

Analytical model of the surface displacement and gravity changes due to the point source of the heat in the viscoelastic halfspace with topography

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Abstract: In the paper a method for including topographic effects in a thermo-viscoelastic model was described. An approximate methodology for the consideration of topography in the computation of thermo-viscoelastic displacement and gravity changes was used. On that way we allow to obtain a relatively general and simple solution useful for solving the inverse problem.

Key words: thermoviscoelastic deformation, effect of topography, gravity changes

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