



## WHIPPLE OBSERVATORY

## FAST SPECTROGRAPH LOG



Page 12119

UT Date 2004-02-29 Observers P Berlind

Coll. Focus 980 Grating/Grism 600

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.DARK	900	20:00	23:23:43.5	+31:28:40	300	90	3.0	#56 Spectropho	4	
0002.DARK	900	20:16	23:38:58.7	+31:28:38	300	90	3.0	#56 Spectropho	4	
0003.DARK	900	20:31	23:54:09.4	+31:28:36	300	90	3.0	#56 Spectropho	4	
0004-0005.DARK	900	21:01	00:24:35.0	+31:28:35	300	90	3.0	#56 Spectropho	4	
0006.DARK	900	21:16	00:39:49.7	+31:28:34	300	90	3.0	#56 Spectropho	4	
0007-0008.DARK	900	21:47	01:10:15.5	+31:28:35	300	90	3.0	#56 Spectropho	4	
0009.DARK	900	22:02	01:25:26.7	+31:28:36	300	90	3.0	#56 Spectropho	4	
0010.DARK	900	22:17	01:40:41.2	+31:28:37	300	90	3.0	#56 Spectropho	4	
0011.DARK	900	22:32	01:55:56.3	+31:28:39	300	90	3.0	#56 Spectropho	2	snow,fog
0012.DARK	900	22:48	02:11:11.7	+31:28:41	300	90	3.0	#56 Spectropho	2	
0013.DARK	900	23:03	02:26:31.1	+31:28:43	300	90	3.0	#56 Spectropho	2	
0014.DARK	900	23:18	02:41:50.3	+31:28:45	300	90	3.0	#56 Spectropho	2	
0015.DARK	900	23:33	02:57:05.7	+31:28:48	300	90	3.0	#56 Spectropho	2	
0016.DARK	900	23:49	03:12:24.8	+31:28:52	300	90	3.0	#56 Spectropho	2	
0017.DARK	900	0:04	03:27:43.9	+31:28:55	300	90	3.0	#56 Spectropho	2	
0018.DARK	900	0:19	03:42:59.8	+31:28:59	300	90	3.0	#56 Spectropho	2	
0019.DARK	900	0:34	03:58:18.8	+31:29:03	300	90	3.0	#56 Spectropho	2	
0020.DARK	900	0:50	04:13:38.4	+31:29:08	300	90	3.0	#56 Spectropho	2	
0021-0030.BIAS	0	1:20	04:28:31.7	+31:29:12	300	90	3.0	#56 Spectropho	4	
0031-0034.FLAT	8	1:21	04:29:54.6	+31:29:12	300	90	3.0	#56 Spectropho	4	



## WHIPPLE OBSERVATORY

## FAST SPECTROGRAPH LOG



Page 12120

UT Date 2004-02-29 Observers P Berlind

Coll. Focus 980 Grating/Grism 600

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0035-0040.FLAT	8	1:23	04:32:00.2	+31:29:13	300	90	3.0	#56 Spectropho	4	
0041-0046.BIAS	0	1:24	04:33:22.5	+31:29:13	300	90	3.0	#56 Spectropho	2	
0047-0050.BIAS	0	1:25	04:34:14.3	+31:29:14	300	90	3.0	#56 Spectropho	2	
0051-0054.FLAT	16	1:27	04:36:37.0	+31:29:14	300	90	3.0	#56 Spectropho	2	
0055-0059.FLAT	16	1:30	04:39:39.6	+31:29:15	300	90	3.0	#56 Spectropho	2	
0060.FLAT	16	1:31	04:40:14.7	+31:29:16	300	90	3.0	#56 Spectropho	2	
0061.COMP	5	2:28	05:37:16.2	+31:29:35	300	90	3.0	#56 Spectropho	4	
0062.COMP	10	3:48	06:22:57.5	+22:30:49	600	90	2.0	Bright Stars	4	
0063.FLAT	40	3:50	06:22:57.5	+22:30:49	600	90	2.0	Bright Stars	4	clearing
0064-0072.FLAT	40	3:57	06:22:57.5	+22:30:49	600	90	2.0	Bright Stars	4	
0073.hs1755	900	4:09	10:53:31.9	25:14:50	600	90	2.0	#122 Halo Star	4	
0074.COMP	10	4:24	10:53:31.9	25:14:50	600	90	2.0	#122 Halo Star	4	
0075.hs1756	1200	4:25	10:53:48.9	16:19:11	600	90	2.0	#122 Halo Star	4	
0076.COMP	10	4:46	10:53:48.9	16:19:11	600	90	2.0	#122 Halo Star	4	
0077.hs1757	1200	4:48	10:54:00.5	38:17:46	600	90	2.0	#122 Halo Star	4	
0078.COMP	10	5:09	10:54:00.5	38:17:46	600	90	2.0	#122 Halo Star	4	
0079.hs1758	1200	5:11	10:54:20.7	17:52:31	600	90	2.0	#122 Halo Star	4	
0080.COMP	10	5:31	10:54:20.7	17:52:31	600	90	2.0	#122 Halo Star	4	
0081.hs1759	600	5:32	10:54:27.6	21:11:29	600	90	2.0	#122 Halo Star	4	
0082.COMP	10	5:42	10:54:27.6	21:11:29	600	90	2.0	#122 Halo Star	4	



## WHIPPLE OBSERVATORY

## FAST SPECTROGRAPH LOG



Page 12121

UT Date 2004-02-29 Observers P BerlindColl. Focus 980 Grating/Grism 600

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0083.hs1844	720	5:46	11:15:01.8	27:37:34	600	90	2.0	#122 Halo Star	4	
0084.COMP	10	5:59	11:15:01.8	27:37:34	600	90	2.0	#122 Halo Star	4	
0085.hs1845	900	6:00	11:15:14.5	37:45:14	600	90	2.0	#122 Halo Star	4	
0086.COMP	10	6:15	11:15:14.5	37:45:14	600	90	2.0	#122 Halo Star	4	
0087.hs1846	900	6:16	11:15:52.3	24:24:12	600	90	2.0	#122 Halo Star	4	
0088.COMP	10	6:31	11:15:52.3	24:24:12	600	90	2.0	#122 Halo Star	4	
0089.hs1847	300	6:33	11:15:58.0	21:19:25	600	90	2.0	#122 Halo Star	4	
0090.COMP	10	6:38	11:15:58.0	21:19:25	600	90	2.0	#122 Halo Star	4	
0091.hs1848	420	6:39	11:16:01.4	24:27:59	600	90	2.0	#122 Halo Star	4	
0092.COMP	10	6:46	11:16:01.4	24:27:59	600	90	2.0	#122 Halo Star	4	
0093.hs1849	300	6:47	11:16:16.3	49:54:03	600	90	2.0	#122 Halo Star	4	
0094.COMP	10	6:52	11:16:16.3	49:54:03	600	90	2.0	#122 Halo Star	4	
0095.hs1853	300	6:53	11:17:06.0	38:10:28	600	90	2.0	#122 Halo Star	4	
0096.COMP	10	6:58	11:17:06.0	38:10:28	600	90	2.0	#122 Halo Star	4	
0097.hs1851	240	6:59	11:16:17.2	15:01:48	600	90	2.0	#122 Halo Star	4	
0098.COMP	10	7:04	11:16:17.2	15:01:48	600	90	2.0	#122 Halo Star	4	
0099.hs1850	420	7:04	11:16:16.7	10:29:15	600	90	2.0	#122 Halo Star	4	
0100.COMP	10	7:12	11:16:16.7	10:29:15	600	90	2.0	#122 Halo Star	4	
0101.hs1852	300	7:13	11:16:25.9	8:22:48	600	90	2.0	#122 Halo Star	4	
0102.COMP	10	7:18	11:16:25.9	8:22:48	600	90	2.0	#122 Halo Star	4	



## WHIPPLE OBSERVATORY

## FAST SPECTROGRAPH LOG



Page 12122

UT Date 2004-02-29 Observers P Berlind

Coll. Focus 980 Grating/Grism 600

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0103.hs1855	300	7:19	11:17:19.9	24:12:07	600	90	2.0	#122 Halo Star	4	
0104.COMP	10	7:25	11:17:19.9	24:12:07	600	90	2.0	#122 Halo Star	4	
0105.hs1857	240	7:25	11:17:42.4	21:31:01	600	90	2.0	#122 Halo Star	4	
0106.COMP	10	7:30	11:17:42.4	21:31:01	600	90	2.0	#122 Halo Star	4	
0107.hs1854	900	7:31	11:17:09.8	42:15:28	600	90	2.0	#122 Halo Star	4	
0108.COMP	10	7:46	11:17:09.8	42:15:28	600	90	2.0	#122 Halo Star	4	
0109.hs1858	300	7:48	11:17:48.3	31:44:27	600	90	2.0	#122 Halo Star	4	
0110.COMP	10	7:53	11:17:48.3	31:44:27	600	90	2.0	#122 Halo Star	4	
0111.hs1859	240	7:54	11:17:53.8	25:23:29	600	90	2.0	#122 Halo Star	4	
0112.COMP	10	7:58	11:17:53.8	25:23:29	600	90	2.0	#122 Halo Star	4	
0113.hs1860	300	7:59	11:18:03.7	44:18:06	600	90	2.0	#122 Halo Star	4	
0114.COMP	10	8:04	11:18:03.7	44:18:06	600	90	2.0	#122 Halo Star	4	
0115.hs1861	900	8:06	11:18:08.6	18:08:23	600	90	2.0	#122 Halo Star	4	
0116.COMP	10	8:21	11:18:08.6	18:08:23	600	90	2.0	#122 Halo Star	4	
0117.hs1862	180	8:22	11:18:08.8	16:15:15	600	90	2.0	#122 Halo Star	4	
0118.COMP	10	8:25	11:18:08.8	16:15:15	600	90	2.0	#122 Halo Star	4	
0119.hs1863	420	8:26	11:18:08.8	20:10:23	600	90	2.0	#122 Halo Star	4	
0120.COMP	10	8:33	11:18:08.8	20:10:23	600	90	2.0	#122 Halo Star	4	
0121.hs1864	420	8:34	11:18:15.0	14:34:52	600	90	2.0	#122 Halo Star	4	
0122.COMP	10	8:41	11:18:15.0	14:34:52	600	90	2.0	#122 Halo Star	4	



## WHIPPLE OBSERVATORY

## FAST SPECTROGRAPH LOG



Page 12123

UT Date 2004-02-29 Observers P BerlindColl. Focus 980 Grating/Grism 600

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0123.hs1810	600	8:43	11:08:17.8	77:23:14	600	90	2.0	#122 Halo Star	4	
0124.COMP	10	8:54	11:08:17.8	77:23:14	600	90	2.0	#122 Halo Star	4	
0125.hs1809	360	8:55	11:08:06.7	79:36:21	600	90	2.0	#122 Halo Star	4	
0126.COMP	10	9:02	11:08:06.7	79:36:21	600	90	2.0	#122 Halo Star	4	
0127.hs1815	300	9:03	11:09:40.7	74:55:29	600	90	2.0	#122 Halo Star	4	
0128.COMP	10	9:08	11:09:40.7	74:55:29	600	90	2.0	#122 Halo Star	4	
0129.hs1819	180	9:09	11:10:44.7	76:21:23	600	90	2.0	#122 Halo Star	4	
0130.COMP	10	9:12	11:10:44.7	76:21:23	600	90	2.0	#122 Halo Star	4	
0131.hs1823	300	9:13	11:11:14.5	75:02:47	600	90	2.0	#122 Halo Star	4	
0132.COMP	10	9:18	11:11:14.5	75:02:47	600	90	2.0	#122 Halo Star	4	
0133.hs1825	420	9:19	11:11:28.6	72:15:01	600	90	2.0	#122 Halo Star	4	
0134.COMP	10	9:26	11:11:28.6	72:15:01	600	90	2.0	#122 Halo Star	4	
0135.hs1828	210	9:27	11:12:14.8	70:08:12	600	90	2.0	#122 Halo Star	4	
0136.COMP	10	9:31	11:12:14.8	70:08:12	600	90	2.0	#122 Halo Star	4	
0137.hs1856	330	9:32	11:17:34.5	76:32:15	600	90	2.0	#122 Halo Star	4	
0138.COMP	10	9:38	11:17:34.5	76:32:15	600	90	2.0	#122 Halo Star	4	
0139.hs1865	900	9:39	11:18:15.9	78:19:37	600	90	2.0	#122 Halo Star	4	
0140.COMP	10	9:54	11:18:15.9	78:19:37	600	90	2.0	#122 Halo Star	4	
0141.hs1868	900	9:55	11:18:27.2	74:47:15	600	90	2.0	#122 Halo Star	4	
0142.COMP	10	10:10	11:18:27.2	74:47:15	600	90	2.0	#122 Halo Star	4	



## WHIPPLE OBSERVATORY

## FAST SPECTROGRAPH LOG



Page 12124

UT Date 2004-02-29 Observers P Berlind

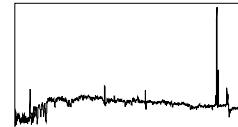
Coll. Focus 980 Grating/Grism 600

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0143.hs1873	210	10:11	11:18:46.2	75:45:12	600	90	2.0	#122 Halo Star	4	
0144.COMP	10	10:15	11:18:46.2	75:45:12	600	90	2.0	#122 Halo Star	4	
0145.hs1901	1200	10:16	11:25:43.8	73:17:02	600	90	2.0	#122 Halo Star	4	
0146.COMP	10	10:36	11:25:43.8	73:17:02	600	90	2.0	#122 Halo Star	4	
0147.hs1908	1200	10:37	11:26:47.5	76:48:08	600	90	2.0	#122 Halo Star	4	
0148.COMP	10	10:57	11:26:47.5	76:48:08	600	90	2.0	#122 Halo Star	4	
0149.hs1923	900	10:59	11:29:35.5	79:11:38	600	90	2.0	#122 Halo Star	4	
0150.COMP	10	11:14	11:29:35.5	79:11:38	600	90	2.0	#122 Halo Star	4	
0151.hs2126	480	11:16	12:01:51.1	35:04:47	600	90	2.0	#122 Halo Star	4	
0152.COMP	10	11:25	12:01:51.1	35:04:47	600	90	2.0	#122 Halo Star	4	
0153.hs2127	600	11:26	12:01:58.7	51:06:30	600	90	2.0	#122 Halo Star	4	
0154.COMP	10	11:36	12:01:58.7	51:06:30	600	90	2.0	#122 Halo Star	4	
0155.hs2128	240	11:37	12:02:15.6	53:27:46	600	90	2.0	#122 Halo Star	4	
0156.COMP	10	11:41	12:02:15.6	53:27:46	600	90	2.0	#122 Halo Star	4	
0157.hs2129	900	11:42	12:02:18.0	52:52:48	600	90	2.0	#122 Halo Star	4	
0158.COMP	10	11:57	12:02:18.0	52:52:48	600	90	2.0	#122 Halo Star	4	
0159.hs2132	330	11:58	12:02:31.7	53:31:52	600	90	2.0	#122 Halo Star	4	
0160.COMP	10	12:04	12:02:31.7	53:31:52	600	90	2.0	#122 Halo Star	4	
0161.hs2133	600	12:04	12:02:37.0	45:32:04	600	90	2.0	#122 Halo Star	4	
0162.COMP	10	12:15	12:02:37.0	45:32:04	600	90	2.0	#122 Halo Star	4	



## WHIPPLE OBSERVATORY

## FAST SPECTROGRAPH LOG



Page 12125

UT Date 2004-02-29 Observers P BerlindColl. Focus 980 Grating/Grism 600

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0163.hs2130	300	12:16	12:02:22.0	28:05:11	600	90	2.0	#122 Halo Star	4	
0164.COMP	10	12:21	12:02:22.0	28:05:11	600	90	2.0	#122 Halo Star	4	
0165.hs2131	360	12:22	12:02:24.2	17:34:58	600	90	2.0	#122 Halo Star	4	
0166.COMP	10	12:28	12:02:24.2	17:34:58	600	90	2.0	#122 Halo Star	4	
0167.hs2135	900	12:29	12:02:54.4	10:19:45	600	90	2.0	#122 Halo Star	4	
0168.COMP	10	12:44	12:02:54.4	10:19:45	600	90	2.0	#122 Halo Star	4	
0169.hs2134	300	12:45	12:02:42.0	35:08:51	600	90	2.0	#122 Halo Star	4	
0170.COMP	10	12:50	12:02:42.0	35:08:51	600	90	2.0	#122 Halo Star	4	
0171.BDp332642	120	12:52	15:50:03.0	33:05:49	600	90	2.0	#122 Halo Star	4	
0172.BDp332642	120	12:54	15:50:03.0	33:05:49	600	90	2.0	#122 Halo Star	4	
0173.COMP	10	12:57	15:50:03.0	33:05:49	600	90	2.0	#122 Halo Star	4	
0174-0183.BIAS	0	12:59	15:50:03.0	33:05:49	600	90	2.0	Bright Stars	4	
0184-0188.FLAT	40	13:03	15:50:03.0	33:05:49	600	90	2.0	Bright Stars	4	