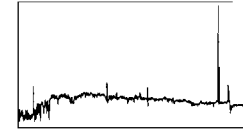


UT Date 2003-06-03 Observers M CalkinsColl. Focus 820 Grating/Grism 600

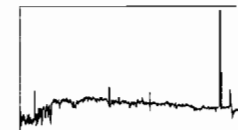
| <i>File</i>    | <i>Exp Time</i> | <i>UT Start</i> | <i>RA</i>  | <i>Dec</i> | <i>Gr.</i> | <i>P.A.</i> | <i>Slit</i> | <i>Program</i> | <i>Bin</i> | <i>Comments</i> |
|----------------|-----------------|-----------------|------------|------------|------------|-------------|-------------|----------------|------------|-----------------|
| 0001-0003.DARK | 900             | 2:09            | 21:48:57.1 | 28:37:48   | 600        | 90          | 2.0         | #88f           | 2          |                 |
| 0004-0013.BIAS | 0               | 2:27            | 21:48:57.1 | 28:37:48   | 600        | 90          | 2.0         | #88f           | 2          |                 |
| 0014-0023.FLAT | 35              | 2:35            | 21:48:57.1 | 28:37:48   | 600        | 90          | 2.0         | #88f           | 2          |                 |
| 0024-0028.sky  | 4               | 2:40            | 21:48:57.1 | 28:37:48   | 600        | 90          | 2.0         | #88f           | 2          |                 |
| 0029.COMP      | 30              | 2:41            | 21:48:57.1 | 28:37:48   | 600        | 90          | 2.0         | #88f           | 2          |                 |
| 0030.Feige34   | 180             | 3:18            | 10:36:41.2 | 43:21:50   | 600        | 106         | 2.0         | #56 Spectropho | 2          | em obs          |
| 0031.COMP      | 30              | 3:21            | 10:36:41.2 | 43:21:50   | 600        | 106         | 2.0         | #56 Spectropho | 2          |                 |
| 0032.COMP      | 30              | 3:28            | 11:03:00.5 | +31:58:16  | 600        | 7           | 2.0         | #88 Mass Funct | 2          |                 |
| 0033.MF0001    | 600             | 3:29            | 11:03:00.5 | +31:58:16  | 600        | 7           | 2.0         | #88 Mass Funct | 2          |                 |
| 0034.MF0001    | 600             | 3:39            | 11:03:00.5 | +31:58:16  | 600        | 7           | 2.0         | #88 Mass Funct | 2          |                 |
| 0035.MF0001    | 600             | 3:49            | 11:03:00.5 | +31:58:16  | 600        | 7           | 2.0         | #88 Mass Funct | 2          |                 |
| 0036.COMP      | 30              | 4:00            | 11:03:00.5 | +31:58:16  | 600        | 7           | 2.0         | #88 Mass Funct | 2          |                 |
| 0037.COMP      | 30              | 4:03            | 11:20:50.5 | +19:22:26  | 600        | 110         | 2.0         | #88 Mass Funct | 2          |                 |
| 0038.MF0010    | 900             | 4:04            | 11:20:50.5 | +19:22:26  | 600        | 110         | 2.0         | #88 Mass Funct | 2          |                 |
| 0039.MF0010    | 900             | 4:19            | 11:20:50.5 | +19:22:26  | 600        | 110         | 2.0         | #88 Mass Funct | 2          |                 |
| 0040.MF0010    | 900             | 4:35            | 11:20:50.5 | +19:22:26  | 600        | 110         | 2.0         | #88 Mass Funct | 2          |                 |
| 0041.COMP      | 30              | 4:50            | 11:20:50.5 | +19:22:26  | 600        | 110         | 2.0         | #88 Mass Funct | 2          |                 |
| 0042.COMP      | 30              | 4:54            | 11:26:44.2 | +59:09:19  | 600        | -25         | 2.0         | #88 Mass Funct | 2          |                 |
| 0043.MF7087    | 600             | 4:55            | 11:26:44.2 | +59:09:19  | 600        | -25         | 2.0         | #88 Mass Funct | 2          |                 |
| 0044.MF7087    | 600             | 5:06            | 11:26:44.2 | +59:09:19  | 600        | -25         | 2.0         | #88 Mass Funct | 2          |                 |



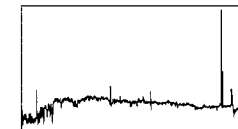
UT Date 2003-06-03 Observers M Calkins

Coll. Focus 820 Grating/Grism 600

| File           | Exp Time | UT Start | RA         | Dec       | Gr. | P.A. | Slit | Program        | Bin | Comments      |
|----------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|---------------|
| 0045.MF7087    | 600      | 5:16     | 11:26:44.2 | +59:09:19 | 600 | -25  | 2.0  | #88 Mass Funct | 2   |               |
| 0046.COMP      | 30       | 5:26     | 11:26:44.2 | +59:09:19 | 600 | -25  | 2.0  | #88 Mass Funct | 2   |               |
| 0047.MF6006    | 450      | 5:29     | 11:42:23.6 | +10:15:51 | 600 | 65   | 2.0  | #88 Mass Funct | 2   |               |
| 0048.MF6006    | 450      | 5:37     | 11:42:23.6 | +10:15:51 | 600 | 65   | 2.0  | #88 Mass Funct | 2   |               |
| 0049.COMP      | 30       | 5:45     | 11:42:23.6 | +10:15:51 | 600 | 65   | 2.0  | #88 Mass Funct | 2   |               |
| 0050.FineFoc   | 60       | 5:52     | 14:54:52.5 | 31:25:24  | 600 | 90   | 2.0  | #88 Mass Funct | 1   |               |
| 0051.FineFoc   | 60       | 5:56     | 14:54:52.5 | 31:25:24  | 600 | 90   | 2.0  | #88 Mass Funct | 1   |               |
| 0052.COMP      | 30       | 6:03     | 12:04:51.1 | +63:07:53 | 600 | 75   | 2.0  | #88 Mass Funct | 2   | begin abs obs |
| 0053.MF4063    | 900      | 6:04     | 12:04:51.1 | +63:07:53 | 600 | 75   | 2.0  | #88 Mass Funct | 2   |               |
| 0054.MF4063    | 900      | 6:19     | 12:04:51.1 | +63:07:53 | 600 | 75   | 2.0  | #88 Mass Funct | 2   |               |
| 0055.MF4063    | 900      | 6:35     | 12:04:51.1 | +63:07:53 | 600 | 75   | 2.0  | #88 Mass Funct | 2   |               |
| 0056.COMP      | 30       | 6:50     | 12:04:51.1 | +63:07:53 | 600 | 75   | 2.0  | #88 Mass Funct | 2   |               |
| 0057.HD145457  | 49       | 6:53     | 16:10:03.9 | 26:44:33  | 600 | 90   | 2.0  | #88f Mass Func | 2   |               |
| 0058.COMP      | 30       | 6:54     | 16:10:03.9 | 26:44:33  | 600 | 90   | 2.0  | #88f Mass Func | 2   |               |
| 0059.NGC4839   | 240      | 6:59     | 12:54:59.0 | 27:46:00  | 600 | 72   | 2.0  | #88f Mass Func | 2   |               |
| 0060.NGC4839   | 240      | 7:03     | 12:54:59.0 | 27:46:00  | 600 | 72   | 2.0  | #88f Mass Func | 2   |               |
| 0061.NGC4839   | 240      | 7:07     | 12:54:59.0 | 27:46:00  | 600 | 72   | 2.0  | #88f Mass Func | 2   |               |
| 0062.COMP      | 30       | 7:12     | 12:54:59.0 | 27:46:00  | 600 | 72   | 2.0  | #88f Mass Func | 2   |               |
| 0063.BDp332642 | 90       | 7:15     | 15:50:03   | 33:05:49  | 600 | 95   | 2.0  | #56 Spectropho | 2   |               |
| 0064.COMP      | 30       | 7:17     | 15:50:03   | 33:05:49  | 600 | 95   | 2.0  | #56 Spectropho | 2   |               |

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| File          | Exp Time | UT Start | RA         | Dec       | Gr. | P.A. | Slit | Program        | Bin | Comments |
|---------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|----------|
| 0065.COMP     | 30       | 7:20     | 13:16:58.4 | +07:50:39 | 600 | 5    | 2.0  | #88 Mass Funct | 2   |          |
| 0066.MF7036   | 900      | 7:21     | 13:16:58.4 | +07:50:39 | 600 | 5    | 2.0  | #88 Mass Funct | 2   |          |
| 0067.MF7036   | 900      | 7:37     | 13:16:58.4 | +07:50:39 | 600 | 5    | 2.0  | #88 Mass Funct | 2   |          |
| 0068.MF7036   | 900      | 7:52     | 13:16:58.4 | +07:50:39 | 600 | 5    | 2.0  | #88 Mass Funct | 2   |          |
| 0069.COMP     | 30       | 8:07     | 13:16:58.4 | +07:50:39 | 600 | 5    | 2.0  | #88 Mass Funct | 2   |          |
| 0070.COMP     | 30       | 8:10     | 16:32:58.9 | +23:11:50 | 600 | 70   | 2.0  | #88 Mass Funct | 2   |          |
| 0071.MF7007   | 900      | 8:11     | 16:32:58.9 | +23:11:50 | 600 | 70   | 2.0  | #88 Mass Funct | 2   |          |
| 0072.MF7007   | 900      | 8:26     | 16:32:58.9 | +23:11:50 | 600 | 70   | 2.0  | #88 Mass Funct | 2   |          |
| 0073.MF7007   | 900      | 8:41     | 16:32:58.9 | +23:11:50 | 600 | 70   | 2.0  | #88 Mass Funct | 2   |          |
| 0074.COMP     | 30       | 8:57     | 16:32:58.9 | +23:11:50 | 600 | 70   | 2.0  | #88 Mass Funct | 2   |          |
| 0075.COMP     | 30       | 9:00     | 16:05:39.9 | +18:03:20 | 600 | 0    | 2.0  | #88 Mass Funct | 2   |          |
| 0076.MF7134   | 900      | 9:01     | 16:05:39.9 | +18:03:20 | 600 | 0    | 2.0  | #88 Mass Funct | 2   |          |
| 0077.MF7134   | 900      | 9:17     | 16:05:39.9 | +18:03:20 | 600 | 0    | 2.0  | #88 Mass Funct | 2   |          |
| 0078.MF7134   | 900      | 9:32     | 16:05:39.9 | +18:03:20 | 600 | 0    | 2.0  | #88 Mass Funct | 2   |          |
| 0079.COMP     | 30       | 9:47     | 16:05:39.9 | +18:03:20 | 600 | 0    | 2.0  | #88 Mass Funct | 2   |          |
| 0080.HD162555 | 40       | 9:50     | 17:50:22.9 | 29:19:19  | 600 | 90   | 2.0  | #88f Mass Func | 2   |          |
| 0081.COMP     | 30       | 9:52     | 17:50:22.9 | 29:19:19  | 600 | 90   | 2.0  | #88f Mass Func | 2   |          |
| 0082.COMP     | 30       | 9:56     | 17:46:39.5 | +51:16:53 | 600 | -10  | 2.0  | #88 Mass Funct | 2   |          |
| 0083.MF7104   | 900      | 9:57     | 17:46:39.5 | +51:16:53 | 600 | -10  | 2.0  | #88 Mass Funct | 2   |          |
| 0084.MF7104   | 900      | 10:12    | 17:46:39.5 | +51:16:53 | 600 | -10  | 2.0  | #88 Mass Funct | 2   |          |

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| File           | Exp Time | UT Start | RA         | Dec       | Gr. | P.A. | Slit | Program        | Bin | Comments                   |
|----------------|----------|----------|------------|-----------|-----|------|------|----------------|-----|----------------------------|
| 0085.MF7104    | 900      | 10:27    | 17:46:39.5 | +51:16:53 | 600 | -10  | 2.0  | #88 Mass Funct | 2   |                            |
| 0086.MF7104    | 900      | 10:43    | 17:46:39.5 | +51:16:53 | 600 | -10  | 2.0  | #88 Mass Funct | 2   |                            |
| 0087.COMP      | 30       | 10:58    | 17:46:39.5 | +51:16:53 | 600 | -10  | 2.0  | #88 Mass Funct | 2   |                            |
| 0088.NGC7331   | 180      | 11:03    | 22:34:46.6 | 34:09:20  | 600 | 94   | 2.0  | #88f Mass Func | 2   |                            |
| 0089.NGC7331   | 180      | 11:06    | 22:34:46.6 | 34:09:20  | 600 | 94   | 2.0  | #88f Mass Func | 2   |                            |
| 0090.NGC7331   | 180      | 11:09    | 22:34:46.6 | 34:09:20  | 600 | 94   | 2.0  | #88f Mass Func | 2   |                            |
| 0091.COMP      | 30       | 11:13    | 22:34:46.6 | 34:09:20  | 600 | 94   | 2.0  | #88f Mass Func | 2   |                            |
| 0092.BDp284211 | 120      | 11:15    | 21:48:57.1 | 28:37:48  | 600 | 105  | 2.0  | #56 Spectropho | 2   |                            |
| 0093.BDp284211 | 120      | 11:17    | 21:48:57.1 | 28:37:48  | 600 | 105  | 2.0  | #56 Spectropho | 2   |                            |
| 0094.COMP      | 30       | 11:20    | 21:48:57.1 | 28:37:48  | 600 | 105  | 2.0  | #56 Spectropho | 2   |                            |
| 0095.HD197989  | 15       | 11:22    | 20:46:12.7 | 33:58:12  | 600 | 90   | 2.0  | #88f Mass Func | 2   | saturated, find another... |
| 0096.COMP      | 30       | 11:23    | 20:46:12.7 | 33:58:12  | 600 | 90   | 2.0  | #88f Mass Func | 2   |                            |
| 0097.HD166842  | 37       | 11:28    | 18:11:32.0 | 25:33:40  | 600 | 90   | 2.0  | #88f Mass Func | 2   |                            |
| 0098.COMP      | 30       | 11:29    | 18:11:32.0 | 25:33:40  | 600 | 90   | 2.0  | #88f Mass Func | 2   |                            |
| 0099-0103.sky  | 2        | 12:16    | 18:11:32.0 | 25:33:40  | 600 | 90   | 2.0  | #88f Mass Func | 2   |                            |
| 0104.COMP      | 30       | 12:16    | 18:11:32.0 | 25:33:40  | 600 | 90   | 2.0  | #88f Mass Func | 2   |                            |
| 0105-0114.BIAS | 0        | 12:22    | 18:11:32.0 | 25:33:40  | 600 | 90   | 2.0  | #88f Mass Func | 2   |                            |
| 0115-0124.FLAT | 35       | 12:30    | 18:11:32.0 | 25:33:40  | 600 | 90   | 2.0  | #88f Mass Func | 2   |                            |
| 0125-0134.DARK | 900      | 14:48    | 18:11:32.0 | 25:33:40  | 600 | 90   | 2.0  | #88f Mass Func | 2   |                            |