"Native" wavelet transform for solution inverse problem of gravimetry on the spherical manifold

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Abstract

© SGEM2015. We show how the continuous wavelet transform with special basis, which we named the "native basis", can be used to analyze geopotential data obtained on the surface of a sphere. The offered method is applied to analyze of gravity anomalies and localize of causative sources of celestial bodies (Earth and Moon).

Keywords

3D sphere, Inverse problem, Wavelet transform