

## Magnetotelluric Survey in the Northern Miyagi Area

# Yuji Mitsuhashi [1], Yasuo Ogawa [1], Masaaki Mishina [2], Yuji Takahashi [3], Toshihiro Uchida [1], Takanobu Yokokura [4]

[1] Geological Survey of Japan, [2] Research Center Prediction Earthquakes and Volcanic Eruptions, Tohoku Univ., [3] Earth and Planetary Sci., T.I.Tech., [4] Geophysics Dept., Geological Survey of Japan

The northern part of Miyagi Prefecture is one of most seismically active areas. In this area, the 1962 Northern Miyagi Earthquake (M6.5) occurred. Many shallow earthquakes occur in and around the area since it. We carried out magnetotelluric surveys in 1993 and 1998 at this area. Results of the survey of 1993 show us that there is a resistive block on the west side of the area and we can see a resistivity discontinuity under it. The distribution of the resistive block is consistent with a high gravity anomalous zone. Besides, the resistivity discontinuity almost agrees with the hypocenter distribution of microearthquakes. The data collected in 1998 support this resistivity structure and will provide us a more detailed and reliable resistivity structure.