

## 60 inch Telescope Log

Observer: P. BerlindPI: M. GrellerSpectrograph: FASTGrating: 3002; 3" slitDate: 10/7/94Page: 3186

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1	COMP					Im back. Start of FAST Run
2-11	BIAS				0s	clear skies
12	FLAT				0.1s	
13, 15	S20.027986	22:23:35.0	+10:37:52.4	3	5m, 10m	15 R Survey ↓
14, 16	COMP			↑		
17	S20.031556	22:20:11.46	+11:02:40.6	3	10m	H+
18	COMP			↑	↑	
19	S18.639788	21:33:31.48	+10:30:29	3	10m	H+
20	COMP			↑		
21	S18.642745	21:34:20.49	+10:31:56	3	8m	seeing 2-3"
22	COMP			↑		
23	S18.644372	21:36:10.66	+10:37:53	3	10m	H+
24	COMP			↑		
25	S21.017835	22:43:18.23	+10:30:02.1	3	5m	
26	COMP			↑		
27	S21.018198	22:51:52.91	+10:30:51.7	3	8m	H+
28	COMP			↑		
29	S21.018662	22:54:48.18	+10:32:41.7	3	10m	
30	COMP			↑		
31	S21.018899	23:03:11	+10:32:21.6	3	5m	
32	COMP			↑		
33	S21.019005	22:46:12.55	+10:35:24.8	3	4m	
34	COMP			↑		
35	S21.019308	22:49:37.07	+10:34:39.5	3	5m	
36	COMP			↑		
37	S21.019315	22:44:06.51	+10:31:28.3	3	5m	
38	COMP			↑		
39	S21.019800A	22:44:18.93	+10:35:28.4	3	10m	South comp
40	COMP			↑		
41	S21.019800B	22:44:29.02	+10:35:58	3	5m	

## 60 inch Telescope Log

Observer: P. BerlindPI: M. GellerSpectrograph: FASTGrating: 300L; 3" slitDate: 10/7/94Page: 3187

Number	Object	R. A.	Dec.	L/R	Exp	Comments
42	COMP			↑		15 R Survey
43	S21.619895	22:49:45.7	+10:37:24	3	10m	photometric, 2-3" seeing
44	COMP			↑		
45,47	S21.020436	23:00:09.18	+10:37:25.6	3	10m	x2
46,48	COMP			↑		
49	S21.020625	22:58:07.03	+10:38:12.4	3	5m	used film 52 for comp
50	COMP			↑		shutter did not open??
51	S21.020720	22:49:23.87	+10:38:52	3	5m	
52	COMP			↑		
53	S21.020906	23:05:41.2	+10:38:02.5	3	5m	
54	COMP			↑		
55	S21.020931	23:01:10.16	+10:38:53	3	10m	H <sub>α</sub>
56	COMP			↑		
57	S21.021057	22:50:9.84	+10:39:54.3	3	5m	
58	COMP			↑		
59,61	S21.021393	22:58:39.57	+10:40:41.9	3	5m, 10m	star to Edge of slit x2
60,62	COMP			↑		
63	S21.021497	23:03:50.74	+10:40:01.9	3	5m	it's a star yes*
64	COMP			↑		
65	S21.021498	23:03:24.11	+10:40:05.4	3	5m	
66	COMP			↑		
67	S21.022194	22:50:10.76	+10:43:19	3	5m	
68	COMP			↑		
69,71	S21.022551	22:51:40.23	+10:44:23.6	3	5m, 10m	x2
70,72	COMP			↑		
73,75	S21.022681	22:58:40.22	+10:44:19.4	3	5m, 10m	x2
74,76	COMP			↑		
77	S21.022999	22:44:11.47	+10:45:29	3	10m	H <sub>α</sub>
78	COMP			↑		
79	S23.026673	23:45:58.19	+11:09:46.9	3	8m	H <sub>α</sub>

## 60 inch Telescope Log

Observer: R. BerlindPI: M. GellerSpectrograph: FASTGrating: 302; 3" slitDate: 10/7/94Page: 3188

Number	Object	R. A.	Dec.	L/R	Exp	Comments
80	COMP			↑		
81	S23.027698	23:44:26.03	+11:13:16	3	8m	
82	COMP			↑		
83, 85	S23.627906	23:52:35.42	+11:13:12	3	5m, 10m x2	
84, 86	COMP			↑		
87	S23.030252	23:56:05.61	+11:20:21.2	3	10m	
88	COMP			↑		
89	S23.039096	23:56:07.7	+11:48:21	3	8m	
90	COMP			↑		
91	S23.035405	23:56:00.37	+11:36:55.4	3	5m	H <sub>α</sub>
92	COMP			↑		
93	S23.034431	23:55:55.84	+11:24:18.6	3	5m	
94	COMP			↑		
95	S23.034475	23:47:47.01	+11:25:24.5	3	5m	H <sub>α</sub>
96	COMP			↑		
97	S23.030596	23:39:47.5	+11:22:28.2	3	8m	H <sub>α</sub>
98	COMP			↑		
99	S23.020397	23:54:03.88	+10:48:37.8	3	5m	no chart
100	COMP			↑		
101	S23.047962	23:54:41.5	+12:16:16.5	3	12m	also observed 9/12/94
102	COMP			↑		3/4/186
103	02200p0009N	02:20:W	+W:09:W	21	5m	H <sub>α</sub> Rich Groups
104	02200p0009S	02:20:W	+W:09:W	21	8m	→ pretty bright in the blue
105	COMP			↑		delay looking for Ians
106	02133m0215	02:13:18	-02:15:W	21	5m	objects - no charts
107	COMP			↑		
108	U01847N	02:21:W	+02:18:W	21	5m	Northwest camp H <sub>α</sub>
109	U01847S	02:21:W	+02:18:W	21	8m	H <sub>α</sub>
110	COMP			↑		
111	U01905	02:23:48	-01:46:00	21	4m	

## 60 inch Telescope Log

Observer: P. BerlindPI: M. GellerSpectrograph: FASTGrating: 3002Date: 10/7/94Page: 3189

Number	Object	R.A.	Dec.	L/R	Exp	Comments
112	COMP			↑		
113	02270p00330	02:27:00	+0:33:00	21	4m	
114	COMP			↑		
115	02287p0137	02:28:42	+0:37:00	21	5m	
116	COMP			↑		
117	02292m0110	02:29:12	-0:10:00	21	5m	H <sub>α</sub>
118	COMP			↑		
119	02292p0150	02:29:12	+0:50:00	21	5m	H <sub>α</sub>
120	COMP			↑		
121	02293p0231	02:29:18	+02:31:00	21	5m	wow strong lines!
122	COMP			↑		
123	02523m0134	02:52:18	-0:34:00	21	5m	H <sub>α</sub>
124	COMP			↑		
125	02525m0204	02:52:30	-02:04:00	21	5m	H <sub>α</sub>
126	COMP			↑		
127	02544m0230	02:54:24	-0:30:00	21	8m	H <sub>α</sub>
128	02547m0138	02:54:42	-0:38:00	21	5m	H <sub>α</sub>
129	COMP			↑		
130	02551p0545	02:55:06	+05:45:00	21	8m	H <sub>α</sub>
131	COMP			↑		
132	U2440	02:55:42	-02:28:00	21	5m	H <sub>α</sub>
133	COMP			↑		
134	02586m0207	02:58:36	-02:07:00	21	10m	H <sub>α</sub>
135	COMP			↑		
136	HZ14	04:38:15.6	+10:53:57	23	5m	HST snapshot stel
137	COMP			↑		Massey
138, 140	Q0454p039	04:54:08.9	+03:56:15	23	10m	3" slit as per JCM
139, 141	COMP			↑		
142	HZ14	04:38:15.6	+10:53:57	23	5m	
143	COMP			↑		

60 inch Telescope Log

Observer: P. Berlind  
 PI: Huchra

Spectrograph: FAST  
 Grating: 300R  
 Date: 10/7/94

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
144	AOS36C	05:07	-09:15	9	10m	"C"
145	COMP			↑		
146, 148	AOS36B	05:07	-09:15	9	10m	(X2)
147, 149	COMP			↑		
150	AOS36C	"	"	9	8m	twilight
151-154	HDS2971	06:57:51.11	+27:13:42	0	10s	
155	COMP			↑		
156-160	AGK2p14783	07:17:47.36	+14:59:37.7	0	20s	
161	COMP			↑		
162-166	HDS8683	07:24:42.1	+27:23:58	0	15s, 10s	
167	COMP			↑		
168-187	BINAS				0s	
188-207	FLAT				0.2s	

11/18/94

## 60 inch Telescope Log

Observer: P. BerlinPI: HuchraSpectrograph: FASTGrating: 300. 3" slitDate: 10/8/94Page: 3191

Number	Object	R. A.	Dec.	L/R	Exp	Comments
H10	BIAS				0s	clear + windy
11-20	FLAT				0.2c	
21	M22	18:36.1	-23:54.0	24	10m	integrated spectra of cluster
22	COMP			↑	15s	bias rate = 3"/sec
23	SKY	18:37	-22:13	24	10m	-23:50:45 to -23:57
24	COMP			↑		
25	M22	18:36.1	-23:54	24	5m	
26	COMP			↑		
27	SKY	19:14	-08	24	5m	rich fields around here
28	COMP			↑		
29	M75	20:06.1	-21:55	24	5m	-21:55:40 to -21:57:30
30	COMP			↑		J (today)
31	SKY	20:05	-21:49	24	5m	
32	COMP			↑		very windy +30
33	M71	19:53.5	+18:46	24	10m	18:47:45 to 18:44:25
34	COMP			↑		
35	SKY	19:53	+19:47	24	10m	
36	N6934	20:33.9	+07:23	24	8m	07:25:00 - 07:22:00
37	COMP			↑		drift rate = 2"/sec
38	SKY	20:33.9	+08:	24	8m	
39	M72	20:53.2	-12:33.0	24	10m	-12:32:45 to -12:34:45
40	COMP			↑		high wind to +35
41	SKY	20:53.2	-12:29	24	10m	OK moon getting low
42	S21.023494	22:44:26.52	+10:46:51.2	3	5m	
43	COMP			↑		
44	S21.023648	22:47:45.35	+10:47:45.4	3	6m	stopped by wind, bumper
45	COMP			↑		He needs more
46	M56	19:16.4	+30:11	24	10m	30:12:45 to 30:10:33
47	COMP			↑		
48	SKY	"	"	24	10m	

60 inch Telescope Log

Observer: P. Berlind

PI: Huchen

Spectrograph: FAST

Grating: 600R; 3"

Date: 10/8/94

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Number	Object	R. A.	Dec.	L/R	Exp	Comments
49	COMP			↑		very high wind
50	COMP			↓	10s	600 line grating; 3" slit
51	M56	"	"	24	10m	centered @ 8500 Å
52	COMP			↑	10s	
53	M56	"	"	24	10m	drift rate = 1"/sec
54	COMP			↑	10s	
55	SKY	19:16:24	+30:22.57	24	10m	strong wind from SE
56, 58	M71	19:53.5	+18:16	24	10m	cant look at faint
57, 59	COMP			↑	10s	fuzzies to East!
60	SKY	19:53	+19:17	24	10m	
61	M15	21:29.7	+12:09.60	24	10m	12:10:30 to 12:08:30
62	COMP			↑	10s	close due to high wind
63-72	FLAT				0.3s	600 line
73-82	BIAS				0s	
83-92	FLAT				0.3s	600 line
93-102	DARK				10m	

## 60 inch Telescope Log

Observer: P. BerlinePI: GellerSpectrograph: FASTGrating: 302, 3" slitPage: 3193Date: 10/9/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-10	BTAS				0s	clear + windy!
11-20	FLAT				0.2s	gusts to +30mph
21, 22	SZ1.058108	22:44:12.05	+12:30:16.5	3	5m	x2 H $\alpha$
23	COMP			↑	15s	
24, 25	SZ1.059346	22:43:15.52	+12:34:08.7	3	5m	x2
26	COMP			↑		
27, 28	SZ1.058767	22:45:32.85	+12:32:31.5	3	5m, 10m	x2
29	COMP			↑		
30	SZ1.058508	22:53:22.43	+12:31:47.2	3	10m	H $\alpha$
31	COMP			↑	14s	
32	SZ1.059708	22:52:57.3	+12:35:35.3	3	5m	H $\alpha$
33	COMP			↑		
34	SZ1.060143	22:43:11.15	+12:38:32.2	3	10m	H $\alpha$
35	COMP			↑		
36, 38	SZ1.060915	23:02:41.96	+12:38:27.3	3	10m	x2
37, 39	COMP			↑		
40	SZ1.061123	22:45:42.73	+12:39:41.3	3	5m	seeing ~2"
41	COMP			↑		
42	SZ1.062022	22:47:16.11	+12:42:45.1	3	10m	
43	COMP			↑		
44	SZ1.063305	22:56:01.98	+12:45:58.1	3	5m	
45	COMP			↑		
46	SZ1.063596	22:56:08.67	+12:47:23	3	10m	H $\alpha$
47	COMP			↑		
48	SZ1.063861	22:44:42.26	+12:48:06.1	3	5m	
49	COMP			↑		
50	SZ1.064654	22:55:50.34	+12:50:53.5	3	5m	
51	COMP			↑		
52, 54	SZ1.064828	22:47:47.78	+12:51:25.1	3	10m	LSB x2
53, 55	COMP			↑		



## 60 inch Telescope Log

Observer: P. BerliandPI: GrellerSpectrograph: FASTGrating: 3002, 3"Date: 10/9/94Page: 3/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
56	S21.065378	22:56:14.92	+12:53:00.9	3	5m	ISR Survey H <sub>α</sub>
57	COMP			↑		
58	S21.066162	22:03:52.3	+12:54:46.2	3	5m	Moon set; wind calm
59	COMP			↑		
60	S21.023648	22:47:45.35	+10:47:45.4	3	10m	H <sub>α</sub> also observed 10/8/94
61	COMP			↑		
62	S21.023823	22:41:14.87	+10:47:57.7	3	5m	
63	COMP			↑		
64	S21.024340	22:58:45.1	+10:49:25.8	3	5m	
65	COMP			↑		
66	S21.024760	22:57:16.14	+10:50:52	3	8m	H <sub>α</sub>
67	COMP			↑		
68	S21.024766	23:05:38.8	+10:49:41.2	3	8m	
69	COMP			↑		
70	S21.024998	22:49:57.94	+10:51:41.3	3	5m	
71	COMP			↑		
72	S21.025021	22:58:35.9	+10:51:28.4	3	8m	
73	COMP			↑		
74	S21.025780	23:05:40.11	+10:52:35.5	3	8m	
75	COMP			↑		
76	S21.026774	23:05:33.74	+10:54:22.1	3	5m	
77	COMP			↑		
78	S21.026460	22:58:24.17	+10:56:01.9	3	5m	H <sub>α</sub>
79	COMP			↑		
80	S21.026755	22:50:37.1	+10:56:47.7	3	10m	H <sub>α</sub>
81	COMP			↑		
82	S21.027279	23:06:12.9	+10:56:43.6	3	5m	
83	COMP			↑		
84	S21.07432	22:59:18.18	+10:58:59.2	3	10m	
85	COMP			↑		

60 Inch Telescope Log

Observer: P. Berndt  
 PI: Greller/Huchra

Spectrograph: FAST  
 Grating: 300L; 3" slit +1200 Page: 3195  
 Date: 10/9/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
86	S21.027797	22:51:07.58	+10:59:533	3	5m	
87	COMP			↑		
88	S21.027858	22:50:48.3	+11:10:02.7	3	10m	
89	COMP			↑		
90	S21.28004	22:49:39.67	+11:10:27.6	3	3m	stellar; H $\alpha$ + broad H $\beta$
91	COMP			↑		Seyfert
92	S21.028642	22:51:36.44	+11:10:26.6	3	5m	
93	COMP			↑		
94	225m280a	00:40:33.3	+11:11:20	24	10m	Globular M31
95	COMP			↑		
96	158m213	00:40:30.2	+40:50:55	24	10m	M31 gc
97	COMP			↑		
98	225m280b	00:41:45.1	+41:05:12	24	10m	M31 gc
99	COMP			↑		
100	SS0019p21	00:17:13.9	+21:40:20	13	10m	1700 line / 2" slit H $\alpha$
101	COMP			↑	12s	
102	SS0019p21	"	"	13	10m	4500-5500 Å 2" slit
103	COMP			↑	120s	
104	SS0019p21	"	"	13	3m	5" slit
105	COMP			↑	60s	
106	PG0216p032	02:16:43	+03:13:08	13	6m	Massey standard
107	COMP			↑	60s	
108-9	BIAS			—		
→ 110	AWM7G2S	02:51:24	+41:57:27	22	10m	These
111	COMP			↑	15s	charts
112,114	AWM7G24	02:51:20.9	+41:53:16	22	10m	id? +2 Suck!
113,115	COMP			↑		
→ 116	AWM7G2S	02:51:24	+41:57:27	22	10m	
117	COMP			↑		
118	AWM7G18	02:50:37	+41:31:27	22	5m	star?

60 inch Telescope log

Observer: P. BertlandPI: HuchraSpectrograph: FASTGrating: 3002Date: 10/9/94Page: 3196

Number	Object	R.A.	Dec.	L/R	Exp	Comments
119	COMP			↑		
120	AWM7G29	02:51:59.4	+41:35:30.4	22	8m	These charts still look ambiguous!
121	COMP			↑		
122	AWM7G27	02:51:48.1	+41:24:20	22	5m	- another mis ID
123	COMP			↑		on chart
124	AWM7G22	02:51:49.9	+41:21:25	22	5m	see chart
125	COMP			↑		→ #23 came up at
126	02362p0150	02:36:12	+01:50:40	21	5m	these coords;
127	COMP			↑		see chart
128	02378m0140	02:37:48	-01:40:10	21	5m	H-I give up on these
129	COMP			↑		charts. Return to
130	02365m046	02:36:30	-01:46:10	21	5m	Ian at least
131	COMP			↑		50% mis-ID's!
132	02442p013	02:44:12	+01:13:10	21	4m	
133	COMP			↑		
134	02443sm0204	02:44:18	-02:04:10	21	5m	H-I
135	COMP			↑		J1994.5
136, 138	Pal 2	04:45:48	+31:22:10	24	15m	+41:21:15 to +31:21:30 x2
137, 139	COMP			↑	15s	drift rate = 0.5"/sec
140	SKY	04:45:39.18	+31:25:24	24	15m	cute cluster
141	COMP			↑		
142	Pal 2	04:45:48	+31:22:10	24	15m	drift rate = 0.25"/sec
143	COMP			↑		end at -16° twilight
144	SKY	04:45:39	+31:25:05	24	7.5m	"
145	COMP			↑		unnecessary, probably
146	05193p1802	05:19:18	+18:02:10	21	5m	
147	COMP			↑		
148-157	BIAS			-	0s	— H-I pos = 336.5
158-172	FLAT			13	1s	1200 line grating blue
173-187	FLAT			13	0.85s	1200 line; H-I H-I = 675

H-I end

60 inch Telescope Log

Observer: J. PetersPI: J. Huchra et alSpectrograph: FASTGrating: 300Page: 3197Date: 10/2/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-15	FLAT				.2 <sup>s</sup>	
16-30	Bias					
31	Hewlett				12 <sup>s</sup>	Calib. File
32	Test				.1	
33	Comp			↓	15 <sup>s</sup>	
34	HD 198858	20 49 50	47 31 07	0	2 <sup>s</sup>	
35	Comp			↓	15 <sup>s</sup>	
36	N2331	22 31 46	34 09 43	0	5 <sup>m</sup>	
37	Comp			↓	15 <sup>s</sup>	
38	MK509	20 41 26	-10 54 18	0	2 <sup>m</sup>	
39	Comp			↓	15 <sup>s</sup>	
40	EG 149	21 44 57	-07 58 03	0	10 <sup>m</sup>	
41	Comp			↓	15 <sup>s</sup>	
42	521.028178	22 57 46	11 00 35	3	10 <sup>m</sup>	
43	Comp			↓	15 <sup>s</sup>	
44	521.028228	23 08 03	10 59 01	3	5 <sup>m</sup>	
45	Comp			↓	15 <sup>s</sup>	
46	521.028247	22 46 20	11 00 56	3	5 <sup>m</sup>	
47	Comp			↓	15 <sup>s</sup>	
48	521.028334	23 01 03	11 00 36	3	10 <sup>m</sup>	
49	Comp			↓	15 <sup>s</sup>	
50	521.028635	22 55 12	11 02 08	3	10 <sup>m</sup>	
51	Comp			↓	15 <sup>s</sup>	
52	521.029310	22 55 58	11 04 10	3	10 <sup>m</sup>	* closest to center 2 obj's close together
53	Comp			↓	15 <sup>s</sup>	
54	521.029479	22 54 02	11 04 43	3	5 <sup>m</sup>	
55	Comp			↓	15 <sup>s</sup>	
56	521.029588	22 43 14	11 04 34	3	8 <sup>m</sup>	
57	Comp			↓	15 <sup>s</sup>	
58	521.030013	22 50 47	11 06 25	3	8 <sup>m</sup>	

# 52

↖ called top object 5 (a galaxy)  
↘ called lower object 10 (a \*)

60 inch Telescope Log

Observer: J. PetersPI: J. HunklerSpectrograph: FastGrating: 300Page: 3198Date: 10/10/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
59	Comp			↓	15 <sup>s</sup>	
60	521,030115	23 02 17	11 05 40	3	8 <sup>m</sup>	
61	Comp			↓	15 <sup>s</sup>	
62	521,031589	23 03 41	11 09 38	3	10 <sup>m</sup>	
63	Comp			↓	15 <sup>s</sup>	
64	521,031612	22 49 00	11 10 47	3	10 <sup>m</sup>	
65	Comp			↓	15 <sup>s</sup>	
66	521,031635	22 49 05	11 11 00	3	10 <sup>m</sup>	
67	Comp			↓	15 <sup>s</sup>	
68	521,031777	22 43 59	11 11 09	3	10 <sup>m</sup>	
69	Comp			↓	15 <sup>s</sup>	
70	521,032398	22 49 51	11 13 24	3	10 <sup>m</sup>	
71	Comp			↓	30 <sup>s</sup>	
72	521,033066	22 51 09	11 15 19	3	8 <sup>m</sup>	
73	Comp			↓	15 <sup>s</sup>	
74	521,033075	22 46 00	11 15 12	3	5 <sup>m</sup>	
75	Comp			↓	15 <sup>s</sup>	
76	521,033078	22 47 02	11 15 16	3	10 <sup>m</sup>	
77	Comp			↓	15 <sup>s</sup>	
78	521,033203	22 48 37	11 15 43	3	8 <sup>m</sup>	
79	Comp			↓	15 <sup>s</sup>	
80	521,033412	22 47 03	11 15 52	3	5 <sup>m</sup>	
81	Comp			↓	15 <sup>s</sup>	
82	521,033458	22 46 09	11 16 19	3	8 <sup>m</sup>	
83	Comp			↓	15 <sup>s</sup>	
84	521,033469	22 53 41	11 16 26	3	10 <sup>m</sup>	
85	Comp			↓	15 <sup>s</sup>	
86	521,033717	22 55 42	11 17 03	3	10 <sup>m</sup>	
87	Comp			↓	15 <sup>s</sup>	
88	521,034452	22 50 30	11 19 18	3	10 <sup>m</sup>	

60 inch Telescope Log

Observer: J. PetersPI: J. HuchraSpectrograph: FIRSTGrating: 300Date: 10/10/94Page: 3/99

Number	Object	R.A.	Dec.	L/R	Exp	Comments
89	Comp			↓	15 <sup>s</sup>	
90	521.034493	23 02 48	11 18 25	3	10 <sup>m</sup>	
91	Comp			↓	15 <sup>s</sup>	
92	BDP 26 595	03 37 08	26 48 01	0	10 <sup>s</sup>	
93	Comp			↓	15 <sup>s</sup>	
94	M 32	00 39 58	40 35 30	0	1 <sup>m</sup>	
95	Comp			↓	15 <sup>s</sup>	
96	4712.1295	03 26 11	-04 21 51	1	15 <sup>m</sup>	WILL KILL THIS
97	Comp			↓	15 <sup>s</sup>	Obj Now
98	A0338N1848 <sup>11</sup>	03 38 19	-18 48 42	1	2 <sup>m</sup>	# 11 on chart
99	Comp			↓	15 <sup>s</sup>	
100	A0338N1848 <sup>12</sup>	03 38 28	-18 48 12	1	5 <sup>m</sup>	# 12 on chart
101	Comp			↓	15 <sup>s</sup>	
102	A0339N1847	03 39 08	-18 47 48	1	15 <sup>m</sup>	# 18 on chart
103	Comp			↓	15 <sup>s</sup>	
104	A0339N1852	03 39 44	-18 52 12	1	10 <sup>m</sup>	# 20 on chart
105	Comp			↓	15 <sup>s</sup>	
106	A0337N1849	03 37 37	-18 49 54	1	10 <sup>m</sup>	# 8 on chart
107	Comp			↓	15 <sup>s</sup>	
108	A0337N1855	03 37 08	-18 55 12	1	10 <sup>m</sup>	# 7 on chart
109	Comp			↓	15 <sup>s</sup>	
110	A0336N1853	03 36 39	-18 53 59	1	10 <sup>m</sup>	# 3 on chart
111	Comp			↓	15 <sup>s</sup>	
112	03052N0100	03 05 12	-01 00 00	21	5 <sup>m</sup>	A on finishing chart
113	Comp			↓	15 <sup>s</sup>	
114	03057N0059	03 05 42	-00 59 00	21	1 <sup>m</sup>	Obj B on chart. Don't
115	Comp			↓	15 <sup>s</sup>	see The Galaxy!
116	03060P0013	03 06 00	00 13 00	21	10 <sup>m</sup>	STR Too BRT
117	Comp			↓	15 <sup>s</sup>	
118	03068N0105	03 06 48	-01 05 00	21	5 <sup>m</sup>	

## 60 inch Telescope Log

Observer: J. PetersPI: J. HuchraSpectrograph: FASTGrating: 300Page: 3200Date: 10/10/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
119	Comp			↓	15 <sup>s</sup>	
120	03085N0224	03 08 35	-02 24 00	21	5 <sup>m</sup>	
121	Comp			↓	15 <sup>s</sup>	
122	03086N0043	03 08 48	-00 43 00	21	5 <sup>m</sup>	
123	Comp			↓	15 <sup>s</sup>	
124	03090N0055	03 09 00	-00 55 00	25	10 <sup>m</sup>	
125	Comp			↓	15 <sup>s</sup>	
126	HD 52071	06 37 42	27 14 00	0	2 <sup>s</sup>	9?
127	Comp			↓	15 <sup>s</sup>	
128	AGK2 P14783	07 17 48	15 01 00	0	10 <sup>s</sup>	
129						
130						
131						
132						
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146						
147						
148						

60 inch Telescope Log

Observer: J. PetersPI: J. HuchraSpectrograph: FASTGrating: 300Page: 3201Date: 10/11/84

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-15	FLAT	300 L/mm	TILT Pos	590	.2	3" SLIT
16-30	Bias	300 L/mm				3" SLIT
31-45	FLAT 1200	1200 L/mm	TILT	675	1 <sup>s</sup>	2" SLIT
46-60	FLAT 1200	1200 L/mm	TILT	336.5	2 <sup>s</sup>	2" SLIT
60-75	Bias	1200 L/mm	"	"		2" SLIT
76	Comp P			↓	15 <sup>s</sup>	
77	SDO 084795	17 01 04	24 55 00	0	10 <sup>s</sup>	
78	Comp P			↓	15 <sup>s</sup>	
79	HD 198858	20 49 42	47 32 00	0	3 <sup>s</sup>	
80	Comp P			↓	15 <sup>s</sup>	
81	EG 149	21 44 57	-07 58 03	0	10 <sup>m</sup>	
82	Comp P			↓	15 <sup>s</sup>	
83	MK 509	20 41 26	-10 54 18	6	2 <sup>m</sup>	LOT of MOON
84	Comp P			↓	15 <sup>s</sup>	
85	521.034841	22 48 55	11 20 30	3	10 <sup>m</sup>	
86	Comp P			↓	15 <sup>s</sup>	
87	521.034885	23 07 14	11 18 50	3	10 <sup>m</sup>	
88	Comp P			↓	15 <sup>s</sup>	
89	521.034906	23 00 10	11 20 07	3	15 <sup>m</sup>	
90	Comp P			↓	15 <sup>s</sup>	
91	521.035060	22 50 21	11 21 14	3	15 <sup>m</sup>	
92	Comp P			↓	15 <sup>s</sup>	
93	521.035132	22 46 34	11 21 26	3	5 <sup>m</sup>	
94	Comp P			↓	15 <sup>s</sup>	
95	521.035343	22 48 31	11 22 04	3	5 <sup>m</sup>	
96	Comp P			↓	15 <sup>s</sup>	
97	521.035330	22 50 12	11 22 03	3	6 <sup>m</sup>	
98	521.035330	" " "	" " "	3	6 <sup>m</sup>	
99	Comp P			↓	15 <sup>s</sup>	
100	521.035426	23 04 13	11 21 08	3	10 <sup>m</sup>	



## 60 inch Telescope Log

Observer: J. PetersPI: J. HuchraSpectrograph: FASTGrating: 300Date: 10/11/94Page: 3202

Number	Object	R. A.	Dec.	L/R	Exp	Comments
101	Comp			↓	15 <sup>s</sup>	
102	521.036248	22 47 25	11 24 45	3	10 <sup>m</sup>	
103	Comp			↓	15 <sup>s</sup>	
104	521.036489	22 47 20	11 25 16	3	10 <sup>m</sup>	
105	Comp			↓	15 <sup>s</sup>	
106	521.036600	22 57 37	11 25 34	3	10 <sup>m</sup>	
107	Comp			↓	15 <sup>s</sup>	
108	521.036828	22 58 19	11 26 12	3	10 <sup>m</sup>	
109	Comp			↓	15 <sup>s</sup>	
110	521.037930	22 49 22	11 29 39	3	10 <sup>m</sup>	
111	Comp			↓	2 <sup>m</sup>	Pos 336.5 JEFF M <sup>c</sup> .
112	550019P 21	00 17 13	21 40 20	13	10 <sup>m</sup>	Blue 2"SLT.
113	550019P 21	↓	↓	13	10 <sup>m</sup>	Blue
114	Comp			↓	90 <sup>s</sup>	Red 675 Pos
115	550019P 21	00 17 13	21 40 20	13	10 <sup>m</sup>	Red 675 Pos 2"SLT
116	550019P 21	↓	↓	13	10 <sup>m</sup>	Red 675 Pos 2"SLT
117	Comp			↓	15 <sup>s</sup>	Red Shift 3004/μm
118	521.038665	22 48 49	11 31 54	3	10 <sup>m</sup>	590 Pos 3"SLT
119	Comp			↓	15 <sup>s</sup>	
120	521.038862	22 46 21	11 32 25	3	10 <sup>m</sup>	
121	521.038862	↓	↓	3	10 <sup>m</sup>	
122	Comp			↓	15 <sup>s</sup>	
123	521.038873	22 55 16	11 32 28	3	10 <sup>m</sup>	
124	Comp			↓	15 <sup>s</sup>	
125	469.070967	02 13 37	13 27 39	3	10 <sup>m</sup>	
126	Comp			↓	15 <sup>s</sup>	
127	469.070210	02 15 45	13 24 56	3	10 <sup>m</sup>	
128	Comp			↓	15 <sup>s</sup>	
129	469.070528	02 14 12	13 26 10	3	10 <sup>m</sup>	
130	Comp			↓	15 <sup>s</sup>	

Blue scans to be centered at coord 5015

## 60 inch Telescope Log

Observer: J. PetersPI: J. HuckraSpectrograph: FASTGrating: 300Page: 3203Date: 10/11/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
131	469.069774	01 54 23	13 22 47	3	5 <sup>m</sup>	
132	Comp			↓	15 <sup>s</sup>	
133	469.069775	01 57 42	13 23 17	3	5 <sup>m</sup>	
134	Comp			↓	15 <sup>s</sup>	
135	469.069237	02 06 44	13 22 14	3	10 <sup>m</sup>	
136	Comp			↓	15 <sup>s</sup>	
137	469.069044	02 08 51	13 21 47	3	10 <sup>m</sup>	
138	Comp			↓	30 <sup>s</sup>	
139	469.069174	01 57 55	13 21 27	3	5 <sup>m</sup>	
140	Comp			↓	15 <sup>s</sup>	
141	469.068428	02 05 26	13 19 36	3	10 <sup>m</sup>	
142	Comp			↓	15 <sup>s</sup>	
143	469.066520	02 17 41	13 12 29	3	10 <sup>m</sup>	
144	Comp			↓	15 <sup>s</sup>	
145	469.066614	01 56 52	13 12 44	3	5 <sup>m</sup>	
146	Comp			↓	15 <sup>s</sup>	
147	469.065831	01 57 20	13 10 11	3	5 <sup>m</sup>	
148	Comp			↓	15 <sup>s</sup>	
149	469.066168	02 14 04	13 11 54	3	5 <sup>m</sup>	
150	Comp			↓	15 <sup>s</sup>	
151	469.065395	02 11 48	13 09 17	3	5 <sup>m</sup>	
152	Comp			↓	15 <sup>s</sup>	
153	469.065830	01 57 03	13 09 60	3	5 <sup>m</sup>	
154	Comp			↓	15 <sup>s</sup>	
155	469.065092	01 57 18	13 07 43	3	5 <sup>m</sup>	
156	Comp			↓	15 <sup>s</sup>	
157	469.063743	01 58 09	13 03 11	3	5 <sup>m</sup>	
158	Comp			↓	15 <sup>s</sup>	
159	469.063034	02 11 49	13 01 14	3	5 <sup>m</sup>	
160	Comp			↓	15 <sup>s</sup>	



60 inch Telescope Log

Observer: J. PetersPI: J. HuchraSpectrograph: FastGrating: 300Date: 10/12/94Page: 3205

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-15	FLAT	Pos 590	3" SLIT		.2	Redshift Survey SET UP.
16-30	Bias					
31-45	FLAT symbiot	Pos 590	5" SLIT		.2	5" SLIT FOR KENYON
46	Comp			↓	15 <sup>s</sup>	
47	BD P253941	19 42 21	26 06 00	12	20 <sup>s</sup>	STD STAR
48	Comp			↓	15 <sup>s</sup>	Kenyon
49	YY HER	19 12 26	20 58 12	12	45 <sup>s</sup>	
50	YY HER	" " "	"	12	3 <sup>m</sup>	
51	Comp			↓	15 <sup>s</sup>	
52	V443 HER	18 20 03	23 25 48	12	10 <sup>s</sup>	
53	V443 HER	↓	↓	12	35	
54	Comp			↓	15 <sup>s</sup>	
55	BFCyg	19 21 55	29 34 30	12	45	
56	BFCyg	↓	↓	12	90 <sup>s</sup>	
57	Comp			↓	15 <sup>s</sup>	
58	CHCyg	19 23 14	50 08 31	12	1 <sup>s</sup>	
59	CHCyg	↓	↓	12	2 <sup>s</sup>	
60	Comp			↓	15 <sup>s</sup>	
61	HMSge	19 39 41	16 37 33	12	2 <sup>s</sup>	
62	HMSge	↓	↓	12	5 <sup>m</sup>	
63	Comp			↓	15 <sup>s</sup>	
64	CI Cyg	19 48 21	35 33 24	12	8 <sup>s</sup>	
65	CI Cyg	↓	↓	12	25 <sup>s</sup>	
66	Comp			↓	15 <sup>s</sup>	
67	V1016 Cyg	19 55 20	39 41 30	12	.5	
68	V1016 Cyg	↓	↓	12	10 <sup>m</sup>	
69	V1016 Cyg	↓	↓	12	5 <sup>m</sup>	
70	Comp			↓	15 <sup>s</sup>	
71	PUVOL	20 19 01	21 24 43	12	1 <sup>s</sup>	
72	PUVOL	↓	↓	12	5 <sup>m</sup>	

60 inch Telescope Log

Observer: J. PetersPI: J. HuchraSpectrograph: FASTGrating: 300Date: 10/12/94Page: 3206

Number	Object	R.A.	Dec.	L/R	Exp	Comments
73	PUVUL	20 19 01	21 24 43	12	2 <sup>m</sup>	Kenyaw
74	Com P			↓	15 <sup>s</sup>	
75	V1329 Cyg	20 49 02	35 27 37	12	10 <sup>s</sup>	
76	γ 1329 Cyg	↓	↓	12	2 <sup>m</sup>	
77	Com P			↓	15 <sup>s</sup>	
78	AG Peg	21 48 36	12 23 27	12	15	
79	AG Peg	"	"	12	7 <sup>s</sup>	
80	Com P			↓	15 <sup>s</sup>	
81	Z And	23 31 15	48 32 32	12	4 <sup>s</sup>	
82	Z And	↓	↓	12	30 <sup>s</sup>	
83	Com P			↓	15 <sup>s</sup>	
84	EG And	00 41 52	40 24 22	12	15 <sup>s</sup>	
85	EG And	↓	↓	12	2 <sup>s</sup>	
86	Com P			↓	15 <sup>s</sup>	
87	AX Per	01 33 06	54 00 18	12	7 <sup>s</sup>	
88	AX Per	↓	↓	12	40 <sup>s</sup>	
89	AX Per	↓	↓	12	60 <sup>s</sup>	
90	Com P			↓	15 <sup>s</sup>	
91	EG 162	23 41 21	32 16 11	0	9 <sup>m</sup>	
92	Com P			↓	15 <sup>s</sup>	
93	469.061466	02 00 55	12 56 07	3	15 <sup>m</sup>	3" SLIT IN
94	Com P			↓	15 <sup>s</sup>	
95	469.062319	02 16 36	12 58 28	3	15 <sup>m</sup>	
96	Com P			↓	15 <sup>s</sup>	
97	469.060874	01 53 46	12 52 47	3	10 <sup>m</sup>	
98	Com P			↓	15 <sup>s</sup>	
99	469.057656	02 03 30	12 43 58	3	10 <sup>m</sup>	
100	Com P			↓	15 <sup>s</sup>	
101	469.055146	02 01 36	12 35 37	3	5 <sup>m</sup>	
102	Com P			↓	15 <sup>s</sup>	

60 inch Telescope Log

Observer: J. PetersPI: J. HuckraSpectrograph: FASTGrating: 300Page: 3207Date: 10/12/74

Number	Object	R. A.	Dec.	L/R	Exp	Comments
103	469,055483	02 02 17	12 36 50	3	10 <sup>m</sup>	
104	Comp			↓	15 <sup>s</sup>	
105	469,053750	02 17 38	12 30 32	3	10 <sup>m</sup>	
106	Comp			↓	15 <sup>s</sup>	
107	469,053913	02 08 55	12 31 50	3	10 <sup>m</sup>	
108	Comp			↓	15 <sup>s</sup>	
109	469,055063	02 03 24	12 35 19	3	5 <sup>m</sup>	
110	Comp			↓	15 <sup>s</sup>	
111	469,052671	01 59 46	12 27 24	3	5 <sup>m</sup>	
112	Comp			↓	15 <sup>s</sup>	
113	469,050377	02 14 23	12 20 13	3	5 <sup>m</sup>	
114	Comp			↓	15 <sup>s</sup>	
115	469,049000	01 57 19	12 15 00	3	5 <sup>m</sup>	Bingo Hd <del>HD</del>
116	Comp			↓	15 <sup>s</sup>	Everything in it
117	469,047101	02 03 35	12 09 13	3	5 <sup>m</sup>	
118	Comp			↓	15 <sup>s</sup>	
119	469,044070	02 02 22	11 59 38	3	10 <sup>m</sup>	This is Object
120	Comp			↓	15 <sup>s</sup>	469,044186
121	469,044070	02 02 22	11 59 38	3	5 <sup>m</sup>	Correct Obj
122	Comp			↓	15 <sup>s</sup>	
123	469,044139	02 14 20	11 59 39	3	5 <sup>m</sup>	Couldn't get Hed, T
124	Comp			↓	15 <sup>s</sup>	To work on, I would
125	469,042562	02 05 48	11 54 54	3	5 <sup>m</sup>	have changed it
126	Comp			↓	15 <sup>s</sup>	
127	469,040678	02 13 31	11 48 54	3	5 <sup>m</sup>	
128	Comp			↓	15 <sup>s</sup>	
129	469,041786	02 07 15	11 52 38	3	5 <sup>m</sup>	
130	Comp			↓	15 <sup>s</sup>	
131	469,038518	02 14 45	11 41 35	3	10 <sup>m</sup>	
132	Comp			↓	15 <sup>s</sup>	

60 inch Telescope Log

Observer: J. Peters

PI: J. Huchra

Spectrograph: Fast

Grating: 300

Date: 10/12/94

Page: 3208

Number	Object	R.A.	Dec.	L/R	Exp	Comments
133	469.038964	02 02 17	11 43 14	3	5M	
134	Comp			↓	15s	
135	469.033756	02 11 49	11 26 17	3	5M	Delay I lost IRAF
136	Comp			↓	15s	
137	469.032629	02 14 42	11 22 38	3	5M	
138	469. duck	↓	Test		15s	Test
139	Comp			↓	15s	
140	469.031357	02 11 42	11 18 24	3	5M	
141	Comp			↓	15s	
142	H 1052971	06 57 51	27 13 42	0	2s	
143	Comp			↓	15s	
144	H 037251	05 35 12	26 11 48	0	1M	
145						
146						
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60 inch Telescope Log

Observer: P. BerlindPI: McClintock & GellerSpectrograph: FASTGrating: 300L, 3" slit + 1200 line Page: 3209Date: 10/13/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0s	bright moon (0.62!)
11-20	FLAT	300L, 3"			0.2s	a lot of cumulus
21-39	DARK				5m	delay of cloud 2+hours
40	SS0019p21	00:17:13.9	+21:40:20	13	10m	Moon @ 21:20 <sup>h</sup> , -11°
41	comp			↑	12s	1200 line 2" slit 7 real
42	BDp284211	21:48:57.1	+28:37:48	13	3m	not photometric; not
43	comp			↑		sunk into slit (2")
44	BDp284211	"	"	13	5m	blue end; tilt = 336.5
45	comp			↑	2m	
46	SS0019p21	00:17:13.9	+21:40:20	13	10m	2" slit; not sunk
47	comp			↑	2m	
48-49	00330p2524	00:33:10	+25:24:10	21	5m	300 line - 3" slit; clouds
50	comp			↑		clouds forming overhead
51-61	FLAT 1200B			13	1s	McClintock 1200 line 2" slit
62-71	FLAT 1200R			13	1.5s	
72-81	BIAS				0s	
82-88	DARK				15m	300L, 3" slit in ↓
89	02300p022	02:30:00	+01:22:00	21	5m	open again @ 2:30 HA
90	comp			↑		some cloud still
91	02283p0338	02:28:18	+03:38:00	21	5m	forming overhead
92	02302p0435	02:30:12	+04:35:00	21	5m	→ junk - clouds
93	comp			↑		through clouds ↓
94	N1W7	02:35:12	+01:56:00	21	4m	
95	comp			↑		SS to north
96	02358m024	02:35:40	-01:24:00	21	5m	HA
97	comp			↑		
98	402044	02:31:18	+01:42:00	21	5m	HA
99	comp			↑		
100	402065	02:33:30	+01:20:00	21	5m	HA
101	comp			↑		stopped by clouds again





## 60 inch Telescope Log

Observer: J. PetersPI: J. HuchraSpectrograph: FastGrating: 300Date: 10/28/94Page: 3267

Number	Object	R. A.	Dec.	L/R	Exp	Comments
1-8	FlasTs	TEST				
9-23	FlAT		3" SLIT		10 <sup>s</sup>	
24-38	Bias					
39	TEST					
40	Comp			↓	15 <sup>s</sup>	
41	MK509	20 41 26	-16 54 18	6	2 <sup>m</sup>	
42	Comp			↓	15 <sup>s</sup>	
43	EG149	21 44 57	-07 58 07	6	10 <sup>m</sup>	
44	Comp			↓	15 <sup>s</sup>	
45	521.066497	23 03 29	12 55 57	3	10 <sup>m</sup>	
46	Comp			↓	15 <sup>s</sup>	
47	521.066573	23 00 38	12 56 32	3	10 <sup>m</sup>	
48	Comp			↓	15 <sup>s</sup>	
49	521.066976	22 57 11	12 58 07	3	5 <sup>m</sup>	
50	Comp			↓	15 <sup>s</sup>	
51	521.067173	23 00 16	12 58 16	3	7 <sup>m</sup>	
52	Comp			↓	15 <sup>s</sup>	
53	521.067706	22 52 39	13 00 40	3	10 <sup>m</sup>	
54	Comp			↓	15 <sup>s</sup>	
55	521.068064	23 00 08	01 15 5	3	5 <sup>m</sup>	Had To Redo This obj
56	Comp			↓	15 <sup>s</sup>	I hit ALTB and
57	521.068523	23 01 49	13 02 30	3	7 <sup>m</sup>	T.L Moved away
58	Comp			↓	15 <sup>s</sup>	
59	521.068634	23 01 16	13 03 00	3	10 <sup>m</sup>	
60	Comp			↓	30 <sup>s</sup>	
61	521.068721	23 02 01	13 03 08	3	10 <sup>m</sup>	
62	Comp			↓	15 <sup>s</sup>	
63	521.069034	23 00 03	13 04 25	3	10 <sup>m</sup>	
64	Comp			↓	15 <sup>s</sup>	
65	521.069261	23 01 45	13 04 54	3	10 <sup>m</sup>	

60 inch Telescope Log

Observer: J. PetersPI: J. HuchraSpectrograph: FASTGrating: 300Page: 3268Date: 10/28/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
66	Comp			↓	15 <sup>s</sup>	
67	521,069366	22 56 09	13 05 49	3	7 <sup>m</sup>	
68	Comp			↓	15 <sup>s</sup>	
69	521,070292	22 43 44	13 08 49	3	10 <sup>m</sup>	
70	Comp			↓	15 <sup>s</sup>	
71	521,070397	22 44 35	13 07 12	3	8 <sup>m</sup>	
72	Comp			↓	15 <sup>s</sup>	
73	521,070523	22 51 55	13 09 53	3	15 <sup>m</sup>	
74	Comp			↓	15 <sup>s</sup>	
75	521,070608	23 01 11	13 09 31	3	10 <sup>m</sup>	
76	Comp			↓	15 <sup>s</sup>	
77	521,071064	23 00 52	13 10 38	3	15 <sup>m</sup>	
78	Comp			↓	15 <sup>s</sup>	
79	225N180	00 41 45	41 05 12	0	10 <sup>m</sup>	*
80	Comp			↓	15 <sup>s</sup>	
81	163N217	00 40 33	41 11 20	0	10 <sup>m</sup>	*
82	Comp			↓	15 <sup>s</sup>	
83	158N213	00 40 30	40 50 55	0	10 <sup>m</sup>	*
84	Comp			↓	15 <sup>s</sup>	
85	521,072119	23 05 15	13 13 30	3	15 <sup>m</sup>	
86	Comp			↓	15 <sup>s</sup>	
87	521,072203	23 04 40	13 13 47	3	15 <sup>m</sup>	
88	Comp			↓	15 <sup>s</sup>	
89	521,072205	23 07 42	13 13 12	3	5 <sup>m</sup>	
90	Comp			↓	15 <sup>s</sup>	
91	521,073072	22 58 10	13 17 49	3	8 <sup>m</sup>	
92	Comp			↓	15 <sup>s</sup>	
93	469,029960	02 05 07	11 14 53	3	7 <sup>m</sup>	
94	Comp			↓	15 <sup>s</sup>	
95	469,030755	02 12 28	11 17 12	3	5 <sup>m</sup>	

60 inch Telescope Log

Observer:

Jim Petrus  
J. HuchraSpectrograph: FastGrating: 300Page: 3269

PI:

Date: 10/28/94

Number	Object	R. A.	Dec.	L/R	Exp	Comments
96	Comp			↓	15 <sup>s</sup>	
97	469,030960	02 11 02	11 17 50	3	5 <sup>m</sup>	
98	Comp			↓	15 <sup>s</sup>	
99	469,028388	02 11 29	11 09 50	3	6 <sup>m</sup>	
100	Comp			↓	15 <sup>s</sup>	
101	469,029095	02 05 11	11 12 07	3	5 <sup>m</sup>	
102	Comp			↓	15 <sup>s</sup>	
103	469,024394	02 02 18	10 57 09	3	5 <sup>m</sup>	
104	Comp			↓	15 <sup>s</sup>	
105	469,025790	02 01 01	11 01 24	3	7 <sup>m</sup>	
106	Comp			↓	15 <sup>s</sup>	
107	469,024038	02 15 41	10 55 51	3	5 <sup>m</sup>	STAR
108	Comp			↓	15 <sup>s</sup>	
109	469,024144	02 01 22	10 56 25	3	5 <sup>m</sup>	H.T By Clouds
110	Comp			↓	15 <sup>s</sup>	} THRU CLOUDS ↓ " "
111	469,022376	01 55 42	10 50 13	3	5 <sup>m</sup>	
112	469,022376	↓	↓	3	5 <sup>m</sup>	
113	DARK				15 <sup>m</sup>	
114	DARK				15 <sup>m</sup>	
115	DARK				15 <sup>m</sup>	
116	DARK				15 <sup>m</sup>	
117	DARK				15 <sup>m</sup>	
118						
119						
120						
121						
122						
123						
124						
125						

60 inch Telescope Log

Observer: J. Peters

PI: J. Hinkley

Spectrograph: Fast

Grating: 300 / 1200

Page: 3270

Date: 10/29/94 Jeff

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-4	Dark				15 <sup>m</sup>	
5-19	Bias					
20-34	FLAT	300 $\mu$ m	3" SLIT	590	10 <sup>s</sup>	Redshift Survey
35	Comp			↓	15 <sup>s</sup>	
36	MK509	20 41 26	-10 54 18	6	2 <sup>m</sup>	Thru Thin Clouds
37	Comp			↓	15 <sup>s</sup>	
38	EG149	20 41 26	-10 54 18	0	10 <sup>m</sup>	Thru Clouds, Best we could get
39	Comp			↓	15 <sup>s</sup>	
40	N7331	22 34 46	34 09 43	0	5 <sup>m</sup>	
41	Comp			↓	15 <sup>s</sup>	
42	21.073365	22 50 05	13 19 06	3	15 <sup>m</sup>	Clouded Out
43	FLAT B	2" SLIT	1200 $\mu$ m	13	1 <sup>m</sup>	Jeff McClintock 1200
44	Comp			↓	2 <sup>m</sup>	Thru Clouds
45	SS0019 P21 B	00 17 13	21 40 20	13	80 <sup>m</sup>	Thru Clouds
46	Comp			↓	2 <sup>m</sup>	
47	Hiltner 102 B	01 05 53	62 31 32	13	15 <sup>m</sup>	Thru Lots of Clouds
48						In And Out.
49						Clouded Out
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						

46 test  
 47 Comp  
 48 Hiltner 102B

← 25

## 60 inch Telescope Log

Observer: Jim PetrosPI: J. HuchraSpectrograph: FASTGrating: 300Page: 3271Date: 10/30/94

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-4	DARK	300 $\mu$ /mm	3" SLIT		15 <sup>m</sup>	LIGHTS were on in Dome for 1 <sup>ST</sup> 5min of 1 <sup>ST</sup> FLAT!
5-19	Bias	↓	↓			
20-34	FLAT	↓	↓		10 <sup>s</sup>	
35	Comp			↓	15 <sup>s</sup>	
36	MK 509	20 41 26	-10 54 18	6	2 <sup>m</sup>	
37	Comp			↓	15 <sup>s</sup>	
38	EG 149	21 44 57	-07 58 03	0	10 <sup>m</sup>	
39	Comp			↓	15 <sup>s</sup>	
40	521.073676	23 02 05	13 19 13	3	10 <sup>m</sup>	
41	Comp			↓	15 <sup>s</sup>	
42	521.074111	23 07 39	13 19 21	3	10 <sup>m</sup>	
43	Comp			↓	15 <sup>s</sup>	
44	521.074302	22 58 53	13 21 30	3	6 <sup>m</sup>	
45	Comp			↓	15 <sup>s</sup>	
46	521.074540	22 53 23	13 22 28	3	15 <sup>m</sup>	
47	Comp			↓	15 <sup>s</sup>	
48	521.074737	22 42 20	13 22 38	3	15 <sup>m</sup>	
49	Comp			↓	15 <sup>s</sup>	
50	521.075475	22 47 04	13 25 12	3	15 <sup>m</sup>	
51	Comp			↓	15 <sup>s</sup>	
52	521.039030	22 49 10	11 32 58	3	5 <sup>m</sup>	
53	Comp			↓	15 <sup>s</sup>	
54	521.039297	22 47 25	11 33 40	3	10 <sup>m</sup>	
55	Comp			↓	15 <sup>s</sup>	
56	521.039358	23 06 37	11 32 18	3	10 <sup>m</sup>	
57	Comp			↓	15 <sup>s</sup>	
58	521.039632	23 06 26	11 32 58	3	15 <sup>m</sup>	
59	Comp			↓	15 <sup>s</sup>	
60	521.039647	22 53 42	11 34 48	3	10 <sup>m</sup>	
61	Comp			↓	15 <sup>s</sup>	

## 60 inch Telescope Log

Observer: J. PetersPI: J. HuckraSpectrograph: FastGrating: 300/1200Page: 3272Date: 10/30/94McClintock  
Stauffer

Number	Object	R. A.	Dec.	L/R	Exp	Comments
62	521.039897	22 49 25	11 35 31	3	5 <sup>M</sup>	
63	Comp			↓	15 <sup>S</sup>	
64	521.040366	23 01 21	11 36 09	3	10 <sup>M</sup>	
65	Comp			↓	15 <sup>S</sup>	
66	158N213	00 40 30	40 50 55	0	10 <sup>M</sup>	
67	Comp			↓	15 <sup>S</sup>	
68	163N217	00 40 33	41 11 20	0	10 <sup>M</sup>	
69	Comp			↓	15 <sup>S</sup>	
70	225N280	00 41 45	41 05 12	0	10 <sup>M</sup>	
71	Comp B	Jeff	2" SLIT	↓	2 <sup>M</sup>	TILT 3365 Blue End
72	SS0019P21 B	00 17 13	21 40 20	13	15 <sup>M</sup>	76 This obj Clouded
73	Comp B			↓	2 <sup>M</sup>	out last night Will
74	HILTNER 102 B	01 05 53	62 31 32	0	10 <sup>M</sup>	get it all This eve
75	FLAT B			↑	1 <sup>M</sup>	
76	Comp R		78	↓	11 <sup>S</sup>	
77	SS0019P21 R	00 17 13	21 40 20	13	15 <sup>M</sup>	
78	Comp R			↓	1 <sup>S</sup>	
79	HILTNER 102 R	01 05 53	62 31 32	0	10 <sup>M</sup>	
80	FLATR			↑	45 <sup>S</sup>	
81	Comp	3006mm	3" SLIT	↓	15 <sup>S</sup>	
82	521.040401	22 49 40	11 36 57	3	15 <sup>M</sup>	
83	Comp			↓	15 <sup>S</sup>	
84	469.021823	02 04 23	10 49 24	3	5 <sup>M</sup>	I have some how
85	Comp			↓	15 <sup>S</sup>	Lost The 1Mh file
86	469.021841	02 06 28	10 47 06	3	15 <sup>M</sup>	on file 84 ??
87	Comp			↓	15 <sup>S</sup>	See file 96 for
88	469.021382	02 03 38	10 48 08	3	8 <sup>M</sup>	The Re do
89	Comp			↓	15 <sup>S</sup>	
90	469.017399	02 15 51	10 35 12	3	10 <sup>M</sup>	
91	Comp			↓	15 <sup>S</sup>	

60 inch Telescope Log

Observer: J. PetersPI: J. HochraSpectrograph: FastGrating: 300 1200/4mm Page: 3273Date: 10/30/94

Number	Object	F.A.	Dec.	L/R	Exp	Comments
92	469.018347	02 09 03	10 38 40	3	10 <sup>m</sup>	
93	Comp			↓	15 <sup>s</sup>	
94	469.016657	02 06 04	10 33 32	3	10 <sup>m</sup>	
95	Comp			↓	15 <sup>s</sup>	
96	469.021823	02 04 23	10 49 24	3	5 <sup>m</sup>	
97	Comp			↓	15 <sup>s</sup>	
98	469.059015	01 57 55	12 47 33	3	5 <sup>m</sup>	
99	Comp			↓	15 <sup>s</sup>	
100	468.011423	01 47 47	10 30 49	3	8 <sup>m</sup>	
101	Comp R	1.5" SLIT	1200/4mm	↓	12 <sup>s</sup>	Used 1.5" SLIT
102	The Ta ORI R	05 32 49	-05 25 16	27	10 <sup>s</sup>	8 <sup>s</sup>
103	Comp	300/4mm	3" SLIT	↓	15 <sup>s</sup>	
104	AGK2P14783	07 17 48	15 01 00	0	10 <sup>s</sup>	
105	Comp			↓	15 <sup>s</sup>	
106	AKN120	05 13 37	-00 12 15	6	5 <sup>m</sup>	
107	Comp			↓	15 <sup>s</sup>	
108	HZ 15	04 37 56	08 35 00	0	5 <sup>m</sup>	
109	Comp			↓	15 <sup>s</sup>	
110	07486P1106	07 48 36	11 06 00	1	15 <sup>m</sup>	
111	Comp			↓	15 <sup>s</sup>	
112	07489P1118	07 48 54	11 18 00	1	15 <sup>m</sup>	
113	Comp			↓	15 <sup>s</sup>	
114	07493P1115	07 49 18	11 15 00	1	10 <sup>m</sup>	
115	Comp R	1200/4mm	1.5" SLIT	↓	12 <sup>s</sup>	Stauffer 91
116	The Ta ORI R	05 32 49	-05 25 16	27	10 <sup>s</sup>	Pos 777.5 HJ
117	FLATR			↑	45 <sup>s</sup>	
118						
119						
120						
121						

6562 = 777.5