UT Date 2002-02-21 Observers P Berlind

| File | Exp Time | $\underset{\text { Start }}{U T}$ | $R A$ | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0001. BIAS | 0 | 3:42 | 06:21:26.0 | 31:30:26 | 300 | 0 | 3.0 | \#2 SN Observat | 4 | big problems with ccd binning |
| 0002-0010.BIAS | 0 | 3:43 | 06:22:31.0 | 31:30:26 | 300 | 0 | 3.0 | \#2 SN Observat | 4 |  |
| 0011.FLAT | 8 | 3:43 | 06:23:19.0 | 31:30:26 | 300 | 0 | 3.0 | \#2 SN Observat | 4 | plus early problems with collimator focus |
| 0012-0014.FLAT | 8 | 3:44 | 06:24:02.0 | 31:30:26 | 300 | 0 | 3.0 | \#2 SN Observat | 4 |  |
| 0015-0020.FLAT | 8 | 3:46 | 06:25:33.0 | 31:30:27 | 300 | 0 | 3.0 | \#2 SN Observat | 4 |  |
| 0021. BIAS | 0 | 3:46 | 06:26:03.0 | 31:30:27 | 300 | 0 | 3.0 | \#2 SN Observat | 2 | these flats and bias frames look ok |
| 0022-0030.BIAS | 0 | 3:48 | 06:27:57.0 | 31:30:27 | 300 | 0 | 3.0 | \#2 SN Observat | 2 |  |
| 0031-0032.FLAT | 16 | 3:49 | 06:29:19.0 | 31:30:27 | 300 | 0 | 3.0 | \#2 SN Observat | 2 |  |
| 0033-0040.FLAT | 16 | 3:53 | 06:33:09.0 | 31:30:28 | 300 | 0 | 3.0 | \#2 SN Observat | 2 |  |
| 0041.Hiltner600 | 60 | 3:57 | 06:42:37.2 | 02:11:25 | 300 | 0 | 3.0 | \#56 Spectropho | 2 |  |
| 0042.Hiltner600 | 60 | 3:58 | 06:42:37.2 | 02:11:25 | 300 | 0 | 3.0 | \#56 Spectropho | 2 |  |
| 0043. COMP | 10 | 4:00 | 06:42:37.2 | 02:11:25 | 300 | 0 | 3.0 | \#56 Spectropho | 2 |  |
| 0044.vso-74771 | 720 | 4:02 | 05:56:18.9 | 00:39:14 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0045. COMP | 10 | 4:14 | 05:56:18.9 | 00:39:14 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0046.vso-75190 | 720 | 4:16 | 05:56:40.3 | 00:42:43 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0047. COMP | 10 | 4:28 | 05:56:40.3 | 00:42:43 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0048.vso-75371 | 720 | 4:29 | 05:56:48.9 | 00:37:09 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0049.COMP | 10 | 4:41 | 05:56:48.9 | 00:37:09 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0050.vso-76155 | 720 | 4:42 | 05:57:30.1 | 00:43:10 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0051. COMP | 10 | 4:54 | 05:57:30.1 | 00:43:10 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |

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| File | Exp Time | $\begin{gathered} U T \\ \text { Start } \end{gathered}$ | $R A$ | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0052.vso-78209 | 720 | 4:55 | 05:59:01.7 | 00:52:00 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0053. COMP | 10 | 5:08 | 05:59:01.7 | 00:52:00 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0054.vso-79148 | 720 | 5:09 | 05:59:46.1 | 00:22:56 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0055.COMP | 10 | 5:21 | 05:59:46.1 | 00:22:56 | 300 | 0 | 3.0 | 112 Orion PMS | 2 |  |
| 0056.Hiltner600 | 60 | 5:22 | 06:42:37.2 | 02:11:25 | 300 | 30 | 3.0 | \#56 Spectropho | 2 |  |
| 0057.Hiltner600 | 60 | 5:24 | 06:42:37.2 | 02:11:25 | 300 | 30 | 3.0 | \#56 Spectropho | 2 |  |
| 0058.Hiltner600 | 60 | 5:25 | 06:42:37.2 | 02:11:25 | 300 | 30 | 3.0 | \#56 Spectropho | 2 |  |
| 0059.COMP | 10 | 5:26 | 06:42:37.2 | 02:11:25 | 300 | 30 | 3.0 | \#56 Spectropho | 2 |  |
| 0060.sn2002an | 1200 | 5:29 | 08:22:47.7 | +24:17:41 | 300 | 30 | 3.0 | \#2 SN Observat | 2 |  |
| 0061. COMP | 10 | 5:49 | 08:22:47.7 | +24:17:41 | 300 | 30 | 3.0 | \#2 SN Observat | 2 |  |
| 0062.Feige34 | 120 | 5:51 | 10:36:41.2 | 43:21:50 | 300 | 100 | 3.0 | \#56 Spectropho | 2 |  |
| 0063.Feige34 | 120 | 5:53 | 10:36:41.2 | 43:21:50 | 300 | 100 | 3.0 | \#56 Spectropho | 2 |  |
| 0064.COMP | 10 | 5:55 | 10:36:41.2 | 43:21:50 | 300 | 100 | 3.0 | \#56 Spectropho | 2 |  |
| 0065.BIAS | 0 | 6:00 | 8:45:00 | 32:00:00 | 600 | 90 | 2.0 | \#122 Halo Star | 4 | 600-line, 2-sec slit |
| 0066. FLAT | 40 | 6:00 | 8:45:00 | 32:00:00 | 600 | 90 | 2.0 | \#122 Halo Star | 4 | this is not binby4 |
| 0067-0085.FLAT | 40 | 6:15 | 8:45:00 | 32:00:00 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0086.hs771 | 240 | 6:28 | 10:35:18.4 | 28:06:14 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0087. COMP | 10 | 6:32 | 10:35:18.4 | 28:06:14 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0088.hs772 | 1200 | 6:33 | 10:36:57.5 | 28:58:03 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0089. COMP | 10 | 6:53 | 10:36:57.5 | 28:58:03 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |

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| File | Exp <br> Time | $\underset{\text { Start }}{U T}$ | $R A$ | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0090.hs773 | 1200 | 6:54 | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0091.COMP | 10 | 7:15 | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0092.test | 5 | 7:15 | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | 4 | binning tests |
| 0093.test | 5 | 7:16 | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0094.test | 5 | 7:16 | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | , |  |
| 0095.test | 5 | $7: 17$ | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | 1 |  |
| 0096.test | 5 | 7:18 | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0097.test | 5 | 7:19 | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0098.test | 5 | 7:20 | 10:37:41.9 | 29:18:22 | 600 | 90 | 2.0 | \#122 Halo Star | 4 | only binby2 is working correctly |
| 0099.test | 5 | 7:22 | 10:38:54.0 | 29:18:26 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0100.test | 5 | 7:22 | 10:39:24.0 | 29:18:26 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0101.test | 16 | 7:23 | 10:40:20.0 | 29:18:26 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0102.test | 80 | 7:24 | 10:42:22.0 | 29:18:27 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0103.Feige34 | 120 | 7:27 | 10:36:41.2 | 43:21:50 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0104.Feige34 | 120 | 7:31 | 10:36:41.2 | 43:21:50 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0105.Feige34 | 120 | 7:33 | 10:36:41.2 | 43:21:50 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0106.COMP | 20 | 7:36 | 10:36:41.2 | 43:21:50 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0107.test | 5 | 7:39 | 10:35:18.4 | 28:06:14 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |
| 0108.hs771 | 180 | 7:40 | 10:35:18.4 | 28:06:14 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0109.COMP | 20 | 7:43 | 10:35:18.4 | 28:06:14 | 600 | 90 | 2.0 | \#122 Halo Star |  | star mixed with comp |

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| File | Exp <br> Time | $\begin{aligned} & \text { UT } \\ & \text { Start } \end{aligned}$ | $R A$ | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0110.hs774 | 1200 | 7:44 | 10:38:35.0 | 28:53:51 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0111. COMP | 10 | 8:05 | 10:38:35.0 | 28:53:51 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0112.hs775 | 1200 | 8:06 | 10:38:37.7 | 29:15:40 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0113.COMP | 20 | 8:27 | 10:38:37.7 | 29:15:40 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0114.hs776 | 1200 | 8:28 | 10:39:29.8 | 29:21:10 | 600 | 90 | 2.0 | \#122 Halo Star | 2 | windy |
| 0115.COMP | 20 | 8:49 | 10:39:29.8 | 29:21:10 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0116.hs777 | 1200 | 8:50 | 10:39:37.0 | 29:40:07 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0117. COMP | 20 | 9:10 | 10:39:37.0 | 29:40:07 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0118.hs784 | 1200 | 9:11 | 10:46:56.3 | 29:25:54 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0119.COMP | 20 | 9:32 | 10:46:56.3 | 29:25:54 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0120.hs785 | 1200 | 9:33 | 10:47:55.6 | 29:43:50 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0121. COMP | 20 | 9:54 | 10:47:55.6 | 29:43:50 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0122.hs788 | 1200 | 9:55 | 10:54:02.0 | 29:13:07 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0123.COMP | 20 | 10:16 | 10:54:02.0 | 29:13:07 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0124.hs795 | 1200 | 10:17 | 10:59:40.6 | 29:08:24 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0125. COMP | 20 | 10:37 | 10:59:40.6 | 29:08:24 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0126.hs799 | 1200 | 10:38 | 11:05:36.9 | 29:27:34 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0127.COMP | 20 | 10:59 | 11:05:36.9 | 29:27:34 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0128.hs800 | 1200 | 11:00 | 11:06:50.4 | 29:35:32 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0129.COMP | 20 | 11:20 | 11:06:50.4 | 29:35:32 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |



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| File | Exp <br> Time | $\begin{aligned} & \text { UT } \\ & \text { Start } \end{aligned}$ | $R A$ | Dec | Gr. | P.A. | Slit | Program | Bir | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0130.hs802 | 1200 | 11:21 | 11:10:28.1 | 28:36:08 | 600 | 90 | 2.0 | \#122 Halo Star | 2 | strong winds |
| 0131.COMP | 20 | 11:42 | 11:10:28.1 | 28:36:08 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0132.hs803 | 600 | 11:43 | 11:12:27.0 | 27:51:19 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0133. COMP | 20 | 11:55 | 11:12:27.0 | 27:51:19 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0134.hs804 | 1200 | 11:57 | 11:14:54.6 | 28:57:28 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0135.COMP | 20 | 12:17 | 11:14:54.6 | 28:57:28 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0136.hs805 | 1200 | 12:18 | 11:15:15.4 | 29:23:56 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0137.COMP | 20 | 12:38 | 11:15:15.4 | 29:23:56 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0138-0147.BIAS | 0 | 12:43 | 11:15:15.4 | 29:23:56 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0148-0167.FLAT | 80 | 13:13 | 11:15:15.4 | 29:23:56 | 600 | 90 | 2.0 | \#122 Halo Star | 2 |  |
| 0168.test | 5 | 13:15 | 11:15:15.4 | 29:23:56 | 600 | 90 | 2.0 | \#122 Halo Star | 4 |  |

