

60 inch Telescope Log

Observer: CALKINS

PI: AN, Kitchner, Beag

Spectrograph: FAST

Grating: 300X

Page: 8295

Date: 3/1/00

Number	Object	H A	Dec.	L/R	Exp	Comments
1-10	DARK				15m	
11-20	BEARS				0s	
21-30	FLAT				6s	
31-40	BEARS				0.5s	
41-50	FLAT				12s	
51, 52	Hiltner 600	6 45	2 08	#56	1m	
53	comp			↑		
54, 55	Hiltner 600	6 45	2 08	#56	1m	
56	comp			↑		
57, 58	Hiltner 600	6 45	2 08	#56	1m	PA = -30
59	comp			↑		
60	AGK2p14783	7 20	14 54	#57	5s	
61	comp			↑		
62	AGK2p14783	7 20	14 54	#57	5m	
63	comp			↑		
64	SN199em	4 41	-2 51	#72	10m	PA = 21°
65	comp			↑		
66	022251p5701	2 23	57 01	#83	17m	PA = 0° to isolate
67	comp			↑		
68	022253p5702	2 22	57 06	#83	15m	
69	comp			↑		
70	022257p5701	2 22	57 01	#83	15m	
71	comp			↑		
72	022322p5711	2 22	57 11	#83	17m	
73	comp			↑		
74	022307p5705	2 23	57 05	#83	18m	
75	comp			↑		
76	022310p5708	2 23	57 08	#83	15m	Row 85
77	comp			↑		
78	qs01640109	5 34	-1 46	#112	12m	

68 //h

72 - several stars on slit -  
extracted object near center

60 inch Telescope Log

Observer: Calkins

PI: Calvet, Rines, Geller

Spectrograph: FAST

Grating: 300L

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Date: 3/1/00

Number	Object	R A	Dec.	L/H	Exp	Comments
79	comp			↑		
80	gusolb41171	5 26	-2 01	#112	10m	seeing terrible
81	comp			↑		
82	gusolb41258	5 26	-1 43	#112	10m	Row 87
83	comp			↑		
84	gusolb59282	5 36	-1 29	#112	12m	PA = 100° to isolate
85	comp			↑		Row 86
86	gusolb59926	5 36	-1 35	#112	15m	
87	comp			↑		
88	gusolb52712	5 38	-0 45	#112	17m	PA = 39° to isolate
89	comp			↑		
90	gusolb49600	5 38	-2 12	#112	13m	
91	comp			↑		
92	gusolb62443	5 40	-1 34	#112	20m	PA = 71° to isolate
93	comp			↑		
94	5766-236	7 21	55 43	#64	17m	
95	comp			↑		
96	-237	7 15	57 04	#64	15m	Row 86
97	comp			↑		
98	-238	7 11	54 22	#64	20m	PA = 0° to get more of gal into slit
99	comp			↑		
100	-194	7 14	57 07	#64	20m	
101	comp			↑		
102	-188	7 25	55 19	#64	20m	
103	comp			↑		
104	-180	7 26	57 10	#64	20m	
105	comp			↑		
106	-182	7 27	54 58	#64	20m	← last one should have skipped.
107	comp			↑		
108	152212p46A.A	15 23	46 35	#113	14m	

94 - either a star or superposed star.  
 If H $\alpha$  em is real (no other em lines) REDO  
 then have a superposed star.

60 inch Telescope log  
 Observer: CALYSON  
 PI: Geller, Kirshner

Spectrograph: FAST  
 Grating: 300L  
 Date: 3/1/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
109	comp			↑		
110	152212...B	15 24	46 33	#113	20m	PA=30° - Major axis
111	comp			↑		
112, 113	<del>152212...A</del>	15 25	49 50	#113	15m	A=row 118, B=row 54 PA=90°
114	comp			↑		
115	<del>152212...A</del>	15 25	8 52	#113	18m	A=row 125, B=row 40 PA=95°
116	comp			↑		
117	155512...A	15 57	15 52	#113	8m	
118	comp			↑		
119	155512...B	15 57	15 52	#113	16m	
120	comp			↑		
121	161600...A	16 17	46 05	#113	12m	PA=110°, major axis
122	comp			↑		
123	161600...B	16 17	46 05	#113	14m	PA=110° to isolate
124	comp			↑		
125, 126	154442...b	15 46	17 52	#113	12m	
127	comp			↑		
128	5006389	17 32	16 24	#2	20m	PA=-52
129	comp			↑		
130	160112...C	16 03	20 57	#113	15m	clouds at sunrise
131	comp			↑		
132-136	sky			#57	2s	Will redo file 130 - etc insufficient for project
137	comp			↑		
138-147	BIAS				0s	
148-157	FLAT				6s	
158-167	BIAS				0s	
168-177	FLAT				12s	
178-187	DARK				15m	

60 inch Telescope Log

Observer: CALLIE

PI: ALL, Kirschner, Kopen, Calvet

Spectrograph: FAST

Grating: 300L

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Date: 3/2/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	DARY				15m	
11-20	DEAS				0s	
21-30	FLAT				6s	
31-40	DEAS				0s	
41-50	FLAT				12s	
51, 52	Hiltner 600	6 45	2 08	#56	45s	
53	comp			↑		
54, 55	Hiltner 600	6 45	2 08	#56	45s	
56	comp			↑		
57, 58	Hiltner 600	6 45	2 08	#56	45s	PA = -23
59	comp			↑		
60	HDS 2971	7 00	27 09	#57	5s	
61	comp			↑		
62	HDS 2971	7 00	27 09	#57	5s	
63	comp			↑		
64	SN 1999gp	2 51	39 22	#2	20m	PA = 82°
65	comp			↑		
66-68	AX Per	1 36	54 15	#12	110, 60	
69	comp			↑		
70, 71	V741 Per	1 58	52 52	#12	10, 60	
72	comp			↑		
73, 74	SS2	4 37	-1 19	#12	45, 5m	
75	comp			↑		
76-78	UV Aur	5 21	32 30	#12	15, 10s	
79	comp			↑		
80, 81	BGGem	6 03	27 41	#12	3, 6m	PA = 82
82	comp			↑		
83, 84	DX Mon	7 25	-3 35	#12	5, 60s	
85	comp			↑		
86	quas 1614880	5 40	-2 12	#112	10m	

60 inch Telescope Log

Observer: CALKINSPI: Calvet, Kirschner, FalcoSpectrograph: FASTGrating: 3006Page: 8299Date: 3/2/00

Number	Object	R A	Dec.	L/R	Exp	Comments
87	comp			↑		
88	gusorb663192	5 91	-1 35	#112	15m	
89	comp			↑		
90	gusorb457649	5 36	-00 06	#112	12m	
91	comp			↑		
92	gusorb53480	5 39	-00 37	#112	12m	
93	comp			↑		
94	gusorb497786	5 39	-00 16	#112	12m	
95	comp			↑		
96	gusorb47964	5 39	-00 23	#112	10m	
97	comp			↑		
98	gusorb49156	5 40	-00 16	#112	10m	
99	comp			↑		
100	gusorb499610	5 41	-00 15	#112	9m	
101	comp			↑		
102	gusorb49714	5 41	00 02	#112	10m	
103	comp			↑		
104	gusorb56053	5 41	-00 35	#112	8m	
105	comp			↑		
106	gusorb50131	5 42	00 04	#112	12m	PA = 74° to isolate
107	comp			↑		
108	gusorb56375	5 42	-00 58	#112	10m	PA = 39° to isolate
109	comp			↑		
110	gusorb59586	5 42	-00 32	#112	12m	
111	comp			↑		
112	gusorb51543	5 43	00 04	#112	10m	
113	comp			↑		
114	sn1999gi	12 18	41 25	#2	10m	PA = 9°
115	comp			↑		
116	09410	9 47	79 46	#84	8m	

60 inch Telescope Log

Observer: CALXENS

PI: FALCO

Spectrograph: FAST

Grating: 700L

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Date: 3/2/00

Number	Object	H A	Dec.	L/H	Exp	Comments
117	comp			↑		
118	09427	9 47	72 59	↑84	2m	
119	comp			↑		
120	09432	9 47	72 57	↑84	90s	
121	comp			↑		
122	09419	9 48	64 09	↑84	9m	PA=69 to isolate
123	comp			↑		
124	09498	9 52	-1 28	↑84	5m	
125	comp			↑		
126	IS91-15.3	9 52	15 46	↑84	2m	
127	comp			↑		
128	09500	9 52	-2 26	↑84	7m	
129	comp			↑		
130	IS72	9 52	15 49	↑84	2.5m	Row 40
131	comp			↑		
132	09520	9 54	-1 17	↑84	1m	
133	comp			↑		
134	09561	9 58	1 03	↑84	3.5m	
135	comp			↑		
136	IS84	9 59	10 22	↑84	2m	
137	comp			↑		
138	09572	10 00	-2 57	↑84	90s	
139	comp			↑		
140	09583	10 00	-3 00	↑84	2.5m	
141	comp			↑		
142	09576	10 01	72 10	↑84	1m	
143	comp			↑		
144	09579	10 02	72 07	↑84	1m	
145	comp			↑		
146	10014	10 05	70 21	↑84	20m	

60 inch Telescope Log

Observer: CALKINS

PI: FALCO, Hydra

Spectrograph: FAST

Grating: 3000

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Date: 3/2/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
147	comp			↑		
148	10230	10 28	79 48	↑	2m	
149	comp			↑		
150	10283	10 30	-2 45	↑	3.5m	
151	comp			↑		
152	10263	10 31	78 53	↑	17m	
153	comp			↑		
154	10296	10 32	-1 29	↑	2m	
155	comp			↑		
156	10297	10 32	-1 33	↑	11m	
157	comp			↑		
158	10305	10 33	-2 05	↑	9m	
159	comp			↑		
160	10311	10 33	-2 16	↑	4m	
161	comp			↑		
162	10315	10 34	-2 22	↑	9m	
163	comp			↑		
164	ZM5141118	14 11	55 10	↑	1m	
165	comp			↑		
166	ZM5141128	14 11	35 53	↑	90s	
167	comp			↑		
168	ZM5143315	14 33	45 47	↑	2m	
169	comp			↑		
170	ZM5145045	14 50	38 13	↑	4m	PA=69° to isolate from foreground *
171	comp			↑		
172	ZM5145419	14 54	38 48	↑	90s	
173	comp			↑		
174	ZM514654	14 56	65 55	↑	4m	
175	comp			↑		
176	ZM5145658	14 56	-2 06	↑	90s	

60 inch Telescope Log

Observer: CALVIN

PI: Andrew Geller

Spectrograph: FAST

Grating: 300L

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Date: 3/2/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
177	comp			↑		
178	2M J150438	15 04	38 01	#68	4m	
179	comp			↑		
180	2M J150457	15 04	16 20	#68	90s	
181	comp			↑		
182	2M J150442	15 06	40 34	#68	2.5m	
183	comp			↑		
184	2M J151825	15 18	72 55	#68	2m	PA=110° to isolate
185	comp			↑		
186	2M J151557	15 36	46 49	#68	90s	
187	comp			↑		
188	2M J154004	15 40	45 56	#68	3m	
189	comp			↑		
190	2M J155049	15 50	13 17	#68	6.5m	
191	comp			↑		
192	2M J155210	15 52	39 04	#68	2.5m	
193	comp			↑		
194	2M J160007	16 00	52 21	#68	4m	
195	comp			↑		
196	160112...A	16 03	20 53	#113	20m	
197	comp			↑		
198, 199	135530...C	15 57	7 26	#113	17m	PA=110° - major axis
200	comp			↑		
201	160112...C	16 03	20 57	#113	12m	
202	comp			↑		
203	161936...B	16 22	-1 33	#113	20m	
204	comp			↑		
205-209	sky			#57	2s	
210	comp			↑		
211-210	BEAS				0s	





FAX to:  
Susan Tokaz  
pg 1 of 6 total

60 inch Telescope log,

Observer: P. Becklund

PI: Ken

Spectrograph: FAST

Grating: 300L

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Date: 3/3/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
10	DARK				15m	
11-20	BIAS				0s	forest fire raging to East clouds to west.
21-30	FLAT				7s	
31-40	BIAS				0s	
41-50	FLAT				14s	
51-55	sky			57	2s	
56	WMP			1		
57-59	HD 59271	07	+57	57	4s	
60	WMP			1		
61	NGC 670	04:46	-01:52	57	3m	
62	WMP			1		
63	NGC 6253	04:44	-17	64	4m	em but sky
64	WMP			1		
65	Z82	04:33	-11	64	4m	to's to west
66	WMP			1		
67	192	04:30	-11:58	64	8m	wk
68	WMP			1		
69	194	04:31	-10:47	64	5m	
70	WMP			1		
71	195	04:33	-13:54	64	11m	
72	WMP			1		
73	196	04:35	-15:01	64	15m	LSD + to E @ out marginal
74	WMP			1		into em
75	197	04:47	-74	64	10m	
76	WMP			1		
77	198	04:45	-15:05	64	9m	
78	WMP			1		
79-80	Miltner 62	06:42	-02	50	50s	PA=5
81	WMP			1		

60 inch Telescope Log

Observer: PS  
 PI: Falko

Spectrograph: FAST  
 Grating: 300  
 Date: 3/30

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
82	SNGOOD	07:05	+50	Z	20m	PA=90
83	WMP			↑		
84	gusomb 55654	05:55	-02	112	12m	
85	WMP			↑		
86	645679	05:55	-02:57	112	12m	
87	WMP			↑		
88	64951EW	05:56	-01:49	112	12m	E-W comps
89	WMP			↑		
90	5247	05:56	-01:45	112	12m	2x bit * to SE
91	WMP			↑		
92-93	36 Gem	06	+27	110	90s, 11m	
94	WMP			↑		
95	08168 puz	08:19	+22:02	84	5m	
96	WMP			↑		
97-98	08130 p710	08:15	+17:41	84	3s, 15m	97 = sup * ; 98 = gal <sup>star</sup> PA=20
99	WMP			↑		emak!
100	08165 p42w	08:10	+16:21	84	8m	
101	WMP			↑		
102	08088 p5805	08:10	+57:55	84	4m	
103	WMP			↑		
104	08130 p443	08:17	+64:32	84	6m	* to E
105	WMP			↑		
106	08256 p3035	08:28	+22:24	84	4m	
107	WMP			↑		
108	08258 p3077	08:28	+22:26	84	5m	
109	WMP			↑		
110	08299 p1002	08:32	-03:12	84	3m	
111	WMP			↑		
112	08301 m052	08:32	-04:01	84	9m	
113	WMP			↑		

60 Inch Telescope Log,

Observer: PB

PT: Falco

Spectrograph: FAST

Grating: 300

Date: 3/3/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
114	U8322p0755N	08:32	+0744	84	2m	see supk 7. no
115	COMP			f		
116	SNG999j	10:38	+11	2	12m	PA=20
117	COMP			f		
118-9	Fer429	10:36	+43	56	90s	PA=20
120	COMP			f		
121	10323p6348	10:35	+63	84	4m	PA=90
122	COMP			f		
123	10336p582	10:36	+54	84	3m	
124	COMP			f		
125	10368p4811	10:39	+47	84	7m	* to E
126	COMP			f		
127	10366p453	10:39	+1457	84	3m	
128	COMP			f		
129	N3789	10:36	+1242	84	15m	LSD. Hz per 2011
130	COMP			f		
131	10319p0029	10:31	-0244	84	4m	
132	COMP			f		
133	10363p055	10:36	+0540	84	4m	
134	COMP			f		
135	10366m0049	10:39	-0229	84	4m	
136	COMP			f		
137	10368m0008	10:39	-0223	84	4m	
138	COMP			f		
139	10353m0203	10:39	-0217	84	7m	
140	COMP			f		
141	10413m0115	10:43	-0231	84	6m	
142	COMP			f		
143	10410p0227	10:43	+12:03	84	10m	
144	COMP			f		

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60 Inch Telescope Log

Observer: PB

PI: Caldwell

Spectrograph: FAST

Grating: 300L/600L

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Date: 3/1/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
145	11002M0522	11:02	-05:59	89	10m	
146	COMP			↑		
147	SNR 190919	12:33	+15:00	2	15m	PA=20
148	COMP			↑		
149	test					
150	COMP			↓		600L; tilt=741, 3" shift ↓
151, 153	VCC 758	12:24	+7:43	70	20m	PA=80 focus=1120
152, 154	COMP			↑		No dust lane <del>---</del>
155, 157, 159	VCC 1486	12:30	+07:40	70	20m	
156, 158, 160	COMP			↑		
161	I 1153	13:57	+46	70	20m	
162	COMP			↑		
163	H 2114	13:21	+52	56/70	4m	
164	COMP			↑		
165-174	FLAT				26s	N.E. 600L; 3" ↑
175	test					300L; normal set-up ↓
176	nr gb 302-113	14:21	+11:53	59	4m	* to W
177	COMP			↑		
178	114	14:31	+10:40	59	12m	
179	COMP			↑		
180	115	14:31	+11:27	59	12m	
181	COMP			↑		
182	302-117	16:12	+30:02	59	12m	
183	COMP			↑		
184	188	16:15	+30:06	59	12m	
185	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Falco

Spectrograph: FAST

Grating: 300

Date: 3/3/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
186	13532p0867	13:53	+10:11	84	6m	
187	WAP			f		
188	13547p1454	13:57	+11:41	84	45s	sup * rec'd w/rotation to C
189	WAP			f		L all * "
190	13518p1217	13:55	+11:56	84	7m	
191	WAP			f		
192-201	BJNS				0s	scattered clouds
202-211	FLAT				0s	or rain
212-221	BJNS				0s	
222-231	FLAT				14s	

60 inch Telescope Log

Observer: P. Berlin

PI: \_\_\_\_\_

Spectrograph: FAST

Grating: 3002

Date: 3/4/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	DARK				20m	
11-20	BIAS				0s	lots of clouds
21-30	FLAT				7s	
31-40	BIAS				0s	
41-50	FLAT				16s	
51-53	HD 52571	06:57	+27	S7	4s	sucker hole
54	COMP			↑		
55-56	B6 Gerny	06:03	+27	1W	90s 12m	sucker hole
57	COMP			↑		
						2" snow!!!
						}

To S. Jha and/or S. Tokarz

60 inch Telescope Log

Observer: S. Jha

PI: Jha

Spectrograph: FAST

Grating: 300

Date: 3/7/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS					binby 2 clouds gone!
11-20	FLAT				12s	
21	Feige 34				120s	PA = 74°
22	COMP				↑	
23	SN 1999gi	10:18:17	+41:21:14		15m	PA = 64°
24	COMP				↑	
25	1999by				10m	PA = 65°
26	COMP				↑	
27	1999by				15m	
28	COMP				↑	
29	1999by				15m	
30	COMP				↑	
31	1999X	085441	36 30 13		20m	PA = -20°
32	COMP				↑	
33	1999X				20m	
34	COMP				↑	
35	1999X				20m	
36	COMP				↑	
37	1994ae	104712	171724		20m	PA = -35°
38	COMP				↑	
39	1994ae				20m	
40	COMP				↑	
41	1994ae				20m	
42	COMP				↑	
43	1991T	123409	02 39 43		10m	PA = -25°
44	COMP				↑	
45	1991T				10m	
46	COMP				↑	
47	1991T				10m	
48	COMP				↑	

PROBLEMS WITH SPECTROGRAPH 89 FILE 51



60 Inch Telescope Log

Observer: S. Jha

PT: Jha

Spectrograph: FAST

Grating: 300

Date: 3/7/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
49	SN2000N	13 27 58	-13 24 54		20 <sup>m</sup>	PA = 5°
50	COMP				↑	
51	SN 2000 O	12 11 16	17 53 32		20 <sup>m</sup>	PA = 60° ccd rotated ??
52	COMP				↑	
53	COMP					testing at zenith PA = 90 still rotated
54	H244	13 23 37	36 08 01		2 <sup>m</sup>	PA = 97° ~ 25° rotated (binby 2)
55	COMP				↑	
56	COMP					binby 1 comp → 25° rotation
57-66	BIAS					
67-76	DARK					

60 Inch Telescope Top

Spectrograph: FASTObserver: S. JhaGrating: 3001Page: 8312PI: Jha/KenyonDate: 3/8/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS					binby 2
11-20	FLAT				12 <sup>s</sup>	"
21-25	SKY				6 <sup>s</sup>	clear
26	COMP				↑	
27	SN 1999em	04 41 27	-02 51 45	#91	15 <sup>m</sup>	PA = 15
28	COMP				↑	
29	JN 2000B	07 05 47	50 35 52		20 <sup>m</sup>	PA = 13
30	COMP				↑	
31	Hiltner 600	06 45 16	02 08 17		2 <sup>m</sup>	PA = 7
32	COMP				↑	
33	1999X	08 54 37	36 30 34		20 <sup>m</sup>	PA = -20 scanned
34	COMP				↑	
35	1999X				20 <sup>m</sup>	
36	COMP				↑	
37	1999X				20 <sup>m</sup>	
38	COMP				↑	
39	BG GEM	06 03 33	27 41 47	#100	3 <sup>m</sup>	PA = 90° (bright object do E)
40	"				6 <sup>m</sup>	larger row
41	COMP				↑	
42	1995D	09 40 56	05 10 20	#91	15 <sup>m</sup>	PA = -5°
43	COMP				↑	
44	1995D				15 <sup>m</sup>	
45	COMP				↑	
46	1995D				15 <sup>m</sup>	
47	COMP				↑	
48	1996X	09 36 48	-21 07 08		10 <sup>m</sup>	star near nvc (not SN!)
49	COMP				↑	PA = -30
50	1996X				10 <sup>m</sup>	
51	COMP				↑	
52	1996X				10 <sup>m</sup>	

60 Inch Telescope Log,

Observer: S. Jha

PI: Jha

Spectrograph: FAST

Grating: 3001

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Date: 3/8/00

Number	Object	H A	Dec.	L/R	Exp	Comments
53	COMP				↑	
54	1992J	10 08 56	-26 38 20		20 <sup>m</sup>	PA = 85
55	COMP				↑	
56	1992J				20 <sup>m</sup>	
57	COMP				↑	
58	1992J				20 <sup>m</sup>	
59	COMP				↑	
60	1991bg	12 25 03	12 52 16		10 <sup>m</sup>	PA = 50
61	COMP				↑	
62	1991bg				10 <sup>m</sup>	
63	COMP				↑	
64	1991bg				10 <sup>m</sup>	
65	COMP				↑	
66	1994D	12 34 02	07 42 06		10 <sup>m</sup>	PA = 20
67	COMP				↑	
68	1994D				10 <sup>m</sup>	
69	COMP				↑	
70	1994D				10 <sup>m</sup>	
71	COMP				↑	
72	1992P	12 42 52	10 21 42		20 <sup>m</sup>	PA = -5°
73	COMP				↑	
74	1992P				20 <sup>m</sup>	
75	COMP				↑	
76	1992P				20 <sup>m</sup>	
77	COMP				↑	
78	1991U	13 23 22	-26 06 33		15 <sup>m</sup>	PA = 5°
79	COMP				↑	
80	1991U				15 <sup>m</sup>	
81	COMP				↑	
82	1991U				15 <sup>m</sup>	

60 inch Telescope Log

Observer: S. Jha

PI: Jha

Spectrograph: FAST

Grating: 3001

Date: 3/8/00

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Number	Object	R A	Dec.	L/R	Exp	Comments
83	COMP				↑	
84	19945	12 31 32	29 09 36		20 <sup>m</sup>	PA = -45°
85	COMP				↑	
86	19945				20 <sup>m</sup>	
87	COMP				↑	
88	19945				20 <sup>m</sup>	
89	COMP				↑	
90	11244	13 23 37	36 08 00		3 <sup>m</sup>	PA = 84°
91	COMP				↑	
92	11244				3 <sup>m</sup>	
93	COMP				↑	
94-103	FLAT				12 <sup>s</sup>	
104-113	BIAS				0'	
114-123	DARK				15 <sup>m</sup>	

60 Inch Telescope Log,

Observer: CAULSWELL

Pl: All, Kenyon, Calvet

Spectrograph: FAST

Grating: 200L

Page: 8315

Date: 3/9/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-5	DARK				15m	
6-15	BIAS				0s	
16-25	FLAT				6s	
26-35	BIAS				0s	
36-45	FLAT				17s	
46, 47	Hiltner 600	6 45	2 08	#56	45s	
48	comp			↑		
49, 50	Hiltner 600	6 45	2 08	#56	95s	
51	comp			↑		
52, 53	Hiltner 600	6 45	2 08	#56	45s	PA = -4.0
54	comp			↑		
55, 56	HD 52971	7 01	27 09	#57	5s	
57	comp			↑		
58, 59	HD 52971	7 01	27 09	#57	5s	
60	comp			↑		
61, 62	BG Seren	6 03	27 41	#100	90, 10	
63	comp			↑		
64, 65	Bx Mars	7 25	-3 35	#12	5, 60s	
66	comp			↑		
67	gvsorb 646150	5 46	1 46	#12	17m	
68	comp			↑		
69	gvsorb 653163	5 47	-00 19	#12	13m	
70	comp			↑		
71	gvsorb 659143	5 49	-00 39	#12	17m	
72	comp			↑		
73	gvsorb 665472	5 49	-1 35	#12	15m	
74	comp			↑		
75	gvsorb 659415	5 49	-00 41	#12	15m	
76	comp			↑		
77	gvsorb 659512	5 49	-00 09	#12	10m	

60 inch Telescope log

Observer: CALVIN

PI: Calvet, Pines

Spectrograph: FAST

Grating: 300

Page: 876

Date: 3/9/00

Number	Object	R A	Dec.	L/R	Exp	Comments
78	comp			↑		
79	gusonb60391	5 50	-1 28	↑112	20m	PA = 69° to isolate
80	comp			↑		
81	gusonb55208	5 50	-00 20	↑112	10m	
82	comp			↑		
83	gusonb60421	5 51	-00 55	↑112	15m	
84	comp			↑		
85	gusonb60551	5 51	-00 27	↑112	15m	
86	comp			↑		
87	gusonb53493	5 51	-00 19	↑112	13m	
88	comp			↑		
89	gusonb48428	5 51	-1 55	↑112	15m	
90	comp			↑		
91	comp-int-001	12 15	34 19	↑64	2m	
92	comp			↑		
93	comp-int-002	12 53	32 14	↑64	90s	
94	comp			↑		
95	-002	13 10	34 28	↑64	2m	
96	comp			↑		
97	-004	13 16	33 58	↑64	3m	
98	comp			↑		
99	-005	13 08	34 00	↑64	2m	
100	comp			↑		
101	-006	13 24	32 35	↑64	3.5m	
102	comp			↑		
103	-007	12 59	28 20	↑64	2m	
104	comp			↑		
105	-008	13 04	35 24	↑64	2m	
106	comp			↑		
107	-010	13 13	34 07	↑64	5m	

60 Inch Telescope Log,

Observer: Callkins

PI: Mina, Brandon, Kirschner, Geller

Spectrograph: FAST

Grating: 300L

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Date: 3/9/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
108	comp			↑		
109	-011	12.45	55.05	#64	6m	
110	comp			↑		
111	-012	12.14	22.56	#64	3m	
112	comp			↑		
113	CS14801	12.05	29.24	#114	20m	em
114	comp			↑		
115	CS1008	12.16	29.03	#114	20m	em?
116	comp			↑		
117	CS1512	12.19	29.39	#114	20m	X
118	comp			↑		
119	CS1089	12.23	28.55	#114	20m	em
120	comp			↑		
121	CS1111	12.58	29.05	#114	20m	X
122	comp			↑		
123	comp. 49/65	13.07	-28.14	#2	2m	PA=0° - To confirm its a CV
124	comp			↑		
125	comp. 49/65	13.07	-28.14	#2	10m	PA=0°
126	comp			↑		
127	161936...A	16.20	-1.20	#113	11m	seeing not so good
128	comp			↑		
129	162618...A	16.28	+12.44	#113	13m	PA=29° - major axis Row 84
130	comp			↑		
131,132	162618...B	16.28	12.45	#113	15m	Row 86
133	comp			↑		
134	163506...B	16.35	00.18	#113	20m	PA=69° to isolate
135	comp			↑		
136	164700...B	16.48	08.42	#113	20m	PA=24° - major axis ← last one !!
137	comp			↑		
138,139	PW Hya	13.34	-25.23	#12	5, 6m	

60 inch Telescope Log

Observer: Collyins

PI: Kenyon Garcia

Spectrograph: FAST

Grating: 300L

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Date: 2/9/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
140	comp			↑		
141	BDZ1d3873	14 16	-21 45	#12	5m	
142	comp			↑		
143-144	HD154791	17 06	23 58	#12	1,10s	
145	comp			↑		
146-148	Acn1341	17 08	-17 26	#12	1,20,90	
149	comp			↑		
150	XTE J1854-22	18 58	22 39	#6.5	20m	seeing 7 2", should have skipped!
151	comp			↑		
152-154	V1016 Cyg	19 57	39 49	#12	1,12,60	
155	comp			↑		
156	NSY66	15 06	55 45	#57	3m	Dust lane
157	comp			↑		
158	BDP332642	15 51	32 56	#52	2m	
159	comp			↑		
160-161	sky			#57	2s	
165	comp			↑		
166-175	BIAS				0s	
176-185	FLAT				6s	
186-195	BIAS				0s	
196-205	FLAT				12s	
206-215	DARK				15m	



60 inch Telescope log

Observer: CALYXNS

PI: All, Great

Spectrograph: FAST

Grating: 300/1200 L

Page: 8319

Date: 3/10/00

Number	Object	H A	Dec.	L/R	Exp	Comments
1-5	DARK				15m	
16-16	BIAS				0s	
16-25	FLAT				0s	
26-35	BIAS				0s	
36-45	FLAT				12s	
46-60	FLAT				8m	1200L/1.5"/Tilt=351
61	comp			↓	90s	Size = 2720 x 121 x 1
62-66	CNOFi	5 52	-5 25	F116	260s	Focus = 1125
67	comp			↑		
68-72	CNOFi	5 52	-5 25	F116	260s	
73	comp			↑		
74-78	CNOFi	5 52	-5 25	F116	260s	New focus = 1085
79	comp			↓		
80-84	CNOFi	5 52	-5 25	F116	260s	
85	comp			↓		
86-90	CNOFi	5 52	-5 25	F116	260s	
91	comp			↓		
92-96	CNOFi	5 52	-5 25	F116	260s	
97	comp			↓		
98-102	CNOFi	5 52	-5 25	F116	260s	
103	comp			↓		
104-108	CNOFi	5 52	-5 25	F116	260s	~ 2.9 hrs on CNOFi
109	comp			↑		
110	comp			↓		
111-115	UGem	7 55	21 59	F116	270s	
116	comp			↓		
117-121	UGem	7 55	21 59	F116	270s	
122	comp			↓		
123-127	UGem	7 55	21 59	F116	270s	

60 inch Telescope Log

Observer: CALVINS

PI: GROTT, Nines

Spectrograph: FAST

Grating: 12006/1000

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Date: 3/10/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
128	comp			↑		
129-133	UGem	7 55	21 59	#116	270s	
134	comp			↓		
135-139	UGem	7 55	21 59	#116	270s	
142	comp			↑		
141-145	UGem	7 55	21 59	#116	270s	
146	comp			↓		
147-151	UGem	7 55	21 59	#116	270s	← 2.6 hrs.
152	comp			↓		
152-162	BIAS				0s	
163	H244	13 23	36 08	#56	2m	3006/3"/T.1 f=610 Focus = 965
164	comp			↑		
165	H244	13 23	36 08	#56	2m	
166	comp			↑		
167	N4853	12 58	27 35	#57	3.5m	
168	comp			↑		
169	coma inf #13	13 14	35 08	#64	90s	
170	comp			↑		
171	#14	13 07	32 46	#64	20m	
172	comp			↑		
173	#15	13 15	33 07	#64	3m	
174	comp			↑		
175	#16	13 21	22 41	#64	3m	
176	comp			↑		
177	#17	12 40	29 48	#64	4m	
178	comp			↑		
179	#18	13 21	32 55	#64	5m	
180	comp			↑		
181	#19	12 42	33 23	#64	90s	
182	comp			↑		

60 inch Telescope log

Observer: CALXSAS

PI: Zines, Brown, Falco, Garcia

Spectrograph: FAST

Grating: 300L

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Date: 3/10/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
183	#20	13 21	33 44	F64	3m	
184	comp			↑		
185	#21	12 43	33 41	F64	7m	
186	comp			↑		
187	#22	12 42	34 42	F64	2m	
188	comp			↑		
189	#23	13 16	34 03	F64	4m	M
190	comp			↑		
191	#24	13 27	28 26	F64	7m	
192	comp			↑		
193	CS15301	12 25	28 57	F114	17m	
194	comp			↑		
195	CS1053	12 25	28 53	F114	13m	
196	comp			↑		
197	14578p1008	15 00	9 56	F84	17m	
198	comp			↑		
199	14580p1420	15 00	14 09	F84	4m	
200	comp			↑		
201	15012p5343	15 02	52 30	F84	2.5m	
202	comp			↑		
203, 204	XTE J1858p22	18 58	22 40	F65	20m	Row 82 (last exposure shortened to 15m due to clouds)
205	comp			↑		
206	BDP332412	15 51	32 57	F56	2m	
207	comp			↑		
208-212	sky			F57	2s	
213	comp			↑		
214-223	BIAS				0s	
224-233	FLAT				6s	
234-243	BIAS				0s	
244-253	FLAT				12s	

254-263

15m

60 inch Telescope Log

Observer: GALICINS

PI: All, Great

Spectrograph: FAST

Grating: 300L/1200L

Page: 8322

Date: 3/11/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-5	DARK				15m	
6-15	BIAS				0s	
16-25	FLAT				10s	
26-35	BIAS				0s	
36-45	FLAT				12s	
46-55	FLAT				8m	1200L/1.5/Tilt=351
56	comp				90s	Bin = 2720x121x1
57-61	CNOFi	5 52	-5 24	#116	260s	Focus = 1085
62	comp			↓		
63-67	CNOFi	5 52	-5 24	#116	260s	
68	comp			↓		
69-73	CNOFi	5 52	-5 24	#116	260s	
74	comp			↓		
75-79	CNOFi	5 52	-5 24	#116	260s	
80	comp			↓		
81-85	CNOFi	5 52	-5 24	#116	260s	
86	comp			↓		
87-91	CNOFi	5 52	-5 24	#116	260s	
92	comp			↓		light cirrus
93-97	CNOFi	5 52	-5 24	#110	260s	
98	comp			↑		
99-103	CNOFi	5 52	-5 24	#116	260s	
104	comp			↓		
105-109	CNOFi	5 52	-5 24	#116	260s	← 3.25 hrs on
110	comp			↑		star (not including
111	comp			↓		comp)
112-116	UGem	7 55	22 00	#116	270s	
117	comp			↓		
118-122	UGem	7 55	22 00	#116	270s	
123	comp			↑		

60 Inch Telescope Log

Observer: Calkins

PI: Griffith, Rines

Spectrograph: FAST

Grating: 100L/300L

Page: 8323

Date: 3/11/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
124-128	UGem	7 55	22 00	#116	270s	circus passing thru
129	comp			↓		
130-134	UGem	7 55	22 00	#116	270s	
135	comp			↓		
136-140	UGem	7 55	22 00	#116	270s	
141	comp			↓		
142-146	UGem	7 55	22 00	#116	270s	
147	comp			↓		
148-152	UGem	7 55	22 00	#116	270s	
153	comp			↓		
154-158	UGem	7 55	22 00	#116	270s	← 3.0 hrs on star
159	comp			↑		(not including comp)
160	H244	13 23	36 07	#56	5m	
161	comp			↑		
162-171	B5AS				0s	
172	H244	13 23	36 07	#56	2m	300/3" tilt=610
173	comp			↑		focus=965
174	NS866	15 06	55 45	#57	2m	Dust lane
175	comp			↑		
176	comp #25	13 15	23 45	#64	4m	
177	comp			↑		
178	#26	12 45	35 07	#64	2m	
179	comp			↑		
180	#27	13 17	22 45	#64	3.5m	
181	comp			↑		
182	#29	13 20	33 06	#64	3m	
183	comp			↑		
184	#30	13 02	29 44	#64	4m	
185	comp			↑		

60 inch Telescope Log

Observer: Callie

PI: Pines, Huebra

Spectrograph: FAST

Grating: 3000

Page: 8724

Date: 3/11/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
186	#31	13 04	23 34	#64	9m	
187	comp			↑		
188	#32	12 54	25 18	#64	8m	
189	comp			↑		
190	#32	13 10	24 51	#64	5m	PA=110 to isolate
191	comp			↑		
192	#34	12 36	27 16	#64	6m	
193	comp			↑		
194	#35	12 58	25 50	#64	2.5m	
195	comp			↑		
196	#36	13 20	32 51	#64	90s	
197	comp			↑		
198	ZMJ160202	16 02	47 13	#68	7m	
199	comp			↑		
200	ZMJ160937	16 07	45 03	#68	2m	
201	comp			↑		
202	ZMJ160816	16 08	36 05	#68	90s	
203	comp			↑		
204	ZMJ160931	16 09	64 21	#68	90s	
205	comp			↑		
206	ZMJ161055	16 10	56 16	#68	90s	
207	comp			↑		
208	ZMJ161104	16 11	02 27	#68	3.5m	
209	comp			↑		
210	ZMJ161645	16 16	13 21	#68	2.5m	PA=110 to isolate
211	comp			↑		
212	ZMJ161725	16 17	50 38	#68	2m	
213	comp			↑		
214	ZMJ161833	16 18	45 04	#68	2m	
215	comp			↑		

60 inch Telescope Log

Observer: CALKINS

PI: Huchra, A11

Spectrograph: FAST

Grating: 3000L

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Date: 3/11/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
216	2M J162009	16 20	37 47	#68	2.5m	
217	comp			↑		
218	2M J162050	16 20	53 32	#68	2m	
219	comp			↑		
220	2M J162252	16 22	02 22	#68	8m	
221	comp			↑		
222	2M J162322	16 23	50 28	#68	90s	
223	comp			↑		
224	2M J162559	16 25	43 57	#68	2.5m	
225	comp			↑		
226	2M J162712	16 27	49 41	#68	2.5m	
227	comp			↑		
228	2M J163744	16 37	49 24	#68	2.5m	
229	comp			↑		
230	BDP 332692	15 51	32 56	#56	2m	
231	comp			↑		
232	BDP 332692	15 51	32 56	#56	90s	
233	comp			↑		
234-238	sky			#57	2s	
239	comp			↑		
240-249	BIAS				0s	
250-259	FLAT				6s	
260-269	BIAS				0s	
270-279	FLAT				12s	
280-289	DARK				15m	

Fax to Susan T.  
pg 1 of 2

60 inch Telescope Log

Observer: Pleasant

PI: JPH

Spectrograph: FAS1

Grating: 300R

Date: 3/12/00

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Number	Object	R.A.	Dec.	L/H	Exp	Comments
1-10	DARK				15m	
11-20	BIAS				0s	
21-30	FLAT				7s	lots of cirrus
31-40	BIAS				0s	bright moon
41-50	FLAT				15s	
51-55	sky			56	5s	
56	WMP			↑		
57-59	test					test
59-61	HD 52971	0657	+07	57	5s	fast loc - 965
62	WMP			↑		
62-64	Hiltner 60	0642	+02	56	10s	PH = 8
65	WMP			↑		
66-67	IC 3639	0603	+07	110	2x15m	
68	WMP			↑		
69	ZM 080003	08:10	+08	68	6m	
70	WMP			↑		
71	ZM 08012	0800	+1000	68	3m	
72	WMP			↑		
73	ZM 080132	08:01	+12	68	3m	
74	WMP			↑		
75	ZM 080109	08:01	+8	68	6m	
76	WMP			↑		
77	ZM 080147	08:01	+16	68	10m	
78	WMP			↑		
79	ZM 080258	0802	+1502	68	10m	
80	WMP			↑		
81	ZM 080218	08:02	+1502	68	10m	
82	WMP			↑		
83	ZM 080208	08:03	+1509	68	10m	stopped by clouds
84	WMP			↑		



60 Inch Telescope Log

Observer: PD

PI: Ken

Spectrograph: FAST

Grating: 302

Date: 3/12/00

Page: 8327

Number	Object	R.A.	Dec.	L/R	Exp	Comments
85	com. inf. 057	1302	+2329	69	6	sucker hole
86	comp			7		stopped
87	058	1322	+2514	69	10m	(redo) wk
88	comp			8		
89-98	BIAS				0	
99-108	FLAT				7	snack!
109-118	BIAS				0	
119-128	FLAT				19s	9/6s

10 inch Telescope Log

Observer: PBerland

PI: Groot

Spectrograph: FAST

Grating: 3000, 1200L

Date: 3/13/00

Page: 8328

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0s	
11-20	FLAT				7s	
21-30	BIAS				0s	solid clouds
31-40	FLAT				14s	clear to West
41-48	sky	zenith		S7	2s	
46	COMP			f		clearing ~ 8pm
47-48	Hiltner 67	06:42	+02	S6	60s	
49	COMP			T		
50	quasar G1789	05:52	-031	112	10s	
51	COMP			f		bright moon!
52	quasar S2999	05:57	-035	112	8s	
53	COMP			f		
54	test					12000, 15" slit, tilt = 350.6
55	COMP			↓	90s	bin by Groot
56-61	UGem	07:55	+22	116	270s	focus = 1045
62	COMP			↓		HA = -00:10
63-68	UGem	"	"	116	270s	in outburst!
69	COMP			↓		some clouds
70-75	UGem			116	270	
76	COMP			↓		
77-82	UGem			116	270	clear!
83	COMP			↓		
84-89	UGem			116	270	
90	COMP			↓		
91-96	UGem			116	270	
97	COMP			↓		
98-103	UGem			116	270	
104	COMP			↓		
105-110	UGem			116	270	

10 inch Telescope Log  
 Observer: PB  
 Pl: Groff/Caldwell/Combo

Spectrograph: FAST  
 Grating: 1200/600/300  
 Date: 3/13/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
111	COMP			↓	90s	1200L, 1.5" slit ↓
112-117	UGem	07:55	+72	1/6	270s	
118	COMP			↓		bright moon
119	fst	Caldwell	↓			600L, 3" slit, f.i.t = 7410 ↓
120	Ferg 34	10:36	+43	56/70	3m	focus = 1005; bin by 2 ↓
121	COMP			↑		
122	VCC1283	12:07	+17:51	70	20m	PA=20
123	COMP			↑		
124	VCC1521	12:31	+11:16	70	20m	PA=-50
125	COMP			↑		
126, 127	VCC1279	12:07	+12:36	70	8m	
128	COMP			↑		wind picking up.
129-138	FLAT				24s	
139	fst	COMBO ↓				300L, 3" slit, normal set-up ↓
140	GN2000P	13:07	-28	2	12m	PA=10
141	COMP			↑		
142	SA 15C 3815	11:40	+24	2	5m	PA=68 NO-SA.
143	COMP			↑		
144	H744	13:21	+43	56	2m	PA=100
145	COMP			↑		
146	Comp. inf. 038	13:22	+25:14	64	7m	PA=90 ↓
147	COMP			↑		
148	039	13:20	+33:06	64	4m	
149	COMP			↑		
150	040	13:32	+75	64	4m	
151	COMP			↑		
152	041	13:22	+33	64	4m	
153	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Ken

Spectrograph: FAST

Coating: 3008

Date: 3/13/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
154	coma inf. 042	13:19	+33	69	3m	
155	COMP			f		
156	043	13:19	+2152	69	5m	
157	COMP			f		
158	044	13:19	+2152	69	5m	
159	COMP			f		
160	046	13:27	+24:45	69	3m	
161	COMP			f		
162	045	13:09	+25:21	69	3m	
163	COMP			f		
164	047	12:59	+24:47	69	3m	
165	COMP			f		
166	048	12:48	+30	69	3m	
167	COMP			f		
168	49	13:15	+22	69	2m	
169	COMP			f		
170	050	13:25	+32	69	8m	
171	COMP			f		
172	052	13:09	+29	69		
173	COMP			f		
174	052	13:09	+34	69	3m	
175	COMP			f		
176	053	13:06	+23	69	6m	close pair of gals. bmbzL
177	COMP			f		
178	054	12:40	+25	69	5m	
179	COMP			f		attempt at XTE1822 - no gal
180	1357p	14:10	+12	69	12m	another gal in slit to far W
181	COMP			f		
182	1357n, 0775	14:10	+02	69	3m	
183	COMP			f		

176 - ~~only~~ see only 1 galaxy on slit to extract

4/6/00

30 inch Telescope Log

Observer: PB

PI: Fales

Spectrograph: FAS

Grating: 3000; 12000

Date: 3/13/60

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
184	13580m0240	1400	-0234	84	3m	sw gal
185	COMP			r		
186	N5405	14:01	+07	84	5m	
187	COMP			r		
188	13588m0223	1401	-0237	84	3m	
189	COMP			r		
190	13595m0207	14:02	-0221	84	5m	
191	COMP			r		
192	13595m0109	1402	-0123	84	3m	
193	COMP			r		
194	N5548	1417	+75	6	2.5m	
195	COMP			r		
196	N5866	1508	+55	57	2m	
197	COMP			r		
198-207	BDAS				0s	
208-217	FLAT				7s	
218-227	BDAS				0s	
228-237	FLAT				1 1/2s	
238-247	BDAS	2200		116	0s	bin by grat
248-267	FLAT	"		116	8m	12000, 1.5" slit from 195

10 inch Telescope Log  
 Observer: P. Berlin  
 PI: Croot  
 Spectrograph: FAST  
 Grating: 1200R + 300R  
 Date: 3/14/00  
 Page: 8392

Number	Object	R.A.	Dec.	L/H	Exp	Comments
1	test					
2-20	BIAS				0s	1200R, 1.5" slit; tilt=30.6 bin by groot
21-45	FLAT				8m	
46-47	Hiltner 600	0642	+02	116/156	3m	
47	COMP			↑		↓
48	COMP			↓		SOME cirrus.
49-55	CNOii	05:52	-05	116	260s	H <sub>2</sub> = +45min
56	COMP			↓		
57-62	CNOii	"	"	116	260	clearly nearly bright moon
63	COMP			↓		
64-69	CNOii	"	"	116	260	
70	COMP			↓		
71-76	CNOii	"	"	116	260s	seemingly worse
77	COMP			↓		
78-83	CNOii	"	"	116	260s	
84	COMP			↓		
85-90	CNOii	"	"	116	260s	H <sub>2</sub> =3:40
91	COMP			↑		
92-93	BG Gem. 1200	0603	+27	100	2m, 10m	1200R 1.5" slit; tilt=68.0
94	COMP			↑	15s	focus = 1005
95	Forn 34	10:36	+43	100	3m	
96	COMP			↑		
97-103	FLAT	-	-	100	80s	N.E. bright moon
104	test					300R, 3" slit normal set-up
105	10447m0205	10:47	-02	84	7m	focus = 965
106	COMP			↑		
107	10463m0319	10:48	-03	84	4m	em
108	COMP			↑		

3/14/00

0 inch Telescope Log

Observer: PB

PI: Falco JPH

Spectrograph: FAST

Grating: 300R

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Date: 3/14/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
109	10468 m1024	10:49	-0:40	84	4m	300R; normal set-up ↓
110	COMP			↑		
111	10556 m1030	10:58	-0:46	84	6m	
112	COMP			↑		
113	10482 p0621	10:50	+06:05	84	5m	
114	COMP			↑		
115	10556 p0750	10:55	+07	84	5m	
116	COMP			↑		
117	10518 p1801	10:51	+17	84	90s	sup *
118	10518 p1801	"	"	84	7m	all fuzz; good em
119	COMP			↑		
120	Faye 34	10:36	+43	86	90s	
121	COMP			↑		
122	10571 p4620	10:57	+46	84	2m	
123	COMP			↑		
124	ZMS 1066	10:06	+96	68	6m	
125	COMP			↑		
126	ZMS 1064	10:16	+72	68	2m	
127	COMP			↑		
128	ZMS 101429	10:14	+65	68	3m	
129	COMP			↑		
130	ZMS 101906	10:19	+66:43	68	3m	
131	COMP			↑		
132	ZMS 102557	10:25	+71	68	5m	
133	COMP			↑		
134	ZMS 102660	10:26	+70	68	2m	
135	COMP			↑		
136	ZMS 102555	10:28	+73	68	2m	
137	COMP			↑		

60 inch Telescope Log

Observer: PB  
 PI: Falco/SPIC

Spectrograph: FAST  
 Grating: 302  
 Date: 3/19/00

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Number	Object	H A	Dec.	L/R	Exp	Comments
138	ZMS103057	10:30	+72	68	2m	
139	COMP			↑		bright sky.
140	ZMS10354	10:34	+73	68	2m	
141	COMP			↑		
142	ZMS104015	10:40	+65	68	2m	
143	COMP			↑		
144	ZMS104557	10:45	+75	68	4m	
145	COMP			↑		
146	ZMS104915	10:49	+80	68	2m	
147	COMP			↑		
148	ZMS105020	10:51	+71	68	2m	
149	COMP			↑		
150	ZMS105416	11:21	+74	68	3m	
151	COMP			↑		
152	10553p7254	10:58	+72	84	6m	sup+ to S.
153	COMP			↑		
154	10477p7725	10:52	+79	84	2m	
155	COMP			↑		
156	10474p7712	10:51	+76	84	4m	
157	COMP			↑		
158	10485p5539	10:51	+55	84	3m	
159	COMP			↑		
160	N3110	10:51	+51	84	6m	still a bright moon out there
161	COMP			↑		
162	10490p5552	10:52	+55	84	8m	can do
163	COMP					
164	11093p5721	11:12	+57	84	2m	
165	COMP			↑		
166	11103p6011	11:13	+59	84	7m	wk em, redo
167	COMP			↑		

160   extracted central section only



0 inch Telescope Log

Observer: PB

PI: JPH

Spectrograph: FAST

Grating: 3002

Date: 3/14/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
168	11156p633	11:14	+63	84	2m	
169	COMP			↑		
170	11175p608	11:20	+59:51	84	2m	
171	COMP			↑		
172	11180p574	11:20	+56:56	84	2m	
173	COMP			↑		
174	SN2000P	13:07	-28	2	12m	PA=4
175	COMP			↑		
176	H244	12:21	-56	86	2m	PA=90
177	COMP			↑		
178	ZMS 124571	12:45	-08:05	68	3m	sup + S.
179	COMP			↑		
180	ZMS 124703	12:47	-08:44	68	2m	
181	COMP			↑		
182	ZMS 125215	12:52	-08:07	68	90s	
183	COMP			↑		
184	ZMS 12552	12:53	-07:14	68	40s	
185	COMP			↑		
186	ZMS 125476	12:54	+34:34	68	2m	
187	COMP			↑		
188	ZMS 125654	12:56	+38:36	68	2m	+ + W m s t
189	COMP			↑		
190	ZMS 125815	12:59	+38	68	90s	
191	COMP			↑		
192	ZMS 124633	12:46	+40:49	68	90s	
193	COMP			↑		
194	ZMS 125249	12:52	+37:44	68	2m	
195	COMP			↑		
196	ZMS 11583	11:55	+54	68	2m	
197	COMP			↑		

0 inch Telescope Log

Observer: PB

PI: JPH

Spectrograph: FAST

Grating: 30R

Date: 3/14/60

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Number	Object	R.A.	Dec.	LIR	Exp	Comments
198	ZM5113541	11:35	+73	68	3m	
199	WMP			↑		
200	ZM5115953	11:59	+86	68	4 1/2m	
201	WMP			↑		
202	ZM512025	12:21	+82	68	3 1/2m	
203	WMP			↑		
204	ZM512025	12:30	+84	68	6m	
205	WMP			↑		
206	ZM5125123	12:51	+78	68	2m	
207	WMP			↑		
208	ZM5125709	12:57	+62	68	90s	
209	WMP			↑		
210	ZM512274	12:21	+80	68	2m	em ok
211	WMP			↑		
212	ZM5121711	12:17	+41	68	2m	
213	WMP			↑		
214	ZM512203	12:20	+34	68	2m	
215	WMP			↑		
216	ZM5122209	12:22	+23	68	90s	
217	WMP			↑		
218	ZM512153	12:15	-07	68	2m	
219	WMP			↑		
220	ZM512232	12:22	-05	68	90s	
221	WMP			↑		
222	ZM5122814	12:28	-04	68	2m	
223	WMP			↑		
224	ZM5-12208	12:30	-05-57	68	2 1/2m	
225	WMP			↑		
226	ZM5122838	12:28	+17	68	7m	faint gal in halo of NGC4150 (high con)
227	WMP			↑		

E ——— gal  
 9 gal  
 NGC4150 W

0 Inch Telescope Log

Observer: PB  
 PI: JPH / Felco / Scott

Spectrograph: FAST  
 Grating: 30R  
 Date: 3/19/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
228	ZM512559	12:25	+37:36	68	6m	HII region from NGC 4395
229	WMP			↑		
230	ZM512528	12:32	+39	68	7m	
231	WMP			↑		
232	ZM512575	12:37	+39	68	90s	
233	WMP			↑		
234	ZM512316	12:31	+46	68	5m	sup + to S
235	WMP			↑		
236	ZM512622	12:36	+48	68	90s	140
237	WMP			↑		
238	ZM512427	12:41	+48	68	100s	142
239	WMP			↑		
240	12402 p55	12:42	+55	84	2m	
241	WMP			↑		
242	13556 p4105	13:58	+44	84	5m	
243	WMP			↑		
244	14181 p5208	14:19	+51	84	6m	
245	WMP			↑		
246	14266 p39	14:28	+38	84	5m	
247	WMP			↑		
248	I 4-118	14:25	+25	84	90s	
249	WMP			↑		
250	Draco Cl	17:19	+57	12	15m	
251	WMP			↑		
252-3	R50 ph	17:50	-06	12	10, 25m	
254	WMP			↑		
255-257	R50 ph	17:50	-06	12	15, 5, 10s	
258	WMP			↑		
259-260	R50 S	18:35	01	12	30, 10m	
261	WMP			↑		

8 inch Telescope Log

Spectrograph: FAST

Observer: PB

Grating: 300

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PI: Scott

Date: 3/14/60

Number	Object	R.A.	Dec.	L/R	Exp	Comments
2623	DORser	18:44	+05	12	300 S <sub>2</sub>	
264	COMP			T		
2656	YHer	18:14	+2	12	100 S <sub>2</sub>	
267	COMP			T		
268-269	V443Her	18:22	+13-27	12	300 S <sub>2</sub>	
270	COMP			T		
271-273	S149	18:18	+072	12	500 S <sub>2</sub>	
274	COMP			T		
2756	BDP 352642	15:50	+33	56	1m	
277	COMP			T		
278	NS66	15:05	+55	57	900	
279	COMP			T		Clear @ dawn
280-281	BRAS				03	~
300-301	FLA				03	
302-303	BRAS				03	
304-305	FLAT				14	
						<del>End of FAST Run</del>

60 inch Telescope Log

Observer: CALVIN

PI: Ally Geller

Spectrograph: FAST

Grating: 300L

Date: 3/24/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
1,2	Test bias					
3	Test comp					
4-8	DAR-V				15m	
9-18	BSAS				0s	
19-28	FLAT				6s	
29-38	BSAS				0s	
39-48	FLAT				12s	
49,50	Feige 34	10 39	43 06	#56	90s	
51	comp			↑		
52, 53	Feige 34	10 39	43 06	#56	90s	PA = 85°
54	comp			↑		
55, 56	Feige 34	10 39	43 06	#56	90s	
57	comp			↑		
58, 59	AGK 2 p 14783	7 20	14 53	#57	5s	
60	comp			↑		
61, 62	AGK 2 p 14783	7 20	14 53	#57	5s	
63	comp			↑		
64, 65	081800...B	8 20	-1 24	#113	15m	PA = 44° major axis row 74
66	comp			↑		
67	085118...A	8 54	49 08	#113	20m	
68	comp			↑		
69, 70	085118...B	8 55	49 08	#113	15m	PA = 69° to isolate
71	comp			↑		
72	085118...C	8 55	49 09	#113	17m	PA = 44° to isolate
73	comp			↑		
74, 75	085724...A	9 00	17 24	#113	15m	
76	comp			↑		
77, 78	085724...B	9 00	17 23	#113	12m	
79	comp			↑		
80	091718...A	9 19	00 56	#113	15m	

50 Inch Telescope Log

Observer: Calvin

PI: Geller, Caldwell, Mahdavi, Tine

Spectrograph: FAST

Grating: 600L/600L

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Date: 3/24/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
81	comp			↑		
82-83	091718... B	9 17	00 57	#113	17m	PA = 110
84	comp			↑		
85-94	FLAT				29s	600L/3" / Tilt = 74/1
95	VCL524	12 22	12 46	#70	20m	Focus = 125, for
96	comp			↑		Nelson
97	VCL1912	12 42	12 35	#70	20m	PA = -24
98	comp			↑		PA = -12
99	HD908611	10 29	28 35	#70	N/A	3"/sec guide rate
100	comp			↑		
101	H294	13 23	26 07	#56	3m	
102	comp			↑		
103	Mrp078.001	10 08	39 13	#59	10m	Normal setup
104	comp			↑		
105	-002	10 08	38 38	#59	13m	
106	comp			↑		
107	-003	10 08	38 37	#59	4m	
108	comp			↑		
109	-004	10 09	38 20	#59	13m	
110	comp			↑		
111	-005	10 09	39 18	#59	5m	
112	comp			↑		
113	-006	10 09	39 16	#59	5m	
114	comp			↑		
115	-007	10 09	38 34	#59	8m	
116	comp			↑		
117	-008	10 09	39 13	#59	17m	PA = 69 to isolate
118	comp			↑		
119	comp in fall	12 56	27 56	F69	3m	
120	comp			↑		

30 Inch Telescope Log  
 Observer: CALYSSUS  
 PI: Pines, Garcia

Spectrograph: FAST  
 Grating: 3006  
 Date: 3/24/00

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
121	#56	12 57	35 31	#64	9m	
122	comp			↑		
123	#57	13 19	23 39	#64	17m	
124	comp			↑		
125	#58	13 25	24 25	#64	12m	PA=110 to isolate
126	comp			↑		
127	#59	12 40	25 51	#64	13m	
128	comp			↑		
129	#60	12 55	28 08	#64	8 m	PA=59° to isolate
130	comp			↑		
131	#61	12 28	28 41	#64	6m	
132	comp			↑		
133	#62	13 01	33 03	#64	4m	
134	comp			↑		
135	#63	13 18	34 28	#64	4 m	
136	comp			↑		
137	#64	13 03	20 13	#64	5 m	
138	comp			↑		
139, 140	ATEJ1858	18 58	22 39	#65	10m	row 73 (last exposure shortened to 11
141	comp			↑		minutes due to
142	BP332642	15 52	32 56	#56	70s	clouds (rising sun)
143	comp			↑		
144-148	sky			#57	25	
149	comp			↑		
150-159	B5-AS				DS	
160-169	FLAT				6s	
170-179	BIAS				DS	
180-189	FLAT				12s	
190-199	DARK				15m	

6 inch Telescope Log

Observer: CALKINS  
 PI: All, Groot, Caldwell

Spectrograph: FAST

Grating: 300L/1200L/600L Page: 8366

Date: 3/25/00

Number	Object	R A	Dec.	F/R	Exp	Comments
1-5	DARK				15m	
6-15	BIAS				0s	
16-25	FLAT				6s	
26-35	BIAS				0s	
36-45	FLAT				12s	
46-55	BIAS				0s	Binning -2770x121x1
56-70	FLAT				8m	1200L/1.5" slit/
71	comp			↓	9s	Tilt=357/focus=1000
72-76	CNOri	5 52	-5 24	F/116	260s	
77	comp			↓		
78-82	CNOri	5 52	-5 24	F/116	260s	
83	comp			↓		
84-88	CNOri	5 52	-5 24	B/116	260s	
89	comp			↓		clouds overhead
90-94	CNOri	5 52	-5 24	F/116	260s	
95	comp			↓		
96-100	CNOri	5 52	-5 24	F/116	260s	
101	comp			↑		
102-106	CNOri	5 52	-5 24	F/116	260s	
107	comp			↓		
108-112	CNOri	5 52	-5 24	F/116	260s	2.53 hrs (not counting comps)
113	comp			↑		
114	HD66141	8 02	2 20	F/70	4m	Binby 2/600L/3.0" Tilt=741/focus=1015
115	comp			↑		
116,117	VCC571	12 22	7 58	F/70	20m	PA=100°
118	comp			↑		
119	H244	13 23	36 07	F/56	2m	
120	comp			↑		
121-130	FLAT				24s	
131	H244	13 23	36 07	F/56	2m	Normal set-up



30 inch Telescope Log

Observer: CALUSHS

PI: Ally, Mahdavi, Keller

Spectrograph: FAST

Grating: 300L

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Date: 3/25/00

Number	Object	R.A.	Dec.	L/H	Exp	Comments
132	comp			↑		
133	H244	13 73	36 07	#56	2m	
134	comp			↑		
135	N3379	10 47	12 34	#57	1m	
136	comp			↑		
137	N3379	10 47	12 34	#57	1m	
138	comp			↑		
139	NG6078.009	10 09	39 40	#59	17m	
140	comp			↑		
141	#011	10 10	39 46	#59	13m	
142	comp			↑		
143	#012	10 10	39 55	#59	4m	PA=79° to iso etc
144	comp			↑		
145	#013	10 10	38 24	#59	20m	
146	comp			↑		
147	#015	10 11	38 21	#59	7m	
148	comp			↑		
149	#017	10 11	37 52	#59	5m	NOT ENOUGH - poor Q
150	comp			↑		
151	#018	10 11	38 26	#59	8m	
152	comp			↑		
153	#019	10 11	37 53	#59	9m	
154	comp			↑		
155	#020	10 11	39 21	#59	17m	clouds moving in
156	comp			↑		
157	130612...A	13 08	-0048	#13	15m	
158	comp			↑		
159, 160	130612...C	13 08	-0045	#13	12m	thru clouds
161	comp			↑		
162	132700...B	13 29	11 40	#13	20m	

159, 160 listed on a in file; just file headers (to c)

60 inch Telescope Log

Observer: CALVIN

PI: Geller, FALLO

Spectrograph: FAST

Grating: 3000

Page: 8370

Date: 3/25/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
163	comp			↑		
164	32700...C	13 29	11 58	#113	17m	PA=30° - major axis
165	comp			↑		wait out clouds
166	14446	14 46	33 24	#84	4m	thru clouds
167	comp			↑		
168	14446/20349	14 47	03 37	#84	3m	PA=105° to isolate
169	comp			↑		
170	14447/20349	14 47	-00 57	#84	10m	PA=100° to isolate
171	comp			↑		
172	14447	14 48	-2 05	#84	4m	PA=100°, major axis
173	comp			↑		
174-178	sky			#57	2s	
179	comp			↑		
180-189	BIAS				0s	
190-199	FLAT				10s	
200-209	BIAS				0s	
210-219	FLAT				12s	
220-229	DARK				15m	

50 Inch Telescope Log

Observer: CALVIN

PI: All Groot

Spectrograph: FAST

Grating: 300L/1200L

Page: 8371

Date: 3/26/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-5	DARK				15m	
6-15	BIAS				0s	
16-25	FLAT				6s	
26-35	BIAS				0s	
36-45	FLAT				12s	
46-55	FLAT				8m	*1200L/Tilt = 351.0
56-65	BIAS				0s	1.5" / Annular = 2120x11.1x1
66	comp			↓		Focus = 10625
67-71	CNOri	5 52	-5 25	#116	260s	UT = 2:27
72	comp			↓		
73-77	CNOri	5 52	-5 25	#116	260s	
78	comp			↓		
79-83	CNOri	5 52	-5 25	#116	260s	
84	comp			↓		
85-89	CNOri	5 52	-5 25	#116	260s	
90	comp			↓		
91-95	CNOri	5 52	-5 25	#116	260s	
96	comp			↓		
97-101	CNOri	5 52	-5 25	#116	260s	
102	comp			↓		2.53 hrs on star
103-107	CNOri	5 52	-5 25	#116	260s	UT = 5:22
108	comp			↑		
109	Feige 34	10 39	43 06	#56	90s	Normal setup
110	comp			↑		
111	Feige 34	10 39	43 06	#56	90s	
112	comp			↑		
113	Feige 34	10 39	43 06	#56	90s	PA = 70°
114	comp			↑		
115	N5379	10 47	12 35	#57	1m	
116	comp			↑		

60 inch Telescope Log

Observer: CALVIN

PL: Malibu

Spectrograph: EAST

Grating: 300L

Page: 8572

Date: 2/26/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
117	11379	10 47	12 35	#57	1m	
118	comp			↑		
119	ngc 6078.021	10 11	39 34	#59	6m	
120	comp			↑		
121	#22	10 12	39 09	#59	20m	PA = 19° - major axis
122	comp			↑		(get very faint - get more
123	#23	10 12	39 28	#59	9m	in slit)
124	comp			↑		
125	#24	10 12	39 38	#59	10m	
126	comp			↑		
127	#25	10 12	39 38	#59	6m	
128	comp			↑		
129	#26	10 12	39 14	#59	10m	
130	comp			↑		
131	#27	10 12	39 09	#59	20m	
132	comp			↑		
133	#28	10 12	38 15	#59	20m	
134	comp			↑		
135	#29	10 12	39 06	#59	7m	
136	comp			↑		
137	#30	10 12	39 22	#59	3.5m	
138	comp			↑		
139	#31	10 12	39 13	#59	9m	
140	comp			↑		Circus moving
141	#32	10 12	38 55	#59	10m	thru.
142	comp			↑		
143	#33	10 13	39 53	#59	7m	
144	comp			↑		wait out clouds
145	#34	10 13	39 14	#59	20m	
146	comp			↑		

3227  
U.S. Army

60 inch Telescope Log

Observer: CALKINS

PI: Kirshner, Kenyon, Geller

Spectrograph: FAST

Grating: 300L

Page: 8373

Date: 3/26/00

Number	Object	H A	Dec.	L/R	Exp	Comments
147	SN2000P	13 07	-28 14	#2	12m	Thru clouds, PA = 0°
148	comp			↑		
149, 150	TX CVn	12 44	36 45	#12	10, 60	
151	comp			↑		
152, 153	RW Aya	13 34	-25 22	#12	5, 60	
154	comp			↑		
155	SD218873	14 16	-21 44	#12	5m	
156	comp			↑		
157	132700... C	13 29	11 38	#13	15m	redo from 3/25 PA = 20°
158	comp			↑		
159	134700... A	12 49	35 15	#13	13m	PA = 110°
160	comp			↑		
161	134700... C	13 49	35 17	#13	17m	
162	comp			↑		
163	134818... A	13 50	33 41	#13	12m	PA = -5, major axis
164	comp			↑		
165	134818... D	13 50	33 44	#13	20m	PA = 5, major axis
166	comp			↑		clouds passing thru
167	135018... A	13 52	02 16	#13	20m	PA = -30
168	comp			↑		
169, 170	135018... C	13 52	2 16	#13	15m	PA = -30, major axis
171	comp			↑		
172, 173	HD 154791	17 06	23 58	#12	1/10	
174	comp			↑		
175	Draco C1	17 20	57 49	#12	12m	sunrise
176	comp			↑		
177-181	sky			#57	2s	
182	comp			↑		
183-192	BIAS				0s	
193-202	FLAT				6s	



Fax: to Susan Tucker  
 pg 1 of 3

60 inch Telescope log  
 Observer: P Berlin  
 PI: Kochanek et al

Spectrograph: EAST  
 Grating: 6000 Å H $\alpha$   
 Date: 3/28/00

Page: 8375

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				0s	6000 grating - 2" slit tilt = 744.0' (2 $\alpha$ = H $\alpha$ )
11-12	DARK				15m	
13-20	BIAS				0s	
21-40	FLAT				30s	"em" setup all night long
41-46	SKY	Zenith		88	20s	
47	COMP			↑	30s	clouds
48-49	Hiltner 60			88	3m	
50	COMP			↑		
51	COMP			↓		
52-54	MF4009	0722.46	+1139.29	88	20m	lots of clouds. ok
55	COMP			↑		PA = -55 solid cloud cap - stop
56	COMP			↓		
57-58	MF0004	1108.09	+302.37	B	20m	clearing. PA = 40
59	COMP			↑		
60-61	MF0013	1130.48	+3534.02	88	8m	PA = -35
62	COMP			↑		
63	COMP			↓		
64-65	MF4012	1302.04	+2915.12	88	15m	PA = 20
66	COMP			↑		
67	COMP			↑		
68-69	MF0022	1152.02	+1648.25	88	15m	PA = 80 good one
70	COMP			↑		
71-72	MF4033	1001.12	+76.51	88	8m	PA = 35
73	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Kochanek

Spectrograph: FAST

Grating: 600/014

Date: 3/28/00

Page: 8376

Number	Object	R.A.	Dec.	L/R	Exp	Comments
74-75	MFC014	11:31:22	+32:42:05	88	8m	PA=75
76	COMP			↑		
77	COMP			↓		
78-80	MF4056	12:27:48	+50:23	88	15m	PA=10
81	COMP			↑		no interference from sup *
82	H244	13:21	+36	88	5m	
83	COMP			↑		
84	COMP			↓		
85-86	MF4044	11:58:43	+25:02:54	88	20m	PA=35; brighter companion to S.
87	COMP			↑		PA=23
88	COMP			↓		
89-91	MF025	12:40:07	+11:05:25	88	15m	PA=40
92	COMP			↑		
93	COMP			↓		
94-95	MF1090	16:30:39	+55:03:22	88	15m	PA=35
96	COMP			↑		
97	COMP			↓		
98-99	MF4076	14:02:04	+14:33:09	B	15m	PA=55
100	COMP			↑		
101	COMP			↓		
102-103	MF4082	15:47:46	+28:38:30	B	15m	PA=30
104	COMP			↑		





FAX: to Susan Deane  
 pg 1 of 3

60 inch Telescope log  
 Observer: P. Berlin  
 PI: Kochanek et al  
 Spectrograph: EAST  
 Grating: 600/10 Ha  
 Date: 3/28/00  
 Page: 8375

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BSAS				0s	600l grating - 2" slit tilt = 74.6° (α = Ha) "em" setup all night long
11-12	DARK				15m	
13-20	BSAS				0s	
21-40	FLAT				30s	
41-46	SKY	Zenith		88	20s	
47	COMP			↑	30s	clouds.
48-49	Hiltner 60			88	3m	
50	COMP			↑		
51	COMP			↓		
52-54	MF4009	0722.46	+11:39:29	88	20m	lots of clouds. ok.
55	COMP			↑		PA = -55 solid cloud cap - stop
56	COMP			↓		
57-58	MF0004	11:08.09	+3:02:57	88	20m	clearing. PA = 40
59	COMP			↑		
60-61	MF0013	11:30:48	+35:34:02	88	8m	PA = -35
62	COMP			↑		
63	COMP			↓		
64-65	MF4012	13:02:04	+76:15:12	88	15m	PA = -20
66	COMP			↑		
67	COMP			↑		
68-69	MF0022	11:52:02	+16:48:25	88	15m	PA = 80 good one
70	COMP			↑		
71-72	MF4033	10:01:12	+76:51	88	8m	PA = 35
73	COMP			↑		

60 inch Telescope Log

Observer: PB

PI: Kochanek

Spectrograph: FAST

Grating: 6000/11

Date: 3/28/00

Page: 8376

Number	Object	R.A.	Dec.	L/R	Exp	Comments
74-75	MFC014	11:31:22	+32:42:05	88	8m	PA=75
76	COMP			T		
77	COMP			L		
78-80	MF4056	12:27:48	+50:23	88	15m	PA=10
81	COMP			T		no interference from sup *
82	HZM	13:21	+36	88	5m	
83	COMP			T		
84	COMP			L		
85-86	MF4044	11:58:43	+25:02:54	88	20m	PA=33 - brighter companion to S
87	COMP			T		PA=33
88	COMP			L		
89-91	MF0225	12:41:07	+11:07:25	88	15m	PA=40
92	COMP			T		
93	COMP			L		
94-95	MF1040	16:30:39	+55:03:22	88	15m	PA=33
96	COMP			T		
97	COMP			L		
98-99	MF4076	11:02:51	+11:33:09	B	15m	PA=55
100	COMP			T		
101	COMP			L		
102-103	MF4082	15:42:46	+28:38:30	B	15m	PA=30
104	COMP			T		



FAX: to Susan Tokarz  
Pg 1 of 3

60 Inch Telescope Log

Observer: P. Berthel

PI: Kochanek et al

Spectrograph: FAST

Grating: 600L 2" slit

Page: 8376

Date: 3/29/00

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BINS				0s	600gpm / 2" slit
11-20	FLAT				55s	tilt = 746.0; focus = 1000
21-30	DARK				15m	7C = -HB
31-40	BINS				0s	"abs" set-up.
41-50	FLAT				55s	
51-55	sky	zenith		88	4s	
56	OMP			↑	20s	
57-59	Hiltner 600	06:42	+02	88	90s	PA = 19
60	OMP			↑		
61-62	HD 37559	05:15	+22	88	60s	3 spectra
63	OMP			↑		
64-65	HD 18133	06:43	+13:15	88	60s	2
66	OMP			↑		
67-69	NGC 1700	04:57	-4:51	88	180s	PA = 90
70	OMP			↑		
71-72	MF 2958	08:56	+59:22	88	8m	PA = 40
73	OMP			↑		
74	OMP			↓		
75-77	MF 4015	08:17	+58:47	88	12m	PA = 13
78	OMP			↑		
79	OMP			↓		
80-81, 83-84	MF 6002	09:20:02	+01:02	35	15m	PA = 20 for Darkenay; #35 Poor Groups
82, 85	OMP			↑		
86	OMP			↓		
87-88, 90-91	MF 6001	09:16	+20:11	35	15m	PA = 65 for Dan #35 Poor Groups
89, 92	OMP			↑		
93-94	Feige 34	10:39	+43	88	2m	PA = -40
95	OMP			↑		

60 inch Telescope Log

Observer: FB

PI: Kochanek/Kuragi

Spectrograph: FAST

Grating: 6000 2'SH

Date: 3/29/00

Page: 8579

Number	Object	R.A.	Dec.	L/R	Exp	Comments
96	COMP			↓		PA=40
97-99	MF0004	11:08:09	+13:02	88	20m	23
100	COMP			↑		
101	COMP			↓		
102-103	MF 6006	11:42:23	+10:15	35	15m	Kuragi
104	COMP			↑		
105-106	MF 6006	"	"	35	5m	shifted N. & hit
107	COMP			↑		
108	H244	13:23	+76	88	3m	PA=75
109	COMP			↑		
110-112	NGC 4125	12:08	+65:10	88	3m	PA=75
113	COMP			↑		
114-116	NGC 4839	12:51	+70:46	88	4m	PA=65
117	COMP			↑		
118	COMP			↓		
119-121	MF0025	12:17	+14:09	88	15m	PA=40
122	COMP			↑		
123	COMP			↓		
124-127	MF6013	14:30	+03:46	35	15m	PA=20 Kuragi
128, 129	COMP			↑		
130	COMP			↓		
131-133	MF0066	15:19	+25:47	88	15m	PA=5 (3 <sup>rd</sup> exp stopped 8m)
134	COMP			↑		a few thin clouds
135, 136	HD 14309	15:57	+26:52	88	1m	moving on
137	COMP			↑		lots of clouds!
138, 139, 140	HD 145457	16:10	+16:44	88	1m	
141	COMP			↑		
142-3	HD 154087	17:02	+25:30	88	90s	
144	COMP			↑		



To: S. Tokarz  
pg 1 of 2

40 inch Telescope Log

Observer: W. Brown

PI: M. Garcia, Krishnan

Spectrograph: FAST

Grating: 300 L

Date: 3/30/2000

Page: 8381

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS				7sec	bin by 4
11-20	FLAT					"
21-30	BIAS				14 sec	bin by 2
31-40	FLAT					
41-50	DARK					clouds moving in
51-55	sky					bin by 4
56-60	sky					bin by 4
61	XTEJ118p48	11:18	43:02	65	300 600	65f Garcia X-Ray Nova Note: still quite cloudy bin by 1
62	"			↑		These fell on row 33. I'll change the position...
63	COMP			"	600	
64-65	XTEJ118p48	"	"	↑		
66	COMP			"	600	
67-68	XTEJ118p48			↑		None of these were at parallactic angle
69	COMP			"		
70	SN 2000au	7:54	50:07	2	1200	2f Krishna SN this is at parallactic angle. Poor see
71	COMP			↑		
72	XTEJ118p48	11:18	43:02	65	600	65f Garcia bin by 4 Terrible see This was wrong obj
For some reason, tel. pointing is a bright star doesn't seem to help.						
72	XTEJ118p48	11:18	43:02	65	600	PA = -34
73	COMP			↑		PA = -56 Pointing is ready
74	"			"		ok
75	COMP			↑		PA = -65 Clouds do M
76	"			"		
77	COMP			↑		PA = -1 bin by 2 2f Ki
78	SN 2000P	13:7	-38:14	2	600	
79	COMP			↑		
80,81	HZ 44	13:21	36:03	36	120	PA = 0 bin by 2
82	COMP			↑		clouds...



To: S. Tokarz  
Pg 2 of 2

60 inch Telescope Log  
Observer: W. Brown  
PI: \_\_\_\_\_

Spectrograph: FAST  
Grating: 300  
Date: 3/30/2000

Page: 8382

Number	Object	R.A.	Dec.	L/I	Exp	Comments
83-84	HZ44	13:21	36:23	56	100	PA=0 binby 4
85	COMP			↑		
86	XTEJ118p48	11:18	48:2	65	600	PA=-70 (clouds) windy
87	COMP			↑		
88	"	"	"	"	"	PA=-80 cloudy, but trying anyway
89	COMP			↑		
90	"	"	"	"	900	PA=-80? These are probably junk.
91	COMP			↑		
		clouds				
92	XTEJ118p48	"	"	65	900	PA=90 I can see it, sort of
93	COMP			↑		
94	"	"	"	"	1200	PA=90 Clouds less thick
95	COMP			↑		
96	"	"	"	"	"	PA=90 Airmass=1.6; tracks, d.R.
97	COMP			↑		Clouds hitting hard again
98	N5846	15:03	+1:47	57	300	PA=23 Vel. standard binby 4
99	COMP			↑		Clouds here too.
100	"	"	"	"	510	PA=33 Dome closed binby 2
101	COMP					humidity nearly 100%
		It's snowing!				
102-111	BIAS					binby 2
112-121	BIAS					binby 4
122-131	FLAT					binby 4
132-141	FLAT					binby 2
142-151	DARK					binby 2

To: Susan Tokarz  
pg 1 of 3

60 inch Telescope Log

Observer: W. Brown

PI: 65, 112, 114, 59

Spectrograph: FAST

Grating: 300L

Page: 8383

Date: 3/31/2000

Number	Object	R.A.	Dec.	L/R	Exp	Comments
1-10	BIAS					binby 2
11-20	BIAS					binby 4
21-30	FLAT					binby 4
31-40	FLAT					binby 2
41-45	sky	(7:09 pm)			2-3 sec	binby 4 clouds moving in
46	COMP			↑		
47, 48	Hiltner 600	6:45	2:06	56	45 sec	PA=26
49	COMP			↑		
50, 51	"	"	"	"	90 sec	binby 2
52	COMP			↑		
53	negal-001	8:04	59:30	113	1000s	PA=90 / binby 4 / Geller 113
54	COMP			↑		
55, 56	XTEJ1118p48	11:18	48:01	65	600s	PA=-78 / Gaccia 65
57	COMP			↑		
58	cs3001	8:36	28:49	114	720s	PA=90 / Brown 114
59	COMP			↑		↳ star low; obj row 41
60	cs3025	8:46	29:05	114	660s	
61	COMP			↑		
62	cs3046	8:52	29:43	114	600s	
63	COMP			↑		
64	cs3050	8:54	29:05	114	600s	
65	COMP			↑		Something went wrong... COMP with Re-booting system.
66	cs3045	9:48	29:15	114	720s	↳ Nearby star... diluting spectrum.
67	COMP			↑		
68	091718p01090	9:19	00:55	113	1200	PA=90 / Geller 113
69	COMP			↑		
70, 71	Fige 3k	10:36	48:21	56	90	PA=90
72	COMP			↑		
73, 74	XTEJ1118p48	11:18	48:01	65	600	PA=24
75	COMP			↑		

66 - both stellar + gal outflow easy to get (no emission!)  
 REVO 64 - COMP NO GOOD; used previous comp but red

60 inch Telescope Log

Observer: W. Brown

PI:

Spectrograph: FAST

Grating: 300 L

Date: 3/31/2000

Page: 8384

Number	Object	R.A.	Dec.	L/H	Exp	Comments
76	104924p04040a	10:52	-5:47	113	450	PA=11 #113 Geller
77	COMP			↑		
78	104924p04040b	10:52	-5:50	113	1200	
79	COMP			↑		
80	104924p04040c	10:52	-3:46	113	900	
81	COMP			↑		
82	CS364	11:15	28:45	114	480	PA=11 #114 Berman
83	COMP			↑		
84	CS863	11:49	29:36	114	600	correct object?
85	COMP			↑		
86	CS3219	12:02	29:14	114	1200	low surface brightness gal
87	COMP			↑		
88	XTEJ118p48	11:18	48:01	65	600	PA--50
89	COMP			↑		
90,91	HZ24	13:21	36:23	56	60	PA=70 No COMP
92	COMP			↑		
92	SS26239.107	13:44	-7:07	59	480	PA=70 #59 Mahdavi
93	COMP			↑		
94	SS26239.108	13:44	-7:27	59	600	
95	COMP			↑		
96	SS26239.109	13:45	-7:36	59	480	
97	COMP			↑		
98	SS26239.110	13:45	-7:04	59	780	
99	COMP			↑		
100	SS26239.111	13:45	-7:39	59	480	clouds?
101	COMP			↑		
102	SS26239.112	13:45	-6:34	59	420	clouds?
103	COMP			↑		
104	XTEJ118p48					clouds
104	XTEJ118p48	11:18	48:01	65	600	#65 Garcia
105	COMP			↑		

90, 91 - NO COMP

60 inch Telescope Log

Observer: W. Brown

PI: \_\_\_\_\_

Spectrograph: FAST

Grating: 300 E

Date: 3/31/2000

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Number	Object	R.A.	Dec.	L/R	Exp	Comments
106	cs 3244	12:14	29:17	114	480	PA=90 #114 Brown
107	COMP			↑		star very close to E
108	cs 1061	12:28	28:52	114	480	clouds
109	COMP			↑		
110	M 5846	15:03	1:47	57	300	vel. standard
111	COMP			↑		
112	cs 1080	12:32	29:17	114	480	clouds back!
113	COMP			↑		
114	cs 3284	12:35	29:11	114	480	
115	COMP			↑		
116	XTES 118, 48	11:18	48:01	65	600	telescope drifting a lot.
117	COMP			↑		clouds thick on W
						clouds
118	cs 1296	13:09	28:53	114	600	clouds
119	COMP			↑		
120	cs 3342	13:17	28:59	114	300	low clouds
121	COMP			↑		
122	cs 1362	13:22	29:24	114	480	
123	COMP			↑		
124	cs 1364	13:23	29:22	114	480	clouds covering sky
125	COMP			↑		
						clouds
126-135	BIAS					binby 4
136-145	FLAT					binby 4
146-155	DARK				1200s	binby 4

Note: no binby observations tonight.