

## 三宅島3次元比抵抗構造解析 (序報)

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## Preliminary report of three-dimensional electrical resistivity structure in Miyakejima

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Miyakejima has a last eruption in 2000 and the next event is going to be expected soon. To detect the temporal precursory change of the resistivity structure, it's essential to infer the resistivity structure in a still state.

The ERI has conducted the MT surveys in 2003-2005, and 2012 in Miyakejima. By using these MT data, the three-dimensional structure is estimated.

The WSINV3DMT code (Siripunvaraporn and Egbert, 2009) is used to invert the full impedance and geomagnetic transfer function data by various mesh refinement and data filtering.

As the result, a highly conductive area is detected just beneath the crater, especially, southern part of a crater which is a current active region with fumaroles. It may be a clay cap rock commonly found in the volcano with hydrothermal system.