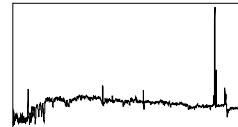




WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12715

UT Date 2004-10-10 Observers P Berlind

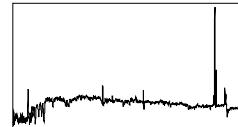
Coll. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|---------------------|----------|----------|------------|----------|-----|------|------|----------------|-----|----------|
| 0001-0010.DARK | 900 | 23:27 | 6:15:00 | 25:00:00 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0011-0015.DARK | 900 | 0:43 | 6:15:00 | 25:00:00 | 300 | 90 | 3.0 | #64 Galaxy For | 2 | |
| 0016-0025.BIAS | 0 | 1:00 | 6:15:00 | 25:00:00 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0026-0035.FLAT | 8 | 1:03 | 6:15:00 | 25:00:00 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0036-0045.BIAS | 0 | 1:05 | 6:15:00 | 25:00:00 | 300 | 90 | 3.0 | #64 Galaxy For | 2 | |
| 0046-0055.FLAT | 16 | 1:11 | 6:15:00 | 25:00:00 | 300 | 90 | 3.0 | #64 Galaxy For | 2 | |
| 0056-0060.sky | 3 | 1:14 | 19:06:00 | 32:00:00 | 300 | 90 | 3.0 | #57 Velocity S | 4 | |
| 0061.COMP | 5 | 1:14 | 19:06:00 | 32:00:00 | 300 | 90 | 3.0 | #57 Velocity S | 4 | |
| 0062.K98-88 | 540 | 2:05 | 22:09:31.8 | 72:58:26 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0063.COMP | 5 | 2:14 | 22:09:31.8 | 72:58:26 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0064.K98-87 | 540 | 2:17 | 22:08:14.4 | 73:27:03 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0065.COMP | 5 | 2:26 | 22:08:14.4 | 73:27:03 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0066.K98-91 | 90 | 2:27 | 22:12:31.5 | 69:56:25 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0067.COMP | 5 | 2:29 | 22:12:31.5 | 69:56:25 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0068.K98-107 | 90 | 2:30 | 22:18:36.1 | 71:57:47 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0069.COMP | 5 | 2:32 | 22:18:36.1 | 71:57:47 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0070.IRAS22129+6949 | 90 | 2:33 | 22:14:06.5 | 70:04:53 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0071.COMP | 5 | 2:35 | 22:14:06.5 | 70:04:53 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0072.sn2004et | 240 | 2:39 | 20:35:25.4 | 60:07:17 | 300 | 0 | 3.0 | #2 SN Observat | 2 | |
| 0073.COMP | 10 | 2:43 | 20:35:25.4 | 60:07:17 | 300 | 0 | 3.0 | #2 SN Observat | 2 | |



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12716

UT Date 2004-10-10 Observers P Berlind

Coll. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bin | Comments |
|-------------------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|--|
| 0074.IRAS22152+6947W | 50 | 2:44 | 22:16:31.3 | 70:02:36 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0075.IRAS22152+6947E | 60 | 2:46 | 22:16:31.3 | 70:02:36 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0076.COMP | 5 | 2:47 | 22:16:31.3 | 70:02:36 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0077.K98-93 | 660 | 2:48 | 22:13:00.5 | 73:27:22 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0078.COMP | 5 | 3:00 | 22:13:00.5 | 73:27:22 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0079.testcomp | 5 | 3:02 | 21:00:00 | 32:00:00 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | ackkk wavelength setting drifting around |
| 0080.testcomp | 5 | 3:03 | 21:00:00 | 32:00:00 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0081.testcomp | 5 | 3:04 | 21:00:00 | 32:00:00 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0082.testcomp | 5 | 3:05 | 21:00:00 | 32:00:00 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | reset wavelength setting |
| 0083.IRASF22181+7335 | 480 | 3:07 | 22:19:06.3 | 73:50:22 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | ok |
| 0084.COMP | 5 | 3:16 | 22:19:06.3 | 73:50:22 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0085.K98-106 | 480 | 3:17 | 22:18:28.1 | 72:16:44 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0086.COMP | 5 | 3:25 | 22:18:28.1 | 72:16:44 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0087.K98-109 | 600 | 3:26 | 22:19:01.6 | 73:46:08 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0088.COMP | 5 | 3:37 | 22:19:01.6 | 73:46:08 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0089.2M18593477+1906217 | 300 | 3:40 | 18:59:34.8 | 19:6:21 | 300 | 0 | 3.0 | #141 Mapping t | 4 | |
| 0090.COMP | 5 | 3:46 | 18:59:34.8 | 19:6:21 | 300 | 0 | 3.0 | #141 Mapping t | 4 | |
| 0091.2M19044485-0336146 | 1800 | 3:48 | 19:4:44.8 | -03:36:14 | 300 | 0 | 3.0 | #141 Mapping t | 2 | |
| 0092.COMP | 10 | 4:18 | 19:4:44.8 | -03:36:14 | 300 | 0 | 3.0 | #141 Mapping t | 2 | |
| 0093.K98-108 | 360 | 4:20 | 22:19:02.1 | 73:19:25 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12717

UT Date 2004-10-10 Observers P Berlind

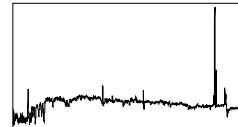
Coll. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|----------------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|----------|
| 0094.COMP | 5 | 4:27 | 22:19:02.1 | 73:19:25 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0095.K98-111 | 120 | 4:28 | 22:19:24.2 | 70:32:05 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0096.COMP | 5 | 4:30 | 22:19:24.2 | 70:32:05 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0097.IRASF22219+7908 | 120 | 4:31 | 22:22:03.3 | 79:23:20 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0098.COMP | 5 | 4:34 | 22:22:03.3 | 79:23:20 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0099.K98-115 | 180 | 4:35 | 22:22:24.7 | 73:44:04 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0100.COMP | 5 | 4:38 | 22:22:24.7 | 73:44:04 | 300 | 0 | 3.0 | #156 Cepheus P | 4 | |
| 0101.sn2004ef | 1800 | 4:41 | 22:42:10.0 | +19:59:40 | 300 | 0 | 3.0 | #2 SN Observat | 4 | |
| 0102.COMP | 5 | 5:13 | 22:42:10.0 | +19:59:40 | 300 | 0 | 3.0 | #2 SN Observat | 4 | |
| 0103.BDp284211 | 90 | 5:16 | 21:48:57.1 | 28:37:48 | 300 | 76 | 3.0 | #56 Spectropho | 2 | |
| 0104.BDp284211 | 90 | 5:17 | 21:48:57.1 | 28:37:48 | 300 | 76 | 3.0 | #56 Spectropho | 2 | |
| 0105.COMP | 10 | 5:19 | 21:48:57.1 | 28:37:48 | 300 | 76 | 3.0 | #56 Spectropho | 2 | |
| 0106.BDp174708 | 45 | 5:21 | 22:11:31.4 | 18:05:34 | 300 | 43 | 3.0 | #56 Spectropho | 2 | |
| 0107.BDp174708 | 45 | 5:22 | 22:11:31.4 | 18:05:34 | 300 | 43 | 3.0 | #56 Spectropho | 2 | |
| 0108.COMP | 10 | 5:23 | 22:11:31.4 | 18:05:34 | 300 | 43 | 3.0 | #56 Spectropho | 2 | |
| 0109.K98-119N | 600 | 5:26 | 22:26:56.5 | 71:18:01 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0110.K98-119S | 900 | 5:36 | 22:26:56.5 | 71:18:01 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0111.COMP | 5 | 5:51 | 22:26:56.5 | 71:18:01 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0112.IRASF22424+7450 | 300 | 5:53 | 22:43:38.8 | 75:06:25 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0113.COMP | 5 | 5:58 | 22:43:38.8 | 75:06:25 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12718

UT Date 2004-10-10 Observers P Berlind

Coll. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|---------------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|------------------|
| 0114.IRAS22480+7533 | 90 | 5:59 | 22:49:17.3 | 75:49:36 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0115.COMP | 5 | 6:01 | 22:49:17.3 | 75:49:36 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0116.K98-135 | 720 | 6:02 | 23:12:22.0 | 74:53:23 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | finishes project |
| 0117.COMP | 5 | 6:14 | 23:12:22.0 | 74:53:23 | 300 | 90 | 3.0 | #156 Cepheus P | 4 | |
| 0118.RAqr | 0 | 6:16 | 23:43:49 | -15:17:05 | 300 | 90 | 3.0 | #12 Symbiotic | 4 | |
| 0119.RAqr | 2 | 6:17 | 23:43:49 | -15:17:05 | 300 | 90 | 3.0 | #12 Symbiotic | 4 | |
| 0120.RAqr | 2 | 6:17 | 23:43:49 | -15:17:05 | 300 | 90 | 3.0 | #12 Symbiotic | 4 | |
| 0121.COMP | 5 | 6:18 | 23:43:49 | -15:17:05 | 300 | 90 | 3.0 | #12 Symbiotic | 4 | |
| 0122.XS02223B6_001 | 1200 | 6:21 | 01:56:37.5 | +05:33:01 | 300 | 90 | 3.0 | #129 CHAMP Sou | 2 | |
| 0123.COMP | 10 | 6:42 | 01:56:37.5 | +05:33:01 | 300 | 90 | 3.0 | #129 CHAMP Sou | 2 | |
| 0124.261_05 | 600 | 6:44 | 01:52:01.4 | -02:25:54 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0125.COMP | 5 | 6:54 | 01:52:01.4 | -02:25:54 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0126.261_06 | 720 | 6:55 | 01:53:47.1 | -02:22:57 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0127.COMP | 5 | 7:07 | 01:53:47.1 | -02:22:57 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0128.261_07 | 720 | 7:08 | 01:51:46.0 | -02:13:56 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0129.COMP | 5 | 7:20 | 01:51:46.0 | -02:13:56 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0130.261_08 | 600 | 7:21 | 01:52:01.3 | -02:10:48 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0131.COMP | 5 | 7:31 | 01:52:01.3 | -02:10:48 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0132.261_09 | 600 | 7:31 | 01:49:47.9 | -02:05:19 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0133.COMP | 5 | 7:42 | 01:49:47.9 | -02:05:19 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12719

UT Date 2004-10-10 Observers P Berlind

Coll. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bin | Comments |
|-------------------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|------------------|
| 0134.261_10 | 720 | 7:42 | 01:49:30.8 | -01:55:20 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0135.COMP | 5 | 7:55 | 01:49:30.8 | -01:55:20 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0136.2M00475430+6807433 | 1800 | 7:58 | 0:47:54.3 | +68:7:43 | 300 | 90 | 3.0 | #141 Mapping t | 2 | oh boy |
| 0137.COMP | 10 | 8:28 | 0:47:54.3 | +68:7:43 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0138.XS01628B3_004 | 1200 | 8:31 | 04:13:58.1 | +05:34:20 | 300 | 90 | 3.0 | #129 CHAMP Sou | 2 | |
| 0139.COMP | 10 | 8:51 | 04:13:58.1 | +05:34:20 | 300 | 90 | 3.0 | #129 CHAMP Sou | 2 | |
| 0140.XS00421B7_016 | 180 | 8:52 | 04:14:42.4 | +05:30:57 | 300 | 90 | 3.0 | #129 CHAMP Sou | 2 | |
| 0141.COMP | 10 | 8:55 | 04:14:42.4 | +05:30:57 | 300 | 90 | 3.0 | #129 CHAMP Sou | 2 | |
| 0142.XS00418B6_001S | 720 | 8:57 | 04:14:48.2 | +05:30:58 | 300 | 60 | 3.0 | #129 CHAMP Sou | 2 | |
| 0143.XS00418B6_001N | 720 | 9:10 | 04:14:48.2 | +05:30:58 | 300 | 60 | 3.0 | #129 CHAMP Sou | 2 | finishes project |
| 0144.COMP | 10 | 9:22 | 04:14:48.2 | +05:30:58 | 300 | 60 | 3.0 | #129 CHAMP Sou | 2 | |
| 0145.484_08 | 900 | 9:25 | 04:18:34.8 | -07:17:51 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0146.COMP | 5 | 9:40 | 04:18:34.8 | -07:17:51 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0147.484_09 | 720 | 9:40 | 04:18:35.7 | -07:10:54 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | finishes project |
| 0148.COMP | 5 | 9:53 | 04:18:35.7 | -07:10:54 | 300 | 90 | 3.0 | #64 Galaxy For | 4 | |
| 0149.2M03331908+6609092 | 1800 | 9:56 | 3:33:19.0 | +66:9:09 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0150.COMP | 10 | 10:26 | 3:33:19.0 | +66:9:09 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0151.2M03351760+4401160 | 600 | 10:27 | 3:35:17.6 | +44:1:16 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0152.COMP | 10 | 10:37 | 3:35:17.6 | +44:1:16 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0153.2M03460109+4201053 | 600 | 10:38 | 3:46:1.0 | +42:1:05 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12720

UT Date 2004-10-10 Observers P Berlind

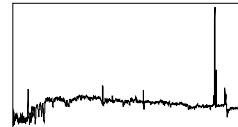
Coll. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|-------------------------|----------|----------|-----------|-----------|-----|------|------|----------------|-----|----------|
| 0154.COMP | 10 | 10:48 | 3:46:1.0 | +42:1:05 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0155.2M04115755+3838463 | 1800 | 10:49 | 4:11:57.5 | +38:38:46 | 300 | 90 | 3.0 | #141 Mapping t | 2 | ugh |
| 0156.COMP | 10 | 11:20 | 4:11:57.5 | +38:38:46 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0157.2M04373506+5414339 | 600 | 11:24 | 4:37:35.0 | +54:14:33 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0158.COMP | 10 | 11:34 | 4:37:35.0 | +54:14:33 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0159.2M04374087+5415389 | 1200 | 11:35 | 4:37:40.8 | +54:15:38 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0160.COMP | 10 | 11:55 | 4:37:40.8 | +54:15:38 | 300 | 90 | 3.0 | #141 Mapping t | 2 | |
| 0161.Ori63 | 15 | 11:59 | 5:28:46.0 | -5:21:49 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0162.Ori63 | 15 | 11:59 | 5:28:46.0 | -5:21:49 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0163.COMP | 5 | 12:00 | 5:28:46.0 | -5:21:49 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0164.Ori64 | 15 | 12:01 | 5:29:18.6 | 1:10:55 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0165.Ori64 | 15 | 12:01 | 5:29:18.6 | 1:10:55 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0166.COMP | 5 | 12:02 | 5:29:18.6 | 1:10:55 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0167.Ori65 | 120 | 12:02 | 5:29:19.5 | -1:3:44 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0168.COMP | 5 | 12:05 | 5:29:19.5 | -1:3:44 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0169.Ori66 | 15 | 12:05 | 5:29:58.4 | 3:33:43 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0170.Ori66 | 15 | 12:06 | 5:29:58.4 | 3:33:43 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0171.COMP | 5 | 12:06 | 5:29:58.4 | 3:33:43 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0172.Ori67 | 45 | 12:09 | 5:30:21.3 | -0:25:13 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0173.Ori67 | 45 | 12:09 | 5:30:21.3 | -0:25:13 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12721

UT Date 2004-10-10 Observers P Berlind

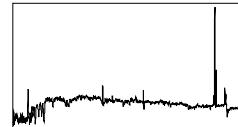
Coll. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bin | Comments |
|------------|----------|----------|-----------|----------|-----|------|------|----------------|-----|----------|
| 0174.COMP | 5 | 12:10 | 5:30:21.3 | -0:25:13 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0175.Ori68 | 5 | 12:11 | 5:30:21.9 | -3:17:57 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0176.Ori68 | 5 | 12:11 | 5:30:21.9 | -3:17:57 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0177.COMP | 5 | 12:12 | 5:30:21.9 | -3:17:57 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0178.Ori69 | 20 | 12:12 | 5:30:32.0 | 3:43:43 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0179.Ori69 | 20 | 12:13 | 5:30:32.0 | 3:43:43 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0180.COMP | 5 | 12:14 | 5:30:32.0 | 3:43:43 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0181.Ori70 | 10 | 12:14 | 5:30:54.6 | 4:25:12 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0182.Ori70 | 10 | 12:15 | 5:30:54.6 | 4:25:12 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0183.COMP | 5 | 12:15 | 5:30:54.6 | 4:25:12 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0184.Ori71 | 15 | 12:16 | 5:30:55.9 | -2:41:56 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0185.Ori71 | 15 | 12:16 | 5:30:55.9 | -2:41:56 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0186.COMP | 5 | 12:17 | 5:30:55.9 | -2:41:56 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0187.Ori72 | 10 | 12:17 | 5:31:20.7 | -1:58:52 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0188.Ori72 | 10 | 12:18 | 5:31:20.7 | -1:58:52 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0189.COMP | 5 | 12:18 | 5:31:20.7 | -1:58:52 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0190.Ori73 | 10 | 12:19 | 5:32:3.9 | -0:25:44 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0191.Ori73 | 10 | 12:19 | 5:32:3.9 | -0:25:44 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0192.COMP | 5 | 12:20 | 5:32:3.9 | -0:25:44 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0193.Ori74 | 6 | 12:20 | 5:32:13.0 | -1:36:1 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12722

UT Date 2004-10-10 Observers P Berlind

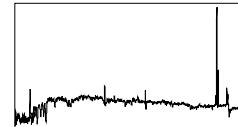
Coll. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bin | Comments |
|------------|----------|----------|-----------|----------|-----|------|------|----------------|-----|----------|
| 0194.Ori74 | 6 | 12:20 | 5:32:13.0 | -1:36:1 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0195.COMP | 5 | 12:21 | 5:32:13.0 | -1:36:1 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0196.Ori75 | 10 | 12:21 | 5:33:15.4 | -1:43:12 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0197.Ori75 | 10 | 12:22 | 5:33:15.4 | -1:43:12 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0198.COMP | 5 | 12:22 | 5:33:15.4 | -1:43:12 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0199.Ori76 | 6 | 12:22 | 5:34:0.4 | -1:45:16 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0200.Ori76 | 6 | 12:23 | 5:34:0.4 | -1:45:16 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0201.COMP | 5 | 12:23 | 5:34:0.4 | -1:45:16 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0202.Ori77 | 4 | 12:24 | 5:34:2.2 | -0:28:34 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0203.Ori77 | 4 | 12:24 | 5:34:2.2 | -0:28:34 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0204.COMP | 5 | 12:24 | 5:34:2.2 | -0:28:34 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0205.Ori78 | 4 | 12:25 | 5:34:9.7 | -1:54:6 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0206.Ori78 | 4 | 12:25 | 5:34:9.7 | -1:54:6 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0207.COMP | 5 | 12:26 | 5:34:9.7 | -1:54:6 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0208.Ori79 | 6 | 12:26 | 5:34:26.2 | -4:22:16 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0209.Ori79 | 6 | 12:26 | 5:34:26.2 | -4:22:16 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0210.COMP | 5 | 12:27 | 5:34:26.2 | -4:22:16 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0211.Ori80 | 4 | 12:27 | 5:34:32.4 | -4:29:14 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0212.Ori80 | 4 | 12:28 | 5:34:32.4 | -4:29:14 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |
| 0213.COMP | 5 | 12:28 | 5:34:32.4 | -4:29:14 | 300 | 0 | 3.0 | #89 Ae/Be star | 4 | |



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



Page 12723

UT Date 2004-10-10 Observers P BerlindColl. Focus 1020 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|-----------------|----------|----------|------------|----------|------|------|------|----------------|-----|----------|
| 0214.Hiltner600 | 45 | 12:29 | 06:42:37.2 | 02:11:25 | 300 | 0 | 3.0 | #56 Spectropho | 4 | |
| 0215.Hiltner600 | 45 | 12:30 | 06:42:37.2 | 02:11:25 | 300 | 0 | 3.0 | #56 Spectropho | 4 | |
| 0216.COMP | 5 | 12:31 | 06:42:37.2 | 02:11:25 | 300 | 0 | 3.0 | #56 Spectropho | 4 | |
| 0217-0226.BIAS | 0 | 12:35 | 6:0:0 | 20:0:0 | 300 | 90 | 3.0 | #129 CHAMP Sou | 4 | |
| 0227-0236.FLAT | 8 | 12:38 | 6:0:0 | 20:0:0 | 300 | 90 | 3.0 | #129 CHAMP Sou | 4 | |
| 0237-0246.BIAS | 0 | 12:40 | 6:0:0 | 20:0:0 | 300 | 90 | 3.0 | #129 CHAMP Sou | 2 | |
| 0247-0256.FLAT | 16 | 12:46 | 6:0:0 | 20:0:0 | 300 | 90 | 3.0 | #129 CHAMP Sou | 2 | |
| 0257.testcomp | 45 | 12:50 | 6:0:0 | 20:0:0 | 1200 | 90 | 1.5 | #129 CHAMP Sou | 2 | |