LBT Observing Log for 2024 Jan 12/13 (MST)

C19 Observer: Andrew Cardwell Partner Observer(s): Donald Tendrup, Michael Tucker Telescope Operator: Steve Allanson

Plan:

Observed and completed:

G191 UVa_Supernovae: SN2023xgo GD71 ND_dwcnc OSU_SCAT: 2023ufx OSU_SCAT: 2023bee WEATHER LOSS BEGINS (07:40) WEATHER LOSS ENDS (11:53) ND_blueglas: J121251+615308

Summary: MODS spectra. Other than losing 4h 13m to high winds we had a very productive night.

Issues:

Overview (times are given in UT):

23:50 Waking mods, putting it in observing mode for test presets. The telescope is currently free of ice, winds are around 15 m/s and coming from the NW. The satellite animation suggests clouds will hit us within the next hour or two.

23:55 Bringing up LUCI and LBC GUIs. LBCs powered on.

00:19 Running simSnap on MODS.

00:30 LUCI field stop positions confirmed, no adjustments required. LBC 2 bias bino checkout looks good, taking a few bias frames.

00:37 Sunset.

00:41 We are open. Winds have been borderline, but we are still within limits.

00:48 Our first target will be G191, MODS specphot.

G191

01:06 We are pointed and collimated. Preset to G191b2b. It's likely still too bright.

01:19 Target acquired, waiting. Clouds are arriving.



01:20 Starting science. Mods[1|2]b.0003-0005, mods[1|2]r.0007-0009.

01:22 IMCS lock timed out on MODS1r, caught on retry. Seeing as reported by the guiders and DIMM is 1".

01:29 12 degree twilight.

01:34 Running the sequence through again as we have time to kill before it's dark enough for our first target. Mods[1|2]b.0006-0008, mods[1|2]r.0010-0012.

UVa_Supernovae: SN2023xgo

01:46 Preset to SN2023xgo.

01:59 18 degree twilight.

02:01 Starting science. DIMM reports 1", guiders 1.2". Mods[1|2]b.0009-0011, mods[1|2]r.0016-0018.

02:26 First spectra look good. Not much visible in the blue arm, but the red arm shows broad emission lines from the SN, and narrow ones from the galaxy it is embedded in. Guiders and DIMM report 0.9".

02:33 Winds are likely to become an issue as we turn into the west.

GD71

03:10 Preset to GD71, MODS specphot.

03:21 Adjustments of +0.3" in x for MODS1 and -0.3" in x for MODS2 were required. Starting science. Mods[1|2]b.0012-0014, mods[1|2]r.0022-0024.

ND_dwcnc

03:38 Preset to dwcnc.

03:41 Target is at 31.5 degrees in elevation and rising.

03:48 Correction needed to acquisition on MODS2.

03:53 Starting science. Mods1b.0015-0039, mods1r.0030-0061, mods2b.0048, mods2r.0066.

03:55 Timeout on IMCS lock for MODS1r, it caught on retry.

03:57 DIMM reports 1", which is a zenith corrected value. Guiders report 1.4" which seems reasonable at 35 degrees in elevation.

05:12 Observations are continuing smoothly. Sky appears to be clear, guiders report just below 1".

05:20 MODS1b stopped reading out at some point, I got it going again with an expdone. About 7 exposures 'missing' / lost on mods1b.

05:51 There is significant lag between the various arms. Mods2r finished first, extra exposures added there to prevent idle time. We will run until mods1r is finished, adding extra exposures to the other arms as needed.

OSU_SCAT: 2023ufx

06:12 Preset to 2023ufx. MODS DG spectroscopy.

06:24 Correction of -0.15" in x applied to mods1 based on through slit exposure.

06:26 Starting science. Mods1b.0040-00??, mod1r.

06:33 Script error, 'slitmas longslit' rather than 'slitmask LS5x60x1.0'. Script updated and run again. Guiders report 0.9", allsky camera shows cloud arriving.



06:56 First spectra look good, several broad emission lines are visible.

OSU_SCAT: 2023bee WEATHER LOSS BEGINS (07:40)

07:40 Preset to 2023bee. Winds are rising and may become an issue.

07:43 Closing, winds are gusting above the limits.

07:58 More gusts over 22 m/s within the last 10 mins. Starting a MODS bias sequence.

08:31 Taking MODS DG arcs.

08:49 MODS DG 0.6" slit flats.

10:18 MODS DG 1" slit flats. Gusts up to 25.3 m/s within the last 10 mins.

10:39 MODS DG 1.2" slit flats.

11:19 MODS DG 2.4" slit flats.

11:45 Winds are still high, but within our limits. Opening.

WEATHER LOSS ENDS (11:53)

ND_blueglas: J121251+615308

11:53 Preset to J1212.

11:56 GS is a double, making the guider seeing estimate inaccurate. DIMM reports 1.2".

12:03 Starting science.

12:15 Initial spectra were pretty faint. We do have some cloud. We will add additional exposures to this target.

12:32 Making a second pass though this script.

12:55 18 degree twilight.

12:57 End of observations. Closing up.

13:03 MODS have been put to sleep, LUCIs safed, and LBCs powered down. We have no urgent cals. Given the high likelihood of closure due to winds or clouds over the next few nights we will save cals for then.

13:25 12 degree twilight.

14:17 Sunrise.