Tesseroids: forward modeling in spherical coordinates

Tesseroids

A collection of **command-line programs** for modeling the **gravitational potential, acceleration, and gradient tensor**. *Tesseroids* supports models and computation grids in Cartesian and spherical coordinates.

Developed by Leonardo Uieda in cooperation with Carla Braitenberg.

Official site: http://tesseroids.leouieda.com

License: BSD 3-clause

Source code: https://github.com/leouieda/tesseroids

Latest release: v1.2.0 (doi:10.5281/zenodo.582366)

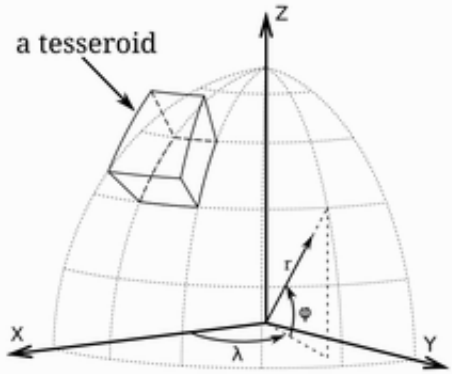
Note

Tesseroids is **research software**. Please consider citing it in your publications if you use it for your research.

Warning

See the list of known issues for things you should be aware of.

The geometric element used in the modeling processes is a **spherical prism**, also called a **tesseroid**. *Tesseroids* also contains programs for modeling using **right rectangular prisms**, both in **Cartesian** and **spherical coordinates**.



View of a tesseroid (spherical prism) in a geocentric coordinate system. Original image (licensed CC-BY) at doi:10.6084/m9.figshare.1495521.