

Evidence of eruption episodes before AD1741 of Oshima-Oshima Volcano, Hokkaido, Japan

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We newly identified two eruption episodes of Oshima-oshima volcano below eruption products of the AD 1741 eruption at an outcrop on the summit of the volcano. The upper eruption product consists of alternating volcanic lapilli fall and ash fall deposits, and the lower one consists of scoria fall deposits. Tephra from those eruptions have not found in the other area including southern Hokkaido. We also identified two thin tephra layers between three eruption products of Oshima-oshima volcano with intercalating soil layers. They are correlating with well-known wide spread tephra such as Ko-d (AD 1640) from Hokkaido-Komagatake Volcano and B-Tm (ca. AD 940) from Changbaishan Volcano, China-North Korea, based on chemistry of volcanic glass shards. Considering the thickness of soil layers, those eruption episodes would occur at around AD 1450 and BC 600. It suggests that Oshima-Oshima volcano erupted at least 4 times in last 2500 years including 2 historical eruptions in AD 1741-1742 and 1759.

This work was supported by JSPS Grant-in-Aid for Scientific Research C, Grant Number 24540447.

Keywords: Oshima-oshima, eruption history, tephra