

CCD Commander Log File
Software v1.3.5
This copy is registered to:
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22:34:36 Action starting.
22:34:36 Connecting to the Camera...
22:34:36 Connecting to the Mount...
22:34:37 Connecting to FocusMax...
22:34:37 Turning on Fan.
22:34:37 Turning on cooler.
22:34:37 Setting cooler = -15
22:34:37 Simple Temperature Control complete.
22:34:37 Waiting for altitude of 30 degrees...
22:34:37 Done waiting!
22:34:37 Starting move to action.
22:34:37 Precessing coordinates.
22:34:37 J2000 Coordinates: RA: 10h 46m 19.0s Dec: +12°44'52"
22:34:37 JNow Coordinates: RA: 10h 46m 38.3s Dec: +12°42'56"
22:34:37 Slewing to SAO 99280...
22:34:56 Done slewing!
22:34:56 Setting imager bin mode to 1x1.
22:34:56 Setting filter to Luminance.
22:35:04 Taking 15 second image for Plate Solve...
22:35:43 Saving Image...
22:35:43 Performing Plate Solve with CCDSoft...
22:35:44 Plate solve results:
22:35:44 Pixel Scale = 0.93 asp.
22:35:44 North Angle = 8.96 degrees.
22:35:44 J2000 Coordinates = RA: 10h 46m 14.7s Dec: +12°45'39"
22:35:44 Syncing to RA 10.77611, Dec 12.72876
22:35:50 Starting focus run...
22:37:29 Focus succeeded! HFD = 3.71
22:37:29 Starting move to action.
22:37:29 Precessing coordinates.
22:37:29 J2000 Coordinates: RA: 10h 48m 12.0s Dec: +12°36'26"
22:37:29 JNow Coordinates: RA: 10h 48m 31.3s Dec: +12°34'30"
22:37:29 Slewing to M105 Field...
22:37:36 Done slewing!
22:37:36 Setting image type to Light.
22:37:36 Setting imager bin mode to 2x2.
22:37:36 Setting filter to Red.
22:37:38 Setting imager to full frame.
22:37:38 Setting imager exposure time to 300 seconds.
22:37:39 Setting autoguider bin mode to 2x2.
22:37:39 Taking a 3 second autoguider exposure.
22:37:49 Beginning guide star search...
22:37:51 Taking a 7.4 second autoguider exposure.
22:38:10 Beginning guide star search...
22:38:12 Found possible guide star at 253, 186 with a max brightness of 3480 ADU.
22:38:12 Taking a 7.4 second autoguider exposure.
22:38:22 Beginning guide star search...
22:38:23 Found appropriate guide star at 254, 186 with a max brightness of 3696 ADU.
22:38:23 Trying to autoguide on star at 254.0,186.0.
22:38:23 Starting to autoguide.
22:38:53 Checking autoguider max error...
22:38:58 Autoguider error: X=0.66 Y=0.31
22:38:58 Checking autoguider max error...
22:39:06 Autoguider error: X=0.87 Y=0.35
22:39:06 Checking autoguider max error...
22:39:15 Autoguider error: X=0.78 Y=0.26
22:39:15 Checking autoguider max error...
22:39:23 Autoguider error: X=0.19 Y=0.24
22:39:23 Autoguider max error < 0.5!
22:39:23 Stopping autoguider...
22:39:25 Automatic guide star acquisition successful!
22:39:25 Setting autoguider exposure time to 7.4 seconds.
22:39:25 Setting guide star position to 254.0,186.0.
22:39:25 Starting to autoguide.
22:39:54 Checking autoguider max error...
22:39:59 Autoguider error: X=1.56 Y=0.30
22:39:59 Checking autoguider max error...
22:40:07 Autoguider error: X=1.03 Y=0.36
22:40:07 Checking autoguider max error...
22:40:15 Autoguider error: X=1.14 Y=0.18
22:40:15 Checking autoguider max error...
22:40:24 Autoguider error: X=1.46 Y=0.20
22:40:24 Checking autoguider max error...
22:40:32 Autoguider error: X=1.39 Y=0.48
22:40:32 Checking autoguider max error...
22:40:40 Autoguider error: X=1.55 Y=0.38
22:40:40 Checking autoguider max error...
22:40:49 Autoguider error: X=0.82 Y=0.22
22:40:49 Checking autoguider max error...
22:40:57 Autoguider error: X=0.44 Y=0.15
22:40:57 Autoguider max error < 0.5!
22:40:57 Starting imager exposure (1 of 6).
22:46:04 Imager exposure complete.
22:46:04 Stopping autoguider...

22:46:06 Setting autoguider exposure time to 7.4 seconds.
22:46:06 Setting guide star position to 256.0,186.0.
22:46:06 Starting to autoguide.
22:46:36 Checking autoguider max error...
22:46:40 Autoguider error: X=-1.74 Y=-0.26
22:46:40 Checking autoguider max error...
22:46:49 Autoguider error: X=-1.29 Y=-0.14
22:46:49 Checking autoguider max error...
22:46:57 Autoguider error: X=-0.74 Y=-0.06
22:46:57 Checking autoguider max error...
22:47:05 Autoguider error: X=-0.20 Y=0.22
22:47:05 Autoguider max error < 0.5!
22:47:05 Starting imager exposure (2 of 6).
22:52:11 Imager exposure complete.
22:52:11 Stopping autoguider...
22:52:13 Setting autoguider exposure time to 7.4 seconds.
22:52:13 Setting guide star position to 256.0,188.0.
22:52:13 Starting to autoguide.
22:52:43 Checking autoguider max error...
22:52:48 Autoguider error: X=-2.31 Y=-0.65
22:52:48 Checking autoguider max error...
22:52:56 Autoguider error: X=-2.09 Y=-0.64
22:52:56 Checking autoguider max error...
22:53:05 Autoguider error: X=-1.24 Y=-0.45
22:53:05 Checking autoguider max error...
22:53:13 Autoguider error: X=-0.79 Y=-0.24
22:53:13 Checking autoguider max error...
22:53:21 Autoguider error: X=-0.27 Y=-0.12
22:53:21 Autoguider max error < 0.5!
22:53:21 Starting imager exposure (3 of 6).
22:58:28 Imager exposure complete.
22:58:28 Stopping autoguider...
22:58:30 Setting autoguider exposure time to 7.4 seconds.
22:58:30 Setting guide star position to 254.0,188.0.
22:58:30 Starting to autoguide.
22:58:59 Checking autoguider max error...
22:59:04 Autoguider error: X=1.03 Y=0.31
22:59:04 Checking autoguider max error...
22:59:12 Autoguider error: X=0.68 Y=0.16
22:59:12 Checking autoguider max error...
22:59:20 Autoguider error: X=0.20 Y=0.27
22:59:20 Autoguider max error < 0.5!
22:59:20 Starting imager exposure (4 of 6).
23:04:26 Imager exposure complete.
23:04:26 Stopping autoguider...
23:04:28 Setting autoguider exposure time to 7.4 seconds.
23:04:28 Setting guide star position to 252.0,188.0.
23:04:28 Starting to autoguide.
23:04:58 Checking autoguider max error...
23:05:03 Autoguider error: X=1.29 Y=0.19
23:05:03 Checking autoguider max error...
23:05:12 Autoguider error: X=1.21 Y=0.07
23:05:12 Checking autoguider max error...
23:05:20 Autoguider error: X=1.33 Y=0.40
23:05:20 Checking autoguider max error...
23:05:29 Autoguider error: X=0.75 Y=0.22
23:05:29 Checking autoguider max error...
23:05:37 Autoguider error: X=-0.10 Y=0.05
23:05:37 Autoguider max error < 0.5!
23:05:37 Starting imager exposure (5 of 6).
23:10:44 Imager exposure complete.
23:10:44 Stopping autoguider...
23:10:46 Setting autoguider exposure time to 7.4 seconds.
23:10:46 Setting guide star position to 252.0,186.0.
23:10:46 Starting to autoguide.
23:11:15 Checking autoguider max error...
23:11:20 Autoguider error: X=0.89 Y=0.02
23:11:20 Checking autoguider max error...
23:11:28 Autoguider error: X=0.14 Y=0.04
23:11:28 Autoguider max error < 0.5!
23:11:28 Starting imager exposure (6 of 6).
23:16:35 Imager exposure complete.
23:16:35 Stopping autoguider...
23:16:37 Take Images Action complete.
23:16:37 Starting move to action.
23:16:37 Precessing coordinatates.
23:16:37 J2000 Coordinates: RA: 10h 46m 19.0s Dec: +12°44'52"
23:16:37 JNow Coordinates: RA: 10h 46m 38.3s Dec: +12°42'56"
23:16:37 Slewing to SAO 99280...
23:16:42 Done slewing!
23:16:42 Setting imager bin mode to 1x1.
23:16:42 Setting filter to Luminance.
23:16:49 Taking 15 second image for Plate Solve...
23:17:28 Saving Image...
23:17:28 Performing Plate Solve with CCDSoft...
23:17:29 Plate solve results:
23:17:29 Pixel Scale = 0.93 asp.
23:17:29 North Angle = 8.95 degrees.
23:17:29 J2000 Coordinates = RA: 10h 46m 16.2s Dec: +12°45'23"
23:17:29 Syncing to RA 10.77654, Dec 12.72421

23:17:36 Starting focus run...
23:19:17 Focus succeeded! HFD = 2.72
23:19:17 Starting move to action.
23:19:17 Precessing coordinates.
23:19:17 J2000 Coordinates: RA: 10h 48m 12.0s Dec: +12°36'26"
23:19:18 JNow Coordinates: RA: 10h 48m 31.3s Dec: +12°34'30"
23:19:18 Slewing to M105 Field...
23:19:24 Done slewing!
23:19:24 Setting image type to Light.
23:19:24 Setting imager bin mode to 2x2.
23:19:24 Setting filter to Green.
23:19:26 Setting imager to full frame.
23:19:26 Setting imager exposure time to 300 seconds.
23:19:27 Setting autoguider bin mode to 2x2.
23:19:27 Taking a 3 second autoguider exposure.
23:19:37 Beginning guide star search...
23:19:39 Taking a 6.19 second autoguider exposure.
23:19:55 Beginning guide star search...
23:19:57 Taking a 7.2 second autoguider exposure.
23:20:15 Beginning guide star search...
23:20:17 Found possible guide star at 257, 207 with a max brightness of 3139 ADU.
23:20:17 Taking a 7.2 second autoguider exposure.
23:20:27 Beginning guide star search...
23:20:28 Taking a 8.23 second autoguider exposure.
23:20:49 Beginning guide star search...
23:20:50 Found possible guide star at 258, 208 with a max brightness of 4258 ADU.
23:20:50 Taking a 8.23 second autoguider exposure.
23:21:02 Beginning guide star search...
23:21:03 Found appropriate guide star at 257, 208 with a max brightness of 4110 ADU.
23:21:03 Trying to autoguide on star at 257.0,208.0.
23:21:03 Starting to autoguide.
23:21:36 Checking autoguider max error...
23:21:40 Autoguider error: X=-0.02 Y=0.33
23:21:40 Autoguider max error < 0.5!
23:21:40 Stopping autoguider...
23:21:42 Automatic guide star acquisition successful!
23:21:42 Setting autoguider exposure time to 8.23 seconds.
23:21:42 Setting guide star position to 257.0,208.0.
23:21:42 Starting to autoguide.
23:22:15 Checking autoguider max error...
23:22:19 Autoguider error: X=1.25 Y=0.57
23:22:19 Checking autoguider max error...
23:22:28 Autoguider error: X=0.89 Y=0.01
23:22:28 Checking autoguider max error...
23:22:37 Autoguider error: X=0.80 Y=0.45
23:22:37 Checking autoguider max error...
23:22:46 Autoguider error: X=0.39 Y=0.20
23:22:46 Autoguider max error < 0.5!
23:22:46 Starting imager exposure (1 of 6).
23:27:52 Imager exposure complete.
23:27:52 Stopping autoguider...
23:27:54 Setting autoguider exposure time to 8.23 seconds.
23:27:54 Setting guide star position to 259.0,208.0.
23:27:54 Starting to autoguide.
23:28:27 Checking autoguider max error...
23:28:32 Autoguider error: X=1.28 Y=-0.33
23:28:32 Checking autoguider max error...
23:28:41 Autoguider error: X=1.34 Y=0.16
23:28:41 Checking autoguider max error...
23:28:50 Autoguider error: X=0.97 Y=0.11
23:28:50 Checking autoguider max error...
23:28:59 Autoguider error: X=0.28 Y=0.54
23:28:59 Checking autoguider max error...
23:29:09 Autoguider error: X=0.13 Y=0.10
23:29:09 Autoguider max error < 0.5!
23:29:09 Starting imager exposure (2 of 6).
23:34:14 Imager exposure complete.
23:34:14 Stopping autoguider...
23:34:16 Setting autoguider exposure time to 8.23 seconds.
23:34:16 Setting guide star position to 259.0,210.0.
23:34:16 Starting to autoguide.
23:34:49 Checking autoguider max error...
23:34:54 Autoguider error: X=0.83 Y=-0.58
23:34:54 Checking autoguider max error...
23:35:03 Autoguider error: X=0.68 Y=-0.41
23:35:03 Checking autoguider max error...
23:35:13 Autoguider error: X=0.34 Y=-0.32
23:35:13 Autoguider max error < 0.5!
23:35:13 Starting imager exposure (3 of 6).
23:40:19 Imager exposure complete.
23:40:19 Stopping autoguider...
23:40:21 Setting autoguider exposure time to 8.23 seconds.
23:40:21 Setting guide star position to 257.0,210.0.
23:40:21 Starting to autoguide.
23:40:54 Checking autoguider max error...
23:40:59 Autoguider error: X=-1.05 Y=-0.02
23:40:59 Checking autoguider max error...
23:41:08 Autoguider error: X=-0.74 Y=0.02
23:41:08 Checking autoguider max error...
23:41:17 Autoguider error: X=-0.05 Y=0.10

23:41:17 Autoguider max error < 0.5!
23:41:17 Starting imager exposure (4 of 6).
23:46:24 Imager exposure complete.
23:46:24 Stopping autoguider...
23:46:26 Setting autoguider exposure time to 8.23 seconds.
23:46:26 Setting guide star position to 255.0,210.0.
23:46:26 Starting to autoguide.
23:46:59 Checking autoguider max error...
23:47:03 Autoguider error: X=0.82 Y=-0.21
23:47:03 Checking autoguider max error...
23:47:13 Autoguider error: X=0.52 Y=-0.15
23:47:13 Checking autoguider max error...
23:47:22 Autoguider error: X=0.51 Y=-0.12
23:47:22 Checking autoguider max error...
23:47:31 Autoguider error: X=0.64 Y=0.05
23:47:31 Checking autoguider max error...
23:47:40 Autoguider error: X=0.24 Y=0.06
23:47:40 Autoguider max error < 0.5!
23:47:40 Starting imager exposure (5 of 6).
23:52:45 Imager exposure complete.
23:52:45 Stopping autoguider...
23:52:47 Setting autoguider exposure time to 8.23 seconds.
23:52:47 Setting guide star position to 255.0,208.0.
23:52:47 Starting to autoguide.
23:53:20 Checking autoguider max error...
23:53:25 Autoguider error: X=0.14 Y=0.09
23:53:25 Autoguider max error < 0.5!
23:53:25 Starting imager exposure (6 of 6).
23:58:32 Imager exposure complete.
23:58:32 Stopping autoguider...
23:58:34 Take Images Action complete.
23:58:34 Starting move to action.
23:58:34 Preprocessing coordinates.
23:58:34 J2000 Coordinates: RA: 10h 46m 19.0s Dec: +12°44'52"
23:58:34 JNow Coordinates: RA: 10h 46m 38.3s Dec: +12°42'56"
23:58:34 Slewing to SAO 99280...
23:58:39 Done slewing!
23:58:39 Setting imager bin mode to 1x1.
23:58:39 Setting filter to Luminance.
23:58:46 Taking 15 second image for Plate Solve...
23:59:25 Saving Image...
23:59:25 Performing Plate Solve with CCDSoft...
23:59:26 Plate solve results:
23:59:26 Pixel Scale = 0.93 asp.
23:59:26 North Angle = 8.96 degrees.
23:59:26 J2000 Coordinates = RA: 10h 46m 18.2s Dec: +12°45'53"
23:59:26 Syncing to RA 10.77708, Dec 12.73243
23:59:31 Starting focus run...
00:00:54 Focus succeeded! HFD = 3.01
00:00:54 Starting move to action.
00:00:54 Preprocessing coordinates.
00:00:54 J2000 Coordinates: RA: 10h 48m 12.0s Dec: +12°36'26"
00:00:54 JNow Coordinates: RA: 10h 48m 31.3s Dec: +12°34'30"
00:00:54 Slewing to M105 Field...
00:01:01 Done slewing!
00:01:01 Setting image type to Light.
00:01:01 Setting imager bin mode to 2x2.
00:01:01 Setting filter to Blue.
00:01:03 Setting imager to full frame.
00:01:03 Setting imager exposure time to 300 seconds.
00:01:04 Setting autoguider bin mode to 2x2.
00:01:04 Taking a 3 second autoguider exposure.
00:01:14 Beginning guide star search...
00:01:15 Taking a 8.15 second autoguider exposure.
00:01:36 Beginning guide star search...
00:01:37 Found possible guide star at 243, 205 with a max brightness of 3813 ADU.
00:01:37 Taking a 8.15 second autoguider exposure.
00:01:48 Beginning guide star search...
00:01:50 Found appropriate guide star at 243, 205 with a max brightness of 3228 ADU.
00:01:50 Trying to autoguide on star at 243.0,205.0.
00:01:50 Starting to autoguide.
00:02:22 Checking autoguider max error...
00:02:26 Autoguider error: X=0.27 Y=0.04
00:02:26 Autoguider max error < 0.5!
00:02:26 Stopping autoguider...
00:02:28 Automatic guide star acquisition successful!
00:02:28 Setting autoguider exposure time to 8.15 seconds.
00:02:28 Setting guide star position to 243.0,205.0.
00:02:28 Starting to autoguide.
00:03:01 Checking autoguider max error...
00:03:05 Autoguider error: X=-0.50 Y=-0.07
00:03:05 Checking autoguider max error...
00:03:14 Autoguider error: X=-0.93 Y=-0.13
00:03:14 Checking autoguider max error...
00:03:23 Autoguider error: X=-0.37 Y=-0.14
00:03:23 Autoguider max error < 0.5!
00:03:23 Starting imager exposure (1 of 6).
00:08:28 Imager exposure complete.
00:08:28 Stopping autoguider...
00:08:30 Setting autoguider exposure time to 8.15 seconds.

00:08:30 Setting guide star position to 245.0,205.0.
00:08:30 Starting to autoguide.
00:09:03 Checking autoguider max error...
00:09:07 Autoguider error: X=-1.51 Y=-0.71
00:09:07 Checking autoguider max error...
00:09:17 Autoguider error: X=-1.22 Y=-0.12
00:09:17 Checking autoguider max error...
00:09:25 Autoguider error: X=-1.00 Y=-0.07
00:09:25 Checking autoguider max error...
00:09:34 Autoguider error: X=-1.10 Y=-0.27
00:09:34 Checking autoguider max error...
00:09:43 Autoguider error: X=-1.05 Y=0.08
00:09:43 Checking autoguider max error...
00:09:53 Autoguider error: X=-0.42 Y=0.10
00:09:53 Autoguider max error < 0.5!
00:09:53 Starting imager exposure (2 of 6).
00:14:59 Imager exposure complete.
00:14:59 Stopping autoguider...
00:15:01 Setting autoguider exposure time to 8.15 seconds.
00:15:01 Setting guide star position to 245.0,207.0.
00:15:01 Starting to autoguide.
00:15:34 Checking autoguider max error...
00:15:38 Autoguider error: X=0.98 Y=-0.71
00:15:38 Checking autoguider max error...
00:15:48 Autoguider error: X=1.22 Y=-0.60
00:15:48 Checking autoguider max error...
00:15:57 Autoguider error: X=0.87 Y=-0.63
00:15:57 Checking autoguider max error...
00:16:06 Autoguider error: X=0.78 Y=-0.62
00:16:06 Checking autoguider max error...
00:16:15 Autoguider error: X=1.14 Y=-0.47
00:16:15 Checking autoguider max error...
00:16:24 Autoguider error: X=1.30 Y=-0.27
00:16:24 Checking autoguider max error...
00:16:33 Autoguider error: X=1.33 Y=-0.03
00:16:33 Checking autoguider max error...
00:16:42 Autoguider error: X=0.35 Y=-0.14
00:16:42 Autoguider max error < 0.5!
00:16:42 Starting imager exposure (3 of 6).
00:21:48 Imager exposure complete.
00:21:48 Stopping autoguider...
00:21:50 Setting autoguider exposure time to 8.15 seconds.
00:21:50 Setting guide star position to 243.0,207.0.
00:21:50 Starting to autoguide.
00:22:23 Checking autoguider max error...
00:22:26 Autoguider error: X=0.60 Y=-0.12
00:22:26 Checking autoguider max error...
00:22:35 Autoguider error: X=0.28 Y=0.04
00:22:35 Autoguider max error < 0.5!
00:22:35 Starting imager exposure (4 of 6).
00:27:42 Imager exposure complete.
00:27:42 Stopping autoguider...
00:27:45 Setting autoguider exposure time to 8.15 seconds.
00:27:45 Setting guide star position to 241.0,207.0.
00:27:45 Starting to autoguide.
00:28:17 Checking autoguider max error...
00:28:21 Autoguider error: X=-0.92 Y=-0.14
00:28:21 Checking autoguider max error...
00:28:30 Autoguider error: X=-1.16 Y=0.52
00:28:30 Checking autoguider max error...
00:28:39 Autoguider error: X=-1.28 Y=0.06
00:28:39 Checking autoguider max error...
00:28:48 Autoguider error: X=-1.18 Y=-0.25
00:28:48 Checking autoguider max error...
00:28:57 Autoguider error: X=-1.15 Y=-0.06
00:28:57 Checking autoguider max error...
00:29:06 Autoguider error: X=-0.31 Y=-0.02
00:29:06 Autoguider max error < 0.5!
00:29:06 Starting imager exposure (5 of 6).
00:34:12 Imager exposure complete.
00:34:12 Stopping autoguider...
00:34:14 Setting autoguider exposure time to 8.15 seconds.
00:34:14 Setting guide star position to 241.0,205.0.
00:34:14 Starting to autoguide.
00:34:47 Checking autoguider max error...
00:34:51 Autoguider error: X=-0.30 Y=-0.19
00:34:51 Autoguider max error < 0.5!
00:34:51 Starting imager exposure (6 of 6).
00:39:56 Imager exposure complete.
00:39:56 Stopping autoguider...
00:39:58 Take Images Action complete.
00:39:58 Starting move to action.
00:39:58 Precessing coordinnates.
00:39:58 J2000 Coordinates: RA: 10h 46m 19.0s Dec: +12°44'52"
00:39:58 JNow Coordinates: RA: 10h 46m 38.3s Dec: +12°42'56"
00:39:58 Slewing to SAO 99280...
00:40:04 Done slewing!
00:40:04 Setting imager bin mode to 1x1.
00:40:04 Setting filter to Luminance.
00:40:10 Taking 15 second image for Plate Solve...

00:40:48 Saving Image...
00:40:49 Performing Plate Solve with CCDSoft...
00:40:50 Plate solve results:
00:40:50 Pixel Scale = 0.93 asp.
00:40:50 North Angle = 8.97 degrees.
00:40:50 J2000 Coordinates = RA: 10h 46m 16.2s Dec: +12°45'51"
00:40:50 Syncing to RA 10.77652, Dec 12.73188
00:40:55 Starting focus run...
00:42:20 Focus succeeded! HFD = 2.62
00:42:20 Starting move to action.
00:42:20 Precessing coordinates.
00:42:20 J2000 Coordinates: RA: 10h 48m 12.0s Dec: +12°36'26"
00:42:20 JNow Coordinates: RA: 10h 48m 31.3s Dec: +12°34'30"
00:42:20 Slewing to M105 Field...
00:42:26 Done slewing!
00:42:26 Setting image type to Light.
00:42:26 Setting imager bin mode to 1x1.
00:42:26 Setting filter to Luminance.
00:42:28 Setting imager to full frame.
00:42:28 Setting imager exposure time to 450 seconds.
00:42:29 Setting autoguider bin mode to 2x2.
00:42:29 Taking a 3 second autoguider exposure.
00:42:40 Beginning guide...
00:42:41 Found possible guide star at 244, 205 with a max brightness of 5359 ADU.
00:42:41 Taking a 3 second autoguider exposure.
00:42:47 Beginning guide star search...
00:42:48 Found appropriate guide star at 243, 205 with a max brightness of 5073 ADU.
00:42:48 Trying to autoguide on star at 243.0,205.0.
00:42:48 Starting to autoguide.
00:43:01 Checking autoguider max error...
00:43:01 Autoguider error: X=-0.20 Y=-0.18
00:43:01 Autoguider max error < 0.5!
00:43:01 Stopping autoguider...
00:43:03 Automatic guide star acquisition successful!
00:43:03 Setting autoguider exposure time to 3 seconds.
00:43:03 Setting guide star position to 243.0,205.0.
00:43:03 Starting to autoguide.
00:43:15 Checking autoguider max error...
00:43:15 Autoguider error: X=-0.43 Y=-0.08
00:43:15 Autoguider max error < 0.5!
00:43:15 Starting imager exposure (1 of 4).
00:50:55 Imager exposure complete.
00:50:55 Stopping autoguider...
00:50:57 Setting autoguider exposure time to 3 seconds.
00:50:57 Setting guide star position to 245.0,205.0.
00:50:57 Starting to autoguide.
00:51:09 Checking autoguider max error...
00:51:10 Autoguider error: X=-2.43 Y=-0.07
00:51:10 Checking autoguider max error...
00:51:14 Autoguider error: X=-1.73 Y=-0.32
00:51:14 Checking autoguider max error...
00:51:18 Autoguider error: X=-0.85 Y=-0.21
00:51:18 Checking autoguider max error...
00:51:22 Autoguider error: X=-1.08 Y=-0.16
00:51:22 Checking autoguider max error...
00:51:26 Autoguider error: X=-0.03 Y=-0.18
00:51:26 Autoguider max error < 0.5!
00:51:26 Starting imager exposure (2 of 4).
00:59:06 Imager exposure complete.
00:59:06 Stopping autoguider...
00:59:08 Setting autoguider exposure time to 3 seconds.
00:59:08 Setting guide star position to 245.0,207.0.
00:59:08 Starting to autoguide.
00:59:20 Checking autoguider max error...
00:59:21 Autoguider error: X=-0.43 Y=-1.05
00:59:21 Checking autoguider max error...
00:59:25 Autoguider error: X=0.78 Y=-0.92
00:59:25 Checking autoguider max error...
00:59:29 Autoguider error: X=-0.31 Y=-1.07
00:59:29 Checking autoguider max error...
00:59:33 Autoguider error: X=-0.08 Y=-1.15
00:59:33 Checking autoguider max error...
00:59:37 Autoguider error: X=-0.19 Y=-1.21
00:59:37 Checking autoguider max error...
00:59:41 Autoguider error: X=-0.44 Y=-0.97
00:59:41 Checking autoguider max error...
00:59:45 Autoguider error: X=-0.16 Y=-0.80
00:59:45 Checking autoguider max error...
00:59:49 Autoguider error: X=-0.97 Y=-0.85
00:59:49 Checking autoguider max error...
00:59:53 Autoguider error: X=-0.73 Y=-0.90
00:59:53 Checking autoguider max error...
00:59:57 Autoguider error: X=-0.95 Y=-0.99
00:59:57 Checking autoguider max error...
01:00:01 Autoguider error: X=-0.66 Y=-0.30
01:00:01 Checking autoguider max error...
01:00:04 Autoguider error: X=-0.31 Y=-0.29
01:00:04 Autoguider max error < 0.5!
01:00:04 Starting imager exposure (3 of 4).
01:07:44 Imager exposure complete.

01:07:44 Stopping autoguider...
01:07:46 Setting autoguider exposure time to 3 seconds.
01:07:46 Setting guide star position to 243.0,207.0.
01:07:46 Starting to autoguide.
01:07:58 Checking autoguider max error...
01:08:02 Autoguider error: x=0.17 y=0.07
01:08:02 Autoguider max error < 0.5!
01:08:02 Starting imager exposure (4 of 4).
01:15:42 Imager exposure complete.
01:15:42 Stopping autoguider...
01:15:44 Take Images Action complete.
01:15:44 Starting move to action.
01:15:44 Precessing coordnates.
01:15:44 J2000 Coordinates: RA: 10h 46m 19.0s Dec: +12°44'52"
01:15:44 JNow Coordinates: RA: 10h 46m 38.3s Dec: +12°42'56"
01:15:44 Slewing to SAO 99280...
01:15:50 Done slewing!
01:15:50 Setting imager bin mode to 1x1.
01:15:50 Setting filter to Luminance.
01:15:52 Taking 15 second image for Plate Solve...
01:16:31 Saving Image...
01:16:31 Performing Plate Solve with CCDSoft...
01:16:32 Plate solve error!
01:16:33 Starting focus run...
01:19:05 Focus succeeded! HFD = 2.60
01:19:05 Starting move to action.
01:19:05 Precessing coordnates.
01:19:05 J2000 Coordinates: RA: 10h 48m 12.0s Dec: +12°36'26"
01:19:05 JNow Coordinates: RA: 10h 48m 31.3s Dec: +12°34'30"
01:19:05 Slewing to M105 Field...
01:19:12 Done slewing!
01:19:12 Setting image type to Light.
01:19:12 Setting imager bin mode to 1x1.
01:19:12 Setting filter to Luminance.
01:19:13 Setting imager to full frame.
01:19:13 Setting imager exposure time to 450 seconds.
01:19:14 Setting autoguider bin mode to 2x2.
01:19:14 Taking a 3 second autoguider exposure.
01:19:26 Beginning guide star search...
01:19:27 Taking a 29.73 second autoguider exposure.
01:20:32 Beginning guide star search...
01:20:33 Taking a 30 second autoguider exposure.
01:21:37 Beginning guide star search...
01:21:39 Found possible guide star at 299, 62 with a max brightness of 3457 ADU.
01:21:39 Taking a 30 second autoguider exposure.
01:22:11 Beginning guide star search...
01:22:13 Cannot find star greater then 3000 ADU.
01:22:13 Stopping autoguider...
01:22:14 Unable to find a guide star.
01:22:14 Take Images Action failed.
01:22:14 Starting move to action.
01:22:14 Precessing coordnates.
01:22:14 J2000 Coordinates: RA: 10h 46m 19.0s Dec: +12°44'52"
01:22:14 JNow Coordinates: RA: 10h 46m 38.3s Dec: +12°42'56"
01:22:14 Slewing to SAO 99280...
01:22:19 Done slewing!
01:22:20 Setting imager bin mode to 1x1.
01:22:20 Setting filter to Luminance.
01:22:21 Taking 15 second image for Plate Solve...
01:23:00 Saving Image...
01:23:01 Performing Plate Solve with CCDSoft...
01:23:02 Plate solve results:
01:23:02 Pixel Scale = 0.93 asp.
01:23:02 North Angle = 8.94 degrees.
01:23:02 J2000 Coordinates = RA: 10h 46m 16.1s Dec: +12°45'55"
01:23:02 Syncing to RA 10.77651, Dec 12.73318
01:23:07 Starting focus run...
01:24:51 Focus succeeded! HFD = 2.47
01:24:51 Starting move to action.
01:24:51 Precessing coordnates.
01:24:51 J2000 Coordinates: RA: 10h 48m 12.0s Dec: +12°36'26"
01:24:51 JNow Coordinates: RA: 10h 48m 31.3s Dec: +12°34'30"
01:24:51 Slewing to M105 Field...
01:24:58 Done slewing!
01:24:58 Setting image type to Light.
01:24:58 Setting imager bin mode to 1x1.
01:24:58 Setting filter to Luminance.
01:25:00 Setting imager to full frame.
01:25:00 Setting imager exposure time to 450 seconds.
01:25:01 Setting autoguider bin mode to 2x2.
01:25:01 Taking a 3 second autoguider exposure.
01:25:11 Beginning guide star search...
01:25:13 Found possible guide star at 252, 208 with a max brightness of 4579 ADU.
01:25:13 Taking a 3 second autoguider exposure.
01:25:19 Beginning guide star search...
01:25:20 Found appropriate guide star at 253, 208 with a max brightness of 4969 ADU.
01:25:20 Trying to autoguide on star at 253.0,208.0.
01:25:20 Starting to autoguide.
01:25:32 Checking autoguider max error...
01:25:32 Autoguider error: x=0.37 y=0.05

01:25:32 Autoguider max error < 0.5!
01:25:32 Stopping autoguider...
01:25:35 Automatic guide star acquisition successful!
01:25:35 Setting autoguider exposure time to 3 seconds.
01:25:35 Setting guide star position to 253.0,208.0.
01:25:35 Starting to autoguide.
01:25:47 Checking autoguider max error...
01:25:47 Autoguider error: X=0.26 Y=0.73
01:25:47 Checking autoguider max error...
01:25:51 Autoguider error: X=0.07 Y=-0.85
01:25:51 Checking autoguider max error...
01:25:55 Autoguider error: X=0.22 Y=-0.62
01:25:55 Checking autoguider max error...
01:25:59 Autoguider error: X=0.80 Y=-0.23
01:25:59 Checking autoguider max error...
01:26:02 Autoguider error: X=0.27 Y=-0.12
01:26:02 Autoguider max error < 0.5!
01:26:02 Starting imager exposure (1 of 4).
01:33:54 Imager exposure complete.
01:33:54 Stopping autoguider...
01:33:56 Setting autoguider exposure time to 3 seconds.
01:33:56 Setting guide star position to 255.0,208.0.
01:33:56 Starting to autoguide.
01:34:08 Checking autoguider max error...
01:34:09 Autoguider error: X=-1.17 Y=-0.27
01:34:09 Checking autoguider max error...
01:34:13 Autoguider error: X=-0.88 Y=-0.22
01:34:13 Checking autoguider max error...
01:34:17 Autoguider error: X=-0.33 Y=0.42
01:34:17 Autoguider max error < 0.5!
01:34:17 Starting imager exposure (2 of 4).
01:41:56 Imager exposure complete.
01:41:56 Stopping autoguider...
01:41:58 Setting autoguider exposure time to 3 seconds.
01:41:58 Setting guide star position to 255.0,210.0.
01:41:58 Starting to autoguide.
01:42:11 Checking autoguider max error...
01:42:11 Autoguider error: X=0.58 Y=-1.41
01:42:11 Checking autoguider max error...
01:42:15 Autoguider error: X=0.51 Y=-1.34
01:42:15 Checking autoguider max error...
01:42:19 Autoguider error: X=0.35 Y=-1.20
01:42:19 Checking autoguider max error...
01:42:23 Autoguider error: X=0.63 Y=-0.97
01:42:23 Checking autoguider max error...
01:42:27 Autoguider error: X=0.31 Y=-0.76
01:42:27 Checking autoguider max error...
01:42:31 Autoguider error: X=0.86 Y=-0.48
01:42:31 Checking autoguider max error...
01:42:35 Autoguider error: X=1.40 Y=-0.65
01:42:35 Checking autoguider max error...
01:42:39 Autoguider error: X=0.94 Y=-0.56
01:42:39 Checking autoguider max error...
01:42:43 Autoguider error: X=1.27 Y=-0.78
01:42:43 Checking autoguider max error...
01:42:46 Autoguider error: X=0.41 Y=-0.14
01:42:46 Autoguider max error < 0.5!
01:42:46 Starting imager exposure (3 of 4).
01:50:26 Imager exposure complete.
01:50:26 Stopping autoguider...
01:50:28 Setting autoguider exposure time to 3 seconds.
01:50:28 Setting guide star position to 253.0,210.0.
01:50:28 Starting to autoguide.
01:50:41 Checking autoguider max error...
01:50:41 Autoguider error: X=2.30 Y=-0.28
01:50:41 Checking autoguider max error...
01:50:45 Autoguider error: X=1.37 Y=-0.03
01:50:45 Checking autoguider max error...
01:50:49 Autoguider error: X=1.24 Y=0.08
01:50:49 Checking autoguider max error...
01:50:53 Autoguider error: X=0.82 Y=0.06
01:50:53 Checking autoguider max error...
01:50:56 Autoguider error: X=0.52 Y=0.06
01:50:56 Checking autoguider max error...
01:51:00 Autoguider error: X=0.58 Y=0.23
01:51:00 Checking autoguider max error...
01:51:04 Autoguider error: X=0.24 Y=0.11
01:51:04 Autoguider max error < 0.5!
01:51:04 Starting imager exposure (4 of 4).
01:58:44 Imager exposure complete.
01:58:44 Stopping autoguider...
01:58:46 Take Images Action complete.
01:58:46 Ignoring Skip To action. Action reached before skip time.
01:58:46 Skip time was 02:25.
01:58:46 Starting move to action.
01:58:46 Precessing coordinates.
01:58:46 J2000 Coordinates: RA: 15h 34m 41.0s Dec: +26°42'53"
01:58:46 JNow Coordinates: RA: 15h 34m 56.4s Dec: +26°41'41"
01:58:46 Slewing to Alphecca...
01:59:48 Done slewing!

01:59:48 Setting image type to Bias.
01:59:48 Setting imager bin mode to 1x1.
01:59:48 Setting filter to Luminance.
01:59:49 Setting imager to full frame.
01:59:50 Starting imager exposure (1 of 20).
01:59:59 Imager exposure complete.
02:00:00 Starting imager exposure (2 of 20).
02:00:09 Imager exposure complete.
02:00:10 Starting imager exposure (3 of 20).
02:00:20 Imager exposure complete.
02:00:21 Starting imager exposure (4 of 20).
02:00:30 Imager exposure complete.
02:00:31 Starting imager exposure (5 of 20).
02:00:40 Imager exposure complete.
02:00:41 Starting imager exposure (6 of 20).
02:00:50 Imager exposure complete.
02:00:51 Starting imager exposure (7 of 20).
02:01:00 Imager exposure complete.
02:01:01 Starting imager exposure (8 of 20).
02:01:10 Imager exposure complete.
02:01:11 Starting imager exposure (9 of 20).
02:01:20 Imager exposure complete.
02:01:21 Starting imager exposure (10 of 20).
02:01:30 Imager exposure complete.
02:01:31 Starting imager exposure (11 of 20).
02:01:40 Imager exposure complete.
02:01:41 Starting imager exposure (12 of 20).
02:01:51 Imager exposure complete.
02:01:52 Starting imager exposure (13 of 20).
02:02:01 Imager exposure complete.
02:02:02 Starting imager exposure (14 of 20).
02:02:11 Imager exposure complete.
02:02:12 Starting imager exposure (15 of 20).
02:02:21 Imager exposure complete.
02:02:22 Starting imager exposure (16 of 20).
02:02:31 Imager exposure complete.
02:02:32 Starting imager exposure (17 of 20).
02:02:41 Imager exposure complete.
02:02:42 Starting imager exposure (18 of 20).
02:02:51 Imager exposure complete.
02:02:52 Starting imager exposure (19 of 20).
02:03:01 Imager exposure complete.
02:03:02 Starting imager exposure (20 of 20).
02:03:11 Imager exposure complete.
02:03:11 Take Images Action complete.
02:03:11 Setting image type to Bias.
02:03:11 Setting imager bin mode to 2x2.
02:03:11 Setting filter to Luminance.
02:03:13 Setting imager to full frame.
02:03:14 Starting imager exposure (1 of 20).
02:03:18 Imager exposure complete.
02:03:19 Starting imager exposure (2 of 20).
02:03:23 Imager exposure complete.
02:03:24 Starting imager exposure (3 of 20).
02:03:28 Imager exposure complete.
02:03:29 Starting imager exposure (4 of 20).
02:03:33 Imager exposure complete.
02:03:34 Starting imager exposure (5 of 20).
02:03:38 Imager exposure complete.
02:03:39 Starting imager exposure (6 of 20).
02:03:43 Imager exposure complete.
02:03:44 Starting imager exposure (7 of 20).
02:03:48 Imager exposure complete.
02:03:49 Starting imager exposure (8 of 20).
02:03:54 Imager exposure complete.
02:03:55 Starting imager exposure (9 of 20).
02:03:58 Imager exposure complete.
02:03:59 Starting imager exposure (10 of 20).
02:04:04 Imager exposure complete.
02:04:05 Starting imager exposure (11 of 20).
02:04:09 Imager exposure complete.
02:04:10 Starting imager exposure (12 of 20).
02:04:14 Imager exposure complete.
02:04:15 Starting imager exposure (13 of 20).
02:04:19 Imager exposure complete.
02:04:20 Starting imager exposure (14 of 20).
02:04:24 Imager exposure complete.
02:04:25 Starting imager exposure (15 of 20).
02:04:29 Imager exposure complete.
02:04:30 Starting imager exposure (16 of 20).
02:04:34 Imager exposure complete.
02:04:35 Starting imager exposure (17 of 20).
02:04:39 Imager exposure complete.
02:04:40 Starting imager exposure (18 of 20).
02:04:45 Imager exposure complete.
02:04:46 Starting imager exposure (19 of 20).
02:04:50 Imager exposure complete.
02:04:51 Starting imager exposure (20 of 20).
02:04:55 Imager exposure complete.
02:04:55 Take Images Action complete.

02:04:55 Setting image type to Dark.
02:04:55 Setting imager bin mode to 1x1.
02:04:55 Setting filter to Luminance.
02:04:57 Setting imager to full frame.
02:04:57 Setting imager exposure time to 450 seconds.
02:04:58 Starting imager exposure (1 of 5).
02:12:39 Imager exposure complete.
02:12:40 Starting imager exposure (2 of 5).
02:20:21 Imager exposure complete.
02:20:22 Starting imager exposure (3 of 5).
02:28:02 Imager exposure complete.
02:28:03 Starting imager exposure (4 of 5).
02:35:45 Imager exposure complete.
02:35:46 Starting imager exposure (5 of 5).
02:43:26 Imager exposure complete.
02:43:26 Take Images Action complete.
02:43:26 Setting image type to Dark.
02:43:26 Setting imager bin mode to 2x2.
02:43:26 Setting filter to Blue.
02:43:30 Setting imager to full frame.
02:43:30 Setting imager exposure time to 300 seconds.
02:43:31 Starting imager exposure (1 of 5).
02:48:35 Imager exposure complete.
02:48:36 Starting imager exposure (2 of 5).
02:53:40 Imager exposure complete.
02:53:41 Starting imager exposure (3 of 5).
02:58:46 Imager exposure complete.
02:58:47 Starting imager exposure (4 of 5).
03:03:51 Imager exposure complete.
03:03:52 Starting imager exposure (5 of 5).
03:08:56 Imager exposure complete.
03:08:56 Take Images Action complete.
03:08:56 Setting image type to Dark.
03:08:56 Setting imager bin mode to 1x1.
03:08:56 Setting filter to Luminance.
03:09:02 Setting imager to full frame.
03:09:02 Setting imager exposure time to 450 seconds.
03:09:03 Starting imager exposure (1 of 5).
03:16:42 Imager exposure complete.
03:16:43 Starting imager exposure (2 of 5).
03:24:22 Imager exposure complete.
03:24:23 Starting imager exposure (3 of 5).
03:32:03 Imager exposure complete.
03:32:04 Starting imager exposure (4 of 5).
03:39:43 Imager exposure complete.
03:39:44 Starting imager exposure (5 of 5).
03:47:23 Imager exposure complete.
03:47:23 Take Images Action complete.
03:47:23 Setting image type to Dark.
03:47:23 Setting imager bin mode to 2x2.
03:47:23 Setting filter to Blue.
03:47:26 Setting imager to full frame.
03:47:27 Setting imager exposure time to 300 seconds.
03:47:28 Starting imager exposure (1 of 5).
03:52:32 Imager exposure complete.
03:52:33 Starting imager exposure (2 of 5).
03:57:37 Imager exposure complete.
03:57:38 Starting imager exposure (3 of 5).
04:02:43 Imager exposure complete.
04:02:44 Starting imager exposure (4 of 5).
04:07:48 Imager exposure complete.
04:07:49 Starting imager exposure (5 of 5).
04:12:54 Imager exposure complete.
04:12:54 Take Images Action complete.
04:12:54 Setting image type to Dark.
04:12:54 Setting imager bin mode to 1x1.
04:12:54 Setting filter to Luminance.
04:13:00 Setting imager to full frame.
04:13:00 Setting imager exposure time to 450 seconds.
04:13:01 Starting imager exposure (1 of 5).
04:20:40 Imager exposure complete.
04:20:41 Starting imager exposure (2 of 5).
04:28:20 Imager exposure complete.
04:28:21 Starting imager exposure (3 of 5).
04:36:00 Imager exposure complete.
04:36:01 Starting imager exposure (4 of 5).
04:43:40 Imager exposure complete.
04:43:41 Starting imager exposure (5 of 5).
04:51:20 Imager exposure complete.
04:51:20 Take Images Action complete.
04:51:21 Setting image type to Dark.
04:51:21 Setting imager bin mode to 2x2.
04:51:21 Setting filter to Blue.
04:51:24 Setting imager to full frame.
04:51:24 Setting imager exposure time to 300 seconds.
04:51:26 Starting imager exposure (1 of 5).
04:56:30 Imager exposure complete.
04:56:31 Starting imager exposure (2 of 5).
05:01:35 Imager exposure complete.
05:01:36 Starting imager exposure (3 of 5).

05:06:40 Imager exposure complete.
05:06:41 Starting imager exposure (4 of 5).
05:11:46 Imager exposure complete.
05:11:47 Starting imager exposure (5 of 5).
05:16:51 Imager exposure complete.
05:16:51 Take Images Action complete.
05:16:51 In Auto Flat Action.
05:16:51 Waiting for dawn twilight...
06:16:44 Slewing to flat target location.
06:16:44 Moving to Alt-Az position: Alt: 85°00' 00.0" Az: 270°00'00"
06:18:51 Done slewing!
06:18:52 Setting imager bin mode to 1x1.
06:18:52 Setting filter to Luminance.
06:18:58 Setting imager to full frame.
06:19:07 Setting imager exposure time to 1.0 seconds.
06:19:07 Starting imager exposure...
06:19:15 Exposure complete. Computing average ADU.
06:19:15 Average ADU = 113
06:19:15 Target ADU = 20000
06:19:15 New exposure time computed to be 176.5
06:19:19 Setting imager exposure time to 40.0 seconds.
06:19:19 Starting imager exposure...
06:20:06 Exposure complete. Computing average ADU.
06:20:07 Average ADU = 317
06:20:07 Target ADU = 20000
06:20:12 Setting imager exposure time to 40.0 seconds.
06:20:12 Starting imager exposure...
06:21:00 Exposure complete. Computing average ADU.
06:21:00 Average ADU = 427
06:21:00 Target ADU = 20000
06:21:05 Setting imager exposure time to 40.0 seconds.
06:21:05 Starting imager exposure...
06:21:53 Exposure complete. Computing average ADU.
06:21:53 Average ADU = 491
06:21:53 Target ADU = 20000
06:21:59 Setting imager exposure time to 40.0 seconds.
06:21:59 Starting imager exposure...
06:22:46 Exposure complete. Computing average ADU.
06:22:47 Average ADU = 426
06:22:47 Target ADU = 20000
06:22:52 Setting imager exposure time to 40.0 seconds.
06:22:52 Starting imager exposure...
06:23:40 Exposure complete. Computing average ADU.
06:23:40 Average ADU = 425
06:23:41 Target ADU = 20000
06:23:46 Setting imager exposure time to 40.0 seconds.
06:23:46 Starting imager exposure...
06:24:34 Exposure complete. Computing average ADU.
06:24:34 Average ADU = 583
06:24:34 Target ADU = 20000
06:24:39 Setting imager exposure time to 40.0 seconds.
06:24:39 Starting imager exposure...
06:25:27 Exposure complete. Computing average ADU.
06:25:28 Average ADU = 889
06:25:28 Target ADU = 20000
06:25:33 Setting imager exposure time to 40.0 seconds.
06:25:33 Starting imager exposure...
06:26:21 Exposure complete. Computing average ADU.
06:26:21 Average ADU = 615
06:26:21 Target ADU = 20000
06:26:26 Setting imager exposure time to 40.0 seconds.
06:26:26 Starting imager exposure...
06:27:14 Exposure complete. Computing average ADU.
06:27:15 Average ADU = 365
06:27:15 Target ADU = 20000
06:27:20 Setting imager exposure time to 40.0 seconds.
06:27:20 Starting imager exposure...
06:28:08 Exposure complete. Computing average ADU.
06:28:08 Average ADU = 285
06:28:08 Target ADU = 20000
06:28:14 Setting imager exposure time to 40.0 seconds.
06:28:14 Starting imager exposure...
06:29:01 Exposure complete. Computing average ADU.
06:29:01 Average ADU = 318
06:29:01 Target ADU = 20000
06:29:07 Setting imager exposure time to 40.0 seconds.
06:29:07 Starting imager exposure...
06:29:54 Exposure complete. Computing average ADU.
06:29:55 Average ADU = 358
06:29:55 Target ADU = 20000
06:30:00 Setting imager exposure time to 40.0 seconds.
06:30:00 Starting imager exposure...
06:30:48 Exposure complete. Computing average ADU.
06:30:48 Average ADU = 404
06:30:48 Target ADU = 20000
06:30:54 Setting imager exposure time to 40.0 seconds.
06:30:54 Starting imager exposure...
06:31:42 Exposure complete. Computing average ADU.
06:31:42 Average ADU = 462
06:31:42 Target ADU = 20000

06:31:47 Setting imager exposure time to 40.0 seconds.
06:31:47 Starting imager exposure...
06:32:35 Exposure complete. Computing average ADU.
06:32:35 Average ADU = 534
06:32:35 Target ADU = 20000
06:32:41 Setting imager exposure time to 40.0 seconds.
06:32:41 Starting imager exposure...
06:33:28 Exposure complete. Computing average ADU.
06:33:29 Average ADU = 629
06:33:29 Target ADU = 20000
06:33:35 Setting imager exposure time to 40.0 seconds.
06:33:35 Starting imager exposure...
06:34:22 Exposure complete. Computing average ADU.
06:34:23 Average ADU = 744
06:34:23 Target ADU = 20000
06:34:28 Setting imager exposure time to 40.0 seconds.
06:34:28 Starting imager exposure...
06:35:16 Exposure complete. Computing average ADU.
06:35:16 Average ADU = 884
06:35:16 Target ADU = 20000
06:35:22 Setting imager exposure time to 40.0 seconds.
06:35:22 Starting imager exposure...
06:36:09 Exposure complete. Computing average ADU.
06:36:10 Average ADU = 1056
06:36:10 Target ADU = 20000
06:36:15 Setting imager exposure time to 40.0 seconds.
06:36:15 Starting imager exposure...
06:37:03 Exposure complete. Computing average ADU.
06:37:03 Average ADU = 1267
06:37:03 Target ADU = 20000
06:37:09 Setting imager exposure time to 40.0 seconds.
06:37:09 Starting imager exposure...
06:37:57 Exposure complete. Computing average ADU.
06:37:57 Average ADU = 1517
06:37:57 Target ADU = 20000
06:38:02 Setting imager exposure time to 40.0 seconds.
06:38:02 Starting imager exposure...
06:38:50 Exposure complete. Computing average ADU.
06:38:50 Average ADU = 1818
06:38:50 Target ADU = 20000
06:38:56 Setting imager exposure time to 40.0 seconds.
06:38:56 Starting imager exposure...
06:39:43 Exposure complete. Computing average ADU.
06:39:44 Average ADU = 2194
06:39:44 Target ADU = 20000
06:39:49 Setting imager exposure time to 40.0 seconds.
06:39:49 Starting imager exposure...
06:40:37 Exposure complete. Computing average ADU.
06:40:37 Average ADU = 2674
06:40:37 Target ADU = 20000
06:40:42 Setting imager exposure time to 40.0 seconds.
06:40:42 Starting imager exposure...
06:41:30 Exposure complete. Computing average ADU.
06:41:31 Average ADU = 3223
06:41:31 Target ADU = 20000
06:41:36 Setting imager exposure time to 40.0 seconds.
06:41:36 Starting imager exposure...
06:42:24 Exposure complete. Computing average ADU.
06:42:24 Average ADU = 3897
06:42:24 Target ADU = 20000
06:42:30 Setting imager exposure time to 40.0 seconds.
06:42:30 Starting imager exposure...
06:43:17 Exposure complete. Computing average ADU.
06:43:18 Average ADU = 4729
06:43:18 Target ADU = 20000
06:43:23 Setting imager exposure time to 40.0 seconds.
06:43:23 Starting imager exposure...
06:44:11 Exposure complete. Computing average ADU.
06:44:11 Average ADU = 5772
06:44:11 Target ADU = 20000
06:44:17 Setting imager exposure time to 40.0 seconds.
06:44:17 Starting imager exposure...
06:45:04 Exposure complete. Computing average ADU.
06:45:05 Average ADU = 7063
06:45:05 Target ADU = 20000
06:45:10 Setting imager exposure time to 40.0 seconds.
06:45:10 Starting imager exposure...
06:45:58 Exposure complete. Computing average ADU.
06:45:58 Average ADU = 8648
06:45:58 Target ADU = 20000
06:46:04 Setting imager exposure time to 40.0 seconds.
06:46:04 Starting imager exposure...
06:46:52 Exposure complete. Computing average ADU.
06:46:52 Average ADU = 10597
06:46:52 Target ADU = 20000
06:46:57 Setting imager exposure time to 40.0 seconds.
06:46:57 Starting imager exposure...
06:47:45 Exposure complete. Computing average ADU.
06:47:46 Average ADU = 13058
06:47:46 Target ADU = 20000

06:47:51 Setting imager exposure time to 40.0 seconds.
06:47:51 Starting imager exposure...
06:48:39 Exposure complete. Computing average ADU.
06:48:39 Average ADU = 16155
06:48:39 Target ADU = 20000
06:48:45 Setting imager exposure time to 40.0 seconds.
06:48:45 Starting imager exposure...
06:49:32 Exposure complete. Computing average ADU.
06:49:33 Average ADU = 20091
06:49:33 Target ADU = 20000
06:49:33 Current exposure time good! Taking Flats.
06:49:38 Setting imager exposure time to 40.0 seconds.
06:49:38 Starting imager exposure #1
06:50:29 Exposure complete. Computing average ADU.
06:50:29 Average ADU = 25056
06:50:29 Recomputing exposure time...
06:50:29 New exposure time computed to be 29.0
06:50:34 Setting imager exposure time to 29.0 seconds.
06:50:35 Starting imager exposure #2
06:51:13 Exposure complete. Computing average ADU.
06:51:14 Average ADU = 22493
06:51:14 Recomputing exposure time...
06:51:14 New exposure time computed to be 23.4
06:51:19 Setting imager exposure time to 23.4 seconds.
06:51:19 Starting imager exposure #3
06:51:52 Exposure complete. Computing average ADU.
06:51:53 Average ADU = 21769
06:51:53 Recomputing exposure time...
06:51:53 New exposure time computed to be 19.5
06:51:58 Setting imager exposure time to 19.5 seconds.
06:51:58 Starting imager exposure #4
06:52:27 Exposure complete. Computing average ADU.
06:52:27 Average ADU = 21312
06:52:27 Recomputing exposure time...
06:52:27 New exposure time computed to be 16.6
06:52:33 Setting imager exposure time to 16.6 seconds.
06:52:33 Starting imager exposure #5
06:52:59 Exposure complete. Computing average ADU.
06:52:59 Average ADU = 21000
06:52:59 Recomputing exposure time...
06:52:59 New exposure time computed to be 14.4
06:52:59 Automatic Flat Action complete.
06:52:59 In Auto Flat Action.
06:52:59 Slewing to flat target location.
06:52:59 Moving to Alt-Az position: Alt: 85°00' 00.0" Az: 270°00'00"
06:53:04 Done slewing!
06:53:05 Setting imager bin mode to 2x2.
06:53:05 Setting filter to Red.
06:53:09 Setting imager to full frame.
06:53:14 Setting imager exposure time to 1.0 seconds.
06:53:14 Starting imager exposure...
06:53:19 Exposure complete. Computing average ADU.
06:53:19 Average ADU = 2580
06:53:19 Target ADU = 20000
06:53:19 New exposure time computed to be 7.8
06:53:22 Setting imager exposure time to 7.8 seconds.
06:53:22 Starting imager exposure...
06:53:35 Exposure complete. Computing average ADU.
06:53:35 Average ADU = 15918
06:53:35 Target ADU = 20000
06:53:35 New exposure time computed to be 9.8
06:53:38 Setting imager exposure time to 9.8 seconds.
06:53:38 Starting imager exposure...
06:53:52 Exposure complete. Computing average ADU.
06:53:52 Average ADU = 21666
06:53:52 Target ADU = 20000
06:53:52 Current exposure time good! Taking Flats.
06:53:56 Setting imager exposure time to 9.8 seconds.
06:53:56 Starting imager exposure #1
06:54:10 Exposure complete. Computing average ADU.
06:54:10 Average ADU = 23642
06:54:10 Recomputing exposure time...
06:54:11 New exposure time computed to be 8.3
06:54:14 Setting imager exposure time to 8.3 seconds.
06:54:14 Starting imager exposure #2
06:54:27 Exposure complete. Computing average ADU.
06:54:27 Average ADU = 21926
06:54:27 Recomputing exposure time...
06:54:27 New exposure time computed to be 7.6
06:54:30 Setting imager exposure time to 7.6 seconds.
06:54:30 Starting imager exposure #3
06:54:43 Exposure complete. Computing average ADU.
06:54:43 Average ADU = 21829
06:54:43 Recomputing exposure time...
06:54:43 New exposure time computed to be 7.0
06:54:46 Setting imager exposure time to 7.0 seconds.
06:54:46 Starting imager exposure #4
06:54:58 Exposure complete. Computing average ADU.
06:54:58 Average ADU = 21778
06:54:58 Recomputing exposure time...

06:54:58 New exposure time computed to be 6.4
06:55:02 Setting imager exposure time to 6.4 seconds.
06:55:02 Starting imager exposure #5
06:55:13 Exposure complete. Computing average ADU.
06:55:13 Average ADU = 21494
06:55:13 Recomputing exposure time...
06:55:13 New exposure time computed to be 6.0
06:55:13 Setting filter to Green.
06:55:17 Setting imager to full frame.
06:55:20 Setting imager exposure time to 1.0 seconds.
06:55:20 Starting imager exposure...
06:55:25 Exposure complete. Computing average ADU.
06:55:25 Average ADU = 3999
06:55:25 Target ADU = 20000
06:55:25 New exposure time computed to be 5.0
06:55:28 Setting imager exposure time to 5.0 seconds.
06:55:28 Starting imager exposure...
06:55:37 Exposure complete. Computing average ADU.
06:55:37 Average ADU = 15942
06:55:37 Target ADU = 20000
06:55:37 New exposure time computed to be 6.3
06:55:41 Setting imager exposure time to 6.3 seconds.
06:55:41 Starting imager exposure...
06:55:51 Exposure complete. Computing average ADU.
06:55:51 Average ADU = 21110
06:55:51 Target ADU = 20000
06:55:51 Current exposure time good! Taking Flats.
06:55:55 Setting imager exposure time to 6.3 seconds.
06:55:55 Starting imager exposure #1
06:56:05 Exposure complete. Computing average ADU.
06:56:06 Average ADU = 22329
06:56:06 Recomputing exposure time...
06:56:06 New exposure time computed to be 5.6
06:56:09 Setting imager exposure time to 5.6 seconds.
06:56:09 Starting imager exposure #2
06:56:19 Exposure complete. Computing average ADU.
06:56:19 Average ADU = 21043
06:56:19 Recomputing exposure time...
06:56:19 New exposure time computed to be 5.3
06:56:23 Setting imager exposure time to 5.3 seconds.
06:56:23 Starting imager exposure #3
06:56:33 Exposure complete. Computing average ADU.
06:56:33 Average ADU = 21046
06:56:33 Recomputing exposure time...
06:56:33 New exposure time computed to be 5.0
06:56:36 Setting imager exposure time to 5.0 seconds.
06:56:36 Starting imager exposure #4
06:56:46 Exposure complete. Computing average ADU.
06:56:46 Average ADU = 20957
06:56:46 Recomputing exposure time...
06:56:46 New exposure time computed to be 4.8
06:56:50 Setting imager exposure time to 4.8 seconds.
06:56:50 Starting imager exposure #5
06:56:59 Exposure complete. Computing average ADU.
06:56:59 Average ADU = 21222
06:56:59 Recomputing exposure time...
06:56:59 New exposure time computed to be 4.5
06:56:59 Setting filter to Blue.
06:57:02 Setting imager to full frame.
06:57:05 Setting imager exposure time to 1.0 seconds.
06:57:05 Starting imager exposure...
06:57:10 Exposure complete. Computing average ADU.
06:57:10 Average ADU = 7028
06:57:10 Target ADU = 20000
06:57:10 New exposure time computed to be 2.8
06:57:13 Setting imager exposure time to 2.8 seconds.
06:57:13 Starting imager exposure...
06:57:20 Exposure complete. Computing average ADU.
06:57:20 Average ADU = 15816
06:57:20 Target ADU = 20000
06:57:20 New exposure time computed to be 3.5
06:57:24 Setting imager exposure time to 3.5 seconds.
06:57:24 Starting imager exposure...
06:57:32 Exposure complete. Computing average ADU.
06:57:32 Average ADU = 20461
06:57:32 Target ADU = 20000
06:57:32 Current exposure time good! Taking Flats.
06:57:35 Setting imager exposure time to 3.5 seconds.
06:57:35 Starting imager exposure #1
06:57:43 Exposure complete. Computing average ADU.
06:57:43 Average ADU = 21281
06:57:43 Recomputing exposure time...
06:57:43 New exposure time computed to be 3.3
06:57:47 Setting imager exposure time to 3.3 seconds.
06:57:47 Starting imager exposure #2
06:57:55 Exposure complete. Computing average ADU.
06:57:55 Average ADU = 20896
06:57:55 Recomputing exposure time...
06:57:55 New exposure time computed to be 3.2
06:57:58 Setting imager exposure time to 3.2 seconds.

06:57:58 Starting imager exposure #3
06:58:07 Exposure complete. Computing average ADU.
06:58:07 Average ADU = 21101
06:58:07 Recomputing exposure time...
06:58:07 New exposure time computed to be 3.0
06:58:10 Setting imager exposure time to 3.0 seconds.
06:58:10 Starting imager exposure #4
06:58:18 Exposure complete. Computing average ADU.
06:58:18 Average ADU = 20588
06:58:18 Recomputing exposure time...
06:58:18 New exposure time computed to be 2.9
06:58:21 Setting imager exposure time to 2.9 seconds.
06:58:21 Starting imager exposure #5
06:58:28 Exposure complete. Computing average ADU.
06:58:29 Average ADU = 20677
06:58:29 Recomputing exposure time...
06:58:29 New exposure time computed to be 2.8
06:58:29 Automatic Flat Action complete.
06:58:29 Turning on Fan.
06:58:29 Warming up camera...
06:58:29 Setting camera temperature to -5.2
06:58:29 Waiting for temperature to rise...
06:59:29 Waiting for temperature to rise...
07:00:09 Setting camera temperature to 4.8
07:00:09 Waiting for temperature to rise...
07:01:09 Waiting for temperature to rise...
07:01:40 Setting camera temperature to 14.9
07:01:40 Waiting for temperature to rise...
07:02:40 Waiting for temperature to rise...
07:03:40 Waiting for temperature to rise...
07:03:50 Shutting down cooler.
07:03:50 Action complete.