

60 inch Telescope Log

Observer: P. Berlind, D. Fabricant, J. ZajacPI: J. HuchraSpectrograph: FASTGrating: 600Page: 2708Date: 1/11/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-13	BIAS					taken during afternoon
14	hear			↓	40s	no neon lamp!
15	07302p2410	07:30:12	+24:10:00		600s	
16	hear			↓		hear that precedes
17	07224p0918	07:22:24	+09:18:00		600	object goes with object
18	hear			↓		
19	N2402A	07:28:00	+09:45:00		600	
20	hear			↓		
21	N2402B	07:28:00	+09:45:00		600	
22	hear			↓		unarmed = hear
23	07336p1723	07:33:36	+17:23:00		600	
24	hear			↓		
25	07340p0416	07:34:00	+04:16:00		600	
26	hear			↓		seeing ≈ 2-3"
27	07371+1721	07:37:06	+17:21:00		600	
28	hear			↓		
29	U3960	07:37:24	+23:23:00		600	
30	hear			↓		
31	07423p2705	07:42:18	+27:05:00		600	
32	hear			↓		
33	HD68483	08:12:52.5	+09:34:40		30	std
34	hear			↓		
35	HD68771	08:16:28	+58:11:20		10	
36	hear			↓		
37	07425p3213	07:42:30	+32:13:00		600	
38	hear			↓		
39	07433p2207	07:43:18	+22:07:00		600	
40	hear			↓		
41	07434p1830	07:43:24	+18:30:00		600	
42	hear			↓		

60 inch Telescope Log

Observer: PB/DF/JZPI: J. HuchraSpectrograph: FASTGrating: 600Date: 1/11/94Page: 2709

Number	Object	R. A.	Dec.	L/R	Exp	Comments
43	07439p0205	07:43:54	+02:05:W		600s	
44	hear			↓	40s	
45	07441p1638	07:44:06	+16:38:W		600	Hx
46	hear			↓		
47	07563p4223	07:56:18	+42:23:W		600	
48	hear			↓		
49	07557p3245	07:55:54	+32:45:W		600	
50	hear			↓		
51	07578p1629	07:57:48	+16:29:W		600	
52	hear			↓		filled dewar
53	07584p2725	07:58:24	+27:25:W		600	
54	hear			↓		
55	11018p1724	11:01:48	+17:24:W		900	redo from 3/93
56	hear			↓		
57	11302m0155	11:30:12	-01:55:W		600	
58	hear			↓		
59	11309m0206	11:30:54	-02:06:W		600	
60	11309m0206	11:30:54	-02:06:W		600	needs more?
61	hear			↓		
62	11304p0206	11:30:24	+02:06:W		600	Hx @ 2432?
63	hear			↓		
64	11318p0332	11:31:48	+03:32:W		600	Hx! 2227
65	hear			↓		
66	11322p0031	11:32:12	+00:31:W		600	
67	hear			↓		
68	11327p0155	11:32:42	+01:55:W		600	Hx 2210
69	hear			↓		
70	11346p0822	11:34:24	+08:22:W		600	Hx 2299
71	hear			↓		
72	11383p0505	11:38:18	+05:05:W		600	will not display

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 600Date: 1/12/94Page: 2711

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-2	BIAS					engineering early eve.
3	hencar			↓	20s	
4	J02141 p1319	02:14:05.13	+13:19:00		10m	
5	hencar			↓		
6	J02141 p1318	02:14:05.14	+13:18:36		10m	seeing 2-3"
7	hencar			↓		
8	J02144 p1220	02:14:23.77	+12:20:13		10m	
9	hencar			↓		
10-11	J02176 p1230	02:17:38.15	+12:30:32		10m	
12	hencar			↑		
13	hencar			↓		
14-15	J0422 p32	04:18:29.92	+32:47:23.6		10m	X-ray nova
16	hencar			↑		
17	hencar			↓		seeing 3-5"
18-19	07125 p1624	07:12:30	+16:24:00		10m	H α 2256
20	hencar			↑		
21	hencar			↓		
22-23	07370 p3223	07:37:00	+32:23:00		10m	H α
24	hencar			↑		
25	hencar			↓		
26-27	07442 p2932	07:44:12	+29:32:00		10m	H α
28	hencar			↑		
29	hencar			↓		lost words
30	07447 p2254	07:44:42	+22:54:00		10m	H α seeing $\approx 2''$
31	hencar			↓		
32	07451 p0655	07:45:06	+06:55:00		10m	H α got it the 1st time!
33	hencar			↓		
34	07462 p0620	07:46:12	+06:20:00		10m	H α
35	hencar			↓		
36	07466 p2758	07:46:36	+27:58:00		10m	H α

notes: 19, 26 (cannot find H α)

60 inch Telescope Log

Observer: P. BertinaPI: J. HuchraSpectrograph: FASTGrating: 600Date: 1/12/94Page: 2712

Number	Object	R. A.	Dec.	L/R	Exp	Comments
37	henear			↓	20s	
38	07476p2756	07:47:36	+27:56:W		10m	H α
39	henear			↓		seeing 1-2"
40	07468p3052	07:46:48	+30:52:00		10m	Hα
41	henear			↓		
42	07477p2337	07:47:42	+23:37:W		10m	H α
43	henear			↓		lines around 5700 \AA are double peaked Λ
44	07491p2336	07:49:06	+23:36:W		10m	
45	henear			↓		
46-47	07493p3336	07:49:18	+33:36:W		10m	H α
48	henear			↑		
49	henear			↓		
50	07502p2735	07:50:12	+27:35:00		10m	dominated by nearby star??
51	henear			↓		
52	07501p3624	07:50:06	+36:24:W		10m	more?
53	henear			↓		
54	RX0748p1834A	07:48:10.6	+18:31:16		5m	
55	RX0748p1834B	"	"		5m	
56	RX0748p1834C	"	"		10m	2 spectra
57	henear			↓		seeing 1-2"
58	07541p2737	07:54:06	+27:37:W		10m	
59	henear			↓		
60	11316m0118	11:31:36	-01:18:W		10m	H α count ^{near} cm500
61	henear			↓		
62	11344p0546	11:34:24	+05:46:W		10m	H α
63	11353p0547	11:35:18	+05:47:W		15m	H α @ 2422 (?) cr?
64	henear			↑		Correct spec
65	henear			↓		
66	13002p0338	13:00:12	+03:38:W		10m	H α @ 2406
67	henear			↓		

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Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 600Date: 1/12/94Page: 2713

Number	Object	R. A.	Dec.	L/R	Exp	Comments
68	13034p0202	13-03-24	+02-02:00		10m	H α ^{cored out} _{free em}
69	henear			↓		
70	U8186	13-03-24	+04-13:00		10m	weak H α ^{cored out} _{free em}
71	henear			↓		
72	13062p0452	13-06-12	+04-52:00		10m	
73	henear			↓		
74	N4991	13-06-42	+02-37:00		10m	cannot free em
75	13072p0244	13-07-12	+02-44:00		10m	H α "
76	henear			↑		
77	henear			↓		
78	13070p0513	13-07-00	+05-13:00		5m	
79	henear			↓		
80	13073p0643	13-07-18	+06-43:00		10m	
81	henear			↓		
82	N4151	12-08-01	+39-41:00		1m	saturated? NO
83	G0140	11-34-27.8	+30-04:35		1m	4800 ADU max
84	henear			↑		
85	henear			↓		
86	N5548	14-15-43.49	+25-22:01.1		1m	
87	N5548	"	"		30s	
88	HZ43	13-14-00.7	+29-21:49		1m	
89	HZ43	"	"		30s	
90	henear			↑		
91-105	BIAS					
106-110	FLAT				0.1s	
111-117	FLAT				0.2s	

60 inch Telescope Log

Observer: PlerindPI: J HuchraSpectrograph: FASTGrating: 600 3" slitPage: 2714Date: 1/13/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1	FLAT				.2	test
2-3	hencar				20s	test
4-18	BIAS					
19	hencar			↓		
20	00090p1314	00:09:00	+13:14:00		15m	redo 1663/37,39,41,43 enough?
21	hencar			↓		
22	00319p0810	00:31:54	+08:10:00		10m	H α
23	hencar			↓		some thin clouds around
24	00598p0706	00:59:48	+07:06:00		10m	
25	hencar			↓		seeing 2-3'
26	Abell 271A	01:51:32.2	+01:25:07		10m	
27	hencar			↓		
28	Abell 279A	01:53:42.8	+0:48:21		10m	header coords may be that of #29
29	Abell 279B	01:53:36.8	+0:48:06		10m	thin clouds
30	hencar			↓		
31	Abell 279G	01:53:46.4	+0:47:55		10m	!
32	hencar			↓		
33	J0206lp1317	02:06:06.02	+13:17:04		15m	strong H α
34	hencar			↓		
35	J02058p1154	02:05:48.95	+1:51:54		10m	
36	hencar			↓		
37	J0157lp1310	01:57:03.93	+13:10:00		10m	needs more
38	hencar			↓		
39	J01595+1326	01:59:33.46	+13:26:27		10m	Needs more exp!
40	hencar			↓		
41	07283p1820	07:28:18	+18:20:00		5m	done got lost - all scardup
42	07283p1820	07:28:18	+18:20:00		10m	star? moved off slit
43	hencar			↓		
44	07460p1729	07:46:00	+17:29:00		10m	H α
45	hencar					

42 bad cosmic

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Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 60Date: 11/13/94Page: 2715

Number	Object	R.A.	Dec.	L/R	Exp	Comments
46	07460p2845	07:46:00	+28:45:00		10m	
47	heneur			↓		
48	07462p4019	07:46:12	+40:19:00		10m	
49				↓		
50	U4053	07:47:42	+16:30:00		5m	
51	heneur			↓		
52	07485p3034	07:48:30	+30:34:00		10m	H α
53	heneur			↓		
54	07485p2730	07:48:30	+27:30:00		10m	H α
55	heneur			↓		
56	07491p0438	07:49:06	+04:38:00		10m	
57	07492p0434	07:49:12	+04:34:00		10m	H α @ 2392
58	heneur			↑		seeing getting bad 2-3"
59	heneur			↓		
60	07503p0537	07:50:18	+05:37:00		10m	H α
61	heneur			↓		
62	07507p0638	07:50:42	+06:38:00		10m	H α
63	07508p0640	07:50:48	+06:38:00		15m	H α 2249
64	heneur			↓		
65	07501p0637	07:50:06	+06:37:00		5m	
66	heneur			↓		
67	07486p2744	07:48:36	+27:44:00		10m	H α weak clouds
68	heneur			↓		
69	07510p4417	07:51:00	+44:17:00		5m	
70	07513p4318	07:51:18	+43:18:00		5m	possible misid- chart
71	heneur			↑		had a nearby star marked
72	heneur			↓		as the object
73	U4087	07:51:30	+43:37:00		10m	watch that star! H α @ 2153
74	heneur			↓		
75	07499p1458	07:49:54	+14:58:00		10m	

63 - 2 obj's extracted . 2nd is gal

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 600Date: 11/13/94Page: 2716

Number	Object	R. A.	Dec.	L/R	Exp	Comments
76	henear			↓		still thin clouds
77	07525p1513	07:52:30	+15:13:00		10m	H α + bad seeing
78	henear			↓		
79	07534p1709	07:53:24	+17:09:00		15m	H α
80	henear			↓		
81	07550p1610	07:55:00	+16:10:00		5m	H α
82	henear			↓		
83	07535p0735	07:53:30	+07:35:00		10m	H α
84	henear			↓		
85	07566p1737	07:56:36	+17:37:00		5m	H α
86	henear			↓		
87	07564p2701	07:56:24	+27:01:00		5m	H α
88	henear			↓		
89	07550p2642	07:55:00	+26:42:00		10m	H α
90	henear			↓		
91	11383p0505	11:38:18	+05:05		15m	through clouds strong H α
92	henear			↓		
93	11308p0105	11:30:48	+01:05:00		10m	H α
94	henear			↓		
95	11343m0158	11:34:18	-01:58:00		10m	H α through clouds
96	henear			↓		not many counts
97	11343p0424	11:34:18	+04:24:00		10m	clouds H α
98	henear			↓		
99	±725	11:40:54	-01:23:00		5m	
100	henear			↓		cloud delay
101	N4151	12:08:01	39:41:02		4m	burn, baby burn
102	henear			↓		
103	G0140	11:34:27.8	+30:04:35		4m	
104	henear			↓		
105	H243	13:14:00.7	+29:21:49		2m	

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60 inch Telescope Log

Observer: J. PetersPI: J. HutchraSpectrograph: FASTGrating: 300Page: 1718Date: 1/15/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1	Comp			↓	20 ^s	Broken Clouds
2	Feige 15	01 46 28	13 18 17	SS	1 ^m	BAT Moon
3	Comp			↓	20 ^s	You are all going To
4	J0156P1051	01 56 41	10 51 27	SS	10 ^m	have to beak with
5	J0156P1051	↓	↓	SS	10 ^m	me for awhile ow
6	Comp			↓	20 ^s	This IRAF thing,
7	J0156P1312	01 56 52	+13 12 49	SS	10 ^m	{ IRAF A four letter
8	Comp			↓	20 ^s	{ word.
9	J0157P1257	01 57 06	12 57 33	SS	10 ^m	File 2 my Test
10	J0157P1257	↓	↓	SS	10 ^m	easy obj
11	Comp			↓	20 ^s	Doing again, Weird
12	J0210P1104	02 10 02	11 04 58	SS	10 ^m	{ Red End.
13	J0210P1104	02 10 02	11 04 58	SS	10 ^m	When doing plot of
14	Comp			↓	20 ^s	obj I see nothing in
15	07510P7355	07 51 00	73 54 00	SS	10 ^m	Spectra. Trying to
16	Comp			↓	20 ^s	figure out what I'm
17	0751P0330	07 51 42	03 30 00	SS	10 ^m	doing wrong.
18	Comp			↓	20 ^s	Perry just called
19	0754P3808	07 54 24	38 08 00	SS	10 ^m	and said Susan don't
20	Comp			↓	20 ^s	want MS files created.
21	0756P2713	07 56 12	27 13 00	SS	10 ^m	
22	Comp			↓	20 ^s	Stopped for clouds 10:00
23	0753P4500	07 53 06	45 00 00	SS	10 ^m	11:15
24	0753P4500	↓	↓	SS	10 ^m	
25	Comp			↓	20 ^s	
26	0756P0738	07 56 12	07 38 00	SS	10 ^m	
27	0756P0738	↓	↓	SS	10 ^m	
28	Comp			↓	20 ^s	
29	0756P0320	07 56 24	03 20 00	SS	10 ^m	
30	0756P0320	↓	↓	SS	10 ^m	

* SS means long slit.

60 inch Telescope Log

Observer: J. PetersPI: J. HuckraSpectrograph: FASTGrating: 300Page: 2719Date: 1/16/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
31	Comp			↓	20 ^s	Wind ≈ 30mph, Thru
32	0756 P 2408	07 56 54	24 08 00	SS	10 ^m	clouds, IRAF STILL
33	Comp			↓	20 ^s	a 4 LETTER something!
34	0757 P 4148	07 57 00	41 48 00	SS	10 ^m	
35	Comp			↓	20 ^s	
36	N 4486 B	12 28 00	12 45 59	SS	10 ^m	Wind + Thru Cloud
37	Comp			↓	20 ^s	Best get This Now
38	Feige 67	12 39 18	17 47 24	SS	5 ^m	Just about clouded out,
39	Comp			↓	20 ^s	here 3:20AM
40	13045 N 0054	13 04 30	-00 54 00	SS	10 ^m	No fixing Chart!
41	13045 N 0054	↓	↓	SS	10 ^m	Thru clouds
42	Comp			↓	20 ^s	
43	N 4151	12 08 01	39 41 02	SS	4 ^m	
44	Comp			↓	20 ^s	
45	Feige 34	10 36 41	43 21 50	SS	2 ^m	Fast screened up the
46	Champ			↓	20 ^s	wavelength
47	N 5548	14 15 43	25 22 01	SS	4 ^m	
48	Champ			↓	20 ^s	Had to check some
49	HZ 43	13 14 00	29 21 49	SS	5 ^m	of These obj's in
50	Champ			↓	20 ^s	wavelength. Sorry
51	HZ 44	13 21 19	36 23 39	SS	5 ^m	about The MS files,
52	FLAT				.2	
53	FLAT				.2	
54	FLAT				.2	
55	FLAT				.2	
56	FLAT				.2	
57	FLAT				.2	
58	FLAT				.2	
59	FLAT				.2	
60	FLAT				.2	

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M

60 inch Telescope Log

Observer: J. Peters

PI: J. Hutchins

Spectrograph: EAST

Grating: 300

Page: 2720

Date: 1/16/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
61	FLAT				.2	
62	FLAT				.2	
63	FLAT				.2	
64	FLAT				.2	
65	FLAT				.2	
66	FLAT				.2	
67						
68						
69						
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72						
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60 inch Telescope Log

Observer: Jim PetersPI: J. HuckraSpectrograph: FASTGrating: 300Page: 2721Date: 1/16/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-15	FLAT				2	There are 15 Flats.
16	Comp			↓	20 ^s	I forgot to Turn The
17	Feige 15	01 46 28	13 18 17	SS	2 ^m	FLAT Lamp off FROM
18	Comp			↓	20 ^s	use last night. IT
19	J0155 P1050	01 55 42	10 58 13	SS	10 ^m	has been on for
20	J0155 P1050	↓	↓	SS	10 ^m	30 12 hours. Sh--
21	J0155 P1050	↓	↓	SS	10 ^m	used + 1W Name
22	Comp			↓	20 ^s	
23	J0156 P1104	01 56 29	11 04 12	SS	10 ^m	
24	J0156 P1104	↓	↓	SS	10 ^m	
25	Comp			↓	20 ^s	
26	01197 P3251	01 19 42	32 51 00	SS	10 ^m	
27	01197 P3251	↓	↓	SS	10 ^m	Delay Locked UP
28	Comp			↓	20 ^s	IRAF,
29	RX0405 P2009 3	04 05 18	20 09 06	SS	10 ^m	Obj #3 on card
30	RX0405 P2009 3	↓	↓	SS	10 ^m	Obj #3 on card
31	Comp			↓	20 ^s	Delay on Phone
32	0757 P4419	07 57 54	44 19 00	SS	10 ^m	with Ted and later
33	0757 P4419	↓	↓	SS	10 ^m	Dan F,
34	Comp			↓	20 ^s	
35	0758 P2725	07 58 24	27 25 00	SS	10 ^m	
36	0758 P2725	↓	↓	SS	10 ^m	
37	Comp			↓	20 ^s	Seeing blowing UP
38	07105 P2253	07 10 30	22 53 00	SS	10 ^m	≈ 3" Wind ≈ 15-20mph
39	07105 P2253	↓	↓	SS	10 ^m	
40	Comp			↓	20 ^s	
41	07133 P2743	07 13 18	27 43 00	SS	10 ^m	This Thing is diffuse.
42	07133 P2743	↓	↓	SS	10 ^m	
43	Comp			↓	20 ^s	
44	07224 P4047	07 22 24	40 47 00	SS	10 ^m	↓

60 inch Telescope Log

Observer: Jim PutneyPI: J. HuchraSpectrograph: FASTGrating: 300Page: 1711Date: 1/16-17/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
45	07224P4047	07 22 24	40 47 00	SS	10 ^m	If The TV could have
46	Comp			↓	20 ^s	The verticle lines
47	07226P3233	07 22 36	32 33 00	SS	10 ^m	Taken out, IT would
48	07226P3233	↓	↓	SS	10 ^m	be much better than
49	Comp			↓	20 ^s	The old ZMach T.V.
50	07249P2630	07 24 54	26 30 00	SS	10 ^m	
51	07249P2630	↓	↓	SS	10 ^m	
52	Comp			↓	20 ^s	
53	07293P2713	07 29 18	27 13 00	SS	10 ^m	
54	07293P2713	↓	↓	SS	10 ^m	
55	Comp			↓	20 ^s	
56	07344P2857	07 34 24	28 57 00	SS	10 ^m	
57	07344P2857	↓	↓	SS	10 ^m	
58	Comp			↓	20 ^s	
59	07369P3220	07 36 54	32 20 00	SS	10 ^m	Have Lost The Mouse
60	07369P3220	↓	↓	SS	10 ^m	on The LKH 1000,
61	Comp			↓	20 ^s	Turned IT off for
62	07543P2600	07 54 18	26 00 00	SS	5 ^m	≈ 5min Then Back on
63	07543P2600	↓	↓	SS	5 ^m	Proplem gone?!
64	Comp			↓	20 ^s	
65	07484P4408	07 48 24	44 08 00	SS	5 ^m	
66	07484P4408	↓	↓	SS	5 ^m	
67	Comp			↓	20 ^s	
68	U4120	07 54 48	39 58 00	SS	10 ^m	
69	U4120	↓	↓	SS	10 ^m	
70	Comp			↓	20 ^s	
71	13048P0217	13 04 48	02 17 00	SS	10 ^m	
72	13048P0217	↓	↓	SS	10 ^m	
73	Comp			↓	20 ^s	
74	13078P0218	13 07 48	02 18 00	SS	10 ^m	

60 inch Telescope Log

Spectrograph: FASTObserver: Jim PattenGrating: 300Page: 2723PI: J. AnshraDate: 1/16-17/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
75	13078P0218	13 07 48	02 18 00	SS	10 ^m	
76	Comp			↓	20 ^s	
77	N4486B	12 28 00	12 45 59	SS	8 ^m	
78	N4486B	↓	↓	SS	8 ^m	
79	Comp			↓	20 ^s	
80	N4151	12 08 01	39 41 02	SS	3 ^m	
81	N4151	↓	↓	SS	3 ^m	
82	Comp			↓	20 ^s	
83	F 34	10 36 41	43 21 50	SS	2 ^m	
84	F 34	↓	↓	SS	2 ^m	
85	Comp			↓	20 ^s	
86	N5548	14 15 43	25 22 01	SS	5 ^m	
87	N5548	↓	↓	SS	5 ^m	
88	Comp			↓	20 ^s	
89	H2 43	13 14 00	29 21 49	SS	2 ^m	
90	H2 43	↓	↓	SS	2 ^m	
91	Comp			↓	20 ^s	
92	H2 44	13 21 19	36 23 38	SS	5 ^m	
93	H2 44	↓	↓	SS	5 ^m	
94	Comp			↓	20 ^s	
95	Feige 67	12 39 18	17 47 24	SS	2 ^m	Dawn Comes
96	Feige 67	↓	↓	↓	2 ^m	No finding Chart
97						
98						
99						
100						
101						
102						
103						
104						

60 inch Telescope Log

Observer: P. Berlind

PI: J. Huchra

Spectrograph: FAST

Grating: 300L, 3" slit

Date: 11/17/94

Page: 2724

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-15	BIAS				0 sec	Moon: 00:25 +6°
16-30	FLAT				0.1 s	
31-45	FLAT				0.2 s	clear skies
46-50	hencar				20s	test
51	hencar			↓	20s	
52	Abell 245B	01:41:31.4	+06:03:52		10m	
53	Abell 245A	01:41:16.1	+06:09:44		10m	
54	hencar			↑		
55	4688.1145	01:49:25.9	-05:12:22		10m	weak signal / bright moon
56	hencar			↑		
57	hencar			↓		
58	Q0232m042	02:32:36.6	-04:15:11		10m	QSO for Olga Kuhn
59	hencar			↓		
60	02264p0009	02:26:24	+00:09:00		15m	H α 2186?
61	hencar			↓		
62	5286.0185	02:50:36.6	-09:43:01		10m	seeing 1-2"
63	hencar			↓		
64	A0338m1915	03:38:49.0	-19:15:12		10m	two objects on slit
65	A0338m1914	03:38:01.0	-19:14:42		10m	NOTE this is faint
66	hencar			↓		
67	Abell 396C	02:53:51.4	+41:18:52		10m	
68	hencar			↓		
69	U3517B	06:40:24	+41:06:00		10m	H α
70	hencar			↓		
71	07134p2942	07:13:24	+29:42:00		10m	H α
72	hencar					
73	07290p3159	07:29:00	+31:59:00		10m	H α ? TV problems
74	hencar			↓		
75	07374p2148	07:37:24	+21:48:00		10m	H α
76	hencar			↓		

extracted 2 spectra from 73
 .2 to put correct object

.1 removed
 file 72
 (4/23/96 at)

2085
 2315
 2147
 3161
 14

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 3002, 3" slitDate: 11/17/94Page: 2725

Number	Object	R. A.	Dec.	L/R	Exp	Comments
77	07375p2615	07:37:30	+26:15:00		10m	H α
78	heneer			↓		
79	07387p2053	07:38:42	+20:53:00		10m	H α
80	heneer			↓		
81	07443p3120	07:44:18	+31:20:00		10m	
82	heneer			↓		
83	07449p2832	07:44:54	+28:32:00		10m	H α barely cts?
84	07448p2827	07:44:48	+28:27:00		5m	H α "2206
85	heneer			↓		
86	07523p2706	07:52:18	+27:06:00		10m	H α
87	heneer			↓		
88	07547p4224	07:54:42	+42:24:00		10m	H α 2 SPECTRA
89	heneer			↓		
90	07599p2753	07:59:54	+27:53:00		10m	H α
91	heneer			↓		
92	07526p2352	07:52:30	+23:52:00		5m	
93	heneer			↓		
94	07559p0823	07:55:54	+08:23:00		5m	nice
95	07558p0800	07:55:48	+08:00:00		10m	H α
96	heneer			↓		
97	07558p0817	07:55:48	+08:17:00		5m	
98	07559p0810	07:55:54	+08:10:00		5m	
99	07555p0817B	07:55:30	+08:17:00		5m	
100	heneer			↑		
101	heneer			↓		
102	07582p0226	07:58:12	+02:26:00		10m	H α
103	heneer			↓		
104	07596p2955	07:59:36	+29:55:00		15m	
105	COMP			↓		
106	08130 p3136	08:13:00	+31:36:00		10m	H α v. diff. to get faint & 100%

cut #90
 started
 with
 at small
 instead
 of defect

redo 106

60 inch Telescope Log

 Observer: P. Berlind
 PI: J. Huchra

 Spectrograph: FAST
 Grating: 300 L, 3" slit
 Date: 1/17/94
Page: 2726

Number	Object	R. A.	Dec.	L/R	Exp	Comments
107	COMP			↓		
108-109	08272p3121	08:27:12	+31:21:W	↓	10m	20min H α 2129
110	COMP			↑		
111	COMP			↓		
112	08339p2731	08:33:54	+27:31:W		10m	H α
113	COMP			↓		
114-115	44725	08:57:48	+32:12:W			20m H α 115- 2129
116	COMP			↑		
117	COMP			↓		
118	09235p2647	09:23:30	+26:47:W		10m	H α
119	09235p2648	09:23:42	+26:48:W		10m	
120	09252p2637	09:25:12	+26:37:W		5m	
121	COMP			↑		
122	COMP			↓		
123	09286p2642N	09:28:36	+26:42:W		10m	H α @ 2429?
124	09268p2642S	09:28:36	+26:42:W		10m	H α
125	COMP			↑		
126	COMP			↓		
127	1ES1234p459	12:34:28	+45:55:33		10m	X-ray superposed star; H α
128	COMP			↓		
129	13011p0810	13:01:06	+08:10:W		15m	a redo from 6/23/93 2207 H α 8
130	COMP			↓		
131	U8217E	13:05:54	+04:38:W		10m	H α
132	U8217W	13:05:54	+04:38:W		10m	H α
133	COMP			↓		
134	13062p0425	13:06:12	+04:25:W		10m	2 OBJECTS !! *
135	COMP			↓		
136	13082p0018	13:08:12	+00:18:W		10m	H α @ 2780 on sky line
137	COMP			↓		
138	N4486B	12:28:00	+12:45:59		5m	

* PLEASE MARK

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300L, 3" slitDate: 1/18/94Page: 2728

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-15	BIAS				0s	Moon 1:06 +10
16-30	FLAT				0.1s	
31-45	FLAT				0.2s	
46-50	COMP				20s	
51	COMP			↓		
52-53	A262196	01:51:21.8	+34:04:15		10m	20m total H α
54	COMP			↓		
55	A262189	01:51:08	+33:54:57		10m	
56	COMP			↓		
57	A262207	01:51:48.5	+33:56:07		10m	
58	COMP			↓		
59	A26240	01:49:01.5	+36:01:32		10m	
60	A26228	01:46:27.8	+36:09:53			
61	COMP			↓		
62	A26234	01:46:43.8	+34:54:30		10m	
63	A26235	01:46:44.2	+35:59:28		10m	
64	COMP			↑		
65	COMP			↓		
66	A0338m1838	03:38:37	-18:38:18		15m	
67	A0339m1825	03:39:14	-18:25:18		10m	another H α in cts? where's H α when slit you need it?
68	COMP			↑		
69	COMP			↓		
70	4712.1295	03:20:11.3	-04:21:51		15m	needs more
71	COMP			↓		
72	07443p3120	07:44:18	+31:20:00		15m	H α
73	07553p3110	07:55:18	+31:10:00		10m	possible mis id on chart star was marked, I observed
74	COMP			↑		
75	COMP			↓		nearby galaxy - see chart
76	07587p2522	07:58:42	+25:22:00		5m	superposed *?
77	COMP			↓		

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 300 λ , 3" slitDate: 1/18/94Page: 2729

Number	Object	R.A.	Dec.	L/R	Exp	Comments
78	07590p2722	07:59:00	+27:22:00		10m	H α
79	COMP			↓		seeing 1-2"
80	07590p3227	07:59:00	+32:27:00		10m	H α
81	COMP			↓		
82	07595p3023	07:59:30	+30:23:00		10m	H α
83	COMP			↓		
84	07577p0757	07:57:42	+07:57:00		5m	H α - decent
85	COMP			↓		
86	07587p0666	07:58:42	+06:16:00		5m	H α
87	COMP			↓		
88	07590p0646	07:59:00	+06:46:00		5m	✓
89	COMP			↓		
90	07586p0425	07:58:36	+04:25:00		3m	
91	07592p0425	07:59:12	+04:25:00		5m	H α
92	07596p0428	07:59:36	+04:28:00		10m	H α
93	COMP			↑		
94	COMP			↓		
95	08010p0742	08:01:00	+07:42:00		10m	
96	08010p0742E	"	"		10m	east knot of galaxy
97	COMP			↑		
98	08015p0731	08:01:30	+07:31:00		5m	
99	COMP			↓		
100	08320p0556	08:32:00	+05:56:00		10m	
101	COMP			↓		
102	08346p0452	08:34:36	+04:52:00		5m	possible H α @ λ 2300 right on sky line
103	COMP			↓		
104	08354p0804E	08:35:24	+08:04:00		5m	East Camp H α ? 2315
105	08354p0804W	08:35:24	+08:04:00		5m	West Camp
106	COMP			↑		extra
107	COMP			↓		

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 3002, 3" slitDate: 1/18/94Page: 2750

Number	Object	R. A.	Dec.	L/R	Exp	Comments
108	08355p0401S	08:35:30	+04:01:00		10m	South camp, H α @ 2230
109	08355p0401N	08:35:30	+04:01:00		10m	North H α @ 2230
110	COMP			↕		
111	08358p0411	08:35:48	+04:11:00		10m	H α
112	COMP			↓		
113	08359p0723	08:35:54	+07:23:00		10m	
114	08361p0741	08:36:01	+07:41:00		10m	
115	COMP			↕		
116	08365p0735	08:36:30	+07:35:00		5m	
117	COMP			↓		
118	08360p0759	08:36:00	+07:59:00		3m	
119	COMP			↓		
120	08464p0734	08:46:24	+07:34:00		10m	
121	COMP			↓		
122	09590p0350	09:59:00	+03:50:00		10m	H α
123	BIAS				0s	seems a little high
124	COMP			↓		ion pump voltage = 2.39 VDC - ok
125	10081m0148	10:08:06	-01:48:00		5m	A957-403
126	COMP			↓		
127	10093p0010	10:09:18	+00:10:00		10m	H α A957-404
128	COMP			↓		
129	10095m0154	10:09:30	-01:54:00		5m	A957-405
130	COMP			↓		
131	11033p0256	11:03:18	+02:56:00		10m	
132	COMP			↓		
133	11035p0335	11:03:30	+03:35:00		5m	
134	11036p0335	11:03:36	+03:35:00		3m	
135	COMP			↑		necessary? probably not
136	COMP			↓		
137	11049p0404	11:04:54	+04:04:00		10m	2 objects cm slit

60 inch Telescope Log

Observer: P. BerlindPI: J. HuchraSpectrograph: FASTGrating: 600Date: 11/18/94Page: 2731

Number	Object	R. A.	Dec.	L/R	Exp	Comments
138	COMP			↓		
139	13084p0125	13:08:24	+01:25:00		10m	H α
140	COMP			↓		
141	13095p0155	13:09:30	+01:55:00		10m	H α
142	COMP			↓		
143	13096p0408	13:09:36	+01:08:00		5m	
144	COMP			↓		
145	13098m0211	13:09:48	-02:11:00		5m	H α
146	COMP			↓		
147	13113p0224	13:11:18	+02:24:00		3m	
148	COMP			↓		
149	13113p0249	13:11:18	+02:49:00			
150	COMP			↓		
151	13116m0010	13:11:36	-00:10:00		10m	
152	BIAS				0s	
153	COMP			↓		
154	13130p0045	13:13:00	+00:45:00		10m	good luck susan may need more
155	COMP			↓		
156	N4486B	12:28:00	+12:45:59		5m	std
157	COMP			↓		
158	Feige 67	12:39:18.9	+17:47:24		2m	std
159	COMP			↓		
160	GD140	11:34:27.8	+30:01:35		2m	std
161	COMP			↓		
162	N4151	12:08:01	+39:41:02		3m	
163	COMP			↓		
164	HZ44	13:21:19	+36:23:39		2m	std
165	COMP			↓		
166	HZ43	13:14:00.9	+29:21:49		2m	std
167	COMP			↓		



60 inch Telescope Log

Observer: P. Berlind / Steve MuscarellaPI: J. HuchraSpectrograph: FASTGrating: 300L, 3" slitDate: 1/19/94Page: 2733

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-15	BIAS				0s	Moon: 1:50 +14
16-20	FLAT				0.1s	lots of thin clouds
21-25	FLAT				0.2s	Bias cts \approx 200; ionpump 26VDC
26	COMP			↓	20s	
27	M31	00:40:00	+40:59:42		10m	seeing rough 2-3"
28	COMP			↑		through clouds
29	COMP			↓		delay for clouds
30	N2615	08:32:00	-02:22:00		3m	U 4481 clearing
31	COMP			↓		
32	N2618	08:33:18	+00:52:00		3m	U 4492
33	COMP			↓		
34-36	HD52971	06:57:51.14	+29:13:42.4		30s	
37	COMP			↓		
38-40	HD52971	"	"		30s	
41	COMP			↓		
42	U4788N	09:04:30	+59:16:00		10m	North comp
43	U4788S	09:04:30	+59:16:00		10m	Hx
44	COMP			↑		
45	U4788SN	09:04:30	+59:16:00		10m	North comp again Hx?
46	COMP			↓		
47	08039p0442	08:03:54	+04:42:00		5m	
48	08047p0436	08:04:42	+04:36:00		5m	
49	COMP			↓		
50	08055p0430	08:05:30	+04:30:00		5m	Hx
51	COMP			↓		
52	08065p0510	08:06:30	+05:10:00		10m	Hx
53	08072p0525	08:07:12.0	+05:25:00		5m	
54	COMP			↓		
55	I498	08:06:48	+05:25:00		10m	
56	COMP			↓		

60 inch Telescope Log

Spectrograph: FastObserver: Jim Peters / Steve MuscoGrating: 300Page: 2735PI: J.H. KuchraDate: 1/20/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1	Comp			↓	205	
2	00168 P1635	00 16 48	16 35 00	SS	10M	Brt Moon, Thin Clouds
3	00168 P1635	00 16 48	16 35 00	SS	10M	Around
4-18	BIAS				05	Stopped By BRT Moon
19-33	FLAT				.25	94% Data 3 Before
34	COMP			↓	205	Purged 16 th 17 th
35	08081 P0319	08 08 00	03 19 00	SS	10M	Data 3 = 51%
36	08081 P0319	08 08 00	03 19 00	SS	10M	
37	COMP			↓	205	
38	08084 P0627	08 08 24.0	06 27 00	SS	10M	
39	08084 P0627	↓	↓	SS	10M	
40	COMP			↓	205	
41	08164 P0347	08 16 24	03 47 00	SS	10M	Stopped Lost The
42	08164 P0347	↓	↓	SS	10M	Mouse SW LKH 1000
43	COMP			↓	205	
44	08225 P0332	08 22 30	03 32 00	SS	10M	
45	08225 P0332	↓	↓	↓	↓	
46	COMP			↓	205	
47	08226 P0405	08 22 36	04 05 00	SS	10M	Stopped T.V. Guider
48	08226 P0405	↓	↓	↓	↓	Full of noise
49	COMP			↓	205	
50	N4839	12 57 24	27 29 51	SS	15M	For N. Caldwell
51	Comp			↓	205	→ 
52	N4486 B	12 28 00	12 45 59	SS	10M	W  East
53	N4486 B	↓	↓	SS	10M	N
54	Comp			↓	205	Doing BRT obj Because
55	Feige 67	12 39 18	17 47 24	SS	4M	of T.V. Guider
56	Feige 67	↓	↓	SS	4M	No finding chart
57	COMP			↓	205	
58	HE 44	13 21 19	36 23 38	SS	4M	

60 inch Telescope Log

Observer: Jim Peters / Steve MuscarellaPI: J. HuchraSpectrograph: FastGrating: 300Page: 2737Date: 1/21/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1	Comp			↓	205	
2	00161 P 4744	0 16 06.0	47 44 00	SS	10M	Bright Moon
3	00161 P 4744	↓	↓	SS	10M	↓
4	Comp			↓	205	
5	00169 P 4658	0 16 54.0	46 58 00	SS	10M	
6	00169 P 4658	↓	↓	SS	10M	
7	Comp			↓	205	
8	4714. 1132	12 21.9	-06 53 20	SS	10M	
9	4714. 1132	↓	↓	SS	10M	
10	Comp			↓	205	Guide Monitor Extrem:
11	08080 P 0737	08 00	07 37 00	SS	10M	Noisy Hx
12	08080 P 0737	↓	↓	SS	10M	
13	COMP			↓	205	
14	08118 P 0429	08 17 36.0	04 29 00	SS	10M	Siglet
15	08118 P 0429	↓	↓	SS	10M	
16	Comp			↓	205	
17	08176 P 0452	08 17 36	04 52 00	SS	10M	Seeing getting bad Hx
18	08176 P 0452	↓	↓	SS	10M	
19	COMP			↓	205	
20	N 2561	08 17 36	04 52 00	SS	10M	v. strong emission Can see nebula
21	N 2561	08 17 36	04 52 00	SS	10M	
22	COMP			↓	205	
23	08213 P 0419	08 21 18	04 19 00	SS	10M	
24	08213 P 0419	↓	↓	SS	10M	
25	Comp P			↓	205	
26	08217 P 0425	08 21 42	04 25 00	SS	10M	
27	08217 P 0425	↓	↓	SS	10M	
28	COMP			↓	205	
29	08229 P 0517	08 21 54	05 17 00	SS	10M	
30	08229 P 0517	↓	↓	SS	10M	

