



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2001-10-16 Observers P Berlind

Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.BIAS	0	0:06	18:20:14.0	31:30:08	300	90	2.0	#99 Director/P	4	binby4
0002-0010.BIAS	0	0:07	18:21:28.0	31:30:08	300	90	2.0	#99 Director/P	4	
0011.BIAS	0	0:07	18:21:55.0	31:30:08	300	90	2.0	#99 Director/P	2	binby3full
0012-0020.BIAS	0	0:09	18:24:04.0	31:30:08	300	90	2.0	#99 Director/P	2	
0021.BIAS	0	0:09	18:25:00.0	31:30:07	300	90	2.0	#99 Director/P	2	binby2
0022-0030.BIAS	0	0:12	18:27:02.0	31:30:07	300	90	2.0	#99 Director/P	2	
0031.FLAT	25	0:12	18:28:38.0	31:30:07	300	90	2.0	#99 Director/P	2	300-line; 2-sec slit; tilt=575
0032-0040.FLAT	25	0:23	18:38:27.0	31:30:06	300	90	2.0	#99 Director/P	2	
0041-0050.FLAT	25	0:30	18:45:02.0	31:30:05	300	90	2.0	#99 Director/P	2	
0051-0055.sky	3	1:03	19:15:00	32:00:00	300	90	2.0	#99 Director/T	2	
0056.COMP	10	1:03	19:15:00	32:00:00	300	90	2.0	#99 Director/T	2	
0057.HR6060	1	1:03	16:15:37	-08:22:10	300	49	2.0	#99 Director/T	2	
0058.HR6060	3	1:03	16:15:37	-08:22:10	300	49	2.0	#99 Director/T	2	
0059.HR6060	3	1:03	16:15:37	-08:22:10	300	49	2.0	#99 Director/T	2	
0060.HR6060	3	1:03	16:15:37	-08:22:10	300	49	2.0	#99 Director/T	2	
0061.HR6060	1	1:03	16:15:37	-08:22:10	300	49	2.0	#99 Director/T	2	
0062.COMP	10	1:03	16:15:37	-08:22:10	300	49	2.0	#99 Director/T	2	
0063.HD186427	3	1:03	19:41:53	50:31:11	300	0	2.0	#99 Director/T	2	
0064.HD186427	3	1:03	19:41:53	50:31:11	300	0	2.0	#99 Director/T	2	
0065.HD186427	3	1:03	19:41:53	50:31:11	300	0	2.0	#99 Director/T	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0066.HD186427	3	1:03	19:41:53	50:31:11	300	0	2.0	#99 Director/T	2	
0067.HD186427	1	1:03	19:41:53	50:31:11	300	0	2.0	#99 Director/T	2	
0068.HD186427	5	1:03	19:41:53	50:31:11	300	0	2.0	#99 Director/T	2	
0069.COMP	10	1:03	19:41:53	50:31:11	300	0	2.0	#99 Director/T	2	
0070.HD186408	3	1:03	19:41:49	50:31:38	300	0	2.0	#99 Director/T	2	
0071.HD186408	3	1:03	19:41:49	50:31:38	300	0	2.0	#99 Director/T	2	
0072.HD186408	1	1:03	19:41:49	50:31:38	300	0	2.0	#99 Director/T	2	
0073.HD186408	5	1:03	19:41:49	50:31:38	300	0	2.0	#99 Director/T	2	
0074.COMP	10	1:03	19:41:49	50:31:38	300	0	2.0	#99 Director/T	2	
0075.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0076.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0077.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0078.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0079.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0080.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0081.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0082.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0083.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0084.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0085.Mars	5	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0086.COMP	10	1:03	19:37:11	-24:05:22	300	5	2.0	#99 Director/T	2	
0087.Pluto	65	1:03	16:52:31	-12:30:04	300	45	2.0	#99 Director/T	2	cool! it
0088.Pluto	300	1:03	16:52:31	-12:30:04	300	45	2.0	#99 Director/T	2	
0089.Pluto	300	1:03	16:52:31	-12:30:04	300	45	2.0	#99 Director/T	2	
0090.COMP	10	1:03	16:52:31	-12:30:04	300	45	2.0	#99 Director/T	2	
0091.Neptune	2	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0092.Neptune	2	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0093.Neptune	2	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0094.Neptune	5	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0095.Neptune	5	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0096.Neptune	5	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0097.NepMoon1	150	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	20arcsec to SW
0098.Neptune	10	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0099.star	60	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0100.COMP	10	1:03	20:33:17	-18:38:52	300	0	2.0	#99 Director/T	2	
0101.Uranus	2	1:03	21:34:26	-15:11:57	300	-15	2.0	#99 Director/T	2	
0102.Uranus	2	1:03	21:34:26	-15:11:57	300	-15	2.0	#99 Director/T	2	
0103.Uranus	1	1:03	21:34:26	-15:11:57	300	-15	2.0	#99 Director/T	2	
0104.Uranus	3	1:03	21:34:26	-15:11:57	300	-15	2.0	#99 Director/T	2	
0105.UrMoon1	90	1:03	21:34:26	-15:11:57	300	-15	2.0	#99 Director/T	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0107.COMP	10	1:03	21:34:26	-15:11:57	300	-15	2.0	#99 Director/T	2	
0108.HD192281	6	1:03	20:10:46.8	40:07:01	300	0	2.0	#99 Director/T	2	
0109.HD192281	6	1:03	20:10:46.8	40:07:01	300	0	2.0	#99 Director/T	2	
0110.HD192281	6	1:03	20:10:46.8	40:07:01	300	0	2.0	#99 Director/T	2	
0111.HD192281	6	1:03	20:10:46.8	40:07:01	300	0	2.0	#99 Director/T	2	
0112.HD192281	6	1:03	20:10:46.8	40:07:01	300	0	2.0	#99 Director/T	2	
0113.COMP	10	1:03	20:10:46.8	40:07:01	300	0	2.0	#99 Director/T	2	
0114.BDp284211	60	1:03	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	
0115.BDp284211	60	1:03	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	
0116.BDp284211	60	1:03	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	
0117.COMP	10	1:03	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	
0118.PlutoRed	600	1:03	16:52:31	-12:30:04	300	51	2.0	#99 Director/T	2	switch to red tilt 811
0119.COMP	34	1:03	16:52:31	-12:30:04	300	51	2.0	#99 Director/T	2	rtsystem crash; bad comp; not critical
0120.COMP	5	1:03	19:37:11	-24:05:22	300	30	2.0	#99 Director/T	2	please use any other red comp...
0121.MarsRed	5	1:03	19:37:11	-24:05:22	300	30	2.0	#99 Director/T	2	
0122.MarsRed	5	1:03	19:37:11	-24:05:22	300	30	2.0	#99 Director/T	2	
0123.MarsRed	5	1:03	19:37:11	-24:05:22	300	30	2.0	#99 Director/T	2	
0124.MarsRed	5	1:03	19:37:11	-24:05:22	300	30	2.0	#99 Director/T	2	
0125.COMP	5	1:03	19:37:11	-24:05:22	300	30	2.0	#99 Director/T	2	
0126.NeptuneRed	2	1:03	20:33:17	-18:38:52	300	13	2.0	#99 Director/T	2	



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0127.NeptuneRed	6	1:03	20:33:17	-18:38:52	300	13	2.0	#99 Director/T	2	
0128.NeptuneRed	10	1:03	20:33:17	-18:38:52	300	13	2.0	#99 Director/T	2	
0129.NeptuneRed	30	1:03	20:33:17	-18:38:52	300	13	2.0	#99 Director/T	2	
0130.NeptuneRed	60	1:03	20:33:17	-18:38:52	300	13	2.0	#99 Director/T	2	
0131.NepMoon1Red	180	1:03	20:33:17	-18:38:52	300	13	2.0	#99 Director/T	2	
0132.NeptuneRed	60	1:03	20:33:17	-18:38:52	300	13	2.0	#99 Director/T	2	
0133.COMP	5	1:03	20:33:17	-18:38:52	300	13	2.0	#99 Director/T	2	
0134.UranusRed	2	1:03	21:34:26	-15:11:57	300	0	2.0	#99 Director/T	2	
0135.UranusRed	4	1:03	21:34:26	-15:11:57	300	0	2.0	#99 Director/T	2	
0136.UranusRed	10	1:03	21:34:26	-15:11:57	300	0	2.0	#99 Director/T	2	
0137.UranusRed	10	1:03	21:34:26	-15:11:57	300	0	2.0	#99 Director/T	2	
0138.UranusRed	2	1:03	21:34:26	-15:11:57	300	0	2.0	#99 Director/T	2	
0139.UrMoon1Red	240	1:03	21:34:26	-15:11:57	300	0	2.0	#99 Director/T	2	
0140.COMP	5	1:03	21:34:26	-15:11:57	300	0	2.0	#99 Director/T	2	
0141.HD186427Red	3	1:03	19:41:53	50:31:11	300	100	2.0	#99 Director/T	2	
0142.HD186427Red	3	1:03	19:41:53	50:31:11	300	100	2.0	#99 Director/T	2	
0143.HD186427Red	3	1:03	19:41:53	50:31:11	300	100	2.0	#99 Director/T	2	
0144.HD186427Red	5	1:03	19:41:53	50:31:11	300	100	2.0	#99 Director/T	2	
0145.HD186427Red	5	1:03	19:41:53	50:31:11	300	100	2.0	#99 Director/T	2	
0146.COMP	5	1:03	19:41:53	50:31:11	300	100	2.0	#99 Director/T	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0147.HD186408Red	3	1:03	19:41:49	50:31:38	300	100	2.0	#99 Director/T	2	
0148.HD186408Red	3	1:03	19:41:49	50:31:38	300	100	2.0	#99 Director/T	2	
0149.HD186408Red	5	1:03	19:41:49	50:31:38	300	100	2.0	#99 Director/T	2	
0150.COMP	5	1:03	19:41:49	50:31:38	300	100	2.0	#99 Director/T	2	
0151.HD192281Red	6	1:03	20:10:46.8	40:07:01	300	100	2.0	#99 Director/T	2	
0152.HD192281Red	6	1:03	20:10:46.8	40:07:01	300	100	2.0	#99 Director/T	2	
0153.HD192281Red	6	1:03	20:10:46.8	40:07:01	300	100	2.0	#99 Director/T	2	
0154.HD192281Red	10	1:03	20:10:46.8	40:07:01	300	100	2.0	#99 Director/T	2	
0155.HD192281Red	10	1:03	20:10:46.8	40:07:01	300	100	2.0	#99 Director/T	2	
0156.COMP	5	1:03	20:10:46.8	40:07:01	300	100	2.0	#99 Director/T	2	
0157.BDp284211Red	60	1:03	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	
0158.BDp284211Red	120	1:03	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	
0159.COMP	5	1:03	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	
0160.FLAT	20	1:03	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	300-line; 2-sec; tilt=811
0161-0179.FLAT	20	3:51	21:48:57.1	28:37:48	300	90	2.0	#99 Director/T	2	
0180.test	5	3:51	21:48:57.1	28:37:48	600	90	3.0	#99 Director/C	2	
0181.test	5	3:51	21:48:57.1	28:37:48	600	90	3.0	#99 Director/C	2	
0182.FLAT	20	3:51	21:48:57.1	28:37:48	600	90	3.0	#99 Director/C	2	
0183.FLAT	20	3:51	21:48:57.1	28:37:48	600	90	3.0	#99 Director/C	2	600-line; 3-sec; tilt=455
0184-0201.FLAT	20	4:07	21:48:57.1	28:37:48	600	90	3.0	#99 Director/C	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0202.BDp284211	120	4:07	21:48:57.1	28:37:48	600	70	3.0	#99 Director/C	2	for Nelson C
0203.BDp284211	120	4:07	21:48:57.1	28:37:48	600	70	3.0	#99 Director/C	2	
0204.BDp284211	120	4:07	21:48:57.1	28:37:48	600	70	3.0	#99 Director/C	2	
0205.COMP	10	4:07	21:48:57.1	28:37:48	600	70	3.0	#99 Director/C	2	
0206.HD217086	10	4:07	22:54:49.0	62:27:35	600	5	3.0	#99 Director/T	2	for Nelson, not Traub
0207.HD217086	10	4:07	22:54:49.0	62:27:35	600	5	3.0	#99 Director/T	2	
0208.HD217086	10	4:07	22:54:49.0	62:27:35	600	5	3.0	#99 Director/T	2	
0209.COMP	10	4:07	22:54:49.0	62:27:35	600	5	3.0	#99 Director/T	2	
0210.M32A	400	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0211.M32B	1200	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0212.COMP	10	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0213.M32C	1200	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0214.M32B	1200	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0215.COMP	10	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0216.M32C	1200	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0217.COMP	10	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0218.M32B	1200	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0219.COMP	10	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0220.M32C	1200	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0221.M32B	1200	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	



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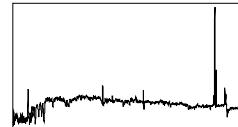
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0222.COMP	10	4:07	00:39:58	+40:35:30	600	-20	3.0	#99 Director/C	2	
0223.COMP	5	4:07	1:30:00	30:00:00	300	90	3.0	#99 Director/C	4	ccd problems. yikes. fixed with complete reset.
0224.COMP	5	4:07	01:35:13.0	30:15:24	300	90	3.0	#99 Director/C	4	
0225.BIAS	0	4:07	01:35:39.0	30:15:24	300	90	3.0	#99 Director/C	4	
0226.BIAS	0	4:07	01:38:53.0	30:15:24	300	90	3.0	#99 Director/C	2	
0227.COMP	5	4:07	01:39:33.0	30:15:24	300	90	3.0	#99 Director/C	2	
0228.FLAT	8	4:07	01:41:17.0	30:15:24	300	90	3.0	#99 Director/C	4	back to normal combo setup
0229-0232.FLAT	8	7:22	01:42:22.0	30:15:24	300	90	3.0	#99 Director/C	4	
0233.FLAT	16	7:22	01:43:15.0	30:15:24	300	90	3.0	#99 Director/C	2	300-line; 3-sec; tilt=610
0234-0236.FLAT	16	7:24	01:44:42.0	30:15:24	300	90	3.0	#99 Director/C	2	
0237.FLAT	16	7:24	01:45:12.0	30:15:25	300	90	3.0	#99 Director/C	2	
0238.158m213	300	7:24	00:40:30.2	+40:50:55	300	90	3.0	#57 Velocity S	2	
0239.COMP	10	7:24	00:40:30.2	+40:50:55	300	90	3.0	#57 Velocity S	2	
0240.M32	30	7:24	00:39:58	+40:35:30	300	90	3.0	#57 Velocity S	2	
0241.COMP	10	7:24	00:39:58	+40:35:30	300	90	3.0	#57 Velocity S	2	
0242.ZAnd	1	7:24	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0243.ZAnd	3	7:24	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0244.ZAnd	5	7:24	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0245.ZAnd	15	7:24	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	
0246.COMP	5	7:24	23:33:40	48:49:06	300	90	3.0	#12 Symbiotic	4	



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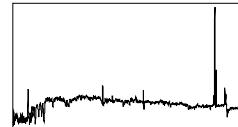
Coll. Focus 1020 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0247.sn2001en	1200	7:24	01:25:22.9	+34:01:30	300	10	3.0	#2 SN Observat	2	pa=100
0248.COMP	10	7:24	01:25:22.9	+34:01:30	300	10	3.0	#2 SN Observat	2	
0249.a168_126	900	7:24	01:16:18.6	2:04:55	300	90	3.0	#64 Cluster In	4	
0250.COMP	5	7:24	01:16:18.6	2:04:55	300	90	3.0	#64 Cluster In	4	
0251.a168_135	300	7:24	01:16:43.4	1:36:08	300	90	3.0	#64 Cluster In	4	
0252.COMP	5	7:24	01:16:43.4	1:36:08	300	90	3.0	#64 Cluster In	4	
0253.a168_138	360	7:24	01:17:17.3	0:30:29	300	90	3.0	#64 Cluster In	4	
0254.COMP	5	7:24	01:17:17.3	0:30:29	300	90	3.0	#64 Cluster In	4	
0255.a168_139	720	7:24	01:05:29.5	0:30:34	300	90	3.0	#64 Cluster In	4	
0256.COMP	5	7:24	01:05:29.5	0:30:34	300	90	3.0	#64 Cluster In	4	
0257.a168_141	720	7:24	01:15:11.1	0:57:53	300	90	3.0	#64 Cluster In	4	
0258.COMP	5	7:24	01:15:11.1	0:57:53	300	90	3.0	#64 Cluster In	4	
0259.a168_142	720	7:24	01:07:49.7	0:36:40	300	90	3.0	#64 Cluster In	4	
0260.COMP	5	7:24	01:07:49.7	0:36:40	300	90	3.0	#64 Cluster In	4	
0261.a168_145	720	7:24	01:18:27.2	0:17:06	300	90	3.0	#64 Cluster In	4	
0262.COMP	5	7:24	01:18:27.2	0:17:06	300	90	3.0	#64 Cluster In	4	thin clouds around
0263.a168_147	300	7:24	01:17:43.7	-0:49:53	300	90	3.0	#64 Cluster In	4	
0264.COMP	5	7:24	01:17:43.7	-0:49:53	300	90	3.0	#64 Cluster In	4	
0265.a168_152	480	7:24	01:07:44.8	1:43:02	300	90	3.0	#64 Cluster In	4	
0266.COMP	5	7:24	01:07:44.8	1:43:02	300	90	3.0	#64 Cluster In	4	



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0267.a168_153	720	7:24	01:20:49.7	-0:28:32	300	90	3.0	#64 Cluster In	4	
0268.COMP	5	7:24	01:20:49.7	-0:28:32	300	90	3.0	#64 Cluster In	4	
0269.a496_332	900	7:24	04:31:41.8	-10:34:06	300	90	3.0	#64 Cluster In	4	
0270.COMP	5	7:24	04:31:41.8	-10:34:06	300	90	3.0	#64 Cluster In	4	
0271.a496_329	270	7:24	04:14:32.7	-13:11:02	300	90	3.0	#64 Cluster In	4	
0272.COMP	5	7:24	04:14:32.7	-13:11:02	300	90	3.0	#64 Cluster In	4	
0273.a496_330	480	7:24	04:47:47.8	-15:31:56	300	90	3.0	#64 Cluster In	4	
0274.COMP	5	7:24	04:47:47.8	-15:31:56	300	90	3.0	#64 Cluster In	4	
0275.HZ14	360	7:24	04:38:15.6	10:53:57	300	0	3.0	#56 Spectropho	2	
0276.COMP	10	7:24	04:38:15.6	10:53:57	300	0	3.0	#56 Spectropho	2	
0277.sn2001ep	1200	7:24	04:57:00.2	-04:45:40	300	0	3.0	#2 SN Observat	2	
0278.COMP	10	7:24	04:57:00.2	-04:45:40	300	0	3.0	#2 SN Observat	2	
0279.BGGem	1200	7:24	6:03:31	27:41:50	300	90	3.0	#100 BGGem	2	
0280.BGGem	300	7:24	6:03:31	27:41:50	300	90	3.0	#100 BGGem	2	
0281.COMP	10	7:24	6:03:31	27:41:50	300	90	3.0	#100 BGGem	2	
0282.Hiltner600	90	7:24	06:42:37.2	02:11:25	300	-15	3.0	#56 Spectropho	2	
0283.Hiltner600	90	7:24	06:42:37.2	02:11:25	300	-15	3.0	#56 Spectropho	2	
0284.COMP	10	7:24	06:42:37.2	02:11:25	300	-15	3.0	#56 Spectropho	2	
0285-0294.FLAT	8	11:32	6:00:00	32:00:00	300	-15	3.0	#56 Spectropho	4	
0295-0304.FLAT	16	11:37	6:00:00	32:00:00	300	-15	3.0	#56 Spectropho	2	



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0305.FLAT	25	11:37	6:00:00	32:00:00	300	0	2.0	#99 Director/P	2	2-sec slit; tilt=575
0306-0314.FLAT	25	11:45	6:00:00	32:00:00	300	0	2.0	#99 Director/P	2	
0315.HD28099	2	11:45	04:26:39	16:44:49	300	52	2.0	#99 Director/T	2	
0316.HD28099	10	11:45	04:26:39	16:44:49	300	52	2.0	#99 Director/T	2	
0317.HD28099	10	11:45	04:26:39	16:44:49	300	52	2.0	#99 Director/T	2	
0318.HD28099	5	11:45	04:26:39	16:44:49	300	52	2.0	#99 Director/T	2	
0319.COMP	10	11:45	04:26:39	16:44:49	300	52	2.0	#99 Director/T	2	
0320.Saturn	10	11:45	4:54:08	20:41:30	300	52	2.0	#99 Director/T	2	
0321.Saturn	6	11:45	4:54:08	20:41:30	300	52	2.0	#99 Director/T	2	
0322.Saturn	6	11:45	4:54:08	20:41:30	300	52	2.0	#99 Director/T	2	
0323.Saturn	6	11:45	4:54:08	20:41:30	300	52	2.0	#99 Director/T	2	
0324.Saturn	6	11:45	4:54:08	20:41:30	300	52	2.0	#99 Director/T	2	
0325.COMP	10	11:45	4:54:08	20:41:30	300	52	2.0	#99 Director/T	2	
0326.Jupiter	6	11:45	7:05:45	22:24:49	300	-50	2.0	#99 Director/T	2	
0327.Jupiter	4	11:45	7:05:45	22:24:49	300	-50	2.0	#99 Director/T	2	
0328.Jupiter	4	11:45	7:05:45	22:24:49	300	-50	2.0	#99 Director/T	2	
0329.Jupiter	4	11:45	7:05:45	22:24:49	300	-50	2.0	#99 Director/T	2	
0330.COMP	10	11:45	7:05:45	22:24:49	300	-50	2.0	#99 Director/T	2	
0331.Ganymede	1	11:45	7:05:03	22:26:01	300	-50	2.0	#99 Director/T	2	
0332.Ganymede	1	11:45	7:05:03	22:26:01	300	-50	2.0	#99 Director/T	2	



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0333.Ganymede	5	11:45	7:05:03	22:26:01	300	-50	2.0	#99 Director/T	2	
0334.Ganymede	5	11:45	7:05:03	22:26:01	300	-50	2.0	#99 Director/T	2	
0335.COMP	10	11:45	7:05:03	22:26:01	300	-50	2.0	#99 Director/T	2	
0336.Io	5	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	just east of Europa
0337.Io	1	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0338.Io	1	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0339.Io	1	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0340.Io	3	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0341.Europa	3	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0342.Europa	1	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0343.Europa	1	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0344.Europa	1	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0345.Callisto	1	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0346.Callisto	1	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0347.Callisto	4	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0348.COMP	10	11:45	7:05:56	22:25:11	300	-50	2.0	#99 Director/T	2	
0349.Hiltner600	100	11:45	06:42:37.2	02:11:25	300	0	2.0	#99 Director/T	2	
0350.Hiltner600	100	11:45	06:42:37.2	02:11:25	300	0	2.0	#99 Director/T	2	
0351.COMP	10	11:45	06:42:37.2	02:11:25	300	0	2.0	#99 Director/T	2	
0352.Hiltner600Red	100	11:45	06:42:37.2	02:11:25	300	0	2.0	#99 Director/T	2	tilt=811; 2-sec slit



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File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0353.Hiltner600Red	100	11:45	06:42:37.2	02:11:25	300	0	2.0	#99 Director/T	2	
0354.COMP	10	11:45	06:42:37.2	02:11:25	300	0	2.0	#99 Director/T	2	the pressure is on
0355.IoRed	1	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0356.IoRed	1	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0357.IoRed	2	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0358.IoRed	2	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0359.EuropaRed	2	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0360.EuropaRed	1	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0361.CallistoRed	2	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0362.CallistoRed	2	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0363.CallistoRed	1	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0364.GanymedeRed	1	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0365.GanymedeRed	2	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0366.GanymedeRed	5	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0367.GanymedeRed	2	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0368.JupiterRed	4	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0369.JupiterRed	4	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0370.JupiterRed	4	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0371.JupiterRed	4	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	
0372.COMP	10	11:45	7:05:45	22:24:49	300	-25	2.0	#99 Director/T	2	



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<i>File</i>	<i>Exp Time</i>	<i>UT Start</i>	<i>RA</i>	<i>Dec</i>	<i>Gr.</i>	<i>P.A.</i>	<i>Slit</i>	<i>Program</i>	<i>Bir</i>	<i>Comments</i>
0373.SaturnRed	4	11:45	4:54:08	20:41:30	300	60	2.0	#99 Director/T	2	
0374.SaturnRed	4	11:45	4:54:08	20:41:30	300	60	2.0	#99 Director/T	2	
0375.SaturnRed	4	11:45	4:54:08	20:41:30	300	60	2.0	#99 Director/T	2	
0376.COMP	10	11:45	4:54:08	20:41:30	300	60	2.0	#99 Director/T	2	