LBT Observing Log for 2023 May 18/19

C19 Observer: Andrew Cardwell (From obs1, x2go session 50)
Partner Observer(s): Mark Whittle (UV, remote), Anusha Pai (OSU, remote)
Telescope Operator: Steve Allanson

PEPSI Log

Plan:

First half MODS and try to observe ND_bluegals and UM_XMDs targets, then switch to PEPSI for the second half and observe high-priority UM_V1405Cas and then as many OSU_BHB targets as possible.

Observed and completed:

MODS:
Standard gd153
ND_bluegals: J1240
ND_bluegals: J1244
UM_XMD: SBS 1420

PEPSI:
UM_PEPSI 58Aql
UM_PEPSI V1405Cas
OSU_BHB 2028
OSU_BHB 2107
OSU_BHB 2236
OSU_FGKBDS BD492561
UVa_Multistar: TIC 2783
UVa_Multistar: TIC 3227
UVa_Multistar: TIC 3753
UVa_Multistar: TIC 8927
UVa_Multistar: TIC 1230

Summary:

Weather clear and seeing ~0.8 all night. Brief closure for dust at evening twilight. Worked on high-priority MODS programs for the first half and PEPSI programs for the second. Very few problems.

Issues:

none

Overview (times are given in UT):

01:35 Bringing up MODS. Steve already woke them and ran simsnap. Repeating this for completeness.

01:41 Bringing up LUCI, init_all on both sides.

01:48 Running full bias sequence for both MODS.

01:57 Field stops are aligned on both MODS.

02:01 Powering up LBCs.

02:07 Running the 2 bias bino checkout on LBCs.

02:21 Taking MODS dual grating arcs.

02:22 Taking 25 LBC biases on each side.

02:34 Sunset

02:37 Opening up. Slight delay waiting for calibs to finish.

02:59 Preset to gd153, MODS specphot. We will observe this in dual grating, and dual grating with 1 x 2 binning. It's likely still too early, so this is just a check. Guiders report 0.8".

03:04 fitsflush required on mods2r.

03:09 Acquisition confirmed on both sides. Waiting approx. 10 mins for the sky to darken further.

03:18 Starting science. Mods[1|2]b.20230614.0026-0027, mods[1|2]r.20230614.0028-0029.

03:23 Guiders report 0.8". Sky clear.

03:26 Spectra look good. Sky still a bit bright.

03:29 Closing. The particle count is over the limit. Only two spectra completed.

03:32 12 degree twilight.

03:51 Opening up again.

03:57 Preset to gd153 to repeat the standard. Acquisition begins with mods[1|2]r.0030.

04:05 Adjusting the start 0.5” to the right on DX.

04:07 Starting science. Mods[1|2]b.20230614.0028-0030, mods[1|2]r.20230614.0033-0035.

04:10 18 degree twilight.

04:22 Odd feature on MODS2b. It has taken all 3 exposures, but still reads ‘Acquiring image 1 of 3.” I had to abort

04:27 Preset to ND_bluegals J1240035.

04:38 Starting science. 0.7” from the guiders, and the DIMM. Mods[1|2]b.20230614.0031-0033, mods[1|2]r.20230614.0039-0041. H-alpha & [NII] visible in the red, no visible [OI]; [OII] in the blue, and Balmer absorption series seen in the blue continuum. [OII] at 4883 giving z ~ 0.31.

05:06 Preset to ND_bluegals J124444.

05:18 Starting science.

05:26 DIMM reports 0.8”. Very little seen. Maybe weak Halpha at 8108 (z ~ 0.235) but couldn’t confirm other lines at same z (Hb; [OIII]; [OII]). Continuum visible, but no obvious absn. lines.

05:45 Preset to UM_XMD SBS1420, running the UT0600 script.

06:05 Starting science.

06:12 Guiders report 0.7”. Excellent spectra: many very narrow lines visible, including many faint lines in the blue. Three 1200 sec exposures in clear skies. Other two UM_XMDs too far over…

07:14 Reconfiguring to PEPSI.

07:36 Preset to OSU_BHBinaries 2MASS J20281989+4048511.

07:39 Starting science.

07:49 The last setup was CD2/CD6, should have been CD2/CD5.

08:06 Preset to OSU_BHBinaries J2107+4214.

08:09 Starting science.

08:14 DIMM reports 1.1”.

08:29 Preset to UM_PEPSI 58 Aql.

08:34 Too bright – using ND2 for guiding.

08:36 Starting science.

08:51 I was interacting with the displayed image on the pepsi interface and the image and file log windows closed. I see no obvious way to open them again.

08:54 They came back by themselves when the next file read out.

08:56 Moving on to UM_PEPSI V1405 Cas. Performing a pointing check nearby first.

09:02 Preset to V1405Cas.

09:04 Taking a 1 min exposure to check for Halpha and confirm target selection.

09:07 Looks good. Starting science. 1” from the DIMM. Clear sky.

10:12 Preset to OSU_BHBinaries 2MASS J2236.

10:14 Starting science.

10:26 Run out of other targets. Not much time left. Try to do as many short exposure UVa_Multistar targets as possible before twilight.

10:27 Preset to Uva_Multistar TIC 278352276.

10:28 Crowded field. Performing a pointing correction nearby.

10:29 18 degree twilight.

10:31 Sending the preset again.

10:32 Starting Science.

10:39 Preset to UVa_Multistar TIC 322727163.

10:43 Science completed. Preset to UVa_Multistar TIC 375325607.

10:45 Starting science.

10:50 Preset to UVa_Multistar TIC 89278612.

10:52 Starting science.

10:54 Preset to UVa_Multistar TIC 123098844.

10:56 Starting science.

11:00 Preset to OSU_FGKBDS BD +49 2561.

11:02 GS not found. Steve is correcting pointing.

11:05 Back on target, starting science.

11:07 12 degree twilight.

11:18 End of science. Closing the enclosure.

11:21 Starting PEPSI calibrations.

11:46 MODS put to sleep, LUCIs safed, LBCs powered off.

12:05 Sunrise.