

Preliminary report on Network MT investigations in the eastern part of Chugoku district, southwestern Honshu, Japan

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Network MT observations were carried out in the Chugoku district in order to study the resistivity structure of the crust and the upper mantle beneath the southwestern Japan arc. The electric field variations between a total of 69 dipoles were measured, whose lengths were more than several kilometers. MT impedances, which can be used for model analysis, were determined at 18 triangular sections in the San'in area, the northern part of the Chugoku district, where the effect of artificial noises caused mainly by current leakage from electrical railways can be ignored. This paper describes the network MT measurements, the MT response and two dimensional analysis. Using the preliminary two dimensional model, the possible causes for the resistivity structure are discussed.