LBT Observing Log for 2024 11 02 UT

Observers: Justin Rupert
Partner Observer: Donald Terndrup, Lucy Lu (OSU)
Telescope Operator: Josh Williams

Plan:

We will start with LUCI and plan to use this instrument most of the night. We will also use MODS some of the time.

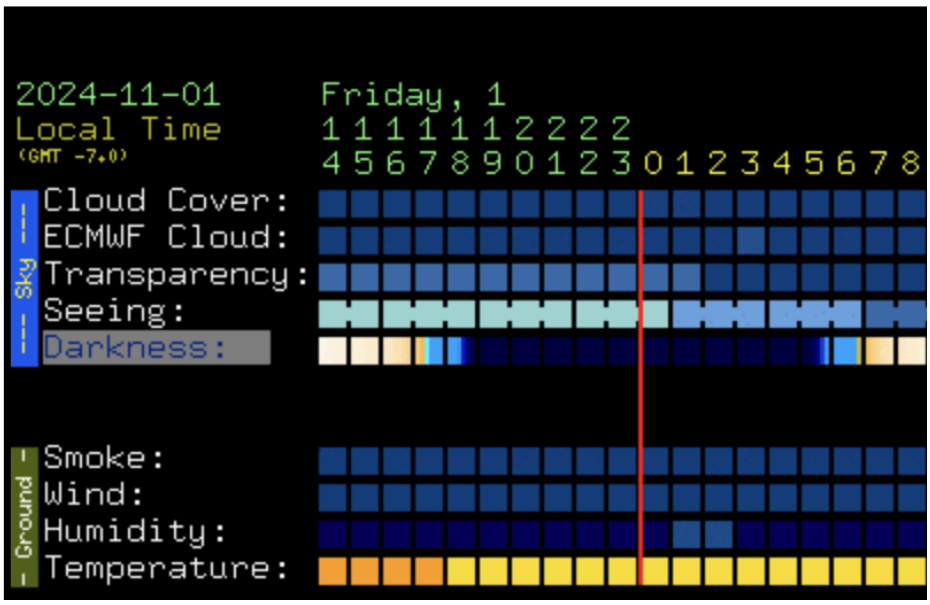
Summary:

Issues:

DIMM was unresponsive again after the first half (IT 7487).

Weather:

Forecast before sunset:



Skies were pretty clear all night. Seeing was mostly around 1” with a little variation near the end of the night.

Overview (times are given in UT):

23:30 Initializing LUCI1.

23:38 Running modsSimSnap 1.

23:39 Running field stop alignment on LUCI1.

23:46 SimSnap looks good. Running 20 more flat images on mods1r to further look for these noisy images (IT 9205).

23:51 Whoops. Did them on blue. Trying again on red.

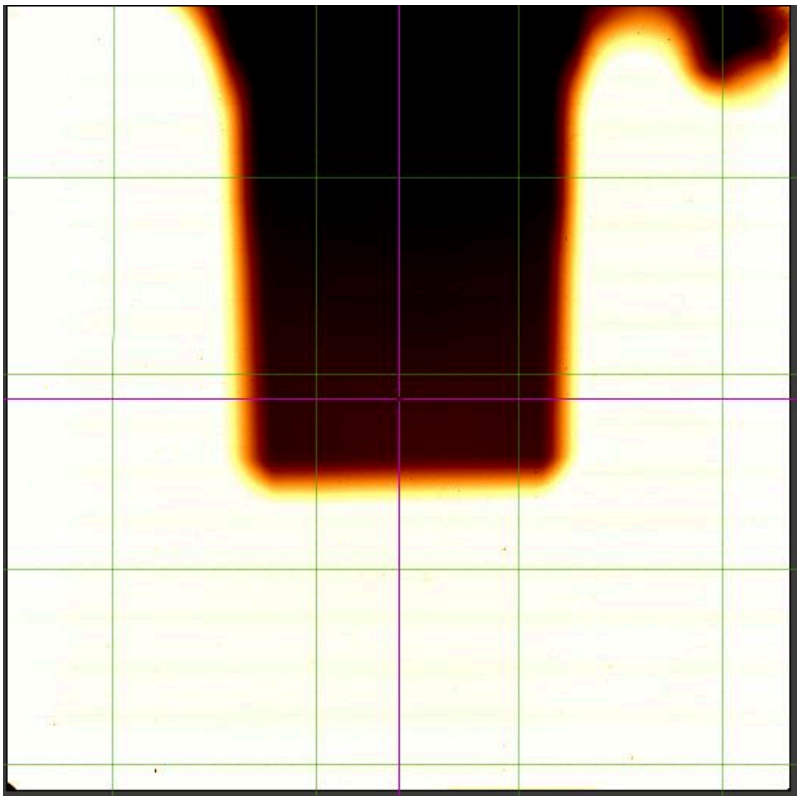
23:53 Running nirjet K flats.

23:56 Also used the quartz instead of Vflat, so there's saturation. Switching.

0:00 Running nirjet H flats.

00:06 Just realized the lamps haven’t been turning on for these flats. Scripts look fine…

00:10 Tried to run them manually turning on the lamps. Used the Halo 2 lamp and H filter (yikes!). Also found the guide probe was in the beam, which could explain the apparent lack of counts in the lamp-on images.



00:28 We've decided to run 3x600-sec darks now and at the end of the night to cover the targets we intend to observe with LUCI to account for the persistence created using the wrong halo lamp for the flats.

00:42 Running more images on mods1r because why not. Still look good.

01:05 Josh is opening. Skies are clear.

01:12 Pointing check.

01:18 Collimation check.

OSU_XMDs_LUCI/SDSSJ2104, HIP98640 (UT 01:21-03:27, 03:28-03:40)

LUC1: 62-76, 77-82
Start with science target, then do telluric star after. Telluric is HIP98640.

01:21 12-degree twilight. Sending preset.

01:33 Making slight adjustment to alignment.

01:37 Starting science. Seeing is 1” on DIMM, 0.8” on guider.

01:49 18-degree twilight.

02:21 Seeing is 1” on DIMM, 0.6” on guider. Because the next object is not up soon, we wanted to get extra images here. We obtained an ABBA sequence followed by the full script ABBAAB for a total of 10 x 10 minutes on source.

03:17 LUCI script seemed to hang after reading out the second-to-last (of 6) science exposures. The block of script grayed out on the LUCI1 side, but not the LUCI2 even though there is nothing there. Skipped to the next line (last science exposure) just fine. Seeing is 0.9” on DIMM, 0.7” on guider.

03:28 Preset to telluric HIP98640.

03:35 Slight alignment adjustment.

03:36 Starting science. Seeing is 0.9” on DIMM, 0.7” on guider.

03:40 RECONFIGURE TO MODS

03:52 Pointing check.
03:59 Collimation check.

UVa_BCD_MODS/J0138 (UT 04:04-05:22)

Mods1r: 43-49
Mods1b: 6-9
04:04 Preset.

04:12 Starting science. Seeing is 1” on DIMM, 0.7” on guider.

05:16 Seeing is 1” on DIMM, 0.6” on guider.

UM_XMDs_MODS/SHOC113 (UT 05:23-06:42)

Mods1r: 50-55
Mods1b: 10-12
05:23 Preset using 05:30 UT acq file.

05:34 Starting science. Seeing is 0.9” on guider.

06:03 Seeing is 0.8” on guider.

06:36 DIMM seems to be stuck again (IT 7487).

OSU_SCAT/2024xal (UT 06:43-07:05)

Mods1r: 56-61
Mods1b: 13-15
06:43 Preset with UT 0700 acq file.

06:51 Starting science. Seeing is 1.1” on guider.

Flux standard GD 71 (UT 07:06-07:30)

Mods1r: 62-
Mods1b: 16-
07:06 Preset.

07:13 Starting science. Seeing is 0.9” on guider.

07:25 RECONFIGURE TO LUCI

07:43 Pointing check.

07:48 Collimation check.

HIP12547 (telluric star for Mrk 5) (UT 07:50-07:58)

Luci: 83-87
07:50 Preset.

07:55 Starting science.

OSU_XMDs_LUCI/Mrk5 (UT 07:59-09:13)

Luci: 88-97
07:59 Preset.

08:09 Starting science. Seeing is 1.1” on guider.

08:40 Seeing is 1” on guider.

OSU_XMDs_LUCI/HS0811 (UT 09:13-10:28)

Luci: 98-107
09:13 Preset.

09:25 Starting science. Seeing is 1.1” on guider.

09:45 Light cirrus passing over where we’re pointed.

10:16 Seeing is 1.5” on guider. Skies are clear again.

10:23 Seeing back down to 1.1” on guider.

HIP53735 (UT 10:28-10:39)

Luci: 108-112
10:28 Preset.

10:30 Seeing is at 3”! We’re at airmass 1.86, but still. Alright now we’re down to 1.7” and decreasing. Just a bubble I guess.

We are pointing at this star too early, which is why it is at a high air mass. Readme file said do telluric before or after the science target, but after is the only appropriate pointing. Oops.

10:37 Starting science. Seeing is 1.4” on guider, varying between 1” and 1.7”.

OSU_XMDs_LUCI/WISEAJ0851 (UT 10:39-11:54)

Luci: 113-122
10:39 Preset.

10:50 Starting science. Seeing is 1.1” on guider.

11:35 Seeing is 1.1” on guider.

HIP53735 (UT 11:54-12:02)

Luci: 123-127
11:54 Preset.

12:00 Starting science. Seeing is 1.3” on guider.

12:02 Closing. The only targets left are in the east. Will run some LUCI cals.

12:15 18 degree twilight.

12:17 Running LUCI darks.

12:44 12 degree twilight

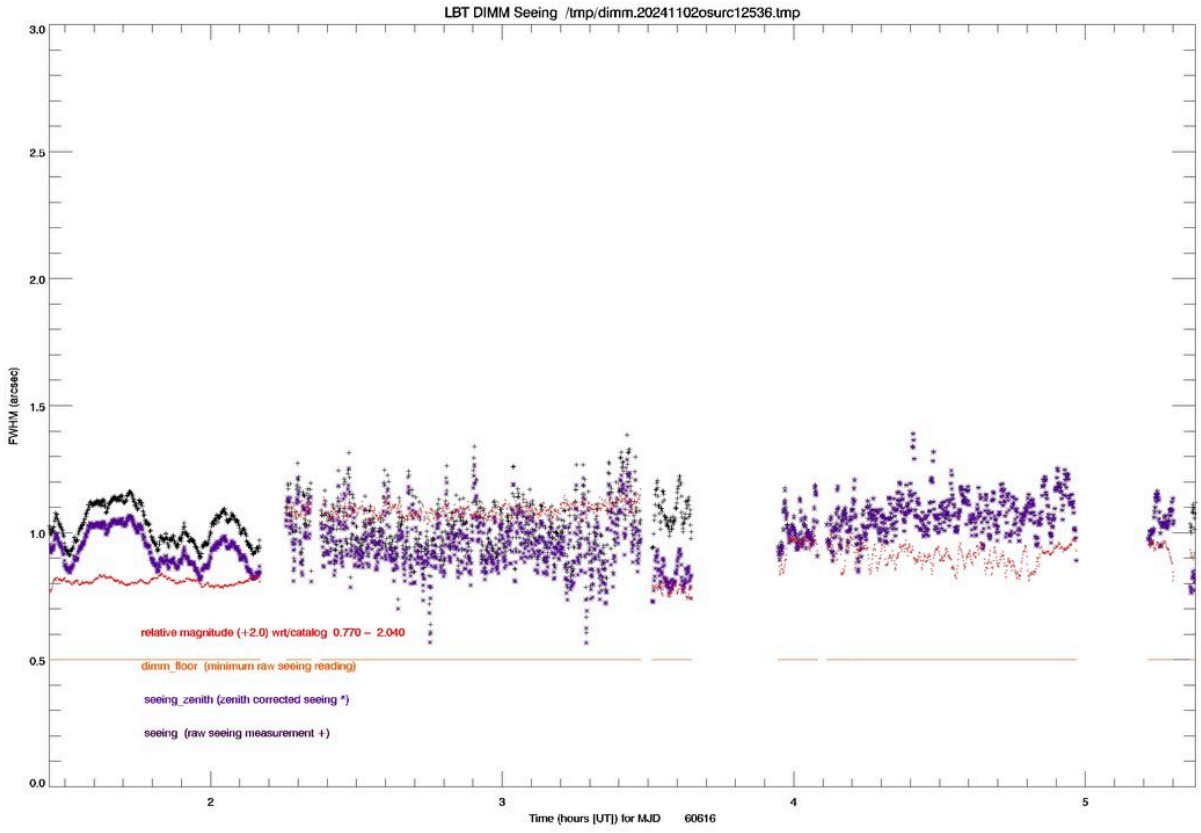
12:56 Running FeII Imaging flats for UVa_nirjets.

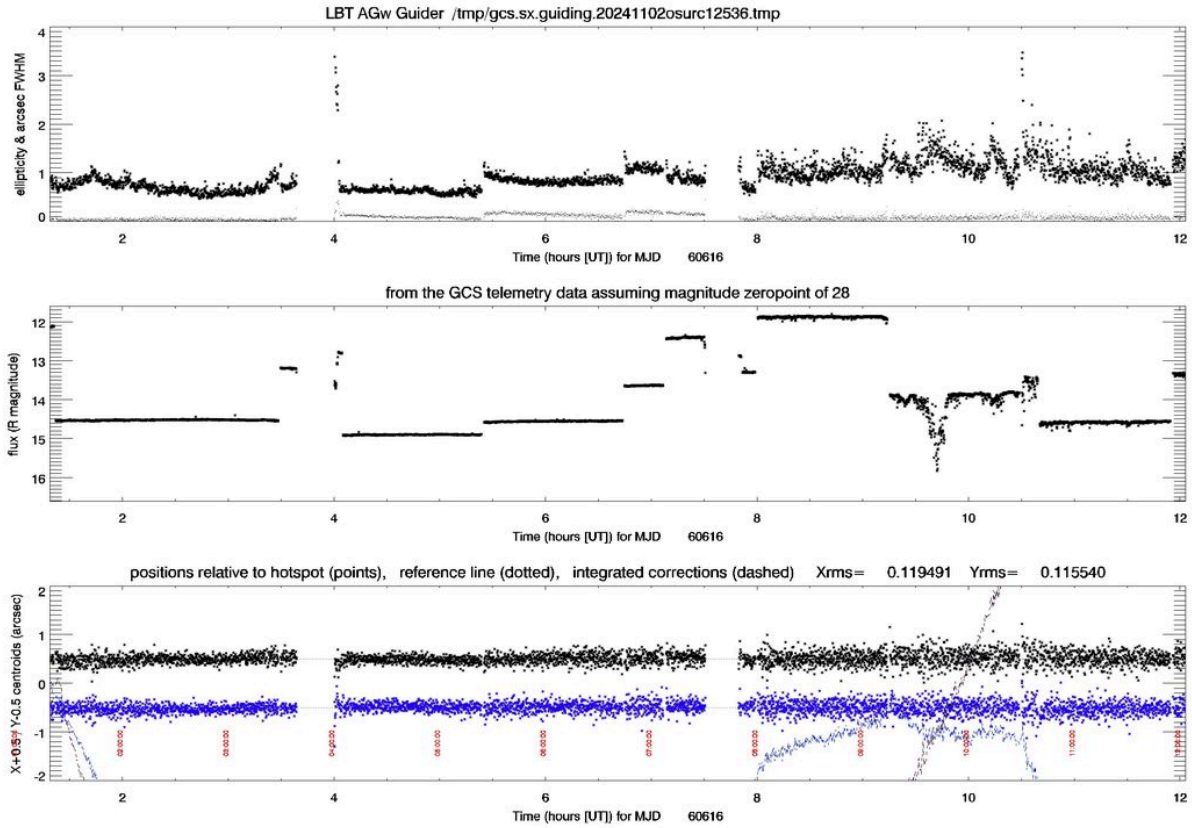
13:03: Running H2 imaging flats. It looks like the halo lights do not turn for these scripts even though the ot says they should (the lamps are functioning normally). Turning the lamps on manually (the correct ones this time).

13:05 Running H imaging flats.

13:08 Running K imaging flats.

13:11 Done for the night.




LBT AGw Guider /tmp/gcs.sx.guiding.20241102osurc12536.tmp
ellipticity & arcsec FWHM
Time (hours [UT]) for MJD 60616
from the GCS telemetry data assuming magnitude zeropoint of 28
flux (R magnitude)
Time (hours [UT]) for MJD 60616
positions relative to hotspot (points), reference line (dotted), integrated corrections (dashed) Xrms= 0.119491 Yrms= 0.115540
X+0.5, Y-0.5 centroids (arcsec)
Time (hours [UT]) for MJD 60616