

Result of the Network-MT survey in the Shikoku district and the problems for the future studies

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The Network MT method was used in the eastern part of the Shikoku district, southwestern Japan, and a total of thirty-nine MT impedances (64 to 2560 sec) were obtained. These MT impedances had their values averaged over a triangular element, whose sides were a few kilometers long with geomagnetic observatory data from the Kakioka Geomagnetic Observatory. A resistivity cross section was derived from the TM-mode data for a profile crossing the eastern part of the area. The resistivity structure from the lower crust to the upper mantle is firstly obtained using the Network-MT method. However, further developments are needed in methods of data analysis, which are robust to artificial electric noise, in order to clarify the spatial distribution of MT impedances in the complete study area