

## Computation of planetary and regional gravitational models of corn and mantles of the Earth with account of its spherical form

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## **Abstract**

A computer program designed for the computation of gravity models of the Earth's crust and mantle, covering large areas, has been developed. Spherical phorm of Earth surface has been taken into account. Models of earth crust have been used as initial data, parameters of which (depth of boundaries and density) are set on a uniform geographic grid. For an example of workability of the program the results of testing fulfilled on the basis of a simple model of a spherical segment are pesented. In addition, the computation of mantle gravitational anomalies on the entire Earth's surface has been performed on basis of the data of the digital model Crust2.

## **Keywords**

Earth crust, Lithosphere, Gravitational modeling, Tectonosphere, Gravitating body, Spherical layer





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