

OSURC Nightlog 20211126 UT

Observer*: Olga Kuhn

Lead Partner Observer*: Patrick Vallely (OSU)

Other Partner Observers*:

Special Assistants*:

Telescope Operator: Steve Allanson (LBT)

*** = from home**

Plan:

(I assume the plan carried over from last night - to start with MODS and finish with PEPSI), but the weather again prevented opening.

Summary:

After checking and adjusting the fold mirrors in LUCI1 to improve the pupil alignment, and waiting for any persistence that may have been left to fade, I took the LUCI darks and repeated the LUCI calibrations. Aside from this, I did some engineering tests.

Issues:

The LUCI2 zJ 1.17 mic flats 93-97 did not look right - this was the problem we see sometimes where the tilt does not get set correctly. I toggled to the mirror and back to G200 @ 1.17 mic which fixed the problem. UV_BCD_LUCI program should use the continuum lamp off/on flats 99-108 and not 88-97.

Weather:

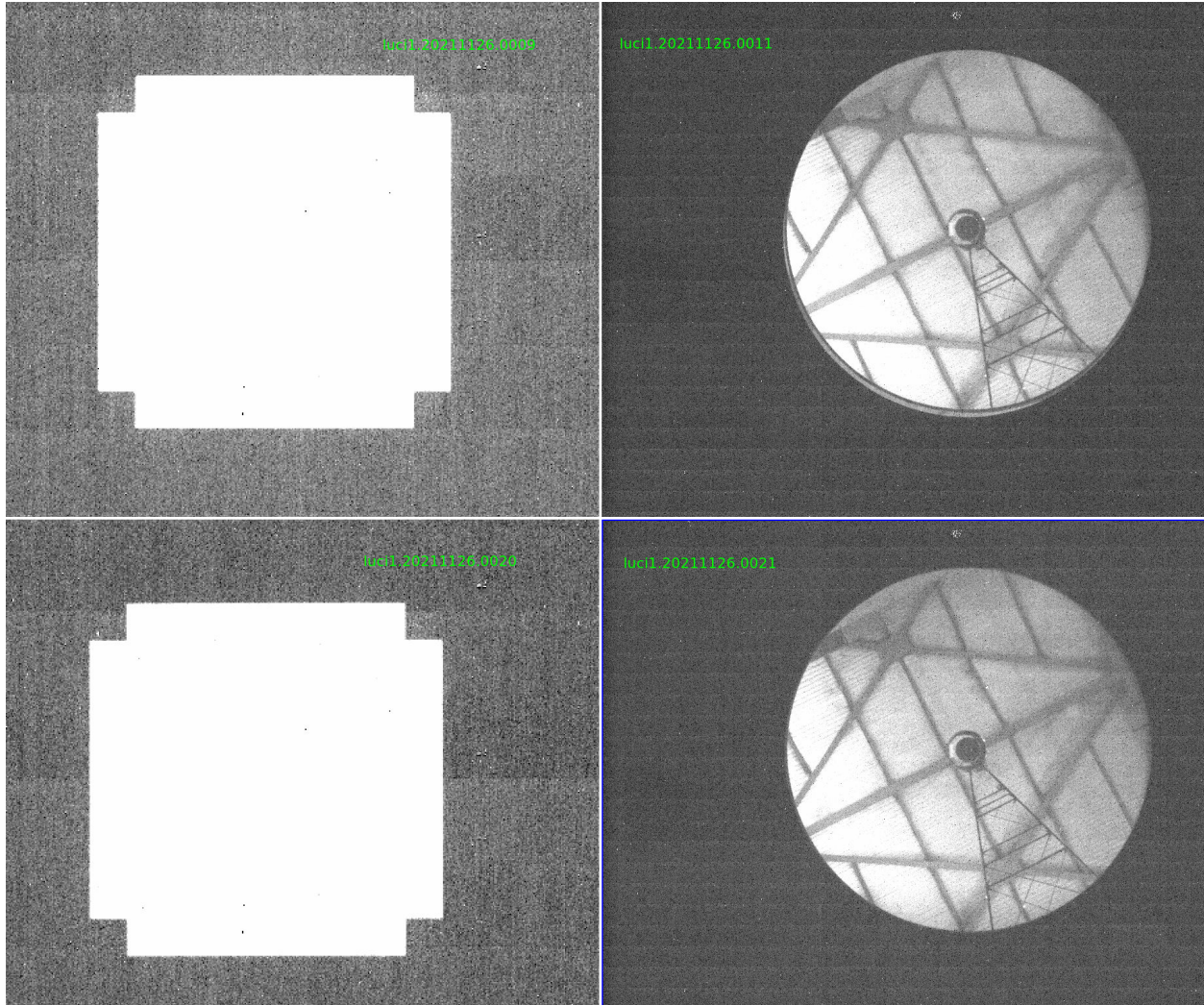
There was more snow and ice buildup during the night. The was gusting to 20 m/s, close to the limits, at the beginning of the night but it has gone down since then. The temperature rose from a low of about -4 C to -1.5 C.

Preparations:

luci[1|2].20211126.0NNN.fits
mods[1|2][b|r].20211126.NNNN.fits
lbc[b|r].20211126.HHMMSS.fits

Overview (times are given in UT):

23:30 Having run up the LUCIs, I checked and adjusted (for LUCI1) the pupil and field stop alignment. For LUCI2, the field stop was well aligned (1023.11, 1025.55) and the rigid secondary fills the cold stop. For LUCI1, I made about 4 iterations and the before and after field stop and pupil images are below:



I plan to allow some time any persistence to fade, although the count levels were only ~100 ADU above the background in a 10-sec DIT. The problem last night was in not using the fluorescent gallery and L9 lights in addition to the high bay floods. Many of the dome lights were changed to LEDs recently.

05:30 Closed dome tests were done while waiting to take LUCI darks and after the LUCI cals were completed: investigate IT 8518; another round of data collection for LBC gain measurements as the non-uniform gradient and a moving de-rotator compromised the earlier set; and a few focus sequences for MODS since the MODS2B dual imaging focus looked a bit off.

LUCI Calibrations:

luci[1|2].20211126.xxxx.fits

DARKS

Started these at 05:50. I finished the pupil & field stop alignment over 4 hours ago. Moreover the illumination was weak --- peak counts in the images were only ~100 ADU.

	L1	L2	DIT	NDIT	readmode	savemode
UVa_nirjets	24-28	8-12	2.51	20	LIR	integrated
	29-33	13-17	10	6	LIR	integrated
UVa_BCD_LUCI	34-43	18-27	9	5	LIR	integrated
	44-53	28-37	240	1	MER	integrated
	54-63	38-47	15	4	LIR	integrated

FLATS & ARCS

	filters L1+L2	lamp	L1	L2
UVa_nirjets	K+K	off on	64-68 69-73	48-52 53-57
	J+H	off on	74-78 79-83	58-62 63-67
	PaB+FeII	off on	84-88 89-93	68-72 73-77
	BrG+H2	off on	94-98 99-103	78-82 83-87
UVa_BCD_LUCI	1" G200 zJ 1.17 mic flats	off on off on	104-108 109-113 --- ---	88-92 bad 93-97 bad 99-103 OK 104-108 OK
	1" G200 zJ 1.17 mic arcs	off (Ne) Ne off(Ar) Ar	114-115 116-117 118-119 120-121	109-110 111-112 113-114 115-116

LBC Biases:

02:40 I started a series of 25 LBC biases. This evening the bias level on chip2 LBCR is not quite as low, but still ~225 ADU. Over the course of the bias series, however, it has dropped.

~12:30 I took a second set of 25 LBC biases.

Notes:

Aladdin v10.0 is displaying the L2 channel near the top, which has a different gain than the others, with 40k vs 15k counts - this is not in GEIRS and may be a gain scaling.