LBT Observing Log: 2025 Mar 06 UT

Observers: Olga Kuhn, Anne Verbiscer
Partner Observer: Anne Verbiscer, Dominik Rowan, Rick Pogge
Telescope Operator: Steve Allanson

Plan:

Start with a dry run of the Uranus occultation observation. Then a mix of MODS, LUCI and the LBCs.

Summary:

It snowed in the late afternoon and early evening, preventing opening anytime tonight. Steve wrote: "We will remain closed tonight due to ongoing snow/graupel accumulation, and rime ice formation on the building."

Issues:

We had a GEIRS sync save error with LUCI1. Took another exposure through the RMGUI, which was fine, and then continued LUCI1 from error.

Weather:

Snow/graupel and rime ice.

Overview (times are given in UT):

01:38: When running a test LUCI script, we had the following error. Just retook the exposure via the RMGUI and then continued the script from the error.

ID: 49996143
Software Timestamp: 2025-04-06 01:38:29.6400
Time Service Client: sync
Type: ERROR (12)
Level: HIGH (3)
Usage: Luci ONE (3)
Host: luci.luci.lbto.org (110)

Program: ONE_GEIRSServer (10)
Address: RMIGEIRSServiceImpl.java:1060
long Address: de.rub.astro.lucifer.control.readout .RMIGEIRSServiceImpl .checkOkAnswer :1060
Content: 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?)' .
Attachment:

02:00 Alex created versions of the Uranus occultation scripts with NExpo=1 and one item per cube.

UranusTest_OT_V6.1.xml and generated scripts with NExpo=1: UranusOccult_withColl**_steps**.xml and UranusOccult_withoutColl**_steps**.xml.

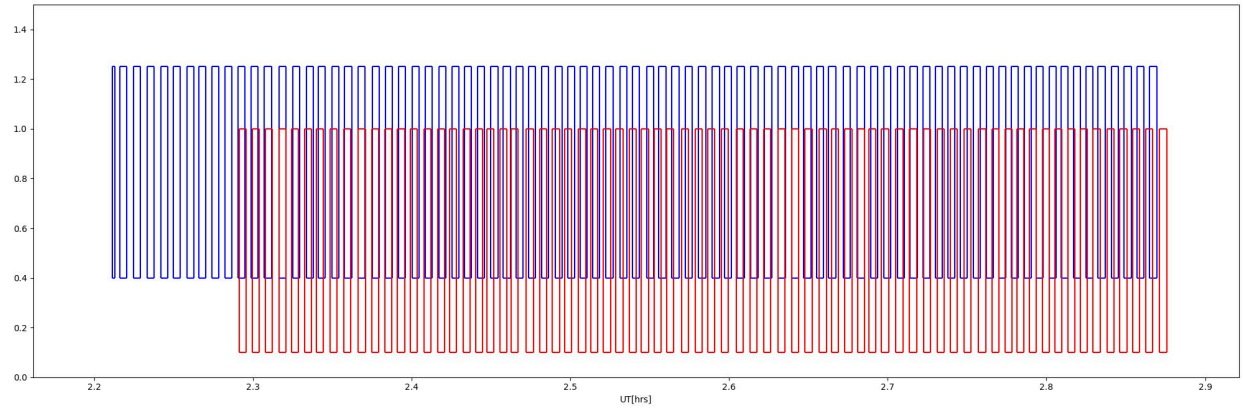
UranusTest_OT_V5.1.xml generated scripts with NExpo = 80: UranusOccult_withColl.xml and UranusOccult_withoutColl.xml

We ran both to completion to see whether this made any difference as far as the LUCI1-LUCI2 (a)synchronization.

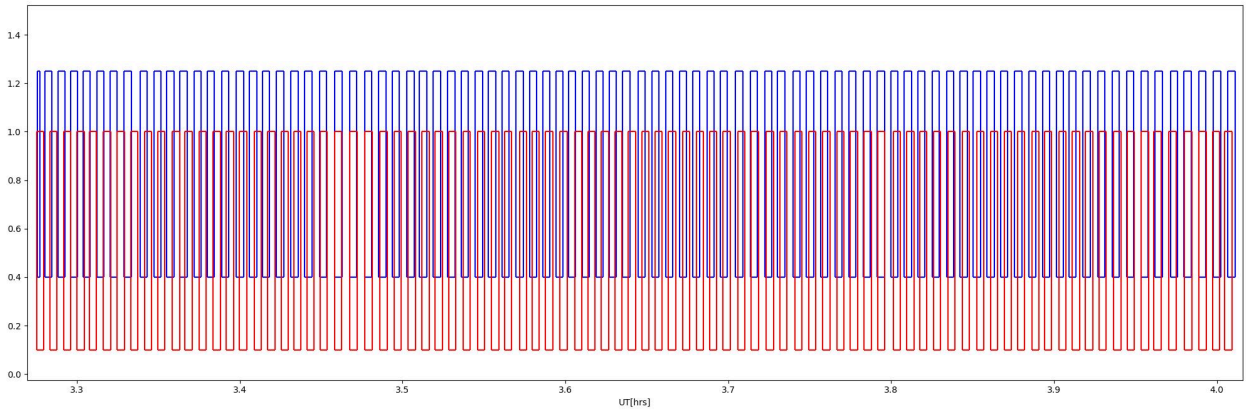
Both showed periods when the LUCI1 and LUCI2 exposures were exactly in-sync (not desired), but also periods when they were out of sync as desired. It seems to be random, as discussed, and it doesn't really seem like one setup is preferred over the other.

Plots showing the start time (as DATE-OBS in the header) and the duration (DIT * NDIT) are below, where LUCI1 is plotted in blue and LUCI2 in red.

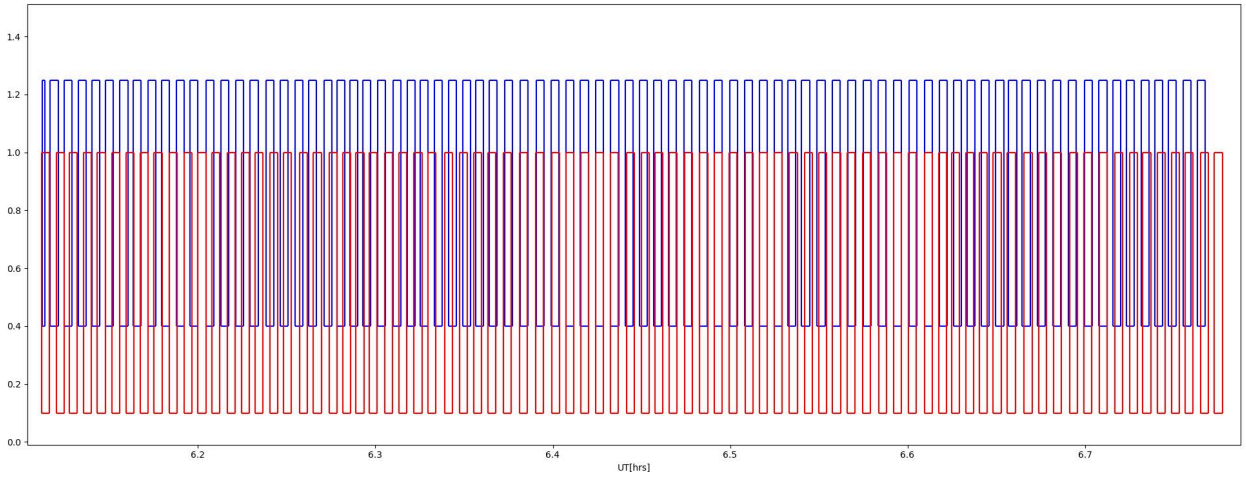
Run 1, Nexpo=80, L1:15-95 (blue) and L2: 18-88 (red). I really don't understand why the first dozen L1 images have Date-obs before the start of L2 or why the number of L2 images is not 81.
The plot below shows that there are some periods when both LUCIs were in-sync, others when out-of-sync as desired.



Run 2, Nexpo=1, L1:102-188 (blue) and L2:94-180 (red). No weirdness but also periods of sync and periods of async.



Run 1.1: Repeating the Nexpo=80 script to see if the weirdness is there again or not…
L1: 190-270 L2: 182-262.
No weirdness this time, just the sync/async:



Run 2.1: Repeating the Nexpo=1 script (_steps).
L1: 271-357 and L2: 263-349