

Eruption products of Nikko-Shirane Volcano since 6th century based on trench surveys

*Yuki Kusano¹, Yoshihiro Ishizuka¹

1. Geological Survey of Japan

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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