

Telescope:

Frame prefix #: F285E

Day of Week: Sat

RA offset: -

Focus: 3856

Humidity: 75% Sheet #: 1

Observers: Marcia, Fink
Schultz

Date MST/UT: July 20/21

Dec offset: 2'07"

Tailpiece: 17

Balance: 50

Temp O/I: 56/58

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.)
001	GZ	120.0	V	16000 /	10 26			1hr	with refraction
002	"	60	V	16000 /	10 32	23 50 31.8	+58 14"	0 45 E	with still refraction
003	"	20	V	9700 / 800	10 36	"	"		cut OK m.
4	"	20	R	15000 / 900	10 39	"	"	36 E	with refraction
5	"	10	R	8000 / 80	10 42	53.8	14 08	54 E	
6	"	20	I	5400 / 100	10 48			31	good for pictures
7	"	20	I	5300 / 100	10 53				but not photometric
8	"	60s	B	5600 / 800	10 55	58.4	14 17	0 20 E	cloud at 11:20
9	"	100s	B	8100 / 1000	10 58				remains clear
10	"	100s	B		11 03				} color composite
11	"	10	V		11 04				
12	"	10	R		11 05				
13	"	120	R	16000	11 07	40.6	14 26		
14	"	5"	V	/900	11 12			0 04 E	noted faint galaxy light

Telescope: 61"

Frame prefix #: FR95E Day of Week: MONDAY

RA offset:

Focus: 4955

Humdty:

Sheet #: 4

Observers: NMS, ABS, RLM, UF Date MST/UT: 23 JULY 85

Dec offset:

Tailpiece: 353

Balance: 710
710

Temp 0/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.)
✓ 38	INCAND	60	D0 0.08	3400	21:37				
✓ 39	TH-AR	60	"	4500	21:46				
✓ 40	FLAT FIELD	600	WIDE OPEN	3500					
✓ 41	FLAT FIELD	600	"	3500					
✓ 42	DARK	0.05	"						CLOCK RESET
✓ 43	JUPITER	60.0	0.08						
✓ 44	INCAND	105	0.08						TOP, BOTTOM OF SLIT ADJUSTED
✓ 45	TH-AR	60s	0.08	4500	12:25				
✓ 46	TH-AR	60s	"		12:25				
✓ 47	JUPITER	60s	"	3700	12:38				
✓ 48	IO	150s	"	1500					
✓ 49	TH-AR	60s	"	1500					
✓ 50	IO	600	"		1:02:41				
✓ 51	DARK	0.05	"	606	1:19:47				
✓ 52	DARK	0.05		607	1:21:25				CLOCK RESET

Telescope: 61"

Frame prefix #: FR55E

Day of Week: MON NIGHT

RA offset:

Focus:

Humdty:

Sheet #: 5

Observers: NMS, RLM

Date MST/UT:

Dec offset:

Tailpiece:

Balance:

Temp \emptyset /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.)
✓ 53	EUROPA	150s	0.08	1460	1:25				
✓ 54	"	600s	"	3000	1:32:48				
✓ 55	JUPITER	60s	"		1:47:31				FROM HERE DOWN, LOGSHEET TIMES ARE THE MORE ACCURATE ONES
✓ 56	TH-AR	60s	"		1:50:14				
✓ 57	INCAND	60s	"		1:52:41				
✓ 58	INCAND	60s	"		1:54:55				DEWAR TOPPED OFF
✓ 59	IO	150s	"		2:12:38				"4-QUICKIES"
✓ 60	IO	150s	"		2:15:43				4 NEARING ONE END OF SLIT
✓ 61	IO	150s	"		2:18:48				
✓ 62	IO	150s	"		2:22:01				
Non-Fps ✓ 63	IO	600s			2:26				
✓ 64	JUPITER	60s			3:37:08				
✓ 65	GANYMEDE	150s			3:42:48				Refocussed to 4952
✓ 66	EUROPA	150s			3:47:57				SEEING 2"-3"
✓ 67	CALLISTO	150s			3:54:09				SEEING WORSE

Telescope: 61"

Frame prefix #: FR85E

Day of Week: MONNIGHT

RA offset:

Focus: 4952

Humdty:

Sheet #: 6

Observers: NMS, RLM

Date ~~MST~~/UT: 23 JULY 85

Dec offset:

Tailpiece:

Balance:

Temp \emptyset /I:

15/20

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	JUPITER	60s	0.08		3:59:49				IO PLACED ON SLIT ALSO SEEING SUCKS
✓ 69	TU-AR	60s	0.08		4:03:26				
✓ 70	INCAND	60s	0.08		4:06:02				
✓ 71	DARK	0.05	0.08		4:08:59				
✓ 72	DARK	0.05	0.08		4:10:16				
✓ 73	IO SHADOW	60	0.08		4:31:02				
✓ 74	SOUTH BELT	60	0.08		4:33:47				
✓ 75	INCAND	60	0.08		4:48:47				
✓ 76	INCAND	60	0.08		4:50:50				
✓ 77	FLATFIELD	1200	WIDE		4:56:00				
✓ 78	FLATFIELD	1200	WIDE		5:18:17				
✓ 79	SCATTERED LIGHT	1200	DARK SLIDEN		5:42:11				
✓ 80	DARK	0.05	"	620	6:06:38				
✓ 81	DARK	0.05	"	620±20	6:07:43				

5

Telescope: 61"

5

5

Frame prefix #: F28TE

Day of Week: Tues

RA offset: 28

Focus:

Humdty:

Sheet #: 7

Observers: Fink, Schain

Date MST/UT: 23/24 July 1985

Dec offset: 21

Tailpiece:

Balance:

Temp θ /I:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MST/UT	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
✓ 82	Mercury	2 ^m	uvray						512x512
✓ 83	"	4 ^m			00 h:	9:44:07	10:44:06	31 W	daytime; middle of mercury.
✓ 84	"	"	uv ray		0 ^h 22 ^m	08.5	43.05	8 ^h 22 ^m W	near S pole
✓ 85	Th-A2	2 ^m	"						
✓ 86	SKY	4 ^m	"		0 ^h 58 ^m 49 ^s				NEAR N. POLE 1' NORTH
✓ 87	SKY	4 ^m	"		0 ^h 58 ^m 46 ^s				NORTH 1' NORTH
✓ 88	♀	4 ^m	"		1 ^h 05 ^m 32 ^s				POSSIBLE FAINT CLOUDS
✓ 89	INCAND	1000 ^s		~11000	1 11 46				
✓ 90	INCAND	800 ^s		9135	1 30 02				
✓ 91	Th-A	120 ^s			1 45 58				
✓ 92	DARK	0.05			1 52 24				
✓ 93	DARK	0.05			1 53 14				
✓ 94	♀	240 ^s			2 27 17				
✓ 95	♀	240 ^s			2 32 18				
✓ 96	♀	240 ^s			2 37 17				

Telescope: 61"

Frame prefix #: FR85E

Day of Week: TUES

RA offset:

Focus:

Humdty:

Sheet #: 8

Observers: SCHNEIDER, FINK

Date MST/UT: 23/24 JULY 85

Dec offset:

Tailpiece:

Balance:

Temp \emptyset /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.)
✓ 97	♀	4 ^m	VERY NARROW	1700	2:42:08				SOME CLOUD INTERFERENCE
✓ 98	♀	4 ^m			2:50:05				CHORD OF DOME ACROSS MIRROR ~ 90°
✓ 99	SKY	4 ^m			2:57:20				TRACKING OFF.
✓ 100	Th-Ar	2 ^m			3:02:54				DEWAR DRY
✓ 101	☿	1 ^m			5:26:26				SLIT NARROW
✓ 102	Io	150 ^s			5:33:35				" "
✓ 103	Th-Ar	60 ^s	↓		5:39:40				" "
✓ 104	Th-Ar	60 ^s	362		5:45:18				SLIT @ 362
✓ 105	Io	150 ^s	362		5:49:50				" "
✓ 106	Io	150 ^s	MAX		5:54:05				SLIT HUGE
✓ 107	Th-Ar	60 ^s	"		5:59:06				
✓ 108	☿	60 ^s	NARROW		6:00:25				NARROW SLIT TOO MANY COUNTS!
✓ 109	☿	60 ^s	"		6:16:36				
✓ 110	Io	600 ^s	362	2900	6:23:47				
✓ 111	Io	300 ^s	"	2000	6:36:00				

Telescope: 61"

Frame prefix #: FR85E

Day of Week:

RA offset:

Focus:

Humdty:

Sheet #: 9

Observers:

Date M81/UT: 24 JULY 85

Dec offset:

Tailpiece:

Balance:

Temp 0/I:

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start M81 UT	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
✓ 112	IO	150	362	1200	6:43:58				
✓ 113	IO	150	362	1350	6:46:44				
✓ 114	IO	75	362	1000	6:51:08				
✓ 115	IO	40	362	475	6:56:29				
✓ 116	IO	20	362	700	6:59:10				
✓ 117	IO	10	362	660	7:01:40				
✓ 118	IO	150	362	1480	7:05:00				
✓ 119	Tu-Ar	60			7:19:26				
✓ 120	DARK	0.05			7:21:39				shutter engaged
✓ 121	DARK	0.05			7:22:35				
✓ 122	DARK	0.05			7:23:36				
✓ 123	DARK	0.05			7:24:06				
✓ 124	INCAND	60 ^s		3800	7:26:45				
✓ 125	INCAND	150			7:29:42				
✓ 126	INCAND	150			?				

Telescope: 61"

Frame prefix #: FR95E

Day of Week:

RA offset:

Focus:

Humdty:

Sheet #: 10

Observers: RLM NMS

Date MST/UT: 24 JULY 85

Dec offset:

Tailpiece:

Balance:

Temp 0/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.)
✓ 127	FLATFIELD	900 ^s	2/2 OPEN DO	5930	8:26:6A				
✓ 128	FLATFIELD	600 ^s	2/KO OPEN	4500	8:51				HAT WAS ON FILTER CHANGE
✓ 129	TH-AR	60 ^s	"		9:00:33				FLTS IN ADOZ WERE FIXED
✓ 130	INCAND	60 ^s	"	4550	9:03:05				
✓ 131	Z	60 ^s	362/KO	2350	9:13:26				SLIT E-W
✓ 132	Z	150 ^s	"	4500	9:16:29				SLIT E-W
✓ 133	Z	150 ^s	"	4700	9:31:54				SLIT N-S
✓ 134	G-Z	120 ^s			10:44:02				
✓ 135	Th-Ar	60 ^s			10:48:18				
✓ 136	G-Z	600 ^s			10:53:31				COMET ~ 40% FROM TOP OF SLIT
✓ 137	G-Z	1200 ^s			11:06:44				
✓ 138	Th-Ar	60 ^s			11:23:02				
✓ 139	Z	60 ^s			11:44:34				
✓ 140	Z	60 ^s			11:47:21				
✓ 141	DARK	0.05			11:50:29				

Telescope: 61"

Frame prefix #: FR88E

Day of Week: Wednesday

RA offset:

Focus: 3844

Humdty: 55%

Sheet #: 12

Observers: DiSanti, Fink, Date MST/UT: July 24/25
Christy, Schulte

Dec offset:

Tailpiece: 17

Balance: 500 Temp 0/I: 58/60

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.)
✓ 150	desk lamp	0.3							(380, 100) - (380, 650)
✓ 151	He	0.3							(384, 100) - (384, 650)
✓ 152	He	1.0							(381, 100) - (381, 650)
✓ 153	H α	1.0							(383, 100) - (383, 650)
✓ 154	H α	10.0							" "
✓ 155	XE	1.0							(384, 100) - (384, 650)
✓ 156	XE	10.0							Top of the dome 8:40 P.M. (385, 100) - (385, 650)
✓ 157	BS 6629	0.1	1mm						(384, 100) - (383, 650)
✓ 158	"	0.1	1mm	10,412					" "
✓ 159	"	0.1	0.5m	6,686					windy, seeing better, but image bouncy
✓ 160	"	0.1	0.25m	3,556	5:33:30				(383, 100) - (383, 650)
✓ 161	"	0.2	0.20m	5,620	5:36:30				(385, 100) - (385, 650)
✓ 162	"	0.4	0.1m	3800	5:39:45				(385, 100) - (384, 650)
✓ 163	"	0.1	1.0m	4116	5:43:10				(385, 100) - (385, 650)
✓ 164	G'Z	60.0	1.0mm		7:05:09		~59.15	1:02	Tailpiece: 40 (388, 100) - (388, 650)

✓ 157
 ✓ 158
 ✓ 159
 ✓ 160
 ✓ 161
 ✓ 162
 ✓ 163

GIACOBINI-ZINNER

Telescope:

Frame prefix #: FC85 E Day of Week: Wed

RA offset: +0.4"
Dec offset: 2' 14" South

Focus: 3844 Humdty: 57% Sheet #: 13
Tailpiece: 48
Balance: 500 Temp 0/I: 55/58

Observers: Christy D. Santi
Fink Schultz Date MST/UT: July 24/25

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.)
✓165	GZ	300	1.0mm	5230	7:08			1:05 W	(390, 100) - (389, 650) Slight wobble off alt & not focus
✓166	GZ	300	1.0mm	6000	7:17:18			1:16	(393, 100) - (392, 650) comet stayed in position
✓167	GZ	300	0.25	3377	7:29:33			1:27	(393, 100) - (392, 650)
✓168	GZ	600	0.25	5000	7:41:18			1h 39	(391, 100) - (390, 650)
✓169	GZ	1200	0.25	7800	7:57:25			1h 55m W	(393, 100) - (392, 650)
✓170	BS 5	20	1.0mm	7402	8:33:24				(393, 100) - (392, 650) out of focus - 10 sec out
✓171	BS 5	80	0.25	5640	8:38:27				(393, 100) - (394, 650) out of focus - 10 sec out
✓172	"	30	"		8:40	05 32.3	+18 19.13	2h 36 E	(393, 100) - (393, 650)
✓173	"	"	1	7000	8:41	"	"	"	(393, 100) - (393, 650)
✓174	"	"	"		8:42			2h 33 E	(394, 100) - (393, 650)
✓175	GZ	1200	0.25	8500	8:55:53	0:18:19.7	+59:14:15	2h 54m W	(390, 100) - (389, 650) frank has big wind.
✓176	BSC	85	0.25	4000	9:34	05 32.0	19 02	1h 40 E	(389, 100) - (388, 650) 2:25 A.M. Topped off dewar
✓177	"	125	1	10000	9:36	"	"		(391, 100) - (390, 650)
✓178	"	10	"	9000	9:39	"	"	1h 37 E	(380, 100) (380, 650)
✓179	NGC 7469	60	1.0	5000	10:20:25	23:02:30	08:45:13		(389, 100) (389, 650)

↑ error in file header for #179

Telescope:

Frame prefix #: **FR95LE** Day of Week: **Thurs**

RA offset:

3863

Focus:

Humdty: **49%**

Sheet #: **15**

Observers: **DiSanti Fink** Date MST/UT: **July 25/26**
Schultz

Dec offset:

Tailpiece: **17**

Balance: **50**

Temp O/I: **58/62**

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.)
193	2-Crb	1.00	R			15:34:09.5	26:43:26		Filled dewar 7:10 P.M. center of dish 470,391
✓ 194	"	1.0	"						Focus set to 3838
✓ 195	"	5.0	"					1 ^h 40 ^m W	
✓ 196	"	5.0	"						
✓ 197	"	5.0	"						
✓ 198	β-Crb	5.0	"						
✓ 199	"	10.0	"						
✓ 200	"	20.0	"		4:46:07	15:27:12.5	29:07:00		
✓ 201	"	20.0	"		4:48:24			2 ^h 15 ^m W	
✓ 202	γ-Ser	10.0	"	6700	5:01:25	15:55:45.6	15:40:09	1 ^h 58 ^m W	
✓ 203	"	20.0	"	12500	5:03:20			2 ^h 00 ^m W	
✓ 204	"	10.0	"	5900	5:05:25			2 02 W	
✓ 205	"	10.0	"	6000	5:07:20			2 04 W	
✓ 206	ζ-Her	5.0	"	7500	5:20:20	16:40:44.0	+31:35:19	2 32 W	
✓ 207	"	5.0	"	8060	5:21:56			1 34 W	

cc. Disk
470,391

16

Telescope:

Frame prefix #: **FR85E** Day of Week:

RA offset:

Focus: **3838**

Humdty:

Sheet #

Observers: **Di Sardi, Frik** Date MST/UT:

Dec offset:

Tailpiece: **17**

Balance: **50**

Temp θ /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.)
✓ 208	3-Her	5.0	R	8000	5:25:35	16:40:46.0	+31:35:19	1:37W	
✓ 209	DM+38	20.0	R	4600					
✓ 210	"	30.0	R		5:48:17	17:14:38	-38:35:43	1:26W	
✓ 211	"	30.0	R	11300	5:50:10			1:28W	
✓ 212	VSCO	1.0	R	2700					
✓ 213	"	2.0	R	5700	6:04:30	17:29:47.9	-37:18:27	1:27W	
✓ 214	"	3.0	R	8700	6:10:35			1:34W	
✓ 215	μ -Her	1.0	R	1450	6:38	17:45:52	+27:41:22	1:46W	Filed down 11:15 P.M.
✓ 216	"	5.0	"	5600	6:41:46			1:49	
✓ 217	"	5.0	"	5000	6:43:30			1:50	
✓ 218	"	8.0	"	8767	6:45:08			1:52	
✓ 219	102 Her	5.0	"	1800	7:10:10	18:08:07.8	+20:46:28	1:55	
✓ 220	"	20.0	"	7200	7:13:26			1:58W	
✓ 221	"	20.0	"	5750	7:15:06			2:00	
✓ 222	DM+58265	10.0	"	1200	7:45:43	23 30 41.7	59 02 55	2:52E	

M=2.7

Telescope:

Frame prefix #:

Day of Week:

RA offset:

Focus:

Humdty:

Sheet #

17

Observers:

Date MST/UT:

Dec offset:

Tailpiece:

Balance:

Temp \emptyset /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.)
✓223	DM 158 ⁶⁰	60.0	R	4300	7:48:58	23:30:41.0	59:02:55	2:48 E	
✓224	"	120.0	"	7900	7:51:35			2:46	
✓225	"	120.0	"	7640	7:55:18			2:42	
✓226	BS 8752	30.0	"	8600	8:26:16	22:59:30.9	56:49:47	1:40	
✓227	"	10.0	"	2900	8:23:28			1:43	
✓228	"	30.0	"	8700	8:28:21			1:38 E	
✓229	NGC 7469	30.0	"	6500	8:55:55			1:13 E	
✓230	"	"	"		9:00:45				
✓231	"	120	"		9:06:57				
✓232	"	30	✓	6600	9:11:56				
✓233	"	120	✓		9:14:25			55 ^m E	
✓234	"	60	B	6700	9:19:25	23:02:39.7	+8:45:32	50 ^m E	
✓235	"	240	"		9:22:21			47 ^m E	
✓236	"	30.0	T	13000	9:28:27				
✓237	"	15.0	"	6500	9:31:12				

Telescope:

Frame prefix #: **FR85E** Day of Week:

RA offset:

Focus: **3838** Humdty:

Sheet #: **(18)**

Observers: **Dasanti Schultz** Date MST/UT:

Dec offset:

Tailpiece: **17**

Balance: **50** Temp \emptyset /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.)
✓238	NGC 7469	60	I		9:33:43				
✓239	LN ⁶⁸⁻²¹⁶ ₂₈₀	3.0	I		9:54:57				
✓240	"	"	I		9:56:13				
✓241	"	1.0	R		10:19:33				Topped off dewar 3:15 A.M.
✓242		0.5	R		10:21:38			1 ^h 2 ^m E	
✓243		0.5	✓		10:25:16				
✓244		1.0	"		10:25:13				
✓245		"	"		10:26:22			57 ^m E	
✓246	"	3.0	B		10:29:19				
✓247	"	3.0	"		10:30:33				
✓248	GZ	60.0	B		10:44:55				
✓249	GZ	20.0	B	6000	10:48:12	00:26:26.4		51:25:52	
✓250	GZ	20.0	✓	13,000	10:50:21				
✓251	"	10.0	"	7000	10:52:11			41 ^m E	
✓252	"	10.0	R	9000	10:54:00				

Telescope:

Frame prefix #: FR85E

Day of Week: THUR

RA offset:

Focus: 3838

Humdty:

Sheet #

19

Observers: D. Santis
Schulz

Date MST/UT: July 25/26

Dec offset:

Tailpiece: 17

Balance: 50

Temp 0/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.)
✓253	GZ	20.0	R		10:55:48			37 ^m E	
✓254	GZ	40.0	R		10:57:37				
✓255		40.0	✓		10:59:40				
✓256		20.0	I	8600	11:01:36			31 ^m E	
✓257		40.0	I		11:03:47				
258	Halley	120	R		11:39:12			5^h 19^mE	5 min exp way over exposed
258		30	R		11:43:05			30sec	2 min ex way over exposed
✓258	Flat Field	5.0	B	7400					
✓259			B						
✓260									
✓261		6.0	✓	8000					
✓262									
✓263									
✓264		0.3	R	6500					

