

## Crustal resistivity structure at the western extension of Kannawa Fault

OGAWA, Yasuo<sup>1\*</sup>, HONKURA, Yoshimori<sup>1</sup>, YOSHIMURA, Ryokei<sup>2</sup>, KANDA, Wataru<sup>1</sup>, UYESHIMA, Makoto<sup>3</sup>

<sup>1</sup>Volcanic Fluid Res. Centr., Tokyo Institute of Technology, <sup>2</sup>DRRI, Kyoto University, <sup>3</sup>ERI, University of Tokyo

Kannawa, Kozu-Matsuda Fault System is located at the boundary between the Izu block and the Honshu block. The western potential extension of the Kannawa fault remains unknown because the surface is covered by volcanics from Mt. Fuji and Mt. Ashitaka. The objective of the present study is to image the crustal resistivity structure under the volcanic cover using wideband magnetotelluric method. The 45km profile extends from Hakone volcano to Lake Kawaguchi with 40 magnetotelluric stations. The data quality was fair from 300Hz to 0.3 Hz after remote referencing to the Eshashi station, in Iwate prefecture operated by Geographical Survey Institute. We chose NE-SW direction as the regional strike and inverted the data in TM mode using two-dimensional inversion code(Ogawa & Uchida, 1996). The initial model was a 100 ohmm uniform earth plus ocean at the southeastern end. The final model had 1.55 as rms and major features of the dataset were explained.

The final model is characterized by the resistive block corresponding to Tanzawa mountains. To the south east of the Tanzawa block, conductors exist down to 4km depth and they dip to northwest. These conductors imply sedimentary layers of Ashigara formation, which deposited in the trough until the collision of the Izu block (Amano, 1991). One of the NW dipping structures corresponds to the western extension of Kannawa fault.

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