

LBT Observing Log: 2025 04 03 UT

Observers: Justin Rupert

Partner Observer: Michael Turner

Telescope Operator: Steve Allanson

Plan:

Highest priority targets are LUCI/LBC. We'll adjust with the weather with PEPSI and MODS as backups.

Summary:

[OSU_XMD_LUCI](#)

[SBS 1159+545 \(04:23-05:52\)](#)

[~~HIP56736 \(05:52-05:58\)~~](#)

[UVa_BCD_LUCI](#)

[~~J1613+3622~~](#)

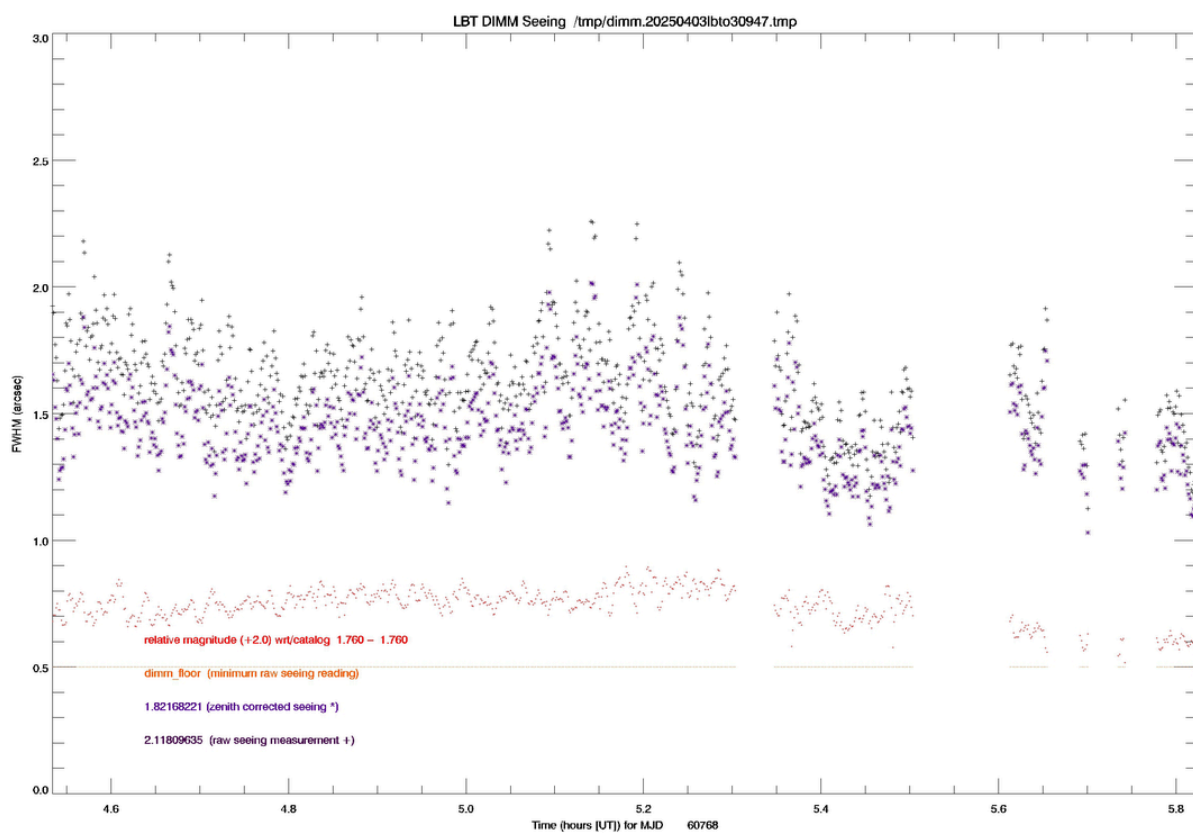
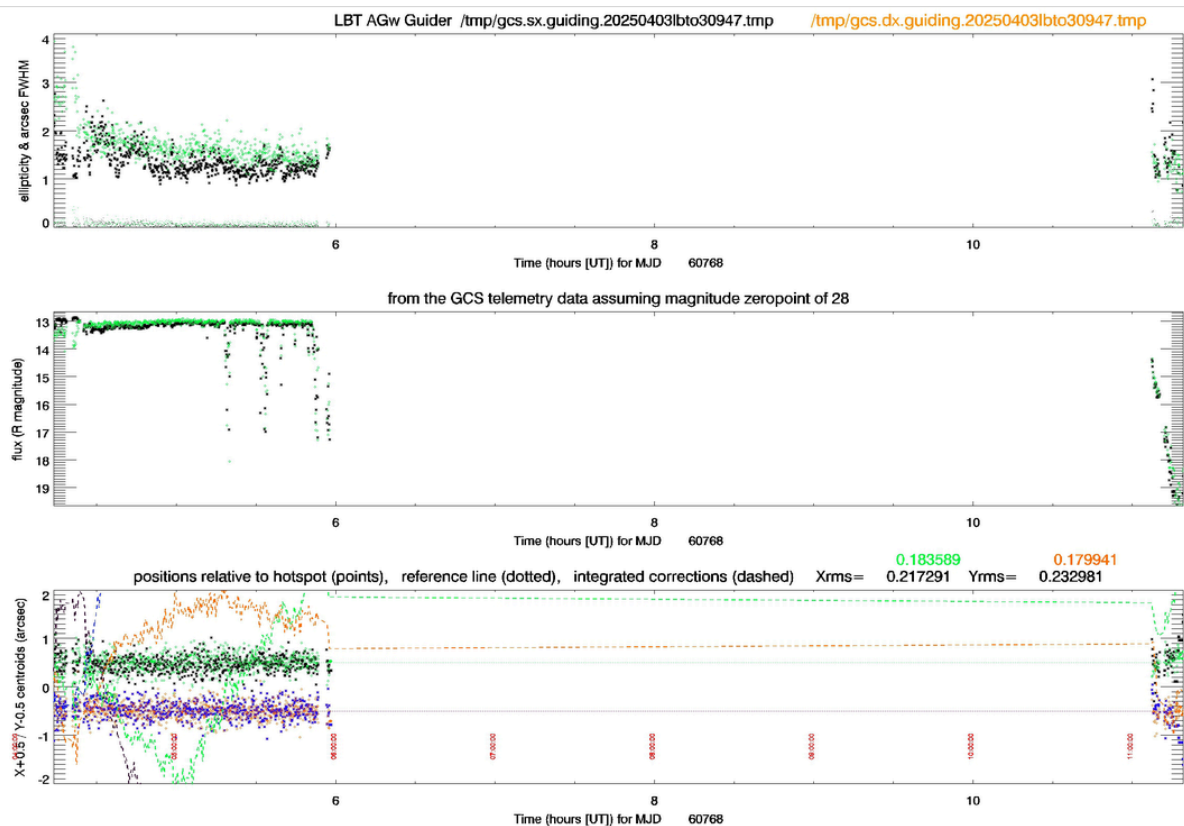
Issues:

IT 7399: Bad bias voltage on LBCB.

Switch 10 flakiness on LUCI one. Worked around that with manual instrument configurations and moving FW 2 with engineering GUIs.

Weather:

Winds and clouds did us in most of the night. We had just enough time to get in one LUCI spec target.



Temperature at ground *

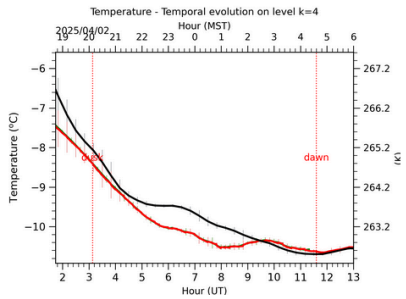


Fig. 4: Absolute temperature temporal evolution between the sunset and the sunrise at [38-62]m.

Wind Speed at ground *

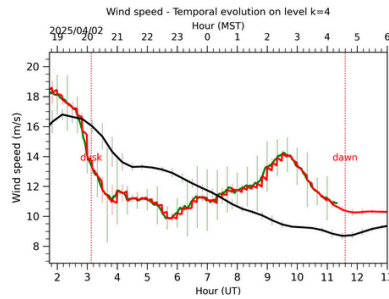


Fig. 5: Wind speed temporal evolution between the sunset and the sunrise at [38-62]m.

Wind Direction at ground *

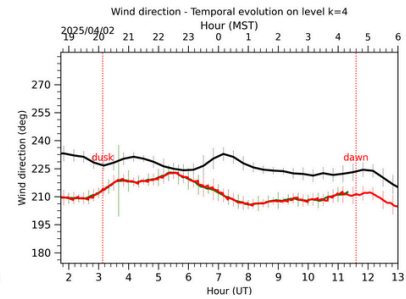
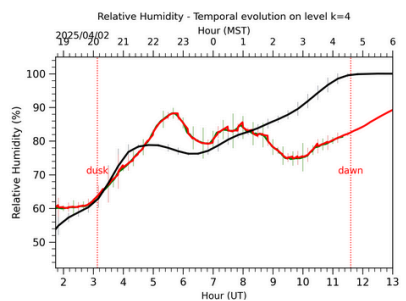
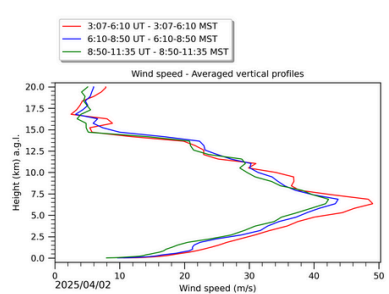


Fig. 6: Wind direction temporal evolution between the sunset and the sunrise at [38-62]m.

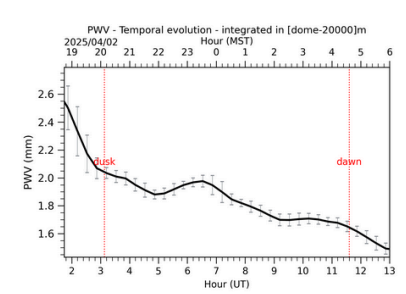
Relative Humidity at ground *



Wind Speed vertical profiles



Precipitable Water Vapor



Overview (times are given in UT):

00:36 Steve has already woken up MODS and run SimSnap.

00:44 Running 3K biases on MODS.

00:46 Initializing LUCIs.

00:58 Fieldstop alignment on LUCIs.

01:01 Running 8K biases on MODS.

01:03 Warming LBCs.

01:12 Running XMD_LUCI G200, zJspec flat/arcs.

01:14 Running MODS arcs.

01:26 Running MODS slitless flats.

01:36 Staying closed due to high winds.

02:17 Turning on LBCs.

02:21 IT 7399:

5	2025/04/03	02:20:17.045000	TRACKERS	CCDCTRL	bad Bias voltage line
16 (+0.52V instead of +0.0V+-0.5V)					
4	2025/04/03	02:20:17.029000	TRACKERS	CCDCTRL	bad Bias voltage line
15 (+15.51V instead of +15.0V+-0.5V)					
3	2025/04/03	02:20:16.982000	TRACKERS	CCDCTRL	bad Bias voltage line
13 (+21.63V instead of +21.0V+-0.5V)					
2	2025/04/03	02:20:16.951000	TRACKERS	CCDCTRL	bad Bias voltage line
11 (+9.55V instead of +9.0V+-0.5V)					
1	2025/04/03	02:20:16.904000	TRACKERS	CCDCTRL	bad Bias voltage line
9 (+15.52V instead of +15.0V+-0.5V)					
0	2025/04/03	02:20:16.795000	TRACKERS	CCDCTRL	bad Bias voltage line
1 (-5.46V instead of -6.0V+-0.5V)					

02:22 Running 2 bias checkout on LBCs.

02:24 Running 25 biases on LBCs.

02:34 12-degree twilight.

03:03 Opening.

03:04 18-degree twilight.

03:13 Particle counts have elevated. We're closing and **reconfiguring to bino LUCI**.

03:58 Opening.

04:05 Pointing check.

04:12 Collimation check.

04:18 DX seeing is terrible: 2"-3". SX is ~1.5". Going to a higher elevation collimation target.

OSU_XMD_LUCI

SBS 1159+545 (04:23-05:52)

Luci1: 96-108

Luci2: 22-31
04:23 Preset.

04:28 Forgot to update detector focus on LUCI1 for first acq image. Re-exposing.

04:31 Looks like the second field image wasn't saved on LUCI1. Image 99 isn't in the readout1 directory:

```
java.rmi.ServerException: RemoteException occurred in server thread; nested exception is:  
java.rmi.ServerException: RemoteException occurred in server thread; nested exception is:  
java.rmi.RemoteException: GEIRS received response with error: ERROR 1 Command 'sync  
save' returned errorcode = 1: (E_error=1) general error: 'error:  
ERROR save error: framebuffer is empty (not yet read?)'
```

Re-took the image, though that required moving the mask out of FPU.

04:44 Starting science. Seeing is 1.6" on SX guider, 1.7" on DX guider, 1.3" on DIMM. Skies are clear.

04:47 Didn't change grating in detector focus. LUCI1 150s behind LUCI2.

05:00 Seeing is 1.3" on SX guider, 1.5" on DX guider, 1.6" on DIMM. Skies are clear.

05:20 Clouds are starting to form above us. Humidity is at 88.4% and rising.

05:28 rm507-s workstation froze. Hard reboot and bringing everything back up was relatively painless.

~~HIP56736 (05:52-05:58)~~

04:23 Preset.

05:58 We've lost the guide star to clouds. With those clouds and the borderline humidity, we are going to close.

07:55 Running 1.2" DG flats on MODS.

10:52 Opening.

11:01 Pointing check.

11:06 Collimation check.

UVa_BCD_LUCI

~~J1613+3622~~

Luci1: 109-110

Luci2: 32-34

11:09 Preset. Some clouds have rolled in.

11:16 Guide stars are barely visible on DX, lost on SX.

11:18 We're closing again. These clouds aren't on the satellite, and are therefore scary. Not obtaining useful images anyway.

11:34 Calling the night.