

Estimation of 3-D resistivity structure of southern Kanto District(1) ; modelling of coast effect and distortion effect

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As the first step to estimate 3-D resistivity structure of southern Kanto District, we modelled effects of surface heterogeneity using 3-D EM solver (Mackie et al.,1994). To incorporate spatial distribution of bathymetry and surface sedimentary layer thickness into a 3-D resistivity model, we used ETOPO5 and gravimetric basement model respectively. Comparing modelled EM responses with those determined by Network-MT observation, the influences of these effects were estimated quantitatively. The result shows that overall feature of their spatial and period dependence was represented by coast effect alone, and better both by coast and distortion effects. But there still remains significant difference between model and observation, which will be a clue to determine a deeper structure.