

Dense AMT/MT observations around the focal region of the 1984 Western Nagano Earthquake

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Around southeastern flank of the Ontake volcano, we carried out audio-frequency magnetotelluric (AMT) observations at 34 sites in September 2008. In this region, earthquake swarm occurs continuously after the 1984 western Nagano Earthquake (M_{JMA} 6.8). Recent study of seismic tomography investigated by dense seismic network (Noda et al., 2006) found out low velocity anomalies beneath earthquake swarm regions. As a result of the preliminary two-dimensional inversion, conductive zone was found along the fault plane of the 1984 Earthquake. This electrical image was consistent, in principle, with previous wideband MT studies (e.g. Kasaya et al., 2002). Additionally, several patches of conductor were also revealed at shallower depths.