Resource: `diamalbedo`

Compilation of estimates of the diameter and albedo of asteroids.

For each measurement of the diameter (`diameter` ± (`err_diameter_up`, `err_diameter_down`) in km) and/or albedo (`albedo` ± (`err_albedo_up`, `err_albedo_down`)), the SSO identification, thermal parameters (`beaming`, `emissivity`, if needed), and method are listed.

Description of columns

Column	Type	Description
`idsso`	int	Unique id (let it empty)
`num`	int	Asteroid IAU Number if available
`name`	str	Asteroid name or designation
`diameter`	float	Diameter estimate (km)
`err_diameter_up`	float	Upper uncertainty on the diameter (km)
`err_diameter_low`	float	Lower uncertainty on the diameter (km)
`albedo`	float	Albedo estimate
`err_up`	float	Upper uncertainty on the albedo
`err_low`	float	Lower uncertainty on the albedo
`beaming`	float	Beaming parameter
`err_beaming`	float	Uncertainty on the beaming parameter
`emissivity`	float	Thermal emissivity
`err_emissivity`	float	Uncertainty on the emissivity
`selection`	int	Flag for selection (black list, neutral, forced: -1/0/1)

Column	Type	Description
`method`	str	Method used to determine the diameter
`iddataset`	int	Unique dataset identifier from the source.ods file

Methods

The column `method` only accept a limited number of valid entries, indicating how the diameter and/or albedo were determined:

- Thermal models
  - `STM` : Standard Thermal Model
  - `FRM` : Fast Rotating Model
  - `NEATM` : Near-Earth Asteroid Thermal Model
  - `NESTM` : Night Emission Simulated Thermal Model
  - `TPM` : ThermoPhysical Model
- Shape modeling from multiple data source
  - `KOALA` : direct-imaging, lightcurves, and occultation
  - `ADAM` : direct-imaging, lightcurves, radar, and occultation
  - `SAGE` : lightcurves and direct-imaging
  - `Radar` : from radar echoes
  - `LC-TPM` : lightcurves and infrared photometry
  - `SPACE` : based on a close-encounter by a space mission
- Scaling of shape models from light curves by
  - `LC+TPM` : infrared photometry (via ThermoPhysical Model)
  - `LC+OCC` : stellar occultations
  - `LC+IM` : disk-resolved imaging
- Shape modeled as ellipsoid
  - `TE-IM` : from disk-resolved images
  - `TE-Occ` : from stellar occultations
- Size measurement on the plane of the sky (2D)

  - `OCC` : stellar occultation
  - `IM` : disk-resolved imaging
  - `IM-PSF` : diameter estimated from PSF deviation
  - `Interferometry`: diameter estimated from interferometry

- Albedo only, determined from

  - `Polarimetry` : degree of polarisation against phase angle
  - `PhaseFunction` : photometric phase curve