Resource: `colors`

Compilation of measurements of colors of asteroids.

For each measurement (`value` ± `uncertainty`), the SSO identification, description of filters , and metadata on where/when/how the observation was taken are listed.

Description of columns

Column	Type	Description
`num`	int	Asteroid IAU Number if available
`name`	str	Asteroid name or designation
`color`	str	Human-readable “name” of the color (g-r)
`value`	float	Value of the color (i.e, magnitude difference)
`uncertainty`	float	Uncertainty on the colors
`from`	str	Survey/Telescope acquiring the data
`observer`	str	IAU ObsCode for the telescope
`epoch`	float	Epoch of observation, in JD
`delta_time`	float	Time interval between the two filters (s)
`color_type`	str	How color was computed: apparent, corrected for lightcurve…
`id_filter_1`	str	Unique identifier for the first filter (from SVO Filter)
`id_filter_2`	str	Unique identifier for the second filter (from SVO Filter)
`phot_sys`	str	Photometryic system for the color (Vega, AB, ST)
`selection`	int	Flag for selection (black list, neutral, forced: -1/0/1)
`iddataset`	int	Unique dataset identifier from the source.ods file

Methods

The columns `color_type` and `phot_sys` only accept a limited number of valid entries.

`color_type`

- `app` : The color is simply computed from the two apparent magnitudes in the two filters
- `lc_cor` : The rotational light curve is taken into account to compute the color
- `abs` : The color is computed from the difference of *absolute magnitudes* in the two filters

`phot_sys`

- `Vega` : The color is reported in the **Vega** photometric system
- `AB` : The color is reported in the **AB** photometric system
- `ST` : The color is reported in the **ST** photometric system

Regarding filter ids

We use the unique identifier of each filter as provided by the SVO Filter Profile Service (Rodrigo et al. 2012, Rodrigo & Solano 2020).

Search the telescope/instrument in the SVO Filter Profile Service. If you cannot find it, use one of the Generic filters