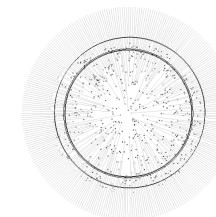


UT Date 04/15/2024 Observers SS))

Focus 1.07 Filter none

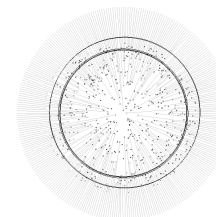
| File | Title | Grat | Exp | UT | RA | Dec | HA | Air | Prop | Comments |
|---------------|---------|------|-----|-------|-------------|------------|--------|------|-----------------|----------------|
| bias.2648 | parked | 270 | 0 | 23:45 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2649 | parked | 270 | 0 | 23:46 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2650 | parked | 270 | 0 | 23:47 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2651 | parked | 270 | 0 | 23:48 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2652 | parked | 270 | 0 | 23:49 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2653 | parked | 270 | 0 | 23:50 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2654 | parked | 270 | 0 | 23:51 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2655 | parked | 270 | 0 | 23:52 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2656 | parked | 270 | 0 | 23:53 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2657 | parked | 270 | 0 | 23:54 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| bias.2658 | parked | 270 | 0 | 23:55 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| domeflat.2659 | ring250 | 270 | 5 | 00:07 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | counts too low |
| domeflat.2660 | ring250 | 270 | 5 | 00:09 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | counts too low |
| domeflat.2661 | ring250 | 270 | 5 | 00:10 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | counts too low |
| comp.2662 | ring250 | 270 | 360 | 00:15 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| comp.2663 | ring250 | 270 | 360 | 00:22 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| comp.2664 | ring250 | 270 | 360 | 00:29 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| domeflat.2665 | ring250 | 270 | 8 | 00:38 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| domeflat.2666 | ring250 | 270 | 8 | 00:40 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| domeflat.2667 | ring250 | 270 | 8 | 00:41 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |



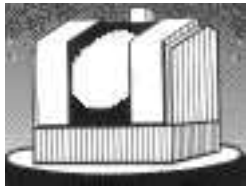
UT Date 04/15/2024 Observers SS))

Focus 1.07 Filter none

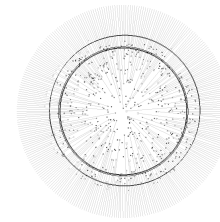
| File | Title | Grat | Exp | UT | RA | Dec | HA | Air | Prop | Comments |
|---|----------------------------------|------|------|-------|-------------|------------|--------|------|--------------------|------------------------------------|
| domeflat.2668 | ring250 | 270 | 8 | 00:42 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| domeflat.2669 | ring250 | 270 | 8 | 00:43 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| sflat.2670 | ring250 | 270 | 10 | 01:53 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | counts too high |
| sflat.2671 | ring250 | 270 | 5 | 01:54 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | counts too high |
| sflat.2672 | ring250 | 270 | 5 | 01:58 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | counts too high |
| sflat.2673 | ring250 | 270 | 5 | 02:02 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | 10-15k counts |
| sflat.2674 | ring250 | 270 | 10 | 02:04 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | 15-20k counts,thin cirrus |
| sflat.2675 | ring250 | 270 | 15 | 02:09 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | counts too low |
| sflat.2676 | ring250 | 270 | 35 | 02:11 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | 10-15k counts |
| sflat.2677 | ring250 | 270 | 50 | 02:13 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | 10-15k counts |
| sflat.2678 | ring250 | 270 | 70 | 02:15 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | clouds,6-8k counts |
| comp.2679 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 360 | 03:07 | +11:58:17.0 | +28:11:27 | -02:40 | 1.21 | 2024A-UA0- G204 | |
| NGC4008_0.55_deg_mr_max_ 21.5_1.2680 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 1200 | 03:15 | +11:58:17.0 | +28:11:27 | -02:32 | 1.19 | 2024A-UA0- G204 | Thin clouds,WFS= 1.4" |
| NGC4008_0.55_deg_mr_max_ 21.5_1.2681 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 1200 | 03:36 | +11:58:17.0 | +28:11:27 | -02:10 | 1.13 | 2024A-UA0- G204 | |
| NGC4008_0.55_deg_mr_max_ 21.5_1.2682 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 1200 | 04:03 | +11:58:17.0 | +28:11:27 | -01:44 | 1.08 | 2024A-UA0- G204 | had to pause for clouds |
| domeflat.2683 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 8 | 04:25 | +11:58:17.0 | +28:11:27 | -01:22 | 1.05 | 2024A-UA0- G204 | 2k counts |
| domeflat.2684 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 20 | 04:27 | +11:58:17.0 | +28:11:27 | -01:20 | 1.05 | 2024A-UA0- G204 | |
| domeflat.2685 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 60 | 04:29 | +11:58:17.0 | +28:11:27 | -01:18 | 1.04 | 2024A-UA0- G204 | |
| domeflat.2686 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 120 | 04:31 | +11:58:17.0 | +28:11:27 | -01:15 | 1.04 | 2024A-UA0- G204 | 120s needed to get adequate counts |
| comp.2687 | NGC4008_0.55_deg_mr_max_ 21.5 | 270 | 360 | 04:35 | +11:58:17.0 | +28:11:27 | -01:12 | 1.04 | 2024A-UA0- G204 | |

UT Date 04/15/2024 Observers SS))Focus 1.07 Filter none

| File | Title | Grat | Exp | UT | RA | Dec | HA | Air | Prop | Comments |
|------------------|-----------|------|------|-------|-------------|------------|--------|------|-----------------|----------------------------|
| comp.2688 | A1831_24a | 270 | 360 | 05:01 | +13:59:37.5 | +27:58:10 | -02:47 | 1.24 | 2024A-SAO-9 | |
| A1831_24a_2.2689 | A1831_24a | 270 | 1200 | 05:08 | +13:59:37.5 | +27:58:10 | -02:40 | 1.21 | 2024A-SAO-9 | Thin clouds,WFS= 1.4"-1.6" |
| A1831_24a_2.2690 | A1831_24a | 270 | 1200 | 05:29 | +13:59:37.5 | +27:58:10 | -02:19 | 1.15 | 2024A-SAO-9 | |
| A1831_24a_2.2691 | A1831_24a | 270 | 1200 | 05:50 | +13:59:37.5 | +27:58:10 | -01:58 | 1.11 | 2024A-SAO-9 | |
| comp.2692 | A1831_24a | 270 | 360 | 06:16 | +13:59:37.5 | +27:58:10 | -01:32 | 1.06 | 2024A-SAO-9 | |
| domeflat.2693 | A1831_24a | 270 | 10 | 06:24 | +13:59:37.5 | +27:58:10 | -01:24 | 1.05 | 2024A-SAO-9 | |
| domeflat.2694 | A1831_24a | 270 | 120 | 06:25 | +13:59:37.5 | +27:58:10 | -01:22 | 1.05 | 2024A-SAO-9 | |
| comp.2695 | A2245_24a | 270 | 360 | 07:18 | +17:02:52.1 | +33:28:57 | -03:33 | 1.40 | 2024A-SAO-9 | |
| A2245_24a_2.2696 | A2245_24a | 270 | 1200 | 07:27 | +17:02:52.1 | +33:28:57 | -03:24 | 1.35 | 2024A-SAO-9 | Mostly clear,WFS= 2.08" |
| A2245_24a_2.2697 | A2245_24a | 270 | 1200 | 07:48 | +17:02:52.1 | +33:28:57 | -03:03 | 1.27 | 2024A-SAO-9 | |
| A2245_24a_2.2698 | A2245_24a | 270 | 1200 | 08:09 | +17:02:52.1 | +33:28:57 | -02:41 | 1.20 | 2024A-SAO-9 | |
| comp.2699 | A2245_24a | 270 | 360 | 08:31 | +17:02:52.1 | +33:28:57 | -02:19 | 1.14 | 2024A-SAO-9 | |
| domeflat.2700 | A2245_24a | 270 | 240 | 08:39 | +17:02:52.1 | +33:28:57 | -02:11 | 1.12 | 2024A-SAO-9 | |
| A2245_24a_3.2701 | A2245_24a | 270 | 1200 | 09:06 | +17:02:35.2 | +33:34:55 | -01:44 | 1.07 | 2024A-SAO-9 | Clear,WFS= 1.11" |
| A2245_24a_3.2702 | A2245_24a | 270 | 1200 | 09:27 | +17:02:35.2 | +33:34:55 | -01:23 | 1.05 | 2024A-SAO-9 | |
| A2245_24a_3.2703 | A2245_24a | 270 | 1200 | 09:48 | +17:02:35.2 | +33:34:55 | -01:02 | 1.02 | 2024A-SAO-9 | |
| A2255_24a_3.2705 | A2255_24a | 270 | 1200 | 10:58 | +17:12:48.8 | +64:07:12 | -00:01 | 1.18 | 2024A-SAO-9 | Clear,WFS= 1.33" |
| A2255_24a_3.2706 | A2255_24a | 270 | 1200 | 11:19 | +17:12:48.8 | +64:07:12 | +00:19 | 1.18 | 2024A-SAO-9 | |
| A2255_24a_3.2707 | A2255_24a | 270 | 840 | 11:40 | +17:12:48.8 | +64:07:12 | +00:40 | 1.19 | 2024A-SAO-9 | |
| dark.2708 | parked | 270 | 900 | 12:54 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |



MMT OBSERVATORY HECTOSPEC LOG



UT Date 04/15/2024 Observers SS))

Focus 1.07 Filter none

| <i>File</i> | <i>Title</i> | <i>Grat</i> | <i>Exp</i> | <i>UT</i> | <i>RA</i> | <i>Dec</i> | <i>HA</i> | <i>Air</i> | <i>Prop</i> | <i>Comments</i> |
|-------------|--------------|-------------|------------|-----------|-------------|------------|-----------|------------|-----------------|-----------------|
| dark.2709 | parked | 270 | 900 | 13:10 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |
| dark.2710 | parked | 270 | 900 | 13:26 | -01:00:00.0 | -100:00:00 | -00:00 | 1.00 | calibratio n | |