

Frame prefix: FR94F

Telescope: 61"

Focus: 3800 decimal

Sheet #: 1

Date: 9/5/94 UT

Iris:

Humidity: 82%

Observers: Hicks, Grundy, Fink

Sun/Mon Aug

Tailpiece:

Balance: 300

Temp: 52°F 56°F

Guidepoint: (391.5, 406)

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, EHA, VME crashes, clouds, etc. (Shutter is stuck)
/	NNM(94M)	20	B/dich	Phot ~ 30k	~6 UT	21:55:04	00:31:29	~1.2	fans upstairs are on too
/	"	"	"						$\delta = -0.1369$ $\alpha = -0.0488$
/	"	"	"				wind from WSW		Lots of clouds
1	"	"	"	30k phot 800pk	6:44			1.18	shutter stuck open still
/				40k phot	6:54				balance moved up to 500
2	"	"	"	40k phot	7:19	21:54:45	+0:18:55	1.22	fixed shutter finally
/	BS 8622	SH.09	"			22:39:01	+39:01:25		re-initialized coordinates
3	NNM(94M)	20	"	40k phot	8:15	21:54:43	+0:13:15	1.35	
4	"	"	"		9:03	21:54:37	0:6:31		Humidity now 75% (VME)
5	MACHOLZ 2A	20	"	174k phot 2k peak	10:37	8:01:46	37:41:13	2.82	-5:50 UA (Fragment A) (crash)
6	" A	2	"		10:49			2.56	not saved
6	" A	"	"	145k phot	10:55	8:01:49	37:40:24	2.46	-5:33
7	" B	60	"		11:00				B is very faint, no strong nucleus
8	" B	"	"		11:06	8:02:57	38:09:06	2.26	-5:22
9	" B	"	"		11:08			2.25	(C visible, too)
10	"	"	"						
11	"	"	"					2.15	
12	"	"	"		11:17				VME CRASH

Frame prefix: FR94F

Telescope: 61"

Sheet #: 2

Observers: GRUNDY, HICKS, FINK

Date:

Focus:
Iris:
Tailpiece:
Balance:

Humidity:

Temp:

Guidepoint: 391.5, 406.0

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
12	Macch2B	60	0/dich	a few photons	11:19	8:02:59	38:08:31	2.10	faint, very faint
13	"	"	"		11:22				
14	"	"	"		11:25	8:02:59	38:08:20	2.03	-5:03 LHA
15	Maccholz ZA	20	B/dich	Phot ~150k	11:31	8:01:57	37:38:50.5	1.96	-4:57 much brighter
16	"	"	"		11:32				lots of structure
17	"	"	"		11:34	8:01:58	37:38:50	1.93	-4:54
18	"	"	"		11:36				
19	"	"	"		11:38			1.90	
20	"	"	"						
21	"	"	"						
22				175k					
23									
24									
28				Phot 176k	11:50	8:02:03	37:38:01	1.78	-4:38
29									
33				169k	11:60			1.70	
	"								
38									

Frame prefix: FR94F

Telescope: 61"

Sheet #: 5

Date: UT Sept. 6, 1994

Focus: 3800 dec

Iris:

Humidity:

Tailpiece:

Balance: 500

Temp:

Observers: GRUNDY, HICKS

Mon/Tues

Guidepoint: (391.5, 406.0)

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
62	P/HARRINGTON	60	OPEN	525k phot 30k peak	~8:10	2:41:06?	5:01:12?	1.53	-2:13 nice tail
62	P/Reinuth 1	"	"	180k phot	8:21	?	5:01	1.43	couldn't find it yet
62	Brooks 2	"	"	180k phot		2:59	13:46		
63	"	"	"	7000 peak 174k phot	8:29	2:59:33	13:47:06	1.38	-2:53
63	Reinuth 1	"	"	180k phot	8:32			1.40	still can't find it
64	Harrington	30	B/dich	~11k phot	8:42	2:08:32	-5:22:55	1.43	-1:48 $\dot{\alpha} = -.0042$ $\dot{\delta} = .0099$
65	"	"	"	~11.5k phot	9:01	2:08:33	-5:23:07	1.37	-1:29
66	"	"	"		9:21	2:08:30	-5:23:11	1.32	-1:08
67	"	"	"		9:45	2:08:30	-5:23:18	1.29	-0:45
68	Bronnelly	60	"	Phot = 102k Peak = 3k	10:00	5:16:13	-5:24:53	2.27	-3:38 $\dot{\alpha} = .0264$ $\dot{\delta} = .0087$
69	"	30	"		10:15	5:16:17	-5:24:38	2.07	-3:23 shutter stuck
69	"	30	"		10:16:10	5:16:18	-5:24:38	2.06	-3:22
70	"	"	"		10:33	5:16:21	-5:24:27	1.87	-3:05
71	Macholz 2(A)	"	"	Phot = 137k	10:43	8:05:47	36:39:04	2.73	-5:45
77	"	"	"	146k	10:59	8:05:51	36:38:23	2.43	-5:29 shutter frequently
85	"	"	"		11:13	8:05:53	36:37:49	2.22	-5:15 sticks open
:									
97	M 2 (B)	100	B/dich		11:36	8:07:03	37:04:40	1.94	-4:53 ← not much there

463 311

Frame prefix: SP94F

Telescope: 61"

Sheet #: 1

Date: SEPT 4/5

Focus: 3800

Iris: 301

Humidity: 82% 82%

Tailpiece:

Balance: 391.4 406

Temp: 54/56

Guidepoint: 391.4, 406

Observers: HICKS, GRUND

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
X	AFTER	3 MINS							OF CRAPPY WEATHER, WE ARE GIVING IT A GO
001	(COMP) BS 7652								
002									
003									SOME CONDENSATION
X	N-N-M 94H	300	0.5		5:34	21:55:10.70	+00:32:55	1.20	DEC MOTOR JAMS BALANCE MOVE 300 MANY TIMES USELESS EXP
004	"	"	"		5:41	21:55:10.5	+00:31:54.4	1.19	SMEARED IN DEC BAD!
005	"	600	"		5:48	21:55:04.2	+00:31:17.3	1.19	CLOUDS MOVE IN EXP=242 AT 170 DARK SLIDE IN
X	WE BREAK								FOR CLOUDS
006	N-N-M 94H	600	11	3K	6:43	21:54:53	+00:24:01	1.18	DEC STICKS - finally power count will be low
007	"	600	"	3K	6:55	21:54:51	00:22:04	1.19	DEC STICKS MANY TIMES WE MOVE BALANCE TO 500
008	"	600	"	4K	7:07	21:54:48	+00:20:38	1.20	tw:50 SEEMS TO BE FINALLY PHOTOMETRIC
009	"	600	"	4.5K	7:20	21:54:46	00:18:52	1.22	
010	"	"	"	4.4K	7:31	21:54:43	60:17:23	1.24	
011	SAD 127201	3.0	0.5	21K	7:47	21:58:08	+03:43:15	1.21	
012	"	"	"	21K	7:48			1.22	
013	"	"	"	23K	7:49			1.22	
014	"	"	"		7:50			1.22	
015	"	"	"					1.22	

420 365

Frame prefix: SP94F

Telescope: 61"

Sheet #: 2

Date: SEPT 4/15

Focus: 3800

Iris: 301

Humidity:

Tailpiece:

Balance: 500

Temp:

Observers: HICKS, GRUNDY, FINK

Guidepoint: 391.4, 406

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
016	BS 8622 (STD)	0.5	1.0	17K	7:57	22:39:00.95	39:01:24.5	1.02	
017	"	1.0	1.0	30K	7:58			1.02	
018	"	1.0	1.0						
019	"	1.0	1.0					1.03	
020	N-N-M	600	0.5	4.3K	8:08	21:54:44	00:14:15	1.32	
021	N-N-M	600	0.5	4.6K	8:31	21:54:41	00:11:11	1.40	
022	"	600	0.5	4.6K	8:42	21:54:39	00:09:36	1.45	
023	"	"	"	4.26	8:55			1.50 - 1.56	
024	^{SAO} 127201	3.0	0.5	20K	9:07	21:58:15	3:45:15	1.48	
025	"	"	"					1.49	READOUT PROB
026	"	"	"					1.50	
027	"	"	"						
028	"	"	"					1.51	
029	^{BS} 8314	1.5	0.5	26K	9:16	21:44:18	14:45:02	1.43	
030	"	"	"	27K	9:19			1.45	
031	"	"	"	27L				1.45	
032	"	"	"		9:21			1.46	
033	"	"	"					1.46	

Frame prefix: SP4F

Telescope: 61"

Sheet #: 3

Date: SEPT 4/5

Focus: 3800

Iris:

Humidity:

Tailpiece:

Balance: 500

Temp:

Guidepoint: 391.4, 406

Observers: HICKS, GRUNDY, FINK

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
34	BS 718	0.5	1.0		9:35			1.15	
35	"	0.5	"		9:37			1.15	
36	"	"	"			2:77:56	+8:26:21	1.15	
37	"	"	"	27K				1.15	
38	"	"	"	24K				1.15	
39	"	"	"					1.15	
40	"	"	"		9:40			1.15	
041	BS 1532	1.0	0.5	20K	10:03	4:47:21.8	-16:56:38	2.55	
042	"	"	"	26K	10:04			2.54	
043	"	"	"	26K	10:05			2.53	
044	"	"	"		10:06			2.51	
045	"	"	"	20K	10:21			2.29	
046	"	"	"		10:22			2.28	
047	"	"	"		10:23			2.27	
048	"	"	"					2.26	
049	MZ (A)	300	0.5		10:37	8:01:46	37:41:13	2.82	GUIDING OFF
050	"	"	"	3,4K	10:46			2.63	GUIDING GOOD
051	"	"	"		10:52			2.51	

Frame prefix: SP94F

Telescope: 61"

Focus: 3830

Sheet #: 5

Date: Sept 5/6

Iris:

Humidity: 70%

Tailpiece:

Balance: 500

Temp: 56/60

Guidepoint:

Observers: HICKS, GRUNDY

Mon

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
65	IO TORUS	300	0.25		2:37	14:33:44.9	-14:06:58	2.96	
66	"	"	"		2:43	14:33:46.23	-14:06:57.9	3.12	
67	"	"	"		2:49	14:33:47.59	-14:06:53.7	3.30	
68	"	"	"		2:56	14:33:50.01	-14:06:53.1	3.54	WE JUMP OVER EUKOPIT
69	"	"	"		3:01	14:33:52.46	-14:06:50.6	3.78	
70	JUPITER	0.1	"		3:08			4.11	NOT A FI
71	IO TORUS	300	"		3:09	14:34:09.05	-14:06:46.0	4.15	
72	"	"	"		3:15	14:34:11.47	-14:06:42.0	4.56	
73	"	300	"		3:21	14:34:13.83	-14:07:59.7	4.92	5.48
X	WE STOW,		MOVE TO		N-M-M				
74	N-M-M	600	0.5	4.0K	3:45	21:51:11	-2:22:55	1.54	LHA = -2:28
75	"	1200	"	7.3K	3:56	21:51:09.1	-2:24:25	1.48	
76	"	"	"	8.0K	4:16	21:51:06.6	-2:26:29		
77	"	"	"	4.9K	4:38	21:51:02.9	-2:29:45	1.33	GUIDING A BIT STRANGE, JUMP IN EAST
78	"	"	"	"	4:59	21:50:56	-2:32:31	1.29	
79	"	"	"	8.3K	5:20	21:50:51	-2:35:13	1.25	
80	"	"	"	8.1K	5:41	21:50:47	-2:38:07	1.23	
81	(COMP) SS7569	1.5	0.5	21K	6:14	19:51:51	11:37:00	1.21	

Frame prefix: SP94K

Telescope: 61"

Sheet #: 6

Date: SEPT 5/6

Focus:

Humidity:

Iris:

Tailpiece:

Balance:

Temp:

Guidepoint:

Observers: HICKS, GRUNDY

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
82	BS 7569	1.5	0.5	22K	6:15			1.21	
83	"	"	"	22K	6:16			1.22	
84	"	"	"	23K	6:17			1.22	
85	"	"	"	19K	6:18			1.22	
86	"	"	"	13L	6:19			1.22	
87	"	"	"		6:20			1.23	
88	BS 7272	2.0	0.5	18K	6:23	01:08:53	34:35:25	1.23	
89	"	2.5	0.5	19K	6:24			1.23	
90	"	"	"		6:26			1.24	
91	"	3.0	"	21K	6:28			1.24	
92	"	"	"	28K	6:29			1.25	
93	"	"	"	26K	6:30			1.25	
94	BS 660	0.5	0.5	21K	6:37	02:16:52	34:14:23	1.56	
95	"	"	"	23K	6:37			1.55	
96	"	"	"	23K	6:38			1.55	
97	"	"	"	22K	6:39			1.54	
98	"	"	"	20K	6:40			1.54	
99	"	"	"	24K	6:41			1.54	

Frame prefix: SP94F

Telescope: 61"

Sheet #: 7

Date: SEPT 5/6

Focus:

Humidity:

Iris:

Tailpiece:

Balance:

Temp:

Guidepoint:

Observers: HICKS, GRUNDY

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
100	BS 720	1.0	0.5	14k	6:44	22:28:29	+29:54:44	1.63	
101	"	1.5	"	29k	6:45			1.62	
102	"	"	"	30k	6:46			1.62	
103	"	"	"	29k	6:46			1.61	
104	"	"	"	24k	6:47			1.61	
105	"	"	"	24k	6:48			1.60	
106	BS 8622	0.5	1.0	17k	6:58	22:38:54	+39:03:65	1.01	STD
107	"	"	"	14k	6:59			1.01	↓
108	"	"	"	15k	6:59			1.01	
109	"	"	"	18k	7:00			1.01	
110	"	"	"	17k	7:01			1.01	
111	BS 634	0.1	1.0	12k	7:09	22:41:09	10:48:25	1.07	STD
112	"	0.1	1.0	13k	7:10			1.07	↓
113	"	0.15	1.0	20k	7:12			1.07	
114	"	"	"	19k	7:12			1.07	
115	"	"	"	22k	7:13			1.08	
X	WE NOTICE TAILPIECE HAS BEEN 25° OFF								
X	WE MOVE IT TO CORRECT POSITION								

Frame prefix: SP94F

Telescope: 61"

Sheet #: 8

Date: SEPT 5/6

Focus:

Humidity:

Iris:

Tailpiece:

Balance:

Temp:

Guidepoint:

Observers: HICKS, GRUNDY

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
116	HARRINGTON	1200	0.5	1K ^{show} _{brck}	8:44	2:08:32	-5:22:59	1.42	-1:46 (LHA)
117	"	"	"		9:06			1.36	Object out of slit ~.30-3 min JUMP IN EAST
118	"	"	"		9:26			1.32	-1.29
119	P/Bonvelly	600	0.5	4K	10:03	5:16:14	-5:24:45	2.23	LHA-3:30 BAD GUIDING
120	"	600	"	4.9K	10:13			2.10	
121	"	"	"	5.2K	10:24			2.16	
122	P/Machholz	600	0.5	3.6K	10:45	8:05:47.8	+36:38:58	2.70	
123	"	"	"	4.1K	10:56			2.36	(AT 110 left)
124	"	"	"	5.0K	11:07			2.31	GUIDING GETTING BETTER
125	"	"	"	4.9K	11:18			2.15	
X	WE BREAK TO IMAGE SECONDARY, TERTIARY								
126	P/M 2	600	0.5	4.1K	11:42	8:06:01	+36:36:33	1.87	
127	"	"	"	5.6K	11:53			1.77	-69 SKY COMING UP
128	BS 3626	1.0	0.5	9K	11:15	9:08:19	+26:39:10	2.57	
129	"	2.0	"		12:17			2.55	BAD GUIDING
130	"	2.0	"	12K				2.52	
131	"	"	"	27K	12:19			2.50	
132				35K				2.48	

133, 134, 135, 136

41K

12K
11.5 sec

27K 28K

2.46, 2.44, 2.42, 2.40