OSURC Nightlog 20220321 UT

Observer*: Olga Kuhn Lead Partner Observer*: Peter Garnavich (ND) Other Partner Observers*: Emily Griffith, Subhash Bose (OSU) Special Assistants*: AO Operator*: Telescope Operator: David Gonzalez Huerta * = from home

Plan:

We configured for PEPSI in the event that it cleared for just long enough to complete one or two of these relatively short, ~15-25-min, observations.

Summary:

The humidity was about 100% all night and there were clouds and what looks like frost or snow on the all sky camera.

We reviewed the LUCI calibrations taken on 20220319 UT (details below) and took LUCI darks for all of the programs as well as more LBC biases. We took all of the necessary MODS calibrations last night, 20220320 UT.

Issues:

We examined the spectra and calibrations taken on 20220319 to look for field shifts or the huge ~half-field shifts that we sometimes see in the dispersion direction. There were no shifts in LUCI1, but in LUCI2 there was a vertical shift, dY ~ 70 pix, of the field between the observation of DDO68 and its telluric. From there on, the region covered by the LUCI2 spectra was the same.

While checking these, we compared the wavelength scales of LUCI1 and LUCI2 G200 spectra: the LUCI1 zJ and HK spectra are shifted to the red wrt the LUCI2 ones, by ~50 pix (~0.01 mic) at zJ and by ~64 pix (~0.027 mic) at HK. These shifts in central wavelength are known and they should be consistent within the year.

Weather:

The humidity is pegged at 99.9% and there are heavy clouds.

Preparations:

luci[1|2].20220321.0NNN.fits mods[1|2][b|r].20220321.NNNN.fits

Closed Dome Calibrations

LUCI

Darks

	L1	L2	DIT	NDIT	readmode	savemode
UVa_nirjets	1-5	1-5	2.5	20	LIR	integrated
	6-10	6-10	10	6	LIR	integrated
UVa_BCD_LUCI	11-20	11-20	9	5	LIR	integrated
	21-30	21-30	240	1	MER	integrated
	31-40	31-40	15	4	LIR	integrated
OSU_XMDs_LUCI	41-45 *	43-47 *	600	1	MER	integrated
	46-50	48-52	5	5	LIR	integrated
	51-55 **	53-57 **	2.51	5	LIR	integrated
OSU_BALQ	56-60	58-62	2.51	1	LIR	normal
	61-65	63-67	20/15+	3/4	LIR	integrated
	66-70	68-72	180/200+	1	MER	integrated
OSU_BALQ (darks_edit.xml)	71-75	73-77	3	10	LIR	integrated

	76-80	78-82	5	3	LIR	integrated
	81-90	83-92	240	1	MER	integrated
	91-100	93-102	300	1	MER	integrated
OSU_XMDs_LUCI (repeat with more nexpo)++	101-110	103-112	600	1	MER	integrated
	111-115	113-117	5	5	LIR	integrated

* = there was a LUCI2 error changing the detector configuration so LUCI2 41 and 42 are 'junk' images

** = for the bright telluric

+ = the first number is for LUCI1 and the second for LUCI2. These times don't match what is used for the quasars & tellurics. I created a new dark script, darks_edit.xml and ran it. ++ = as there's time, we'll take more darks for OSU_XMDs_LUCI.

PEPSI

We'll do these on the night we take PEPSI data.

MODS

These were completed last night, 20220320 UT. I reviewed the configurations for the MODS programs in the queue to confirm that we did not miss any calibrations.



25 biases

Overview (times are given in UT):

02:51 Staying closed for weather (RH = 99.9%) and heavy clouds. We're taking LUCI darks.

11:06 The humidity is still well above limits (RH = 99.8%) and the sky is overcast, with what looks like snow or frost on the all-sky camera's dome.



ALTA predictions



The green lines are the actual values, red are short-term forecasts based on the actual values and the black is the forecast issued before the start of the night. No actual seeing data to add to the plot below since we were closed all night.



LBTplot