

44 B

Telescope: 61"

Frame prefix #: FR94B Day of Week: MON / TUE

Observers: HICKS, GRAYBATE NST/UT: MARCH 14/15  
FINK

Iris: 3674 Oct. 1  
Humidity: 80 Sheet #: 1  
Tailpiece:  
Balance: Temp O/I: 34/38  
Guidepoint: 392.3 406

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.)
X	ASH-B	60	OPEN	1k peak 48k peak	3:09	2:36:26	24:47:28	14:30	2.06	v variable clouds
X	Hurtley 3	60	OPEN	6k peak 423k						
001	Hurtley 3	60	open		3:20	3:31:59	24:34:53	13:55	1.61	clearing up
002	stupid	1	B/dich			done needed = 10" / AR mirror				
Test 101	Pi-hole target	0-10	VTR	6500		stared				public I paid!
502	"	"	B	25000		" 411-76	432.67			HIV public: 1.81/1.79 1.91/1.73
"	"	0-10	VTR	65530		" 411-89	432.02			1.87/1.11
"	"	0.03	VTR	48025		411-89	432.02			1.12/1.05
"	"	0.03	IS	4978		411-72	432.17			exceeding sharp focus! double peak deep with primary public humida aly colors 1.55/1.76 peak!
"	"	0-10	IS	12450		411-77	432.12			double peak aly colors! FWZ FwZ-CD 1.42/1.83 FWZ FwZ-CD
"	"	0.03	open	64171/200		411-98	432.42			FWZ FwZ-CD 1.89/1.95
"	"	0.02	"	43553		411-98	432.44			1.79/1.94
"	"	0.02	VTR	26639/2020		411-99	432.08			1.22/1.07
"	"	0.04	"	58139/2056		"	0.09			2k. range aly colors 1.25/1.08 A=70% Temp: 48/46

386

2

Telescope: 61"  
Day of Week: TUE/WED

Iris:  
Focus:  
Tailpiece:  
Balance:

Humidity:

Temp O/I:

Sheet #:

Date MST/UT: MARCH 15/16 UT

Observers: GRUNDY  
FINK, MATTOLA, HICKS

Guidepoint: 293,406 spectroscopy

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME crashes, seeing, Moon, clouds, etc.
002	SKY FLAT	0.1	OPEN	20K		P/TUTTLE	FIELD	6h	~3	SUNSET glow
003	SKY FLAT	0.2	"	37K	2:04		+22			in west
004	"	0.2	"	25K						
005	"	0.3	"	24K						
006	"	0.5	"	39K	2:08					380 430
007	"	1.0	"	26K					~3.5	
8	Geographos 60		V			Geographos (380, 430) = C1				10.01 sec dark
9	"	300	"		3:12	6:03:51	29:42:16	1:18		(412, 462)
10	"	"	"		3:20			1:27	1.06	bias = 817.2 (6~21)
11	"	"	"		3:27	6:03:53	29:42:03	1:34	1.07	813.8
12	"	"	"		3:34			1:42	1.08	813.8
13	"	"	"		3:43			1:50	1.09	813.7
14	"	"	"		3:50	6:03:53	29:41:35	1:57	1.11	813.0 ± 20
15	"	"	"		3:57			2:04	1.12	815.0 ± 21
16	"	"	"		4:04			2:11	1.14	814.3 ± 20

512<sup>2</sup>

256<sup>2</sup>

Telescope: 61"

Iris:

3

Frame prefix #: FR94B Day of Week: TUESDAY

Humidity:

Focus:

Observers: Grundy, Fink,  
Hicks, Mottola

Tailpiece:

Date MST/UT: MARCH 15/16

Temp O/I:

Balance:

Guidepoint:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.
17	Geographos	300	B	2600 sky	4:14	6:03:54	29:41:05	2:21	1.16	bias = 817.8 ± 20.2
18	"	"	V	1100 sky						821.2
19	"	"	"		4:28	6:03:54.5	29:41:02	2:36	1.20	821.7 ± 21
20	"	"	"		4:36	6:03:55.2	29:40:57	2:43	1.22	827.0 ± 20
21	"	"	"		4:44			2:51	1.25	828.4 ± 19.6
22	"	"	"		4:52	6:03:55	29:40:42	2:59	1.27	829.7 ± 19.9
23	"	"	"		4:59			3:06	1.30	826.2 ± 19.0
24	"	"	"		5:05	6:03:55.8	29:40:31	3:13	1.33	831.1 ± 20.0
25	"	"	"		5:12			3:20	1.36	832.2 ± 19.2
26	"	"	"		5:19	6:03:57	29:40:16	3:27	1.39	835.7 ± 20.2
27	"	"	"		5:26			3:33	1.42	833.5 ± 20.3
28	"	"	"		5:33	6:03:58	29:40:04	3:40	1.46	835.6 ± 19.5
29	"	"	"		5:39			3:47	1.50	836.6 ± 20.2
30	"	"	"		5:46				1.54	
31	"	"	"						1.60	834.4 ± 19.3

Telescope: 61"

Frame prefix #: FR94B Day of Week: TUESDAY

Observers: Date MST/UT: MARCH 15/16

Iris: Focus: Tailpiece: Balance: Humdty: Sheet #: 4

Temp O/I: Guidepoint: 411, 491

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.)
32	Geographos	300	N		6:02	6:03:59	29:39:59	4:09	1.65	836.13 ± 19.2
33	"	"	"		6:10			4:17	1.72	835.6 ± 18.9
34	"	"	"		6:16			4:24	1.77	837.1 ± 19.4
35	"	"	"		6:24	6:04:00	29:39:33	4:31	1.84	844.8 ± 19.1
36	"	"	"		6:30			4:37	1.91	839.2 ± 19.5
37	"	"	"		6:37	6:04:01	29:39:14	4:44	1.99	839.9 ± 19.2
38	AST 1	600	Open		6:59	11:54:11.5	10:13:32	~:45	1.10	
39	"	300	"	4 <sup>pk</sup> 65k phot		(478, 377)		asteroid		found it!
40	AST 2	"	"		7:26	11:58:36	10:20:28	-:20	1.08	(header times are exact)
41	AST 3	"	"		7:38	12:00:34.6	10:30:39	-:10	1.08	
42	AST 4	"	"		7:44	12:00:22.4	10:21:47	-:04	1.08	
43	AST 5	"	"		7:51	12:00:27.5	10:39:44.5	+ :02	1.06	
44	AST 6	"	"		7:57	11:59:44.0	10:47:28	+ :09	1.08	
45	AST 7	"	"		8:06	12:01:03.8	10:13:28	+ :17	1.08	
46	AST 8	"	"		8:12	12:00:30.0	10:19:48.5	+ :24	1.06	

512<sup>2</sup>

Telescope: 61"

Iris:

Frame prefix #: FR94B

Day of Week: TUESDAY

Humidity:

Sheet #: 5

Observers:

Date MST/UT: MARCH 15/16 UT

Tailpiece:

Temp O/I:

Guidepoint:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	Hour-angle exp-start	SecZ	Comments: VME crashes, seeing, Moon, clouds, etc.)
47	AST 9	300	Open		8:19	12:00:30.2	9:59:50.9	00:30	1.09	
48	AST 10	"	"		8:27.5	11:57:54.3	10:11:38	00:41	1.10	
49	AST 11	"	"		8:34	11:58:00.6	10:02:38	1:47	1.10	
50	AST 12	"	"		8:43	11:57:02	10:02:58	1:57	1.11	13-4 Megahertz
51	AST 2	"	"		8:51	11:58:36	10:20:20	01:05	1.12	
52	AST 3	"	"		8:58	12:00:34	10:30:39	+ 1:09	1.12	
53	AST 4	"	"		9:03	12:00:22	10:21:49	1:16	1.13	NAME WRONG - IN HEADER
54	AST 5	"	"		9:10	12:00:27	10:39:44	1:21	1.14	
55	AST 6	"	"		9:16	11:59:44	10:47:28	1:28	1.15	
56	AST 7	"	"		9:22	12:01:03	10:13:28	1:32	1.16	
57	AST 8	"	"		9:28	12:00:30	10:19:48	1:40	1.17	
58	AST 9	"	"		9:40	12:00:30	10:59:51	1:52	1.21	SYSTEM CRASHED - SKY LEVEL UP
59	AST 10	"	"		9:46	11:57:54	10:11:37	2:00	1.23	-SKY 45K
60	AST 11	"	"		10:00	11:58:00	10:02:38	2:14	1.27	SYSTEM CRASHED LOST IMAGE, RESTARTED
61	AST 12	"	"		10:06	11:57:02	10:02:58	2:22	1.30	

WV

bad file? →



Telescope: 61"

Day of Week: THUR / FRI

Mis: 3156 (TOTAL)

7

Frame prefix #: FR94B

Humidity:

Sheet #:

Observers: FINK, GRUNDY  
HICKS, MOTOLO

Tailpiece:

Balance: GP 350,450 (START) CIRKUS

Date MST/UT: MARCH 17/18

Temp O/I:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MST	RA set	Dec set	hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
68	Geographos 300	"	V		3:29	6:06:06	+29:03:43	+1:42	BOX CENTER 430,300 2562
69	"	"	"		3:38	6:06:09	+29:03:06	+1:51	BIAS = 755.3 ± 22 (TAKEN BEFORE EXP)
70	"	"	"		3:46	6:06:09	+29:03:06	+1:59	755.6
71	"	"	"		3:54	6:06:10	+29:02:51	+2:07	759.3
72	"	"	"		4:01	6:06:09	+29:02:49	+2:13	754.6
73	"	"	"		4:09	6:06:10	+29:02:54	+2:22	752.7
74	"	"	K		4:18	6:06:10	+29:02:48	+2:31	756.0
75	"	"	"		4:25	6:06:11	+29:02:42	+2:39	761.95 ± 20.8
76	"	"	"		4:33	6:06:11	29:02:36	+2:47	759.4 TIME GOOD TO ONE SEC.
77	"	"	"		4:41	6:06:11	+29:02:46	2:54	758.5
78	"	"	"		4:48	6:06:11	+29:02:42	3:01	761.5 TIME N HEADER ± SEC TOO FAST
79	"	"	"		4:55	6:06:10	+29:02:38	3:08	762.6 ± 20.4
80	"	"	"		5:03	6:06:10	+29:02:33	3:16	762.2 OKY UP
81	"	"	"		5:10			3:23	763.3 STREAKS COMING IN
82	"	"	"		5:17	6:06:11	+29:02:31	3:31	764.7

Telescope: 61"

Iris:

Frame prefix #: F R 94 D Day of Week: T H U R / F R I

Humidity: 50% Sheet #: 8

Observers: MOTOLA + Fellows

Focus: Tailpiece: Balance:

Temp O/I:

Date MST/UT: MARCH 17/18

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MST	RA set	Dec set	hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
83	Geographos	300	V		5:25	6:06:11	+29:07:24	3:30	1.46 773.1
84	"	"	"		5:32	6:06:11	+29:07:20	3:45	1.50 777.31
85	"	"	"		5:39	6:06:12	+29:02:26	3:52	1.55 778.9
86	"	"	"		5:46	6:06:12	+29:02:25	3:59	1.50 776.8
87	"	"	"		5:53	6:06:12	+29:02:24	4:06	1.63 777.6 <sup>nst</sup> photometric
88	"	"	"		6:00	6:06:13	+29:02:43	4:13	1.69 783.9
89	"	"	"		6:08	6:06:13	29:02:27	4:21	1.76 780.1
90	"	"	"		6:17	6:06:10	29:02:31	4:30	1.85 783.0
91	"	"	"		6:24	6:06:09.5	29:02:26	4:	1.92 783.4 ±19.7
92	"	"	B		6:32				2.03
93	"	"	V		6:40	6:06:12	29:02:15	4:54	2.13 784.9
94	"	"	"		6:47	6:06:12	29:02:22	5:01	2.23 787.7
95	"	"	"		6:55	6:06:12	29:02:18	5:08	2.36 786.4
96	"	"	"		7:02	6:06:12	29:02:14	5:15	2.48
97	P/BUS	60	OPEN		7:33	11:09:44	4:28:03	7:40	1.15



Telescope: 61"

Iris: Iris: 3780 dec, 3656 oct, 9  
 Focus: Humidity: 65 Sheet #: 9  
 Tailpiece: Temp O/I: 42/46  
 Balance:

Frame prefix #: FR94B Day of Week: Thurs/Fri

Observers: FINK, GRUNDY, Date MST/UT: March 17/18  
 HICKS, MOTTOLA

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start	RA set	Dec set	hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
98	SN-2	60	OPEN	Phot=742k	7:39	8:19:22	21:29:30	3:40	1.57(?)
/	"	30	B/dichr	300 pk Phot=17k				4:03	1.73 focus → 3640 octal
99	PLUTO	60	V		10:02	15:55:26	-5:47:03	-1:33	1.39
100	LAN 106-1250	0.3	V	35k pk		14:41:09	00:07:25		1.18
101	"	"	"	27k pk	10:39			0:18	1.18
102	"	"	"		10:41			0:20	1.19
103	"	1.5	B	24k peak 550k phot	10:43			0:22	1.19
104	"	"	"	38k 511k					
105	"	"	"	31k 589k	10:45			1:26	1.19 ← slit at row 393
106	Jupiter & 10	0.1	CO Dichr	ID 16k phot	11:10	14:48:18	-14:47:44	1:46	1.50 Guiding for SP94B096
107	"	0.2	"	16k IO	11:16	"	"	1:49	1.51 "
/	"	"	"	5k IO	11:28	14:	-14:47:44		1.53 Clouds!
108	"	0.5	6						Guide for SP94B097
/									
/									

512  
256

Telescope: 61" Iris: 3640 octal

Frame prefix #: FR94B Day of Week: March 18/19 1994 Humidity: 95% Sheet #: 10

Observers: Grundy, Hicks, Moffala Date MST/UT: Friday/Sat. Tailpiece: Balance: 20 Temp O/I: Guidepoint: N/A

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.)
<del>108</del>		0.4 sec								
109	FLAT	<del>0.4</del>	V	22k peak		meridian	(-65° offset)			Dome Flats
110	"	"	"	"	shorter					Variac = 6S
111	"	"	"	"	exposures, whiter light					"
112	"	"	"	"						"
113	"	2.0 sec	V	24k peak	longer					Variac = 45
114	"	"	"	"	exposures, redder light					"
115	"	"	"	"						"
116	"	"	"	"						"
<del>117</del>	<del>DARK</del>	<del>300</del>	<del>/</del>		6:08					
117	Bias	0.01	/		6:08					Variac off,
118	DARK	300	/							shutter closed
<del>119</del>	Bias	0.01	/	bias = 783.8	6:15					
120	FLAT	30	B	21k	6:21					Variac = 45
121	"	"	"		6:22					

256

Telescope: 61"

Iris: 300

11

Frame prefix #: FR94B Day of Week: FRIDAY/SATURDAY

Focus: 3640 <sup>actual</sup> Humidity: 95% Sheet #: 11

Observers: Hicks, Gundy, Mottele Date MST/UT: MARCH 18/19 UT 1994

Balance: Temp O/I: 34°F/39°F

Guidepoint:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME flashes, seeing, clouds, etc.
122	FLAT	30 sec	B	22k						Variac = 45
123	"	"	"	22k	6:26	bias =	773.9,	816.5, <sup>after saturation</sup>		"
124	"	3 sec	OPEN	24k	6:32					Variac = 20
125	"	"	"	"	6:33					"
126	"	"	"	"	6:34	bias =	770.8,	770.0		"
<hr/>										
127	Kushida	60	OPEN	1500 pk 70k phot	9:01	9:44:36.6	4:15:53	3:40	1.93	clouds → T = 32°F/37°F
128	Jupiter masked	10	B	sky = 12k						95% humidity very cloudy, extinction
129	"	40	B	sky 39k	10:38	14:48:12	-14:47:21	4:15	1.47	w/ apodizing mask
130	Jupiter unmasked	0.1	B	24k peak						"
131	masked	40	B/dichr	44k peak sky						Very good seeing
132	masked	10	V	24k sky						

dome vignetting  
AOT saved



94B

Telescope: 61"

Inis: 300

Frame prefix #: FR94B Day of Week: MONDAY / TUE

Focus: 3572 OCTAL

Humidity: Sheet #: 13

Tailpiece:

Observers: HICKS GIRDNER Date MST/UT: MARCH 21/22

Balance: Temp O/I:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MST	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
134	Kushida	600	OPEN		4:28	9:45:53	+04:25:18	-0:41	1.15 focus 3572 OCTAL Problem w/ camera focus
135	AST1A	200.0	OPEN		7:47	11:47:38	+10:33:45	+0:35	1.09 GUIDER-SPEC MISMATCH
136	AST1B	200.0	OPEN		7:52	11:47:48	+10:33:15	+0:40	1.09
137	AST2A	2000	"		8:03	11:54:48	+10:46:24	0:44	1.09
138	AST3A	150	"		8:20	11:55:01	+11:17:29	1:00	1.19 we over expose and redo w/ shorter exp.
139	AST4A	120	"		8:24	11:54:46	+10:56:51	1:06	1.11
140	AST6A	120	"		8:27	11:54:69	+11:48:41	1:09	1.11
141	AST8A	120	"		8:37	11:55:39	+11:19:14	1:17	1.13
142	AST1A	120	"		8:40	11:47:29	+10:33:45	1:28	1.15
143	AST1B	100	"		8:44	11:47:40	+10:35:15	1:32	1.16
144	AST2A	100	"		8:47	11:54:48	+10:46:24	1:28	1.15
145	AST3A	100	"		8:49	11:55:05	+11:12:29	1:30	1.15
146	AST4A	100	"		8:52	11:54:45	+10:56:51	1:33	1.16
147	AST6A	100	"		8:54	11:54:09	11:48:41	1:36	1.16
148	AST8A	100	"		8:57	11:55:39	11:19:15	1:40	1.16

Telescope: 61"

iris: 300

Frame prefix #: FR94B

Day of Week: MON/TUE

Focus: 3640

Humidity: Sheet #: 14

Observers: HICKS

Date MST/UT: MARCH

Tailpiece: Balance:

Temp O/I:

CP = 393.6 / 406 FOR CO+ / DICHR

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MST	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
149	10 TOEWS	1:0	CD		9:30	14:47:36	-14:44:01	-0:34	1.46 FIELD FOR SP94B119
150	"	"	"		9:44	14:47:34	-14:43:41	-0:27	1.48 SP94B120
151	"	"	"		9:46	14:47:34	-14:47:41		SP94B121
152	"	"	"		9:53	14:47:33	-14:43:34	-0:18	1.47 SP94B122
153	"	"	"						SP94B123
154	"	"	"		10:00	14:47:32	-14:43:14	-0:11	1.47 SP94B124
155	"	"	"		10:08	14:47:27	-14:42:56		SP94B125
156	"	"	"		10:12	14:47:26	-14:42:48	+0:00	1.47 SP94B126
157	"	"	"		10:20	14:47:26	-14:42:58	0:08	SP94B127
158	"	"	"		10:25	14:47:25	-14:42:48	0:14	1.47 SP94B128
159	"	"	"		10:29	14:47:25	-14:42:48	0:17	1.47 NAME WRONG IN HEADER SP94B129
160	"	"	"		10:34	14:47:24	-14:42:38	0:23	1.47 SP94B130
161	"	"	"		10:38	14:47:23	-14:42:37	0:26	1.48 SP94B131
162	"	"	"		10:42	14:47:22	-14:42:33	0:31	1.48 SP94B132
163	"	"	"		10:52	14:47:21	-14:42:33	0:41	1.49 SP94B133

9.1B

Telescope: 61"

Iris: 300

Frame prefix #: SP94B Day of Week: MON/TUE Humidity: 80 Sheet #: 1

Observers: FINK, GRUMBATE MST/UT: March 14/15

Balance: 340 Temp O/I: 34/38  
Guidepoint: 292.3 | 406

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.)
001	Haley's	600	0.50	180/1500	3:27:46	3:31:59	24 34 43	7 4:03	1.60	
002	"	1200	"			32.00	468	4:14	1.78	Super d=390.
003	"	1200			3:59:12			4:27	2.12	cloud mount in!
004	COMP BS 1262	2.0	0.5	224	4:28	4:04:59	21:59:02	4:31	2.00	
005	"	3.0	0.5	384	4:29	4:04:59	21:59:37	4:32	2.02	
006	"	2.5	"	184	4:30			4:33	2.03	
007	"	2.5	"	194	4:31			4:33	2.04	
008	"	2.5	"	224	4:32				2.05	
009	STD BS 3314	0.2	1.0	144	4:43	8:25:21	-3:53:31	0:25	1.25	CLOUDS ALLOWED NOT PHOTOMETRIC
010	"	0.3	"	194	4:44			0:26	1.25	
011	"	0.4	"	114	4:45			0:27	1.25	
012	"	0.4	"	224	4:46			6:28	1.25	
013	SS 171	600	0.5	200K?	7:45	10:59:36	00:31:27	0:53	1.21	VFMO
014	SS 171	600	0.5	210K 11300	7:56	10:58:02	00:30:27	1:08	1.23	possible faint star on objic. first star
015	"	600	0.5	210K 11300		10:56:59	00:22:58	1:19	1.25	
016	"	600	0.5	210K 11300				1:27	1.27	OUTSIDE OF SLIT

W ✓  
LOST

W ✓

W ✓  
LOST

W ✓

W ✓

W ✓

W ✓

W ✓

W ✓

W ✓

W ✓

W ✓

W ✓







378 656  
42/46  
Fins and dx

Telescope: 61"

Iris: 3.0

Day of Week: Wed

Humidity: 60 Sheet #: 4

Frame prefix #: SP99 B

Observers: FKX/Bottle Date MST/UT: Nov 16/17

Focus: 890  
Tailpiece:  
Balance: 2.0  
Temp O/I: ~45

Guidepoint: S92.3, 406

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.
046	Tempel 1	6.00	0.52mm	4849/1m	7:46:07	13:33:06	11:27.5	-1:30	1.15	purely cloudy, but very clear 30sec 1.75 at 1.20m plate
047	"	6.00	"	4849/1m	"	08:10	"	-1:15	1.12	no emission inside despite good seeing
048	"	"	"	4509/1m	08:14	33:02	27:34	-1:02	1.11	$r=1.87 \Delta=0.96$
049	"	12.00	"	7377/...	08:27	:02	:32	-00:49	1.09	very faint CN
050	"	11	"	"	"	33:02	42	-00:26	1.08	
051	"	11	"	6200	"	"	"	-00:04	1.07	
052	Comp BS S570	1.0	"	26000	9:42	14:02:15	69:42:16	-00:02	1.08	
053	"	"	"	23000	9:44	"	"	-00:01	"	~10% photometric limit
054	"	"	"	20000	"	"	"	"	"	
055	"	"	"	19000	9:46	"	"	7:00:01	1.08	
056	"	"	"	21000	"	"	"	"	"	
057	SAB BS S511	0.2	1.00	17800	9:58	14:45:57	01:54:26	-00:30	1.17	
058	"	11	"	16400	"	"	"	"	"	
059	"	0.3	"	28180	10:02	"	"	"	"	
060	"	11	"	22360	10:02	"	"	-00:27	1.17	
061	"	4	11	26900	10:05	"	"	-00:27	1.17	

Telescope: 61"

Iris:

Frame prefix #: SP94R

Day of Week: Wed

Focus: Europa

Humidity: S

Observers: Fink, Roffler

Date MST/UT: March 16/17

Tailpiece:

Temp O/I:

Guidepoint:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.)
062	Io-Tm	208	0.25		10136	<del>12h 30m</del>	10 N 22m 12s	10:12	1.47	done part in way set before sunset
063	"	"	"			"				just inside Europa
064	"	"	"							before Europa in Io Io's bright side N
065	"	"	"		Fish S	12h 30m	N 22m 12s	10:40	1.70	just outside Io

W W W W

94B

Telescope: 61"

Iris:

Frame prefix #: SP94B

Day of Week: Thur / Fri

Focus: 3980

Humidity: 65 Sheet #: 6

Observers: Hicks + all

Date MST/UT: March 17/18

Tailpiece:  
Balance:

Temp O/I: 42/46

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MST	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
66	SW-2	300	0.5	800 PK 1200 SK	7:48	8:19:21	+21:20:03	3:49	1.61
67	"	1200	0.5	3000 PK 1700 SK	7:54	8:19:22	21:20:04	3:54	PK 500 in guider Phot 17K 30 sec
68	"	1200	0.5	2K W	8:16			4:17	1.86-2.11 off guiding
69	"	1200	0.5	1.7K	8:37	8:19:23	21:20:07	4:38	2.12-2.4? off guiding in dc
70	COMP BS 3625	1.0	0.5	3K	9:02	9:08:32	+33:53:46	+4:13	1.64
71	"	5.0	"	18K	9:03				1.64 } ACTUALY BS 3625
72	"	7.0	"	26K	9:05				1.65 } NAME WRONG
73	"	7.0	"	22K					1.66 } IN HEADER
74	COMP BS 3510	10.0	0.5	9K	9:10	8:56:41	15:21:44	+4:40	2.37
75	"	15.0	0.5	5K	9:12				2.40 Photometry droppings
76	"	15.0	0.5	15K					2.45
77	"	15.0	0.5	27K					
78	"	15	0.5	23K					2.48
79	BS 4534	0.1	1.0	9K	9:22	11:48:45	+14:36:15	+1:53	1.17
80	"	0.4	1.0	2K					1.17

74B

Telescope: 61"

Iris:

Frame prefix #: SP94B Day of Week: Thu/Fri

Humidity: Sheet #: 7

Observers: Hicks + Date MST/UT: March 17/18

Focus: Tailpiece: Balance:

Temp O/I:

Guidepoint:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.
81	B54534	0.4	1.0		9:25					1.18
82	"	"	"	30K	9:26					1.18
83	"	"	"		9:29					1.19 refocused
X	ALL PREVIOUS		STANDARD		WERE OFF	LOOKING AT WRONG COLUMN				
84	B54534	0.1	1.0	47K	9:31					1.19
85	"	0.05	1.0	26K						1.20
86	"	0.05	1.0	30K	9:33					1.20
87	"	0.05	1.0	32K	9:34					1.20
88	B54529	1.0	0.5	64	9:40	11:48:05	-10:17:15	5:12 + 7:15		1.60
89	"	5.0	0.5	354	9:45				1.69	
90	"	4.0	0.5	264					1.69	
91	"	4.0	0.5		9:47					1.70
92	B53626	1.0	0.5	15K	9:53	4:08:28	+26:38:33	5:04	2.38	
93	"	1.5	0.5	27K	9:54					2.40
94	"	1.5	0.5	28K	9:55					2.41
95	"	1.5	0.5	21K						2.43





Telescope: 61"

Iris:

3640 OCT

Humidity: Sheet #: ) )

Frame prefix #: SP94B Day of Week: MON/TUE

Focus: Tailpiece:

Balance: Temp O/I:

Observers: HICW Date MST/UT: MARCH 21/22

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MST	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
115	STD BS 4534	7.05	1.0	30K	7:28	14:48:45	-14:35:50	0:14	105 CIRRUS ABOUT
116	"	0.65	1.0	24K	7:29			0:15	1.05
117	"	"	"	25K	7:30			0:16	1.05
118	"	"	"		7:31			0:17	1.07
119	10 TORUS	1.00	0.5	38K	9:37	14:47:36	14:44:00	-0:33	1.48
120	"	80	0.5	54K	9:43	14:47:34	-14:43:44	-0:28	1.48 CIRRUS EVERYWHERE
121	"	60	"	41K	9:46	14:47:34	-14:43:40		1.48
122	"	50	"	40K	9:52	14:47:33	-14:43:31	-0:19	1.47
123	"	40	"	36K	9:56	14:47:33	-14:43:26	-0:15	1.47
124	"	35	"	42K	9:59	14:47:32	-14:43:14		1.47
125	"	40	"	36K	10:08	14:47:27	-14:42:56	-0:03	1.47
126	"	55	"	31K	10:12	14:47:26	-14:42:48		
127	"	75	"	32K	10:19	14:47:26	-14:42:38	+0:04	1.47
128	"	120	"	61K	10:21	14:47:25	-14:42:48		1.47
129	"	100	"	59K	10:28	14:47:25	-14:42:48	0:16	1.47



Telescope: 61"

Iris: 300 (octal)  
Focus: 3640 Humdy: 85 Sheet #: 10  
Tailpiece:  
Balance: Temp O/I: 32/38  
CP 391.5, 406

Frame prefix #: SP44B Day of Week: MON/TUE

Observers: HICKS GIRDNER Date MST/UT: MARCH 21/22

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MST	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
100	Kushidz	1:20	0.5	1000	5:21	9:45:54	4:24:47	+0:10	1.13 Guiding poor
101	"	"	"	1060	5:43			0:33	1.14
102	"	"	"	1K	6:06	9:45:55	4:24:58	0:56	1.16
103	"	"	6.5	1K	6:28	9:45:55	4:25:01	1:18	1.20 - 1.29
104	COMP BS 3951	1:10	0.5	63K	6:58	10:00:42	7:35:35	1:33	1.06 CIRRUS COMP MOVING IN
105	"	1.0	0.5	34K	6:54			1:34	1.06
106	"	1.0	0.5	39K	7:00				1.06
107	"	"	"	38K	7:07			1:36	1.07
108	"	"	"	37K	7:02			1:37	1.07
109	(COMP) BS 5423	2:0	0.5	31K	7:14	14:29:31	4:19:44	-2:41	1.19
110	"	"	"	30K	7:14			-2:40	1.19
111	"	"	"	24K	7:15			-2:39	1.19
112	"	"	"	32K	7:16			-2:38	1.19
113	"	"	"	34K	7:17			-2:37	1.19
114	"	"	"	25K	7:18			-2:36	1.19



Telescope: 61"

Iris:

Frame prefix #: IM94B

Day of Week: SAT/SUN

Focus: 960 (D) Humidity: 95 Sheet #: 1

Tailpiece:

Observers: Grady Hicks

Date MST/UT: 3/13 - 3/14

Balance: Temp O/I: 25/30

Guidepoint:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start UT	RA set	Dec set	hour-angle exp-start	SecZ	Comments: VME Crashes, seeing, Moon, clouds, etc.
0001	1210-D	600	OPEN		5:39	11:57:11	10:13:49	-2:27	1.38	
0002	1210-7	600	"		5:42	11:59:04	10:13:58	-2:16	1.27	
0003	1210-2	600	"		5:55	12:00:56	10:13:50	-2:06	1.24	
0004	1210-3	600	"		6:07	12:02:49	10:13:50	-1:55	1.22	
0005	1210-4	600	"		6:20	12:02:49	9:46:10	-1:42	1.19	
0006	1210-5	600	"		6:33	12:00:56	9:46:10	-1:29	1.16	
0007	1210-6	600	"		6:45	11:59:04	9:46:10	-1:14	1.14	HUMIDITY 89% SKY CLEAR
0009	1210-0	600	"		7:09	11:57:11	10:14:09	-0:48	1.10	
0010	1210-1	600	"		7:22	11:59:04	10:14:13	-0:36	1.09	
0011	1210-2	600	"	from header →	(7:35)	12:00:56	10:14:09	-0:25	1.06	
X	OPPS FORGOT TO RECORD				THIS AT THE TIME,			THIS FROM IRAS HEADER		
0008	1210-7	600	"	1	6:57	11:57:11.4	9:48:10		1.12	
X	WE RETURN TO ORIGINAL				SCHEDULED PROGRAM					
0012	1210-3	600	"		7:48	12:02:48	10:14:16	-0:14	1.08	
0013	1210-4	600	"		8:01	12:02:48	9:48:30	-0:01	1.08	

