
[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.

[SVC41-P36]Exploration of S-wave velocity structure of Ogasawara Iwo-To Island

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Keywords:Ogasawara Iwo-To Island, S-wave velocity structure, subsurface structure, microtremor

Ogasawara Iwo-To island is an active volcanic island which is located on the southernmost part of Izu-Ogasawara arc. Microtremors have been observed at two sites in the Ogasawara Iwo-To island, through observations performed on October 6-9, 2017, in order to investigate 1-D S-wave velocity structures. The circular-array microtremor data were recorded by 3 seismometers distributed along the circumferences of circle as well as a seismometer deployed in the center at two sites. Each microtremor observation site includes two arrays with different radii. The maximum radii of the equilateral triangles are 400m for the western site and 1240m for the northern site in the Ogasawara Iwo-To island. The phase velocities and the S-wave velocities of the subsurface structures down to a depth of several km were estimated at each site from the microtremor data by using the SPAC method.

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