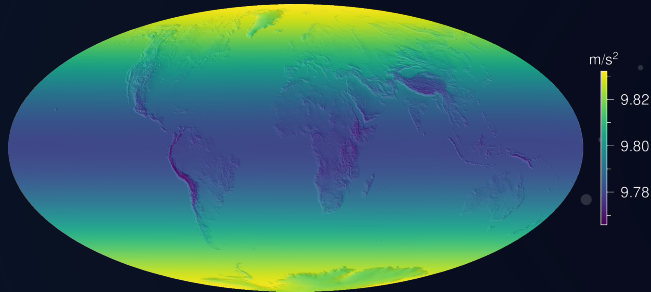


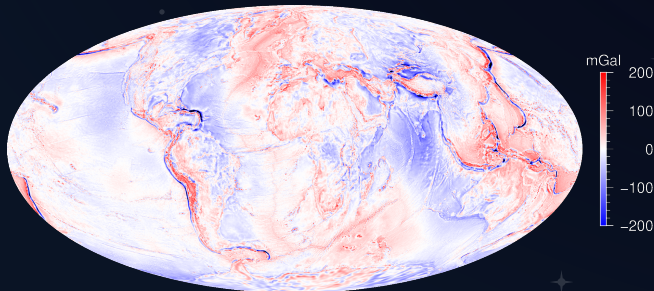
# Boule

- Defines planetary reference **ellipsoids**
- Calculates **normal gravity** at any point
- **No free-air** corrections needed
- Spheres, oblate & [future] tri-axial ellipsoids

Born out of shared necessity in the geophysics Python community (SHTools and Harmonica).



Normal gravity (WGS84) at the surface of the Earth.



Gravity disturbance from the analytical normal gravity.

# Modern Python tools for geophysical gravimetry



Leonardo Uieda<sup>1</sup>, Santiago R. Soler<sup>2,3</sup>,  
Agustina Pesce<sup>2,3</sup>, Lorenzo Perozzi<sup>4</sup>,  
Mark A. Wieczorek<sup>5</sup>

## Join the development

We are still evolving our goals and scope.  
**Input from the community is welcome!**



Join our  
**Slack**



Attend a  
**community  
call**



Contribute  
on **GitHub**

Part of the **Fatiando a Terra** project

[www.fatiando.org](http://www.fatiando.org)



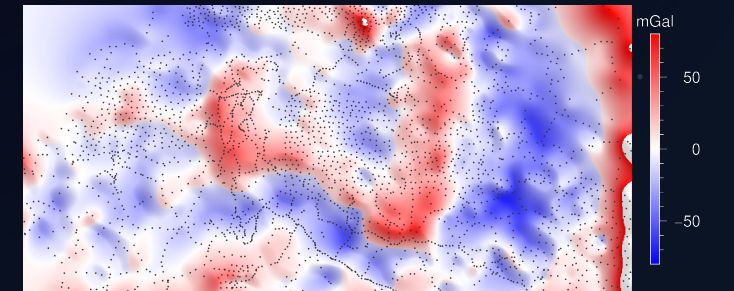
# Harmonica

- Processing, modeling, & inversion
- **Equivalent-source** interpolation
- **Forward modeling**: prisms, tesseroids, points
- [future] Non-linear (geometry) inversion

Opinionated design to encourage current best practices in gravity and magnetics.



Observed gravity values for the Bushveld Complex, South Africa.



Final product: topographic correction with prisms, 2nd order trend removal, and gridding to constant height with equivalent sources.