SOAR AEON 2024B Goodman High Throughput Spectrograph configurations

Updated 30 Dec 2024 – César Briceño

BLUE Camera Setup: Gratings: 400, 600BLUE; Filters: SDSS-u, g, r, CN-3870

FOCUS: SP Blue 400M1 NO FILTER, SP Blue 600 UV NO FILTER, IM Blue u-SDSS, IM Blue g-SDSS, IM Blue r-SDSS, IM Blue CN

BIAS: SP BLUE 200ATTN0 2x2, IM BLUE 200ATTN0 2x2 (N=21 for each mode)

FLATS will be obtained for each of the configurations shown in the tables below (N=15 for each config)

BLUE CAMERA: SPECTROSCOPY CONFIGURATIONS Readout: 200ATTN0 (Readout noise=4.74e-, Gain=1.4e-/ADU, readout time=12s with 2x2 binning)							
Grating	**Mode**	**Filter**	**Filter**	**Slit (“)**	**Binning**	**Wavelength range (A)**	**OSM Designation**
400	400M1	---	---	1.0	2x2	3000-7050	GHTS_B_400m1_2x2
600	600UV	---	---	1.5	2x2	3010-5690	GHTS_B_600UV_2x2_slit1p5

BLUE CAMERA: IMAGING CONFIGURATIONS Readout: 200ATTN0 (Readout noise=4.74e-, Gain=1.4e-/ADU, readout time=15s with 2x2 binning)		
Filters	**Binning**	**Designation**
SDSS-u	2x2	GHTS_B_Img-u_2x2
SDSS-g	2x2	GHTS_B_Img-g_2x2
SDSS-r	2x2	GHTS_B_Img-r_2x2
CN-3870	2x2	GHTS_B_Img-CN_2x2

Note for SOAR Telescope Operators and staff: the CN filter is labeled at SOAR as CN-3870