

CCD Commander Log File
Software v1.3.12
This copy is registered to:
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22:52:08 Action starting.
22:52:08 Connecting to the Camera...
22:52:08 Connecting to the Mount...
22:52:09 Connecting to FocusMax...
22:52:09 Turning on Fan.
22:52:09 Turning on cooler.
22:52:09 Setting cooler = -20
22:52:09 Simple Temperature Control complete.
22:52:09 Running m101_red_40m.act
22:52:09 Starting move to action.
22:52:09 Precessing cooridnates.
22:52:09 J2000 Coordinates: RA: 13h 57m 60.0s Dec: +54°35'09"
22:52:09 JNow Coordinates: RA: 13h 57m 13.3s Dec: +54°33'21"
22:52:09 Slewing to SAO 28942...
22:53:02 Done slewing!
22:53:02 Starting post slew delay.
22:53:05 Completed post slew delay.
22:53:05 Setting imager bin mode to 2x2.
22:53:05 Setting filter to Luminance.
22:53:07 Taking 5 second image for Plate solve...
22:53:16 Saving Image...
22:53:17 Performing Plate Solve with CCDSoft...
22:53:18 Plate solve results:
22:53:18 Pixel Scale = 1.86 asp.
22:53:18 North Angle = 273.31 degrees.
22:53:18 J2000 Coordinates = RA: 13h 57m 60.0s Dec: +54°35'50"
22:53:18 Syncing to RA 13.95369, Dec 54.56733
22:53:28 Starting focus run...
22:55:29 Focus succeeded! HFD = 4.87
22:55:29 Starting move to action.
22:55:29 Precessing cooridnates.
22:55:29 J2000 Coordinates: RA: 14h 03m 12.0s Dec: +54°20'58"
22:55:29 JNow Coordinates: RA: 14h 03m 25.1s Dec: +54°19'12"
22:55:29 Slewing to m101...
22:55:38 Done slewing!
22:55:38 Starting post slew delay.
22:55:41 Completed post slew delay.
22:55:41 Setting imager bin mode to 2x2.
22:55:41 Setting filter to Luminance.
22:55:48 Taking 5 second image for Plate Solve...
22:56:05 Saving Image...
22:56:06 Performing Plate Solve with CCDSoft...
22:56:07 Plate solve results:
22:56:07 Pixel Scale = 1.86 asp.
22:56:07 North Angle = 273.26 degrees.
22:56:07 J2000 Coordinates = RA: 14h 03m 12.1s Dec: +54°20'56"
22:56:07 Syncing to RA 14.05698, Dec 54.31955
22:56:12 Setting image type to Light.
22:56:12 Setting imager bin mode to 2x2.
22:56:12 Setting filter to Red.
22:56:15 Setting imager to full frame.
22:56:15 Setting imager exposure time to 600 seconds.
22:56:16 Setting autoguider bin mode to 2x2.
22:56:16 Taking a 1 second autoguider exposure.
22:56:22 Beginning guide star search...
22:56:23 Taking a 1.74 second autoguider exposure.
22:56:32 Beginning guide star search...
22:56:33 Found possible guide star at 163, 151 with a max brightness of 2633 ADU.
22:56:33 Taking a 1.74 second autoguider exposure.

22:56:38 Beginning guide star search...
22:56:39 Found appropriate guide star at 163, 151 with a max brightness of 3020 ADU.
22:56:39 Trying to autoguide on star at 163.0,151.0.
22:56:39 Starting to autoguide.
22:56:46 Checking autoguider max error...
22:56:47 Autoguider error: X=0.41 Y=0.38
22:56:47 Checking autoguider max error...
22:56:50 Autoguider error: X=0.49 Y=0.17
22:56:50 Checking autoguider max error...
22:56:53 Autoguider error: X=-0.12 Y=0.22
22:56:53 Autoguider max error < 0.4!
22:56:53 Stopping autoguider...
22:56:55 Automatic guide star acquisition successful!
22:56:55 Setting autoguider exposure time to 1.74 seconds.
22:56:55 Setting guide star position to 163.0,151.0.
22:56:55 Starting to autoguide.
22:57:02 Checking autoguider max error...
22:57:04 Autoguider error: X=-0.15 Y=0.18
22:57:04 Autoguider max error < 0.4!
22:57:04 Starting imager exposure (1 of 4).
23:07:10 Imager exposure complete.
23:07:10 Stopping autoguider...
23:07:12 Setting autoguider exposure time to 1.74 seconds.
23:07:12 Setting guide star position to 165.0,151.0.
23:07:12 Starting to autoguide.
23:07:19 Checking autoguider max error...
23:07:22 Autoguider error: X=-1.22 Y=-0.35
23:07:22 Checking autoguider max error...
23:07:25 Autoguider error: X=-1.42 Y=-0.21
23:07:25 Checking autoguider max error...
23:07:28 Autoguider error: X=-1.45 Y=-0.16
23:07:28 Checking autoguider max error...
23:07:31 Autoguider error: X=-1.62 Y=0.03
23:07:31 Checking autoguider max error...
23:07:34 Autoguider error: X=-1.38 Y=0.10
23:07:34 Checking autoguider max error...
23:07:37 Autoguider error: X=-1.63 Y=0.08
23:07:37 Checking autoguider max error...
23:07:41 Autoguider error: X=-0.44 Y=0.33
23:07:41 Checking autoguider max error...
23:07:43 Autoguider error: X=-0.17 Y=-0.01
23:07:43 Autoguider max error < 0.4!
23:07:43 Starting imager exposure (2 of 4).
23:17:49 Imager exposure complete.
23:17:49 Stopping autoguider...
23:17:51 Setting autoguider exposure time to 1.74 seconds.
23:17:51 Setting guide star position to 165.0,153.0.
23:17:51 Starting to autoguide.
23:17:58 Checking autoguider max error...
23:18:01 Autoguider error: X=-0.25 Y=-0.69
23:18:01 Checking autoguider max error...
23:18:04 Autoguider error: X=0.01 Y=0.29
23:18:04 Autoguider max error < 0.4!
23:18:04 Starting imager exposure (3 of 4).
23:28:09 Imager exposure complete.
23:28:09 Stopping autoguider...
23:28:11 Setting autoguider exposure time to 1.74 seconds.
23:28:11 Setting guide star position to 163.0,153.0.
23:28:11 Starting to autoguide.
23:28:18 Checking autoguider max error...
23:28:21 Autoguider error: X=0.49 Y=0.29
23:28:21 Checking autoguider max error...
23:28:24 Autoguider error: X=-0.70 Y=-0.29
23:28:24 Checking autoguider max error...
23:28:27 Autoguider error: X=-0.30 Y=0.41

23:28:27 Checking autoguider max error...
23:28:30 Autoguider error: X=-0.20 Y=0.50
23:28:30 Checking autoguider max error...
23:28:33 Autoguider error: X=-0.29 Y=-0.09
23:28:33 Autoguider max error < 0.4!
23:28:33 Starting imager exposure (4 of 4).
23:38:38 Imager exposure complete.
23:38:38 Stopping autoguider...
23:38:40 Take Images Action complete.
23:38:40 Done running m101_red_40m.act
23:38:40 Running m101_grn_40m.act
23:38:40 Starting move to action.
23:38:40 Precessing coordinates.
23:38:40 J2000 Coordinates: RA: 13h 57m 60.0s Dec: +54°35'09"
23:38:40 JNow Coordinates: RA: 13h 57m 13.3s Dec: +54°33'21"
23:38:40 Slewing to SAO 28942...
23:38:48 Done slewing!
23:38:48 Starting post slew delay.
23:38:51 Completed post slew delay.
23:38:51 Setting imager bin mode to 2x2.
23:38:51 Setting filter to Luminance.
23:38:58 Taking 5 second image for Plate Solve...
23:39:07 Saving Image...
23:39:08 Performing Plate Solve with CCDSoft...
23:39:10 Plate solve results:
23:39:10 Pixel Scale = 1.86 asp.
23:39:10 North Angle = 273.27 degrees.
23:39:10 J2000 Coordinates = RA: 13h 57m 01.8s Dec: +54°34'10"
23:39:10 Syncing to RA 13.95419, Dec 54.53949
23:39:18 Starting focus run...
23:41:20 Focus succeeded! HFD = 4.59
23:41:20 Starting move to action.
23:41:20 Precessing coordinates.
23:41:20 J2000 Coordinates: RA: 14h 03m 12.0s Dec: +54°20'58"
23:41:20 JNow Coordinates: RA: 14h 03m 25.1s Dec: +54°19'12"
23:41:20 Slewing to m101...
23:41:30 Done slewing!
23:41:30 Starting post slew delay.
23:41:33 Completed post slew delay.
23:41:33 Setting imager bin mode to 2x2.
23:41:33 Setting filter to Luminance.
23:41:39 Taking 5 second image for Plate Solve...
23:41:57 Saving Image...
23:41:57 Performing Plate Solve with CCDSoft...
23:41:58 Plate solve results:
23:41:58 Pixel Scale = 1.86 asp.
23:41:58 North Angle = 273.31 degrees.
23:41:58 J2000 Coordinates = RA: 14h 03m 11.8s Dec: +54°22'22"
23:41:58 Syncing to RA 14.05690, Dec 54.34333
23:42:05 Setting image type to Light.
23:42:05 Setting imager bin mode to 2x2.
23:42:05 Setting filter to Green.
23:42:07 Setting imager to full frame.
23:42:07 Setting imager exposure time to 600 seconds.
23:42:08 Setting autoguider bin mode to 2x2.
23:42:08 Taking a 1 second autoguider exposure.
23:42:14 Beginning guide star search...
23:42:16 Taking a 1.4 second autoguider exposure.
23:42:23 Beginning guide star search...
23:42:24 Found possible guide star at 165, 149 with a max brightness of 2790 ADU.
23:42:24 Taking a 1.4 second autoguider exposure.
23:42:29 Beginning guide star search...
23:42:30 Taking a 1.58 second autoguider exposure.
23:42:37 Beginning guide star search...
23:42:38 Found possible guide star at 166, 149 with a max brightness of 2887 ADU.

23:42:38 Taking a 1.58 second autoguider exposure.
23:42:43 Beginning guide star search...
23:42:44 Found appropriate guide star at 166, 150 with a max brightness of 3241 ADU.
23:42:44 Trying to autoguide on star at 166.0,150.0.
23:42:44 Starting to autoguide.
23:42:50 Checking autoguider max error...
23:42:52 Autoguider error: X=-0.58 Y=0.36
23:42:52 Checking autoguider max error...
23:42:55 Autoguider error: X=-0.40 Y=-0.55
23:42:55 Checking autoguider max error...
23:42:57 Autoguider error: X=-0.17 Y=0.10
23:42:57 Autoguider max error < 0.4!
23:42:57 Stopping autoguider...
23:42:59 Automatic guide star acquisition successful!
23:42:59 Setting autoguider exposure time to 1.58 seconds.
23:42:59 Setting guide star position to 166.0,150.0.
23:42:59 Starting to autoguide.
23:43:06 Checking autoguider max error...
23:43:08 Autoguider error: X=-0.33 Y=0.65
23:43:08 Checking autoguider max error...
23:43:10 Autoguider error: X=-0.08 Y=-0.06
23:43:10 Autoguider max error < 0.4!
23:43:10 Starting imager exposure (1 of 4).
23:53:15 Imager exposure complete.
23:53:16 Stopping autoguider...
23:53:18 Setting autoguider exposure time to 1.58 seconds.
23:53:18 Setting guide star position to 168.0,150.0.
23:53:18 Starting to autoguide.
23:53:24 Checking autoguider max error...
23:53:27 Autoguider error: X=-1.91 Y=-0.30
23:53:27 Checking autoguider max error...
23:53:30 Autoguider error: X=-1.89 Y=0.15
23:53:30 Checking autoguider max error...
23:53:33 Autoguider error: X=-1.58 Y=-0.19
23:53:33 Checking autoguider max error...
23:53:36 Autoguider error: X=-1.67 Y=-0.08
23:53:36 Checking autoguider max error...
23:53:39 Autoguider error: X=-1.37 Y=0.24
23:53:39 Checking autoguider max error...
23:53:41 Autoguider error: X=-1.06 Y=0.04
23:53:41 Checking autoguider max error...
23:53:44 Autoguider error: X=-0.29 Y=-0.82
23:53:44 Checking autoguider max error...
23:53:47 Autoguider error: X=0.01 Y=0.84
23:53:47 Checking autoguider max error...
23:53:49 Autoguider error: X=0.04 Y=-0.04
23:53:49 Autoguider max error < 0.4!
23:53:49 Starting imager exposure (2 of 4).
00:03:55 Imager exposure complete.
00:03:55 Stopping autoguider...
00:03:57 Setting autoguider exposure time to 1.58 seconds.
00:03:57 Setting guide star position to 168.0,152.0.
00:03:57 Starting to autoguide.
00:04:03 Checking autoguider max error...
00:04:06 Autoguider error: X=0.21 Y=-0.04
00:04:06 Autoguider max error < 0.4!
00:04:06 Starting imager exposure (3 of 4).
00:14:11 Imager exposure complete.
00:14:11 Stopping autoguider...
00:14:13 Setting autoguider exposure time to 1.58 seconds.
00:14:13 Setting guide star position to 166.0,152.0.
00:14:13 Starting to autoguide.
00:14:20 Checking autoguider max error...
00:14:22 Autoguider error: X=-0.26 Y=0.04
00:14:22 Autoguider max error < 0.4!

00:14:22 Starting imager exposure (4 of 4).

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00:51:04 Action starting.
00:51:04 Connecting to the Camera...
00:51:04 Connecting to the Mount...
00:51:05 Connecting to FocusMax...
00:51:05 Turning on Fan.
00:51:05 Turning on cooler.
00:51:05 Setting cooler = -20
00:51:05 Simple Temperature Control complete.
00:51:05 Running m101_grn_40m.act
00:51:05 Starting move to action.
00:51:05 Precessing coordinates.
00:51:06 J2000 Coordinates: RA: 13h 57m 60.0s Dec: +54°35'09"
00:51:06 JNow Coordinates: RA: 13h 57m 13.3s Dec: +54°33'21"
00:51:06 Slewing to SAO 28942...
00:51:14 Done slewing!
00:51:14 Starting post slew delay.
00:51:17 Completed post slew delay.
00:51:17 Setting imager bin mode to 2x2.
00:51:17 Setting filter to Luminance.
00:51:24 Taking 5 second image for Plate Solve...
00:51:42 Saving Image...
00:51:42 Performing Plate Solve with CCDSoft...
00:51:44 Plate solve results:
00:51:44 Pixel Scale = 1.86 asp.
00:51:44 North Angle = 273.30 degrees.
00:51:44 J2000 Coordinates = RA: 13h 57m 01.5s Dec: +54°33'33"
00:51:44 Syncing to RA 13.95412, Dec 54.52917
00:51:52 Starting focus run...
00:51:58 Focus failed!
00:51:58 Starting move to action.
00:51:58 Precessing coordinates.
00:51:58 J2000 Coordinates: RA: 14h 03m 12.0s Dec: +54°20'58"
00:51:58 JNow Coordinates: RA: 14h 03m 25.1s Dec: +54°19'12"
00:51:58 Slewing to m101...
00:52:08 Done slewing!
00:52:08 Starting post slew delay.
00:52:11 Completed post slew delay.
00:52:11 Setting imager bin mode to 2x2.
00:52:11 Setting filter to Luminance.
00:52:18 Taking 5 second image for Plate Solve...
00:52:27 Saving Image...
00:52:27 Performing Plate Solve with CCDSoft...
00:52:28 Plate solve results:
00:52:28 Pixel Scale = 1.85 asp.
00:52:28 North Angle = 273.26 degrees.
00:52:28 J2000 Coordinates = RA: 14h 03m 11.5s Dec: +54°22'39"
00:52:28 Syncing to RA 14.05683, Dec 54.34801
00:52:35 Setting image type to Light.
00:52:35 Setting imager bin mode to 2x2.
00:52:35 Setting filter to Green.
00:52:38 Setting imager to full frame.
00:52:38 Setting imager exposure time to 600 seconds.
00:52:39 Setting autoguider bin mode to 2x2.
00:52:39 Taking a 1 second autoguider exposure.
00:52:45 Beginning guide star search...
00:52:47 Taking a 1.58 second autoguider exposure.
00:52:54 Beginning guide star search...

00:52:55 Taking a 2 second autoguider exposure.
00:53:03 Beginning guide star search...
00:53:05 Taking a 2.35 second autoguider exposure.
00:53:14 Beginning guide star search...
00:53:15 Found possible guide star at 165, 148 with a max brightness of 2687 ADU.
00:53:15 Taking a 2.35 second autoguider exposure.
00:53:21 Beginning guide star search...
00:53:22 Found appropriate guide star at 165, 147 with a max brightness of 3327 ADU.
00:53:22 Trying to autoguide on star at 165.0,147.0.
00:53:22 Starting to autoguide.
00:53:31 Checking autoguider max error...
00:53:32 Autoguider error: X=0.05 Y=0.25
00:53:32 Autoguider max error < 0.4!
00:53:32 Stopping autoguider...
00:53:34 Automatic guide star acquisition successful!
00:53:34 Setting autoguider exposure time to 2.35 seconds.
00:53:34 Setting guide star position to 165.0,147.0.
00:53:34 Starting to autoguide.
00:53:43 Checking autoguider max error...
00:53:44 Autoguider error: X=0.03 Y=0.28
00:53:44 Autoguider max error < 0.4!
00:53:44 Starting imager exposure (1 of 2).
01:03:49 Imager exposure complete.
01:03:49 Stopping autoguider...
01:03:51 Setting autoguider exposure time to 2.35 seconds.
01:03:51 Setting guide star position to 167.0,147.0.
01:03:51 Starting to autoguide.
01:04:01 Checking autoguider max error...
01:04:02 Autoguider error: X=-1.27 Y=0.74
01:04:02 Checking autoguider max error...
01:04:06 Autoguider error: X=-1.08 Y=0.15
01:04:06 Checking autoguider max error...
01:04:09 Autoguider error: X=-1.25 Y=-0.07
01:04:09 Checking autoguider max error...
01:04:13 Autoguider error: X=-0.98 Y=0.10
01:04:13 Checking autoguider max error...
01:04:16 Autoguider error: X=-1.29 Y=-0.07
01:04:16 Checking autoguider max error...
01:04:19 Autoguider error: X=-1.23 Y=-0.10
01:04:19 Checking autoguider max error...
01:04:23 Autoguider error: X=-1.05 Y=0.37
01:04:23 Checking autoguider max error...
01:04:26 Autoguider error: X=-0.67 Y=-0.04
01:04:26 Checking autoguider max error...
01:04:29 Autoguider error: X=-0.70 Y=0.67
01:04:29 Checking autoguider max error...
01:04:33 Autoguider error: X=0.15 Y=-0.25
01:04:33 Autoguider max error < 0.4!
01:04:33 Starting imager exposure (2 of 2).
01:14:38 Imager exposure complete.
01:14:38 Stopping autoguider...
01:14:40 Take Images Action complete.
01:14:40 Done running m101_grn_40m.act
01:14:40 Running m101_blu_40m.act
01:14:40 Starting move to action.
01:14:40 Precessing coordinates.
01:14:40 J2000 Coordinates: RA: 13h 57m 60.0s Dec: +54°35'09"
01:14:40 JNow Coordinates: RA: 13h 57m 13.3s Dec: +54°33'21"
01:14:40 Slewing to SAO 28942...
01:14:48 Done slewing!
01:14:48 Starting post slew delay.
01:14:51 Completed post slew delay.
01:14:51 Setting imager bin mode to 2x2.
01:14:51 Setting filter to Luminance.
01:14:57 Taking 5 second image for Plate solve...

01:15:07 Saving Image...
01:15:07 Performing Plate Solve with CCDSoft...
01:15:08 Plate solve results:
01:15:08 Pixel Scale = 1.86 asp.
01:15:08 North Angle = 273.31 degrees.
01:15:08 J2000 Coordinates = RA: 13h 57m 02.7s Dec: +54°33'41"
01:15:08 Syncing to RA 13.95444, Dec 54.53133
01:15:17 Starting focus run...
01:15:22 Focus failed!
01:15:22 Starting move to action.
01:15:22 Precessing coordnates.
01:15:22 J2000 Coordinates: RA: 14h 03m 12.0s Dec: +54°20'58"
01:15:22 JNow Coordinates: RA: 14h 03m 25.1s Dec: +54°19'12"
01:15:22 Slewing to m101...
01:15:31 Done slewing!
01:15:31 Starting post slew delay.
01:15:34 Completed post slew delay.
01:15:34 Setting imager bin mode to 2x2.
01:15:34 Setting filter to Luminance.
01:15:40 Taking 5 second image for Plate solve...
01:15:50 Saving Image...
01:15:50 Performing Plate Solve with CCDSoft...
01:15:51 Plate solve results:
01:15:51 Pixel Scale = 1.85 asp.
01:15:51 North Angle = 273.29 degrees.
01:15:51 J2000 Coordinates = RA: 14h 03m 12.0s Dec: +54°22'40"
01:15:51 Syncing to RA 14.05696, Dec 54.34829
01:15:56 Setting image type to Light.
01:15:56 Setting imager bin mode to 2x2.
01:15:56 Setting filter to Blue.
01:16:00 Setting imager to full frame.
01:16:00 Setting imager exposure time to 600 seconds.
01:16:01 Setting autoguider bin mode to 2x2.
01:16:01 Taking a 1 second autoguider exposure.
01:16:08 Beginning guide star search...
01:16:09 Taking a 1.86 second autoguider exposure.
01:16:17 Beginning guide star search...
01:16:18 Found possible guide star at 166, 149 with a max brightness of 2552 ADU.
01:16:18 Taking a 1.86 second autoguider exposure.
01:16:24 Beginning guide star search...
01:16:25 Found appropriate guide star at 166, 148 with a max brightness of 2530 ADU.
01:16:25 Trying to autoguide on star at 166.0,148.0.
01:16:25 Starting to autoguide.
01:16:32 Checking autoguider max error...
01:16:34 Autoguider error: X=-0.23 Y=0.42
01:16:34 Checking autoguider max error...
01:16:37 Autoguider error: X=-0.08 Y=-0.10
01:16:37 Autoguider max error < 0.4!
01:16:37 Stopping autoguider...
01:16:39 Automatic guide star acquisition successful!
01:16:39 Setting autoguider exposure time to 1.86 seconds.
01:16:39 Setting guide star position to 166.0,148.0.
01:16:39 Starting to autoguide.
01:16:46 Checking autoguider max error...
01:16:48 Autoguider error: X=0.08 Y=-0.08
01:16:48 Autoguider max error < 0.4!
01:16:48 Starting imager exposure (1 of 4).
01:26:53 Imager exposure complete.
01:26:53 Stopping autoguider...
01:26:55 Setting autoguider exposure time to 1.86 seconds.
01:26:55 Setting guide star position to 168.0,148.0.
01:26:55 Starting to autoguide.
01:27:02 Checking autoguider max error...
01:27:04 Autoguider error: X=-0.91 Y=-0.11
01:27:04 Checking autoguider max error...

01:27:07 Autoguider error: X=-0.61 Y=-0.36
01:27:07 Checking autoguider max error...
01:27:11 Autoguider error: X=-0.42 Y=-0.72
01:27:11 Checking autoguider max error...
01:27:13 Autoguider error: X=-0.78 Y=0.00
01:27:13 Checking autoguider max error...
01:27:16 Autoguider error: X=-0.77 Y=0.08
01:27:16 Checking autoguider max error...
01:27:19 Autoguider error: X=-0.64 Y=-0.04
01:27:19 Checking autoguider max error...
01:27:22 Autoguider error: X=-0.84 Y=-0.28
01:27:22 Checking autoguider max error...
01:27:25 Autoguider error: X=-0.55 Y=-0.28
01:27:25 Checking autoguider max error...
01:27:28 Autoguider error: X=-0.41 Y=-0.13
01:27:28 Checking autoguider max error...
01:27:31 Autoguider error: X=-0.50 Y=-0.86
01:27:31 Checking autoguider max error...
01:27:34 Autoguider error: X=-0.51 Y=-0.14
01:27:34 Checking autoguider max error...
01:27:37 Autoguider error: X=-0.28 Y=0.11
01:27:37 Autoguider max error < 0.4!
01:27:37 Starting imager exposure (2 of 4).
01:37:42 Imager exposure complete.
01:37:42 Stopping autoguider...
01:37:44 Setting autoguider exposure time to 1.86 seconds.
01:37:44 Setting guide star position to 168.0,150.0.
01:37:44 Starting to autoguide.
01:37:52 Checking autoguider max error...
01:37:54 Autoguider error: X=0.17 Y=-1.74
01:37:54 Checking autoguider max error...
01:37:57 Autoguider error: X=0.30 Y=-0.80
01:37:57 Checking autoguider max error...
01:38:00 Autoguider error: X=0.13 Y=-0.32
01:38:00 Autoguider max error < 0.4!
01:38:00 Starting imager exposure (3 of 4).
01:48:04 Imager exposure complete.
01:48:04 Stopping autoguider...
01:48:06 Setting autoguider exposure time to 1.86 seconds.
01:48:06 Setting guide star position to 166.0,150.0.
01:48:06 Starting to autoguide.
01:48:14 Checking autoguider max error...
01:48:16 Autoguider error: X=-0.34 Y=-0.30
01:48:16 Autoguider max error < 0.4!
01:48:16 Starting imager exposure (4 of 4).
01:58:21 Imager exposure complete.
01:58:21 Stopping autoguider...
01:58:23 Take Images Action complete.
01:58:23 Done running m101_blu_40m.act
01:58:23 Running m101_lum_45m.act
01:58:23 Running Action List Iteration #1
01:58:23 Starting move to action.
01:58:23 Precessing coordnates.
01:58:23 J2000 Coordinates: RA: 13h 57m 60.0s Dec: +54°35'09"
01:58:23 JNow Coordinates: RA: 13h 57m 13.3s Dec: +54°33'21"
01:58:23 Slewing to SAO 28942...
01:58:32 Done slewing!
01:58:32 Starting post slew delay.
01:58:35 Completed post slew delay.
01:58:35 Setting imager bin mode to 2x2.
01:58:35 Setting filter to Luminance.
01:58:37 Taking 5 second image for Plate solve...
01:58:47 Saving Image...
01:58:47 Performing Plate solve with CCDSoft...
01:58:48 Plate solve results:

01:58:48 Pixel Scale = 1.86 asp.
01:58:48 North Angle = 273.27 degrees.
01:58:48 J2000 Coordinates = RA: 13h 57m 02.7s Dec: +54°33'57"
01:58:48 Syncing to RA 13.95446, Dec 54.53588
01:58:55 Starting focus run...
01:59:00 Focus failed!
01:59:00 Starting move to action.
01:59:00 Precessing coordinates.
01:59:00 J2000 Coordinates: RA: 14h 03m 12.0s Dec: +54°20'58"
01:59:00 JNow Coordinates: RA: 14h 03m 25.1s Dec: +54°19'12"
01:59:00 Slewing to m101...
01:59:10 Done slewing!
01:59:10 Starting post slew delay.
01:59:13 Completed post slew delay.
01:59:13 Setting imager bin mode to 2x2.
01:59:13 Setting filter to Luminance.
01:59:15 Taking 5 second image for Plate solve...
01:59:25 Saving Image...
01:59:25 Performing Plate Solve with CCDSoft...
01:59:26 Plate solve results:
01:59:26 Pixel Scale = 1.85 asp.
01:59:26 North Angle = 273.30 degrees.
01:59:26 J2000 Coordinates = RA: 14h 03m 12.0s Dec: +54°22'38"
01:59:26 Syncing to RA 14.05695, Dec 54.34782
01:59:31 Setting image type to Light.
01:59:31 Setting imager bin mode to 1x1.
01:59:31 Setting filter to Luminance.
01:59:33 Setting imager to full frame.
01:59:33 Setting imager exposure time to 900 seconds.
01:59:34 Setting autoguider bin mode to 2x2.
01:59:34 Taking a 1 second autoguider exposure.
01:59:41 Beginning guide star search...
01:59:42 Found possible guide star at 164, 149 with a max brightness of 4732 ADU.
01:59:42 Taking a 1 second autoguider exposure.
01:59:46 Beginning guide star search...
01:59:47 Found appropriate guide star at 164, 150 with a max brightness of 4946 ADU.
01:59:47 Trying to autoguide on star at 164.0,150.0.
01:59:48 Starting to autoguide.
01:59:52 Checking autoguider max error...
01:59:52 Autoguider error: X=0.19 Y=0.03
01:59:52 Autoguider max error < 0.4!
01:59:52 Stopping autoguider...
01:59:54 Automatic guide star acquisition successful!
01:59:54 Setting autoguider exposure time to 1 seconds.
01:59:54 Setting guide star position to 164.0,150.0.
01:59:54 Starting to autoguide.
01:59:58 Checking autoguider max error...
01:59:59 Autoguider error: X=0.04 Y=-0.12
01:59:59 Autoguider max error < 0.4!
01:59:59 Starting imager exposure (1 of 3).
02:15:09 Imager exposure complete.
02:15:09 Stopping autoguider...
02:15:11 Setting autoguider exposure time to 1 seconds.
02:15:11 Setting guide star position to 166.0,150.0.
02:15:11 Starting to autoguide.
02:15:15 Checking autoguider max error...
02:15:16 Autoguider error: X=-1.43 Y=-0.14
02:15:16 Checking autoguider max error...
02:15:18 Autoguider error: X=-1.71 Y=-0.22
02:15:18 Checking autoguider max error...
02:15:20 Autoguider error: X=-1.43 Y=-0.34
02:15:20 Checking autoguider max error...
02:15:22 Autoguider error: X=-1.17 Y=-0.59
02:15:22 Checking autoguider max error...
02:15:25 Autoguider error: X=-0.88 Y=0.08

02:15:25 Checking autoguider max error...
02:15:27 Autoguider error: X=-1.10 Y=0.14
02:15:27 Checking autoguider max error...
02:15:29 Autoguider error: X=-1.16 Y=-0.62
02:15:29 Checking autoguider max error...
02:15:31 Autoguider error: X=-0.87 Y=0.05
02:15:31 Checking autoguider max error...
02:15:33 Autoguider error: X=-0.23 Y=0.67
02:15:33 Checking autoguider max error...
02:15:35 Autoguider error: X=-0.37 Y=0.08
02:15:35 Autoguider max error < 0.4!
02:15:35 Starting imager exposure (2 of 3).
02:30:45 Imager exposure complete.
02:30:45 Stopping autoguider...
02:30:47 Setting autoguider exposure time to 1 seconds.
02:30:47 Setting guide star position to 166.0,152.0.
02:30:47 Starting to autoguide.
02:30:51 Checking autoguider max error...
02:30:52 Autoguider error: X=0.16 Y=-1.16
02:30:52 Checking autoguider max error...
02:30:54 Autoguider error: X=-0.21 Y=-0.65
02:30:54 Checking autoguider max error...
02:30:56 Autoguider error: X=0.30 Y=-0.63
02:30:56 Checking autoguider max error...
02:30:58 Autoguider error: X=0.46 Y=-0.36
02:30:58 Checking autoguider max error...
02:31:00 Autoguider error: X=-0.06 Y=-0.07
02:31:00 Autoguider max error < 0.4!
02:31:00 Starting imager exposure (3 of 3).
02:46:10 Imager exposure complete.
02:46:10 Stopping autoguider...
02:46:12 Take Images Action complete.
02:46:12 Running Action List Iteration #2
02:46:12 Starting move to action.
02:46:12 Precessing coordinates.
02:46:12 J2000 Coordinates: RA: 13h 57m 60.0s Dec: +54°35'09"
02:46:12 JNow Coordinates: RA: 13h 57m 13.3s Dec: +54°33'21"
02:46:12 Slewing to SAO 28942...
02:46:20 Done slewing!
02:46:20 Starting post slew delay.
02:46:23 Completed post slew delay.
02:46:23 Setting imager bin mode to 2x2.
02:46:23 Setting filter to Luminance.
02:46:25 Taking 5 second image for Plate solve...
02:46:34 Saving Image...
02:46:35 Performing Plate Solve with CCDSoft...
02:46:36 Plate solve results:
02:46:36 Pixel Scale = 1.85 asp.
02:46:36 North Angle = 273.30 degrees.
02:46:36 J2000 Coordinates = RA: 13h 56m 59.3s Dec: +54°35'05"
02:46:36 Syncing to RA 13.95351, Dec 54.55480
02:46:44 Starting focus run...
02:46:49 Focus failed!
02:46:49 Starting move to action.
02:46:49 Precessing coordinates.
02:46:49 J2000 Coordinates: RA: 14h 03m 12.0s Dec: +54°20'58"
02:46:49 JNow Coordinates: RA: 14h 03m 25.1s Dec: +54°19'12"
02:46:49 Slewing to m101...
02:46:58 Done slewing!
02:46:58 Starting post slew delay.
02:47:01 Completed post slew delay.
02:47:02 Setting imager bin mode to 2x2.
02:47:02 Setting filter to Luminance.
02:47:04 Taking 5 second image for Plate solve...
02:47:13 Saving Image...

02:47:13 Performing Plate Solve with CCDSoft...
02:47:14 Plate solve results:
02:47:14 Pixel Scale = 1.85 asp.
02:47:14 North Angle = 273.30 degrees.
02:47:14 J2000 Coordinates = RA: 14h 03m 15.3s Dec: +54°21'36"
02:47:15 Syncing to RA 14.05787, Dec 54.33054
02:47:20 Setting image type to Light.
02:47:20 Setting imager bin mode to 1x1.
02:47:20 Setting filter to Luminance.
02:47:22 Setting imager to full frame.
02:47:22 Setting imager exposure time to 900 seconds.
02:47:23 Setting autoguider bin mode to 2x2.
02:47:23 Taking a 1 second autoguider exposure.
02:47:29 Beginning guide star search...
02:47:30 Found possible guide star at 162, 149 with a max brightness of 3741 ADU.
02:47:30 Taking a 1 second autoguider exposure.
02:47:34 Beginning guide star search...
02:47:36 Found appropriate guide star at 162, 149 with a max brightness of 2785 ADU.
02:47:36 Trying to autoguide on star at 162.0,149.0.
02:47:36 Starting to autoguide.
02:47:40 Checking autoguider max error...
02:47:40 Autoguider error: X=0.24 Y=0.34
02:47:40 Autoguider max error < 0.4!
02:47:40 Stopping autoguider...
02:47:42 Automatic guide star acquisition successful!
02:47:42 Setting autoguider exposure time to 1 seconds.
02:47:42 Setting guide star position to 162.0,149.0.
02:47:42 Starting to autoguide.
02:47:47 Checking autoguider max error...
02:47:47 Autoguider error: X=-0.24 Y=0.02
02:47:47 Autoguider max error < 0.4!
02:47:47 Starting imager exposure (1 of 3).
03:02:58 Imager exposure complete.
03:02:58 Stopping autoguider...
03:03:00 Setting autoguider exposure time to 1 seconds.
03:03:00 Setting guide star position to 164.0,149.0.
03:03:00 Starting to autoguide.
03:03:04 Checking autoguider max error...
03:03:04 Autoguider error: X=-1.73 Y=-0.40
03:03:04 Checking autoguider max error...
03:03:07 Autoguider error: X=-1.00 Y=0.00
03:03:07 Checking autoguider max error...
03:03:09 Autoguider error: X=-1.38 Y=-0.65
03:03:09 Checking autoguider max error...
03:03:11 Autoguider error: X=-1.26 Y=-0.11
03:03:11 Checking autoguider max error...
03:03:13 Autoguider error: X=-1.62 Y=0.27
03:03:13 Checking autoguider max error...
03:03:15 Autoguider error: X=-1.05 Y=-0.01
03:03:15 Checking autoguider max error...
03:03:17 Autoguider error: X=-0.89 Y=-0.43
03:03:17 Checking autoguider max error...
03:03:19 Autoguider error: X=-0.98 Y=0.01
03:03:19 Checking autoguider max error...
03:03:21 Autoguider error: X=-0.08 Y=0.10
03:03:21 Autoguider max error < 0.4!
03:03:21 Starting imager exposure (2 of 3).
03:18:31 Imager exposure complete.
03:18:31 Stopping autoguider...
03:18:34 Setting autoguider exposure time to 1 seconds.
03:18:34 Setting guide star position to 164.0,151.0.
03:18:34 Starting to autoguide.
03:18:38 Checking autoguider max error...
03:18:38 Autoguider error: X=-0.23 Y=-2.00
03:18:38 Checking autoguider max error...

03:18:40 Autoguider error: X=-0.13 Y=-0.77
03:18:40 Checking autoguider max error...
03:18:42 Autoguider error: X=-0.19 Y=-0.08
03:18:42 Autoguider max error < 0.4!
03:18:42 Starting imager exposure (3 of 3).
03:33:52 Imager exposure complete.
03:33:52 Stopping autoguider...
03:33:54 Take Images Action complete.
03:33:54 Running Action List Iteration #3
03:33:54 Starting move to action.
03:33:54 Precessing coordinates.
03:33:54 J2000 Coordinates: RA: 13h 57m 60.0s Dec: +54°35'09"
03:33:54 JNow Coordinates: RA: 13h 57m 13.3s Dec: +54°33'21"
03:33:54 Slewing to SAO 28942...
03:34:02 Done slewing!
03:34:02 Starting post slew delay.
03:34:05 Completed post slew delay.
03:34:05 Setting imager bin mode to 2x2.
03:34:05 Setting filter to Luminance.
03:34:07 Taking 5 second image for Plate solve...
03:34:17 Saving Image...
03:34:17 Performing Plate Solve with CCDSoft...
03:34:18 Plate solve results:
03:34:18 Pixel Scale = 1.86 asp.
03:34:18 North Angle = 273.32 degrees.
03:34:18 J2000 Coordinates = RA: 13h 57m 02.7s Dec: +54°33'55"
03:34:18 Syncing to RA 13.95443, Dec 54.53531
03:34:25 Starting focus run...
03:34:31 Focus failed!
03:34:31 Starting move to action.
03:34:31 Precessing coordinates.
03:34:31 J2000 Coordinates: RA: 14h 03m 12.0s Dec: +54°20'58"
03:34:31 JNow Coordinates: RA: 14h 03m 25.1s Dec: +54°19'12"
03:34:31 Slewing to m101...
03:34:40 Done slewing!
03:34:40 Starting post slew delay.
03:34:43 Completed post slew delay.
03:34:43 Setting imager bin mode to 2x2.
03:34:43 Setting filter to Luminance.
03:34:45 Taking 5 second image for Plate solve...
03:34:54 Saving Image...
03:34:55 Performing Plate Solve with CCDSoft...
03:34:56 Plate solve results:
03:34:56 Pixel Scale = 1.85 asp.
03:34:56 North Angle = 273.30 degrees.
03:34:56 J2000 Coordinates = RA: 14h 03m 11.7s Dec: +54°22'37"
03:34:56 Syncing to RA 14.05688, Dec 54.34743
03:35:02 Setting image type to Light.
03:35:02 Setting imager bin mode to 1x1.
03:35:02 Setting filter to Luminance.
03:35:04 Setting imager to full frame.
03:35:04 Setting imager exposure time to 900 seconds.
03:35:05 Setting autoguider bin mode to 2x2.
03:35:05 Taking a 1 second autoguider exposure.
03:35:12 Beginning guide star search...
03:35:14 Found possible guide star at 164, 151 with a max brightness of 3836 ADU.
03:35:14 Taking a 1 second autoguider exposure.
03:35:18 Beginning guide star search...
03:35:19 Found appropriate guide star at 164, 151 with a max brightness of 4060 ADU.
03:35:19 Trying to autoguide on star at 164.0,151.0.
03:35:19 Starting to autoguide.
03:35:23 Checking autoguider max error...
03:35:24 Autoguider error: X=-0.41 Y=0.13
03:35:24 Checking autoguider max error...
03:35:25 Autoguider error: X=-0.44 Y=0.03

03:35:26 Checking autoguider max error...
03:35:27 Autoguider error: X=-0.38 Y=0.08
03:35:27 Autoguider max error < 0.4!
03:35:27 Stopping autoguider...
03:35:30 Automatic guide star acquisition successful!
03:35:30 Setting autoguider exposure time to 1 seconds.
03:35:30 Setting guide star position to 164.0,151.0.
03:35:30 Starting to autoguide.
03:35:34 Checking autoguider max error...
03:35:34 Autoguider error: X=0.11 Y=-0.17
03:35:34 Autoguider max error < 0.4!
03:35:34 Starting imager exposure (1 of 3).
03:50:45 Imager exposure complete.
03:50:45 Stopping autoguider...
03:50:47 Setting autoguider exposure time to 1 seconds.
03:50:47 Setting guide star position to 166.0,151.0.
03:50:47 Starting to autoguide.
03:50:51 Checking autoguider max error...
03:50:52 Autoguider error: X=-1.97 Y=-0.07
03:50:52 Checking autoguider max error...
03:50:54 Autoguider error: X=-1.28 Y=0.31
03:50:54 Checking autoguider max error...
03:50:56 Autoguider error: X=-1.22 Y=0.04
03:50:56 Checking autoguider max error...
03:50:58 Autoguider error: X=-1.22 Y=-0.10
03:50:58 Checking autoguider max error...
03:51:00 Autoguider error: X=-0.94 Y=-0.45
03:51:00 Checking autoguider max error...
03:51:02 Autoguider error: X=-0.96 Y=0.22
03:51:02 Checking autoguider max error...
03:51:04 Autoguider error: X=-0.49 Y=0.19
03:51:04 Checking autoguider max error...
03:51:06 Autoguider error: X=-0.82 Y=0.58
03:51:06 Checking autoguider max error...
03:51:08 Autoguider error: X=-0.91 Y=-0.01
03:51:08 Checking autoguider max error...
03:51:10 Autoguider error: X=-0.34 Y=0.15
03:51:10 Autoguider max error < 0.4!
03:51:10 Starting imager exposure (2 of 3).
04:06:20 Imager exposure complete.
04:06:20 Stopping autoguider...
04:06:22 Setting autoguider exposure time to 1 seconds.
04:06:22 Setting guide star position to 166.0,153.0.
04:06:22 Starting to autoguide.
04:06:26 Checking autoguider max error...
04:06:27 Autoguider error: X=-0.05 Y=-1.35
04:06:27 Checking autoguider max error...
04:06:29 Autoguider error: X=0.31 Y=-0.80
04:06:29 Checking autoguider max error...
04:06:30 Autoguider error: X=0.11 Y=-0.50
04:06:31 Checking autoguider max error...
04:06:32 Autoguider error: X=0.08 Y=0.20
04:06:32 Autoguider max error < 0.4!
04:06:32 Starting imager exposure (3 of 3).
04:21:42 Imager exposure complete.
04:21:42 Stopping autoguider...
04:21:44 Take Images Action complete.
04:21:44 Running Action List Iteration #4
04:21:44 Starting move to action.
04:21:44 Precessing coordinates.
04:21:44 J2000 Coordinates: RA: 13h 57m 60.0s Dec: +54°35'09"
04:21:44 JNow Coordinates: RA: 13h 57m 13.3s Dec: +54°33'21"
04:21:44 Flipping mount...
04:23:53 Slewing to SAO 28942...
04:24:09 Done slewing!

04:24:09 Starting post slew delay.
04:24:12 Completed post slew delay.
04:24:12 Setting imager bin mode to 2x2.
04:24:12 Setting filter to Luminance.
04:24:15 Taking 5 second image for Plate Solve...
04:24:24 Saving Image...
04:24:24 Performing Plate Solve with CCDSoft...
04:24:26 Plate solve results:
04:24:26 Pixel Scale = 1.85 asp.
04:24:26 North Angle = 273.84 degrees.
04:24:26 J2000 Coordinates = RA: 13h 58m 42.5s Dec: +54°37'32"
04:24:26 Syncing to RA 13.98214, Dec 54.59582
04:24:36 Starting focus run...
04:24:42 Focus failed!
04:24:42 Starting move to action.
04:24:42 Precessing coordinates.
04:24:42 J2000 Coordinates: RA: 14h 03m 12.0s Dec: +54°20'58"
04:24:42 JNow Coordinates: RA: 14h 03m 25.1s Dec: +54°19'12"
04:24:42 Slewing to m101...
04:24:51 Done slewing!
04:24:51 Starting post slew delay.
04:24:54 Completed post slew delay.
04:24:54 Setting imager bin mode to 2x2.
04:24:54 Setting filter to Luminance.
04:24:56 Taking 5 second image for Plate Solve...
04:25:06 Saving Image...
04:25:06 Performing Plate Solve with CCDSoft...
04:25:08 Plate solve results:
04:25:08 Pixel Scale = 1.85 asp.
04:25:08 North Angle = 273.84 degrees.
04:25:08 J2000 Coordinates = RA: 14h 03m 11.5s Dec: +54°20'53"
04:25:08 Syncing to RA 14.05683, Dec 54.31856
04:25:13 Setting image type to Light.
04:25:13 Setting imager bin mode to 1x1.
04:25:13 Setting filter to Luminance.
04:25:15 Setting imager to full frame.
04:25:15 Setting imager exposure time to 900 seconds.
04:25:16 Setting autoguider bin mode to 2x2.
04:25:16 Taking a 1 second autoguider exposure.
04:25:23 Beginning guide star search...
04:25:24 Taking a 2 second autoguider exposure.
04:25:34 Beginning guide star search...
04:25:35 Taking a 16.92 second autoguider exposure.
04:26:13 Beginning guide star search...
04:26:15 Taking a 36.47 second autoguider exposure.
04:27:32 Beginning guide star search...
04:27:34 Taking a 40 second autoguider exposure.
04:28:59 Beginning guide star search...
04:29:00 Found possible guide star at 174, 168 with a max brightness of 3570 ADU.
04:29:00 Taking a 40 second autoguider exposure.
04:29:43 Beginning guide star search...
04:29:45 Found possible guide star at 173, 166 with a max brightness of 3084 ADU.
04:29:45 Taking a 40 second autoguider exposure.
04:30:28 Beginning guide star search...
04:30:29 Found possible guide star at 173, 164 with a max brightness of 2697 ADU.
04:30:29 Taking a 40 second autoguider exposure.
04:31:12 Beginning guide star search...
04:31:13 Found appropriate guide star at 173, 163 with a max brightness of 2804 ADU.
04:31:13 Trying to autoguide on star at 173.0,163.0.
04:31:14 Starting to autoguide.
04:33:54 Checking autoguider max error...
04:33:59 Autoguider error: X=-0.46 Y=0.25
04:33:59 Checking autoguider max error...
04:34:40 Autoguider error: X=-0.16 Y=-1.14
04:34:40 Checking autoguider max error...

04:35:21 Autoguider error: X=3.99 Y=4.76
04:35:21 Checking autoguider max error...
04:36:03 Autoguider error: X=0.60 Y=-9.83
04:36:03 Checking autoguider max error...
04:36:44 Autoguider error: X=13.67 Y=1.65
04:36:45 Checking autoguider max error...
04:37:26 Autoguider error: X=-1.64 Y=-0.47
04:37:26 Checking autoguider max error...
04:38:07 Autoguider error: X=-1.31 Y=-0.80
04:38:07 Checking autoguider max error...
04:38:49 Autoguider error: X=-0.72 Y=-1.37
04:38:49 Checking autoguider max error...
04:39:30 Autoguider error: X=-0.33 Y=-1.77
04:39:30 Checking autoguider max error...
04:40:12 Autoguider error: X=-0.31 Y=-1.38
04:40:12 Checking autoguider max error...
04:40:53 Autoguider error: X=-0.54 Y=-0.27
04:40:53 Checking autoguider max error...
04:41:34 Autoguider error: X=-0.42 Y=0.36
04:41:34 Checking autoguider max error...
04:42:15 Autoguider error: X=-0.42 Y=1.28
04:42:15 Checking autoguider max error...
04:42:56 Autoguider error: X=-0.19 Y=1.41
04:42:56 Checking autoguider max error...
04:43:37 Autoguider error: X=-0.27 Y=0.69
04:43:37 Checking autoguider max error...
04:44:18 Autoguider error: X=-0.19 Y=-0.25
04:44:18 Autoguider max error < 0.4!
04:44:18 Stopping autoguider...
04:44:20 Automatic guide star acquisition successful!
04:44:20 Setting autoguider exposure time to 40 seconds.
04:44:20 Setting guide star position to 173.0,163.0.
04:44:20 Starting to autoguide.
04:47:01 Checking autoguider max error...
04:47:06 Autoguider error: X=-0.23 Y=0.01
04:47:06 Autoguider max error < 0.4!
04:47:06 Starting imager exposure (1 of 3).
05:02:15 Imager exposure complete.
05:02:15 Stopping autoguider...
05:02:17 Setting autoguider exposure time to 40 seconds.
05:02:17 Setting guide star position to 175.0,163.0.
05:02:17 Starting to autoguide.
05:04:57 Checking autoguider max error...
05:05:03 Autoguider error: X=-0.14 Y=-1.76
05:05:03 Checking autoguider max error...
05:05:44 Autoguider error: X=-0.27 Y=-0.17
05:05:44 Autoguider max error < 0.4!
05:05:44 Starting imager exposure (2 of 3).
05:18:57 User aborted! Stopping imager and autoguider...
05:18:57 Done running m101_lum_45m.act
05:18:57 Action stopped.

CCD Commander Log File
Software v1.3.12
This copy is registered to:
Jon K. Olson
jon@astroham.com

05:19:42 Action starting.
05:19:42 Connecting to the Camera...
05:19:42 Connecting to the Mount...
05:19:43 Connecting to FocusMax...
05:19:43 Setting image type to Dark.
05:19:43 Setting imager bin mode to 1x1.
05:19:43 Setting filter to Blue.

05:19:47 Setting imager to full frame.
05:19:47 Setting imager exposure time to 900 seconds.
05:19:48 Starting imager exposure (1 of 5).
05:34:57 Imager exposure complete.
05:34:58 Starting imager exposure (2 of 5).
05:50:06 Imager exposure complete.
05:50:07 Starting imager exposure (3 of 5).
06:05:16 Imager exposure complete.
06:05:17 Starting imager exposure (4 of 5).
06:20:26 Imager exposure complete.
06:20:27 Starting imager exposure (5 of 5).
06:33:29 Skip ahead at 06:33 action is active. Skipping ahead.
06:33:29 Skipping remainder of Action: Dark 5x900s Blue AS "dark_1x1_m..."
06:33:30 Skipping Action: Dark 5x600s Blue AS "dark_2x2_m..."
06:33:30 In Auto Flat Action.
06:33:30 Slewing to flat target location.
06:33:30 Moving to Alt-Az position: Alt: 85°00' 00.0" Az: 270°00'00"
06:34:04 Done slewing!
06:34:04 Starting post slew delay.
06:34:07 Completed post slew delay.
06:34:08 Setting imager bin mode to 1x1.
06:34:08 Setting filter to Luminance.
06:34:15 Setting imager to full frame.
06:34:21 Setting imager exposure time to 1.0 seconds.
06:34:21 Starting imager exposure...
06:34:30 Exposure complete. Computing average ADU.
06:34:31 Average ADU = 1770
06:34:31 Target ADU = 20000
06:34:31 New exposure time computed to be 11.3
06:34:34 Setting imager exposure time to 11.3 seconds.
06:34:34 Starting imager exposure...
06:34:53 Exposure complete. Computing average ADU.
06:34:54 Average ADU = 16242
06:34:54 Target ADU = 20000
06:34:54 New exposure time computed to be 13.9
06:34:57 Setting imager exposure time to 13.9 seconds.
06:34:57 Starting imager exposure...
06:35:19 Exposure complete. Computing average ADU.
06:35:19 Average ADU = 22442
06:35:19 Target ADU = 20000
06:35:19 New exposure time computed to be 12.4
06:35:23 Setting imager exposure time to 12.4 seconds.
06:35:23 Starting imager exposure...
06:35:43 Exposure complete. Computing average ADU.
06:35:44 Average ADU = 23060
06:35:44 Target ADU = 20000
06:35:44 New exposure time computed to be 10.8
06:35:47 Setting imager exposure time to 10.8 seconds.
06:35:47 Starting imager exposure...
06:36:06 Exposure complete. Computing average ADU.
06:36:06 Average ADU = 22341
06:36:06 Target ADU = 20000
06:36:06 New exposure time computed to be 9.7
06:36:10 Setting imager exposure time to 9.7 seconds.
06:36:10 Starting imager exposure...
06:36:27 Exposure complete. Computing average ADU.
06:36:28 Average ADU = 21792
06:36:28 Target ADU = 20000
06:36:28 Current exposure time good! Taking Flats.
06:36:31 Setting imager exposure time to 9.7 seconds.
06:36:31 Starting imager exposure #1
06:36:50 Exposure complete. Computing average ADU.
06:36:50 Average ADU = 23907
06:36:50 Recomputing exposure time...
06:36:50 New exposure time computed to be 7.4

06:36:54 Setting imager exposure time to 7.4 seconds.
06:36:54 Starting imager exposure #2
06:37:10 Exposure complete. Computing average ADU.
06:37:10 Average ADU = 19948
06:37:10 Recomputing exposure time...
06:37:10 New exposure time computed to be 6.7
06:37:14 Setting imager exposure time to 6.7 seconds.
06:37:14 Starting imager exposure #3
06:37:29 Exposure complete. Computing average ADU.
06:37:29 Average ADU = 19793
06:37:29 Recomputing exposure time...
06:37:29 New exposure time computed to be 6.2
06:37:33 Setting imager exposure time to 6.2 seconds.
06:37:33 Starting imager exposure #4
06:37:48 Exposure complete. Computing average ADU.
06:37:48 Average ADU = 19965
06:37:48 Recomputing exposure time...
06:37:48 New exposure time computed to be 5.6
06:37:52 Setting imager exposure time to 5.6 seconds.
06:37:52 Starting imager exposure #5
06:38:06 Exposure complete. Computing average ADU.
06:38:06 Average ADU = 19329
06:38:06 Recomputing exposure time...
06:38:06 New exposure time computed to be 5.3
06:38:06 Automatic Flat Action complete.
06:38:06 In Auto Flat Action.
06:38:06 Slewing to flat target location.
06:38:06 Moving to Alt-Az position: Alt: 80°00' 00.0" Az: 270°00'00"
06:38:21 Done slewing!
06:38:21 Starting post slew delay.
06:38:24 Completed post slew delay.
06:38:25 Setting imager bin mode to 2x2.
06:38:25 Setting filter to Red.
06:38:29 Setting imager to full frame.
06:38:34 Setting imager exposure time to 1.0 seconds.
06:38:34 Starting imager exposure...
06:38:39 Exposure complete. Computing average ADU.
06:38:39 Average ADU = 7709
06:38:39 Target ADU = 20000
06:38:39 New exposure time computed to be 2.6
06:38:43 Setting imager exposure time to 2.6 seconds.
06:38:43 Starting imager exposure...
06:38:49 Exposure complete. Computing average ADU.
06:38:50 Average ADU = 16293
06:38:50 Target ADU = 20000
06:38:50 New exposure time computed to be 3.2
06:38:53 Setting imager exposure time to 3.2 seconds.
06:38:53 Starting imager exposure...
06:39:01 Exposure complete. Computing average ADU.
06:39:01 Average ADU = 20912
06:39:01 Target ADU = 20000
06:39:01 Current exposure time good! Taking Flats.
06:39:05 Setting imager exposure time to 3.2 seconds.
06:39:05 Starting imager exposure #1
06:39:12 Exposure complete. Computing average ADU.
06:39:12 Average ADU = 22097
06:39:12 Recomputing exposure time...
06:39:12 New exposure time computed to be 2.9
06:39:16 Setting imager exposure time to 2.9 seconds.
06:39:16 Starting imager exposure #2
06:39:23 Exposure complete. Computing average ADU.
06:39:23 Average ADU = 21119
06:39:23 Recomputing exposure time...
06:39:23 New exposure time computed to be 2.7
06:39:26 Setting imager exposure time to 2.7 seconds.

06:39:26 Starting imager exposure #3
06:39:33 Exposure complete. Computing average ADU.
06:39:33 Average ADU = 20808
06:39:33 Recomputing exposure time...
06:39:33 New exposure time computed to be 2.6
06:39:37 Setting imager exposure time to 2.6 seconds.
06:39:37 Starting imager exposure #4
06:39:44 Exposure complete. Computing average ADU.
06:39:44 Average ADU = 21167
06:39:44 Recomputing exposure time...
06:39:44 New exposure time computed to be 2.5
06:39:47 Setting imager exposure time to 2.5 seconds.
06:39:47 Starting imager exposure #5
06:39:54 Exposure complete. Computing average ADU.
06:39:54 Average ADU = 21594
06:39:54 Recomputing exposure time...
06:39:54 New exposure time computed to be 2.3
06:39:54 Setting filter to Green.
06:39:58 Setting imager to full frame.
06:40:01 Setting imager exposure time to 1.0 seconds.
06:40:01 Starting imager exposure...
06:40:06 Exposure complete. Computing average ADU.
06:40:06 Average ADU = 8891
06:40:06 Target ADU = 20000
06:40:06 New exposure time computed to be 2.2
06:40:10 Setting imager exposure time to 2.2 seconds.
06:40:10 Starting imager exposure...
06:40:16 Exposure complete. Computing average ADU.
06:40:16 Average ADU = 15946
06:40:16 Target ADU = 20000
06:40:16 New exposure time computed to be 2.8
06:40:19 Setting imager exposure time to 2.8 seconds.
06:40:19 Starting imager exposure...
06:40:26 Exposure complete. Computing average ADU.
06:40:26 Average ADU = 21180
06:40:26 Target ADU = 20000
06:40:26 Current exposure time good! Taking Flats.
06:40:30 Setting imager exposure time to 2.8 seconds.
06:40:30 Starting imager exposure #1
06:40:37 Exposure complete. Computing average ADU.
06:40:37 Average ADU = 22047
06:40:37 Recomputing exposure time...
06:40:37 New exposure time computed to be 2.5
06:40:40 Setting imager exposure time to 2.5 seconds.
06:40:40 Starting imager exposure #2
06:40:47 Exposure complete. Computing average ADU.
06:40:47 Average ADU = 20784
06:40:47 Recomputing exposure time...
06:40:47 New exposure time computed to be 2.4
06:40:51 Setting imager exposure time to 2.4 seconds.
06:40:51 Starting imager exposure #3
06:40:57 Exposure complete. Computing average ADU.
06:40:57 Average ADU = 20866
06:40:57 Recomputing exposure time...
06:40:57 New exposure time computed to be 2.3
06:41:01 Setting imager exposure time to 2.3 seconds.
06:41:01 Starting imager exposure #4
06:41:07 Exposure complete. Computing average ADU.
06:41:07 Average ADU = 20792
06:41:07 Recomputing exposure time...
06:41:07 New exposure time computed to be 2.2
06:41:10 Setting imager exposure time to 2.2 seconds.
06:41:10 Starting imager exposure #5
06:41:17 Exposure complete. Computing average ADU.
06:41:17 Average ADU = 20792

06:41:17 Recomputing exposure time...
06:41:17 New exposure time computed to be 2.1
06:41:17 Setting filter to Blue.
06:41:20 Setting imager to full frame.
06:41:24 Setting imager exposure time to 1.0 seconds.
06:41:24 Starting imager exposure...
06:41:29 Exposure complete. Computing average ADU.
06:41:29 Average ADU = 15221
06:41:29 Target ADU = 20000
06:41:29 New exposure time computed to be 1.3
06:41:32 Setting imager exposure time to 1.3 seconds.
06:41:32 Starting imager exposure...
06:41:38 Exposure complete. Computing average ADU.
06:41:38 Average ADU = 16032
06:41:38 Target ADU = 20000
06:41:38 New exposure time computed to be 1.6
06:41:41 Setting imager exposure time to 1.6 seconds.
06:41:41 Starting imager exposure...
06:41:47 Exposure complete. Computing average ADU.
06:41:47 Average ADU = 20532
06:41:47 Target ADU = 20000
06:41:47 Current exposure time good! Taking Flats.
06:41:51 Setting imager exposure time to 1.6 seconds.
06:41:51 Starting imager exposure #1
06:41:57 Exposure complete. Computing average ADU.
06:41:57 Average ADU = 21334
06:41:57 Recomputing exposure time...
06:41:57 New exposure time computed to be 1.5
06:42:00 Setting imager exposure time to 1.5 seconds.
06:42:00 Starting imager exposure #2
06:42:06 Exposure complete. Computing average ADU.
06:42:06 Average ADU = 20838
06:42:06 Recomputing exposure time...
06:42:06 New exposure time computed to be 1.4
06:42:09 Setting imager exposure time to 1.4 seconds.
06:42:09 Starting imager exposure #3
06:42:15 Exposure complete. Computing average ADU.
06:42:15 Average ADU = 20182
06:42:15 Recomputing exposure time...
06:42:15 New exposure time computed to be 1.4
06:42:19 Setting imager exposure time to 1.4 seconds.
06:42:19 Starting imager exposure #4
06:42:24 Exposure complete. Computing average ADU.
06:42:24 Average ADU = 20870
06:42:24 Recomputing exposure time...
06:42:24 New exposure time computed to be 1.3
06:42:28 Setting imager exposure time to 1.3 seconds.
06:42:28 Starting imager exposure #5
06:42:33 Exposure complete. Computing average ADU.
06:42:34 Average ADU = 20125
06:42:34 Recomputing exposure time...
06:42:34 New exposure time computed to be 1.3
06:42:34 Automatic Flat Action complete.
06:42:34 Action complete.