C19 Observer: Andrew Cardwell (From obs1, x2go session 50).
Partner Observer(s): Mark Whittle, Noah Rogers.
Telescope Operator: Josh Williams.

Plan: We start with MODS. Aim for ND_gaia19bxc; OSU_ASASSN18jd; OSU_XMD_J0133; OSU_XMD_UM133; OSU_XMD_HS0134; Mrk71. Possibly switch to LBC-monitor with some I-band objects.

Summary: Productive night. Mostly clear conditions (some light clouds in second half).
ND_Gaia19bxc: 3 of 5 exposures done (terminated by elevation limit)
OSU_ASASSN_18jd
Feige 110 (Standard)
OSU_XMD_J0133
OSU_XMD_UM133
OSU_XMD_HS0134
G191b2b (Standard)
OSU_XMD_Mrk71 (long/short exposures for faint/strong lines)
OSU_XMD_HS0811 (28 deg from moon – but looks OK)
OSU_ASASSN_N3822 (42 deg from moon – but looks OK).

Issues: LUCI2 is out of action.

Weather: Calm wind, low humidity, thin clouds passing in second half, but DIMM shows little variation; seeing ~1 arcsec mostly, with periods at ~0.6 arcsec.

Overview (times are given in UT):

00:02 Waking MODS, running simSnap. Looks good.

00:23 Sunset. Opening is slightly delayed due to the LUCI2 troubleshooting.

00:53 Preset to ND_gaia10bxc, MODS LS. Acquisition begins with mods[1|2]r.20221115.0003.

01:05 The sky is still too bright, taking the acquisition exposures again.

01:13 12 degree twilight. Still too faint to acquire with confidence. Increasing the acq time from 50s to 90s and trying again.

01:17 1” from the DIMM.

01:23 The target of interest is now easy to identify. Seeing also improved a little which helped.

01:27 Starting science. Mods[1|2]b.20221115.0003-0005, mods[1|2]r.20221115.0010-0012. Guiders currently report 1.2”.

01:42 18 degree twilight.

02:04 We got 3 good exposures before hitting the elevation limit. Recovering the adsecs.

02:09 Recollimating before moving on to the next target. Problems, SX primary just went into panic. Recovering.

02:27 Preset to OSU target ASASSN18jd. Acquisition begins with mods[1|2]r.20221115.0012.

02:43 Starting science. Mods[1|2]b.20221115.0006-0008, mods[1|2]r.20221115.0017-0019.

02:45 IMCS failed to lock on mods1r, we got it on retry. DIMM reports 1.2”.

03:28 DIMM reports 0.8”.

03:49 Reading out, DIMM reports 1”.

03:50 Preset to Feige110. Acquisition begins with mods[1|2]r.20221115.0020.

03:58 Starting science. Mods[1|2]b.20221115.0009-0011, mods[1|2]r.20221115.0022-0024

04:09 DIMM reports 0.65”.

04:17 Preset to OSU_XMD, J0133. MODS LS. Acquisition begins with mods[1|2]r.20221115.0026.

04:28 Starting science. Mods[1|2]b.20221115.0012-0014, mods[1|2]r.20221115.0029-0031.

04:53 Guiders report 0.65”. Very strong emission lines in the first spectra.

05:11 Guiders report 0.8”.

05:38 Preset to OSU_XMD, UM133. MODS LS. Acquisition begins with mods[1|2]r.20221115.0032.

05:48 My x2go session has frozen up. This is not an issue with my internet connection as zoom is working perfectly well. It may be a VPN issue.

05:56 Starting science. Mods[1|2]b.20221115.0015-0017, mods[1|2]r.20221115.00335-0037.

07:03 1.2” from the DIMM. reset to OSU_XMD, HS0134. MODS LS. Acquisition begins with mods[1|2]r.20221115.0038.

07:19 Starting science. Mods[1|2]b.20221115.0018-0020, mods[1|2]r.20221115.0042-0044. DIMM reports 0.9”.

08:13 DIMM reports 0.7”.

08:27 Preset to G191-b2b, MODS LS specphot. Acquisition begins with mods[1|2]r.20221115.0045.

08:36 Starting science. Mods[1|2]b.20221115.0021-0023, mods[1|2]r.20221115.0047-0049.

08:43 DIMM reports 0.7”.

08:49 Preset to Mrk71, MODS LS. Acquisition begins with mods[1|2]r.20221115.0050.

09:03 Starting science. Mods[1|2]b.20221115.0024-0030, mods[1|2]r.20221115.0053-0059.

09:05 IMCS failed to lock on mods1r. It caught on retry.

09:25 We have saturation in the initial 900s spectra. The second set were manually shortened to around 450s. Even with this exp time there was clear saturation on mods2 spectra.

09:46 We have taken 2x240s on both sides, even in this the Halpha line is peaking at 52k on mods2r, it’s fine on mods1. Our current plan is to take a further 240s exposure on both sides, and then 2 900s on each side.

09:57 DIMM reports 1”.

10:31 Preset to HS0811, MODS LS. Acquisition begins with mods[1|2]r.20221115.0060.

Science exposures are Mods[1|2]b.20221115.0031-0033, mods[1|2]r.20221115.0064-0066.

11:43 1.1” from the DIMM.

11:52 Preset to OSU_ASASSN, NGC3822. Acquisition begins with mods[1|2]r.20221115.0067. Stopping to reenable an actuator on the SX primary.

11:58 Another blip in VPN connectivity.

12:00 Sending the preset again.

12:01 Another VPN freeze.

12:16 Starting science. Mods[1|2]b.20221115.0034-0039, mods[1|2]r.20221115.0071-0076. DIMM reports 1.1”.

12:24 18 degree twilight.

12:54 12 degree twilight.

12:58 1.1” from the DIMM.

13:00 End of observing, closing the enclosure.

13:15 Taking pending MODS cals in 1x2 binning.

Full bias sequence: Mods[1|2]b.20221115.0040-0059, mods[1|2]r.20221115.0077-0096

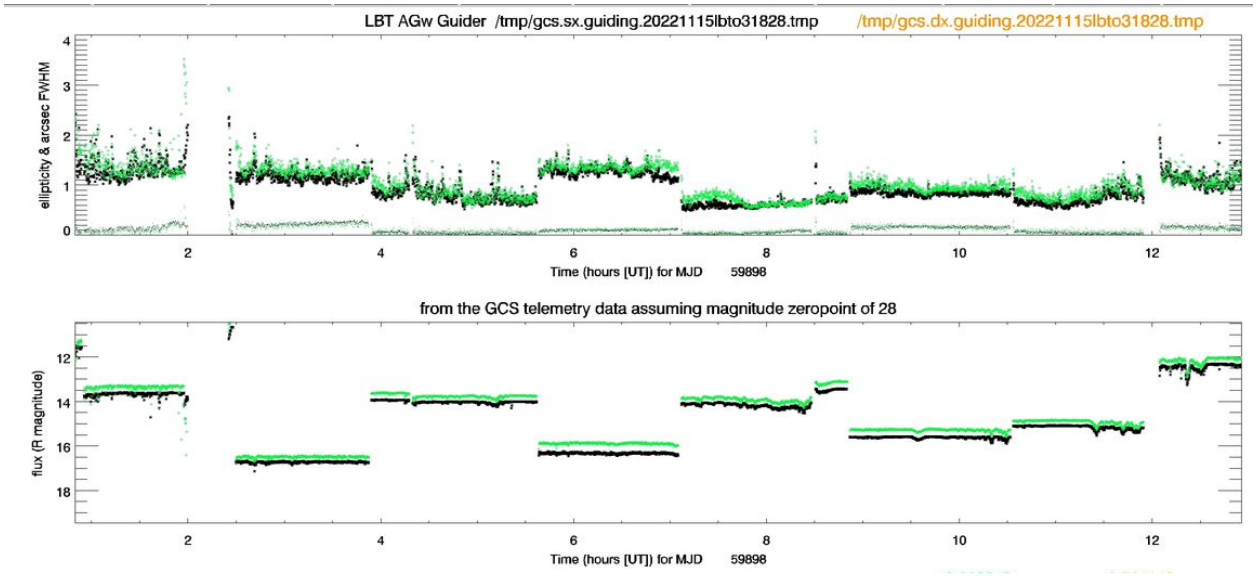
13:44 Sunrise.

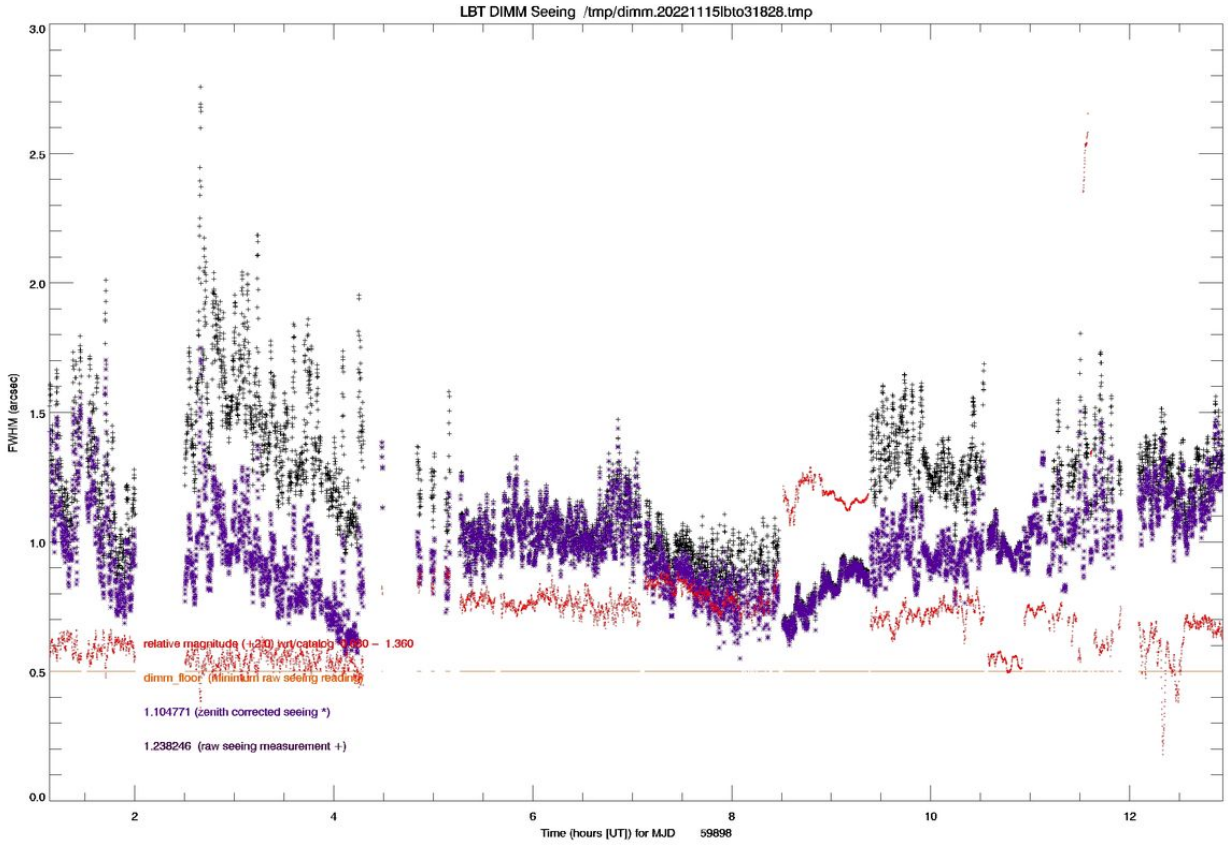
Arcs: Mods[1|2]b.20221115.0060-0062, mods[1|2]r.20221115.0097-0099.

13:55 1” slitflats. Mods[1|2]b.20221115.0063-0069, mods[1|2]r.20221115.0100-0105.

14:10 5” slitflats. Mods[1|2]b.20221115.0070-0074, mods[1|2]r.20221115.0106-0108.

14:25 Slitless flats. Mods[1|2]b.20221115.0075-007?, mods[1|2]r.20221115.0109-011?.




LBT DIMM Seeing /tmp/dimm.20221115lbto31828.tmp
FWHM (arcsec)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
4
6
8
10
12
Time (hours [UT]) for MJD 59898
relative magnitude (+2.0) ivt/catalog 1.000 – 1.360
dimm_floor (Minimum raw seeing reading)
1.104771 (zenith corrected seeing *)
1.238246 (raw seeing measurement +)