

Crustal heterogeneity on electrical resistivity around the Niigata-Kobe Tectonic Zone, Chubu Region, Japan

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In October 2004, wideband magnetotelluric (MT) soundings were carried out across the Atotsugawa fault located along the concentrated deformation zone, Chubu region, Japan (NKTZ: Niigata-Kobe Tectonic Zone). The NKTZ becomes one of important target areas in *the 2nd new Program of and Observation for Earthquake Prediction* (Hirata, 2004). We obtained the electric and magnetic fields data at 30 sites along the survey line with 100 km. Observed data at all sites were processed by the remote reference technique. Using Phase Tensor analysis (Caldwell et al., 2004), we verified the data showed strong two-dimensionality in the long period (1-1000sec). Apparent resistivity and phase in TM mode, phase in TE mode and tipper were used for two-dimensional inversions. Obtained model shows inhomogeneity in the middle and lower crust.

We will report outline of the MT soundings and also discuss results derived by 2D inversion.