



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-02 Observers H Hao

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.DARK	900	22:51	02:21:11.0	+31:28:23	300	90	3.0	#57 Velocity S	4	
0002.DARK	900	23:06	02:36:21.2	+31:28:27	300	90	3.0	#57 Velocity S	4	
0003.DARK	900	23:21	02:51:31.8	+31:28:30	300	90	3.0	#57 Velocity S	4	
0004.DARK	900	23:36	03:06:38.7	+31:28:34	300	90	3.0	#57 Velocity S	4	
0005.DARK	900	23:51	03:21:49.1	+31:28:39	300	90	3.0	#57 Velocity S	4	
0006.DARK	900	0:06	03:36:56.2	+31:28:43	300	90	3.0	#57 Velocity S	4	
0007.DARK	900	0:21	03:52:06.6	+31:28:49	300	90	3.0	#57 Velocity S	4	
0008.DARK	900	0:36	04:07:13.8	+31:28:54	300	90	3.0	#57 Velocity S	4	
0009.DARK	900	0:52	04:22:24.1	+31:29:00	300	90	3.0	#57 Velocity S	4	
0010-0019.BIAS	0	1:15	04:31:17.5	+31:29:03	300	90	3.0	#57 Velocity S	4	
0020-0023.FLAT	6	1:21	04:37:22.6	+31:29:05	300	90	3.0	#57 Velocity S	4	
0024-0029.FLAT	6	1:23	04:38:40.2	+31:29:06	300	90	3.0	#57 Velocity S	4	
0030-0031.sky	2	1:36	04:52:12.1	+31:29:11	300	90	3.0	#57 Velocity S	4	
0032-0034.sky	2	1:37	04:52:38.0	+31:29:12	300	90	3.0	#57 Velocity S	4	
0035.COMP	5	1:38	04:53:38.8	+31:29:12	300	90	3.0	#57 Velocity S	4	
0036-0039.FLAT	24	2:02	05:17:56.9	+31:29:22	600	90	2.0	#122 Halo Star	4	
0040-0044.FLAT	24	2:04	05:20:32.6	+31:29:23	600	90	2.0	#122 Halo Star	4	
0045.FLAT	24	2:05	05:21:03.0	+31:29:24	600	90	2.0	#122 Halo Star	4	
0046.hs3530	324	2:23	2:31:16.4	14:27:39	600	90	2.0	#122 Halo Star	4	Warren
0047.COMP	10	2:29	2:31:16.4	14:27:39	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
0048.hs3530	700	2:30	2:31:16.4	14:27:39	600	90	2.0	#122 Halo Star	4	Double the exposure time
0049.COMP	10	2:42	2:31:16.4	14:27:39	600	90	2.0	#122 Halo Star	4	
0050.hs3531	192	2:44	2:31:29.2	12:34:41	600	90	2.0	#122 Halo Star	4	
0051.COMP	10	2:48	2:31:29.2	12:34:41	600	90	2.0	#122 Halo Star	4	
0052.hs3532	216	2:50	2:33:58.6	5:45:00	600	90	2.0	#122 Halo Star	4	
0053.COMP	10	2:54	2:33:58.6	5:45:00	600	90	2.0	#122 Halo Star	4	
0054.hs3533	504	2:59	2:33:59.2	9:40:16	600	70	2.0	#122 Halo Star	4	Warren
0055.COMP	10	3:07	2:33:59.2	9:40:16	600	70	2.0	#122 Halo Star	4	
0056.hs3534	240	3:16	2:34:44.9	12:40:12	600	90	2.0	#122 Halo Star	4	
0057.COMP	10	3:20	2:34:44.9	12:40:12	600	90	2.0	#122 Halo Star	4	
0058.hs3535	246	3:22	2:35:51.5	11:31:04	600	90	2.0	#122 Halo Star	4	
0059.COMP	10	3:28	2:35:51.5	11:31:04	600	90	2.0	#122 Halo Star	4	
0060.G191B2B	10	3:30	05:01:31.5	52:45:52	600	90	2.0	#56 Spectropho	4	wrong data
0061.COMP	10	3:31	05:01:31.5	52:45:52	600	90	2.0	#56 Spectropho	4	
0062.Hiltner600	60	3:59	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	4	
0063.COMP	12	4:01	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	4	
0064.sn2004gq	1500	4:33	05:12:04.8	-15:40:54	300	35	3.0	#2 SN Observat	2	airmass 2, observe late
0065.COMP	12	4:58	05:12:04.8	-15:40:54	300	35	3.0	#2 SN Observat	2	
0066.Hiltner600	60	5:12	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	
0067.COMP	12	5:14	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0068-0077.BIAS	0	5:17	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	
0078-0097.FLAT	12	5:26	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	
0098.XS02545B6_021	420	5:36	7:37:15.6	-9:44:25	300	90	3.0	#152 ChaMPlane	2	
0099.COMP	12	5:43	7:37:15.6	-9:44:25	300	90	3.0	#152 ChaMPlane	2	
0100.XS02545B8_003	480	5:46	7:37:0.7	-9:32:47	300	90	3.0	#152 ChaMPlane	2	weak exposure
0101.COMP	12	5:55	7:37:0.7	-9:32:47	300	90	3.0	#152 ChaMPlane	2	
0102.XS02545B8_003	720	5:56	7:37:0.7	-9:32:47	300	90	3.0	#152 ChaMPlane	2	
0103.COMP	12	6:09	7:37:0.7	-9:32:47	300	90	3.0	#152 ChaMPlane	2	
0104.XS02553B1_007	480	6:13	6:48:49.7	-4:28:30	300	90	3.0	#152 ChaMPlane	2	
0105.COMP	12	6:21	6:48:49.7	-4:28:30	300	90	3.0	#152 ChaMPlane	2	
0106.XS02553B2_010	300	6:23	6:49:27.6	-4:39:50	300	90	3.0	#152 ChaMPlane	2	
0107.COMP	12	6:28	6:49:27.6	-4:39:50	300	90	3.0	#152 ChaMPlane	2	
0108.XS02553B3_020	300	6:30	6:49:13.9	-4:26:2	300	90	3.0	#152 ChaMPlane	2	
0109.COMP	12	6:36	6:49:13.9	-4:26:2	300	90	3.0	#152 ChaMPlane	2	
0110.XS02553B2_008	180	6:39	6:49:27.8	-4:32:17	300	100	3.0	#152 ChaMPlane	2	
0111.XS02553B2_008	180	6:43	6:49:27.8	-4:32:17	300	100	3.0	#152 ChaMPlane	2	
0112.XS02553B2_008	180	6:46	6:49:27.8	-4:32:17	300	100	3.0	#152 ChaMPlane	2	
0113.COMP	12	6:49	6:49:27.8	-4:32:17	300	100	3.0	#152 ChaMPlane	2	
0114.Feige34	120	6:53	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0115.COMP	12	6:56	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0116.N3227	150	7:20	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0117.N3227	150	7:23	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0118.COMP	12	7:26	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0119.sn2005u	1200	7:32	11:28:33.1	+58:33:41	300	19	3.0	#2 SN Observat	2	
0120.COMP	12	7:53	11:28:33.1	+58:33:41	300	19	3.0	#2 SN Observat	2	
0121.N4051	150	8:07	12:03:09.7	+44:31:53	300	89	3.0	#6 AGN Monitor	2	
0122.N4051	150	8:10	12:03:09.7	+44:31:53	300	89	3.0	#6 AGN Monitor	2	
0123.N4051	150	8:13	12:03:09.7	+44:31:53	300	89	3.0	#6 AGN Monitor	2	
0124.COMP	12	8:16	12:03:09.7	+44:31:53	300	89	3.0	#6 AGN Monitor	2	
0125.N3379	180	8:18	10:45:11.4	+12:50:48	300	89	3.0	#57 Velocity S	2	
0126.COMP	12	8:22	10:45:11.4	+12:50:48	300	89	3.0	#57 Velocity S	2	
0127.N5548	150	11:55	14:17:59.6	+25:08:12	300	89	3.0	#6 AGN Monitor	2	
0128.N5548	150	11:57	14:17:59.6	+25:08:12	300	89	3.0	#6 AGN Monitor	2	
0129.N5548	150	12:00	14:17:59.6	+25:08:12	300	89	3.0	#6 AGN Monitor	2	
0130.COMP	12	12:04	14:17:59.6	+25:08:12	300	89	3.0	#6 AGN Monitor	2	
0131.BDp332642	90	12:07	15:50:03.0	33:05:49	300	89	3.0	#56 Spectropho	2	
0132.COMP	12	12:10	15:50:03.0	33:05:49	300	89	3.0	#56 Spectropho	2	
0133.2052-04	1200	12:16	15:18:30.6	+06:19:59	300	89	3.0	#64 Cluster an	2	
0134.COMP	12	12:36	15:18:30.6	+06:19:59	300	89	3.0	#64 Cluster an	2	
0135-0144.BIAS	0	13:11	15:15:24.8	+06:26:54	300	89	3.0	#56 Spectropho	4	



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UT Date 2005-03-02 Observers H HaoColl. Focus 1015 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>
0145-0154.FLAT	6	13:17	15:15:24.8	+06:26:54	300	89	3.0	#56 Spectropho	4	
0155-0164.BIAS	0	13:21	15:15:24.8	+06:26:54	300	89	3.0	#56 Spectropho	2	
0165-0184.FLAT	12	13:29	15:15:24.8	+06:26:54	300	89	3.0	#56 Spectropho	2	
0185-0194.DARK	900	15:49	15:15:24.8	+06:26:54	300	89	3.0	#56 Spectropho	2	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	22:58	02:32:12.0	+31:28:26	300	89	3.0	#56 Spectropho	4	
0002.DARK	900	23:13	02:47:22.5	+31:28:29	300	89	3.0	#56 Spectropho	4	
0003.DARK	900	23:28	03:02:29.4	+31:28:33	300	89	3.0	#56 Spectropho	4	
0004.DARK	900	23:43	03:17:39.8	+31:28:37	300	89	3.0	#56 Spectropho	4	
0005.DARK	900	23:58	03:32:46.9	+31:28:42	300	89	3.0	#56 Spectropho	4	
0006.DARK	900	0:13	03:47:57.4	+31:28:47	300	89	3.0	#56 Spectropho	4	
0007.DARK	900	0:28	04:03:04.3	+31:28:52	300	89	3.0	#56 Spectropho	4	
0008.DARK	900	0:44	04:18:14.6	+31:28:58	300	89	3.0	#56 Spectropho	4	
0009.DARK	900	0:59	04:33:25.2	+31:29:04	300	89	3.0	#56 Spectropho	4	
0010-0019.BIAS	0	1:17	04:36:19.1	+31:29:05	300	89	3.0	#56 Spectropho	4	
0020-0029.FLAT	8	1:20	04:39:47.4	+31:29:06	300	89	3.0	#56 Spectropho	4	
0030.sky	2	1:35	04:54:32.8	+31:29:12	300	89	3.0	#57 Velocity S	4	
0031-0034.sky	2	1:36	04:55:33.4	+31:29:13	300	89	3.0	#57 Velocity S	4	
0035.COMP	5	1:36	04:56:20.7	+31:29:13	300	89	3.0	#57 Velocity S	4	
0036.BIAS	0	1:49	05:08:51.7	+31:29:18	300	89	3.0	#57 Velocity S	2	
0037-0045.BIAS	0	1:51	05:10:44.6	+31:29:19	300	89	3.0	#57 Velocity S	2	
0046-0050.FLAT	16	1:55	05:15:39.5	+31:29:21	300	89	3.0	#57 Velocity S	2	
0051-0055.FLAT	16	1:58	05:17:58.9	+31:29:22	300	89	3.0	#57 Velocity S	2	
0056-0057.FLAT	16	2:02	05:22:31.9	+31:29:24	300	89	3.0	#57 Velocity S	2	
0058-0062.FLAT	16	2:05	05:24:54.8	+31:29:25	300	89	3.0	#57 Velocity S	2	



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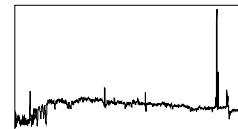
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0063-0065.FLAT	16	2:06	05:26:17.7	+31:29:26	300	89	3.0	#57 Velocity S	2	
0066.GITau	240	2:13	4:33:34	24:21:18	300	89	3.0	#12 Symbiotic	2	
0067.COMP	12	2:18	4:33:34	24:21:18	300	89	3.0	#12 Symbiotic	2	
0068.GKTau	240	2:20	4:33:34.5	24:21:07	300	89	3.0	#12 Symbiotic	2	
0069.COMP	12	2:25	4:33:34.5	24:21:07	300	89	3.0	#12 Symbiotic	2	
0070.XS02553B0_004	900	2:32	6:48:58.3	-4:35:43	300	89	3.0	#152 ChaMPlane	2	
0071.COMP	12	2:48	6:48:58.3	-4:35:43	300	89	3.0	#152 ChaMPlane	2	
0072.IPHAS_B94	600	2:53	03:32:34.8	50:23:46	300	89	3.0	#157 IPHAS	2	
0073.COMP	12	3:03	03:32:34.8	50:23:46	300	89	3.0	#157 IPHAS	2	
0074.IPHAS_B95	600	3:05	03:32:35.6	52:24:18	300	89	3.0	#157 IPHAS	2	
0075.COMP	12	3:16	03:32:35.6	52:24:18	300	89	3.0	#157 IPHAS	2	
0076.IPHAS_B96	660	3:19	03:33:10.8	52:37:54	300	90	3.0	#157 IPHAS	2	
0077.COMP	12	3:31	03:33:10.8	52:37:54	300	90	3.0	#157 IPHAS	2	
0078.IPHAS_B97	420	3:33	03:33:28.9	54:12:32	300	90	3.0	#157 IPHAS	2	
0079.COMP	12	3:41	03:33:28.9	54:12:32	300	90	3.0	#157 IPHAS	2	
0080.2M04503126p1054471	600	3:46	04:50:31.2	+10:54:47	300	90	3.0	#141 Mapping t	2	
0081.COMP	12	3:56	04:50:31.2	+10:54:47	300	90	3.0	#141 Mapping t	2	
0082.2M04510820p2448189	480	3:59	04:51:08.2	+24:48:19	300	90	3.0	#141 Mapping t	2	
0083.COMP	12	4:08	04:51:08.2	+24:48:19	300	90	3.0	#141 Mapping t	2	
0084.2M04520143p1305596	480	4:12	04:52:01.4	+13:05:59	300	90	3.0	#141 Mapping t	2	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0085.COMP	12	4:20	04:52:01.4	+13:05:59	300	90	3.0	#141 Mapping t	2	
0086.2M04530345p1026268	600	4:24	04:53:03.4	+10:26:27	300	90	3.0	#141 Mapping t	2	
0087.COMP	12	4:34	04:53:03.4	+10:26:27	300	90	3.0	#141 Mapping t	2	
0088.2M04530425p1313140	1200	4:36	04:53:04.2	+13:13:13	300	90	3.0	#141 Mapping t	2	
0089.COMP	12	4:56	04:53:04.2	+13:13:13	300	90	3.0	#141 Mapping t	2	
0090.2M04562292p1337032	600	4:59	04:56:22.9	+13:37:03	300	90	3.0	#141 Mapping t	2	
0091.COMP	12	5:09	04:56:22.9	+13:37:03	300	90	3.0	#141 Mapping t	2	
0092.2M04564295p6044123	600	5:12	04:56:42.9	+60:44:12	300	90	3.0	#141 Mapping t	2	
0093.COMP	12	5:23	04:56:42.9	+60:44:12	300	90	3.0	#141 Mapping t	2	
0094.HD52071	5	5:28	06:57:51	+27:13:42	300	90	3.0	#57 Velocity S	2	
0095.COMP	12	5:29	06:57:51	+27:13:42	300	90	3.0	#57 Velocity S	2	
0096.XS02553B2_001	900	5:34	6:49:23.9	-4:35:52	300	90	3.0	#152 ChaMPlane	2	
0097.COMP	12	5:49	6:49:23.9	-4:35:52	300	90	3.0	#152 ChaMPlane	2	
0098.XS02553B0_005	720	6:04	6:49:10.1	-4:42:32	300	100	3.0	#152 ChaMPlane	2	
0099.COMP	12	6:16	6:49:10.1	-4:42:32	300	100	3.0	#152 ChaMPlane	2	
0100.XS02553B1_004	780	6:19	6:48:37.0	-4:35:27	300	90	3.0	#152 ChaMPlane	2	
0101.COMP	12	6:32	6:48:37.0	-4:35:27	300	90	3.0	#152 ChaMPlane	2	
0102.sn2005am	480	6:55	09:16:12.4	-16:18:16	300	16	3.0	#2 SN Observat	2	row=82
0103.COMP	12	7:04	09:16:12.4	-16:18:16	300	16	3.0	#2 SN Observat	2	
0104.HD84937	13	7:12	09:48:56.1	13:44:39	300	26	3.0	#56 Spectropho	2	



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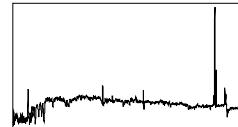
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0105.COMP	12	7:13	09:48:56.1	13:44:39	300	26	3.0	#56 Spectropho	2	
0106.Feige34	120	7:20	10:36:41.2	43:21:50	300	2	3.0	#56 Spectropho	2	
0107.COMP	12	7:23	10:36:41.2	43:21:50	300	2	3.0	#56 Spectropho	2	
0108.N3227	150	7:27	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0109.N3227	150	7:29	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0110.COMP	12	7:32	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0111.N4051	150	7:35	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0112.N4051	150	7:37	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0113.N4051	150	7:40	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0114.COMP	12	7:44	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0115.N4151	30	7:46	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0116.N4151	30	7:47	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0117.COMP	12	7:48	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0118.sn2005o	1800	7:55	10:42:18.3	-00:22:41	300	20	3.0	#2 SN Observat	2	
0119.COMP	12	8:26	10:42:18.3	-00:22:41	300	20	3.0	#2 SN Observat	2	
0120.sn2004gt	1200	8:32	12:01:50.3	-18:52:12	300	-3	3.0	#2 SN Observat	2	
0121.COMP	12	8:52	12:01:50.3	-18:52:12	300	-3	3.0	#2 SN Observat	2	
0122.1631_02	720	9:06	12:52:59.4	-15:46:33	300	90	3.0	#64 Cluster an	2	
0123.COMP	12	9:19	12:52:59.4	-15:46:33	300	90	3.0	#64 Cluster an	2	
0124.1631_03	720	9:22	12:50:43.6	-15:23:29	300	90	3.0	#64 Cluster an	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0125.COMP	12	9:34	12:50:43.6	-15:23:29	300	90	3.0	#64 Cluster an	2	
0126.1631_04	780	9:36	12:50:57.0	-15:14:52	300	90	3.0	#64 Cluster an	2	
0127.COMP	12	9:50	12:50:57.0	-15:14:52	300	90	3.0	#64 Cluster an	2	
0128.hs2287	480	10:16	12:27:55.4	54:05:20	600	90	2.0	#122 Halo Star	4	
0129.COMP	10	10:25	12:27:55.4	54:05:20	600	90	2.0	#122 Halo Star	4	
0130.hs2288	300	10:30	12:27:56.0	79:30:40	600	90	2.0	#122 Halo Star	4	
0131.COMP	10	10:36	12:27:56.0	79:30:40	600	90	2.0	#122 Halo Star	4	
0132.hs2289	426	10:41	12:28:34.1	79:04:19	600	60	2.0	#122 Halo Star	4	
0133.COMP	10	10:48	12:28:34.1	79:04:19	600	60	2.0	#122 Halo Star	4	
0134.hs2290	360	10:55	12:28:43.5	28:20:36	600	90	2.0	#122 Halo Star	4	
0135.COMP	10	11:02	12:28:43.5	28:20:36	600	90	2.0	#122 Halo Star	4	
0136.hs2291	600	11:05	12:28:57.9	65:29:48	600	80	2.0	#122 Halo Star	4	
0137.COMP	10	11:15	12:28:57.9	65:29:48	600	80	2.0	#122 Halo Star	4	
0138.hs2292	630	11:17	12:29:33.1	44:51:19	600	90	2.0	#122 Halo Star	4	
0139.COMP	10	11:28	12:29:33.1	44:51:19	600	90	2.0	#122 Halo Star	4	
0140.hs2293	180	11:30	12:30:14.9	46:37:20	600	90	2.0	#122 Halo Star	4	
0141.COMP	10	11:33	12:30:14.9	46:37:20	600	90	2.0	#122 Halo Star	4	
0142.BDp332642	100	11:36	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0143.COMP	10	11:38	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0144-0153.FLAT	24	11:44	15:50:03.0	33:05:49	600	90	2.0	#64 Cluster an	4	



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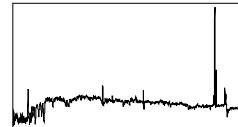
UT Date 2005-03-03 Observers H HaoColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0154.N5548	150	12:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0155.N5548	150	12:03	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0156.N5548	150	12:06	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0157.COMP	12	12:09	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0158.2052_05	780	12:13	15:15:24.8	+06:26:54	300	90	3.0	#64 Cluster an	2	
0159.COMP	12	12:27	15:15:24.8	+06:26:54	300	90	3.0	#64 Cluster an	2	
0160.2052_06	600	12:30	15:15:18.1	+06:32:57	300	90	3.0	#64 Cluster an	2	
0161.COMP	12	12:41	15:15:18.1	+06:32:57	300	90	3.0	#64 Cluster an	2	
0162.2052_07	300	12:42	15:19:22.0	+07:05:11	300	90	3.0	#64 Cluster an	2	
0163.COMP	12	12:47	15:19:22.0	+07:05:11	300	90	3.0	#64 Cluster an	2	
0164-0173.BIAS	0	12:51	15:19:22.0	+07:05:11	300	90	3.0	#64 Cluster an	4	
0174-0183.FLAT	8	12:54	15:19:22.0	+07:05:11	300	90	3.0	#64 Cluster an	4	
0184-0193.BIAS	0	12:58	15:19:22.0	+07:05:11	300	90	3.0	#64 Cluster an	2	
0194-0213.FLAT	16	13:08	15:19:22.0	+07:05:11	300	90	3.0	#64 Cluster an	2	
0214-0223.DARK	900	15:27	15:19:22.0	+07:05:11	300	90	3.0	#64 Cluster an	2	



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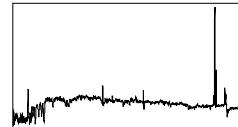
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	23:21	02:59:21.4	+31:28:32	300	90	3.0	#64 Cluster an	4	
0002.DARK	900	23:36	03:14:28.2	+31:28:37	300	90	3.0	#64 Cluster an	4	
0003.DARK	900	23:51	03:29:38.6	+31:28:41	300	90	3.0	#64 Cluster an	4	
0004.DARK	900	0:06	03:44:48.9	+31:28:46	300	90	3.0	#64 Cluster an	4	
0005.DARK	900	0:21	03:59:55.9	+31:28:51	300	90	3.0	#64 Cluster an	4	
0006.DARK	900	0:36	04:15:06.2	+31:28:57	300	90	3.0	#64 Cluster an	4	
0007.DARK	900	0:52	04:30:13.0	+31:29:03	300	90	3.0	#64 Cluster an	4	
0008-0017.BIAS	0	1:08	04:31:39.8	+31:29:03	300	90	3.0	#64 Cluster an	4	
0018-0026.FLAT	8	1:11	04:34:46.7	+31:29:04	300	90	3.0	#64 Cluster an	4	
0027.FLAT	8	1:11	04:35:03.7	+31:29:05	300	90	3.0	#64 Cluster an	4	
0028-0032.sky	2	1:34	04:58:08.4	+31:29:14	300	90	3.0	#57 Velocity S	4	
0033.COMP	5	1:35	04:58:51.4	+31:29:14	300	90	3.0	#57 Velocity S	4	
0034-0043.BIAS	0	2:25	2:36:08.8	11:25:58	300	90	3.0	#57 Velocity S	2	
0044-0063.FLAT	16	2:41	02:13:37.4	-00:43:05	300	90	3.0	#57 Velocity S	2	
0064.G191B2B	150	3:11	05:01:31.5	52:45:52	300	-45	3.0	#56 Spectropho	2	
0065.COMP	12	3:14	05:01:31.5	52:45:52	300	-45	3.0	#56 Spectropho	2	
0066.Hiltner600	60	3:20	06:42:37.2	02:11:25	300	-2	3.0	#56 Spectropho	2	
0067.COMP	12	3:21	06:42:37.2	02:11:25	300	-2	3.0	#56 Spectropho	2	
0068.sn2004gq	1200	3:44	05:12:04.8	-15:40:54	300	28	3.0	#2 SN Observat	2	row=80
0069.COMP	12	4:04	05:12:04.8	-15:40:54	300	28	3.0	#2 SN Observat	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0070.IPHAS_B129	420	4:13	05:55:38.0	25:51:33	300	90	3.0	#157 IPHAS	2	
0071.COMP	12	4:20	05:55:38.0	25:51:33	300	90	3.0	#157 IPHAS	2	
0072.IPHAS_B130	480	4:23	05:55:52.5	25:17:14	300	90	3.0	#157 IPHAS	2	
0073.COMP	12	4:32	05:55:52.5	25:17:14	300	90	3.0	#157 IPHAS	2	
0074.IPHAS_B131	420	4:33	05:55:58.8	25:48:46	300	90	3.0	#157 IPHAS	2	
0075.COMP	12	4:41	05:55:58.8	25:48:46	300	90	3.0	#157 IPHAS	2	
0076.IPHAS_B132	300	4:42	05:57:42.6	27:19:29	300	90	3.0	#157 IPHAS	2	
0077.COMP	12	4:48	05:57:42.6	27:19:29	300	90	3.0	#157 IPHAS	2	
0078.IPHAS_B133	300	4:50	05:58:31.4	26:42:36	300	90	3.0	#157 IPHAS	2	
0079.COMP	12	4:56	05:58:31.4	26:42:36	300	90	3.0	#157 IPHAS	2	
0080.2M04574901p2333503	900	5:00	04:57:49.0	+23:33:50	300	90	3.0	#141 Mapping t	2	
0081.COMP	12	5:15	04:57:49.0	+23:33:50	300	90	3.0	#141 Mapping t	2	
0082.2M04585919p1534408	720	5:18	04:58:59.2	+15:34:40	300	90	3.0	#141 Mapping t	2	
0083.COMP	12	5:31	04:58:59.2	+15:34:40	300	90	3.0	#141 Mapping t	2	
0084.2M05261836p0622571	720	5:33	05:26:18.3	+06:22:57	300	90	3.0	#141 Mapping t	2	
0085.COMP	12	5:45	05:26:18.3	+06:22:57	300	90	3.0	#141 Mapping t	2	
0086.2M05340505p0513366	660	5:49	05:34:05.0	+05:13:36	300	90	3.0	#141 Mapping t	2	
0087.COMP	12	6:00	05:34:05.0	+05:13:36	300	90	3.0	#141 Mapping t	2	
0088.XS02553B7_001	480	6:02	6:49:58.6	-4:22:29	300	90	3.0	#152 ChaMPlane	2	
0089.COMP	12	6:10	6:49:58.6	-4:22:29	300	90	3.0	#152 ChaMPlane	2	



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0090.XS02553B3_012	120	6:12	6:49:4.7	-4:29:20	300	90	3.0	#152 ChaMPlane	2	
0091.XS02553B3_012	120	6:14	6:49:4.7	-4:29:20	300	90	3.0	#152 ChaMPlane	2	
0092.XS02553B3_012	120	6:16	6:49:4.7	-4:29:20	300	90	3.0	#152 ChaMPlane	2	
0093.COMP	12	6:19	6:49:4.7	-4:29:20	300	90	3.0	#152 ChaMPlane	2	
0094.XS02553B0_008	120	6:21	6:48:57.6	-4:41:53	300	90	3.0	#152 ChaMPlane	2	
0095.XS02553B0_008	120	6:23	6:48:57.6	-4:41:53	300	90	3.0	#152 ChaMPlane	2	
0096.XS02553B0_008	120	6:25	6:48:57.6	-4:41:53	300	90	3.0	#152 ChaMPlane	2	
0097.COMP	12	6:28	6:48:57.6	-4:41:53	300	90	3.0	#152 ChaMPlane	2	
0098.sn2005m	1200	7:14	09:37:32.3	+23:12:02	300	53	3.0	#2 SN Observat	2	row=79
0099.COMP	12	7:34	09:37:32.3	+23:12:02	300	53	3.0	#2 SN Observat	2	
0100.N3227	150	7:38	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0101.N3227	150	7:41	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0102.COMP	12	7:44	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0103.N3377	180	7:47	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	2	
0104.COMP	12	7:51	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	2	
0105.N4051	150	8:19	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0106.N4051	150	8:21	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0107.N4051	150	8:24	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0108.COMP	12	8:27	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0109.1631_05	780	8:30	12:52:30.1	-15:10:29	300	90	3.0	#64 Cluster an	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0110.COMP	12	8:45	12:52:30.1	-15:10:29	300	90	3.0	#64 Cluster an	2	
0111.sn2005-eso506-g011	1200	8:55	12:28:27.3	-24:38:024	300	20	3.0	#2 SN Observat	2	Thick cloud
0112.COMP	12	9:16	12:28:27.3	-24:38:024	300	20	3.0	#2 SN Observat	2	
0113.1631_06	720	9:24	12:52:18.7	-15:06:17	300	100	3.0	#64 Cluster an	2	
0114.COMP	12	9:37	12:52:18.7	-15:06:17	300	100	3.0	#64 Cluster an	2	
0115.MRK279	120	9:49	13:51:53.6	69:33:13	300	91	3.0	#6 AGN Monitor	2	
0116.MRK279	120	9:51	13:51:53.6	69:33:13	300	91	3.0	#6 AGN Monitor	2	
0117.COMP	12	9:54	13:51:53.6	69:33:13	300	91	3.0	#6 AGN Monitor	2	
0118.N5548	150	10:01	14:17:59.6	+25:08:12	300	91	3.0	#6 AGN Monitor	2	
0119.N5548	150	10:04	14:17:59.6	+25:08:12	300	91	3.0	#6 AGN Monitor	2	
0120.N5548	150	10:06	14:17:59.6	+25:08:12	300	91	3.0	#6 AGN Monitor	2	
0121.COMP	12	10:09	14:17:59.6	+25:08:12	300	91	3.0	#6 AGN Monitor	2	
0122.hs2294	600	10:27	12:30:33.3	30:59:58	600	91	2.0	#122 Halo Star	4	
0123.COMP	12	10:37	12:30:33.3	30:59:58	600	91	2.0	#122 Halo Star	4	
0124.hs2295	360	10:41	12:30:38.3	45:53:06	600	91	2.0	#122 Halo Star	4	
0125.COMP	12	10:47	12:30:38.3	45:53:06	600	91	2.0	#122 Halo Star	4	
0126.hs2296	456	10:49	12:30:58.8	54:22:23	600	91	2.0	#122 Halo Star	4	
0127.COMP	12	10:57	12:30:58.8	54:22:23	600	91	2.0	#122 Halo Star	4	
0128.hs2297	582	10:58	12:31:10.4	37:19:08	600	91	2.0	#122 Halo Star	4	
0129.COMP	12	11:08	12:31:10.4	37:19:08	600	91	2.0	#122 Halo Star	4	



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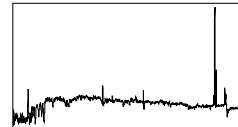
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0130.hs2298	606	11:10	12:31:20.9	38:56:08	600	91	2.0	#122 Halo Star	4	
0131.COMP	12	11:20	12:31:20.9	38:56:08	600	91	2.0	#122 Halo Star	4	
0132.hs2299	606	11:22	12:32:07.6	56:31:34	600	91	2.0	#122 Halo Star	4	weak exposure
0133.COMP	12	11:32	12:32:07.6	56:31:34	600	91	2.0	#122 Halo Star	4	
0134.hs2299	780	11:34	12:32:07.6	56:31:34	600	91	2.0	#122 Halo Star	4	weak exposure
0135.COMP	12	11:47	12:32:07.6	56:31:34	600	91	2.0	#122 Halo Star	4	
0136.BDp332642	150	11:50	15:50:03.0	33:05:49	600	91	2.0	#56 Spectropho	4	weak exposure
0137.COMP	12	11:53	15:50:03.0	33:05:49	600	91	2.0	#56 Spectropho	4	
0138-0147.FLAT	24	11:59	15:50:03.0	33:05:49	600	91	2.0	#122 Halo Star	4	
0148.152030-01100	900	12:19	15:23:01.8	-01:20:51	300	90	3.0	#84f Updated Z	2	
0149.COMP	12	12:35	15:23:01.8	-01:20:51	300	90	3.0	#84f Updated Z	2	
0150-0159.BIAS	0	12:39	15:23:01.8	-01:20:51	300	90	3.0	none	4	
0160-0169.FLAT	8	12:43	15:23:01.8	-01:20:51	300	90	3.0	none	4	
0170-0179.BIAS	0	12:47	15:23:01.8	-01:20:51	300	90	3.0	none	2	
0180-0199.FLAT	16	12:56	15:23:01.8	-01:20:51	300	90	3.0	none	2	
0200-0209.DARK	900	15:19	15:23:01.8	-01:20:51	300	90	3.0	none	2	
0210-0261.BIAS	0	18:55	15:23:01.8	-01:20:51	300	90	3.0	none	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.DARK	900	23:01	02:43:22.9	+31:28:28	300	90	3.0	#57 Velocity S	4	
0002.DARK	900	23:16	02:58:29.7	+31:28:32	300	90	3.0	#57 Velocity S	4	
0003.DARK	900	23:31	03:13:40.4	+31:28:36	300	90	3.0	#57 Velocity S	4	
0004.DARK	900	23:46	03:28:47.1	+31:28:41	300	90	3.0	#57 Velocity S	4	
0005.DARK	900	0:01	03:43:57.6	+31:28:46	300	90	3.0	#57 Velocity S	4	
0006.DARK	900	0:17	03:59:08.1	+31:28:51	300	90	3.0	#57 Velocity S	4	
0007.DARK	900	0:32	04:14:14.8	+31:28:57	300	90	3.0	#57 Velocity S	4	
0008.DARK	900	0:47	04:29:25.1	+31:29:02	300	90	3.0	#57 Velocity S	4	
0009.DARK	900	1:02	04:44:32.0	+31:29:08	300	90	3.0	#57 Velocity S	4	
0010.DARK	900	1:17	04:59:42.6	+31:29:15	300	90	3.0	#57 Velocity S	4	
0011-0020.BIAS	0	2:06	05:34:02.8	+31:29:29	300	90	3.0	#57 Velocity S	4	
0021-0026.FLAT	8	2:20	05:47:29.0	+31:29:35	300	90	3.0	#57 Velocity S	4	
0027-0030.FLAT	8	2:21	05:48:25.9	+31:29:36	300	90	3.0	#57 Velocity S	4	
0031-0039.BIAS	0	2:33	06:00:56.4	+31:29:41	300	90	3.0	#57 Velocity S	2	
0040.BIAS	0	2:33	06:01:09.3	+31:29:42	300	90	3.0	#57 Velocity S	2	
0041-0042.FLAT	16	2:37	06:05:16.6	+31:29:43	300	90	3.0	#57 Velocity S	2	
0043-0046.FLAT	16	2:39	06:07:09.5	+31:29:44	300	90	3.0	#57 Velocity S	2	
0047-0051.FLAT	16	2:41	06:09:32.4	+31:29:45	300	90	3.0	#57 Velocity S	2	
0052-0055.FLAT	16	2:43	06:11:25.3	+31:29:46	300	90	3.0	#57 Velocity S	2	
0056-0060.FLAT	16	2:46	06:13:48.1	+31:29:47	300	90	3.0	#57 Velocity S	2	



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UT Date 2005-03-05 Observers H HaoColl. Focus 1015 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>
0061-0070.DARK	900	14:42	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	



WHIPPLE OBSERVATORY

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UT Date 2005-03-06 Observers H Hao

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	23:56	03:42:46.0	+31:28:46	300	90	3.0	#56 Spectropho	4	
0002.DARK	900	0:11	03:57:52.8	+31:28:51	300	90	3.0	#56 Spectropho	4	
0003.DARK	900	0:27	04:13:03.2	+31:28:56	300	90	3.0	#56 Spectropho	4	
0004.DARK	900	0:42	04:28:13.7	+31:29:02	300	90	3.0	#56 Spectropho	4	
0005.DARK	900	0:57	04:43:20.5	+31:29:08	300	90	3.0	#56 Spectropho	4	
0006.DARK	900	1:12	04:58:31.1	+31:29:14	300	90	3.0	#56 Spectropho	4	
0007.DARK	900	1:27	05:13:37.9	+31:29:21	300	90	3.0	#56 Spectropho	4	
0008.DARK	900	1:42	05:28:48.2	+31:29:27	300	90	3.0	#56 Spectropho	4	
0009.DARK	900	1:57	05:43:58.6	+31:29:34	300	90	3.0	#56 Spectropho	4	
0010.DARK	900	2:12	05:59:05.6	+31:29:41	300	90	3.0	#56 Spectropho	4	
0011-0020.BIAS	0	2:29	06:00:32.3	+31:29:41	300	90	3.0	#57 Velocity S	4	
0021-0022.FLAT	8	2:31	06:03:08.0	+31:29:42	300	90	3.0	#57 Velocity S	4	
0023-0030.FLAT	8	2:33	06:05:05.2	+31:29:43	300	90	3.0	#57 Velocity S	4	
0031-0038.BIAS	0	2:38	06:09:42.8	+31:29:45	300	90	3.0	#57 Velocity S	2	
0039-0040.BIAS	0	2:38	06:10:08.9	+31:29:46	300	90	3.0	#57 Velocity S	2	
0041-0044.FLAT	16	2:42	06:14:03.3	+31:29:47	300	90	3.0	#57 Velocity S	2	
0045-0048.FLAT	16	2:44	06:15:56.2	+31:29:48	300	90	3.0	#57 Velocity S	2	
0049-0053.FLAT	16	2:46	06:18:19.1	+31:29:49	300	90	3.0	#57 Velocity S	2	
0054-0057.FLAT	16	2:48	06:20:12.1	+31:29:50	300	90	3.0	#57 Velocity S	2	
0058-0060.FLAT	16	2:50	06:21:38.6	+31:29:51	300	90	3.0	#57 Velocity S	2	



WHIPPLE OBSERVATORY

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UT Date 2005-03-06 Observers H Hao

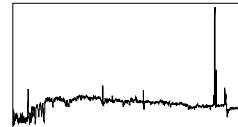
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0061.DARK	900	11:19	15:07:12.1	+31:31:24	300	90	3.0	#57 Velocity S	2	
0062.DARK	900	11:34	15:22:27.6	+31:31:19	300	90	3.0	#57 Velocity S	2	
0063.DARK	900	11:49	15:37:39.4	+31:31:15	300	90	3.0	#57 Velocity S	2	
0064.DARK	900	12:04	15:52:55.1	+31:31:10	300	90	3.0	#57 Velocity S	2	
0065.DARK	900	12:20	16:08:10.6	+31:31:04	300	90	3.0	#57 Velocity S	2	
0066.DARK	900	12:35	16:23:26.0	+31:30:58	300	90	3.0	#57 Velocity S	2	
0067.DARK	900	12:50	16:38:41.5	+31:30:52	300	90	3.0	#57 Velocity S	2	
0068.DARK	900	13:05	16:53:56.8	+31:30:46	300	90	3.0	#57 Velocity S	2	
0069.DARK	900	13:20	17:09:12.6	+31:30:40	300	90	3.0	#57 Velocity S	2	
0070.DARK	900	13:36	17:24:24.6	+31:30:33	300	90	3.0	#57 Velocity S	2	



WHIPPLE OBSERVATORY

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UT Date 2005-03-07 Observers H Hao

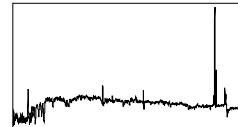
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.DARK	900	0:00	03:50:01.2	+31:28:48	300	90	3.0	#57 Velocity S	4	
0002.DARK	900	0:15	04:05:11.5	+31:28:53	300	90	3.0	#57 Velocity S	4	
0003.DARK	900	0:30	04:20:18.3	+31:28:59	300	90	3.0	#57 Velocity S	4	
0004.DARK	900	0:45	04:35:28.7	+31:29:05	300	90	3.0	#57 Velocity S	4	
0005.DARK	900	1:00	04:50:36.0	+31:29:11	300	90	3.0	#57 Velocity S	4	
0006.DARK	900	1:15	05:05:46.6	+31:29:17	300	90	3.0	#57 Velocity S	4	
0007.DARK	900	1:30	05:20:53.6	+31:29:24	300	90	3.0	#57 Velocity S	4	
0008.DARK	900	1:45	05:36:04.1	+31:29:30	300	90	3.0	#57 Velocity S	4	
0009.DARK	900	2:01	05:51:14.5	+31:29:37	300	90	3.0	#57 Velocity S	4	
0010.DARK	900	2:16	06:06:21.5	+31:29:44	300	90	3.0	#57 Velocity S	4	
0011-0020.BIAS	0	2:40	06:16:03.1	+31:29:48	300	90	3.0	#57 Velocity S	4	
0021-0025.FLAT	8	2:47	06:22:46.0	+31:29:51	300	90	3.0	#57 Velocity S	4	
0026-0030.FLAT	8	2:48	06:23:59.6	+31:29:52	300	90	3.0	#57 Velocity S	4	
0031-0038.BIAS	0	2:51	06:27:10.8	+31:29:53	300	90	3.0	#57 Velocity S	2	
0039-0040.BIAS	0	2:52	06:27:36.7	+31:29:54	300	90	3.0	#57 Velocity S	2	
0041-0044.FLAT	16	2:55	06:31:17.4	+31:29:55	300	90	3.0	#57 Velocity S	2	
0045-0049.FLAT	16	2:58	06:33:36.8	+31:29:56	300	90	3.0	#57 Velocity S	2	
0050-0054.FLAT	16	3:00	06:35:59.6	+31:29:57	300	90	3.0	#57 Velocity S	2	
0055-0058.FLAT	16	3:02	06:37:52.5	+31:29:58	300	90	3.0	#57 Velocity S	2	
0059-0060.FLAT	16	3:03	06:38:48.9	+31:29:59	300	90	3.0	#57 Velocity S	2	



WHIPPLE OBSERVATORY

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UT Date 2005-03-07 Observers H Hao

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0061.N3227	150	7:53	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0062.N3227	150	7:55	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0063.COMP	12	7:59	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0064.MRK421	300	8:14	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0065.MRK421	300	8:19	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0066.MRK421	300	8:24	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0067.COMP	12	8:30	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0068.HD84937	10	8:34	09:48:56.1	13:44:39	300	54	3.0	#56 Spectropho	2	
0069.COMP	12	8:35	09:48:56.1	13:44:39	300	54	3.0	#56 Spectropho	2	
0070.Feige34	120	8:39	10:36:41.2	43:21:50	300	-66	3.0	#56 Spectropho	2	
0071.COMP	12	8:42	10:36:41.2	43:21:50	300	-66	3.0	#56 Spectropho	2	
0072.N4051	150	8:45	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0073.N4051	150	8:48	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0074.N4051	150	8:50	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0075.COMP	12	8:53	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0076.N4151	30	8:55	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0077.N4151	30	8:56	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0078.COMP	12	8:57	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0079.sn2004gt	1200	9:03	12:01:50.3	-18:52:12	300	10	3.0	#2 SN Observat	2	
0080.COMP	12	9:23	12:01:50.3	-18:52:12	300	10	3.0	#2 SN Observat	2	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0081.sn2004gk	1200	9:29	12:25:33.2	+12:15:39	300	23	3.0	#2 SN Observat	2	
0082.COMP	12	9:49	12:25:33.2	+12:15:39	300	23	3.0	#2 SN Observat	2	
0083.N4486B	300	9:53	12:30:32	+12:29:25	300	90	3.0	#57 Velocity S	2	
0084.COMP	12	9:59	12:30:32	+12:29:25	300	90	3.0	#57 Velocity S	2	
0085.MRK279	120	10:02	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	2	
0086.MRK279	120	10:04	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	2	
0087.COMP	12	10:07	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	2	
0088.N5548	150	10:09	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0089.N5548	150	10:11	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0090.N5548	150	10:14	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0091.COMP	12	10:17	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0092.1631_07	780	10:20	12:52:21.2	-15:05:29	300	90	3.0	#64 Cluster an	2	
0093.COMP	12	10:34	12:52:21.2	-15:05:29	300	90	3.0	#64 Cluster an	2	
0094.1631_08	780	10:36	12:51:09.5	-15:03:34	300	90	3.0	#64 Cluster an	2	
0095.COMP	12	10:49	12:51:09.5	-15:03:34	300	90	3.0	#64 Cluster an	2	
0096.133106-02290	720	10:53	13:33:40.6	-02:44:32	300	90	3.0	#84f Updated Z	2	
0097.COMP	12	11:06	13:33:40.6	-02:44:32	300	90	3.0	#84f Updated Z	2	
0098.133224+61590	720	11:09	13:34:03.1	+61:43:37	300	90	3.0	#84f Updated Z	2	
0099.COMP	12	11:21	13:34:03.1	+61:43:37	300	90	3.0	#84f Updated Z	2	
0100.140254-00350	600	11:24	14:05:25.2	-00:48:41	300	90	3.0	#84f Updated Z	2	



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UT Date 2005-03-07 Observers H Hao

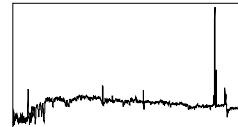
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0101.COMP	12	11:35	14:05:25.2	-00:48:41	300	90	3.0	#84f Updated Z	2	
0102.140418-01180	480	11:37	14:06:51.7	-01:32:30	300	90	3.0	#84f Updated Z	2	
0103.COMP	12	11:45	14:06:51.7	-01:32:30	300	90	3.0	#84f Updated Z	2	
0104.2052_01	720	11:48	15:16:30.1	+06:14:09	300	90	3.0	#64 Cluster an	2	
0105.COMP	12	12:01	15:16:30.1	+06:14:09	300	90	3.0	#64 Cluster an	2	
0106.152036+08470	540	12:07	15:23:05.4	+08:36:33	300	90	3.0	#84f Updated Z	2	
0107.COMP	12	12:16	15:23:05.4	+08:36:33	300	90	3.0	#84f Updated Z	2	
0108.152036-03200	720	12:19	15:23:10.7	-03:29:57	300	90	3.0	#84f Updated Z	2	
0109.COMP	12	12:32	15:23:10.7	-03:29:57	300	90	3.0	#84f Updated Z	2	
0110-0114.sky	2	13:31	15:23:10.7	-03:29:57	300	90	3.0	#57 Velocity S	4	
0115.COMP	5	13:32	15:23:10.7	-03:29:57	300	90	3.0	#57 Velocity S	4	
0116-0125.BIAS	0	13:37	15:23:10.7	-03:29:57	300	90	3.0	#57 Velocity S	4	
0126-0135.FLAT	8	13:40	15:23:10.7	-03:29:57	300	90	3.0	#57 Velocity S	4	
0136-0145.BIAS	0	13:42	15:23:10.7	-03:29:57	300	90	3.0	#57 Velocity S	2	
0146-0165.FLAT	16	13:52	15:23:10.7	-03:29:57	300	90	3.0	#57 Velocity S	2	
0166-0169.DARK	900	14:39	15:23:10.7	-03:29:57	300	90	3.0	#57 Velocity S	2	



WHIPPLE OBSERVATORY

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UT Date 2005-03-08 Observers H Hao

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	22:57	02:51:30.6	+31:28:31	300	90	3.0	#57 Velocity S	4	
0002.DARK	900	23:12	03:06:41.0	+31:28:35	300	90	3.0	#57 Velocity S	4	
0003.DARK	900	23:28	03:21:47.8	+31:28:39	300	90	3.0	#57 Velocity S	4	
0004.DARK	900	23:43	03:36:58.4	+31:28:44	300	90	3.0	#57 Velocity S	4	
0005.DARK	900	23:58	03:52:05.2	+31:28:49	300	90	3.0	#57 Velocity S	4	
0006.DARK	900	0:13	04:07:15.8	+31:28:54	300	90	3.0	#57 Velocity S	4	
0007.DARK	900	0:28	04:22:22.8	+31:29:00	300	90	3.0	#57 Velocity S	4	
0008.DARK	900	0:43	04:37:33.3	+31:29:05	300	90	3.0	#57 Velocity S	4	
0009.DARK	900	0:58	04:52:44.0	+31:29:12	300	90	3.0	#57 Velocity S	4	
0010.BIAS	0	1:16	04:55:07.8	+31:29:12	300	90	3.0	#57 Velocity S	4	
0011-0019.BIAS	0	1:17	04:56:08.7	+31:29:13	300	90	3.0	#57 Velocity S	4	
0020-0022.FLAT	8	1:18	04:57:30.2	+31:29:13	300	90	3.0	#57 Velocity S	4	
0023-0029.FLAT	8	1:20	04:59:10.6	+31:29:14	300	90	3.0	#57 Velocity S	4	
0030-0034.sky	2	1:38	05:18:02.1	+31:29:22	300	90	3.0	#57 Velocity S	4	
0035.COMP	5	1:39	05:18:32.6	+31:29:23	300	90	3.0	#57 Velocity S	4	
0036-0038.BIAS	0	1:41	05:20:38.1	+31:29:23	300	90	3.0	#57 Velocity S	2	
0039-0045.BIAS	0	1:43	05:22:05.2	+31:29:24	300	90	3.0	#57 Velocity S	2	
0046-0050.FLAT	16	1:45	05:25:02.4	+31:29:25	300	90	3.0	#57 Velocity S	2	
0051-0055.FLAT	16	1:48	05:27:21.8	+31:29:26	300	90	3.0	#57 Velocity S	2	
0056-0060.FLAT	16	1:50	05:29:44.6	+31:29:27	300	90	3.0	#57 Velocity S	2	



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UT Date 2005-03-08 Observers H Hao

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0061-0065.FLAT	16	1:52	05:32:07.5	+31:29:28	300	90	3.0	#57 Velocity S	2	
0066.G191B2B	150	2:22	05:01:31.5	52:45:52	300	-30	3.0	#56 Spectropho	2	
0067.COMP	12	2:25	05:01:31.5	52:45:52	300	-30	3.0	#56 Spectropho	2	
0068.sn2005-n1599	1200	2:31	04:31:38.8	-04:35:06	300	31	3.0	#2 SN Observat	2	row=77
0069.COMP	12	2:52	04:31:38.8	-04:35:06	300	31	3.0	#2 SN Observat	2	
0070.Hiltner600	60	2:56	06:42:37.2	02:11:25	300	-4	3.0	#56 Spectropho	2	
0071.COMP	12	2:58	06:42:37.2	02:11:25	300	-4	3.0	#56 Spectropho	2	
0072.2M04371588p2504027	720	3:03	04:37:15.8	+25:04:02	300	85	3.0	#141 Mapping t	2	
0073.COMP	12	3:16	04:37:15.8	+25:04:02	300	85	3.0	#141 Mapping t	2	
0074.2M04372528p1245084	720	3:18	04:37:25.2	+12:45:08	300	90	3.0	#141 Mapping t	2	
0075.COMP	12	3:31	04:37:25.2	+12:45:08	300	90	3.0	#141 Mapping t	2	
0076.2M04372915p2125009	720	3:33	04:37:29.1	+21:25:00	300	90	3.0	#141 Mapping t	2	
0077.COMP	12	3:45	04:37:29.1	+21:25:00	300	90	3.0	#141 Mapping t	2	
0078.2M04373580p0144543	600	3:48	04:37:35.7	+01:44:54	300	90	3.0	#141 Mapping t	2	
0079.COMP	12	3:59	04:37:35.7	+01:44:54	300	90	3.0	#141 Mapping t	2	
0080.XS02553B3_006	780	4:09	6:49:14.0	-4:30:57	300	90	3.0	#152 ChaMPlane	2	
0081.COMP	12	4:22	6:49:14.0	-4:30:57	300	90	3.0	#152 ChaMPlane	2	
0082.2M08311018+0936194	480	4:25	8:31:10.1	+09:36:19	300	90	3.0	#141 Mapping t	2	
0083.COMP	12	4:33	8:31:10.1	+09:36:19	300	90	3.0	#141 Mapping t	2	
0084.2M08311919+3626166	480	4:37	8:31:19.1	+36:26:16	300	90	3.0	#141 Mapping t	2	



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UT Date 2005-03-08 Observers H Hao

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0085.COMP	12	4:45	8:31:19.1	+36:26:16	300	90	3.0	#141 Mapping t	2	
0086.2M08330822+0009436	480	4:59	8:33:8.2	+00:09:43	300	95	3.0	#141 Mapping t	2	
0087.COMP	12	5:07	8:33:8.2	+00:09:43	300	95	3.0	#141 Mapping t	2	
0088.2M08334012+0957493	360	5:09	8:33:40.1	+09:57:49	300	90	3.0	#141 Mapping t	2	
0089.COMP	12	5:16	8:33:40.1	+09:57:49	300	90	3.0	#141 Mapping t	2	
0090.2M08354710-0156381	300	5:18	8:35:47.1	-01:56:38	300	90	3.0	#141 Mapping t	2	
0091.COMP	12	5:23	8:35:47.1	-01:56:38	300	90	3.0	#141 Mapping t	2	
0092.2M08365849+5538443	420	5:27	8:36:58.4	+55:38:44	300	105	3.0	#141 Mapping t	2	
0093.COMP	12	5:35	8:36:58.4	+55:38:44	300	105	3.0	#141 Mapping t	2	
0094.sn2005am	480	5:52	09:16:12.4	-16:18:16	300	4	3.0	#2 SN Observat	2	
0095.COMP	12	6:00	09:16:12.4	-16:18:16	300	4	3.0	#2 SN Observat	2	
0096.2M09335306+3024146	420	6:08	9:33:53.0	+30:24:14	300	90	3.0	#141 Mapping t	2	
0097.COMP	12	6:16	9:33:53.0	+30:24:14	300	90	3.0	#141 Mapping t	2	
0098.2M09351203-0446136	300	6:19	9:35:12.0	-04:46:13	300	100	3.0	#141 Mapping t	2	
0099.COMP	12	6:25	9:35:12.0	-04:46:13	300	100	3.0	#141 Mapping t	2	
0100.2M09352903+3459114	240	6:27	9:35:29.0	+34:59:11	300	90	3.0	#141 Mapping t	2	
0101.COMP	12	6:32	9:35:29.0	+34:59:11	300	90	3.0	#141 Mapping t	2	
0102.2M09363403+2326267	360	6:34	9:36:34.0	+23:26:26	300	90	3.0	#141 Mapping t	2	
0103.COMP	12	6:40	9:36:34.0	+23:26:26	300	90	3.0	#141 Mapping t	2	
0104.N3227	150	6:43	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0105.N3227	150	6:45	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0106.COMP	12	6:48	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0107.N3379	180	6:50	10:45:11.4	+12:50:48	300	90	3.0	#57 Velocity S	2	
0108.COMP	12	6:54	10:45:11.4	+12:50:48	300	90	3.0	#57 Velocity S	2	
0109.115348+32180	900	7:20	11:56:23.2	+32:02:20	300	90	3.0	#84f Updated Z	2	
0110.COMP	12	7:36	11:56:23.2	+32:02:20	300	90	3.0	#84f Updated Z	2	
0111.120054+16460	300	7:43	12:03:27.3	+16:29:10	300	90	3.0	#84f Updated Z	2	
0112.COMP	12	7:49	12:03:27.3	+16:29:10	300	90	3.0	#84f Updated Z	2	
0113.120212+31260	300	7:50	12:04:45.2	+31:09:38	300	90	3.0	#84f Updated Z	2	
0114.COMP	12	7:56	12:04:45.2	+31:09:38	300	90	3.0	#84f Updated Z	2	
0115.120242+10550	600	7:58	12:05:12.5	+10:38:26	300	90	3.0	#84f Updated Z	2	
0116.COMP	12	8:09	12:05:12.5	+10:38:26	300	90	3.0	#84f Updated Z	2	
0117.120812+18100	420	8:11	12:10:42.1	+17:53:15	300	90	3.0	#84f Updated Z	2	
0118.COMP	12	8:18	12:10:42.1	+17:53:15	300	90	3.0	#84f Updated Z	2	
0119.120948+29290	600	8:20	12:12:20.7	+29:12:36	300	90	3.0	#84f Updated Z	2	
0120.COMP	12	8:32	12:12:20.7	+29:12:36	300	90	3.0	#84f Updated Z	2	
0121.N4051	150	8:34	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0122.N4051	150	8:36	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0123.N4051	150	8:39	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0124.COMP	12	8:42	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	



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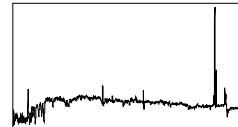
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0125.N5548	150	8:47	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0126.N5548	150	8:50	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0127.N5548	150	8:53	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0128.COMP	12	8:56	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0129.hs2300	408	9:07	12:32:19.3	50:52:41	600	90	2.0	#122 Halo Star	4	
0130.COMP	10	9:14	12:32:19.3	50:52:41	600	90	2.0	#122 Halo Star	4	
0131.hs2301	246	9:17	12:32:24.3	73:11:43	600	90	2.0	#122 Halo Star	4	
0132.COMP	10	9:21	12:32:24.3	73:11:43	600	90	2.0	#122 Halo Star	4	
0133.hs2302	552	9:23	12:32:43.0	57:08:36	600	90	2.0	#122 Halo Star	4	cloud pass by
0134.COMP	10	9:32	12:32:43.0	57:08:36	600	90	2.0	#122 Halo Star	4	
0135.hs2303	246	9:35	12:32:47.2	37:15:32	600	90	2.0	#122 Halo Star	4	
0136.COMP	10	9:39	12:32:47.2	37:15:32	600	90	2.0	#122 Halo Star	4	
0137.hs2304	246	9:42	12:32:47.3	61:05:32	600	90	2.0	#122 Halo Star	4	
0138.COMP	10	9:46	12:32:47.3	61:05:32	600	90	2.0	#122 Halo Star	4	
0139.hs2305	156	9:48	12:32:48.3	21:23:24	600	90	2.0	#122 Halo Star	4	
0140.COMP	10	9:51	12:32:48.3	21:23:24	600	90	2.0	#122 Halo Star	4	
0141.hs2306	360	9:53	12:33:17.1	61:26:57	600	90	2.0	#122 Halo Star	4	
0142.COMP	10	9:59	12:33:17.1	61:26:57	600	90	2.0	#122 Halo Star	4	
0143.hs2307	594	10:00	12:33:35.3	56:16:01	600	90	2.0	#122 Halo Star	4	
0144.COMP	10	10:11	12:33:35.3	56:16:01	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
0145.hs2308	540	10:12	12:33:42.3	57:14:02	600	100	2.0	#122 Halo Star	4	
0146.COMP	10	10:22	12:33:42.3	57:14:02	600	100	2.0	#122 Halo Star	4	
0147.hs2309	372	10:28	12:33:46.3	33:10:57	600	90	2.0	#122 Halo Star	4	
0148.COMP	10	10:35	12:33:46.3	33:10:57	600	90	2.0	#122 Halo Star	4	
0149.hs2310	336	10:39	12:33:55.9	70:57:21	600	90	2.0	#122 Halo Star	4	
0150.COMP	10	10:45	12:33:55.9	70:57:21	600	90	2.0	#122 Halo Star	4	
0151.hs2311	540	10:47	12:34:02.3	37:35:05	600	90	2.0	#122 Halo Star	4	
0152.COMP	10	10:56	12:34:02.3	37:35:05	600	90	2.0	#122 Halo Star	4	
0153.hs2312	234	10:58	12:34:07.1	33:57:00	600	90	2.0	#122 Halo Star	4	
0154.COMP	10	11:02	12:34:07.1	33:57:00	600	90	2.0	#122 Halo Star	4	
0155.hs2313	288	11:04	12:34:15.0	34:14:03	600	90	2.0	#122 Halo Star	4	
0156.COMP	10	11:09	12:34:15.0	34:14:03	600	90	2.0	#122 Halo Star	4	
0157.BDp332642	90	11:11	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0158.COMP	10	11:13	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0159-0168.FLAT	24	11:20	15:50:03.0	33:05:49	600	90	2.0	#6 AGN Monitor	4	
0169.2052_08	600	11:36	15:15:11.6	+07:25:19	300	70	3.0	#64 Cluster an	2	
0170.COMP	12	11:46	15:15:11.6	+07:25:19	300	70	3.0	#64 Cluster an	2	
0171.2052_09	720	11:48	15:18:28.2	+07:39:31	300	90	3.0	#64 Cluster an	2	
0172.COMP	12	12:01	15:18:28.2	+07:39:31	300	90	3.0	#64 Cluster an	2	
0173.2052_10	660	12:02	15:15:59.5	+07:39:53	300	90	3.0	#64 Cluster an	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>
0174.COMP	12	12:14	15:15:59.5	+07:39:53	300	90	3.0	#64 Cluster an	2	
0175.sn2005ao	1200	12:18	17:44:59.0	+61:56:53	300	43	3.0	#2 SN Observat	2	
0176.COMP	12	12:39	17:44:59.0	+61:56:53	300	43	3.0	#2 SN Observat	2	
0177-0186.BIAS	0	12:47	17:44:59.0	+61:56:53	300	90	3.0	#6 AGN Monitor	4	
0187-0196.FLAT	8	12:50	17:44:59.0	+61:56:53	300	90	3.0	#6 AGN Monitor	4	
0197-0206.BIAS	0	12:55	17:44:59.0	+61:56:53	300	90	3.0	#6 AGN Monitor	2	
0207-0226.FLAT	16	13:07	17:44:59.0	+61:56:53	300	90	3.0	#6 AGN Monitor	2	
0227-0236.DARK	900	15:25	17:44:59.0	+61:56:53	300	90	3.0	#6 AGN Monitor	2	



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UT Date 2005-03-09 Observers H Hao

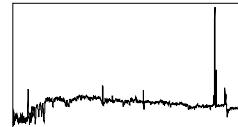
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	22:38	02:35:50.9	+31:28:27	300	90	3.0	#6 AGN Monitor	4	
0002.DARK	900	22:53	02:51:01.3	+31:28:30	300	90	3.0	#6 AGN Monitor	4	
0003.DARK	900	23:08	03:06:08.2	+31:28:34	300	90	3.0	#6 AGN Monitor	4	
0004.DARK	900	23:23	03:21:18.5	+31:28:39	300	90	3.0	#6 AGN Monitor	4	
0005.DARK	900	23:38	03:36:29.1	+31:28:43	300	90	3.0	#6 AGN Monitor	4	
0006.DARK	900	23:53	03:51:35.8	+31:28:49	300	90	3.0	#6 AGN Monitor	4	
0007.DARK	900	0:08	04:06:46.0	+31:28:54	300	90	3.0	#6 AGN Monitor	4	
0008.DARK	900	0:24	04:21:52.8	+31:28:59	300	90	3.0	#6 AGN Monitor	4	
0009.DARK	900	0:39	04:37:03.4	+31:29:05	300	90	3.0	#6 AGN Monitor	4	
0010.DARK	900	0:54	04:52:10.8	+31:29:11	300	90	3.0	#6 AGN Monitor	4	
0011-0020.BIAS	0	1:14	04:56:56.7	+31:29:13	300	90	3.0	#6 AGN Monitor	4	
0021-0028.FLAT	8	1:16	04:59:29.2	+31:29:14	300	90	3.0	#6 AGN Monitor	4	
0029-0030.FLAT	8	1:16	04:59:59.4	+31:29:15	300	90	3.0	#6 AGN Monitor	4	
0031-0035.sky	2	1:39	05:22:36.1	+31:29:24	300	90	3.0	#57 Velocity S	4	
0036.COMP	5	1:40	05:23:23.7	+31:29:25	300	90	3.0	#57 Velocity S	4	
0037-0041.BIAS	0	1:42	05:25:16.6	+31:29:25	300	90	3.0	#57 Velocity S	2	
0042-0046.BIAS	0	1:43	05:26:21.2	+31:29:26	300	90	3.0	#57 Velocity S	2	
0047.FLAT	16	1:44	05:27:26.9	+31:29:26	300	90	3.0	#57 Velocity S	2	
0048-0052.FLAT	16	1:46	05:29:49.8	+31:29:27	300	90	3.0	#57 Velocity S	2	
0053-0057.FLAT	16	1:48	05:32:12.6	+31:29:28	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
0058-0062.FLAT	16	1:51	05:34:31.9	+31:29:29	300	90	3.0	#57 Velocity S	2	
0063-0066.FLAT	16	1:53	05:36:24.7	+31:29:30	300	90	3.0	#57 Velocity S	2	
0067.G191B2B	150	2:05	05:01:31.5	52:45:52	300	-23	3.0	#56 Spectropho	2	
0068.COMP	12	2:08	05:01:31.5	52:45:52	300	-23	3.0	#56 Spectropho	2	
0069.Hiltner600	60	2:13	06:42:37.2	02:11:25	300	-21	3.0	#56 Spectropho	2	
0070.COMP	12	2:15	06:42:37.2	02:11:25	300	-21	3.0	#56 Spectropho	2	
0071.IPHAS_B90	420	2:20	03:05:1.7	58:51:46	300	80	3.0	#157 IPHAS	2	
0072.COMP	12	2:28	03:05:1.7	58:51:46	300	80	3.0	#157 IPHAS	2	
0073.IPHAS_B91	660	2:31	03:05:19.6	55:51:19	300	90	3.0	#157 IPHAS	2	
0074.COMP	12	2:42	03:05:19.6	55:51:19	300	90	3.0	#157 IPHAS	2	
0075.IPHAS_B92	660	2:45	03:06:7.2	63:50:12	300	90	3.0	#157 IPHAS	2	
0076.COMP	12	2:56	03:06:7.2	63:50:12	300	90	3.0	#157 IPHAS	2	
0077.IPHAS_B93	300	2:59	03:30:22.3	51:38:0	300	105	3.0	#157 IPHAS	2	
0078.COMP	12	3:05	03:30:22.3	51:38:0	300	105	3.0	#157 IPHAS	2	
0079.2M06402494p362054n	420	3:19	06:40:24.9	+36:20:54	300	110	3.0	#141 Mapping t	2	
0080.COMP	12	3:27	06:40:24.9	+36:20:54	300	110	3.0	#141 Mapping t	2	
0081.2M06402256p362037m	780	3:30	06:40:22.5	+36:20:37	300	95	3.0	#141 Mapping t	2	
0082.COMP	12	3:44	06:40:22.5	+36:20:37	300	95	3.0	#141 Mapping t	2	
0083.2M06402265p362009s	1200	3:46	06:40:22.6	+36:20:09	300	95	3.0	#141 Mapping t	2	
0084.COMP	12	4:06	06:40:22.6	+36:20:09	300	95	3.0	#141 Mapping t	2	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0085.2M08430920-0144211	540	4:09	8:43:9.2	-01:44:21	300	85	3.0	#141 Mapping t	2	
0086.COMP	12	4:19	8:43:9.2	-01:44:21	300	85	3.0	#141 Mapping t	2	
0087.2M08434522-0032041	480	4:21	8:43:45.2	-00:32:4	300	90	3.0	#141 Mapping t	2	
0088.COMP	12	4:29	8:43:45.2	-00:32:4	300	90	3.0	#141 Mapping t	2	
0089.2M08445953+4829004	540	4:31	8:44:59.5	+48:29:0	300	90	3.0	#141 Mapping t	2	
0090.COMP	12	4:41	8:44:59.5	+48:29:0	300	90	3.0	#141 Mapping t	2	
0091.2M08452858-0228416	540	4:43	8:45:28.5	-02:28:41	300	90	3.0	#141 Mapping t	2	
0092.COMP	12	4:53	8:45:28.5	-02:28:41	300	90	3.0	#141 Mapping t	2	
0093.2M08503288+6629148	780	4:56	8:50:32.8	+66:29:14	300	90	3.0	#141 Mapping t	2	
0094.COMP	12	5:10	8:50:32.8	+66:29:14	300	90	3.0	#141 Mapping t	2	
0095.2M08525827+1921360	720	5:13	8:52:58.2	+19:21:36	300	95	3.0	#141 Mapping t	2	
0096.COMP	12	5:25	8:52:58.2	+19:21:36	300	95	3.0	#141 Mapping t	2	
0097.sn2005am	480	5:42	09:16:12.4	-16:18:16	300	-2	3.0	#2 SN Observat	2	
0098.COMP	12	5:51	09:16:12.4	-16:18:16	300	-2	3.0	#2 SN Observat	2	
0099.sn2005m	1200	5:56	09:37:32.3	+23:12:02	300	1	3.0	#2 SN Observat	2	
0100.COMP	12	6:17	09:37:32.3	+23:12:02	300	1	3.0	#2 SN Observat	2	
0101.HD84937	10	6:28	09:48:56.1	13:44:39	300	14	3.0	#56 Spectropho	2	
0102.COMP	12	6:28	10:36:41.2	43:21:50	300	14	3.0	#56 Spectropho	2	
0103.Feige34	120	6:31	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	
0104.COMP	12	6:33	10:36:41.2	43:21:50	300	90	3.0	#56 Spectropho	2	



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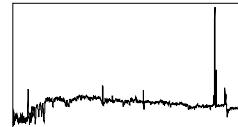
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0105.N3227	150	6:35	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0106.N3227	150	6:38	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0107.COMP	12	6:41	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0108.N3377	180	6:42	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	2	
0109.COMP	12	6:46	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	2	
0110.2M09381242+6850003	540	6:49	9:38:12.4	+68:50:0	300	90	3.0	#141 Mapping t	2	
0111.COMP	12	6:58	9:38:12.4	+68:50:0	300	90	3.0	#141 Mapping t	2	
0112.2M09383601-0420061	540	7:04	9:38:36.0	-04:20:6	300	90	3.0	#141 Mapping t	2	
0113.COMP	12	7:14	9:38:36.0	-04:20:6	300	90	3.0	#141 Mapping t	2	
0114.2M09432294+2249133	540	7:16	9:43:22.9	+22:49:13	300	90	3.0	#141 Mapping t	2	
0115.COMP	12	7:28	9:43:22.9	+22:49:13	300	90	3.0	#141 Mapping t	2	
0116.2M09433110+3158364	480	7:29	9:43:31.1	+31:58:36	300	90	3.0	#141 Mapping t	2	
0117.COMP	12	7:38	9:43:31.1	+31:58:36	300	90	3.0	#141 Mapping t	2	
0118.2M09491302+6411441	600	7:40	9:49:13.0	+64:11:44	300	90	3.0	#141 Mapping t	2	
0119.COMP	12	7:50	9:49:13.0	+64:11:44	300	90	3.0	#141 Mapping t	2	
0120.N4051	150	7:58	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0121.N4051	150	8:00	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0122.N4051	150	8:03	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0123.COMP	12	8:06	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0124.N4151	30	8:09	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	



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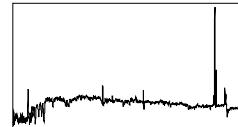
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0125.N4151	30	8:10	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0126.COMP	12	8:11	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0127.sn2004gt	1800	8:21	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0128.COMP	12	8:51	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0129.N5548	150	8:55	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0130.N5548	150	8:58	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0131.N5548	150	9:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0132.COMP	12	9:03	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0133.hs2314	396	9:20	12:34:32.8	44:37:32	600	90	2.0	#122 Halo Star	4	
0134.COMP	10	9:27	12:34:32.8	44:37:32	600	90	2.0	#122 Halo Star	4	
0135.hs2315	450	9:29	12:34:56.2	47:37:33	600	90	2.0	#122 Halo Star	4	
0136.COMP	10	9:37	12:34:56.2	47:37:33	600	90	2.0	#122 Halo Star	4	
0137.hs2316	282	9:40	12:35:08.6	77:46:59	600	90	2.0	#122 Halo Star	4	
0138.COMP	10	9:45	12:35:08.6	77:46:59	600	90	2.0	#122 Halo Star	4	
0139.hs2317	210	9:48	12:35:12.0	40:07:30	600	90	2.0	#122 Halo Star	4	
0140.COMP	10	9:52	12:35:12.0	40:07:30	600	90	2.0	#122 Halo Star	4	
0141.hs2318	474	9:55	12:35:13.3	63:13:46	600	75	2.0	#122 Halo Star	4	
0142.COMP	10	10:03	12:35:13.3	63:13:46	600	75	2.0	#122 Halo Star	4	
0143.hs2319	276	10:06	12:35:21.3	31:17:59	600	90	2.0	#122 Halo Star	4	
0144.COMP	10	10:11	12:35:21.3	31:17:59	600	90	2.0	#122 Halo Star	4	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0145.hs2320	462	10:14	12:35:24.7	69:42:19	600	90	2.0	#122 Halo Star	4	
0146.COMP	10	10:22	12:35:24.7	69:42:19	600	90	2.0	#122 Halo Star	4	
0147.hs2321	156	10:24	12:35:51.1	42:22:39	600	90	2.0	#122 Halo Star	4	
0148.COMP	10	10:27	12:35:51.1	42:22:39	600	90	2.0	#122 Halo Star	4	
0149.hs2322	222	10:33	12:36:00.1	80:30:38	600	90	2.0	#122 Halo Star	4	
0150.COMP	10	10:37	12:36:00.1	80:30:38	600	90	2.0	#122 Halo Star	4	
0151.hs2323	216	10:40	12:36:21.7	27:16:33	600	90	2.0	#122 Halo Star	4	
0152.COMP	10	10:44	12:36:21.7	27:16:33	600	90	2.0	#122 Halo Star	4	
0153.hs2324	366	10:46	12:36:30.1	57:50:26	600	90	2.0	#122 Halo Star	4	
0154.COMP	10	10:52	12:36:30.1	57:50:26	600	90	2.0	#122 Halo Star	4	
0155.hs2325	474	10:55	12:36:45.1	47:55:22	600	90	2.0	#122 Halo Star	4	
0156.COMP	10	11:03	12:36:45.1	47:55:22	600	90	2.0	#122 Halo Star	4	
0157.hs2326	216	11:05	12:36:51.0	67:09:00	600	90	2.0	#122 Halo Star	4	
0158.COMP	10	11:09	12:36:51.0	67:09:00	600	90	2.0	#122 Halo Star	4	
0159.hs2327	396	11:11	12:36:57.0	59:45:41	600	90	2.0	#122 Halo Star	4	
0160.COMP	10	11:17	12:36:57.0	59:45:41	600	90	2.0	#122 Halo Star	4	
0161.BDp332642	90	11:24	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0162.COMP	10	11:27	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0163-0172.FLAT	24	11:33	15:50:03.0	33:05:49	600	90	2.0	#6 AGN Monitor	4	
0173.2128_01	1800	12:20	15:47:49.5	-03:33:05	300	90	3.0	#64 Cluster an	2	



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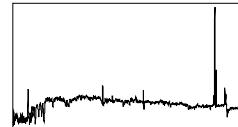
UT Date 2005-03-09 Observers H HaoColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0174.COMP	10	12:52	15:47:49.5	-03:33:05	300	90	3.0	#64 Cluster an	2	
0175-0184.FLAT	8	13:04	15:47:49.5	-03:33:05	300	90	3.0	#6 AGN Monitor	4	
0185-0194.BIAS	0	13:06	15:47:49.5	-03:33:05	300	90	3.0	#6 AGN Monitor	4	
0195-0214.FLAT	16	13:17	15:47:49.5	-03:33:05	300	90	3.0	#6 AGN Monitor	2	
0215-0224.BIAS	0	13:20	15:47:49.5	-03:33:05	300	90	3.0	#6 AGN Monitor	2	



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UT Date 2005-03-10 Observers J Foster

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	21:23	01:25:19.7	+31:28:16	300	90	3.0	#6 AGN Monitor	4	
0002.DARK	900	21:39	01:40:26.4	+31:28:18	300	90	3.0	#6 AGN Monitor	4	
0003.DARK	900	21:54	01:55:36.6	+31:28:20	300	90	3.0	#6 AGN Monitor	4	
0004.DARK	900	22:09	02:10:43.1	+31:28:22	300	90	3.0	#6 AGN Monitor	4	
0005.DARK	900	22:24	02:25:53.4	+31:28:25	300	90	3.0	#6 AGN Monitor	4	
0006.DARK	900	22:39	02:41:03.6	+31:28:28	300	90	3.0	#6 AGN Monitor	4	
0007.DARK	900	22:54	02:56:10.4	+31:28:32	300	90	3.0	#6 AGN Monitor	4	
0008.DARK	900	23:09	03:11:20.6	+31:28:36	300	90	3.0	#6 AGN Monitor	4	
0009.DARK	900	23:24	03:26:27.6	+31:28:40	300	90	3.0	#6 AGN Monitor	4	
0010.DARK	900	23:39	03:41:37.9	+31:28:45	300	90	3.0	#6 AGN Monitor	4	
0011-0017.BIAS	0	0:29	04:16:33.3	+31:28:57	300	90	3.0	#6 AGN Monitor	4	
0018-0020.BIAS	0	0:30	04:16:54.6	+31:28:58	300	90	3.0	#6 AGN Monitor	4	
0021.FLAT	8	0:34	04:21:45.4	+31:28:59	300	90	3.0	#6 AGN Monitor	4	
0022-0030.FLAT	8	0:37	04:23:59.4	+31:29:00	300	90	3.0	#6 AGN Monitor	4	
0031-0039.BIAS	0	0:42	04:29:37.9	+31:29:02	300	90	3.0	#6 AGN Monitor	2	
0040.BIAS	0	0:43	04:29:50.9	+31:29:03	300	90	3.0	#6 AGN Monitor	2	
0041-0042.FLAT	16	0:45	04:32:09.4	+31:29:03	300	90	3.0	#6 AGN Monitor	2	
0043-0047.FLAT	16	0:47	04:34:28.7	+31:29:04	300	90	3.0	#6 AGN Monitor	2	
0048-0053.FLAT	16	0:50	04:37:18.0	+31:29:05	300	90	3.0	#6 AGN Monitor	2	
0054-0058.FLAT	16	0:52	04:39:40.7	+31:29:06	300	90	3.0	#6 AGN Monitor	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0059-0060.FLAT	16	0:53	04:40:37.3	+31:29:07	300	90	3.0	#6 AGN Monitor	2	
0061-0069.sky	10	1:38	05:25:26.8	+31:29:25	300	90	3.0	#57 Velocity S	4	
0070.sky	10	1:38	05:25:44.1	+31:29:26	300	90	3.0	#57 Velocity S	4	
0071.COMP	5	1:39	05:26:53.0	+31:29:26	300	90	3.0	#57 Velocity S	4	Line is at 2660
0072.COMP	5	1:42	05:29:47.0	+31:29:27	300	90	3.0	#57 Velocity S	4	Line is at 2662
0073.COMP	5	1:44	05:31:44.5	+31:29:28	300	90	3.0	#57 Velocity S	4	Line is at 2661
0074.G191B2B	150	2:19	05:01:31.5	52:45:52	300	79	3.0	#56 Spectropho	2	
0075.COMP	12	2:22	05:01:31.5	52:45:52	300	79	3.0	#56 Spectropho	2	
0076.Hiltner600	60	2:30	06:42:37.2	02:11:25	300	57	3.0	#56 Spectropho	2	
0077.COMP	12	2:32	06:42:37.2	02:11:25	300	57	3.0	#56 Spectropho	2	
0078.sn2004gq	1500	2:46	05:12:04.8	-15:40:54	300	21	3.0	#2 SN Observat	2	
0079.COMP	12	3:12	05:12:04.8	-15:40:54	300	21	3.0	#2 SN Observat	2	
0080.cvso-250354	300	3:25	05:18:31.8	-03:21:53	300	90	3.0	#112 Orion PMS	2	
0081.COMP	6	3:32	05:18:31.8	-03:21:53	300	90	3.0	#112 Orion PMS	2	
0082.cvso-251076	300	3:35	05:19:15.1	-02:54:07	300	90	3.0	#112 Orion PMS	2	
0083.COMP	6	3:42	05:19:15.1	-02:54:07	300	90	3.0	#112 Orion PMS	2	
0084.cvso-251191	300	3:44	05:19:28.6	-03:36:50	300	85	3.0	#112 Orion PMS	2	
0085.COMP	6	3:50	05:19:28.6	-03:36:50	300	85	3.0	#112 Orion PMS	2	
0086.cvso-251824	300	3:52	05:20:12.3	-03:39:45	300	85	3.0	#112 Orion PMS	2	
0087.COMP	6	3:58	05:20:12.3	-03:39:45	300	85	3.0	#112 Orion PMS	2	



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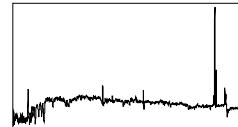
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0088.cvso-231469	300	4:09	05:20:15.0	-04:14:44	300	85	3.0	#112 Orion PMS	2	Finding Chart shows unresolved binary. Northern component positi
0089.COMP	6	4:15	05:20:15.0	-04:14:44	300	85	3.0	#112 Orion PMS	2	
0090.cvso-229811	150	4:21	05:20:23.5	-02:05:49	300	85	3.0	#112 Orion PMS	2	
0091.COMP	6	4:25	05:20:23.5	-02:05:49	300	85	3.0	#112 Orion PMS	2	
0092.sn2005am	480	4:48	09:16:12.4	-16:18:16	300	-12	3.0	#2 SN Observat	2	
0093.COMP	12	4:58	09:16:12.4	-16:18:16	300	-12	3.0	#2 SN Observat	2	
0094.N3227	150	5:05	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0095.N3227	150	5:08	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0096.COMP	12	5:11	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0097.MRK421	300	5:14	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0098.MRK421	300	5:19	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0099.MRK421	300	5:24	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0100.COMP	12	5:31	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0101.N4051	150	5:33	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0102.N4051	150	5:35	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0103.N4051	150	5:38	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0104.COMP	12	5:43	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0105.XS02209B8_009	1200	5:49	11:15:19.2	+40:37:19	300	90	3.0	#129 CHAMP Sou	4	
0106.COMP	6	6:11	11:15:19.2	+40:37:19	300	90	3.0	#129 CHAMP Sou	4	
0107.XS01660B1_006	1800	6:23	11:20:41.7	+23:27:52	300	90	3.0	#129 CHAMP Sou	4	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0108.COMP	6	6:53	11:20:41.7	+23:27:52	300	90	3.0	#129 CHAMP Sou	4	
0109.sn05_n3450	1200	6:56	10:48:03.5	-20:50:56	300	-1	3.0	#2 SN Observat	2	
0110.COMP	12	7:17	10:48:03.5	-20:50:56	300	-1	3.0	#2 SN Observat	2	
0111.Feige34	120	7:31	10:36:41.2	43:21:50	300	-36	3.0	#56 Spectropho	2	
0112.COMP	12	7:34	10:36:41.2	43:21:50	300	-36	3.0	#56 Spectropho	2	
0113.HD84937	10	7:40	09:48:56.1	13:44:39	300	47	3.0	#56 Spectropho	2	
0114.COMP	12	7:40	09:48:56.1	13:44:39	300	47	3.0	#56 Spectropho	2	
0115.MRK279	120	7:48	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	2	
0116.MRK279	120	7:50	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	2	
0117.COMP	12	7:53	13:51:53.6	69:33:13	300	90	3.0	#6 AGN Monitor	2	
0118.121424+69450	300	8:04	12:16:42.1	+69:27:46	300	90	3.0	#84f Updated Z	4	
0119.COMP	6	8:10	12:16:42.1	+69:27:46	300	90	3.0	#84f Updated Z	4	
0120.121424+69450	600	8:13	12:16:42.1	+69:27:46	300	90	3.0	#84f Updated Z	4	
0121.COMP	6	8:25	12:16:42.1	+69:27:46	300	90	3.0	#84f Updated Z	4	
0122.121430+09410	1500	8:47	12:17:01.1	+09:24:28	300	90	3.0	#84f Updated Z	4	
0123.COMP	6	9:13	12:17:01.1	+09:24:28	300	90	3.0	#84f Updated Z	4	
0124.121506+12400	1500	9:18	12:17:33.4	+12:23:09	300	30	3.0	#84f Updated Z	4	
0125.COMP	6	9:43	12:17:33.4	+12:23:09	300	30	3.0	#84f Updated Z	4	
0126.N5548	150	9:51	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0127.N5548	150	9:53	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	



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UT Date 2005-03-10 Observers J FosterColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0128.N5548	150	9:56	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0129.COMP	12	9:59	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0130.2128_02	1200	10:08	15:47:21.2	-03:32:42	300	30	3.0	#64 Cluster an	4	
0131.COMP	6	10:28	15:47:21.2	-03:32:42	300	30	3.0	#64 Cluster an	4	
0132.2128_03	1200	10:35	15:48:00.9	-03:30:28	300	90	3.0	#64 Cluster an	4	
0133.COMP	12	10:56	15:48:00.9	-03:30:28	300	90	3.0	#64 Cluster an	4	
0134.2128_03	1800	10:57	15:48:00.9	-03:30:28	300	90	3.0	#64 Cluster an	4	
0135.COMP	12	11:28	15:48:00.9	-03:30:28	300	90	3.0	#64 Cluster an	4	
0136.2128_04	2600	11:35	15:49:18.8	-03:02:47	300	90	3.0	#64 Cluster an	4	
0137.COMP	12	12:19	15:49:18.8	-03:02:47	300	90	3.0	#64 Cluster an	4	
0152.FLAT	8	12:57	15:49:01.6	-02:42:25	300	80	3.0	#56 Spectropho	4	
0153-0162.BIAS	0	13:03	15:49:01.6	-02:42:25	300	80	3.0	#56 Spectropho	4	
0163-0172.FLAT	8	13:06	15:49:01.6	-02:42:25	300	80	3.0	#56 Spectropho	4	
0173-0182.BIAS	0	13:09	15:49:01.6	-02:42:25	300	80	3.0	#56 Spectropho	2	
0183-0203.FLAT	16	13:19	15:49:01.6	-02:42:25	300	80	3.0	#56 Spectropho	2	



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UT Date 2005-03-11 Observers J Foster

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0010.DARK	900	1:11	15:49:01.6	-02:42:25	300	80	3.0	#56 Spectropho	2	
0011-0012.BIAS	0	1:39	05:30:07.2	+31:29:27	300	80	3.0	#56 Spectropho	4	
0013-0020.BIAS	0	1:40	05:31:03.4	+31:29:28	300	80	3.0	#56 Spectropho	4	
0021-0024.FLAT	8	1:41	05:32:25.9	+31:29:28	300	80	3.0	#56 Spectropho	4	
0025-0030.FLAT	8	1:43	05:34:27.5	+31:29:29	300	80	3.0	#56 Spectropho	4	
0031.BIAS	0	1:43	05:34:44.8	+31:29:29	300	80	3.0	#56 Spectropho	2	
0032-0040.BIAS	0	1:45	05:36:37.7	+31:29:30	300	80	3.0	#56 Spectropho	2	
0041-0045.FLAT	16	1:48	05:39:17.9	+31:29:31	300	80	3.0	#56 Spectropho	2	
0046-0049.FLAT	16	1:50	05:41:19.1	+31:29:32	300	80	3.0	#56 Spectropho	2	
0050-0054.FLAT	16	1:52	05:43:47.2	+31:29:33	300	80	3.0	#56 Spectropho	2	
0055-0058.FLAT	16	1:54	05:45:48.8	+31:29:34	300	80	3.0	#56 Spectropho	2	
0059-0061.FLAT	16	1:56	05:47:19.8	+31:29:35	300	80	3.0	#56 Spectropho	2	
0062.COMP	5	2:09	04:56:58.1	-04:52:23	300	80	3.0	#57 Velocity S	4	
0063.NGC1700	150	2:15	04:56:58.1	-04:52:23	300	90	3.0	#57 Velocity S	4	
0064.COMP	5	2:19	04:56:58.1	-04:52:23	300	90	3.0	#57 Velocity S	4	
0065.cvso-231675	150	2:22	05:20:32.3	-03:48:57	300	90	3.0	#112 Orion PMS	4	
0066.COMP	5	2:25	05:20:32.3	-03:48:57	300	90	3.0	#112 Orion PMS	4	
0067.cvso-229962	150	2:30	05:20:33.8	-01:55:23	300	90	3.0	#112 Orion PMS	4	
0068.COMP	5	2:33	05:20:33.8	-01:55:23	300	90	3.0	#112 Orion PMS	4	
0069.cvso-229962	300	2:33	05:20:33.8	-01:55:23	300	90	3.0	#112 Orion PMS	4	



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UT Date 2005-03-11 Observers J FosterColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0070.COMP	5	2:39	05:20:33.8	-01:55:23	300	90	3.0	#112 Orion PMS	4	
0071.cvso-252548	60	2:41	05:21:01.5	-03:08:01	300	90	3.0	#112 Orion PMS	4	
0072.COMP	5	2:43	05:21:01.5	-03:08:01	300	90	3.0	#112 Orion PMS	4	
0073.cvso-252585	180	2:44	05:21:04.0	-03:22:01	300	90	3.0	#112 Orion PMS	4	
0074.COMP	5	2:48	05:21:04.0	-03:22:01	300	90	3.0	#112 Orion PMS	4	
0075.cvso-230535	120	2:49	05:21:10.7	-02:18:56	300	90	3.0	#112 Orion PMS	4	
0076.COMP	5	2:52	05:21:10.7	-02:18:56	300	90	3.0	#112 Orion PMS	4	
0077.cvso-232178	60	2:53	05:21:12.9	-04:02:49	300	90	3.0	#112 Orion PMS	4	
0078.COMP	5	2:55	05:21:12.9	-04:02:49	300	90	3.0	#112 Orion PMS	4	
0079.cvso-231507	90	2:56	05:22:21.8	-02:16:50	300	90	3.0	#112 Orion PMS	4	
0080.COMP	5	2:58	05:22:21.8	-02:16:50	300	90	3.0	#112 Orion PMS	4	
0081.cvso-231689	180	3:01	05:22:35.4	-02:12:50	300	90	3.0	#112 Orion PMS	4	
0082.COMP	5	3:05	05:22:35.4	-02:12:50	300	90	3.0	#112 Orion PMS	4	
0083.cvso-234727	180	3:10	05:24:31.4	-03:49:20	300	90	3.0	#112 Orion PMS	4	
0084.COMP	5	3:13	05:24:31.4	-03:49:20	300	90	3.0	#112 Orion PMS	4	
0085.cvso-256248	240	3:16	05:24:51.9	-03:14:18	300	100	3.0	#112 Orion PMS	4	
0086.COMP	5	3:21	05:24:51.9	-03:14:18	300	100	3.0	#112 Orion PMS	4	
0087.cvso-235030	120	3:23	05:25:55.0	-01:54:13	300	90	3.0	#112 Orion PMS	4	
0088.COMP	5	3:26	05:25:55.0	-01:54:13	300	90	3.0	#112 Orion PMS	4	
0089.cvso-235041	120	3:28	05:25:56.0	-02:16:01	300	68	3.0	#112 Orion PMS	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0090.COMP	5	3:30	05:25:56.0	-02:16:01	300	68	3.0	#112 Orion PMS	4	
0091.cvso-258121	120	3:32	05:27:13.1	-02:34:15	300	90	3.0	#112 Orion PMS	4	
0092.COMP	5	3:35	05:27:13.1	-02:34:15	300	90	3.0	#112 Orion PMS	4	
0093.cvso-236678	240	3:36	05:27:44.3	-01:56:27	300	90	3.0	#112 Orion PMS	4	
0094.COMP	5	3:41	05:27:44.3	-01:56:27	300	90	3.0	#112 Orion PMS	4	
0095.cvso-237386	120	3:43	05:27:46.9	-04:02:07	300	80	3.0	#112 Orion PMS	4	
0096.COMP	5	3:45	05:27:46.9	-04:02:07	300	80	3.0	#112 Orion PMS	4	
0097.cvso-237401	60	3:48	05:27:48.7	-03:46:24	300	90	3.0	#112 Orion PMS	4	Binary? Did southern (bright) component
0098.COMP	5	3:49	05:27:48.7	-03:46:24	300	90	3.0	#112 Orion PMS	4	
0099.cvso-237186	180	3:52	05:28:15.8	-02:05:12	300	90	3.0	#112 Orion PMS	4	
0100.COMP	5	3:55	05:28:15.8	-02:05:12	300	90	3.0	#112 Orion PMS	4	
0101.cvso-259386	180	4:02	05:28:17.5	-03:22:50	300	100	3.0	#112 Orion PMS	4	
0102.COMP	5	4:06	05:28:17.5	-03:22:50	300	100	3.0	#112 Orion PMS	4	
0103.cvso-237348	300	4:13	05:28:24.3	-01:57:40	300	109	3.0	#112 Orion PMS	4	
0104.COMP	5	4:18	05:28:24.3	-01:57:40	300	109	3.0	#112 Orion PMS	4	
0105.cvso-237945	180	4:21	05:28:32.3	-04:02:04	300	80	3.0	#112 Orion PMS	4	
0106.COMP	5	4:24	05:28:32.3	-04:02:04	300	80	3.0	#112 Orion PMS	4	
0107.cvso-237945	360	4:25	05:28:32.3	-04:02:04	300	80	3.0	#112 Orion PMS	4	
0108.COMP	5	4:31	05:28:32.3	-04:02:04	300	80	3.0	#112 Orion PMS	4	
0109.BGGem	300	4:40	6:03:31	27:41:50	300	70	3.0	#12 Symbiotic	4	Close companions and poor seeing may have caused some contamination



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0110.COMP	5	4:48	6:03:31	27:41:50	300	70	3.0	#12 Symbiotic	4	
0111.BGGem	1200	4:49	6:03:31	27:41:50	300	70	3.0	#12 Symbiotic	4	Same problem as shorter exposure
0112.COMP	5	5:09	6:03:31	27:41:50	300	70	3.0	#12 Symbiotic	4	
0113.BXMon	15	5:13	7:25:23	-03:35:51	300	85	3.0	#12 Symbiotic	4	
0114.COMP	5	5:14	7:25:23	-03:35:51	300	85	3.0	#12 Symbiotic	4	
0115.BXMon	180	5:15	7:25:23	-03:35:51	300	85	3.0	#12 Symbiotic	4	
0116.COMP	5	5:20	7:25:23	-03:35:51	300	85	3.0	#12 Symbiotic	4	
0117.sn2005am	480	5:26	09:16:12.4	-16:18:16	300	0	3.0	#2 SN Observat	2	
0118.COMP	10	5:35	09:16:12.4	-16:18:16	300	0	3.0	#2 SN Observat	2	
0119.HD84937	10	5:40	09:48:56.1	13:44:39	300	-12	3.0	#56 Spectropho	2	
0120.COMP	10	5:40	09:48:56.1	13:44:39	300	-12	3.0	#56 Spectropho	2	
0121.Feige34	120	5:53	10:36:41.2	43:21:50	300	50	3.0	#56 Spectropho	2	
0122.COMP	10	5:56	10:36:41.2	43:21:50	300	50	3.0	#56 Spectropho	2	
0123.XS01630B7_016	1200	6:02	11:18:16.6	+07:43:23	300	90	3.0	#129 CHAMP Sou	4	
0124.COMP	5	6:22	11:18:16.6	+07:43:23	300	90	3.0	#129 CHAMP Sou	4	
0125.XS01660B3_008	900	6:26	11:20:45.8	+23:25:35	300	90	3.0	#129 CHAMP Sou	4	Very faint
0126.COMP	5	6:42	11:20:45.8	+23:25:35	300	90	3.0	#129 CHAMP Sou	4	
0127.XS01660B3_027	900	6:47	11:21:10.5	+23:23:34	300	20	3.0	#129 CHAMP Sou	4	
0128.COMP	5	7:05	11:21:10.5	+23:23:34	300	20	3.0	#129 CHAMP Sou	4	
0129.N3227	150	7:11	10:23:30.6	+19:51:54	300	20	3.0	#6 AGN Monitor	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0130.N3227	150	7:14	10:23:30.6	+19:51:54	300	20	3.0	#6 AGN Monitor	2	
0131.COMP	10	7:17	10:23:30.6	+19:51:54	300	20	3.0	#6 AGN Monitor	2	
0132.sn_cgcf011	1200	7:20	11:15:19.0	-03:46:18	300	-1	3.0	#2 SN Observat	2	
0133.COMP	10	7:41	11:15:19.0	-03:46:18	300	-1	3.0	#2 SN Observat	2	
0134.N4051	150	7:47	12:03:09.7	+44:31:53	300	-1	3.0	#6 AGN Monitor	2	
0135.N4051	150	7:49	12:03:09.7	+44:31:53	300	-1	3.0	#6 AGN Monitor	2	
0136.N4051	150	7:52	12:03:09.7	+44:31:53	300	-1	3.0	#6 AGN Monitor	2	
0137.COMP	10	7:56	12:03:09.7	+44:31:53	300	-1	3.0	#6 AGN Monitor	2	
0138.N4151	30	8:00	12:10:32.6	+39:24:21	300	45	3.0	#6 AGN Monitor	2	
0139.N4151	30	8:00	12:10:32.6	+39:24:21	300	45	3.0	#6 AGN Monitor	2	
0140.COMP	10	8:01	12:10:32.6	+39:24:21	300	45	3.0	#6 AGN Monitor	2	
0141.COMP	10	8:07	12:10:32.6	+39:24:21	300	45	3.0	#6 AGN Monitor	2	
0142.sn2004gk	1200	8:15	12:25:33.2	+12:15:39	300	-12	3.0	#2 SN Observat	2	
0143.COMP	10	8:36	12:25:33.2	+12:15:39	300	-12	3.0	#2 SN Observat	2	
0144.N5548	150	8:45	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0145.N5548	150	8:47	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0146.N5548	150	8:50	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0147.COMP	10	8:53	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0148.TXCVn	10	9:00	12:44:42	36:45:48	300	90	3.0	#12 Symbiotic	4	
0149.COMP	5	9:00	12:44:42	36:45:48	300	90	3.0	#12 Symbiotic	4	



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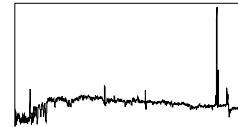
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0150.TXCVn	30	9:01	12:44:42	36:45:48	300	90	3.0	#12 Symbiotic	4	
0151.COMP	5	9:06	12:44:42	36:45:48	300	90	3.0	#12 Symbiotic	4	
0152.RWHyA	2	9:08	13:34:18	-25:22:51	300	90	3.0	#12 Symbiotic	4	
0153.RWHyA	10	9:08	13:34:18	-25:22:51	300	90	3.0	#12 Symbiotic	4	
0154.RWHyA	20	9:11	13:34:18	-25:22:51	300	90	3.0	#12 Symbiotic	4	
0155.COMP	5	9:15	13:34:18	-25:22:51	300	90	3.0	#12 Symbiotic	4	
0156.TCrB	15	9:21	15:59:30	25:55:12	300	90	3.0	#12 Symbiotic	4	
0157.TCrB	60	9:24	15:59:30	25:55:12	300	90	3.0	#12 Symbiotic	4	
0158.COMP	5	9:28	15:59:30	25:55:12	300	90	3.0	#12 Symbiotic	4	
0159.AGDra	2	9:31	16:01:41	66:48:10	300	90	3.0	#12 Symbiotic	4	
0160.AGDra	15	9:32	16:01:41	66:48:10	300	90	3.0	#12 Symbiotic	4	
0161.AGDra	45	9:34	16:01:41	66:48:10	300	90	3.0	#12 Symbiotic	4	
0162.COMP	5	9:35	16:01:41	66:48:10	300	90	3.0	#12 Symbiotic	4	
0163.XS00809B7_003	300	9:40	13:44:49.1	+55:58:10	300	90	3.0	#129 CHAMP Sou	2	
0164.COMP	5	9:47	13:44:49.1	+55:58:10	300	90	3.0	#129 CHAMP Sou	2	
0165.XS02251B2_004	360	9:57	13:45:21.4	-00:01:20	300	90	3.0	#129 CHAMP Sou	2	
0166.COMP	5	10:03	13:45:21.4	-00:01:20	300	90	3.0	#129 CHAMP Sou	2	
0167.XS00325B3_002	600	10:06	13:12:31.1	+42:31:06	300	90	3.0	#129 CHAMP Sou	2	
0168.COMP	5	10:18	13:12:31.1	+42:31:06	300	90	3.0	#129 CHAMP Sou	2	
0169.XS02210B5_003	900	10:20	12:57:22.6	+47:08:06	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
0170.COMP	5	10:36	12:57:22.6	+47:08:06	300	90	3.0	#129 CHAMP Sou	2	
0171.XS02210B7_001	1200	10:41	12:57:12.4	+47:19:50	300	90	3.0	#129 CHAMP Sou	2	Just too faint
0172.COMP	5	11:03	12:57:12.4	+47:19:50	300	90	3.0	#129 CHAMP Sou	2	
0173.2148_01	1200	11:15	16:04:29.2	+24:57:48	300	80	3.0	#64 Cluster an	2	
0174.COMP	5	11:37	16:04:29.2	+24:57:48	300	80	3.0	#64 Cluster an	2	
0175.2148_02	900	11:38	16:02:48.5	+25:02:23	300	80	3.0	#64 Cluster an	2	
0176.COMP	5	11:54	16:02:48.5	+25:02:23	300	80	3.0	#64 Cluster an	2	
0177.2148_03	1200	11:55	16:01:11.5	+25:14:36	300	80	3.0	#64 Cluster an	2	
0178.COMP	5	12:16	16:01:11.5	+25:14:36	300	80	3.0	#64 Cluster an	2	
0179.2148_04	1200	12:26	16:00:36.4	+25:16:28	300	80	3.0	#64 Cluster an	2	
0180.COMP	5	12:46	16:00:36.4	+25:16:28	300	80	3.0	#64 Cluster an	2	
0181-0190.BIAS	0	12:56	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	4	
0191-0200.FLAT	8	12:59	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	4	
0201-0210.BIAS	0	13:02	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	2	
0211-0231.FLAT	16	13:12	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0010.DARK	900	1:10	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	2	
0011.BIAS	0	1:43	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	4	Stormclouds
0012-0020.BIAS	0	1:44	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	4	
0021-0030.FLAT	8	1:48	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	4	
0031-0040.BIAS	0	1:50	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	2	
0041-0061.FLAT	16	2:00	16:00:36.4	+25:16:28	300	80	3.0	#57 Velocity S	2	
0062.HD84937	10	7:04	09:48:56.1	13:44:39	300	38	3.0	#56 Spectropho	2	Very poor seeing/transparency
0063.COMP	10	7:05	09:48:56.1	13:44:39	300	38	3.0	#56 Spectropho	2	
0064.Feige34	120	7:08	10:36:41.2	43:21:50	300	24	3.0	#56 Spectropho	2	
0065.COMP	10	7:11	10:36:41.2	43:21:50	300	24	3.0	#56 Spectropho	2	
0066.N3227	150	7:22	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0067.N3227	150	7:25	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0068.COMP	10	7:28	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0069.N4051	30	8:24	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0070.N4051	30	8:25	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0071.COMP	10	8:26	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	2	
0072.TXCVn	10	8:40	12:44:42	36:45:48	300	90	3.0	#12 Symbiotic	2	
0073.TXCVn	30	8:41	12:44:42	36:45:48	300	90	3.0	#12 Symbiotic	2	
0074.COMP	10	8:42	12:44:42	36:45:48	300	90	3.0	#12 Symbiotic	2	
0075.N4486B	300	9:19	12:30:32	+12:29:25	300	90	3.0	#57 Velocity S	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0076.COMP	5	9:25	12:30:32	+12:29:25	300	90	3.0	#57 Velocity S	4	
0077.N5548	150	10:11	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0078.N5548	150	10:14	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0079.N5548	150	10:17	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0080.COMP	10	10:20	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0081.143606+18240	300	11:03	14:38:25.4	+18:11:02	300	90	3.0	#84f Updated Z	4	
0082.COMP	5	11:08	14:38:25.4	+18:11:02	300	90	3.0	#84f Updated Z	4	
0083.143606+18240	600	11:09	14:38:25.4	+18:11:02	300	90	3.0	#84f Updated Z	4	
0084.COMP	5	11:20	14:38:25.4	+18:11:02	300	90	3.0	#84f Updated Z	4	
0085.143530+16050	600	11:26	14:37:54.1	+15:51:47	300	90	3.0	#84f Updated Z	4	
0086.COMP	5	11:36	14:37:54.1	+15:51:47	300	90	3.0	#84f Updated Z	4	
0087.145124+20190	600	11:39	14:53:46.6	+20:06:57	300	90	3.0	#84f Updated Z	4	
0088.COMP	5	11:58	14:53:46.6	+20:06:57	300	90	3.0	#84f Updated Z	4	
0089-0098.BIAS	0	12:26	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	4	
0099-0108.FLAT	8	12:29	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	4	
0109-0118.BIAS	0	12:31	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	2	
0119-0139.FLAT	16	12:42	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	2	



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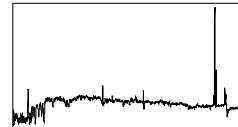
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.DARK	900	22:36	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	2	Cloudy
0002-0010.DARK	900	0:53	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	2	
0011-0020.BIAS	0	1:24	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	4	
0021-0030.FLAT	8	1:28	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	4	
0031-0040.BIAS	0	1:30	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	2	
0041-0061.FLAT	16	1:40	14:17:59.6	+25:08:12	300	90	3.0	#56 Spectropho	2	
0062.cvso-259608	180	2:30	05:28:32.4	-03:14:09	300	69	3.0	#112 Orion PMS	4	Clearing Up
0063.COMP	5	2:35	05:28:32.4	-03:14:09	300	69	3.0	#112 Orion PMS	4	
0064.cvso-259376	600	2:40	05:28:43.9	-02:44:54	300	69	3.0	#112 Orion PMS	4	
0065.COMP	5	2:51	05:28:43.9	-02:44:54	300	69	3.0	#112 Orion PMS	4	
0066.cvso-260117	600	2:53	05:29:04.3	-03:33:37	300	69	3.0	#112 Orion PMS	4	
0067.COMP	5	3:03	05:29:04.3	-03:33:37	300	69	3.0	#112 Orion PMS	4	
0068.cvso-238861	600	3:05	05:29:50.0	-04:03:10	300	90	3.0	#112 Orion PMS	4	
0069.COMP	5	3:15	05:29:50.0	-04:03:10	300	90	3.0	#112 Orion PMS	4	
0070.cvso-239029	600	3:17	05:30:20.5	-02:03:25	300	90	3.0	#112 Orion PMS	4	
0071.COMP	5	3:28	05:30:20.5	-02:03:25	300	90	3.0	#112 Orion PMS	4	
0072.cvso-260645	600	3:36	05:30:22.4	-02:58:14	300	90	3.0	#112 Orion PMS	4	
0073.COMP	5	3:47	05:30:22.4	-02:58:14	300	90	3.0	#112 Orion PMS	4	
0074.cvso-260694	600	3:48	05:30:25.4	-02:56:25	300	90	3.0	#112 Orion PMS	4	
0075.COMP	5	3:59	05:30:25.4	-02:56:25	300	90	3.0	#112 Orion PMS	4	



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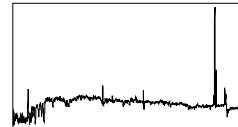
UT Date 2005-03-13 Observers FosterColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0076.cvso-239167	600	4:05	05:30:30.9	-02:11:27	300	85	3.0	#112 Orion PMS	4	
0077.COMP	5	4:15	05:30:30.9	-02:11:27	300	85	3.0	#112 Orion PMS	4	
0078.cvso-239325	600	4:17	05:30:42.7	-04:07:42	300	90	3.0	#112 Orion PMS	4	
0079.COMP	5	4:27	05:30:47.8	-03:37:00	300	90	3.0	#112 Orion PMS	4	
0080.cvso-261756	600	4:29	05:30:47.8	-03:37:00	300	90	3.0	#112 Orion PMS	4	
0081.COMP	5	4:39	05:30:47.8	-03:37:00	300	90	3.0	#112 Orion PMS	4	
0082.sn2005am	480	4:54	09:16:12.4	-16:18:16	300	-5	3.0	#2 SN Observat	2	
0083.COMP	10	5:02	09:16:12.4	-16:18:16	300	-5	3.0	#2 SN Observat	2	
0084.HD84937	10	5:10	09:48:56.1	13:44:39	300	-24	3.0	#56 Spectropho	2	
0085.COMP	10	5:10	09:48:56.1	13:44:39	300	-24	3.0	#56 Spectropho	2	
0086.Feige34	120	5:15	10:36:41.2	43:21:50	300	64	3.0	#56 Spectropho	2	
0087.COMP	10	5:17	10:36:41.2	43:21:50	300	64	3.0	#56 Spectropho	2	
0088.N3377	180	5:24	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	2	
0089.COMP	10	5:28	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	2	
0090.N3227	150	5:33	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0091.N3227	150	5:35	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0092.COMP	10	5:39	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0093.XS00868B2_010	1200	5:45	11:18:38.8	+40:33:51	300	80	3.0	#129 CHAMP Sou	4	
0094.COMP	5	6:06	11:18:38.8	+40:33:51	300	80	3.0	#129 CHAMP Sou	4	
0095.XS01660B3_010	900	6:08	11:21:16.2	+23:26:22	300	80	3.0	#129 CHAMP Sou	4	



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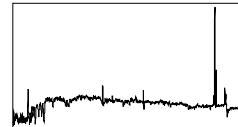
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0096.COMP	5	6:24	11:21:16.2	+23:26:22	300	80	3.0	#129 CHAMP Sou	4	
0097.XS00874B7_005	1200	6:27	12:00:36.4	+29:08:45	300	80	3.0	#129 CHAMP Sou	4	
0098.COMP	5	6:47	12:00:36.4	+29:08:45	300	80	3.0	#129 CHAMP Sou	4	
0099.XS02183B6_009	120	6:53	12:04:39.3	-00:16:51	300	90	3.0	#129 CHAMP Sou	4	
0100.COMP	5	6:55	12:04:39.3	-00:16:51	300	90	3.0	#129 CHAMP Sou	4	
0101.sn2005ar	1800	7:00	11:15:19.0	-03:46:18	300	-6	3.0	#2 SN Observat	2	
0102.COMP	10	7:31	11:15:19.0	-03:46:18	300	-6	3.0	#2 SN Observat	2	
0103.121518+13290	1200	7:41	12:17:52.7	+13:10:35	300	80	3.0	#84f Updated Z	4	
0104.COMP	5	8:02	12:17:52.7	+13:10:35	300	80	3.0	#84f Updated Z	4	
0105.123412+04230	1200	8:08	12:36:49.1	+04:06:16	300	90	3.0	#84f Updated Z	4	
0106.COMP	5	8:29	12:36:49.1	+04:06:16	300	90	3.0	#84f Updated Z	4	
0107.123854+12310	900	8:33	12:41:39.3	+12:14:49	300	90	3.0	#84f Updated Z	4	
0108.COMP	5	8:49	12:41:39.3	+12:14:49	300	90	3.0	#84f Updated Z	4	
0109.123918+09410	900	9:02	12:41:51.9	+09:24:10	300	80	3.0	#84f Updated Z	4	
0110.COMP	5	9:18	12:41:51.9	+09:24:10	300	80	3.0	#84f Updated Z	4	
0111.N4051	150	9:22	12:03:09.7	+44:31:53	300	60	3.0	#6 AGN Monitor	2	
0112.N4051	150	9:24	12:03:09.7	+44:31:53	300	60	3.0	#6 AGN Monitor	2	
0113.N4051	150	9:27	12:03:09.7	+44:31:53	300	60	3.0	#6 AGN Monitor	2	
0114.COMP	10	9:30	12:03:09.7	+44:31:53	300	60	3.0	#6 AGN Monitor	2	
0115.N4151	30	9:33	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	



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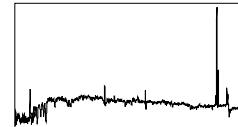
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0116.N4151	30	9:33	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0117.COMP	10	9:35	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	2	
0118.MRK279	120	9:41	13:51:53.6	69:33:13	300	45	3.0	#6 AGN Monitor	2	
0119.MRK279	120	9:43	13:51:53.6	69:33:13	300	45	3.0	#6 AGN Monitor	2	
0120.COMP	10	9:48	13:51:53.6	69:33:13	300	45	3.0	#6 AGN Monitor	2	
0121.N5548	150	9:52	14:17:59.6	+25:08:12	300	0	3.0	#6 AGN Monitor	2	
0122.N5548	150	9:55	14:17:59.6	+25:08:12	300	0	3.0	#6 AGN Monitor	2	
0123.N5548	150	9:58	14:17:59.6	+25:08:12	300	0	3.0	#6 AGN Monitor	2	
0124.COMP	10	10:01	14:17:59.6	+25:08:12	300	0	3.0	#6 AGN Monitor	2	
0125.2148_05	300	10:06	16:03:22.2	+25:22:20	300	90	3.0	#64 Cluster an	4	
0126.COMP	5	10:12	16:03:22.2	+25:22:20	300	90	3.0	#64 Cluster an	4	
0127.2148_06	300	10:16	16:02:00.6	+25:27:24	300	45	3.0	#64 Cluster an	4	
0128.COMP	5	10:22	16:02:00.6	+25:27:24	300	45	3.0	#64 Cluster an	4	
0129.2148_06	600	10:25	16:02:00.6	+25:27:24	300	110	3.0	#64 Cluster an	4	
0130.COMP	5	10:36	16:02:00.6	+25:27:24	300	110	3.0	#64 Cluster an	4	
0131.2148_07	480	10:39	16:01:53.6	+25:28:35	300	90	3.0	#64 Cluster an	4	
0132.COMP	5	10:47	16:01:53.6	+25:28:35	300	90	3.0	#64 Cluster an	4	
0133.2148_08	480	10:50	16:04:07.7	+25:44:24	300	90	3.0	#64 Cluster an	4	
0134.COMP	5	10:58	16:04:07.7	+25:44:24	300	90	3.0	#64 Cluster an	4	
0135.2148_09	480	11:00	16:01:56.9	+25:47:26	300	80	3.0	#64 Cluster an	4	



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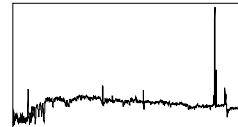
UT Date 2005-03-13 Observers FosterColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0136.COMP	5	11:09	16:01:56.9	+25:47:26	300	80	3.0	#64 Cluster an	4	
0137.2148_10	600	11:10	16:05:27.3	+25:51:27	300	80	3.0	#64 Cluster an	4	
0138.COMP	5	11:21	16:05:27.3	+25:51:27	300	80	3.0	#64 Cluster an	4	
0139.2128_05	900	11:39	15:47:44.7	-02:52:14	300	80	3.0	#64 Cluster an	4	I believe this finishes program
0140.COMP	5	11:54	15:47:44.7	-02:52:14	300	80	3.0	#64 Cluster an	4	
0141.sn2005ao	1800	12:02	17:44:59.0	+61:56:53	300	40	3.0	#2 SN Observat	2	
0142.COMP	10	12:33	17:44:59.0	+61:56:53	300	40	3.0	#2 SN Observat	2	
0143.152448-02440	180	12:39	15:27:25.6	-02:53:26	300	90	3.0	#84f Updated Z	4	May be a bit short
0144.COMP	5	12:42	15:27:25.6	-02:53:26	300	90	3.0	#84f Updated Z	4	
0145-0154.BIAS	0	12:56	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	4	
0155-0164.FLAT	8	12:59	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	4	
0165-0174.BIAS	0	13:01	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	2	
0175-0195.FLAT	16	13:12	15:27:25.6	-02:53:26	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
0001-0010.DARK	900	1:12	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	2	
0011-0020.BIAS	0	1:38	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	4	
0021-0030.FLAT	8	1:42	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	4	
0031-0040.BIAS	0	1:44	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	2	
0041-0061.FLAT	16	1:54	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	2	
0062.COMP	5	2:00	15:27:25.6	-02:53:26	300	90	3.0	#56 Spectropho	2	Line is at 2661
0063.cvso-261785	600	2:10	05:30:49.8	-03:35:33	300	90	3.0	#112 Orion PMS	4	
0064.COMP	5	2:21	05:30:49.8	-03:35:33	300	90	3.0	#112 Orion PMS	4	
0065.cvso-262032	600	2:23	05:31:06.3	-03:22:31	300	90	3.0	#112 Orion PMS	4	
0066.COMP	5	2:33	05:31:06.3	-03:22:31	300	90	3.0	#112 Orion PMS	4	
0067.cvso-239814	600	2:35	05:31:31.1	-03:46:27	300	90	3.0	#112 Orion PMS	4	
0068.COMP	5	2:46	05:31:31.1	-03:46:27	300	90	3.0	#112 Orion PMS	4	
0069.cvso-261769	600	2:47	05:31:51.9	-02:41:05	300	90	3.0	#112 Orion PMS	4	
0070.COMP	5	2:57	05:31:51.9	-02:41:05	300	90	3.0	#112 Orion PMS	4	
0071.cvso-261769	600	2:58	05:31:51.9	-02:41:05	300	90	3.0	#112 Orion PMS	4	
0072.COMP	5	3:09	05:31:51.9	-02:41:05	300	90	3.0	#112 Orion PMS	4	
0073.cvso-262904	600	3:12	05:32:04.5	-03:40:27	300	85	3.0	#112 Orion PMS	4	
0074.COMP	5	3:22	05:32:04.5	-03:40:27	300	85	3.0	#112 Orion PMS	4	
0075.cvso-262302	600	3:24	05:32:35.9	-02:49:14	300	85	3.0	#112 Orion PMS	4	
0076.COMP	5	3:34	05:32:35.9	-02:49:14	300	85	3.0	#112 Orion PMS	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0077.cvso-240779	600	3:36	05:32:44.0	-04:07:14	300	85	3.0	#112 Orion PMS	4	
0078.COMP	5	3:46	05:32:44.0	-04:07:14	300	85	3.0	#112 Orion PMS	4	
0079.cvso-241563	600	3:47	05:32:59.2	-02:00:37	300	85	3.0	#112 Orion PMS	4	
0080.COMP	5	3:57	05:32:59.2	-02:00:37	300	85	3.0	#112 Orion PMS	4	
0081.cvso-241000	600	3:59	05:33:01.4	-03:58:28	300	85	3.0	#112 Orion PMS	4	
0082.COMP	5	4:09	05:33:01.4	-03:58:28	300	85	3.0	#112 Orion PMS	4	
0083.2M08593885+4541124	300	4:11	8:59:38.8	+45:41:12	300	85	3.0	#141 Mapping t	4	
0084.COMP	5	4:16	8:59:38.8	+45:41:12	300	85	3.0	#141 Mapping t	4	
0085.2M09150664+7407318	300	4:20	9:15:6.6	+74:07:31	300	89	3.0	#141 Mapping t	4	
0086.COMP	5	4:26	9:15:6.6	+74:07:31	300	89	3.0	#141 Mapping t	4	
0087.2M09161996+6952568	480	4:27	9:16:19.9	+69:52:56	300	110	3.0	#141 Mapping t	4	
0088.COMP	5	4:36	9:16:19.9	+69:52:56	300	110	3.0	#141 Mapping t	4	
0089.2M09162215+1013546	480	4:38	9:16:22.1	+10:13:54	300	110	3.0	#141 Mapping t	4	
0090.COMP	5	4:47	9:16:22.1	+10:13:54	300	110	3.0	#141 Mapping t	4	
0091.2M09164113+2920222	480	4:53	9:16:41.1	+29:20:22	300	90	3.0	#141 Mapping t	4	
0092.COMP	5	5:01	9:16:41.1	+29:20:22	300	90	3.0	#141 Mapping t	4	
0093.2M09504251+3029344	480	5:02	9:50:42.5	+30:29:34	300	90	3.0	#141 Mapping t	4	
0094.COMP	5	5:11	9:50:42.5	+30:29:34	300	90	3.0	#141 Mapping t	4	
0095.sn2005am	480	5:15	09:16:12.4	-16:18:16	300	0	3.0	#2 SN Observat	2	
0096.COMP	10	5:23	09:16:12.4	-16:18:16	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
0097.N3377	180	5:29	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	4	
0098.COMP	5	5:32	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	4	
0099.N3227	150	5:34	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0100.N3227	150	5:36	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0101.COMP	10	5:43	10:23:30.6	+19:51:54	300	90	3.0	#6 AGN Monitor	2	
0102.MRK421	300	5:45	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0103.MRK421	300	5:50	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0104.MRK421	300	5:55	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0105.COMP	10	6:01	11:04:27.4	+38:12:32	300	90	3.0	#6 AGN Monitor	2	
0106.HD84937	10	6:05	09:48:56.1	13:44:39	300	13	3.0	#56 Spectropho	2	
0107.COMP	10	6:06	09:48:56.1	13:44:39	300	13	3.0	#56 Spectropho	2	
0108.Feige34	120	6:08	10:36:41.2	43:21:50	300	30	3.0	#56 Spectropho	2	
0109.COMP	10	6:11	10:36:41.2	43:21:50	300	30	3.0	#56 Spectropho	2	
0110.N4051	150	6:14	12:03:09.7	+44:31:53	300	30	3.0	#6 AGN Monitor	2	
0111.N4051	150	6:17	12:03:09.7	+44:31:53	300	30	3.0	#6 AGN Monitor	2	
0112.N4051	150	6:19	12:03:09.7	+44:31:53	300	30	3.0	#6 AGN Monitor	2	
0113.COMP	10	6:23	12:03:09.7	+44:31:53	300	30	3.0	#6 AGN Monitor	2	
0114.2M10251867+7010223	300	6:28	10:25:18.6	+70:10:22	300	90	3.0	#141 Mapping t	4	Getting quite cloudy
0115.COMP	5	6:34	10:25:18.6	+70:10:22	300	90	3.0	#141 Mapping t	4	
0116.2M10273358+6657234	300	6:37	10:27:33.5	+66:57:23	300	90	3.0	#141 Mapping t	4	



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UT Date 2005-03-14 Observers FosterColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0117.COMP	5	6:42	10:27:33.5	+66:57:23	300	90	3.0	#141 Mapping t	4	
0118.2M10294146+6850482	300	6:43	10:29:41.4	+68:50:48	300	90	3.0	#141 Mapping t	4	
0119.COMP	5	6:49	10:29:41.4	+68:50:48	300	90	3.0	#141 Mapping t	4	
0120.2M10340239+3452104	480	6:56	10:34:2.3	+34:52:10	300	90	3.0	#141 Mapping t	4	
0121.COMP	5	7:06	10:34:2.3	+34:52:10	300	90	3.0	#141 Mapping t	4	
0122.2M10400907+7223135	480	7:12	10:40:9.0	+72:23:13	300	90	3.0	#141 Mapping t	4	
0123.COMP	5	7:21	10:40:9.0	+72:23:13	300	90	3.0	#141 Mapping t	4	
0124.sn2005u	1800	7:25	11:28:33.1	+58:33:41	300	0	3.0	#2 SN Observat	2	I think this was at the wrong location. See 128
0125.COMP	10	7:55	11:28:33.1	+58:33:41	300	0	3.0	#2 SN Observat	2	
0126.sn2004gt	1800	8:02	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0127.COMP	10	8:32	12:01:50.3	-18:52:12	300	0	3.0	#2 SN Observat	2	
0128.sn2005u	1800	8:38	11:28:33.1	+58:33:41	300	-30	3.0	#2 SN Observat	2	
0129.COMP	10	9:08	11:28:33.1	+58:33:41	300	-30	3.0	#2 SN Observat	2	
0130.140330-00040	1200	9:25	14:06:01.4	-00:18:39	300	90	3.0	#84f Updated Z	4	
0131.COMP	5	9:46	14:06:01.4	-00:18:39	300	90	3.0	#84f Updated Z	4	
0132.140424-01210	1200	9:50	14:06:56.5	-01:35:42	300	90	3.0	#84f Updated Z	4	
0133.COMP	5	10:11	14:06:56.5	-01:35:42	300	90	3.0	#84f Updated Z	4	
0134.141148+00020	1200	10:14	14:14:24.4	-00:11:31	300	90	3.0	#84f Updated Z	4	
0135.COMP	5	10:34	14:14:24.4	-00:11:31	300	90	3.0	#84f Updated Z	4	
0136.141242-02120	900	10:48	14:15:17.9	-02:26:42	300	90	3.0	#84f Updated Z	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-14 Observers Foster

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0137.COMP	5	11:05	14:15:17.9	-02:26:42	300	90	3.0	#84f Updated Z	4	
0138.141354-00310	900	11:09	14:16:29.0	-00:44:38	300	90	3.0	#84f Updated Z	4	
0139.COMP	5	11:24	14:16:29.0	-00:44:38	300	90	3.0	#84f Updated Z	4	
0140.150754-01590	600	11:30	15:10:29.5	-02:10:08	300	90	3.0	#84f Updated Z	4	
0141.COMP	5	11:41	15:10:29.5	-02:10:08	300	90	3.0	#84f Updated Z	4	
0142.150824+05560	600	11:44	15:10:56.1	+05:44:41	300	76	3.0	#84f Updated Z	4	
0143.COMP	5	11:55	15:10:56.1	+05:44:41	300	76	3.0	#84f Updated Z	4	
0144.150900-00050	600	11:57	15:11:37.0	-00:16:23	300	90	3.0	#84f Updated Z	4	
0145.COMP	5	12:07	15:11:37.0	-00:16:23	300	90	3.0	#84f Updated Z	4	
0146.150930-03030	600	12:09	15:12:01.1	-03:13:19	300	90	3.0	#84f Updated Z	4	
0147.COMP	5	12:20	15:12:01.1	-03:13:19	300	90	3.0	#84f Updated Z	4	
0148.151436-03010	300	12:21	15:17:12.2	-03:11:39	300	90	3.0	#84f Updated Z	4	
0149.COMP	5	12:27	15:17:12.2	-03:11:39	300	90	3.0	#84f Updated Z	4	
0150.151500+13210	300	12:30	15:17:22.0	+13:10:55	300	90	3.0	#84f Updated Z	4	
0151.COMP	5	12:37	15:17:22.0	+13:10:55	300	90	3.0	#84f Updated Z	4	
0152.151748-00040	300	12:38	15:20:24.7	-00:13:33	300	90	3.0	#84f Updated Z	4	
0153.COMP	5	12:44	15:20:24.7	-00:13:33	300	90	3.0	#84f Updated Z	4	
0154-0163.BIAS	0	12:50	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	4	
0164-0173.FLAT	8	12:53	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	4	
0174-0183.BIAS	0	12:56	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-14 Observers FosterColl. Focus 1015 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>
0184-0204.FLAT	16	13:06	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	



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FAST SPECTROGRAPH LOG



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UT Date 2005-03-15 Observers Briceno

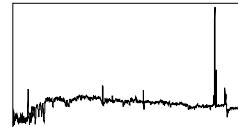
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.COMP	5	23:24	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	
0002.COMP	5	23:49	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	
0003.COMP	5	23:52	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	
0004-0013.BIAS	0	23:56	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	
0014-0023.BIAS	0	23:59	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	4	
0024-0033.FLAT	8	0:02	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	4	
0034-0043.BIAS	0	0:04	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	
0044-0064.FLAT	16	0:15	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	
0065-0068.DARK	900	1:48	15:20:24.7	-00:13:33	300	90	3.0	#57 Velocity S	2	
0069.COMP	5	3:14	06:57:51	+27:13:42	300	90	3.0	#57 Velocity S	2	
0070.HD52071	5	3:16	06:57:51	+27:13:42	300	90	3.0	#57 Velocity S	2	
0071.COMP	5	3:27	05:33:24.5	-02:11:21	300	90	3.0	#112 Orion PMS	2	
0072.cvso-241998	600	3:28	05:33:24.5	-02:11:21	300	90	3.0	#112 Orion PMS	2	
0073.COMP	5	3:38	05:33:24.5	-02:11:21	300	90	3.0	#112 Orion PMS	2	
0074.COMP	10	11:27	17:44:59.0	+61:56:53	300	90	3.0	#2 SN Observat	2	
0075.sn2005ao	1200	11:31	17:44:59.0	+61:56:53	300	90	3.0	#2 SN Observat	2	
0076.COMP	10	11:52	17:44:59.0	+61:56:53	300	90	3.0	#2 SN Observat	2	
0077.COMP	10	11:57	15:50:03.0	33:05:49	300	90	3.0	#56 Spectropho	2	
0078.BDp332642	90	11:58	15:50:03.0	33:05:49	300	90	3.0	#56 Spectropho	2	
0079.COMP	10	12:02	15:50:03.0	33:05:49	300	90	3.0	#56 Spectropho	2	



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UT Date 2005-03-15 Observers BricenoColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0080.BDp332642	30	12:03	15:50:03.0	33:05:49	300	90	3.0	#56 Spectropho	2	
0081.COMP	10	12:08	15:50:03.0	33:05:49	300	90	3.0	#56 Spectropho	2	
0082.BDp262606	45	12:12	14:49:02.3	+25:42:09	300	90	3.0	#56 Spectropho	2	
0083.COMP	10	12:14	14:49:02.3	+25:42:09	300	90	3.0	#56 Spectropho	2	
0084.BDp262606	90	12:16	14:49:02.3	+25:42:09	300	90	3.0	#56 Spectropho	2	
0085.COMP	10	12:20	14:49:02.3	+25:42:09	300	90	3.0	#56 Spectropho	2	
0086.COMP	10	12:24	17:44:59.0	+61:56:53	300	90	3.0	#2 SN Observat	2	
0087.sn2005ao	1200	12:24	17:44:59.0	+61:56:53	300	90	3.0	#2 SN Observat	2	
0088.COMP	10	12:45	17:44:59.0	+61:56:53	300	90	3.0	#2 SN Observat	2	
0089.COMP	10	12:50	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0090.N5548	150	12:51	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0091.N5548	150	12:54	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0092.N5548	150	12:57	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0093.COMP	150	13:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	2	
0094-0102.BIAS	0	13:45	17:54:33.6	+31:30:21	300	90	3.0	#2 SN Observat	4	
0103.BIAS	0	13:45	17:54:38.1	+31:30:20	300	90	3.0	#2 SN Observat	4	
0104-0109.FLAT	8	13:47	17:56:43.5	+31:30:20	300	90	3.0	#2 SN Observat	4	
0110-0113.FLAT	8	13:49	17:58:02.0	+31:30:19	300	90	3.0	#2 SN Observat	4	
0114-0117.BIAS	0	13:50	17:58:58.2	+31:30:19	300	90	3.0	#2 SN Observat	2	
0118-0123.BIAS	0	13:51	18:00:16.0	+31:30:18	300	90	3.0	#2 SN Observat	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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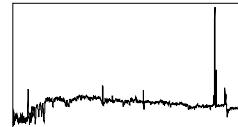
UT Date 2005-03-15 Observers BricenoColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0124.FLAT	16	13:51	18:00:51.3	+31:30:18	300	90	3.0	#2 SN Observat	2	
0125-0129.FLAT	16	13:54	18:03:22.9	+31:30:17	300	90	3.0	#2 SN Observat	2	
0130-0133.FLAT	16	13:56	18:05:24.3	+31:30:16	300	90	3.0	#2 SN Observat	2	
0134-0138.FLAT	16	13:58	18:07:56.1	+31:30:15	300	90	3.0	#2 SN Observat	2	
0139-0142.FLAT	16	14:00	18:09:57.4	+31:30:14	300	90	3.0	#2 SN Observat	2	
0143-0144.FLAT	16	14:01	18:10:58.1	+31:30:13	300	90	3.0	#2 SN Observat	2	
0145.DARK	900	14:06	18:29:55.2	+31:30:05	300	90	3.0	#2 SN Observat	4	
0146.DARK	900	14:21	18:45:06.5	+31:29:58	300	90	3.0	#2 SN Observat	4	
0147.DARK	900	14:36	19:00:21.4	+31:29:51	300	90	3.0	#2 SN Observat	4	
0148.DARK	900	14:51	19:15:32.8	+31:29:44	300	90	3.0	#2 SN Observat	4	
0149.DARK	900	15:06	19:30:44.1	+31:29:37	300	90	3.0	#2 SN Observat	4	
0150.DARK	900	15:21	19:45:58.9	+31:29:30	300	90	3.0	#2 SN Observat	2	
0151.DARK	900	15:37	20:01:18.0	+31:29:24	300	90	3.0	#2 SN Observat	2	
0152.DARK	900	15:52	20:16:33.6	+31:29:17	300	90	3.0	#2 SN Observat	2	
0153.DARK	900	16:07	20:31:52.5	+31:29:11	300	90	3.0	#2 SN Observat	2	
0154.DARK	900	16:22	20:47:08.2	+31:29:05	300	90	3.0	#2 SN Observat	2	



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UT Date 2005-03-16 Observers Briceno

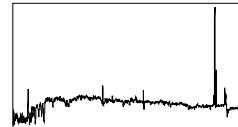
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0010.BIAS	0	0:49	05:00:23.7	+31:29:15	300	90	3.0	#2 SN Observat	4	
0011-0012.FLAT	8	0:50	05:01:06.8	+31:29:15	300	90	3.0	#2 SN Observat	4	
0013-0019.FLAT	8	0:52	05:03:29.8	+31:29:16	300	90	3.0	#2 SN Observat	4	
0020.FLAT	8	0:53	05:03:51.0	+31:29:17	300	90	3.0	#2 SN Observat	4	
0021-0030.BIAS	0	0:55	05:06:01.4	+31:29:17	300	90	3.0	#2 SN Observat	2	
0031-0034.FLAT	16	0:57	05:08:11.1	+31:29:18	300	90	3.0	#2 SN Observat	2	
0035-0039.FLAT	16	0:59	05:10:39.3	+31:29:19	300	90	3.0	#2 SN Observat	2	
0040-0044.FLAT	16	1:02	05:13:11.0	+31:29:20	300	90	3.0	#2 SN Observat	2	
0045-0048.FLAT	16	1:04	05:15:12.2	+31:29:21	300	90	3.0	#2 SN Observat	2	
0049-0051.FLAT	16	1:05	05:16:43.3	+31:29:22	300	90	3.0	#2 SN Observat	2	
0052.COMP	10	1:12	05:22:43.3	+31:29:24	300	0	3.0	#2 SN Observat	2	
0053.COMP	10	1:40	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	2	
0054-0056.sky	10	1:43	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	2	
0057.sky	15	1:43	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	2	
0058.sky	18	1:44	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	2	
0059.sky	20	1:44	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	2	
0060.sky	25	1:46	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	2	
0061-0063.sky	30	1:48	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	2	
0064.COMP	10	1:49	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	2	
0065.sky	10	1:50	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	



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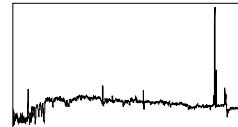
UT Date 2005-03-16 Observers BricenoColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0066.sky	25	1:51	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0067.sky	30	1:51	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0068.sky	35	1:52	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0069.sky	40	1:53	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0070.sky	45	1:54	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0071.sky	50	1:55	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0072.sky	60	1:56	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0073.sky	90	1:57	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0074.sky	120	1:59	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0075.sky	180	2:01	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0076.COMP	5	2:10	05:46:38.3	+31:29:35	300	0	3.0	#57 Velocity S	4	
0077.G191B2B	150	2:34	05:01:31.5	52:45:52	300	90	3.0	#56 Spectropho	2	
0078.COMP	10	2:37	05:01:31.5	52:45:52	300	90	3.0	#56 Spectropho	2	
0079.sn2004gq	1800	2:47	05:12:04.8	-15:40:54	300	27	3.0	#2 SN Observat	2	
0080.COMP	10	3:18	05:12:04.8	-15:40:54	300	27	3.0	#2 SN Observat	2	
0081.cvso-241295	600	3:28	05:33:25.1	-04:03:30	300	0	3.0	#112 Orion PMS	2	
0082.COMP	10	3:39	05:33:25.1	-04:03:30	300	0	3.0	#112 Orion PMS	2	
0083.cvso-241805	600	3:54	05:34:04.8	-04:04:34	300	40	3.0	#112 Orion PMS	2	
0084.COMP	10	4:05	05:34:04.8	-04:04:34	300	40	3.0	#112 Orion PMS	2	
0085.cvso-264863	600	4:10	05:34:10.3	-03:16:59	300	40	3.0	#112 Orion PMS	2	



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FAST SPECTROGRAPH LOG



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UT Date 2005-03-16 Observers Briceno

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0086.COMP	10	4:21	05:34:10.3	-03:16:59	300	40	3.0	#112 Orion PMS	2	
0087.cvso-264867	900	4:26	05:34:10.6	-03:18:22	300	90	3.0	#112 Orion PMS	2	
0088.COMP	10	4:42	05:34:10.6	-03:18:22	300	90	3.0	#112 Orion PMS	2	
0089.cvso-242031	600	4:44	05:34:20.5	-04:07:14	300	90	3.0	#112 Orion PMS	2	
0090.COMP	10	4:55	05:34:20.5	-04:07:14	300	90	3.0	#112 Orion PMS	2	
0091.sn2005am	480	5:11	09:16:12.4	-16:18:16	300	0	3.0	#2 SN Observat	2	
0092.COMP	10	5:19	09:16:12.4	-16:18:16	300	0	3.0	#2 SN Observat	2	
0093.sn2005m	1500	5:43	09:37:32.3	+23:12:02	300	0	3.0	#2 SN Observat	2	
0094.COMP	10	6:09	09:37:32.3	+23:12:02	300	0	3.0	#2 SN Observat	2	
0095.Feige34	120	6:15	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0096.COMP	10	6:17	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0097.Feige34	180	6:18	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0098.HD84937	20	6:27	09:48:56.1	13:44:39	300	31	3.0	#56 Spectropho	2	
0099.COMP	10	6:29	09:48:56.1	13:44:39	300	31	3.0	#56 Spectropho	2	
0100.N3377	180	6:34	10:45:02.6	+14:14:51	300	0	3.0	#57 Velocity S	2	
0101.COMP	10	6:38	10:45:02.6	+14:14:51	300	0	3.0	#57 Velocity S	2	
0102.N3379	240	6:40	10:45:11.4	+12:50:48	300	0	3.0	#57 Velocity S	2	
0103.COMP	10	6:44	10:45:11.4	+12:50:48	300	0	3.0	#57 Velocity S	2	
0104.Feige34	180	7:21	10:36:41.2	43:21:50	600	0	2.0	#56 Spectropho	4	Bad-Grating cover in!
0105.COMP	5	7:25	10:36:41.2	43:21:50	600	0	2.0	#56 Spectropho	4	Bad-Grating cover in!



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0106.hs2344	200	7:32	12:42:15.1	27:54:33	600	0	2.0	#122 Halo Star	4	Bad-Grating cover in!
0107.hs2344	600	7:38	12:42:15.1	27:54:33	600	0	2.0	#122 Halo Star	4	
0108.COMP	5	7:48	12:42:15.1	27:54:33	600	0	2.0	#122 Halo Star	4	
0109.Feige34	180	7:51	10:36:41.2	43:21:50	600	0	2.0	#56 Spectropho	4	
0110.COMP	10	7:54	10:36:41.2	43:21:50	600	0	2.0	#56 Spectropho	4	
0111.hs2345	700	7:58	12:42:22.4	62:25:24	600	0	2.0	#122 Halo Star	4	
0112.COMP	5	8:10	12:42:22.4	62:25:24	600	0	2.0	#122 Halo Star	4	
0113.hs2349	400	8:13	12:42:57.7	32:04:03	600	0	2.0	#122 Halo Star	4	
0114.COMP	5	8:21	12:42:57.7	32:04:03	600	0	2.0	#122 Halo Star	4	
0115.hs2353	300	8:23	12:43:41.7	32:21:27	600	0	2.0	#122 Halo Star	4	
0116.COMP	5	8:29	12:43:41.7	32:21:27	600	0	2.0	#122 Halo Star	4	
0117.COMP	10	8:29	12:43:41.7	32:21:27	600	0	2.0	#122 Halo Star	4	
0118.hs2358	400	8:34	12:44:56.7	75:41:03	600	0	2.0	#122 Halo Star	4	
0119.COMP	10	8:41	12:44:56.7	75:41:03	600	0	2.0	#122 Halo Star	4	
0120.hs2362	360	8:45	12:45:32.5	56:53:32	600	0	2.0	#122 Halo Star	4	
0121.COMP	10	8:52	12:45:32.5	56:53:32	600	0	2.0	#122 Halo Star	4	
0122.hs2366	360	9:00	12:46:23.9	76:18:27	600	0	2.0	#122 Halo Star	4	
0123.COMP	10	9:07	12:46:23.9	76:18:27	600	0	2.0	#122 Halo Star	4	
0124.hs2369	300	9:11	12:47:15.5	45:21:23	600	0	2.0	#122 Halo Star	4	
0125.COMP	10	9:17	12:47:15.5	45:21:23	600	0	2.0	#122 Halo Star	4	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0126.hs2372	360	9:20	12:48:58.8	26:48:03	600	0	2.0	#122 Halo Star	4	
0127.COMP	10	9:28	12:48:58.8	26:48:03	600	0	2.0	#122 Halo Star	4	
0128.hs2375	400	9:30	12:49:08.2	62:01:58	600	0	2.0	#122 Halo Star	4	
0129.COMP	10	9:37	12:49:08.2	62:01:58	600	0	2.0	#122 Halo Star	4	
0130.hs2376	360	9:40	12:49:17.4	67:10:07	600	0	2.0	#122 Halo Star	4	
0131.COMP	10	9:47	12:49:17.4	67:10:07	600	0	2.0	#122 Halo Star	4	
0132.hs2377	420	9:51	12:49:23.0	34:25:48	600	0	2.0	#122 Halo Star	4	
0133.COMP	10	9:58	12:49:23.0	34:25:48	600	0	2.0	#122 Halo Star	4	
0134.hs2384	300	10:01	12:50:09.8	63:20:17	600	0	2.0	#122 Halo Star	4	
0135.COMP	10	10:06	12:50:09.8	63:20:17	600	0	2.0	#122 Halo Star	4	
0136.hs2388	400	10:11	12:51:01.8	67:59:14	600	0	2.0	#122 Halo Star	4	
0137.COMP	10	10:18	12:51:01.8	67:59:14	600	0	2.0	#122 Halo Star	4	
0138.hs2396	300	10:23	12:51:53.8	53:15:17	600	0	2.0	#122 Halo Star	4	
0139.COMP	10	10:28	12:51:53.8	53:15:17	600	0	2.0	#122 Halo Star	4	
0140.hs2398	400	10:32	12:52:36.6	43:04:34	600	0	2.0	#122 Halo Star	4	
0141.COMP	10	10:39	12:52:36.6	43:04:34	600	0	2.0	#122 Halo Star	4	
0142.hs2411	400	10:43	12:55:40.7	56:41:06	600	0	2.0	#122 Halo Star	4	
0143.COMP	10	10:50	12:55:40.7	56:41:06	600	0	2.0	#122 Halo Star	4	
0144.hs2413	400	10:54	12:56:22.9	63:16:42	600	0	2.0	#122 Halo Star	4	
0145.COMP	10	11:01	12:56:22.9	63:16:42	600	0	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.hs2435	280	11:11	13:02:38.6	38:27:21	600	0	2.0	#122 Halo Star	4	
0147.COMP	10	11:17	13:02:38.6	38:27:21	600	0	2.0	#122 Halo Star	4	
0148.hs2436	300	11:20	13:04:17.1	43:15:15	600	0	2.0	#122 Halo Star	4	
0149.COMP	10	11:25	13:04:17.1	43:15:15	600	0	2.0	#122 Halo Star	4	
0150.hs2602	300	11:35	13:58:11.4	63:44:38	600	0	2.0	#122 Halo Star	4	
0151.COMP	10	11:40	13:58:11.4	63:44:38	600	0	2.0	#122 Halo Star	4	
0152.hs2603	300	11:43	13:58:29.0	55:48:41	600	0	2.0	#122 Halo Star	4	
0153.COMP	10	11:48	13:58:29.0	55:48:41	600	0	2.0	#122 Halo Star	4	
0154.hs2605	300	11:50	13:59:27.4	68:11:54	600	0	2.0	#122 Halo Star	4	
0155.COMP	10	11:56	13:59:27.4	68:11:54	600	0	2.0	#122 Halo Star	4	
0156.hs2607	240	11:59	14:00:58.7	70:09:25	600	0	2.0	#122 Halo Star	4	
0157.COMP	10	12:04	14:00:58.7	70:09:25	600	0	2.0	#122 Halo Star	4	
0158.hs2611	240	12:08	14:01:53.4	49:31:50	600	0	2.0	#122 Halo Star	4	
0159.COMP	10	12:12	14:01:53.4	49:31:50	600	0	2.0	#122 Halo Star	4	
0160.hs2621	300	12:15	14:06:41.2	75:36:17	600	0	2.0	#122 Halo Star	4	
0161.COMP	10	12:21	14:06:41.2	75:36:17	600	0	2.0	#122 Halo Star	4	
0162.hs2622	400	12:29	14:07:11.7	58:53:27	600	90	2.0	#122 Halo Star	4	
0163.COMP	10	12:36	14:07:11.7	58:53:27	600	90	2.0	#122 Halo Star	4	
0164.hs2628	400	12:40	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	4	
0165.COMP	10	12:47	14:08:33.3	53:05:49	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
0166-0168.FLAT	24	12:56	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	4	Bad
0169-0181.FLAT	24	13:03	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	4	
0182-0191.BIAS	0	13:16	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	4	
0192-0196.DARK	900	14:34	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	4	
0197-0201.DARK	900	15:50	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	2	



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Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0010.BIAS	0	0:52	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	4	
0011-0020.FLAT	8	0:55	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	4	Wrong! 600 grating!
0021-0030.BIAS	0	0:58	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	2	Wrong! 600 grating!
0031-0051.FLAT	16	1:08	14:08:33.3	53:05:49	600	90	2.0	#122 Halo Star	2	Wrong! 600 grating!
0052-0061.BIAS	0	1:24	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	4	
0062-0071.FLAT	8	1:28	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	4	
0072-0081.BIAS	0	1:30	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0082-0102.FLAT	16	1:40	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0103.sky	30	1:45	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0104.sky	45	1:47	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0105.sky	50	1:48	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0106.sky	60	1:50	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0107.sky	90	1:54	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0108-0109.sky	120	1:58	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0110.sky	150	2:00	14:08:33.3	53:05:49	300	90	3.0	#122 Halo Star	2	
0111.COMP	10	2:13	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0112.GKTau	60	2:13	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0113.GKTau	300	2:16	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0114.COMP	10	2:21	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0115.GITau	60	2:25	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	



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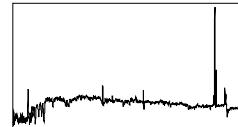
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0116.GITau	300	2:26	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0117.COMP	10	2:32	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0118.cvso-242099	600	2:37	05:34:26.6	-04:00:40	300	90	3.0	#112 Orion PMS	2	
0119.COMP	10	2:47	05:34:26.6	-04:00:40	300	90	3.0	#112 Orion PMS	2	
0120.cvso-242486	600	2:50	05:34:55.4	-03:59:42	300	90	3.0	#112 Orion PMS	2	
0121.COMP	10	3:01	05:34:55.4	-03:59:42	300	90	3.0	#112 Orion PMS	2	
0122.cvso-243582	700	3:03	05:34:56.5	-02:05:33	300	90	3.0	#112 Orion PMS	2	
0123.COMP	10	3:15	05:34:56.5	-02:05:33	300	90	3.0	#112 Orion PMS	2	
0124.cvso-264430	600	3:17	05:34:58.2	-02:59:01	300	90	3.0	#112 Orion PMS	2	
0125.COMP	10	3:28	05:34:58.2	-02:59:01	300	90	3.0	#112 Orion PMS	2	
0126.cvso-242596	400	3:29	05:35:03.9	-03:56:25	300	90	3.0	#112 Orion PMS	2	
0127.COMP	10	3:36	05:35:03.9	-03:56:25	300	90	3.0	#112 Orion PMS	2	
0128.cvso-264551	600	3:39	05:35:07.5	-02:48:59	300	90	3.0	#112 Orion PMS	2	
0129.COMP	10	3:49	05:35:07.5	-02:48:59	300	90	3.0	#112 Orion PMS	2	
0130.cvso-265770	600	3:52	05:35:09.5	-03:30:06	300	90	3.0	#112 Orion PMS	2	
0131.COMP	10	4:03	05:35:09.5	-03:30:06	300	90	3.0	#112 Orion PMS	2	
0132.cvso-242841	700	4:04	05:35:20.7	-04:15:33	300	90	3.0	#112 Orion PMS	2	
0133.COMP	10	4:21	05:35:20.7	-04:15:33	300	90	3.0	#112 Orion PMS	2	
0134.cvso-264781	700	4:24	05:35:21.7	-02:49:53	300	90	3.0	#112 Orion PMS	2	
0135.COMP	10	4:36	05:35:21.7	-02:49:53	300	90	3.0	#112 Orion PMS	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0136.cvso-244220	800	4:39	05:35:30.5	-02:00:39	300	90	3.0	#112 Orion PMS	2	
0137.COMP	10	4:52	05:35:30.5	-02:00:39	300	90	3.0	#112 Orion PMS	2	
0138.cvso-247101	400	4:54	05:37:54.2	-02:14:00	300	90	3.0	#112 Orion PMS	2	
0139.COMP	10	5:01	05:37:54.2	-02:14:00	300	90	3.0	#112 Orion PMS	2	
0140.COMP	10	5:05	05:37:54.2	-02:14:00	300	90	3.0	#112 Orion PMS	2	
0141.COMP	10	5:08	05:37:54.2	-02:14:00	300	90	3.0	#112 Orion PMS	2	Adjusted grating tilt slightly. Line 7383.9 was at 2665. Now at
0142.sn2005am	480	5:22	09:16:12.4	-16:18:16	300	5	3.0	#2 SN Observat	2	
0143.COMP	10	5:31	09:16:12.4	-16:18:16	300	5	3.0	#2 SN Observat	2	
0144.sn2005m	1800	5:37	09:37:32.3	+23:12:02	300	35	3.0	#2 SN Observat	2	
0145.COMP	10	6:07	09:37:32.3	+23:12:02	300	35	3.0	#2 SN Observat	2	
0146.HD84937	20	6:14	09:48:56.1	13:44:39	300	25	3.0	#56 Spectropho	2	
0147.HD84937	10	6:16	09:48:56.1	13:44:39	300	25	3.0	#56 Spectropho	2	
0148.COMP	10	6:17	09:48:56.1	13:44:39	300	25	3.0	#56 Spectropho	2	
0149.Feige34	120	6:20	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	NOTE: PA=0
0150.COMP	10	6:23	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0151.COMP	10	6:23	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0152.Feige34	120	6:25	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	NOTE: PA=0
0153.COMP	10	6:27	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	2	
0154.N3377	180	6:33	10:45:02.6	+14:14:51	300	0	3.0	#57 Velocity S	2	
0155.COMP	10	6:36	10:45:02.6	+14:14:51	300	0	3.0	#57 Velocity S	2	



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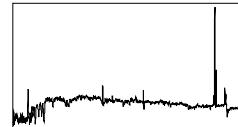
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0156.N3379	180	6:38	10:45:11.4	+12:50:48	300	0	3.0	#57 Velocity S	2	
0157.COMP	10	6:41	10:45:11.4	+12:50:48	300	0	3.0	#57 Velocity S	2	
0158.FineFoc	60	6:46	11:01:27.4	31:14:47	300	0	3.0	#56 Spectropho	1	
0159.FineFoc	60	6:54	11:01:27.4	31:14:47	300	0	3.0	#56 Spectropho	1	
0160.2M10344164-0957441	600	7:05	10:34:41.6	-09:57:44	300	0	3.0	#141 Mapping t	2	binned by 2
0161.2M10344164-0957441	1000	7:17	10:34:41.6	-09:57:44	300	0	3.0	#141 Mapping t	2	binned by 2
0162.COMP	10	7:35	10:34:41.6	-09:57:44	300	0	3.0	#141 Mapping t	2	
0163.2M12591294+3607460	800	7:45	12:59:12.9	+36:07:46	300	0	3.0	#141 Mapping t	4	
0164.COMP	10	7:58	12:59:12.9	+36:07:46	300	0	3.0	#141 Mapping t	4	
0165.2M13103415+3438103	600	8:05	13:10:34.1	+34:38:10	300	0	3.0	#141 Mapping t	4	
0166.COMP	10	8:17	13:10:34.1	+34:38:10	300	0	3.0	#141 Mapping t	4	
0167.2M13435632+0745376	900	8:22	13:43:56.3	+07:45:37	300	0	3.0	#141 Mapping t	4	
0168.COMP	10	8:38	13:43:56.3	+07:45:37	300	0	3.0	#141 Mapping t	4	
0169.sn2004gk	1200	8:45	12:25:33.2	+12:15:39	300	25	3.0	#2 SN Observat	4	
0170.COMP	10	9:05	12:25:33.2	+12:15:39	300	25	3.0	#2 SN Observat	4	
0171.2M13551573+1933486	800	9:11	13:55:15.7	+19:33:48	300	25	3.0	#141 Mapping t	4	
0172.COMP	10	9:25	13:55:15.7	+19:33:48	300	25	3.0	#141 Mapping t	4	
0173.2M13452239+0816259	800	9:28	13:45:22.3	+08:16:25	300	25	3.0	#141 Mapping t	4	
0174.COMP	10	9:42	13:45:22.3	+08:16:25	300	25	3.0	#141 Mapping t	4	
0175.2128_05	1800	9:52	15:47:44.7	-02:52:14	300	0	3.0	#64 Cluster an	4	



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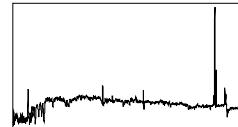
UT Date 2005-03-17 Observers BricenoColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0176.COMP	10	10:23	15:47:44.7	-02:52:14	300	0	3.0	#64 Cluster an	4	
0177.BDp332642	90	10:38	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0178.COMP	10	10:40	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0179.hs2595	300	10:47	13:55:08.0	79:47:27	600	90	2.0	#122 Halo Star	4	
0180.COMP	10	10:53	13:55:08.0	79:47:27	600	90	2.0	#122 Halo Star	4	
0181.hs2596	318	11:00	13:55:57.6	+73:40:46	600	90	2.0	#122 Halo Star	4	
0182.COMP	10	11:06	13:55:57.6	+73:40:46	600	90	2.0	#122 Halo Star	4	
0183.hs2597	426	11:09	13:56:29.8	61:04:37	600	90	2.0	#122 Halo Star	4	
0184.COMP	10	11:17	13:56:29.8	61:04:37	600	90	2.0	#122 Halo Star	4	
0185.hs2598	180	11:22	13:56:36.0	80:39:36	600	90	2.0	#122 Halo Star	4	
0186.COMP	10	11:25	13:56:36.0	80:39:36	600	90	2.0	#122 Halo Star	4	
0187.hs2599	324	11:29	13:56:37.3	54:57:25	600	90	2.0	#122 Halo Star	4	
0188.COMP	10	11:36	13:56:37.3	54:57:25	600	90	2.0	#122 Halo Star	4	
0189.hs2600	312	11:40	13:56:50.7	58:44:42	600	90	2.0	#122 Halo Star	4	
0190.COMP	10	11:46	13:56:50.7	58:44:42	600	90	2.0	#122 Halo Star	4	
0191.hs2601	528	11:50	13:57:24.8	44:53:57	600	90	2.0	#122 Halo Star	4	
0192.COMP	10	11:59	13:57:24.8	44:53:57	600	90	2.0	#122 Halo Star	4	
0193.hs2604	264	12:04	13:59:27.2	66:22:00	600	90	2.0	#122 Halo Star	4	
0194.COMP	10	12:08	13:59:27.2	66:22:00	600	90	2.0	#122 Halo Star	4	
0195.hs2606	606	12:14	13:59:27.4	55:08:34	600	90	2.0	#122 Halo Star	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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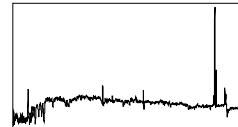
UT Date 2005-03-17 Observers BricenoColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0196.COMP	10	12:24	13:59:27.4	55:08:34	600	90	2.0	#122 Halo Star	4	
0197.hs2608	800	12:27	14:01:13.1	51:55:32	600	90	2.0	#122 Halo Star	4	
0198.COMP	10	12:41	14:01:13.1	51:55:32	600	90	2.0	#122 Halo Star	4	
0199-0208.FLAT	24	12:53	14:01:13.1	51:55:32	600	90	2.0	#122 Halo Star	4	
0209-0218.BIAS	0	12:58	14:01:13.1	51:55:32	600	90	2.0	#122 Halo Star	4	
0219.COMP	10	13:06	14:01:13.1	51:55:32	300	90	3.0	#122 Halo Star	4	
0220.COMP	10	13:08	14:01:13.1	51:55:32	300	90	3.0	#122 Halo Star	4	
0221.COMP	10	13:12	14:01:13.1	51:55:32	300	90	3.0	#122 Halo Star	4	
0222.COMP	10	13:13	14:01:13.1	51:55:32	300	90	3.0	#122 Halo Star	4	
0223.COMP	10	13:14	14:01:13.1	51:55:32	300	90	3.0	#122 Halo Star	4	
0224.COMP	10	13:17	14:01:13.1	51:55:32	300	90	3.0	#122 Halo Star	4	
0225-0229.DARK	900	14:21	14:01:13.1	51:55:32	300	90	3.0	#122 Halo Star	4	
0230-0234.DARK	900	15:37	14:01:13.1	51:55:32	300	90	3.0	#122 Halo Star	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-18 Observers CrookColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0010.BIAS	0	1:26	05:44:37.9	+31:29:34	300	90	3.0	#122 Halo Star	4	
0011-0013.FLAT	8	1:27	05:45:40.4	+31:29:34	300	90	3.0	#122 Halo Star	4	
0014-0019.FLAT	8	1:29	05:47:40.6	+31:29:35	300	90	3.0	#122 Halo Star	4	
0020.FLAT	8	1:29	05:48:01.8	+31:29:36	300	90	3.0	#122 Halo Star	4	
0021-0029.BIAS	0	1:31	05:50:00.9	+31:29:36	300	90	3.0	#122 Halo Star	2	
0030.BIAS	0	1:31	05:50:13.6	+31:29:37	300	90	3.0	#122 Halo Star	2	
0031-0034.FLAT	16	1:33	05:52:21.8	+31:29:37	300	90	3.0	#122 Halo Star	2	
0035-0038.FLAT	16	1:35	05:54:24.5	+31:29:38	300	90	3.0	#122 Halo Star	2	
0039-0043.FLAT	16	1:38	05:56:53.8	+31:29:39	300	90	3.0	#122 Halo Star	2	
0044-0047.FLAT	16	1:40	05:58:56.6	+31:29:40	300	90	3.0	#122 Halo Star	2	
0048-0051.FLAT	16	1:42	06:00:56.0	+31:29:41	300	90	3.0	#122 Halo Star	2	
0052.sky	30	1:48	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	Bad
0053.sky	45	1:50	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	Bad
0054.sky	30	1:51	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	Bad
0055.sky	10	1:52	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	
0056-0057.sky	15	1:53	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	
0058.sky	20	1:54	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	
0059.sky	30	1:54	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	
0060.sky	45	1:55	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	
0061.sky	60	1:56	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-18 Observers Crook

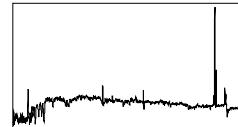
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0062.sky	80	1:58	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	
0063.sky	120	1:59	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	
0064.sky	180	2:02	06:04:00	32:00:00	300	90	3.0	#122 Halo Star	2	
0065.COMP	10	2:16	06:04:00	32:00:00	300	90	3.0	#56 Spectropho	2	
0066.HD52071	10	2:54	06:57:51	+27:13:42	300	0	3.0	#57 Velocity S	2	Comment field has wrong PA
0067.COMP	10	2:55	06:57:51	+27:13:42	300	0	3.0	#57 Velocity S	2	Comment field has wrong PA
0068.HD52071	10	2:57	06:57:51	+27:13:42	300	0	3.0	#57 Velocity S	4	Comment field has wrong PA
0069.COMP	10	2:57	06:57:51	+27:13:42	300	0	3.0	#57 Velocity S	4	Comment field has wrong PA
0070.AGK2p14783	15	3:00	07:17:47	+14:59:38	300	0	3.0	#57 Velocity S	4	Comment field has wrong PA
0071.COMP	10	3:00	07:17:47	+14:59:38	300	0	3.0	#57 Velocity S	4	Comment field has wrong PA
0072.AGK2p14783	60	3:01	07:17:47	+14:59:38	300	0	3.0	#57 Velocity S	4	Comment field has wrong PA
0073.COMP	10	3:02	07:17:47	+14:59:38	300	0	3.0	#57 Velocity S	4	Comment field has wrong PA
0074.AGK2p43928	120	3:20	09:52:29	+43:28:00	300	0	3.0	#57 Velocity S	4	Comment field has wrong PA
0075.COMP	10	3:22	09:52:29	+43:28:00	300	0	3.0	#57 Velocity S	4	Comment field has wrong PA
0076.HD84937	30	3:26	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	4	Comment field has wrong PA
0077.COMP	10	3:27	09:48:56.1	13:44:39	300	0	3.0	#56 Spectropho	4	Comment field has wrong PA
0078.Feige34	150	3:31	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	4	Comment field has wrong PA
0079.COMP	10	3:34	10:36:41.2	43:21:50	300	0	3.0	#56 Spectropho	4	Comment field has wrong PA
0080.2M10473124+3900114	900	3:39	10:47:31.2	+39:00:11	300	0	3.0	#141 Mapping t	4	Comment field has wrong PA
0081.COMP	10	3:54	10:47:31.2	+39:00:11	300	0	3.0	#141 Mapping t	4	Comment field has wrong PA



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-18 Observers Crook

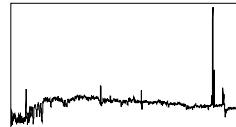
Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0082.sn2005am	600	4:09	09:16:12.4	-16:18:16	300	-12	3.0	#2 SN Observat	4	Comment field has wrong PA
0083.COMP	10	4:19	09:16:12.4	-16:18:16	300	-12	3.0	#2 SN Observat	4	Comment field has wrong PA
0084.2M09381242+6850003	900	4:29	09:38:12.4	+68:50:0	300	-12	3.0	#141 Mapping t	4	Comment field has wrong PA
0085.COMP	10	4:44	09:38:12.4	+68:50:0	300	-12	3.0	#141 Mapping t	4	Comment field has wrong PA
0086.2M09491302+6411441	1000	4:52	09:49:13.0	+64:11:44	300	90	3.0	#141 Mapping t	4	
0087.COMP	10	5:09	09:49:13.0	+64:11:44	300	90	3.0	#141 Mapping t	4	
0088.2M09162215+1013546	1200	5:18	09:16:22.1	+10:13:54	300	90	3.0	#141 Mapping t	4	
0089.COMP	10	5:38	09:16:22.1	+10:13:54	300	90	3.0	#141 Mapping t	4	
0090.sn2005u	1500	7:45	11:28:33.1	+58:33:41	300	-23	3.0	#2 SN Observat	4	Comment field has wrong PA
0091.COMP	10	8:10	11:28:33.1	+58:33:41	300	-23	3.0	#2 SN Observat	4	Comment field has wrong PA
0092.sn2005ar	1800	8:22	11:15:19.0	-03:46:18	300	27	3.0	#2 SN Observat	4	
0093.COMP	10	8:52	11:15:19.0	-03:46:18	300	27	3.0	#2 SN Observat	4	
0094.2M14015319+3332443	900	8:58	14:01:53.1	+33:32:44	300	90	3.0	#141 Mapping t	4	
0095.COMP	10	9:13	14:01:53.1	+33:32:44	300	90	3.0	#141 Mapping t	4	
0096.2M13573966+3620077	900	9:17	13:57:39.6	+36:20:7	300	90	3.0	#141 Mapping t	4	
0097.COMP	10	9:32	13:57:39.6	+36:20:7	300	90	3.0	#141 Mapping t	4	
0098.2M14240397+3624038	700	9:33	14:24:3.9	+36:24:3	300	90	3.0	#141 Mapping t	4	
0099.COMP	10	9:46	14:24:3.9	+36:24:3	300	90	3.0	#141 Mapping t	4	
0100.2M14295714+4130261	800	9:48	14:29:57.1	+41:30:26	300	90	3.0	#141 Mapping t	4	
0101.COMP	10	10:01	14:29:57.1	+41:30:26	300	90	3.0	#141 Mapping t	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-18 Observers Crook

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0102.COMP	10	10:06	14:29:57.1	+41:30:26	300	90	3.0	#141 Mapping t	4	Set up for Program 122
0103.FLAT	24	10:08	14:29:57.1	+41:30:26	300	90	3.0	#141 Mapping t	4	Set up for Program 122
0104.BDp332642	90	10:13	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0105.COMP	10	10:15	15:50:03.0	33:05:49	600	90	2.0	#56 Spectropho	4	
0106.hs2346	540	10:19	12:42:31.6	42:08:41	600	90	2.0	#122 Halo Star	4	
0107.COMP	10	10:28	12:42:31.6	42:08:41	600	90	2.0	#122 Halo Star	4	
0108.hs2347	600	10:31	12:42:37.4	38:01:08	600	90	2.0	#122 Halo Star	4	
0109.COMP	10	10:41	12:42:37.4	38:01:08	600	90	2.0	#122 Halo Star	4	
0110.hs2629	300	10:50	14:09:00.9	49:17:39	600	90	2.0	#122 Halo Star	4	
0111.COMP	10	10:55	14:09:00.9	49:17:39	600	90	2.0	#122 Halo Star	4	
0112.hs2609	220	11:00	14:01:23.1	80:51:42	600	90	2.0	#122 Halo Star	4	
0113.COMP	10	11:04	14:01:23.1	80:51:42	600	90	2.0	#122 Halo Star	4	
0114.hs2617	280	11:06	14:05:02.9	53:10:59	600	90	2.0	#122 Halo Star	4	
0115.COMP	10	11:12	14:05:02.9	53:10:59	600	90	2.0	#122 Halo Star	4	
0116.hs2623	320	11:14	14:07:20.2	56:02:31	600	90	2.0	#122 Halo Star	4	
0117.COMP	10	11:19	14:07:20.2	56:02:31	600	90	2.0	#122 Halo Star	4	
0118.hs2630	280	11:22	14:10:08.0	74:59:53	600	90	2.0	#122 Halo Star	4	
0119.COMP	10	11:27	14:10:08.0	74:59:53	600	90	2.0	#122 Halo Star	4	
0120.hs2631	270	11:29	14:10:39.4	59:40:35	600	90	2.0	#122 Halo Star	4	
0121.COMP	10	11:34	14:10:39.4	59:40:35	600	90	2.0	#122 Halo Star	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-18 Observers CrookColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0122.hs2633	340	11:36	14:11:28.6	66:07:27	600	90	2.0	#122 Halo Star	4	
0123.COMP	10	11:42	14:11:28.6	66:07:27	600	90	2.0	#122 Halo Star	4	
0124.hs2634	400	11:46	14:12:16.2	68:46:21	600	90	2.0	#122 Halo Star	4	
0125.COMP	10	11:53	14:12:16.2	68:46:21	600	90	2.0	#122 Halo Star	4	
0126.hs2835	600	11:57	16:17:22.3	73:34:19	600	90	2.0	#122 Halo Star	4	
0127.COMP	10	12:08	16:17:22.3	73:34:19	600	90	2.0	#122 Halo Star	4	
0128.hs2639	400	12:11	14:14:49.7	65:22:34	600	90	2.0	#122 Halo Star	4	
0129.COMP	10	12:18	14:14:49.7	65:22:34	600	90	2.0	#122 Halo Star	4	
0130.hs2637	320	12:20	14:13:37.7	56:21:57	600	90	2.0	#122 Halo Star	4	
0131.COMP	10	12:25	14:13:37.7	56:21:57	600	90	2.0	#122 Halo Star	4	
0132.hs2612	540	12:28	14:02:09.5	52:37:46	600	90	2.0	#122 Halo Star	4	
0133.COMP	10	12:37	14:02:09.5	52:37:46	600	90	2.0	#122 Halo Star	4	
0134-0143.FLAT	24	12:44	14:02:09.5	52:37:46	600	90	2.0	#122 Halo Star	4	
0144-0153.BIAS	0	12:46	14:02:09.5	52:37:46	600	90	2.0	#122 Halo Star	4	
0154.COMP	10	12:57	14:02:09.5	52:37:46	300	90	3.0	#122 Halo Star	4	Bad
0155.COMP	10	12:57	14:02:09.5	52:37:46	300	90	3.0	#122 Halo Star	4	
0156-0160.DARK	900	14:24	14:02:09.5	52:37:46	300	90	3.0	#122 Halo Star	4	
0161-0165.DARK	900	15:40	14:02:09.5	52:37:46	300	90	3.0	#122 Halo Star	2	



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FAST SPECTROGRAPH LOG



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UT Date 2005-03-19 Observers Crook

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.COMP	10	0:19	14:02:09.5	52:37:46	300	90	3.0	#122 Halo Star	2	
0002-0011.BIAS	0	0:26	14:02:09.5	52:37:46	300	90	3.0	Flats	4	
0012-0021.FLAT	8	0:29	14:02:09.5	52:37:46	300	90	3.0	Flats	4	
0022-0031.BIAS	0	0:32	14:02:09.5	52:37:46	300	90	3.0	Flats	2	
0032-0052.FLAT	16	0:42	14:02:09.5	52:37:46	300	90	3.0	Flats	2	
0053-0054.sky	5	1:02	05:20:00	32:00:00	300	90	3.0	Flats	4	Bad
0055.sky	2	1:13	05:40:00	32:00:00	300	90	3.0	Flats	4	Bad
0056-0058.sky	1	1:21	05:40:00	32:00:00	300	90	3.0	sky	4	Bad
0059-0060.sky	0	1:30	05:40:00	32:00:00	300	90	3.0	sky	4	Bad
0061-0062.sky	1	1:37	06:00:00	32:00:00	300	90	3.0	sky	4	Bad
0063.COMP	10	1:38	06:00:00	32:00:00	300	90	3.0	sky	4	
0064.sky	1	1:39	06:00:00	32:00:00	300	90	3.0	sky	4	
0065.sky	2	1:40	06:00:00	32:00:00	300	90	3.0	sky	4	saturated
0066-0071.sky	1	1:42	06:00:00	32:00:00	300	90	3.0	sky	4	
0072.COMP	10	1:43	06:00:00	32:00:00	300	90	3.0	sky	4	
0073-0074.sky	2	1:44	06:00:00	32:00:00	300	90	3.0	sky	2	
0075.sky	3	1:44	06:00:00	32:00:00	300	90	3.0	sky	2	
0076-0077.sky	4	1:45	06:00:00	32:00:00	300	90	3.0	sky	2	
0078.sky	6	1:45	06:00:00	32:00:00	300	90	3.0	sky	2	
0079.sky	5	1:46	06:00:00	32:00:00	300	90	3.0	sky	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-19 Observers CrookColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0080.COMP	10	1:47	06:00:00	32:00:00	300	90	3.0	sky	2	
0081.sky	10	1:47	06:00:00	32:00:00	300	90	3.0	sky	2	
0082.sky	12	1:48	06:00:00	32:00:00	300	90	3.0	sky	2	
0083.sky	15	1:48	06:00:00	32:00:00	300	90	3.0	sky	2	
0084.sky	20	1:49	06:00:00	32:00:00	300	90	3.0	sky	2	
0085.sky	25	1:49	06:00:00	32:00:00	300	90	3.0	sky	2	
0086-0087.sky	30	1:51	06:00:00	32:00:00	300	90	3.0	sky	2	
0088.COMP	10	1:51	06:00:00	32:00:00	300	90	3.0	sky	2	
0089.sky	30	1:52	06:00:00	32:00:00	300	90	3.0	sky	4	
0090.sky	35	1:53	06:00:00	32:00:00	300	90	3.0	sky	4	
0091.sky	40	1:54	06:00:00	32:00:00	300	90	3.0	sky	4	
0092.COMP	10	1:55	06:00:00	32:00:00	300	90	3.0	sky	4	Chance of rain - dome closed



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-20 Observers CrookColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.COMP	10	0:36	06:00:00	32:00:00	300	90	3.0	sky	4	
0002-0011.BIAS	0	0:41	06:00:00	32:00:00	300	90	3.0	sky	4	
0012-0021.FLAT	8	0:44	06:00:00	32:00:00	300	90	3.0	sky	4	
0022-0031.BIAS	0	0:46	06:00:00	32:00:00	300	90	3.0	sky	2	
0032-0052.FLAT	16	0:56	06:00:00	32:00:00	300	90	3.0	sky	2	
0053.COMP	10	0:58	06:00:00	32:00:00	300	90	3.0	sky	2	Completely overcast - dome remaining closed
0054-0058.DARK	900	2:02	06:00:00	32:00:00	300	90	3.0	sky	4	
0059-0063.DARK	900	3:18	06:00:00	32:00:00	300	90	3.0	sky	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2005-03-21 Observers Crook

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.COMP	10	0:20	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0002.COMP	10	0:23	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0003.COMP	10	0:25	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0004.COMP	10	0:26	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0005.COMP	10	0:27	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0006.COMP	10	0:28	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0007.COMP	10	0:30	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0008.COMP	10	0:31	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0009.COMP	10	0:33	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0010-0019.BIAS	0	0:37	06:00:00	32:00:00	300	90	3.0	sky	4	
0020-0029.FLAT	8	0:40	06:00:00	32:00:00	300	90	3.0	sky	4	
0030-0039.BIAS	0	0:43	06:00:00	32:00:00	300	90	3.0	sky	2	
0040-0060.FLAT	16	0:53	06:00:00	32:00:00	300	90	3.0	sky	2	
0061-0063.sky	1	1:30	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	Bad
0064.COMP	10	1:30	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0065-0074.sky	1	1:38	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0075.COMP	10	1:39	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0076-0083.sky	1	1:45	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0084-0085.sky	2	1:46	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0086.COMP	10	1:47	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	



WHIPPLE OBSERVATORY

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UT Date 2005-03-21 Observers Crook

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0087.sky	3	1:47	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0088.sky	4	1:49	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0089.sky	5	1:49	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0090.sky	10	1:51	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0091.sky	9	1:51	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0092.sky	12	1:52	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0093.COMP	10	1:53	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	4	
0094.sky	20	1:53	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0095.sky	25	1:54	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0096.sky	30	1:55	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0097.sky	35	1:56	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0098.sky	40	1:57	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0099.sky	50	1:58	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0100.sky	65	1:59	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0101.COMP	10	2:01	06:00:00	32:00:00	300	90	3.0	#57 Spectropho	2	
0102.HD52071	10	2:03	06:57:51	+27:13:42	300	90	3.0	#57 Velocity S	2	
0103.HD52071	10	2:04	06:57:51	+27:13:42	300	90	3.0	#57 Velocity S	2	
0104.COMP	10	2:06	06:57:51	+27:13:42	300	90	3.0	#57 Velocity S	2	
0105.GITau	300	2:08	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0106.GITau	60	2:13	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	



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UT Date 2005-03-21 Observers Crook

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0107.COMP	10	2:15	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0108.GKTau	60	2:16	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0109.GKTau	300	2:18	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0110.COMP	10	2:23	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0111.sn2004gq	720	2:39	05:12:04.8	-15:40:54	300	33	3.0	#2 SN Observat	2	Cloud present, guiding lost - exposure terminated and repeated
0112.COMP	10	2:51	05:12:04.8	-15:40:54	300	33	3.0	#2 SN Observat	2	
0113.sn2004gq	1500	2:55	05:12:04.8	-15:40:54	300	33	3.0	#2 SN Observat	2	
0114.COMP	10	3:22	05:12:04.8	-15:40:54	300	33	3.0	#2 SN Observat	2	tcs crashed - redone
0115.COMP	10	3:22	05:12:04.8	-15:40:54	300	33	3.0	#2 SN Observat	2	tcs re-opened, comp redone
0116.cvso-243061	600	3:27	05:35:37.3	-03:51:06	300	90	3.0	#112 Orion PMS	2	
0117.COMP	10	3:37	05:35:37.3	-03:51:06	300	90	3.0	#112 Orion PMS	2	
0118.cvso-243370	600	3:39	05:35:58.8	-03:44:48	300	90	3.0	#112 Orion PMS	2	
0119.COMP	10	3:50	05:35:58.8	-03:44:48	300	90	3.0	#112 Orion PMS	2	
0120.cvso-265458	600	3:52	05:36:01.8	-02:51:17	300	90	3.0	#112 Orion PMS	4	
0121.COMP	10	4:03	05:36:01.8	-02:51:17	300	90	3.0	#112 Orion PMS	4	
0122.cvso-266623	600	4:06	05:36:02.0	-03:32:24	300	90	3.0	#112 Orion PMS	4	
0123.COMP	10	4:16	05:36:02.0	-03:32:24	300	90	3.0	#112 Orion PMS	4	
0124.cvso-265541	600	4:18	05:36:06.0	-02:45:31	300	90	3.0	#112 Orion PMS	4	
0125.COMP	10	4:29	05:36:06.0	-02:45:31	300	90	3.0	#112 Orion PMS	4	
0126.sn2005am	600	4:35	09:16:12.4	-16:18:16	300	-2	3.0	#2 SN Observat	2	



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FAST SPECTROGRAPH LOG



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UT Date 2005-03-21 Observers Crook

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0127.COMP	10	4:45	09:16:12.4	-16:18:16	300	-2	3.0	#2 SN Observat	2	
0128.2M09251973-0640286	230	4:48	09:25:19.7	-06:40:28	300	-2	3.0	#141 Mapping t	4	Bad
0129.COMP	10	4:52	09:25:19.7	-06:40:28	300	-2	3.0	#141 Mapping t	4	
0130.2M08540086-0712592	720	5:03	08:54:0.8	-07:12:59	300	-2	3.0	#141 Mapping t	4	
0131.COMP	10	5:15	08:54:0.8	-07:12:59	300	-2	3.0	#141 Mapping t	4	
0132.HD84937	10	5:19	9:48:56.1	13:44:39	300	2	3.0	#56 Spectropho	2	Note: PA=+2
0133.COMP	10	5:20	9:48:56.1	13:44:39	300	2	3.0	#56 Spectropho	2	Note: PA=+2
0134.Feige34	120	5:27	10:39:36.8	43:06:10	300	40	3.0	#56 Spectropho	2	
0135.COMP	10	5:30	10:39:36.8	43:06:10	300	40	3.0	#56 Spectropho	2	
0136.2M10051583+7019448	1200	5:33	10:05:15.8	+70:19:44	300	40	3.0	#141 Mapping t	2	
0137.COMP	10	5:54	10:05:15.8	+70:19:44	300	40	3.0	#141 Mapping t	2	
0138.2M10375434-0712195	1000	5:58	10:37:54.3	-07:12:19	300	90	3.0	#141 Mapping t	4	
0139.COMP	10	6:15	10:37:54.3	-07:12:19	300	90	3.0	#141 Mapping t	4	
0140.2M10404377+3947467	1500	6:18	10:40:43.7	+39:47:46	300	90	3.0	#141 Mapping t	4	
0141.COMP	10	6:43	10:40:43.7	+39:47:46	300	90	3.0	#141 Mapping t	4	
0142.sn2005ar	1500	6:51	11:15:19.0	-03:46:18	300	6	3.0	#2 SN Observat	2	
0143.COMP	10	7:17	11:15:19.0	-03:46:18	300	6	3.0	#2 SN Observat	2	
0144.sn2005u	1800	7:26	11:28:33.1	+58:33:41	300	-17	3.0	#2 SN Observat	2	
0145.COMP	10	7:57	11:28:33.1	+58:33:41	300	-17	3.0	#2 SN Observat	2	
0146.2M12255801+3101190	1200	8:00	12:25:58.0	+31:01:19	300	0	3.0	#141 Mapping t	4	



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UT Date 2005-03-21 Observers Crook

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0147.COMP	10	8:21	12:25:58.0	+31:01:19	300	0	3.0	#141 Mapping t	4	
0148.2M11254505+1440359	1000	8:23	11:25:45.0	+14:40:35	300	0	3.0	#141 Mapping t	4	
0149.COMP	10	8:40	11:25:45.0	+14:40:35	300	0	3.0	#141 Mapping t	4	
0150.2M11254505+1440359	600	8:40	11:25:45.0	+14:40:35	300	0	3.0	#141 Mapping t	4	
0151.2M11221405-0759300	1500	8:52	11:22:14.0	-07:59:30	300	0	3.0	#141 Mapping t	4	
0152.COMP	10	9:18	11:22:14.0	-07:59:30	300	0	3.0	#141 Mapping t	4	
0153.2M13222928+3941255	1320	9:20	13:22:29.2	+39:41:25	300	0	3.0	#141 Mapping t	4	
0154.COMP	10	9:42	13:22:29.2	+39:41:25	300	0	3.0	#141 Mapping t	4	Changed gratings to 600 line
0155.COMP	10	9:47	13:22:29.2	+39:41:25	300	0	3.0	#141 Mapping t	4	
0156.FLAT	24	9:51	13:22:29.2	+39:41:25	600	90	2.0	#141 Mapping t	4	Bad
0157.FLAT	24	9:53	13:22:29.2	+39:41:25	600	90	2.0	#141 Mapping t	4	
0158.BDp332642	90	9:56	15:51:59.9	32:56:54	600	90	2.0	#56 Spectropho	4	
0159.COMP	10	9:58	15:51:59.9	32:56:54	600	90	2.0	#56 Spectropho	4	
0160.hs2613	600	10:03	14:03:54.8	52:24:27	600	90	2.0	#122 Halo Star	4	
0161.COMP	10	10:13	14:03:54.8	52:24:27	600	90	2.0	#122 Halo Star	4	
0162.hs2614	700	10:15	14:04:26.5	58:20:28	600	90	2.0	#122 Halo Star	4	
0163.COMP	10	10:27	14:04:26.5	58:20:28	600	90	2.0	#122 Halo Star	4	
0164.hs2616	800	10:29	14:04:41.6	47:26:53	600	90	2.0	#122 Halo Star	4	
0165.COMP	10	10:42	14:04:41.6	47:26:53	600	90	2.0	#122 Halo Star	4	
0166.hs2619	700	10:44	14:06:10.4	46:34:44	600	90	2.0	#122 Halo Star	4	



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UT Date 2005-03-21 Observers Crook

Coll. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0167.COMP	10	10:56	14:06:10.4	46:34:44	600	90	2.0	#122 Halo Star	4	
0168.hs2620	900	10:58	14:06:32.0	52:36:11	600	90	2.0	#122 Halo Star	4	
0169.COMP	10	11:13	14:06:32.0	52:36:11	600	90	2.0	#122 Halo Star	4	
0170.hs2625	540	11:18	14:07:40.7	75:42:59	600	90	2.0	#122 Halo Star	4	
0171.COMP	10	11:28	14:07:40.7	75:42:59	600	90	2.0	#122 Halo Star	4	
0172.hs2627	540	11:30	14:08:02.1	58:12:49	600	90	2.0	#122 Halo Star	4	
0173.COMP	10	11:39	14:08:02.1	58:12:49	600	90	2.0	#122 Halo Star	4	
0174.hs2643	700	11:46	14:17:41.1	64:19:48	600	90	2.0	#122 Halo Star	4	
0175.COMP	10	11:58	14:17:41.1	64:19:48	600	90	2.0	#122 Halo Star	4	
0176.hs2642	540	12:00	14:17:36.7	48:21:55	600	90	2.0	#122 Halo Star	4	
0177.COMP	10	12:09	14:17:36.7	48:21:55	600	90	2.0	#122 Halo Star	4	
0178.hs2635	700	12:13	14:13:16.8	59:01:38	600	0	2.0	#122 Halo Star	4	Note: PA=0
0179.COMP	10	12:25	14:13:16.8	59:01:38	600	0	2.0	#122 Halo Star	4	PA=0
0180.hs2632	720	12:27	14:10:43.2	61:55:41	600	0	2.0	#122 Halo Star	4	PA=0
0181.COMP	10	12:40	14:10:43.2	61:55:41	600	0	2.0	#122 Halo Star	4	PA=0
0182.FLAT	24	12:49	14:01:49.7	70:28:29	600	0	2.0	#122 Halo Star	4	Bad
0183-0192.FLAT	24	12:55	14:01:49.7	70:28:29	600	0	2.0	#122 Halo Star	4	
0193-0202.BIAS	0	12:57	14:01:49.7	70:28:29	600	0	2.0	#122 Halo Star	4	
0203.COMP	10	13:12	14:01:49.7	70:28:29	600	0	2.0	#122 Halo Star	4	
0204.COMP	10	13:14	14:01:49.7	70:28:29	600	0	2.0	#122 Halo Star	4	



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FAST SPECTROGRAPH LOG



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UT Date 2005-03-21 Observers CrookColl. Focus 1015 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0205.COMP	10	13:15	14:01:49.7	70:28:29	600	0	2.0	#122 Halo Star	4	
0206.DARK	900	13:30	18:17:28.4	+31:30:10	600	0	2.0	#122 Halo Star	4	
0207.DARK	900	13:45	18:32:42.2	+31:30:03	600	0	2.0	#122 Halo Star	4	
0208.DARK	900	14:00	18:47:56.0	+31:29:57	600	0	2.0	#122 Halo Star	4	
0209.DARK	900	14:15	19:03:06.1	+31:29:50	600	0	2.0	#122 Halo Star	4	
0210.DARK	900	14:30	19:18:19.3	+31:29:43	600	0	2.0	#122 Halo Star	4	
0211.DARK	900	14:45	19:33:34.0	+31:29:36	600	0	2.0	#122 Halo Star	2	
0212.DARK	900	15:01	19:48:52.4	+31:29:29	600	0	2.0	#122 Halo Star	2	
0213.DARK	900	15:16	20:04:07.4	+31:29:23	600	0	2.0	#122 Halo Star	2	
0214.DARK	900	15:31	20:19:25.5	+31:29:16	600	0	2.0	#122 Halo Star	2	
0215.DARK	900	15:46	20:34:43.7	+31:29:10	600	0	2.0	#122 Halo Star	2	



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UT Date 2005-03-30 Observers Falco & Nutzman

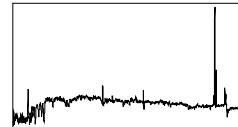
Coll. Focus 1034 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.COMP	5	22:52	03:57:28.6	+31:28:52	600	90	2.0	#122 Halo Star	4	
0002.BIAS	0	22:52	03:57:54.5	+31:28:52	600	90	2.0	#122 Halo Star	4	
0003.COMP	12	22:53	03:58:41.0	+31:28:52	600	90	2.0	#122 Halo Star	4	
0004.BIAS	0	0:35	05:41:31.3	+31:29:33	600	90	2.0	#122 Halo Star	4 bin4	
0005-0013.BIAS	0	0:37	05:42:38.9	+31:29:33	600	90	2.0	#122 Halo Star	4	
0014.FLAT	8	0:37	05:43:00.2	+31:29:33	300	90	3.0	#122 Halo Star	4 bin4	
0015-0021.FLAT	8	0:39	05:45:24.5	+31:29:34	300	90	3.0	#122 Halo Star	4	
0022-0023.FLAT	8	0:40	05:46:06.9	+31:29:35	300	90	3.0	#122 Halo Star	4	
0024.BIAS	0	0:40	05:46:24.0	+31:29:35	600	90	2.0	#122 Halo Star	2 bin2	
0025-0030.BIAS	0	0:42	05:47:40.9	+31:29:35	600	90	2.0	#122 Halo Star	2	
0031-0033.BIAS	0	0:42	05:48:22.9	+31:29:36	600	90	2.0	#122 Halo Star	2	
0034.FLAT	16	0:43	05:49:00.9	+31:29:36	300	90	3.0	#122 Halo Star	2 bin2	
0035-0036.FLAT	16	0:44	05:50:09.5	+31:29:36	300	90	3.0	#122 Halo Star	2	
0037-0039.FLAT	16	0:46	05:51:55.9	+31:29:37	300	90	3.0	#122 Halo Star	2	
0040-0043.FLAT	16	0:48	05:54:20.3	+31:29:38	300	90	3.0	#122 Halo Star	2	
0044.FLAT	24	1:09	06:15:23.0	+31:29:48	600	90	2.0	#122 Halo Star	4 bin4	
0045-0047.FLAT	24	1:10	06:16:56.2	+31:29:48	600	90	2.0	#122 Halo Star	4	
0048-0052.FLAT	24	1:13	06:19:33.4	+31:29:49	600	90	2.0	#122 Halo Star	4	
0053.FLAT	24	1:13	06:20:03.3	+31:29:50	600	90	2.0	#122 Halo Star	4	
0054.sky	5	1:49	06:53:56.1	+31:30:05	300	90	3.0	#57 Velocity S	4	



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UT Date 2005-03-30 Observers Falco & Nutzman

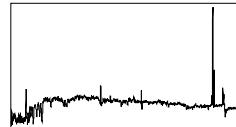
Coll. Focus 1034 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0055.sky	10	1:50	06:53:56.1	+31:30:05	300	90	3.0	#57 Velocity S	4	
0056-0059.sky	12	1:54	06:53:56.1	+31:30:05	300	90	3.0	#57 Velocity S	4	
0060-0063.sky	15	1:56	06:53:56.1	+31:30:05	300	90	3.0	#57 Velocity S	4	
0064.sky	20	1:57	06:53:56.1	+31:30:05	300	90	3.0	#57 Velocity S	4	
0065.sky	40	1:58	06:53:56.1	+31:30:05	300	90	3.0	#57 Velocity S	4	
0066.sky	90	1:59	06:53:56.2	+31:30:05	300	90	3.0	#57 Velocity S	4	
0067.GITau	10	2:35	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	test
0068.GITau	10	2:35	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0069.GITau	240	2:38	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0070.COMP	5	2:42	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0071.GKTau	10	2:53	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0072.GKTau	240	2:54	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0073.COMP	5	2:59	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0074.sn2005am	5	3:41	09:16:12.4	-16:18:16	300	-10	3.0	#2 SN Observat	4	test
0075.sn2005am	5	3:41	09:16:12.4	-16:18:16	300	-10	3.0	#2 SN Observat	4	test
0076.sn2005am	600	3:42	09:16:12.4	-16:18:16	300	-10	3.0	#2 SN Observat	4	
0077.COMP	5	3:53	09:16:12.4	-16:18:16	300	-10	3.0	#2 SN Observat	4	
0078.sn2005ay	900	4:17	11:52:48.0	+44:06:18	300	90	3.0	#2 SN Observat	4	
0079.COMP	5	4:33	11:52:48.0	+44:06:18	300	90	3.0	#2 SN Observat	4	
0080.HD84937	10	4:49	9:48:54.8	13:45:13	300	90	3.0	#56 Spectropho	4	



WHIPPLE OBSERVATORY

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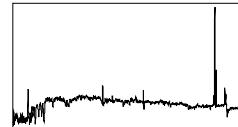
Coll. Focus 1034 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0081.COMP	5	4:51	9:48:54.8	13:45:13	300	90	3.0	#56 Spectropho	4	
0082.Feige34	120	4:54	10:39:36.8	43:06:10	300	90	3.0	#56 Spectropho	4	
0083.COMP	5	4:56	10:39:36.8	43:06:10	300	90	3.0	#56 Spectropho	4	
0084.AGK2p43928	180	5:01	09:52:29	+43:28:00	300	90	3.0	#57 Velocity S	4	
0085.COMP	5	5:05	09:52:29	+43:28:00	300	90	3.0	#57 Velocity S	4	
0086.N3377	180	5:08	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	4	
0087.COMP	5	5:11	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	4	
0088.HD84937	10	5:33	9:48:56.1	13:44:39	300	90	5.0	#56 Spectropho	4	
0089.COMP	5	5:35	9:48:56.1	13:44:39	300	90	5.0	#56 Spectropho	4	
0090.Feige34	120	5:43	10:39:36.8	43:06:10	300	90	5.0	#56 Spectropho	4	
0091.COMP	5	5:46	10:39:36.8	43:06:10	300	90	5.0	#56 Spectropho	4	
0092.hs2347	492	6:17	12:42:37.4	38:01:08	600	90	2.0	#122 Halo Star	4	
0093.COMP	5	6:26	12:42:37.4	38:01:08	600	90	2.0	#122 Halo Star	4	
0094.hs2348	492	6:35	12:42:42.5	44:44:23	600	90	2.0	#122 Halo Star	4	
0095.COMP	5	6:44	12:42:42.5	44:44:23	600	90	2.0	#122 Halo Star	4	
0096.hs2351	300	6:48	12:43:25.1	71:52:29	600	90	2.0	#122 Halo Star	4	
0097.COMP	5	6:54	12:43:25.1	71:52:29	600	90	2.0	#122 Halo Star	4	
0098.hs2352	354	7:05	12:43:39.0	29:31:49	600	90	2.0	#122 Halo Star	4	
0099.COMP	5	7:11	12:43:39.0	29:31:49	600	90	2.0	#122 Halo Star	4	
0100.hs2350	600	7:17	12:43:22.4	62:52:56	600	90	2.0	#122 Halo Star	4	



WHIPPLE OBSERVATORY

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UT Date 2005-03-30 Observers Falco & Nutzman

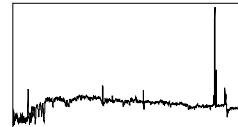
Coll. Focus 1034 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0101.COMP	5	7:27	12:43:22.4	62:52:56	600	90	2.0	#122 Halo Star	4	
0102.hs2357	330	8:04	12:44:55.1	58:11:21	600	90	2.0	#122 Halo Star	4	
0103.COMP	5	8:11	12:44:55.1	58:11:21	600	90	2.0	#122 Halo Star	4	
0104.hs2359	264	8:18	12:45:00.7	53:26:08	600	90	2.0	#122 Halo Star	4	
0105.COMP	5	8:23	12:45:00.7	53:26:08	600	90	2.0	#122 Halo Star	4	
0106.hs2360	336	8:29	12:45:12.8	50:46:52	600	90	2.0	#122 Halo Star	4	
0107.COMP	5	8:35	12:45:12.8	50:46:52	600	90	2.0	#122 Halo Star	4	
0108.hs2363	342	8:41	12:45:40.7	54:20:30	600	90	2.0	#122 Halo Star	4	
0109.COMP	5	8:47	12:45:40.7	54:20:30	600	90	2.0	#122 Halo Star	4	
0110.hs2364	216	8:50	12:45:49.5	45:32:04	600	90	2.0	#122 Halo Star	4	
0111.COMP	5	8:55	12:45:49.5	45:32:04	600	90	2.0	#122 Halo Star	4	
0112.hs2367	252	8:59	12:46:47.5	69:32:02	600	90	2.0	#122 Halo Star	4	
0113.COMP	5	9:03	12:46:47.5	69:32:02	600	90	2.0	#122 Halo Star	4	
0114.hs2371	264	9:06	12:48:04.3	26:44:49	600	90	2.0	#122 Halo Star	4	
0115.COMP	5	9:17	12:48:04.3	26:44:49	600	90	2.0	#122 Halo Star	4	
0116.hs2381	294	9:21	12:50:01.2	47:11:44	600	90	2.0	#122 Halo Star	4	
0117.COMP	5	9:26	12:50:01.2	47:11:44	600	90	2.0	#122 Halo Star	4	
0118.hs2383	276	9:29	12:50:08.7	65:28:42	600	90	2.0	#122 Halo Star	4	
0119.COMP	5	9:34	12:50:08.7	65:28:42	600	90	2.0	#122 Halo Star	4	
0120.hs2385	258	9:36	12:50:12.5	74:04:09	600	90	2.0	#122 Halo Star	4	



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UT Date 2005-03-30 Observers Falco & Nutzman

Coll. Focus 1034 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0121.COMP	5	9:40	12:50:12.5	74:04:09	600	90	2.0	#122 Halo Star	4	
0122.hs2393	264	9:45	12:51:36.1	36:00:20	600	90	2.0	#122 Halo Star	4	
0123.COMP	5	9:49	12:51:36.1	36:00:20	600	90	2.0	#122 Halo Star	4	
0124.sn2004gk	1200	10:12	12:25:33.2	+12:15:39	300	56	3.0	#2 SN Observat	4	
0125.COMP	5	10:36	12:25:33.2	+12:15:39	300	56	3.0	#2 SN Observat	4	
0126.XS02085B7_006	30	10:43	15:33:13.9	-00:37:44	300	90	3.0	#129 CHAMP Sou	4	
0127.COMP	5	10:45	15:33:13.9	-00:37:44	300	90	3.0	#129 CHAMP Sou	4	
0128.RSOph	5	10:53	17:50:13	-06:42:30	300	90	3.0	#12 Symbiotic	4	
0129.COMP	5	10:53	17:50:13	-06:42:30	300	90	3.0	#12 Symbiotic	4	
0130.RSOph	60	10:54	17:50:13	-06:42:30	300	90	3.0	#12 Symbiotic	4	
0131.COMP	5	10:56	17:50:13	-06:42:30	300	90	3.0	#12 Symbiotic	4	
0132.XXOph	1	10:58	17:43:56	-06:16:08	300	90	3.0	#12 Symbiotic	4	
0133.COMP	5	10:58	17:43:56	-06:16:08	300	90	3.0	#12 Symbiotic	4	
0134.XXOph	5	10:59	17:43:56	-06:16:08	300	90	3.0	#12 Symbiotic	4	
0135.COMP	5	10:59	17:43:56	-06:16:08	300	90	3.0	#12 Symbiotic	4	
0136.XXOph	10	11:00	17:43:56	-06:16:08	300	90	3.0	#12 Symbiotic	4	
0137.COMP	5	11:04	17:43:56	-06:16:08	300	90	3.0	#12 Symbiotic	4	
0138.145036+03320	300	11:08	14:53:05.3	+03:19:55	300	90	3.0	#84f Updated Z	4	
0139.COMP	5	11:14	14:53:05.3	+03:19:55	300	90	3.0	#84f Updated Z	4	
0140.144936-00030	600	11:16	14:52:11.2	-00:15:23	300	90	3.0	#84f Updated Z	4	



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FAST SPECTROGRAPH LOG



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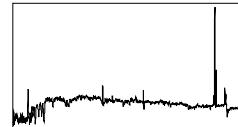
UT Date 2005-03-30 Observers Falco & NutzmanColl. Focus 1034 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0141.COMP	5	11:27	14:52:11.2	-00:15:23	300	90	3.0	#84f Updated Z	4	
0142.145400-01550	600	11:31	14:56:33.1	-02:06:25	300	90	3.0	#84f Updated Z	4	
0143.COMP	5	11:42	14:56:33.1	-02:06:25	300	90	3.0	#84f Updated Z	4	
0144.150206+17530	600	11:48	15:04:29.4	+17:41:32	300	90	3.0	#84f Updated Z	4	
0145.COMP	5	11:58	15:04:29.4	+17:41:32	300	90	3.0	#84f Updated Z	4	
0146-0155.DARK	900	14:49	15:05:21.1	-02:02:05	300	90	3.0	#84f Updated Z	4	



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UT Date 2005-03-31 Observers Nutzman

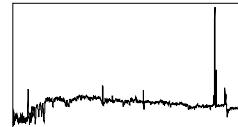
Coll. Focus 1010 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.BIAS	0	22:56	04:06:12.9	+31:28:55	300	90	3.0	#56	4	
0002.COMP	5	22:57	04:06:56.0	+31:28:55	300	90	3.0	#56	4	
0003-0007.FLAT	5	23:43	04:52:38.1	+31:29:12	300	90	5.0	#56	4	
0008-0012.FLAT	5	23:44	04:53:37.6	+31:29:13	300	90	5.0	#56	4	
0013-0021.BIAS	0	23:55	05:05:02.5	+31:29:17	300	90	3.0	#56	4	
0022.BIAS	0	23:55	05:05:10.9	+31:29:18	300	90	3.0	#56	4	
0023-0028.FLAT	8	23:57	05:07:14.3	+31:29:18	300	90	3.0	#56	4	
0029-0032.FLAT	8	23:58	05:08:35.0	+31:29:19	300	90	3.0	#56	4	
0033-0038.BIAS	0	0:00	05:09:55.9	+31:29:19	300	90	3.0	#56	2	
0039-0042.BIAS	0	0:01	05:10:47.2	+31:29:20	300	90	3.0	#56	2	
0043-0044.FLAT	16	0:02	05:11:55.2	+31:29:20	300	90	3.0	#56	2	
0045-0049.FLAT	16	0:04	05:14:24.3	+31:29:21	300	90	3.0	#56	2	
0050-0054.FLAT	16	0:07	05:16:57.2	+31:29:22	300	90	3.0	#56	2	
0055-0059.FLAT	16	0:09	05:19:26.5	+31:29:23	300	90	3.0	#56	2	
0060-0063.FLAT	16	0:11	05:21:29.4	+31:29:24	300	90	3.0	#56	2	
0064-0073.sky	2	2:24	07:30:00	31:30:00	300	90	3.0	#57 Velocity S	2	
0073.skyq.ms	2	2:24	07:30:00	31:30:00	300	90	3.0	#57 Velocity S	1	
0074.COMP	5	2:27	07:30:00	31:30:00	300	90	3.0	#57 Velocity S	2	
0075.sky	2	2:40	07:30:00	31:30:00	300	90	3.0	#57 Velocity S	2	
0076-0085.sky	2	2:43	07:30:00	31:30:00	300	90	3.0	#57 Velocity S	4	



WHIPPLE OBSERVATORY

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UT Date 2005-03-31 Observers Nutzman

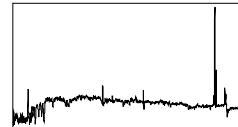
Coll. Focus 1010 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0085.skyq.ms	2	2:43	07:30:00	31:30:00	300	90	3.0	#57 Velocity S	1	
0086.COMP	5	2:44	07:30:00	31:30:00	300	90	3.0	#57 Velocity S	4	
0087.GKTau	60	3:31	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0088.COMP	5	3:33	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0089.GKTau	300	3:35	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0090.COMP	5	3:41	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	4	
0091.GITau	60	3:42	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0092.GITau	300	3:43	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0093.COMP	5	3:49	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	4	
0094.HD84937	10	4:12	9:48:56.1	13:44:39	300	90	3.0	#56 Spectropho	4	
0095.COMP	5	4:12	9:48:56.1	13:44:39	300	90	3.0	#56 Spectropho	4	
0096.Feige34	120	4:16	10:39:36.8	43:06:10	300	90	3.0	#56 Spectropho	4	
0097.COMP	5	4:19	10:39:36.8	43:06:10	300	90	3.0	#56 Spectropho	4	
0098.N3379	180	4:30	10:45:11.4	+12:50:48	300	90	3.0	#57 Velocity S	4	
0099.COMP	5	4:33	10:45:11.4	+12:50:48	300	90	3.0	#57 Velocity S	4	
0100.sn2004gk	900	5:52	12:25:33.2	+12:15:39	300	-42	3.0	#2 SN Observat	2	
0101.COMP	5	6:07	12:25:33.2	+12:15:39	300	-42	3.0	#2 SN Observat	2	
0102.sn2005au	1200	6:24	13:16:12.4	30:56:40	300	98	3.0	#2 SN Observat	2	
0103.COMP	5	6:45	13:16:12.4	30:56:40	300	98	3.0	#2 SN Observat	2	
0104.hs2361	456	7:35	12:45:28.3	47:22:51	600	90	2.0	#122 Halo Star	4	



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UT Date 2005-03-31 Observers Nutzman

Coll. Focus 1010 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0105.COMP	5	7:44	12:45:28.3	47:22:51	600	90	2.0	#122 Halo Star	4	
0106.hs2387	450	7:56	12:50:57.9	60:37:28	600	90	2.0	#122 Halo Star	4	
0107.COMP	5	8:04	12:50:57.9	60:37:28	600	90	2.0	#122 Halo Star	4	
0108.hs2394	300	8:15	12:51:45.8	60:18:30	600	90	2.0	#122 Halo Star	4	
0109.COMP	5	8:21	12:51:45.8	60:18:30	600	90	2.0	#122 Halo Star	4	
0110.hs2395	325	9:00	12:51:52.6	36:40:42	600	90	2.0	#122 Halo Star	4	
0111.COMP	5	9:06	12:51:52.6	36:40:42	600	90	2.0	#122 Halo Star	4	
0112.hs2400	400	9:08	12:52:46.6	59:48:00	600	90	2.0	#122 Halo Star	4	
0113.COMP	5	9:16	12:52:46.6	59:48:00	600	90	2.0	#122 Halo Star	4	
0114.hs2402	450	9:20	12:53:17.2	65:54:36	600	90	2.0	#122 Halo Star	4	
0115.COMP	5	9:28	12:53:17.2	65:54:36	600	90	2.0	#122 Halo Star	4	
0116.hs2403	350	9:32	12:53:18.3	52:55:13	600	90	2.0	#122 Halo Star	4	
0117.COMP	5	9:38	12:53:18.3	52:55:13	600	90	2.0	#122 Halo Star	4	
0118.hs2407	450	9:41	12:53:51.1	32:09:56	600	90	2.0	#122 Halo Star	4	
0119.COMP	5	9:49	12:53:51.1	32:09:56	600	90	2.0	#122 Halo Star	4	
0120.hs2408	350	9:52	12:53:57.2	29:38:08	600	90	2.0	#122 Halo Star	4	
0121.COMP	5	9:58	12:53:57.2	29:38:08	600	90	2.0	#122 Halo Star	4	
0122.hs2410	425	10:03	12:54:40.5	51:40:21	600	90	2.0	#122 Halo Star	4	
0123.COMP	5	10:10	12:54:40.5	51:40:21	600	90	2.0	#122 Halo Star	4	
0124.hss342	1000	10:44	15:54:40.6	49:53:44	600	90	2.0	#122 Halo Star	4	



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UT Date 2005-03-31 Observers NutzmanColl. Focus 1010 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0125.COMP	5	11:01	15:54:40.6	49:53:44	600	90	2.0	#122 Halo Star	4	
0126.hss343	1200	11:06	15:54:44.5	51:47:47	600	90	2.0	#122 Halo Star	4	
0127.COMP	5	11:27	15:54:44.5	51:47:47	600	90	2.0	#122 Halo Star	4	
0128.hss345	1200	11:35	15:55:37.4	46:13:25	600	90	2.0	#122 Halo Star	4	
0129.COMP	5	11:56	15:55:37.4	46:13:25	600	90	2.0	#122 Halo Star	4	
0130-0149.FLAT	24	12:44	17:30:00	31:30:00	600	90	2.0	#122 Halo Star	4	
0150-0169.BIAS	0	12:52	17:30:00	31:30:00	600	90	2.0	#122 Halo Star	4	
0170-0174.DARK	900	14:14	17:30:00	31:30:00	600	90	2.0	#122 Halo Star	4	



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UT Date 2005-04-01 Observers Nutzman

Coll. Focus 975 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.BIAS	0	23:38	17:30:00	31:30:00	300	90	3.0	#56	4	
0002.COMP	5	23:40	17:30:00	31:30:00	300	90	3.0	#56	4	
0003.COMP	5	23:53	17:30:00	31:30:00	300	90	3.0	#56	4	
0004.COMP	5	23:57	17:30:00	31:30:00	300	90	3.0	#56	4	
0005.COMP	5	0:01	17:30:00	31:30:00	300	90	3.0	#56	4	
0006.COMP	5	0:05	17:30:00	31:30:00	300	90	3.0	#56	4	
0007.fastfoc	10	0:16	17:30:00	31:30:00	300	90	3.0	#56	4	
0008.fastfoc	10	0:16	17:30:00	31:30:00	300	90	3.0	#56	4	
0009.fastfoc	10	0:17	17:30:00	31:30:00	300	90	3.0	#56	4	
0010.fastfoc	10	0:17	17:30:00	31:30:00	300	90	3.0	#56	4	
0011.fastfoc	10	0:17	17:30:00	31:30:00	300	90	3.0	#56	4	
0012.fastfoc	10	0:18	17:30:00	31:30:00	300	90	3.0	#56	4	
0013.fastfoc	10	0:18	17:30:00	31:30:00	300	90	3.0	#56	4	
0014.fastfoc	10	0:18	17:30:00	31:30:00	300	90	3.0	#56	4	
0015.fastfoc	10	0:19	17:30:00	31:30:00	300	90	3.0	#56	4	
0016.fastfoc	10	0:19	17:30:00	31:30:00	300	90	3.0	#56	4	
0017.fastfoc	10	0:19	17:30:00	31:30:00	300	90	3.0	#56	4	
0018.fastfoc	10	0:20	17:30:00	31:30:00	300	90	3.0	#56	4	
0019.fastfoc	10	0:20	17:30:00	31:30:00	300	90	3.0	#56	4	
0020.fastfoc	10	0:20	17:30:00	31:30:00	300	90	3.0	#56	4	



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Coll. Focus 975 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0021-0030.BIAS	0	1:00	17:30:00	31:30:00	300	90	3.0	#56	4	
0031-0040.FLAT	8	1:04	17:30:00	31:30:00	300	90	3.0	#56	4	
0041-0050.BIAS	0	1:06	17:30:00	31:30:00	300	90	3.0	#56	2	
0051-0071.FLAT	16	1:16	17:30:00	31:30:00	300	90	3.0	#56	2	
0072-0076.sky	2	1:59	7:10:00	31:30:00	300	90	3.0	#57 Velocity S	4	
0077.COMP	5	2:01	7:10:00	31:30:00	300	90	3.0	#57 Velocity S	4	
0078.FineFoc	60	2:20	07:02:00.9	31:56:18	300	90	3.0	#12 Symbiotic	1	
0079.GKTau	60	3:34	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0080.GKTau	300	3:35	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0081.COMP	5	3:40	04:33:34.5	+24:21:07	300	90	3.0	#12 Symbiotic	2	
0082.GITau	60	3:43	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0083.GITau	300	3:44	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0084.COMP	5	3:49	04:33:34.0	+24:21:18	300	90	3.0	#12 Symbiotic	2	
0085.HD84937	10	3:55	09:48:54.8	13:45:13	300	90	3.0	#56 Spectropho	2	
0086.COMP	5	3:58	09:48:54.8	13:45:13	300	90	3.0	#56 Spectropho	2	
0087.HD84937	10	3:59	09:48:54.8	13:45:13	300	90	3.0	#56 Spectropho	4	
0088.COMP	5	4:00	09:48:54.8	13:45:13	300	90	3.0	#56 Spectropho	4	
0089.Feige34	120	4:39	10:39:36.8	43:06:10	300	90	3.0	#56 Spectropho	4	
0090.COMP	5	4:41	10:39:36.8	43:06:10	300	90	3.0	#56 Spectropho	4	
0091.Feige34	120	4:42	10:39:36.8	43:06:10	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
0092.COMP	5	4:45	10:39:36.8	43:06:10	300	90	3.0	#56 Spectropho	2	
0093.N3377	180	7:35	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	2	
0094.COMP	5	7:41	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	2	
0095.N3377	180	7:43	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	4	
0096.COMP	5	7:46	10:45:02.6	+14:14:51	300	90	3.0	#57 Velocity S	4	
0097-0106.BIAS	0	10:19	14:05:53.8	+48:21:55	300	90	3.0	#57 Velocity S	4	
0107-0116.FLAT	8	10:22	14:05:53.8	+48:21:55	300	90	3.0	#57 Velocity S	4	
0117-0126.BIAS	0	10:25	14:05:53.8	+48:21:55	300	90	3.0	#57 Velocity S	2	
0127-0147.FLAT	16	10:35	14:05:53.8	+48:21:55	300	90	3.0	#57 Velocity S	2	
0148-0152.DARK	900	11:45	14:05:53.8	+48:21:55	300	90	3.0	#57 Velocity S	4	
0153-0157.DARK	900	13:01	14:05:53.8	+48:21:55	300	90	3.0	#57 Velocity S	2	