## OSURC Nightlog 20220321 UT

Observer\*: Olga Kuhn Lead Partner Observer\*: Other Partner Observers\*: Special Assistants\*: AO Operator\*:

Telescope Operator: David Gonzalez Huerta

\* = from home

#### Plan:

## Summary:

There was no observing tonight, since there was rime ice on the building at sunset.

A set of 1" G200 zJ flats and arcs were taken to match the DDO68 observations (20220319UT) where the LUCI2 field had shifted by dY~ +70 pixels with respect to the norm, for unknown reasons. I moved the fold mirror FM4 to match the data and then returned it to its starting position and checked the pupil and field stop alignment (the pupil was well aligned but the field stop needed to be shifted).

We then reconfigured the LBT to the LBCs for an engineering test with the TMS lasers.

#### Issues:

#### Weather:

There were clouds over the summit and the humidity was pegged at about 100% all day. Rime ice had built up last night and today, and at sunset it was still there. There is no chance to open tonight.

Although the skies have cleared, the humidity is still about 100% at 05:30 UT.

## Preparations:

# luci[1|2].20220322.0NNN.fits mods[1|2][b|r].20220322.NNNN.fits

Opened the LUCI user interface and clicked initialize. There was a LUCI2 MOS error -a 'precondition violation' in that the strain gauges were on although the grabber was not holding onto a mask. The mask was in the focal plane. Dave Thompson helped us recover.

#### **Closed Dome Calibrations**

## LUCI

I shifted the fold mirror to obtain a set of zJ 1" calibrations that match the DDO68 observation from 20220319 UT. Files wil be luci[1,2.20220322.00NN.fits. Note: the rotators were not at the park positions, however the lookup table was enabled.

Program	Lamps	L1	L2
OSU_XMDs_LUCI	lamp off	1-5	3-7
	halo 2/1 on	6-10	8-12
L2 field shifted to match the DDO68	lamp off	11,12	13,14
	Ne	13,14	15,16
spectra from	lamp off	15,16	17,18
20220319UT	Ar	17,18	19,20

I returned FM4 to it's old position after taking these flats.

Taking a set of L2 images to check pupil & FS after the large FM4 move.

## Overview (times are given in UT):

02:30-03:10 Used the AFC tab on the RTD to shift the fold mirror 4 in LUCI2 in order to take flats and arcs that matched the data. After taking these, I put FM4 back to its original position.

06:09-07:09 Checked the pupil and field stop alignment for LUCI2. The field needed to be moved to the left (dX = -28) and up (dY = 10). The pupil was well aligned.

07:20 Reconfiguring to LBCs for closed-dome work with the TMS — using TMS to track thermal changes in the telescope. The temperature had risen earlier in the night, however the ambient temperature remained about constant at -5.7 to -5.8 deg C during these tests.

07:20 The humidity has dropped to 64%. But since there was ice on the dome at sunset, there is no chance of opening.

13:30 Finished the TMS work.