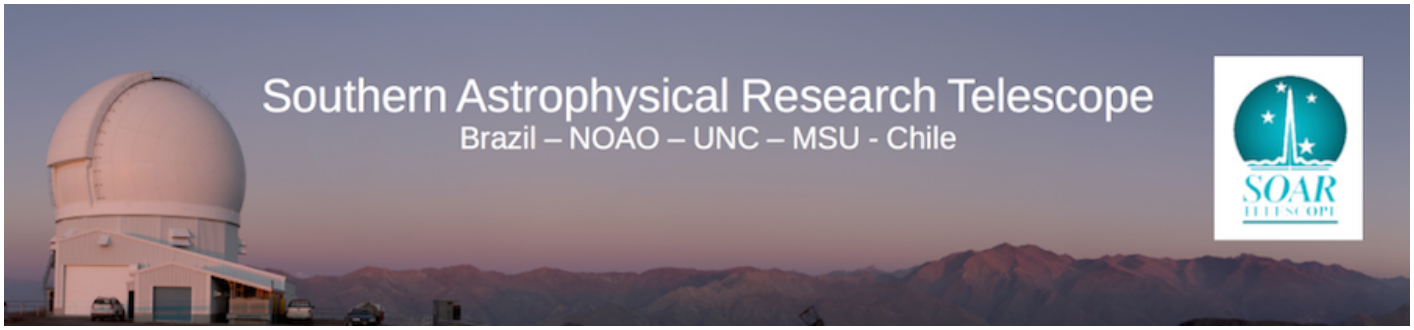


Published on *SOAR* (http://www.ctio.noao.edu/soar)

Filters Available at SOAR

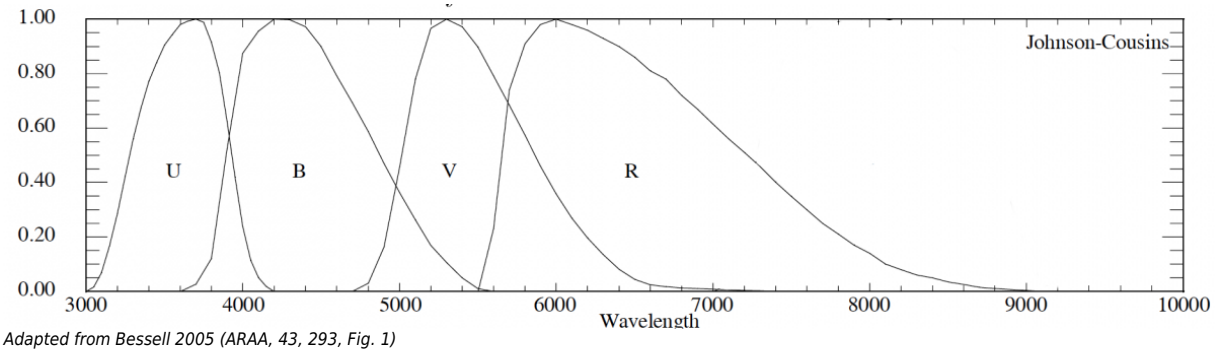
Filter Name	Filter Set	Central Wavelength/ FWHM (A)	Transmission Curve
u	Stromgren [1]	3460/441	plot [2] / data [3]
u'	SDSS [4]	3529/719	plot [5] / data [6]
U	Bessell [7]	3624/784	plot [8] / data [9]
v	Stromgren [1]	4084/207	plot [10] / data [11]
B	Bessell [7]	4326/1269	plot [12] / data [13]
b	Stromgren [1]	4694/229	plot [14] / data
g'	SDSS [4]	4737/1734	plot [15] / data [16]
V	Bessell [7]	5332/1073	plot [17] / data [18]
y	Stromgren [1]	5455/285	plot [19] / data [20]
r'	SDSS [4]	6271/1779	plot [21] / data [22]
R	Bessell [7]	6289/1922	plot [23] / data [24]
VR	Wide VR filter	6000/2410	plot [25]
Halpha (CTIO set)	narrow [26]	6563/75	plot [27] / data [28]
[S II] (CTIO set)	narrow [26]	6738/50	plot [29] / data [30]
Halpha 6600 (CTIO set)	narrow [26]	6600/75	
[OIII] (CTIO set)	narrow [26]	5019/50	
i'	SDSS [4]	7731/2006	plot [31] / data [32]
TiO	Wing [26]	7779/125	plot [33] / data [34]
CN	Wing [26]	8123/116	plot [35] / data [36]

Filter Name	Filter Set	Central Wavelength/ FWHM (A)	Transmission Curve
I	Bessell [7]	8665/3914	plot [37] / data [38]
z'	SDSS [4]	10094/4842	plot [39] / data [40]

SAMI Filters (3 x 3 Inches Square)

SAMI has one filter wheel with 7 positions for 3 inch square filters. The new **SAMI Filter page [41]** lists the characteristics of the two new broadband filter sets, plus an assortment of narrow band filters, which have been specifically designed and built for use on SAMI: a **Kron-Cousins BVRI set, a SDSS griz set, and Ha, NI, [NII] and [SII] narrow band filters**, in addition to several redshifted Ha filters designed for the Fabry-Perot module (more details in this link [42]). Any of these filters are readily available for use with SAMI. Additional 3x3 inch filters from the CTIO filter stock (click here [43]) can also be requested.

Goodman Circular 4 Inch Diameter Filters

FILTER NAME	
	 *Adapted from Bessell 2005 (ARAA, 43, 293, Fig. 1)*
Johnson **U**	Central wavelength = 366
Johnson **B**	Central wavelength = 436
Johnson **V**	Central wavelength = 545
Kron-Cousins **Rc**	Central wavelength = 641
Order blocking **GG-385**	Cutoff wavelength: < 385
Order blocking **GG-455**	Cutoff wavelength: < 455
Order blocking **GG-495**	Cutoff wavelength: < 495

Order blocking **OG-590**	Cutoff wavelength: < 590
Order blocking **S8612**	Wavelength range: ~330-620 (data [44], plot) [45]

SPARTAN Filters

Filter List

- Plots

Filter	Wavelength [μm]	Width [μm]	Width [km/s]
He I	1.082	0.092	2570
[Fe II]	1.640	0.014	2630
cont_1	2.040	0.032	4660
He I / C IV	2.065	0.029	4150
H2	2.116	0.031	4380
cont_2	2.140	0.030	4260
Brγ	2.162	0.021	2870
cont_3	2.208	0.032	4310
CO	2.331	0.071	9100
Y	1.020	0.100	
J	1.236	0.186	
H	1.632	0.287	
K	2.148	0.307	

CTIO Imaging Filters

Information on the 3x3 inch and 4x4 inch square filters available at CTIO can be found **here** [43]. These filters can generally be borrowed for use for imaging on SOAR, although older filters may need testing to confirm that their performance is acceptable.

Links
[1] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/strom.jpg
[2] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/u_strom.jpg
[3] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_strom_u.dat
[4] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/sdss.jpg
[5] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/u_sdss.jpg
[6] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_sdss_u.dat
[7] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/bessel.jpg
[8] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/U_bessell.jpg
[9] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_bessel_U.dat
[10] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/v_strom.jpg
[11] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_strom_v.dat

[12] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/B_bessell.jpg
[13] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_bessel_B.dat
[14] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/b_strom.jpg
[15] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/g_sdss.jpg
[16] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_sdss_g.dat
[17] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/V_bessell.jpg
[18] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_bessel_V.dat
[19] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/y_strom.jpg
[20] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_strom_y.dat
[21] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/r_sdss.jpg
[22] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_sdss_r.dat
[23] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/R_Bessell.jpg
[24] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_bessel_R.dat
[25] http://www.ctio.noao.edu/soar/sites/default/files/GOODMAN/Goodman_4x4_wide_VR_transmission.png
[26] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/narrow.jpg
[27] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/Ha.jpg
[28] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_Ha.dat
[29] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/SII.jpg
[30] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_SII.dat
[31] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/i_sdss.jpg
[32] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_sdss_i.dat
[33] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/TiO.jpg
[34] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_TiO.dat
[35] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/CN.jpg
[36] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_CN.dat
[37] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/I_bessell.jpg
[38] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_bessel_I.dat
[39] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/z_sdss.jpg
[40] http://www.ctio.noao.edu/soar/sites/default/files/Instrument_Plots/filt_sdss_z.dat
[41] http://www.ctio.noao.edu/soar/content/filters-sami
[42] http://www.ctio.noao.edu/soar/content/filters-sam-fp
[43] http://www.ctio.noao.edu/noao/content/CTIO-3x3-inch-and-4x4-inch-Filters
[44] http://www.ctio.noao.edu/soar/sites/default/files/GOODMAN/S8162_center_transmission.dat
[45] http://www.ctio.noao.edu/soar/sites/default/files/GOODMAN/S8612_measured_center_transmission.png