

## A TDEM experiment for revealing electrical structure of Aso Volcano

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In 1998, a TDEM experiment to study the resistivity structure of Aso Volcano was conducted in the area around the active Nakadake crater to Kusasenri old crater. Characteristic phenomena such as very long tremor and geomagnetic variations have been observed around the active crater. The objective of this study is to estimate the distribution of hydrothermal fluid under the ground which is possibly concerned in the origins of those phenomena. From results of a 1-D inversion, a low resistivity layer of several ohm-m was widely found in the observation area at the depth range from 1 to 2 km. The depth of this low resistivity layer is coincide with that of the pressure source inferred from the very long tremor data, which implies the existence of the hydrothermal fluid around that depth.