LBT Observing Log for 2023 Nov 4/5 (MST)

C19 Observer: Andrew Cardwell
Partner Observer(s): Rick Pogge, Caprice Williams (OSU, remote)
Telescope Operator: Josh Williams

Plan:

Start with binocular LUCI
  OSU_XMDs_LUCI:
      HIP116886 (tel), UM161, HIP116886, WISEAJ2310
      UM420, HIP13917 (tel)
      HIP16956 (tel), SBS0335
  UVa_nirjets: W3_IRS5 imaging
  OSU_XMDs_LUCI: HIP31659 (tel), KUG0743
  OSU_SCAT-LUCI: 2023ufx, hd73708 (tel)

PEPSI if there is time
   OSU_BHBinaries: **J0625+2418, J0308+6548, J0542+4248, J0518+1737

Completed:

LUCI:
  OSU_XMDs: UM161, WISEAJ2310, UM420, SBS0335, KUG0743
  UVa_nirjets: W3_IRS5
  OSU_SCAT-LUCI: 2023ufx
PEPSI:
  OSU_BHBinaries: J0625+2418, J0542+4248, J0518+1737, J0308+6548

Summary:

Good night, seeing >1-arcsec in the middle then settled into sub-arcsecond until twilight. A few LUCI1 filter wheel errors as noted.

Issues:

Overview (times are given in UT):

23:48 Setting up LUCI. Init_all on both sides.
23:55 Adjusting LUCI field stop positions, waking MODS. Running simSnap.
00:06 Running MODS DG arcs and 1" slit flats.
00:07 Powering on LBCs.

00:32 **Sunset**.

00:41 Opening up.
00:48 Pointing preset.
00:54 Collimation preset.

01:00 Preset to **HIP116886**.
01:10 Slight adjustment required for LUCI2. Starting science. Luci[1|2].20231105.0013-0014
01:11 LUCI1 camera error switching from N3.75 to N1.8.
01:17 The camera was in its negative limit. Resolved and continuing.

01:21 Preset to **OSU_XMDs_LUCI UM161**.

01:22 **12 degree twilight**.

01:33 Manually running a longer confirmation exposure, this is a faint diffuse target.
01:39 Starting science. Luci[1|2].0018-0024. 1.1" from DIMM and guiders.
02:02 Clear emission lines in the first pair subtraction. Guiders report 1" to 1.2".

01:51 **18 degree twilight**.

02:44 Preset to **HIP116886**.
02:50 Starting science. Luci[1|2].0028-0029.

02:52 Preset to **OSU_XMDs_LUCI WISEAJ2310**.
03:08 Starting science. Luci[1|2].0033-0038.
03:10 Error with FW2 on luci1. It did not reach position.
03:12 Back in action, actually starting science.
03:21 DIMM reports 0.7", guiders agree.
03:23 Very clear emission lines in the first set of spectra!
04:05 0.9" on the DIMM and guiders.

04:15 Preset to **HIP16956**.
04:18 Target is too low, about 20 degrees in elevation. Taking the telescope up to reset the shells (wrong telluric was paired with the science target).

04:23 Going to the science target instead. We will pick up a telluric after it.

04:23 Preset to **OSU_XMDs_LUCI UM420.**
04:34 Acquisition confirmed, starting science.

05:38 Preset to **HIP13917**
05:44 Acquisition confirmed, starting science. Luci[1|2].0053-0054].

05:46 Preset to **HIP24342**. Nope! Also too low! - another mis-association

05:49 Preset to **HIP16956** (see above @ 04:15)
05:56 Starting science. luci[1|2].0058-0059.

06:03 Preset to **OSU_XMDs_LUCI SBS0335**.
06:14 Acquisition confirmed, starting science. Luci[1|2].0064-0069.
06:26 Clear emission lines in the first spectra.
07:16 0.8" to 1" on the guiders.

07:18 Preset to **UVa_nirjets W3_IRS5.Imaging**. Executed as schedule filler for LUCI because of a gap between priority targets in the program.

07:24 Starting science. Luci[1|2].0070-0121.
07:29 IQ of 0.45" in luci1.0072.
07:39 FW2 error on LUCI1.

2023.11.05 07:39:41 s | error high | luci.luc | System | Scheduler | AbstractCommitter.java#call(121) | Error during commit
2023.11.05 07:39:41 s | error medium | luci.luc | System | Scheduler | InstrumentManagerClient.java#commitSetup(65) | Error committing setup to instrument manager at "rmi://luci.luci.lbto.org:60001/ONE_InstrumentManager"!
1916.02.27 16:20:18 u | error high | obs1.mou | Engineer | ObserverPanel@o | RMIInstrumentStatusPanelImpl.java#done(335) | filter unit 2 at position -1, status: unknown
1916.02.27 16:20:18 u | error high | to1.moun | Engineer | ObserverPanel@t | RMIInstrumentStatusPanelImpl.java#done(335) | filter unit 2 at position -1, status: unknown
1916.02.27 16:20:18 u | error high | luci.luc | Engineer | LuciferManageme | RMIInstrumentStatusPanelImpl.java#done(335) | filter unit 2 at position -1, status: unknown
2023.11.05 07:39:41 s | error medium | luci.luc | Luci ONE | ONE_InstrumentM | RMIInstrumentManagerImpl.java#commitSetu(320) | error while committing setup FILTER_TWO
2023.11.05 07:39:41 s | error medium | luci.luc | Luci ONE | ONE_InstrumentM | FilterUnitClient.java#setPosition(80) | Error setting the position of the filter unit to 0 at "rmi://localhost:60001/ONE_FilterUnit_2"!
2023.11.05 07:39:41 s | system medium | luci.luc | Luci ONE | ONE_FilterUnit_ | RMIFilterUnitImpl.java#generateStatus(419) | filter unit 2 at position -1, status: unknown

07:44 Resolved, returning to science.
08:04 DIMM reports 1.1", guiders 0.8". IQ of 0.8" in luci2.0093.

08:48 Preset to **HIP31659**. DIMM reports 1.1".
08:56 Starting science. luci[1|2].0125-0126.

08:58 Preset to **OSU_XMDs_LUCI KUG0743**.

09:00 No GS found on DX, Josh is performing a pointing check.
09:03 Returning to science target.
09:14 Acquisition confirmed, starting science. luci[1|2].0131-0136

10:19 Preset to **OSU_SCAT-LUCI 2023ufx**.

10:34 Starting science. The target is well acquired on luci1, but was bouncing around in the 0."
slit on luci2. We got it as close as we could, but between exposures with no offsets applied it
was bouncing around by half a slit width or more. ~~Luci[1|2].0147-01??~~. DIMM reports 1".

10:38 The science target is set up for 4x[10x30.0] which is 1200s per spectroscopic dither
position, which is nuts.

10:45 We have edited the script to be 1x[10x3.0] which is a closer, but not perfect, match to
what is described in the readme. Luci[1|2].0148-0151. Called the PI who approved.

11:09 Preset to **HD73708**.
11:13 Starting science. luci[1|2].0155-0158.

11:17 LUCIs safed, **reconfiguring to PEPSI.**

11:34 Pointing has been corrected, collimation preset.

11:36 Preset to **OSU_BHBinaries 3383631280821336448 J0625+2418**.
11:39 Starting science.

11:47 Preset to **OSU_BHBinaries 195971111380071040 J0542+4248**.
11:49 Starting science. DIMM reports 0.85".

11:52 Preset to **OSU_BHBinaries 3394539634461265792 J0518+1737**. Exp time increased
from 3m20s to 5m as we are running out of targets.

11:55 GS not captured on DX, despite being clearly visible in the initial GS image. Josh is
correcting.

11:58 Returning to science target.

12:00 Starting science.

12:06 Preset to **OSU_BHBinaries 492116360644495104 J0308+6548**.

12:08 Starting science. Exptime increased from 5m to 10m to take us to the beginning of
twilight.

12:16 **18 degree twilight.**

12:19 End of observation, closing up. **Starting PEPSI cals**.

12:27 Taking LUCI bino cals for **OSU_XMDs_LUCI**, also MODS 0.6" slit flats.

12:45 **12 degree twilight.** Odd read error on LUCI2. Stopping and starting GEIRS.

2023.11.05 12:40:35 s | error high | luci.luc | System | Scheduler |
AbstractCommitter.java#call(121) | Error during commit
2023.11.05 12:40:35 s | error medium | luci.luc | System | Scheduler |
ReadoutManagerClient.java#commitSetup(73) | Error committing setup to readout manager
at "rmi://luci.luci.lbto.org:60002/TWO_ReadoutManager"!
2023.11.05 12:40:35 s | error medium | luci.luc | Luci TWO | TWO_ReadoutMana |
GEIRSClient.java#saveFile(264) | Save FITS file error in GEIRS application
("rmi://localhost:60002/TWO_GEIRSServer").
2023.11.05 12:40:35 s | instrument med | luci.luc | Luci TWO | TWO_GEIRSServer |
RMIGEIRSServiceImpl.java#sendCommand(886) | status
2023.11.05 12:40:34 s | error high | luci.luc | Luci TWO | TWO_GEIRSServer |
RMIGEIRSServiceImpl.java#checkOkAnswer(1012) | GEIRS received response with error:
ERROR 1 Command 'sync save' returned errorcode = 1: (E_error=1) general error: 'error:
ERROR save error: framebuffer is empty (not yet read?)'
.
2023.11.05 12:40:34 s | instrument med | luci.luc | Luci TWO | TWO_GEIRSServer |
RMIGEIRSServiceImpl.java#sendCommand(886) | save -r 1 1
/dataB/readout2/DATA/20231105/luci2.20231105.0173; sync save;
2023.11.05 12:40:33 s | user medium | luci.luc | Luci TWO | TWO_GEIRSServer |
RMIGEIRSServiceImpl.java#saveFile(730) | GEIRS saving: -r 1 1
/dataB/readout2/DATA/20231105/luci2.20231105.0173
2023.11.05 12:40:33 s | error high | luci.luc | Luci TWO | TWO_GEIRSServer |
RMIGEIRSServiceImpl.java#updateFITSHeade(1362) | Could not add FITS properties
("activatable server "TWO_GEIRSServer" at registry "rmi://localhost:60002/(127.0.0.1):60002"").
2023.11.05 12:40:33 s | error medium | luci.luc | Luci TWO | TWO_ReadoutMana |
GEIRSClient.java#readOut(246) | Readout error in GEIRS application
("rmi://localhost:60002/TWO_GEIRSServer").
2023.11.05 12:40:33 s | instrument med | luci.luc | Luci TWO | TWO_GEIRSServer |
RMIGEIRSServiceImpl.java#sendCommand(886) | status
2023.11.05 12:40:33 s | error high | luci.luc | Luci TWO | TWO_GEIRSServer |
RMIGEIRSServiceImpl.java#checkOkAnswer(1012) | GEIRS received response with error:
ERROR 1 Command 'sync read' returned errorcode = 1: (E_error=1) general error: 'error:
ERROR read (E_ptimeout=21) timeout on OPTPCI interface'
.
12:50 That cleared the issue.

12:51 MODS 1.2" slit flats.

12:54 Taking lamp flats for **UVa_nirjets**.

13:18 Putting MODS to sleep.

13:35 **Sunrise.**