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## Magnetotelluric imaging of geofluids around Zao volcano

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A subducting oceanic plate carries fluid at depth and fluid released by metamorphic reaction promotes generations of magmatic melt and crustal fluid under the seismogenic zone. In this study we made magnetotelluric profiling across the Zao volcano and analyzed the data in terms of two-dimensional modeling with distortion analyses. The final model is characterized by the two separate conducting bodies at the mid-crustal depth. The seismicity is high at the upper (seismogenic) crust where conductors underlie. The resistive gap between the two conductors is characterized by the deep seismic events, which is consistent with the idea that the conductive zones are fluid rich and ductile. The western conductor may lie at the deep extension of the Nagamachi-Rifu fault, accommodating the quasi stationary slip.