

## **DETERMINATION OF GEOMETRIC STRUCTURE OF GRAVITAION FIELD ON THE TERRITORY OF WESTERN SIBERIA ON THE DATA OF MODERN GLOBAL GEOPOTENTIAL MODELS**

**Denis N. Goldobin**

Siberian State University of Geosystems and Technologies, 10, Plakhotnogo St., Novosibirsk, 630108, Russia, Engineer, Department of Space and Physical Geodesy, phone: (913)455-92-66, e-mail: phis.geo.sggs@gmail.com

The work is dedicated to determination gravitation tensor components as differential characteristics of the Earth's gravitation field geometric structure. There were obtained the formulae for calculation of gravitation tensor components and initial level curvature radii. There were driven the calculation results of gravitation tensor components, and also Gaussian and average curvature of the external equipotential surfaces on harmonic coefficients of geopotential global model (on the example model EIGEN-6C4) on the territory of Western Siberia.

**Key words:** initial level curvature, gravitation gradients, spherical functions, gravitation potential, tensor matrix, average curvature, Gaussian curvature.

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