

## Estimation of conductivity structure beneath the Philippine Sea Plate by Magnetotelluric method

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The estimation of underground structure at places with different crustal age in the Philippine Sea Plate is very important to understand mechanism of oceanic plate evolution. Six OBEMs were deployed along a line crossing the Philippine Sea from NW to SE. Each OBEM measures two horizontal components of the electric field and three components of the geomagnetic field every one-minute during about eight months. We use rrrmt algorithm and Occams inversion to estimate MT impedance and conductivity structure, respectively. The preliminary inversion results indicate that the central part of the Shikoku-Parece Vela Basin has the highest conductivity. Conductivity decreases from east of Mariana Trough to West Philippine Basin, and spreading center of Mariana Trough has the lowest conductivity.