Calibrations for OSURC run: 2022 May 23-26 UT



Twilight Sky Flats

20220524

evening (thin cirrus)

filters	DIT x NDIT	L1	L2	count levels	counts L2
K+K high	2.5 x 1	16-25	8-17	~13k	9000-13k
J+H high	2.5 x 3	32-40	24-32	~12-16k	13-16k
K+K low	2.5 x 1	41-50	33-42	~6000	6-7000
J+H low	2.5 x 3	51-60	43-52	~6000-8000	12k*

In summary, we might have gotten decent flats at K+K and J, provided the illumination is even although variable. At H, we did not get a set of low illumination flats, probably due to clouds and we started too late for the NB filters.

morning (clear)

filters	DIT x NDIT	L1	L2	count levels
J+H	2.51 x 1	106-110 111-114	098-102 103-106	14k-too high(>~30k) @ J and 6000-~25k @ H
PaB+Fell	2.51 x 1	115-126	107-118	4500 @ PaB and 3200 @ FeII and rising
BrG+H2	2.51 x 1	127-150	119-142	starting at ~4000, going to 20k 5 min after sunrise

20220526 morning

filters	L1	L2	count levels
К+К	120-124 125-130	62-66 67-71	10k-14k 20-30k
BrG+H2	148-172	91-116	10k-25k

^{*} These were primarily to repeat the K+K set that was taken through thin cirrus at the start of 20220524 UT. The rest were taken at the end of the night (20220524UT) and were ok.

Closed Dome Calibrations

	20220524					
filters (L1+	+L2)	L1	L2			
l .	amp off amp on	151-155 156-160	143-147 148-152			
PaB+FeII	off on	161-165 166-170	153-157 158-162			
K+K	off on off on	171-175 176-180 181-185 186-190	163-167 168-172 173-177 178-182	lamp off flats have ~10k counts but 3 DITs. lamp on have ~50k counts. (50/3 per DIT).		
J+H	off on	191-195 196-200	183-187 188-192			
1" slit G200 flats & arcs		201-205 lamp off 206-210 halo2 on 211,212 lamp off 213,214 Ne 215,216 lamp off 217,218 Ar	193-197 lamp off 198-202 halo1 on 203,204 lamp off 205,206 Ne 207,208 lamp off 209,210 Ar			

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	40	7	20	15	25	

luci[1,2],20220525.0NNN.fits Repeated the set of spectroscopic flats and arcs (the ones done last night, though, were fine).				
	L1	L2		
1" G200 zJ flats & arcs	644-648 649-653	72-76 lamp off 77-81 lamp on		
	654,655 656,657	82,83 lamp off 84,85 Ne		
	658,659 660,661	86,87 lamp off 88,89 Ar		

Darks

	20220527 luci[1,2].20220527.00NN.fits					
Program	DIT x NDIT	readmode	savemode	L1	L2	
UVa_nirjet	2.5s x 20	LIR	integrated	1-5	1-5	
S	10s x 6	LIR	integrated	6-10	6-10	
ignore 11 - a	test MER da	rk				
OSU_XMD	15s x 4	LIR	integrated	12-16	12-16	
s_LUCI	600s x 1	MER	integrated	17-23	17-23	The first dark on each LUCI shows a lot of structure

MODS

Closed Dome Calibrations

	20220524 mods[1,2][b,r].20220524.00NN.fits						
	m1b m1r m2b m2r						
1.2" slit flats	19-21 22-24	47-49 50-52	20-22 23-25	44-46 47-49			
1" slit flats (will repeat)	25-27 28-30	53-55 56-58	26-28 29-31	50-52 53-55	Reconfig had finished, did not complete set		
pixflats	31-35 36-40	57-61 62-65 (extras taken - how?)	32-36 37-41	55-59	m1r 62-65 seem to be extras taken, but how?		
comp lamps	41-43	66-68	42-44	60-62			
8K biases	44-48	69-73	45-49	63-67			

20220525 mods[1,2][b,r].20220525.00NN.fits				
	m1b	m1r	m2b	m2r
1" slit flats	3-5 6-8	3-5 6-8	3-5 6-8	3-5 6-8
0.8" slit flats	9-11 12-14	9-11 12-14	9-11 12-14	9-11 12-14
1x2 binned calibra	ations			
bin12 0.8" slit flats	15-17 18-20	15-17 18-20	15-17 18-20	15-17 18-20
bin12 pixflats	21-25 26-30	21-25	21-25 26-30	21-25

bin12 biases	31-35, 36-40	26-30, 31-35	31-35, 36-40	26-30, 31-35
unbinned				
5" slit flats	41-43 44-46	36-38	41-43 44-46	36-38

20220526 mods[1,2][b,r].20220526.000NN.fits				
	m1b	m1r	m2b	m2r
bias1K	24-34	33-43	24-34	39-49



Biases

20220523:

12:14 Taking 2 sets of 25 biases. I started while the telescope was being reconfigured and noticed noise in LBCR chip2. Unsure it is caused by moving swingarms, but I will stop this set and resume once the reconfiguration is done. Discard biases before 12:20 UT.

20220525:

11:56 25 biases - there is substantial banding on the LBCR biases.

12:12 Starting a new set. Again, banding — but as it tends to settle down, I'll continue.

12:56 Finished 2 sets of 25. The end of the first and the second set are OK.