

Frame prefix: SP97cd

Telescope: 61"
Date: 97 Apr 29

Sheet #: 1

Focus: 3780
Iris: 2.0
Tailpiece: +60 white
Humidity: 54%
Balance: 60° 40
Temp: 47/51

Observers: Fick, Fung, Junt, Collins, Renee Duffard
Argentina

Guidepoint: (391.41, 400.66)

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
001	Hale-Bopp	20	0.25	12500	3:08:17	04:34:23.1	27 10 21.8	3.24	HA 5.25 PA=62.3
002	"	50	"	28000	3:11:09	"	"	3.32	5.42
003	"	"	"	30K	3:12	"	"	3.36	20000 tailpiece
004	"	"	"	29K	3:15	"	"	3.37	
005	"	"	"	31K	3:15	29.4	15.1	3.47	
006	"	200	"	18K	3:21	34:38	10:40	3.74	offset center high
007	"	"	"	18K	3:22			3.93	5.10
008	"	"	"	2600 max		35:38	26:07	4.20	offset almost bridge of halo
009	"	"	"	2600/2200/1200	3:36:22			4.44	
010	Wirtan	600	0.25	1770/1420/1200	3:47	05:48:53	29:35:44	2.26	half of center photo 2000 in 60 sec
011	"	"	"	1840/1400/1300	3:57	"	"	2.45	HA 5.14 PA=65
012	"	"	"		4:09	"	"	2.70	5.26 star electron 2x center PA=64
013	"	"	"	1830/1470/1200	4:30			3.27	Star passing near or thru slit in addition faint star passing through center
14	Wild 2	1200	0.25	4800/1480/1300	4:57	09:09:03	19 14 47	1.30	HA 2:50 PA=62
15	"	"	"	5070/1500/1100	5:15			1.41	photo 7300 in 60 sec 70% of center
16	"	"	"	8040/1570/1300	5:37	1:08	1:30	1.54	1.69 PA=64
17	BS 2643	200	1.0	2100 27K	6:08 6:09	07:03:22	29:20:30	4.59	PA=64
18	"	"	"	"	6:10	"	"	4.48	
19	"	"	"	"	6:11	"	"	4.52	
20	"	"	"	"	"	"	"	4.58	

some stars but
 quite clear; some stars
 not near center!

Frame prefix: SP97d

Telescope:

3780 / 2750

Sheet #: 2

Date:

Focus:

Humidity:

Iris:

Tailpiece:

Balance:

Temp:

Guidepoint:

Observers: Ank, Fari, Lyns, Collins, Renee

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.	
021	BS 3625	2.0	1.0	29K	6:15	09:08:45	38:53:22	1.65	PA = 73°	
022	"	"	"	32K	6:16	"	"	1.62		
023	"	"	"	40K	"	"	"	"		
024	"	"	"	28K	6:17	"	"	1.65		
025	BS 5183	2.0	1.0	23K	6:23	13:46:50	06:21:26	1.11	PA = 86	
026	"	"	"	"	"	"	"	"		
027	"	"	"	32K	"	"	"	"		
028	"	"	"	22K	"	"	"	1.11		
029	"	"	"	32K	"	"	"	"	not possible photometer photometer ~ 10% range of cirrus cloud	
030	"	"	"	26K	6:28	"	"	1.11		
031	BS 3750	"	"	37K	"	09:27:39	-06:03:39	3.07		PA = 63
032	"	"	"	41K	6:39	"	"	3.10		
033	"	"	"	49K	6:37	"	"	3.20		not possible photometer photometer ~ 10% range of cirrus cloud
034	"	1.5	"	30K	"	"	"	3.25		
035	"	"	"	29K	6:40	"	"	3.28		
036	"	"	"	23K	6:41	"	"	3.32		
037	"	"	"	32K	6:43	"	"	3.40		
038	"	"	"	35K	6:44	"	"	3.43		
039	"	"	"	33K	6:45	"	"	3.48		
040	"	"	"	57K	6:46	"	"	3.52		
041	BS 4724	0.10	1.0	56K	6:52	11:48:15	14 35 00	1.21	PA = 54 PA = 53	
042	" STA	0.09	"	19K	6:53	"	"	1.22		
043	"	"	"	12K	6:54	"	"	1.22	Counts for high PA = 54 PA = 53	
044	"	"	"	12K	6:50	"	"	1.22		
045	"	0.06	"	23K	6:57	"	"	1.23		
046	367A Dimple	1.20	0.50	2567/1699/1335	7:32	14:00:31	26:26:25	1.01	Rotate tailpiece had N-S passing cloud @ 7:43 UT UT 8:27 Photometry down by 10% N-S N-S N-S	
047	"	"	"	3150/2287/1590	8:18	14:06:27	26:26:36.9	1.05		
048	"	"	"	2983/1817/1523	9:38	14:06:21	26:27:00.2	1.22	Photometry variable by 30% Cirrus clouds	
049	14976032	"	"	3235/1919/1555	10:59	16:52:33	+12:29:51	1.11	"	
050	"	"	"	~8500/6284/4807	11:23	16:52:58	+12:31:07	1.15	Twilight/moonlight becoming too bright, quitting for the evening. May be light-contaminated.	

2

Frame prefix: SP97D

Telescope: 61"

Date: Apr 29/30 Tues.

Focus: 3760

Iris: 300

Tailpiece: +60° (269°)

Balance:

Humidity:

Temp:

Sheet #: 3 *Irat guiding system coords.*

Observers: Fink, Fevig, Grundy, Hicks

Guidepoint: (348.04, 393.83)

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
51	Hale-Bopp	5	0.25	21K	2:44	4:37:45	+26:33:17	2.61	LHA = 5:16 PA = +64
52	"	"	"	37K	2:45	"	"	2.64	= 5:17 PA = +63.9
53	"	"	"	39K	2:46	"	"	2.66	= 5:18 = 63.8
54	"	"	"	34K	2:47	"	"	2.68	
55	"	"	"	33K	2:48	"	"	2.70	
56	"	"	"	33K	2:48	"	"	2.72	LHA = 5:20 PA = 63.7
57	"	200	"	9K	3:03	4:38:03	+26:35:28	3.13	LHA = 5:35 Offset down PA = +62.5 tail
58	"	"	"	8K	3:07	"	"	3.26	
59	"	"	"	Saturated	3:14	4:37:54	+26:32:53	3.50	This is an exposure which jibes with Trudy's 60" offset
60	"	30	"	34K	3:18	"	"	3.68	PA = +61.4 same offset
61	"	300	"	via NAD + Hot 6K	3:21	4:38:33	+26:35:15	3.77	This is an exposure which jibes with Trudy's 600" offset
62	Wirtann	600	0.25	2230/APD/150	3:36	5:53:34	+29:42:50	2.09	star very clear in field of view PA (7.1)
63	"	"	"	290/Z	3:47			2.25	first star due to Wirtann
64	"	"	"	NAD 2400 220/1760/160	3:56			2.44	- first exposure with no star what matter? photo's dropped with
65	"	"	"	190/1670/1460	4:06			2.66	
66	"	"	"	NAD 2000 2030/1850/1430	4:19			2.91	→ 2.25 star in field again
67	Hild 2	"	"	3250/1470/1470	4:27	9:11:19.3	+19:06:19.1	1.26	
68	"	"	"	2830/1520/1430	4:48			1.30	

white tail pipe
600
↓

jibes
jibes

Frame prefix: SP97D

Telescope: 61"

Sheet #: 4

Date: Apr 29/30
Tuesday

Focus:
Iris:
Tailpiece:
Balance:

Humidity:
Temp: 42/48

Observers: Fish, Fung, Kopy, Hicks

Guidepoint:

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
069	W.622	120	0.25	4640/160/1420	5:00			1.35	
070	"	"		500/160/1420	5:20	9:11:23	+19:20:20	1.45	
071	"	"		280/150/1420	5:41			1.75	PA = 03°
072	RS3625	20	1.0	24K	6:08	9:08:42	+33:53:20	1.60	PA = 73°
073	"	"	"		6:11			1.63	
074	"	"	"	29K	6:14			1.65	
075	"	"	"	26K	6:16			1.67	
076	RS5183	20	1.0	25K	6:22			1.11	
077	"	"	"	26K	6:23	13:46:10	06:21:30	"	PA = -66°
078	"	"	"	26K				"	
079	"	"	"	23K	6:25			"	
080	"	"	"	23K	6:25				
081	"	"	"	28K	6:26			1.11	
082	RS 5770	1.5	"	35K	6:31	9:27:40	-06:05:33	3.12	
083	"	"	"	40K				3.16	
084	"	"	"	35K	6:39			3.24	
085	"	"	"					3.28	
086	"	"	"	31K				3.36	
087	"	"	"	35K	6:39			3.41	PA = 53
088	"	"	"		6:42			3.52	
089	"	"	"		6:43			3.57	
090	"	"	"	34K	6:46			3.68	
091	"	"	"	35K	6:46			3.72	
092	RS473A Std	0.04	1.0	15K	6:50	11:48:55	14:55:00	1.24	
093	"	0.06	"	76K	6:58			1.24	
094	"	"	"	25K				"	
095	"	"	"	24K	6:59			1.25	
096	RS3626	2.0	1.0	27K	7:12	9:08:59	+26:33:14	2.56	slightly off zero coln 2 PA = 64°
097	"	"	"	28K				2.58	
098	"	2.5	"	32K	7:13			2.62	
099	"	"	"	34K	7:16			2.64	

Frame prefix: SP97D

Telescope: 61"

Sheet #: 5

Date: We Apr 30, May 01

Focus: 3771 ✓

Iris: 2.0

Humidity: 58%

Tailpiece: white t60 to 269

Balance: ✓

Temp: 46/50

Observers: Pink, Fung, Lynn, Hieb

Guidepoint: ICE/IRAF

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
100	RS 3626	2.5	1.0	34K	7:18			2.68	
101	"	"	"	29K	7:18			2.69	
102	"	"	"	37K	7:19			2.72	
103	"	"	"	36K	7:20			2.74	
Wednesday									
104	Hale-Bopp	5.0	0.25	39K	2:49	04:41:07	+25:55:37	2.77	white tailpiece
105	"	"	"			"	"	2.80	
106	"	"	"	40K	2:51			2.82	
107	"	"	"	39K	2:52			2.85	
108	"	"	"	36K	2:53			2.88	
109	"	"	"	35K	2:54			2.91	
110	"	30k	"	22K		04:41:11.7	+25:55:45	?	effect 60" into tank
111	"	300	"	8230/1600/1400	2:59	41:51.0	58:09	3.03	effect 600" into tank
112	"	"	"		3:05			3.22	partial vignetting by dome for just pose
113	Wirtan	600	"	2600/1600/1400	4:02	5:58:21	+29:44:13	2.81	stray star through PA=64°
114	"	600	"	2400/1600/1470	4:13	"	"	2.74	real bright star say through
115	"	"	"	2600/1600/1470	4:30	5:58:28	+29:49:28	3.20	at least none close NO more stars in the way
116	"	"	"	2600/1500/1470	4:41			3.63	
117	"	"	"	1100/1600/1400	4:52			4.14 → 4.75	
118	1697-GH3	1200	"	2460/1730/1410	5:34	10:32:17	12:42:30	1.25	

Frame prefix: SP97D

Telescope: 61"

Sheet #: 6

Date: We Apr 30 / May 01

Focus:

Humidity:

Iris:

Tailpiece:

Balance:

Temp:

Guidepoint:

Observers: Rich, Ferns, Gurf, Hoch

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
119	1997GH3	1200	0.00	2530/1732/1100 ~700 net	5:55			1.33	
120	"	"	"		6:16	10:32:26	+12:41:44	1.42	2 faint shells but with 2.6 PA = 57°
121	"	"	"	2602/1722/454	6:36			1.54	-1.69
122	^{SPD} BS 5511	0.10	1.0	10000	7:07	14:46:06	01:52:48	1.17	
123	"	0.10	"	11000	7:09	"	"	1.16	HA = -00:22
124	"	0.20	"	17K	7:11	"	"	1.16	
125	"	0.20	"	18K	7:11	"	"	1.16	
126	(Comp) BS 4529	2.0	"	21K		11:48:14	-10:18:03	2.45	1.2m 15" sec 1500" = 301 60
127	"	3.0	"	27K	8:07	"	"	2.50	
128	"	4.0	"	37K	8:17	"	"	2.70	
129	"	"	"	42K	8:18	"	"	2.72	PA = +49.1
130	"	"	"	36K	8:19	"	"	2.75	
131	"	"	"	41K	8:20	"	"	2.77	
132	"	"	"	46K	8:21	"	"	2.78	
133	"	"	"	36K	8:22	"	"	2.80	
134	"	"	"	34K	8:23	"	"	2.83	
135	"	"	"	38K	8:23	"	"	2.85	
136	"	"	"	39K	8:24	"	"	2.87	
137	"	"	"		8:25	"	"	2.90	
138	"	"	"	39K	8:26	"	"	2.92	
139	"	"	"	41K	8:28	"	"	2.96	
140	"	"	"	48K	8:29	"	"	2.99	
141	(Comp) BS 5968	1.0	"	32k phot	8:42	16:00:56	+33:18:41	1.00	-VME CRASH, CAMERA READOUT PROB
-148	"	"	"					"	
149	"	"	"					4.18	
150	BS 4529	4.0	1.0	20k ph 27K ph	8:59	11:48:15	-10:17:41	4.14	
151	"	"	"	28K	9:01	"	"	4.32	
152	"	"	"		9:02	"	"	4.39	

W
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Frame prefix: SP97D

Telescope: 61"

Sheet #: 7

Date: WED Apr 30

Focus:

Humidity:

(IRAF)

Observers: FEVIG GRUNDY HICKES

MAY 01

Iris:

Tailpiece:

Balance:

Temp:

Guidepoint: 348.25 343.46

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
153	BS 6060 (comp)	1.50	1.0	42k	9:03	16:15:28	-8:21:46	1.32	
154	"	1.25	1.0		9:09			1.32	
155	"	"	"					1.32	
156	"	"	"	31k				"	
157	"	"	"					1.32	
158	"	"	"		9:12			1.32	
159	"	"	"					1.32	
160	1097 6032	1200	0.5	5100/1660/1200	9:50	18:10:27	15:19:26	1.00	PEAK IS FIELD STAR LOTS OF FIELD STARS
161	"	"	"	2927/1540/1320	10:11	18:11:09	15:20:34	1.06	E Row 381
162	"	"	"	2955/1552/1302	10:31	18:11:51	15:21:47	1.05	E
163	"	"	"	3111/1535/1269	10:52	18:12:34	15:22:28	1.05	V. GOOD!
164	"	"	"	3291/1584/1335	11:13	18:13:17	15:24:03	1.05	* light through object briefly
165	"	"	"		11:35	18:14:01	15:25:10	1.06	1.07 SKY rapidly rising
	165 is lost			err - 1		can't create VMS file			
166									

163

Frame prefix: SP97D

Telescope: 61
 Date: MAY 2/3
 THUR

Focus: 3730
 Iris:
 Tailpiece:
 Balance:

Sheet #: 8

Humidity: 65%
 Temp: 45/48

Guidepoint: 347.88, 343.71

Observers:

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
166	HALE-F09P	5	0.25	40K	2:54	4:44:22	+25:18:47	2.94	
167	"	"	"	22K	2:55			2.98	
168	"	"	"	41K	2:56			3.01	
169	"	"	"	36K	2:56			3.02	
170	"	30	"	27K	2:58	44:26.6	18:51.5	3.07	about 60" into trail
171	"	300	"	7.7K	3:00			3.13	about 600" into trail
				deleted	01-099				
172	P/Wistman	80	0.50	^{net 500} 2260/170/1300	4:05	6:03:032	+24:54 59	2.54	
173	"	"	"	2260/170/1300	4:16			2.77	- bright star in field
174	"	"	"	^{net 500} 2230/170/1300	4:27			3.02	wait for star to pass
175	"	"	"	2220/170/1300	4:41			3.58	
176	"	"	"	2180/170/1300	4:52			4.08	look pretty clean
177	P/W16D2	1200	0.50	7200/1800/1400	5:10	69:15:59	18:48:27	1.41	
178	"	"	"	7200/1800/1400	5:32			1.54	
179	"	"	"		5:53			1.70	1.90
180	^{COMP} BS 3750	1.5	1.0	28K	6:19	9:27:34	-6:03:30	3.01	
181	"	1.5	"	20K	6:20			3.02	
182	"	2.0	"	20K	6:22			3.08	
183	"	2.0	"	26K				3.12	
184	"	"	"	28K	6:22			3.15	

Frame prefix:

Telescope:

Sheet #: 9

Date:

Focus:

Humidity:

Observers:

Iris:

Tailpiece:

Balance:

Temp:

Guidepoint:

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
185 186	BS 3750	2.0	1.0	32K 31K				3.18 3.21	
187 188	"	"	"	406K 428K	6:34 6:35			3.52 3.56	
189 190	"	"	"	36K 40K	6:40 6:42			3.81 3.92	
191 192	"	"	"	37K	6:47 6:48			4.18 4.22	
193 194	BS 2626	1.5 "	" "	20K 24K	7:01			2.50 2.53	
195	"	2.0	"	32K	7:04			2.56	
196	BS 5960	1.5	1.0	47K	7:57	16:00:58	33:18:35	1.01	
197 198	" "	1.0 "	" "	25K 28K	7:58 7:59	" "	" "	1.01 1.01	
199 200	" "	" "	" "	25K 33K	8:00 8:01	" "	" "	" "	
201	"	"	"	27K	8:02	"	"	"	
202	BS 7272	4.0	1.0	33K	8:08	19:09:07	34:35:44	1.43	
203	"	"	"	37K	8:10	"	"	1.43	
204	"	"	"	28K	8:11	"	"	1.42	
205	"	"	"	29K	8:12	19:09:06	+34:35:11	1.41	
206	"	"	"	37K	8:14	"	"	1.41	
207	"	"	"	29K	8:15	19:09:06	+34:35:10	1.40	
208 209	BS 5511	0.4	"	41K 43K	8:25 8:27	14:46:07 "	30:53:42 "	1.20 "	
210 211	" "	" "	" "	36K 39K	8:28 8:29	" "	" "	" "	

W
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Frame prefix: SP97D

Telescope: 61" >

Sheet #: 11

Date: MAY 31/94

Focus:

Humidity:

Observers: FINK, HICKS, FEVIG

FR1

Iris:

Tailpiece:

Balance:

Temp:

Guidepoint:

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
219	HALE-BOPP	50	0.25	46K	5:20			4.76	slot N-S
220	"	"	"	50K	5:22			4.90	
221	"	"	"	47K					
222	"	300	"	6K					offset 60" into tail
223	"	60	"	10K	5:25			5.17	60" + zone tail
224	"	60	"	3.5K	5:27			5.32	+20"
225	"	60	"	2.8K		04:48:09	+24:43:08	5.12	+20"
226	"	60	"			48:24	+24:43:45		+20"
227	"	"	"	23K		04:48:39	+24:44:24	5.74	+20"
228	"	"	"	2K		04:48:53	+24:44:47	6.00	+20"
229	"	"	"	1.8K		49:08	+24:45:35	6.20	+20"
230	"	"	"	1.6K		49:23	46.6	6.38	+20"
231	Wirtanen	60	0.50	240/1760/1400	4:10	06:07:42	30:40:15	2.42	
232	"	"	"	240/1740/1400	4:11			2.65	
233	"	"	"	2240/1760/1370	4:24			2.40	
234	"	"	"	2350/1740/1350	4:32			3.22	
235	1997 BH3	1200	0.5	3300/1720/1450	4:55	10:43:21	11:51:52	1.15	
236	"	"	"	3470/1695/1455	5:15	"	"	1.19	

181

4,7 → 5,1

Frame prefix: SP97D

Telescope: 61"

Sheet #: 12

Date: May 2/3
Friday

Focus: 3740

Iris:

Humidity: 45%

Tailpiece:

Temp: 48/50

Balance:

Guidepoint: (347.34, 393.94)

Observers: Fink, Fevig, Hicks, Collins

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
237	1997 GHz ₃	1200	0.5	³⁵⁷⁰ 1729/1449	5:36	10:43:38	11:51:05	1.25	
238	"	"	"	³⁵²⁹ 1687 1403	5:56	"	"	1.33	
239	"	"	"	³¹⁹⁴ 1743 1416	6:19	10:43:47	11:50:21	1.42	
240	"	"	"	²⁹¹⁴ 1730 1594	6:40	10:43:52	11:49:58	1.55	-1.69
241	BS 3625	2.0	1.0	³⁵ 35K	7:35	9:08:41	33:53:35	3.02	
242	"	"	"	24K	7:36	"	"	3.04	
243	"	"	"	36K	7:37	"	"	3.07	
244	"	"	"	30K	7:38	"	"	3.09	
245	"	"	"	26K	7:39	"	"	3.12	
246	"	"	"	28K	7:40	"	"	3.15	
247	BS 5511 570	0.2	"	27K	7:48	19:46:06	701:53:49.6	1.17	Standard
248	"	"	"	27K	7:49	"	"	1.17	
249	"	"	"	19K	7:50	"	"	1.17	
250	"	"	"	20K	7:51	"	"	1.17	
251	BS 5468	1.0	"	40K	7:55	16:00:56	+33:18:34	1.01	comp
252	"	"	"	30K	7:56	"	"	1.01	
253	"	"	"	43K	7:57	"	"	1.01	
254	"	"	"	47K	7:58	"	"	1.01	
255	"	"	"	43.5K	7:59	"	"	1.01	
256	"	"	"	42K	8:00	"	"	1.01	
257	BS 3625	2.5	"	24K	8:14	09:08:41	+33:53:33	4.7	comp
258	"	"	"	27K	8:15	"	"	4.76	
259	"	"	"	28K	8:16	"	"	4.82	
260	"	"	"	25K	8:17	"	"	4.88	
261	"	"	"	26K	8:18	"	"	4.94	
262	"	"	"	29K	8:18:42	"	"	5.00	
263	"	"	"	28K	8:19	"	"	5.06	
264	"	"	"	2.7K	8:20	"	"	5.14	
265	BS 4486	3.0	"	37K	8:27	11:38:36	+45:07:24	1.53	comp
266	"	"	"	42K	8:28	"	"	1.54	

dw

ICE/IRAF w/ long camera

Telescope: 61"

Frame prefix: ti97D

Date: UT 1997 May 1

Focus: 3770

Iris:

Tailpiece: rot 60°

Balance:

Humidity: 56%

Temp: 51/47°F

Sheet #: 3

Observers: FINK HICKS FEVIG GRUNDY

Guidepoint: (348.25, 393.46)

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon , LHA, VME , clouds, etc. photometric
11	Hale-Bopp	0.2	B/di	~20k peak 820k phot	2:49~	4:41:07	25:55:36	2.79	centered on guidepoint
12	"	0.2	"	"		4:41:12	25:55:43	2.9	sp97d110
13	"	10.0	"	comet not in field		4:41:51	25:58:08	3.0	sp97d111
X	Wirtanen	60	B/di	20K	4:03~	5:58:23	+29:48:15	~2.55	
14	"	"	"						
X	1997 G _{H3}	60	B/di	10K	5:20	10:32:09	+12:44:30	~1.22	
15	"	60	"			"	"	~1.26	
16	"	"	"			"	"	1.29	
Σ	Files ti97D 0015 - 0057 0057 are 1997 G _{H3}								
X	1997 G _{D32}	60	B/di	26K	9:52	18:10:14	+15:19:00	1.08	starting time
X	Took images automatically for each guide until								
X	May be a vignetting problem near FI 97D.0089								
X	Image Images 106 & 107 are the same								
	Files ti97D 0058 -								
	(ti97D0058's header is in error, should read "1997 G _{D32} ")								
	Images 117 & 116 are the same								

6" wide field camera
 mounted at north finder scope
 Frame prefix: WF97D

Telescope: 61"

Date: UT May 1 1997

Observers: FINK-GRUNDY-FEVIG-HICKS

VME-10

Sheet #:  2

Focus: red mark on 3705
 Iris: bolts
 Tailpiece:
 Balance:

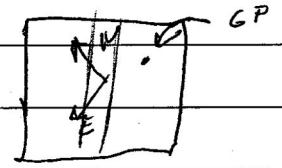
Humidity: 82%

Temp: 46/50

Guidepoint:

800²
 Some on ima
 some on sys

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
001	HALE-BOPP	60	H ₂ O ⁺	not identified: 11				3.18	note: Camera is
2	"	1	Open	50k	3:37	4:42:58	25:28:17	4.91	way off alignment with
3	"	60	CO ⁺	4000 over sky peak				5.2	telescope sop coordinates
4	"	"	H ₂ O ⁺	52k?				5.34	are meaningless
5	"	"	cont	26k peak				5.55	
6	"	120	NaD	8700 peak				5.89-6.10	
7	"	"	CO ⁺	7450 Peak	3:50:29			6.23-6.51	
TO	OFFSET	FDR WF		RA +00:02:35				DEC - 00:32:23	
8	EST WEST TEST	100	H ₂ O ⁺						WILL TURNED OFF TRACKING 2 SEC AFTER EXP STARTED
9	Plan								} Paed by accident by Mike
10	Plan								
009	SKYFLAT	0.1	CO ⁺	45k	22:01				THROUGH DOME SLIT
010	"	"	"						
011	"	0.1	CO ⁺						
012	"	0.1	H ₂ O ⁺	45k					
013	"	"	"						
014	"	"	"						



* H₂O⁺ 114 SAVED ALSO, SORRY FOR MISTAKE

VME-10

Sheet #:

4

Frame prefix: WF97D

Telescope: 61"

Focus:

Iris:

Tailpiece:

Balance:

Humidity:

Temp:

Guidepoint:

Date: May 1/2
Thursday

Observers: Fink, Fevig, Hicks, Collins

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA α	Dec δ	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
30	HALE-Bopp	120	CO+	10 Kpk	3:10	4:47:42	+24:48:16	3.47	OFFSET
31	"	60	H ₂ O+	57 pk	3:14			3.58	00:02:35 -00:32,23
32	"	60	⁶²⁵⁰ CONT	27 pk				3.67	
33	"	120	NAD	10 kpk	3:18			3.77	
34	"	300	NAD	22 kpk	3:21			3.92	
35	"	300	CO+	20 K	3:27	4:47:45	24:47:47	4.26	
36	HALE-Bopp	30	C2	37 K	3:36	4:27:00	24:47:32	4.96	OFFSET -00:45 RA
37	"	60	NH ₂	18 K	3:38			5.20	
38	"	120	⁸⁶⁰⁰ CONT	55 K	3:40			5.33	
39	"	120	CU	26 K				5.45	(END)
40	B5 3626	60	CU		7:15			2.79	
41								2.84	
42	B5 3626	30	8600	2 K	7:20			2.91	
43								2.94	
44	"	20	NH ₂	7.4				2.99	
45		30		4.4				3.03	
46	"	30	C2	9.4	7:27			3.09	
47		30		7.6				3.13	
48	"	40	N ₂ O	3.5	7:35			3.28	
49		20						3.39	
50	"	30	6250	6.4				3.47	
51		30						3.52	
52	"	30	H ₂ O+	13 K	7:40			3.59	
53	"	30						3.65	
54		60	CO+	2.2 K				3.76	
55		60						3.83	

Z ↓

W ↓