

Resistivity structure of upflow zone of geothermal fluid in Beppu geothermal field

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Beppu hot spring at the eastern end of Central Kyushu, is one of the biggest geothermal fields in Japan, in which fumarolic and hot spring activity spreads out up from the Tsurumi volcanic group down to the eastern coast, over a 5 km (E-W) by 8 km (N-S) range. Flow rate of the hot spring water including fumarolic steam and heat flow amounts to 50,000 tons/day and 350 MW, respectively. The aim of this study is to localize the upflow zone of the parent geothermal fluid as a pattern of contrast in the electrical conductivity. On May and June 1999, broadband MT surveys were performed around the Tsurumi volcano group.

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