389p703	12:38	+72:03	1	6m	em
67	COMP			↑		
68	12390p705	12:39	+72:05	1	10m	H α em! pri 2031
69	COMP			↑		→ wk NII, STE
70	N4363	12:21	+75:14	1	8m	em
71	COMP			↑		
72	11421p5810	11:42	+58:10	1	20m	old redo nice H β obs
73	COMP			↑		
74	12085p6712	12:08	+67:12	1	10m	old redo em!
75	COMP			↑		

69 comp center way below normal,
 → sol not very good.

60 Inch Telescope Log

Observer: PB

PI: redo cleanup

Spectrograph: FAST

Grating: 300R

Date: 6/27/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
76	12088p506	12.08	+75.06	↑	15m	old redo em
77	COMP			↑		
78	infall. c.24	13.11	+75.19	64	15m	old redo 6/s
79	COMP			↑		
80	1096.C1.07	14.08	+75.41	59	15m	old redo
81	COMP			↑		
82	1096.C1.03	14.06	+75.57	59	17m	em
83	COMP			↑		
84	1096.C1.18	14.12	+75.48	59	20m	
85	COMP			↑		
86	9wm3-61	14.29	+75.21	61	20m	
87	COMP			↑		
88	N002976W	15.38	+29.27	60	10m	em
89	COMP			↑		
90	Z014034E	15.50	+41.58	60	5m	em
91	Z014034W	15.50	+41.58	60	4m	
92	COMP			↑		→ wk
93	Z007521E	15.54	+41.37	60	5m	em
94	Z007521W	15.54	+41.37	60	5m	em
95	COMP			↑		
96	N002977	15.54	+27.51	60	6m	em
97	COMP			↑		
98	N002835E	15.56	+18.38	60	6m	em
99	N002835W	15.56	+18.38	60	5m	
100	COMP			↑		
101	Z003948N	15.57	+16.18	60	3m	
102	Z003948S	15.57	+16.18	60	5m	
103	COMP			↑		
104	160016p160312	16.00	+16.03	25	15m	old redo
105	COMP			↑		

60 inch Telescope Log

Observer: PB
 PI: Huchra & Geller

Spectrograph: FAST

Grating: 3WL

Date: 6/27/97

Page: SS33

Number	Object	R.A.	Dec.	L/R	Exp	Comments
106	160327p182931	16:03	+18:29	25	20m	old redo 6/6
107	WMP			↑		
108	160101p185233	16:01	+18:52	25	20m	old redo 6/6
109	WMP			↑		
110	Z009606	16:19	+18:07	60	10m	em
111	WMP			↑		
112	Z011467W	16:24	+19:28	60	5m	
113	Z011467E	16:24	+19:28	60	10m	next to bright star em
114	WMP			↑		
115	Z002109	16:21	+18:55	60	6m	em
116	WMP			↑		
117	Z00868E	16:23	+18:13	60	9m	em
118	Z00868W	16:23	+18:13	60	6m	
119	WMP			↑		
120	Z013807	16:25	+32:27	60	7m	clouds! rapidly increasing
121	WMP			↑		
122	Z0390.3	18:45	+79:43	6	10m	
123	WMP			↑		
124	18197p6340W	18:19	+63:40	43	5m	
125	18197p6340E	18:19	+63:40	43	7m	em+1
126	WMP			↑		
127	18208p6051	18:20	+60:51	43	6m	stopped short by clouds
128	WMP			↑		
129	MRK509	20:41	-10:43	6	6m	observed in Feb 1994 on 16"
130	WMP			↑		
131	N7469	23:05	+108:52	6	4m	
132	WMP			↑		
133-134	BP028411	21:48	+28:37	56	1m	
135	WMP			↑		clouds...
136-138	HD92251	20:10	+10:07	56	5s	

139 WMP
 140-149 BRAS
 150-159 FLAT

60 inch Telescope Log
 Observer: P Berlin & P Korman
 PI: Wilkes & Huchra
 Spectrograph: F151
 Grating: 3000, 3° slit
 Date: 6/28/97
 Page: 5534

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	BAB				0s	
11-20	FLAT				6s	
21-30	BAB				0s	some thin cloud.
31-40	FLAT				12s	
41-45	sky			S6	2s	
46	COMP			↑		
47-48	Ferguson	12:31	+25:20	S6	45s	
49	COMP			↑		
50	N4151			6	30s	
51	COMP			↑		
52	N4258	12:16	+17:34	6	2m	
53	COMP			↑		
54	H214	13:21	+36:23	S6	2m	
55	COMP			↑		
56	MRK259	13:53	+69:48	6	3m	
57	COMP			↑		
58	N5548	14:15	+25:22	6	3m	
59	COMP			↑		
60-61	N4456B	12:30	+12:29	S6	4m	
62	COMP			↑		
63	12333 p762	12:55	+76:12	1	6m	em
64	COMP			↑		
65	12094 p6812	12:09	+68:12	1	6m	em!
66	COMP			↑		
67	12117 p6622	12:11	+66:22	1	10m	huge LSB gal next to 6 ^m mag wk em? 500 arcs
68	COMP			↑		
69	12361 p7142	12:36	+71:42	1	12m	em
70	COMP			↑		
71	12384 p6337	12:38	+63:37	1	12m	em!!
72	COMP			↑		

#67 - extracted several times; could not get emission lines except at $v_r = 0$. This has a stellar velocity - some of a?

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5535</u>	
Observer: <u>PB</u>			Grating: <u>300</u>			
PI: <u>Huchra & Geller</u>			Date: <u>6/28/97</u>			
Number	Object	R.A.	Dec.	L/R	Exp	Comments
73	12405 p6452	12:40	+64:52	1	5m	poor seeing
74	COMP			↑		
75	12439 p7446	12:43	+74:46	1	5m	
76	COMP			↑		
77	12490 p7749	12:49	+77:49	1	6m	em
78	COMP			↑		
79	12521 p7455	12:52	+74:55	1	5m	
80	COMP			↑		
81	12524 p7741	12:52	+77:41	1	6m	em
82	COMP			↑		
83	N000897	13:30	+31:20	60	7m	em
84	COMP			↑		
85	Z003487 EW	13:30	+31:17	60	7m	EW comps
86	COMP			↑		E comp = *burst !!
87	N001096	13:46	+11:40	60	7m	
88	COMP			↑		
89	Z013413N	13:46	+14:24	60	6m	
90	Z013413S	13:46	+14:24	60	5m	
91	COMP			↑		
92	N002103E	13:46	+11:34	60	7m	em
93	N002103W	13:46	+11:34	60	7m	
94	COMP			↑		
95	Z008150	13:52	+07:47	60	5m	em
96	COMP			↑		
97	Z005463S	13:59	+38:10	60	6m	nice dust lane; wk em
98	Z005463N	13:59	+38:10	60	5m	em
99	COMP			↑		
100	N002174E	14:02	+18:24	60	10m	em
101	N002174W	14:02	+18:24	60	10m	em
102	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Geller

Spectrograph: FAST

Grating: 3WL

Date: 6/28/97

Page: 5536

Number	Object	R. A.	Dec.	L/R	Exp	Comments
103	Z003934N	14:02	+14:33	60	4m	
104	Z003934S	14:02	+14:33	60	9m	em!
105	COMP			↑		
106	A000687	16:08	+07:29	60	10m	poor seeing
107	COMP			↑		3-5" ↓
108	Z007092S	16:12	+04:36	60	6m	
109	Z007092N	16:12	+04:36	60	6m	em
110	COMP			↑		
111	Z011206	16:14	+06:09	60	6m	
112	Z013133	16:14	+06:09	60	6m	
113	COMP			↑		
114	Z003851E	16:14	+03:59	60	6m	em
115	Z003851W	16:14	+03:59	60	6m	em
116	COMP			↑		
117	Z007094S	16:27	+03:04	60	6m	em
118	Z007094N	16:27	+03:04	60	6m	
119	COMP			↑		
120	Z011746W	16:11	+26:52	60	5m	seeing finally
121	Z011746E	16:11	+26:52	60	5m	improved
122	COMP			↑		
123	N000683W	16:08	+17:44	60	5m	em
124	N000683M	16:08	+17:44	60	6m	em
125	N000683E	16:08	+17:44	60	5m	
126	COMP			↑		
127	Z011458E	16:05	+18:05	60	5m	
128	Z011458W	16:05	+18:05	60		
129	COMP			↑		
130	Z006153N	16:05	+17:35	60	4m	
131	Z006153S	16:05	+17:35	60	5m	
132	COMP			↑		

60 inch Telescope Log		Spectrograph: <u>FABT</u>		Page: <u>SS37</u>		
Observer: <u>P.B.</u>		Grating: <u>300L 3" slit</u>		Date: <u>6/28/97</u>		
PI: <u>Geller & Huchra</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
133	201345ZE	16:05	+16:12	60	8m	
134	201345ZW	16:05	+16:12	60	8m	sup ⁺ faint gal
135	COMP			↑		2 wk
136	2007256	16:05	+17:42	60	5m	
137	COMP			↑		
138	2011943.1	16:27	+39:15	60	5m	"1"
139	2011943.2	16:27	+39:15	60	5m	"2"
140	2011943.3	16:27	+39:15	60	4m	"3"
141	2011943.4	16:27	+39:15	60	5m	"4"
142	COMP			↑		
143	18158 p6725	18:15	+67:25	43	5m	
144	COMP			↑		
145	18152 p6215	18:15	+67:15	43	8m	
146	COMP			↑		
147	18208 p6051	18:21	+60:52	43	7m	
148	COMP			↑		
149	18231 p6214	18:23	+62:14	43	6m	em
150	COMP			↑		
151	18235 p62813	18:23	+65:16	43	9m	A= star
152	COMP			↑		
153	18248 p6028	18:25	+60:29	43	5m	
154	COMP			↑		
155	18257 p7030	18:25	+70:30	43	8m	em
156	COMP			↑		
157-158	N7331	22:34	+34:09	57	4m	
159	COMP			↑		
160	N7469	23:03	+68:52	6	2m	
161	COMP			↑		
162	Fergello	23:17	-05:26	56	2m	
163	COMP			↑		

60 inch Telescope Log

Observer: D. KORANYI

PI: WILKES/KORANYI

Spectrograph: FAST

Grating: 300L

Date: 6/29/97

Page: 5539

Number	Object	R. A.	Dec	I/R	Exp	Comments
1-10	BIAS				0s	BIN BY 4 ; CLOUDLESS!
11-20	FLAT				6s	"
21-30	BIAS				0s	BIN BY 2 FOR SN
31-40	FLAT				12s	"
41-45	SKY				2s	BIN x4 AGAIN
46	COMP				↑	
47-48	FEIGE 66	12:34:54	25:20:31	56	60s	
49-50	FEIGE 66			56/2	120s	BIN x2 FOR SN (Need to Sky Look for COMP)
51	COMP				↑	BIN x4
52-53	H744	13:21	36:23	56	2m	
54	COMP				↑	
55	NY151	12:08	39:41	6	30s	
56	COMP				↑	
57	NY258	12:16	47:34	6	120s	
58	COMP				↑	
59	MKR 279	13:51	69:33	6	120s	
60	COMP				↑	
61	N5548	14:15	22:52	6	180s	
62	COMP				↑	
63	mkw17-021	14:01:52	9:37:47	35	8m	
64	COMP				↑	
65	mkw17-022	14:01:52	9:37:59	35	10m	GUIDE BEHIND
66	COMP				↑	
67	mkw17-023	14:04:47	8:48:30	35	15m	EXTREMELY DIFFUSE! NO COUNTS.
68	COMP				↑	
69	mkw17-024	14:02:55	7:02:57	35	15m	
70	COMP				↑	
71	mkw17-025	14:05:17.80	7:27:31.18	35	15m	DIFFUSE. - LOW SIGNAL
72	COMP				↑	
73	mkw17-026	14:02:53	8:53:28	35	15m	

NO COMP →

message "no comp for file 40-50
- 106 111 474 48 211)

60 inch Telescope Log
 Observer: D. KORANYI
 PI: KORANYI/KIRSCHEN/DELLER
 Spectrograph: FAST
 Grating: 3002
 Date: 6/29/97
 Page: 5570

Number	Object	R.A.	Dec.	L/R	Exp	Comments
74	COMP				↑	
75	mkw12-027	14:02:50	8:46:47	35	15m	
76	COMP				↑	
77	mkw12-029	14:03:48	9:33:10	35	10m	
78	COMP				↑	
79	mkw12-030	14:00:31	8:53:57	35	8m	
80	COMP				↑	
81	mkw12-031	14:02:08	9:33:59	35	15m	V. DIFFUSE.
82	COMP				↑	
83	mkw12-033	14:02:26	9:35:19	35	15m	FAN OFF.
84	COMP				↑	
85	mkw12-034	14:01:59	9:37:07	35	10m	
86	COMP				↑	
87-88	SN 1997CS	15:11:07	3:05:00	2	15m	SN 22; ^{SN 22 - 6.87 - 1.87}
89	COMP				↑	"
90	2007255E	15:58:54.8	14:58:39.7	60	8m	SN 24
91	2007255W	15:58:50.1	14:57:51.6	60	8m	
92	COMP				↑	
93	2000848.1	15:59:13.3	28:45:50.1	60	8m	1" A 9th mag star in 1967?
94	2000848.2	15:59:11.4	20:45:44.4	60	7m	"
95	2000848.3	15:59:11.7	20:45:29.7	60	8m	POSSIBLE STAR ON SLIT STAR
96	COMP				↑	
97	2007474	15:59:47.7	37:07:46.8	60	6m	
98	COMP				↑	
99	2010248E	16:00:06.5	41:29:25.7	60	5m	
100	COMP				↑	
101	2010248W	15:59:59.6	41:29:27.8	60	9m	STAR ON SLIT, TO E.
102	COMP				↑	
103	18276p 7245	18:27:36	32:45:00	40	12m	BEHIND MOUNT, FROM MOON...
104	COMP				↑	

60 inch Telescope Log				Spectrograph: <u>CAST</u>		
Observer: <u>D. WILKES</u>				Grating: <u>3000</u>		Page: <u>5541</u>
PI: <u>HUCHRA/WILKES</u>				Date: <u>6/29/97</u>		
Number	Object	R. A.	Dec.	L/R	Exp	Comments
105	18280 p 7248	18:28	72:48	43	15m	V. FUZZY...
106	COMP				↑	
107	17467 p 6119	17:46	61:19	43	4m	
108	COMP				↑	
109	17469 p 5926	17:46	59:26	43	6m	
110	COMP				↑	
111	17473 p 6141N	17:47	61:41	43	8m	
112	17473 p 6141S	17:47	61:41	43	12m	NOT MUCH SIGNAL - FUZZY
113	COMP				↑	
114	17486 p 6141	17:48	61:41	43	7m	
115	COMP				↑	
116	17491 p 5938	17:49	59:38	43	12m	
117	COMP				↑	
118	17491 p 6023	17:49	60:23	43	4m	
119	COMP				↑	
120	17484 p 6137	17:49	61:37	43	12m	FUZZBALL
121	COMP				↑	
122	17494 p 6721	17:49	67:21	43	10m	
123	COMP				↑	
124-126	CE 698	19:50:12	35:41:04	12	2, 60, 30s	
127	COMP				↑	
128-129	N 7331	23:37:04	31:24:44	57	4m	
130	COMP				↑	
131	N 7469	23:08:12	08:57:02	6	2m	STAR ON SLIT, TO THE EAST
132	COMP				↑	
133	M 335	00:06:16	20:11:36	6	2m	
134	COMP				↑	
135	F 110	23:19:55	-05:10:24	56	2m	
136	COMP				↑	CLEAR AT DAWN!
137-139	H 0197281				53	BEAUTIFUL THE WHOLE NIGHT!

60 inch Telescope Log
 Observer: D. KORANYI
 PI: WILKES/KORANYI

Spectrograph: FAC T
 Grating: 800
 Date: 6/30/97

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0s	CLEAR SLIDES
11-20	FLAT				6s	} BIN BY 4
21-30	BIAS				0s	
31-40	FLAT				12s	} BIN BY 2 FOR SW
41-45	SKY	- 2 5 M 1	TH -		5s	
46	COMP				↑	FOCUS IS FINE.
47, 48	FRIGE 66	12:34	25:20	56	60s	BIN 24
49	FRIGE 66	12:34	25:20	56, 2	120s	BIN 22
50	COMP				↑	BIN 24 →
51, 52	H244	13:21	36:23	56	2m	
53	COMP				↑	
54	MRK 421	11:01	38:28	6	5m	
55	COMP				↑	
56	N4051	12:00	44:48	6	2m	
57	COMP				↑	
58	N4151	12:08	39:41	6	30s	
59	COMP				↑	
60	MRK 279	13:51	69:33	6	2m	
61	COMP				↑	
62	N5848	14:15	25:22	6	3m	
63	COMP				↑	
64	mkw12-055	14:04:44.9	9:49:53.5	35	12m	
65	COMP				↑	
66	mkw12-036	14:05:12.6	9:16:16.2	35	15m	
67	COMP				↑	
68	mkw12-033	14:01:47.2	9:13:23.9	35	15m	
69	COMP				↑	
70	mkw12-040	14:03:46.6	9:06:37.3	35	15m	
71	COMP				↑	
72	mkw12-042	14:02:22.5	9:19:25.8	35	15m	

60 inch Telescope Log			Spectrograph: <u>FAST</u>		Page: <u>5544</u>	
Observer: <u>D. KORANYI</u>			Grating: <u>300L</u>		Date: <u>6/30/97</u>	
PI: <u>KORANYI/KIRSUNGER/GALLER/WILKES</u>						
Number	Object	R.A.	Dec.	L/R	Exp	Comments
73	COMP				↑	
74	WHL2-013	14:02:01.1	9:57:56.6	35	12m	
75	COMP				↑	
76	WHL2-044	14:01:27.8	9:09:22.3	35	15m	
77	COMP				↑	
78	WHL2-015	14:01:22.9	9:10:02.7	35	12m	
79	COMP				↑	
80	WHL2-047	14:03:57.7	9:38:22.0	35	15m	
81	COMP				↑	
82	WHL2-048	14:05:26.8	9:06:40.9	35	15m	
83	COMP				↑	
84,85	SN 1997 ct (?)	14:06:30	70:40:20	2	15m	BIN x 2 / HARDY VISIBLE; WASTED TIME?
86	COMP				↑	
87	Z005267N	14:51:26.4	9:20:36.3	60	7m	BIN x 4 →
88	Z005267S	14:51:26.8	9:19:48.4	60	7m	
89	COMP				↑	
90	N002829	14:52:22.6	17:07:18.2	60	8m	
91	COMP				↑	
92	N00114N	15:21:00.0	45:43:58.5	60	10m	
93	N00114S	15:20:59.8	45:43:39.2	60	7m	
94	COMP				↑	
95	Z013107N	15:21:49.6	7:44:41.5	60	7m	
96	Z013107S	15:21:25.0	7:43:07.0	60	7m	
97	COMP				↑	
98	N002190N	16:00:43.6	16:43:19.9	60	15m	V. FAINT! - good picky wrong row
99	N002190S	16:00:37.9	16:40:37.8	60	15m	ALSO FAINT; STAR ON SLIT, TO E.
100	COMP				↑	
101	Z008433	16:01:16.6	17:41:01.4	60	12m	
102	COMP				↑	
103	MRK 501			6	5m	STAR ON SLIT, TO E. STAR MARK 501

60 inch Telescope Log

Observer: D. KORANYI

PI: GALLAGHER/KENTON/WILKES

Spectrograph: FAST

Grating: 300L

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Date: 6/30/93

Number	Object	R.A.	Dec.	L/R	Exp	Comments
104	COMP				↑	
105	Z1032 p 0730 F1	21:05:55	07:40:28	60	6m	
106	COMP				↑	
107	Z1098 p 1248 EF1	21:11:56	13:03:14	60	11m	
108	COMP				↑	
109	Z1098 p 1248 G02	21:12:02	13:58:16	60	12m	
110	COMP				↑	
111	Z1098 p 1248 EF3	21:12:13	13:01:04	60	8m	
112	COMP				↑	
113	Z1108 p 0632 F1	21:12:55	04:53:06	60	15m	FUZZ
114	COMP				↑	
115	Z1207 N	21:39:42	04:16:04	60	15m	FUZZ
116	COMP				↑	
117	Z1202 p 08122	22:14:52	13:18:42	60	8m	
118	COMP				↑	
119	Z1474 p 09422	22:49:47	12:03:50	60	12m	
120					↑	
121	Z3080 p 0725 F1	23:10:38	08:11:22	60	10m	
122	COMP				↑	
123-125	CIC 8	19:50	35:14	12	2,20,70s	
126	COMP				↑	
127	HR 509	20:41	-10:54	6	3m	
128	COMP				↑	
129	N7469	23:03	08:52	6	2m	STAR ON SLIT, TO E.
130	COMP				↑	
131	HR 435	00:03	19:55	6	2m	
132	COMP				↑	
133, 134	N7331	22:34	34:09	57	4m	SKY COMMA BRIGHT...
135	COMP				↑	
136-138	H0192241	20:10	40:07	56	5s	

