LBT Observing Log for 2024 10 09 UT

Observers: Alex Becker
Partner Observer: Michael Tucker
Telescope Operator: Josh Wiliams

Plan:

Summary:

http://people.lbto.org/~cveillet/dms/lbcIQ_raw_20241009.png

PEPSI log:
https://drive.google.com/file/d/1maMWxmWTkqnp7Gt2ygvHymhj6R-bPd6W/view?usp=sharing

Targets:

LBC: OSU_monitor: NGC6503, 6946 (lost 625 to clouds)
PEPSI: OSU_BHBinares: 4 OK, 1 aborted due to clouds, 1 no acq due to clouds
MODS: OSU_SCAT: 2024any LS and ASASSN-24fw LS, 1 no acq due to clouds

Issues:

Weather:

Start of the night: 12.3°C, Humidity 31.1%, 2.2 m/s '217, mostly clear at the start, then lost about 2+ hours to clouds starting at 05UT, lost guide stars and acquisitions because of clouds at various times, see below.

Overview

(times are given in UT)

00:15 LBCs turned on

00:20 mods awake

00:20 modsSimSnap 2
all good

00:21 LBC 2 bias bino checkout
all good

00:25 LBC 25 bias bino
Occasional horizontal banding on LBCR starting somewhere halfway through the sequence

00:40 Taking 10 more biases for LBC
This time far less banding

00:55 Opening

LBC

OSU_monitor

N6503

01:23 Slewing to the collimation field and waiting for twilight

01:37 dohybrid
Still too bright. Backing out

01:42 dohybrid
Nope, backing out

01:45 dohybrid –x2
LBCR is looking really bad. Huge pupils. About 180 pixel
Manually adding Z4 +2000

01:53 And another 5000 Z4
This was just enough to get it going. dohybrid added another 10000 and dofpia another 22000
at the first iteration

02:05 lbcrangebal
We also had a bit of an offset, but LBCB was further off (star right at the outer circle)

02:09 Starting science script

N6946

02:26 preset to focus field

02:28 dofpia

02:34 lbcrangebal

02:37 Starting science script

02:50 Clouds are coming in from the north-east
They are just forming near the summit, so it is hard to predict how it will evolve

N672

03:13 Preset to copointing field
And this brought us right into the clouds at an airmass of 2.3…

03:19 Not much to see here, switching to PEPSI

PEPSI

03:37 pointing check

03:42 collimation preset

BHBinaries

2MJ23005913-0631412

03:44 Preset

03:47 Starting science exposure
Vmag 13.7 and we see 17.0 on the guider. The clouds on the all sky camera don't look like
>3mag of extinction at the position we are pointing at…

Seeing 0.6"-0.7" on the guider and DIMM

04:12 GCS shows the magnitude to be variable by about 0.1

04:35 So far the observation was mostly out of the clouds, but more clouds seem to be coming
in from the north-east again. 10 minutes left on this target

Target is gone! Stopping exposure after 52 minutes. >2 mag of extinction

SNR blue 101, red 151

2MJ22462025+7046389

04:41 Preset
DummDumm … failed
This might be the only spot without clouds or not … the all-sky image is already 2 minutes old. Who knows…

04:45 Pointing check

04:51 Preset
We saw the target for a second, now it's gone

05:01 And Josh was even able to lose a 2.5mag star. Closing the shutters

Closed

07:07 Opening again

PEPSI

07:08 Pointing and collimation check
Let's see if Josh is able to find his star again.
Eureka!

BHBinaries

2MJ22462025+7046389

07:14 Preset

07:15 Starting science exposure

Still a bit cloudy, but SNR 94 on red and 64 on blue

2MJ23391679-1404375

Moving a bit further out of the clouds. Meaning, the opposite side

07:21 Preset

07:26 Starting science exposure

2MJ01315672+6220567

07:44 Preset

07:48 Starting science exposure

2MJ01234622+6114394

07:52 Preset

07:54 Starting science exposure

08:00 Done!

08:01 Reconfig to MODS

MODS

08:13 Pointing check

18:18 Yeah, yeah … fine … I am putting MODS into observing mode

08:19 Collimation

OSU_SCAT

2024any LS

Seeing ~0.7"

08:22 Sending acq script
2024any_UT0800.acq

offsetxy 3.249 8.644 rel
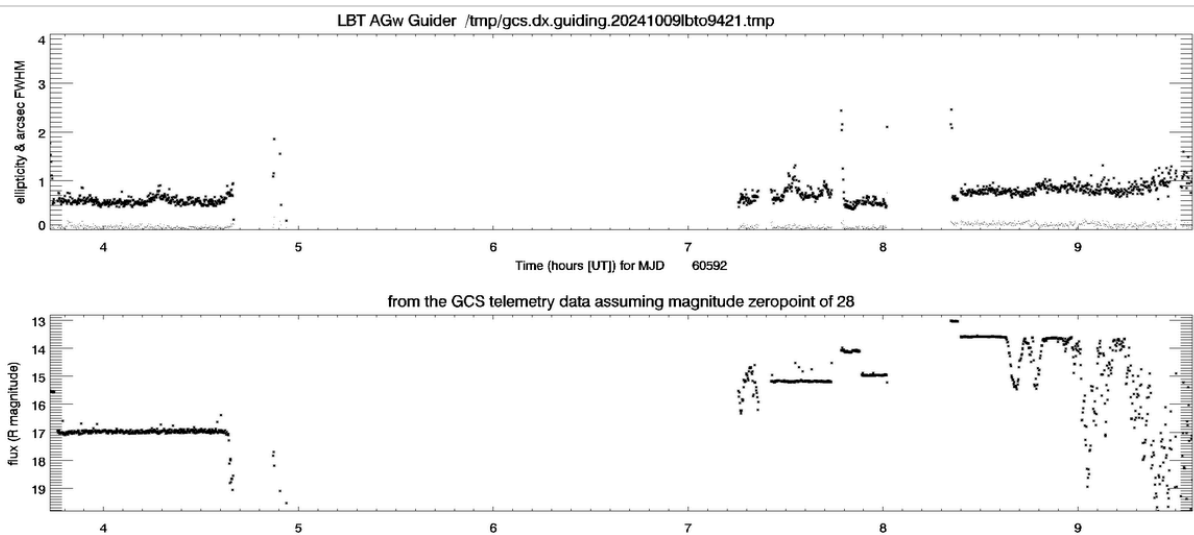
08:31 x2go froze for a bit. It seems like it was caused by contrast changes in ds9 which caused a long lag…

08:33 Starting science exposures

08:47 Clouds with up to 2 mag of extinction are passing by

09:14 For the last 10 minutes we were getting some thicker clouds with up to 5 mag of extinction.

09:31 GS lost due to clouds. Exposure 3 of 6 paused, ~400sec left

09:41 Resuming exposure

09:55 Not a whole lot of spectrum in mods2r..0005 and mods2b..0008, the exposures that were paused. However, a faint trance is visible

ASASSN-24fw LS

10:56 Sending acq script ASASSN-24fw_UT1100.acq

GS is a double source, but we are keeping it

offsetxy 3.158 7.100 rel

11:08 Starting science exposures

11:30 Sending acq script 2024sag_UT1100.acq

offsetxy 3.312 7.409 rel

manually moving another delta x = -0.1"

11:43 No object in the confirmation image due to clouds. We also lost the GS

11:45 starting science script

12:24 Closing the dome

12:25 Taking PEPSI calibs

12:25 Turning LBCs off

12:32 Putting MODS to bed