

APPLICATION OF THE CORRELATION FORECAST MODEL FOR CREATION OF THE SPEED MAP OF MODERN VERTICAL MOVEMENTS OF THE EARTH'S CRUST OF THE REPUBLIC OF BELARUS ACCORDING TO DATA FROM VARIOUS EARTH SCIENCES

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The article presents studies related to assessing the possibility of using the correlation model for predicting the velocities of modern vertical movements of the earth's crust to construct velocity maps of modern vertical movements of the earth's crust. The presented methodology for predicting the velocities of modern vertical movements of the earth's crust is based on an axiomatic correlation model for predicting various parameters of the crust based on gravitational anomalies. This methodology was proposed by G. I. Karataev in the 60-s of the twentieth century. In this article, this approach was first tested for the territory of the Republic of Belarus with the use of geodetic, geological and geophysical and seismological data and the construction of a velocity map of modern vertical movements of the earth's crust. The results of predicting the velocities of modern vertical movements of the earth's crust showed that the use of a correlation forecast model can improve the accuracy of constructing velocity maps of modern vertical movements of the earth's crust. The correlation forecast model is recommended as a replacement for the linear interpolation method.

Key words: forecast correlation model, modern vertical movements of the earth's crust, forecasting, regression equations, data from various earth sciences, tectonic structure.

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Received 13.01.2020

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