

Frame prefix: SP97F

Telescope: 61"

Sheet #: 1

Date: Oct 29/30

Focus:

Humidity: 72

Iris:

Tailpiece:

Balance:

Temp: 41/37

Observers: FINK FEVIG HICKS (GLASS UP IN DOME)

Guidepoint: [337.7, 395.9 for +60° rot]

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.
<del>001</del>	<del>UTSONOMMA</del>	<del>600</del>	<del>0.5</del>	<del>11800</del>	<del>3:02</del>	<del>19:07:45</del>	<del>39:01:59</del>	<del>1.27</del>	<del>STAR IN SLIT</del>
001	UTSONOMMA	600	0.5	11800 Ndr600 1535/1132	3:02	19:07:45	39:01:59	1.27	STAR IN SLIT <i>INALATK ANGLE 8P</i>
002	"	1200	"	11175 1524/1131	3:35			1.40	
003	"	1200	"	11126 1528/1137	4:03			1.54	
004	"	"	"	5478 1523/1148	4:37	22:15:34	-3:43:25	1.35	PA 29.7 <i>TAIL LHA+1.57</i>
005	1997SES	1200	"	5543 1507/1143	4:57			1.41	<i>PIECE rot +60</i>
006	"	"	"	9781/11518 1149	4:17	22:15:41	-3:42:50	1.49	PA +38.9 (42 ENT)
007	4183C426	1700	"	2460 1374/1170	5:54	01:51:34	+24:37:23	1.02	
008	"	1200	"	2759 1427/1160	6:15	01:51:33	+24:37:18	1.01	
009	"	1200	"	2778 1446/1210	6:36	"	"	1.01	
010	BS660 Solar Comp	0.5	1.0	31,000	7:04	02:16:56	+34:21:54	1.00	
011	"	"	"	28K	7:06	"	"	"	
012	"	"	"	"	7:07	"	"	"	
013	"	"	"	20K	7:08	"	"	"	
014	"	"	"	~26K	7:09	"	"	"	
015	"	"	"	"	"	"	"	"	
016	BS 9107 (Solar Comp)	2.0	"	21K 32K	7:~16 7:17	00:04:47	+34:38:54	1.15 1.16	
017	"	"	"	28K	7:18	"	"	1.16	
018	"	"	"	27K	7:14	"	"	1.16	
019	"	"	"	34K	7:20	"	"	1.17	
020	"	"	"						

Frame prefix: SP97F

Telescope: 61"

Sheet #: 2

Date: Oct 29/30

Focus:

Humidity: 72

Iris:

Tailpiece:

Balance:

Temp: 41/37

Observers:

Guidepoint:  $\left( \begin{matrix} 337.7, 395.9 \\ \text{for } +60^\circ \text{ Rot} \end{matrix} \right)$

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
021	BS 2067	4	1.0	39K	7:30	05:55:56	+13:55:31	1.48	
022	"	"	"	45K	7:32	"	"	1.47	
023	"	3	"	30K	7:33	"	"	1.46	
024	"	"	"	34K	7:34	"	"	1.46	
025	"	"	"	29K	7:35	"	"	1.45	
026	"	"	"	30K	7:36	"	"	1.45	
027	"	"	"	26K	7:37	"	"	1.44	
028	"	"	"	25K	7:38	"	"	1.44	
029	(FLUX STANDARD) BS 718	0.5	"	28K	7:49	02:28:02	+08:27:01	1.10	
030	"	"	"	23K	7:50	"	"	1.10	
031	"	"	"	28K	7:51	"	"	1.11	
032	"	"	"		7:52	"	"	1.11	
033	349 Dembowska	30	0.5	12135 1192/1163	8:45	04:58:14	+28:46:02	1.03	Rotated Tailpiece. New Guidepoint SAME
034	"	60	"	24463 1208/1173	8:47	"	"	"	
035	"	"	"	23059 1200/1181	8:49	"	"	1.02	
036	"	"	"	22704 1204/1147	8:52	"	"	"	
037	"	"	"	23812 1183/1179	8:54	"	"	"	
038	"	"	"	21414 1179/1179	8:56	"	"	"	
039	"	"	"	24162 1204/1161	8:59	"	"	"	
040	"	"	"	20639 1175/1167	9:01	"	"	"	
041	HW 02F-H	1200	0.5	3625 <del>1195</del> 1631 1195	10:15	9:08:25	+7:9:3	1.83	
042	"	"	"	3761 1626/1227				1.55	21 5mm to go
043	"	"	"	4002/11650 1263	10:57			1.51	

Frame prefix:

SP97F

Telescope:

61"

Sheet #:

3

Date:

OCT 29/30

Focus:

Iris:

Tailpiece: -

Humidity:

Observers:

HICKS, FEUC

WED EVENING

Balance:

Temp:

Guidepoint:

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
44	P/WOLF-Hartz	1200	5mm	4096/1663 1316	11:18	9:08:30	7:09:05	1.40	-1.32
45	COMP BS 3750	1.0	1.0m	26K		9:27:42	-6:04:02	1.61	
46	"	"	"		11:50			1.61	
47	"	"	"	29K				1.61	
48	"	"	"					1.60	
49	"	"	"					1.66	
50	BS 4627	1.0	1.0	12K	12:00	10:16:23	28:41:18	1.30	
51	"	2.5	"	24K				1.29	928 218
52	"	"	"					1.29	let 70824
53	"	"	"					1.24	
54	"	"	"					1.28	
Theory Oct. 30/31 tailpiece tilted to 60° Top 45/43 Fov 2460									
55	103P/Hartz	1200	0.50	Net 500 2370/1700/1500	2:26:01	19:35:20.6	-07:48:39	1.55	PA +35 SLIDE IN AT 726 SEC TO GO
56	"	"	"	Net 1500 550/2010/1400	2:46:42	22.4	24)	1.62	2nd mag at top 218 D.S. out
57	"	"	"	Net 1500 3500/2000/1500	3:07:32	24.01	24.7	1.81	
58	"	9000 12	"	Net 1500 2800/1500/1310	3:28:23	26.10	44.8	2.01	DARK SLIDE IN rec. of AT-300 SEC recording etc
59	1922 ZUW	1200	"	Net 2000 2200/1500/1400	04:11	01:18:18.9	+24:48:16	1.11	2nd quick problem
60	"	"	"	Net 3000 2000/1800/1400	04:32:24			1.07	jump in east
61	"	"	"	Net 4000 2200/1600/1400	4:54	13.2	36.5	1.04	
62	"	"	"	2200/1600/1400	5:15	11.2	19.8	1.03	
63	"	"	"	2620/1639/1434	5:38			1.01	-101
64	4183 Com0	1200	0.10	1300 net 2970/1610/1380	6:08	01:49:46.5	20:28:55	1.01	

Frame prefix: SPAP

Telescope: G<sup>14</sup>  
 Date: Oct 30/31  
 Thursday

Focus: 3460  
 Iris: 300  
 Tailpiece: +60  
 Balance:

Sheet #: 4

Humidity: 63  
 Temp: 46/42

Observers: Fink, Hicks

Guidepoint:

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
065	418 <sup>s</sup> Coma	1.20	0.50	<sup>low out</sup> 2680/1630/1320	06:29	01:49:40.7	21:28:48.1	1.01	NAME WRONG IN HEADER
066	"	"	"	2650/1373	6:50			1.01	
067	"	"	"	3877/1615 1376	7:12	01:49:41	+24:28:34	1.02	
068	Comp BS 1262	1.5	1.0	32K	8:33	04:05:14	+21:59:56	1.02	
069	"	"	"		8:49			"	← Dome needed rotating
070	"	"	"	38K	8:50			"	
071	"	1.0	"	23K				"	← Reset exposure time
072	"	"	"	26K				"	
073	"	"	"					"	
074	"	"	"					"	
075	"	"	"					"	
076	"	"	"					"	
077	Comp BS 9107	1.5	"	26K	9:09	00:04:48	+34:38:43	1.68	Name wrong in header
078	"	"	"	23K	9:11			1.69	
079	"	"	"					1.70	
080	"	"	"					1.70	↓
081	"	"	"					1.72	
082	"	"	"					1.72	
083	Comp BS 448	1.5	"	25K	9:27	01:33:37	-07:02:10	1.99	
084	"	"	"					2.00	
085	"	"	"	29K				2.01	
086	"	"	"					2.05	
087	"	"	"	29K	9:34			2.07	
088	"	"	"					2.10	
089	"	"	"					2.12	
090	"	"	"	28K	9:41			2.15	
091	"	"	"					2.19	
092	Standard BS 1855	0.5	"	21K	9:52	05:31:51	-07:18:21	1.30	



Frame prefix: SP97F

Telescope: 61"

Sheet #: 5

Date: Oct 31 UT

Focus:

Humidity: 63%

Iris:

Tailpiece: +60°

Balance:

Temp: 46°/44°

Guidepoint: 337.7, 395.9

Observers: Fevig, Collins, Fink

T<sub>2</sub>  
↓ W.

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.
093	BS 1855 (Std)	0.5	1.0	20K	9:53	05:31:51	-07:18:21	1.30	
094	"	"	"					1.30	
095	"	"	"					1.30	
096	"	"	"					1.30	
097	Wolf - Harrington	1200	0.5	Net 2600 4420/1870/1400	10:21	09:10:22	+06:45:11	1.76	PA = -55.1° <span style="border: 1px solid black; padding: 2px;">Rotated tailpiece to -60°</span>
098	"	"	"	Net 2500 4320/1810/1410	10:42	09:10:24	+06:44:50	1.59	PA = -53.5°
099	"	"	"	Net 2450 4260/1810/1450	11:03	09:10:26	+06:44:31	1.47	PA = -51.4°
100	"	"	"	Net 2580 4370/1790/1420	11:25	09:10:27	+06:44:11	1.36	PA = -48.5°
101	"	"	"	Net 2600 4420/1800/1430	11:46	09:10:28	+06:43:53	1.29	PA = -44.8°
102	"	"	"	Net 1950 3770/1830/1450	12:07	09:10:29	+06:43:34	1.23	PA = -40.5° <span style="border: 1px solid black; padding: 2px;">Jump in the East! @ LHA ≈ -1:30</span>
103	"	"	"	≈ 4000/2640/1410	12:28	9:10:27	+6:43:14	1.18	PA = -34.0°
104	Comp BS 3750	1.0	1.0	26K	12:58	9:27:38	-6:04:00	1.35	
105	"	"	"					1.34	
106	"	"	"					"	
107	"	"	"					"	
108	"	"	"					"	
109	"	"	"	30K				1.33	
110	"	"	"					"	
									Sys. l. Sys. Free: 37% Delete 101-109 ~ 23% run 604, he

Frame prefix: SP97F

Telescope: 61"

Sheet #: 6

Date: Oct 31 / Nov 01

Focus: 3790

Iris: 2.0

Humidity: 46%

Tailpiece: +60°

Balance:

Temp: 52/50

Guidepoint:

Observers: Fevig, Fink, Hicks, Collins / Friday

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
111	Dome Flat	3	2.0	26K					
112	"	"	"						
113	"	"	"						
114	"	"	"						
115	"	"	"						
116	"	"	"						
117	"	"	"						
118	Hartley 2	12W	0.50	Net 1600 3440/1850/1270	2:12	19:37:42.7	-07:59:23.1	1.51	
119	"	"	"	2980/180/1200	2:35:22	46.7	57:40	1.61	2 stars passed through slit
120	"	"	"	5700/1400/1270	2:56	46.7	:27	1.74	star full frame
121	"	"	"	OR <sup>limit</sup> <del>me</del>	3:16:47	48.6	:28	1.91	→ 2.11
122	Utsunomiya	900s <del>1200</del>	0.50	10060/1660/1270				1.50	exposure started prematurely guided in at end of 900s run
123	"	12W	"	11280/1770/1580	04:10:2	19:04:08.15	+36:35:42.5	1.63	
124	"	12W	"	10795/1780/1350	04:24	06.7	34:41	1.81	2.02
									rotated slit N-S
125	A09035	12W	0.50	3100/1820/1800	05:14:19	01:37:48.9	06:03:32.2	1.16	both half of readout has fixed pattern and a baseline
126	"	"	"	Net 1800 <del>2800</del> 1800/1430	05:35	46.7	02:47.1	1.13	second star passing through
127	"	"	"	Net 1200 2940/1750/1500	05:56.5			1.12	
128	"	"	"	Net 1260 2960/1700/1430	6:58	01:37:42	+06:00:47	1.12	Accidentally pulled keyboard connector out ... re-booted
129	"	"	"	~3000/	6:52	1:37:38	+5:59:48	1.13	

A09035 = 1997 US9

V. CLEAR NIGHT!

Frame prefix: SP97F

Telescope: 61"

Sheet #: 7

Date: Oct 31/Nov 01

Focus:

Humidity:

Iris:

Tailpiece: N-S

Balance:

Temp:

Guidepoint:

Observers: Fevig, Hicks, Collins

Friday

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
130	1997UH9	1200	0.5	Net 1070 2700/1630/1390	7:49	03:17:22	+15:04:19	1.05	Fast moving object... Aten!
131	"	"	4	Net 890 2600/1713/1460					
132	"	"	"		8:31	3:17:07	+15:05:36	1.06	
<del>133</del>	TAILPIECE ROTATED TO -60° FOR WOLF HARTINGTON								
133	<sup>Comp</sup> BS 1262	1.0	1.0	20K	9:10	4:05:09	22:00:07	1.02	
134	"	"	"	"				1.02	
135	"	"	"	"				"	
136	"	"	"	"				1.02	
137	"	"	"	"				1.02	
138	"	"	"	"				1.02	
139	<sup>Comp</sup> BS 4028	1.5	1.0	16K	9:31	10:27:56	+48:47:40	2.18	
140	"	2	"	19K				2.16	
141	"	2.5	"	20K				2.15	
142	"	"	"	24K				2.13	
143	"	"	"					2.12	
144	"	"	"					2.12	
145	"	"	"					2.11	
146	"	"	"					2.10	
147	<sup>Comp</sup> BS 3626	1.5	"		9:47	09:08:44	+26:38:10	1.63	
148	"	"	"					1.62	
149	"	"	"					1.61	
150	"	"	"	25K				1.61	
151	"	"	"	20K				1.60	
152	"	"	"	24K				1.59	

Temp

Frame prefix: SP97F

Telescope: 61"

Sheet #: 8

Date: Oct 31/Nov 01

Focus:

Iris:

Humidity:

Tailpiece: N-S

Balance:

Temp:

Guidepoint:

Observers: Fevig, Collins, Fink Friday

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
153	(Standard) BS 1855	0.5	1.0	18K	10:01	5:31:47	-7:18:00	1.30	
154	"	"	"					"	
155	"	"	"					"	
156	"	"	"					"	
157	"	"	"					"	
158	Wolf-Harrington	1200	0.25	Net 1600 3000/1400/1200	10:27	9:12:18	+6:21:42	1.71	Rotated tailpiece to -60°
159	"	"	"	Net 1650 3070/1420/1230	10:48	9:12:19	+6:21	1.55	
160	"	"	"	Net 1740 3160/1420/1240	11:12	9:12:20	+6:20:56	1.42	
161	"	"	"	Net 1850 3267/1430/1260	11:33	9:12:22	+6:20:37	1.33	
162	"	"	"	Net 2040 3440/1400/1260	11:54	9:12:23	+6:20:19	1.26	
163	"	"	"	Net = 650 2020/143/1290	12:15	9:12:25	+6:20:00	1.21	Jump in the East!
164	"	"	"	Net = 1780 4970/3190/1470	12:35			1.17	
									<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">                     no disk                      110 hrs 27% free                      0 hrs 84% free                 </div>

↓N.

Frame prefix: Sp97f

8634

Telescope: 61"

Sheet #: 9

Date: Nov 01/02

Focus: 3770

Humidity: 53%

Observers: Fens, Ank

Set

Iris:

Tailpiece: N-S

Temp: 41°/38°

K-counts

Balance:

Guidepoint: PA

LHA

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Rhot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc. VMag	
165- 168	Vega	.01	1.0	45, 21, 26, 30k	1:35	18:36:50	+38:47:22	1.15 -1.17	AUS	0
169- 172	BS 7672	1.0	"	26, 21, 23, ?	1:54	20:03:59	+17:04:20	1.08- 1.09	Solar	40.3° 5.8
173- 176	BS 7914	2.0	"	28, 29, 27, 29	2:01	20:40:39	+19:55:38	1.04-	Solar	35.1° 6.45
177- 180	BS 7906	0.2	"	22, 21, 21, 22	2:17	20:39:32	+15:54:15	1.07-	Standard	35.6° 3.77
181- 184	BS 7994	2.0	"	31, 29, 29, 32	2:27	20:52:58	-11:34:27	1.44- 1.44	Solar	17.0° 6.37 +01:30
185- 188	BS 8041	1.5	"	28, 30, 27, 29k	2:36	21:00:26	-04:43:52	1.30- 1.30	Solar	19.8° 6.20 +00:56
189- 192	BS 8148	2.0	"	27, 27, 26, 24	2:45	21:19:38	-26:21:37	1.98- 1.99	"Bad" Solar	12.4° 6.55 +00:50
193- 196	BS 8283	0.6	"	29, 25, 29, 28	2:54	21:41:26	-14:03:26	1.47- 1.47	Solar	10.0° 5.17 +00:33
197- 200	BS 8314	1.2	"	28, 27, 27, 28	3:03	21:44:24	+14:46:08	1.06- 1.0	Solar	26.8° 5.94 +00:41
201- 204	BS 8544	1.5	"	29, 31, 30, ?	3:16	22:26:27	-16:44:56	1.53- 1.53	questionable Vmag Solar	2.8° → 6.57? +00:10
205- 208	BS 8631	1.0	"	28, 30, 29, 30	3:24	22:40:45	+14:32:39	1.05-	"Bad" Solar	4.7° 5.70 +00:06
209- 212	BS 8622	0.5	"	25, 30, 28, 28	3:42	22:39:09	+39:02:59	1.01- 1.01	Standard	136.5° 4.87 +00:25
213- 216	BS 8634	0.15	"	19, 19, 22, 22	3:51	22:41:20	+10:49:41	1.08- 1.09	Standard	18.4° 3.39 +00:33
217- 220	BS 8729	0.8	"	29, 30, 31, 30	3:59	22:57:21	+20:45:26	1.03-	Solar	26.3° 5.49
221- 224	BS 8737	2.0	"	25, 28, 28, 30	4:09	22:58:28	+09:21:13	1.10-	Solar	17.7° 6.42 +00:34
225- 228	BS 8792	1.8	"	24, 23, 25, 25	4:15	23:06:25	+19:54:24	1.03- 1.03	"Bad" Solar	28.9° 6.29 +00:34
229- 232	BS 8781	0.07	"	27, 21, 26, 22	4:24	23:04:38	+15:12:06	1.06- 1.06	Standard	28.3° 2.49 +00:43
233- 236	BS 8931	2.0	"	20, 19, 21,	4:33	23:31:24	-04:05:37	1.25- 1.25	Solar	10.0° 6.49 +00:28

↓ BS

18

deleted to 259

Frame prefix: SP97F

Telescope: 61"

Sheet #: 10

Date: Nov 01/02

Focus: 3770

Iris:

Humidity:

Tailpiece: N-S

Balance:

Temp:

Observers: Fevig, Fenk, Collins

Sat.

K-counts

Guidepoint:

PA

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc. <u>Vmag</u>	LHA
237-240	BS 9074/75	2.0	1.0	30,30,31,32	4:42	23:59:22	+33:43:13	1.00-1.00	"Bad" Solar 132.8° 6.58	+00:07
241-244	BS 9107	1.4	"	23,23,24,26	4:49	00:04:46	+34:39:24	1.00-1.00	Solar 142.9° 6.12	+00:07
245-248	BS 5	1.2	"	22,22,22,23	4:59	00:06:08	+58:27:15	1.12-1.12	Solar 170.0° 5.95	+00:19
249-252	BS 72	2.0	"	28,27,26,29	5:07	00:18:35	-08:03:54	1.31-1.31	Solar 4.0° 6.45	+00:12
253-256	BS 2141	1.4	2.0	20,25,25,28	5:23	06:06:07	+35:23:29	2.32-2.28	Solar -66.9° 6.12	-05:20
257-260	BS 88	2.0	1.0	30,29,32,29	5:32	00:22:45	-12:12:51	1.42-1.42	Solar 10.5 6.38	+00:35
261-264	BS 159	0.8	"	25,25,19,23	5:42	00:37:14	-24:46:33	1.86-	"Bad" Solar 7.2° 5.57	+00:28
265-268	BS 173	1.4	"	21,17,20,19	5:49	00:40:26	-23:48:58	1.82-1.82	"Bad" Solar 8.3° 6.13	+00:32
269-272	BS 300	1.8	"	24,23,28,30	5:58	01:03:11	-29:32:07	2.13-2.13	"Bad" Solar 4.5° 6.29	+00:19
273-276	BS 448	1.0	"	21,20,24,22	6:05	01:33:36	-07:01:52	1.29-	Solar -0.5° 5.75	-00:03
277-280	BS 2141	1.4	2.0	23,23,24,19	6:15	06:06:56	+35:23:27	1.72-1.69	Fits header has wrong slit width Solar -72.8° 6.12	-04:25
281-284	BS 483	0.5	1.0	24,20,27,27	6:24	01:41:39	+42:37:40	1.02-1.02	Solar 171.4° 4.95	+00:08
285-288	BS 219	0.15	"	27,28,25,?	6:36	00:48:58	+57:50:04	1.14-1.14	Solar 146.7° 3.43	
289-292	BS 508	1.8	"	29,26,23,25	6:45	01:44:49	+20:04:20	1.03-1.03	Solar 23.9° 6.26	+00:25
293-296	BS 560	1.3	"	20,22,22,23	6:53	01:55:46	+01:50:49	1.16-1.17	Solar 9.1° 6.00	+00:22
297-300	BS 582	1.2	"	23,24,24,25	7:01	02:00:02	+03:05:38	1.15-1.15	Solar 11.0° 5.87	+00:25
301-304	BS 660	0.5	"	28,27,27,28	7:11	02:16:54	+34:13:28	1.00-1.00	Solar +116.4° 4.87	+00:18
305-308	BS 695	0.7	"	22,21,22,22	7:21	02:22:26	-23:49:25	1.89-1.81	Solar 6.3° 5.20	+00:29

W. 266



Frame prefix: SP97F

Telescope: 61"  
Date: Nov 01/02

Focus: ~~3770~~ 3730 (3730 @ 9:30 UT)  
Iris:  
Tailpiece: N-S  
Balance:

Sheet #: 11

Observers: Fevig, Collins, Fink

Sat  
K-counts

Humidity:  
Temp:

Guidepoint:  
PA

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc. <u>Vmag</u>	LHA
309-312	BS720	1.2	1.0	25, 24, 23, 21	7:32	02:28:41	+29:55:20	1.01-	Solar 66.5° 5.88	+00:27
313-316	BS937	0.3	1.0	25, 27, 28, 26	7:42	03:08:55	+49:36:19	1.05-	Solar -177.9° 4.04	-00:03
317-320	BS996	0.4	"	20, 21, 20, 18	7:51	03:19:14	+03:22:13	1.14- 1.14	Solar -1.1° 4.83	-00:02
321-324	BS718	0.4	"	24, 26, 25, 22	8:01	02:28:02	+08:27:38	1.12-	Standard 27.5° 4.28	+00:58
325-327	BS875	0.7	"	24, 21, 21, X	8:09	02:56:31	-03:43:15	~1.26	Standard only 3 files wrote 5.16	
328-331	BS1262	1.2	1.0	26, 27, 22, 26	9:34	04:05:12	+22:00:37	1.04-	Solar New focus of 3730 47.1° 5.90	+00:54
332-335	BS1322	1.8	"	29, 28, 19, 24	9:45	04:15:21	+06:11:24	~1.15	Solar 25.3° 6.30	+00:57
336-339	BS1532	0.8	"	24, 19, 23, 21	9:54	04:47:30	-16:56:07	1.55- 1.55	Solar 8.6° 5.50	+00:31
340-343	BS1608	0.8	"	28, 31, 30, 30	10:01	04:59:44	-10:15:41	1.37- 1.37	Solar 8.1° 5.37	+00:26
344-347	BS1662	1.5	"	25, 23, 23, 30	10:09	05:07:30	+09:28:33	~1.09	Solar 6.16	
348-351	BS1729	0.4	"	27, 31, 32, 28	10:23	05:18:58	+40:07:18	1.01- 1.02	Solar 141.9° 4.70	+00:28
352-355	BS1747	1.3	"	23, 20, 22, ?	10:32	05:18:45	-18:07:57	1.60-	Solar 10.4° 5.95	+00:38
356-359	BS1855	0.16	"	20, 24, 28, 27	10:42	05:31:49	-07:17:50	1.31- 1.32	Standard 11.1° 4.62	+00:38
360-363	BS2141	1.4	1.0	29, 31, 23, 23	10:52	06:05:59	+35:23:51	1.00- 1.00	Solar 142.5° 6.12	+00:11
364-367	BS2141	1.4	2.0	23, 23, 28, 23	10:57	"	"	1.00- 1.00	Solar " at mag 4.7 132.2° "	+00:16
368-371	BS2007	1.3	1.0	26, 29, 29, ?	11:05	05:48:28	-04:05:24	1.26- 1.27	Solar 14.5° 5.96	+00:41
372-375	BS2047	0.3	"	32, 31, 29, 28	11:15	05:54:14	+20:16:33	1.04-	Solar 37.1° 4.41	+00:44
376-379	BS2067	2.0	"	20, 22, 24, 25	11:24	05:55:55	+13:55:53	1.08- 1.08	Solar 31.8° 6.59	+00:54





Frame prefix: Sp97f

Telescope: 61"

Sheet #: 13

Date: Nov. 02/03

Focus: 3750

Humidity: 52%

Observers: Pink, Feig, Collins

Sandy

Iris:

Tailpiece: N-S

Temp: 50/44

Balance:

Guidepoint: 3358, 2918 + 4

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
412	4835 (1989BC)	1200	0.5	Extremely low due to jump	3:32	00:22:26	-19:10:31	1.75	PA -21.1° <u>Jump in the East @ LHA = -1:15</u>
413	"	"	"	Net 350 1850/1500/1170	3:54	00:22:22	-19:10:35	1.68	PA -15.8°
414	"	"	"	Net 370 1870/1500/1180	4:15	00:22:22	-19:10:36	1.64	PA -10.8°
415	"	"	"	Net 780 1900/1520/1170	4:36	00:22:21	-19:10:35	1.61	PA -5.2°
416	"	"	"	Net 400 1940/1540/1130	4:56	00:22:21	-19:10:34	1.60	PA +0.9°
417	"	"	"	Net 500 2020/1520/1210	5:18	00:22:21	-19:10:34	1.61	PA +6.5°
418	"	"	"	Net 330 1900/1570/1200	5:39	00:22:20	-19:10:32	1.64	PA +11.9°
419	1997 US9	"	"	Net 1520 2960/1440/1200	6:12	01:33:33	+04:13:41	1.13	Same as A09035 PA +2.9°
420	"	"	"	Net 1550 3010/1460/1200	6:32	01:33:31	+04:12:52	1.14	PA +12.4°
421	"	"	"	Net 1320 2780/1460/1200	6:53	01:33:28	+04:12:09	1.16	PA +20.5°
422	"	"	"	Net 1330 2770/1440/1180	7:14	01:33:27	+04:11:25	1.18	PA +27.8°
423	1997 UH9	"	"	Net 1210 2680/1470/1190	7:58	03:00:44	+16:24:34	1.04	PA +19.0° <u>Very close approach to star (see images)</u>
424	"	"	"	Net 1110 2610/1500/1230	8:19			1.06	
425	"	"	"	Net 1190 2690/1520/1230	8:40	03:00:28	+16:25:28	1.08	PA +41.4° <u>2 stars in image</u>
426	"	"	"	Net 1140 2680/1540/1240	9:01	03:00:21	+16:26:23	1.11	PA +47.8
427	Standard BS 1855	0.6	1.0	19K	9:30	05:31:50	-07:18:05	1.31	
428	"	"	"	25K				"	
429	"	"	"					"	
430	"	"	"					"	
431	"	"	"					"	

W

Frame prefix: SP97F

Telescope: 61"

Sheet #: 14

Date: Nov 02/03

Focus: 3790

Humidity: 52%

Observers: Fevig, Collins, Fink Sunday

Iris:

Tailpiece: N-S

Balance:

Temp: 50/44

Guidepoint:

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
432	Comp BS 2007	1.3	1.0	22K	9:39	05:48:29	-04:05:38	1.26	
433	"		"	26K				"	
434	"		"					"	
435	"		"					"	
436	"		"					"	
437	"		"					"	
438	Comp BS 4098	2.0	"	26K	9:50	10:28:03	+48:47:52	1.91	
439	"	"	"					1.90	
440	"	"	"					1.90	
441	"	"	"					1.89	
442	"	"	"					1.88	
443	"	"	"					1.88	
444	"	"	"					1.87	
445	Comp BS 2141	1.4	"	24K	10:02	06:06:00	+35:23:17	1.01	
446	"	"	"					"	
447	"	"	"					"	
448	"	"	"					"	
449	"	"	"					"	
450	"	"	"					"	
451	"	"	"					"	
<del>452</del>	<del>Wolf-Harrington</del>	<del>1200</del>	<del>0.25</del>	<del>Net 1770 3150/1350/1200</del>	<del>10:50</del>	<del>09:16:04</del>	<del>+05:34:08</del>	<del>1.67</del>	rotated tailpiece to -60°
452	Wolf-Harrington	1200	0.25	Net 1700 3100/1350/1230	10:51	09:16:05	+05:33:42	1.52	found it when using LED still in the LED glare.
453	"	"	"	Net 1600 3000/1400/1200	11:18	09:16:06	+05:33:14	1.39	Diffuse stars passing through slit star in hp but doesn't cut through
454	"	"	"	3100/1400/1200	11:40	09:16:08	+05:32:56	1.31	PA = -42
455	"	"	"	2800/1450/1200	01:16			1.24	jump in cut 3000 PA = -40
456	"	"	"	Net 1700 3200/1500/1200	12:22:16	06.6	16.5	1.20	fine & good exposure PA = -34°

Frame prefix: Sp97R

Telescope: 61"

Sheet #: 15

Date: Nov 02/03

Focus:

Humidity: 45%

Sandy night

Iris:

Tailpiece: -60°

Temp: 42/46

Balance:

Guidepoint:

Observers: Rick Collins

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
457	Wirt-Humbt	1200	0.25	8760/6500/1300	12:43:39			1-16	26 cur up foot PA = -26° → 1.14
<p>Nov 03/04 Monday</p> <p>some high clouds but not bad clear to the horizon</p>									
458	1980 Tezcatlipoca	600	0.5	Net 14,500 16000/1500/1360	2:49	21:41:18	+58:20:51	1.12	Tailpiece N-S
459	"	555	"	1400/1400/1200	3:00	21:41:23	+58:20:35	1.13	Darkslide inserted with 45 seconds left we wait for 2 stars to pass
460	"	600	"	17K/1370/1260	03:25:32	33	02	1.14	
461	"	"	"		03:35	58	19:49	1.15	No Na! but the H $\gamma$ line for Phoen?
462	"	"	"	16400/1390/1270	03:47	43	27	1.16	San Manuel does not appear to have H $\gamma$ light
463	"	329	"	9930/1340/1250	3:57	48	10	1.18	dark did not see out at 60
464	"	"	"	16912/1400/1260	4:09	53	53	1.19	→ 1.21
465	1992 VI	1200	"	Net 500 2000/1500/1260	4:50	00:13:53	+12:22:29	1.06	Jeff's comet H $\gamma$ is gone! PA +45° Na's back
466	Jeff's comet	"	"	Net 500 2030/1500/1280	5:14	53	24	1.07	sky looks quite clear
467	"	"	"	Net 500 2000/1500/1280	5:35	53	21	1.09	
468	1997 UH9	"	"	Net 1310 2870/1500/1300	6:13	02:52:54	+17:00:15	1.08	Results clear
469	"	"	"	Net 830 2600/1770/1310	6:34	46	49	1.05	Intermittent light clouds
470	"	"	"	Net 1050 2690/1640/1300	6:55	38	26	1.04	PA -19.3° light clouds
471	"	"	"	Net 550 2600/1650/1240	7:22	23	10	1.04	Filled dewars light clouds
472	"	"	"	NOTHING 2800/1440/1200	7:43	20	+17:02:45	1.04	PA +17.9° clouds increased Useless Exposures
473	"	"	"	garbage	8:05	11	18	1.05	PA +32.1° waiting for clouds to pass

quite clear but not perfect  
 some thin clouds  
 Dump in the East @ 1:15 LHA  
 Did not affect exposures

Frame prefix: SP97F

Telescope: 61"

Sheet #: 16

Date: Nov 03/04

Focus:

Humidity:

Iris:

Tailpiece: N-S

Balance:

Temp:

Guidepoint:

Observers: Fevig, Collins

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
474	Comp BS1262	1.7	1.0	26K	8:48	4:05:11	+22:00:41	1.02	Shooting Comp's + Std's between light clouds
475	"	"	"	28K				"	
476	"	"	"	28K				"	
477	"	"	"	27K				"	
478	"	"	"	24K				"	→ Leave out 478, clouds
479	"	"	"	30K				"	
480	"	"	"	28K				"	
481	Comp BS2251	1.0	"	22K	8:59	06:17:14	+05:06:14	1.25	
482	"	"	"	23K				1.24	
483	"	"	"	23K				"	
484	"	"	"	29K				"	
485	"	"	"	29K				"	
486	"	"	"	24K				1.23	
487	"	"	"	27K				"	
488	Std BS1855	0.7	"	31K	9:18	05:31:49	-07:18:04	1.32	
489	"	"	"	26K				1.12	
490	"	"	"	24K				"	
491	"	"	"	29K				"	
492	"	"	"	31K				1.31	
493	"	"	"	30K				"	
494	"	"	"	21K				"	
495	Comp BS4098	2.0	"	19K	9:44	10:28:03	+48:47:48	1.93	
496	"	"	"	22K				1.92	
497	"	"	"	19K				1.91	
498	"	"	"	18K				1.90	
499	"	"	"	19K				1.89	↓
500	Wolf-Harrington	1200	0.25	2200/1300/1170	10:18	09:17:56	+05:10:38	1.76	PA = -53°
501	"	1	"	2200/1300/1170	14:40			1.59	-2°
502	"	1	"		11:08				No good key cloud made in!

Frame prefix: T197F

Telescope: 61"

Sheet #: ①

Date: 10/30 UT

Focus: ~285  
Iris: ~285  
Tailpiece: 310  
Balance: 3000

Humidity: 73%

Temp: 37°/31°

Guidepoint: 337.7, 395.9

Observers: Ferig, Hicks, Fink (NOT HERE), COLLINS

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
X	Tabur	30	B/Di						Could not find
X	Uesunomija	30	B/Di	4K	3:02	19:07:44	+39:01:47		
X	1997 SE <sub>5</sub>	45	B/Di	2K	4:36	22:15:35	-3:43:25		
X	WE START SAVING GUIDING EXPOSURES FOR 1997 SE <sub>5</sub>								201-600, 201-606
	T10001-008								
X	Row to bed, Jim takes his place: we set up on 4183 Cuno								
	T10009 → 040 ARE CUNO GUIDING EXP.								
41	BS 660	0.09	B/Di			2:16:57	+31:11:54	1.00	
42	"	"	"	48K	7:07			1.00	
43	<sup>SOLAR COMP</sup> BS 9107	0.2	"	42K	7:15	06:09:47	34:38:59	1.15	
44	"	0.2	"		7:18			1.16	
45	"	"	"		7:20			1.16	
46	<sup>SOLAR COMP</sup> BS 2067	1	"		7:32	5:56:03	+13:54:16	1.48	TITLE LONG IN HEAD PA-59 but tailpiece +60
47	"	"	"		7:35			1.46	"
49	"	"	"		7:37			1.45	
X	WE HUNT FOR 1997 UR, FAST MOVER IN DENSE FIELD, CANT FIND								
X	WE FIND F1993MF L100 PK 245 SEC AND HEADING TOWARDS BRIGHT STARS								
X	Jim to bed, Row takes his place: we set up on Wolf-Harrington								

























Frame prefix: *TI97F*

Telescope:

Sheet #: *11*

Date:

Focus:

Humidity:

Iris:

Tailpiece:

Balance:

Temp:

Observers:

Guidepoint:

Exp. #	Object	Exp. time	Filter (slit)	Counts: Peak/Phot	UT time Start	RA $\alpha$	Dec $\delta$	SecZ	Comments: seeing, moon, LHA, VME crashes, clouds, etc.
<del>X</del>	<sup>1980</sup> Tezcatlipoca	30	B/Di	~6000					
340	"	"	"	5350	3:03	21:41:24	+58:20:29	1.13	Name in header incorrect
341	"	"	"					"	Name in header correct
342	"	"	"					"	Name in header correct
343	1997 V1	120	B/Di	<sup>Peak</sup> 54K <sup>Flux</sup> 14050	~4:33	00:13:54	+12:22:34	1.06	Jeff's Comet <sup>Name in header</sup> incorrect
343	"	"	B/Di		~5:17	00:13:53	+12:22:24	1.07	Name in header correct
345	"	"	"	50K 2140 50	~5:41	00:13:52	+12:22:20	1.10	
<del>X</del>	1997 UH9	45	B/Di	<sup>Peak</sup> 17K <sup>Flux</sup> 500	5:58				
346	"	"	"		6:04	02:53:02	+16:59:51	1.09	Name in header incorrect
<del>347</del>	"	"	"						"
<del>→ 342</del>					8:32				Intermittent thin clouds
393	BS1262	0.1	"	20K	8:42	04:05:11	+22:00:55	1.02	"
394	"	"	"	17K	8:44	"	"	"	"
395	BS 2251	"	"	15K	9:01	06:17:15	+05:06:13	1.24	"
396	"	"	"	24K	9:04	"	"	"	
397	"	"	"	"	9:05	"	"	1.23	
398	BS 1855	0.02	"	23K	9:13	05:31:44	-07:18:00	1.33	
399	"	"	"	"	9:19	"	"	1.32	

Discrepancy in numbering

