

Network-MT survey in Chubu district, central Japan (first report)

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In Chubu district, there runs the Niigata-Kobe tectonic zone in its backarc side, seismic and volcanic active zone beneath the Northern Japan Alps, and low-frequency seismic zone of non-volcanic origin in its forearc side. All these crustal activities are considered to be directly or indirectly related to the existence or movement of the crustal fluids such as water or melt. Electrical conductivity is an underground physical property which is sensitive to the existence of such crustal fluids and their connectivity. Thus, aiming at elucidating mechanism of the various kinds of crustal activities occurring beneath Chubu district, we have started the Network-MT survey to determine regional and deep electrical conductivity structure down to the upper mantle. In this paper, we introduce total plan of the survey and will show preliminary results from the first datasets which we have just started to obtain since late Dec., 2005 in a survey line from Shitsuura, Ishikawa Prefecture on Noto Peninsula to Kamitakara, Gifu Prefecture.