

Basin and crustal structure model for strong ground motion simulation in Kinki area

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We construct a prototype of basin and crustal structure model in Kinki area for strong ground motion prediction of hypothetical crustal and subduction earthquakes. In 2004, two deep seismic exploration experiments were conducted in Kinki area, by the project of regional characterization of the crust in metropolitan areas for prediction of strong ground motion supported by MEXT. Obtained those profiles give underground structures from the crust to subducting slab (Ito et al., 2005; Sato et al., 2005). Velocity model of the crust by three-dimensional tomography result is also used for constructing the crustal structure model. The basin structure models in Osaka and Kyoto area are plugged into this crustal structure model. The applicability of this model to ground motion simulation is confirmed through waveform simulation of small or intermediate size event records. This study is supported by the DAIDAITOKU-1 project by MEXT.