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[JJ] Evening Poster | S (Solid Earth Sciences) | S-VC Volcanology

## [S-VC41]Active Volcanism

convener:Yuta Maeda(Nagoya University), Takahiro Miwa(National research institute for earth science and disaster prevention), Yosuke Aoki(東京大学地震研究所, 共同), Takeshi Nishimura(Department of Geophysics, Graduate School of Science, Tohoku University)

Wed. May 23, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

This session discusses various aspects of active volcanisms including, but not limited to, recent and historical eruptions, various phenomena associated with the volcanic activities, underground structures of the volcanoes, and developments of new instruments based on geophysical, geochemical, geological, and multidiscipline approaches. We also welcome studies on understanding and predicting the transitions of the eruptive activities from observational, theoretical, and experimental approaches.

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## [SVC41-P05]Subsurface Resistivity Imaging by TDEM Method in Nasudake volcano

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Keywords:Nasudake, volcano, Resistivity

Resistivity structure survey of shallow part by TDEM method was carried out around Cyausu-dake (1915 m) of active volcano, Nasudake, to investigate the relationship with fumarolic area and geological structure. Two survey lines were set in the east-west (5.5 km) and the north-south direction (3.1 km) where the intersection of Minenocuyaya-ato of the northern side of Cyausu-dake.

On the western side from Minenocuyaya-ato of the east-west survey line, it is shown that resistivity structure has a two-layer structure of low- medium resistivity, whereas on the east side it was a three layer structure with low- medium- high resistivity. The low resistivity value layer on the eastern side of the survey line is considered to indicate the fluidized layer of hot water because the source of the hot spring is dotted in the surrounding area.

On the north - south survey line, the resistivity structure was roughly a two - layer structure with low - medium resistivity.In the fumarolic area, the layer thickness of low resistivity was thin, and the medium resistivity area continued until the analysis depth (altitude 800 m).