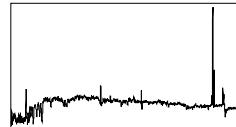




WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9922

UT Date 2001-12-19 Observers Lucas MacriColl. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0001.BIAS	0	22:08	20:34:43.0	31:29:58	300	90	3.0		4	
0002-0010.BIAS	0	22:20	20:46:30.0	31:29:56	300	90	3.0		4	
0011.DARK	900	22:20	21:03:04.0	31:29:54	300	90	3.0		4	
0012.DARK	900	22:20	21:18:15.0	31:29:52	300	90	3.0		4	
0013.DARK	900	22:20	21:33:26.0	31:29:50	300	90	3.0		4	
0014.DARK	900	22:20	21:48:34.0	31:29:49	300	90	3.0		4	
0015.DARK	900	22:20	22:03:44.0	31:29:47	300	90	3.0		4	
0016-0025.FLAT	6	23:39	22:06:33.0	31:29:47	300	90	3.0		4	
0026-0035.BIAS	0	23:42	22:08:57.0	31:29:47	300	90	3.0		2	
0036.DARK	900	23:42	22:24:22.0	31:29:46	300	90	3.0		2	
0037.DARK	900	23:42	22:39:38.0	31:29:45	300	90	3.0		2	
0038.DARK	900	23:42	22:54:54.0	31:29:44	300	90	3.0		2	
0039-0040.DARK	900	0:43	23:25:26.0	31:29:43	300	90	3.0		2	
0041-0050.FLAT	12	1:08	23:35:16.0	31:29:42	300	90	3.0		2	
0051.BDp284211	30	1:08	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0052.BDp284211	30	1:08	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0053.COMP	12	1:08	21:48:57.1	28:37:48	300	90	3.0	#56 Spectropho	2	
0054.2MJ2139151p335426	300	1:08	21:39:15.1	+33:54:26	300	90	3.0	#68 2MASS Reds	2	too faint, redo
0055.COMP	12	1:08	21:39:15.1	+33:54:26	300	90	3.0	#68 2MASS Reds	2	
0056.2MJ2139151p335426	900	1:08	21:39:15.1	+33:54:26	300	90	3.0	#68 2MASS Reds	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9923

UT Date 2001-12-19 Observers Lucas Macri

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0057.COMP	12	1:08	21:39:15.1	+33:54:26	300	90	3.0	#68 2MASS Reds	2	
0058.2MJ2235071p390503	420	1:08	22:35:07.1	+39:05:03	300	90	3.0	#68 2MASS Reds	2	
0059.COMP	12	1:08	22:35:07.1	+39:05:03	300	90	3.0	#68 2MASS Reds	2	
0060.2MJ2231176p415744	360	1:08	22:31:17.6	+41:57:44	300	90	3.0	#68 2MASS Reds	2	
0061.COMP	12	1:08	22:31:17.6	+41:57:44	300	90	3.0	#68 2MASS Reds	2	
0062.2MJ2228546p514141	480	1:08	22:28:54.6	+51:41:41	300	90	3.0	#68 2MASS Reds	2	
0063.COMP	12	1:08	22:28:54.6	+51:41:41	300	90	3.0	#68 2MASS Reds	2	
0064.2MJ2230121p510536	480	1:08	22:30:12.1	+51:05:36	300	90	3.0	#68 2MASS Reds	2	
0065.COMP	12	1:08	22:30:12.1	+51:05:36	300	90	3.0	#68 2MASS Reds	2	
0066.2MJ2235338p510308	360	1:08	22:35:33.8	+51:03:08	300	90	3.0	#68 2MASS Reds	2	
0067.COMP	12	1:08	22:35:33.8	+51:03:08	300	90	3.0	#68 2MASS Reds	2	
0068.2MJ2301463p521317	360	1:08	23:01:46.3	+52:13:17	300	90	3.0	#68 2MASS Reds	2	
0069.COMP	12	1:08	23:01:46.3	+52:13:17	300	90	3.0	#68 2MASS Reds	2	
0070.2MJ2309592p512605	360	1:08	23:09:59.2	+51:26:05	300	90	3.0	#68 2MASS Reds	2	
0071.COMP	12	1:08	23:09:59.2	+51:26:05	300	90	3.0	#68 2MASS Reds	2	
0072.2MJ2313249p513257	360	1:08	23:13:24.9	+51:32:57	300	90	3.0	#68 2MASS Reds	2	
0073.COMP	12	1:08	23:13:24.9	+51:32:57	300	90	3.0	#68 2MASS Reds	2	
0074.2MJ2347529p492828	300	1:08	23:47:52.9	+49:28:28	300	90	3.0	#68 2MASS Reds	2	
0075.COMP	12	1:08	23:47:52.9	+49:28:28	300	90	3.0	#68 2MASS Reds	2	
0076.2MJ2352586p515813	300	1:08	23:52:58.6	+51:58:13	300	90	3.0	#68 2MASS Reds	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9924

UT Date 2001-12-19 Observers Lucas Macri

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0077.COMP	12	1:08	23:52:58.6	+51:58:13	300	90	3.0	#68 2MASS Reds	2	
0078.2MJ2359438p515417	360	1:08	23:59:43.8	+51:54:17	300	90	3.0	#68 2MASS Reds	2	
0079.COMP	12	1:08	23:59:43.8	+51:54:17	300	90	3.0	#68 2MASS Reds	2	
0080.2MJ0027416p493009	420	1:08	00:27:41.6	+49:30:09	300	90	3.0	#68 2MASS Reds	2	
0081.COMP	12	1:08	00:27:41.6	+49:30:09	300	90	3.0	#68 2MASS Reds	2	
0082.2MJ0047076p443202	360	1:08	00:47:07.6	+44:32:02	300	90	3.0	#68 2MASS Reds	2	
0083.COMP	12	1:08	00:47:07.6	+44:32:02	300	90	3.0	#68 2MASS Reds	2	
0084.2MJ0050360p545644	360	1:08	00:50:36.0	+54:56:44	300	90	3.0	#68 2MASS Reds	2	
0085.COMP	12	1:08	00:50:36.0	+54:56:44	300	90	3.0	#68 2MASS Reds	2	
0086.2MJ0050451p560745	480	1:08	00:50:45.1	+56:07:45	300	90	3.0	#68 2MASS Reds	2	
0087.COMP	12	1:08	00:50:45.1	+56:07:45	300	90	3.0	#68 2MASS Reds	2	
0088.2MJ0111139p711324	360	1:08	01:11:13.9	+71:13:24	300	90	3.0	#68 2MASS Reds	2	
0089.COMP	12	1:08	01:11:13.9	+71:13:24	300	90	3.0	#68 2MASS Reds	2	
0090.2MJ0113391p690429	480	1:08	01:13:39.1	+69:04:29	300	90	3.0	#68 2MASS Reds	2	
0091.COMP	12	1:08	01:13:39.1	+69:04:29	300	90	3.0	#68 2MASS Reds	2	
0092.2MJ0113416p733833	420	1:08	01:13:41.6	+73:38:33	300	90	3.0	#68 2MASS Reds	2	row=75
0093.COMP	12	1:08	01:13:41.6	+73:38:33	300	90	3.0	#68 2MASS Reds	2	
0094.2MJ0115427p555946	480	1:08	01:15:42.7	+55:59:46	300	90	3.0	#68 2MASS Reds	2	
0095.COMP	12	1:08	01:15:42.7	+55:59:46	300	90	3.0	#68 2MASS Reds	2	
0096.2MJ0121558p560137	480	1:08	01:21:55.8	+56:01:37	300	90	3.0	#68 2MASS Reds	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9925

UT Date 2001-12-19 Observers Lucas Macri

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0097.COMP	12	1:08	01:21:55.8	+56:01:37	300	90	3.0	#68 2MASS Reds	2	
0098.2MJ0123025p495619	480	1:08	01:23:02.5	+49:56:19	300	90	3.0	#68 2MASS Reds	2	
0099.COMP	12	1:08	01:23:02.5	+49:56:19	300	90	3.0	#68 2MASS Reds	2	
0100.2MJ0420123p360844	360	1:08	04:20:12.3	+36:08:44	300	90	3.0	#68 2MASS Reds	2	
0101.COMP	12	1:08	04:20:12.3	+36:08:44	300	90	3.0	#68 2MASS Reds	2	
0102.2MJ0420160p305356	360	1:08	04:20:16.0	+30:53:56	300	90	3.0	#68 2MASS Reds	2	
0103.COMP	12	1:08	04:20:16.0	+30:53:56	300	90	3.0	#68 2MASS Reds	2	
0104.2MJ0420399m064401	300	1:08	04:20:39.9	-06:44:01	300	90	3.0	#68 2MASS Reds	2	
0105.COMP	12	1:08	04:20:39.9	-06:44:01	300	90	3.0	#68 2MASS Reds	2	
0106.2MJ0420438m035233	300	1:08	04:20:43.8	-03:52:33	300	90	3.0	#68 2MASS Reds	2	
0107.COMP	12	1:08	04:20:43.8	-03:52:33	300	90	3.0	#68 2MASS Reds	2	
0108.2MJ0420533m030942	300	1:08	04:20:53.3	-03:09:42	300	90	3.0	#68 2MASS Reds	2	
0109.COMP	12	1:08	04:20:53.3	-03:09:42	300	90	3.0	#68 2MASS Reds	2	
0110.2MJ0420506m094550	360	1:08	04:20:50.6	-09:45:50	300	90	3.0	#68 2MASS Reds	2	
0111.COMP	12	1:08	04:20:50.6	-09:45:50	300	90	3.0	#68 2MASS Reds	2	
0112.2MJ0421017m094419	480	1:08	04:21:01.7	-09:44:19	300	90	3.0	#68 2MASS Reds	2	
0113.COMP	12	1:08	04:21:01.7	-09:44:19	300	90	3.0	#68 2MASS Reds	2	
0114.2MJ0421541m061349	360	1:08	04:21:54.1	-06:13:49	300	90	3.0	#68 2MASS Reds	2	
0115.COMP	12	1:08	04:21:54.1	-06:13:49	300	90	3.0	#68 2MASS Reds	2	
0116.2MJ0422021m034019	360	1:08	04:22:02.1	-03:40:19	300	90	3.0	#68 2MASS Reds	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9926

UT Date 2001-12-19 Observers Lucas Macri

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0117.COMP	12	1:08	04:22:02.1	-03:40:19	300	90	3.0	#68 2MASS Reds	2	
0118.2MJ0421428m021218	300	1:08	04:21:42.8	-02:12:18	300	90	3.0	#68 2MASS Reds	2	
0119.COMP	12	1:08	04:21:42.8	-02:12:18	300	90	3.0	#68 2MASS Reds	2	
0120.2MJ0423245m072215	240	1:08	04:23:24.5	-07:22:15	300	90	3.0	#68 2MASS Reds	2	
0121.COMP	12	1:08	04:23:24.5	-07:22:15	300	90	3.0	#68 2MASS Reds	2	
0122.2MJ0423282m114724	240	1:08	04:23:28.2	-11:47:24	300	90	3.0	#68 2MASS Reds	2	
0123.COMP	12	1:08	04:23:28.2	-11:47:24	300	90	3.0	#68 2MASS Reds	2	
0124.2MJ0425011m095420	300	1:08	04:25:01.1	-09:54:20	300	90	3.0	#68 2MASS Reds	2	two objs in slit
0125.COMP	12	1:08	04:25:01.1	-09:54:20	300	90	3.0	#68 2MASS Reds	2	
0126.2MJ0427471p404330	240	1:08	04:27:47.1	+40:43:30	300	90	3.0	#68 2MASS Reds	2	
0127.COMP	12	1:08	04:27:47.1	+40:43:30	300	90	3.0	#68 2MASS Reds	2	
0128.2MJ0427303p375002	480	1:08	04:27:30.3	+37:50:02	300	90	3.0	#68 2MASS Reds	2	
0129.COMP	12	1:08	04:27:30.3	+37:50:02	300	90	3.0	#68 2MASS Reds	2	
0130.2MJ0427303p375002	600	1:08	04:27:30.3	+37:50:02	300	90	3.0	#68 2MASS Reds	2	
0131.COMP	12	1:08	04:27:30.3	+37:50:02	300	90	3.0	#68 2MASS Reds	2	
0132.2MJ0429295p263151	480	1:08	04:29:29.5	+26:31:51	300	90	3.0	#68 2MASS Reds	2	
0133.COMP	12	1:08	04:29:29.5	+26:31:51	300	90	3.0	#68 2MASS Reds	2	
0134.2MJ0437037p245605	480	1:08	04:37:03.7	+24:56:05	300	90	3.0	#68 2MASS Reds	2	
0135.COMP	12	1:08	04:37:03.7	+24:56:05	300	90	3.0	#68 2MASS Reds	2	
0136.2MJ0437233p223228	480	1:08	04:37:23.3	+22:32:28	300	90	3.0	#68 2MASS Reds	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9927

UT Date 2001-12-19 Observers Lucas Macri

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bin	Comments
0137.COMP	12	1:08	04:37:23.3	+22:32:28	300	90	3.0	#68 2MASS Reds	2	
0138.2MJ0527065p064344	480	1:08	05:27:06.5	+06:43:44	300	90	3.0	#68 2MASS Reds	2	
0139.COMP	12	1:08	05:27:06.5	+06:43:44	300	90	3.0	#68 2MASS Reds	2	
0140.2MJ0527357p065552	480	1:08	05:27:35.7	+06:55:52	300	90	3.0	#68 2MASS Reds	2	
0141.COMP	12	1:08	05:27:35.7	+06:55:52	300	90	3.0	#68 2MASS Reds	2	
0142.2MJ0530181p532114	420	1:08	05:30:18.1	+53:21:14	300	90	3.0	#68 2MASS Reds	2	
0143.COMP	12	1:08	05:30:18.1	+53:21:14	300	90	3.0	#68 2MASS Reds	2	
0144.2MJ0531033p611745	420	1:08	05:31:03.3	+61:17:45	300	90	3.0	#68 2MASS Reds	2	
0145.COMP	12	1:08	05:31:03.3	+61:17:45	300	90	3.0	#68 2MASS Reds	2	
0146.2MJ0532558p552335	480	1:08	05:32:55.8	+55:23:35	300	90	3.0	#68 2MASS Reds	2	
0147.COMP	12	1:08	05:32:55.8	+55:23:35	300	90	3.0	#68 2MASS Reds	2	
0148.2MJ0536049p523042	420	1:08	05:36:04.9	+52:30:42	300	90	3.0	#68 2MASS Reds	2	
0149.COMP	12	1:08	05:36:04.9	+52:30:42	300	90	3.0	#68 2MASS Reds	2	
0150.2MJ0536081p513208	480	1:08	05:36:08.1	+51:32:08	300	90	3.0	#68 2MASS Reds	2	
0151.COMP	12	1:08	05:36:08.1	+51:32:08	300	90	3.0	#68 2MASS Reds	2	
0152.2MJ0535566p522754	480	1:08	05:35:56.6	+52:27:54	300	90	3.0	#68 2MASS Reds	2	
0153.COMP	12	1:08	05:35:56.6	+52:27:54	300	90	3.0	#68 2MASS Reds	2	
0154.2MJ0740510p643939	420	1:08	07:40:51.0	+64:39:39	300	90	3.0	#68 2MASS Reds	2	
0155.COMP	12	1:08	07:40:51.0	+64:39:39	300	90	3.0	#68 2MASS Reds	2	
0156.2MJ0737483p645941	240	1:08	07:37:48.3	+64:59:41	300	90	3.0	#68 2MASS Reds	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9928

UT Date 2001-12-19 Observers Lucas Macri

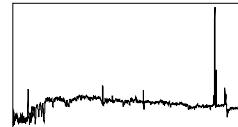
Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0157.COMP	12	1:08	07:37:48.3	+64:59:41	300	90	3.0	#68 2MASS Reds	2	
0158.2MJ0801302p565404	360	1:08	08:01:30.2	+56:54:04	300	90	3.0	#68 2MASS Reds	2	
0159.COMP	12	1:08	08:01:30.2	+56:54:04	300	90	3.0	#68 2MASS Reds	2	
0160.2MJ0806387p670253	480	1:08	08:06:38.7	+67:02:53	300	90	3.0	#68 2MASS Reds	2	
0161.COMP	12	1:08	08:06:38.7	+67:02:53	300	90	3.0	#68 2MASS Reds	2	
0162.sn2001gc	1200	1:08	05:55:26.1	51:54:34	300	90	3.0	#2 SN Observat	2	
0163.COMP	12	1:08	05:55:26.1	51:54:34	300	90	3.0	#2 SN Observat	2	
0164.Hiltner600	45	1:08	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	
0165.COMP	12	1:08	06:42:37.2	02:11:25	300	90	3.0	#56 Spectropho	2	
0166.2MJ1003552p544254	420	1:08	10:03:55.2	+54:42:54	300	90	3.0	#68 2MASS Reds	2	
0167.COMP	12	1:08	10:03:55.2	+54:42:54	300	90	3.0	#68 2MASS Reds	2	
0168.2MJ1005118p501059	360	1:08	10:05:11.8	+50:10:59	300	90	3.0	#68 2MASS Reds	2	
0169.COMP	12	1:08	10:05:11.8	+50:10:59	300	90	3.0	#68 2MASS Reds	2	
0170.2MJ1012336p581425	360	1:08	10:12:33.6	+58:14:25	300	90	3.0	#68 2MASS Reds	2	
0171.COMP	12	1:08	10:12:33.6	+58:14:25	300	90	3.0	#68 2MASS Reds	2	
0172.2MJ1013390p592602	360	1:08	10:13:39.0	+59:26:02	300	90	3.0	#68 2MASS Reds	2	
0173.COMP	12	1:08	10:13:39.0	+59:26:02	300	90	3.0	#68 2MASS Reds	2	
0174.2MJ1036037p813224	300	1:08	10:36:03.7	+81:32:24	300	90	3.0	#68 2MASS Reds	2	
0175.COMP	12	1:08	10:36:03.7	+81:32:24	300	90	3.0	#68 2MASS Reds	2	
0176.2MJ1306491p825158	300	1:08	13:06:49.1	+82:51:58	300	90	3.0	#68 2MASS Reds	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9929

UT Date 2001-12-19 Observers Lucas Macri

Coll. Focus 1000 Grating/Grism 300

File	Exp Time	UT Start	RA	Dec	Gr.	P.A.	Slit	Program	Bir	Comments
0177.COMP	12	1:08	13:06:49.1	+82:51:58	300	90	3.0	#68 2MASS Reds	2	
0178.2MJ1130533p261928	420	1:08	11:30:53.3	+26:19:28	300	90	3.0	#68 2MASS Reds	2	
0179.COMP	12	1:08	11:30:53.3	+26:19:28	300	90	3.0	#68 2MASS Reds	2	
0180.2MJ1147333p233720	420	1:08	11:47:33.3	+23:37:20	300	90	3.0	#68 2MASS Reds	2	
0181.COMP	12	1:08	11:47:33.3	+23:37:20	300	90	3.0	#68 2MASS Reds	2	
0182.2MJ1152463p232833	360	1:08	11:52:46.3	+23:28:33	300	90	3.0	#68 2MASS Reds	2	
0183.COMP	12	1:08	11:52:46.3	+23:28:33	300	90	3.0	#68 2MASS Reds	2	
0184.2MJ1233111p480257	360	1:08	12:33:11.1	+48:02:57	300	90	3.0	#68 2MASS Reds	2	
0185.COMP	12	1:08	12:33:11.1	+48:02:57	300	90	3.0	#68 2MASS Reds	2	
0186.2MJ1244082p445330	360	1:08	12:44:08.2	+44:53:30	300	90	3.0	#68 2MASS Reds	2	
0187.COMP	12	1:08	12:44:08.2	+44:53:30	300	90	3.0	#68 2MASS Reds	2	
0188.HZ44	30	1:08	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0189.HZ44	30	1:08	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0190.COMP	12	1:08	13:21:19.0	36:23:39	300	90	3.0	#56 Spectropho	2	
0191-0198.BIAS	0	13:25	13:21:19.0	36:23:39	300	90	3.0		2	
0199-0200.BIAS	0	13:25	11:55:00	31:30:00	300	90	3.0		2	
0201-0210.FLAT	12	13:30	11:55:00	31:30:00	300	90	3.0		2	
0211-0214.sky	20	13:55	11:55:00	31:30:00	300	90	3.0	#57 Velocity S	2	
0215-0217.sky	15	13:57	11:55:00	31:30:00	300	90	3.0	#57 Velocity S	2	
0218-0219.sky	10	13:58	11:55:00	31:30:00	300	90	3.0	#57 Velocity S	2	



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 9930

UT Date 2001-12-19 Observers Lucas MacriColl. 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>
0220.sky	7	13:58	11:55:00	31:30:00	300	90	3.0	#57 Velocity S	2	
0221-0225.DARK	900	15:01	11:55:00	31:30:00	300	90	3.0	#57 Velocity S	2	