

FR85B -

UT DATE: 14 FEB 85

TAPE #: FR85B001-21

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
001	HALLEY	10M	3:25:40	5:05:28.7	+13:04:56	V
2	HALLEY	10M	3:36:43	5:05:29.2	+13:04:57	V
3	HALLEY	10M	3:47:38	5:05:29.0	+13:04:58	V
4	HALLEY	10M	3:58:32	5:05:27.8	+13:04:59	V
5	HALLEY	10M	4:09:26	5:05:28.0	+13:04:56	V
6	HALLEY	10M	4:20:22	5:05:28.1	+13:06:56	V
7	HALLEY	10M	4:31:34	5:05:26.7	+13:07:02	V
8	HALLEY	10M	4:42:30	5:05:27.3	+13:07:03	V
9	HALLEY	10M	4:53:44	5:05:27.2	+13:07:02	V
10	HALLEY	10M	5:04:39	5:05:25.9	+13:07:02	V
1	HALLEY	10M	5:15:43	5:05:26.7	+13:07:03	V
2	HALLEY	10M	5:26:41	5:05:26.3	+13:07:06	V
3	HALLEY	10M	5:39:54	5:05:26.6	+13:05:05	V
4	HALLEY	10M	5:50:58	5:05:26.0	+13:05:06	V
5	LANDOLT 76281	7S	6:27:26	8:19:59.9	+14:45:40	V
6	76281	7S	6:29:19	8:20:00.0	+14:45:40	V BLANK
7	76281	7S	6:20:55	8:19:59.4	+14:45:40	V
8	76281	7S	6:36:33	8:20:00.3	+14:45:39	V
9	76281	7S	6:37:35	8:20:00.0	+14:45:39	V
20	76281	7S	6:44:05	8:20:00.6	+14:45:39	V
1	76281	7S	6:48:13	8:19:59.	+14:45:40	V
2	FLAT FIELD	1S	NOTE HOLE AT	(464,402) IN	CHIP	V
3	FLAT FIELD	1S	→ CAN'T USE	(450,400) AS	CENTER	V
4	DARK FRAME	1S	7:00:00			V
5	FLAT FIELD	1S				V
6	FLAT FIELD	1S				V
7	FLAT FIELD	1S				V
8						
9						
0						

(450,400) center
H X

ENTRAILED
IMAGES UNTIL NOW

28
[119, 656, 95, 706]

NOT CENTERED

↑ 7:02:01, 02
20:02:01, 02

MS 1%
9° INSIDE
4° OUTSIDE

30 SHEETS 2 SQUARE
21 SHEETS 3 SQUARE
42 SHEETS 18
NATIONAL

BU TAPE
FILE #1
2
3

FR85B

UT DATE: 14 FEB 85

TAPE #: FR85B

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
1						
2						
3	PLUTO	DATA	BEGINS THIS SHEET			
4						
5						
6						
7						
28	COMP #1	45	8:16:47			V
9	"	45	8:17:31	14:31:14.2	+2:54:05	V
30	P	40 s	8:23:28	14:32:02.6	+2:53:19	V
1	P	255	8:26:04	14:32:01.9	+2:53:19	V
2	P	255	8:29:08	14:32:02.9	+2:53:19	V
3	COMP #1	45	8:34:04	14:31:14.6	+2:54:00	V
4	COMP #1	45	8:34:04			V
5	P	255	8:39:08	14:32:03	+2:53:12	V
6	P	255	8:40:24	14:32:02.3	+2:53:12	V
7	P	255	8:41:40	14:32:01.8	+2:53:12	V
8	COMP #1	45	8:49:20	14:32:45.3	"	
9	COMP #1	45	8:49:55			
40	P	255	8:52:34			
1	P	255	8:53:30			
2	P	255	8:54:27			
3	COMP #1	45	8:57:43			
4	COMP #1	45	8:58:20			
5	P ?	255	9:03:08			
6	COMP #1	255	8:58:20			
7	COMP	255	9:12:31			
8	P	255	9:19:21			
9	P	205	9:22:57			
50	P	205	9:24:09			

UT DATE :

TAPE # :

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
51	L	20s	9:25:20			V
2	COMP#1	25 45	9:28:42			
3	COMP#1	25	9:34:52			
4	COMP#1	25	9:35:45			
5	L	20s	9:39:24			
6	L	20s	9:40:35			
7	L	20s	9:41:47			
8	COMP#1	25	9:44:50			
9	COMP#1	25	9:48:12			
60	L	20s	9:51:52			
1	L	20s	9:53:03			
2	L (PARK)	20s	9:54:15			
3	COMP#1	25	10:02:49			
4	COMP#1	25	10:05:51			
5	COMP#1	25	10:06:44			
6	COMP#1	25	10:07:37			
7	L	20s	10:10:50			
8	L	20s	10:12:02			
9	L	20s	10:13:13			
0	L	20s	10:15:31			
71	L	20s	10:23:02			
2	L	20s	10:25:43			
3	L	20s	10:26:53			
4	L	20s	10:28:05			
5	L	20s	10:30:23			
6	L	20s	10:31:35			
7	COMP#1	25	10:40:52			
8	COMP#1	25	10:42:24			
9	COMP#1	25	10:43:43			
80	L 2	20s	10:47:26			V

50 SHEETS 5 SQUARE
 42.383 100 SHEETS 5 SQUARE
 42.386 200 SHEETS 5 SQUARE
 NATIONAL

FR 85B-

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TAPE #:

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
81	P 20 ^s	10:44:34	10:44:38			V
82	P	20 S	10:49:49			
83	P	20 S	10:52:07			
84	P	20 S	10:53:19			
85	Pluto Comp 1	25	10:55:19			
86	"	25	? dark			
87	"	25	11:07:53			
88	P	20 S	11:11:27			
89	P	20 S	11:12:39			
90	P	20 S	11:13:50			
91	P	20 S	11:26:43			
92	P	20 S	11:27:55			
93	P	20 S	11:28:28			
94	P	20 S	11:30:25			
95	COMP #1	25	11:40:27			
96	COMP #1	25	11:42:02			
97	COMP #1	25	11:42:35			
98	P	20 S	11:45:42			
99	P	20 S	11:47:25			
100	P	20 S	?			
101	COMP #1	25	11:51:02			
102	COMP #1	25	11:51:38			
103	COMP #1	25	11:52:10			
104	P	20 S	11:55:37			
105	P	20 S	11:56:22			
106	P	20 S	11:58:02			
107	COMP #1	25	12:02:10			
108	COMP #1	25	12:02:44			
109	COMP (DARK?)	25				
110	P	20 S	12:06:42			W

UT DATE :

TAPE # :

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
111	L	120 20s	12:07:33			
112	L	20s	12:08:27			
113	COMP #1	2s	12:11:26			
114	COMP #1	2s	12:11:59			
1186	L	20s	12:15:17			
1167	L	20s	12:16:09			
1178	L	20s	?			
1189	COMP #1	2s	12:20:20			
1190	COMP #1	2s	12:21:14			
1201	COMP #1	2s	12:22:07			
1282	L	20s	12:25:14			
1273	L	20s	12:26:25			
1284	L	20s	12:27:36			
1285	COMP #1	2s	12:30:50			
1286	COMP #1	2s	12:31:42			
1287	COMP #1	2s	12:32:35			
1278	L	20s	12:35:34			
1289	L	20s	12:36:45			
12930	L	20s	12:37:57			
1301	COMP #1	2s	12:41:03			
1310	COMP #1	2s	12:41:03			non-existent
132	COMP #1	2s	12:58:07			
133	COMP #1	2s	12:59:00			
134	COMP #1	2s	12:59:53			
135	L	20s	13:02:49			
136	L	20s	13:04:00			
137	L	20s	13:05:11			
138	COMP #1	2s	13:08:41			
139	COMP #1	2s	13:09:33			
140	COMP #1	2s	13:10:27			

115 in a Comp #1 exposure
all following are off by one

50 SHEETS 9 SQUARE
100 SHEETS 3 SQUARE
200 SHEETS 3 SQUARE
NATIONAL

correct

26
33
26

FR 85B-

UT DATE: 2/15/85
~~14 JAN 85~~

corrected by HHS
 TAPE #:

EXPOSURE #	OBJECT	EXPOSURE TIME (sec)	UT TIME	RA	DEC	FILTER	W
141	Venus	2S	02 08 09 00 34 27.8	10 34 41 10 2 41	07 02 41	V	3 42
2	Star 76281	2S	3 1 41	8 20 04	14 45 49	V	
3	"	4S	3 1 42	"	"	B	2 21 E
4	"	2S	3 1 45 10	"	"	R	
5	"	4S	3 54 44	"	"	I	2 08 E
6	"	2S	3 59 15	"	"	V	2 05 E
7	Halley	10m	4 09 23	5 04 10.5	13 07 06	V	1 21 W
8	"	10m	4 24 18	57.2	07	R	1 36 W
9	"	10m	4 36 58	49.8	08	V	1 4 W
150	Star 76281	2S	4 54 24	8 20 04	14 45 49	V	1 10 E
1	"	4S	5 6 30	"	"	B	
2	"	2S	5 00 32	"	"	R	
3	"	8S	05 14	"	"	I	0 10 E
4	"	2S	07 57			V	
5	Halley	10m	5 13 24	5 04 50.0	13 07 08	V	
6	"	10m	26 41	"	11 09	B	2 13 W
7	"	10m	5 45 10	11 48.5	11 10	V	2 50 W
158	A-R	5m	7 07 35	9 02 40.0	30 30 45	B P520	
9	"	20m	7 08 32	11 34.3	11 13	63W OI	0 32 W
160	MKn 739	10m	7 57 43	11 55 24.0	21 39 28	#674	
1	"	10m	8 12 48	"	"	#374	
2	MKn 777	10m	8 34 45	12 37 10	14 24 48	#674	
3	"	10m	8 57 50	"	"	#674	No find
4	Star EG64	1m	9 28	9 45 30.0	43 57 35	#674	
5	"	1m	~9 32	"	"	#374	
6	MKn 777	10m		12 37 10	14 24 48	#674	
7	MKn 788	10m	9 59	13 23 51	16 12 03	#374	
8	MKn 266	10m	9 58	13 37 26	48 19 55	#674	
9	"	10m	10 37 45	"	"	#674	
170	MKn 789	10m	10 58	13 18 07	11 22 16	#374	

42 SHEETS 5 SQUARE
 42 SHEETS 3 SQUARE
 42 SHEETS 2 SQUARE
 42 SHEETS 1 SQUARE

42 SHEETS 1 SQUARE
 42 SHEETS 3 SQUARE
 42 SHEETS 2 SQUARE
 42 SHEETS 1 SQUARE

42 SHEETS 1 SQUARE
 42 SHEETS 3 SQUARE
 42 SHEETS 2 SQUARE
 42 SHEETS 1 SQUARE

42 SHEETS 1 SQUARE
 42 SHEETS 3 SQUARE
 42 SHEETS 2 SQUARE
 42 SHEETS 1 SQUARE

W
 3 42
 2 21 E
 2 08 E
 2 05 E
 1 21 W
 1 36 W
 1 4 W
 1 10 E
 0 10 E
 2 13 W
 2 50 W
 0 32 W
 No find

UT DATE: 2/15/85

FR85B/55, IM

TAPE #:

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
171	Mkn 273	10m	11 ^h 30 ^m	13 ^h 43 ^m 16 ^s	+55° 10' 30"	#074
2	Mkn 403	10m		13 ^h 45 ^m 16 ^s	+18° 20' 06"	#245
3	FF	12S	—	—	—	#124F
4	"	"				"
5	"	2FS	—	—	—	#074
6	"	"				"
7	"	5S				#374
8	"	"				"
9	✓					✓
180	✓					✓
1	8520	1S				8520
2	63w	60S				8520 6300
3	4	60S				8520 6300
4	8520	1S				8520 8520
185	✓	1S				✓
6						
7						
8						
9						
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						

42 SHEETS 3 SQUARE
21 SHEETS 100 SHEETS 3 SQUARE
NATIONAL

Mkn
Tape

UT DATE: 2/16/85

TAPE #: FR85B183

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
1						
2						
183	Field	1 s				8520
4	Dark	10 s				V
5	Field	1 s				V
6	ST 76281	2 s	2:09:45	8:20:02	14:45:49	V
7	"	8 s	2:13:40	8:20:02	14:45:49	B
8	"	2 s	2:15:45	"	"	R
9	"	6 s	2:22:40	"	"	I
1900	"	2 s	2:25:40	"	"	V
1	Halley	10 m	2:32:55	5:04.15	13:09:40	V
2	"	20 m	2:47:30	"	"	B
3	"	10 m	3:10:44	5:04:14	13:09:42	V
4	ST 76281 V	2 s	3:45	8 20 02	14 45 49	V
5	" B	5 s	3:49	"	"	B
6	" V	1 s	3:52	"	"	V
7	" R	1 s	3:57	"	"	R
8	" I	5 s	4:00	"	"	I
9	" V	1 s	4:05	"	"	V
200	Halley	10 m	4:11	5 04 14.5	13 09 09	V
1	" I	10 m	4:24	"	"	I
2	" V	10 m	4:42	"	"	V
3	ST 76281	1 s	5:02	8 20 09	14 45 48	V
4	"	1 s	5:05	"	"	R
5	"	5 s	5:08	"	"	I
6	"	1 s	5:12	"	"	V
7	"	5 s		"	"	B
8	"	1 s	5:16	"	"	V
9	Halley	10 m	5:29	5 04 14.5	13 09 09	V
210	"	10 m	5:38	"	"	R

IME
5 seconds
slow
82
0
50 SHEETS 3 SQUARE
100 SHEETS 3 SQUARE
2500
7500
3000
3000
2300
2700
2400
2600
2760
1440
2500
2000
2800
2600
9800
21080
8300
5000
2750

5 hr 50 m
2 13
1 56 E
1 27 W
2 16 W
2 1 E
1 43 E
2 40 W

149, 655

2/16/85
 UT DATE :

TAPE # :

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
211	Hally	10 ^m	5:50	1509 14.5	13 09 09	V
2	Star 76281	1s	6:08	820 204	14 24 49	V
3	"	5s	6:10	"	"	B
4	"	1s	6:12	"	"	R
215	"	1s	6:15	"	"	V
6	"	5s	6:17	"	"	I
7	"	1s	6:19	"	"	V
8	A-Rent	5 ^m	6:32	9:02:40	30:47:32	8520
9	" OE	20 ^m	6:42	"	"	6300
220	" NH ₂	10 ^m	7:05	"	"	5945
1	" CN	10 ^m	7:23	"	"	9280
2	Star 667	1 ^m		9 45 28	43 57 36	"
3	"	1 ^m	7:45	"	"	8520
4	"	1 ^m	7:50	"	"	5945
5	"	5 ^m	7:55	"	"	6300
6	"	1M	8:18:35	"	"	1245
7	"	20 S	8:22:42	"	"	373
8	"	1M	8:25:38	"	"	1238
9	"	1M	8:31:43	"	"	673
230	"	30 S	8:39:29	"	"	1150 1150
1	MKN 272	5M	8:49	11:05:45	12:49:49	1150
2	MKN 273	8M	9:09:48	13:43:54	55:56:32	1150
3	MKN 756	5M	9:40:58	13:23:51.6	16:12:03	1150
4	MKN 480	8M	12:08:56 15:05:46.6	42:40:36		1150
5	MKN 673	5M	10:30:48	14:16:26.7	26:54:15	1150
6	MKN 673	3M	10:41:47	14:16:26.7	"	373
7	MKN 273	3M	10:51:20	13:43:54	55:56:32	373
8	MKN 1394	2M	11:06:18	15:08:43.7	-7:48:09	373
9	MKN 296	2M	11:17:46	16:02:33.1	19:10:50	373
240	266	3M	12:27:14 13:37:26	13:37:26 48:19:55	11:22:16	373

11:32:20 13:37:26 48:19:55

50 SHEETS 5 SQUARE
 42 SHEETS 5 SQUARE
 42 SHEETS 5 SQUARE
 NATIONAL

2176

2000

2^h 10^m W
 0^h 03^m W

09^m E
 01^m E

21^m W
 25^m W

UT DATE: 2/16/85

TAPE #: ^{FR} 85B232

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
241	463	2M	11:43:11	13:55:16	18:25:06	373
2	212 212	3M	11:56:57	21:45:29 12:29:15.9	02:19:17 29:20:45	373
3	11	2M	12:05:53	11	11	11
4	1685	2 1/2 M	12:16:33	14:30:14.8	29:16:55	373
5	60	150A	12:27:05	12:59:11.4	29:55:30	373
6	496	3M	12:38:23	16:11:2.8	52:28:21	373
7	496	150sec	12:48:55	11	11	373
8	586	2M	12:59:08	14:36:31.8	36:36:50	373
9	11	1M	13:04:52	11	11	373
250	Saturn	3H				373
1	Saturn	3H				673
2	Saturn	1T				673
3	FLAT FIELD	1S				373
4	11	1S				373
5	11	10S				1150
6	Flat Field	10S	14:05:33			1150
7	Flat Field	30S			6300	9280
8	Flat Field	30S			6300	9280
9						
260						
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						

42 SHEETS 5 SQUARE
42 SHEETS 3 SQUARE
42 SHEETS 300 SHEETS 3 SQUARE
NATIONAL

UT
V. Page

UT DATE: 2/17/85

TAPE #: MK85B289

EXPOSURE #	OBJECT	EXPOSURE TIME (SEC)	UT TIME	RA	DEC	FILTER
1						
2						
3						
4						
5						
6						
7						
8	1985	Centaurus	Feb 17	Mar Tap		
259	Flat Field	10S	~ 2:32			5995
260	Flat Field	1S	2:40			8520
1	Flat Field	4S	2:47:20			9280
2	Flat Field	1M	2:57			6300
3	Flat Field	2M	3:03:47			6300
4	Flat Field	4S	3:10:45			9280
5	Flat Field	5S	3:24:15			B
6	Flat Field	1S	3:27:10			V
7	Flat Field	4T	3:39:37			R
8	Flat Field	4T	3:40:30			R
9	Flat Field	4T	3:45:10			E
270	Flat Field	5S	3:47:45			B
1	Star 7629	2S	4:01:25	8:20:04	14:45:49	V
2	Star	2S	4:04:18	"	"	V
3	Halley's	10M	04:17	5:03:58	13:11:13	V
4	"	"	4:31	"	"	"
5	"	"	4:42	"	"	V
6	Star 7629	2S	4:59	8:20:04	14:45:49	V
7	"	"	5:03	"	"	"
8	A-R	5M	5:30	9:02:40	31:03:02	8520
9	"	20M	5:37	"	"	6300
280	"	10M	6:03	"	" 29	5995

~1h done
1h 17" W
2h 03" W
50" E
1:09 E

NATIONAL
 100 SHEETS 3 SQUARE
 42.389 200 SHEETS 5 SQUARE
 MADE IN U.S.A.

5000
"
0000
pub 625
90/60
10/60
000/800

UT DATE: 4/2/01

TAPE #: FR85B 259.1M

EXPOSURE #	OBJECT	EXPOSURE TIME (sec)	UT TIME	RA	DEC	FILTER
1	A-R	10 ^m	0:21	9 02 40	31 03 34	9280
2	"	5 ^m	9:08	" 44	31 05 03	241/1mm
3	"	10 ^m	9:14	"	09	"
4	"	20 ^m	9:26	"	22	0.5mm
5	MKN 729	10M	10:05:53			"
6	MKN 450	15M	10:39:22	15:05:48.6	42:40:44	"
7	MKN	30M	11:20:57			"
8	Flat Field	10		(512 X 512 cropped)		"
9	Flat Field	10		(512 X 512 ")		"
0	Flat Field	10		(356 X 800)		"
1	Flat Field	10		(356 X 800)		"
2	DARK	10			(512 X 512)	
3	DARK	10		$\Delta x = 350 \rightarrow 600$		
4	DARK	10				
5						
6						
7						
8						
9						
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						

2^42 EV
2^42 EV
2^42 EV
Spec
Spec
Spec
"
"
"
"

willow
6800000
42-381
50 SHEETS 5 SQUARE
42-382
200 SHEETS 3 SQUARE
NATIONAL