

# OSURC Nightlog 20211127 UT

**Observer\*:** Olga Kuhn

**Lead Partner Observer\*:** Patrick Vallely (OSU)

**Other Partner Observers\*:**

**Special Assistants\*:**

**Telescope Operator:** Steve Allanson (LBT)

**\* = from home**

## Plan:

The plan carried over from last night - to start with MODS and finish with PEPSI.

Target	Planned Time
<input checked="" type="checkbox"/> OSU_ASASSN/J022448	<del>01:25 - 01:45</del>
--- Closed for humidity ---	
<input checked="" type="checkbox"/> MODSPhotCal/feige110	<del>03:55 - 04:05</del>
--- Closed for humidity ---	
<input type="checkbox"/> OSU_monitor/N628	
<input type="checkbox"/> OSU_monitor/N672	
<input type="checkbox"/>	

## Summary:

.With the humidity going up and down, we were only able to open for two short periods totalling 1h25m. During this time, we observed OSU\_ASASSN/J022448 and the spectrophotometric standard Feige 110 (2 exposures of 3).

## Issues:

The ASASSN18jd script used a faint guide star (R=16.3). Patrick edited it to use an R=14.6 guide star instead.

I used the LBCs for closed dome engineering work and encountered a couple of issues with it. With MODS, there were no issues except a MODS1 Red imcslock timeout. Soon after issuing retry, lock was achieved.

The LBC UI that is launched in a chromium browser by the "LBC" application requires that one scroll up/down to see all of the information in the "OB Execution" page. (IT 7595)

There were two RPC errors with the LBCB science camera that stopped the OB. lbckill/lbcstart recovered.

## Weather:

The conditions were unstable - the humidity dropped enough to open near the start of the night but rose again. It dropped below our limit and then soon after rose. After that it stayed high and at times hit 99.9%. The temperature also went up and down.

## Preparations:

**luci[1|2].20211127.0NNN.fits**  
**mods[1|2][b|r].20211127.NNNN.fits**  
**lbc[b|r].20211127.HHMMSS.fits**

After noting that the dual blue imaging focus was a bit off, I implemented the +55mic offset and also checked and implemented smaller  $\sim 30$  mic offsets to the dual grating focus values for m1b, m2b & m2r which bring them close to what they were before they had been lowered at the time of our September restart.

## Overview (times are given in UT):

00:55: Steve opened the enclosure. Opening was delayed because of clouds at sunset (00:18). There are some clouds on the allsky but it looks pretty clear.

## OSU\_ASASSN/J022448

01:10 acqBinoMODS J022448\_edit.acq

Changed PA from 85 to 105 deg. Parangle is -85 (95) at the start. Actually, I typed in the wrong coordinates to check parallactic angle (coords for J023..)

m1r: 4 & 5  $\rightarrow$  offsetxy -0.945 10.337 rel  $\rightarrow$  6 tweak +0.14" in x  $\rightarrow$  7 ok

m2r: 4 & 5  $\rightarrow$  offsetxy 3.486 7.663 rel  $\rightarrow$  6  $\rightarrow$  -0.18" tweak  $\rightarrow$  7  $\rightarrow$  +0.14" tweak (did not check)

01:11 12-deg twilight

01:24 execBinoMODS J022448.obs

	m1b	m1r	m2b	m2r	FWHM guiders	AM
01:24	4-6	8-10	4-6	8-10	1.44/1.58	1.394

01:41 About 1 mag of extinction from clouds.

01:46 Finished

## OSU\_ASASSN/ASASSN18jd (not observed)

01:47 acqBinoMODS ASASSN18jd.acq

m1r: →

m2r: 11 →

Guide star is faint, R=16.3. Patrick edited the script to use a brighter star, R=14.6. Control-C'd the script

01:56 humidity is rising - now 94.8%.

01:55 acqBinoMODS ASASSN18jd.acq

01:58 We had to abort the acquisition to close for high humidity.

03:50 We reopened.

## Feige 110

03:52 acqBinoMODS feige110.acq

FWHM on guiders ~ 1.1-1.3" during acq but sometimes puffing up to

m1r: 11 → offsetxy -1.578 11.967 rel → 12 ok

m2r: 13 → offsetxy 3.001 9.067 rel → 14 ok

~04:00 execBinoMODS feige110\_dualGrating.obs

red imcslock timeout on MODS1R, retry worked right away

	m1b	m1r	m2b	m2r	FWHM guiders	AM
04:04	7-8	13-14 (15)	7-8 (9)	15-16 (17)	~1.4"	1.449

04:12 The humidity rose above 95% and we had to close. We got two full exposures of the standard star in all channels and I stopped the 3rd exposures on m2b, m2r and m1r (index numbers of the partial exposures are in parentheses in the table above). The 3rd m2b exposure had not yet started.

We're going to switch to the LBCs while closed.

04:16 The humidity has reached 99.9%.

09:00 The humidity remains above the limit - 96.5% now.

09:00 Steve is reconfiguring to the PEPSI.

11:45 Now we are accumulating ice of the building and, with this, unlikely we'll be able to open even if it clears and the humidity drops.

roof.cam 2021-11-27 11:39:09



13:04 12-deg twilight