LBT Observing Log: 2025 Jun 03 UT

Observers: Alex Becker
Partner Observer: Mark Whittle (UVa), Yifan Zhou (UVa), Annika Peter (OSU), Sarah Taft (UM).
Telescope Operator: Josh Williams

Plan:

ND_bluegals: J1145 (1.0 hr) (skipped)
ND_bluegals: J1342 (0.6 hr)
ND_bluegals: J1307 (1.0 hr)

Assuming Pepsi observation starts at 6:50 UT
ND_M3Cluster: NGC 5272 998 (GC7) 6:50 to 7:35
ND_M3Cluster: NGC 5272 1050 (GC8) 7:35 to 8:20
ND_M3Cluster: NGC 5272 832 (GC5) 8:20 to 9:00

OSU_EBRV: V380 Dra 9:00 to 9:30

UVA_Multistar: TIC4270 9:30 to 10:00
UVA_Multistar: TIC3227 10:00 to 10:20
UVA_Multistar: TIC2581 10:20 to 10:40

Summary:

Only a 3 hour window between 4 and 7 UTC when we could open because of clouds and high humidity. Seeing was poor, 1.5-2.5 arcsec. 2 MODS targets in poor seeing and had to abort the one PEPSI target.

Issues:

Weather:

High humidity and clouds most of the night, only 3 hours workable.

Overview (times are given in UT):

01:12 modsWake bino

01:13 modsSimSnap bino
all good

01:13 turning on LBCs

01:18 LBC 2bias bino checkout
all good

02:30 Closed due to clouds, fog, and 100% humidity

02:32 LUCI init all

03:45 Humidity appears to be stable below 90%. We will give it a try and open.

03:46 **Putting MODS into observing mode.**

MODS2: OBSMODE could not open hatch, PRINT ERROR
Updating GUI and retry worked.

MODS

ND_bluegals

J1145 (not observed)

04:08 acqBinoMODS j1145.acq
Seeing ~2"+-0.5
Target not visible on MODS1. Increasing exp time to 2 minutes.
Ok, we have no chance with this target. Switching to:

J1342

04:21 acqBinoMODS j1342.acq
DIMM 1.5"
Missed the GS on the left side twice… To pointing checks. It might be related to the bad seeing

04:33 Preset
DIMM 2" Left WFS is struggling, GS looks more like a spiral galaxy. And we lost it

04:42 acqBinoMODS j1342_PA220.acq.txt

Let's try a brighter GS. 13.5mag PA 220deg, was 20deg… We found it on both sides!

modsAlign -y 11 mods1r.20250603.0007.fits mods1r.20250603.0008.fits
MODS1 Offset Command:
   offsetxy -0.098 10.906 rel
manual adjustment delta_x -0.16

modsAlign -y 9 mods2r.20250603.0007.fits mods2r.20250603.0008.fits
MODS2 Offset Command:
   offsetxy 4.427 7.346 rel

4:58 execBinoMODS j1342_PA220.obs.txt
ParAng at start of the observation ~16deg

J1307

05:26 acqBinoMODS j1307.acq

modsAlign -y 11 mods1r.20250603.0015.fits mods1r.20250603.0016.fits
MODS1 Offset Command:
   offsetxy -0.561 11.782 rel

modsAlign -y 9 mods2r.20250603.0013.fits mods2r.20250603.0014.fits
MODS2 Offset Command:
   offsetxy 3.572 8.637 rel

05:37 execBinoMODS j1307.obs

06:28 **We are done with MODS. Switching to PEPSI**

PEPSI

ND_M3Cluster

NGC 5272 998

06:57 Preset
06:59 Starting exposure
07:02 Thick clouds coming in and humidity rising rapidly and we were on the wrong target on SX anyway.

10:31 We are giving up for tonight. 30 minutes left until 12deg twilight. Turning LBCs off and putting MODS asleep