



WHIPPLE OBSERVATORY

FAST SPECTROGRAPH LOG



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UT Date 2002-02-16 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bin | Comments |
|----------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|---------------------------|
| 0001-0010.DARK | 900 | 2:11 | 12:57:33.9 | 28:28:56 | 300 | 90 | 3.0 | #64f Cluster I | 2 | |
| 0011-0020.BIAS | 0 | 2:28 | 12:57:33.9 | 28:28:56 | 300 | 90 | 3.0 | #64f Cluster I | 2 | |
| 0021-0030.FLAT | 8 | 2:32 | 12:57:33.9 | 28:28:56 | 300 | 90 | 3.0 | #64f Cluster I | 2 | |
| 0031.BIAS | 0 | 2:33 | 12:57:33.9 | 28:28:56 | 300 | 90 | 3.0 | #64f Cluster I | 2 | thick cirrus |
| 0032-0040.BIAS | 0 | 2:35 | 12:57:33.9 | 28:28:56 | 300 | 90 | 3.0 | #64f Cluster I | 2 | |
| 0041-0050.FLAT | 16 | 2:41 | 12:57:33.9 | 28:28:56 | 300 | 90 | 3.0 | #64f Cluster I | 2 | |
| 0051.HIP25302 | 8 | 3:00 | 05:24:44.8 | +01:50:47 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | bright MK stds for Zoltan |
| 0052.HIP25302 | 8 | 3:00 | 05:24:44.8 | +01:50:47 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0053.HIP25302 | 8 | 3:00 | 05:24:44.8 | +01:50:47 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0054.COMP | 5 | 3:01 | 05:24:44.8 | +01:50:47 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0055.HIP25980 | 8 | 3:01 | 05:32:41.3 | -01:35:31 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0056.HIP25980 | 8 | 3:02 | 05:32:41.3 | -01:35:31 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0057.HIP25980 | 8 | 3:03 | 05:32:41.3 | -01:35:31 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0058.COMP | 5 | 3:03 | 05:32:41.3 | -01:35:31 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0059.HIP26063 | 8 | 3:04 | 05:33:31.4 | -01:09:21 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0060.HIP26063 | 8 | 3:04 | 05:33:31.4 | -01:09:21 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0061.HIP26063 | 8 | 3:05 | 05:33:31.4 | -01:09:21 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0062.COMP | 5 | 3:05 | 05:33:31.4 | -01:09:21 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0063.HIP26885 | 8 | 3:06 | 05:42:28.6 | +01:28:28 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0064.HIP26885 | 8 | 3:07 | 05:42:28.6 | +01:28:28 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |



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Coll. Focus 1000 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|---------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|----------|
| 0065.HIP26885 | 8 | 3:08 | 05:42:28.6 | +01:28:28 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0066.COMP | 5 | 3:08 | 05:42:28.6 | +01:28:28 | 300 | 0 | 3.0 | #89 Ae/Be Star | 4 | |
| 0067.HD13738 | 30 | 3:20 | 02:15:28 | 52:30:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0068.HD13738 | 60 | 3:21 | 02:15:28 | 52:30:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0069.COMP | 5 | 3:22 | 02:15:28 | 52:30:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0070.HD14372 | 60 | 3:23 | 02:20:41 | 47:18:39 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0071.HD14372 | 60 | 3:24 | 02:20:41 | 47:18:39 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0072.COMP | 5 | 3:26 | 02:20:41 | 47:18:39 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0073.HD16160 | 60 | 3:27 | 02:35:58 | 06:52:00 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0074.HD16160 | 90 | 3:28 | 02:35:58 | 06:52:00 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0075.COMP | 5 | 3:30 | 02:35:58 | 06:52:00 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0076.HD20791 | 60 | 3:31 | 03:21:05 | 03:40:32 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0077.HD20791 | 60 | 3:32 | 03:21:05 | 03:40:32 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0078.COMP | 5 | 3:34 | 03:21:05 | 03:40:32 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0079.HD26965 | 30 | 3:35 | 04:15:23 | -07:36:19 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0080.HD26965 | 30 | 3:35 | 04:15:23 | -07:36:19 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0081.COMP | 5 | 3:36 | 04:15:23 | -07:36:19 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0082.HD16908 | 60 | 3:38 | 02:43:27 | 27:42:26 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0083.HD16908 | 30 | 3:39 | 02:43:27 | 27:42:26 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0084.COMP | 5 | 3:40 | 02:43:27 | 27:42:26 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |



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| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|--------------|----------|----------|----------|----------|-----|------|------|----------------|-----|----------|
| 0085.HD16895 | 25 | 3:41 | 02:44:10 | 49:13:47 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0086.HD16895 | 20 | 3:41 | 02:44:10 | 49:13:47 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0087.COMP | 5 | 3:42 | 02:44:10 | 49:13:47 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0088.HD17709 | 15 | 3:43 | 02:51:30 | 35:03:38 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0089.HD17709 | 10 | 3:44 | 02:51:30 | 35:03:38 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0090.COMP | 5 | 3:44 | 02:51:30 | 35:03:38 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0091.HD19807 | 30 | 3:45 | 03:12:30 | 37:09:04 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0092.HD19807 | 100 | 3:45 | 03:12:30 | 37:09:04 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0093.COMP | 5 | 3:47 | 03:12:30 | 37:09:04 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0094.HD21071 | 30 | 3:48 | 03:25:57 | 49:07:16 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0095.HD21071 | 15 | 3:49 | 03:25:57 | 49:07:16 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0096.COMP | 5 | 3:49 | 03:25:57 | 49:07:16 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0097.HD21447 | 15 | 3:50 | 03:30:00 | 55:27:07 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0098.HD21447 | 10 | 3:51 | 03:30:00 | 55:27:07 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0099.COMP | 5 | 3:51 | 03:30:00 | 55:27:07 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0100.HD22951 | 10 | 3:52 | 03:42:22 | 33:57:54 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0101.HD22951 | 10 | 3:53 | 03:42:22 | 33:57:54 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0102.COMP | 5 | 3:53 | 03:42:22 | 33:57:54 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0103.HD23585 | 30 | 3:54 | 03:47:03 | 23:59:44 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0104.HD23585 | 90 | 3:55 | 03:47:03 | 23:59:44 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |



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|--------------|----------|----------|----------|----------|-----|------|------|----------------|-----|----------|
| 0105.COMP | 5 | 3:56 | 03:47:03 | 23:59:44 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0106.HD23873 | 30 | 3:57 | 03:49:21 | 24:22:52 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0107.HD23873 | 30 | 3:58 | 03:49:21 | 24:22:52 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0108.COMP | 5 | 3:59 | 03:49:21 | 24:22:52 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0109.HD23886 | 90 | 3:59 | 03:49:25 | 24:14:54 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0110.HD23886 | 100 | 4:01 | 03:49:25 | 24:14:54 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0111.COMP | 5 | 4:03 | 03:49:25 | 24:14:54 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0112.HD23948 | 45 | 4:03 | 03:49:56 | 24:20:58 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0113.HD23948 | 120 | 4:04 | 03:49:56 | 24:20:58 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0114.COMP | 5 | 4:07 | 03:49:56 | 24:20:58 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0115.HD24131 | 30 | 4:07 | 03:51:53 | 34:21:32 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0116.HD24131 | 30 | 4:08 | 03:51:53 | 34:21:32 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0117.COMP | 5 | 4:09 | 03:51:53 | 34:21:32 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0118.HD26015 | 30 | 4:10 | 04:07:41 | 15:09:46 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0119.HD26015 | 60 | 4:11 | 04:07:41 | 15:09:46 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0120.COMP | 5 | 4:12 | 04:07:41 | 15:09:46 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0121.HD27383 | 60 | 4:13 | 04:19:54 | 16:31:22 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0122.HD27383 | 120 | 4:14 | 04:19:54 | 16:31:22 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0123.COMP | 5 | 4:16 | 04:19:54 | 16:31:22 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0124.HD27534 | 60 | 4:17 | 04:21:31 | 18:25:05 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |



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|--------------|----------|----------|----------|----------|-----|------|------|----------------|-----|----------|
| 0125.HD27534 | 120 | 4:18 | 04:21:31 | 18:25:05 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0126.COMP | 5 | 4:20 | 04:21:31 | 18:25:05 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0127.HD27697 | 10 | 4:21 | 04:22:55 | 17:32:34 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0128.HD27697 | 15 | 4:21 | 04:22:55 | 17:32:34 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0129.COMP | 5 | 4:22 | 04:22:55 | 17:32:34 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0130.HD27836 | 150 | 4:22 | 04:24:12 | 14:45:30 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0131.HD27836 | 180 | 4:25 | 04:24:12 | 14:45:30 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0132.COMP | 5 | 4:28 | 04:24:12 | 14:45:30 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0133.HD27808 | 240 | 4:29 | 04:24:14 | 21:44:12 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0134.HD27808 | 240 | 4:33 | 04:24:14 | 21:44:12 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0135.COMP | 5 | 4:38 | 04:24:14 | 21:44:12 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0136.HD28305 | 60 | 4:39 | 04:28:36 | 19:10:51 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0137.HD28305 | 60 | 4:40 | 04:28:36 | 19:10:51 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0138.COMP | 5 | 4:41 | 04:28:36 | 19:10:51 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0139.HD34078 | 90 | 4:42 | 05:16:17 | 34:18:41 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0140.HD34078 | 180 | 4:44 | 05:16:17 | 34:18:41 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0141.COMP | 5 | 4:47 | 05:16:17 | 34:18:41 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0142.HD35620 | 120 | 4:49 | 05:27:38 | 34:28:34 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0143.HD35620 | 120 | 4:51 | 05:27:38 | 34:28:34 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0144.COMP | 5 | 4:53 | 05:27:38 | 34:28:34 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |



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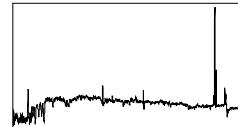
Coll. Focus 1000 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|---------------|----------|----------|----------|-----------|-----|------|------|----------------|-----|----------|
| 0145.HD36134 | 180 | 4:55 | 05:29:22 | -03:26:46 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0146.HD36134 | 300 | 4:59 | 05:29:22 | -03:26:46 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0147.COMP | 5 | 5:04 | 05:29:22 | -03:26:46 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0148.HD36389 | 90 | 5:05 | 05:32:12 | 18:35:39 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0149.HD36389 | 45 | 5:08 | 05:32:12 | 18:35:39 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0150.COMP | 5 | 5:09 | 05:32:12 | 18:35:39 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0151.HD35601 | 120 | 5:10 | 05:27:10 | 29:55:15 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0152.HD35601 | 150 | 5:12 | 05:27:10 | 29:55:15 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0153.COMP | 5 | 5:15 | 05:27:10 | 29:55:15 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0154.HD232979 | 420 | 5:16 | 04:37:39 | 52:54:01 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0155.COMP | 5 | 5:23 | 04:37:39 | 52:54:01 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0156.HD28099 | 600 | 5:25 | 04:26:39 | 16:44:49 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0157.COMP | 5 | 5:39 | 04:26:39 | 16:44:49 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0158.HD36395 | 360 | 5:40 | 05:31:24 | -03:38:54 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0159.COMP | 5 | 5:46 | 05:31:24 | -03:38:54 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0160.HD36936 | 360 | 5:47 | 05:34:58 | -04:21:14 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0161.COMP | 5 | 5:53 | 05:34:58 | -04:21:14 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0162.HD37016 | 360 | 5:53 | 05:35:21 | -04:25:29 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0163.COMP | 5 | 6:00 | 05:35:21 | -04:25:29 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0164.HD37468 | 90 | 6:00 | 05:38:44 | -02:36:00 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |



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|--------------|----------|----------|----------|-----------|-----|------|------|----------------|-----|----------|
| 0165.HD37468 | 60 | 6:02 | 05:38:44 | -02:36:00 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0166.COMP | 5 | 6:04 | 05:38:44 | -02:36:00 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0167.HD39045 | 60 | 6:05 | 05:51:25 | 32:07:28 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0168.HD39045 | 60 | 6:06 | 05:51:25 | 32:07:28 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0169.COMP | 5 | 6:07 | 05:51:25 | 32:07:28 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0170.HD39587 | 5 | 6:08 | 05:54:23 | 20:16:38 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0171.HD39587 | 15 | 6:09 | 05:54:23 | 20:16:38 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0172.COMP | 5 | 6:09 | 05:54:23 | 20:16:38 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0173.HD41161 | 15 | 6:11 | 06:05:48 | 48:14:49 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0174.HD41161 | 20 | 6:11 | 06:05:48 | 48:14:49 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0175.COMP | 5 | 6:12 | 06:05:48 | 48:14:49 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0176.HD46149 | 60 | 6:13 | 06:31:55 | 05:01:51 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0177.HD46149 | 180 | 6:14 | 06:31:55 | 05:01:51 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0178.COMP | 5 | 6:18 | 06:31:55 | 05:01:51 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0179.HD50281 | 480 | 6:21 | 06:52:19 | -05:11:23 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0180.COMP | 5 | 6:30 | 06:52:19 | -05:11:23 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0181.HD54895 | 60 | 6:31 | 07:13:22 | 51:25:42 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0182.HD54895 | 30 | 6:33 | 07:13:22 | 51:25:42 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0183.COMP | 5 | 6:33 | 07:13:22 | 51:25:42 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0184.HD56537 | 15 | 6:35 | 07:18:05 | 16:32:27 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |



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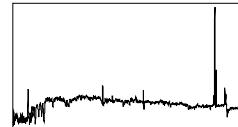
Coll. Focus 1000 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|--------------|----------|----------|----------|-----------|-----|------|------|----------------|-----|----------|
| 0185.HD56537 | 15 | 6:35 | 07:18:05 | 16:32:27 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0186.COMP | 5 | 6:36 | 07:18:05 | 16:32:27 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0187.HD60522 | 15 | 6:36 | 07:35:55 | 26:53:49 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0188.HD60522 | 15 | 6:37 | 07:35:55 | 26:53:49 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0189.COMP | 5 | 6:38 | 07:35:55 | 26:53:49 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0190.HD70272 | 15 | 6:38 | 08:22:50 | 43:11:22 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0191.HD70272 | 15 | 6:39 | 08:22:50 | 43:11:22 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0192.COMP | 5 | 6:39 | 08:22:50 | 43:11:22 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0193.HD71155 | 15 | 6:41 | 08:25:39 | -03:54:21 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0194.HD71155 | 15 | 6:41 | 08:25:39 | -03:54:21 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0195.COMP | 5 | 6:42 | 08:25:39 | -03:54:21 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0196.HD42088 | 120 | 6:47 | 06:09:41 | 20:29:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0197.HD42088 | 180 | 6:49 | 06:09:41 | 20:29:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0198.COMP | 5 | 6:52 | 06:09:41 | 20:29:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0199.HD76830 | 60 | 6:53 | 08:59:10 | 18:08:08 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0200.HD76830 | 30 | 6:54 | 08:59:10 | 18:08:08 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0201.COMP | 5 | 6:55 | 08:59:10 | 18:08:08 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0202.HD88230 | 30 | 6:56 | 10:11:29 | 49:27:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0203.HD88230 | 60 | 6:57 | 10:11:29 | 49:27:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0204.COMP | 5 | 6:58 | 10:11:29 | 49:27:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |



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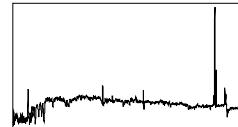
Coll. Focus 1000 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
|---------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|-------------|
| 0205.HD237903 | 120 | 6:59 | 10:30:26 | 55:59:58 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0206.HD237903 | 180 | 7:01 | 10:30:26 | 55:59:58 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0207.COMP | 5 | 7:05 | 10:30:26 | 55:59:58 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0208.HD101501 | 30 | 7:07 | 11:41:02 | 34:12:24 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0209.HD101501 | 60 | 7:07 | 11:41:02 | 34:12:24 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0210.COMP | 5 | 7:09 | 11:41:02 | 34:12:24 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0211.HD94705 | 30 | 7:10 | 10:56:01 | 06:11:07 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0212.HD94705 | 60 | 7:10 | 10:56:01 | 06:11:07 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0213.COMP | 5 | 7:12 | 10:56:01 | 06:11:07 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0214.HD87696 | 60 | 7:15 | 10:07:25 | 35:14:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0215.HD87696 | 60 | 7:17 | 10:07:25 | 35:14:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0216.COMP | 5 | 7:19 | 10:07:25 | 35:14:40 | 300 | 90 | 3.0 | #115 PMS NGC68 | 4 | |
| 0217.Feige34 | 300 | 8:31 | 10:36:41.2 | 43:21:50 | 300 | 90 | 3.0 | #56 Spectropho | 4 | sucker hole |
| 0218.Feige34 | 300 | 8:36 | 10:36:41.2 | 43:21:50 | 300 | 90 | 3.0 | #56 Spectropho | 4 | |
| 0219.COMP | 5 | 8:42 | 10:36:41.2 | 43:21:50 | 300 | 90 | 3.0 | #56 Spectropho | 4 | |
| 0220.N3227 | 240 | 9:31 | 10:23:30.6 | +19:51:54 | 300 | 57 | 3.0 | #6 AGN Monitor | 4 | sucker hole |
| 0221.N3227 | 240 | 9:35 | 10:23:30.6 | +19:51:54 | 300 | 57 | 3.0 | #6 AGN Monitor | 4 | |
| 0222.COMP | 5 | 9:39 | 10:23:30.6 | +19:51:54 | 300 | 57 | 3.0 | #6 AGN Monitor | 4 | |
| 0223.MRK421 | 360 | 9:41 | 11:04:27.4 | +38:12:32 | 300 | 100 | 3.0 | #133 MRK421 | 4 | |
| 0224.MRK421 | 360 | 9:47 | 11:04:27.4 | +38:12:32 | 300 | 100 | 3.0 | #133 MRK421 | 4 | |



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UT Date 2002-02-16 Observers P Berlind

Coll. Focus 1000 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bin | Comments |
|----------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|--------------|
| 0225.MRK421 | 360 | 9:53 | 11:04:27.4 | +38:12:32 | 300 | 100 | 3.0 | #133 MRK421 | 4 | |
| 0226.COMP | 5 | 9:59 | 11:04:27.4 | +38:12:32 | 300 | 100 | 3.0 | #133 MRK421 | 4 | |
| 0227.comas_030 | 600 | 11:22 | 12:58:58.1 | 27:35:41 | 300 | 100 | 3.0 | #64f Cluster I | 4 | clearing |
| 0228.COMP | 5 | 11:32 | 12:58:58.1 | 27:35:41 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0229.comas_031 | 330 | 11:33 | 12:59:15.2 | 27:58:14 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0230.COMP | 5 | 11:39 | 12:59:15.2 | 27:58:14 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0231.comas_032 | 240 | 11:39 | 12:59:19.9 | 28:05:03 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0232.COMP | 5 | 11:43 | 12:59:19.9 | 28:05:03 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0233.comas_033 | 300 | 11:44 | 12:59:30.8 | 27:53:03 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0234.COMP | 5 | 11:49 | 12:59:30.8 | 27:53:03 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0235.comas_034 | 300 | 11:50 | 12:59:31.4 | 28:02:47 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0236.COMP | 5 | 11:55 | 12:59:31.4 | 28:02:47 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0237.comas_035 | 360 | 11:56 | 12:59:46.8 | 27:58:26 | 300 | 100 | 3.0 | #64f Cluster I | 4 | coma central |
| 0238.COMP | 5 | 12:02 | 12:59:46.8 | 27:58:26 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0239.comas_036 | 300 | 12:08 | 12:59:47.4 | 21:48:47 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0240.COMP | 5 | 12:13 | 12:59:47.4 | 21:48:47 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0241.comas_037 | 420 | 12:14 | 13:00:02.1 | 33:26:15 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0242.COMP | 5 | 12:21 | 13:00:02.1 | 33:26:15 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0243.comas_038 | 360 | 12:22 | 13:00:06.5 | 29:27:45 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0244.COMP | 5 | 12:28 | 13:00:06.5 | 29:27:45 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |



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UT Date 2002-02-16 Observers P BerlindColl. Focus 1000 Grating/Grism 300

| File | Exp Time | UT Start | RA | Dec | Gr. | P.A. | Slit | Program | Bin | Comments |
|----------------|----------|----------|------------|----------|-----|------|------|----------------|-----|--------------------------|
| 0245.comas_039 | 720 | 12:29 | 13:00:35.7 | 27:34:26 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0246.COMP | 5 | 12:41 | 13:00:35.7 | 27:34:26 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0247.comas_040 | 300 | 12:42 | 13:02:18.3 | 32:53:25 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0248.COMP | 5 | 12:47 | 13:02:18.3 | 32:53:25 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0249.comas_041 | 300 | 12:48 | 13:02:54.4 | 23:39:25 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0250.COMP | 5 | 12:53 | 13:02:54.4 | 23:39:25 | 300 | 100 | 3.0 | #64f Cluster I | 4 | |
| 0251.BDp332642 | 60 | 12:54 | 15:50:03 | 33:05:49 | 300 | 100 | 3.0 | #56 Spectropho | 4 | |
| 0252.BDp332642 | 60 | 12:55 | 15:50:03 | 33:05:49 | 300 | 100 | 3.0 | #56 Spectropho | 4 | |
| 0253.COMP | 5 | 12:56 | 15:50:03 | 33:05:49 | 300 | 100 | 3.0 | #56 Spectropho | 4 | |
| 0254.BIAS | 0 | 12:58 | 15:50:03 | 33:05:49 | 300 | 100 | 3.0 | #133 MRK421 | 4 | a few thin clouds @ dawn |
| 0255-0263.BIAS | 0 | 12:59 | 15:50:03 | 33:05:49 | 300 | 100 | 3.0 | #133 MRK421 | 4 | |
| 0264-0273.FLAT | 8 | 13:02 | 15:50:03 | 33:05:49 | 300 | 100 | 3.0 | #133 MRK421 | 4 | |
| 0274-0283.BIAS | 0 | 13:04 | 15:50:03 | 33:05:49 | 300 | 100 | 3.0 | #133 MRK421 | 2 | |
| 0284-0293.FLAT | 16 | 13:09 | 15:50:03 | 33:05:49 | 300 | 100 | 3.0 | #133 MRK421 | 2 | |