

Telescope: 61"

Frame prefix #: FR87C Day of Week: Sat/Sun

Observers: Fink, Tyler Date MST/UT: 28 Feb/Mar 01

RA offset: -0.012
Dec offset: 0.0020

Focus: 3690 Humdty: 20% Sheet #: 1
Tailpiece: 17
Balance: 100 Temp O/I: 22/26
the 26/30

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	Halley	6w	R	1700/9000	3:40:35	360	91	5h 49E	2.96/2.74
2	"	"	"	1540	4:03:41	355	414	3h 18	2.47/2.32
3	"	"	"	1580/800	4:16:57	351	414		2.16
4	"	"	"	1680/900	4:32:49	348	415	2h 49	2.10 / -15.0911 -0.002
5	"	"	"	1750/1200	4:48:26	343	416	2:39	1.97 / -15.0928 -0.0047 / 2.95
6	"	"	"	1760/1200	5:06:15	321	415	2:16	MW E 15 1.81/1.74 -15.0442 0.0014
7	"	"	"	1750/1020	5:23:13	364	417	2:0E	MW 35 1.72/1.66 -15.0452 .0021
8	"	"	"	1650	5:37:48	358	417	1:49	1.69 -15.0458 .0026
9	"	"	"	1980/1500	5:59:43	351	416	1:27	1.58 -15.0465 .0032
10	"	"	"	2550/2200	6:11:42	342	418	1:10	1.53 -15.0473 .0036 clear clouds
11	FF	0.9s	R	20 000	7:34	04A	-20°		
12	"	"	"	20 000	7:37	"	"		
13	"	"	"	20 000	"				
14	"	"	"	"	7:39				17 dark blue lights on

15. Dark
16. 17
20h / 3600s = 0.0055 17
1080 / 12.8
1080 / 13.2

17-18

1

Telescope:

Frame prefix #: FR87C

Day of Week: Mon/Tues

RA offset:

Focus:

Humdty:

Sheet #:

3

Observers: FINK, DiSANTO

Date MST/UT: 02/03 MAR.

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.)
2 ✓ 032	Helium	.05	.25	12800					
✓ 033	"	.2	"	9000					
✓ 34	Xenon	.2	"						
✓ 35	"	.05	"						
✓ 36	R-mon	120	"		2:56	6:38:30	+8:45:18	-0:25E	
✓ 37	"	300	"	Hx Sat	3:02:10			-0:19E	
✓ 38	"	300	"	"	09:19			=0:105E	
9 ✓ 39	Hubble	900	"	~500 Hx peak	2:10	6:38:30.0	+8:45:47	0:00	
5 ✓ 40	BS 3950	0.3	1a0	8000	50:30	9:29:12	+6:00:28	2:20.5E	1.57 = Sec 2
✓ 41	"	↓	"	6000	53:00			2:15.5	1.08
✓ 42	"	↓	"	8000	54:00			2:13.5	1.55
6 ✓ 43	BS4030	0.3	"	~5000	4:02	10:15:55	+23:36:17	2:48E	1.27
✓ 44	"	0.5	"	7000	:08			2:43	1.25
✓ 45	"	0.5	"	7000	:05			2:45	1.26 Image=017
✓ 046	BS3314	0.1	"	7500	4:28	8:25:34	-3:51:36	0:38E	1.26

Tape for

check

9

check

5

6

removed
4/15

Telescope:

Frame prefix #: *F187C* Day of Week: *Mon/Tues*

RA offset:

Focus: *3710* Humdty: *5620* Sheet #: *(4)*
 Tailpiece: *17*
 Balance: *500* Temp O/I: *30/34*

Observers: *FINK/DISANTH* Date MST/UT: *02/03 Mar*

Dec offset:

Tape Pos
17

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.)
<i>47</i>	<i>BS3314</i>	<i>0.1</i>	<i>1.0</i>		<i>4:31:30</i>	<i>8:25:35</i>	<i>-3:51:36</i>	<i>0:35E</i>	<i>1.26</i>
<i>48</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>5500</i>	<i>33:10</i>			<i>:33E</i>	<i>1.25</i>
<i>49</i>	<i>Hubble</i>	<i>900</i>	<i>0.25</i>	<i>~5100</i>	<i>46:12</i>	<i>6:38:30</i>	<i>8:45:50</i>	<i>1:26W</i>	<i>1.17 → 1.20 = Sec 2</i>
<i>50</i>	<i>"</i>	<i>1200</i>	<i>"</i>	<i>~5800</i>	<i>5:04:45</i>			<i>1:45W</i>	<i>1.20 →</i>
<i>51</i>	<i>BS3314</i>	<i>0.1</i>	<i>1.0</i>	<i>5000</i>	<i>33:08</i>	<i>8:25:03</i>	<i>-3:51:25</i>	<i>0:27W</i>	<i>1.25</i>
<i>52</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>8300</i>	<i>34:52</i>			<i>0:29</i>	<i>"</i>
<i>53</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>8500</i>	<i>36:36</i>			<i>0:30.5</i>	<i>" recentered</i>
<i>54</i>	<i>BS3750</i>	<i>0.3</i>	<i>1.0</i>	<i>8500</i>	<i>42:50</i>	<i>9:27:17</i>	<i>-6:00:30</i>	<i>0:25E</i>	<i>1.28</i>
<i>55</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>8000</i>	<i>45:00</i>			<i>0:23</i>	<i>"</i>
<i>56</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>47:10</i>			<i>0:21</i>	<i>1.28</i>
<i>57</i>	<i>BS 4030</i>	<i>0.5</i>	<i>"</i>	<i>6000</i>	<i>55:20</i>	<i>10:15:55</i>	<i>+23:35:15</i>	<i>1:01SE</i>	<i>1.04</i>
<i>58</i>	<i>"</i>	<i>0.7</i>	<i>"</i>	<i>10000</i>	<i>57:00</i>			<i>0:59.5</i>	<i>"</i>
<i>59</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>~1000</i>	<i>58:20</i>			<i>0:58</i>	<i>"</i>
<i>60</i>	<i>HALLEY</i>	<i>500</i>	<i>R</i>	<i>12600</i>	<i>6:43:12</i>			<i>0:28E</i>	<i>Sec 2 = 1.45 Halley at (400, 284)</i>
<i>61</i>	<i>"</i>	<i>600</i>	<i>"</i>	<i>15000/6500</i>	<i>56:10</i>			<i>0:15E</i>	<i>1.44 (405, 423)</i>

7:08:32

0:10:3E 7:44

Telescope:

Frame prefix #: *FR 87C* Day of Week: *Mon/Tues*

RA offset:

Focus:

Humdty:

Sheet #: *5*

Observers: *FINK/DISH* Date MST/UT: *02/03/00*

Dec offset:

Tailpiece: *17*

Balance: *500*

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.)
✓ 062	HALLEY	600	R	16100	7:08:32	10:31:28	-13:28:52	0:03 E	<i>sec z = 1.44 (406, 421)</i>
✓ 063	"	"	"	<i>(15400/6300)</i>	20:53			0:08 W	<i>(bins = .0966 / +.00516) 1.1 (405, 420)</i>
✓ 064	LAG 16266	8	R	4600	-7:42	10:33:05	-11:36:03	0:30 W	<i>sec z = 1.40 (442, 351)</i>
✓ 065	"	16	"	9500					
✓ 066	"	"	"	9300	7:47:31			+0:33 W	<i>sec z = 1.41</i>
✓ 067	BS 3750	0.3	2.0mm	7000	8:00:00	9:27:10.6	-6:00:21	1:52 W	1.46
✓ 068	"	0.4	"	8500	02:30			1:54	1.47
✓ 069	"	"	"	9000	03:35			1:56	"
✓ 070	PLUTO	300	"	3700	8:20:50	14:50:36	+01:04:30	3:10 E	<i>sec z = 1.72</i>
✓ 071	"	600	"	7500	29:49			3:01 E	1.66
✓ 072	"	600	"	7600	46:44			2:44 E	1.55 check
✓ 073	"	"	"	7000	9:10:40			2:20	1.43 <i>pos. against comp.</i>
✓ 074	"	"	"	"	23:09	14:50:37	+01:03:57	2:07.5	1.38
✓ 075	"	"	"	"	36:00			1:55	1.33
✓ 076	"	"	"	5500	48:00			1:12.5	1.28

↑
sample
space

check
②

Comp. crashed

~10:17 ← all FittsADR.

Telescope:

Frame prefix #:

Day of Week: *M*

RA offset:

Focus:

Humdty:

Sheet #: *6*

Observers:

Date MST/UT:

Dec offset:

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.)
✓ 077	Pluto	600	1.0	7100	10:32	14:50:36	+1:03:54	0:58	1.21 = <i>not</i>
✓ 078	"	"	"	6800	10:45:20			0:45	1.19
079	"	"	"	6200	11:00:00			0:31	1.18
080	"	"	"	6300	11:12:30			0:18	1.17
081	"	"	"	6900	25:30			0:05	1.17
082	"	"	"	6500	37:25	14:50:35.6	+1:03:57	0:07W	"
083	"	"	"	"	50:23	"	"	0:20	1.18 <i>comp. crushed</i>
✓ 084	"	"	"	7060	12:09:10			0:39	1.19
✓ 085	"	"	"	6500	21:20			0:51W	1.20
✓ 086	"	"	"	650/1200	33:17			1:03	1.22
✓ 087	?				45:01			1:15	1.24

49 files

partially written

may be lost

Telescope: 61"

Frame prefix #: FR87C Day of Week: Tue

RA offset:

Focus: 3700 Humdty: 60% Sheet #: 7

Observers: Ficky Wells, Lem Date MST/UT: Nov 03/04

Dec offset:

Tailpiece: 17 Balance: 500 Temp O/I: 36/40

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.)
✓ 088	Hubble	300.0	0.25	11500 / 5000	2:35:09	6 ^h 38 ^m 29.9 ^s	+8 ^o 45'22.3"	-40 ^m avg 1.11	N-S slit
✓ 089	Hubble	18000	0.25	2500/1000	2:47:04	Mov 3 rd E 6 ^h 38 ^m 30.1 ^s	Mov 11 30" 8 ^o 45'50.3"	-28 ^m avg 1.10	N-S slit
✓ 090	F2 camp	1400	0.25	6000/1000	3:35:00	6 ^h 38 ^m 35.18 ^s	+8 ^o 47'11.4"	+0.1416 avg 1.09	N-S slit
✓ 091	"	400	0.25	3000/1000		"	"	"	"
✓ 092	"	400	1.00	8000/1000		"	"	"	Header says 0.25, it's wrong 1.00 ⁴⁵¹⁷
✓ 093	BS 3750	0.3	1.00	7000/1000	4:01:02	9 ^h :27:11.83	-6 ^o 00'28.5"		old 3680 Focus new - old 0.2
✓ 094	"	0.3	1.0	5574		"	"	LHA-2 ^h 01 avg 1.50	
✓ 095	"	0.3	1.0	7800/1000	4:04:53	"	"	avg 1.49	
✓ 96	FR	300	"	6000	4:17:18	0 HA	-20		
✓ 97	"	500	"	9500					
✓ 98	"	"	"	-					
✓ 99	"	"	"	-					
✓ 100	Darb	1-0							
14 ✓ 101	"	1-0							

Telescope:

Frame prefix #:

Day of Week:

RA offset:

Focus:

Humdty:

Sheet #: 8

Observers:

Date MST/UT:

Dec offset:

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.)
✓ 102	BS370	0.3	1.0um	6700	9:29:24			-1:14 -1:40	
✓ 103	"	"	"	8700	34:48			-1:29 -1:39	
✓ 104	"	"	"	7900					
✓ 105	BS4030	0.3	1.0um	5400	4:43:03			4:43 - 2:19 dec 3 1.15	
✓ 106	BS4030	0.4	1.0um	5600	4:45:01			dec 3 1.15	↑ Spec
✓ 107	"	0.4	"	5200				dec 3 1.14	
✓ 108	Halley	6000	R filter	1600/700		10 ^h 30 ^m 33.0	-13° 24' 54"	-1:41 ^m	the run S 1.5 W 352 368
✓ 109	"	6000	R	1200/600	5:43:04	10 ^h 30 ^m 31.5	-13° 25' 42"	-1:24 ^m	354 426
✓ 110	"	"	"	15900/6400	5:50:	10 ^h 30 ^m 30.38	-13° 25' 56.2"	dec 3 1.56	357 426
✓ 111	"	"	"	16000/6400	6:10:10	10 ^h 30 ^m 29.78	-13 25 32.9	dec 3 1.49	353 426
✓ 112	"	"	"	16000	6:24:46		425	549 dec 3 1.47	349 425
✓ 113	G162 66	20s		13000			548	2:02 -0:20 1.40	Run 263 - 518 276 Gal. 272 - 527 256 348
✓ 114	"	"	"	9000	6:53:53			-0:16 1:29	
✓ 115	Hally	600	"	13000	58:28		429	532 -0:08 1:24	
✓ 116	Field of 2nd night	"	"		7:14:57	10:52:33	-13:58:17	-0:16 1:48	print Hally field

Checked
of
Hobby

Hand 02

Telescope:

Frame prefix #: FRJTC

Day of Week:

RA offset:

Focus: 3706

Humdty:

Sheet #: 9

Observers:

Date MST/UT:

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.)
117	Halley	600	R	1500	8:02:30			+0:15 1.49	
118	"	"	"	15400/6500	8:18:14	γ = 373	X = 435	+1:11 1.52	
119	Halleyfield	600	R						577, 525 E b 25 tie
120	"	600	R		8:44:18	10h 33' 50.6"	-13° 45' 55.2"	HA +1:31 mag 1.59	577 245 S 8 200
121	Ca G 16286	200	R	900				1.60	
122	"	"	"	8100/1200	9:03:35	10:33.09	-11 36 32	+1:14 1.62	
123	101281	5.00	R	1000/2000	13:07	9:56 28.3	-0:26 06	+2:40 1.56	
124	"	2.60	"	11800	16	"	"	1.57	
125	Halley	600	"	14000/700	9:21:59			+2:15 1.79	getting windy quite from east
126	Photo	600	lum		10:27:32	14:50:39.5	+0:04 36.9	+1:00 1.21	
126	Photo	"	"	5600	10 47	"	"	-90 1.19	Even 2300 in winter EOT
127	"	"	"	5900	11/14			1.17	
128	"	"	"	5500					
129	"			5400	11 29			-01m 1.17	
130	"				11 44 20			+18m 1.17	
131	lum	300	R	380.00	12:17:00	15:30:17	-12:20:14	mag 1.41	
132	"	600	R		12:32			1.42	

Collect (10)

Collect (11)

Collect (12)

Spec

100

110

130

120

140

150

160

Telescope: 61 inch

Frame prefix #: FR87C

Day of Week: Sat/Sun

RA offset:

Focus: 2670

Humidity: 76

Sheet #: 110

Observers: Fink/DiSanti

Date MST/UT: 07/08 MARCH

Dec offset:

Tailpiece: 17

Temp O/I: 33/39

Balance: 109

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.)
✓ 139	DARK	1.0	N/A	1028 ± 12.6					
✓ 140	"	"	"	1027 ± 12.6					
✓ 141	HALLEY	600	(R)	^{halley} 26000	4:00:45	10:26:18.8	-12:56:51	2:47E	more like day "FF"
✓ 142	FF (day)	180	"	22000	~4:15			:32	sec = 1.90
✓ 143	Halley	600	"	20700 / 12000	4:32:00			2:16E	1.78
✓ 144	"	"	"	20000 / 11200	47:42	398	421	2:00	SOILS 1.69 ^{45 to W}
✓ 145	"	"	"	20600 / 11000	59:15	397	420	-1:47	1.63 (420, 397)
✓ 146	G16266	20s	"	13400	5:17:10	10:30:10.4	-11:36:13	-1:37	1.55
✓ 147	"	"	"	17000	20:50			-1:33	1.54
✓ 148	"	"	"	20000	22:49			-1:31	1.53
✓ 149	Halley	600s	"	21000	28:46	10:26:12.8	-12:57:44	-1:18	1.53
✓ 150	"	"	"	21800 / 11000	40:47	384	425	-1:07	1.50
✓ 151	"	"	"	22000 / 10000	53:55	381	425	-0:53	1.47
✓ 152	G16266	20	"	24000	6:07:27	10:33:05	-11:36:12	-0:47	1.42
✓ 153	"	15	"		09:17			-0:45	1.42

15

16

17

New Tape

HS

15

16

Telescope:

Frame prefix #: FR87C

Day of Week: Sat/Sun

RA offset:

Focus:

Humdty: 93 Sheet #: 12

Observers: FINK/DI SANTI

Date MST/UT: 07/08 March

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.)	
✓ 154	101281	4	R	23000	6:22:00	9:56:35	-0:24:58	-0:00	1.19	
✓ 155	"	"	"	21000	23:59	"	"	+0:06(W)	"	
✓ 156	Halley	600	"	23000	6:29:50	10:26:12.7	-12:57:44	-0:17	1.43	
✓ 157	"	500	"	19000/8000	43:40	10:08:3	-0:20	-0:03	1.42	
✓ 158	Halley Field #1	600	"	sky ~ 10300	57:07	10:33:50.6	-13:45:55	+0:02	1.44	
✓ 159	G162-66	15	"	24000	7:10:37	10:33:04.8	-11:36:11	+0:16	1.39	
✓ 160	"	10	"	14400	13:03	"	"	0:19	1.40	
✓ 161	Halley Field #2	600	"	sky ~ 10000	16:40	10:32:33.3	-13:38:17	+0:23	1.45	
✓ 162	G162-66	10	"	13000	29:00	10:33:05	-11:36:10	0:35	1.41	
✓ 163	"	"	"	13000	30:25	"	"	0:36	1.41	
✓ 164	Halley	500	"	17000	33:05	10:26:08	-12:57:14	0:46	1.46	
✓ 165	"	"	"	19000/8000	43:20	10:07:3	-0:06	0:56	1.48	
✓ 166	G162-66	10	"	13000	54:50	33:04.8	-11:36:11	1:01	1.45	
✓ 167	"	"	"	11000	56:25	"	"	1:02	1.45	
✓ 168	Halley Field #3	600	M	sky ~ 11000	58:43	10:29:27.6	-13:17:31	1:08	1.51	have mark in?

Calib #2

#2

#4

#1

