

Telescope: 61"

214-725

10 P.M.

Frame prefix #: FR85G Day of Week: TU/WED

RA offset:

Focus: 3797 Humdty: 100% Sheet #: 1

Observers: Fink, Rein, Date MDT/UT: Aug 20/21  
Schultz, Strittmatter

Dec offset:

Tailpiece: 17 Balance: 050 Temp O/I: 52/57

Exp #	Object	Exp time	Filter slit	Counts Object/Sky	Exp start MDT UT	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
✓ 001	Halley	60	V	1700/1700	11:43:30			6:11:28	Fill dewar 3 AM. Halley ~ 2' N of orb
✓ 002	"	120	V	3500/3700	11:46:11	6:05:54.0	19:09:40	3:14.4/E	Humidity gauge reads
✓ 003	✓	60	V	8500/2800	11:40:14	6:05:55	19:09:40	3:14.0/E	greater than 100% - appears to be broken
✓ 004	R	60	R	1000/500	11:52:51	6:05:54	19:09:39	3:13.7	seeing ~ 3.5 pixels
✓ 005	I	120	I	1600/1200	11:55:43	6:05:54	19:09:39	3:13.4	Halley ~ 10 pixels with 489, 389
AM ✓ 006	✓	60	V	13000/8000	11:59:21	6:05:55	19:09:39	3:13.1	
1.25 ✓ 007	LAM 68 216	1.0	V	5000/800	12:06:59	0:17:30	15:41:58	2:12.5	check with 489, 386
✓ 008	11-1/2	5.0	V	17000/3200	12:01:16			2:29:30	Finder charts
✓ 009	check	5.0	V	-	12:03:15	00:17:30.7	15:41:58		
1.28 ✓ 010	"	1.0	V	5000/1000	12:15:43				
✓ 011	FLAT Field	.70	✓	8700					
✓ 012	"	"	"						
✓ 013	"	"	"						
✓ 014	"	.2	R	6600					
✓ 015	"	"	"	6500					

✓ 016 Dark 1.0

✓ 017 Dark 1.0

Telescope:

Inclined 60°  
Outdoor 55°

(2)

Frame prefix #: F28SG Day of Week: wed 1/1h

RA offset:

Focus: 3797

Humdty:

Sheet #:

Observers: Fink, R. Smith, Robert, Hill, &amp; Fink, Strickland

Date MST/UT: Aug 21/22

Dec offset:

Tailpiece: 17

Balance: 30 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.)
✓ 018	NGC 6814	60 sec	V	5500	5:57:29	19:41:53.0	-10:23:31		
✓ 019	"	180 sec	V	14900	6:01:28			1:01 <sup>m</sup> W	
✓ 020	"	60	R	7668	6:09:58			1:09	
✓ 021	"	120	R	14500	6:13:22			1:13	
✓ 022	"	60	I	4000	6:20:33			1:20	
✓ 023	"	180	I	10800	6:23:43			1:23	A cloud - south
✓ 024	"	180	I	8300	6:31:57	"	-10:25:11		moved tel v 15 S
✓ 025	"	180	B	5500	6:40:30	"	-10:23:31	1:40	more tel back
✓ 026	"	360	B	9200	6:45:40			1:45	
✓ 027	"	600	B	12900	6:55:35				
✓ 028	DARK								
✓ 029	DARK								
✓ 030	LAN 68-216	15	B	8300	7:33:25	00:17:32.0	+15:42:18	2:03E	done after #31 1.18
✓ 031	"	15	B	8200	7:29:32			2:05	1.19
✓ 032	"	5	V	7000	7:43:57			1:59.	1.18

Telescope:

Frame prefix #: FR85G

Day of Week: wed 17th RA offset:

Focus: 3997

Humdty:

Sheet #:

Tailpiece: 17

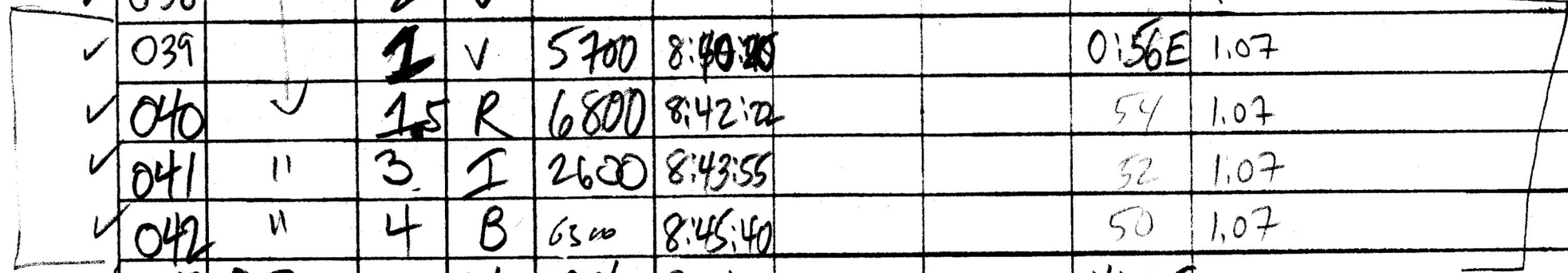
Observers:

Date MST/UT: Aug 21/22

Dec offset:

Balance: 50 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.)
✓ 033	LANG8-216	5	V	7800	7:46:52	00:17:31.2	+15:42:18	1:49E	1.15
✓ 034		5	R	7200	7:48:45			1:47	1.15
✓ 035		5	R	8000	7:57:08			1:39E	1.13
✓ 036		10	I	4300	8:00:40			1:35	1.12
✓ 037		10	I		8:01:43			1:34	(1.12) filled dewar @ ~ 8h UT
✓ 038		2	V						? refocused
✓ 039		1	V	5700	8:40:00			0:56E	1.07
✓ 040		15	R	6800	8:42:02			54	1.07
✓ 041	"	3	I	2600	8:43:55			52	1.07
✓ 042	"	4	B	6300	8:45:40			50	1.07
✓ 043	GZ	10	V	10900/700	9:04:07			4:26E	
✓ 044	"	30	V	17K	9:08:00				
✓ 045	"	10	R	15000	9:11:12				
✓ 046	"	5	R	7500	9:15:56				
J ✓ 047	"	10	I	5000	9:17:59			4:12E	



- new tape

Telescope:

Frame prefix #: FR856

Day of Week: Wed 17k

RA offset:

Focus:

Humdty:

Sheet #: 4

Observers:

Date MST/UT: 2/22

Dec offset:

Tailpiece:

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.)
✓ 048	G-z	30	I	14500	9:20:22	4:11:41.4	49:03:48		
✓ 049	"	20	B	8850	9:23:05			4:07E	
✓ 050	"	60	B	17K	9:25:27				
✓ 051	"	20	R	17K	9:28:31				
✓ 052	"	60	V	719K	9:34:02				moved tel 21° W
✓ 053	Halley	60	V	4760	10:11:42			5 <sup>h</sup> 12 <sup>m</sup> E	487, 399
✓ 054	"	120	V	9500	10:17:11	6:06:17.5	+19:11:13	5:05.5	486, 398
✓ 055	"	120	V	9200 <sup>202x</sup>	10:24:11			4:58.5	487, 399
✓ 056	"	120	V	10900	10:35:35			4:47	486, 399
✓ 057	DARK								
✓ 058	DARK								
✓ 059	Halley	120	V	9970	10:50:26			4 <sup>h</sup> 33 <sup>m</sup> E	487, 400
✓ 060	"	120	R	12120 <sup>202x</sup>	10:55:34			4:28	487, 400
✓ 061	"	100	R	11700/2300	10:59:45			4:24	488, 398
✓ 062		60	R	7200	11:04:01			4:20	487, 398

Clock 4<sup>m</sup> 52<sup>s</sup> slow  
 ⇒ add 4<sup>m</sup> 52<sup>s</sup> to all times  
 (5)

Telescope:  
 Frame prefix #: FR856 Day of Week: Wed Th RA offset: Focus: Humdty: Sheet #:  
 Observers: Date MST/UT: 2/22 Dec offset: Balance: Temp Ø/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.)
✓ 063	Hally	2 <sup>m</sup>	I	59w/28w	11:06:58	6:06:21.8	+19:10:52	4:17E	
✓ 064	"	3 <sup>m</sup>	I	86w/38w	11:10:46			4:13	480, 397
✓ 065	"	5 <sup>m</sup>	V	16w/57w	11:15:45			4:08	
✓ 066	"	1 <sup>m</sup>	R	25w/10w	11:27:21			3:57	
✓ 067	"	2 <sup>m</sup>	R	42w/1w	11:30:15			3:54	480, 397
✓ 068	"	1 <sup>m</sup>	V	6022	11:33:57			3:50	480, 397
✓ 069	"	5 <sup>m</sup>	V		11:36:56			3:47	
✓ 070	"	1 <sup>m</sup>	V	64w/14w	11:43:11			3:41	480, 396 (image 070 at grid of third tape also but no double Exp)
NEW TAPE ✓ 071	DARK	1 sec	-						
✓ 072	Flat Field	0.4	V	87w					
✓ 73	"	"	"						
✓ 74	"	"	"						
✓ 75	"	0.15	R	76w					
✓ 76	"	"	"	"					
✓ 77	"		I	814w					

78 " " I 79, 80B 2.0 s ~ 8000 081 Dark 1 sec

set spec rows 272-471  
 cols 55-854

6

Telescope:

Frame prefix #: FR856 Day of Week: Thurs Nite RA offset: Focus: Humdty: Sheet #:  
 Observers: Fink, Sill, Disanti Date MST/UT: 2/23 Dec offset: Tailpiece: Balance: Temp  $\emptyset$ /I:

Tape file

Exp #	Object	Exp time	slit(mm)	Counts Object/Sky	Exp start MST/UT	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
13 ✓	Helium	0.5 sec	0.01mm						
14 ✓	"	2.0	"	850/650					
15 ✓	Argon	2	"						
16 ✓	"	0.5	"						
17 ✓	Xenon	0.5	"						
18 ✓	"	2							
19 ✓	Neon	0.2							
20 ✓	"	1							
21 ✓	Mercury Arc.	4							
22 ✓	Desk Lamp (cont)	0.1							
23 ✓	10 Lac	0.4	1.0 mm		7:20:56	22:38:37.8	+38:56:08	0 <sup>h</sup> 35 <sup>m</sup> E	appears to be 0.25 for A Burs
24 ✓	"	"	"		7:22:48				
25 ✓	"	"	"		7:25:18				
26 ✓	RS 937	4 sec	0.25"	8000	8:26			3:59 <sup>E</sup>	Rotated tailpiece to 97° ( $\Rightarrow$ P.A. = 80°) for 400-att for 2.13" dia
27 ✓	"	4	"	9000 @ (238/395)	8:29:54				

Telescope:

Frame prefix #: FR85G

Day of Week: Th/Fri

RA offset:

Focus:

Humdty:

Sheet #:

Observers:

Date MST/UT: 22/23

Dec offset:

Tailpiece:

Balance:

Temp  $\emptyset$ /I:

Exp #	Object	Exp time	Filter slit (mm)	Counts Object/Sky	Exp start MST	RA set	Dec set	Hour-angle exp-start	Comments (P.A., seeing, Moon, clouds, etc.)
28 ✓	BS 937	4 sec	0.25mm	6700 (238, 511)	8:39:33	3:07:59.8	+49:31:37	3:45 E	
29 ✓	"	"	"	9200	8:48:31			3:37	
30 ✓	099	"	"		9:02:58				Topped off dewar at ~8:50 UT
31 ✓	100	"	"	8800	9:04:10			3:21 E	
32 ✓	101 G-Z	300s	"	1500	9:22:05		+48:32	4:13 E	
33 ✓	102	1200	"	~6000	9:35:31			4 <sup>h</sup> 00 <sup>m</sup> E	t exp ~18 <sup>m</sup> (interrupted ~2 <sup>m</sup> for recentering)
34 ✓	103	1320	"	~6500	10:02:48			3 <sup>h</sup> 33 <sup>m</sup>	t exp lessened by ~1 <sup>m</sup> 45 <sup>s</sup> (center)
35 ✓	BS 2047	2	1.0	~12K	10:49:00	5:53:27.0	+20:14:44	4 <sup>h</sup> 23 E	Rotated tailpiece back to 17° (PA=0) (out of focus as w/ BS 937)
36 ✓	105	1	"	8000	10:50:38				
37 ✓	106	1	"		10:52:00				
38 ✓	107 Halley	300	"		11:14:05		+19:13	4:09	
39 ✓	108 "Obj #2"	"	"		11:26:15				
40 ✓	109 Halley	600	"		11:34:36			3:49	
41 ✓	110 "	150 <sup>s</sup>	"		11:46:19				Cut exp short @ 11:53:58 (twilight)
42 ✓	111 Flat field	3s	"	7200					

✓ 112 " 15s, 0.25 9000 ; ✓ 113 15s .25mm ~9000

Telescope:

Frame prefix #: FRBSG Day of Week: Fri/Sat

RA offset:

3842

Humdty: 58% Sheet #:

Observers: Finck Schulte Date MST/UT: 23/24

Dec offset:

Focus: Tailpiece: 17

Balance: Temp 0/I: 62/63

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.)
✓ 114	B5 2047	1.0	1.00 mm	3800/700	10:08:32	5:53:24.6	20:15:00	4:58	out of focus Filled dewar 2:20 A.M.
✓ 115	✓	"		5200/700	10:12:12	5:53:25.6	20:14:56	4:54	
✓ 116	✓	"		5100/700	10:14:14			4:53	
✓ 117	Halley	600	1.0	4000/900	10:31:00	6:06:45.1	19:12:30	4:48 E	not
✓ 118	✓	600	1.0	7000/900	10:47:09	6:06:45.5	19:12:33	4:32	set in mag. day. Halley
✓ 119	✓	600	1.0	9000/900	11:04:44	6:06:47.1	19:12:20	4:15	
✓ 120	✓	"	"	3400/900	11:22:10	6:06:51.2	19:10:21	3:57	different object adm. not Halley
Halley → ✓ 121	Halley ✓	"	"	1900/1100	11:42:33	6:07:21.4	19:12:11	3:30	moved telescope part of Halley
✓ 122	✓	"	"	4400/3600	11:55:09	6:07:22.9	19:12:16	3:24	Day break
✓ 123	Flat Field	3.0	1.0	6700	late MST				
✓ 124	✓	"	"	6700					
✓ 125	DARIC	"	"	600					
✓ 126	Dark	"		600					

Possible wrong object

Halley →





Telescope:

iris = 300

Frame prefix #: FR85G

Day of Week: Wed/Thur

RA offset: 0

Focus: 3825 Humdty: 62%

Sheet #: 10

Observers: DiSanti, Fink  
Schulz

Date MST/UT: Aug 28/29

Dec offset: 2'23"

Tailpiece: 17

Balance: 500 Temp O/I: 60/63

tape file # 13

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.)
✓ 251	SAO 47529	3.0	1.0	1300/600					Topped dewar 9:45
✓ 252	"	2.5	"	1000/600	5:38				look like 0.25" slit
✓ 253	"	"	"	1000/600	5:39:22	18:28:40.2	43:53:10	2:17 W	
✓ 254	DARK	300	1.0	620					
✓ 255	1828+487	300	1.0		6:04:25	18:29:10.3	48:41:50	2:41 W	
✓ 256	"	600	1.0	6	6:18:25	18:29:12.5	48:41:55	2:55 W	
✓ 257	BS 8622	0.4	1.0	11000	6:51:03	22:38:37.8	38:56:08	0:41 E	seeing is better
✓ 258	"	0.3	1.0	7500	6:52:32				
✓ 259	"	"	1.0	7000	6:53:40	22:38:39.0	38:56:08		
✓ 260	"	"	1.0	6000	6:56:05				RE-centered in slit
✓ 261	"	"	1.0	6800	7:25:44				ROTATED tailpiece to 90° P.A. ≈ 260°
✓ 262	"	"	1.0	6500	7:27:03			0:05 E	
✓ 263	BS 937	2.0	0.25	8400	7:52:40	3:07:58.6	+49:31:41	4:09 E	Refilled dewar ~12:30 out for 400
✓ 264	"	"	"	8700	7:55:06			4:04 E	re-centered
✓ 265	"	"	"	9400	8:08:10			3:53 E	

295-474 180  
55-854 800

Telescope:

Frame prefix #:

Day of Week:

RA offset:

Focus:

Humdty:

Sheet #: 11

Observers:

Date MST/UT:

Dec offset:

Tailpiece:

Balance:

Temp O/I:

Tape file #28

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.)
✓ 266	BS 937	2.0	0.25		8:10:33	3:07:59.5	49:31:37	3:51E	lowered upper wind screen
✓ 267	Dark	"	—		~8:15				about full Moon
✓ 268	Dark	"	—						
✓ 269	BS 937	"	0.25	~9000	8:35:30	3:07:59.8	49:31:36	3:27E	
✓ 270	"	"	"	9900	8:37:06			3:25E	
✓ 271	GZ	1200	"	~5000	8:55:09	4:55:25.5	41:05:43	4:54E	focus back to 3825 intercept 9:02:18 (centering) resume 9:03:35
✓ 272	GZ	1200	"	~3000	9:19:53	4:55:32.5	41:04:17	4:29E	Moon study for (see dark)
✓ 273	GZ	1800	"	$\frac{12000}{1100}$	9:44:31	4:55:39.0	41:02:57	4:05E	set position 10:09:41 10:10:26 2m and for pointing
✓ 274	DARK	2.0	N/A	600	~10:22				
✓ 275	BS 2047	0.5	1.0	5200	10:37:28	5:53:26.8	20:14:50	4:09	out of focus
✓ "	"	0.8	"	$\frac{7800}{600}$	10:39:31			4:07	"
✓ 277	"	"	"		10:52:29				"
#40 ✓ 278	"	"	"	$\frac{8000}{600}$	10:53:31	5:53:28.5	20:14:44		"
✓ 279	Halley	1200	1.0	$\frac{5300}{2200}$	11:08:59	6:09:33.2	19:16:33	3:52E	tailpiece at 97°
42 ✓ 280	"	"	"	$\frac{4000}{2300}$	11:31:40	6:09:35.3	19:16:31	3:30	1.45

Forgot to change FITSDR

