LBT Observing Log for 2023 Dec 10/11 (MST)

C19 Observer: Andrew Cardwell Partner Observer(s): Peter Garnavich Telescope Operator: Steve Allanson

PEPSI Log

Plan: The prediction is for increasing clouds as the night goes on.

Observed and completed:

Summary:

LBT Observing Log for 2023 Dec 10/11 (MST) OSU_GammaDor: KIC 9366994 OSU_GammaDor: KIC 8329014 OSU_BHBinaries Gaia DR3 387633236689336960_J0039+4315 OSU_BHBinaries Gaia DR3 424347789670037632_J0054+5748 OM_Warhol Part1:Seeing Limited. ND_bluegals: J0912 MODS PhotCal: G191b2b ND_bluegals: J0956 OSU_XMD_MODS: DESIJ0923_UT1000 ND_bluegals: J1105 OSU_Monitor

Issues:

Overview (times are given in UT):

23:40 Waking mods, running simSnap.

23:50 Everything looks good with MODS. Checking out LUCI, taking MODS biases.

23:56 No adjustment required to LUCI field stops. LUCIs safed until needed.

00:02 LBCs are powered on, taking a bias.

00:05 Biases look good, taking a full LBC bias sequence.

00:19 Sunset.

00:22 Opening up. The pepsi interface crashed while I was working with it. Restarting.

00:35 The pepsi interface is now up and functioning correctly. Steve is taking care of pointing and collimation for the first target.

OSU_GammaDor: KIC 9366994 00:56 Preset.

01:01 Looking good. I will start the science exposure at 01:05.

01:05 Starting science.

01:11 12 degree twilight.

01:41 18 degree twilight.

OSU_GammaDor: KIC 8329014

02:09 Preset.

02:10 Wrong star grabbed on DX. Steve is correcting.

02:12 Starting science. Seeing is still excellent, 0.44" from the DIMM.

OSU_BHBinaries Gaia DR3 387633236689336960 J0039+4315 03:37 Preset.

Pointing check required.

03:44 Starting science.

OSU_BHBinaries Gaia DR3 424347789670037632 J0054+5748 03:54 Preset.

03:55 Starting science.

04:00 Reconfiguring to LUCI.

OM_Warhol Part1:Seeing Limited.

This acquisition contains both a blind offset, and the 2"/1.5" slit.

04:16 Preset to target. It is currently at 26.3 degrees in elevation.

04:20 Panic on the LUCI1 MOS unit.

04:27 The solution is not clear to me. It did not appear that anything was in a dangerous state, so I tried an init. That did not clear the issue. I called Dave T. and he is looking at the issue now.

04:31 It appears to be a mask selection issue.

04:40 Resolved, progressing with acquisition.

04:46 Target will be acquired at y=1468 on both sides.

04:49 Starting science, the blind offset has been applied. Luci1.20231211.0008-0039, luci2.20231211.0010-0041. El=29.5, Guiders report 0.9". Cloud is now coming in...

04:59 We think we see a faint trace in the first pair subtraction.

05:12 We have about 1 mag of extinction.

06:42 Preset to telluric for this target, HIP13917.

06:52 Starting science.

06:59 Switching to MODS.

NOTE: The LUCI cals currently uploaded for the previous target do not appear to be correct. They don't match the slit or central wavelengths used for science. The PI should provide us with updated cals.

ND_bluegals: J0912

07:22 Preset to J0912.

07:34 The confirmation exposure shows the target to be offset to the right in the MODS1 slit. Taking a second exposure to rule out guider settling.

07:36 Nope, still off. Applying -0.2" in x.

07:39 Acquisition confirmed, starting science. Mods[1|2]b.20231211.0018-0021, mods[1|2]r.20231211.0023-0026.

07:42 MODS1r IMCS failed to lock on the first attempt. Caught on retry.

07:54 Trace is visible in the red exposures. Guiders report 0.8" seeing.

MODS PhotCal: G191b2b 08:31 Preset.

08:42 Acquisition confirmed on both sides, starting science. Mods[1|2]b.20231211.0022-0024, mods[1|2]r.20231211.0031-0033.

ND_bluegals: J0956 08:55 Preset.

09:12 Starting science. Mods[1|2]b.20231211.0025-0027, mods[1|2]r.20231211.0038-0040.

09:14 MODS1r timed out on IMCS lock. Caught on retry.

OSU_XMD_MODS: DESIJ0923_UT1000

09:42 Preset.

09:44 No GS found on DX, pointing check required.

09:47 Preset to science target.

09:57 Target was too faint to acquire on mods1 acq image, taking a longer exposure. Carrying on with acquisition on mods2.

10:05 Starting science. Mods[1|2]b.20231211.0028-0030, mods[1|2]r.20231211.0045-0047.

ND bluegals: J1105

11:13 Preset.

11:26 Starting science. Guiders report 0.5". Thin cloud. Mods[1|2]b.20231211.0031-003, mods[1|2]r.20231211.0051-0053.

12:04 Reconfiguring to LBCs.

OSU_Monitor

12:22 Preset to collimation and copointing field for NGC3344.

12:24 Starting collimation. Dohybrid, /X2.

12:34 Collimated. Moving on to copointing.

12:38 Preset to science field. The copointing exposures have excellent IQ. 0.6". PSF shape is better on red than blue. Cloud.

12:51 Collimation is going soft on lbcb. Fwhm is about 1pix worse than on red. Approximately 0.75" on blue and 0.55" on red.

12:43 18 degree twilight.

13:04 Strong satellite trails in lbcr.20231211.125854.fits and bcb.20231211.125931.fits

13:10 Closing for the night.

13:38 Taking LBC biases and MODS dual grating 2.4" slit flats.

13:13 12 degree twilight.

13:59 LBCs are powered off.

14:05 Sunrise.

14:30 LUCI calibrations for UM_Warhol: L1: 48-52 lamp off; 53-57 Halo1 lamp on; L1: 58-59 lamp off; 60-61 Ar lamp on L1: 62-63 lamp off; 64-65 Xe lamp on

L2: 50-54 lamp off; 55-59 Halo1 on L2: 60-61 lamp off; 62-63 Ar lamp on L2: 64-65 lamp off; 66-67 Xe lamp on