2 pages total

OBJ = 25

start of FAST run.

60 inch Telescope Log
Observer: P. Berlind
PI: Huchra/Wilkes/Kenyon

Spectrograph: FAST
Grating: 300; 3"S1A
Date: 9/15/95

Page: 3924

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-100	BIAS			0	0s	new noise pattern
101-120	FLAT			0	8s	chip has been re-UVflooded +
121-125	SAO084795	17:01:06	+24:55:05	0	5s	electronic ajustments made
126	COMP			↑		in Cambridge since last run
127	PG1708+602	17:08:759	+60:17:52	6	3m	
128	COMP			↑		poor seeing
129	3C390.3	18:45:37.2	+79:43:06	6	4m	
130	COMP			↑		
131	1734+670 E	17:34:76	+67:04:40	1	5m	Hα
132	COMP			↑		
133	1734+670 W	17:34:36	+67:04:40	1	10m	Hα
134	COMP			↑		
135	N6723	17:36:41.9	+68:57:1883	1	5m	
136	COMP			↑		clouds...
137-138	N7331	22:34:46	+34:09:43	0	2m	
139				↑		
140	1827+705	18:26:35.9	+72:46:58	1	7m	needs more clouds
141	COMP			↑		
142	IC 5146.034	21:44:46.0	+47:33.2	30	30s	
143	COMP			↑		
144	IC 5146.041	21:47:46.2	+47:56.25	30	30s	
145	COMP			↑		
146	IC 5146.042	21:45:22.2	+47:35:50	30	60s	
147	COMP			↑		
148(60)	IC 5146.040	21:46:24.5	+47:38:11	30	60s, 5m	x2
149	COMP			↑		
151	IC 5146.046	21:47:45	+47:35:41	30	3m	
152	COMP			↑		clouds
153 (BS)	IC 5146.037	21:45:03	+47:32:55	30	5m	x2
154				↑		close.

z_w = 1.8
old = 1.12

60 inch Telescope Log

Observer: P. Berlind

PI: Kirshner

Spectrograph: FAST

Grating: 300l

Date: 9/15/95

Page: 3925

Number	Object	R.A.	Dec.	L/R	Exp	Comments
156-165	BIAS				0s	foggy
166-169	FLAT				8s	
170-175	DARK				10m	open ~ 4am
185-194	FLAT				8s	
195	NGC1855N	00:39:40	+48:20:40	L	10m	SN candidate
196	COMP			↑		poor sky conditions
197,198	SN1995K	01:10:59.6	+53:08:40.7	L	10m	x2
198,200	COMP			↑		
201,202	G191B2B	05:01:31.5	+52:48:52	L	2m	clouds Massey Std
203	COMP			↑		
204-213	BIAS				0s	

176 – 183 do not exist

FAX to Susan Tokarz
4 pages

~~68~~ 66 + 1 Sum = 67

60 inch Telescope Log
Observer: P. Berlind
PI: Huchra

Spectrograph: FAST
Grating: 300
Date: 9/16/95

Page: 3926

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-25	BIAS				0s	rain @ sunset
26-50	FLAT				8s	
51,52	BQ[illegible]84211	21:48	+28:37	0	1m	open @ 8', lots of clouds
53	comp			↑		
54	17344p6230EW	17:34:50	+62:28:09	1	10m	E+W comps (Hα both comps)
55	comp			↑		
56	17372p5710	17:36:02	+57:08:22	1	4m	Hα
57	comp			↑		tv camera tumbles
58	17378p6101	17:36:37	+61:03:10	1	5m	Hα
59	comp			↑		
60	17386p6803	17:38:24.8	+68:01:26	1	5m	not pretty but should be ok
61	comp			↑		
62	17389p6359	17:39:14	+63:57:46	1	6m	Hα
63	comp			↑		
64	NGC461	17:38:42	+73:20:29	1	15m	LSB
65	comp			↑		
66	17406p6609	17:40:36	+66:25:60	1	4m	
67	comp			↑		
68	17412p6642	17:41:10.5	+66:42:42	1	6m	
69	comp			↑		
70	17421p5850	17:42:45.7	+58:18:43	1	15m	Hα
71	comp			↑		
72	18421p6356	18:42:06	+63:58:40	1	4m	Hα
73	comp			↑		
74	18280p7248	18:26:54	+72:47:55	1	15m	LSB Hα
75	comp			↑		
76	18421p6358	18:42:06	+63:58:00	1	5m	star
77	comp			↑		
78	18462p7206	18:45:22	+72:11:65	1	5m	~~*~~ burst, strong lines
79	comp			↑		

105

3.41 N 111

111 bright = 15

60 inch Telescope Log

Observer: PBerlind

PI: Huchra/Wilkes/Geller

Spectrograph: FAST

Grating: 300R

Date: 9/16/95

Page: 3927

Number	Object	R.A.	Dec.	L/R	Exp	Comments
80	18534p7307	18:52:23	+73:10:45	R	15m	star on slit to E galaxy slit
81	comp			↑		
82	18567p6022	18:57:21.8	+60:26:06	1	5m	
83	comp			↑		
84	18579p7209	18:57:06	+72:13:08.8	1	10m	Ha
85	comp			↑		
86	18590p6433	18:59:17	+64:37:15	1	5m	star on slit to E
87	comp			↑		
88	MRK355	0:03	+19:59	6	1m	
89	comp			↑		
90	Fergel10	23:17	-05:26	6	1m	
91	comp			↑		
92	MRK509	20:41	-10:59	6	1m	
93	comp			↑		
94	522.015481	23:18:50	+10:30:07	3	7m	ISR Survey
95	comp			↑		
96	522.017459	23:19:29	+10:37:47	3	7m	
97	comp			↑		
98	522.019575	23:19:01.24	+10:42:25	3	5m	
99	comp			↑		
100,102	522,027141	23:09:20.47	+11:06:32.8	3	5m, 7m x2	
101	comp			↑		
103	522.028016	23:27:52.01	+11:08:11.2	3	7m	(transit) reduce #102
104	comp			↑		(#100 may be ok after ccd proc but here it looks pretty bad)
105	522.029508	23:09:29.27	+11:13:51.9	3	7m	
106	comp			↑		
107	522.031260	23:23:48	+11:19:26	3	10m	
108	comp			↑		
109	522.033435	23:23:49.85	+11:22:16.1	3	15m	Ha
110	comp			↑		

MRW 6;+20

60 inch Telescope Log
Observer: P. Berlind
PI: Geller

Spectrograph: FAST
Grating: 300l
Date: 9/16/95

Page: 3928

Number	Object	R.A.	Dec.	L/R	Exp	Comments
111	S22.035673	23:22:41.48	+11:27:04.3	3	15m	Moon's up
112	comp			↑		
113	S22.035976	23:23:17.76	+11:35:52.9	3	15m	Ha
114	comp			↑		
115	S22.036851	23:18:17.75	+11:35:52	3	7m	
116	comp			↑		
117	S22.036906	23:21:06.75	+11:36:52.5	3	7m	
118	comp			↑		increasing cloud
119	S22.043574	23:25:26.35	+11:56:06.7	3	10m	
120	comp			↑		stopped by clouds
121	awm7_1.01	02:49:40.5	+41:03:17	35	4m	Bright sky
122	comp			↑		
123	awm7_1.02	02:49	+41:03	35	7m	Ha
124	comp			↑		stopped by clouds
125-134	BIAS			0	0s	delay & cloud
135	01303p0529	01:30:18	+05:29:00	21	15m	Ha
136	comp			↑		
137	01334p0505	01:33:24	+05:05:00	21	7m	
138	comp			↑		
139	01391p0536	01:39:06	+05:36:00	21	10m	Ha
140	comp			↑		
141	01402p0130	01:40:12	+01:30:00	21	6m	
142	comp			↑		
143	UD1238	01:41:00	+01:50:00	21	6m	
144	comp			↑		
145	01471p0332	01:47:06	+03:32:00	21	6m	
146	comp			↑		
147	01476p0346	01:47:36	+03:46:00	21	7m	Ha
148	A0147p0349	01:47:42	+03:49:00	21	7m	Ha
149	comp			↑		

726 - 000

60 inch Telescope Log

Observer: RB

PI: Gaetler & Karanji

Spectrograph: FAST

Grating: 300 l

Date: 9/16/95

Page: 3925

Number	Object	R.A.	Dec.	L/R	Exp	Comments
150	0148+0528	01:48:24	+05:28:00	21	7m	
151	comp			↑		
152	0148+0146	01:48:30	+01:46:00	21	10m	
153	comp			T		
154	awm7_1.03	02:49:48.1	+41:27:55.0	35	4m	
155	comp			↑		
156	awm7_104	02:49:51	+41:34:03	35	5m	
157	comp			↑		
158	awm7_1.05	02:50:46.0	+41:40:18	35	2m	Sy1
159	comp			↑		
160	awm7_1.06	02:50:41.7	+42:00:21	35	10m	He
161	comp			↑		
162	awm7_107	02:50:55.6	+41:37:54	35	6m	
163	comp			↑		
164	awm7_1.08	02:51:18.6	+41:33:55.1	35	5m	
165	comp			↑		
166	awm7_1.10	02:51:37.8	+40:41:24.1	35	6m	
167	comp			↑		
168-172	AGK2p14783	07:17	+14:59	0	10s	S20
173	comp			↑		
174-178	sky	zenith		0	10s	
179	comp			↑		
180-189	FLAT			0	8s	
190-214	BIAS			0	0s	
215-219	DARK			0	15m	

49 Total
24 = 15R

60 inch Telescope Log
Observer: P. Berlind
PI: Geller

Spectrograph: FAST
Grating: 300
Date: 9/17/95

Page: 3930

Number	Object	R.A.	Dec.	1/R	Exp	Comments
1-25	BIAS			0	0s	rain @ sunset
26-35	FLAT			0	8s	open ~9:45
36	S22.043863	23:20:22.4	+11:58:05.7	3	15m	clearing; thin clad Hα
37	COMP			↑		
38	S27.044845	23:22:44.05	+12:04:01.5	3	7m	
39	COMP			↑		
40	S22.045099	23:23:48.5	+12:04:49.1	3	7m	Hα
41	COMP			↑		
42	S22.045362	23:11:02.06	+12:02:14.7	3	6m	
43	COMP			↑		... clouds ..
44	S27.047243	23:20:23.16	+12:04:45.9	3	7m	
45	COMP			↑		
46	S22.047482	23:31:59.21	+12:04:10.6	3	15m	name incorrect in raw data
47	COMP			↑		
48	S22.048263	23:28:39.26	+12:11:12.1	3	15m	Hα (w/cosmic 8)
49	COMP			↑		
50	S22.048908	23:22:13.42	+12:13:57	3	6m	
51	COMP			↑		
52	S22.053261	23:23:11.67	+12:26:51.7	3	10m	
53	COMP			↑		
54	S22.053492	23:22:41.11	+12:28:22.2	3	10m	
55	COMP			↑		
56	S22.054140	23:26:35.23	+12:30:01.1	3	7m	
57	COMP			↑		
58	S22.055485	23:12:D.4	+12:36:25.3	3	7m	
59	COMP			↑		
60	S22.056039	23:31:24.58	+12:35:27	3	10m	
61	COMP			↑		
62	S22.060143	23:20:10.82	+12:48:41.7	3	6m	
63	COMP			↑		

Li 6708

60 inch Telescope Log

Observer: P. Berlind

PI: Geller/Wilks

Spectrograph: FAST

Grating: 300

Date: 9/17/95

Page: 3931

Number	Object	R.A.	Dec.	L/R	Exp	Comments
64	S22.061575	23:27:036	+12:53:22	3	7m	clear...
65	comp			↑		
66	S22.062404	23:19:09.8	+12:55:18.4	3	10m	
67	comp			↑		
68	S22.062555	23:15:51.6	+12:59:17.6	3	10m	Hα
69	comp			↑		
70	01548 p0406	01:54:48	+04:06:00	21	20m	Hα
71	comp			↑		
72	S22.062535	23:26:11.92	+12:59:36.3	3	8m	
73	comp			↑		
74	S22.064404	23:15:57.2	+13:03:01.2	3	8m	
75	comp			↑		
76	S22.064557	23:12:37.4	+13:03:736	3	7m	
77	comp			↑		
78	S22.065280	23:16:49.02	+13:05:46.6	3	8m	Hα
79	comp			↑		
80	S22.06627	23:15:07.9	+13:10:12.1	3	7m	Hα
81	comp			↑		
82	S22.068984	23:12:35.37	+13:16:26.4	3	10m	
83	comp			↑		
84	S22.069301	23:24:10.18	+13:18:32.3	3	15m	Finishes the plate!
85	comp			↑		
86	Fergelio	23:17:23.5	-05:26:22	0	1m	
87	comp			↑		
88	MRK 335	00:03:45	+19:58:27	6	1m	
89	comp			↑		
90,91	22Sm250	00:41:95.1	+41:05:12	0	3m	x2
92	comp			↑		
93	a1944galaxy	01:21	-01:31	33	10m	Hα
94	comp			↑		

Moon 6:46 +17

60 inch Telescope Log
Observer: P. Berlind
PI: Barton & Kavanagh

Spectrograph: FAST
Grating: 300
Date: 9/17/95

Page: 3932

Number	Object	R.A.	Dec.	L/R	Exp	Comments
95	a194_qa1002	01:21:24	-01:25:25	33	10m	
96	comp			↑		
97	a194_qa1003	01:21:37	-01:31:40	33	15m	
98	comp			↑		
99	a194_qa1004	01:21:56	-01:55:20	33	10m	Ha
100	comp			↑		
101	a194_qa1005	01:22:21	-02:12:32	33	15m	
102	comp			↑		
103	a194_qa1006	01:22:23	-01:27:57	33	10m	
104	comp			↑		
105	a194_qa1007	01:22:27	-02:18:16	33	10m	
106	comp			↑		
107	a194_qa1008	01:22:38	-02:22:49	33	15m	Ha
108	comp			↑		
109	a194_qa1009	01:23:11	-02:14:39	33	15m	Ha
110	comp			↑		
111	a194_qa1010	01:23:21	-01:58:52	33	7m	Wow what a pretty spiral!
112	comp			↑		Ha SL...
113	a194_qa1011	01:23:33	-02:27:21	33	8m	nice lines to boot
114	comp			↑		
115	a194_qa1012	01:23:42	-01:21:18	33	7m	3 objects on slit --
116	comp			↑		all 3 are stars
117	awm7_1.09	02:51:23	+41:37:33	35	10m	Ha
118	comp			↑		
119	awm7_1.11	02:51:47.8	+41:34:45.9	35	5m	Ha
120	comp			↑		
121	awm7_1.12	02:52:07.9	+41:31:45.9	35	4m	
122	comp			↑		
123	awm7_1.13	02:52:38.5	+41:34:41.1	35	4m	
124	comp			↑		

60 inch Telescope Log

Observer: P. Berlind

PI: Kurucz

Spectrograph: FAST

Grating: 300

Date: 9/17/95

Page: 3933

Number	Object	R.A.	Dec.	L/R	Exp	Comments
125	arm7-1.15	08:52:42.3	+41:19:33.5	35	4m	
126	COMP			↑		
127	AKN120	05:13:37	-07:12:15.8	6	2m	
128	COMP			↑		
129	HZ15	04:37:35.1	106:34:30	0	2m	
130	COMP			↑		
131-155	BIAS			0	0s	
156-165	FLAT			0	8s	
166-169	DARK			0	15m	

FAX To: Susan Tokarz 63 + 2(2nd) = 65
4 pages total

60 inch Telescope Log
Observer: P. Barthel
PI: Geller

Spectrograph: FAST
Grating: 300
Date: 9/18/95

Page: 3934

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-25	BIAS			0	0s	rain @ sunset again
25-50	FLAT			0	6s	
51-53	N7331	22:34:46.9	+34:07:43	0	2m	open ~9:10
54	COMP			↑		
55	S18.042423	21:49:24.06	+10:35:33.9	3	10m	Hα
56	COMP			↑		
57	S18.042976	21:30:43.7	+10:31:58.8	3	10m	
58	COMP			↑		
59	S18.043977	21:30:32.9	+10:36:24.9	3	6m	
60	COMP			↑		
61	S18.043983	21:30:42.3	+10:36:29.3	3	8m	
62	COMP			↑		
63	S18.047155	21:38:34.2	+10:36:10.9	3	10m	Hα
64	COMP			↑		
65	S18.044188	21:36:17.4	+10:37:43.4	3	10m	
66	COMP			↑		
67	S18.045526	21:37:11.9	+10:39:14.8	3	10m	
68	COMP			↑		Hα
69	S18.047629	21:31:59.45	+10:42:25.1	3	15m	superposed star a-gal
70	COMP			↑		
71	S18.045304	21:31:14.54	+10:46:07.3	3	10m	
72	COMP			↑		
73	S18.052264	21:32:04.46	+10:49:31	3	15m	
74	COMP			↑		thin cloud
75	S18.054823	21:49:54.77	+10:54:42.7	3	15m	Hα
76	COMP			↑		
77	S18.041002	21:30:43.14	+10:31:54.6	3	10m	weak
78	COMP			↑		
79 81	S18 043032	21:37:01.71	+10:36:17.7	3	10m	15m x2 done
80 82	COMP			↑		

60 inch Telescope Log

Observer: P. Berlind

PI: Geller / Kirshner / Wilkes / Barton

Spectrograph: FAST

Grating: 300

Date: 9/18/95

Page: 3935

Number	Object	R.A.	Dec.	L/R	Exp	Comments
83	SIR.0459.31	21:48:15.75	+10-41-01.6	3	12m	star on slit to W
84	COMP			↑		
85	SN1995V	01:10:59.6	+37:06:40.7	2	15m	
86	COMP			↑		
87	MRK335	00:03:45.1	+19:55:27	6	1m	
88	COMP			↑		clearing nicely
89	Feige110	23:47:23	-05:26:22	0	1m	seeing 1-2"
90	COMP			↑		
91	S23.015022	23:50:79.44	+10-37-11.2	3	7m	
92	COMP			↑		
93	S23.015489	23:51:57.35	+10:32:32.3	3	7m	
94	COMP			↑		
95,99	S23.015642	23:53:11.68	+10:32:49.7	3	7m	x2 ; 12m
96,100	COMP			↑		
97	S23.015745	23:51:17.46	+10-33-31	3	15m	Ha
98	COMP			↑		
101	S23.017747	23:48:25.82	+10:40:22.9	3	7m	
102	COMP			↑		
103	S23.018673	23:51:23.6	+10-43-37.3	3	15m	Ha
104	COMP			↑		
105	S23.019177	23:32:45.8	+10:44:57.6	3	15m	Ha
106	COMP			↑		
107	a194_ga1013	01:23:47	-01:31:01	33	10m	
108	COMP			↑		
109	a194_ga1014	01:23:53	-01:18:43	33	10m	
110	COMP			↑		
111	a194_ga1015	01:24:24	-02:28:57.6	33	15m	weak
112	COMP			↑		
113	a194_ga1016	01:24:24.75	-01:03:25.3	33	2m	a star
114	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Barton

Spectrograph: FAST

Grating: 300

Date: 9/18/95

Page: 3935

Number	Object	R.A.	Dec.	L/R	Exp	Comments
115	a194_ga1017	01:24:25	-01:13:17	33	5m	2 stars (chip binned by 1)
116	comp			↑		
117	a194_ga1018	01:24:32	-01:11:58	33	15m	LSB Hα @ pixel 2051
118	comp			↑		
119,121	a194_ga1019	01:24:34	-01:42:02	33	6m,15m	star w/ faint fuzz fuzz has Hα @ pix 2171
120,122	comp			↑		
123	a194_ga1020	01:24:41.7	-01:35:15	33	2m	Finally... something bright
124	comp			↑		
125	awm7_1.14	02:52:40.4	+41:23:46.5	35	10m	nice Hα
126	comp			↑		
127	awm7_1.16	02:52:51.2	+42:12:48.1	35	3m	Hα
128	comp			↑		
129	awm7_1.17	02:52:58.5	+41:32:01.6	35	4m	
130	comp			↑		
131	awm7_1.18	02:53:00.8	+40:50:27.6	35	10m	star on slit; Hα
132	comp			↑		
133	awm7_1.19	02:53:31.6	+41:53:08.1	35	7m	Hα
134	comp			↑		
135	SN1995G	04:43:42	-05:19:00	2	20m	
136	comp			↑		
137,138	Feige24	02:32	+03:30	0	1m	
139	comp			↑		
NO-142	EGAnd	00:41	+40:24	12	1s,0.5s,5s	
143	comp			↑		rush, rush, rush
144-146	AXFer	01:33	+54:00	12	1s,4s,60s	
147	comp			↑		
148-150	LAUAur	05:58	+32:27	12	0.5s,1s,2m	
151	comp			↑		
152,153	G191B2B	05:01	+52:45	12	1m	
154	comp			↑		

13 + 2

60 inch Telescope Log

Observer: PB

PI: Kenyon

Spectrograph: EAST

Grating: 300 l

Date: 9/18/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
155-158	DK Moon	07:22	-03:30	12	1s, 5s, 20s, 1m	
159	COMP			↑		
160-164	sky	Zenith		0	5s	5:52
165	COMP			↑		
166-190	BIAS			0	0s	
191-200	FLAT			0	8s	
201-204	DARK			0	15m	

FAX to Susan Tokarz pg 1 of 6 ?? Total
21 15R

60 inch Telescope Log
Observer: P. Berlind
PI: Huchra

Spectrograph: FAST
Grating: 300l
Date: 9/19/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-25	BIAS			0	0s	clearing before sunset
26-35	FLAT			0	8s	
36-40	SKY			0	8s	
41	COMP			↑	10s	
42	16030 p8150	15:58:34	+81:41:44	1	3m	
43	COMP			↑		
44	16030 p8000	15:59:533	+79:52:05	1	3m	
45	COMP			↑		
46	16015 p7138	16:00:56	+71:30:09	1	4m	
47	COMP			↑		
48	16019 p7132	16:01:12.1	+71:24:16	1	5m	Ha
49	COMP			↑		
50	16060 p8201 S	16:01:27.7	+81:53:11	1	3m	stars ; some nebulosity
51	16060 p8201 D	16:01:27.7	+81:53:11	1	3m	
52	COMP			↑		still some clouds around
53	16024 p7034	16:01:60	+70:26:40	1	3m	
54	COMP			↑		
55	16025 p6637	16:02:36.1	+66:29:10	1	5m	Ha
56	COMP			↑		
57	Abell 2168A	16:17:50.4	+54:08:41	1	20m	Ha 2 pix 2.0
58	COMP			↑		
59	Abell 2168B	16:17:52.1	+54:07:54	1	20m	
60	COMP			↑		
61	16529 p5158	16:53:56.7	+51:53:60	1	7m	Ha
62	COMP			↑		
63	16557 p5808	16:56:26.8	+58:01:17	1	10m	Ha
64	COMP			↑		
65	16565 p5229	16:59:31.1	+52:24:19	1	6m	Ha
66	COMP			↑		
67	N6285	16:58:13.7	+58:58:16	1	4m	

60 inch Telescope Log
Observer: P. Barland
PI: Huchra/Shwikes/Geller

Spectrograph: FAST
Grating: 300
Date: 9/19/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
68	N6286	16:58:30	+58:56:20	1	5m	Hα
69	comp			↑		
70	16577p5912	16:58:19.2	+59:07:15	1	4m	
71	comp			↑		
72	16575p5456	16:58:27.5	+54:57:07	1	4m	Hα
73	comp			↑		
74	16586p5608	16:59:29.9	+56:03:40	1	7m	Hα
75	comp			↑		
76	16586p5510	17:00:40.5	+55:05:24	1	10m	Hα
77	comp			↑		
78	MRK335	00:03	+19:55	1	1m	
79	comp			↑		
80	BDp284211	21:48	+28:37	0	1m	
81	comp			↑		
82	MRK509	20:44:26	-10:54:18	6	1m	
83	comp			↑		
84	S18.058403	21:50:25	+11:00:20	3	15m	Hα
85	comp			↑		
86	S18.061062	21:38:33	+11:04:36	3	15m	
87	comp			↑		
88	S18.063121	21:32:07.08	+11:06:35.8	3	7m	Hα
89	comp			↑		
90	S18.066060	21:38:23	+11:17:04.4	3	10m	2 stars also on slit
91	comp			↑		
92	S18.070451	21:54:22	+11:19:37.5	3	15m	
93	comp			↑		
94	S18071493	21:38:20.8	+11:20:55.3	3	15m	
95	comp			↑		
96	S18.071550	21:50:02.24	+11:21:22.4	3	15m	
97	comp			↑		

60 inch Telescope Log

Observer: RB

PI: Geller

Spectrograph: FAST

Grating: 300l

Date: 9/19/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
98	518.073305	21:31:44.2	+11:22:51(	3	10m	
99	COMP			↑		
100	518.074847	21:33:36.01	+11:23:17.5	3	10m	
101	COMP			↑		
102	518.076452	21:33:40.78	+11:28:11	3	10m	
103	COMP			↑		
104	518.076929	21:31:029	+11:28:252	3	10m	
105	COMP			↑		
106	518.077884	21:42:44.3	+11:31:22	3	12m	
107	COMP			↑		
108	518.079492	21:36:38	+11:33:30.	3	10m	Hα @ 2146
109	COMP			↑		
110	518.085448	21:40:358	+11:43:80.7	3	12m	
111	COMP			↑		
112	523.020519	2340.02	+10:49:46.3	3	15m	
113	COMP			↑		this galaxy is readable; the
114	523.024196	23:41:06.81	+11:01:37.5	3	15m	superposed star [illegible]
115	COMP			↑		q fast row 2=39 !
116	523.028122	23:55:223	+11:23:323	3	10m	weak
117	COMP			↑		
118	523.028540	23:53:26.4	+11:15:02.7	3	15m	LSB Hα @ pix 2150 !
119	COMP			↑		
120	523.029176	23:51:39.8	+11:17:293	3	10m	
121	COMP			↑		
122	523.029550	23:37:50.3	+11:19:01.4	3	12m	
122	COMP			↑		
124	523.030294	23:30:39	+11:20.58	3	15m	
125	COMP			↑		
126	q194-qq1024	01:24:47	-01:31:52	33	15m	
127	COMP			↑		

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60 inch Telescope Log
Observer: PB + CarmenP.
PI: Barton & Keränyi

Spectrograph: FAST
Grating: 300 l
Date: 9/19/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
128	a194_ga1022	01:25:03.86	-02:30:07	33	15m	
129	COMP			↑		
130	a194-ga1023	01:25:10.77	-01 36 43.70	33	20m	very LSB! Hd-yes!
131	COMP			↑		incredible------
132	awm7_1.20	02:53:36.	+42:18:13	35	7m	Hk
133	COMP			↑		
134	awm7_1.21	02:53:40	+41:43:31.1	35	4m	
135	COMP			↑		
136	awm7_1.22	02:53:50	+41:27:48	35	4m	
137	COMP			↑		
138	awm7_1.23	02:53:51.3	+41:17:38	35	4m	
139	COMP			↑		
140	awm7_1.24	02:54:14.8	+41:23:40	35	4m	
141	COMP			↑		
142	awm7_1.25	02:54:26.9	+41:34:19.6	35	5m	
143	COMP			↑		
144	awm7_1.26	02:54:27	+41:34:42	35	2 min	
145	COMP			↑		
146	awm7_1.27	02:54:34	+41:33:32	35	6m	
147	COMP			↑		
148	awm7_1.28	02:54:44	+41:52:08	35	4m	
149	COMP			↑		
150	awm7_1.29	02:54:44.6	+41:31:41.4	35	3m	
151	COMP			↑		
152	awm7_1.30	02:54:45.1	+41:24:34	35	4m	
153	COMP			↑		
154	awm7_1.31	02:55:02.4	+41:36:24.1	35	5m	
155	COMP			↑		
156	awm7_1.32	02:55:04	+42:15:45	35	5m	Sup*kmga1
157	COMP			↑		

65

60 inch Telescope Log
Observer: PBS CP
PI: Koranyi

Spectrograph: FAST
Grating: 300
Date: 9/19/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
158	awm2 1.36	02:56:07.4	+41-37-54	35	3m	
159	COMP			↑		
160-164	AGK2p14783	07:17:47	+14-59-37	0	10s	
165	COMP			↑		
166	HD34487	04:59:02	+51-56-19	0	5s	
167	COMP			↑		
168-170	HD16458	02:47:46.9	+61-26-32	0	5s	
171	COMP			↑		
172-173	HD20394	03:16:53	+02-71-06	0	5s	
174	COMP			↑		
175-199	BIAS			0	0s	
200-209	FLAT			0	8s	
210-215	DARK			0	15m	
216						

~~2" slit used this night (st)~~ NO - fiber in divider 2" slit 3" was used

60 Inch Telescope Log

Observer: Huchra / Pantoja

PI: Huchra

Spectrograph:

Grating:

Date: 09/20/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
0001	HD198858	20 49 50	47 31 07	0	4s	defocus
0002	COMP			↑		
3-12	BIAS				0s	
13	3C390.3	18h 45 37.6	79 43 06	6	180	
14	COMP			↑		
15	BDp284211	21 48 57.0	28 37 48	0	30	
16	COMP			↑		
17	16342p7651	16 32 14.8	76 44 20	1	420	
18	COMP			↑		
19	16455p7829	16 42 04	78 24 19	1	240	
20	COMP			↑		
21	A2506A	22 57 03.2	13 21 17		900	
22	COMP			↑		
23	518.089042	21 44 13.3	11 49 34.5	3	600	
24	COMP			↑		
25	518.093345	21 39 11.97	11 56 20.0	3	600	
26	COMP			↑		
27	518.096237	21 41 28.84	12 01 08	3	600	
28	COMP			↑		
29	518.101089	21 48 18.04	12 09 04.0	3	600	
30	COMP			↑		
31	518.103498	21 49 45.08	12 12 43.0	3	900	
32	COMP			↑		
33	518.104489	21 51 57.0	12 14 10.2	3	600	
34	COMP			↑		
35	518.104711	21 36 03.93	12 14 01.7	3	900	
36	COMP			↑		
37	518.106677	21 44 27.48	12 17 43.2	3		
38	COMP					
39	AGPeg	21 48 36.2	12 23 27	12	1s	

Changed aperture from "2" to "3" in header on 44 object files (-x.*.ms.imh)

17
27 ??

60 inch Telescope Log
Observer: Huchra/Pantoja
PI:

Spectrograph:
Grating:
Date: 09/20/95

Page: 3944

Number	Object	R.A.	Dec.	L/R	Exp	Comments
40	AGPeg	21 48 36.2	12 23 27	12	5s	
41	COMP			↑		
42	ZAnd	23 31 15.3	48 32 32	12	1s	
43	ZAnd	23 31 15.3	48 32 32	12	30s	
44	RAqr	23 43 49.4	-15 17 04	12	1s	
45	RAqr	23 43 49.4	-15 17 04	12	10s	
46	COMP			↑		
47	V1515Cyg	21 45 27.0	47 18 08	12	900s	
48	COMP			↑		
49	MRK335	00 03 45.1	19 55 27	6	60s	
50	COMP			↑		
51	163m217	00h40m 33.3	41 11 02	0	400s	
52	COMP			↑		
53	225m280	00 41 45.1	41 05 01	0	300s	
54	COMP			↑		
55	468.020917	01 47 28.35	11 11 12.9	3	900s	
56	COMP			↑		
57	468.021042	01 33 50.82	11 11 01.3	3	900s	#'s in field
58	COMP			↑		
59	468.026479	01 30 57.11	11 32 38.7	3	900s	
60	COMP			↑		
61	468.026525	01 49 29.59	11 33 36.7	3	900s	
62	Comp			↑		
63	468.030406	01 54 19.06	+11 48 37.6	3	720	
64	comp			↑		
65	468.030782	01 46 [illegible]5.7	11 50 44.6	3	900	
66	Comp			↑		
67	468.031772	01 43.5189	11 54 27.6	3	900	
68	Comp			↑		
69	468.033449	01 36 07.04	11 59 56.9	3	900	

60 inch Telescope Log
Observer: Huchra/Pantoja
PI: _____

Spectrograph: _____
Grating: _____
Date: 09/20/9

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
70	COMP			↑		
71	468.036687	01 34 59.71	12 11 03.8	3	900s	
72	COMP			↑		
73	468.036781	01 37 47	12 11 41.3	3	900	Cloudy
74	COMP			↑		
75	RX0657p4246A	06 57 01.6	+42 46 42	1	720	
76	COMP			↑		
77	HZ15	04 37 36	+08 34 50	0	60	
78	COMP			↑		
79	BDp26 595			0	5	
80	BDp26595			0	5	
81	BDp26595			0	5	
82	COMP			↑		
83-92	BIAS			0	0	
93-102	Flat			0	8	
103-107	BIAS			0	—	
108-117	FLAT			0	8	
118	Comp			↓		
119	sky			0	20s	
120	sky			0	20s	
121-123	sky			0	20	
124	COMP			↑		

32 TOTAL
20 15R

60 inch Telescope Log
Observer: Pantoja/Huchra
PI:

Spectrograph: FAST
Grating:
Date: 09/21/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0	binby 4
11-20	FLAT				9s	
21-25	sky				20	
26	COMP			↑		
27	SA0084795	17h01m06s	24 55 05	0	6	Template star
28	COMP			↑		
29	BDp284211	21h 48m 57.0	28°37 48	0	30	photometric standard
30	COMP			↑		
31	518.106677	21 44 27.48	12 17 43.2	3	900	
32	COMP			↑		
33	518.111914	21 52 32.12	12 25 32.8	3	900	
34	COMP			↑		
35	518.118466	21 40 11.67	12 36 36.4	3	600	
36	COMP			↑		
37	518.120646	21 34 24.95	12 39 27.5	3	600	
38	COMP			↑		
39	N7331	22 34 46.7	34 09 20	0	8	template galaxy ↳ two short 300s
40	COMP			↑		
41	ic5146.001	21 44 59.0	47 37 46	30	900	other bright * on slit
42	COMP			↑		
43	ic5146.033	21 44 40.8	47 38 48	30	180	
44	ic 5146.002	21 45 03.4	47 33 40	30	600	oops! comparison skipped
45	COMP			↑		
46	ic5146.037	21 45 03.0	47 32 59	30	60	
47	COMP			↑		
48	518.120646	21 34 24.9	+12 39 21	3	~~720~~ 240	
49	COMP					
50	518.121848	21 34 21.35	12 41 24.1	3	720	
51	COMP					
52	518.122423	21 46 42.90	12 43 22.3	3	720	

computed gain 1.2
read 8.9

60 inch Telescope Log
Observer: Pantoja / Huchra
PI:

Spectrograph: FAST
Grating:
Date: 09/21/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
53	COMP			↑		
54	518.123213	21 38 15.49	12 44 16.1	3	720	
55	COMP			↑		
56	518.127541	21 39 04.10	12 51 31.2	3	720	
57	COMP			↑		
58	518.134325	21 32 40.84	13 02 15.7	3	720	
59	COMP			↑		
60	518.135350	21 47 35.05	13 05 14.1	3	720	
61	COMP			↑		
62	518.137548	21 50 18.19	13 09 03.7	3	720	
63	COMP					
64	518.142855	21 37 20.95	13 17 45.7	3	720	cloudy
65	COMP					
66	SN1995Y	01 11.0	33 09	2	900	thin cirrus, binby2
67	COMP			↑		
68	SN1995Y	01 11.0	33 09	2	900	
69	COMP			↑		
70-74	BIAS2X			2		
75-79	FLAT2X			2	12s	
80	SN1995Y	01 10 59.6	33 08 40.7	2	900	
81	COMP			↑		
82	468.043211	01 56 06.56	12 34 00.9	3	720	binby 4
83	COMP			↑		
84	468.043617	01 51 52.98	12 36 04.9	3	720	
85	COMP			↑		
86	468.044230	01 49 03.85	12 38 39.6	3	720	
87	COMP			↑		
88	468.045165	01 48 37.06	12 42 21.0	3	720	
89	COMP			↑		
90	468.045361	01 35 36.89	12 42 33.7		720	

60 inch Telescope Log
Observer: PANTOJA/HUCHRA
PI:

Spectrograph: FAST
Grating:
Date: 9/21/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
91	COMP			↑		
92	468.046363	01 37 48.06	12 46 36.0	3	720	
93	COMP			↑		
94	468.046874	01 54 05.6	12 47 57.0	3	720	
95	COMP					
96-105	BIAS				0	
106-115	FLAT				8	
116-119	DARK				900	

findspec did an outstanding job of eliminating extra objects on slit!!

64 TOTAL
9 15R

60 inch Telescope Log
Observer: PANTOJA/HUCHRA
PI:

Spectrograph: FAST
Grating:
Date: 09/22/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS					
11-20	FLAT				8	
21-25	BIAS					
26-	DARK				900	
27-30	Sky				15	
31	COMP			↑	100	
32	comp			↑	105	
33-36	HD198858	20 49.50	47 31 07	#0	45	defocus, trail
37	COMP			↑		
38-39	BDp284211	21 48 57.0	28 37 48	0	30	
40	COMP			↑	10	
41	N5548	14 15 43.49	25 22 01.1	0	150	clouds!
42	COMP			↑		
43	MK509	20 41 26	-10 54 18		60	
44	COMP			↑		
45	N7331	22 34 46.7	34 09 20		150	
46	COMP			↑		
47	TCrB	15 57 24.0	26 03 36	12	5	
48	TCrB			12	20s	
49	COMP			↑		
50	YYHer	18 12 26.0	20 58 12	12	5	
51	YYHer			12	20	
52	YYHer			12	180	
53	COMP			↑		
54	RSOph	17 47 31.6	-06:41 39	12	10	
55	RSOph	17 47 31.6	-06 41 39	12	120	
56	COMP			↑		
57	V433 Her	18 20 02.8	23 25 48	12	3	
58	V433 Her	18 20 02.8	23 25 48	12	60	
59	COMP					

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60 inch Telescope Log
Observer: PANTOJA / HUCHRA
PI:

Spectrograph: FAST
Grating:
Date: 09/22/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
60	AGDra	16 01 23.2	66 56 25	12	3	
61	AGDra	16 01 23.2	66 56 25	12	30	
62	COMP			↑		
63	BFCyg	19 21 55	29 34 30	12	5	
64	BFCyg	19 21 55	29 34 30	12	180	
65	COMP			↑		
66	CHCyg	19 23 14.2	50 08 31	12	1	
67	CHCyg	19 23 14.2	50 08 31	12	5	
68	COMP			↑		
69	HM Sge	19 23 14.2	50 08 31	12	2	cloudy
70	COMP			↑		
71	CICyg	19 48 21.0	35 33 24	12	2	
72	CICyg	19 48 21.0	35 33 24	12	60	cloudy
73	COMP			↑		
74	V1016Cyg	19 55 20.0	39 41 30	12	1	
75	COMP					
76	PUVul	20 19 01.1	21 24 43	12	3	
77	PUVul	20 19 01.1	21 24 43	12	120	
78	COMP			↑		
79	V1329Cyg	20 49 02.6	35 23 37	12	5	
80	V1329Cyg	20 49 02.6	35 23 37	12	120	
81	COMP			↑		
82	V1057Cyg	20 57 06.2	44 03 46	12	180	
83	COMP			↑		
84	W63X1	20 19 04.0	45 38 20	99	900	
85	COMP			↑		
86	W63X2			99	900	
87	COMP			↑		
88	BDp284211	21 48 57.0	28 37 48	0	30	
89	BDp284211	21 48 57	28 37 48	0	30	

Need Second

31

60 inch Telescope Log
Observer: Pantoja / Huchra
PI:

Spectrograph: FAST
Grating:
Date: 09/22/95
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Number	Object	R.A.	Dec.	L/R	Exp	Comments
90	COMP			↑		
91	Abell 2388 A	21 51.1	08 01	1	480	
92	COMP			↑		
93	Abell 2388B	21 51.1	08 01	#1	600	
94	Comp			↑		
95	MRK 335	00 03 45.1	19 55 27		60	
96	COMP			↑		
97-98	Feige 110	23 17 23.5	-05 26 22	0	30	
99	COMP			↑		
100	M32	00 39 58.2	40 35 30	0	60	
101	COMP			↑		
102	M31	00 40 00.0	40 59 42	0	60	
103	COMP			↑		
104	Sky M31			↑	60	
105	xe523.031013	23 56 03.	11 22 58.7	3	900	
106	COMP			↑		
107	xe523.031335	23 46 33.31	11 24 59.3	3	900	
108	COMP			↑		
109	xe523.032654	23 55 41.13	11 28 19.5	3	900	
110	COMP			↑		
111	xe523.033113	23 54 57.09	11 29 51.8	3	900	
112	COMP			↑		
113	xe523.034072	23 46 59.34	11 33 45.0	3	900	
114	COMP			↑		
115	xe523.035260	23 53 14.61	11 36 53.1	3	900	
116	COMP			↑		
117	xe523.035954	23 35 14.10	11 39 21.8	3	400	
118	COMP			↑		
119	xe523.036017	23 38 37.59	11 39 55.5	3	300	
120	COMP					

→ what happened?? looks as though someone ran into the spectrograph — redo!
problem was with reduction - reredused

60 inch Telescope Log

Observer: PANTOSA/HUCHRA

PI:

Spectrograph: FAST

Grating:

Date: 09/22/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
121	xe523.036333	23 52 30.11	11 40 16.9	3	400	
122	COMP			↑		
123	awm7_1.33	02 55 19.8	40 43 54.9	35	1200	STAR
124	COMP			↑		
125	awm7_1.34	02 55 54.0	41 44 37.6	35	400	cloudy
126	COMP			↑		
127	Awm7_1.35	02 55 55.3	41 34 58.1	35	400	cloudy
128	COMP			↑		
129	Awm7-1.37	02 56 37.6	41 00 44.3	35	400	
130	COMP			↑		
131	Awm7-1.38	02 56 46.2	41 46 25.4	35	400	
132	Comp			↑		
133	awm7-1.39	02 56 56.2	41 58 41.1	35	400	
134	comp			↑		
135	awm7_1.40	02 57 09.0	41 31 00.0	35	400	
136	Comp			↑		
137-146	BIAS				0	
147-156	FLAT				8	
157-160	PARK					

35 Total (300 l/m, 3", blaze)
3 15R

60 inch Telescope Log
Observer: PANTOJA
PI:

Spectrograph: FAST
Grating:
Date: 09/23/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0	bin by 4
11-20	FLAT				8s	
21-25	Sky				10	Sky started too late!
26	COMP					
27	SAO084795	170106	24 55 05	0	6	template star
28	COMP			↑	↑	
29	HD198858	20 49 50	47 31 07	#0	4	Cloudy!!
30	COMP				↑	
31	3C390.3	18 45 37.6	79 43 06	#6	300	
32	COMP				↑	
33	PG1708+602	17 09 35.9	60 13 52	#6	180	Standard star
34	COMP				↑	
35-36	BD+28 4211	21 48 57.0	28 37 48	#0	30	photometric standard
37	COMP				↑	
38	N7331	22 34 46.7	34 09 20	#0	120	template galaxy
39	COMP				↑	
40	RX1819.8+3307A	18 19 50.3	33 07 43.7	#1	600	
41	COMP				↑	
42	RX1819.8+3307A	18 19 50.3	33 07 43.7	#1	900	
43	COMP				↑	
44	Mrk 335	00 03 45.1	19 55 27	#6	60	
45	COMP				↑	
46	M31	00 40 00.0	40 59 4.2	#0	30s	
47	COMP				↑	
48	M31 sky				30	
49	M32	00 39 58.2	40 35 30	#0	30	
50	COMP				↑	
51	M32				60	
52	COMP				↑	
53	SN1995Y	01 10 59.6	33 08 40.7	#2	900	bin by 2

60 Inch Telescope Log
Observer: Pantoja
PI:

Spectrograph: FAST
Grating:
Date: 09/23/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
54	COMP			2	↑	binby 2
55-59	biasX2			2	0	
60-64	flatX2			2	12	
65	SN1995Y			2	900	
66	COMP			2	↑	
67	awm7_1.41	02 57 22.0	41 56 19.5	#35	900	binby 4
68	COMP			↑		
69	awm7_1.42	02 57 33.5	41 30 57.9	#35	400	
70	COMP			↑		
71	awm7-1.43	02 58 12.4	41 42 11.9	#35	400	
72	COMP			↑		
73	awm7_1.44	02 58 31.5	40 51 39.1	#35	400	
74	COMP			↑		
75	awm7_ 1.45	02 58 54.1	40 44 57.7	#35	400	
76	COMP			↑		
77	awm7_1.46	02 58 58.8	41 17 17.5	#35	400	
78	COMP			↑		
79	awm7_1.47	02 59 01.1	42 20 45.5	#35	400	
80	COMP			↑		
81	awm7_1.48	02 59 32.2	41 22 32.8	#35	400	
82	COMP			↑		
83	Abell536A	05 07 44.8	-09 15 20	#1	900	
84	COMP			↑		
85	xe468.047392	01 47 56.34	12 50 25.6	#3	900	
86	COMP			↑		
87	xe468.049171	0147 02.20	12 56 50.8	#3	900	
88	COMP			↑		
89	xe468.049532	01 47 41.38	12 58 09.4	#3	600	
90	COMP			↑		
91-95	Skg				10	

60 inch Telescope Log
Observer: Pantoja
PI:

Spectrograph: FAST
Grating:
Date: 09/23/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
96	COMP			↑		
97–106	BIAS				0	
107–116	FLAT				8	
117–120	DARK				900	

Good Morning Susan!

FAX to Susan Tokarz

pg 1 of 6

From Flwd 60"

60 inch Telescope Log
Observer: PBerlind
PI: Huchra

Spectrograph: FAST
Grating: 300;3°51';blaze 4
Date: 9/24/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-25	BIAS			0	0s	Clouds all over
26-35	FLAT			0	6s	
36-40	sky			0	4s	fastfoc=low
41	comp			↑	10s	
42-43	Cyg OB2 no 9	20:11:23	+41:04:50	0	30s	
44	comp			↑		
45,46,47	N7331	22:34	+34:49	0	30s,2m	nucleus
48	comp			↑		
49	1604+6936	16:04:07.	+69:27:13	1	4m	
50	comp			↑		
51	1605+6429S	16:02:27	+64:21:10	1	5m	Ha through the roof
52	comp			↑		* burst; lots of lines
53	1601+6429N	16:02:12	+64:21:10	1	10m	LSB Ha
54	comp			↑		
55	1606+7945	16:04:30.9	+79:37:58	1	10m	Ha
56	comp			↑		clouds...
57	1611+8126	16:06:20.1	+81:18:27	1	4m	
58	comp			↑		centered @ row 45
59	1613+6323E	16:14:10.2	+63:15:43	1	7m	E Comp (some spillover from W)
60	1613+6323W	16:14	+63:15	1	3m	W Comp
61	comp			↑	↑	centered @ row 41
62	1613+6323	16:13:36	+63:23:03	1	10m	LSB
63	comp			↑		increasing clouds
64	1614+6507	16:14:12.7	+64:55:43	1	7m	Ha
65	comp			↑		
66	1616+6528	16:16:16.5	+65:20:46	1	7m	
67	comp			↑		
68	1621+7356	16:20:27.7	+73:51:03	1	7m	
69	comp			↑		
70	PG1708+602	17:08:	60:13	0	3m	

60 inch Telescope Log
Observer: P. Berlind
PI: Wilkes/Kenyon

Spectrograph: FAST
Grating: 300 l
Date: 9/24/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
71	comp			↑		clouds
72	3C390.3	18:45:37	+79:47:07	6	7m	
73	comp			↑		
74	MRK509	20:41:26	-10:54:18	6	90s	
75	comp			↑		
76	BDp284211	21:48	+28:37	0	30s	
77	comp			↑		
78	MRK335	00:03	+19:55	6	90s	clouds biz time
79	comp			↑		
80	IC5146.034	21:44	+47:33	30	1m	high s/n ↓
81	comp			↑		
82	IC5146.037	21:46	+47:32	30	5m	
83	comp			↑		
84	IC5146.038	21:47	+47:33	30	5m	
85	comp			↑		
86	IC5146.039	21:47	+47:33	30	5m	
87	comp			↑		
88	IC5146.036	21:46	+47:36	30	5m	
89	comp			↑		
90	IC5146.035	21:45	+47:31	30	8m	
91	comp			↑		
92	IC5146.033	21:44	+47:38	30	6m	
93	comp			↑		
94	IC5146.043	21:47	+47:39	30	7m	
95	comp			↑		
96	IC5146.044	21:45:19.2	+47:39:16	30	6m	
97	comp			↑		
98	IC5146.045	21:45	+47:31	30	3m	
99	comp			↑		
100	IC5146.047	21:47	+47:37	30	3m	

60 inch Telescope Log
Observer: ABerlind
PI: Kenyon & Geller

Spectrograph: FAST
Grating: 300
Date: 9/24/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
101	comp			↑		
102	TC5146.048	21:47	+47:37	30	6m	
103	comp			↑		
104	TC 5146.049	21:45	+47:38	30	7m	
105	comp			↑		
106	TC5146.050	21:46:55.3	+47:31:45	30	4m	
107	comp			↑		
108	TC5146.051	21:47:26.7	+47:35:19	30	4m	
109	comp			↑		
110	TC5146.005	21:46	+47:35	30	7m	
111	comp			↑		
112	TC5146.007	21:46:23	+47:35:45	30	15m	
113	comp			↑		
114	V15 15Cyg	21:45:27	+47:18:08	12	15m	
115	comp			↑		
116,117	Feige 110	23:17:23	-05:26:22	0	1m	thin cloud
118	comp			↑		
119	S23.037306	23:43:24	+11:43:58	3	10m	Ha
120	comp			↑		
121	S23.038215	23:45:28	+11:46:44.6	3	10m	
122	comp			↑		
123	S23.038456	23:44:13.46	+11:46:43	3	10m	Ha
124	comp			↑		
125	S23.039741	23:31:56.13	+11:50:50.8	3	15m	
126	comp			↑		clearing...
127	S23.040998	23:34:42	+11:53:18	3	15m	
128	comp			↑		
129	S23.040863	23:36:26	+11:54:53	3	10m	
130	comp			↑		
131	S23042745	23:51:25.86	+12:01:21.4	3	15m	

60 inch Telescope Log
Observer: P. Berlind
PI: Geller

Spectrograph: FAST
Grating: 300l
Date: 9/24/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
132	comp			↑		
133	S23.044760	23:37:38	+12:06:004	3	10m	Ha
134	comp			↑		
135	S23.045324	23:31:59	+12:08:106	3	10m	
136	COMP			↑		
137	S23.045819	23:46:50	+12:10:35	3	8m	
138	COMP			↑		
139	S23.045881	23:32:08.7	+12:10:04	3	10m	
140	COMP			↑		
141	S23.046651	23:47:46.15	+12:13:00	3	10m	
142	COMP			↑		
143	S23.046855	23:46:56.9	+12:13:52	3	8m	Ha
144	comp			↑		
145	S23.046524	23:32:30	+12:13:30	3	10m	
146	COMP			↑		
147	S23.047355	23:42:07.84	+12:15:32	3	8m	
148	COMP			↑		
149	S23.053488	23:55:55	+12:33:47	3	8m	Ha
150	COMP			↑		
151	S23.054914	23:47:06	+12:38:34	3	8m	
152	COMP			↑		
153	S23.056178	23:53:00.73	+12:41:46	3	10m	Ha
154	COMP			↑		
155	Abell 3070	02:05:24	+10:14:00	1	15m	
156	COMP			↑		
157	Abell 3071AB	02:05:24	+10:14:00	1	20m	A+B Comps (A is west of B) Zoom!
158	comp			↑		
159	468.050890	01:49:19	+13:02:30	3	10m	star on slit to W
160	COMP			↑		
161	468.051971	01:50:07	+13:06:35	3	10m	

141 - did not get comp. Gt should be
149 -
169

149

60 inch Telescope Log
Observer: PBerlind
PI: Geller/Huchra

Spectrograph: FAST
Grating: 300l
Date: 9/24/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
162	COMP			↑		
163	468.0552765	01:44:26	+13:09:34	3	7m	Ha
164	COMP			↑		
165	468.0552250	01:38:03	+13:18:18	3	7m	finishes the plate!
166	COMP			↑		
167	Abell415A	03:04:30.5	-12:18:18	↑	12m	
168	COMP			↑		
169	Abell415B	03:06:53	-11:58:07	1	10m	Ha
170	COMP			↑		
171	Abell415D	03:06:51	-11:57:23	1	8m	
172	COMP			↑		
173	4710.0338	03:05:33.3	-4:35:26	1	4m	
174	COMP			↑		
175	4710.1095	03:06:17	-04:17:30	1	3m	
176	COMP			↑		
177	4715.0815A	03:21:34.2	-06:06:38	1	5m	Ha
178	4715.0815B	03:21:34.2	-06:06:45	1	4m	Ha
179	COMP			↑		
180	4712.0920	03:23:48.5	-04:54:35	1	4m	
181	COMP			↑		
182-184	HD 258174	05:35:12	02:61:00	1	10s	
185	COMP			↑		
186	HD 252117	06:02:18	+04:15:00	1	10s	
187	COMP			↑		
188-189	HD 49641	06:44:18	+03:49:00	1	10s	
190	COMP			↑		
191,192	HD49841	06:45:18	+03:46:00	1	10s	
193	COMP			↑		
194,195	HD50082	06:46:30	+06:43:00	1	10s	5:25
196	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: All

Spectrograph: FAST

Grating: 300 ℓ

Date: 9/24/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
197,198	Hiltner 600	06:42:37	+02:11:25	0	30s	
199	COMP			↑		
200-209	BIAS			0	0s	
210-219	FLAT			0	6s	

60 inch Telescope Log
Observer: PBarthel
PI: Huchra

Spectrograph: FAST
Grating: 300l, 3rd; bunby 4
Date: 9/25/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	mostly clear
11-20	FLAT			0	6s	
21-25	sky			0	2s	
26	comp			↑	10s	
27,28,29,31	N7331	22:34	+3409	0	2m	
29,32	comp			↑		
33	16221p6435	16:22:20.7	+64:27:07	1	4m	
34	comp			↑		
35	16158p6413	16:16:05.9	+64:06:03	1	7m	Hα
36	comp			↑		
37	N5969	15:34:40.1	+56:28:55	1	4m	
38	comp			↑		
39	N5976A	15:35:47.4	+59:34:57	1	10m	
40	comp			↑		
41	16320p8028	16:48:11.6	+80:21:23	1	5m	
42	comp			↑		thin cloud
43	16560p7909	16:53:19.3	+79:03:53	1	15m	Hα pix 2046; * on slit
44	comp			↑		
45	U11417	19:12:24	+29:54:40	1	15m	Hα lots of *'s on slit
46	comp			↑		
47	U11223W	18:24:03	+36:27:41	1	7m	
48	comp			↑		
49	U11223E	18:24	+36:27	1	15m	
50	comp			↑		
51	S18, 046044	21:35:48.37	+10:40:30	3	15m	Hα etal
57	comp			↑		
53	S18 046852	21:31:35.44	+10:41:34	3	10m	weak
54	comp			↑		
55	S18-047181	21:30:44	+10:41:26	3	15m	
56	comp			↑		

gain 1.16
read 9.0

60 inch Telescope Log

Observer: P. Berlind
PI: Geller

Spectrograph: FAST
Grating: 300l
Date: 9/25/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
57	S18.050546	21:44:16.54	+10:48:13.6	3	10m	
58	comp			↑		
59	S18.050654	21:38:13.7	+10:47:57	3	10m	
60	comp			↑		
61	S18.055194	21:41:58	+10:55:22	3	15m	
62	comp			↑		
63	S18.055893	21:36:16	+10:55:43	3	15m	Hb
64	comp			↑		slow going!
65	S18.057134	21:32:37	+10:57:11	3	10m	
66	comp			↑		
67	S18.058134	21:47:47	+10:59:59	3	10m	
68	comp			↑		
69	S18.058194	21:38:31.5	+10:59:42	3	10m	
70	comp			↑		
71	S18.067128	21:45:58	+11:15:31	3	7m	Hb
72	comp			↑		
73	S18.069643	21:38:42	+11:17:57	3	15m	Hb tucked in amongst a forest of cosmic rays (?)
74	comp			↑		
75	S18.074169	21:47:36.3	+11:25:25	3	10m	Hb
76	comp			↑		
77	S18.076582	21:49:09	+11:29:50.6	3	12m	Hb
78	comp			↑		
79	S23.049375	23:33:38	+12:21:27	3	8m	
80	comp			↑		
81	S23.050503	23:31:58	+12:24:45	3	10m	
82	comp			↑		
83	S23.054955	23:38:31	+12:38:44	3	10m	weak but ok
84	comp			↑		
85	S23.057635	23:58:32	+12:43:34	3	10m	
86	comp			↑		

60 inch Telescope Log
Observer: PBerlind
PI: Geller

Spectrograph: FAST
Grating: 300l
Date: 9/25/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
87	S23.057858	23:44:46	+17:47:08	3	10m	Hα
88	comp			↑		
89	S23.058340	23:50:47	+17:48:32	3	8m	
90	comp			↑		
91	S23.060565	23:38:26.8	+17:55:37.7	3	15m	Hα
92	comp			↑		
93	S23.060615	23:53:54	+17:55:02	3	7m	Hα - nice!
94	comp			↑		
95	S23.060832	23:45:20	+17:56:33	3	8m	Hα
96	comp			↑		
97	S23.063985	23:42:28	+17:06:27	3	10m	
98	comp			↑		
99	S23.064538	23:38:27	+17:06:00	3	8m	* on slit to E
100	comp			↑		
101	S23.065044	23:50:44	+17:09:15	3	8m	
102	comp			↑		
103	S23.066019	23:37:42	+17:12:23	3	10m	
104 105	comp			↑		
105 106	S23.066499A	23:43:27.7	+17:12:33	3	4m	
106 107	comp			↑		
107 108	S23.066199B	23:43:30	+17:12:45	3	15m	the outer edges of gal A are overlapping on the chip
108 109	comp			↑		
109 109	S23.066228	23:37:47	+17:13:09.1	3	7m	Hα
110	comp			↑		
111	S23.067035	23:37:35	+17:15:31	3	7m	Hα
112	comp			↑		
113	S23.066941	23:53:48	+17:14:36	3	7m	
114	comp			↑		
115	S23.066475	23:55:32	+17:12:56	3	10m	Finishes the Plate!!
116	comp			↑		

60 inch Telescope Log

Observer: PB

PI: Wilkes/Hucha

Spectrograph: FAST

Grating: 300l

Date: 9/25/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
117	MRK335	00:03:45.1	+19:55:27	6	1m	great seeing
118	comp			↑		
119	PG0205+134	02:05:21	+13:22:08	0	2m	
120	comp			↑		
121	Abell415K	03:07:05.7	+12:06:08	1	10m	J band #11
122	comp			↑		
123	Abell415C	03:04	+12:17	1	8m	#3
124	comp			↑		
125	Abell415E	03:04	+12:17	1	10m	#5
126	comp			↑		
127	Abell415L	03:04	+12:17	1	8m	#12
128	comp			↑		
129	Abell415H	03:04	+12:17	1	10m	
130	comp			↑		
131	Abell415I	03:04	+12:17	1	10m	
132	comp			↑		
133	011002	04:22:36.7	+22:42:32	37	10m	<400 cts
134	comp			↑		
135	011005	04:22:39.3	+22:25:06	37	3m	800 cts
136	comp			↑		
137	011003	04:22:38.5	+22:38:47	37	8m	600
138	comp			↑		
139	012006	04:21:31.1	+22:44:35	37	3m	
140	012007	04:21:30	+22:41:15	37	3m	extra * on slit to E
141	comp	"		↑		
142	012009	04:21:33	+22:35:43	37	8m	
143	012010	04:21:31	+22:27:54	37	2m	
144	comp			↑		
145	021012	04:22:34.5	+23:03:30	37	3m	
146	022020	04:21:30	+22:49:41	37	2m	

60 inch Telescope Log

Observer: PB

PI: AH

Spectrograph: FAST

Grating: 300l

Date: 9/25/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
147	COMP			↑		
148,149	G191B2B	05:01	+52:45	0	1m	
160	COMP			↑		
151,152	HD31487	04:51	+51:47	0	10s	
153	COMP			↑		
154,155	HD30616	04:44	+41:24	0	10s	
156	COMP	"		↑		
157,158	HD24786	03:46	+36:31	0	5s	
159	COMP			↑		
160-169	BIAS					
170-179	FLATS					

WITH IFS.

61 + 1 sm = 62

15 R: 22 + 1 sm = 23

60 inch Telescope Log

Observer: Perlmutter

PI: Kenyon Gfeller

Spectrograph: FAST

Grating: 300; 3"; 6mm; 4

Date: 9/26/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	a few clouds
11-20	FLAT			0	6s	
21-25	SKY			0	2s	
26	COMP			↑	10s	
27,28	N7331	22:34	+3409	0	2m	
29	COMP			↑		
30-32	BDp284211	21:48	+28-37	0	30s	clouds!
33	COMP			↑		
34	IC5146.034	21:44:49	+47:37:02	30	30s	
35	COMP			↑		
36	IC5146.000	21:46:43.1	+47:37:20	30	5m	
37	COMP			↑		
38	IC5146.013	21:46:49.6	+47:35:39	30	6m	
39	COMP			↑		
40	IC5146.015	21:46:59	+47:34:28	30	6m	
41	COMP			↑		
42,46	SIR.080346	21:31:49.1	+11:33:54	3	15m	+2 V≈14,000km/s
43,47	COMP			↑		Hα
44	SIR.082715	21:30:37	+11:37:45	3	10m	
45	COMP			↑		
48	SIR.082949	21:32:56	+11:38:36	3	15m	
49	COMP			↑		
50	SIR.085225	21:32:20	+11:42:08	3	12m	
51	COMP			↑		
52	SIR.086296	21:48:41.1	+11:45:01.8	3	10m	
53	COMP			↑		
54	SIR.090864	21:35:23	+11:52:17.5	3	10m	
55	COMP			↑		
56	SIR.091677	21:39:20	+11:53:32.9	3	15m	Hα * on slit to W
57	COMP			↑		

4:30 - 5

60 inch Telescope Log

Observer: PB

PI: Geller & Kirshner

Spectrograph: FAST

Grating: 300l-bnby2+4

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Date: 9/26/95

Number	Object	R.A.	Dec.	L/R	Exp	Comments
58	S18.095417	21:36:01.45	+12:00:7.4	3	10m	RA bias = -0.05
59	COMP			↑		δ bias = +0.03
60	S18.096498	21:33:03.75	+12:00:57	3	15m	Hε
61	COMP			↑		
62	S18.110914	21:48:31.3	+12:24:22.9	3	12m	Hε
63	COMP			↑		
64	S18.112260	21:46:04.22	+12:26:31.6	3	12m	
65	COMP			↑		
66	S18.114396	21:52:47.78	+12:29:40.4	3	15m	
67	COMP			↑		
68	S18.114424	21:47:22.9	+12:29:52	3	5m	Hε
69	COMP			↑		
70	S18.115249	21:49:01	+12:30:45	3	5m	
71	COMP			↑		
72	SN1995ac	22:45:41	-08:45:12	2	20m	← regular tilt + binning
73	COMP			↑		OK: guess what? Pete Challis is now
74,76	SN1995ac	"	"	2	20m	here; so: tilt=590; bin by 2
75,77	COMP			↑		x2
78	SN95ac.gal	"	"	2	7m	
79	COMP			↑		
80	Fergelio	23:17:23.5	-05:26:22	0	1m	
81	COMP			↑		↑ humidity + some
82	SN1995ab	23:26:41	-04:57:45.9	0	20m	local clouds forming
83	COMP			↑		
84	COMP			–	test	bin by 4; tilt = 610 (normal)
85	S21.019498	23:10:17.31	+10:34:46	3	15m	Hε @ pix 2567 (?) (weak
86	COMP			↑		clouds...
87	S21.020128	22:48:14	+10:35:02.3	3	12m	Hε
88	COMP			↑		
89	S21.020627	23:06:30.	+10:37:01	3	8m	

Oct 22

60 inch Telescope Log

Observer: PB

PI: Geller/Wilkes/Barton

Spectrograph: FAST

Grating: 300l

Date: 9/26/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
90	COMP			↑		
91	521.021258	23:04:01.53	+10:39:20	3	15m	Hb
92	COMP			↑		
93	521.021809	23:06:37	+10:40:30	3	9m	Hb
94	COMP			↑		
95	521.022668	22:52:25.9	+10:44:49.2	3	10m	Hb
96	COMP			↑		
97	521.023454	22:44:26.8	+10:46:51	3	5m	humid... 80%+
98	COMP			↑		
99	MRK335	00:03	+19:55	6	1m	
100	COMP			↑		
101	PG0205+134	02:05:24.3	+13:22:15	0	2m	
102	COMP			↑		
103	a194_ga1024	01:25:16.5	-02:32:35	33	3m	star - another *
104	COMP			↑		
105	a194_ga1025	01:25:29.1	-00:42:41	33	8m	Hb
106				↑		
107	a194_ga1026	01:25:31.5	-02:32:45	33	2m	star - another *
108	COMP			↑		
109	a194_ga1027	01:25:40.49	-02:23:158	33	5m	
110	COMP			↑		
111	a194_ga1028	01:25:47.7	-01:20:41	33	5m	
112	COMP			↑		
113	a194_ga1029	01:25:50.9	-01:48:18	33	2m	star
114	COMP			↑		
115	a194_ga1030	01:26:05.05	-01:49:18	33	15m	
116	COMP			↑		
117	a194_ga1031	01:26:07.48	-01:19:50	33	15m	Ack! auto dome closer
118	COMP			↑		just closed the dome
119	a194_ga1032	01:26:23.7	-00:56:20	33	12m	MMT in fog bank

tentatively open again

60 inch Telescope Log

Observer: RB

PI: Barton/Goodman

Spectrograph: FAST

Grating: 300R

Date: 9/26/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
120	COMP			↑		MMT in huge cloud
121	a194_ga1033	01:26:30	-01:50:17	33	12m	
122	COMP			↑		
123	021013	04:22:36.9	+22:57:46	37	4m	
124	COMP			↑		
125	021014	04:22:36.2	+22:53:01	37	2m	cut short
126	COMP	"		↑		close due to high humidity
127-136	BIAS			0	0s	
137-146	FLAT			0	6s	
147-156	BIAS	binby 2	for the	SN guys	0s	binby 2
157-166	FLAT	"	"	"	12s	tilt = 590
167-170	DARK				15m	binby 4; tilt is back to normal too

60 inch Telescope Log

Observer: P. Berlind

PI: Kenyon

Spectrograph: FAST

Grating: 300l; 3"51.7

Date: 9/27/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS			0	0s	heavy cloud
11-20	FLAT			0	6s	
21-25	SKY			0	6s	on cloud
26	COMP			↑	6s	
27-36	BIAS.SN			2	0s	bin by 2
37-46	FLAT.SN			2	12s	"
47	COMP			test	6s	bin by 4 ↓
48,49	N7331	22:34:46.9	+34:05:43	0	2m	clouds
50	COMP			↑		
51,52	HD195722	20:19:55.9	+46:30:15	0	5s	Ap
53	COMP			↑		
54,55	HD182274	19:23:12.4	+19:22:32	0	5s	
56	COMP			↑		seeing is very poor
57	PG1708+602	17:08	+60:13	0	3m	lots of clouds; lightning to north + south
58	COMP			↑		
59	IC5146-012	21:45:27.2	+47:35:50	30	1m	OK forget the north! too cloudy
60	COMP			↑		
61	IC 5146-017	21:47:05.4	+47:38:13	30	15m	
62	COMP			↑		
63	IC5146.020	21:47:13.5	+47:37:34	30	15m	clearing
64	COMP			↑		
65	IC5146.023	21:47:16.4	+47:39:58	30	15m	
66	COMP			↑		
67	IC5146.027	21:47:19.7	+47:32:50	30	10m	
68	COMP			↑		
69	IC5146.026.024	21:47:19.1	+47:36:43	30	15m	stars #26 and #24 (to West)
70	COMP			↑		
71	IC 5146.031	21:47:41.5	+47:32:40	30	15m	
72	COMP			↑		
73,75	3C390.3	18:45:37	+79:4307	6	1m,	3m

60 inch Telescope Log
Observer: PBerlind
PI: Wilkes/Geller

Spectrograph: FAST
Grating: 300Q
Date: 9/27/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
74	COMP			↑		
76,77	Cyg0B2-9	20:31	+41:04	0	30s	
78	COMP			↑		
79	MRK 335	00:03	+19:55	6	2m	
80	COMP			↑		
81	MRK509	20:41:26	-10:54:14	6	2m	
82	COMP			↑		
83	S18.122914	21:45:33.4	+12:39:22	3	10m	
84	COMP			↑		
85	S18.122701	21:41:52.3	+12:43:42	3	15m	more clouds
86	COMP			↑		Guide star 2527
87	S18.130667	21:39:59	+12:57:23	3	10m	all cloud
88	COMP			↑		stopped by cloud
89-98	BIAS			0	0s	
99-106	FLAT			0	6s	
						It is pouring rain
						End of Combo Fast Run
						Fizzle
						Fizzle

1575

60 inch Telescope Log
Observer: J. Hughes
PI: Vancura / Hughes

Spectrograph: FAST
Grating: 600 l/mm
Date: 9/28/95

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Number	Object	R.A.	Dec.	L/R	Exp(s)	Comments
1-10	BIAS				—	515 mean
11	COMP				6	check grating tilt
12-22	FAST FOC				6	focus FAST (=980)
23	COMP				6	
24	BIAS				—	Filled dewar just before 515 mean
25	DARK				1800	522 "
26	FLAT				0.2	~730 mean
27-31	FLAT				10	~8200 mean
32	55R187A				10	
33	"				60	
34	COMP				10	
35	"				6s	
36	Tycho Pos 1	00:26:01	64:08:45	1.38	1800	Guide by hand
37	COMP				6s	
38	Tycho Pos 1	00:26:01	64:08:44	1.32	1800	" " "
39	COMP				6s	
40	Tycho Pos 1	00:26:04	64:08:44	1.25	1800	" " "
41	COMP				6s	
42	SN95ac	22:45:41	-08:45:12	1.32	1800	aborted before end
43	COMP				6s	
44-53	FLAT				10s	
54-63	BIAS				—	
64	DARK				900	
65	COMP				6s	slit cleared
66	POS 1	00:26:01	64:08:45	1.47	1800	Guide by hand Refocused 498840
67	COMP				6s	
68	POS 2			1.67	900	Slit 5" West of POS1
69	COMP				6s	
70	POS 3			1.70	900	Slit 5" East of POS1
71	COMP				6s	

60 inch Telescope Log
Observer: J. Hughes
PI: Vancura/ Hughes

Spectrograph: FAST
Grating: 600 lpm
Date: 9/28/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
72	POS4			1.80	900	10" E of POS1 → guiding difficult
73	COMP				6	
74	Feige 15	1:49:22	13:34:10	1.88	30	
75	Feige 15	"	"	1.92	120	
76	"	"	"	1.95	120	
77-86	FLAT				10s	
87-96	BIAS				—	

60 inch Telescope Log

Observer: T. Hearty
PI: Stauffer

Spectrograph: Fast
Grating: 600 l/m
Date: 9/29/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-2	COMP				10	Bin by 2
3-12	BIAS				—	No Clouds
13-22	FLAT				8s	
23	BD 25 3941	19:42:21.9	26:08:00		120s	1950 coords
24	55S595a	23:02:37.5	15:10:14.8		300s	2000 coords 555595 Hz
25	unnamed	23:02:37.5	15:10:14.8		600s	Really 555595A
26	COMP				10s	
27	G 318	23:37:38.5	+48:24:12.6		120s	No Li
28	COMP				10s	
29	55m108a	23:03:27	14:43:50.9		300s	
30	COMP				10s	
31	55m108b	23:03:27	14:43:50.9		900s	moon 500 cnts
32	COMP				10s	
33	55m122a	23:04:22.9	15:15:42.8		360s	
34	COMP				10s	
35	55m122b	23:04:22.9	14:15:42.8		1,080s	
36	COMP					
37	55m166a	23:08:42.6	+15:32:49.5		30s	
38	55m166b	23:08:42.6	+15:32:49.5		900s	
39	COMP					
40	55m167a	23:08:48.7	14:13:10.3		900s	guide is made 15min later File is still called 167a
41	COMP					
42	55m176 a+b	23:09:56.7	+14:25:44		15s	2 objects on slit
43						
44	55m176a+b	23:09:56.7	+14:25:44		10s	Both objects on slit
45	COMP				10s	
46	55m178	23:10:18.5	14:47:15.0		1080s	
47	COMP				10s	
48	55m192	23:11:20.9	14:50:53.6		300s	
49	COMP				10s	

60 inch Telescope Log

Observer: T. Heasley

PI: J. Stauffer

Spectrograph: FAST

Grating: 600 l/mm

Date: 7/29/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
80	COMP				10s	
81	7m34a	02:18:08.1	+19:18:58		1080s	<1000 counts
82	COMP				10s	
83	7m31	02:17:55.3	+18:15:03.6		1080s	
84	COMP				10s	
86	COMP				10s	
87	7m46	02:22:19	18:47:59		1080	
88	COMP				10s	
89	7m54a	2:34:28.9	+19:22:56		480	
90	COMP				10s	
91	7m54b	2:34:28.9	+19:22:56		900s	
92	COMP				10s	
93	7m50a	2:30:07.3	+14:05:43		480	Two of not certain Ethan and beam pointing wrong
94	7m50a	2:30:7.3	+14:05:43		300s	
95	COMP				10s	
96	7m41	2:20:32	+20:07:43		30s	
97	COMP				10s	
98	7m49	2:28:46.1	+16:27:14		60s	
99	COMP				10s	
100	7m52	2:32:53	+15:02:087		10s	
101	7m52	2:32:53.1	+15:02:087		10s	Sky gets bright
102	COMP				10s	
103	NTT5K7	04:32:09.2	+17:57:23		300s	
104	COMP				10s	
105-114	FLAT				8s	
115-124	BIAS				—	

60 inch Telescope Log

Observer: T. Hearty

PI: J. Stauffer

Spectrograph: FAST

Grating: 600

Date: 9/30/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				—	Clear
11-20	FLAT				8	
21	BD253941	19:42:21.9	26:06:00		2min	
22	COMP				10s	
23	BD253941	19:42:21.9	26:06:00		2min	
24	Comp				10s	
25	PB55m4a	23:01:46.5	16:15:35.8		180s	Poor guiding
26	Comp				10s	
27	PB55m4a	23:01:46.5	16:15:35.8		10m	
28	Comp				10s	
29	G318	23:37:38	+48:24:13		120s	Dome was partial covering
30	Comp				10s	the telescope for 29&31
31	G318	2:37:38	+48:24:13		180s	
32	COMP				10s	
33	G318	2:37:38	+48:24:13		120s	This one has the correct
34	COMP				10s	Dome position
35	55m108a	23:03:27	14:43:60		360s	
36	COMP				10s	
37	55m108b	23:03:27	14:43:60		900s	
38	comp				10s	
39	55m213a6	23:13:27	14:45:33		900s	
40	COMP				10s	
41	55m122b	23:04:23	15:15:43		900s	
42	Comp				10s	
43	55m167a	23:08:48.7	14:13:10.3		900s	
44	COMP				10s	
45	SN1995ac	22:45:41	-8:45:12		1140.8s	
46	SN1995ac	22:45:41	-8:45:12		660s	
47	Comp				10s	
48	55m225				120s	

60 inch Telescope Log

Observer: J. Hearty
PI: J. Stauffer

Spectrograph: FAST
Grating: 600 l/mm
Date: 9/30/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
49	COMP				10s	
50	55m96a	23:02:35.1	21:55:05.1		300s	
51	COMP				10s	
52	55m105	23:03:21.9	20:17:45.1		1080s	
53	COMP				10s	
54	55m106a	23:03:24	17:13:28		90s	
55	COMP				10s	
56	55m106b	23:03:24	17:13:28		600s	Ha
57	COMP				10s	
58	55m107a	23:03:26.4	23:04:10.6		600s	Ha
59	COMP				10s	
60	55m112	23:03:45.2	22:20:26.4		600s	
61	COMP				10s	
62	55m117a	23:04:07.4	+21:34:48.3		600s	Ha
63	COMP				10s	
64	55m117b	23:04:07.4	+21:34:48.3		600s	
65	COMP				10s	
66	55m119	23:04:14.6	21:53:19.7		200s	
67	COMP				10s	
68	55m120	23:04:17.8	16:45:41		120s	
69	COMP				10s	
70	55m141b	23:05:59.3	19:38:40		600s	
71	COMP				10s	
72	55m141a	23:05:59.3	19:38:40		900s	
73	COMP				10s	
74	55m170	23:09:07.3	18:25:20.1		180s	
75	COMP				10s	
76	55m187a	23:10:59.6	+21:42:59		100s	
77	COMP				10s	
78	55m187a	23:10:59.6	+21:42:59		60s	

60 inch Telescope Log
Observer: T. Heasting
PI: J. Stauffer

Spectrograph: FAST
Grating: 600 LPMM
Date: 9/30/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
79	COMP				10s	
80	55m187c	2370: 59.6	+21:42:59		600s	
81	COMP				10s	
82	55m187b	23:10:59.6	+21:42:59		120s	
83	COMP				10s	
84	55m 203a	23:12:26	19:02:31		120s	
85	COMP				10s	
86	55m203b	23:12:26	19:02:31		90s	
87	COMP				10s	
88	55m203b	23:12:26	19:02:31		90s	
89	COMP				10s	
90	55m207a	23:12:37	19:23:08		120s	
91	COMP				10s	
92	55m207b	23:12:37	19:23:08		120s	
93	COMP				10s	
94	55m200a	23:12:18	+16:14:47		900s	there could be a galaxy on this slit
95	COMP				10s	
96	55m200a	23:12:18	+16:14:47		900s	add 94+96 to increase S/N
97	COMP				10s	
98	55m196	23:12:04.8	22:45:28		30s	
99	COMP				10s	
100	55m159a	23:07:52	17:10:41		30s	Hα
101	COMP				10s	
102	55m159a	23:07:52	17:10:41		30s	Hα
103	COMP				10s	
104	55m159b	23:07:52	17:10:41		600s	
105	COMP					
106	55m150	23:07:04	17:58:28		155	
107	COMP					
108	55m146	23/06/31.9	19/55/00		5s	

60 inch Telescope Log

Observer: T. Hearty

PI: J. Stauffer

Spectrograph: FAST

Grating: 600 l/mm

Date: 9/30/95

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
109	comp				10s	
110	55m144a	23:06:17.3	18:31:09		10s	
111	comp				10s	
112	55m144b	23:06:17.3	18:31:09		480s	Be careful the a comp may show up
113	comp				10s	
114	55m132	23:05:06	16:33:47		10s	
115	comp				10s	
116	55m102	23:03:05	20:55:17		10s	
117	comp				10s	
118	P7136	2:22:28	20:09:25		900s	
119	comp				10s	
120	P7m18a	2:22:54	20:08:49		900s	
121	comp				10s	
122	7m17	2:14:21.1	17:04:41		120s	notice dip in the slit faintly object I should reduce it too
123	comp				10s	
124	NTSK1	4:27:10.6	17:50:44		60s	
125	comp				10s	
126	7m12	2:13:43	14:19:54		600s	Ha
127	comp				10s	
128	7m196	2:14:60	18:48:42		1585	Get a spectrum of the fainter C component
129	comp				10s	
130	7m31	2:17:55.3	+18:16:04		900s	
131	comp				10s	
132	16m4a	3:16:28.6	10:54:29.8		600s	I separates into 2 components A is in the south Ha
133	comp				10s	
134	16m4b	3:16:28.6	10:54:29.8		600s	Ha
135	comp				10s	
136	16m2a	3:14:46.8	11:27:31.6		200s	Ha
137	comp				10s	
138	16m6	3:16:53.9	10:43:26.6		400s	Ha sky is getting bright

60 inch Telescope Log

Observer: T. Hearty

PI: J. Stauffer

Spectrograph: FAST

Grating: 600 l/mm

Date: 9/30

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
139	comp				10 s	Sky is very Bright now
140	16m 3	3:16:08.5	11:22:36		400s	fix none
141	Comp				10s	
142	16m 8	3:13:14.6	11:17:41.4		98.3s	
143	comp				10s	
144	16m 1a	3:13:15.5	11:33:39.3		40.9s	
145	COMP				10s	
146-155	FLAT				8s	
156-165	BIAS				—	