



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-01-05 Observers M Calkins

Coll. Focus 992 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0010.BIAS	0	10:41	10:17:34.1	+31:31:27	300	90	3.0	#56 Spectropho	4	
0011-0013.FLAT	6	10:43	10:19:20.5	+31:31:27	300	90	3.0	#56 Spectropho	4	
0014-0020.FLAT	6	10:44	10:20:49.7	+31:31:28	300	90	3.0	#56 Spectropho	4	
0021-0029.BIAS	0	10:47	10:23:35.4	+31:31:28	300	90	3.0	#56 Spectropho	2	
0030.BIAS	0	10:47	10:23:48.3	+31:31:29	300	90	3.0	#56 Spectropho	2	
0031-0038.FLAT	12	10:51	10:27:54.7	+31:31:29	300	90	3.0	#56 Spectropho	2	
0039-0040.FLAT	12	10:52	10:28:45.4	+31:31:30	300	90	3.0	#56 Spectropho	2	
0041.DARK	900	10:53	10:44:37.8	+31:31:33	300	90	3.0	#56 Spectropho	2	
0042.DARK	900	11:08	10:59:53.4	+31:31:36	300	90	3.0	#56 Spectropho	2	
0043.DARK	900	11:23	11:15:07.9	+31:31:38	300	90	3.0	#56 Spectropho	2	
0044.DARK	900	11:39	11:30:22.3	+31:31:40	300	90	3.0	#56 Spectropho	2	
0045.DARK	900	11:54	11:45:36.6	+31:31:41	300	90	3.0	#56 Spectropho	2	
0046-0049.DARK	900	12:55	12:46:39.2	+31:31:42	300	90	3.0	#56 Spectropho	2	
0050.DARK	900	13:10	13:01:53.4	+31:31:41	300	90	3.0	#56 Spectropho	2	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	22:25	22:18:10.7	+31:28:21	300	90	3.0	#56 Spectropho	4	
0002.DARK	900	22:40	22:33:20.6	+31:28:17	300	90	3.0	#56 Spectropho	4	
0003.DARK	900	22:55	22:48:30.1	+31:28:14	300	90	3.0	#56 Spectropho	4	
0004.DARK	900	23:10	23:03:37.4	+31:28:12	300	90	3.0	#56 Spectropho	4	
0005.DARK	900	23:25	23:18:46.9	+31:28:10	300	90	3.0	#56 Spectropho	4	
0006.DARK	900	23:40	23:33:56.7	+31:28:08	300	90	3.0	#56 Spectropho	4	
0007.DARK	900	23:55	23:49:06.0	+31:28:07	300	90	3.0	#56 Spectropho	4	
0008-0010.DARK	900	0:41	00:34:32.2	+31:28:06	300	90	3.0	#56 Spectropho	4	
0011-0020.BIAS	0	2:29	02:08:26.9	+31:28:17	300	90	3.0	#56 Spectropho	4	
0021.COMP	5	2:33	02:11:50.8	+31:28:18	300	90	3.0	#56 Spectropho	4	
0022.fastfoc	10	2:36	02:15:11.0	+31:28:19	300	90	3.0	#56 Spectropho	4	
0023.fastfoc	10	2:36	02:15:31.9	+31:28:19	300	90	3.0	#56 Spectropho	4	
0024.fastfoc	10	2:36	02:15:49.4	+31:28:19	300	90	3.0	#56 Spectropho	4	
0025.fastfoc	10	2:37	02:16:10.3	+31:28:19	300	90	3.0	#56 Spectropho	4	
0026.fastfoc	10	2:37	02:16:31.4	+31:28:19	300	90	3.0	#56 Spectropho	4	
0027.fastfoc	10	2:37	02:16:48.9	+31:28:19	300	90	3.0	#56 Spectropho	4	
0028.fastfoc	10	2:38	02:17:10.2	+31:28:19	300	90	3.0	#56 Spectropho	4	
0029.fastfoc	10	2:38	02:17:31.2	+31:28:19	300	90	3.0	#56 Spectropho	4	
0030.fastfoc	10	2:38	02:17:48.8	+31:28:19	300	90	3.0	#56 Spectropho	4	
0031.fastfoc	10	2:39	02:18:09.8	+31:28:19	300	90	3.0	#56 Spectropho	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0032.fastfoc	10	2:39	02:18:30.9	+31:28:19	300	90	3.0	#56 Spectropho	4	
0033.fastfoc	10	2:39	02:18:48.4	+31:28:19	300	90	3.0	#56 Spectropho	4	
0034.fastfoc	10	2:40	02:19:09.3	+31:28:20	300	90	3.0	#56 Spectropho	4	
0035.fastfoc	10	2:40	02:19:30.2	+31:28:20	300	90	3.0	#56 Spectropho	4	
0036.FineFoc	60	3:35	03:01:15.8	31:57:18	300	90	3.0	#56 Spectropho	1	
0037.COMP	5	3:48	05:47:48.3	+00:40:59	300	90	3.0	#112 Orion PMS	4	
0038.cvso-71947	480	3:50	05:47:48.3	+00:40:59	300	90	3.0	#112 Orion PMS	4	
0039.COMP	5	4:05	05:47:50.5	+01:35:57	300	90	3.0	#112 Orion PMS	4	
0040.cvso-75472	480	4:06	05:47:50.5	+01:35:57	300	90	3.0	#112 Orion PMS	4	
0041.COMP	5	4:19	05:48:05.8	+01:39:29	300	90	3.0	#112 Orion PMS	4	
0042.cvso-75764	420	4:20	05:48:05.8	+01:39:29	300	90	3.0	#112 Orion PMS	4	
0043.COMP	10	4:34	03:08:25.6	26:19:51	300	90	3.0	#56 Spectropho	2	
0044.HD19445	30	4:36	03:08:25.6	26:19:51	300	90	3.0	#56 Spectropho	2	
0045.COMP	10	4:41	05:01:31.5	52:45:52	300	90	3.0	#56 Spectropho	2	
0046.G191B2B	180	4:43	05:01:31.5	52:45:52	300	90	3.0	#56 Spectropho	2	
0047.G191B2B	240	4:48	05:01:31.5	52:45:52	300	90	3.0	#56 Spectropho	2	
0048.COMP	10	5:15	05:12:04.8	-15:40:54	300	-7	3.0	#2 SN Observat	2	
0049.sn2004gq	1500	5:17	05:12:04.8	-15:40:54	300	-7	3.0	#2 SN Observat	2	
0050.COMP	5	6:00	05:48:09.2	+01:12:27	300	90	3.0	#112 Orion PMS	4	
0051.cvso-74323	480	6:01	05:48:09.2	+01:12:27	300	90	3.0	#112 Orion PMS	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0052.COMP	5	6:11	05:48:16.9	+00:22:29	300	90	3.0	#112 Orion PMS	4	
0053.cvso-72085	480	6:13	05:48:16.9	+00:22:29	300	90	3.0	#112 Orion PMS	4	
0054.COMP	5	6:26	05:59:19.2	+00:09:27	300	90	3.0	#112 Orion PMS	4	
0055.cvso-53844	360	6:27	05:59:19.2	+00:09:27	300	90	3.0	#112 Orion PMS	4	
0056.COMP	5	6:35	05:59:39.1	+01:41:27	300	90	3.0	#112 Orion PMS	4	
0057.cvso-87471	420	6:36	05:59:39.1	+01:41:27	300	90	3.0	#112 Orion PMS	4	
0058.COMP	5	6:52	08:29:37.4	+29:59:12	300	90	3.0	#64 Cluster an	4	
0059.0671_01	1200	6:53	08:29:37.4	+29:59:12	300	90	3.0	#64 Cluster an	4	
0060.COMP	5	7:16	08:28:51.6	+30:09:19	300	90	3.0	#64 Cluster an	4	
0061.0671_02	1200	7:16	08:28:51.6	+30:09:19	300	90	3.0	#64 Cluster an	4	
0062.COMP	5	7:39	08:26:32.0	+30:10:52	300	90	3.0	#64 Cluster an	4	
0063.0671_03	900	7:40	08:26:32.0	+30:10:52	300	90	3.0	#64 Cluster an	4	
0064.COMP	5	7:57	08:28:34.5	+30:15:58	300	90	3.0	#64 Cluster an	4	
0065.0671_04	600	7:58	08:28:34.5	+30:15:58	300	90	3.0	#64 Cluster an	4	
0066.COMP	5	8:10	08:29:27.3	+30:16:33	300	90	3.0	#64 Cluster an	4	
0067.0671_05	900	8:11	08:29:27.3	+30:16:33	300	90	3.0	#64 Cluster an	4	
0068.COMP	5	8:30	08:29:00.3	+30:19:39	300	90	3.0	#64 Cluster an	4	
0069.0671_06	600	8:30	08:29:00.3	+30:19:39	300	90	3.0	#64 Cluster an	4	
0070.COMP	5	8:43	08:28:22.8	+30:21:23	300	90	3.0	#64 Cluster an	4	
0071.0671_07	600	8:45	08:28:22.8	+30:21:23	300	90	3.0	#64 Cluster an	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0072.COMP	5	8:58	08:28:23.6	+30:22:51	300	90	3.0	#64 Cluster an	4	
0073.0671_08	600	9:01	08:28:23.6	+30:22:51	300	90	3.0	#64 Cluster an	4	
0074.COMP	10	9:20	08:38:23.1	+17:37:39	300	20	3.0	#2 SN Observat	2	
0075.sn2004gs	1200	9:21	08:38:23.1	+17:37:39	300	20	3.0	#2 SN Observat	2	
0076.COMP	10	9:59	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0077.Feige34	120	9:59	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0078.COMP	5	10:05	11:26:40.2	+53:44:50	300	90	3.0	#84f Updated Z	4	
0079.112348+54010	300	10:08	11:26:40.2	+53:44:50	300	90	3.0	#84f Updated Z	4	
0080.112348+54010	900	10:16	11:26:40.2	+53:44:50	300	90	3.0	#84f Updated Z	4	
0081.COMP	5	10:37	11:28:58.6	+20:45:01	300	90	3.0	#84f Updated Z	4	
0082.112612+21010	300	10:37	11:28:58.6	+20:45:01	300	90	3.0	#84f Updated Z	4	
0083.COMP	10	10:55	10:36:41.2	43:21:50	600	90	2.0	#56 Spectropho	4	
0084.COMP	10	10:56	10:36:41.2	43:21:50	600	90	2.0	#56 Spectropho	2	
0085.Feige34	180	10:58	10:36:41.2	43:21:50	600	90	2.0	#56 Spectropho	2	
0086.COMP	10	11:04	12:13:38.2	24:32:06	600	90	2.0	#122 Halo Star	2	
0087.hs2204	156	11:05	12:13:38.2	24:32:06	600	90	2.0	#122 Halo Star	2	
0088.COMP	10	11:10	12:14:42.2	54:59:29	600	90	2.0	#122 Halo Star	2	
0089.hs2210	486	11:12	12:14:42.2	54:59:29	600	90	2.0	#122 Halo Star	2	
0090.COMP	10	11:23	12:18:08.4	33:24:36	600	90	2.0	#122 Halo Star	2	
0091.hs2230	462	11:25	12:18:08.4	33:24:36	600	90	2.0	#122 Halo Star	2	



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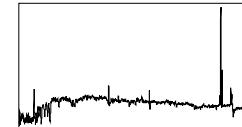
Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0092.COMP	10	11:35	12:19:04.9	17:29:39	600	90	2.0	#122 Halo Star	2	
0093.hs2237	582	11:36	12:19:04.9	17:29:39	600	90	2.0	#122 Halo Star	2	
0094.COMP	10	11:48	12:19:02.3	48:30:27	600	90	2.0	#122 Halo Star	2	
0095.hs2234	204	11:49	12:19:02.3	48:30:27	600	90	2.0	#122 Halo Star	2	
0096.COMP	10	11:54	12:19:02.5	41:01:21	600	90	2.0	#122 Halo Star	2	
0097.hs2235	210	11:55	12:19:02.5	41:01:21	600	90	2.0	#122 Halo Star	2	
0098.COMP	10	12:01	12:19:04.6	44:20:38	600	90	2.0	#122 Halo Star	2	
0099.hs2236	384	12:02	12:19:04.6	44:20:38	600	90	2.0	#122 Halo Star	2	
0100.COMP	10	12:12	12:19:08.7	25:26:17	600	90	2.0	#122 Halo Star	2	
0101.hs2238	444	12:13	12:19:08.7	25:26:17	600	90	2.0	#122 Halo Star	2	
0102.COMP	10	12:23	12:19:25.2	44:18:46	600	90	2.0	#122 Halo Star	2	
0103.hs2239	576	12:24	12:19:25.2	44:18:46	600	90	2.0	#122 Halo Star	2	
0104-0111.FLAT	24	12:40	12:19:25.2	44:18:46	600	90	2.0	#56 Spectropho	2	
0112.COMP	10	12:46	12:19:25.2	44:18:46	600	90	2.0	#56 Spectropho	2	
0113.COMP	10	12:51	12:25:33.2	+12:15:39	300	10	2.0	#2 SN Observat	2	
0114.sn2004gk	900	12:52	12:25:33.2	+12:15:39	300	10	2.0	#2 SN Observat	2	
0115.COMP	5	13:12	12:41:54.6	+09:35:04	300	90	2.0	#84f Updated Z	4	
0116.123924+09510	600	13:13	12:41:54.6	+09:35:04	300	90	2.0	#84f Updated Z	4	
0117-0126.BIAS	0	13:33	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	4	
0127-0136.FLAT	8	13:37	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	4	



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UT Date 2005-01-06 Observers E FalcoColl. Focus 960 Grating/Grism 300

<i>File</i>	<i>Exp Time</i>	<i>UT Start</i>	<i>RA</i>	<i>Dec</i>	<i>Gr.</i>	<i>P.A.</i>	<i>Slit</i>	<i>Program</i>	<i>Bir</i>	<i>Comments</i>
0137-0146.BIAS	0	13:39	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	2	
0147-0156.FLAT	16	13:45	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	2	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.COMP	5	21:53	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	4	all but 600gpm are 3 arcsec slit
0002-0011.BIAS	0	21:56	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	4	
0012-0021.FLAT	8	21:59	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	4	
0022-0031.BIAS	0	22:01	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	2	
0032-0041.FLAT	16	22:07	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	2	
0042-0046.DARK	900	0:48	12:41:54.6	+09:35:04	300	90	2.0	#56 Spectropho	2	
0047.test	10	1:16	1:9:0	30:0:0	300	90	2.0	#56 Spectropho	2	
0048.sky	60	1:17	1:9:0	30:0:0	300	90	2.0	#56 Spectropho	2	
0049.sky	120	1:21	22:0:0	50:0:0	300	90	3.0	#57 Velocity S	2	
0050.sky	300	1:28	22:0:0	50:0:0	300	90	3.0	#57 Velocity S	2	
0051.COMP	10	1:39	1:17:0	31:0:0	300	90	2.0	#56 Spectropho	4	
0052-0055.FLAT	24	1:41	1:17:0	31:0:0	300	90	2.0	#56 Spectropho	4	
0056.FLAT	24	1:42	1:17:0	31:0:0	600	90	2.0	#56 Spectropho	4	these are 2 arcsec slit
0057-0061.FLAT	24	1:44	1:17:0	31:0:0	600	90	2.0	#56 Spectropho	4	
0062.COMP	5	2:07	1:36:23	54:15:03	300	90	2.0	#12 Symbiotic	4	
0063.COMP	5	2:17	1:36:23	54:15:03	300	90	2.0	#12 Symbiotic	4	
0064.AXPer	8	2:20	1:36:23	54:15:03	300	90	2.0	#12 Symbiotic	4	
0065.AXPer	60	2:21	1:36:23	54:15:03	300	90	3.0	#12 Symbiotic	4	
0066.AXPer	180	2:22	1:36:23	54:15:03	300	90	2.0	#12 Symbiotic	4	
0067.COMP	5	2:33	4:33:34	24:21:18	300	90	2.0	#12 Symbiotic	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0068.GITau	240	2:33	4:33:34	24:21:18	300	90	2.0	#12 Symbiotic	4	
0069.GKTau	240	2:39	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	4	
0070.fastfoc	10	3:02	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0071.fastfoc	10	3:02	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0072.fastfoc	10	3:02	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0073.fastfoc	10	3:03	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0074.fastfoc	10	3:03	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0075.fastfoc	10	3:03	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0076.fastfoc	10	3:04	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0077.fastfoc	10	3:04	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0078.fastfoc	10	3:04	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0079.fastfoc	10	3:05	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0080.fastfoc	10	3:05	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0081.fastfoc	10	3:05	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0082.fastfoc	10	3:06	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0083.fastfoc	10	3:06	23:50:27.0	+26:08:47	300	90	2.0	#12 Symbiotic	4	
0084.COMP	5	5:03	05:48:29.7	+01:40:53	300	90	2.0	#112 Orion PMS	4	
0085.cvso-76339	600	5:04	05:48:29.7	+01:40:53	300	90	2.0	#112 Orion PMS	4	
0086.COMP	5	5:16	05:52:58.7	-00:06:25	300	90	2.0	#112 Orion PMS	4	
0087.cvso-47810	300	5:17	05:52:58.7	-00:06:25	300	90	2.0	#112 Orion PMS	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0088.COMP	5	5:25	05:51:35.0	+00:46:33	300	90	2.0	#112 Orion PMS	4	
0089.cvso-74718	240	5:25	05:51:35.0	+00:46:33	300	90	2.0	#112 Orion PMS	4	
0090.COMP	5	5:32	05:53:58.6	+01:44:09	300	90	2.0	#112 Orion PMS	4	
0091.cvso-82434	240	5:32	05:53:58.6	+01:44:09	300	90	2.0	#112 Orion PMS	4	
0092.COMP	10	5:40	02:30:43.2	-02:56:19	300	40	2.0	#2 SN Observat	2	
0093.SN2005A	1200	5:42	02:30:43.2	-02:56:19	300	40	2.0	#2 SN Observat	2	
0094.COMP	10	6:05	05:12:04.8	-15:40:54	300	13	2.0	#2 SN Observat	2	
0095.sn2004gq	1500	6:07	05:12:04.8	-15:40:54	300	13	2.0	#2 SN Observat	2	
0096.COMP	5	6:42	08:29:10.1	+30:23:05	300	90	2.0	#64 Cluster an	4	
0097.0671_09	300	6:44	08:29:10.1	+30:23:05	300	90	2.0	#64 Cluster an	4	
0098.0671_09	300	6:51	08:29:10.1	+30:23:05	300	90	3.0	#64 Cluster an	4	
0099.COMP	5	6:58	08:28:05.6	+30:27:07	300	90	2.0	#64 Cluster an	4	
0100.0671_10	600	6:59	08:28:05.6	+30:27:07	300	90	2.0	#64 Cluster an	4	
0101.COMP	5	7:10	08:28:24.2	+30:27:54	300	90	2.0	#64 Cluster an	4	
0102.0671_11	480	7:11	08:28:24.2	+30:27:54	300	90	2.0	#64 Cluster an	4	
0103.COMP	5	7:50	08:29:10.2	+30:57:56	300	90	2.0	#64 Cluster an	4	
0104.0671_20	600	7:51	08:29:10.2	+30:57:56	300	90	2.0	#64 Cluster an	4	
0105.COMP	5	8:02	08:28:29.3	+30:50:03	300	90	2.0	#64 Cluster an	4	
0106.0671_19	480	8:02	08:28:29.3	+30:50:03	300	90	2.0	#64 Cluster an	4	
0107.COMP	5	8:09	08:26:54.1	+30:45:31	300	90	2.0	#64 Cluster an	4	



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0108.0671_18	420	8:10	08:26:54.1	+30:45:31	300	90	2.0	#64 Cluster an	4	
0109.N3227	150	8:22	10:23:30.6	+19:51:54	300	90	2.0	#6 AGN Monitor	4	
0110.N3227	150	8:25	10:23:30.6	+19:51:54	300	90	2.0	#6 AGN Monitor	4	
0111.COMP	5	8:33	10:23:30.6	+19:51:54	300	90	2.0	#6 AGN Monitor	4	
0112.COMP	5	8:36	7:25:23	-03:35:51	300	90	2.0	#12 Symbiotic	4	
0113.BXMon	15	8:37	7:25:23	-03:35:51	300	90	2.0	#12 Symbiotic	4	
0114.BXMon	180	8:37	7:25:23	-03:35:51	300	90	3.0	#12 Symbiotic	4	
0115.COMP	5	8:48	09:10:17.4	+54:17:59	300	90	2.0	#129 CHAMP Sou	4	
0116.XS02452B2_005	240	8:50	09:10:17.4	+54:17:59	300	90	2.0	#129 CHAMP Sou	4	
0117.COMP	5	8:56	09:11:31.0	+54:14:03	300	90	2.0	#129 CHAMP Sou	4	
0118.XS02452B6_006	1200	9:11	09:11:31.0	+54:14:03	300	90	2.0	#129 CHAMP Sou	4	
0119.COMP	10	9:34	09:48:56.1	13:44:39	300	90	2.0	#56 Spectropho	2	
0120.HD84937	20	9:35	09:48:56.1	13:44:39	300	90	2.0	#56 Spectropho	2	
0121.HD84937	10	9:36	09:48:56.1	13:44:39	300	90	2.0	#56 Spectropho	2	
0122.COMP	10	9:41	10:36:41.2	43:21:50	300	90	2.0	#56 Spectropho	2	
0123.Feige34	120	9:41	10:36:41.2	43:21:50	300	90	2.0	#56 Spectropho	2	
0124.COMP	5	9:47	9:19:36.0	+33:25:42	300	90	2.0	#141 Mapping t	4	
0125.2M09193602+3325420	180	9:48	9:19:36.0	+33:25:42	300	90	2.0	#141 Mapping t	4	
0126.COMP	5	9:52	9:16:41.1	+29:20:22	300	90	2.0	#141 Mapping t	4	
0127.2M09164113+2920222	180	9:53	9:16:41.1	+29:20:22	300	90	2.0	#141 Mapping t	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0128.COMP	5	9:58	9:25:50.4	+49:19:47	300	90	2.0	#141 Mapping t	4	
0129.2M09255043+4919474	180	9:58	9:25:50.4	+49:19:47	300	90	2.0	#141 Mapping t	4	
0130.COMP	5	10:03	9:27:50.1	+68:24:36	300	90	2.0	#141 Mapping t	4	
0131.2M09275012+6824369	120	10:04	9:27:50.1	+68:24:36	300	90	2.0	#141 Mapping t	4	South
0132.2M09275012+6824369	120	10:06	9:27:50.1	+68:24:36	300	90	2.0	#141 Mapping t	4	North
0133.COMP	5	10:18	11:20:48.4	+00:34:53	300	90	2.0	#84f Updated Z	4	
0134.111812+00510	300	10:19	11:20:48.4	+00:34:53	300	90	2.0	#84f Updated Z	4	
0135.COMP	5	10:30	11:21:03.8	-03:12:01	300	90	2.0	#84f Updated Z	4	
0136.111830-02550	300	10:31	11:21:03.8	-03:12:01	300	90	2.0	#84f Updated Z	4	
0137.COMP	5	10:37	11:20:38.5	-03:32:47	300	90	2.0	#84f Updated Z	4	
0138.111806-03160	300	10:38	11:20:38.5	-03:32:47	300	90	2.0	#84f Updated Z	4	
0139.COMP	5	10:45	11:24:37.1	-00:59:32	300	90	2.0	#84f Updated Z	4	
0140.COMP	10	11:04	10:36:41.2	43:21:50	600	90	2.0	#56 Spectropho	4	
0141.Feige34	120	11:05	10:36:41.2	43:21:50	600	90	2.0	#56 Spectropho	4	
0142.COMP	10	11:10	12:19:30.5	20:49:49	600	90	2.0	#122 Halo Star	4	
0143.hs2240	210	11:10	12:19:30.5	20:49:49	600	90	2.0	#122 Halo Star	4	clouds moved in, too little integration
0144.hs2240	480	11:33	12:19:30.5	20:49:49	600	90	2.0	#122 Halo Star	4	
0145.COMP	5	11:46	12:19:58.4	64:02:48	600	90	2.0	#122 Halo Star	4	
0146.COMP	10	11:46	12:19:58.4	64:02:48	600	90	2.0	#122 Halo Star	4	
0147.hs2241	500	11:47	12:19:58.4	64:02:48	600	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0148.COMP	10	12:00	12:21:07.3	58:50:34	600	90	2.0	#122 Halo Star	4	
0149.hs2244	420	12:01	12:21:07.3	58:50:34	600	90	2.0	#122 Halo Star	4	
0150.COMP	10	12:11	12:22:19.1	61:18:14	600	90	2.0	#122 Halo Star	4	
0151.hs2255	600	12:11	12:22:19.1	61:18:14	600	90	2.0	#122 Halo Star	4	
0152.COMP	10	12:23	12:22:44.8	56:50:58	600	90	2.0	#122 Halo Star	4	
0153.hs2257	420	12:24	12:22:44.8	56:50:58	600	90	2.0	#122 Halo Star	4	
0154.COMP	10	12:43	12:25:33.2	+12:15:39	300	0	3.0	#2 SN Observat	2	forgot to update comments hereafter...
0155.sn2004gk	900	12:50	12:25:33.2	+12:15:39	300	0	3.0	#2 SN Observat	2	
0156.COMP	5	13:13	12:17:14.5	+08:56:34	300	90	3.0	#84f Updated Z	4	
0157.COMP	5	13:16	12:25:59.6	+15:40:12	300	90	3.0	#84f Updated Z	4	
0158.122330+15570	300	13:17	12:25:59.6	+15:40:12	300	90	3.0	#84f Updated Z	4	
0159.sky	120	13:25	12:25:59.6	+15:40:12	300	90	3.0	#84f Updated Z	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.COMP	5	23:59	23:46:10.8	+31:28:07	300	90	3.0	#84f Updated Z	4	fast cables corrupted again
0002.COMP	5	0:04	23:50:27.4	+31:28:07	300	90	3.0	#84f Updated Z	4	
0003.COMP	5	0:06	23:52:48.3	+31:28:07	300	90	3.0	#84f Updated Z	4	
0004.COMP	5	0:08	23:54:42.7	+31:28:07	300	90	3.0	#84f Updated Z	4	
0005.COMP	5	0:20	00:07:18.9	+31:28:06	300	90	3.0	#84f Updated Z	4	
0006.COMP	5	0:22	00:09:13.7	+31:28:06	300	90	3.0	#84f Updated Z	4	
0007.COMP	5	0:23	00:10:22.5	+31:28:06	300	90	3.0	#84f Updated Z	4	
0008-0020.BIAS	0	0:26	00:13:08.4	+31:28:06	300	90	3.0	#84f Updated Z	4	
0021-0030.FLAT	8	0:30	00:16:32.6	+31:28:06	300	90	3.0	#84f Updated Z	4	
0031-0040.BIAS	0	0:32	00:18:44.4	+31:28:06	300	90	3.0	#84f Updated Z	2	
0041-0050.FLAT	16	0:38	00:24:37.7	+31:28:06	300	90	3.0	#84f Updated Z	2	
0051.N7469	120	2:37	23:03:15.7	+08:52:27	300	60	3.0	#6 AGN Monitor	2	
0052.N7469	120	2:39	23:03:15.7	+08:52:27	300	60	3.0	#6 AGN Monitor	2	
0053.COMP	10	2:41	23:03:15.7	+08:52:27	300	60	3.0	#6 AGN Monitor	2	
0054.Akn564	150	2:43	22:42:39.4	+29:43:31	300	73	3.0	#6 AGN Monitor	4	
0055.Akn564	150	2:46	22:42:39.4	+29:43:31	300	73	3.0	#6 AGN Monitor	4	
0056.COMP	5	2:50	22:42:39.4	+29:43:31	300	73	3.0	#6 AGN Monitor	4	
0057.SN2005A	1200	2:53	02:30:43.2	-02:56:19	300	5	3.0	#2 SN Observat	2	
0058.COMP	10	3:14	02:30:43.2	-02:56:19	300	5	3.0	#2 SN Observat	2	
0059.ZAnd	3	3:18	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0060.ZAnd	10	3:18	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0061.ZAnd	30	3:19	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0062.COMP	5	3:21	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0063.MRK335	150	3:23	00:06:19.6	+20:12:11	300	90	3.0	#6 AGN Monitor	4	
0064.MRK335	150	3:25	00:06:19.6	+20:12:11	300	90	3.0	#6 AGN Monitor	4	
0065.COMP	5	3:28	00:06:19.6	+20:12:11	300	90	3.0	#6 AGN Monitor	4	
0066.0147_01	720	3:30	01:08:09.4	+01:43:51	300	90	3.0	#64 Cluster an	4	
0067.COMP	5	3:43	01:08:09.4	+01:43:51	300	90	3.0	#64 Cluster an	4	
0068.0147_02	720	3:43	01:07:01.8	+01:59:44	300	90	3.0	#64 Cluster an	4	
0069.COMP	5	3:56	01:07:01.8	+01:59:44	300	90	3.0	#64 Cluster an	4	
0070.GITau	180	3:57	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0071.GITau	60	4:01	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0072.GKTau	60	4:02	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0073.GKTau	300	4:03	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0074.COMP	5	4:09	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0075.0147_03	600	4:10	01:10:32.2	+02:08:03	300	90	3.0	#64 Cluster an	4	
0076.COMP	5	4:20	01:10:32.2	+02:08:03	300	90	3.0	#64 Cluster an	4	
0077.0147_04	540	4:21	01:07:32.8	+02:11:29	300	90	3.0	#64 Cluster an	4	
0078.COMP	5	4:30	01:07:32.8	+02:11:29	300	90	3.0	#64 Cluster an	4	
0079.0147_05	720	4:31	01:08:21.0	+02:12:08	300	90	3.0	#64 Cluster an	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0080.COMP	5	4:43	01:08:21.0	+02:12:08	300	90	3.0	#64 Cluster an	4	
0081.0376_01	300	4:45	02:46:16.2	+36:22:13	300	90	3.0	#64 Cluster an	4	
0082.COMP	5	4:51	02:46:16.2	+36:22:13	300	90	3.0	#64 Cluster an	4	
0083.0376_05	900	4:58	02:47:55.0	+36:35:07	300	90	3.0	#64 Cluster an	4	
0084.COMP	5	5:14	02:47:55.0	+36:35:07	300	90	3.0	#64 Cluster an	4	
0085.sn2004gq	1200	5:17	05:12:04.8	-15:40:54	300	4	3.0	#2 SN Observat	2	
0086.COMP	10	5:38	05:12:04.8	-15:40:54	300	4	3.0	#2 SN Observat	2	
0087.cvso-55390	360	5:41	05:48:50.8	-00:44:51	300	4	3.0	#112 Orion PMS	4	
0088.COMP	5	5:47	05:48:50.8	-00:44:51	300	4	3.0	#112 Orion PMS	4	
0089.cvso-60920	420	5:49	05:49:19.8	-01:14:40	300	4	3.0	#112 Orion PMS	4	
0090.COMP	5	5:57	05:49:19.8	-01:14:40	300	4	3.0	#112 Orion PMS	4	
0091.cvso-61498	420	5:57	05:50:13.9	-01:05:14	300	4	3.0	#112 Orion PMS	4	
0092.COMP	5	6:05	05:50:13.9	-01:05:14	300	4	3.0	#112 Orion PMS	4	
0093.cvso-76199	480	6:05	05:50:26.1	+01:10:13	300	4	3.0	#112 Orion PMS	4	
0094.COMP	5	6:14	05:50:26.1	+01:10:13	300	4	3.0	#112 Orion PMS	4	
0095.cvso-78857	420	6:16	05:50:35.4	+01:36:38	300	4	3.0	#112 Orion PMS	4	
0096.COMP	5	6:23	05:50:35.4	+01:36:38	300	4	3.0	#112 Orion PMS	4	
0097.cvso-46020	360	6:24	05:50:39.4	-00:13:56	300	4	3.0	#112 Orion PMS	4	
0098.COMP	5	6:30	05:50:39.4	-00:13:56	300	4	3.0	#112 Orion PMS	4	
0099.cvso-78997	420	6:31	05:50:40.4	+01:35:59	300	4	3.0	#112 Orion PMS	4	



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0100.COMP	5	6:38	05:50:40.4	+01:35:59	300	4	3.0	#112 Orion PMS	4	
0101.cvso-74175	480	6:39	05:51:02.3	+00:44:13	300	20	3.0	#112 Orion PMS	4	
0102.COMP	5	6:48	05:51:02.3	+00:44:13	300	20	3.0	#112 Orion PMS	4	
0103.cvso-77230	480	6:48	05:51:31.1	+01:22:10	300	20	3.0	#112 Orion PMS	4	
0104.COMP	5	6:57	05:51:31.1	+01:22:10	300	20	3.0	#112 Orion PMS	4	
0105.cvso-74961	360	6:57	05:51:49.2	+00:43:34	300	20	3.0	#112 Orion PMS	4	
0106.COMP	5	7:04	05:51:49.2	+00:43:34	300	20	3.0	#112 Orion PMS	4	
0107.cvso-47390	360	7:04	05:52:22.5	-00:00:58	300	20	3.0	#112 Orion PMS	4	
0108.COMP	5	7:11	05:52:22.5	-00:00:58	300	20	3.0	#112 Orion PMS	4	
0109.cvso-75522	360	7:11	05:52:25.7	+00:20:52	300	20	3.0	#112 Orion PMS	4	
0110.COMP	5	7:18	05:52:25.7	+00:20:52	300	20	3.0	#112 Orion PMS	4	
0111.cvso-47656	420	7:19	05:52:44.5	+00:06:46	300	20	3.0	#112 Orion PMS	4	
0112.COMP	5	7:26	05:52:44.5	+00:06:46	300	20	3.0	#112 Orion PMS	4	
0113.cvso-81934	360	7:27	05:53:23.2	+01:34:27	300	20	3.0	#112 Orion PMS	4	
0114.COMP	5	7:33	05:53:23.2	+01:34:27	300	20	3.0	#112 Orion PMS	4	
0115.cvso-76714	420	7:34	05:53:25.3	+00:30:52	300	20	3.0	#112 Orion PMS	4	
0116.COMP	5	7:41	05:53:25.3	+00:30:52	300	20	3.0	#112 Orion PMS	4	
0117.cvso-82057	360	7:42	05:53:31.2	+02:04:40	300	20	3.0	#112 Orion PMS	4	
0118.COMP	5	7:48	05:53:31.2	+02:04:40	300	20	3.0	#112 Orion PMS	4	
0119.cvso-40940	360	7:49	05:53:39.8	-02:00:10	300	20	3.0	#112 Orion PMS	4	



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0120.COMP	5	7:56	05:53:39.8	-02:00:10	300	20	3.0	#112 Orion PMS	4	
0121.cvso-82175	300	7:57	05:53:40.9	+01:38:14	300	20	3.0	#112 Orion PMS	4	
0122.COMP	5	8:03	05:53:40.9	+01:38:14	300	20	3.0	#112 Orion PMS	4	
0123.cvso-77038	360	8:07	05:53:41.3	+00:26:36	300	45	3.0	#112 Orion PMS	4	
0124.COMP	5	8:14	05:53:41.3	+00:26:36	300	45	3.0	#112 Orion PMS	4	
0125.cvso-82192	420	8:16	05:53:42.6	+01:41:21	300	45	3.0	#112 Orion PMS	4	
0126.COMP	5	8:23	05:53:42.6	+01:41:21	300	45	3.0	#112 Orion PMS	4	
0127.cvso-82669	300	8:23	05:54:20.1	+01:42:56	300	45	3.0	#112 Orion PMS	4	
0128.COMP	5	8:29	05:54:20.1	+01:42:56	300	45	3.0	#112 Orion PMS	4	
0129.0671_12	600	8:30	08:28:55.9	+30:30:10	300	90	3.0	#64 Cluster an	4	
0130.COMP	5	8:41	08:28:55.9	+30:30:10	300	90	3.0	#64 Cluster an	4	
0131.0671_13	600	8:41	08:29:52.5	+30:33:55	300	90	3.0	#64 Cluster an	4	
0132.COMP	5	8:52	08:29:52.5	+30:33:55	300	90	3.0	#64 Cluster an	4	
0133.0671_14	480	8:52	08:28:50.6	+30:35:47	300	90	3.0	#64 Cluster an	4	
0134.COMP	5	9:01	08:28:50.6	+30:35:47	300	90	3.0	#64 Cluster an	4	
0135.0671_15	540	9:01	08:28:16.5	+30:37:18	300	90	3.0	#64 Cluster an	4	
0136.COMP	5	9:10	08:28:16.5	+30:37:18	300	90	3.0	#64 Cluster an	4	
0137.0671_16	300	9:11	08:29:41.3	+30:41:16	300	90	3.0	#64 Cluster an	4	
0138.COMP	5	9:16	08:29:41.3	+30:41:16	300	90	3.0	#64 Cluster an	4	
0139.0671_17	600	9:17	08:29:59.0	+30:43:40	300	90	3.0	#64 Cluster an	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0140.COMP	5	9:27	08:29:59.0	+30:43:40	300	90	3.0	#64 Cluster an	4	
0141.112200-00430	360	9:29	11:24:37.1	-00:59:32	300	90	3.0	#84f Updated Z	4	
0142.COMP	5	9:35	11:24:37.1	-00:59:32	300	90	3.0	#84f Updated Z	4	
0143.112336-01340	360	9:36	11:26:06.2	-01:50:03	300	90	3.0	#84f Updated Z	4	
0144.COMP	5	9:42	11:26:06.2	-01:50:03	300	90	3.0	#84f Updated Z	4	
0145.112518-00570	360	9:42	11:27:54.5	-01:13:34	300	90	3.0	#84f Updated Z	4	
0146.COMP	5	9:49	11:27:54.5	-01:13:34	300	90	3.0	#84f Updated Z	4	
0147.112524-00560	360	9:49	11:27:57.7	-01:12:45	300	90	3.0	#84f Updated Z	4	
0148.COMP	5	9:55	11:27:57.7	-01:12:45	300	90	3.0	#84f Updated Z	4	
0149.112600-01200	270	9:56	11:28:34.4	-01:37:47	300	90	3.0	#84f Updated Z	4	
0150.COMP	5	10:01	11:28:34.4	-01:37:47	300	90	3.0	#84f Updated Z	4	
0151.112536+04360	1200	10:02	11:28:13.2	+04:19:04	300	90	3.0	#84f Updated Z	4	
0152.COMP	5	10:22	11:28:13.2	+04:19:04	300	90	3.0	#84f Updated Z	4	
0153.HD84937	10	10:24	09:48:56.1	13:44:39	300	17	3.0	#56 Spectropho	2	
0154.HD84937	10	10:25	09:48:56.1	13:44:39	300	17	3.0	#56 Spectropho	2	
0155.HD84937	10	10:25	09:48:56.1	13:44:39	300	17	3.0	#56 Spectropho	2	
0156.COMP	10	10:25	09:48:56.1	13:44:39	300	17	3.0	#56 Spectropho	2	
0157.112512+08160	300	10:28	11:27:47.2	+07:59:16	300	0	3.0	#84f Updated Z	2	sup star, with very faint h-alpha
0158.COMP	10	10:33	11:27:47.2	+07:59:16	300	0	3.0	#84f Updated Z	2	from the galaxy at pixel 2200, long feature
0159.113054-02060	1200	10:36	11:33:25.5	-02:22:55	300	0	3.0	#84f Updated Z	2	



WHIPPLE OBSERVATORY

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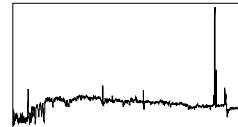
Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0160.COMP	10	10:56	11:33:25.5	-02:22:55	300	0	3.0	#84f Updated Z	2	
0161.Feige34	120	10:58	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0162.Feige34	120	11:00	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0163.COMP	10	11:02	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0164.113048+34350	720	11:04	11:33:30.0	+34:18:58	300	90	3.0	#84f Updated Z	2	
0165.COMP	10	11:16	11:33:30.0	+34:18:58	300	90	3.0	#84f Updated Z	2	
0166.113412+20170	270	11:17	11:36:51.5	+20:00:16	300	90	3.0	#84f Updated Z	2	
0167.COMP	10	11:22	11:36:51.5	+20:00:16	300	90	3.0	#84f Updated Z	2	
0168.113430+15510	540	11:23	11:37:01.9	+15:34:15	300	90	3.0	#84f Updated Z	2	
0169.COMP	10	11:33	11:37:01.9	+15:34:15	300	90	3.0	#84f Updated Z	2	
0170.113430+03070	480	11:34	11:37:09.6	+02:50:18	300	90	3.0	#84f Updated Z	2	
0171.COMP	10	11:42	11:37:09.6	+02:50:18	300	90	3.0	#84f Updated Z	2	
0172.113130-03190	420	11:43	11:33:59.4	-03:36:25	300	90	3.0	#84f Updated Z	2	target is gal at row 82
0173.COMP	10	11:50	11:33:59.4	-03:36:25	300	90	3.0	#84f Updated Z	2	ignore gal fuzz at row 73
0174.113354-02320	720	11:51	11:36:22.8	-02:49:31	300	90	3.0	#84f Updated Z	4	
0175.COMP	5	12:04	11:36:22.8	-02:49:31	300	90	3.0	#84f Updated Z	4	
0176.sn2004gt	900	12:07	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	sn in the the mice galaxies
0177.COMP	10	12:23	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0178.113030+50350	1200	12:26	11:33:13.4	+50:18:09	300	90	3.0	#84f Updated Z	2	
0179.COMP	10	12:46	11:33:13.4	+50:18:09	300	90	3.0	#84f Updated Z	2	



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UT Date 2005-01-08 Observers P Berlind

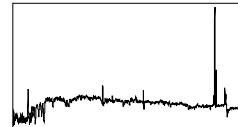
Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0180.113636+58330	720	12:47	11:39:21.4	+58:16:07	300	90	3.0	#84f Updated Z	4	ok em
0181.COMP	5	13:00	11:39:21.4	+58:16:07	300	90	3.0	#84f Updated Z	4	
0182.N5548	150	13:01	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0183.N5548	150	13:04	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0184.COMP	5	13:06	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0185.N4051	150	13:07	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0186.N4051	150	13:10	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0187.COMP	5	13:13	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0188.N4151	30	13:13	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0189.N4151	30	13:14	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0190.COMP	5	13:15	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0191.N4853	150	13:16	12:58:35.1	+27:35:47	300	90	3.0	#57 Velocity S	4	
0192.COMP	5	13:19	12:58:35.1	+27:35:47	300	90	3.0	#57 Velocity S	4	
0193-0202.BIAS	0	13:22	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0203-0212.FLAT	8	13:25	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0213-0222.BIAS	0	13:27	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	
0223-0243.FLAT	16	13:39	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	
0244-0253.DARK	900	15:56	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0254-0263.DARK	900	18:29	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	



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UT Date 2005-01-09 Observers P Berlind

Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0010.BIAS	0	23:31	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0011-0020.FLAT	8	23:35	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0021-0030.BIAS	0	23:37	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	
0031-0051.FLAT	16	23:47	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	
0052-0056.sky	3	0:54	00:40:00	32:00:00	300	90	3.0	#57 Velocity S	4	
0057.COMP	5	0:54	00:40:00	32:00:00	300	90	3.0	#57 Velocity S	4	
0058.M32	30	1:42	00:39:58	+40:35:30	300	90	3.0	#57 Velocity S	4	thin clouds all over
0059.M32	30	1:43	00:39:58	+40:35:30	300	90	3.0	#57 Velocity S	4	
0060.COMP	5	1:44	00:39:58	+40:35:30	300	90	3.0	#57 Velocity S	4	
0061.2572-16	660	1:52	23:17:03.3	+19:08:28	300	90	3.0	#64 Cluster an	4	
0062.COMP	5	2:04	23:17:03.3	+19:08:28	300	90	3.0	#64 Cluster an	4	
0063.2666_02	720	2:05	23:50:27.0	+26:08:47	300	90	3.0	#64 Cluster an	4	
0064.COMP	5	2:17	23:50:27.0	+26:08:47	300	90	3.0	#64 Cluster an	4	
0065.2666_08	900	2:19	23:48:07.6	+26:59:35	300	90	3.0	#64 Cluster an	4	
0066.COMP	5	2:34	23:48:07.6	+26:59:35	300	90	3.0	#64 Cluster an	4	
0067.sn2004gv	1800	2:38	02:13:37.4	-00:43:05	300	20	3.0	#2 SN Observat	2	
0068.COMP	10	3:09	02:13:37.4	-00:43:05	300	20	3.0	#2 SN Observat	2	
0069.GITau	330	3:12	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0070.GITau	60	3:18	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0071.GKTau	330	3:19	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	yes this is GKTau



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0072.GKTau	60	3:25	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	GKTau
0073.COMP	5	3:26	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0074.0160_01	720	3:29	01:12:23.4	+15:43:34	300	90	3.0	#64 Cluster an	4	
0075.COMP	5	3:41	01:12:23.4	+15:43:34	300	90	3.0	#64 Cluster an	4	
0076.0160_02	600	3:42	01:12:59.3	+15:59:04	300	90	3.0	#64 Cluster an	4	
0077.COMP	5	3:52	01:12:59.3	+15:59:04	300	90	3.0	#64 Cluster an	4	
0078.0160_03	600	3:53	01:14:14.3	+16:02:04	300	90	3.0	#64 Cluster an	4	
0079.COMP	5	4:03	01:14:14.3	+16:02:04	300	90	3.0	#64 Cluster an	4	
0080.0160_04	600	4:04	01:13:12.2	+16:02:55	300	90	3.0	#64 Cluster an	4	
0081.COMP	5	4:14	01:13:12.2	+16:02:55	300	90	3.0	#64 Cluster an	4	
0082.0160_05	720	4:15	01:12:12.2	+16:05:27	300	90	3.0	#64 Cluster an	4	
0083.COMP	5	4:27	01:12:12.2	+16:05:27	300	90	3.0	#64 Cluster an	4	
0084.0160_06	720	4:28	01:12:11.7	+16:06:07	300	90	3.0	#64 Cluster an	4	
0085.COMP	5	4:41	01:12:11.7	+16:06:07	300	90	3.0	#64 Cluster an	4	
0086.0376_06	600	4:42	02:45:51.8	+36:39:29	300	90	3.0	#64 Cluster an	4	
0087.COMP	5	4:53	02:45:51.8	+36:39:29	300	90	3.0	#64 Cluster an	4	
0088.0376_07	900	4:53	02:45:33.7	+36:40:36	300	90	3.0	#64 Cluster an	4	
0089.COMP	5	5:09	02:45:33.7	+36:40:36	300	90	3.0	#64 Cluster an	4	
0090.0376_08	900	5:09	02:45:55.6	+36:43:14	300	90	3.0	#64 Cluster an	4	
0091.COMP	5	5:25	02:45:55.6	+36:43:14	300	90	3.0	#64 Cluster an	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0092.cvso-77827	480	5:26	05:54:23.3	+00:50:29	300	90	3.0	#112 Orion PMS	4	
0093.COMP	5	5:35	05:54:23.3	+00:50:29	300	90	3.0	#112 Orion PMS	4	
0094.cvso-65769	480	5:36	05:54:25.5	-01:07:46	300	90	3.0	#112 Orion PMS	4	
0095.COMP	5	5:44	05:54:25.5	-01:07:46	300	90	3.0	#112 Orion PMS	4	
0096.cvso-49396	480	5:44	05:54:49.6	+00:11:57	300	90	3.0	#112 Orion PMS	4	
0097.COMP	5	5:53	05:54:49.6	+00:11:57	300	90	3.0	#112 Orion PMS	4	
0098.cvso-49477	480	5:53	05:54:54.8	-00:13:44	300	90	3.0	#112 Orion PMS	4	
0099.COMP	5	6:02	05:54:54.8	-00:13:44	300	90	3.0	#112 Orion PMS	4	
0100.cvso-49552	480	6:02	05:54:59.9	-00:02:17	300	90	3.0	#112 Orion PMS	4	
0101.COMP	5	6:11	05:54:59.9	-00:02:17	300	90	3.0	#112 Orion PMS	4	
0102.cvso-49597	480	6:11	05:55:02.2	+00:02:53	300	90	3.0	#112 Orion PMS	4	
0103.COMP	5	6:20	05:55:02.2	+00:02:53	300	90	3.0	#112 Orion PMS	4	
0104.cvso-82960	480	6:20	05:55:03.8	+01:54:24	300	90	3.0	#112 Orion PMS	4	
0105.COMP	5	6:28	05:55:03.8	+01:54:24	300	90	3.0	#112 Orion PMS	4	
0106.cvso-49662	480	6:29	05:55:06.7	+00:07:07	300	90	3.0	#112 Orion PMS	4	
0107.COMP	5	6:38	05:55:06.7	+00:07:07	300	90	3.0	#112 Orion PMS	4	
0108.cvso-78631	480	6:38	05:55:07.6	+00:40:55	300	90	3.0	#112 Orion PMS	4	
0109.COMP	5	6:46	05:55:07.6	+00:40:55	300	90	3.0	#112 Orion PMS	4	
0110.cvso-49674	420	6:47	05:55:07.6	-00:15:35	300	90	3.0	#112 Orion PMS	4	
0111.COMP	5	6:55	05:55:07.6	-00:15:35	300	90	3.0	#112 Orion PMS	4	



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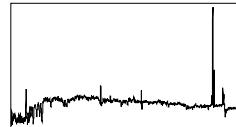
Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0112.cvso-80930	420	6:55	05:55:10.0	+01:18:13	300	90	3.0	#112 Orion PMS	4	
0113.COMP	5	7:03	05:55:10.0	+01:18:13	300	90	3.0	#112 Orion PMS	4	
0114.cvso-80936	480	7:03	05:55:10.7	+01:14:02	300	90	3.0	#112 Orion PMS	4	
0115.COMP	5	7:12	05:55:10.7	+01:14:02	300	90	3.0	#112 Orion PMS	4	
0116.cvso-81001	420	7:12	05:55:12.9	+01:12:09	300	90	3.0	#112 Orion PMS	4	
0117.COMP	5	7:20	05:55:12.9	+01:12:09	300	90	3.0	#112 Orion PMS	4	
0118.2M05134643p2052353	900	7:21	05:13:46.4	+20:52:35	300	90	3.0	#141 Mapping t	4	
0119.COMP	5	7:37	05:13:46.4	+20:52:35	300	90	3.0	#141 Mapping t	4	
0120.2M05153162p0601501	300	7:38	05:15:31.6	+06:01:49	300	45	3.0	#141 Mapping t	4	
0121.COMP	5	7:43	05:15:31.6	+06:01:49	300	45	3.0	#141 Mapping t	4	
0122.2M05172422p1305072	900	7:44	05:17:24.2	+13:05:07	300	45	3.0	#141 Mapping t	4	
0123.COMP	5	7:59	05:17:24.2	+13:05:07	300	45	3.0	#141 Mapping t	4	
0124.2M05184342p1453069	660	8:00	05:18:43.4	+14:53:07	300	45	3.0	#141 Mapping t	4	
0125.COMP	5	8:12	05:18:43.4	+14:53:07	300	45	3.0	#141 Mapping t	4	
0126.2M05241341p0455374	360	8:14	05:24:13.4	+04:55:37	300	0	3.0	#141 Mapping t	4	
0127.COMP	5	8:20	05:24:13.4	+04:55:37	300	0	3.0	#141 Mapping t	4	
0128.2M05322750p0122038	390	8:21	05:32:27.5	+01:22:03	300	0	3.0	#141 Mapping t	4	
0129.COMP	5	8:28	05:32:27.5	+01:22:03	300	0	3.0	#141 Mapping t	4	
0130.2M05401462p1033517	540	8:29	05:40:14.6	+10:33:51	300	0	3.0	#141 Mapping t	4	
0131.COMP	5	8:39	05:40:14.6	+10:33:51	300	0	3.0	#141 Mapping t	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0132.sn2004gs	1800	8:41	08:38:23.1	+17:37:39	300	0	3.0	#2 SN Observat	2	
0133.COMP	10	9:11	08:38:23.1	+17:37:39	300	0	3.0	#2 SN Observat	2	
0134.113506+48090	600	9:13	11:37:50.5	+47:52:53	300	0	3.0	#84f Updated Z	4	
0135.COMP	5	9:23	11:37:50.5	+47:52:53	300	0	3.0	#84f Updated Z	4	
0136.113624+55560	360	9:24	11:39:08.7	+55:39:52	300	0	3.0	#84f Updated Z	4	
0137.COMP	5	9:30	11:39:08.7	+55:39:52	300	0	3.0	#84f Updated Z	4	
0138.113806+56280	480	9:31	11:40:54.2	+56:12:06	300	0	3.0	#84f Updated Z	4	
0139.COMP	5	9:39	11:40:54.2	+56:12:06	300	0	3.0	#84f Updated Z	4	
0140.114118+20130	240	9:41	11:43:57.5	+19:57:14	300	0	3.0	#84f Updated Z	4	
0141.COMP	5	9:45	11:43:57.5	+19:57:14	300	0	3.0	#84f Updated Z	4	
0142.114024+19550	360	9:45	11:43:02.1	+19:38:59	300	0	3.0	#84f Updated Z	4	
0143.COMP	5	9:52	11:43:02.1	+19:38:59	300	0	3.0	#84f Updated Z	4	
0144.HD84937	15	9:53	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	2	
0145.HD84937	15	9:53	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	2	
0146.HD84937	15	9:54	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	2	
0147.COMP	10	9:55	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	2	
0148.114018+26340	240	9:56	11:43:02.8	+26:16:41	300	0	3.0	#84f Updated Z	4	
0149.COMP	5	10:00	11:43:02.8	+26:16:41	300	0	3.0	#84f Updated Z	4	
0150.112512+08160	1200	10:03	11:27:47.2	+07:59:16	300	90	3.0	#84f Updated Z	4	ok
0151.COMP	5	10:23	11:27:47.2	+07:59:16	300	90	3.0	#84f Updated Z	4	



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UT Date 2005-01-09 Observers P Berlind

Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0152.113930+10400	420	10:24	11:42:04.8	+10:23:03	300	90	3.0	#84f Updated Z	4	
0153.COMP	5	10:31	11:42:04.8	+10:23:03	300	90	3.0	#84f Updated Z	4	
0154.114118+20030	210	10:32	11:43:59.6	+19:46:41	300	90	3.0	#84f Updated Z	4	
0155.COMP	5	10:36	11:43:59.6	+19:46:41	300	90	3.0	#84f Updated Z	4	
0156.114142+55550	300	10:37	11:44:29.0	+55:39:08	300	90	3.0	#84f Updated Z	4	
0157.COMP	5	10:42	11:44:29.0	+55:39:08	300	90	3.0	#84f Updated Z	4	
0158.114254+56090	660	10:43	11:45:35.6	+55:53:11	300	90	3.0	#84f Updated Z	4	
0159.COMP	5	10:54	11:45:35.6	+55:53:11	300	90	3.0	#84f Updated Z	4	
0160.Feige34	120	10:55	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0161.Feige34	120	10:57	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0162.COMP	10	10:59	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0163.MRK421	300	11:00	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	4	
0164.MRK421	300	11:05	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	4	
0165.COMP	5	11:10	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	4	
0166.114554+13000	1200	11:12	11:48:30.7	+12:43:48	300	90	3.0	#84f Updated Z	4	target gal at row 36
0167.COMP	5	11:32	11:48:30.7	+12:43:48	300	90	3.0	#84f Updated Z	4	
0168.114754+04580	600	11:33	11:50:28.4	+04:41:41	300	90	3.0	#84f Updated Z	4	
0169.COMP	5	11:44	11:50:28.4	+04:41:41	300	90	3.0	#84f Updated Z	4	
0170.123054+08570	720	11:46	12:33:24.8	+08:41:27	300	90	3.0	#84f Updated Z	4	
0171.COMP	5	11:58	12:33:24.8	+08:41:27	300	90	3.0	#84f Updated Z	4	



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UT Date 2005-01-09 Observers P Berlind

Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0172.122818+11370	720	11:59	12:30:45.9	+11:20:36	300	90	3.0	#84f Updated Z	4	
0173.COMP	5	12:11	12:30:45.9	+11:20:36	300	90	3.0	#84f Updated Z	4	
0174.sn2004gk	1200	12:14	12:25:33.2	+12:15:39	300	-5	3.0	#2 SN Observat	2	
0175.COMP	10	12:34	12:25:33.2	+12:15:39	300	-5	3.0	#2 SN Observat	2	
0176.113012+70400	900	12:38	11:33:09.7	+70:23:26	300	90	3.0	#84f Updated Z	4	more clouds, ok em
0177.COMP	5	12:53	11:33:09.7	+70:23:26	300	90	3.0	#84f Updated Z	4	
0178.114000+77400	720	12:54	11:42:49.0	+77:22:24	300	90	3.0	#84f Updated Z	4	ok em
0179.COMP	5	13:06	11:42:49.0	+77:22:24	300	90	3.0	#84f Updated Z	4	
0180.N4486B	240	13:08	12:30:32	+12:29:25	300	90	3.0	#57 Velocity S	4	
0181.COMP	5	13:12	12:30:32	+12:29:25	300	90	3.0	#57 Velocity S	4	
0182-0191.BIAS	0	13:15	12:30:32	+12:29:25	300	90	3.0	#12 Symbiotic	4	
0192-0201.FLAT	8	13:18	12:30:32	+12:29:25	300	90	3.0	#12 Symbiotic	4	
0202-0211.BIAS	0	13:21	12:30:32	+12:29:25	300	90	3.0	#12 Symbiotic	2	
0212-0232.FLAT	16	13:31	12:30:32	+12:29:25	300	90	3.0	#12 Symbiotic	2	
0233.COMP	5	13:34	13:27:13.0	+31:31:39	300	90	3.0	#12 Symbiotic	4	
0234.DARK	900	13:36	13:43:44.5	+31:31:37	300	90	3.0	#12 Symbiotic	4	
0235.DARK	900	13:51	13:58:55.2	+31:31:34	300	90	3.0	#12 Symbiotic	4	
0236.DARK	900	14:06	14:14:09.7	+31:31:31	300	90	3.0	#12 Symbiotic	4	
0237.DARK	900	14:21	14:29:20.7	+31:31:27	300	90	3.0	#12 Symbiotic	4	
0238.DARK	900	14:36	14:44:35.7	+31:31:23	300	90	3.0	#12 Symbiotic	4	



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UT Date 2005-01-09 Observers P BerlindColl. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0239.DARK	900	14:52	14:59:47.4	+31:31:19	300	90	3.0	#12 Symbiotic	2	
0240.DARK	900	15:07	15:15:06.3	+31:31:14	300	90	3.0	#12 Symbiotic	2	
0241.DARK	900	15:22	15:30:24.6	+31:31:09	300	90	3.0	#12 Symbiotic	2	
0242.DARK	900	15:37	15:45:42.4	+31:31:03	300	90	3.0	#12 Symbiotic	2	
0243.DARK	900	15:53	16:01:02.0	+31:30:58	300	90	3.0	#12 Symbiotic	2	
0244.BIAS	0	18:23	18:16:54.3	+31:29:57	300	90	3.0	#12 Symbiotic	2	



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UT Date 2005-01-10 Observers W Brown

Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.BIAS	0	20:09	20:02:33.1	+31:29:09	300	90	3.0	#56 Calibratio	4	x10
0002-0006.BIAS	0	20:09	20:03:07.2	+31:29:09	300	90	3.0	#56 Calibratio	4	
0007-0010.BIAS	0	20:10	20:03:36.8	+31:29:08	300	90	3.0	#56 Calibratio	4	
0011.FLAT	8	20:10	20:03:58.1	+31:29:08	300	90	3.0	#56 Calibratio	4	x10
0012-0015.FLAT	8	20:11	20:05:18.9	+31:29:08	300	90	3.0	#56 Calibratio	4	
0016-0020.FLAT	8	20:13	20:07:00.7	+31:29:07	300	90	3.0	#56 Calibratio	4	
0021.BIAS	0	20:13	20:07:18.0	+31:29:07	300	90	3.0	#56 Calibratio	2	x10
0022-0023.BIAS	0	20:14	20:07:43.4	+31:29:07	300	90	3.0	#56 Calibratio	2	
0024-0030.BIAS	0	20:15	20:09:12.7	+31:29:06	300	90	3.0	#56 Calibratio	2	
0031.FLAT	16	20:16	20:09:51.0	+31:29:06	300	90	3.0	#56 Calibratio	2	x20
0032-0036.FLAT	16	20:18	20:12:24.0	+31:29:05	300	90	3.0	#56 Calibratio	2	
0037-0041.FLAT	16	20:21	20:14:53.2	+31:29:04	300	90	3.0	#56 Calibratio	2	
0042-0046.FLAT	16	20:23	20:17:26.0	+31:29:03	300	90	3.0	#56 Calibratio	2	
0047-0050.FLAT	16	20:25	20:19:25.8	+31:29:02	300	90	3.0	#56 Calibratio	2	
0051.FLAT	16	20:26	20:19:55.5	+31:29:01	300	90	3.0	#56 Calibratio	2	
0052.DARK	900	20:47	20:56:26.4	+31:28:47	300	90	3.0	#56 Calibratio	2	x10
0053.DARK	900	21:02	21:11:40.4	+31:28:42	300	90	3.0	#56 Calibratio	2	
0054.DARK	900	21:18	21:26:54.6	+31:28:36	300	90	3.0	#56 Calibratio	2	
0055.DARK	900	21:33	21:42:09.7	+31:28:32	300	90	3.0	#56 Calibratio	2	
0056.DARK	900	21:48	21:57:23.7	+31:28:27	300	90	3.0	#56 Calibratio	2	



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UT Date 2005-01-10 Observers W Brown

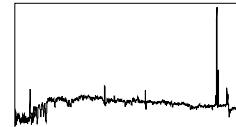
Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0057.DARK	900	22:03	22:12:37.6	+31:28:23	300	90	3.0	#56 Calibratio	2	
0058.DARK	900	22:18	22:27:51.9	+31:28:19	300	90	3.0	#56 Calibratio	2	
0059.DARK	900	22:34	22:43:06.2	+31:28:16	300	90	3.0	#56 Calibratio	2	
0060.DARK	900	22:49	22:58:20.0	+31:28:13	300	90	3.0	#56 Calibratio	2	
0061.DARK	900	23:04	23:13:38.0	+31:28:11	300	90	3.0	#56 Calibratio	2	
0062.GITau	120	6:30	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0063.COMP	5	6:32	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0064.GITau	600	6:33	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0065.COMP	5	6:43	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0066.GKTau	120	6:44	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	really GKTau
0067.COMP	5	6:46	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0068.GKTau	1200	6:59	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0069.COMP	5	7:21	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0070.sn2004gy	1800	11:32	13:03:58.4	+26:14:03	300	0	3.0	#2 SN Observat	2	
0071.COMP	10	12:02	13:03:58.4	+26:14:03	300	0	3.0	#2 SN Observat	2	
0072.sn2004gt	1200	12:41	12:01:50.3	-18:52:12	300	6	3.0	#2 SN Observat	2	
0073.COMP	10	13:01	12:01:50.3	-18:52:12	300	6	3.0	#2 SN Observat	2	
0074.HZ44	60	13:07	13:21:19.0	36:23:39	300	45	3.0	#56 Spectropho	2	
0075.COMP	10	13:09	13:21:19.0	36:23:39	300	45	3.0	#56 Spectropho	2	
0076.HZ44	30	13:12	13:21:19.0	36:23:39	300	45	3.0	#56 Spectropho	4	



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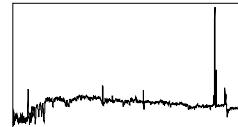
UT Date 2005-01-10 Observers W BrownColl. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0077.COMP	5	13:13	13:21:19.0	36:23:39	300	45	3.0	#56 Spectropho	4	
0078.BIAS	0	13:16	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	x10
0079-0087.BIAS	0	13:17	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	
0088.BIAS	0	13:18	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	x10
0089-0097.BIAS	0	13:19	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0098-0105.DARK	900	15:07	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	



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UT Date 2005-01-11 Observers W Brown

Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.BIAS	0	0:17	13:21:19.0	36:23:39	600	90	2.0	#56 Spectropho	4	x10
0002-0010.BIAS	0	0:18	13:21:19.0	36:23:39	600	90	2.0	#56 Spectropho	4	
0011.FLAT	24	0:20	13:21:19.0	36:23:39	600	90	2.0	#56 Spectropho	4	x10
0012-0020.FLAT	24	0:26	13:21:19.0	36:23:39	600	90	2.0	#56 Spectropho	4	
0021.DARK	600	0:29	13:21:19.0	36:23:39	600	90	2.0	#56 Spectropho	4	x5
0022-0025.DARK	600	1:10	13:21:19.0	36:23:39	600	90	2.0	#56 Spectropho	4	
0026.HD19445	20	1:23	03:08:25.6	26:19:51	600	90	2.0	#56 Spectropho	4	
0027.COMP	10	1:25	03:08:25.6	26:19:51	600	90	2.0	#56 Spectropho	4	
0028.HD19445	30	1:25	03:08:25.6	26:19:51	600	90	2.0	#56 Spectropho	4	
0029.COMP	10	1:26	03:08:25.6	26:19:51	600	90	2.0	#56 Spectropho	4	
0030.hs3218	162	1:36	0:50:09.3	9:25:00	600	90	2.0	#122 Halo Star	4	
0031.COMP	10	1:39	0:50:09.3	9:25:00	600	90	2.0	#122 Halo Star	4	
0032.hs3216	168	1:40	0:49:27.5	5:59:11	600	90	2.0	#122 Halo Star	4	
0057.COMP.ms	5	1:10	2:10:00	32:00:00	300	90	3.0	#57 Velocity S	1	
0058.COMP	10	1:43	0:49:27.5	5:59:11	600	90	2.0	#122 Halo Star	4	qfast messed up counter
0059.hs3219	234	1:44	0:52:10.6	8:50:59	600	90	2.0	#122 Halo Star	4	
0060.COMP	10	1:48	0:52:10.6	8:50:59	600	90	2.0	#122 Halo Star	4	
0061.hs3215	264	1:48	0:49:21.2	11:21:09	600	90	2.0	#122 Halo Star	4	
0062.COMP	10	1:53	0:49:21.2	11:21:09	600	90	2.0	#122 Halo Star	4	
0063.hs3213	250	1:54	0:49:08.9	11:41:01	600	90	2.0	#122 Halo Star	4	



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UT Date 2005-01-11 Observers W BrownColl. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0064.COMP	10	1:58	0:49:08.9	11:41:01	600	90	2.0	#122 Halo Star	4	
0065.hs3214	342	1:59	0:49:11.7	9:38:12	600	90	2.0	#122 Halo Star	4	
0066.COMP	10	2:05	0:49:11.7	9:38:12	600	90	2.0	#122 Halo Star	4	
0067.hs3212	396	2:06	0:48:34.1	7:58:35	600	90	2.0	#122 Halo Star	4	
0068.COMP	10	2:12	0:48:34.1	7:58:35	600	90	2.0	#122 Halo Star	4	
0069.hs3217	336	2:13	0:50:04.7	8:28:05	600	90	2.0	#122 Halo Star	4	
0070.COMP	10	2:19	0:50:04.7	8:28:05	600	90	2.0	#122 Halo Star	4	
0071.hs3221	534	2:20	0:53:53.7	6:34:40	600	90	2.0	#122 Halo Star	4	
0072.COMP	10	2:29	0:53:53.7	6:34:40	600	90	2.0	#122 Halo Star	4	
0073.hs3222	576	2:30	0:55:17.0	13:16:34	600	90	2.0	#122 Halo Star	4	
0074.COMP	10	2:40	0:55:17.0	13:16:34	600	90	2.0	#122 Halo Star	4	
0075.hs3228	486	2:41	1:04:41.3	9:49:42	600	90	2.0	#122 Halo Star	4	
0076.COMP	5	2:49	1:04:41.3	9:49:42	600	90	2.0	#122 Halo Star	4	
0077.hs3229	408	2:50	1:04:45.1	9:18:39	600	90	2.0	#122 Halo Star	4	
0078.COMP	10	2:57	1:04:45.1	9:18:39	600	90	2.0	#122 Halo Star	4	
0079.hs3225	234	2:58	0:59:21.9	8:56:08	600	90	2.0	#122 Halo Star	4	
0080.COMP	10	3:02	0:59:21.9	8:56:08	600	90	2.0	#122 Halo Star	4	
0081.hs3224	372	3:03	0:58:03.6	11:00:41	600	90	2.0	#122 Halo Star	4	
0082.COMP	10	3:09	0:58:03.6	11:00:41	600	90	2.0	#122 Halo Star	4	
0083.hs3223	282	3:10	0:57:00.5	13:43:25	600	90	2.0	#122 Halo Star	4	



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UT Date 2005-01-11 Observers W Brown

Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0084.COMP	10	3:15	0:57:00.5	13:43:25	600	90	2.0	#122 Halo Star	4	
0085.hs3220	200	3:16	0:52:32.3	14:12:28	600	90	2.0	#122 Halo Star	4	
0086.COMP	10	3:20	0:52:32.3	14:12:28	600	90	2.0	#122 Halo Star	4	
0087.hs3226	180	3:21	1:01:37.1	7:28:35	600	90	2.0	#122 Halo Star	4	
0088.COMP	10	3:24	1:01:37.1	7:28:35	600	90	2.0	#122 Halo Star	4	
0089.hs3226	180	3:25	1:01:37.1	7:28:35	600	90	2.0	#122 Halo Star	4	
0090.COMP	10	3:28	1:01:37.1	7:28:35	600	90	2.0	#122 Halo Star	4	
0091.hs3230	480	3:29	1:07:27.6	10:09:23	600	90	2.0	#122 Halo Star	4	
0092.COMP	10	3:37	1:07:27.6	10:09:23	600	90	2.0	#122 Halo Star	4	
0093.hs3227	210	3:38	1:03:50.9	14:27:21	600	90	2.0	#122 Halo Star	4	
0094.COMP	10	3:42	1:03:50.9	14:27:21	600	90	2.0	#122 Halo Star	4	
0095.hs3231	216	3:42	1:12:07.1	13:36:18	600	90	2.0	#122 Halo Star	4	
0096.COMP	10	3:46	1:12:07.1	13:36:18	600	90	2.0	#122 Halo Star	4	
0097.hs3405	450	3:47	1:48:17.3	24:50:01	600	90	2.0	#122 Halo Star	4	
0098.COMP	10	3:55	1:48:17.3	24:50:01	600	90	2.0	#122 Halo Star	4	
0099.hs3405	600	3:56	1:48:17.3	24:50:01	600	90	2.0	#122 Halo Star	4	
0100.COMP	10	4:06	1:48:17.3	24:50:01	600	90	2.0	#122 Halo Star	4	
0101.hs3406	300	4:07	1:48:28.8	22:53:45	600	90	2.0	#122 Halo Star	4	
0102.COMP	10	4:12	1:48:28.8	22:53:45	600	90	2.0	#122 Halo Star	4	
0103.hs3406	180	4:13	1:48:28.8	22:53:45	600	90	2.0	#122 Halo Star	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0104.COMP	10	4:16	1:48:28.8	22:53:45	600	90	2.0	#122 Halo Star	4	
0105.hs3407	420	4:17	1:49:25.0	23:37:33	600	90	2.0	#122 Halo Star	4	
0106.COMP	10	4:24	1:49:25.0	23:37:33	600	90	2.0	#122 Halo Star	4	
0107.hs3408	600	4:25	1:49:33.1	21:48:20	600	90	2.0	#122 Halo Star	4	
0108.COMP	10	4:35	1:49:33.1	21:48:20	600	90	2.0	#122 Halo Star	4	
0109.hs3408	462	4:37	1:49:33.1	21:48:20	600	90	2.0	#122 Halo Star	4	
0110.COMP	10	4:45	1:49:33.1	21:48:20	600	90	2.0	#122 Halo Star	4	
0111.hs3411	180	4:45	1:51:54.4	22:47:25	600	90	2.0	#122 Halo Star	4	
0112.COMP	10	4:49	1:51:54.4	22:47:25	600	90	2.0	#122 Halo Star	4	
0113.hs3409	720	4:49	1:50:37.0	22:10:30	600	90	2.0	#122 Halo Star	4	
0114.COMP	10	5:02	1:50:37.0	22:10:30	600	90	2.0	#122 Halo Star	4	
0115.hs3410	360	5:03	1:51:21.1	25:08:12	600	90	2.0	#122 Halo Star	4	
0116.COMP	10	5:09	1:51:21.1	25:08:12	600	90	2.0	#122 Halo Star	4	
0117.hs3466	180	5:10	2:41:11.4	18:17:47	600	90	2.0	#122 Halo Star	4	
0118.COMP	10	5:14	2:41:11.4	18:17:47	600	90	2.0	#122 Halo Star	4	
0119.hs3620	600	5:18	3:19:54.8	11:59:50	600	90	2.0	#122 Halo Star	4	
0120.COMP	10	5:28	3:19:54.8	11:59:50	600	90	2.0	#122 Halo Star	4	
0121.hs3624	600	5:31	3:21:07.9	11:24:54	600	90	2.0	#122 Halo Star	4	
0122.COMP	10	5:41	3:21:07.9	11:24:54	600	90	2.0	#122 Halo Star	4	
0123.hs3627	480	5:42	3:21:33.6	6:52:32	600	90	2.0	#122 Halo Star	4	



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Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0124.COMP	10	5:51	3:21:33.6	6:52:32	600	90	2.0	#122 Halo Star	4	
0125.FLAT	8	5:58	3:21:33.6	6:52:32	300	90	3.0	#122 Halo Star	4	x10
0126-0134.FLAT	8	6:01	3:21:33.6	6:52:32	300	90	3.0	#122 Halo Star	4	
0135.GITau	60	6:02	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	4	
0136.COMP	5	6:03	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	4	
0137.GITau	300	6:04	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	4	
0138.COMP	5	6:09	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	4	
0139.GKTau	60	6:10	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0140.COMP	5	6:11	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0141.GKTau	300	6:11	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0142.COMP	5	6:17	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0143.sn2004gq	1500	6:20	05:12:04.8	-15:40:54	300	20	3.0	#2 SN Observat	2	
0144.COMP	10	6:45	05:12:04.8	-15:40:54	300	20	3.0	#2 SN Observat	2	
0145.Hiltner600	120	6:49	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	2	
0146.COMP	10	6:52	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	2	
0147.Hiltner600	60	6:53	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	4	
0148.COMP	5	6:54	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	4	
0149.BGGem	300	7:00	6:03:31	27:41:50	300	85	3.0	#12 Symbiotic	4	
0150.COMP	5	7:06	6:03:31	27:41:50	300	85	3.0	#12 Symbiotic	4	
0151.BGGem	60	7:07	6:03:31	27:41:50	300	85	3.0	#12 Symbiotic	4	



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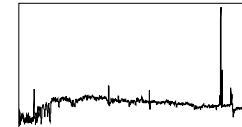
Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0152.COMP	5	7:08	6:03:31	27:41:50	300	85	3.0	#12 Symbiotic	4	clouds socked in; doing flats
0153-0172.FLAT	16	7:36	8:0:0	30:0:0	300	90	3.0	#12 Symbiotic	2	
0173.1100_04	1200	7:47	10:46:37.1	+22:02:22	300	90	3.0	#64 Cluster an	4	
0174.COMP	5	8:07	10:46:37.1	+22:02:22	300	90	3.0	#64 Cluster an	4	
0175.1100_02	900	8:08	10:48:26.3	+21:48:48	300	90	3.0	#64 Cluster an	4	
0176.COMP	5	8:24	10:48:26.3	+21:48:48	300	90	3.0	#64 Cluster an	4	
0177.1100_01	600	8:25	10:49:09.1	+21:40:31	300	90	3.0	#64 Cluster an	4	
0178.COMP	5	8:35	10:49:09.1	+21:40:31	300	90	3.0	#64 Cluster an	4	
0179.1100_03	780	8:37	10:49:32.3	+21:54:22	300	90	3.0	#64 Cluster an	4	
0180.COMP	5	8:50	10:49:32.3	+21:54:22	300	90	3.0	#64 Cluster an	4	
0181.1100_03	1200	8:51	10:49:32.3	+21:54:22	300	90	3.0	#64 Cluster an	4	
0182.COMP	5	9:11	10:49:32.3	+21:54:22	300	90	3.0	#64 Cluster an	4	
0183.1100_05	900	9:12	10:51:04.4	+22:05:59	300	90	3.0	#64 Cluster an	4	
0184.COMP	5	9:27	10:51:04.4	+22:05:59	300	90	3.0	#64 Cluster an	4	
0185.1100_06	900	9:38	10:48:33.7	+22:08:00	300	90	3.0	#64 Cluster an	4	
0186.COMP	5	9:53	10:48:33.7	+22:08:00	300	90	3.0	#64 Cluster an	4	
0187.1100_07	1200	9:54	10:49:05.3	+22:09:03	300	90	3.0	#64 Cluster an	4	
0188.COMP	5	10:15	10:49:05.3	+22:09:03	300	90	3.0	#64 Cluster an	4	
0189.1100_08	1230	10:16	10:47:44.4	+22:10:18	300	90	3.0	#64 Cluster an	4	clouds solid; this image is hosed
0190.COMP	5	10:43	10:47:44.4	+22:10:18	300	90	3.0	#64 Cluster an	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0191.BIAS	0	10:45	10:47:44.4	+22:10:18	300	90	3.0	#12 Symbiotic	4	x10
0192-0200.BIAS	0	10:46	10:47:44.4	+22:10:18	300	90	3.0	#12 Symbiotic	4	
0201.BIAS	0	11:08	10:47:44.4	+22:10:18	300	90	3.0	#12 Symbiotic	2	x10
0202-0210.BIAS	0	11:10	10:47:44.4	+22:10:18	300	90	3.0	#12 Symbiotic	2	
0211.DARK	600	11:12	10:47:44.4	+22:10:18	300	90	3.0	#12 Symbiotic	4	x5
0212-0215.DARK	600	11:53	10:47:44.4	+22:10:18	300	90	3.0	#12 Symbiotic	4	



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UT Date 2005-01-12 Observers W Brown

Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.BIAS	0	0:35	10:47:44.4	+22:10:18	300	90	3.0	#12 Symbiotic	4	x10; cloud cover
0002-0010.BIAS	0	0:36	10:47:44.4	+22:10:18	300	90	3.0	#12 Symbiotic	4	
0011.FLAT	24	0:54	10:47:44.4	+22:10:18	600	90	2.0	#56 Calibratio	4	x10; wind 25 mph
0012-0020.FLAT	24	0:59	10:47:44.4	+22:10:18	600	90	2.0	#56 Calibratio	4	
0021.DARK	600	1:01	10:47:44.4	+22:10:18	600	90	2.0	#56 Calibratio	4	x9; chance of snow
0022-0029.DARK	600	2:42	10:47:44.4	+22:10:18	600	90	2.0	#56 Calibratio	4	
0030.COMP	5	3:57	10:47:44.4	+22:10:18	600	90	2.0	#56 Calibratio	4	changing to 300 line
0031.FLAT	8	4:03	10:47:44.4	+22:10:18	300	90	3.0	#56 Calibratio	4	x10
0032-0040.FLAT	8	4:05	10:47:44.4	+22:10:18	300	90	3.0	#56 Calibratio	4	
0041.BIAS	0	4:08	10:47:44.4	+22:10:18	300	90	3.0	#56 Calibratio	2	x10
0042-0050.BIAS	0	4:09	10:47:44.4	+22:10:18	300	90	3.0	#56 Calibratio	2	
0051.FLAT	16	4:12	10:47:44.4	+22:10:18	300	90	3.0	#56 Calibratio	2	x10
0052-0060.FLAT	16	4:17	10:47:44.4	+22:10:18	300	90	3.0	#56 Calibratio	2	
0061.DARK	900	4:58	10:47:44.4	+22:10:18	300	90	3.0	#56 Calibratio	2	x10
0062-0070.DARK	900	9:10	10:47:44.4	+22:10:18	300	90	3.0	#56 Calibratio	2	
0071.sn2004gk	1200	12:02	12:25:33.2	+12:15:39	300	-8	3.0	#2 SN Observat	2	humidity hovering at 90
0072.COMP	10	12:22	12:25:33.2	+12:15:39	300	-8	3.0	#2 SN Observat	2	seeing is terrible
0073.sn2004gz	1200	12:39	16:13:45.7	61:01:25	300	75	3.0	#2 SN Observat	2	
0074.COMP	10	13:00	16:13:45.7	61:01:25	300	75	3.0	#2 SN Observat	2	
0075.Feige34	120	13:03	10:36:41.2	43:21:50	300	100	3.0	#56 Spectropho	2	



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<i>File</i>	<i>Exp Time</i>	<i>UT Start</i>	<i>RA</i>	<i>Dec</i>	<i>Gr.</i>	<i>P.A.</i>	<i>Slit</i>	<i>Program</i>	<i>Bir</i>	<i>Comments</i>
0076.COMP	10	13:06	10:36:41.2	43:21:50	300	100	3.0	#56 Spectropho	2	



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UT Date 2005-01-13 Observers W Brown

Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.BIAS	0	0:24	00:30:58.4	+31:28:06	300	90	3.0	#2 SN Observat	4	cold, clear, 25 mph wind
0002.foc	3	0:32	00:38:59.5	+31:28:06	300	90	3.0	#56 calibratio	4	focus run: 1000
0003.foc	3	0:33	00:39:20.4	+31:28:06	300	90	3.0	#56 calibratio	4	
0004.foc	3	0:33	00:39:41.5	+31:28:07	300	90	3.0	#56 calibratio	4	
0005.foc	3	0:33	00:39:54.7	+31:28:07	300	90	3.0	#56 calibratio	4	
0006.foc	3	0:34	00:40:23.9	+31:28:07	300	90	3.0	#56 calibratio	4	
0007.foc	3	0:34	00:40:36.7	+31:28:07	300	90	3.0	#56 calibratio	4	
0008.foc	3	0:35	00:41:15.4	+31:28:07	300	90	3.0	#56 calibratio	4	
0009.foc	3	0:35	00:41:32.3	+31:28:07	300	90	3.0	#56 calibratio	4	
0010.foc	3	0:35	00:41:45.5	+31:28:07	300	90	3.0	#56 calibratio	4	
0011.foc	3	0:38	00:44:48.4	+31:28:07	300	90	3.0	#56 calibratio	4	
0012.foc	3	0:38	00:45:00.9	+31:28:07	300	90	3.0	#56 calibratio	4	
0013.foc	3	0:39	00:45:13.8	+31:28:07	300	90	3.0	#56 calibratio	4	
0014.BIAS	0	1:00	01:06:33.4	+31:28:08	500	90	2.0	#56 calibratio	4	x10
0015-0023.BIAS	0	1:01	01:07:36.7	+31:28:08	500	90	2.0	#56 calibratio	4	
0024.FLAT	24	1:03	01:09:40.2	+31:28:08	500	90	2.0	#56 calibratio	4	x10
0025-0026.FLAT	24	1:04	01:10:43.6	+31:28:08	500	90	2.0	#56 calibratio	4	
0027-0033.FLAT	24	1:07	01:14:16.6	+31:28:09	500	90	2.0	#56 calibratio	4	
0034.hs3288	360	1:40	0:38:39.0	15:04:58	500	90	2.0	#122 Halo Star	4	dome is lost
0035.COMP	10	1:46	0:38:39.0	15:04:58	500	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0036.hs3288	180	1:53	0:38:39.0	15:04:58	500	90	2.0	#122 Halo Star	4	
0037.COMP	10	1:56	0:38:39.0	15:04:58	500	90	2.0	#122 Halo Star	4	
0038.hs3292	240	1:57	0:39:42.7	15:24:43	500	90	2.0	#122 Halo Star	4	
0039.COMP	10	2:01	0:39:42.7	15:24:43	500	90	2.0	#122 Halo Star	4	
0040.hs3293	300	2:03	0:40:37.4	24:09:06	500	90	2.0	#122 Halo Star	4	
0041.COMP	10	2:08	0:40:37.4	24:09:06	500	90	2.0	#122 Halo Star	4	
0042.hs3291	400	2:09	0:39:17.7	18:26:40	500	90	2.0	#122 Halo Star	4	
0043.COMP	10	2:16	0:39:17.7	18:26:40	500	90	2.0	#122 Halo Star	4	
0044.hs3290	720	2:17	0:39:08.9	18:41:53	500	90	2.0	#122 Halo Star	4	
0045.COMP	10	2:29	0:39:08.9	18:41:53	500	90	2.0	#122 Halo Star	4	
0046.hs3289	540	2:30	0:38:50.6	19:19:11	500	90	2.0	#122 Halo Star	4	
0047.COMP	10	2:39	0:38:50.6	19:19:11	500	90	2.0	#122 Halo Star	4	
0057.COMP.ms	5	1:10	2:10:00	32:00:00	300	90	3.0	#57 Velocity S	1	
0058.hs3289	500	2:40	0:38:50.6	19:19:11	500	90	2.0	#122 Halo Star	4	
0059.COMP	10	2:49	0:38:50.6	19:19:11	500	90	2.0	#122 Halo Star	4	
0060.hs3232	360	2:49	1:13:22.1	9:06:01	500	90	2.0	#122 Halo Star	4	
0061.COMP	10	2:56	1:13:22.1	9:06:01	500	90	2.0	#122 Halo Star	4	
0062.hs3233	460	2:57	1:14:34.6	10:45:52	500	90	2.0	#122 Halo Star	4	
0063.COMP	10	3:05	1:14:34.6	10:45:52	500	90	2.0	#122 Halo Star	4	
0064.hs3234	360	3:06	1:16:02.6	12:00:07	500	90	2.0	#122 Halo Star	4	



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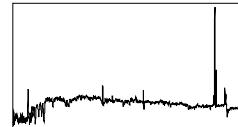
Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0065.COMP	10	3:12	1:16:02.6	12:00:07	500	90	2.0	#122 Halo Star	4	
0066.hs3235	300	3:13	1:16:47.0	5:56:00	500	90	2.0	#122 Halo Star	4	
0067.COMP	10	3:18	1:16:47.0	5:56:00	500	90	2.0	#122 Halo Star	4	
0068.hs3236	420	3:20	1:16:50.1	6:57:09	500	90	2.0	#122 Halo Star	4	
0069.COMP	10	3:27	1:16:50.1	6:57:09	500	90	2.0	#122 Halo Star	4	
0070.hs3237	540	3:28	1:21:36.8	8:39:28	500	90	2.0	#122 Halo Star	4	
0071.COMP	10	3:37	1:21:36.8	8:39:28	500	90	2.0	#122 Halo Star	4	
0072.hs3238	400	3:38	1:21:42.5	11:50:57	500	90	2.0	#122 Halo Star	4	
0073.COMP	10	3:45	1:21:42.5	11:50:57	500	90	2.0	#122 Halo Star	4	
0074.hs3239	160	3:46	1:22:13.4	7:04:42	500	90	2.0	#122 Halo Star	4	
0075.COMP	10	3:49	1:22:13.4	7:04:42	500	90	2.0	#122 Halo Star	4	
0076.hs3240	222	3:49	1:23:02.2	8:11:39	500	90	2.0	#122 Halo Star	4	
0077.COMP	10	3:53	1:23:02.2	8:11:39	500	90	2.0	#122 Halo Star	4	
0078.hs3241	342	3:54	1:23:36.0	12:46:34	500	90	2.0	#122 Halo Star	4	
0079.COMP	10	4:00	1:23:36.0	12:46:34	500	90	2.0	#122 Halo Star	4	
0080.hs3242	276	4:01	1:24:34.0	10:57:52	500	90	2.0	#122 Halo Star	4	
0081.COMP	10	4:06	1:24:34.0	10:57:52	500	90	2.0	#122 Halo Star	4	
0082.hs3244	470	4:07	1:25:57.9	8:32:37	500	90	2.0	#122 Halo Star	4	
0083.COMP	10	4:15	1:25:57.9	8:32:37	500	90	2.0	#122 Halo Star	4	
0084.hs3243	192	4:16	1:24:34.4	9:00:26	500	90	2.0	#122 Halo Star	4	



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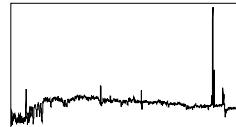
UT Date 2005-01-13 Observers W BrownColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0085.COMP	10	4:19	1:24:34.4	9:00:26	500	90	2.0	#122 Halo Star	4	
0086.hs3245	252	4:20	1:26:55.2	11:37:43	500	90	2.0	#122 Halo Star	4	
0087.COMP	10	4:25	1:26:55.2	11:37:43	500	90	2.0	#122 Halo Star	4	
0088.hs3246	384	4:25	1:28:33.8	13:51:22	500	90	2.0	#122 Halo Star	4	
0089.COMP	10	4:32	1:28:33.8	13:51:22	500	90	2.0	#122 Halo Star	4	
0090.hs3412	276	4:33	1:52:11.0	16:48:00	500	90	2.0	#122 Halo Star	4	
0091.COMP	10	4:38	1:52:11.0	16:48:00	500	90	2.0	#122 Halo Star	4	
0092.hs3413	384	4:39	1:52:46.7	16:54:32	500	90	2.0	#122 Halo Star	4	
0093.COMP	10	4:46	1:52:46.7	16:54:32	500	90	2.0	#122 Halo Star	4	
0094.hs3414	228	4:46	1:53:05.0	23:11:42	500	90	2.0	#122 Halo Star	4	
0095.COMP	10	4:51	1:53:05.0	23:11:42	500	90	2.0	#122 Halo Star	4	
0096.hs3415	320	4:51	1:53:11.3	21:33:41	500	90	2.0	#122 Halo Star	4	
0097.COMP	10	4:57	1:53:11.3	21:33:41	500	90	2.0	#122 Halo Star	4	
0098.hs3418	600	4:58	1:53:37.0	22:37:03	500	90	2.0	#122 Halo Star	4	
0099.COMP	10	5:08	1:53:37.0	22:37:03	500	90	2.0	#122 Halo Star	4	
0100.hs3418	600	5:09	1:53:37.0	22:37:03	500	90	2.0	#122 Halo Star	4	
0101.COMP	10	5:19	1:53:37.0	22:37:03	500	90	2.0	#122 Halo Star	4	
0102.hs3416	174	5:21	1:53:12.7	23:12:56	500	90	2.0	#122 Halo Star	4	
0103.COMP	10	5:24	1:53:12.7	23:12:56	500	90	2.0	#122 Halo Star	4	
0104.hs3419	264	5:25	1:53:39.9	22:25:17	500	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0105.COMP	10	5:29	1:53:39.9	22:25:17	500	90	2.0	#122 Halo Star	4	
0106.hs3417	180	5:30	1:53:31.7	25:18:15	500	90	2.0	#122 Halo Star	4	
0107.COMP	10	5:33	1:53:31.7	25:18:15	500	90	2.0	#122 Halo Star	4	
0108.hs3629	540	5:35	3:21:40.3	11:29:39	500	90	2.0	#122 Halo Star	4	
0109.COMP	10	5:44	3:21:40.3	11:29:39	500	90	2.0	#122 Halo Star	4	
0110.hs3631	336	5:47	3:22:11.3	10:37:38	500	90	2.0	#122 Halo Star	4	
0111.COMP	10	5:53	3:22:11.3	10:37:38	500	90	2.0	#122 Halo Star	4	
0112.hs3635	414	5:54	3:23:21.9	8:43:19	500	90	2.0	#122 Halo Star	4	
0113.COMP	10	6:01	3:23:21.9	8:43:19	500	90	2.0	#122 Halo Star	4	
0114.hs3635	414	6:01	3:23:21.9	8:43:19	500	90	2.0	#122 Halo Star	4	
0115.COMP	10	6:09	3:23:21.9	8:43:19	500	90	2.0	#122 Halo Star	4	
0116.hs3636	660	6:09	3:23:30.4	11:51:24	500	90	2.0	#122 Halo Star	4	
0117.COMP	10	6:21	3:23:30.4	11:51:24	500	90	2.0	#122 Halo Star	4	
0118.Hiltner600	120	6:27	06:42:37.2	02:11:25	500	0	2.0	#56 Spectropho	4	
0119.COMP	10	6:29	06:42:37.2	02:11:25	500	0	2.0	#56 Spectropho	4	
0120.COMP	5	6:38	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	4	adjusting grating tilt
0121.COMP	5	6:39	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	4	
0122.Hiltner600	45	6:40	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	4	
0123.COMP	5	6:41	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	4	
0124.Hiltner600	90	6:42	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0125.COMP	10	6:44	06:42:37.2	02:11:25	300	0	3.0	#56 Spectropho	2	
0126.GITau	60	6:50	04:33:34.0	+24:21:18	300	68	3.0	#12 Symbiotic	4	strange...object name did not update; re-done
0127.COMP	5	6:51	04:33:34.0	+24:21:18	300	68	3.0	#12 Symbiotic	4	
0128.GITau	300	6:52	04:33:34.0	+24:21:18	300	68	3.0	#12 Symbiotic	4	
0129.COMP	5	6:57	04:33:34.0	+24:21:18	300	68	3.0	#12 Symbiotic	4	
0130.GKTau	60	6:58	04:33:34.5	+24:21:07	300	68	3.0	#12 Symbiotic	4	
0131.COMP	5	6:59	04:33:34.5	+24:21:07	300	68	3.0	#12 Symbiotic	4	
0132.GKTau	300	6:59	04:33:34.5	+24:21:07	300	68	3.0	#12 Symbiotic	4	
0133.COMP	5	7:05	04:33:34.5	+24:21:07	300	68	3.0	#12 Symbiotic	4	
0134.Feige34	120	7:18	10:36:41.2	43:21:50	300	86	3.0	#56 Spectropho	4	
0135.COMP	5	7:21	10:36:41.2	43:21:50	300	86	3.0	#56 Spectropho	4	
0136.Feige34	240	7:21	10:36:41.2	43:21:50	300	86	3.0	#56 Spectropho	2	
0137.COMP	10	7:26	10:36:41.2	43:21:50	300	86	3.0	#56 Spectropho	2	
0138.XTEJ1118p480	300	7:30	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0139.COMP	5	7:35	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0140.XTEJ1118p480	300	7:36	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0141.COMP	5	7:41	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0142.XTEJ1118p480	300	7:41	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0143.COMP	5	7:47	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0144.XTEJ1118p480	300	7:47	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	



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0145.COMP	5	7:52	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0146.XTEJ1118p480	300	7:53	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0147.COMP	5	7:58	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0148.XTEJ1118p480	300	7:58	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0149.COMP	5	8:04	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0150.XTEJ1118p480	300	8:04	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0151.COMP	5	8:10	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0152.XTEJ1118p480	300	8:10	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0153.COMP	5	8:15	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0154.XTEJ1118p480	300	8:17	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0155.COMP	5	8:22	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0156.XTEJ1118p480	300	8:22	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0157.COMP	5	8:27	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0158.XTEJ1118p480	300	8:28	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0159.COMP	5	8:33	11:18:10.9	48:2:13	300	86	3.0	#149 X-ray Nov	4	
0160.XTEJ1118p480	300	8:34	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0161.COMP	5	8:40	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0162.XTEJ1118p480	300	8:40	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0163.COMP	5	8:45	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0164.XTEJ1118p480	300	8:47	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0165.COMP	5	8:52	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0166.XTEJ1118p480	300	8:52	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0167.COMP	5	8:58	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0168.XTEJ1118p480	300	8:58	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0169.COMP	5	9:03	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0170.XTEJ1118p480	300	9:04	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0171.COMP	5	9:09	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0172.XTEJ1118p480	300	9:09	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0173.COMP	5	9:15	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0174.XTEJ1118p480	300	9:16	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0175.COMP	5	9:21	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0176.XTEJ1118p480	300	9:22	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0177.COMP	5	9:27	11:18:10.9	48:2:13	300	70	3.0	#149 X-ray Nov	4	
0178.XTEJ1118p480	300	9:28	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0179.COMP	5	9:33	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0180.XTEJ1118p480	300	9:34	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0181.COMP	5	9:39	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0182.XTEJ1118p480	300	9:40	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0183.COMP	5	9:45	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0184.XTEJ1118p480	300	9:46	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	



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0185.COMP	5	9:51	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0186.XTEJ1118p480	300	9:51	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0187.COMP	5	9:57	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0188.XTEJ1118p480	300	9:58	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0189.COMP	5	10:03	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0190.XTEJ1118p480	300	10:03	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0191.COMP	5	10:09	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0192.XTEJ1118p480	300	10:10	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0193.COMP	5	10:15	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0194.XTEJ1118p480	300	10:15	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0195.COMP	5	10:21	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0196.XTEJ1118p480	300	10:21	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0197.COMP	5	10:26	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0198.XTEJ1118p480	300	10:27	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0199.COMP	5	10:32	11:18:10.9	48:2:13	300	48	3.0	#149 X-ray Nov	4	
0200.XTEJ1118p480	300	10:33	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0201.COMP	5	10:38	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0202.XTEJ1118p480	300	10:38	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0203.COMP	5	10:44	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0204.XTEJ1118p480	300	10:44	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0205.COMP	5	10:50	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0206.XTEJ1118p480	300	10:50	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0207.COMP	5	10:55	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0208.XTEJ1118p480	300	10:56	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0209.COMP	5	11:01	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0210.XTEJ1118p480	300	11:01	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0211.COMP	5	11:07	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0212.XTEJ1118p480	300	11:07	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0213.COMP	5	11:12	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0214.XTEJ1118p480	300	11:13	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0215.COMP	5	11:18	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0216.XTEJ1118p480	300	11:19	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0217.COMP	5	11:24	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0218.XTEJ1118p480	300	11:25	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0219.COMP	5	11:30	11:18:10.9	48:2:13	300	11	3.0	#149 X-ray Nov	4	
0220.XTEJ1118p480	300	11:31	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0221.COMP	5	11:36	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0222.XTEJ1118p480	300	11:37	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0223.COMP	5	11:42	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0224.XTEJ1118p480	300	11:43	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	



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0225.COMP	5	11:48	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0226.XTEJ1118p480	300	11:49	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0227.COMP	5	11:54	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0228.XTEJ1118p480	300	11:54	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0229.COMP	5	11:59	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0230.XTEJ1118p480	300	12:00	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0231.COMP	5	12:06	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0232.XTEJ1118p480	300	12:06	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0233.COMP	5	12:11	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0234.XTEJ1118p480	300	12:12	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0235.COMP	5	12:17	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0236.XTEJ1118p480	300	12:17	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0237.COMP	5	12:23	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0238.XTEJ1118p480	300	12:23	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0239.COMP	5	12:29	11:18:10.9	48:2:13	300	-34	3.0	#149 X-ray Nov	4	
0240.XTEJ1118p480	300	12:30	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0241.COMP	5	12:36	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0242.XTEJ1118p480	300	12:36	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0243.COMP	5	12:42	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0244.XTEJ1118p480	300	12:42	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0245.COMP	5	12:48	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0246.XTEJ1118p480	300	12:48	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0247.COMP	5	12:53	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0248.XTEJ1118p480	300	12:54	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	seeing getting a lot worse
0249.COMP	5	12:59	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0250.XTEJ1118p480	300	13:00	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0251.COMP	5	13:05	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0252.XTEJ1118p480	300	13:05	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0253.COMP	5	13:11	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0254.XTEJ1118p480	300	13:11	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0255.COMP	5	13:17	11:18:10.9	48:2:13	300	106	3.0	#149 X-ray Nov	4	
0256.FLAT	8	13:19	11:18:10.9	48:2:13	300	90	3.0	#149 X-ray Nov	4	x20
0257-0275.FLAT	8	13:27	11:18:10.9	48:2:13	300	90	3.0	#149 X-ray Nov	4	
0276.BIAS	0	13:29	11:18:10.9	48:2:13	300	90	3.0	#149 X-ray Nov	4	x10
0277-0285.BIAS	0	13:30	11:18:10.9	48:2:13	300	90	3.0	#149 X-ray Nov	4	
0286-0295.DARK	600	15:16	11:18:10.9	48:2:13	300	90	3.0	#149 X-ray Nov	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.BIAS	0	0:32	11:18:10.9	48:2:13	300	90	3.0	#149 X-ray Nov	4	x10; cloudy
0002-0010.BIAS	0	0:33	11:18:10.9	48:2:13	300	90	3.0	#149 X-ray Nov	4	
0011.FLAT	24	0:34	11:18:10.9	48:2:13	600	90	2.0	#56 Calibration	4	x10
0012-0020.FLAT	24	0:39	11:18:10.9	48:2:13	600	90	2.0	#56 Calibration	4	
0021.hs3294	180	1:41	0:41:48.9	15:57:42	600	90	2.0	#122 Halo Star	4	
0022.COMP	5	1:44	0:41:48.9	15:57:42	600	90	2.0	#122 Halo Star	4	
0023.hs3297	168	1:45	0:44:15.4	15:43:30	600	90	2.0	#122 Halo Star	4	
0024.COMP	5	1:48	0:44:15.4	15:43:30	600	90	2.0	#122 Halo Star	4	
0025.hs3298	200	1:49	0:44:53.2	18:02:45	600	90	2.0	#122 Halo Star	4	
0026.COMP	5	1:53	0:44:53.2	18:02:45	600	90	2.0	#122 Halo Star	4	
0027.hs3295	390	1:53	0:43:08.0	17:27:35	600	90	2.0	#122 Halo Star	4	
0028.COMP	5	2:00	0:43:08.0	17:27:35	600	90	2.0	#122 Halo Star	4	
0029.hs3296	420	2:01	0:43:26.6	26:54:40	600	90	2.0	#122 Halo Star	4	
0030.COMP	5	2:08	0:43:26.6	26:54:40	600	90	2.0	#122 Halo Star	4	
0058.hs3301	720	2:10	0:48:57.8	16:33:14	600	90	2.0	#122 Halo Star	4	
0059.COMP	5	2:23	0:48:57.8	16:33:14	600	90	2.0	#122 Halo Star	4	
0060.hs3301	1200	2:24	0:48:57.8	16:33:14	600	90	2.0	#122 Halo Star	4	clouds really socked in
0061.COMP	5	2:35	0:48:57.8	16:33:14	600	90	2.0	#122 Halo Star	4	
0062.COMP	5	6:06	6:0:0	30:0:0	300	65	3.0	#12 Symbiotic	4	setting grating tilt
0063.COMP	5	6:07	6:0:0	30:0:0	300	65	3.0	#12 Symbiotic	4	



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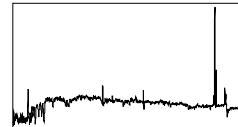
Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0064.GITau	300	6:09	04:33:34.0	+24:21:18	300	65	3.0	#12 Symbiotic	4	big sucker hole overhead
0065.COMP	5	6:15	04:33:34.0	+24:21:18	300	65	3.0	#12 Symbiotic	4	
0066.GKTau	300	6:15	04:33:34.5	+24:21:07	300	65	3.0	#12 Symbiotic	4	
0067.COMP	5	6:21	04:33:34.5	+24:21:07	300	65	3.0	#12 Symbiotic	4	
0068.GKTau	60	6:21	04:33:34.5	+24:21:07	300	65	3.0	#12 Symbiotic	4	
0069.COMP	5	6:22	04:33:34.5	+24:21:07	300	65	3.0	#12 Symbiotic	4	
0070.GITau	300	6:23	04:33:34.0	+24:21:18	300	65	3.0	#12 Symbiotic	4	
0071.COMP	5	6:29	04:33:34.0	+24:21:18	300	65	3.0	#12 Symbiotic	4	
0072.cvso-81206	1200	6:33	05:55:24.5	+01:05:48	300	90	3.0	#112 Orion PMS	4	a close double
0073.COMP	5	6:53	05:55:24.5	+01:05:48	300	90	3.0	#112 Orion PMS	4	
0074.cvso-66868	900	6:55	05:55:25.1	-01:34:22	300	90	3.0	#112 Orion PMS	4	sucker hole starting to disappear
0075.COMP	5	7:10	05:55:25.1	-01:34:22	300	90	3.0	#112 Orion PMS	4	
0076.cvso-66868	1200	7:10	05:55:25.1	-01:34:22	300	90	3.0	#112 Orion PMS	4	second try, to get more S/N
0077.COMP	5	7:24	05:55:25.1	-01:34:22	300	90	3.0	#112 Orion PMS	4	
0078.Feige34	90	8:46	10:36:41.2	43:21:50	300	70	3.0	#56 Spectropho	4	another sucker hole...
0079.COMP	5	8:47	10:36:41.2	43:21:50	300	70	3.0	#56 Spectropho	4	
0080.Feige34	180	8:48	10:36:41.2	43:21:50	300	70	3.0	#56 Spectropho	2	
0081.COMP	10	8:51	10:36:41.2	43:21:50	300	70	3.0	#56 Spectropho	2	
0082.FLAT	8	8:55	10:36:41.2	43:21:50	300	70	3.0	#56 Spectropho	4	x10
0083-0091.FLAT	8	8:57	10:36:41.2	43:21:50	300	70	3.0	#56 Spectropho	4	



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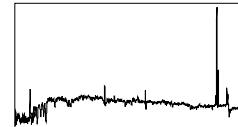
Coll. Focus 960 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0092.Feige34	120	9:01	10:36:41.2	43:21:50	600	70	2.0	#56 Spectropho	4	
0093.COMP	10	9:04	10:36:41.2	43:21:50	600	70	2.0	#56 Spectropho	4	
0094.hs2209	420	9:07	12:14:35.8	45:26:58	600	90	2.0	#122 Halo Star	4	
0095.COMP	5	9:14	12:14:35.8	45:26:58	600	90	2.0	#122 Halo Star	4	
0096.hs2212	240	9:15	12:14:58.5	49:25:44	600	90	2.0	#122 Halo Star	4	
0097.COMP	5	9:20	12:14:58.5	49:25:44	600	90	2.0	#122 Halo Star	4	
0098.hs2215	480	9:21	12:15:24.3	38:16:23	600	90	2.0	#122 Halo Star	4	
0099.COMP	5	9:29	12:15:24.3	38:16:23	600	90	2.0	#122 Halo Star	4	
0100.hs2214	540	9:30	12:15:17.1	37:21:36	600	90	2.0	#122 Halo Star	4	
0101.COMP	5	9:40	12:15:17.1	37:21:36	600	90	2.0	#122 Halo Star	4	
0102.hs2206	300	9:42	12:13:43.8	67:09:49	600	90	2.0	#122 Halo Star	4	clouds pretty bad
0103.COMP	5	9:47	12:13:43.8	67:09:49	600	90	2.0	#122 Halo Star	4	
0104.hs2206	270	9:48	12:13:43.8	67:09:49	600	90	2.0	#122 Halo Star	4	
0105.COMP	5	9:53	12:13:43.8	67:09:49	600	90	2.0	#122 Halo Star	4	
0106.FLAT	24	10:49	12:14:28.0	58:19:14	600	90	2.0	#56 Calibratio	4	x10
0107-0115.FLAT	24	10:53	12:14:28.0	58:19:14	600	90	2.0	#56 Calibratio	4	
0116.test	5	11:00	12:14:28.0	58:19:14	300	0	3.0	#56 Calibratio	4	changing to 300 line
0117.FLAT	16	11:08	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	x20
0118-0136.FLAT	16	11:17	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0137.sn2004gt	1620	11:32	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0138.COMP	10	12:00	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0139.sn2004gz	1800	12:30	16:13:45.7	+61:01:25	300	75	3.0	#2 SN Observat	2	
0140.COMP	10	13:01	16:13:45.7	+61:01:25	300	75	3.0	#2 SN Observat	2	
0141.HD84937	15	13:06	09:48:56.1	13:44:39	300	60	3.0	#56 Spectropho	2	
0142.COMP	10	13:06	09:48:56.1	13:44:39	300	60	3.0	#56 Spectropho	2	
0143.BIAS	0	13:08	09:48:56.1	13:44:39	300	60	3.0	#2 SN Observat	2	x10
0144-0152.BIAS	0	13:10	09:48:56.1	13:44:39	300	60	3.0	#2 SN Observat	2	
0153-0160.DARK	900	15:08	09:48:56.1	13:44:39	300	90	3.0	#2 SN Observat	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.focus	5	0:09	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	focus test: 980
0002.focus	5	0:09	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0003.focus	5	0:10	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0004.focus	5	0:10	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0005.focus	5	0:11	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0006.focus	5	0:11	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0007.focus	5	0:11	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0008.focus	5	0:12	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0009.focus	5	0:12	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0010.focus	5	0:12	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0011.focus	5	0:13	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0012.focus	5	0:13	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0013.BIAS	0	0:15	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	x10
0014-0022.BIAS	0	0:16	09:48:56.1	13:44:39	300	90	3.0	#56 Calibratio	4	
0023.FLAT	24	0:56	09:48:56.1	13:44:39	600	90	2.0	#56 Calibratio	4	changing to 600 line
0024-0032.FLAT	24	1:01	09:48:56.1	13:44:39	600	90	2.0	#56 Calibratio	4	
0033.hs3299	300	2:10	0:45:09.0	22:59:40	600	90	2.0	#122 Halo Star	4	clouds clearing
0034.COMP	5	2:15	0:45:09.0	22:59:40	600	90	2.0	#122 Halo Star	4	
0058.hs3300	186	2:16	0:45:19.8	22:32:39	600	90	2.0	#122 Halo Star	4	
0059.COMP	5	2:20	0:45:19.8	22:32:39	600	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0060.hs3303	246	2:20	0:49:49.2	20:35:14	600	90	2.0	#122 Halo Star	4	
0061.COMP	5	2:25	0:49:49.2	20:35:14	600	90	2.0	#122 Halo Star	4	
0062.hs3307	600	2:26	0:53:41.0	15:40:42	600	90	2.0	#122 Halo Star	4	
0063.COMP	5	2:36	0:53:41.0	15:40:42	600	90	2.0	#122 Halo Star	4	
0064.hs3309	240	2:37	0:54:32.4	15:13:30	600	90	2.0	#122 Halo Star	4	
0065.COMP	10	2:41	0:54:32.4	15:13:30	600	90	2.0	#122 Halo Star	4	
0066.hs3310	240	2:42	0:55:19.2	24:51:49	600	90	2.0	#122 Halo Star	4	clouds back
0067.COMP	10	2:49	0:55:19.2	24:51:49	600	90	2.0	#122 Halo Star	4	
0068.hs3306	300	2:56	0:52:18.4	23:07:15	600	90	2.0	#122 Halo Star	4	
0069.COMP	10	3:01	0:52:18.4	23:07:15	600	90	2.0	#122 Halo Star	4	
0070.hs3305	360	3:02	0:51:05.9	25:55:42	600	90	2.0	#122 Halo Star	4	
0071.COMP	10	3:09	0:51:05.9	25:55:42	600	90	2.0	#122 Halo Star	4	
0072.hs3308	300	3:10	0:53:48.0	22:10:19	600	90	2.0	#122 Halo Star	4	very cloudy
0073.hs3308	300	3:36	0:53:48.0	22:10:19	600	90	2.0	#122 Halo Star	4	
0074.COMP	10	3:41	0:53:48.0	22:10:19	600	90	2.0	#122 Halo Star	4	
0075.test	5	3:48	3:30:0	30:0:0	300	90	3.0	#56 Calibratio	4	changing to 300 line
0076.FLAT	8	3:50	3:30:0	30:0:0	300	90	3.0	#56 Calibratio	4	x10
0077-0085.FLAT	8	3:52	3:30:0	30:0:0	300	90	3.0	#56 Calibratio	4	
0086.GITau	60	4:02	04:33:34.0	+24:21:18	300	-20	3.0	#12 Symbiotic	4	
0087.GITau	300	4:03	04:33:34.0	+24:21:18	300	-20	3.0	#12 Symbiotic	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0088.COMP	5	4:09	04:33:34.0	+24:21:18	300	-20	3.0	#12 Symbiotic	4	
0089.GKTau	60	4:10	04:33:34.5	+24:21:07	300	-20	3.0	#12 Symbiotic	4	
0090.GKTau	300	4:11	04:33:34.5	+24:21:07	300	-20	3.0	#12 Symbiotic	4	
0091.COMP	5	4:16	04:33:34.5	+24:21:07	300	-20	3.0	#12 Symbiotic	4	
0092.sn2004gv	1800	4:22	02:13:37.4	-00:43:05	300	45	3.0	#2 SN Observat	2	cloudy
0093.COMP	10	4:52	02:13:37.4	-00:43:05	300	45	3.0	#2 SN Observat	2	
0094.sn2004gq	1470	4:59	05:12:04.8	-15:40:54	300	0	3.0	#2 SN Observat	2	
0095.COMP	10	5:24	05:12:04.8	-15:40:54	300	0	3.0	#2 SN Observat	2	
0096.Hiltner600	210	5:27	06:42:37.2	02:11:25	300	-20	3.0	#56 Spectropho	2	
0097.COMP	10	5:31	06:42:37.2	02:11:25	300	-20	3.0	#56 Spectropho	2	
0098.Hiltner600	120	5:32	06:42:37.2	02:11:25	300	-20	3.0	#56 Spectropho	4	
0099.COMP	5	5:34	06:42:37.2	02:11:25	300	-20	3.0	#56 Spectropho	4	
0100.cvso-58207	540	5:39	05:55:28.1	+00:05:35	300	90	3.0	#112 Orion PMS	4	
0101.COMP	5	5:48	05:55:28.1	+00:05:35	300	90	3.0	#112 Orion PMS	4	
0102.cvso-83415	480	5:49	05:55:44.0	+01:56:28	300	90	3.0	#112 Orion PMS	4	
0103.COMP	5	5:58	05:55:44.0	+01:56:28	300	90	3.0	#112 Orion PMS	4	
0104.cvso-50584	600	6:00	05:56:08.0	-00:14:35	300	90	3.0	#112 Orion PMS	4	
0105.COMP	5	6:10	05:56:08.0	-00:14:35	300	90	3.0	#112 Orion PMS	4	
0106.cvso-80386	690	6:11	05:56:35.1	+00:20:56	300	90	3.0	#112 Orion PMS	4	
0107.COMP	5	6:22	05:56:35.1	+00:20:56	300	90	3.0	#112 Orion PMS	4	



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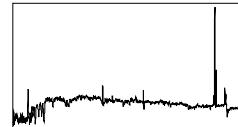
Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0108.cvso-68607	480	6:23	05:56:56.1	-01:35:32	300	90	3.0	#112 Orion PMS	4	
0109.COMP	5	6:32	05:56:56.1	-01:35:32	300	90	3.0	#112 Orion PMS	4	
0110.cvso-51404	510	6:32	05:56:58.1	+00:12:32	300	90	3.0	#112 Orion PMS	4	
0111.COMP	5	6:41	05:56:58.1	+00:12:32	300	90	3.0	#112 Orion PMS	4	
0112.cvso-83061	510	6:42	05:57:01.1	+01:04:23	300	90	3.0	#112 Orion PMS	4	
0113.COMP	5	6:51	05:57:01.1	+01:04:23	300	90	3.0	#112 Orion PMS	4	
0114.Feige34	120	6:53	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	4	
0115.COMP	5	6:56	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	4	
0116.Feige34	240	6:56	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	still cloudy
0117.COMP	10	7:01	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0118.FLAT	16	7:01	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	x20
0119-0137.FLAT	16	7:10	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0138.Feige34	210	7:16	10:36:41.2	43:21:50	600	90	2.0	#56 Spectropho	4	changing to 600 line
0139.COMP	10	7:20	10:36:41.2	43:21:50	600	90	2.0	#56 Spectropho	4	finally, clouds clearing
0140.hss250	1800	7:21	9:02:07.1	0:19:45	600	90	2.0	#122 Halo Star	4	
0141.COMP	10	7:51	9:02:07.1	0:19:45	600	90	2.0	#122 Halo Star	4	
0142.hss251	1500	7:52	9:03:15.5	1:50:28	600	90	2.0	#122 Halo Star	4	
0143.COMP	5	8:17	9:03:15.5	1:50:28	600	90	2.0	#122 Halo Star	4	
0144.hss252	1410	8:18	9:03:15.9	0:04:47	600	90	2.0	#122 Halo Star	4	
0145.COMP	10	8:42	9:03:15.9	0:04:47	600	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0146.hs2205	288	8:45	12:13:42.9	35:36:41	600	90	2.0	#122 Halo Star	4	
0147.COMP	10	8:51	12:13:42.9	35:36:41	600	90	2.0	#122 Halo Star	4	
0148.hs2218	306	8:52	12:15:44.3	37:41:01	600	90	2.0	#122 Halo Star	4	
0149.COMP	10	8:57	12:15:44.3	37:41:01	600	90	2.0	#122 Halo Star	4	
0150.hs2225	276	8:58	12:17:20.9	32:11:26	600	90	2.0	#122 Halo Star	4	
0151.COMP	10	9:03	12:17:20.9	32:11:26	600	90	2.0	#122 Halo Star	4	
0152.hs2229	366	9:04	12:18:05.5	30:17:24	600	90	2.0	#122 Halo Star	4	
0153.COMP	10	9:10	12:18:05.5	30:17:24	600	90	2.0	#122 Halo Star	4	
0154.hs2222	360	9:11	12:17:03.9	21:27:59	600	90	2.0	#122 Halo Star	4	
0155.COMP	10	9:18	12:17:03.9	21:27:59	600	90	2.0	#122 Halo Star	4	
0156.hs2216	330	9:18	12:15:33.3	16:49:16	600	90	2.0	#122 Halo Star	4	
0157.COMP	5	9:24	12:15:33.3	16:49:16	600	90	2.0	#122 Halo Star	4	
0158.hs2217	270	9:25	12:15:33.9	14:28:40	600	90	2.0	#122 Halo Star	4	
0159.COMP	10	9:30	12:15:33.9	14:28:40	600	90	2.0	#122 Halo Star	4	
0160.hs2223	426	9:30	12:17:04.1	16:19:23	600	90	2.0	#122 Halo Star	4	
0161.COMP	10	9:38	12:17:04.1	16:19:23	600	90	2.0	#122 Halo Star	4	
0162.hs2224	220	9:39	12:17:19.5	16:03:54	600	90	2.0	#122 Halo Star	4	
0163.COMP	10	9:43	12:17:19.5	16:03:54	600	90	2.0	#122 Halo Star	4	
0164.hs2233	120	9:43	12:18:58.0	15:07:26	600	90	2.0	#122 Halo Star	4	
0165.COMP	10	9:46	12:18:58.0	15:07:26	600	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0166.hs2240	190	9:47	12:19:30.5	20:49:49	600	90	2.0	#122 Halo Star	4	
0167.COMP	10	9:50	12:19:30.5	20:49:49	600	90	2.0	#122 Halo Star	4	
0168.hs2231	462	9:51	12:18:20.6	19:54:42	600	90	2.0	#122 Halo Star	4	
0169.COMP	10	9:59	12:18:20.6	19:54:42	600	90	2.0	#122 Halo Star	4	
0170.hs2227	540	10:00	12:17:57.0	14:20:40	600	90	2.0	#122 Halo Star	4	
0171.COMP	10	10:09	12:17:57.0	14:20:40	600	90	2.0	#122 Halo Star	4	
0172.hs2251	300	10:10	12:22:01.2	18:46:55	600	90	2.0	#122 Halo Star	4	
0173.COMP	10	10:15	12:22:01.2	18:46:55	600	90	2.0	#122 Halo Star	4	
0174.hs2258	160	10:16	12:22:48.3	17:33:30	600	90	2.0	#122 Halo Star	4	
0175.COMP	10	10:19	12:22:48.3	17:33:30	600	90	2.0	#122 Halo Star	4	
0176.hs2259	280	10:19	12:22:51.6	16:50:49	600	90	2.0	#122 Halo Star	4	
0177.COMP	10	10:24	12:22:51.6	16:50:49	600	90	2.0	#122 Halo Star	4	
0178.hs2260	220	10:25	12:23:02.6	27:27:16	600	90	2.0	#122 Halo Star	4	
0179.COMP	10	10:29	12:23:02.6	27:27:16	600	90	2.0	#122 Halo Star	4	
0180.hs2243	160	10:30	12:20:52.5	33:10:50	600	90	2.0	#122 Halo Star	4	
0181.COMP	10	10:33	12:20:52.5	33:10:50	600	90	2.0	#122 Halo Star	4	
0182.hs2245	360	10:42	12:21:12.8	27:00:47	600	90	2.0	#122 Halo Star	4	dome got lost
0183.COMP	10	10:48	12:21:12.8	27:00:47	600	90	2.0	#122 Halo Star	4	
0184.hs2249	620	10:49	12:21:55.5	34:23:56	600	90	2.0	#122 Halo Star	4	
0185.COMP	10	10:59	12:21:55.5	34:23:56	600	90	2.0	#122 Halo Star	4	



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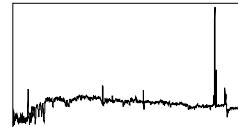
Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0186.hs2246	160	11:00	12:21:39.2	38:33:09	600	90	2.0	#122 Halo Star	4	
0187.COMP	10	11:03	12:21:39.2	38:33:09	600	90	2.0	#122 Halo Star	4	
0188.hs2254	438	11:04	12:22:15.8	39:31:08	600	90	2.0	#122 Halo Star	4	
0189.COMP	10	11:12	12:22:15.8	39:31:08	600	90	2.0	#122 Halo Star	4	
0190.hs2252	282	11:13	12:22:04.2	40:26:18	600	90	2.0	#122 Halo Star	4	
0191.COMP	10	11:18	12:22:04.2	40:26:18	600	90	2.0	#122 Halo Star	4	
0192.hs2220	300	11:20	12:16:02.6	46:37:29	600	90	2.0	#122 Halo Star	4	
0193.COMP	10	11:25	12:16:02.6	46:37:29	600	90	2.0	#122 Halo Star	4	
0194.hs2248	378	11:26	12:21:50.1	52:14:34	600	90	2.0	#122 Halo Star	4	
0195.COMP	10	11:32	12:21:50.1	52:14:34	600	90	2.0	#122 Halo Star	4	
0196.hs2208	170	11:33	12:14:28.0	58:19:14	600	90	2.0	#122 Halo Star	4	
0197.COMP	10	11:36	12:14:28.0	58:19:14	600	90	2.0	#122 Halo Star	4	
0198.hs2219	348	11:37	12:15:56.6	62:26:45	600	90	2.0	#122 Halo Star	4	
0199.COMP	10	11:43	12:15:56.6	62:26:45	600	90	2.0	#122 Halo Star	4	
0200.hs2232	180	11:44	12:18:40.7	63:02:56	600	90	2.0	#122 Halo Star	4	
0201.COMP	10	11:47	12:18:40.7	63:02:56	600	90	2.0	#122 Halo Star	4	
0202.hs2228	582	11:48	12:17:57.6	64:17:23	600	90	2.0	#122 Halo Star	4	
0203.COMP	10	11:58	12:17:57.6	64:17:23	600	90	2.0	#122 Halo Star	4	
0204.hs2242	260	11:59	12:20:30.5	68:58:35	600	90	2.0	#122 Halo Star	4	
0205.COMP	10	12:04	12:20:30.5	68:58:35	600	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0206.hs2207	345	12:05	12:14:13.2	70:47:04	600	90	2.0	#122 Halo Star	4	
0207.COMP	10	12:11	12:14:13.2	70:47:04	600	90	2.0	#122 Halo Star	4	
0208.hs2221	190	12:12	12:16:08.4	76:13:04	600	90	2.0	#122 Halo Star	4	
0209.COMP	10	12:15	12:16:08.4	76:13:04	600	90	2.0	#122 Halo Star	4	
0210.hs2226	160	12:16	12:17:35.9	80:51:22	600	90	2.0	#122 Halo Star	4	
0211.COMP	10	12:19	12:17:35.9	80:51:22	600	90	2.0	#122 Halo Star	4	
0212.hs2247	286	12:22	12:21:41.5	79:53:13	600	90	2.0	#122 Halo Star	4	
0213.COMP	10	12:27	12:21:41.5	79:53:13	600	90	2.0	#122 Halo Star	4	
0214.hs2253	170	12:28	12:22:08.2	76:02:48	600	90	2.0	#122 Halo Star	4	
0215.COMP	10	12:31	12:22:08.2	76:02:48	600	90	2.0	#122 Halo Star	4	
0216.hs2334	582	12:32	12:40:07.5	64:29:20	600	90	2.0	#122 Halo Star	4	
0217.COMP	10	12:42	12:40:07.5	64:29:20	600	90	2.0	#122 Halo Star	4	
0218.hs2334	400	12:43	12:40:07.5	64:29:20	600	90	2.0	#122 Halo Star	4	
0219.COMP	10	12:50	12:40:07.5	64:29:20	600	90	2.0	#122 Halo Star	4	
0220.hs2333	460	12:51	12:40:03.0	61:12:08	600	90	2.0	#122 Halo Star	4	
0221.COMP	10	12:59	12:40:03.0	61:12:08	600	90	2.0	#122 Halo Star	4	
0222.hs2335	320	12:59	12:40:38.2	51:16:00	600	90	2.0	#122 Halo Star	4	
0223.COMP	10	13:05	12:40:38.2	51:16:00	600	90	2.0	#122 Halo Star	4	
0224.hs2341	420	13:06	12:41:48.7	60:00:04	600	90	2.0	#122 Halo Star	4	
0225.COMP	10	13:13	12:41:48.7	60:00:04	600	90	2.0	#122 Halo Star	4	



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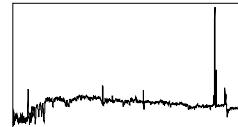
UT Date 2005-01-15 Observers W BrownColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0226.hs2342	330	13:14	12:41:53.9	76:26:47	600	90	2.0	#122 Halo Star	4	
0227.COMP	10	13:20	12:41:53.9	76:26:47	600	90	2.0	#122 Halo Star	4	
0228.hs2343	210	13:24	12:42:07.9	30:55:40	600	90	2.0	#122 Halo Star	4	
0229.COMP	10	13:27	12:42:07.9	30:55:40	600	90	2.0	#122 Halo Star	4	
0230.BIAS	0	13:29	12:42:07.9	30:55:40	600	90	2.0	#122 Halo Star	4	x10
0231-0239.BIAS	0	13:30	12:42:07.9	30:55:40	600	90	2.0	#122 Halo Star	4	
0240.FLAT	24	13:31	12:42:07.9	30:55:40	600	90	2.0	#122 Halo Star	4	x10
0241-0249.FLAT	24	13:36	12:42:07.9	30:55:40	600	90	2.0	#122 Halo Star	4	
0250.BIAS	0	13:37	12:42:07.9	30:55:40	600	90	2.0	#122 Halo Star	2	x10
0251-0259.BIAS	0	13:38	12:42:07.9	30:55:40	600	90	2.0	#122 Halo Star	2	
0260-0269.DARK	900	16:09	12:42:07.9	30:55:40	600	90	2.0	#56 Calibration	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0010.BIAS	0	0:05	00:23:09.2	+31:28:07	600	90	2.0	#56 Calibratio	4	
0011.FLAT	24	0:06	00:25:12.1	+31:28:07	600	90	2.0	#56 Calibratio	4	600-line, 2-sec, Warren
0012-0030.FLAT	24	0:16	00:34:55.2	+31:28:07	600	90	2.0	#56 Calibratio	4	
0031.hs3311	360	1:26	0:55:46.1	17:53:41	600	90	2.0	#122 Halo Star	4	
0032.COMP	10	1:33	0:55:46.1	17:53:41	600	90	2.0	#122 Halo Star	4	
0033.hs3312	240	1:34	0:56:36.8	27:02:28	600	90	2.0	#122 Halo Star	4	
0034.COMP	10	1:38	0:56:36.8	27:02:28	600	90	2.0	#122 Halo Star	4	
0035.hs3313	480	1:40	0:57:49.3	18:16:24	600	90	2.0	#122 Halo Star	4	
0036.COMP	10	1:48	0:57:49.3	18:16:24	600	90	2.0	#122 Halo Star	4	
0037.hs3314	420	1:49	0:57:59.4	23:15:51	600	90	2.0	#122 Halo Star	4	
0038.COMP	10	1:56	0:57:59.4	23:15:51	600	90	2.0	#122 Halo Star	4	
0039.hs3315	180	1:57	0:58:00.8	26:31:21	600	90	2.0	#122 Halo Star	4	
0040.COMP	10	2:00	0:58:00.8	26:31:21	600	90	2.0	#122 Halo Star	4	
0041.hs3304	540	2:01	0:50:40.2	25:51:52	600	90	2.0	#122 Halo Star	4	
0042.COMP	10	2:10	0:50:40.2	25:51:52	600	90	2.0	#122 Halo Star	4	
0043.hs3302	600	2:11	0:49:09.4	26:07:16	600	90	2.0	#122 Halo Star	4	
0044.COMP	10	2:21	0:49:09.4	26:07:16	600	90	2.0	#122 Halo Star	4	
0045.hs3420	600	2:23	1:53:46.1	18:34:09	600	70	2.0	#122 Halo Star	4	
0046.COMP	10	2:33	1:53:46.1	18:34:09	600	70	2.0	#122 Halo Star	4	
0047.hs3421	420	2:34	1:55:45.9	20:13:12	600	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0048.COMP	10	2:41	1:55:45.9	20:13:12	600	90	2.0	#122 Halo Star	4	
0049.hs3422	300	2:42	1:56:54.3	23:26:15	600	90	2.0	#122 Halo Star	4	
0050.COMP	10	2:47	1:56:54.3	23:26:15	600	90	2.0	#122 Halo Star	4	
0051.hs3507	240	2:48	2:14:09.3	9:01:05	600	90	2.0	#122 Halo Star	4	
0052.COMP	10	2:53	2:14:09.3	9:01:05	600	90	2.0	#122 Halo Star	4	
0053.hs3508	600	2:53	2:14:50.8	7:13:29	600	90	2.0	#122 Halo Star	4	
0054.COMP	10	3:04	2:14:50.8	7:13:29	600	90	2.0	#122 Halo Star	4	
0055.hs3509	360	3:05	2:15:42.5	12:07:53	600	90	2.0	#122 Halo Star	4	
0056.COMP	10	3:11	2:15:42.5	12:07:53	600	90	2.0	#122 Halo Star	4	
0057.hs3510	480	3:13	2:15:44.0	7:34:35	600	90	2.0	#122 Halo Star	4	
0058.COMP	10	3:21	2:15:44.0	7:34:35	600	90	2.0	#122 Halo Star	4	
0059.hs3511	360	3:22	2:16:26.0	6:29:28	600	90	2.0	#122 Halo Star	4	
0060.COMP	10	3:28	2:16:26.0	6:29:28	600	90	2.0	#122 Halo Star	4	
0061.hs3512	480	3:29	2:16:52.2	7:06:15	600	90	2.0	#122 Halo Star	4	
0062.COMP	10	3:38	2:16:52.2	7:06:15	600	90	2.0	#122 Halo Star	4	
0063.hs3513	720	3:38	2:19:33.8	10:25:42	600	90	2.0	#122 Halo Star	4	
0064.COMP	10	3:51	2:19:33.8	10:25:42	600	90	2.0	#122 Halo Star	4	
0065.hs3514	600	3:51	2:20:41.4	11:18:38	600	90	2.0	#122 Halo Star	4	
0066.COMP	10	4:02	2:20:41.4	11:18:38	600	90	2.0	#122 Halo Star	4	
0067.hs3515	300	4:02	2:21:22.8	8:09:14	600	90	2.0	#122 Halo Star	4	



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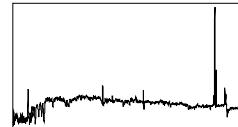
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0068.COMP	10	4:08	2:21:22.8	8:09:14	600	90	2.0	#122 Halo Star	4	
0069.hs3516	360	4:08	2:22:29.1	13:36:45	600	90	2.0	#122 Halo Star	4	
0070.COMP	10	4:15	2:22:29.1	13:36:45	600	90	2.0	#122 Halo Star	4	
0071.hs3517	540	4:15	2:22:34.4	5:43:13	600	90	2.0	#122 Halo Star	4	
0072.COMP	10	4:25	2:22:34.4	5:43:13	600	90	2.0	#122 Halo Star	4	
0073.hs3518	720	4:25	2:22:45.4	13:28:54	600	90	2.0	#122 Halo Star	4	
0074.COMP	10	4:41	2:22:45.4	13:28:54	600	90	2.0	#122 Halo Star	4	
0075.hs3519	720	4:41	2:22:55.1	12:33:49	600	90	2.0	#122 Halo Star	4	
0076.COMP	10	4:54	2:22:55.1	12:33:49	600	90	2.0	#122 Halo Star	4	
0077.hs3520	300	4:54	2:23:00.5	10:02:31	600	90	2.0	#122 Halo Star	4	
0078.COMP	10	5:00	2:23:00.5	10:02:31	600	90	2.0	#122 Halo Star	4	
0079.hs3521	240	5:00	2:23:46.5	8:35:57	600	90	2.0	#122 Halo Star	4	
0080.COMP	10	5:04	2:23:46.5	8:35:57	600	90	2.0	#122 Halo Star	4	
0081.hs3522	240	5:05	2:24:50.4	13:54:32	600	90	2.0	#122 Halo Star	4	
0082.COMP	10	5:09	2:24:50.4	13:54:32	600	90	2.0	#122 Halo Star	4	
0083.hs3523	300	5:10	2:27:15.9	12:03:05	600	90	2.0	#122 Halo Star	4	
0084.COMP	10	5:15	2:27:15.9	12:03:05	600	90	2.0	#122 Halo Star	4	
0085.hs3637	1200	5:17	3:23:30.5	12:52:40	600	90	2.0	#122 Halo Star	4	
0086.COMP	10	5:37	3:23:30.5	12:52:40	600	90	2.0	#122 Halo Star	4	
0087.hs3638	240	5:38	3:23:33.4	8:58:49	600	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0088.COMP	10	5:42	3:23:33.4	8:58:49	600	90	2.0	#122 Halo Star	4	
0089.hs3639	720	5:43	3:23:55.7	12:24:34	600	90	2.0	#122 Halo Star	4	
0090.COMP	10	5:57	3:23:55.7	12:24:34	600	90	2.0	#122 Halo Star	4	
0091.hs3640	720	5:58	3:24:00.0	13:25:47	600	90	2.0	#122 Halo Star	4	
0092.COMP	10	6:10	3:24:00.0	13:25:47	600	90	2.0	#122 Halo Star	4	
0093.hs3684	600	6:11	3:49:09.9	5:40:44	600	90	2.0	#122 Halo Star	4	
0094.COMP	10	6:21	3:49:09.9	5:40:44	600	90	2.0	#122 Halo Star	4	
0095.Hiltner600	60	6:24	06:42:37.2	02:11:25	600	90	2.0	#122 Halo Star	4	
0096.Hiltner600	120	6:26	06:42:37.2	02:11:25	600	90	2.0	#122 Halo Star	4	
0097.COMP	10	6:28	06:42:37.2	02:11:25	600	90	2.0	#122 Halo Star	4	
0098.test	5	6:31	7:0:0	32:0:0	300	90	3.0	#122 Halo Star	4	
0099.GITau	60	6:33	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	300-line, 3-sec, combo
0100.GITau	300	6:34	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0101.GKTau	60	6:40	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0102.GKTau	300	6:41	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0103.COMP	5	6:46	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0104.IPHAS_B103	600	6:47	05:33:8.4	26:19:24	300	90	3.0	#157 IPHAS	4	
0105.COMP	5	6:58	05:33:8.4	26:19:24	300	90	3.0	#157 IPHAS	4	
0106.IPHAS_B104	720	6:59	05:36:34.5	25:22:32	300	70	3.0	#157 IPHAS	2	
0107.COMP	10	7:11	05:36:34.5	25:22:32	300	70	3.0	#157 IPHAS	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0108.IPHAS_B105	720	7:12	05:38:57.3	26:35:6	300	70	3.0	#157 IPHAS	2	
0109.COMP	10	7:25	05:38:57.3	26:35:6	300	70	3.0	#157 IPHAS	2	
0110.IPHAS_B106	480	7:25	05:41:59.2	27:40:38	300	70	3.0	#157 IPHAS	2	
0111.COMP	10	7:34	05:41:59.2	27:40:38	300	70	3.0	#157 IPHAS	2	
0112.IPHAS_B107	720	7:35	05:44:24.5	34:28:2	300	70	3.0	#157 IPHAS	2	
0113.COMP	10	7:47	05:44:24.5	34:28:2	300	70	3.0	#157 IPHAS	2	
0114.IPHAS_B108	480	7:48	05:44:36.7	31:36:58	300	80	3.0	#157 IPHAS	2	
0115.COMP	10	7:56	05:44:36.7	31:36:58	300	80	3.0	#157 IPHAS	2	
0116.IPHAS_B109	480	7:57	05:44:50.3	29:07:54	300	80	3.0	#157 IPHAS	2	
0117.COMP	10	8:05	05:44:50.3	29:07:54	300	80	3.0	#157 IPHAS	2	
0118.IPHAS_B110	660	8:06	05:44:56.6	25:49:21	300	80	3.0	#157 IPHAS	2	
0119.COMP	10	8:17	05:44:56.6	25:49:21	300	80	3.0	#157 IPHAS	2	
0120.IPHAS_B111	720	8:18	05:45:22.5	21:02:13	300	67	3.0	#157 IPHAS	2	
0121.COMP	10	8:31	05:45:22.5	21:02:13	300	67	3.0	#157 IPHAS	2	
0122.IPHAS_B112	600	8:32	05:45:53.5	29:36:46	300	75	3.0	#157 IPHAS	2	
0123.COMP	10	8:42	05:45:53.5	29:36:46	300	75	3.0	#157 IPHAS	2	
0124.IPHAS_B113	600	8:43	05:48:6.3	30:21:29	300	75	3.0	#157 IPHAS	2	poor seeing
0125.COMP	10	8:53	05:48:6.3	30:21:29	300	75	3.0	#157 IPHAS	2	
0126.1100_08	600	8:56	10:47:44.4	+22:10:18	300	90	3.0	#64 Cluster an	4	
0127.COMP	5	9:06	10:47:44.4	+22:10:18	300	90	3.0	#64 Cluster an	4	



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Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0128.1100_09	600	9:07	10:48:50.3	+22:11:58	300	90	3.0	#64 Cluster an	4	
0129.COMP	5	9:17	10:48:50.3	+22:11:58	300	90	3.0	#64 Cluster an	4	
0130.1100_10	480	9:18	10:48:35.6	+22:14:58	300	90	3.0	#64 Cluster an	4	
0131.COMP	5	9:26	10:48:35.6	+22:14:58	300	90	3.0	#64 Cluster an	4	
0132.HD84937	10	9:29	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	2	
0133.HD84937	10	9:29	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	2	
0134.HD84937	10	9:29	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	2	
0135.COMP	10	9:30	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	2	
0136.XS00839B6_003	300	9:35	09:32:13.1	+79:10:27	300	90	3.0	#129 CHAMP Sou	4	
0137.COMP	5	9:40	09:32:13.1	+79:10:27	300	90	3.0	#129 CHAMP Sou	4	
0138.XS00839B7_002	1200	9:42	09:33:27.5	+79:08:04	300	90	3.0	#129 CHAMP Sou	2	
0139.COMP	10	10:03	09:33:27.5	+79:08:04	300	90	3.0	#129 CHAMP Sou	2	
0140.1100_11	540	10:05	10:48:54.3	+22:16:03	300	90	3.0	#64 Cluster an	4	
0141.COMP	5	10:14	10:48:54.3	+22:16:03	300	90	3.0	#64 Cluster an	4	
0142.1100_12	540	10:15	10:50:50.8	+22:16:45	300	90	3.0	#64 Cluster an	4	
0143.COMP	5	10:24	10:50:50.8	+22:16:45	300	90	3.0	#64 Cluster an	4	
0144.Feige34	150	10:27	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0145.Feige34	150	10:30	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0146.COMP	10	10:33	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0147.1100_13	420	10:34	10:47:56.7	+22:17:52	300	90	3.0	#64 Cluster an	4	



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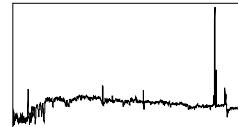
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0148.COMP	5	10:42	10:47:56.7	+22:17:52	300	90	3.0	#64 Cluster an	4	
0149.1100_14	600	10:42	10:48:02.4	+22:22:23	300	90	3.0	#64 Cluster an	4	
0150.COMP	5	10:53	10:48:02.4	+22:22:23	300	90	3.0	#64 Cluster an	4	
0151.1100_15	480	10:53	10:49:19.3	+22:23:13	300	90	3.0	#64 Cluster an	4	
0152.COMP	5	11:01	10:49:19.3	+22:23:13	300	90	3.0	#64 Cluster an	4	
0153.1100_16	900	11:03	10:50:33.2	+22:27:22	300	90	3.0	#64 Cluster an	4	
0154.COMP	5	11:19	10:50:33.2	+22:27:22	300	90	3.0	#64 Cluster an	4	
0155.1100_17	600	11:19	10:48:34.1	+22:32:37	300	90	3.0	#64 Cluster an	4	
0156.COMP	5	11:29	10:48:34.1	+22:32:37	300	90	3.0	#64 Cluster an	4	
0157.sn2004gt	900	11:32	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0158.COMP	10	11:47	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0159.sn2004gk	900	11:50	12:25:33.2	+12:15:39	300	0	3.0	#2 SN Observat	2	
0160.COMP	10	12:05	12:25:33.2	+12:15:39	300	0	3.0	#2 SN Observat	2	
0161.1100_17	480	12:08	10:48:34.1	+22:32:37	300	90	3.0	#64 Cluster an	4	
0162.COMP	5	12:16	10:48:34.1	+22:32:37	300	90	3.0	#64 Cluster an	4	
0163.1100_18	480	12:17	10:48:59.9	+22:33:31	300	90	3.0	#64 Cluster an	4	
0164.COMP	5	12:25	10:48:59.9	+22:33:31	300	90	3.0	#64 Cluster an	4	
0165.1142_01	480	12:26	11:01:12.3	+09:45:56	300	90	3.0	#64 Cluster an	4	
0166.COMP	5	12:34	11:01:12.3	+09:45:56	300	90	3.0	#64 Cluster an	4	
0167.1142_02	480	12:35	10:59:31.8	+10:01:49	300	90	3.0	#64 Cluster an	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0168.COMP	5	12:43	10:59:31.8	+10:01:49	300	90	3.0	#64 Cluster an	4	
0169.MRK421	300	12:44	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	4	
0170.MRK421	300	12:50	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	4	
0171.COMP	5	12:55	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	4	
0172.N4051	150	12:56	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0173.N4051	150	12:58	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0174.COMP	5	13:01	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0175.N4151	30	13:02	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0176.N4151	30	13:02	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0177.COMP	5	13:03	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0178.N5548	150	13:04	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0179.N5548	150	13:07	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0180.COMP	5	13:09	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0181.MRK279	150	13:11	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	4	
0182.MRK279	150	13:13	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	4	
0183.COMP	5	13:16	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	4	
0184.N4853	240	13:17	12:58:35.1	+27:35:47	300	90	3.0	#57 Velocity S	4	
0185.COMP	5	13:22	12:58:35.1	+27:35:47	300	90	3.0	#57 Velocity S	4	
0186-0195.BIAS	0	13:24	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0196-0205.FLAT	8	13:27	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	



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<i>File</i>	<i>Exp Time</i>	<i>UT Start</i>	<i>RA</i>	<i>Dec</i>	<i>Gr.</i>	<i>P.A.</i>	<i>Slit</i>	<i>Program</i>	<i>Bir</i>	<i>Comments</i>
0206-0215.BIAS	0	13:29	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	
0216-0236.FLAT	16	13:40	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	
0237-0246.DARK	900	15:57	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0247-0256.DARK	900	18:30	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	



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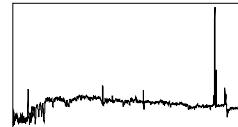
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0010.BIAS	0	23:28	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0011-0020.FLAT	8	23:31	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	4	
0021-0030.BIAS	0	23:33	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	
0031-0051.FLAT	16	23:44	12:58:35.1	+27:35:47	300	90	3.0	#64 Cluster an	2	
0052-0056.sky	3	1:00	1:15:00	32:00:00	300	90	3.0	#57 Velocity S	4	
0057.COMP	5	1:01	1:15:00	32:00:00	300	90	3.0	#57 Velocity S	4	
0058.ZAnd	3	1:30	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0059.ZAnd	1	1:30	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0060.ZAnd	10	1:30	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0061.COMP	5	1:31	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0062.EGAnd	1	1:33	0:44:37	40:40:47	300	90	3.0	#12 Symbiotic	4	
0063.EGAnd	5	1:34	0:44:37	40:40:47	300	90	3.0	#12 Symbiotic	4	
0064.COMP	5	1:34	0:44:37	40:40:47	300	90	3.0	#12 Symbiotic	4	
0065.Akn564	180	1:36	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	4	
0066.Akn564	180	1:39	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	4	
0067.COMP	5	1:42	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	4	
0068.N7469	120	1:44	23:03:15.7	+08:52:27	300	56	3.0	#6 AGN Monitor	4	
0069.N7469	120	1:46	23:03:15.7	+08:52:27	300	56	3.0	#6 AGN Monitor	4	
0070.COMP	5	1:48	23:03:15.7	+08:52:27	300	56	3.0	#6 AGN Monitor	4	
0071.MRK335	150	1:50	00:06:19.6	+20:12:11	300	62	3.0	#6 AGN Monitor	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0072.MRK335	150	1:52	00:06:19.6	+20:12:11	300	62	3.0	#6 AGN Monitor	4	
0073.COMP	5	1:55	00:06:19.6	+20:12:11	300	62	3.0	#6 AGN Monitor	4	
0074.HD12623	5	1:57	02:02:19	+62:56:04	300	90	3.0	#57 Velocity S	4	
0075.HD12623	5	1:58	02:02:19	+62:56:04	300	90	3.0	#57 Velocity S	4	
0076.HD12623	5	1:58	02:02:19	+62:56:04	300	90	3.0	#57 Velocity S	4	
0077.COMP	5	1:59	02:02:19	+62:56:04	300	90	3.0	#57 Velocity S	4	
0078.IPHAS_B1	540	2:00	02:00:48.7	58:58:35	300	90	3.0	#157 IPHAS	4	
0079.COMP	5	2:09	02:00:48.7	58:58:35	300	90	3.0	#157 IPHAS	4	
0080.IPHAS_B2	540	2:10	02:00:49.4	63:59:43	300	90	3.0	#157 IPHAS	4	
0081.COMP	5	2:19	02:00:49.4	63:59:43	300	90	3.0	#157 IPHAS	4	
0082.IPHAS_B3	600	2:20	02:01:5.3	61:34:3	300	90	3.0	#157 IPHAS	2	
0083.COMP	10	2:31	02:01:5.3	61:34:3	300	90	3.0	#157 IPHAS	2	
0084.IPHAS_B4	600	2:31	02:01:9.6	64:12:19	300	90	3.0	#157 IPHAS	2	
0085.COMP	10	2:42	02:01:9.6	64:12:19	300	90	3.0	#157 IPHAS	2	
0086.IPHAS_B5	480	2:42	02:01:36.0	61:32:7	300	90	3.0	#157 IPHAS	2	
0087.COMP	10	2:51	02:01:36.0	61:32:7	300	90	3.0	#157 IPHAS	2	
0088.IPHAS_B6	480	2:51	02:01:44.8	58:19:30	300	90	3.0	#157 IPHAS	2	
0089.COMP	10	3:00	02:01:44.8	58:19:30	300	90	3.0	#157 IPHAS	2	
0090.IPHAS_B7	420	3:01	02:02:42.2	66:23:25	300	90	3.0	#157 IPHAS	2	
0091.COMP	10	3:08	02:02:42.2	66:23:25	300	90	3.0	#157 IPHAS	2	



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Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0092.IPHAS_B7_ne	120	3:09	02:02:42.2	66:23:25	300	90	3.0	#157 IPHAS	2	fainter ne comp to b7, yes b7
0093.IPHAS_B8	720	3:12	02:02:52.2	62:09:26	300	90	3.0	#157 IPHAS	2	fainter comp to ne is out of slit
0094.COMP	10	3:24	02:02:52.2	62:09:26	300	90	3.0	#157 IPHAS	2	
0095.IPHAS_B9	720	3:25	02:03:25.8	58:41:45	300	90	3.0	#157 IPHAS	2	
0096.COMP	10	3:38	02:03:25.8	58:41:45	300	90	3.0	#157 IPHAS	2	
0097.IPHAS_B10	600	3:38	02:03:26.0	63:59:43	300	90	3.0	#157 IPHAS	2	
0098.COMP	10	3:49	02:03:26.0	63:59:43	300	90	3.0	#157 IPHAS	2	
0099.GITau	60	3:50	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0100.GITau	300	3:51	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0101.GKTau	60	3:57	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0102.GKTau	300	3:58	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0103.COMP	5	4:04	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0104.IPHAS_B80	600	4:05	03:00:1.9	61:00:13	300	90	3.0	#157 IPHAS	2	
0105.COMP	10	4:16	03:00:1.9	61:00:13	300	90	3.0	#157 IPHAS	2	
0106.IPHAS_B81	480	4:16	03:00:10.3	61:32:23	300	90	3.0	#157 IPHAS	2	
0107.COMP	10	4:25	03:00:10.3	61:32:23	300	90	3.0	#157 IPHAS	2	
0108.IPHAS_B82	720	4:26	03:00:23.6	57:28:48	300	90	3.0	#157 IPHAS	2	
0109.COMP	10	4:38	03:00:23.6	57:28:48	300	90	3.0	#157 IPHAS	2	
0110.IPHAS_B83	540	4:39	03:01:21.6	60:28:56	300	90	3.0	#157 IPHAS	2	
0111.COMP	10	4:48	03:01:21.6	60:28:56	300	90	3.0	#157 IPHAS	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0112.IPHAS_B84	600	4:49	03:01:24.0	61:02:21	300	90	3.0	#157 IPHAS	2	
0113.COMP	10	4:59	03:01:24.0	61:02:21	300	90	3.0	#157 IPHAS	2	
0114.IPHAS_B85	480	5:00	03:01:33.6	59:35:18	300	90	3.0	#157 IPHAS	2	
0115.COMP	10	5:08	03:01:33.6	59:35:18	300	90	3.0	#157 IPHAS	2	
0116.IPHAS_B86	540	5:09	03:03:17.4	58:34:2	300	90	3.0	#157 IPHAS	2	
0117.COMP	10	5:18	03:03:17.4	58:34:2	300	90	3.0	#157 IPHAS	2	
0118.IPHAS_B87	600	5:19	03:03:31.3	58:52:34	300	90	3.0	#157 IPHAS	2	
0119.COMP	10	5:29	03:03:31.3	58:52:34	300	90	3.0	#157 IPHAS	2	
0120.IPHAS_B88	420	5:30	03:04:23.3	62:29:1	300	90	3.0	#157 IPHAS	2	
0121.COMP	10	5:37	03:04:23.3	62:29:1	300	90	3.0	#157 IPHAS	2	
0122.IPHAS_B98	360	5:38	03:33:28.9	54:12:32	300	90	3.0	#157 IPHAS	2	
0123.COMP	10	5:45	03:33:28.9	54:12:32	300	90	3.0	#157 IPHAS	2	
0124.IPHAS_B99	300	5:45	03:33:33.4	52:47:48	300	90	3.0	#157 IPHAS	2	
0125.COMP	10	5:51	03:33:33.4	52:47:48	300	90	3.0	#157 IPHAS	2	
0126.IPHAS_B100	600	5:52	03:34:22.0	51:57:57	300	90	3.0	#157 IPHAS	2	
0127.COMP	10	6:02	03:34:22.0	51:57:57	300	90	3.0	#157 IPHAS	2	
0128.IPHAS_B101	480	6:03	03:38:47.2	52:15:8	300	90	3.0	#157 IPHAS	2	
0129.COMP	10	6:11	03:38:47.2	52:15:8	300	90	3.0	#157 IPHAS	2	
0130.IPHAS_B102	600	6:13	03:39:7.3	55:04:19	300	90	3.0	#157 IPHAS	2	
0131.COMP	10	6:23	03:39:7.3	55:04:19	300	90	3.0	#157 IPHAS	2	



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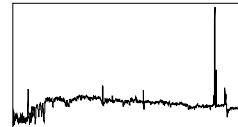
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0132.IPHAS_B114	600	6:24	05:48:28.9	31:20:19	300	90	3.0	#157 IPHAS	2	
0133.COMP	10	6:35	05:48:28.9	31:20:19	300	90	3.0	#157 IPHAS	2	
0134.IPHAS_B115	600	6:36	05:48:37.6	28:17:10	300	90	3.0	#157 IPHAS	2	
0135.COMP	10	6:46	05:48:37.6	28:17:10	300	90	3.0	#157 IPHAS	2	
0136.IPHAS_B116	600	6:47	05:48:48.2	28:35:47	300	90	3.0	#157 IPHAS	2	
0137.COMP	10	6:57	05:48:48.2	28:35:47	300	90	3.0	#157 IPHAS	2	
0138.IPHAS_B117	480	6:58	05:49:37.8	28:11:23	300	90	3.0	#157 IPHAS	2	
0139.COMP	10	7:07	05:49:37.8	28:11:23	300	90	3.0	#157 IPHAS	2	
0140.IPHAS_B118	720	7:07	05:50:10.5	26:42:23	300	90	3.0	#157 IPHAS	2	
0141.COMP	10	7:20	05:50:10.5	26:42:23	300	90	3.0	#157 IPHAS	2	
0142.IPHAS_B119	600	7:20	05:50:34.9	25:38:27	300	90	3.0	#157 IPHAS	2	
0143.COMP	10	7:31	05:50:34.9	25:38:27	300	90	3.0	#157 IPHAS	2	
0144.IPHAS_B120	420	7:32	05:51:18.7	28:56:57	300	90	3.0	#157 IPHAS	2	
0145.COMP	10	7:39	05:51:18.7	28:56:57	300	90	3.0	#157 IPHAS	2	
0146.IPHAS_B121	660	7:40	05:52:57.2	25:06:22	300	90	3.0	#157 IPHAS	2	
0147.COMP	10	7:51	05:52:57.2	25:06:22	300	90	3.0	#157 IPHAS	2	
0148.IPHAS_B122	420	7:52	05:53:20.4	28:16:56	300	90	3.0	#157 IPHAS	2	
0149.COMP	10	8:00	05:53:20.4	28:16:56	300	90	3.0	#157 IPHAS	2	
0150.sn2004gs	1800	8:04	08:38:23.1	+17:37:39	300	0	3.0	#2 SN Observat	2	
0151.COMP	10	8:35	08:38:23.1	+17:37:39	300	0	3.0	#2 SN Observat	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0152.XS00377B6_005	1500	8:38	07:41:12.2	+31:14:46	300	90	3.0	#129 CHAMP Sou	2	
0153.COMP	10	9:04	07:41:12.2	+31:14:46	300	90	3.0	#129 CHAMP Sou	2	
0154.1142_03	480	9:05	10:59:32.6	+10:04:29	300	90	3.0	#64 Cluster an	4	
0155.COMP	5	9:14	10:59:32.6	+10:04:29	300	90	3.0	#64 Cluster an	4	
0156.1142_04	600	9:15	11:01:27.2	+10:12:48	300	95	3.0	#64 Cluster an	4	
0157.COMP	5	9:25	11:01:27.2	+10:12:48	300	95	3.0	#64 Cluster an	4	
0158.1142_05	480	9:26	11:01:09.0	+10:45:40	300	95	3.0	#64 Cluster an	4	
0159.COMP	5	9:34	11:01:09.0	+10:45:40	300	95	3.0	#64 Cluster an	4	
0160.1314_01	360	9:35	11:31:38.4	+48:29:20	300	95	3.0	#64 Cluster an	4	
0161.COMP	5	9:42	11:31:38.4	+48:29:20	300	95	3.0	#64 Cluster an	4	
0162.1314_02	600	9:43	11:35:41.0	+48:48:13	300	95	3.0	#64 Cluster an	4	
0163.COMP	5	9:53	11:35:41.0	+48:48:13	300	95	3.0	#64 Cluster an	4	
0164.1314_03	240	9:53	11:31:52.1	+48:49:34	300	95	3.0	#64 Cluster an	4	
0165.COMP	5	9:58	11:31:52.1	+48:49:34	300	95	3.0	#64 Cluster an	4	
0166.HD84937	10	10:00	09:48:56.1	13:44:39	300	25	3.0	#56 Spectropho	2	
0167.HD84937	10	10:00	09:48:56.1	13:44:39	300	25	3.0	#56 Spectropho	2	
0168.HD84937	10	10:01	09:48:56.1	13:44:39	300	25	3.0	#56 Spectropho	2	
0169.COMP	10	10:01	09:48:56.1	13:44:39	300	25	3.0	#56 Spectropho	2	
0170.Feige34	120	10:03	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0171.Feige34	120	10:05	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0172.COMP	10	10:08	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0173.2M12353123+4752178	240	10:09	12:35:31.2	+47:52:17	300	90	3.0	#141 Mapping t	2	fainter comp in slit to east
0174.COMP	10	10:13	12:35:31.2	+47:52:17	300	90	3.0	#141 Mapping t	2	
0175.2M12461145+4840031	270	10:14	12:46:11.4	+48:40:3	300	90	3.0	#141 Mapping t	4	
0176.COMP	5	10:19	12:46:11.4	+48:40:3	300	90	3.0	#141 Mapping t	4	
0177.2M12484185+5503447	300	10:20	12:48:41.8	+55:03:44	300	90	3.0	#141 Mapping t	4	
0178.COMP	5	10:25	12:48:41.8	+55:03:44	300	90	3.0	#141 Mapping t	4	
0179.2M13075120+3550050	240	10:26	13:7:51.2	+35:50:5	300	90	3.0	#141 Mapping t	4	
0180.COMP	5	10:30	13:7:51.2	+35:50:5	300	90	3.0	#141 Mapping t	4	
0181.2M13223476+3309252	300	10:31	13:22:34.7	+33:09:25	300	90	3.0	#141 Mapping t	4	
0182.COMP	5	10:36	13:22:34.7	+33:09:25	300	90	3.0	#141 Mapping t	4	
0183.2M13400274+4025146	330	10:37	13:40:2.7	+40:25:14	300	90	3.0	#141 Mapping t	4	
0184.COMP	5	10:42	13:40:2.7	+40:25:14	300	90	3.0	#141 Mapping t	4	
0185.2M13423701+2951164	600	10:43	13:42:37.0	+29:51:16	300	90	3.0	#141 Mapping t	4	
0186.COMP	5	10:53	13:42:37.0	+29:51:16	300	90	3.0	#141 Mapping t	4	
0187.2M13413717+0848096	360	10:54	13:41:37.1	+08:48:9	300	90	3.0	#141 Mapping t	4	
0188.COMP	5	11:01	13:41:37.1	+08:48:9	300	90	3.0	#141 Mapping t	4	
0189.2M12072862-0709295	240	11:02	12:7:28.6	-07:09:29	300	90	3.0	#141 Mapping t	4	
0190.COMP	5	11:06	12:7:28.6	-07:09:29	300	90	3.0	#141 Mapping t	4	
0191.2M12100219-1130008	240	11:06	12:10:2.1	-11:30:0	300	90	3.0	#141 Mapping t	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0192.COMP	5	11:11	12:10:2.1	-11:30:0	300	90	3.0	#141 Mapping t	4	
0193.2M12342250-0749562	240	11:11	12:34:22.5	-07:49:56	300	90	3.0	#141 Mapping t	4	
0194.COMP	5	11:15	12:34:22.5	-07:49:56	300	90	3.0	#141 Mapping t	4	
0195.2M12343078-0732472	240	11:16	12:34:30.7	-07:32:47	300	90	3.0	#141 Mapping t	4	
0196.COMP	5	11:20	12:34:30.7	-07:32:47	300	90	3.0	#141 Mapping t	4	
0197.2M12350695-0746107	180	11:21	12:35:6.9	-07:46:10	300	90	3.0	#141 Mapping t	4	
0198.COMP	5	11:24	12:35:6.9	-07:46:10	300	90	3.0	#141 Mapping t	4	
0199.2M12372610-0524337	300	11:25	12:37:26.1	-05:24:33	300	90	3.0	#141 Mapping t	4	
0200.COMP	5	11:30	12:37:26.1	-05:24:33	300	90	3.0	#141 Mapping t	4	
0201.2M12404073-0852008	270	11:31	12:40:40.7	-08:52:0	300	90	3.0	#141 Mapping t	4	
0202.COMP	5	11:35	12:40:40.7	-08:52:0	300	90	3.0	#141 Mapping t	4	
0203.2M12413093-1002012	180	11:36	12:41:30.9	-10:02:1	300	90	3.0	#141 Mapping t	4	
0204.COMP	5	11:39	12:41:30.9	-10:02:1	300	90	3.0	#141 Mapping t	4	
0205.2M12422599-0600594	180	11:40	12:42:25.9	-06:00:59	300	90	3.0	#141 Mapping t	4	
0206.COMP	5	11:43	12:42:25.9	-06:00:59	300	90	3.0	#141 Mapping t	4	
0207.2M12442381-0708592	180	11:43	12:44:23.8	-07:08:59	300	90	3.0	#141 Mapping t	4	
0208.COMP	5	11:47	12:44:23.8	-07:08:59	300	90	3.0	#141 Mapping t	4	
0209.2M12530421-1021571	180	11:47	12:53:4.2	-10:21:57	300	90	3.0	#141 Mapping t	4	
0210.COMP	5	11:50	12:53:4.2	-10:21:57	300	90	3.0	#141 Mapping t	4	
0211.2M12531359-1102084	420	11:51	12:53:13.5	-11:02:8	300	90	3.0	#141 Mapping t	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0212.COMP	5	11:58	12:53:13.5	-11:02:8	300	90	3.0	#141 Mapping t	4	
0213.2M13000579-1029205	240	11:59	13:0:5.7	-10:29:20	300	90	3.0	#141 Mapping t	4	
0214.COMP	5	12:03	13:0:5.7	-10:29:20	300	90	3.0	#141 Mapping t	4	
0215.2M13025911-0352305	240	12:05	13:2:59.1	-03:52:30	300	90	3.0	#141 Mapping t	2	fainter comp in slit to west
0216.COMP	10	12:09	13:2:59.1	-03:52:30	300	90	3.0	#141 Mapping t	2	
0217.2M13060826-0522403	210	12:10	13:6:8.2	-05:22:40	300	90	3.0	#141 Mapping t	2	
0218.COMP	10	12:14	13:6:8.2	-05:22:40	300	90	3.0	#141 Mapping t	2	
0219.2M13113290-0642284	180	12:14	13:11:32.9	-06:42:28	300	90	3.0	#141 Mapping t	4	
0220.COMP	5	12:17	13:11:32.9	-06:42:28	300	90	3.0	#141 Mapping t	4	
0221.2M13134531-0504480	210	12:18	13:13:45.3	-05:04:48	300	90	3.0	#141 Mapping t	4	
0222.COMP	5	12:22	13:13:45.3	-05:04:48	300	90	3.0	#141 Mapping t	4	
0223.2M13235748-0423425	270	12:22	13:23:57.4	-04:23:42	300	90	3.0	#141 Mapping t	4	
0224.COMP	5	12:27	13:23:57.4	-04:23:42	300	90	3.0	#141 Mapping t	4	
0225.2M13351273-1122361	480	12:28	13:35:12.7	-11:22:36	300	90	3.0	#141 Mapping t	4	
0226.COMP	5	12:36	13:35:12.7	-11:22:36	300	90	3.0	#141 Mapping t	4	
0227.2M13425627-0503500	300	12:37	13:42:56.2	-05:03:50	300	90	3.0	#141 Mapping t	4	
0228.COMP	5	12:42	13:42:56.2	-05:03:50	300	90	3.0	#141 Mapping t	4	
0229.2M13525284-0951295	180	12:42	13:52:52.8	-09:51:29	300	90	3.0	#141 Mapping t	4	
0230.COMP	5	12:46	13:52:52.8	-09:51:29	300	90	3.0	#141 Mapping t	4	
0231.2M14070845-0414169	360	12:46	14:7:8.4	-04:14:16	300	90	3.0	#141 Mapping t	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0232.COMP	5	12:53	14:7:8.4	-04:14:16	300	90	3.0	#141 Mapping t	4	
0233.2M14090953-0511558	180	12:53	14:9:9.5	-05:11:55	300	90	3.0	#141 Mapping t	4	
0234.COMP	5	12:56	14:9:9.5	-05:11:55	300	90	3.0	#141 Mapping t	4	
0235.2M14130574-0750313	240	12:57	14:13:5.7	-07:50:31	300	90	3.0	#141 Mapping t	4	
0236.COMP	5	13:01	14:13:5.7	-07:50:31	300	90	3.0	#141 Mapping t	4	
0237.2M14135549-0828359	180	13:02	14:13:55.4	-08:28:35	300	90	3.0	#141 Mapping t	4	
0238.COMP	5	13:05	14:13:55.4	-08:28:35	300	90	3.0	#141 Mapping t	4	
0239.2M14161808-0740557	240	13:05	14:16:18.0	-07:40:55	300	90	3.0	#141 Mapping t	4	
0240.COMP	5	13:10	14:16:18.0	-07:40:55	300	90	3.0	#141 Mapping t	4	
0241.2M14201929-0424594	180	13:10	14:20:19.2	-04:24:59	300	90	3.0	#141 Mapping t	4	
0242.COMP	5	13:13	14:20:19.2	-04:24:59	300	90	3.0	#141 Mapping t	4	
0243.2M14312433-0808456	210	13:14	14:31:24.3	-08:08:45	300	90	3.0	#141 Mapping t	4	
0244.COMP	5	13:18	14:31:24.3	-08:08:45	300	90	3.0	#141 Mapping t	4	
0245.N4853	240	13:19	12:58:35.1	+27:35:47	300	90	3.0	#57 Velocity S	4	
0246.COMP	5	13:23	12:58:35.1	+27:35:47	300	90	3.0	#57 Velocity S	4	
0247-0256.BIAS	0	13:25	12:58:35.1	+27:35:47	300	90	3.0	#129 CHAMP Sou	4	
0257-0266.FLAT	8	13:28	12:58:35.1	+27:35:47	300	90	3.0	#129 CHAMP Sou	4	
0267-0276.BIAS	0	13:31	12:58:35.1	+27:35:47	300	90	3.0	#129 CHAMP Sou	2	
0277-0286.FLAT	16	13:36	12:58:35.1	+27:35:47	300	90	3.0	#129 CHAMP Sou	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	0:32	01:13:04.5	+31:28:09	300	90	3.0	#129 CHAMP Sou	4	(Hi Susan!)
0002.DARK	900	0:47	01:28:13.5	+31:28:11	300	90	3.0	#129 CHAMP Sou	4	
0003.DARK	900	1:02	01:43:23.6	+31:28:13	300	90	3.0	#129 CHAMP Sou	4	
0004.DARK	900	1:17	01:58:33.3	+31:28:16	300	90	3.0	#129 CHAMP Sou	4	
0005-0014.BIAS	0	1:33	01:59:49.8	+31:28:16	300	90	3.0	#129 CHAMP Sou	4	
0015-0024.FLAT	6	1:36	02:02:44.3	+31:28:16	300	90	3.0	#129 CHAMP Sou	4	
0025-0034.BIAS	0	1:41	02:07:41.8	+31:28:17	300	90	3.0	#129 CHAMP Sou	2	
0035-0044.FLAT	12	1:45	02:11:49.1	+31:28:18	300	90	3.0	#129 CHAMP Sou	2	
0045.M31	60	1:52	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	4	
0046.COMP	5	1:53	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	4	
0047.M31	60	1:54	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	2	
0048.COMP	12	1:56	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	2	
0049.IPHAS_B11	540	2:00	02:03:28.0	62:43:34	300	90	3.0	#157 IPHAS	2	
0050.COMP	12	2:10	02:03:28.0	62:43:34	300	90	3.0	#157 IPHAS	2	
0051.sn2004gx	1800	2:16	23:33:30.8	+24:01:07	300	75	3.0	#2 SN Observat	2	row=70
0052.COMP	12	2:46	23:33:30.8	+24:01:07	300	75	3.0	#2 SN Observat	2	
0053.IPHAS_B12	360	2:58	02:03:43.8	58:10:58	300	90	3.0	#157 IPHAS	2	
0054.COMP	12	3:05	02:03:43.8	58:10:58	300	90	3.0	#157 IPHAS	2	
0055.IPHAS_B13	540	3:06	02:04:7.8	64:31:22	300	90	3.0	#157 IPHAS	2	
0056.COMP	12	3:16	02:04:7.8	64:31:22	300	90	3.0	#157 IPHAS	2	



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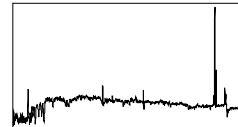
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0057.IPHAS_B14	540	3:17	02:04:21.0	59:17:8	300	109	3.0	#157 IPHAS	2	row=74
0058.COMP	12	3:27	02:04:21.0	59:17:8	300	109	3.0	#157 IPHAS	2	
0059.IPHAS_B15	750	3:30	02:04:59.2	59:45:59	300	90	3.0	#157 IPHAS	2	
0060.COMP	12	3:43	02:04:59.2	59:45:59	300	90	3.0	#157 IPHAS	2	
0061.IPHAS_B16	750	3:45	02:05:4.1	63:02:16	300	90	3.0	#157 IPHAS	2	
0062.COMP	12	3:58	02:05:4.1	63:02:16	300	90	3.0	#157 IPHAS	2	
0063.GITau	60	4:01	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	2	
0064.COMP	12	4:02	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	2	
0065.GITau	300	4:03	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	2	
0066.COMP	12	4:08	4:33:34	24:21:18	300	90	3.0	#12 Symbiotic	2	
0067.GKTau	60	4:09	4:33:34.5	24:21:07	300	90	3.0	#12 Symbiotic	2	
0068.COMP	12	4:11	4:33:34.5	24:21:07	300	90	3.0	#12 Symbiotic	2	
0069.GKTau	300	4:12	4:33:34.5	24:21:07	300	90	3.0	#12 Symbiotic	2	
0070.COMP	12	4:17	4:33:34.5	24:21:07	300	90	3.0	#12 Symbiotic	2	
0071.IPHAS_B17	360	4:19	02:05:47.4	64:10:51	300	90	3.0	#157 IPHAS	2	
0072.COMP	12	4:26	02:05:47.4	64:10:51	300	90	3.0	#157 IPHAS	2	
0073.IPHAS_B18	660	4:27	02:06:18.6	64:49:45	300	90	3.0	#157 IPHAS	2	
0074.COMP	12	4:39	02:06:18.6	64:49:45	300	90	3.0	#157 IPHAS	2	
0075.IPHAS_B19	420	4:40	02:07:7.6	61:24:22	300	90	3.0	#157 IPHAS	2	
0076.COMP	12	4:48	02:07:7.6	61:24:22	300	90	3.0	#157 IPHAS	2	



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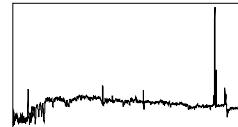
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0077.IPHAS_B20	660	4:49	02:07:10.6	60:25:46	300	90	3.0	#157 IPHAS	2	
0078.COMP	12	5:01	02:07:10.6	60:25:46	300	90	3.0	#157 IPHAS	2	
0079.IPHAS_B21	660	5:02	02:07:10.6	60:25:46	300	90	3.0	#157 IPHAS	2	
0080.COMP	12	5:14	02:07:10.6	60:25:46	300	90	3.0	#157 IPHAS	2	
0081.IPHAS_B22	660	5:15	02:07:31.1	63:45:20	300	90	3.0	#157 IPHAS	2	
0082.COMP	12	5:26	02:07:31.1	63:45:20	300	90	3.0	#157 IPHAS	2	
0083.IPHAS_B123	660	5:29	05:53:24.2	35:35:46	300	90	3.0	#157 IPHAS	2	
0084.COMP	12	5:40	05:53:24.2	35:35:46	300	90	3.0	#157 IPHAS	2	
0085.IPHAS_B124	420	5:41	05:53:39.8	31:51:12	300	90	3.0	#157 IPHAS	2	
0086.COMP	12	5:49	05:53:39.8	31:51:12	300	90	3.0	#157 IPHAS	2	
0087.IPHAS_B125	360	5:51	05:54:28.6	29:33:10	300	90	3.0	#157 IPHAS	2	
0088.COMP	12	5:57	05:54:28.6	29:33:10	300	90	3.0	#157 IPHAS	2	
0089.IPHAS_B126	600	5:59	05:54:37.8	25:21:6	300	90	3.0	#157 IPHAS	2	
0090.COMP	12	6:09	05:54:37.8	25:21:6	300	90	3.0	#157 IPHAS	2	
0091.BGGem	300	6:11	6:03:31	27:41:50	300	90	3.0	#12 Symbiotic	2	
0092.COMP	12	6:17	6:03:31	27:41:50	300	90	3.0	#12 Symbiotic	2	
0093.BGGem	1200	6:17	6:03:31	27:41:50	300	90	3.0	#12 Symbiotic	2	
0094.COMP	12	6:38	6:03:31	27:41:50	300	90	3.0	#12 Symbiotic	2	
0095.cvso-216321	300	6:44	05:00:21.9	-04:13:57	300	90	3.0	#112 Orion PMS	2	
0096.COMP	12	6:49	05:00:21.9	-04:13:57	300	90	3.0	#112 Orion PMS	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0097.cvso-212749	300	6:51	05:00:34.0	-01:55:57	300	90	3.0	#112 Orion PMS	2	
0098.COMP	12	6:56	05:00:34.0	-01:55:57	300	90	3.0	#112 Orion PMS	2	
0099.cvso-236553	360	6:57	05:02:58.4	-03:24:59	300	90	3.0	#112 Orion PMS	2	
0100.COMP	12	7:04	05:02:58.4	-03:24:59	300	90	3.0	#112 Orion PMS	2	
0101.cvso-219018	480	7:05	05:04:03.9	-03:45:15	300	90	3.0	#112 Orion PMS	2	
0102.COMP	12	7:14	05:04:03.9	-03:45:15	300	90	3.0	#112 Orion PMS	2	
0103.cvso-215913	600	7:15	05:04:18.7	-02:21:37	300	90	3.0	#112 Orion PMS	2	
0104.COMP	12	7:25	05:04:18.7	-02:21:37	300	90	3.0	#112 Orion PMS	2	
0105.cvso-215921	660	7:27	05:04:20.4	-01:56:21	300	90	3.0	#112 Orion PMS	2	
0106.COMP	12	7:38	05:04:20.4	-01:56:21	300	90	3.0	#112 Orion PMS	2	
0107.cvso-219258	420	7:39	05:04:24.5	-03:52:19	300	90	3.0	#112 Orion PMS	2	
0108.COMP	12	7:47	05:04:24.5	-03:52:19	300	90	3.0	#112 Orion PMS	2	
0109.cvso-219502	600	7:48	05:04:42.7	-04:16:07	300	90	3.0	#112 Orion PMS	2	
0110.COMP	12	7:59	05:04:42.7	-04:16:07	300	90	3.0	#112 Orion PMS	2	
0111.cvso-220155	600	8:01	05:05:43.7	-03:57:35	300	90	3.0	#112 Orion PMS	2	
0112.COMP	12	8:11	05:05:43.7	-03:57:35	300	90	3.0	#112 Orion PMS	2	
0113.sn2004gs	1500	8:17	08:38:23.1	+17:37:39	300	3	3.0	#2 SN Observat	2	
0114.COMP	12	8:43	08:38:23.1	+17:37:39	300	3	3.0	#2 SN Observat	2	
0115.COMP	12	8:46	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0116.XTEJ1118p480	300	8:47	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0117.XTEJ1118p480	300	8:52	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0118.XTEJ1118p480	300	8:57	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0119.XTEJ1118p480	300	9:02	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0120.XTEJ1118p480	300	9:07	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0121.XTEJ1118p480	300	9:13	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0122.COMP	12	9:18	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0123.XTEJ1118p480	300	9:19	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0124.XTEJ1118p480	300	9:24	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0125.XTEJ1118p480	300	9:29	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0126.XTEJ1118p480	300	9:34	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0127.XTEJ1118p480	300	9:40	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0128.XTEJ1118p480	300	9:45	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0129.COMP	12	9:50	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0130.XTEJ1118p480	300	9:51	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0131.XTEJ1118p480	300	9:56	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0132.XTEJ1118p480	300	10:01	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0133.XTEJ1118p480	300	10:07	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0134.XTEJ1118p480	300	10:12	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0135.XTEJ1118p480	300	10:17	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0136.COMP	12	10:22	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	



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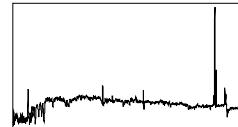
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0137.XTEJ1118p480	300	10:23	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0138.XTEJ1118p480	300	10:28	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0139.XTEJ1118p480	300	10:33	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0140.XTEJ1118p480	300	10:39	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0141.XTEJ1118p480	300	10:44	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0142.XTEJ1118p480	300	10:49	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0143.COMP	12	10:55	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0144.XTEJ1118p480	300	10:55	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0145.XTEJ1118p480	300	11:00	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0146.XTEJ1118p480	300	11:06	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0147.XTEJ1118p480	300	11:11	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0148.XTEJ1118p480	300	11:16	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0149.XTEJ1118p480	300	11:21	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0150.COMP	12	11:27	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0151.XTEJ1118p480	300	11:27	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0152.XTEJ1118p480	300	11:32	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0153.XTEJ1118p480	300	11:38	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0154.XTEJ1118p480	300	11:43	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0155.XTEJ1118p480	300	11:48	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0156.XTEJ1118p480	300	11:53	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0157.COMP	12	11:59	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0158.XTEJ1118p480	300	11:59	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0159.XTEJ1118p480	300	12:05	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0160.XTEJ1118p480	300	12:10	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0161.XTEJ1118p480	300	12:15	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0162.XTEJ1118p480	300	12:20	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0163.XTEJ1118p480	300	12:25	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0164.COMP	12	12:31	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0165.XTEJ1118p480	300	12:32	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0166.XTEJ1118p480	300	12:37	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0167.XTEJ1118p480	300	12:42	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0168.XTEJ1118p480	300	12:47	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0169.XTEJ1118p480	300	12:52	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0170.XTEJ1118p480	300	12:58	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0171.COMP	12	13:03	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0172.XTEJ1118p480	300	13:04	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0173.XTEJ1118p480	300	13:09	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0174.COMP	12	13:15	11:18:10.9	48:02:12	300	90	3.0	#149 Black Hol	2	
0175.sn2005g	600	13:20	13:44:32.7	04:46:44	300	2	3.0	#2 SN Observat	2	
0176.COMP	12	13:30	13:44:32.7	04:46:44	300	2	3.0	#2 SN Observat	2	



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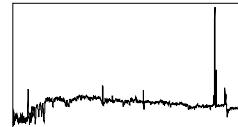
UT Date 2005-01-18 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0177.Feige34	70	13:35	10:36:41.2	43:21:50	300	88	3.0	#56 Spectropho	2	
0178.COMP	12	13:36	10:36:41.2	43:21:50	300	88	3.0	#56 Spectropho	2	
0179.BDp332642	60	13:39	15:50:03.0	33:05:49	300	94	3.0	#56 Spectropho	2	
0180.COMP	12	13:41	15:50:03.0	33:05:49	300	94	3.0	#56 Spectropho	2	
0181-0190.BIAS	0	13:55	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	4	
0191-0200.FLAT	6	13:58	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	4	
0201-0210.BIAS	0	14:03	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	2	
0211-0220.FLAT	12	14:08	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	2	
0221-0230.DARK	900	16:26	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0007.DARK	900	1:17	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	4	
0008-0017.BIAS	0	1:33	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	4	
0018-0027.FLAT	6	1:36	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	4	
0028-0037.BIAS	0	1:38	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	2	
0038-0057.FLAT	12	1:47	15:50:03.0	33:05:49	300	90	3.0	#57 Velocity S	2	
0058.M31	60	1:53	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	2	
0059.COMP	12	1:54	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	2	
0060.BDp174708	60	2:08	22:11:31.4	18:05:34	300	63	3.0	#56 Spectropho	2	
0061.COMP	12	2:10	22:11:31.4	18:05:34	300	63	3.0	#56 Spectropho	2	
0062.BDp284211	70	2:12	21:48:57.1	28:37:48	300	67	3.0	#56 Spectropho	2	
0063.COMP	12	2:13	21:48:57.1	28:37:48	300	67	3.0	#56 Spectropho	2	
0064.sn2004gx	1800	2:21	23:33:30.8	+24:01:07	300	50	3.0	#2 SN Observat	2	
0065.COMP	12	2:52	23:33:30.8	+24:01:07	300	50	3.0	#2 SN Observat	2	
0066.hs3316	438	2:59	0:58:11.3	21:52:27	600	90	2.0	#122 Halo Star	4	600L, tilt=440, 2 arcsec
0067.COMP	10	3:06	0:58:11.3	21:52:27	600	90	2.0	#122 Halo Star	4	
0068.hs3317	300	3:07	0:59:03.5	19:53:34	600	90	2.0	#122 Halo Star	4	
0069.COMP	10	3:13	0:59:03.5	19:53:34	600	90	2.0	#122 Halo Star	4	
0070.hs3318	378	3:14	0:59:13.6	27:22:21	600	90	2.0	#122 Halo Star	4	
0071.COMP	12	3:21	0:59:13.6	27:22:21	600	90	2.0	#122 Halo Star	4	
0072.hs3319	432	3:22	0:59:26.2	26:27:29	600	90	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0073.COMP	10	3:29	0:59:26.2	26:27:29	600	90	2.0	#122 Halo Star	4	
0074.hs3320	198	3:30	0:59:35.0	17:33:43	600	90	2.0	#122 Halo Star	4	
0075.COMP	10	3:34	0:59:35.0	17:33:43	600	90	2.0	#122 Halo Star	4	
0076.hs3321	384	3:35	0:59:35.0	25:04:33	600	90	2.0	#122 Halo Star	4	
0077.COMP	10	3:42	0:59:35.0	25:04:33	600	90	2.0	#122 Halo Star	4	
0078.hs3322	294	3:43	0:59:50.5	25:00:03	600	90	2.0	#122 Halo Star	4	
0079.COMP	10	3:52	00:59:49.4	+25:00:36	600	90	2.0	#122 Halo Star	4	
0080.hs3323	246	4:00	0:59:51.3	20:57:11	600	90	2.0	#122 Halo Star	4	
0081.COMP	12	4:04	0:59:51.3	20:57:11	600	90	2.0	#122 Halo Star	4	
0082.hs3324	168	4:06	0:59:56.6	15:44:13	600	90	2.0	#122 Halo Star	4	
0083.COMP	12	4:09	0:59:56.6	15:44:13	600	90	2.0	#122 Halo Star	4	
0084.hs3325	720	4:16	1:00:31.1	27:06:38	600	80	2.0	#122 Halo Star	4	
0085.COMP	10	4:29	1:00:31.1	27:06:38	600	80	2.0	#122 Halo Star	4	
0086.hs3326	660	4:30	1:00:36.5	15:55:27	600	90	2.0	#122 Halo Star	4	
0087.COMP	10	4:43	1:00:36.5	15:55:27	600	90	2.0	#122 Halo Star	4	
0088.Hiltner600	60	4:46	06:42:37.2	02:11:25	600	90	2.0	#56 Spectropho	4	
0089.Hiltner600	60	4:47	06:42:37.2	02:11:25	600	90	2.0	#56 Spectropho	4	
0090.COMP	10	4:48	06:42:37.2	02:11:25	600	90	2.0	#56 Spectropho	4	
0091-0100.FLAT	24	4:55	06:42:37.2	02:11:25	600	90	2.0	#12 Symbiotic	4	
0101.GITau	60	5:02	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	combo setup



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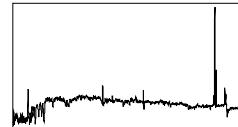
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0102.COMP	12	5:03	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0103.GITau	300	5:04	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0104.COMP	12	5:09	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0105.GKTau	60	5:11	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0106.COMP	12	5:12	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0107.GKTau	300	5:13	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0108.COMP	12	5:19	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0109.cvso-220931	600	5:25	05:06:49.8	-03:54:33	300	90	3.0	#112 Orion PMS	2	
0110.COMP	12	5:36	05:06:49.8	-03:54:33	300	90	3.0	#112 Orion PMS	2	
0111.cvso-218389	780	5:38	05:07:18.5	-02:15:56	300	90	3.0	#112 Orion PMS	2	
0112.COMP	12	5:51	05:07:18.5	-02:15:56	300	90	3.0	#112 Orion PMS	2	
0113.cvso-240572	680	5:52	05:07:58.5	-03:12:54	300	90	3.0	#112 Orion PMS	2	
0114.COMP	12	6:04	05:07:58.5	-03:12:54	300	90	3.0	#112 Orion PMS	2	
0115.cvso-222733	420	6:08	05:09:11.9	-04:03:12	300	90	3.0	#112 Orion PMS	2	
0116.COMP	12	6:15	05:09:11.9	-04:03:12	300	90	3.0	#112 Orion PMS	2	
0117.cvso-242745	600	6:16	05:09:40.5	-02:40:06	300	90	3.0	#112 Orion PMS	2	
0118.COMP	12	6:28	05:09:40.5	-02:40:06	300	90	3.0	#112 Orion PMS	2	
0119.cvso-244011	780	6:32	05:11:07.3	-02:55:09	300	90	3.0	#112 Orion PMS	2	
0120.COMP	12	6:47	05:11:07.3	-02:55:09	300	90	3.0	#112 Orion PMS	2	
0121.cvso-222614	540	6:49	05:11:55.1	-01:57:54	300	90	3.0	#112 Orion PMS	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-01-19 Observers M Calkins

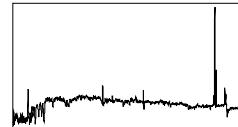
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0122.COMP	12	6:59	05:11:55.1	-01:57:54	300	90	3.0	#112 Orion PMS	2	
0123.2M08164932+6029350	1200	7:03	8:16:49.3	+60:29:35	300	40	3.0	#141 Mapping t	2	
0124.COMP	12	7:24	8:16:49.3	+60:29:35	300	40	3.0	#141 Mapping t	2	
0125.2M08180960+5805327	540	7:25	8:18:9.6	+58:05:32	300	90	3.0	#141 Mapping t	2	
0126.COMP	12	7:35	8:18:9.6	+58:05:32	300	90	3.0	#141 Mapping t	2	
0127.2M08181880+5907457	420	7:36	8:18:18.8	+59:07:45	300	90	3.0	#141 Mapping t	2	
0128.COMP	12	7:44	8:18:18.8	+59:07:45	300	90	3.0	#141 Mapping t	2	
0129.2M08192513+5505501	420	7:45	8:19:25.1	+55:05:50	300	90	3.0	#141 Mapping t	2	
0130.COMP	12	7:52	8:19:25.1	+55:05:50	300	90	3.0	#141 Mapping t	2	
0131.2M08202872+7049291	480	7:53	8:20:28.7	+70:49:29	300	90	3.0	#141 Mapping t	2	
0132.COMP	12	8:02	8:20:28.7	+70:49:29	300	90	3.0	#141 Mapping t	2	
0133.2M08240900-0346172	480	8:04	8:24:9.0	-03:46:17	300	90	3.0	#141 Mapping t	2	
0134.COMP	12	8:14	8:24:9.0	-03:46:17	300	90	3.0	#141 Mapping t	2	
0135.2M08243707+6118550	480	8:18	8:24:37.0	+61:18:55	300	90	3.0	#141 Mapping t	2	
0136.COMP	12	8:26	8:24:37.0	+61:18:55	300	90	3.0	#141 Mapping t	2	
0137.2M08282582+2500530	420	8:28	8:28:25.8	+25:00:53	300	90	3.0	#141 Mapping t	2	
0138.COMP	12	8:36	8:28:25.8	+25:00:53	300	90	3.0	#141 Mapping t	2	
0139.2M08283097+1728017	480	8:37	8:28:30.9	+17:28:1	300	90	3.0	#141 Mapping t	2	
0140.COMP	12	8:46	8:28:30.9	+17:28:1	300	90	3.0	#141 Mapping t	2	
0141.2M08300775+0938421	420	8:48	8:30:7.7	+09:38:42	300	90	3.0	#141 Mapping t	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-01-19 Observers M Calkins

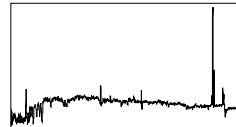
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0142.COMP	12	8:56	8:30:7.7	+09:38:42	300	90	3.0	#141 Mapping t	2	
0143.sn2005_n4012	1200	9:02	11:58:28.5	10:01:9	300	110	3.0	#2 SN Observat	2	
0144.COMP	10	9:23	11:58:28.5	10:01:9	300	110	3.0	#2 SN Observat	2	
0145.sn2005_n4012	1200	9:25	11:58:28.5	10:01:9	300	0	3.0	#2 SN Observat	2	
0146.COMP	12	9:46	11:58:28.5	10:01:9	300	0	3.0	#2 SN Observat	2	
0147.sn2005k	1500	9:57	09:36:04.3	16:45:46	300	24	3.0	#2 SN Observat	2	
0148.COMP	12	10:22	09:36:04.3	16:45:46	300	24	3.0	#2 SN Observat	2	
0149.N3227	150	10:26	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0150.N3227	150	10:28	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0151.COMP	12	10:31	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0152.N4051	150	10:32	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0153.N4051	150	10:41	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0154.N4051	150	10:44	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0155.COMP	12	10:47	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0156.N4151	30	10:48	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0157.N4151	30	10:49	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0158.COMP	12	10:50	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0159.1314_04	480	10:51	11:36:33.8	+48:51:51	300	90	3.0	#64 Cluster an	2	
0160.COMP	12	11:00	11:36:33.8	+48:51:51	300	90	3.0	#64 Cluster an	2	
0161.1314_05	600	11:01	11:35:39.5	+48:55:28	300	90	3.0	#64 Cluster an	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-01-19 Observers M Calkins

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0162.COMP	12	11:12	11:35:39.5	+48:55:28	300	90	3.0	#64 Cluster an	2	
0163.1314_06	480	11:13	11:37:59.7	+48:55:47	300	90	3.0	#64 Cluster an	2	
0164.COMP	12	11:22	11:37:59.7	+48:55:47	300	90	3.0	#64 Cluster an	2	
0165.1314_07	360	11:23	11:33:43.6	+48:56:02	300	90	3.0	#64 Cluster an	2	
0166.COMP	12	11:29	11:33:43.6	+48:56:02	300	90	3.0	#64 Cluster an	2	
0167.1314_08	360	11:30	11:32:10.3	+48:59:40	300	90	3.0	#64 Cluster an	2	
0168.COMP	12	11:37	11:32:10.3	+48:59:40	300	90	3.0	#64 Cluster an	2	
0169.1314_09	540	11:38	11:34:16.2	+49:00:14	300	90	3.0	#64 Cluster an	2	
0170.COMP	12	11:47	11:34:16.2	+49:00:14	300	90	3.0	#64 Cluster an	2	
0171.1314_10	600	11:48	11:31:44.2	+49:05:11	300	90	3.0	#64 Cluster an	2	
0172.COMP	12	11:59	11:31:44.2	+49:05:11	300	90	3.0	#64 Cluster an	2	
0173.1314_11	780	12:01	11:34:43.0	+49:05:26	300	90	3.0	#64 Cluster an	2	
0174.COMP	12	12:15	11:34:43.0	+49:05:26	300	90	3.0	#64 Cluster an	2	
0175.1314_12	840	12:16	11:34:33.0	+49:06:05	300	90	3.0	#64 Cluster an	2	
0176.COMP	12	12:30	11:34:33.0	+49:06:05	300	90	3.0	#64 Cluster an	2	
0177.1314_13	420	12:31	11:35:29.3	+49:06:25	300	90	3.0	#64 Cluster an	2	
0178.COMP	12	12:38	11:35:29.3	+49:06:25	300	90	3.0	#64 Cluster an	2	
0179.1314_14	780	12:39	11:34:31.0	+49:07:40	300	90	3.0	#64 Cluster an	2	
0180.COMP	12	12:53	11:34:31.0	+49:07:40	300	90	3.0	#64 Cluster an	2	
0181.1314_15	720	12:54	11:35:43.7	+49:09:59	300	90	3.0	#64 Cluster an	2	



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FAST SPECTROGRAPH LOG



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UT Date 2005-01-19 Observers M Calkins

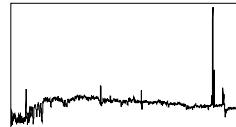
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0182.COMP	12	13:06	11:35:43.7	+49:09:59	300	90	3.0	#64 Cluster an	2	
0183.1314_16	540	13:07	11:30:32.6	+49:10:04	300	90	3.0	#64 Cluster an	2	
0184.COMP	12	13:17	11:30:32.6	+49:10:04	300	90	3.0	#64 Cluster an	2	
0185.1314_17	600	13:18	11:32:03.3	+49:10:25	300	90	3.0	#64 Cluster an	2	
0186.COMP	12	13:28	11:32:03.3	+49:10:25	300	90	3.0	#64 Cluster an	2	
0187.BDp332642	60	13:30	15:50:03.0	33:05:49	300	90	3.0	#56 Spectropho	2	
0188.BDp332642	60	13:31	15:50:03.0	33:05:49	300	90	3.0	#56 Spectropho	2	
0189.COMP	12	13:33	15:50:03.0	33:05:49	300	90	3.0	#56 Spectropho	2	
0190-0199.BIAS	0	13:43	15:50:03.0	33:05:49	300	90	3.0	#12 Symbiotic	4	
0200-0209.FLAT	6	13:45	15:50:03.0	33:05:49	300	90	3.0	#12 Symbiotic	4	
0210-0219.BIAS	0	13:48	15:50:03.0	33:05:49	300	90	3.0	#12 Symbiotic	2	
0220-0229.FLAT	12	13:53	15:50:03.0	33:05:49	300	90	3.0	#12 Symbiotic	2	
0230-0239.DARK	900	16:10	15:50:03.0	33:05:49	300	90	3.0	#12 Symbiotic	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-01-20 Observers M Calkins

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0010.DARK	900	1:22	15:50:03.0	33:05:49	300	90	3.0	#12 Symbiotic	4	
0011-0020.BIAS	0	3:27	1:00:48.9	24:18:26	300	90	3.0	#122 Halo Star	4	
0021-0030.FLAT	6	3:30	1:00:48.9	24:18:26	300	90	3.0	#122 Halo Star	4	
0031-0040.BIAS	0	3:33	1:00:48.9	24:18:26	300	90	3.0	#122 Halo Star	2	
0041-0050.FLAT	12	3:37	1:00:48.9	24:18:26	300	90	3.0	#122 Halo Star	2	
0051.GITau	60	3:45	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	thin cirrus, bright moon
0052.COMP	12	3:46	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0053.GITau	360	3:47	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0054.COMP	12	3:54	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0055.GKTau	60	3:55	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0056.COMP	12	3:57	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0057.GKTau	360	3:57	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0058.COMP	12	4:04	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0059.MRK335	180	4:06	00:06:19.6	+20:12:11	300	90	3.0	#6 AGN Monitor	2	
0060.MRK335	180	4:10	00:06:19.6	+20:12:11	300	90	3.0	#6 AGN Monitor	2	
0061.COMP	12	4:13	00:06:19.6	+20:12:11	300	90	3.0	#6 AGN Monitor	2	
0062.Akn120	360	4:16	05:13:38.0	-00:12:15	300	90	3.0	#6 AGN Monitor	2	
0063.COMP	12	4:23	05:13:38.0	-00:12:15	300	90	3.0	#6 AGN Monitor	2	
0064.Hiltner600	60	4:26	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	
0065.COMP	12	4:28	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	



WHIPPLE OBSERVATORY

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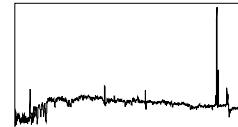
UT Date 2005-01-20 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0066.BXMon	15	5:14	7:25:23	-03:35:51	300	90	3.0	#12 Symbiotic	2	
0067.BXMon	180	5:15	7:25:23	-03:35:51	300	90	3.0	#12 Symbiotic	2	
0068.COMP	12	5:18	7:25:23	-03:35:51	300	90	3.0	#12 Symbiotic	2	
0069.IPHAS_B89	900	5:20	03:04:51.2	59:47:58	300	90	3.0	#157 IPHAS	2	
0070.COMP	12	5:36	03:04:51.2	59:47:58	300	90	3.0	#157 IPHAS	2	
0071.IPHAS_B69	420	5:38	02:53:18.8	62:10:25	300	90	3.0	#157 IPHAS	2	
0072.COMP	12	5:46	02:53:18.8	62:10:25	300	90	3.0	#157 IPHAS	2	
0073.IPHAS_B71	1020	6:06	02:53:24.5	61:46:22	300	90	3.0	#157 IPHAS	2	will get again on a better night
0074.COMP	12	6:26	02:53:24.5	61:46:22	300	90	3.0	#157 IPHAS	2	
0075.IPHAS_B127	1020	6:28	05:54:39.9	32:03:0	300	90	3.0	#157 IPHAS	2	
0076.COMP	12	6:46	05:54:39.9	32:03:0	300	90	3.0	#157 IPHAS	2	
0077-0086.BIAS	0	12:41	8:31:10.1	+09:36:19	300	90	3.0	#12 Symbiotic	2	
0087-0096.FLAT	12	12:48	8:31:10.1	+09:36:19	300	90	3.0	#12 Symbiotic	2	
0097-0106.DARK	900	15:12	8:31:10.1	+09:36:19	300	90	3.0	#12 Symbiotic	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-01-21 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

<i>File</i>	<i>Exp Time</i>	<i>UT Start</i>	<i>RA</i>	<i>Dec</i>	<i>Gr.</i>	<i>P.A.</i>	<i>Slit</i>	<i>Program</i>	<i>Bir</i>	<i>Comments</i>
0001.BIAS	0	1:02	01:40:04.7	+31:28:13	300	90	3.0	#12 Symbiotic	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-02-01 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.BIAS	0	0:29	01:49:56.4	+31:28:15	300	90	3.0	#12 Symbiotic	4	start of FAST run
0002-0010.BIAS	0	0:30	01:50:57.4	+31:28:15	300	90	3.0	#12 Symbiotic	4	
0011-0014.FLAT	8	0:31	01:52:19.7	+31:28:15	300	90	3.0	#12 Symbiotic	4	
0015-0020.FLAT	8	0:33	01:54:21.1	+31:28:16	300	90	3.0	#12 Symbiotic	4	
0021-0030.BIAS	0	0:35	01:56:31.5	+31:28:16	300	90	3.0	#12 Symbiotic	2	
0031-0033.FLAT	16	0:36	01:58:11.1	+31:28:16	300	90	3.0	#12 Symbiotic	2	
0034-0045.FLAT	16	0:43	02:04:11.2	+31:28:17	300	90	3.0	#12 Symbiotic	2	
0046-0051.FLAT	16	0:46	02:07:13.0	+31:28:18	300	90	3.0	#12 Symbiotic	2	
0052-0056.sky	3	1:14	2:35:00	32:00:00	300	90	3.0	#57 Velocity S	4	
0057.COMP	5	1:15	2:35:00	32:00:00	300	90	3.0	#57 Velocity S	4	
0058.HD12623	4	1:40	02:02:19	+62:56:04	300	90	3.0	#57 Velocity S	4	
0059.HD12623	4	1:40	02:02:19	+62:56:04	300	90	3.0	#57 Velocity S	4	
0060.HD12623	4	1:40	02:02:19	+62:56:04	300	90	3.0	#57 Velocity S	4	
0061.COMP	5	1:41	02:02:19	+62:56:04	300	90	3.0	#57 Velocity S	4	
0062.ZAnd	2	1:42	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0063.ZAnd	5	1:42	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0064.ZAnd	30	1:43	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0065.COMP	5	1:44	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0066.N7469	120	1:47	23:03:15.7	+08:52:27	300	60	3.0	#6 AGN Monitor	4	a few clouds, east wind
0067.N7469	120	1:49	23:03:15.7	+08:52:27	300	60	3.0	#6 AGN Monitor	4	



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UT Date 2005-02-01 Observers P Berlind

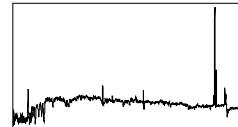
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0068.COMP	5	1:52	23:03:15.7	+08:52:27	300	60	3.0	#6 AGN Monitor	4	
0069.Akn564	150	1:54	22:42:39.4	+29:43:31	300	60	3.0	#6 AGN Monitor	4	
0070.Akn564	150	1:56	22:42:39.4	+29:43:31	300	60	3.0	#6 AGN Monitor	4	
0071.COMP	5	1:59	22:42:39.4	+29:43:31	300	60	3.0	#6 AGN Monitor	4	
0072.2666_11	420	2:02	23:47:01.3	+27:16:24	300	90	3.0	#64 Cluster an	4	
0073.COMP	5	2:09	23:47:01.3	+27:16:24	300	90	3.0	#64 Cluster an	4	
0074.2666_13	420	2:10	23:46:53.8	+27:19:18	300	90	3.0	#64 Cluster an	4	
0075.COMP	5	2:17	23:46:53.8	+27:19:18	300	90	3.0	#64 Cluster an	4	
0076.2666_14	360	2:18	23:46:57.6	+27:20:11	300	90	3.0	#64 Cluster an	4	
0077.COMP	5	2:24	23:46:57.6	+27:20:11	300	90	3.0	#64 Cluster an	4	
0078.2666_09	540	2:25	23:54:28.6	+27:12:01	300	90	3.0	#64 Cluster an	2	faint comp in slit to east
0079.COMP	10	2:34	23:54:28.6	+27:12:01	300	90	3.0	#64 Cluster an	2	
0080.2666_10	600	2:35	23:53:37.7	+27:13:55	300	90	3.0	#64 Cluster an	4	
0081.COMP	5	2:45	23:53:37.7	+27:13:55	300	90	3.0	#64 Cluster an	4	
0082.2666_17	270	2:46	23:48:24.2	+27:56:57	300	90	3.0	#64 Cluster an	4	
0083.COMP	5	2:51	23:48:24.2	+27:56:57	300	90	3.0	#64 Cluster an	4	
0084.2666_18	600	2:52	23:49:01.6	+27:56:58	300	90	3.0	#64 Cluster an	4	
0085.COMP	5	3:02	23:49:01.6	+27:56:58	300	90	3.0	#64 Cluster an	4	
0086.0076_01	300	3:03	00:40:44.4	+06:10:02	300	90	3.0	#64 Cluster an	4	
0087.COMP	5	3:09	00:40:44.4	+06:10:02	300	90	3.0	#64 Cluster an	4	



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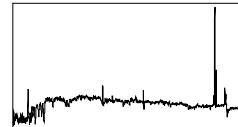
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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0088.0076_02	300	3:09	00:40:41.9	+06:10:27	300	90	3.0	#64 Cluster an	4	
0089.COMP	5	3:15	00:40:41.9	+06:10:27	300	90	3.0	#64 Cluster an	4	
0090.0076_03	420	3:15	00:40:29.0	+06:23:38	300	90	3.0	#64 Cluster an	4	
0091.COMP	5	3:22	00:40:29.0	+06:23:38	300	90	3.0	#64 Cluster an	4	
0092.0076_04	600	3:23	00:39:15.3	+06:24:20	300	90	3.0	#64 Cluster an	4	
0093.COMP	5	3:33	00:39:15.3	+06:24:20	300	90	3.0	#64 Cluster an	4	
0094.sn2004gq	1200	3:38	05:12:04.8	-15:40:54	300	0	3.0	#2 SN Observat	2	
0095.sn2004gq	5	3:43	05:12:04.8	-15:40:54	300	0	3.0	#2 SN Observat	2	junk tcs died
0096.sn2004gq	1200	3:44	05:12:04.8	-15:40:54	300	0	3.0	#2 SN Observat	2	tcs crash again
0097.Akn120	300	4:04	05:13:38.0	-00:12:15	300	0	3.0	#6 AGN Monitor	4	ok
0098.COMP	5	4:09	05:13:38.0	-00:12:15	300	0	3.0	#6 AGN Monitor	4	
0099.sn2004gq	1200	4:11	05:12:04.8	-15:40:54	300	10	3.0	#2 SN Observat	2	ok
0100.COMP	10	4:31	05:12:04.8	-15:40:54	300	10	3.0	#2 SN Observat	2	
0101.0376_02	1200	4:35	02:44:32.8	+36:24:23	300	90	3.0	#64 Cluster an	2	
0102.COMP	10	4:55	02:44:32.8	+36:24:23	300	90	3.0	#64 Cluster an	2	
0103.0376_04	1200	4:56	02:46:25.3	+36:32:24	300	90	3.0	#64 Cluster an	2	
0104.COMP	10	5:17	02:46:25.3	+36:32:24	300	90	3.0	#64 Cluster an	2	
0105.2M04202542p3532247	540	5:19	04:20:25.4	+35:32:24	300	90	3.0	#141 Mapping t	4	
0106.COMP	5	5:28	04:20:25.4	+35:32:24	300	90	3.0	#141 Mapping t	4	
0107.2M04222770p3447150	540	5:29	04:22:27.7	+34:47:15	300	90	3.0	#141 Mapping t	4	



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0108.COMP	5	5:38	04:22:27.7	+34:47:15	300	90	3.0	#141 Mapping t	4	
0109.2M04231402p3113454	900	5:39	04:23:14.0	+31:13:45	300	90	3.0	#141 Mapping t	4	
0110.COMP	5	5:54	04:23:14.0	+31:13:45	300	90	3.0	#141 Mapping t	4	
0111.2M04231409p3516114	720	5:55	04:23:14.0	+35:16:11	300	90	3.0	#141 Mapping t	4	
0112.COMP	5	6:07	04:23:14.0	+35:16:11	300	90	3.0	#141 Mapping t	4	
0113.2M04290963p2619398	900	6:08	04:29:09.6	+26:19:39	300	90	3.0	#141 Mapping t	4	
0114.COMP	5	6:23	04:29:09.6	+26:19:39	300	90	3.0	#141 Mapping t	4	
0115.2M04302705p2807071	1200	6:25	04:30:27.0	+28:07:07	300	90	3.0	#141 Mapping t	4	
0116.COMP	5	6:45	04:30:27.0	+28:07:07	300	90	3.0	#141 Mapping t	4	
0117.sn2005m	1200	6:48	09:37:32.3	+23:12:02	300	0	3.0	#2 SN Observat	2	
0118.COMP	10	7:08	09:37:32.3	+23:12:02	300	0	3.0	#2 SN Observat	2	
0119.COMP	10	7:18	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0120.XTEJ1118p480	600	7:18	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0121.XTEJ1118p480	600	7:28	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0122.XTEJ1118p480	600	7:39	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0123.COMP	10	7:49	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0124.XTEJ1118p480	600	7:50	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0125.XTEJ1118p480	600	8:00	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0126.XTEJ1118p480	600	8:10	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0127.COMP	10	8:21	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	



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0128.XTEJ1118p480	600	8:21	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0129.XTEJ1118p480	600	8:31	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0130.XTEJ1118p480	600	8:42	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0131.COMP	10	8:52	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0132.XTEJ1118p480	600	8:53	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0133.XTEJ1118p480	600	9:03	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0134.XTEJ1118p480	600	9:13	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0135.COMP	10	9:23	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0136.XTEJ1118p480	600	9:37	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0137.XTEJ1118p480	600	9:47	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0138.XTEJ1118p480	600	9:58	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0139.COMP	10	10:08	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0140.XTEJ1118p480	600	10:09	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0141.XTEJ1118p480	600	10:19	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0142.XTEJ1118p480	600	10:29	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0143.COMP	10	10:39	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0144.XTEJ1118p480	600	10:40	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0145.XTEJ1118p480	600	10:50	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0146.XTEJ1118p480	600	11:00	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0147.COMP	10	11:11	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	



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0148.XTEJ1118p480	600	11:11	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0149.XTEJ1118p480	600	11:22	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0150.XTEJ1118p480	600	11:32	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0151.COMP	10	11:42	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0152.XTEJ1118p480	600	11:43	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0153.XTEJ1118p480	600	11:53	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0154.XTEJ1118p480	600	12:03	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0155.COMP	10	12:14	11:18:10.9	48:02:12	300	1	3.0	#149 Black Hol	2	
0156.Feige66	60	12:16	12:34:54.7	25:20:31	300	61	3.0	#56 Spectropho	2	
0157.Feige66	60	12:17	12:34:54.7	25:20:31	300	61	3.0	#56 Spectropho	2	
0158.COMP	10	12:19	12:34:54.7	25:20:31	300	61	3.0	#56 Spectropho	2	
0159.sn2005u	90	12:22	11:28:33.1	+58:33:41	300	110	3.0	#2 SN Observat	2	
0160.sn2005u	900	12:25	11:28:33.1	+58:33:41	300	110	3.0	#2 SN Observat	2	
0161.COMP	10	12:40	11:28:33.1	+58:33:41	300	110	3.0	#2 SN Observat	2	
0162.1314_18	480	12:43	11:35:59.1	+49:15:51	300	90	3.0	#64 Cluster an	4	
0163.COMP	5	12:52	11:35:59.1	+49:15:51	300	90	3.0	#64 Cluster an	4	
0164.1314_19	330	12:52	11:35:45.3	+49:16:20	300	90	3.0	#64 Cluster an	4	
0165.COMP	5	12:58	11:35:45.3	+49:16:20	300	90	3.0	#64 Cluster an	4	
0166.1314_20	300	12:58	11:35:08.6	+49:17:18	300	90	3.0	#64 Cluster an	4	
0167.COMP	5	13:04	11:35:08.6	+49:17:18	300	90	3.0	#64 Cluster an	4	



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0168.N4853	300	13:05	12:58:35.1	+27:35:47	300	90	3.0	#57 Velocity S	4	
0169.COMP	5	13:10	12:58:35.1	+27:35:47	300	90	3.0	#57 Velocity S	4	
0170.BDp262606	60	13:12	14:49:02.3	+25:42:09	300	90	3.0	#56 Spectropho	2	
0171.BDp262606	60	13:13	14:49:02.3	+25:42:09	300	90	3.0	#56 Spectropho	2	
0172.COMP	10	13:14	14:49:02.3	+25:42:09	300	90	3.0	#56 Spectropho	2	
0173-0182.BIAS	0	13:17	14:49:02.3	+25:42:09	300	90	3.0	#149 Black Hol	4	
0183-0192.FLAT	8	13:21	14:49:02.3	+25:42:09	300	90	3.0	#149 Black Hol	4	
0193-0202.BIAS	0	13:23	14:49:02.3	+25:42:09	300	90	3.0	#149 Black Hol	2	
0203-0212.FLAT	16	13:28	14:49:02.3	+25:42:09	300	90	3.0	#149 Black Hol	2	
0213-0222.DARK	900	15:53	14:49:02.3	+25:42:09	300	90	3.0	#149 Black Hol	4	
0223-0232.DARK	900	18:25	14:49:02.3	+25:42:09	300	90	3.0	#149 Black Hol	2	