

Experiments of Correction of Spherical Harmonic Coefficients of the Earth's Gravitational Field EGM2008 on the Basis of Detailed Gravimetric Data on the Vietnamese Territory

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SUMMARY

This paper presents a results of experiment of a correcting for the spherical harmonic coefficients of the EGM2008 based on detailed gravity anomalies data in an area of the North Vietnam with purpose of solving problem "Fill-in" to increase an accuracy of global quasigeoid heights determined from the EGM2008. On base of perfection of Colombo's method with purpose of the correcting for the spherical harmonic coefficients of the EGM2008 on ellipsoid, authors had created software for accomplishing of above mentioned task. The results of experiment carried out with 2006 detailed gravimetric points in an area of the North Vietnam show that a gravity anomalies calculated from the corrected EGM2008 are more near to a ground based gravity anomalies in experimental region. Obtained results allow to orient an usage of the detailed gravity data for construction of highly accurate national quasigeoid model in Vietnam in the future.

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