

LBT Observing Log: 2025 Jun 22 UT

Observers: Alex Becker

Partner Observer: Peter Garnavich, Everett McArthur

Telescope Operator: Josh Williams

Plan:

MODS with turnover at 7:22 UT

Standard GD153 (in south, too windy)

UM_HZ43 for DQ Her program (tried, but too windy)

ND_J1145 - done

ND_J1305 - done

UM_DQ Her - not attempted, could not do HZ43

UVa_J1613 - 3 out of 4 exposures

Summary:

First half of the night OSURC, second half LBTO ECD. Wind prevented observing targets toward the south. MODS and MODS calibrations.

Issues:

38min SX AdSec issues. Several actuators had to be removed due to high forces

modsDisp crashed a couple of times (osurc on robs2). It seems to be caused by having a smoothed image displayed at the time it tries to load a new image.

Weather:

Clear, 11C, Humidity 57%, Wind 15 m/s @ 230

Overview (times are given in UT):

01:22 Waking up MODS

01:24 modsSimSnap bino
all good

bias 8k (mods1r missing, will take them in the morning)

MODS1r is having some issues. It started with

```
[2025-06-22T02:18:07.342] M1.RC>MC1 WARNING: GO IE Timeout with ERROR: No
Response EXPSTATUS=ISTATUS
[2025-06-22T02:18:07.343] MC1>OBS1 WARNING: RED GO IE Timeout with ERROR: No
Response EXPSTATUS=ISTATUS
[2025-06-22T02:20:01.482] M1.CR>MC1 WARNING: FITS file
'/lhome/data/mods1r.20250622.0023.fits' already exists, writing as
'/lhome/data/250621M8.00p.fits' instead
```

And it didn't write the file.

red expdone for recovery and it got hung on starting exposure. Another red expdone got it doing, but

```
[2025-06-22T02:30:00.760] M1.RC>MC1 DONE: NEXTFILE
NextFile=/lhome/data/mods1r.20250622.0025 EXPSTATUS=ISTATUS
[2025-06-22T02:30:00.827] M1.RC>MC1 ERROR: GO Already acquiring data!
EXPSTATUS=ISTATUS
[2025-06-22T02:30:01.117] MC1>M1.RC nextfile
[2025-06-22T02:30:01.619] MC1>M1.RC GO
[2025-06-22T02:30:02.121] MC1>OBS1 STATUS: RED GO Red Exposure 4 of 5 completed...
[2025-06-22T02:30:03.553] M1.RC>MC1 DONE: NEXTFILE
NextFile=/lhome/data/mods1r.20250622.0025 EXPSTATUS=LOADING_MAP
[2025-06-22T02:30:06.612] M1.RC>MC1 STATUS: GO EXPSTATUS=ERASE
[2025-06-22T02:30:06.613] MC1>OBS1 STATUS: RED GO EXPSTATUS=ERASE
[2025-06-22T02:30:12.134] M1.RC>MC1 ERROR: GO Already acquiring data!
EXPSTATUS=ERASE
```

and it got stuck on writing the image again.

02:50 Opening, but we will have to pretty much avoid the south due to high winds

03:07 Yep, I have to put MODS into observing mode...

UM_NovaRecon

03:16 acqBinoMODS Hz43.acq

And SX AdSec just ripped. High winds?

Guido just informed us about a detached magnet from an actuator (469, 229).

03:30 Feige 34

03:33 Script aborted. Going to zenith to remove the actuator from the list.

This takes longer than expected. Guide and Xianyu are chasing actuators that are having issues

ND_bluegals

J1145

Seeing 1.3"

04:11 acqBinoMODS j1145.acq

modsAlign -y 11 mods1r.20250622.0029.fits mods1r.20250622.0030.fits

MODS1 Offset Command:

offsetxy -0.514 11.728 rel

modsAlign -y 9 mods2r.20250622.0030.fits mods2r.20250622.0031.fits

MODS2 Offset Command:

offsetxy 3.288 9.095 rel

There is something fuzzy in the slit. Centering is as good as it gets with this object and the seeing

04:23 execBinoMODS j1145.obs

04:47

*** ERROR: Cannot display image mods2b.20250622.0024.fits

Reason: UnboundLocalError("cannot access local variable 'e' where it is not associated with a value")

*** modsDisp must abort - please restart ***

modsDisp stop requested, cleaning up...

modsDisp ,,, Terminated

04:48

*** ERROR: Cannot display image mods1r.20250622.0033.fits

Reason: UnboundLocalError("cannot access local variable 'e' where it is not associated with a value")

*** modsDisp must abort - please restart ***

modsDisp stop requested, cleaning up...

modsDisp ,,, Terminated

J1305

05:13 acqBinoMODS j1305.acq

modsAlign -y 11 mods1r.20250622.0036.fits mods1r.20250622.0037.fits

MODS1 Offset Command:

offsetxy -0.810 11.830 rel

modsAlign -y 9 mods2r.20250622.0037.fits mods2r.20250622.0038.fits

MODS2 Offset Command:

offsetxy 3.703 7.917 rel

05:25 execBinoMODS j1305.obs

05:52

*** ERROR: Cannot display image mods2b.20250622.0028.fits

Reason: UnboundLocalError("cannot access local variable 'e' where it is not associated with a value")

*** modsDisp must abort - please restart ***

modsDisp stop requested, cleaning up...

modsDisp ,,, Terminated

I wonder if this has something to do with smoothing the image. Smoothing mods1r ... If I am right it will crash when trying to load image 0041

06:06 Yep, it crashed again. Mystery solved!

UVa_BCD

J1613

06:16 acqBinoMODS J1613.acq

And x2go is unresponsive ...

modsAlign -y 11 mods1r.20250622.0043.fits mods1r.20250622.0044.fits

MODS1 Offset Command:

offsetxy -0.714 10.838 rel

manual offset delta_x -0.06

modsAlign -y 9 mods2r.20250622.0044.fits mods2r.20250622.0045.fits

MODS2 Offset Command:

offsetxy 3.510 8.076 rel

06:31 execBinoMODS J1613.obs

07:25 Handing over to LBTO for the second half of the night as planned

Calibs

09:49 MODS bias 8k

10:02 MODS grpixflats

10:26 MODS grslitflats_5.0_m2.txt