

LBT Observing Log: 2026 May 24 UT

Observers: Justin Rupert

Partner: Mark Whittle, Yifan Zhou

Telescope Operator: Gil Esquerdo

Plan:

We'll start with PEPSI. Here's the plan:

OSU_PETS WASP 189 transit. Start in twilight (Ingress at UT 4:00, Egress at UT 8:20), end at UT 9:20. (~6 hours)

ND V795 (1.2 hours)

UVa_metalpoor (0.2 hours x a few) [Alternate: UVa_multistar, TIC 8927; 2783]

Contingency (since PEPSI seems to be having problems):

LUCI (which doesn't have AO/ESM on LUCI-1)

OSU_SCAT 2026kia (1.2 hr) setting fast!

UVa_planets (since seeing predicted to be excellent) (1 hr)

UVa_BCD two targets, each 1 hr

Change to MODS after moon down

ND V844 2 hrs

OSU_SCAT 2026myp 0.7 hrs.

Summary:

UVa

BCD_LUCI

J1355+4651 (UT 04:01-05:13)

Planets

2M J11151597+1937266 (UT 05:13-06:08)

HD 96781 (UT 06:08-06:27)

BCD_LUCI

BD40+2857 (UT 06:27-06:40)

J1300+3625 (UT 06:42-07:48)

BD32+2351 (UT 07:48-08:00)

ND

V844

V844 (UT 08:21-10:41)

Standard

BD+33 2642 (UT 10:41-10:59)

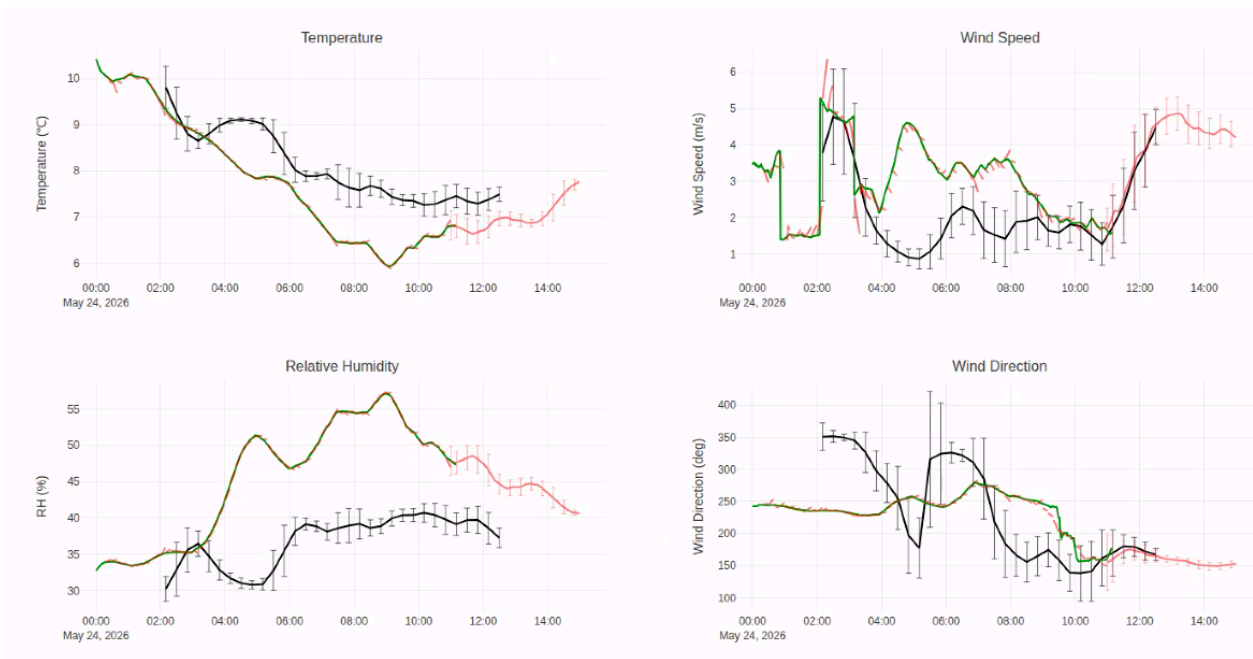
Issues:

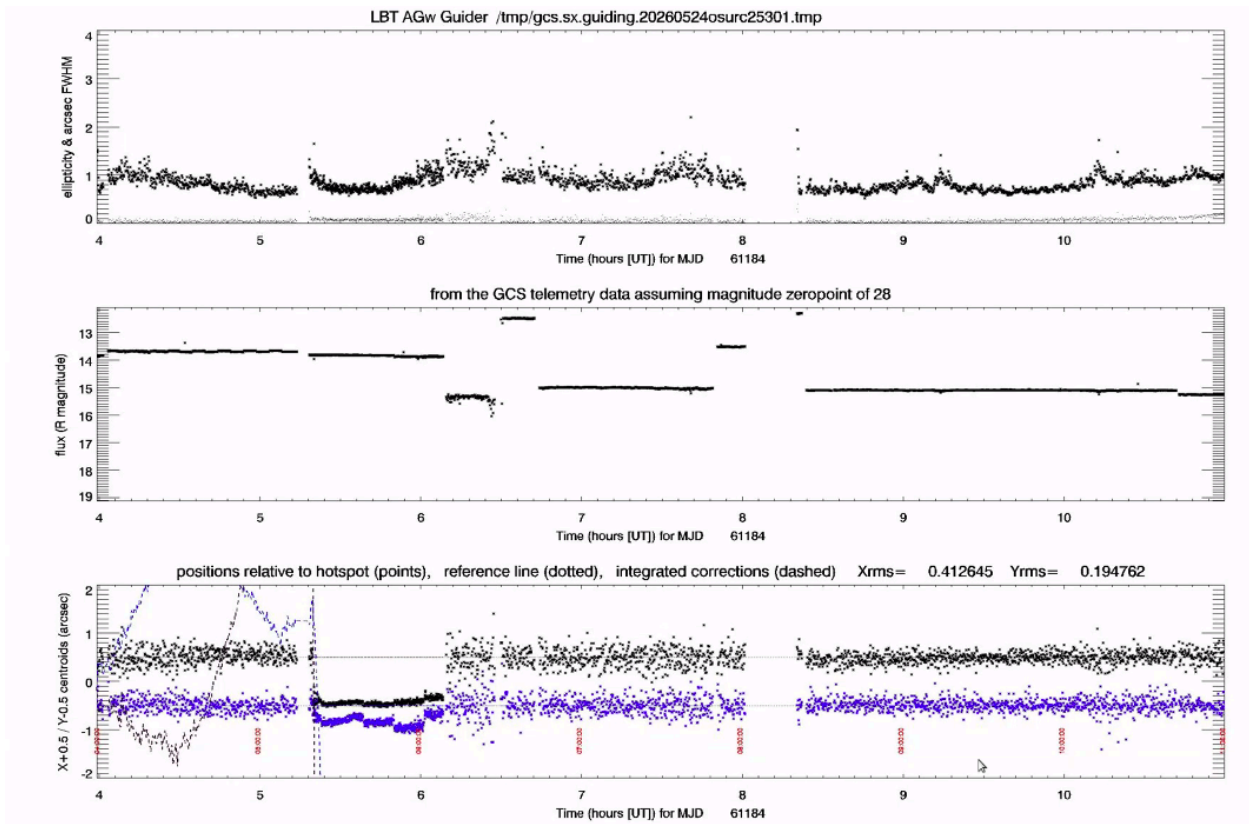
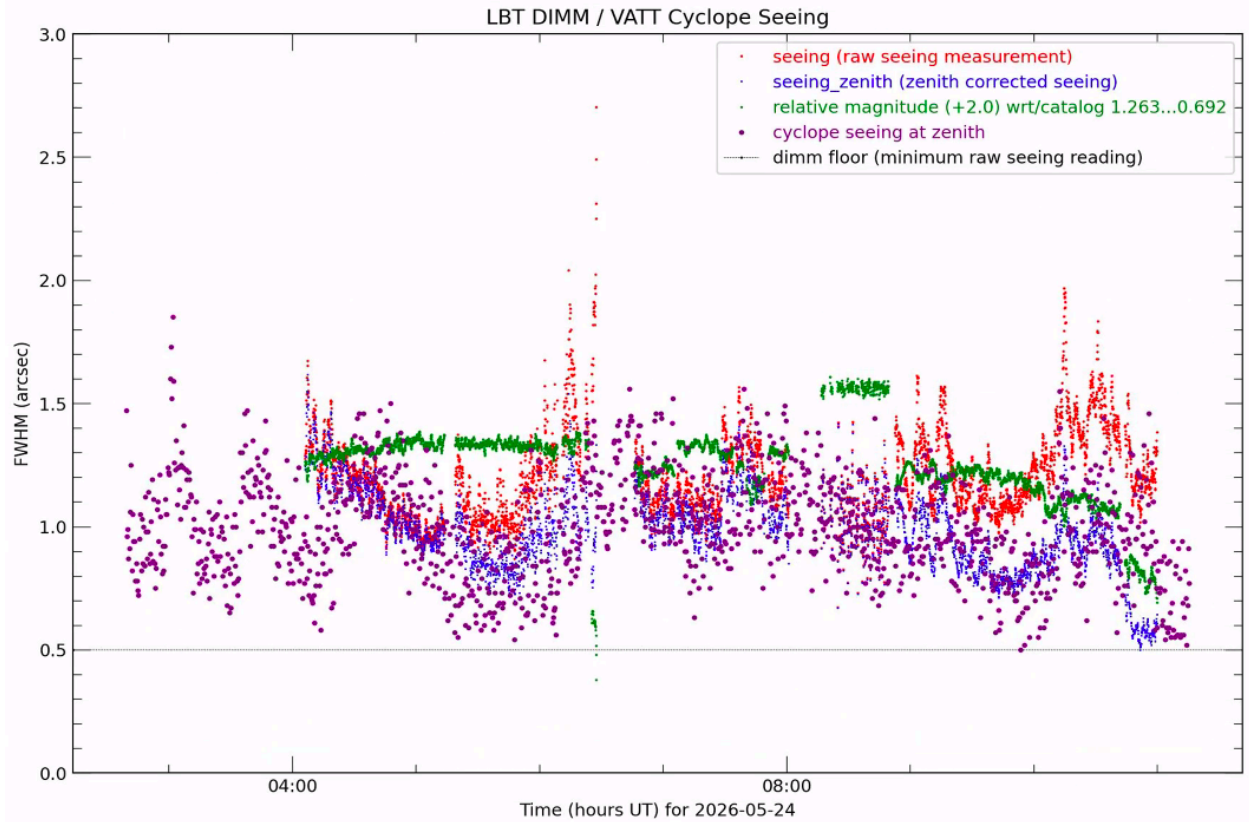
IT 9524: Can't connect to UMAC.

One instance of a negative countdown on LUCI2.

Weather:

Clear skies all night.





Overview:

00:24 UT Initializing LUCIs.

00:26 UT Running S darks for Lopez_DDT (INAF).

00:46 UT Running W darks for Lopez_DDT.

00:51 UT of Issue: Negative exposure countdown on LUCI2. Set a pause, aborted, and manually ran exposures of that obs item.

01:15 UT Running Marziani darks.

02:16 UT Opening. Ilya is troubleshooting an issue with PEPSI. Flats on the blue channel (CD3) were traceless.

02:22 UT sunset

02:43 UT Ilya can't seem to power on the UMAC. Gil is getting Joe.

"PU #1 : RPC Communication Error (0x0C9) in unit=1 (PEPSI Chamber) device= 0 (UMAC) when OneWire set option"

02:49 UT Joe is going to cycle the UMAC. In the meantime, no scripts for the other instruments have been loaded to the mountain machines. Mark is trying to get a hold of Rick Pogge.

02:52 UT Joe is back. He didn't see anything obviously wrong.

02:54 UT That didn't seem to solve it.

03:04 UT Waking MODS1.

03:13 UT Running simSnap. Looks like the spot in the bottom right corner of both MODS channels from UT20260522 is gone.

03:16 UT This issue with PEPSI might be IT 9200. Joe is going to

03:18 UT 12 degree evening twilight

03:34 UT Looks like the bypass did not work. In the meantime, Mark sent a couple LUCI programs while he makes calls to individual PIs to send their programs.

03:44 UT **Reconfiguring to LUCI.**

03:49 UT FS alignment.

03:51 UT Pointing check.

03:54 UT 18 degree evening twilight

03:59 UT Collimation check.

UVa

BCD_LUCI

J1355+4651 (UT 04:01-05:13)

04:01 UT Preset.

04:24 UT Starting science. Target is quite faint, but we'll see if we can see it in the spectra. Seeing is 0.96" on SX guider, 0.9" on DX guider, 1.28" on DIMM. Clear skies.

Planets

2M J11151597+1937266 (UT 05:13-06:08)

05:13 UT Preset. This is a version I created of the original script. It is now ESM on LUCI1 and SL on LUCI2 due to the BCU2K issues on DX LUCI AO.

05:31 UT Tweaking slit alignment on LUCI2.

05:33 UT Starting science. Seeing is 0.68" on SX guider, 0.82" on DX guider, 0.84" on DIMM. Clear skies. From the acquisition image: 0.53" on LUCI1 (ESM), 0.63" on LUCI 2 (SL).

HD 96781 (UT 06:08-06:27)

06:08 UT Preset.

06:17 UT Tweaking slit alignment on LUCI2.

06:18 UT Starting science. Seeing is 1.2" on SX guider, 1.1" on DX guider, 0.96" on DIMM. Clear skies. We're about 9 degrees separated from the moon.

BCD_LUCI

BD40+2857 (UT 06:27-06:40)

06:27 UT Preset.

06:37 UT Starting science. Seeing is 0.96" on SX guider, 0.89" on DX guider, 1.28" on cyclope. Clear skies.

J1300+3625 (UT 06:42-07:48)

06:42 UT Preset.

07:00 UT Starting science. Seeing is 0.89" on guiders, 0.99" on DIMM.

BD32+2351 (UT 07:48-08:00)

07:48 UT Preset.

07:57 UT Starting science. Seeing is 0.89" on SX guider, 0.86" on DX guider, 1.04" on DIMM. Clear skies.

08:00 UT **Reconfiguring to MODS1.**

08:14 UT Pointing check.

08:18 UT Collimation check.

ND

V844

V844 (UT 08:21-10:41)

08:21 UT Preset.

```
Computed Slit Alignment Offset:  
dX = -0.468 arcsec  
dY = 11.625 arcsec  
  
MODS1 Offset Command:  
offsetxy -0.468 11.625 rel
```

08:36 UT Tweaking slit alignment.

08:41 UT Starting science. Seeing is 0.7" on SX guider, 1.05" on cyclope. Clear skies.

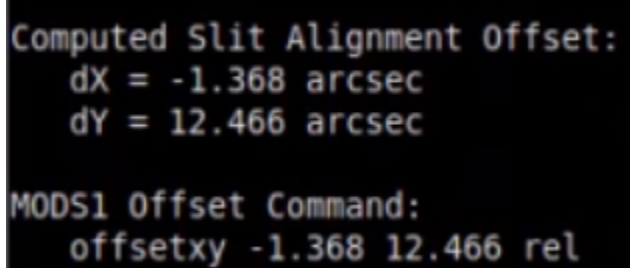
09:25 UT Rick has just uploaded the scripts to the mountain.

10:38 UT 18 degree morning twilight

Standard

BD+33 2642 (UT 10:41-10:59)

10:41 UT Preset.



```
Computed Slit Alignment Offset:  
dX = -1.368 arcsec  
dY = 12.466 arcsec  
  
MODS1 Offset Command:  
offsetxy -1.368 12.466 rel
```

10:47 UT Starting science. Seeing is 0.95" on SX guider. Clear skies.

10:50 UT IMCS lock failed on MODS1R. Retry was successful.

10:59 UT Closing.

11:11 UT Running lamps on MODS1 and flats/arcs for UVa_BCD_LUCI.

11:14 UT 12 degree evening twilight

11:18 UT Running pixel flats on MODS1.

11:25 UT Running 0.8" slit flats on MODS1.

11:32 UT Running LUCI1 flats/arcs for UVa_planets.

11:36 UT Running 1.0" slit flats on MODS1.

11:45 UT Running modsSleep.

12:10 UT sunrise

12:32 UT The 0.8" slit flats were supposed to be binned 1x2. Will need to run that script later.