

## Electrical resistivity structure around the region of the deep nonvolcanic tremors in the Kii peninsula, southwest Japan (2)

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We conducted magnetotelluric (MT) soundings, in order to investigate electrical resistivity structure around the region of the deep nonvolcanic tremors in the Kii peninsula, southwest Japan. We obtained both the electric and magnetic field data at 12 sites, and the electric field data only at 4 sites along the survey line of about 70 km across the epicentral area of the tremors. From the electric and magnetic field data, we determined apparent resistivity and phase using the remote reference method. Magnetic field data for the remote reference processing were observed at a site in Iwate prefecture. Apparent resistivity and phase of the TM mode were used for determining a two-dimensional resistivity structure model with the 2D inversion code of Ogawa and Uchida (1996). An obtained model shows low resistivity around the hypocenters of the nonvolcanic tremors located in the middle of the profile, suggesting that aqueous fluids from the subducting Philippine Sea plate may exist around the region of the deep tremors.