LBT Observing Log for 2023 Nov 6/7 (MST)

C19 Observer: Alex Becker Partner Observer(s): Brian Healy (UM), Mark Whittle Telescope Operator: Josh Wiliams

Plan:

Start with MODS: UVa_Supernova 2023vyl, 2020jfv OSU_XMDs_MODS WISEAJ2310 (program completion priority) Feige 110 standard Switch to LBC OSU_Monitor N628, N672, N925 Switch to PEPSI OSU_FGKHosts OSU_FGKHosts OSU_BHBinaries Option if seeing is good to switch to MODS last 2-ish hours of the night for priority targets OSU_XMDs_MODS KUG0743 OSU_nebla targets G191B2b standard

Observed and completed:

Summary:

LBC IQ plot:

http://people.lbto.org/~cveillet/Chris/lbcIQ_500nm_Zenith/lbcIQ500z_20231107.png

PEPSI log: https://drive.google.com/file/d/18GYFQtjIX0IS-for-FIlw0n2S1Tnc-4W

Issues:

IT #9001: Bad CMOS battery in LBC Red Sci computer

Overview (times are given in UT):

23:25 waking up mods, turning LBCs on

All good for MODS, for LBC see 23:33

23:27 modsSimSnap bino

23:32 mods DG pixelflat

23:33 LBCR: RPC Client/Host communication failed. CameraInitialize failed, disabling Camera System.

Turning everything off and on again

23:46 Nope ... lbckill/lbcstart

23:53 LBCR camera is still not coming up. RPC Client/Host communication failed. Giving it one more try. Turning systems off, lbckill/lbcstart, turning systems on again And again...

00:12 Still nothing. Olga is looking into it

00:25 Open

00:40 LBCR camera is now up. Bad CMOS battery on the Sci computer. Olga is opening an issue track for that. We should be good for tonight as long as we don't to restart it again Taking 2 bias for checkout ... all good

MODS

00:44 Pointing check 00:52 Collimation

Feige 110

00:55 Preset MODS1 offsetxy -1.000 11.722 MODS2 offsetxy 3.139 8.697

01:02 Starting science script Seeing between 1.5" and 2" Decided to take the brighter SN Target while still in twilight.

2023vyl PA -50

Changed PA to -50°. Selected new GS

01:21 Preset mods1 offsetxy -0.029 10.431 mods2 offsetxy 3.634 8.280 + additional offset deltax 0.13

01:33 Starting science script Seeing 1.5 arcsec.

2020jfv PA 158

Changed PA to 160. Same GS

01:50 Preset mods1 offsetxy -0.708 10.515 + additional offset deltax -0.13 mods2 offsetxy 3.289 8.086

02:09 Starting science script 02:11 MODS1 IMCSLOCK RED failed. Retry... ok 02:30 seeing improved: 0.8 arcsec. Narrow emission lines visible, little continuum.

WISEAJ2310 UT0400

03:18 Preset GS not found on DX. I can see it in the GCS acq image.... Time for a pointing check

03:25 Let's try this again ... preset

The VATT is giving us some extra light



03:29 It's dark again We are going for the component on the right side. mods1 offsetxy -0.685 10.985 + additional offset deltax -0.2 and +0.1 back...

mods2 offsetxy 3.418 8.288

03:40 Starting science script

Lots of emission lines. Even in parts of the spectrum where the throughput is too low for the continuum



04:49 Reconfig to LBC

LBC

N628

05:05 Preset to focus field Copointing limit

05:08 Preset Copointing limit on SX

05:13 Preset 05:14 dohybrid 05:21 Ibcrangebal 05:26 Starting science script IQ on first image ~0.9"



N672

06:02 Preset 06:04 dofpia 06:09 copointing check 06:12 Starting science script OK, that doesn't seem to be right. Telescope is moving directly back into the wind. We are going to another target for now and I will check afterwards

Collimation and copointing field were at 2:12:28 +27:27 Target at 01:47:53 +27:26 That shouldn't have moved us >60° in AZ. Telescope N925

06:15 Preset to focus field
06:18 dofpia
06:24 lbcrangebal
06:27 Starting science script
06:30 Image quality poor on lbcb..62817. Trails or lost collimation.
06:43 Stars are very trailed on lbcb..63442 ... something was moving?
LBCR is still doing fine

OK, now we have it on both sides... Stopping script

06:47 Sending preset again And the telescope is sending us again -112 away in AZ. Something is messed up here....

It smells like IT #8966...

06:50 Josh is restarting PCS. 06:57 Nope, it was just me not realizing we were at elevation 86

No other target for LBC at this time. Either N672 which is in the wind or N925 at high elevation...

Moving out of the wind first.

07:27 OK, we are below 85° now. Trying to re-collimate 07:37 Z11/Z22 is running away on LBCR. Deactivating Z11 corrections and trying again That didn't work out too well... Clearing optics on LBCR & reactivating Z11 correction

07:43 dohybrid Much better. 3 iterations

07:50 lbcrangebal 07:53 Starting science script That didn't take long at all...

08:10 DIMM seeing ~1.5" 08:18 Reconfig PEPSI

PEPSI

08:44 Pointing check 09:00 Collimation check Gaia 338363 = J0625+2418

09:02 Preset 09:04 Starting science integration

Gaia 338121 = J0650+2433

09:11 Preset 09:12 Starting science integration

J0628+0607

09:23 Preset 09:25 Starting science integration

ASAS J060240-1646.0

09:32 Preset 09:34 Pointing check!!! 09:38 Preset 09:39 Starting science integration

Gaia DR3 29492727 = J0651-1329

09:49 Preset 09:52 Starting science integration

2MASS J08301619-0204550

10:06 Preset 10:09 Starting science integration

Gaia DR3 212658 = J0254+0953

10:24 Preset

Oh, that is pointing us into the wind. We take another target

Gaia DR3 1095613 = J0743+6556

10:28 Preset10:33 And that is me being stupid and sending the preset again instead of starting the exposure...10:34 Starting science integration

10:36 Reconfig MODS

MODS

10:50 Pointing preset

KUG0743 PA 180

RA 07:47:33.95, Dec 51:11:17.71 (J2000)

11:08 Preset

It is not entirely clear which part of the galaxy should be targeted. However, with the current PA we get the two brightest blobs into the slit. Centering on the brightest at the bottom. Y-value of the offset is about 3" larger than usual

[rwp note: all finding charts are in 00Finders/ in the osurc folder...]

mods1 offsetxy -0.471 13.975 mods2 offsetxy 3.645 10.597

11:23 Starting science script

11:47 We just saw a jump on SX where the GS disappeared for a while. We don't know why



12:40 We are done for tonight!

12:44 Turning LBCs off, bringing MODS to sleep