Boule v0.4.1: Reference ellipsoids for geodesy and geophysics

Fatiando a Terra , C. Dinneen[1], M. Gomez[2], L. Li[3], A. Pesce[2], S. R. Soler[4], and L. Uieda[5]

[1]Unaffiliated
[2]Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE), Mexico
[3]School of Earth Sciences, The University of Western Australia, Australia
[4]CONICET, Argentina; Instituto Geofísico Sismológico Volponi, Universidad Nacional de San Juan, Argentina
[5]Department of Earth, Ocean and Ecological Sciences, School of Environmental Sciences, University of Liverpool, UK

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Abstract

This document describes Boule v0.4.1, a software package for representing reference ellipsoids geometrically, calculating their gravity fields, and performing some global coordinate conversions. "Boule" is also French for "ball" as well as a traditional shape of bread resembling a squashed ball (much like the Earth). It is part of the Fatiando a Terra project and is available on Zenodo.

1 Introduction

Boule is a Python library for representing reference ellipsoids and calculating their gravity fields.

Boule is designed for:

- Storing and manipulating ellipsoid parameters for spherical harmonic analysis and coordinate system conversions.
- Calculating normal gravity for generating gravity anomalies and gravity disturbances.

2 Changelog for Version 0.4.1

Documentation:

- Update contact link in the docs side bar (141).
- Add definition of "co-located grids" to the glossary (139).
- Fix typo in overview docs page (137).

Maintenance:

- Undo deprecation of coordinate conversion methods (142).
- Drop support for Python 3.6 (144).
- Add `serve` target in `doc/Makefile` (136).

3 Citation

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