

A Magnetotelluric Exploration for Crustal Electrical Conductivity Distribution beneath around Azuma Volcano, Northeastern Japan

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A magnetotelluric (MT) observation was carried out to explore electrical conductivity distribution in the crust beneath around Azuma Volcano, northeastern Japan. We expanded 16 MT observation sites in 20 X 20 km² area of which Oana-Crater lay in the center. Electromagnetic field variation during 3 days with 32 Hz sampling and during 30 hours with 1024 Hz sampling were acquired at each site. The MT response function has been calculated using procMT software (Metronix Inc.). The phase tensor attitude indicates high dimensionality around this area. To obtain three-dimensional conductivity model, we will have used WSINV3DMT (e.g. Siripunvaraporn et al., 2009), and will be discussing magma/hydrotherm transportation from deep crust in this presentation.

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