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

[S-VC43] Volcanic and igneous activities, and these long-term forecasting

convener: Teruki Oikawa (GSJ, National Institute of Advanced Industrial Science and Technology), Takeshi Hasegawa (Department of Earth Sciences, College of Science, Ibaraki University), Daisuke MIURA (一般財団法人 電力中央研究所 地球工学研究所 地圏科学領域, 共同), Nobuo Geshi (Geological Survey of Japan, The National Institute of Advanced Industrial Science and Technology)

Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

This session focuses on generation and accumulation processes of magmas, magma-crust interaction and degassing, and modes of eruption, long-term forecast of eruption, dispersal and emplacement of the volcanic products. The discussion spans petrological, geochemical, geophysical, and geological processes related with volcanic activity and products in the past, the present and the future.

[SVC43-P10] Eruption products of Nikko-Shirane Volcano since 6th century based on trench surveys

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Keywords: Nikko-Shirane Volcano, tephra stratigraphy, trench survey, carbon dating

Eruption history of the Nikko-Shirane volcano in 1400 years is revealed by observations of trench surveys around summit area and drilling core sampled from JMA's borehole type volcanic monitoring station. We have detected three tephra fall deposits in the 1400 years resulted from the tephra stratigraphy, carbon dating and tephra composition; 7th century (7C), 12th century (12C) and 1649 AD deposits of Nikko-Shirane Volcano. The 7C deposit is overlying a distal tephra from Mt. Haruna (Hr-Fp) at middle of 6th century. The 12C deposit is directly covering another distal tephra from Mt. Asama (As-B) at early 12th century. The tephra thickness and grain size of ash and angular blocks around summit suggest that scale of the 7C eruption should be larger than 1649 AD eruption which is the biggest one of record in the Nikko-Shirane eruption.

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