

## Network-MT survey in Kyushu island, SW Japan (4th report)

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To determine deep and large-scale 3-D electrical conductivity distributions in the earth, a new field observation technique, Network-MT, was developed in Japan. In 1992-1998, we performed the Network-MT survey in Kyushu-Island. Philippine Sea Plate is subducted westwards from the east of the island and NW-SE extensional tectonic regime is assumed to prevail in the NE-SW elongated area in the center of the islands (Beppu-Shimabara graben). In this sense, Kyushu island possesses features of not a normal island arc such as Tohoku arc in NE Japan. However, as far as phase values of the TM-mode impedance are concerned, whose electric field direction is perpendicular to the strike of the arc, almost the same feature as in the Tohoku arc was detected.