

## 四国西部におけるネットワークMT観測について

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## On the Network-MT observation in the western part of Shikoku

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In the Bungo channel region at the western margin of the Nankai megathrust rupture zones, the long-term slow slip events (SSE) repeatedly occurred about every 6 or 7 years and we expect the next event soon.

In order to examine influence of interstitial fluids on occurrence of the SSE, we have started the Network-MT survey in the western part of the Shikoku Island facing the Bungo channel since April, 2016. We use metallic telephone line network of the Nippon Telegraph and Telephone Corp. to measure the electrical potential difference with long baselines of from several kilometers to 10 and several kilometers. We selected 17 areas in the western part of the Shikoku Island and installed 3 or 4 electrodes in the respective areas. The electrical potential differences measured in this way are known to be less affected by small scale near-surface lateral resistivity heterogeneities (e.g. Uyeshima, 2007). We also measure the geomagnetic field by using fluxgate magnetometers at two stations in the target region. With the aid of the BIRRP code (Chave and Thomson, 2004), we could estimate the frequency-domain response functions of good quality.

In this presentation we will show the 3-D electrical resistivity structure in the target region and compare with regional seismicity. In the inversion, we used the 3-D DASOCC inversion code (Siripunvaraporn et al., 2004), which directly invert the Network-MT response between the voltage difference and the magnetic field.

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