
[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-P13]Changes in water chemistry of hot springs at the eastern foot of Kusatsu-Shirane volcano before and after the eruption of Mt. Moto-Shirane in 2018

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Keywords:Kusatsu-Shirane volcano, Mt. Moto-Shirane, Kusatsu hot springs

The Kusatsu-Shirane volcano is one of the most famous active volcanoes in Japan. The volcano consists of the three pyroclastic cones named Shirane, Ainomine and Moto-Shirane. On January 23, 2018, Mt. Moto-Shirane had erupted suddenly without obvious precursor phenomenon. There are no geothermal activities around the summit of Mt Moto-Shirane although the fumarolic area and the hot springs are located at the eastern side of the mountain body. We reconstructed the time series data on the water chemistry of the two major hot springs located at the eastern foot of Mt. Moto-Shirane, which are known as Bandaiko and Kusatsu-Yubatake, to understand the changes in the geothermal conditions connected to the eruption. In those hot springs, an increase of a concentration of some dissolved components was observed since 2013 which may correspond to the increase of volcanic activity of Kusatsu-Shirane volcano suggested by several observation phenomena. However, we could not find any change in water chemistry thought to have been induced by the eruption of Mt. Moto-Shirane in January 2018.