

60 inch Telescope Log

Observer: Jim PetersPI: Huchra et al.Spectrograph: FASTGrating: 300Page: 2878Date: 4/1/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
3	Comp	TEST			10 ^s	TEST FRAME
4	COMP			↓	10 ^s	3" SLIT
5	67P1553	08 49 46	11 26 54	10	5 ^s	3" SLIT
6	Comp	↓	↓	↓ 10 ^s	10 ^s	1.5" SLIT
7	67P1553	↓	↓	10	10 ^s	1.5" SLIT ↑
8	67P258	08 46 50	11 02 36	↓ 10	20 ^s	" "
9	67P364	08 47 12	11 52 44	10	30 ^s	THIN CLOUDS
10	67P1010	08 48 38	11 59 19	10	45 ^s	
11	67P1084	08 48 42	12 05 09	10	60 ^s	
12	67P1479	08 49 15	12 06 25	10	2 ^m	
13	67P1054	08 48 32	12 02 03	10	4 ^m	
14	67P989	08 48 37	11 57 22	10	4 ^m	STR. To West in SLIT
15	67P792	08 48 11	12 03 30	10	4 ^m	CLOUDS ARE PLAYING
16	67P1305	08 48 51	12 04 52	10	5 ^m	HELL WITH THIS PAGE
17	67P434	08 47 27	11 30 54	10	6 ^m	
18	67P674	08 47 39	12 31 12	10	12 ^m	Guide TV full of IIII
19	COMP			↑	10 ^s	Lines
20	67P1069	08 48 44	12 03 17	10	10 ^m	Put Backlash To 35
21	67P1275	08 48 53	12 01 22	10	10 ^m	Put STR To East in SLIT
22	67P1639	08 49 48	12 17 46	10	7 ^m	
23	67P815	08 45 10	12 07 44	10	6 ^m	Seeing Bad ≈ 3"
24	COMP	↓	↓		10 ^s	at times
25	67P815	↓	↓	10	6 ^m	3" SLIT
26	H2 44	13 21 19	36 23 38	0	6 ^m	1.5" SLIT
27	COMP			↓	10 ^s	TEST 3" SLIT 1.5" slit
28	N4486B	12 28 00	12 45 59	0	5 ^m	3" SLIT 3" slit
29	COMP			↓	10 ^s	
30	Ferge 67	12 39 18	17 47 24	0	2 ^m	
31	COMP			↓	10 ^s	
32	H2 44	13 21 19	36 23 38	0	2 ^m	

60 inch Telescope Log

Observer: J. PetersPI: Huchra et. alSpectrograph: FASTGrating: 300Page: 1879Date: 4/1/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
33	COMP			↓	10 ^s	Thin clouds ↓
34	60140	11 34 27	30 07 35	0	2 ^m	
35	COMP			↓	10 ^s	
36	N4151	12 08 01	39 41 02	6	30 ^s	
37	COMP			↓	10 ^s	
38	H2 43	13 14 00	29 21 49	0	5 ^m	
39	COMP			↓	10 ^s	
40	N5548	14 15 43	25 22 01	6	5 ^m	
41	COMP			↓	10 ^s	Delay The Vertical
42	13448P0750	13 44 48	07 50 00	1	10 ^m	Line very bad in
43	COMP			↓	10 ^s	Guide T.V. Took
44	14060P0554	14 06 00	05 54 00	1	10 ^m	Teop off LKH 1000
45	COMP			↓	10 ^s	helped a LITTLE
46	14249P0347	14 24 51	03 48 00	1	10 ^m	
47	COMP			↓	10 ^s	
48	14443P1023	14 44 15	10 22 26	1	10 ^m	
49	COMP			↓	10 ^s	
50	14446P0349	14 44 36	03 49 00	1	10 ^m	
51	COMP			↓	10 ^s	
52	1446P1129	14 46 12	11 29 00	1	10 ^m	
53	COMP			↓	10 ^s	
54	14479P1033	14 47 54	10 33 00	1	10 ^m	
55	COMP			↓	10 ^s	
56	14502P1216	14 50 12	12 16 00	1	10 ^m	
57	COMP			↓	10 ^s	
58	15128P0546	15 12 42	05 46 00	1	10 ^m	
59	COMP			↓	10 ^s	
60	15248P0640	15 24 48	06 40 00	1	10 ^m	

60 inch Telescope Log

Observer: Jim PetersPI: J. Huchra et al.Spectrograph: FASTGrating: 300Page: 2880Date: 4/2/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1	Comp	Test	1.5"	SLIT	10 ^s	Bin 1 Large 2704x928
2	Comp	Test	3.0"	SLIT	10 ^s	} Flat @ Large = (23000 To 24000 CTs)
3	Comp	3"	SLIT	↓	10 ^s	
4	67-1239	08 49 00	11 57 43	10	6 ^m	N. Caldwell 3" SLIT
5	Comp	↓	↓	↓	10 ^s	1" SLIT
6	67P1239	↓	↓	10	6 ^m	1" SLIT
7	67P1485	08 49 07	12 09 08	10	6 ^m	
8	67P794	08 48 13	12 03 38	10	6 ^m	(BRT STAR IN SLIT TO EAST,
9	67P998	08 48 00	11 59 00	10	6 ^m	2 [#] 67-997 IN SLIT.)
10	67P964	08 48 00	11 59 00	10	6 ^m	
11	67P2219	08 48 00	11 59 00	10	10 ^m	North South Guiding
12	Comp			↓	10 ^s	a LITTLE jumpy at
13	67P1031	08 48 00	11 59 00	10	10 ^m	Times.
14	67P758	↓	↓	10	10 ^m	
15	67P990	↓	↓	10	10 ^m	
16	67P1032	↓	↓	10	10 ^m	
17	67P1025	↓	↓	10	10 ^m	
18	67P1068	↓	↓	10	10 ^m	Dome Run Away! 67-1034 IN SLIT EAST side
19	67P1033	↓	↓	10	10 ^m	
20	67P991	↓	↓	10	15 ^m	
21	Comp			↑	10 ^s	
22	67P991	↓	↓	10	15	3" SLIT
23	Comp			↑	10 ^s	3" SLIT
24	Comp			↓	10 ^s	1" SLIT
25	Feige 67	12 39 18	17 47 24	0	5 ^m	1" SLIT
26	Comp			↓	10 ^s	1" SLIT
27	HE 44	13 21 19	36 23 38	0	6 ^m	1" SLIT
28	Comp			↓	10 ^s	1" SLIT
29	H2 43	13 14 00	29 21 49	0	13 ^m	1" SLIT
30	Comp			↓	10 ^s	Bin by 2 3" SLIT

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
31	H2 43	13 14 00	29 21 49	0	5m	
32	Comp			↓	10 ^s	
33	N5548	14 15 43	25 22 01	6	5m	
34	Comp			↓	10 ^s	
35	H2 44	13 21 19	36 23 38	0	3m	
36	Comp			↓	10 ^s	
37	Feige 56	12 04 13	11 56 55	0	3m	
38	Comp			↓	10 ^s	
39	SN1994D	12 31 31	07 58 30	2	11m	
40	Comp			↓	10 ^s	
41	GD140	11 34 27	30 04 35	0	2m	
42	Comp			↓	10 ^s	
43	N4151	12 08 01	39 41 02	6	30 ^s	
44	Comp			↓	10 ^s	
45	Feige 67	12 39 18	17 47 24	0	3m	
46	Comp			↓	10 ^s	
47	N4486 B	12 28 00	12 45 59	0	5m	
48	Comp			↓	10 ^s	
49	SN 1994I	13 27 47	47 26 59	2	10m	Test Shot 600cts
50	SN 1994I	↓	↓	2	15m	
51	Comp			↓	10 ^s	
52	H2 44	13 21 19	36 23 38	0	3m	
53	Comp			↓	10 ^s	
54	14057 P0602	14 05 42	06 02 00	1	10m	
55	Comp			↓	10 ^s	
56	14060 P0339	14 06 00	03 37 00	1	10m	
57	Comp			↓	10 ^s	
58	14060 P0315	14 06 00	03 15 00	1	15m	
59	Comp			↓	10 ^s	
60	14421 P1228	14 42 03	12 28 04	1	10m	

60 inch Telescope Log

Observer: Perry Berlind
 PI: J. Kuchra

Spectrograph: FAST
 Grating: 300; 3" slit
 Date: 4/4/94

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
4-13	BIAS				0s	
14-23	FLAT				0.1s	clearing
24	COMP					test
25-34	FLAT				03.5	1.5" slit; no binning, For Nelson
35	07107p0642	07:10:42	+06:42:40	01	5m	3" slit is in
36	COMP			↑		
37	07592p0425	07:59:12	+04:25:00	1	5m	star on slit E of galaxy H _α
38	COMP			↑		
39	07545p1111	07:54:30	+11:11:00	1	5m	
40	07546p1121	07:54:36	+11:21:00	1	10m	cnts?
41	COMP			↑		clouds...
42	07553p1027	07:55:18	+10:27:00	1	5m	
43	COMP			↑		
44	07558p1218	07:55:48	+12:18:00	1	5m	H _α
45	COMP			↑		
46	07578p1350	07:57:48	+13:50:00	1	3m	
47	COMP			↑		
48	07585p0924	07:58:30	+09:24:00	1	3m	
49	COMP			↑		
50	09437p0555N	09:43:42	+05:55:00	1	5m	North comp H _α
51	09437p0555S	09:43:42	+05:55:00	1	10m	
52	COMP			↑		
53	U05277	09:47:48	+05:44:00	1	10m	H _α
54	COMP			↑		
55	11300p0117	11:30:00	+01:17:00	5	5m	H _α
56	COMP			↑		
57	11305p0149	11:30:30	+01:49:00	5	5m	H _α
58	COMP			↑		
59	11306p0505	11:30:36	+05:05:00	5	5m	
60	COMP			↑		

Wed 322 JPH @ 4 meter
 3321 15

NO FILES 1-3

D every other

I every day

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300Page: 2884Date: 4/4/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
61	12064m0207	12:06:24	-02:07:W	5	5m	seeing 2-3"
62	COMP			↑		
63	12064p0528	12:06:24	+05:28:W	5	5m	H ₂
64	COMP			↑		
→ 65	12170m0232	12:17:W	-02:32:W	5	5m	H ₂ 6700 6850
66	COMP			↓		
→ 67	12170m0232	"	"	5	5m	H ₂
68	12195m0219	12:19:30	-02:19:W	5	5m	
69	COMP			↑		
70	12215p0535	12:21:30	+05:35:W	5	5m	
71	COMP			↑		
72	12255m0122	12:25:30	-01:22:W	5	5m	
73	COMP			↑		
74	N4493	12:28:36	+00:53:W	5	3m	delay @ 48"
75	N4493A	12:28:36	+00:53:W	5	5m	
76	COMP			↑		clouds again
77	12332m0238	12:33:12	-02:38:W	5	10m	lots of cosmic rays
78	COMP			↑		
79	SN1994E	13:27:47.62	+47:26.59	2	15m	through heavy clouds
80	COMP			↑		
81	SN1994E	"	"	2	15m	through clouds
82	Feige 56	12:04:13.9	+11:56:55	2	3m	
83	Feige 56	"	"	2	6/1205	
84	SN1994D	12:31:31	+07:58:30	2	15m	
85	SN1994E	13:27:47	+47:26.59	2	15m	
86	12528m0245	12:52:48	-02:45:W	2	5m	H ₂
87	COMP			↑		
88	12532m0043	12:53:12	-00:43:W	5	5m	
89	COMP			↑		
90	U8138	12:59:18	+05:16:W	5	5m	H ₂

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300Date: 4/4/94Page: 2885

Number	Object	R. A.	Dec.	L/R	Exp	Comments
91	12595p0520	12:59:30	+05:18:00	5	5m	there is a
92	12592p0518	12:59:30	+05:18:00	5	5m	star to W of galaxy
93	COMP			↑		
94	13133p0818	13:13:18	+08:18:00	5	5m	H α
95	N5059	13:14:24	+08:06:00	5	5m	
96	COMP			↑		
97	N4151	12:08:01	+39:41:02	6	5m	AGN
98	COMP			↑		
99	H243	13:14:00.7	+29:21:49	6	3m	
100	COMP			↑		
101	N5548	14:15:43.5	+25:22:09	6	5m	
102	J13153p3205	13:15:20	+32:05:42	3	5m	H α
103	COMP			↑		
104	J13158p2825	13:15:48.7	+28:25:48	3	5m	
105	COMP			↑		
106	J13178p2713	13:17:45.7	+27:13:01	3	5m	H α
107	COMP			↑		
108	J13181p3157	13:18:08	+31:57:33	3	5m	H α
109	COMP			↑		
110	J13183p2837	13:18:20.3	+28:37:06	3	5m	
111	COMP			↑		
112	J13199p2814	13:19:58.4	+28:14:47	3	5m	nice H α
113	COMP			↑		
114	J13204p2618	13:20:23.5	+26:18:34	3	5m	H α
115	COMP			↑		
116	J13208p3045	13:20:48.6	+30:45:26	3	5m	
117	COMP			↑		
118	J13211p2952	13:21:08	+29:52:13	3	5m	H α
119	COMP			↑		
120	J13216p3159	13:21:36.6	+31:59:50	3	5m	

60 inch Telescope Log

Observer: P BerlinclPI: J. HuchraSpectrograph: FASTGrating: 300Date: 4/4/94Page: 2886

Number	Object	R. A.	Dec.	L/R	Exp	Comments
121	COMP			↑		
122	J16209p2737	16:20:57.5	+27:31:45	3	5m	
123	COMP			↑		
124	J16221p2720	16:22:09	+27:20:54	3	5m	
125	COMP			↑		
126	J16233p3015	16:23:18.2	+30:15:45	3	5m	
127	COMP			↑		
128	J16242p2639	16:24:13.9	+26:39:53	3	2m	This object is a star *
129	COMP			↑		no sign of nebulosity
130	J16244p3229	16:24:29.2	+32:29:35	3	5m	H α in vicinity
131	COMP			↑		
132	J16254p3234S	16:25:26.1	+32:34:21	3	2m	North comp a star; a star *
133	COMP			↑		
134	J16270p2749	16:27:00.3	+27:49:52	3	5m	
135	COMP			↑		
136	J16283p3248N	16:28:20.7	+32:48:37	3	5m	H α
137	J16283p3248S	16:28:20.8	+32:48:27	3	1m	a star * μ W.
138	COMP			↑		
→ 139	J16297p2651	16:29:44.6	+26:51:23	3	5m	
140	COMP			↓		
→ 141	J16297p2651	"	"	3	5m	
142	COMP			↑		
143	J16331p2837	16:33:08.7	+28:37:50	3	5m	
144	COMP			↑		
145	J16332p2642	16:33:14.4	+26:42:36	3	5m	
146	J16333p2642	16:33:17.7	+26:42:22	3	5m	
147	COMP			↑		
148	J16342p2634	16:34:12	+26:34:10	3	5m	
149	COMP			↑		
150	J16343p2957	16:34:19.8	+29:57:23	3	5m	H α , superposed star

60 inch Telescope Log

Observer: Perry BerlindPI: J. HuchraSpectrograph: FASTGrating: 300Date: 4/5/94Page: 2886

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	BIAS					clouds to west
12-21	FLAT				0.1s	3" slit
22-31	FLAT				0.3s	1.5" slit for Nelson bin x2
32	COMP			↓		3" slit
34	67m978	08:48:33.3	+11:56:39	10	2m	3" slit bin x1
35	67m978	"	"	10	2m	1.5" slit
36	67m1135	08:48:35.5	+12:29:28	10	2m	
37	67m1016	08:48:33.1	+11:59:32	10	2m	
38	67m1074	08:48:28.6	+12:03:59	10	2m	
39	67m1316	08:48:05.6	+11:46:25	10	2m	
40	67m721	08:48:05.6	+11:46:25	10	4m	
41	67m288	08:48:58.2	+12:02:40	10	4m	
42	67m277	08:48:58.1	+12:01:27	10	4m	1.5" slit
43	COMP	"	"	↓	20s	1.5" slit
44	67m277	08:48:58.1	+12:01:27	10	4m	3" slit
45	07585p0924	07:58:30	+09:24:00	1	5m	
46	07599p0939	07:59:54	+09:39:00	↓	5m	
47	07597p0944	07:59:42	+09:44:00	↑	5m	
48	COMP			↑	5m	15R
49	J09259p2740	09:25:57	+27:40:28	3	5m	15R Survey
50	COMP			↑		
51	J09264p2634	09:26:25.4	+26:34:32.6	3	5m	nice H _α
52	COMP			↑		
53	J09265p2822	09:26:31.5	+28:22:56	3	5m	H _α
54	COMP			↑		
55	J09265p2729	09:26:32.1	+27:29:10	3	5m	
56	COMP			↑		
57	J09266p2635	09:26:38.89	+26:35:09.6	3	10m	H _α
58	COMP			↑		
59	J09270p2750	09:27:03.1	+27:50:43	3	5m	int?

60 inch Telescope Log

Observer: P. Berling

PI: J. Huchra

Spectrograph: FAST

Grating: 300

Date: 4/5/94

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
60	COMP			↑		
61	J09273p2650	09:27:22.8	+26:50:13	3	5m	
62	COMP			↑		
63	J09276p2627	09:27:41.1	+26:27:02	3	5m	H _α
64	COMP			↑		
65	J09281p2623	09:28:06.6	+26:22:59.8	3	5m	
66	COMP			↑		
67	J09282p2624	09:28:13.95	+26:24:13.1	3	5m	
68	COMP			↑		
69	J09285p2723	09:28:34.6	+27:23:60	3	5m	
70	COMP			↑		
71	J09286p2644	09:28:39.9	+26:44:32.3	3	5m	
72	COMP			↑		
73	J09288p2732	09:28:52.3	+27:32:18	3	5m	
74	COMP			↑		
75	J09290p2659	09:29:02.1	+26:59:02	3	5m	
76	J09290p2657	09:29:05.4	+26:57:14	3	5m	
77	COMP			↑		
78	12167p0634	12:16:42	+06:34:00	5	5m	3C 273 H _α
79	12167p0635	12:16:42	+06:35:00	5	5m	
80	COMP			↑		
→ 81	12153p0609	12:15:18	+06:09:00	5	10m	} garbage why?? good emission
→ 82	COMP			↑		
83	12153p0609	"	"	5	10m	
84	U 07809	12:36:06	+01:44:00	5	5m	H _α
85	COMP			↑		
86	12367p0142	12:36:42	+01:42:00	5	10m	
87	COMP			↑		
88	12371p0101	12:37:06	+01:01:00	5	5m	
89	COMP			↑		

60 inch Telescope Log

Observer: P. BarlowPI: J. HuchraSpectrograph: FASTGrating: 300Date: 4/5/94Page: 2890

Number	Object	R. A.	Dec.	L/R	Exp	Comments
90	12388 m0247	12:38:48	-02:47:00	S	5m	H+
91	COMP			↑		
92	12404 p0357	12:40:24	+03:57:00	S	5m	
93	COMP			↑		
94	test			-		
95	12406 p0351	12:40:36	+03:51:00	S	5m	H+
96	12408 p0349	12:40:48	+03:49:00	S	5m	
97	COMP			↑		
98	12410 p0743	12:41:00	+07:43:00	S	5m	H+
99	12406 p0740	12:40:36	+07:44:00	S	5m	H+
100	COMP			↑		thin cloud
101	U7912	12:41:54	+03:48:00	S	5m	
102	U7912B	12:41:54	+03:48:00	S	5m	
103	12414 p0353	12:41:24	+03:53:00	S	5m	
104	COMP			↑		increasing clouds
105	U7909W	12:41:48	+04:42:00	S	5m	H+
106	U7909E	12:41:48	+04:42:00	S	5m	H+
107	COMP			↑		
108	12493 m0148	12:49:18	-01:48:00	S	5m	H+
109	COMP			↑		
110-11	12505 p0757	12:50:30	+07:57:00	S	5m	
112	COMP			↑		
113	12566 p0829	12:56:06	+08:29:00	S	5m	
114	COMP			↑		clouds, clouds, clouds
115	N4151	12:08:01	+39:41:02	6	5m	
116	COMP			↑		
117	N4486B	12:28:00	+12:45:59	0	5m	
118	COMP			↑		
119	H243	13:14:00.7	+29:21:49	6/0	3m	
120	COMP			↑		

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300Date: 4/5/94Page: 2891

Number	Object	R. A.	Dec.	L/R	Exp	Comments
121	N5548	14:15:43.5	+25:22:01	6	5m	
122	COMP			↑		
123	H244	13:21:19	+36:23:39	0	3m	
124	COMP			↑		
125-26	SN1994E	13:27:47	+47:26:59.1	2	15m	SN
127	COMP			↑		
128	J13001p2927	13:00:06.7	+29:27:44	3	5m	ISR
129	COMP			↑		
130	J13003p2733	13:00:19.3	+27:33:12	3	5m	
131	COMP			↑		
132	J13004p2920	13:00:21.3	+29:20:11	3	5m	Hd
133	COMP			↑		
134	J13006p2860	13:00:38.8	+28:00:50	3	5m	
135	J13007p2759	13:00:40.97	+27:59:46	3	5m	
136	J13007p2757	13:00:42.9	+27:57:46	3	5m	
137	COMP			↑		
138	J13017p2955	13:01:44	+29:55:35	3	5m	Hd - nice
139	COMP			↑		
140	J13020p2739	13:02:01.2	+27:39:09	3	5m	
141	COMP			↑		
142	J13033p3119	13:03:15.1	+31:19:45	3	5m	
143	COMP			↑		
144	J13042p2811	13:04:12.9	+28:11:35	3	5m	
145	COMP			↑		
146	J13043p2901	13:04:18.1	+29:01:45	3	5m	
147	COMP			↑		
148	15317p0716	15:31:42	+07:16:00	1	5m	CFA Redshift Survey
149	15328p0718	15:32:48	+07:18:00	1	5m	Hd
150	COMP			↑		
151	15330p0628	15:33:00	+06:28:00	1	5m	West comp

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300Page: 2892Date: 4/5/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
152	15334p0614	15:33:24	+06:14:00		5m	
153	COMP			↑		
154	15403p0758	15:40:18	+07:58:00		5m	H _α
155	COMP			↑		
156	15415p0800	15:41:30	+08:00:00		5m	
157	COMP			↑		
158	15425p0237	15:42:30	+02:37:00		5m	
159	COMP			↑		
160	15428p0519	15:42:48	+05:19:00		5m	
161	COMP			↑		
162	15432p0234	15:43:12	+02:34:00		5m	H _α
163	15435p0251	15:43:30	+02:51:00		5m	H _α - thank you
164	COMP			↑		
165	15433p0717	15:43:18	+07:17:00		5m	H _α
166	COMP			↑		
167	15435p0518	15:43:30	+05:18:00		5m	
168	COMP			↑		
169	15436p0322	15:43:36	+03:22:00		5m	H _α
170	COMP			↑		
171	15437p0446	15:43:42	+04:46:00		5m	H _α
172	COMP			↑		
173	15460p0717	15:46:00	+07:17:00		5m	H _α
174	15477p0720	15:47:42	+07:20:00		5m	twilight
175	COMP			↑		
176-185	BITS				0s	

60 inch Telescope Log

Observer: Perry BerlinPI: J. HuchraSpectrograph: FASTGrating: 300Page: 2893Date: 4/6/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	BIAS					circus all over
11-20	FLAT				0.6s	3" slit bin x 2
21-30	FLAT				0.3s	1.5" slit bin x 1
31	67m488	08:47:28	+12:02:37	10	1m	3" slit bin x 1
32	COMP				10s	3" slit
33	67m488	"	"	10	1m	1.5" slit ↓
34	67m277	08:46:37	+12:15:32	10	4m	
35	67m1001	08:48:24.3	+11:58:28	10	4m	
36	67m657	08:47:454	+12:19:21	10	6m	
37	67m1034	08:48:34.5	+12:00:38	10	6m	
38	67m1270	08:49:05	+12:01:02	10	6m	
39	67m1607	08:49:37.2	+12:02:02	10	6m	
40	COMP			↑	20s	
41	67m445	08:47:16.5	+11:36:52	10	6m	
42	67m1186	08:48:46.1	+11:46:28	10	6m	
43	67m1429	08:49:19.5	+11:52:43	10	6m	
44	67m1589	08:49:34.6	+11:54:45	10	6m	
45	67m1231	08:48:45.3	+11:56:45	10	6m	seems 1-2"; thin cloud
46	67m1219	08:48:00	+11:59:00	10	6m	
47	67m1030	08:48:00	+11:59:00	10	6m	08:48:41 +12:01:02
48	67m1030	"	"	10	6m	3" slit ↓
49	COMP			↑		bin x 1
50	08235p0445	08:23:30	+04:45:00	1	5m	bin x 2 H _α
51	COMP			↑		
52	10275p0415EW	10:27:30	+04:15:00	1	7m	both E+W comps
53	COMP			↑		
54	10281p0458E	10:28:06	+04:58:00	1	5m	East Comp H _α
55	10281p0458W	10:28:06	+04:58:00	1	5m	West Comp H _α
56	COMP			↑		
57	10308p0723S	10:30:48	+07:23:00	1	5m	South Comp strong H _α !!!

#48 NOT REDUCED 1.5" slit

#10 = Caldwell

60 inch Telescope Log

Observer: P. BerlindSpectrograph: FASTGrating: 300Page: 2894PI: J. HuchraDate: 4/6/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
58	10308p0723N	10:30:48	+07:23:00	B	5m	Northcamp H _a !!!
59	COMP			↑		
60	10323p0504W	10:32:18	+05:04:00	1	3m	West Camp
61	10323p0504E	10:32:18	+05:04:00	1	5m	
62	COMP			↑		
63	10393p0405W	10:39:18	+04:05:00	1	3m	
64	10393p0405E	10:39:18	+04:05:00	1	5m	
65	COMP			↑		
66	N3349	10:41:12	+07:01:00	1	3m	H _a
67	10412p0701	10:41:12	+07:01:00	1	5m	H _a
68	COMP			↑		
69	10258p0401	10:25:48	+04:01:00	1	5m	
70	COMP			↑		
71	10445p0732	10:44:30	+07:32:00	1	5m	"B"
72	10445p0730	10:44:30	+07:30:00	1	5m	TV getting bad
73	COMP			↑		
74-75	12405m0100	12:40:30	-01:00:00	5	5m	6712 H _a
76	COMP			↑		
77-78	12365m0215	12:36:30	-02:15:00	5	5m	H _a
79	COMP			↑		
80	12461p0106	12:46:06	+01:06:00	5	5m	H _a
81	COMP			↑		
82	12495p0649	12:49:30	+06:49:00	5	5m	severe noise on guide-tv
83	COMP			↑		can hardly see stars
84	12515m0114	12:51:30	-01:14:00	5	5m	
85	COMP			↑		delay for +10% TV
86	13108p0712	13:10:48	+07:12:00	5	5m	
87	13112p0715	13:11:12	+07:15:00	5	5m	H _a
88	13114p0713	13:11:24	+07:13:00	5	5m	
89	COMP			↓		

H 66 NOT reduced

60 inch Telescope Log

Observer: P. BerlindPI: J HuckraSpectrograph: FASTGrating: 300Date: 4/6/94Page: 2895

Number	Object	R.A.	Dec.	L/R	Exp	Comments
90	13113p0713	13:11:18	+07:13:00	S	5m	H α
91	13112p0707	13:11:12	+07:07:00	S	5m	H α
92	COMP			↑		
93	13139p0715	13:13:54	+07:15:00	S	5m	
94	13138p0719	13:13:48	+07:19:00	S	5m	
95	13134p0735	13:13:24	+07:35:00	S	5m	H α
96	COMP			↑		
97	13120p0318	13:12:00	+03:18:00	S	5m	H α - strong
98	13125p0317	13:12:30	+03:17:00	S	2m	
99-100	U 8324	13:12:36	+03:18:00	S	5m	6700 H α
101	COMP			↑		
102	12534m0105	12:53:24	-01:05:00	S	5m	
103	COMP			↑		
104	12544p0420	12:54:24	+04:20:00	S	5m	H α
105	COMP			↑		
106	12592p0333	12:59:12	+03:33:00	S	5m	H α
107	COMP			↑		clouds
108	13193p0024	13:19:48	+00:24:00	S	5m	delay for H α
109	COMP			↑		
110	SN1994E	13:27:47	+47:26:59	- 2	15m	clouds
111	COMP			↑		
112	SN1994E	"	"	2	15m	
113	COMP			↓		
114-115	H244	13:21:19	+36:23:39	2/0	5m	
116	SN1994D	12:31:31	07:58:30	2	15m	
117	COMP			↓		
118	SN1994D	"	"	2	10m	clearing
119	COMP			↑		
120	J13062p2741	13:06:11.2	+27:41:58	3	3m	c
121	COMP			↑		

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300Page: 2896Date: 4/6/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
122	J13066p2752	13:06:36.6	+27:52:21	3	5m	H α
123	COMP			↑		
124	J13080p2607	13:08:10	+26:07:40	3	5m	H α
125	COMP			↑		
126	J13082p2749	13:08:09.2	+27:49:33	3	5m	
127	COMP			↑		
128	J13089p2843	13:08:58	+28:43:59	3	5m	H α
129	COMP			↑		
130	J13094p2824	13:09:26.5	+28:24:55	3	5m	H α
131	COMP			↓		
132	J13094p2818	13:09:21.7	+28:18:40	3	5m	
133	J13094p3055	13:09:21.9	+30:55:20	3	5m	H α
134	J13099p3054	13:09:57.3	+30:54:46	3	5m	H α
135	COMP			↑		
136	J13100p3002	13:10:02.9	+30:02:35	3	5m	
137	COMP			↑		
138	J13113p2947	13:11:18	+29:47:57	3	5m	
139	COMP			↑		
140	15175p0536	15:17:30	+05:36:10	1	5m	H α
141	15167p0541	15:16:42	+05:41:10	1	5m	H α
142	COMP			↑		
143	15190p0640	15:19:10	+06:40:10	1	5m	H α
144	COMP			↑		
145	15192p0354	15:19:12	+03:54:10	1	5m	H α et al!
146	15196p0356	15:19:36	+03:56:10	1	3m	H α
147	COMP			↑		
148	15255p0750	15:25:30	+07:50:10	1	5m	H α
149	15263p0732	15:26:18	+07:32:10	1	5m	H α
150	15263p0734	15:26:18	+07:34:10	1	3m	
151	COMP			↓		

60 inch Telescope Log

Observer: J. PetersPI: J. Huchra et alSpectrograph: FESTGrating: 300Page: 2898Date: 4/7/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1	Comp	TEST	TEST		10 ³	TEST
2	Comp			↓	10 ³	
3	AGK2P14783	07 17 48	15 01 00	0	10 ³	
4	Comp			↓	10 ³	
5	AGK2P43928	09 49 18	43 42 00	0	5 ³	
6	Comp			↓	10 ³	Thin Clouds Around
7	BDP82015	08 13 01	07 46 28	0	2 ^M	
8	Comp			↓	10 ³	
9	07144P5227	07 14 24	52 27 00	1	10 ^M	
10	Comp			↓	10 ³	
11	07340P1001	07 34 00	10 01 00	1	10 ^M	
12	07340P1001	↓	↓	1	10 ^M	
13	Comp			↓	10 ³	
14	07352P1018	07 35 12	10 18 00	1	10 ³	
15	Comp			↓	10 ³	
16	07362P1344	07 36 12	13 44 00	1	10 ^M	STAR IN SLIT East of 0
17	Comp			↓	10 ³	
18	07364P0914	07 36 24	09 14 00	1	15 ^M	I THINK THERE IS SOMETHING
19	Comp			↓	10 ³	ELSE IN SLIT ALSO
20	07558P1218	07 55 48	12 18 00	1	10 ^M	
21	Comp			↓	10 ³	
22	07580P0948	07 58 00	09 48 00	1	10 ^M	
23	Comp			↓	10 ³	
24	08005P6141	08 00 30	61 41 00	1	15 ^M	
25	Comp			↓	10 ³	
26	07352P1018	07 35 12	10 18 00	1	10 ^M	
27	Comp			↓	10 ³	
28	10020P4654	10 02 00	46 54 00	1	15 ^M	
29	Comp			↓	10 ³	
30	10028P5225	10 02 48	52 25 00	1	10 ^M	

22 looks like 2 objects on DSS. Only 1 was extracted 8/31/98 st

60 inch Telescope Log

Observer: J. PetersPI: J. Huchra et al.Spectrograph: Fu5TGrating: 300Page: 4899Date: 4/7/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
31	Comp			↓	10 ^s	
32	10048 P0419	16 04 48	04 19 00	↓	10 ^s	
33	Comp			↓	10 ^s	
34	J12522 P2925	12 52 15	29 25 42	3	15 ^m	
35	Comp			↓	10 ^s	
36	J12533 P2812	12 53 18	28 12 39	3	15 ^m	
37	↓	↓	↓	3	10 ^m	
38	Comp			↓	10 ^s	
39	60140	11 34 27	30 04 35	0	2 ^m	
40	Comp			↓	10 ^s	
41	N4151	12 08 01	39 41 02	6	30 ^s	
42	Comp			↓	10 ^s	
43	Feige 67	12 39 18	17 47 24	0	2 ^m	
44	Comp			↓	10 ^s	
45	HE 44	13 21 19	36 23 38	0	2 ^m	Thin clouds
46	Comp			↓	10 ^s	↓
47	SN1994I	13 27 47	47 26 59	2	15 ^m	
48	Comp			↓	10 ^s	
49	J12530 P2628	12 53 03	26 28 35	3	10 ^m	
50	Comp			↓	10 ^s	
51	RX1232 P1236A	12 32 26	12 36 47	1	5 ^m	
52	Comp			↓	10 ^s	
53	Feige 98	14 36 04	27 42 28	0	5 ^m	Thin clouds
54	Comp			↓	10 ^s	
55	N5548	14 15 43	25 22 01	6	5 ^m	lots clouds. Obj in hole
56	Comp			↓	10 ^s	
57	J16349 P2640	16 34 33	26 40 20	3	10 ^m	Thin clouds
58	Comp			↓	10 ^s	↓
59	J16375 P3210	16 37 28	32 10 31	3	10 ^m	
60	Comp			↓	10 ^s	

60 inch Telescope Log

Observer: J. Peters

PI: J. Huchra et al

Spectrograph: FAST

Grating: 300

Date: 4/8/94

Page: 2901

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1	Comp			↓	10 ^s	
2	AGK2P14783	07 17 48	15 01 00	0	10 ^s	
3	Comp			↓	10 ^s	Guide TV is Really
4	AGK2P43928	09 49 18	43 42 00	0	10 ^s	Bad.
5	Comp			↓	10 ^s	
6	07516P1352	07 51 36	13 52 00	1	10 ^m	
7	Comp			↓	10 ^s	Thin clouds + Terrible
8	J09310P2649	09 31 01	26 49 10	3	15 ^m	Guide T.V.
9	Comp			↓	10 ^s	
10	J09312P2632	09 31 16	26 32 58	3	10 ^m	clouded out!
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

60 inch Telescope Log

Observer: J. Peters

PI: J. Huchra et al

Spectrograph: FAST

Grating: 300

Date: 4/8/94

Page: 2901

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1	Comp			↓	10 ^s	
2	AGK2P14783	07 17 48	15 01 00	0	10 ^s	
3	Comp			↓	10 ^s	Guide TV is Really
4	AGK2P43928	09 49 18	43 42 00	0	10 ^s	Bad.
5	Comp			↓	10 ^s	
6	07516P1352	07 51 36	13 52 00	1	10 ^m	
7	Comp			↓	10 ^s	Thin clouds + Terrible
8	J09310P2649	09 31 01	26 49 10	3	15 ^m	Guide T.V.
9	Comp			↓	10 ^s	
10	J09312P2632	09 31 16	26 32 58	3	10 ^m	clouded out!
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

60 inch Telescope Log

Observer: J. PetersPI: J. Huxford et alSpectrograph: FASTGrating: 300Page: 2902Date: 4/9/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1	Comp			↓	10 ^s	Guide TV Full of
2	AGK2P43928	09 49 18	43 42 00	○	10 ^s	Vertical Lines.
3	Comp			↓	10 ^s	
4	Feige 34	10 36 41	43 21 50	○	10 ^s	Thin Clouds
5	Comp			↓	10 ^s	
6	N4151	12 08 01	39 41 02	○	30 ^s	TV NOT Too Bad
7	Comp			↓	10 ^s	
8	N4486B	12 28 00	12 45 59	○	5 ^m	
9	Comp			↓	10 ^s	
10	Feige 56	12 04 13	11 56 55	○	3 ^m	TV getting Bad
11	Comp			↓	10 ^s	1000cps/60"
12	SN1994D	12 31 31	07 58 30	2	15 ^m	
13	Comp			↓	10 ^s	
14	HZ44	13 21 19	36 23 38	○	2 ^m	
15	Comp			↓	10 ^s	
16	SN1994I	13 27 47	47 26 59	2	15 ^m	1000 cps
17	Comp			↓	10 ^s	Wind almost 30mph
18	HZ43	13 14 00	29 21 49	○	5 ^m	Trying To get Thing
19	Comp			↓	10 ^s	done before need
20	N5548	14 15 43	25 22 01	○	5 ^m	To close Name
21	Comp			↓	10 ^s	
22	Feige 67	12 39 18	17 47 24	○	2 ^m	
23	Comp			↓	10 ^s	TV Guider So Bad I
24	J12535P2745	12 53 35	27 45 30	3	15 ^m	can't see obj @ Times
25	J12535P2745	↓	↓	3	10 ^m	To guide on it,
26	Comp			↓	10 ^s	Stopped 12:30 AM, TV
27	J12539P2811	12 53 54	28 11 09	3	15 ^m	so Bad can't see obj.
28	Comp			↓	10 ^s	Not To Bad @ 1:30 AM
29	15410P0804	15 41 00	08 04 00	1	10 ^m	Clouded out @ 1:50 AM
30	Comp			↓	10 ^s	

60 inch Telescope Log

Observer: Perry BerlindPI: J. HuchraSpectrograph: FASTGrating: 300/3" slitPage: 2904Date: 4/10/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0s	lots of low level clouds
11-25	FLAT				0.1s	
26	COMP		test	-	10s	clouds
27	07052p1314W	07:05:12	+13:14:10	1	5m	clouds
28	07052p1314E	07:05:12	+13:14:10	1	5m	clouds
29	COMP			↓		
30	07052p1314E	07:05:12	+13:14:10	1	5m	6725 H _α
31	07052p1314S	07:05:12	+13:14:10	1	5m	H _α
32	07052p1314W	07:05:12	+13:14:10	1	5m	clear - repeat of #27
33	RXJ9076p3342	09:07:34	+33:42:12	1	5m	more cloud
34	COMP			↑		
35	J09294p2731	09:29:28.7	+27:31:04	3	5m	ISR Survey
36	COMP			↑		
37	J09302p2807	09:30:12	+28:07:10	3	5m	H _α
38	COMP			↑		
39	J09317p2732	09:31:46.1	+27:32:31	3	5m	cnts?
40	J09318p2725	09:31:53.9	+27:25:54	3	5m	
41	COMP			↓		
42	J09318p2725	"	"	3	5m	seeing 1-2", clear
43	J09324p2622	09:32:28.83	+26:22:39.6	3	5m	
44	COMP			↑		
45	J09346p2713	09:34:38.5	+27:13:10	3	5m	
46	J09350p2716	09:35:02.4	+27:16:14.5	3	5m	
47	COMP			↑		
48	J09351p2813	09:35:01.7	+28:13:14	3	5m	
49	J09351p2715	09:35:11.2	+27:15:37	3	5m	
50	J09358p2715	09:35:50.8	+27:15:55	3	5m	star on slit E of galaxy
51	COMP			↑		
52	J09352p2630	09:35:12.4	+26:30:10.7	3	5m	
53	COMP			↑		

60 inch Telescope Log

Observer: P BerlinPI: JHuchraSpectrograph: FASTGrating: 300Date: 4/10/94Page: 2905

Number	Object	R. A.	Dec.	L/R	Exp	Comments
54	N4151	12:08:01	+39:41:02	6	5m	
55	COMP			A		no file saved
55	G0140	11:34:27.8	+30:04:35	6/0	2m	
56	COMP			↑		
57	SN1994D	12:31:31	+07:58:30	2	10m	
58	COMP			↑		
59	HZ44	13:21:19.1	+36:23:38	2/0	3m	
60	COMP			↑		
61	SN1994I	13:27:47.6	+47:26:59	2	15m	
62	COMP			↑		
63	SN1994E	"	"	2	15m	
64	COMP			↑		
65	12542p0804	12:54:12	+06:04:10	5	5m	H α 3C 273
66	COMP			↑		
67-68	12186p0051	12:18:36	+00:51:00	5	5m	6600 H α ! ~6600 Å
69	COMP			↑		seeing getting bad 2-3"
70-1	12544p0825	12:54:24	+08:25:00	5	5m	Na 6300
72	COMP			↑		
73-74	12594p0322	12:59:24	+03:22:00	5	5m	H α
75	COMP			↑		
76	13043p0743	13:04:18	+07:43:00	5	5	H α
77	13032p0749N	13:03:12	+07:49:00	5	5m	"B" on chart. This object
78	13032p0749S	13:03:12	+07:49:00	5	5m	came up closer to "A"
79	COMP			↑		check coords for these 3
80	13192p0028	13:19:12	+0:28:00	5	5m	H α
81	COMP			↑		
82-84	13151m0044	13:15:06	-00:44:00	5	5m	
85	COMP			↑		
86	13281p0748	13:28:06	+07:48:00	5	5m	H α
87	13278p0745	13:27:48	+07:45:00	5	5m	

60 inch Telescope Log

Observer: P BerlinPI: J HuchraSpectrograph: FASTGrating: 300Date: 4/10/94Page: 2906

Number	Object	R. A.	Dec.	L/R	Exp	Comments
88	COMP			↑		
89	NS192	13:28:18	-01:31:00	5	5m	H α
90	NS196	13:28:48	-01:21:00	5	5m	
91	NS197	13:28:54	-01:26:00	5	5m	
92	COMP			↑		
93	RXJ1229p1148	12:29:00.9	+11:48:04.7	1	3m	stellar
94	COMP			↕		
95	RXJ1229p1148	"	"	1	5m	
96	J13129p2628	13:12:59.7	+26:28:23	3	5m	ISR broad H α S γ ?
97	COMP			↑		weak H β , OIII
98	J13128p2752	13:12:52	+27:52:47	3	5m	H α
99	COMP			↑		
100	J13131p3011	13:13:10.2	+30:11:28	3	5m	H α
101	J13133p3033	13:13:20.7	+30:33:32	3	5m	H α
102	COMP			↑		
103	J13147p2606	13:14:47.2	+26:06:25	3	5m	H α
104	COMP			↑		
105	J13146p3013	13:14:39.5	+30:13:28	3	5m	H α
106	J13141p3000	13:14:07.5	+30:00:52	3	5m	H α
107	COMP			↑		
108	J13138p2946	13:13:52.1	+29:46:28	3	5m	H α
109	COMP			↑		
110	J13150p2802	13:15:02.3	+28:02:09	3	5m	H α
111	COMP			↑		
112-113	J13150p3054	13:15:00	+30:54:16	3	5m	6705
114	J13151+2938	13:15:09.5	+29:38:08	3	5m	H α
115	COMP			↑		
116	J13158p2633	13:15:51.3	+26:33:21	3	5m	H α
117	COMP			↑		
118	J13203p3026	13:20:23.2	+30:26:40	3	5m	E+W Comps E-H α

60 inch Telescope Log

Observer: P. BertlandPI: JHuchraSpectrograph: FASTGrating: 300Date: 4/10/94Page: 2907

Number	Object	R. A.	Dec.	L/R	Exp	Comments
119	COMP			↑		
120	RXJ1451p1436	14:15:08.2	+14:36:50.4	1	5m	Abell 1978
121	COMP			↓		
122	RXJ1451p1436	"	"	1	10m	
123	15104p0442	15:10:24	+04:42:00	1	3m	A
124	15106p0441	15:10:36	+04:41:00	1	5m	B
125	15107p0440	15:10:42	+04:40:00	1	3m	D
126	COMP			↓		
127	15108p0440	15:10:48	+04:40:00	1	5m	E
128	15107p0428C1	15:10:42	+04:28:00	1	3m	C1 H α
129	15107p0428C2	15:10:42	+04:28:00	1	5m	C2
130	COMP			↑		
131	15070p0504	15:07:00	+05:04:00	1	5m	H α
132	COMP			↑		
133	15165p0523	15:16:30	+05:23:00	1	5m	
134	15170p0526	15:17:00	+05:26:00	1	5m	H α
135	COMP			↑		
136	15191p0746	15:19:07.9	+07:45:48	1	5m	
137	COMP			↑		
138	15218p0501	15:21:48	+05:01:00	1	3m	strong H α - broad S γ ?
139	COMP			↑		
140	15230p0459	15:23:00	+04:59:00	1	5m	H α
141	15226p0500	15:22:36	+05:00:00	1	3m	dome ran away
142	COMP			↑		
143	15533p0459	15:53:18	+04:59:00	1	5m	H α
144	COMP			↑		
145	15558p0305	15:55:48	+03:05:00	1	3m	
146	COMP			↑		dome ran away again
147	15597p0714	15:59:42	+07:14:00	1	3m	H α
148	COMP			↑		

60 inch Telescope Log

Observer: Perry BerlindPI: J. HuchraSpectrograph: FASTGrating: 300L, 3" slitPage: 2909Date: 4/11/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BETS				0s	clouds to west + south
11-25	FLAT				0.1s	
26-30	HD52971	06:57:51.14	+27:13:42.4	0	15s	
31	COMP			↑		
32-36	AGK2p14783	07:17:47.4	+14:59:37.7	0	60s	
37	COMP			↑		
38-42	AGK2p43928	09:49:20.96	+43:42:07.5	0	30s	
43	COMP			↑		
44	07364p0914	07:36:24	+09:14:10	1	5m	7.15 Hz
45	COMP			↑		
46	07362p1344	07:36:12	+13:44:10	1	5m	Hz
47	COMP			↑		
48	07393p1217	07:39:18	+12:17:10	1	5m	Hz
49	COMP			↑		guide TV noise is getting bad
50	07416p1005	07:41:36	+10:05:10	1	5m	Hz can't see a thing!
51	COMP			↑		
52	07448p1022E	07:44:48	+10:22:10	1	5m	Hz
53	07448p1022W	07:44:48	+10:22:10	1	5m	pix 2240
54	COMP			↓		
55	07448p1022W	"	"	1	5m	Hz
56	J09324p3031	09:32:09.2	+30:31:49	3	5m	TV is terrible!!!!!!
57	COMP			↑		
58	J09457p3014	09:45:44.9	+30:14:38	3	5m	
59	COMP			↑		
60	J09282p3011	09:28:16.9	+30:11:27	3	5m	
61	COMP			↑		
62	J09280p3002	09:28:01.1	+30:02:11	3	3m	
63	COMP			↑		
64	J09274p2959	09:27:25.7	+29:59:09	3	3m	
65	COMP			↑		

60 inch Telescope Log

Observer: P. BerlindPI: J HuchraSpectrograph: FASTGrating: 3002Date: 4/11/94Page: 2910

Number	Object	R.A.	Dec.	L/R	Exp	Comments
66	J09380p2956	09:38:00.4	+29:56:36	3	5m	
67	COMP			↑		
68	J09412p2956	09:41:14.8	+29:56:23	3	5m	
69	COMP			↑		
70	J09259p2927	09:25:56.2	+29:39:27	3	5m	H _α
71	COMP			↑		
72	J09279p2947	09:27:54.4	+29:47:29	3	3m	
73	COMP			↑		
74	J09283p2942	09:28:18	+29:42:20	3	3m	
75	COMP			↑		tu comes + goes
76	J09318p2947	09:31:53.1	+29:47:38	3	3m	
77	COMP			↑		
78	J09346p2949	09:34:40	+29:49:09	3	5m	
79	COMP			↑		
80	J09354p2948	09:35:26.4	+29:48:44	3	3m	H _α
81	COMP			↑		
82	J09445p2948	09:44:32.6	+29:48:06	3	5m	
83	COMP			↑		
84	U0641	11:02:00	+05:28:00	1	5m	H _α
85	11025p0813	11:02:30	+08:13:00	1	5m	H _α
86	COMP			↑		
87	N3705X	11:27:33	+09:33:12	2	2m	N3705 SN? no.
88	N3705	"	"	2	2m	nucleus of galaxy
89	COMP			↑		possible SN. nope.
90	11046p0640	11:04:36	+06:40:00	1	5m	H _α ↑ requested by Brian/Peter
91	I669	11:04:36	+06:40:00	1	3m	no coords on chart!
92	COMP			↑		U6174
93	11050p0532	11:05:00	+05:32:00	1	5m	H _α
94	COMP			↑		
95	11053p0743	11:05:18	+07:43:00	1	3m	H _α

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300R, 3" slitPage: 2911Date: 4/11/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
96	11053p0745	11:05:18	+07:45:00	1	3m	
97	COMP			↑		dome ran away
98	11058p0606	11:05:48	+06:06:00	1	3m	
99	COMP			↑		
100	11078p0805	11:07:48	+08:05:00	1	5m	H _α
101	COMP			↑		
102	U66233	11:08:48	+07:11:00	1	3m	H _α
103	COMP			↑		
104	HS1251p245	12:51:17.3	+24:50:39	8	10m	QSO ID's for M. Eluz
105	COMP			↑		H _α @ 7015 Å
106	HS1231p220	12:31:11.5	+22:01:18	8	5m	delay to sort out charts
107	COMP			↑		finders + cards all mixed up
108	HS1254p245	12:54:11.9	+24:51:32	8	5m	75 cts - weak
109	COMP			↑		clouds moving, in - thing
110	HS1254p213	12:54:49.8	+21:36:30	8	10m	
111	COMP			↑		TU getting really bad again.
112	HS1255p234	12:55:40.9	+23:45:32	8	10m	Can't see object, slit, or
113	COMP			↑		field stars
114	HS1255p231	12:55:52.3	+23:11:50	8	5m	100 cts - weak clouds
115	COMP			↑		
116	HS1256p241	12:56:25.1	+24:11:39	8	10m	QSO! decant spectra!
117	COMP			↑		
118	HS1258p243	12:58:15.8	+24:38:16	8	5m	
119	COMP			↑		
120	HS1259p220	12:59:28.5	+22:10:02	8	5m	cool
121	COMP			↑		
122	HS1300p203	13:00:32.6	+20:57:27	8	10m	clouds
123	COMP			↑		
124	HS1301p225	13:01:09	+22:56:22	8	5m	
125	COMP			↑		

60 inch Telescope Log

Observer: P. BerlindPI: J HuchraSpectrograph: FASTGrating: 300RDate: 4/1/94Page: 2912

Number	Object	R. A.	Dec.	L/R	Exp	Comments
126	HS1301p243	13:01:49.1	+24:33:30	8	5m	thin clouds present
127	COMP			↑		
128	HS1305p234	13:05:57.8	+23:47:29	8	5m	
129	COMP			↑		
130	HS1309p205	13:09:16.4	+20:55:21	8	10m	
131	COMP			↑		
132	HS1309p224	13:09:45.5	+22:41:09	8	10m	clouds coming
133	COMP			↑		
134	HS1312p240	13:12:19.4	+24:04:18	8	5m	
135	COMP			↑		
136	HS1312p210	13:12:51.7	+21:10:49	8	3m	
137	COMP			↑		
138	HS1313p214	13:13:29.7	+21:41:09	8	10m	
139	COMP			↑		
140	HS1316p215	13:16:50.4	+21:59:12	8	5m	
141	COMP			↑		seeing 1-2"
142	HS1317p205	13:17:27.5	+20:50:24	8	7m	
143	COMP			↑		
144	HS1319p245	13:19:47.2	+24:55:29	8	3m	
145	COMP			↑		
146	HS1320p243	13:20:18.7	+24:37:39	8	3m	
147	COMP			↑		
148	HS1321p235	13:21:25.2	+23:56:28	8	2m	
149	COMP			↑		
150	HS1323p222	13:23:28.2	+22:20:18	8	10m	clouds... getting worse
151	COMP			↑		
152	SN1994I	13:27:47	+47:26:59	2	15m	clouds
153	COMP			↑		
154	SN1994I	"	"	2	15m	clouds
155	COMP			↑		

↑ 120

60 inch Telescope Log

Observer: P. BerlindPI: J. HutchonSpectrograph: FASTGrating: 3000Date: 4/11/94Page: 2913

Number	Object	R. A.	Dec.	L/R	Exp	Comments
156-7	HZ44	13:21:19.1	+36:23:38	0/2	3m	TV real bad again
158	COMP			↑		
159	15572p0251	15:57:12	+02:51:00	1	5m	
160	15573p0248	15:57:18	+02:48:00	1	5m	
161	COMP			↑		
162	15548	14:15:43	+25:22:	6	5m	
163	COMP			↑		
164	F98	14:36:04	+27:42:28	6	3m	
165	COMP			↑		
166	15558p0435	15:55:48	+04:35:00	1	5m	
167	COMP			↓		
168	15558p0435	"	"	1	5m	
169	15456p0605	15:45:36	+06:05:00	1	5m	H+
170	COMP			↑		
171-72	U 10394	16:25:18	-01:40:00	1	5m	H+
173	COMP			↑		
174	J16400p2929	16:40:03	+29:29:27	3	5m	
175	COMP			↑		
176	J16410p3049	16:41:02.3	+30:49:37	3	5m	Ugh! TV goes bad again
177	COMP			↑		
178	J16412p2903	16:41:10.7	+29:03:01	3	5m	
179	COMP			↑		
180	J16479p2906	16:47:58.4	+29:08:28	3	3m	twilight
181	COMP			↑		
182-83	AGK2p24	17:01:05	+24:55:05	0	10s	
184-88	AGK2p24	"	"	0	30s	S:15
189	COMP			↑		
190-199	BIAS				0s	
200	BIAS				0s	

(1)

CCD LOG SHEET

DATE: 12/04/94 PAGE 1 of 2
 OBSERVATORY: FLWO INSTRUMENT: 60" FAST
 OBSERVERS: JANSSEN, FABRIKANT, CALDWELL, BERLIND PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: 1 TAPE FORMAT: FITS
 FOCUS: 8.46.34.0 PA. set to 90° (default) WEATHER: OVERCAST, THIN CLOUDS: A ~ 2 mag

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0001	COMP He-Ne-Ar	600f.	10 s.	23:28	00:32:24		Cloudy!!!!
0001	BIAS						Installed new camera
0001	COMP He-Ne-Ar	600f.	10 s.				to test; put back old one.
0002	BIAS	600f.					Put new COMP lamp
0003	"	"					on; put back old one.
0004	"	"					Put in 600 f. grating
0005	"	"					
0006	"	"					
0007	"	"					
0008	"	"					
0009	"	"					
0010	BIAS	600f.					
0011	COMP He-Ar	600f.	10 s.				
0012	NGC 3978	600f.	900 s.				Clouds overhead and very
0013	COMP He-Ar	600f.	10 s.	00:29	1:39:58	1.20	"
0014	NGC 3978	600f.	900 s.	00:37			
0015	NGC 3978	600f.	900 s.	00:50			
0016	COMP He-Ar	600f.	10 s.	1:			
0017	NGC 3978	600f.	900 s.	1:04		1:26	
0018	COMP He-Ar	600f.	10 s.	1:23			
0019	COMP He-Ar	600f.	900 s.	1:48			
0019	NGC 5608	600f.	900 s.	1:49			
0021	COMP He-Ar	600f.	10 s.				
0022	NGC 5608	600f.	900 s.				
0023	Comp He-Ar	600f.	10 s.				
0024	NGC 5608	600f.	900 s.				
0025	COMP He-Ar	600f.	10 s.				

Non-photometric: lots of clouds: mostly thin, but especially ~~early~~ in the evening also thicker clouds (enough to let brighter stars like Sirius disappear!)

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CCD LOG SHEET

DATE: 13/04/94 PAGE 1 of 2
 OBSERVATORY: FLWO, MT. HOPKINS INSTRUMENT: FAST @ 60"
 OBSERVERS: JANSEN, FABRIKANT, CALDWELL PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: 1 TAPE FORMAT: FITS
 FOCUS: 847.160 P.A. set to 105° WEATHER: CLOUDY, MOSTLY CLEAR, SOMETIMES SUN

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0001	HD 058207 ^{compact}	600 l	10 sec	20:46	+2:33	1.20	
0002	HD 058207	600 l	20 sec	20:52	+2:38	1.22	stowed telescope afterwards: cloud
0003	HD 042886 ^{33"}	600 l	5 sec	22:		1:	
0004	"	"	60 sec	22:33		1:	
0005	"	"	60 sec	22:39		1.18	re-focused after
0006	HD 093102	600 l	80 sec	22:43			
0007	COMP HeNeAr	600 l	10 s.	22:50			
0008	COMP HeNeAr	"	10 s.	22:56		1.19	
0009	1200 + 6439	"	900 s.	22:58	-0:02	1.19	
0010	COMP HeNeAr	"	10 s.	23:13		1.19	
0011	1200 + 6439	"	900 s.	23:15	+0:16	1.19	
0012	COMP HeNeAr	"	10 s.	23:30		1.20	
0013	1200 + 6439	"	900 s.	23:32	+0:33	1.20	
0014	COMP HeNeAr	"	10 s.	23:47		1.20	
0015	COMP HeNeAr	600 l	10 s.	23:53		1.01	
0016	Feige 66	600 l	30 s.	23:55		1.01	Flux standard for spectral
0017	COMP HeNeAr	600 l	10 s.	0:26		1.01	
0018	NGC 4961	"	900 s.	0:30	+0:28	1.01	
0019	COMP HeNeAr	"	10 s.	0:45		1.02	
0020	NGC 4961	"	900 s.	0:47	+0:45	1.02	Last two minutes: cloud
0021	COMP HeNeAr	"	10 s.	1:06		1.03	heavy, making galaxy invisible
0022	NGC 4961	"	900 s.	1:59	+1:58	1.11	comment file angepasst Alle
0023	COMP HeNeAr	"	10 s.	2:14		1.14	Verzerrte images werden automatisch
0024	COMP HeNeAr	"	10 s.	2:20		1.09	
0025	1430 + 1149	"	900 s.	2:24	+0:56	1.09	focus set ab 845950
0026	COMP HeNeAr	"	10 s.	2:39		1.11	
0029	1430 + 1149	"	900 s.	2:41	+1:12	1.11	

New TV-camera success during cloudy nights. If galaxies are no longer (barely) visible, then also impossible to obtain usable spectrum in 15 min. exposure. !

CCD LOG SHEET

DATE: 19/04/94 PAGE 2 of 2
 OBSERVATORY: FLWO, MT. HOPKINS INSTRUMENT: 60" FAST
 OBSERVERS: JANSEN, CALDWELL, FABRICANT PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: 1 TAPE FORMAT: FITS
 FOCUS: 845950 WEATHER: THIN CLOUDS

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0028	COMP HeNeAr	600 l.	10s	2:56		1.14	
0029	1430+1149		900s.	2:57		1.14	
0030	COMP HeNeAr		10s.	3:13		1.17	
0031	COMP HeNeAr		10s.	3:17		1.03	
0032	IC 1144		900s.	3:18	+0:33	1.03	
0033	COMP HeNeAr		10s.	3:34		1.04	
0034	IC 1144		900s	3:34	+0:49	1.04	
0035	COMP HeNeAr		10s.	3:50		1.05	
0036	COMP HeNeAr		10s	3:55		1.02	
0037	NGC 6131		720s	3:56	+0:39	1.02	focus set to 845455
0038	COMP HeArNe		10s.	4:09		1.03	
0039	NGC 6131		720s	4:09	+0:50	1.03	
0040	COMP HeArNe		10s.	4:22		1.04	
0041	COMP HeArNe NGC 6131		720s.	4:23	+1:06	1.04	
0042	COMP HeArNe		10s.	4:36		1.05	
0043	COMP HeArNe		60s.	4:41		1.15	
0044	PS 1708+602		10s	4:42	+0:38	1.15	
0045	COMP HeArNe PS 1708+602		240s	4:47	+0:42	1.15	
0046	HD 136512		30s	4:59	+2:45	1.23	
0047	COMP HeArNe HD 136512		60s	5:01	+2:47	1.23	
0048	HD 136512		60s	5:04	+2:48	1.24	
0049	COMP HeArNe		10s	5:05		1.24	
0050	HD 170829		240s	5:09	-0:18		6 times scanning over
0051	COMP HeArNe		10s	5:14			
0052	-0061 INLAND		0.1s	5:18			
0062	-0076 BIAS		0s.	5:23			
0063							

52 - 60 FLAT
 61 - 76 BIAS
 76 files

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CCD LOG SHEET

DATE: 14/04/93 PAGE 1 of 4
 OBSERVATORY: FLWO MT. HOPKINS INSTRUMENT: 60" FAST
 OBSERVERS: PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: TAPE FORMAT: FITS
 FOCUS: 847390 P.A. set at 170° WEATHER: CLEAR

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0001	BIAS	600 P.	0 S.	16:40			
0015	BIAS	"	0 S.	16:42			LAMPS IN DOME WERE LEFT ON! CHECK IF OK.
0016	INCAND FLAT	"	21 S.	16:52			
0025	INCAND FLAT	"	21 S.	"			
0026	BIAS	"	0 S.	17:18			
00	BIAS	"	0 S.				
0041	SKYFLAT	"	5 S.	19:15		1.00	
0042	SKYFLAT	"	300 S.	19:18		1.00	
0043	HD039003	"	120 S.	19:34	+2:46	1.23	Scanned star 2 hrs across slit
0044	↑ COMP HeArNe	"	10 S.	19:37	+2:52	1.23	Scanned
0045	HD058207	"	120 S.	19:41	+1:22	1.05	Scanned 4 hrs across slit
0046	↑ COMP HeArNe	"	10 S.	19:44	+1:26	1.06	Scanned
0047	HD058003	"	60 S.	19:49	+3:05	1.27	Scanned 1 X across slit
0048	↑ COMP HeArNe	"	10 S.	19:51	+3:07	1.28	
0049	HD058207	"	60 S.	19:54	+1:30	1.07	Scanned 1 X across slit
0050	↑ COMP HeArNe	"	10 S.	19:55	+1:38	1.08	
0051	HD072324	"	120 S.	19:59	+0:34	1.02	Scanned 4 X across slit
0052	↑ COMP HeArNe	"	10 S.	20:02	+0:37	1.02	
0053	HD085503	"	60 S.	20:04	-0:41	1.02	Scanned 1 X across slit
0054	↑ COMP HeArNe	"	10 S.	20:05	-0:39	1.02	
0055	PG0934+554	"	30 S.	20:21	-0:10	1.09	put star in slit for entire exp.
0056	↑ COMP HeArNe	"	10 S.	20:23	-0:06	1.09	focus set at 846815
0057	HD085503 COMP	"	10 S.	20:37	+0:20	1.02	
0058	NGC 2798	"	600 S.		+0:22	1.02	Kennicutt's galaxy: scanned for 60 min back and forth across slit.
0059	↑ COMP HeArNe	"	10 S.	20:44	+0:34	1.02	
0060	NGC 2798	"	600 S.	20:51		1.02	Whole sweep: 42 arcsec
0061	↑ COMP HeArNe	"	10 S.	21:03	+0:54	1.04	

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CCD LOG SHEET

DATE: 14/04/93 PAGE 2 of 4
 OBSERVATORY: FLWD, MT. HOPKINS INSTRUMENT: 60" EAST
 OBSERVERS: JANSEN, FABRICANT PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: TAPE FORMAT: FITS
 FOCUS: 846015 WEATHER: CLEAR

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0062	↓ COMP	600f.	10s	21:08	+1:19	1.11	
0063	NGC 2692	"	600s	21:09	+1:20	1.11	
0064	↑ COMP	"	10s	21:19	+1:31	1.12	
0065	NGC 2692	"	600s	21:21	+1:32	1.12	
0066	↓ COMP HeArHe	"	10s	21:34	+1:42	1.13	
0067	0856 p 5242	"	600s	21:36	+1:43	1.14	
0068	↓ COMP HeArHe	"	10s	21:47	+1:54	1.15	
0069	0856 p 5242	"	600s	21:49	+1:56	1.15	
0070	↓ COMP HeArHe	"	10s	22:04	+0:58	1.17	
0071	NGC 3165	"	900s	22:05	+0:59	1.17	focus at 846040
0072	↓ COMP	"	10s	22:21	+1:15	1.20	
0073	NGC 3165	"	900s	22:22	+1:16	1.20	
0074	↑ COMP	"	10s	22:37	+1:31	1.23	
0075	NGC 3165	"	900s	22:39	+1:33	1.23	
0076	↓ COMP	"	10s	22:56	+1:15	1.16	
0077	1046+0711	"	600s	22:58	+1:17	1.16	
0078	↑ COMP	"	10s	23:08	+1:27	1.18	
0079	1046+0711	"	600s	23:09	+1:28	1.18	
0080	↑ COMP	"	10s	23:20	+1:38	1.20	
0081	1046+0711	"	600s	23:21	+1:39	1.20	
0082	↓ COMP	"	10s	23:33	+1:37	1.07	
0083	NGC 3510	"	900s	23:35	+1:40	1.08	
0084	↑ COMP	"	10s	23:51	+1:55	1.10	
0085	NGC 3510	"	900s	23:52	+1:56	1.11	
0086	↓ COMP	"	10s	00:07	+2:02	1.14	
0087	NGC 3510	"	900s	00:09	+2:13	1.14	
0088	↓ COMP	"	10s	00:27		1.31	

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CCD LOG SHEET

DATE: 14/04/94 PAGE 3 of 4
 OBSERVATORY: FLWO, MT. HOPKINS INSTRUMENT: 60" FAST
 OBSERVERS: JANSON, FABRICANT PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: _____ TAPE FORMAT: FITS
 FOCUS: 845910 WEATHER: CLEAR

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0089	NGC 4120	600s	900s	0:28	+1:28	+1:31	focus set to 845910
0090	↓ COMP	"	10s	0:43	+1:43	1.32	
0091	NGC 4120	"	300s	0:45	+1:44	1.32	(increasing line number is to the south in the spectrum)
0092	↓ COMP	"	10s	1:00	+2:00	1.34	
0093	NGC 4120	"	300s	1:02	+2:02	1.34	
0094	↓ COMP	"	10s	1:21	+0:59	1.06	} requested observation
0095	SN 1994 I (MSI)	"	900s	1:23	+1:01	1.06	
0096	↑ COMP	"	10s	1:38	+1:16	1.07	
0097	↓ COMP	"	10s	1:43	+1:19	1.16	
0098	NGC 5208	"	600s	1:44	+1:20	1.16	
0099	↓ COMP	"	10s	1:55	+1:30	1.18	
0100	NGC 5208	"	600s	1:56	+1:32	1.18	
0101	↓ COMP	"	10s	2:07	+1:43	1.21	
0102	NGC 5208	"	600s	2:08	+1:44	1.21	
0103	↓ COMP	"	10s	2:20	+1:44	1.08	
0104	1342 p 3526	"	900s	2:21	+1:45	1.08	
0105	↓ COMP	"	10s	2:37	+2:02	1.01	
0106	1342 p 3526	"	900s	2:38	+2:03	1.11	
0107	↓ COMP	"	10s	2:53	+2:17	1.14	
0108	1342 p 3526	"	900s	2:54	+2:18	1.14	
0109	↓ COMP	"	10s	3:14	+0:27	1.04	
0100	1552+1645	"	600s	3:15	+0:29	1.04	set focus to 845470
0101	↓ COMP	"	10s	3:26	+0:40	1.05	
0102	1552+1645	"	600s	3:27	+0:41	1.05	
0103	↓ COMP	"	10s	3:37	+0:51	1.06	
0104	1552+1645	"	600s	3:38	+0:52	1.06	
0105	↓ COMP	"	10s	3:52	+0:08	1.14	set focus to 845395

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CCD LOG SHEET

DATE: 15/04/94 PAGE 1 of 3
 OBSERVATORY: FLWO, MT. HOPKINS INSTRUMENT: 60" FAST
 OBSERVERS: JANSEN, FABRICANT PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: 1 TAPE FORMAT: FITS
 FOCUS: 10270 P.A. set at 183° WEATHER: CLEAR, BUT A BIT HAZY. LOW @ HORZ
 VISIBILITY ~50 miles

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0001	BIAS	600f	0 s				
0015	BIAS	600f	0 s				PROBLEMS WITH FOCUS
0016	HD072324	"	120 s	19:59	+0:40	1.02	MOTOR! SOLVED.
0017	↑ COMP	"	10 s	20:05	+0:43	1.02	
0018	PG0334-554	"	10 s	20:11	-0:15	1.09	
0019	"	"	180 s	20:12	-0:14	1.09	
0020	↓ COMP	"	10 s	20:24	+0:27	1.01	
0021	0904+3329	"	900 s	20:25	+0:28	1.01	focus set at 10265
0022	↓ COMP	"	10 s	20:41	+0:45	1.01	
0023	0904+3328	"	900 s	20:42	+0:46	1.02	
0024	↓ COMP	"	10 s	20:57	+1:01	1.03	
0025	0904+3328	"	900 s	20:59	+1:03	1.03	
0026	↓ COMP	"	10 s	21:21	-0:02	1.05	
0027	1033+1358	"	600 s	21:22	-0:01	1.05	
0028	↓ COMP	"	10 s	21:37	+0:12	1.05	
0029	1033+1358	"	600 s	21:38	+0:13	1.05	seeing
0030	↓ COMP	"	10 s	21:48	+0:24	1.06	getting
0031	1033+1358	"	600 s	21:49	+0:25	1.06	better
0032	↓ COMP	"	10 s	22:05	-0:09	1.08	
0033	1123+5401	"	900 s	22:06	-0:08	1.08	↓
0034	↓ COMP	"	10 s	22:22	+0:06	1.08	
0035	1123+5401	"	900 s	22:23	+0:08	1.08	GOOD SEEING!
0036	↓ COMP	"	10 s	22:38	+0:23	1.08	
0037	1123+5401	"	900 s	22:39	+0:24	1.08	↓
0038	↓ COMP	"	10 s	22:55	+0:40	1.09	
0039	1123+5401	"	900 s	22:56	+0:41	1.09	
0040	↓ COMP	"	10 s	23:15	+0:51	1.13	

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CCD LOG SHEET

DATE: 15/04/94 PAGE 2 of 3
 OBSERVATORY: FLWO, MT. HOPKINS INSTRUMENT: 60" FAST
 OBSERVERS: FABRICANT, JANSEN PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: 1 TAPE FORMAT: FITS
 FOCUS: 10265 WEATHER: CLEAR

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0041	1133+5829	600L	900s.	23:17	+0:52	1.14	Noise in frame!
0042	↓ COMP	"	10s.	23:32	+1:08	1.15	Noise in frame!
0043	1133+5829	"	900s.	23:33	+1:09	1.15	Noise gone.
0044	↑ COMP	"	10s.	23:49	+1:24	1.16	
0045	1133+5829	"	300s.	23:50	+1:26	1.16	focus @ 10140
0046	↓ COMP	"	10s.	0:21	+0:46	1.08	
0047	1244+5155	"	300s.	0:22	+0:47	1.08	P.Angle looks more like 90°!
0048	↑ COMP	"	10s.	0:37	+1:03	1.09	
0049	1244+5155	"	900s.	0:39	+1:04	1.09	(no absorption lines)
0050	↓ COMP	"	10s.	0:56	+0:39	1.05	
0051	SN1994I (M51)	"	300s.	0:57	+0:40	1.05	
0052	↓ COMP	"	10s.	1:15	+1:04	1.03	focus ab 9740
0053	HZ44	"	120s.	1:17	+1:06	1.03	(flux standard)
0054	↓ COMP	"	10s.	1:21	+1:04	1.03	
0055	1328+3153	"	900s.	1:23	+1:05	1.03	
0056	↑ COMP	"	10s.	1:38	+1:21	1.05	
0057	1328+3153	"	900s.	1:40	+1:22	1.05	
0058	↓ COMP	"	10s.	1:58	-0:19	1.10	Noise present again
0059	NGC 5940	"	600s.	2:00	-0:18	1.10	Noise gone
0060	↑ COMP	"	10s.	2:11	-0:07	1.10	
0061	NGC 5940	"	600s.	2:12	-0:06	1.10	
0062	↓ COMP	"	10s.	2:22	+0:04	1.10	
0063	NGC 5940	"	600s.	2:23	+0:05	1.10	
0064	↓ COMP	"	10s.	2:36	+0:16	1.24	
0065	1531+6744	"	900s.	2:37	+0:18	1.24	
0066	↑ COMP	"	10s.	2:53	+0:33	1.24	
0067	1531+6744	"	900s.	2:54	+0:35	1.24	

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CCD LOG SHEET

DATE: 16/04/94 PAGE 1 of 3
 OBSERVATORY: FLWO., MT. HOPKINS INSTRUMENT: FAST @ 6"
 OBSERVERS: JANSSEN, FABRICANT PROGRAM: NEARBY GALAXY SURVEY
 TAPE NO.: 1 TAPE FORMAT: FITS
 FOCUS: 10455 PA. set at 8.0° WEATHER: variable clouds, windy

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0001	Sky Flat	600l.	10 s.	19:13		1.00	
0002	Sky Flat	"	120 s.	19:15		1.00	
0003	Sky Flat	"	200 s.	19:18		1.00	high winds!
0004	Sky Flat	"	600 s.	19:22		1.00	
0005	^{COMP} HD058207	"	^{10 s.} 200 s.	^{19:29} 19:39	^{+1:29} +1:29	^{1.06} 1.06	FAF high wind
0006							bouncing secondary
0007	COMP		10 s.	19:52	-0:44	1.02	
0008	HD085503		100 s.	19:53	-0:43	1.02	FAF streaked like CRAZY
0009	COMP		10 s.	20:06	+0:06	1.07	
0010	0912 p 5303		780 s.	20:08	+0:08	1.07	Dome pointing weak: much less in dome !!
0011	COMP		10 s.	20:36	-0:06	1.04	
0012	0955 p 4758		1200 s.	20:39	-0:03	1.04	
0013	COMP		10 s.	20:59	+0:16	1.04	
0014	0955 p 4758		1200 s.	21:01	+0:18	1.04	
0015	COMP		10 s.	21:21	+0:38	1.05	
0016	0955 p 4758		1200 s.	21:23	+0:40	1.05	
0017	COMP		10 s.	21:43	+1:00	1.06	
0018	COMP		10 s.	22:14	-0:15	1.04	CLOUDS
0019	HD102224		200 s.	22:16	-0:13	1.04	CLOSED DOME AND STOPPED
0020	DARKFRAME		1800 s.	23:04		1.00	
0021	DARKFRAME		1800 s.	23:39		1.00	
0022	BIAS		05	0:10		1.00	
0031	BIAS		05	0:13		1.00	
0032	DARKFRAME		900 s.	0:13		1.00	Noise is back!
0033	BIAS		05	0:30		1.00	no noise present
0034	DARKFRAME		900 s.	0:30		1.00	Noise is back!
0035	DARKFRAME		900 s.	1:26		1.00	Noise is gone

*) to weak under present sky conditions ; going to next galaxy

DATE: 11.17.94 4.17.94 (14) PAGE 1 of 1

OBSERVATORY: FLWO, MT. HOPKINS INSTRUMENT: FAST @ 60"

BSERVERS: FABRICANT, JANSEN PROGRAM: N.G.S.

TAPE NO.: 1 TAPE FORMAT: FITS

FOCUS: 9435 PA. set at 110° WEATHER: CLOUDY

Obs.no.	Object	Disp.	Exp.	Time	H.A.	Airmass	Comments
0001	Skyflat	600. l.	5 s.	19:17		1.00	
0002	Skyflat	"	200 s.	19:18		1.00	
0003	Skyflat	"	600 s.	19:22		1.00	
0004	COMP	"	10 s.	19:33		1.08	
0005	BIAS	"	0 s.	19:45		1.00	
0014	BIAS	"	0 s.			1.00	
0015	HD136512	"	200 s.	2:35	+0:36	1.01	↓ CLOUDS: TOO HEAVY TO DO ANYTHING
0016	↑ COMP	"	10 s.	2:39	+0:39	1.01	
0017	↓ COMP	"	10 s.	2:56	+1:41	1.08	sub focus at 9120
0018	NGC 5684	"	900 s.	2:58	+1:43	1.08	
0019	↓ COMP	"	10 s.	3:14	+1:59	1.10	
0020	NGC 5684	"	900 s.	3:15	+2:00	1.11	
0021	↑ COMP	"	10 s.	3:30	+2:15	1.14	
0022	↓ COMP	"	10 s.	3:38	+1:50	1.14	
0023	1507+5229	"	900 s.	3:39	+1:51	1.14	
0024	↓ COMP	"	10 s.	3:55	+2:07	1.17	
0025	1507+5229	"	900 s.	3:56	+2:09	1.17	
0026	↓ COMP	"	10 s.	4:12	+2:24	1.20	
0027	1507+5229	"	900 s.	4:13	+2:25	1.20	
0028	↑ COMP	"	10 s.	4:22	+2:35	1.22	
0029	INCAND FLAT	"	0.1 s.	4:32		1.00	
0038	INCAND FLAT	"	0.1 s.	4:35		1.00	
0039	BIAS	"	0 s.	4:35		1.00	
0048	BIAS	"	0 s.	4:38		1.00	noise in some!
0049	DARKFRAME	"	1800 s.	4:41		1.00	

Intermittent: clear spots and bands of thin cloud during exposures.
 Stopped after 75 min

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300L, 3' slitPage: 2940Date: 4/29/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
116	BTAS				0s	Start of FAST run
11-20	FLAT				0.1s	clear skies
21	10558 p0659	10:55:48	+06:59:00	1	5m	H _α
22	COMP			↑	15s	
23	U06066	10:56:24	+06:47:00	1	3m	
24	COMP			↑	15s	
25	U06068	10:56:36	+06:33:00	1	3m	
26	COMP			↑	15s	
27	10568 p0715	10:56:48	+07:15:00	1	3m	H _α
28	COMP			↑	10s	COMP now 10s
29	10572 p0415	10:57:12	+04:15:00	1	5m	H _α
30	10578 p0427N	10:57:48	+04:27:00	1	3m	needs more
31	10578 p0427S	10:57:48	+04:27:00	1	5m	H _α
32	COMP			↓		
33	10578 p0427N	10:57:48	+04:27:00	1	5m	got it!
34	10577 p0629	10:57:42	+06:29:00	1	3m	
35	10578 p0640	10:57:48	+06:40:00	1	5m	H _α
36	COMP			↑		
37	11322 p0031	11:32:12	+0:31:00	1	5m	
38	COMP			↑		
39	11327 p0155	11:32:42	+01:55:00	1	5m	H _α
40	COMP			↑		
41	U06578N	11:34:00	+01:06:00	1	5m	cross north comp H _α etc)
42	U06578S	11:34:00	+01:06:00	1	5m	H _α
43	COMP					
44	11385 p0146	11:38:30	+01:46:00	1	5m	H _α
45	COMP			↑		
46	11308 p0105	11:30:48	+01:05:00	1	5m	H _α
47	COMP			↑		
48	11463 p0120	11:46:18	+01:20:00	1	5m	H _α

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 3022Date: 4/29/94Page: 2941

Number	Object	R.A.	Dec.	L/R	Exp	Comments
49	COMP			↑		
50	11490p011	11:49:00	+00:11:00	1	5m	H _α
51	COMP			↑		
52	11579p0047	11:57:54	+00:47:00	1	5m	
53	COMP			↑		
54-55	12153p0609	12:15:18	+06:09:00	#5	10m	30273
56	COMP			↑		
57	12160p0700	12:16:00	+07:00:00	#5	10m	H _α
58	COMP			↑		
59-61	12178p0040	12:17:48	+00:40:00	1	5m	
62	COMP			↑		
63	12208p0146	12:20:48	+01:46:00	1	5m	H _α
64	12202p0134	12:20:12	+01:34:00	1	5m	not 11 = 13h 51 H _α
65	12211p0137	12:21:06	+01:37:00	1	5m	H _α
66	COMP			↑		
67	12342p0423	12:34:12	+04:23:00	#5	10m	
68	COMP			↑		
69	13004p0547A1	13:00:24	+05:47:00	5	5m	A1 SW H _α
70	13004p0547A2	13:00:24	+05:47:00	5	5m	A2 NW H _α
71	13004p0547A3	13:00:24	+05:47:00	5	5m	A3 H _α
72	COMP			↓		Moon's up
73	13004p0547A4	13:00:24	+05:47:00	5	10m	A4
74	13004p0547B	13:00:24	+05:47:00	5	10m	
75	COMP			↑		
76	SNR94D	12:31:31	+07:58:30	2	15m	
77	COMP			↑		
78	HZ44	13:21:19.1	+36:23:38	2/0	3m	
79	COMP			↑		
80	SNR94E	13:27:47	+17:26:59.1	2	15m	has faded to ~ 1/4+
81	COMP			↑		

60 inch Telescope Log

Observer: P. BerlinkPI: J. HuchraSpectrograph: FASTGrating: 300Date: 4/29/94Page: 2942

Number	Object	R.A.	Dec.	L/R	Exp	Comments
82	SN1994E	"	"	2	15m	
83	COMP			↑		
84	H243	13:14:00.7	+29:21:49	6	3m	
85	COMP			↑		
86	N5548	14:15:43.5	+25:22:01	6	5m	
87	COMP			↑		
88	14502 p0801	14:50:12	+08:01:00	1	5m	Moon is very bright
89	N5769	14:50:14.1	+08:08:10	1	5m	dome ran away AZ=172
90	COMP			↓		
91	14504 p0809	14:50:24	+08:09:00	1	5m	
92	14508 p0802	14:50:48	+08:02:00	1	5m	
93	COMP			↑		
94	18092 p4954	18:09:12	+49:54:00	1	5m	
95	COMP			↑		
96	18102 p6402	18:10:12	+64:02:00	1	5m	H α
97	COMP			↑		
98	N6609	18:12:00	+61:19:00	1	5m	
99	N6608	18:11:42	+61:19:00	1	5m	H α
100	COMP			↑		
101	18130 p5949	18:13:00	+59:49:00	1	5m	
102	COMP			↓		
103	18130 p5949	"	"	1	5m	
104	18130 p7410	18:13:00	+74:10:00	1	5m	
105	COMP			↑		
106-7	18154 p7620E	18:15:24	+76:20:00	1	5m	
108	18154 p7620W	18:15:24	+76:20:00	1	5m	
109	COMP			↑		
110	I4708	18:13:12	+61:08:00	1	5m	H α
111	COMP			↑		
112	18194 p6340	18:19:24	+63:40:00	1	3m	

Moon 18:52 -19

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300Date: 4/29/94Page: 2943

Number	Object	R. A.	Dec.	L/R	Exp	Comments
113	COMP			↑		
114	N6650	18:25:36	+67:58:W	1	3m	
115	COMP			↑		
116	18270p6205	18:27:W	+62:05:W	1	5m	
117	COMP			↑		
118	18293p4816	18:29:18	+48:16:W	1	5m	
119	COMP			↑		
120	18317p7405	18:31:42	+74:05:W	1	5m	H _α
121	COMP			↑		
122	18471p7018	18:47:06	+70:18:W	1	5m	H _α
123	COMP			↑		
124	18498p7318	18:49:48	+73:18:W	1	5m	nearby star
125	COMP			↑		star to E of gal.
126	18535p6610	18:53:30	+66:10:W	1	5m	H _α
127	COMP			↑		
128	N6747	18:56:18	+72:43:W	1	5m	H _α
129	COMP			↑		
130	U11402	19:04:12	+72:58:W	1	5m	
131	COMP			↑		
132	19043p7343	19:04:18	+73:43:W	1	5m	
133	COMP			↑		
134-143	BIAS				0s	
144-155	FLAT				0.1s	



60 inch Telescope Lg

Observer: P. BerlinPI: J. HuchraSpectrograph: FASTGrating: 300Date: 4/30/94Page: 2944

Number	Object	R. A.	Dec.	L/R	Exp	Comments
10	BIAS				0s	
11-25	FLAT				0.1s	
26	COMP			↓	10s	3" slit bin x 2
27	67m1250	08:48:46	+11:58:34	10	2m	3" slit bin x 2
28	67m1250	"	"	10	2m	1.5" slit bin x 2
29	67m1557	08:49:32.9	+11:30:57	10	2m	bin x 1
30	67m1592	08:49:34.5	+11:55:46	10	2m	
31	67m1279	08:48:44.8	+12:01:50	10	2m	
32	67m1402	08:49:27	+11:43:09	10	2m	
33	COMP			↑	20s	1.5" slit
34	67m1402	"	"	10	2m	3" slit
35	J09510p3035	09:51:02.3	+30:35:02	3	5m	3" slit bin x 2 H α
36	J09510p3036	09:51:00.6	+30:36:12	3	5m	clouds.
37	COMP			↑		
38	J09453p3040	09:45:23.4	+30:40:53	3	5m	seeing ~2"
39	COMP			↑		
40	J09466p3044	09:46:40.3	+30:44:42	3	5m	
41	COMP			↑		
42	J09378p3047	09:37:51.8	+30:47:52	3	5m	H α
43	COMP			↑		clearing
44	N3921	11:48:28.2	+55:21:24	1	15m	for Caldwell/Franx probably not p. 1
45	COMP			↑		
46	12237p0033	12:23:42	+10:33:00	1	5m	H α
47	COMP			↑		
48	12316p0045(EW)	12:31:36	+10:45:10	1	5m	E+W comps E-H α
49	COMP			↑		
50	12345p0205	12:34:30	+10:05:10	1	5m	
51	COMP			↑		
52-53	12367p0142	12:36:42	+10:42:10	1	5m	check chart
54	COMP			↑		nearby gal. came up closer to slit

60 inch Telescope Log

Observer: P. BerlindPI: J HuchraSpectrograph: FASTGrating: 300Date: 4/30/94Page: 2945

Number	Object	R. A.	Dec.	L/R	Exp	Comments
55	12442p0316	12:44:42	+03:16:40		5m	Needs more - try again
56	COMP			↑		
57	U08105EW	12:57:24	+02:18:40		5m	EW comps. W looks stellar, ^{can see only one component}
58	COMP			↑		
59	13034p0202	13:03:24	+02:02:40		3m	H ₂
60	COMP			↑		
61	13048p0217	13:04:48	+02:17:40		5m	H ₂
62	COMP			↑		
63	13078p0218	13:07:48	+02:18:40		5m	H ₂
64	COMP			↑		
65	13082p0218	13:08:12	+02:18:40		5m	H ₂
66	COMP			↑		
67	13084p0225	13:08:24	+01:25:40		5m	
68	COMP			↑		
69-70	13095p0155	13:09:30	+01:55:40		5m	
71	COMP			↑		
72	13193p0224	13:19:18	+02:24:40		5m	
73	COMP			↑		
74	13167p0742	13:16:42	+07:42:40		5m	H ₂
75	13170p0745	13:17:40	+07:45:40		5m	H ₂
76	COMP			↑		
77-8	U08532	13:30:42	+06:01:40		5m	6727 H ₂
79	COMP			↑		
80-81	13315p0521	13:31:30	+05:21:40		5m	6734
82	COMP			↑		
83	U8650	13:37:42	+02:43:40		3m	
84	COMP			↑		
85	13423p0416	13:42:18	+04:16:40		3m	
86	13428p0403	13:42:48	+04:03:40		3m	
87	COMP			↑		

M₂₀₀ 19.45 -17

60 inch Telescope Log

Observer: P. BerlindPI: JHuchraSpectrograph: FASTGrating: 300Date: 4/30/94Page: 2946

Number	Object	R.A.	Dec.	L/R	Exp	Comments
88	13433p0746	13:43:18	+07:46:00	1	5m	H ₂
89	COMP			↑		
90	±952	13:51:12	+03:37:00	1	5m	U 08808
91	COMP			↑		
92	H244	13:21:19.1	+36:23:38	2/0	3m	
93	COMP			↑		
94	SN1994E	13:27:47	+47:26:59	2	30m	1x30min as per Petr Challis request
95	COMP			↑		
96	U09746	15:07:48	+02:07:00	1	5m	H ₂
97	COMP			↑		bright, bright moon
98	15092p0050	15:09:12	+00:50:00	1	5m	
99	COMP			↑		
100	NS887	15:12:12	+01:20:00	1	3m	U 9779
101	COMP			↑		
102	15130p0225	15:13:00	+02:25:00	1	3m	
103	COMP			↑		
104	15139p0053	15:13:54	+0:53:00	1	5m	H ₂
105	COMP			↑		
106	15181p0200	15:18:06	+02:00:00	1	5m	
107	COMP			↑		
108	15191p0038	15:19:06	+00:38:00	1	5m	H ₂
109	COMP			↑		
110	15250p0027	15:25:00	+00:27:00	1	5m	
111	COMP			↑		
112	15284p0109	15:28:24	+01:09:00	1	5m	H ₂
113	COMP			↑		
114	15475p0020	15:47:30	+00:20:00	1	3m	
115	COMP			↑		
116	15580p0039	15:58:00	+00:39:00	1	5m	
117	COMP			↑		

60 inch Telescope Log

Observer: P. BerlindPI: J HuckigSpectrograph: F115Grating: 300Date: 4/30/94Page: 2947

Number	Object	R.A.	Dec.	L/R	Exp	Comments
118	16038p0218	16:03:48	+02:18:W	1	5m	H _α
119	COMP			↑		
120	16053p0132	16:05:18	+01:32:W	1	5m	H _α
121	COMP			↑		
122	U10264	16:10:18	+00:01:W	1	5m	H _α
123	COMP			↑		
124	16130p0139	16:13:W	+01:39:W	1	5m	
125	COMP			↑		
126	16173p0205	16:17:18	+02:05:W	1	5m	
127	COMP			↑		
128	16207p0153	16:20:42	+01:53:W	1	3m	
129	COMP			↑		
130	16320p0206	16:32:W	+02:06:W	1	5m	
131	COMP			↑		
132	16331p0205	16:33:06	+02:25:W	1	3m	
133	COMP			↑		
134	16406p0211	16:40:24	+02:11:W	1	5m	
135	COMP			↑		
136	J16433p2635	16:43:18.7	+26:35:21	3	5m	
137	COMP			↑		
138-39	J16449p3248	16:44:55.1	+32:48:14	3	5m	x2
140	COMP			↑		
141	J16459p2715	16:45:55.7	+27:15:19	3	5m	
142	COMP			↑		
143	J16459p2731	16:45:55.9	+27:31:05	3	5m	H _α
144	COMP			↑		
145	J16463p3143	16:46:16.7	+31:43:31	3	5m	see chart: 2-objects
146	J16479p3208	16:47:53.6	+32:08:45	3	5m	lots of morning sky light
147	COMP			↑		
148-162	FLAT			10	0.25	6m x 1 for Nelson, 1.5" slit
163-172	DEBS				0s	6m x 2 some noise