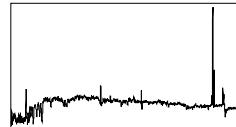




WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-11 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.BIAS	0	2:36	14:29:01.1	31:30:33	300	90	3.0	#57 Velocity S	4	start of FAST run
0002.BIAS	0	2:36	14:29:09.1	31:30:33	300	90	3.0	#57 Velocity S	4	
0003-0010.BIAS	0	2:38	14:30:11.1	31:30:32	300	90	3.0	#57 Velocity S	4	
0011-0020.FLAT	8	2:41	14:33:26.2	31:30:32	300	90	3.0	#57 Velocity S	4	
0021.BIAS	0	2:41	14:36:19.2	31:30:32	300	90	3.0	#57 Velocity S	2	Hi Susan!
0022-0030.BIAS	0	2:46	14:38:21.2	31:30:32	300	90	3.0	#57 Velocity S	2	
0031-0034.FLAT	16	2:48	14:40:56.2	31:30:32	300	90	3.0	#57 Velocity S	2	
0035-0040.FLAT	16	2:51	14:43:55.2	31:30:31	300	90	3.0	#57 Velocity S	2	
0041.N5866	180	2:51	15:05:07.2	+55:57:18	300	90	3.0	#57 Velocity S	4	overcast @ sunset; clearing...
0042.COMP	5	2:51	15:05:07.2	+55:57:18	300	90	3.0	#57 Velocity S	4	
0043.MRK421	300	2:51	11:04:27.4	+38:12:32	300	75	3.0	#6 AGN Monitor	4	
0044.COMP	5	2:51	11:04:27.4	+38:12:32	300	75	3.0	#6 AGN Monitor	4	
0045.N4051	150	2:51	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0046.N4051	150	2:51	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0047.COMP	5	2:51	12:03:09.7	+44:31:53	300	90	3.0	#6 AGN Monitor	4	
0048.N4151	30	2:51	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0049.N4151	30	2:51	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0050.COMP	5	2:51	12:10:32.6	+39:24:21	300	90	3.0	#6 AGN Monitor	4	
0051.MRK279	180	2:51	13:51:53.6	69:33:13	300	-40	3.0	#6 AGN Monitor	4	
0052.MRK279	180	2:51	13:51:53.6	69:33:13	300	-40	3.0	#6 AGN Monitor	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-11 Observers P BerlindColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0053.COMP	5	2:51	13:51:53.6	69:33:13	300	-40	3.0	#6 AGN Monitor	4	
0054.N5548	120	2:51	14:17:59.6	+25:08:12	300	68	3.0	#6 AGN Monitor	4	
0055.N5548	120	2:51	14:17:59.6	+25:08:12	300	68	3.0	#6 AGN Monitor	4	
0056.COMP	5	2:51	14:17:59.6	+25:08:12	300	68	3.0	#6 AGN Monitor	4	
0057.comak_031	480	2:51	12:31:33.1	23:55:58	300	90	3.0	#64f Cluster I	4	
0058.COMP	5	2:51	12:31:33.1	23:55:58	300	90	3.0	#64f Cluster I	4	
0059.comak_032	300	2:51	12:57:05.3	28:58:53	300	90	3.0	#64f Cluster I	4	
0060.COMP	5	2:51	12:57:05.3	28:58:53	300	90	3.0	#64f Cluster I	4	
0061.comak_034	420	2:51	12:39:32.0	27:29:50	300	90	3.0	#64f Cluster I	4	
0062.COMP	5	2:51	12:39:32.0	27:29:50	300	90	3.0	#64f Cluster I	4	
0063.comak_035	270	2:51	13:02:22.0	33:12:53	300	90	3.0	#64f Cluster I	4	
0064.COMP	5	2:51	13:02:22.0	33:12:53	300	90	3.0	#64f Cluster I	4	
0065.comak_037	330	2:51	13:06:11.5	21:30:15	300	90	3.0	#64f Cluster I	4	
0066.COMP	5	2:51	13:06:11.5	21:30:15	300	90	3.0	#64f Cluster I	4	
0067.comak_039	330	2:51	13:31:37.5	24:45:27	300	90	3.0	#64f Cluster I	4	
0068.COMP	5	2:51	13:31:37.5	24:45:27	300	90	3.0	#64f Cluster I	4	
0069.comak_036	240	2:51	13:23:28.7	33:45:03	300	90	3.0	#64f Cluster I	4	
0070.COMP	5	2:51	13:23:28.7	33:45:03	300	90	3.0	#64f Cluster I	4	
0071.comak_033	270	2:51	13:27:45.1	25:10:44	300	90	3.0	#64f Cluster I	4	
0072.COMP	5	2:51	13:27:45.1	25:10:44	300	90	3.0	#64f Cluster I	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-11 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0073.sn2001ck	1200	2:51	14:37:50.0	+30:29:02	300	80	3.0	#2 SN Observat	2	
0074.COMP	10	2:51	14:37:50.0	+30:29:02	300	80	3.0	#2 SN Observat	2	
0075.BDp332642	60	2:51	15:50:03	33:05:49	300	89	3.0	#56 Spectropho	2	
0076.BDp332642	60	2:51	15:50:03	33:05:49	300	89	3.0	#56 Spectropho	2	
0077.COMP	10	2:51	15:50:03	33:05:49	300	89	3.0	#56 Spectropho	2	
0078.id2792	360	2:51	19:59:03.1	35:14:09	300	90	3.0	#115 PMS NGC68	4	
0079.id1661	420	2:51	20:06:18.8	35:48:05	300	90	3.0	#115 PMS NGC68	4	ignore brighter star in slit to W
0080.COMP	5	2:51	20:06:18.8	35:48:05	300	90	3.0	#115 PMS NGC68	4	
0081.id2243	600	2:51	20:05:08.9	35:55:58	300	90	3.0	#115 PMS NGC68	4	
0082.id1911	420	2:51	20:05:52.5	35:54:34	300	90	3.0	#115 PMS NGC68	4	
0083.COMP	5	2:51	20:05:52.5	35:54:34	300	90	3.0	#115 PMS NGC68	4	
0084.id2401	420	2:51	20:04:35.6	35:56:17	300	90	3.0	#115 PMS NGC68	4	
0085.id2038	480	2:51	20:05:34.4	35:37:00	300	90	3.0	#115 PMS NGC68	4	
0086.COMP	5	2:51	20:05:34.4	35:37:00	300	90	3.0	#115 PMS NGC68	4	
0087.id2056	540	2:51	20:05:32.1	35:49:31	300	90	3.0	#115 PMS NGC68	4	
0088.id1548	600	2:51	20:06:32.8	35:45:31	300	90	3.0	#115 PMS NGC68	4	
0089.COMP	5	2:51	20:06:32.8	35:45:31	300	90	3.0	#115 PMS NGC68	4	
0090.id2503	540	2:51	20:04:16.9	35:35:57	300	90	3.0	#115 PMS NGC68	4	
0091.id1008	540	2:51	20:07:33.6	35:37:22	300	90	3.0	#115 PMS NGC68	4	
0092.COMP	5	2:51	20:07:33.6	35:37:22	300	90	3.0	#115 PMS NGC68	4	



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FAST SPECTROGRAPH LOG



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UT Date 2001-07-11 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0093.id2628	540	2:51	20:00:02.8	35:11:36	300	90	3.0	#115 PMS NGC68	4	
0094.id2049	540	2:51	20:05:33.1	35:42:56	300	90	3.0	#115 PMS NGC68	4	
0095.COMP	5	2:51	20:05:33.1	35:42:56	300	90	3.0	#115 PMS NGC68	4	
0096.id1502	600	2:51	20:06:41.3	35:52:52	300	90	3.0	#115 PMS NGC68	4	
0097.id1155	600	2:51	20:07:20.2	35:38:25	300	90	3.0	#115 PMS NGC68	4	
0098.COMP	5	2:51	20:07:20.2	35:38:25	300	90	3.0	#115 PMS NGC68	4	
0099.id1356	600	2:51	20:06:58.5	35:37:17	300	90	3.0	#115 PMS NGC68	4	
0100.id1552	600	2:51	20:06:31.7	35:36:10	300	90	3.0	#115 PMS NGC68	4	
0101.COMP	5	2:51	20:06:31.7	35:36:10	300	90	3.0	#115 PMS NGC68	4	
0102.id2333	600	2:51	20:04:48.9	35:49:31	300	90	3.0	#115 PMS NGC68	4	
0103.id1376	600	2:51	20:06:56.6	35:56:31	300	90	3.0	#115 PMS NGC68	4	
0104.COMP	5	2:51	20:06:56.6	35:56:31	300	90	3.0	#115 PMS NGC68	4	
0105.HD192281	5	2:51	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	4	
0106.HD192281	5	2:51	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	4	
0107.HD192281	5	2:51	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	4	
0108.COMP	5	2:51	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	4	
0109.BDp404032	60	2:51	20:06:40	41:06:15	300	90	3.0	#56 Spectropho	4	
0110.BDp404032	60	2:51	20:06:40	41:06:15	300	90	3.0	#56 Spectropho	4	
0111.COMP	5	2:51	20:06:40	41:06:15	300	90	3.0	#56 Spectropho	4	
0112.id1477	900	2:51	20:06:44.8	35:39:13	300	90	3.0	#115 PMS NGC68	4	



WHIPPLE OBSERVATORY

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UT Date 2001-07-11 Observers P BerlindColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0113.id1355	600	2:51	20:06:58.6	35:39:38	300	90	3.0	#115 PMS NGC68	4	
0114.COMP	5	2:51	20:06:58.6	35:39:38	300	90	3.0	#115 PMS NGC68	4	
0115.id2143	600	2:51	20:05:20.8	35:45:23	300	90	3.0	#115 PMS NGC68	4	a few rogue clouds forming
0116.id1578	600	2:51	20:06:28.1	35:46:51	300	90	3.0	#115 PMS NGC68	4	
0117.COMP	5	2:51	20:06:28.1	35:46:51	300	90	3.0	#115 PMS NGC68	4	
0118.id2511	660	2:51	20:04:14.9	35:40:18	300	90	3.0	#115 PMS NGC68	4	
0119.id2158	660	2:51	20:05:18.8	35:44:49	300	90	3.0	#115 PMS NGC68	4	
0120.COMP	5	2:51	20:05:18.8	35:44:49	300	90	3.0	#115 PMS NGC68	4	
0121.sn2001cy	1200	2:51	22:09:27.7	+40:59:16	300	15	3.0	#2 SN Observat	2	
0122.COMP	10	2:51	22:09:27.7	+40:59:16	300	15	3.0	#2 SN Observat	2	
0123.BDp284211	90	2:51	21:48:57.1	28:37:48	300	55	3.0	#56 Spectropho	2	
0124.BDp284211	90	2:51	21:48:57.1	28:37:48	300	55	3.0	#56 Spectropho	2	
0125.COMP	10	2:51	21:48:57.1	28:37:48	300	55	3.0	#56 Spectropho	2	
0126.snngc7780	600	2:51	23:53:32.7	+08:07:02	300	0	3.0	#2 SN Observat	2	
0127.COMP	10	2:51	23:53:32.7	+08:07:02	300	0	3.0	#2 SN Observat	2	
0128.Akn564	240	2:51	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	2	
0129.Akn564	240	2:51	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	2	
0130.COMP	10	2:51	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	2	
0131.id1878	660	2:51	20:05:55.4	35:46:41	300	90	3.0	#115 PMS NGC68	4	
0132.id1543	720	2:51	20:06:33.3	35:37:37	300	90	3.0	#115 PMS NGC68	4	more clouds



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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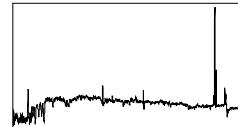
UT Date 2001-07-11 Observers P BerlindColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0133.COMP	5	2:51	20:06:33.3	35:37:37	300	90	3.0	#115 PMS NGC68	4	
0134.ZAnd	2	2:51	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0135.ZAnd	90	2:51	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0136.COMP	5	2:51	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0137-0146.BIAS	0	11:23	23:33:40	48:49:06	300	90	3.0	#6 AGN Monitor	4	
0147-0156.FLAT	8	11:26	23:33:40	48:49:06	300	90	3.0	#6 AGN Monitor	4	
0157-0166.BIAS	0	11:28	23:33:40	48:49:06	300	90	3.0	#6 AGN Monitor	2	
0167-0176.FLAT	16	11:34	23:33:40	48:49:06	300	90	3.0	#6 AGN Monitor	2	
0177-0181.DARK	900	12:44	00:53:03.1	31:30:11	300	90	3.0	#6 AGN Monitor	4	
0182.DARK	900	12:44	01:08:13.0	31:30:12	300	90	3.0	#6 AGN Monitor	4	
0183-0184.DARK	900	13:29	01:38:32.9	31:30:13	300	90	3.0	#6 AGN Monitor	4	
0185.DARK	900	13:29	01:53:42.8	31:30:14	300	90	3.0	#6 AGN Monitor	4	
0186.DARK	900	13:29	02:08:51.7	31:30:15	300	90	3.0	#6 AGN Monitor	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-12 Observers P Berlind

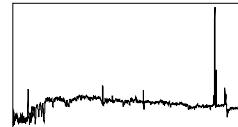
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.BIAS	0	2:34	9:45:00	27:00:00	300	90	3.0	#6 AGN Monitor	4	cloudy
0002-0010.BIAS	0	2:35	9:45:00	27:00:00	300	90	3.0	#6 AGN Monitor	4	
0011-0020.FLAT	8	2:39	9:45:00	27:00:00	300	90	3.0	#6 AGN Monitor	4	
0021-0030.BIAS	0	2:42	9:45:00	27:00:00	300	90	3.0	#6 AGN Monitor	2	
0031-0040.FLAT	16	2:47	9:45:00	27:00:00	300	90	3.0	#6 AGN Monitor	2	
0041.N5866	210	2:47	15:05:07.2	+55:57:18	300	90	3.0	#57 Velocity S	4	
0042.COMP	5	2:47	15:05:07.2	+55:57:18	300	90	3.0	#57 Velocity S	4	
0043.comak_036	240	2:47	13:23:28.7	33:45:03	300	90	3.0	#64f Cluster I	4	sucker hole
0044.COMP	5	2:47	13:23:28.7	33:45:03	300	90	3.0	#64f Cluster I	4	
0045.sn2001cp	1500	2:47	17:11:02.5	05:50:26	300	-30	3.0	#2 SN Observat	2	dome runaway ate up 5-min of exp
0046.COMP	10	2:47	17:11:02.5	05:50:26	300	-30	3.0	#2 SN Observat	2	
0047.comak_035	300	2:47	13:02:22.0	33:12:53	300	90	3.0	#64f Cluster I	4	
0048.COMP	5	2:47	13:02:22.0	33:12:53	300	90	3.0	#64f Cluster I	4	
0049.comak_037	330	2:47	13:06:11.5	21:30:15	300	90	3.0	#64f Cluster I	4	
0050.COMP	5	2:47	13:06:11.5	21:30:15	300	90	3.0	#64f Cluster I	4	
0051.comak_039	480	2:47	13:31:37.5	24:45:27	300	90	3.0	#64f Cluster I	4	
0052.COMP	5	2:47	13:31:37.5	24:45:27	300	90	3.0	#64f Cluster I	4	
0053.comak_033	300	2:47	13:27:45.1	25:10:44	300	90	3.0	#64f Cluster I	4	
0054.COMP	5	2:47	13:27:45.1	25:10:44	300	90	3.0	#64f Cluster I	4	
0055.comak_044	240	2:47	13:19:56.8	33:21:20	300	90	3.0	#64f Cluster I	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-12 Observers P Berlind

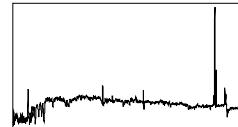
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0056.COMP	5	2:47	13:19:56.8	33:21:20	300	90	3.0	#64f Cluster I	4	
0057.comak_045	330	2:47	13:22:27.1	26:41:41	300	90	3.0	#64f Cluster I	4	
0058.COMP	5	2:47	13:22:27.1	26:41:41	300	90	3.0	#64f Cluster I	4	
0059.comak_046	360	2:47	13:23:31.3	33:47:36	300	90	3.0	#64f Cluster I	4	
0060.COMP	5	2:47	13:23:31.3	33:47:36	300	90	3.0	#64f Cluster I	4	
0061.BDp332642	60	2:47	15:50:03	33:05:49	300	90	3.0	#56 Spectropho	2	
0062.BDp332642	90	2:47	15:50:03	33:05:49	300	90	3.0	#56 Spectropho	2	
0063.COMP	10	2:47	15:50:03	33:05:49	300	90	3.0	#56 Spectropho	2	
0064.BDp404032	90	2:47	20:06:40	41:06:15	300	90	3.0	#56 Spectropho	2	
0065.BDp404032	90	2:47	20:06:40	41:06:15	300	90	3.0	#56 Spectropho	2	
0066.COMP	10	2:47	20:06:40	41:06:15	300	90	3.0	#56 Spectropho	2	
0067.HD192281	5	2:47	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	2	
0068.HD192281	5	2:47	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	2	
0069.HD192281	5	2:47	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	2	
0070.COMP	10	2:47	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	2	
0071.id2604	900	2:47	20:03:56.3	35:55:11	300	90	3.0	#115 PMS NGC68	4	
0072.COMP	5	2:47	20:03:56.3	35:55:11	300	90	3.0	#115 PMS NGC68	4	
0073.id1528	1200	2:47	20:06:36.9	35:42:17	300	90	3.0	#115 PMS NGC68	4	
0074.COMP	5	2:47	20:06:36.9	35:42:17	300	90	3.0	#115 PMS NGC68	4	
0075.id1778	1200	2:47	20:06:04.7	35:37:47	300	90	3.0	#115 PMS NGC68	4	increasing clouds...



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-12 Observers P Berlind

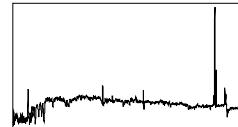
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0076.COMP	5	2:47	20:06:04.7	35:37:47	300	90	3.0	#115 PMS NGC68	4	
0077.id1281	900	2:47	20:07:06.4	35:55:52	300	90	3.0	#115 PMS NGC68	4	
0078.COMP	5	2:47	20:07:06.4	35:55:52	300	90	3.0	#115 PMS NGC68	4	
0079.id2106	900	2:47	20:05:45.9	35:40:54	300	90	3.0	#115 PMS NGC68	4	
0080.COMP	5	2:47	20:05:45.9	35:40:54	300	90	3.0	#115 PMS NGC68	4	
0081.id2010	900	2:47	20:05:39.0	35:49:56	300	90	3.0	#115 PMS NGC68	4	clearing again!
0082.COMP	5	2:47	20:05:39.0	35:49:56	300	90	3.0	#115 PMS NGC68	4	
0083.tr37.C.1-208	300	2:47	21:37:30.8	57:18:34	300	90	3.0	#127 Star Form	4	asicilia@cfa.harvard.edu
0084.COMP	5	2:47	21:37:30.8	57:18:34	300	90	3.0	#127 Star Form	4	
0085.tr37.C.1-794	300	2:47	21:37:51.9	57:22:23	300	90	3.0	#127 Star Form	4	
0086.COMP	5	2:47	21:37:51.9	57:22:23	300	90	3.0	#127 Star Form	4	
0087.tr37.1.3-277	300	2:47	21:38:17.3	57:31:22	300	45	3.0	#127 Star Form	4	
0088.COMP	5	2:47	21:38:17.3	57:31:22	300	45	3.0	#127 Star Form	4	
0089.tr37.C.3-1243	300	2:47	21:39:16.7	57:37:21	300	45	3.0	#127 Star Form	4	
0090.COMP	5	2:47	21:39:16.7	57:37:21	300	45	3.0	#127 Star Form	4	
0091.tr37.2.4-13	300	2:47	21:39:03.4	57:30:29	300	45	3.0	#127 Star Form	4	bright stars near/in slit to west
0092.COMP	5	2:47	21:39:03.4	57:30:29	300	45	3.0	#127 Star Form	4	
0093.tr37.C.3-995.east	300	2:47	21:40:17.6	57:35:40	300	45	3.0	#127 Star Form	4	east * of close pair
0094.tr37.C.3-995.west	300	2:47	21:40:17.6	57:35:40	300	45	3.0	#127 Star Form	4	west *
0095.COMP	5	2:47	21:40:17.6	57:35:40	300	45	3.0	#127 Star Form	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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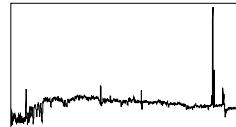
UT Date 2001-07-12 Observers P BerlindColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0096.tr37.2.1-1950	300	2:47	21:39:58.1	57:28:33	300	45	3.0	#127 Star Form	4	
0097.COMP	5	2:47	21:39:58.1	57:28:33	300	45	3.0	#127 Star Form	4	
0098.tr37.1.3-1758	330	2:47	21:37:58.0	57:38:51	300	45	3.0	#127 Star Form	4	
0099.COMP	5	2:47	21:37:58.0	57:38:51	300	45	3.0	#127 Star Form	4	
0100.tr37.1.1-173	390	2:47	21:37:10.5	57:18:40	300	45	3.0	#127 Star Form	4	stopped by clouds
0101.COMP	5	2:47	21:37:10.5	57:18:40	300	45	3.0	#127 Star Form	4	
0102.tr37.1.2-2399	900	2:47	21:37:57.3	57:28:32	300	0	3.0	#127 Star Form	4	
0103.COMP	5	2:47	21:37:57.3	57:28:32	300	0	3.0	#127 Star Form	4	
0104.tr37.1.2-209	900	2:47	21:38:33.0	57:18:56	300	0	3.0	#127 Star Form	4	stopped by clouds
0105.COMP	5	2:47	21:38:33.0	57:18:56	300	0	3.0	#127 Star Form	4	
0106-0115.BIAS	0	10:42	21:38:33.0	57:18:56	300	90	3.0	#127 Star Form	4	
0116-0125.FLAT	8	10:46	21:38:33.0	57:18:56	300	90	3.0	#127 Star Form	4	
0126-0135.BIAS	0	10:49	21:38:33.0	57:18:56	300	90	3.0	#127 Star Form	2	
0136-0145.FLAT	16	10:54	21:38:33.0	57:18:56	300	90	3.0	#127 Star Form	2	
0146-0155.DARK	900	13:13	21:38:33.0	57:18:56	300	90	3.0	#127 Star Form	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-14 Observers M Calkins

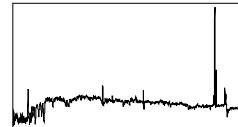
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	1:44	14:03:39.0	31:30:33	300	90	3.0		4	
0002.DARK	900	1:44	14:18:46.1	31:30:32	300	90	3.0		4	
0003-0004.DARK	900	2:30	14:49:08.2	31:30:31	300	90	3.0		4	
0005.DARK	900	2:30	15:04:16.3	31:30:29	300	90	3.0		4	
0006-0015.BIAS	0	3:05	15:09:10.3	31:30:30	300	90	3.0		4	
0016-0025.FLAT	6	3:08	15:12:17.3	31:30:30	300	90	3.0		4	
0026-0030.BIAS	0	3:09	15:13:57.3	31:30:30	300	90	3.0		2	
0031-0035.BIAS	0	3:10	15:15:02.3	31:30:29	300	90	3.0		2	
0036-0045.FLAT	12	3:15	15:19:23.3	31:30:29	300	90	3.0		2	
0046.HZ44	120	3:15	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0047.COMP	12	3:15	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0048.HZ44	120	3:15	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	
0049.COMP	5	3:15	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	
0050.HZ44	120	3:15	13:21:19.0	36:23:39	300	86	3.0	#56 Spectropho	2	
0051.COMP	12	3:15	13:21:19.0	36:23:39	300	86	3.0	#56 Spectropho	2	
0052.N5866	180	3:15	15:05:07.2	+55:57:18	300	90	3.0	#57 Velocity S	2	
0053.COMP	12	3:15	15:05:07.2	+55:57:18	300	90	3.0	#57 Velocity S	2	
0054.comak_041	300	3:15	12:27:51.9	24:56:32	300	90	3.0	#64f Cluster I	4	
0055.COMP	5	3:15	12:27:51.9	24:56:32	300	90	3.0	#64f Cluster I	4	
0056.comak_042	360	3:15	12:32:30.4	31:22:30	300	90	3.0	#64f Cluster I	4	



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UT Date 2001-07-14 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0057.COMP	5	3:15	12:32:30.4	31:22:30	300	90	3.0	#64f Cluster I	4	
0058.comak_043	1200	3:15	12:53:07.5	33:29:19	300	90	3.0	#64f Cluster I	4	
0059.COMP	5	3:15	12:53:07.5	33:29:19	300	90	3.0	#64f Cluster I	4	
0060.comak_048	300	3:15	13:01:24.4	32:40:50	300	90	3.0	#64f Cluster I	2	
0061.COMP	12	3:15	13:01:24.4	32:40:50	300	90	3.0	#64f Cluster I	2	
0062.comak_049	480	3:15	13:18:08.2	31:57:35	300	90	3.0	#64f Cluster I	4	
0063.COMP	5	3:15	13:18:08.2	31:57:35	300	90	3.0	#64f Cluster I	4	
0064.comak_050	780	3:15	12:40:55.1	28:31:36	300	90	3.0	#64f Cluster I	4	
0065.COMP	5	3:15	12:40:55.1	28:31:36	300	90	3.0	#64f Cluster I	4	
0066.comak_051	240	3:15	13:00:12.9	28:04:32	300	90	3.0	#64f Cluster I	4	
0067.COMP	5	3:15	13:00:12.9	28:04:32	300	90	3.0	#64f Cluster I	4	
0068.comak_052	600	3:15	13:07:36.5	31:04:44	300	90	3.0	#64f Cluster I	4	
0069.COMP	5	3:15	13:07:36.5	31:04:44	300	90	3.0	#64f Cluster I	4	
0070.comak_053	900	3:15	13:18:24.2	31:20:37	300	90	3.0	#64f Cluster I	4	
0071.COMP	5	3:15	13:18:24.2	31:20:37	300	90	3.0	#64f Cluster I	4	lost time to disabled tele.
0072.sn2001bf	1200	3:15	18:01:33.9	26:15:02	300	37	3.0	#2 SN Observat	2	
0073.COMP	12	3:15	18:01:33.9	26:15:02	300	37	3.0	#2 SN Observat	2	
0074.sn2001br	1200	3:15	18:30:25.5	34:06:13	300	-57	3.0	#2 SN Observat	2	
0075.COMP	12	3:15	18:30:25.5	34:06:13	300	-57	3.0	#2 SN Observat	2	
0076.id1699	720	3:15	20:06:14.3	35:36:59	300	90	3.0	#115 PMS NGC68	2	



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FAST SPECTROGRAPH LOG



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UT Date 2001-07-14 Observers M Calkins

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0077.COMP	12	3:15	20:06:14.3	35:36:59	300	90	3.0	#115 PMS NGC68	2	
0078.id2461	900	3:15	20:04:24.0	35:54:42	300	90	3.0	#115 PMS NGC68	2	
0079.COMP	12	3:15	20:04:24.0	35:54:42	300	90	3.0	#115 PMS NGC68	2	
0080.id1128	780	3:15	20:07:22.6	35:39:29	300	90	3.0	#115 PMS NGC68	2	row=78
0081.COMP	12	3:15	20:07:22.6	35:39:29	300	90	3.0	#115 PMS NGC68	2	
0082.id2454	780	3:15	20:04:26.0	35:49:19	300	90	3.0	#115 PMS NGC68	2	clouds blowing thru
0083.COMP	12	3:15	20:04:26.0	35:49:19	300	90	3.0	#115 PMS NGC68	2	wait them out
0084.sn2001cy	1200	3:15	22:09:27.7	+40:59:16	300	-19	3.0	#2 SN Observat	2	row=83
0085.COMP	12	3:15	22:09:27.7	+40:59:16	300	-19	3.0	#2 SN Observat	2	
0086.snnngc7780	1200	3:15	23:53:32.7	+08:07:02	300	-30	3.0	#2 SN Observat	2	
0087.COMP	12	3:15	23:53:32.7	+08:07:02	300	-30	3.0	#2 SN Observat	2	
0088.tr37.C.1-347	600	3:15	21:37:34.2	57:19:33	300	90	3.0	#127 Star Form	2	
0089.COMP	12	3:15	21:37:34.2	57:19:33	300	90	3.0	#127 Star Form	2	
0090.tr37.1.4-1971	540	3:15	21:37:18.8	57:39:52	300	90	3.0	#127 Star Form	2	
0091.COMP	12	3:15	21:37:18.8	57:39:52	300	90	3.0	#127 Star Form	2	
0092.BDp284211	40	3:15	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0093.BDp284211	40	3:15	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0094.COMP	12	3:15	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0095-0099.sky	2	12:13	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0100.COMP	5	12:13	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	



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FAST SPECTROGRAPH LOG



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UT Date 2001-07-14 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0101-0110.BIAS	0	12:16	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0111-0120.FLAT	6	12:20	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0121-0130.BIAS	0	12:23	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	
0131-0140.FLAT	12	12:28	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	
0141-0150.DARK	900	14:46	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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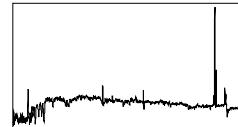
UT Date 2001-07-15 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0010.DARK	900	1:33	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0011-0020.BIAS	0	2:51	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0021-0030.FLAT	6	3:00	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0031-0040.BIAS	0	3:07	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	
0041.FLAT	12	3:07	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	storms at sunset
0042-0050.FLAT	12	3:12	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	
0051.PG1708p602	480	3:12	17:08:35.9	60:13:52	300	90	3.0	#56 Spectropho	2	
0052.COMP	12	3:12	17:08:35.9	60:13:52	300	90	3.0	#56 Spectropho	2	
0053.sn2001cp	1200	3:12	17:11:02.5	05:50:26	300	20	3.0	#2 SN Observat	2	
0054.COMP	12	3:12	17:11:02.5	05:50:26	300	20	3.0	#2 SN Observat	2	
0055.BDp404032	120	3:12	20:06:40	41:06:15	300	72	3.0	#56 Spectropho	2	saturated? Get again...
0056.COMP	12	3:12	20:06:40	41:06:15	300	72	3.0	#56 Spectropho	2	
0057.BDp404032	60	3:12	20:06:40	41:06:15	300	72	3.0	#56 Spectropho	2	
0058.COMP	12	3:12	20:06:40	41:06:15	300	72	3.0	#56 Spectropho	2	
0059.MRK509	60	3:12	20:44:09.8	-10:43:24	300	90	3.0	#6 AGN Monitor	2	
0060.MRK509	60	3:12	20:44:09.8	-10:43:24	300	90	3.0	#6 AGN Monitor	2	
0061.COMP	12	3:12	20:44:09.8	-10:43:24	300	90	3.0	#6 AGN Monitor	2	
0062.id1746	660	3:12	20:06:09.6	35:48:08	300	90	3.0	#115 PMS NGC68	2	row=81
0063.COMP	12	3:12	20:06:09.6	35:48:08	300	90	3.0	#115 PMS NGC68	2	
0064.id1557	780	3:12	20:06:31.3	35:55:56	300	90	3.0	#115 PMS NGC68	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-15 Observers M Calkins

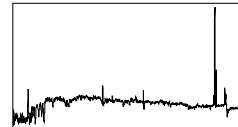
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0065.COMP	12	3:12	20:06:31.3	35:55:56	300	90	3.0	#115 PMS NGC68	2	
0066.id1184	900	3:12	20:07:18.0	35:49:41	300	90	3.0	#115 PMS NGC68	2	row=83
0067.COMP	12	3:12	20:07:18.0	35:49:41	300	90	3.0	#115 PMS NGC68	2	
0068.id1550	900	3:12	20:06:32.3	35:46:52	300	90	3.0	#115 PMS NGC68	2	
0069.COMP	12	3:12	20:06:32.3	35:46:52	300	90	3.0	#115 PMS NGC68	2	
0070.id2257	780	3:12	20:05:05.7	35:39:22	300	90	3.0	#115 PMS NGC68	2	
0071.COMP	12	3:12	20:05:05.7	35:39:22	300	90	3.0	#115 PMS NGC68	2	
0072.id1644	600	3:12	20:06:21.0	35:35:00	300	90	3.0	#115 PMS NGC68	2	
0073.COMP	12	3:12	20:06:21.0	35:35:00	300	90	3.0	#115 PMS NGC68	2	
0074.id2614	540	3:12	20:03:53.7	35:49:59	300	90	3.0	#115 PMS NGC68	2	
0075.COMP	12	3:12	20:03:53.7	35:49:59	300	90	3.0	#115 PMS NGC68	2	
0076.id1879	720	3:12	20:05:55.3	35:40:06	300	90	3.0	#115 PMS NGC68	2	
0077.COMP	12	3:12	20:05:55.3	35:40:06	300	90	3.0	#115 PMS NGC68	2	
0078.id1817	600	3:12	20:06:01.3	35:52:36	300	90	3.0	#115 PMS NGC68	2	
0079.COMP	12	3:12	20:06:01.3	35:52:36	300	90	3.0	#115 PMS NGC68	2	
0080.id2618	720	3:12	20:03:53.1	35:53:37	300	90	3.0	#115 PMS NGC68	2	
0081.COMP	12	3:12	20:03:53.1	35:53:37	300	90	3.0	#115 PMS NGC68	2	
0082.id1366	780	3:12	20:06:57.5	35:45:26	300	90	3.0	#115 PMS NGC68	2	row=81
0083.COMP	12	3:12	20:06:57.5	35:45:26	300	90	3.0	#115 PMS NGC68	2	
0084.id1825	900	3:12	20:06:00.7	35:50:01	300	90	3.0	#115 PMS NGC68	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-15 Observers M Calkins

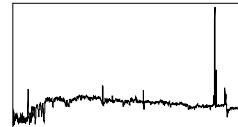
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0085.COMP	12	3:12	20:06:00.7	35:50:01	300	90	3.0	#115 PMS NGC68	2	
0086.id2683	780	3:12	19:59:44.9	35:06:02	300	90	3.0	#115 PMS NGC68	2	
0087.COMP	12	3:12	19:59:44.9	35:06:02	300	90	3.0	#115 PMS NGC68	2	
0088.id2764	720	3:12	19:59:15.6	35:23:59	300	90	3.0	#115 PMS NGC68	2	
0089.COMP	12	3:12	19:59:15.6	35:23:59	300	90	3.0	#115 PMS NGC68	2	
0090.id1719	600	3:12	20:06:12.4	35:45:23	300	90	3.0	#115 PMS NGC68	2	
0091.COMP	12	3:12	20:06:12.4	35:45:23	300	90	3.0	#115 PMS NGC68	2	
0092.id2795	720	3:12	19:59:01.4	35:20:40	300	90	3.0	#115 PMS NGC68	2	
0093.COMP	12	3:12	19:59:01.4	35:20:40	300	90	3.0	#115 PMS NGC68	2	
0094.id1118	720	3:12	20:07:23.0	35:35:10	300	90	3.0	#115 PMS NGC68	2	row=82
0095.COMP	12	3:12	20:07:23.0	35:35:10	300	90	3.0	#115 PMS NGC68	2	
0096.ZAnd	2	3:12	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	2	
0097.ZAnd	10	3:12	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	2	
0098.ZAnd	60	3:12	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	2	
0099.COMP	12	3:12	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	2	
0100.tr37.1.1-1630	600	3:12	21:36:54.1	57:25:11	300	90	3.0	#127 Star Form	2	
0101.COMP	12	3:12	21:36:54.1	57:25:11	300	90	3.0	#127 Star Form	2	
0102.ngcsh.3-654	360	3:12	21:53:58.1	62:43:21	300	90	3.0	#127 Star Form	2	
0103.COMP	12	3:12	21:53:58.1	62:43:21	300	90	3.0	#127 Star Form	2	
0104.ngcsh.3-835	300	3:12	21:54:05.0	62:45:05	300	90	3.0	#127 Star Form	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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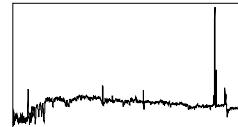
UT Date 2001-07-15 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0105.COMP	12	3:12	21:54:05.0	62:45:05	300	90	3.0	#127 Star Form	2	
0106.ngcsh.3-500	240	3:12	21:55:04.8	62:41:48	300	90	3.0	#127 Star Form	2	
0107.COMP	12	3:12	21:55:04.8	62:41:48	300	90	3.0	#127 Star Form	2	
0108.ngcsh.1-1067	240	3:12	21:53:36.3	62:33:14	300	90	3.0	#127 Star Form	2	
0109.COMP	12	3:12	21:53:36.3	62:33:14	300	90	3.0	#127 Star Form	2	
0110.ngcsh.1-1060	660	3:12	21:53:36.4	62:33:14	300	60	3.0	#127 Star Form	2	rotate to isolate
0111.COMP	12	3:12	21:53:36.4	62:33:14	300	60	3.0	#127 Star Form	2	
0112.BDp284211	40	3:12	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0113.COMP	12	3:12	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0114.BDp284211	40	3:12	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	4	
0115.COMP	5	3:12	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	4	
0116-0120.sky	2	12:13	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0121.COMP	5	12:13	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0122-0131.BIAS	0	12:16	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0132-0141.FLAT	6	12:18	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0142-0151.BIAS	0	12:21	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	
0152-0161.FLAT	12	12:25	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	
0162-0171.DARK	900	14:51	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	



WHIPPLE OBSERVATORY

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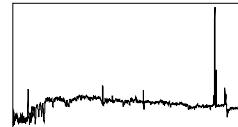
UT Date 2001-07-16 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0010.DARK	900	0:51	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0011-0020.BIAS	0	2:09	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0021-0030.FLAT	6	2:13	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	4	
0031-0040.BIAS	0	2:31	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	
0041-0050.FLAT	12	2:35	21:48:57.1	28:37:48	300	90	3.0	#57 Velocity S	2	
0051.BDp404032	120	2:35	20:06:40	41:06:15	300	90	3.0	#56 Spectropho	4	hole closed
0052.COMP	5	2:35	20:06:40	41:06:15	300	90	3.0	#56 Spectropho	4	wait out clouds
0053.BDp404032	45	2:35	20:06:40	41:06:15	300	31	3.0	#56 Spectropho	2	
0054.COMP	12	2:35	20:06:40	41:06:15	300	31	3.0	#56 Spectropho	2	
0055.id1564	540	2:35	20:06:30.2	35:46:18	300	90	3.0	#115 PMS NGC68	2	
0056.COMP	12	2:35	20:06:30.2	35:46:18	300	90	3.0	#115 PMS NGC68	2	
0057.id1969	720	2:35	20:05:46.1	35:54:51	300	90	3.0	#115 PMS NGC68	2	row=80
0058.COMP	12	2:35	20:05:46.1	35:54:51	300	90	3.0	#115 PMS NGC68	2	
0059.id1448	660	2:35	20:06:48.5	35:47:16	300	90	3.0	#115 PMS NGC68	2	row=78
0060.COMP	12	2:35	20:06:48.5	35:47:16	300	90	3.0	#115 PMS NGC68	2	
0061.id2397	720	2:35	20:04:36.0	35:48:46	300	90	3.0	#115 PMS NGC68	2	
0062.COMP	12	2:35	20:04:36.0	35:48:46	300	90	3.0	#115 PMS NGC68	2	
0063.id1367	720	2:35	20:06:57.4	35:40:16	300	90	3.0	#115 PMS NGC68	2	
0064.COMP	12	2:35	20:06:57.4	35:40:16	300	90	3.0	#115 PMS NGC68	2	
0065.id2298	720	2:35	20:04:57.6	35:55:33	300	90	3.0	#115 PMS NGC68	2	



WHIPPLE OBSERVATORY

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UT Date 2001-07-16 Observers M Calkins

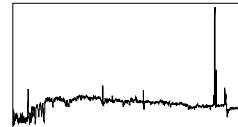
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0066.COMP	12	2:35	20:04:57.6	35:55:33	300	90	3.0	#115 PMS NGC68	2	
0067.id1241	720	2:35	20:07:11.5	35:38:31	300	90	3.0	#115 PMS NGC68	2	row=82
0068.COMP	12	2:35	20:07:11.5	35:38:31	300	90	3.0	#115 PMS NGC68	2	
0069.id1187	720	2:35	20:07:17.9	35:55:08	300	90	3.0	#115 PMS NGC68	2	row=79
0070.COMP	12	2:35	20:07:17.9	35:55:08	300	90	3.0	#115 PMS NGC68	2	
0071.id1635	780	2:35	20:06:22.0	35:46:44	300	90	3.0	#115 PMS NGC68	2	
0072.COMP	12	2:35	20:06:22.0	35:46:44	300	90	3.0	#115 PMS NGC68	2	
0073.id1156	720	2:35	20:07:20.0	35:35:47	300	90	3.0	#115 PMS NGC68	2	
0074.COMP	12	2:35	20:07:20.0	35:35:47	300	90	3.0	#115 PMS NGC68	2	
0075.id1494	600	2:35	20:06:42.3	35:37:39	300	90	3.0	#115 PMS NGC68	2	
0076.COMP	12	2:35	20:06:42.3	35:37:39	300	90	3.0	#115 PMS NGC68	2	
0077.id1722	660	2:35	20:06:11.9	35:37:03	300	90	3.0	#115 PMS NGC68	2	
0078.COMP	12	2:35	20:06:11.9	35:37:03	300	90	3.0	#115 PMS NGC68	2	
0079.id1671	780	2:35	20:06:17.2	35:38:17	300	90	3.0	#115 PMS NGC68	2	row=82
0080.COMP	12	2:35	20:06:17.2	35:38:17	300	90	3.0	#115 PMS NGC68	2	
0081.sn2001cy	1200	2:35	22:09:27.7	+40:59:16	300	-35	3.0	#2 SN Observat	2	row=83
0082.COMP	12	2:35	22:09:27.7	+40:59:16	300	-35	3.0	#2 SN Observat	2	
0083.sn01da	1200	2:35	23:53:32.7	+08:07:02	300	-24	3.0	#2 SN Observat	2	
0084.COMP	12	2:35	23:53:32.7	+08:07:02	300	-24	3.0	#2 SN Observat	2	
0085.ngcsh.3-193	300	2:35	21:54:49.9	62:38:17	300	90	3.0	#127 Star Form	2	



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FAST SPECTROGRAPH LOG



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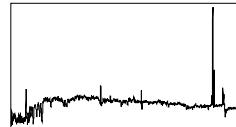
UT Date 2001-07-16 Observers M CalkinsColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0086.COMP	12	2:35	21:54:49.9	62:38:17	300	90	3.0	#127 Star Form	2	
0087.ngcsh.1-615	360	2:35	21:52:35.6	62:29:08	300	90	3.0	#127 Star Form	2	
0088.COMP	12	2:35	21:52:35.6	62:29:08	300	90	3.0	#127 Star Form	2	
0089.BDp284211	40	2:35	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0090.COMP	12	2:35	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0091.N7331	180	2:35	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	2	
0092.COMP	12	2:35	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	2	
0093-0097.sky	2	12:14	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	4	
0098.COMP	5	12:14	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	4	
0099-0108.BIAS	0	12:18	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	4	
0109-0118.FLAT	6	12:21	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	4	
0119-0128.BIAS	0	12:23	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	2	
0129-0138.FLAT	12	12:28	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	2	
0139-0148.DARK	900	14:54	22:34:46.9	+34:09:43	300	90	3.0	#57 Velocity S	2	



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UT Date 2001-07-18 Observers P Berlind

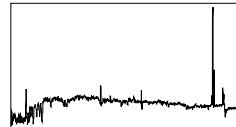
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0020.BIAS	0	1:46	14:06:28.0	31:30:32	300	90	3.0	#57 Velocity S	2	
0021.FLAT	55	1:46	14:19:38.1	31:30:32	300	90	3.0	#57 Velocity S	2	600-line @ H-beta; 2-sec slit
0022-0029.FLAT	55	2:08	14:28:49.1	31:30:32	300	90	3.0	#57 Velocity S	2	
0030-0040.FLAT	55	2:20	14:41:24.2	31:30:31	300	90	3.0	#57 Velocity S	2	
0041.HZ44	180	2:20	13:21:19.0	36:23:39	600	90	2.0	#88f Mass Func	2	abs setup
0042.COMP	10	2:20	13:21:19.0	36:23:39	600	90	2.0	#88f Mass Func	2	
0043.HD120420	30	2:20	13:48:38.7	31:11:24	600	90	2.0	#88f Mass Func	2	clearing!
0044.HD120420	30	2:20	13:48:38.7	31:11:24	600	90	2.0	#88f Mass Func	2	
0045.COMP	10	2:20	13:48:38.7	31:11:24	600	90	2.0	#88f Mass Func	2	
0046.HD117876	40	2:20	13:32:48.2	24:20:48	600	90	2.0	#88f Mass Func	2	
0047.HD117876	40	2:20	13:32:48.2	24:20:48	600	90	2.0	#88f Mass Func	2	
0048.COMP	10	2:20	13:32:48.2	24:20:48	600	90	2.0	#88f Mass Func	2	
0049.NGC4839	240	2:20	12:54:59.0	27:46:00	600	65	2.0	#88f Mass Func	2	dome problems are frustrating-closing; running away.
0050.NGC4839	240	2:20	12:54:59.0	27:46:00	600	65	2.0	#88f Mass Func	2	
0051.COMP	10	2:20	12:54:59.0	27:46:00	600	65	2.0	#88f Mass Func	2	
0052.MF7012	600	2:20	13:57:49.3	+09:52:23	600	100	2.0	#88 Mass Funct	2	
0053.MF7012	600	2:20	13:57:49.3	+09:52:23	600	100	2.0	#88 Mass Funct	2	
0054.COMP	10	2:20	13:57:49.3	+09:52:23	600	100	2.0	#88 Mass Funct	2	
0055.MF7036	720	2:20	13:16:58.4	+07:50:39	600	5	2.0	#88 Mass Funct	2	
0056.MF7036	1200	2:20	13:16:58.4	+07:50:39	600	5	2.0	#88 Mass Funct	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-18 Observers P BerlindColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0057.COMP	10	2:20	13:16:58.4	+07:50:39	600	5	2.0	#88 Mass Funct	2	
0058.COMP	10	2:20	14:59:11.4	+13:25:18	600	5	2.0	#88 Mass Funct	2	
0059.MF7126	900	2:20	14:59:11.4	+13:25:18	600	20	2.0	#88 Mass Funct	2	
0060.MF7126	900	2:20	14:59:11.4	+13:25:18	600	20	2.0	#88 Mass Funct	2	
0061.COMP	10	2:20	14:59:11.4	+13:25:18	600	20	2.0	#88 Mass Funct	2	
0062.COMP	10	2:20	15:39:04.3	+10:48:0	600	20	2.0	#88 Mass Funct	2	
0063.MF7142	900	2:20	15:39:04.3	+10:48:0	600	-35	2.0	#88 Mass Funct	2	
0064.MF7142	900	2:20	15:39:04.3	+10:48:0	600	-35	2.0	#88 Mass Funct	2	
0065.MF7142	900	2:20	15:39:04.3	+10:48:0	600	-35	2.0	#88 Mass Funct	2	
0066.COMP	10	2:20	15:39:04.3	+10:48:0	600	-35	2.0	#88 Mass Funct	2	
0067.HD156362	60	2:20	17:15:58.9	27:08:02	600	90	2.0	#88f Mass Func	2	
0068.HD156362	60	2:20	17:15:58.9	27:08:02	600	90	2.0	#88f Mass Func	2	
0069.COMP	10	2:20	17:15:58.9	27:08:02	600	90	2.0	#88f Mass Func	2	
0070.HD156775	60	2:20	17:18:29.9	25:48:28	600	90	2.0	#88f Mass Func	2	
0071.HD156775	60	2:20	17:18:29.9	25:48:28	600	90	2.0	#88f Mass Func	2	
0072.COMP	10	2:20	17:18:29.9	25:48:28	600	90	2.0	#88f Mass Func	2	
0073.HD156874	60	2:20	17:18:48.5	28:49:22	600	90	2.0	#88f Mass Func	2	
0074.HD156874	60	2:20	17:18:48.5	28:49:22	600	90	2.0	#88f Mass Func	2	
0075.COMP	5	2:20	17:18:48.5	28:49:22	600	90	2.0	#88f Mass Func	2	
0076.HD158974	60	2:20	17:30:55.4	31:09:29	600	90	2.0	#88f Mass Func	2	



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UT Date 2001-07-18 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0077.HD158974	60	2:20	17:30:55.4	31:09:29	600	90	2.0	#88f Mass Func	2	
0078.COMP	5	2:20	17:30:55.4	31:09:29	600	90	2.0	#88f Mass Func	2	
0079.HD192281	6	2:20	20:10:46.8	40:07:01	600	90	2.0	#88f Mass Func	2	
0080.HD192281	6	2:20	20:10:46.8	40:07:01	600	90	2.0	#88f Mass Func	2	
0081.HD192281	6	2:20	20:10:46.8	40:07:01	600	90	2.0	#88f Mass Func	2	
0082.COMP	10	2:20	20:10:46.8	40:07:01	600	90	2.0	#88f Mass Func	2	
0083.BDp404032	120	2:20	20:06:40	41:06:15	600	90	2.0	#88f Mass Func	2	
0084.BDp404032	120	2:20	20:06:40	41:06:15	600	90	2.0	#88f Mass Func	2	
0085.COMP	10	2:20	20:06:40	41:06:15	600	90	2.0	#88f Mass Func	2	no more mass func gals
0086.FLAT	55	2:20	19:30:00	32:00:00	600	90	2.0	#88f Mass Func	2	switch to combo per Mike P/Emilio
0087-0095.FLAT	55	6:59	19:30:00	32:00:00	600	90	2.0	#88f Mass Func	2	
0096.BIAS	0	6:59	19:30:00	32:00:00	600	90	2.0	#88f Mass Func	2	
0097.COMP	5	6:59	19:30:00	32:00:00	300	90	3.0	#88f Mass Func	2	back to 300-line; 3-sec slit
0098.2M184422p814113	270	6:59	18:44:22.6	+81:41:13	300	90	3.0	#68 2MASS Reds	4	normal combo setup
0099.COMP	5	6:59	18:44:22.6	+81:41:13	300	90	3.0	#68 2MASS Reds	4	
0100.2M193534p760026	360	6:59	19:35:34.0	+76:00:26	300	90	3.0	#68 2MASS Reds	4	ugh dome runs away again and again and again
0101.COMP	5	6:59	19:35:34.0	+76:00:26	300	90	3.0	#68 2MASS Reds	4	
0102.2M194154p640425	240	6:59	19:41:54.4	+64:04:25	300	90	3.0	#68 2MASS Reds	4	
0103.COMP	5	6:59	19:41:54.4	+64:04:25	300	90	3.0	#68 2MASS Reds	4	
0104.2M195508p682317	480	6:59	19:55:08.2	+68:23:17	300	90	3.0	#68 2MASS Reds	4	



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UT Date 2001-07-18 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0105.COMP	5	6:59	19:55:08.2	+68:23:17	300	90	3.0	#68 2MASS Reds	4	
0106.2M195830p651335	300	6:59	19:58:30.3	+65:13:35	300	90	3.0	#68 2MASS Reds	4	
0107.COMP	5	6:59	19:58:30.3	+65:13:35	300	90	3.0	#68 2MASS Reds	4	
0108.2M200144p730727	1200	6:59	20:01:44.8	+73:07:27	300	90	3.0	#68 2MASS Reds	4	
0109.COMP	5	6:59	20:01:44.8	+73:07:27	300	90	3.0	#68 2MASS Reds	4	
0110.2M200456p624754	300	6:59	20:04:56.1	+62:47:54	300	90	3.0	#68 2MASS Reds	4	dome spinning
0111.COMP	5	6:59	20:04:56.1	+62:47:54	300	90	3.0	#68 2MASS Reds	4	
0112.2M200313p512050	300	6:59	20:03:13.4	+51:20:50	300	90	3.0	#68 2MASS Reds	4	
0113.COMP	5	6:59	20:03:13.4	+51:20:50	300	90	3.0	#68 2MASS Reds	4	
0114.2M200650p715709	300	6:59	20:06:50.9	+71:57:09	300	90	3.0	#68 2MASS Reds	4	
0115.COMP	5	6:59	20:06:50.9	+71:57:09	300	90	3.0	#68 2MASS Reds	4	
0116.2M200947p711847	300	6:59	20:09:47.4	+71:18:47	300	90	3.0	#68 2MASS Reds	4	
0117.COMP	5	6:59	20:09:47.4	+71:18:47	300	90	3.0	#68 2MASS Reds	4	
0118.2M201144p622402	300	6:59	20:11:44.3	+62:24:02	300	90	3.0	#68 2MASS Reds	4	
0119.COMP	5	6:59	20:11:44.3	+62:24:02	300	90	3.0	#68 2MASS Reds	4	
0120.2M201247p560836	270	6:59	20:12:47.0	+56:08:36	300	90	3.0	#68 2MASS Reds	4	
0121.COMP	5	6:59	20:12:47.0	+56:08:36	300	90	3.0	#68 2MASS Reds	4	
0122.2M201518p560857	330	6:59	20:15:18.1	+56:08:57	300	90	3.0	#68 2MASS Reds	4	
0123.COMP	5	6:59	20:15:18.1	+56:08:57	300	90	3.0	#68 2MASS Reds	4	
0124.2M201831p624128	120	6:59	20:18:31.4	+62:41:28	300	90	3.0	#68 2MASS Reds	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-07-18 Observers P Berlind

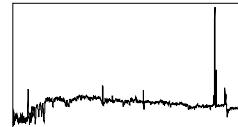
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0125.COMP	5	6:59	20:18:31.4	+62:41:28	300	90	3.0	#68 2MASS Reds	4	
0126.2M201951p481620	180	6:59	20:19:51.3	+48:16:20	300	90	3.0	#68 2MASS Reds	4	star
0127.2M202039p494518	900	6:59	20:20:39.3	+49:45:18	300	90	3.0	#68 2MASS Reds	4	
0128.COMP	5	6:59	20:20:39.3	+49:45:18	300	90	3.0	#68 2MASS Reds	4	
0129.2M202406p681644	300	6:59	20:24:06.3	+68:16:44	300	90	3.0	#68 2MASS Reds	4	
0130.COMP	5	6:59	20:24:06.3	+68:16:44	300	90	3.0	#68 2MASS Reds	4	
0131.2M202720p535757	180	6:59	20:27:20.9	+53:57:57	300	90	3.0	#68 2MASS Reds	4	
0132.COMP	5	6:59	20:27:20.9	+53:57:57	300	90	3.0	#68 2MASS Reds	4	
0133.2M202757p623157	540	6:59	20:27:57.4	+62:31:57	300	90	3.0	#68 2MASS Reds	4	
0134.COMP	5	6:59	20:27:57.4	+62:31:57	300	90	3.0	#68 2MASS Reds	4	
0135.2M203240p600018	300	6:59	20:32:40.6	+60:00:18	300	90	3.0	#68 2MASS Reds	4	
0136.COMP	5	6:59	20:32:40.6	+60:00:18	300	90	3.0	#68 2MASS Reds	4	
0137.2M203325p645641	600	6:59	20:33:25.7	+64:56:41	300	90	3.0	#68 2MASS Reds	4	
0138.COMP	5	6:59	20:33:25.7	+64:56:41	300	90	3.0	#68 2MASS Reds	4	
0139.2M203613p634422	360	6:59	20:36:13.4	+63:44:22	300	90	3.0	#68 2MASS Reds	4	sup *; gal has good H-alpha em @ pix 2079
0140.COMP	5	6:59	20:36:13.4	+63:44:22	300	90	3.0	#68 2MASS Reds	4	really it does!
0141.2M204014p593455	720	6:59	20:40:14.3	+59:34:55	300	90	3.0	#68 2MASS Reds	4	
0142.COMP	5	6:59	20:40:14.3	+59:34:55	300	90	3.0	#68 2MASS Reds	4	
0143.Akn564	210	6:59	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	4	
0144.Akn564	210	6:59	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	4	



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FAST SPECTROGRAPH LOG



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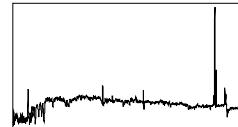
UT Date 2001-07-18 Observers P BerlindColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0145.COMP	5	6:59	22:42:39.4	+29:43:31	300	90	3.0	#6 AGN Monitor	4	
0146.BDp284211	60	6:59	21:48:57.1	28:37:48	300	75	3.0	#56 Spectropho	2	
0147.BDp284211	60	6:59	21:48:57.1	28:37:48	300	75	3.0	#56 Spectropho	2	
0148.COMP	10	6:59	21:48:57.1	28:37:48	300	75	3.0	#56 Spectropho	2	
0149.N7469	120	6:59	23:03:15.7	+08:52:27	300	0	3.0	#6 AGN Monitor	4	
0150.N7469	120	6:59	23:03:15.7	+08:52:27	300	0	3.0	#6 AGN Monitor	4	
0151.COMP	5	6:59	23:03:15.7	+08:52:27	300	0	3.0	#6 AGN Monitor	4	
0152.sn2001da	1200	6:59	23:53:32.7	+08:07:02	300	-15	3.0	#2 SN Observat	2	
0153.COMP	10	6:59	23:53:32.7	+08:07:02	300	-15	3.0	#2 SN Observat	2	
0154.RAqr	1	6:59	23:43:49	-15:17:05	300	-15	3.0	#12 Symbiotic	4	
0155.RAqr	1	6:59	23:43:49	-15:17:05	300	-15	3.0	#12 Symbiotic	4	
0156.RAqr	5	6:59	23:43:49	-15:17:05	300	-15	3.0	#12 Symbiotic	4	
0157.RAqr	2	6:59	23:43:49	-15:17:05	300	-15	3.0	#12 Symbiotic	4	
0158.COMP	5	6:59	23:43:49	-15:17:05	300	-15	3.0	#12 Symbiotic	4	
0159.ZAnd	1	6:59	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0160.ZAnd	2	6:59	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0161.ZAnd	5	6:59	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0162.ZAnd	10	6:59	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0163.ZAnd	30	6:59	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0164.COMP	5	6:59	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	



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UT Date 2001-07-18 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0165.EGAnd	1	6:59	0:44:37	40:40:47	300	90	3.0	#12 Symbiotic	4	
0166.EGAnd	3	6:59	0:44:37	40:40:47	300	90	3.0	#12 Symbiotic	4	
0167.EGAnd	10	6:59	0:44:37	40:40:47	300	90	3.0	#12 Symbiotic	4	
0168.COMP	5	6:59	0:44:37	40:40:47	300	90	3.0	#12 Symbiotic	4	
0169.AXPer	2	6:59	1:36:23	54:15:03	300	90	3.0	#12 Symbiotic	4	
0170.AXPer	6	6:59	1:36:23	54:15:03	300	90	3.0	#12 Symbiotic	4	
0171.AXPer	30	6:59	1:36:23	54:15:03	300	90	3.0	#12 Symbiotic	4	
0172.AXPer	90	6:59	1:36:23	54:15:03	300	90	3.0	#12 Symbiotic	4	
0173.COMP	5	6:59	1:36:23	54:15:03	300	90	3.0	#12 Symbiotic	4	
0174.V741Per	20	6:59	1:58:50	52:53:47	300	90	3.0	#12 Symbiotic	4	
0175.V741Per	150	6:59	1:58:50	52:53:47	300	90	3.0	#12 Symbiotic	4	
0176.V741Per	10	6:59	1:58:50	52:53:47	300	90	3.0	#12 Symbiotic	4	
0177.COMP	5	6:59	1:58:50	52:53:47	300	90	3.0	#12 Symbiotic	4	
0178.ComLinearA1	30	6:59	21:58:42	+17:04:12	300	90	3.0	#57 Velocity S	4	
0179.ComLinearA1	120	6:59	21:58:42	+17:04:12	300	90	3.0	#57 Velocity S	4	
0180.ComLinearA1	120	6:59	21:58:42	+17:04:12	300	90	3.0	#57 Velocity S	4	
0181.COMP	5	6:59	21:58:42	+17:04:12	300	90	3.0	#57 Velocity S	4	
0182.HD217086	5	6:59	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	more clouds moving in @ dawn
0183.HD217086	5	6:59	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0184.HD217086	5	6:59	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	



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UT Date 2001-07-18 Observers P BerlindColl. Focus 1000 Grating/Grism 300

<i>File</i>	<i>Exp Time</i>	<i>UT Start</i>	<i>RA</i>	<i>Dec</i>	<i>Gr.</i>	<i>P.A.</i>	<i>Slit</i>	<i>Program</i>	<i>Bir</i>	<i>Comments</i>
0185.COMP	5	6:59	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0186-0195.BIAS	0	11:40	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	
0196-0205.FLAT	8	11:43	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	
0206-0215.BIAS	0	11:45	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	2	
0216-0225.FLAT	16	11:50	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	2	
0226-0235.DARK	900	14:08	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	2	



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UT Date 2001-07-19 Observers P Berlind

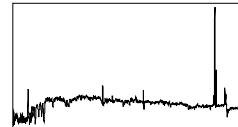
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	0:11	12:49:26.7	31:30:36	600	90	2.0	#12 Symbiotic	2	
0002-0003.DARK	900	0:41	13:19:59.8	31:30:35	600	90	2.0	#12 Symbiotic	2	
0004.DARK	900	0:41	13:35:15.9	31:30:34	600	90	2.0	#12 Symbiotic	2	
0005.DARK	900	0:41	13:50:32.0	31:30:33	600	90	2.0	#12 Symbiotic	2	
0006-0007.DARK	900	1:42	14:21:00.1	31:30:32	600	90	2.0	#12 Symbiotic	2	
0008.DARK	900	1:42	14:36:16.2	31:30:31	600	90	2.0	#12 Symbiotic	2	
0009.BIAS	0	1:42	14:37:12.2	31:30:31	600	90	2.0	#12 Symbiotic	2	cloudy
0010-0020.BIAS	0	2:17	14:41:10.2	31:30:31	600	90	2.0	#12 Symbiotic	2	
0021.FLAT	30	2:17	14:52:54.2	31:30:29	600	90	2.0	#12 Symbiotic	2	600-line; 2-sec slit
0022-0025.FLAT	30	2:31	14:55:51.2	31:30:29	600	90	2.0	#12 Symbiotic	2	
0026-0035.FLAT	30	2:38	15:03:10.3	31:30:30	600	90	2.0	#12 Symbiotic	2	
0036-0040.FLAT	30	2:42	15:06:47.3	31:30:29	600	90	2.0	#12 Symbiotic	2	
0041.HZ44	180	2:42	13:21:19.0	36:23:39	600	80	2.0	#88f Mass Func	2	em setup
0042.HZ44	240	2:42	13:21:19.0	36:23:39	600	80	2.0	#88f Mass Func	2	
0043.COMP	10	2:42	13:21:19.0	36:23:39	600	80	2.0	#88f Mass Func	2	
0044.COMP	10	2:42	14:40:42.8	+03:27:53	600	80	2.0	#88 Mass Funct	2	
0045.MF6014	1200	2:42	14:40:42.8	+03:27:53	600	80	2.0	#88 Mass Funct	2	
0046.MF6014	1200	2:42	14:40:42.8	+03:27:53	600	15	2.0	#88 Mass Funct	2	
0047.MF6014	1200	2:42	14:40:42.8	+03:27:53	600	15	2.0	#88 Mass Funct	2	
0048.COMP	10	2:42	14:40:42.8	+03:27:53	600	15	2.0	#88 Mass Funct	2	



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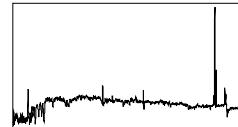
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0049.COMP	10	2:42	15:39:04.3	+10:48:0	600	-35	2.0	#88 Mass Funct	2	
0050.MF7142	1200	2:42	15:39:04.3	+10:48:0	600	-35	2.0	#88 Mass Funct	2	
0051.MF7142	1200	2:42	15:39:04.3	+10:48:0	600	-35	2.0	#88 Mass Funct	2	
0052.COMP	10	2:42	15:39:04.3	+10:48:0	600	-35	2.0	#88 Mass Funct	2	
0053.HD192281	5	2:42	20:10:46.8	40:07:01	600	90	2.0	#88f Mass Func	2	out of mass func objects
0054.HD192281	5	2:42	20:10:46.8	40:07:01	600	90	2.0	#88f Mass Func	2	
0055.HD192281	5	2:42	20:10:46.8	40:07:01	600	90	2.0	#88f Mass Func	2	
0056.COMP	10	2:42	20:10:46.8	40:07:01	600	90	2.0	#88f Mass Func	2	
0057-0066.FLAT	30	6:50	19:20:00	32:00:00	600	90	2.0	#88f Mass Func	2	
0067.BIAS	0	6:50	19:20:00	32:00:00	600	90	2.0	#88f Mass Func	4	clouds increasing, delay
0068.COMP	5	6:50	19:20:00	32:00:00	300	90	3.0	#88f Mass Func	4	switch back to 300-line; 3-sec slit
0069.MRK509	300	6:50	20:44:09.8	-10:43:24	300	5	3.0	#6 AGN Monitor	4	combo
0070.MRK509	180	6:50	20:44:09.8	-10:43:24	300	5	3.0	#6 AGN Monitor	4	
0071.COMP	5	6:50	20:44:09.8	-10:43:24	300	5	3.0	#6 AGN Monitor	4	
0072.S180	45	6:50	20:39:20	-05:17:16	300	5	3.0	#12 Symbiotic	4	
0073.S180	480	6:50	20:39:20	-05:17:16	300	5	3.0	#12 Symbiotic	4	
0074.COMP	5	6:50	20:39:20	-05:17:16	300	5	3.0	#12 Symbiotic	4	
0075.S190	10	6:50	21:41:45	02:43:54	300	5	3.0	#12 Symbiotic	4	clearing nicely
0076.S190	5	6:50	21:41:45	02:43:54	300	5	3.0	#12 Symbiotic	4	
0077.S190	30	6:50	21:41:45	02:43:54	300	5	3.0	#12 Symbiotic	4	



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UT Date 2001-07-19 Observers P Berlind

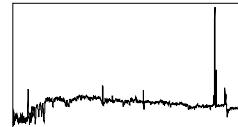
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0078.COMP	5	6:50	21:41:45	02:43:54	300	5	3.0	#12 Symbiotic	4	
0079.snMCG	1200	6:50	21:39:18.1	-25:29:36	300	0	3.0	#2 SN Observat	2	
0080.COMP	10	6:50	21:39:18.1	-25:29:36	300	0	3.0	#2 SN Observat	2	
0081.AGPeg	1	6:50	21:51:02	12:37:33	300	0	3.0	#12 Symbiotic	4	
0082.AGPeg	2	6:50	21:51:02	12:37:33	300	0	3.0	#12 Symbiotic	4	
0083.AGPeg	10	6:50	21:51:02	12:37:33	300	0	3.0	#12 Symbiotic	4	
0084.AGPeg	30	6:50	21:51:02	12:37:33	300	0	3.0	#12 Symbiotic	4	
0085.COMP	5	6:50	21:51:02	12:37:33	300	0	3.0	#12 Symbiotic	4	
0086.BDp284211	60	6:50	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0087.BDp284211	120	6:50	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0088.COMP	10	6:50	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0089.2M201514p090721	240	6:50	20:15:14.4	+09:07:21	300	90	3.0	#68 2MASS Reds	4	
0090.COMP	5	6:50	20:15:14.4	+09:07:21	300	90	3.0	#68 2MASS Reds	4	
0091.2M200957p045935	240	6:50	20:09:57.2	+04:59:35	300	90	3.0	#68 2MASS Reds	4	
0092.COMP	5	6:50	20:09:57.2	+04:59:35	300	90	3.0	#68 2MASS Reds	4	
0093.2M200936p031300	240	6:50	20:09:36.5	+03:13:00	300	90	3.0	#68 2MASS Reds	4	
0094.COMP	5	6:50	20:09:36.5	+03:13:00	300	90	3.0	#68 2MASS Reds	4	
0095.2M200632p064045	180	6:50	20:06:32.6	+06:40:45	300	90	3.0	#68 2MASS Reds	4	
0096.COMP	5	6:50	20:06:32.6	+06:40:45	300	90	3.0	#68 2MASS Reds	4	
0097.2M200653p033410	210	6:50	20:06:53.2	+03:34:10	300	90	3.0	#68 2MASS Reds	4	



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UT Date 2001-07-19 Observers P Berlind

Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0098.COMP	5	6:50	20:06:53.2	+03:34:10	300	90	3.0	#68 2MASS Reds	4	
0099.2M201720m052206	270	6:50	20:17:20.4	-05:22:06	300	90	3.0	#68 2MASS Reds	4	
0100.COMP	5	6:50	20:17:20.4	-05:22:06	300	90	3.0	#68 2MASS Reds	4	
0101.2M201608p225107	360	6:50	20:16:08.7	+22:51:07	300	90	3.0	#68 2MASS Reds	4	
0102.COMP	5	6:50	20:16:08.7	+22:51:07	300	90	3.0	#68 2MASS Reds	4	
0103.2M202003p005225	240	6:50	20:20:03.0	+00:52:25	300	90	3.0	#68 2MASS Reds	4	
0104.COMP	5	6:50	20:20:03.0	+00:52:25	300	90	3.0	#68 2MASS Reds	4	
0105.2M202044p093639	240	6:50	20:20:44.8	+09:36:39	300	90	3.0	#68 2MASS Reds	4	
0106.COMP	5	6:50	20:20:44.8	+09:36:39	300	90	3.0	#68 2MASS Reds	4	
0107.2M202225p101335	240	6:50	20:22:25.4	+10:13:35	300	90	3.0	#68 2MASS Reds	4	
0108.COMP	5	6:50	20:22:25.4	+10:13:35	300	90	3.0	#68 2MASS Reds	4	
0109.2M202231p100900	120	6:50	20:22:31.0	+10:09:00	300	90	3.0	#68 2MASS Reds	4	ackkk more clouds
0110.COMP	5	6:50	20:22:31.0	+10:09:00	300	90	3.0	#68 2MASS Reds	4	
0111.NCyg01	180	6:50	20:07:17.9	+36:04:37	300	90	3.0	#2 SN Observat	4	lots of clouds
0112.COMP	5	6:50	20:07:17.9	+36:04:37	300	90	3.0	#2 SN Observat	4	
0113.HD217086	20	6:50	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0114.HD217086	10	6:50	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0115.HD217086	10	6:50	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0116.HD217086	10	6:50	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0117.COMP	5	6:50	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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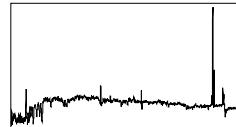
UT Date 2001-07-19 Observers P BerlindColl. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0118.V407Cyg	60	6:50	21:02:09	45:46:33	300	90	3.0	#12 Symbiotic	4	
0119.V407Cyg	45	6:50	21:02:09	45:46:33	300	90	3.0	#12 Symbiotic	4	
0120.V407Cyg	360	6:50	21:02:09	45:46:33	300	90	3.0	#12 Symbiotic	4	
0121.COMP	5	6:50	21:02:09	45:46:33	300	90	3.0	#12 Symbiotic	4	
0122.sn2001da	720	6:50	23:53:32.7	+08:07:02	300	-6	3.0	#2 SN Observat	2	ok sky again
0123.COMP	10	6:50	23:53:32.7	+08:07:02	300	-6	3.0	#2 SN Observat	2	
0124.Feige110	150	6:50	23:17:23.5	-05:26:22	300	10	3.0	#56 Spectropho	2	
0125.COMP	10	6:50	23:17:23.5	-05:26:22	300	10	3.0	#56 Spectropho	2	
0126.M32	30	6:50	00:39:58	+40:35:30	300	10	3.0	#57 Velocity S	4	
0127.M32	30	6:50	00:39:58	+40:35:30	300	90	3.0	#57 Velocity S	4	
0128.COMP	5	6:50	00:39:58	+40:35:30	300	90	3.0	#57 Velocity S	4	
0129-0138.BIAS	0	11:33	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	4	
0139-0148.FLAT	8	11:36	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	4	
0149-0158.BIAS	0	11:38	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	2	
0159-0168.FLAT	16	11:43	00:40:00.0	+40:59:42	300	90	3.0	#57 Velocity S	2	



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Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0002.DARK	900	2:28	15:11:01.3	31:30:29	300	90	3.0	#57 Velocity S	4	
0003-0004.DARK	900	2:58	15:41:20.4	31:30:27	300	90	3.0	#57 Velocity S	4	
0005.DARK	900	2:58	15:56:31.4	31:30:26	300	90	3.0	#57 Velocity S	4	
0006.DARK	900	2:58	16:11:43.5	31:30:24	300	90	3.0	#57 Velocity S	4	
0007-0008.DARK	900	3:59	16:42:01.6	31:30:23	300	90	3.0	#57 Velocity S	4	
0009.DARK	900	3:59	16:57:09.6	31:30:22	300	90	3.0	#57 Velocity S	4	
0010.DARK	900	3:59	17:12:21.6	31:30:21	300	90	3.0	#57 Velocity S	4	
0011-0020.BIAS	0	6:25	18:54:02.6	31:30:15	300	90	3.0	#57 Velocity S	4	
0021-0030.FLAT	6	6:28	18:57:08.6	31:30:14	300	90	3.0	#57 Velocity S	4	
0031-0040.BIAS	0	6:31	19:00:15.6	31:30:14	300	90	3.0	#57 Velocity S	2	
0041-0043.FLAT	12	6:33	19:02:25.6	31:30:14	300	90	3.0	#57 Velocity S	2	
0044-0048.FLAT	12	6:36	19:04:31.6	31:30:13	300	90	3.0	#57 Velocity S	2	
0049-0050.FLAT	12	6:36	19:05:23.6	31:30:14	300	90	3.0	#57 Velocity S	2	
0051.HD192281	5	6:36	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	2	
0052.HD192281	5	6:36	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	2	
0053.COMP	12	6:36	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	2	
0054.HD192281	5	6:36	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	4	
0055.HD192281	5	6:36	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	4	
0056.COMP	5	6:36	20:10:46.8	40:07:01	300	90	3.0	#56 Spectropho	4	
0057.HD192281	8	6:36	20:10:46.8	40:07:01	300	58	3.0	#56 Spectropho	2	Heavy clouds still in area



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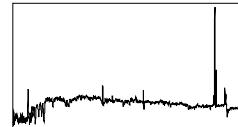
UT Date 2001-07-20 Observers M CalkinsColl. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0058.HD192281	8	6:36	20:10:46.8	40:07:01	300	58	3.0	#56 Spectropho	2	
0059.COMP	12	6:36	20:10:46.8	40:07:01	300	58	3.0	#56 Spectropho	2	wait out clouds...
0060.id2362	1200	6:36	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	2	fighting clouds...
0061.COMP	12	6:36	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	2	clouds, humidity win!
0062-0071.BIAS	0	12:05	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	2	
0072-0081.FLAT	12	12:11	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	2	
0082-0091.BIAS	0	12:13	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	4	
0092-0101.FLAT	6	12:16	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	4	
0102-0111.DARK	900	14:35	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	2	



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UT Date 2001-07-21 Observers M Calkins

Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0010.DARK	900	1:30	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	4	
0011-0020.BIAS	0	2:48	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	4	
0021-0030.FLAT	6	3:01	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	4	
0031-0040.BIAS	0	3:04	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	2	
0041.FLAT	12	3:04	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	2	hole overhead
0042-0050.FLAT	12	3:10	20:04:43.6	35:36:06	300	90	3.0	#115 PMS NGC68	2	
0051.HZ44	120	3:10	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	
0052.COMP	5	3:10	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	
0053.HZ44	120	3:10	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0054.COMP	12	3:10	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0055.HZ44	180	3:10	13:21:19.0	36:23:39	300	84	3.0	#56 Spectropho	2	
0056.COMP	12	3:10	13:21:19.0	36:23:39	300	84	3.0	#56 Spectropho	2	
0057.BDp332642	180	3:10	15:50:03	33:05:49	300	95	3.0	#56 Spectropho	2	
0058.COMP	12	3:10	15:50:03	33:05:49	300	95	3.0	#56 Spectropho	2	
0059.sn2001bf	1200	3:10	18:01:33.9	26:15:02	300	110	3.0	#2 SN Observat	2	
0060.COMP	12	3:10	18:01:33.9	26:15:02	300	110	3.0	#2 SN Observat	2	
0061.sn2001cp	1200	3:10	17:11:02.5	05:50:26	300	0	3.0	#2 SN Observat	2	
0062.COMP	12	3:10	17:11:02.5	05:50:26	300	0	3.0	#2 SN Observat	2	
0063.UKSCe1	900	3:10	16:15:30	-22:12:15	300	90	3.0	#12 Symbiotic	2	clouds getting worse, humidity at 98 pct
0064.COMP	12	3:10	16:15:30	-22:12:15	300	90	3.0	#12 Symbiotic	2	wait a while



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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>
0065-0074.BIAS	0	11:19	20:00:00.2	35:06:52	300	90	3.0	#12 Symbiotic	4	
0075-0084.FLAT	6	11:22	20:00:00.2	35:06:52	300	90	3.0	#12 Symbiotic	4	
0085-0094.BIAS	0	11:24	20:00:00.2	35:06:52	300	90	3.0	#12 Symbiotic	2	
0095-0104.FLAT	12	11:29	20:00:00.2	35:06:52	300	90	3.0	#12 Symbiotic	2	
0105-0114.DARK	900	13:50	20:00:00.2	35:06:52	300	90	3.0	#12 Symbiotic	2	



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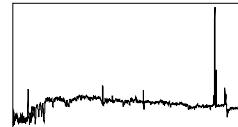
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0010.DARK	900	2:01	01:00:03.1	31:30:11	300	90	3.0	#12 Symbiotic	4	
0011-0020.BIAS	0	2:26	01:00:03.1	31:30:11	300	90	3.0	#12 Symbiotic	4	
0021-0030.FLAT	6	2:32	01:00:03.1	31:30:11	300	90	3.0	#12 Symbiotic	4	
0031-0040.BIAS	0	2:35	01:00:03.1	31:30:11	300	90	3.0	#12 Symbiotic	2	
0041-0043.FLAT	12	2:36	01:00:03.1	31:30:11	300	90	3.0	#12 Symbiotic	2	
0044.FLAT	12	2:36	02:58:34.0	41:08:45	300	90	3.0	#12 Symbiotic	2	
0045.FLAT	12	2:36	08:17:56.4	31:30:36	300	90	3.0	#12 Symbiotic	2	
0046-0050.FLAT	12	2:39	15:19:17.3	31:30:28	300	90	3.0	#12 Symbiotic	2	
0051-0053.sky	3	2:44	15:24:03.3	31:30:28	300	90	3.0	#57 Velocity S	4	
0054-0055.sky	3	2:44	15:24:24.3	31:30:27	300	90	3.0	#57 Velocity S	4	
0056.COMP	5	2:44	15:24:59.4	31:30:27	300	90	3.0	#57 Velocity S	4	
0057.BDp332642	480	2:44	15:50:03	33:05:49	300	90	3.0	#56 Spectropho	4	thru thick cirrus
0058.COMP	5	2:44	15:50:03	33:05:49	300	90	3.0	#56 Spectropho	4	
0059.BDp332642	480	2:44	15:50:03	33:05:49	300	90	3.0	#56 Spectropho	2	
0060.COMP	12	2:44	15:50:03	33:05:49	300	90	3.0	#56 Spectropho	2	looking for more holes...
0061.HD154791	1	2:44	17:06:34	23:58:17	300	90	3.0	#12 Symbiotic	2	
0062.HD154791	10	2:44	17:06:34	23:58:17	300	90	3.0	#12 Symbiotic	2	
0063.COMP	12	2:44	17:06:34	23:58:17	300	90	3.0	#12 Symbiotic	2	
0064.Hen1341	10	2:44	17:08:36	-17:26:30	300	90	3.0	#12 Symbiotic	2	
0065.Hen1341	60	2:44	17:08:36	-17:26:30	300	90	3.0	#12 Symbiotic	2	



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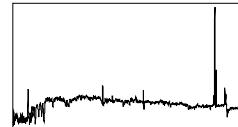
UT Date 2001-07-23 Observers M CalkinsColl. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0066.Hen1341	180	2:44	17:08:36	-17:26:30	300	90	3.0	#12 Symbiotic	2	
0067.COMP	12	2:44	17:08:36	-17:26:30	300	90	3.0	#12 Symbiotic	2	
0068.Hen1341	300	2:44	17:08:36	-17:26:30	300	90	3.0	#12 Symbiotic	2	
0069.Hen1341	480	2:44	17:08:36	-17:26:30	300	90	3.0	#12 Symbiotic	2	
0070.COMP	12	2:44	17:08:36	-17:26:30	300	90	3.0	#12 Symbiotic	2	
0071.YYHer	30	2:44	18:14:34	20:59:19	300	90	3.0	#12 Symbiotic	2	
0072.YYHer	150	2:44	18:14:34	20:59:19	300	90	3.0	#12 Symbiotic	2	
0073.YYHer	600	2:44	18:14:34	20:59:19	300	90	3.0	#12 Symbiotic	2	
0074.COMP	12	2:44	18:14:34	20:59:19	300	90	3.0	#12 Symbiotic	2	
0075.S149	40	2:44	18:18:56	27:26:27	300	90	3.0	#12 Symbiotic	2	
0076.S149	360	2:44	18:18:56	27:26:27	300	90	3.0	#12 Symbiotic	2	
0077.COMP	12	2:44	18:18:56	27:26:27	300	90	3.0	#12 Symbiotic	2	
0078.V443Her	1	2:44	18:22:07	23:27:20	300	90	3.0	#12 Symbiotic	2	
0079.V443Her	5	2:44	18:22:07	23:27:20	300	90	3.0	#12 Symbiotic	2	
0080.V443Her	300	2:44	18:22:07	23:27:20	300	90	3.0	#12 Symbiotic	2	
0081.COMP	12	2:44	18:22:07	23:27:20	300	90	3.0	#12 Symbiotic	2	
0082.DQSer	120	2:44	18:44:40	05:02:49	300	90	3.0	#12 Symbiotic	2	row=80
0083.DQSer	210	2:44	18:44:40	05:02:49	300	90	3.0	#12 Symbiotic	2	
0084.DQSer	720	2:44	18:44:40	05:02:49	300	90	3.0	#12 Symbiotic	2	
0085.COMP	12	2:44	18:44:40	05:02:49	300	90	3.0	#12 Symbiotic	2	



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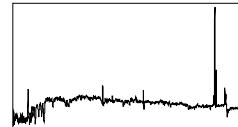
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0086.V1413Aql	30	2:44	19:03:47	16:26:17	300	90	3.0	#12 Symbiotic	2	
0087.V1413Aql	360	2:44	19:03:47	16:26:17	300	90	3.0	#12 Symbiotic	2	
0088.COMP	12	2:44	19:03:47	16:26:17	300	90	3.0	#12 Symbiotic	2	
0089.BFCyg	5	2:44	19:23:53	29:40:27	300	90	3.0	#12 Symbiotic	2	
0090.BFCyg	240	2:44	19:23:53	29:40:27	300	90	3.0	#12 Symbiotic	2	
0091.COMP	12	2:44	19:23:53	29:40:27	300	90	3.0	#12 Symbiotic	2	
0092.CHCyg	1	2:44	19:24:33	50:14:30	300	90	3.0	#12 Symbiotic	2	
0093.CHCyg	5	2:44	19:24:33	50:14:30	300	90	3.0	#12 Symbiotic	2	lightening nearby
0094.CHCyg	30	2:44	19:24:33	50:14:30	300	90	3.0	#12 Symbiotic	2	
0095.CHCyg	0	2:44	19:24:33	50:14:30	300	90	3.0	#12 Symbiotic	2	
0096.COMP	12	2:44	19:24:33	50:14:30	300	90	3.0	#12 Symbiotic	2	
0097.S164	45	2:44	19:28:41	-06:03:51	300	90	3.0	#12 Symbiotic	2	
0098.S164	300	2:44	19:28:41	-06:03:51	300	90	3.0	#12 Symbiotic	2	
0099.COMP	12	2:44	19:28:41	-06:03:51	300	90	3.0	#12 Symbiotic	2	
0100.CMAql	15	2:44	19:03:35	-03:03:14	300	90	3.0	#12 Symbiotic	2	
0101.CMAql	600	2:44	19:03:35	-03:03:14	300	90	3.0	#12 Symbiotic	2	
0102.COMP	12	2:44	19:03:35	-03:03:14	300	90	3.0	#12 Symbiotic	2	
0103.HMSge	2	2:44	19:41:57	16:44:41	300	90	3.0	#12 Symbiotic	2	
0104.HMSge	4	2:44	19:41:57	16:44:41	300	90	3.0	#12 Symbiotic	2	
0105.HMSge	20	2:44	19:41:57	16:44:41	300	90	3.0	#12 Symbiotic	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0106.HMSge	2	2:44	19:41:57	16:44:41	300	90	3.0	#12 Symbiotic	2	
0107.HMSge	90	2:44	19:41:57	16:44:41	300	90	3.0	#12 Symbiotic	2	
0108.COMP	12	2:44	19:41:57	16:44:41	300	90	3.0	#12 Symbiotic	2	
0109.AS360	4	2:44	19:45:49	18:36:49	300	90	3.0	#12 Symbiotic	2	
0110.AS360	360	2:44	19:45:49	18:36:49	300	90	3.0	#12 Symbiotic	2	
0111.COMP	12	2:44	19:45:49	18:36:49	300	90	3.0	#12 Symbiotic	2	
0112.S169	120	2:44	19:49:57	46:15:20	300	90	3.0	#12 Symbiotic	2	
0113.S169	480	2:44	19:49:57	46:15:20	300	90	3.0	#12 Symbiotic	2	
0114.COMP	12	2:44	19:49:57	46:15:20	300	90	3.0	#12 Symbiotic	2	
0115-0124.BIAS	0	11:31	19:50:12	35:41:02	300	90	3.0	#12 Symbiotic	4	
0125-0134.FLAT	6	11:37	19:50:12	35:41:02	300	90	3.0	#12 Symbiotic	4	
0135-0144.BIAS	0	11:42	19:50:12	35:41:02	300	90	3.0	#12 Symbiotic	2	
0145-0154.FLAT	12	11:46	19:50:12	35:41:02	300	90	3.0	#12 Symbiotic	2	
0155-0164.DARK	900	14:06	19:50:12	35:41:02	300	90	3.0	#12 Symbiotic	2	



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UT Date 2001-07-24 Observers P Berlind

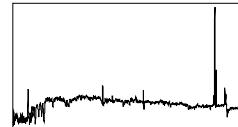
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0007.BIAS	0	2:27	15:10:33.3	31:30:28	300	90	3.0	#12 Symbiotic	4	
0008-0010.BIAS	0	2:27	15:11:00.3	31:30:29	300	90	3.0	#12 Symbiotic	4	
0011.FLAT	8	2:27	15:11:30.3	31:30:29	300	90	3.0	#12 Symbiotic	4	cloudy but looks like it will clear sooner or later
0012-0020.FLAT	8	2:30	15:13:57.3	31:30:29	300	90	3.0	#12 Symbiotic	4	
0021-0030.BIAS	0	2:33	15:16:56.3	31:30:28	300	90	3.0	#12 Symbiotic	2	
0031.FLAT	16	2:33	15:17:35.3	31:30:28	300	90	3.0	#12 Symbiotic	2	Hi Susan!
0032-0040.FLAT	16	2:38	15:22:04.3	31:30:28	300	90	3.0	#12 Symbiotic	2	
0041.2M193737p023356	900	2:38	19:37:37.1	+02:33:56	300	90	3.0	#68 2MASS Reds	2	
0042.COMP	10	2:38	19:37:37.1	+02:33:56	300	90	3.0	#68 2MASS Reds	2	
0043.2M193631p022006	900	2:38	19:36:31.8	+02:20:06	300	90	3.0	#68 2MASS Reds	4	
0044.COMP	5	2:38	19:36:31.8	+02:20:06	300	90	3.0	#68 2MASS Reds	4	
0045.2M193220p002449	240	2:38	19:32:20.0	+00:24:49	300	90	3.0	#68 2MASS Reds	4	interesting blue * to W
0046.COMP	5	2:38	19:32:20.0	+00:24:49	300	90	3.0	#68 2MASS Reds	4	
0047.2M193206p062406	750	2:38	19:32:06.6	+06:24:06	300	90	3.0	#68 2MASS Reds	2	sup *
0048.COMP	10	2:38	19:32:06.6	+06:24:06	300	90	3.0	#68 2MASS Reds	2	
0049.2M180825p420927	1200	2:38	18:08:25.2	+42:09:27	300	90	3.0	#68 2MASS Reds	4	high cz gal
0050.COMP	5	2:38	18:08:25.2	+42:09:27	300	90	3.0	#68 2MASS Reds	4	
0051.2M183916p052745	1200	2:38	18:39:16.0	+05:27:45	300	90	3.0	#68 2MASS Reds	4	good em
0052.COMP	5	2:38	18:39:16.0	+05:27:45	300	90	3.0	#68 2MASS Reds	4	
0053.2M184523p054908	1200	2:38	18:45:23.6	+05:49:08	300	90	3.0	#68 2MASS Reds	4	



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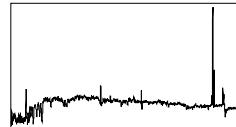
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0054.COMP	5	2:38	18:45:23.6	+05:49:08	300	90	3.0	#68 2MASS Reds	4	
0055.2M191609m004709	1200	2:38	19:16:09.2	-00:47:09	300	90	3.0	#68 2MASS Reds	4	
0056.COMP	5	2:38	19:16:09.2	-00:47:09	300	90	3.0	#68 2MASS Reds	4	
0057.2M191745p014020	720	2:38	19:17:45.3	+01:40:20	300	90	3.0	#68 2MASS Reds	4	
0058.COMP	5	2:38	19:17:45.3	+01:40:20	300	90	3.0	#68 2MASS Reds	4	
0059.2M193754p065924	420	2:38	19:37:54.8	+06:59:24	300	90	3.0	#68 2MASS Reds	4	
0060.COMP	5	2:38	19:37:54.8	+06:59:24	300	90	3.0	#68 2MASS Reds	4	
0061.2M194005p294139	420	2:38	19:40:05.8	+29:41:39	300	90	3.0	#68 2MASS Reds	4	
0062.COMP	5	2:38	19:40:05.8	+29:41:39	300	90	3.0	#68 2MASS Reds	4	
0063.2M194011p291656	900	2:38	19:40:11.2	+29:16:56	300	90	3.0	#68 2MASS Reds	4	
0064.COMP	5	2:38	19:40:11.2	+29:16:56	300	90	3.0	#68 2MASS Reds	4	
0065.2M194404p075213	600	2:38	19:44:04.5	+07:52:13	300	90	3.0	#68 2MASS Reds	4	
0066.COMP	5	2:38	19:44:04.5	+07:52:13	300	90	3.0	#68 2MASS Reds	4	
0067.2M194530p054945	240	2:38	19:45:30.8	+05:49:45	300	90	3.0	#68 2MASS Reds	4	
0068.COMP	5	2:38	19:45:30.8	+05:49:45	300	90	3.0	#68 2MASS Reds	4	
0069.2M194643p421611	330	2:38	19:46:43.9	+42:16:11	300	90	3.0	#68 2MASS Reds	4	
0070.COMP	5	2:38	19:46:43.9	+42:16:11	300	90	3.0	#68 2MASS Reds	4	
0071.2M195036p103507	330	2:38	19:50:36.8	+10:35:07	300	90	3.0	#68 2MASS Reds	4	
0072.COMP	5	2:38	19:50:36.8	+10:35:07	300	90	3.0	#68 2MASS Reds	4	
0073.2M200006p182756	360	2:38	20:00:06.2	+18:27:56	300	90	3.0	#68 2MASS Reds	4	



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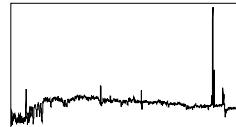
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0074.COMP	5	2:38	20:00:06.2	+18:27:56	300	90	3.0	#68 2MASS Reds	4	
0075.2M200009p220149	1020	2:38	20:00:09.6	+22:01:49	300	90	3.0	#68 2MASS Reds	4	
0076.COMP	5	2:38	20:00:09.6	+22:01:49	300	90	3.0	#68 2MASS Reds	4	
0077.2M200222p393737	480	2:38	20:02:22.7	+39:37:37	300	90	3.0	#68 2MASS Reds	4	
0078.COMP	5	2:38	20:02:22.7	+39:37:37	300	90	3.0	#68 2MASS Reds	4	
0079.2M200241p085228	180	2:38	20:02:41.8	+08:52:28	300	90	3.0	#68 2MASS Reds	4	
0080.COMP	5	2:38	20:02:41.8	+08:52:28	300	90	3.0	#68 2MASS Reds	4	
0081.2M200417p071006	240	2:38	20:04:17.5	+07:10:06	300	90	3.0	#68 2MASS Reds	4	good sky
0082.COMP	5	2:38	20:04:17.5	+07:10:06	300	90	3.0	#68 2MASS Reds	4	
0083.sn2001XX	1200	2:38	22:10:13.3	+36:39:14	300	-10	3.0	#2 SN Observat	2	
0084.COMP	10	2:38	22:10:13.3	+36:39:14	300	-10	3.0	#2 SN Observat	2	
0085.sn2001de	1200	2:38	22:34:18.0	+50:24:54	300	-10	3.0	#2 SN Observat	2	
0086.COMP	10	2:38	22:34:18.0	+50:24:54	300	-10	3.0	#2 SN Observat	2	
0087.BDp284211	90	2:38	21:48:57.1	28:37:48	300	76	3.0	#56 Spectropho	2	
0088.BDp284211	45	2:38	21:48:57.1	28:37:48	300	76	3.0	#56 Spectropho	2	
0089.COMP	10	2:38	21:48:57.1	28:37:48	300	76	3.0	#56 Spectropho	2	
0090.Feige110	150	2:38	23:17:23.5	-05:26:22	300	0	3.0	#56 Spectropho	2	
0091.COMP	10	2:38	23:17:23.5	-05:26:22	300	0	3.0	#56 Spectropho	2	
0092.N7469	120	2:38	23:03:15.7	+08:52:27	300	0	3.0	#6 AGN Monitor	4	
0093.N7469	120	2:38	23:03:15.7	+08:52:27	300	0	3.0	#6 AGN Monitor	4	



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Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0094.COMP	5	2:38	23:03:15.7	+08:52:27	300	0	3.0	#6 AGN Monitor	4	
0095.sn2001da	1200	2:38	23:53:32.7	+08:07:02	300	-8	3.0	#2 SN Observat	2	
0096.COMP	10	2:38	23:53:32.7	+08:07:02	300	-8	3.0	#2 SN Observat	2	
0097.Akn564	180	2:38	22:42:39.4	+29:43:31	300	80	3.0	#6 AGN Monitor	4	
0098.Akn564	180	2:38	22:42:39.4	+29:43:31	300	80	3.0	#6 AGN Monitor	4	
0099.COMP	5	2:38	22:42:39.4	+29:43:31	300	80	3.0	#6 AGN Monitor	4	
0100.2M205647p544109	600	2:38	20:56:47.6	+54:41:09	300	80	3.0	#68 2MASS Reds	4	
0101.COMP	5	2:38	20:56:47.6	+54:41:09	300	80	3.0	#68 2MASS Reds	4	
0102.2M205555p544448	600	2:38	20:55:55.3	+54:44:48	300	80	3.0	#68 2MASS Reds	4	
0103.COMP	5	2:38	20:55:55.3	+54:44:48	300	80	3.0	#68 2MASS Reds	4	
0104.2M205255p621710	240	2:38	20:52:55.1	+62:17:10	300	80	3.0	#68 2MASS Reds	4	
0105.COMP	5	2:38	20:52:55.1	+62:17:10	300	80	3.0	#68 2MASS Reds	4	
0106.ZAnd	1	2:38	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0107.ZAnd	2	2:38	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0108.ZAnd	5	2:38	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0109.ZAnd	10	2:38	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0110.COMP	5	2:38	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0111.HD217086	5	2:38	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0112.HD217086	5	2:38	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0113.HD217086	5	2:38	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	



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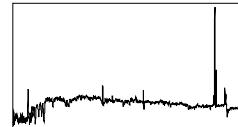
UT Date 2001-07-24 Observers P BerlindColl. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0114.COMP	5	2:38	22:54:49.0	62:27:35	300	90	3.0	#56 Spectropho	4	
0115-0124.BIAS	0	11:44	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	
0125.FLAT	8	11:44	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	clouds to E @ dawn
0126-0134.FLAT	8	11:47	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	
0135-0144.BIAS	0	11:50	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	2	
0145-0154.FLAT	16	11:55	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	2	
0155-0164.DARK	900	14:15	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	



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UT Date 2001-07-25 Observers P Berlind

Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0010.DARK	900	1:24	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	2	
0011.BIAS	0	1:24	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	colorful sunset
0012-0020.BIAS	0	2:54	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	
0021-0030.FLAT	8	2:58	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	4	
0031-0040.BIAS	0	3:01	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	2	
0041-0050.FLAT	16	3:07	22:54:49.0	62:27:35	300	90	3.0	#12 Symbiotic	2	
0051.N5548	180	3:07	14:17:59.6	+25:08:12	300	70	3.0	#6 AGN Monitor	4	clearing...
0052.N5548	240	3:07	14:17:59.6	+25:08:12	300	70	3.0	#6 AGN Monitor	4	
0053.COMP	5	3:07	14:17:59.6	+25:08:12	300	70	3.0	#6 AGN Monitor	4	
0054.2M200604p080920	300	3:07	20:06:04.6	+08:09:20	300	90	3.0	#68 2MASS Reds	4	
0055.COMP	5	3:07	20:06:04.6	+08:09:20	300	90	3.0	#68 2MASS Reds	4	
0056.2M200631p101808	600	3:07	20:06:31.8	+10:18:08	300	90	3.0	#68 2MASS Reds	4	
0057.COMP	5	3:07	20:06:31.8	+10:18:08	300	90	3.0	#68 2MASS Reds	4	
0058.2M202642p104141	240	3:07	20:26:42.6	+10:41:41	300	90	3.0	#68 2MASS Reds	4	
0059.COMP	5	3:07	20:26:42.6	+10:41:41	300	90	3.0	#68 2MASS Reds	4	
0060.2M202530p103420	480	3:07	20:25:30.2	+10:34:20	300	90	3.0	#68 2MASS Reds	4	
0061.COMP	5	3:07	20:25:30.2	+10:34:20	300	90	3.0	#68 2MASS Reds	4	
0062.2M202739p104526	720	3:07	20:27:39.6	+10:45:26	300	90	3.0	#68 2MASS Reds	4	
0063.COMP	5	3:07	20:27:39.6	+10:45:26	300	90	3.0	#68 2MASS Reds	4	
0064.2M202909p104438	300	3:07	20:29:09.5	+10:44:38	300	90	3.0	#68 2MASS Reds	4	clouds moving in from E



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Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0065.COMP	5	3:07	20:29:09.5	+10:44:38	300	90	3.0	#68 2MASS Reds	4	
0066.2M200554m064331	1200	3:07	20:05:54.3	-06:43:31	300	90	3.0	#68 2MASS Reds	4	too weak, re-done later as file 76
0067.COMP	5	3:07	20:05:54.3	-06:43:31	300	90	3.0	#68 2MASS Reds	4	
0068.2M200556m090227	420	3:07	20:05:56.5	-09:02:27	300	90	3.0	#68 2MASS Reds	4	
0069.COMP	5	3:07	20:05:56.5	-09:02:27	300	90	3.0	#68 2MASS Reds	4	
0070.sn2001cp	1200	3:07	17:11:02.5	05:50:26	300	40	3.0	#2 SN Observat	2	storms all around
0071.COMP	10	3:07	17:11:02.5	05:50:26	300	40	3.0	#2 SN Observat	2	
0072.2M200635m080401	270	3:07	20:06:35.0	-08:04:01	300	90	3.0	#68 2MASS Reds	4	lots of lightning flashes on tv
0073.COMP	5	3:07	20:06:35.0	-08:04:01	300	90	3.0	#68 2MASS Reds	4	
0074.2M202130p594413	420	3:07	20:21:30.3	59:44:13	300	90	3.0	#68 2MASS Reds	4	
0075.COMP	5	3:07	20:21:30.3	59:44:13	300	90	3.0	#68 2MASS Reds	4	
0076.2M200554m064331	900	3:07	20:05:54.3	-06:43:31	300	90	3.0	#68 2MASS Reds	4	this is a redo of file 66
0077.COMP	5	3:07	20:05:54.3	-06:43:31	300	90	3.0	#68 2MASS Reds	4	
0078.2M204834.7m080752	210	3:07	20:48:34.7	-08:07:52	300	90	3.0	2MASS Redshift	4	
0079.COMP	5	3:07	20:48:34.7	-08:07:52	300	90	3.0	2MASS Redshift	4	
0080.2M204845.0m085244	210	3:07	20:48:45.0	-08:52:44	300	90	3.0	2MASS Redshift	4	
0081.COMP	5	3:07	20:48:45.0	-08:52:44	300	90	3.0	2MASS Redshift	4	
0082.HD192281	5	3:07	20:10:46.8	40:07:01	300	-10	3.0	#56 Spectropho	2	
0083.HD192281	5	3:07	20:10:46.8	40:07:01	300	-10	3.0	#56 Spectropho	2	
0084.HD192281	5	3:07	20:10:46.8	40:07:01	300	-10	3.0	#56 Spectropho	2	



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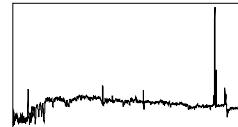
UT Date 2001-07-25 Observers P BerlindColl. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0085.COMP	10	3:07	20:10:46.8	40:07:01	300	-10	3.0	#56 Spectropho	2	
0086.BDp404032	90	3:07	20:06:40	41:06:15	300	-10	3.0	#56 Spectropho	2	
0087.COMP	10	3:07	20:06:40	41:06:15	300	-10	3.0	#56 Spectropho	2	close; clouds
0088-0097.BIAS	0	9:17	21:09:49.8	-08:50:53	300	-10	3.0	#56 Spectropho	4	
0098.FLAT	8	9:17	21:09:49.8	-08:50:53	300	-10	3.0	#56 Spectropho	4	yikes big rain storm!
0099-0107.FLAT	8	9:21	21:09:49.8	-08:50:53	300	-10	3.0	#56 Spectropho	4	
0108-0117.BIAS	0	9:25	21:09:49.8	-08:50:53	300	-10	3.0	#56 Spectropho	2	
0118-0127.FLAT	16	9:43	22:32:22.9	31:30:07	300	-10	3.0	#56 Spectropho	2	



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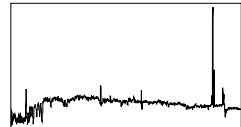
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001-0010.BIAS	0	23:07	11:57:59.4	31:30:38	300	90	3.0	#56 Spectropho	4	
0011.BIAS	0	23:07	14:16:26.1	31:30:31	300	90	3.0	#56 Spectropho	4	
0012-0026.FLAT	10	1:32	14:23:31.1	31:30:31	300	90	3.0	#56 Spectropho	4	
0027-0036.BIAS	0	1:36	14:27:43.1	31:30:31	300	90	3.0	#56 Spectropho	2	
0037.FLAT	15	1:36	14:28:48.1	31:30:31	300	90	3.0	#56 Spectropho	2	
0038-0046.FLAT	15	1:42	14:33:49.2	31:30:30	300	90	3.0	#56 Spectropho	2	
0047.DARK	600	1:42	14:45:49.2	31:30:30	300	90	3.0	#56 Spectropho	4	
0048.DARK	600	1:42	14:55:56.2	31:30:29	300	90	3.0	#56 Spectropho	4	
0049.DARK	600	1:42	15:06:04.3	31:30:28	300	90	3.0	#56 Spectropho	4	
0050-0051.DARK	600	2:25	15:26:24.4	31:30:27	300	90	3.0	#56 Spectropho	4	
0052-0056.BIAS	0	3:00	15:51:51.4	31:30:26	300	90	3.0	#56 Spectropho	4	
0057.skyS	30	3:00	15:55:20.4	31:30:25	300	90	3.0	#56 Spectropho	4	
0058.skyS	100	3:00	15:57:56.5	31:30:25	300	90	3.0		4	
0059.skyS	100	3:00	15:59:45.5	31:30:25	300	90	3.0		4	
0060.COMP	5	3:00	16:00:38.5	31:30:25	300	90	3.0		4	
0061.N5548	90	3:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0062.N5548	90	3:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0063.N5548	90	3:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0064.BIAS	0	3:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0065.COMP	5	3:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	



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UT Date 2001-07-26 Observers J. Huchra/M. Borkin

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0066.FLAT	8	3:00	14:17:59.6	+25:08:12	300	90	3.0	#6 AGN Monitor	4	
0067.HZ44	60	3:00	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	
0068.COMP	5	3:00	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	
0069.HZ44	60	3:00	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	4	
0070.HZ44	60	3:00	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0071.HZ44	10	3:00	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0072-0075.BIAS	0	4:06	16:57:53.6	31:30:21	300	90	3.0	#56 Spectropho	4	
0076-0077.BIAS	0	4:16	17:08:17.6	31:30:20	300	90	3.0	#56 Spectropho	4	
0078.BIAS	0	4:16	17:16:37.6	31:30:19	300	90	3.0	#56 Spectropho	4	
0079.BIAS	10	4:16	17:20:14.6	31:30:19	300	90	3.0	#56 Spectropho	4	
0080-0083.BIAS	0	4:36	17:28:34.6	31:30:19	300	90	3.0	#56 Spectropho	4	
0084-0085.BIAS	0	4:43	17:35:03.6	31:30:18	300	90	3.0	#56 Spectropho	4	
0086.BIAS	0	4:43	17:38:24.6	31:30:17	300	90	3.0	#56 Spectropho	4	
0087-0088.BIAS	0	4:52	17:44:36.6	31:30:18	300	90	3.0	#56 Spectropho	4	
0089.BIAS	0	4:52	17:53:01.6	31:30:17	300	90	3.0	#56 Spectropho	4	
0090.BIAS	0	4:52	18:04:37.6	31:30:16	300	90	3.0	#56 Spectropho	4	
0091-0092.BIAS	0	5:26	18:18:40.6	31:30:15	300	90	3.0	#56 Spectropho	4	
0093.COMP	5	5:26	18:19:19.6	31:30:15	300	90	3.0	#56 Spectropho	4	
0094.COMP	5	5:26	18:20:16.6	31:30:15	300	90	3.0	#56 Spectropho	4	
0095.BIAS	0	5:26	18:26:26.6	31:30:15	300	90	3.0	#56 Spectropho	4	



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FAST SPECTROGRAPH LOG



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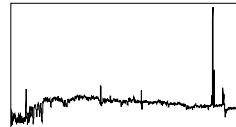
UT Date 2001-07-26 Observers J. Huchra/M. BorkinColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0096-0098.BIAS	0	5:43	18:35:02.6	31:30:14	300	90	3.0	#56 Spectropho	4	
0099-0100.BIAS	0	6:01	18:52:56.6	31:30:13	300	90	3.0	#56 Spectropho	2	
0101.BIAS	0	6:01	18:53:13.6	31:30:14	300	90	3.0	#56 Spectropho	1	
0102.BIAS	10	6:01	18:53:49.6	31:30:14	300	90	3.0	#56 Spectropho	1	
0103.BIAS	0	6:01	19:03:19.6	31:30:12	300	90	3.0	#56 Spectropho	4	
0104.BIAS	20	6:01	21:30:0.0	+12:10:00	300	90	3.0	#56 Spectropho	4	



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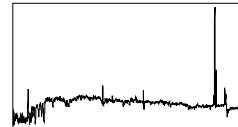
UT Date 2001-07-28 Observers M CalkinsColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001-0002.DARK	900	23:44	12:57:55.7	31:30:36	300	90	3.0	#56 Spectropho	4	
0003.DARK	900	23:44	13:13:06.8	31:30:34	300	90	3.0	#56 Spectropho	4	
0004-0005.DARK	900	0:29	13:43:26.9	31:30:33	300	90	3.0	#56 Spectropho	4	
0006-0007.DARK	900	0:59	14:13:46.1	31:30:32	300	90	3.0	#56 Spectropho	4	
0008.DARK	900	0:59	14:28:57.1	31:30:31	300	90	3.0	#56 Spectropho	4	
0009.DARK	900	0:59	14:44:05.2	31:30:29	300	90	3.0	#56 Spectropho	4	
0010.DARK	900	0:59	14:59:16.3	31:30:28	300	90	3.0	#56 Spectropho	4	
0011-0017.BIAS	0	2:02	15:01:26.3	31:30:28	300	90	3.0	#56 Spectropho	4	
0018-0020.BIAS	0	2:02	15:01:48.3	31:30:29	300	90	3.0	#56 Spectropho	4	
0021-0030.FLAT	6	2:13	15:13:09.3	31:30:28	300	90	3.0	#56 Spectropho	4	
0031-0040.BIAS	0	5:28	18:27:59.6	31:30:14	300	90	3.0	#56 Spectropho	2	
0041-0050.FLAT	12	5:33	18:33:21.6	31:30:14	300	90	3.0	#56 Spectropho	2	
0051.BDp284211	40	5:33	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	4	
0052.COMP	5	5:33	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	4	
0053.BDp284211	40	5:33	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0054.COMP	12	5:33	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0055.BDp284211	40	5:33	21:48:57.1	28:37:48	300	104	3.0	#56 Spectropho	2	
0056.COMP	12	5:33	21:48:57.1	28:37:48	300	104	3.0	#56 Spectropho	2	
0057.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0058.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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FAST SPECTROGRAPH LOG



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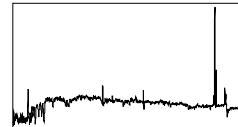
UT Date 2001-07-28 Observers M CalkinsColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0059.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0060.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0061.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0062.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0063.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0064.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0065.WZSge	5	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0066.COMP	12	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0067.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0068.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0069.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0070.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0071.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0072.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0073.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0074.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0075.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0076.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0077.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0078.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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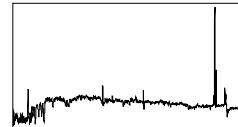
UT Date 2001-07-28 Observers M CalkinsColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0079.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0080.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0081.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0082.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0083.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0084.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0085.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0086.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0087.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0088.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0089.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0090.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0091.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0092.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0093.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0094.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0095.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0096.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0097.COMP	12	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0098.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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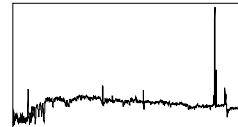
UT Date 2001-07-28 Observers M CalkinsColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0099.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0100.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0101.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0102.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0103.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0104.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0105.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0106.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0107.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0108.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0109.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0110.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0111.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0112.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0113.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0114.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0115.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0116.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0117.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0118.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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UT Date 2001-07-28 Observers M Calkins

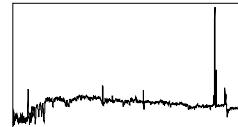
Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0119.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0120.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0121.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0122.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0123.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0124.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0125.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0126.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0127.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0128.COMP	12	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0129.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0130.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0131.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0132.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0133.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0134.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0135.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0136.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0137.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0138.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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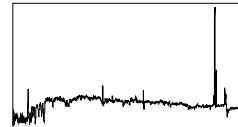
UT Date 2001-07-28 Observers M CalkinsColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0139.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0140.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0141.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0142.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0143.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0144.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0145.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0146.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0147.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0148.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0149.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0150.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0151.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0152.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0153.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0154.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0155.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0156.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0157.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0158.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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FAST SPECTROGRAPH LOG



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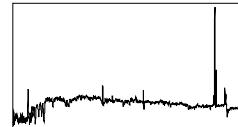
UT Date 2001-07-28 Observers M CalkinsColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0159.COMP	12	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0160.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0161.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0162.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0163.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0164.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0165.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0166.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0167.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0168.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0169.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0170.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0171.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0172.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0173.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0174.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0175.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0176.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0177.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0178.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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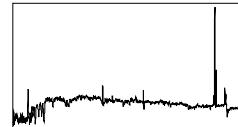
UT Date 2001-07-28 Observers M CalkinsColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0179.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0180.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0181.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0182.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0183.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0184.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0185.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0186.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0187.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0188.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0189.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0190.COMP	12	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0191.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0192.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0193.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0194.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0195.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0196.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0197.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0198.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0199.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0200.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0201.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0202.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0203.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0204.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0205.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0206.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0207.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0208.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0209.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0210.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0211.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0212.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0213.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0214.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0215.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0216.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0217.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0218.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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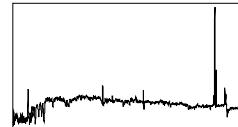
UT Date 2001-07-28 Observers M CalkinsColl. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0219.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0220.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0221.COMP	12	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0222.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0223.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0224.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0225.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0226.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0227.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0228.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0229.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0230.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0231.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0232.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0233.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0234.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0235.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0236.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0237.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0238.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	



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UT Date 2001-07-28 Observers M Calkins

Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0239.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0240.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0241.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0242.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0243.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0244.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0245.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0246.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0247.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0248.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0249.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0250.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0251.WZSge	10	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0252.COMP	12	5:33	20:07:36.2	17:42:15	300	91	3.0	#65f	2	
0253-0262.BIAS	0	11:24	21:02:21.8	+50:48:34	300	91	3.0	#68 2MASS Reds	4	
0263-0272.FLAT	6	11:52	21:02:21.8	+50:48:34	300	91	3.0	#68 2MASS Reds	4	
0273-0282.BIAS	0	11:55	21:02:21.8	+50:48:34	300	91	3.0	#68 2MASS Reds	2	
0283-0292.FLAT	12	11:59	21:02:21.8	+50:48:34	300	91	3.0	#68 2MASS Reds	2	
0293-0302.DARK	900	14:28	21:02:21.8	+50:48:34	300	91	3.0	#68 2MASS Reds	2	



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UT Date 2001-07-30 Observers P Berlind

Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0001.BIAS	0	1:58	15:05:19.3	31:30:28	300	90	3.0	#68 2MASS Reds	4	foggy on the mtn all day
0002-0010.BIAS	0	1:59	15:06:28.3	31:30:28	300	90	3.0	#68 2MASS Reds	4	
0011-0020.FLAT	8	2:02	15:09:39.3	31:30:28	300	90	3.0	#68 2MASS Reds	4	
0021-0030.BIAS	0	2:05	15:12:02.3	31:30:28	300	90	3.0	#68 2MASS Reds	2	
0031.FLAT	16	2:05	15:29:37.4	31:30:26	300	90	3.0	#68 2MASS Reds	2	clearing some; bright moon
0032-0039.FLAT	16	2:26	15:33:35.4	31:30:26	300	90	3.0	#68 2MASS Reds	2	
0040.FLAT	16	2:26	15:34:06.4	31:30:25	300	90	3.0	#68 2MASS Reds	2	
0041.2M171550.4p572200	480	2:26	17:15:50.4	+57:22:00	300	90	3.0	#68 2MASS Reds	4	star in slit to E of gal
0042.COMP	5	2:26	17:15:50.4	+57:22:00	300	90	3.0	#68 2MASS Reds	4	
0043.2M171049.8p455114	600	2:26	17:10:49.8	+45:51:14	300	90	3.0	#68 2MASS Reds	4	
0044.COMP	5	2:26	17:10:49.8	+45:51:14	300	90	3.0	#68 2MASS Reds	4	
0045.2M170538.5p251229	300	2:26	17:05:38.5	+25:12:29	300	90	3.0	#68 2MASS Reds	4	
0046.COMP	5	2:26	17:05:38.5	+25:12:29	300	90	3.0	#68 2MASS Reds	4	
0047.2M162740.9p392258	180	2:26	16:27:40.9	+39:22:58	300	90	3.0	#68 2MASS Reds	4	
0048.COMP	5	2:26	16:27:40.9	+39:22:58	300	90	3.0	#68 2MASS Reds	4	
0049.2M162919.0p392544	210	2:26	16:29:20.0	+39:25:44	300	90	3.0	#68 2MASS Reds	4	
0050.COMP	5	2:26	16:29:20.0	+39:25:44	300	90	3.0	#68 2MASS Reds	4	
0051.2M163053.9p395051	210	2:26	16:30:53.9	+39:50:51	300	90	3.0	#68 2MASS Reds	4	
0052.COMP	5	2:26	16:30:53.9	+39:50:51	300	90	3.0	#68 2MASS Reds	4	
0053.2M161918.8p241311	300	2:26	16:19:18.8	+24:13:11	300	90	3.0	#68 2MASS Reds	4	



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UT Date 2001-07-30 Observers P Berlind

Coll. Focus 980 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0054.COMP	5	2:26	16:19:18.8	+24:13:11	300	90	3.0	#68 2MASS Reds	4	
0055.2M161422.4p631540	240	2:26	16:14:22.4	+63:15:40	300	90	3.0	#68 2MASS Reds	2	
0056.COMP	5	2:26	16:14:22.4	+63:15:40	300	90	3.0	#68 2MASS Reds	2	
0057.2M170335.0p783744S	240	2:26	17:03:36.0	+78:37:44	300	90	3.0	#68 2MASS Reds	2	south gal
0058.2M170335.0p783744N	300	2:26	17:03:36.0	+78:37:44	300	90	3.0	#68 2MASS Reds	2	north gal
0059.COMP	10	2:26	17:03:36.0	+78:37:44	300	90	3.0	#68 2MASS Reds	2	clouds...
0060.2M172057.4p420918	846	2:26	17:20:57.4	+42:09:18	300	90	3.0	#68 2MASS Reds	4	
0061.COMP	5	2:26	17:20:57.4	+42:09:18	300	90	3.0	#68 2MASS Reds	4	
0062.BIAS	0	2:26	17:20:57.4	+42:09:18	1200	90	1.5	#68 2MASS Reds	4	switch to 1200-line grating
0063.COMP	20	2:26	17:20:57.4	+42:09:18	1200	90	1.5	#68 2MASS Reds	3	
0064.BIAS	0	2:26	17:20:57.4	+42:09:18	1200	90	1.5	#68 2MASS Reds	3	
0065.BIAS	0	2:26	17:20:57.4	+42:09:18	1200	90	1.5	#68 2MASS Reds	3	fogged out!; see you in Sept. Susan!