

Eruption history and hazard map on Atosanupuri volcano group, eastern Hokkaido

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Atosanupuri is a Holocene volcano, made of a cluster of lava domes and associated pyroclastic ejecta, in eastern Hokkaido. We surveyed stratigraphy and occurrence of ejecta and carried out major element compositions and C-14 ages of dome lavas. Four eruptive periods are identified. These are consistent with stratigraphic relations and inconsistent with a classification given by Katsui (1962). Magma discharge rate is mostly uniform throughout younger three eruptive periods. The youngest eruption centers concentrate at the north-eastern side of the volcano group. Typical volcanic activities during this period are discharge of tephra falls, pyroclastic flows and ejection of ballistics due to phreatic explosion.

Atosanupuri is a Holocene volcano in eastern Hokkaido. The volcano consists of a cluster of lava domes and associated pyroclastic ejecta. Katsui (1962) proposed two stages of activities separated by a large-scale pyroclastic flow derived from nearby Mashu caldera. We surveyed stratigraphy and occurrence of ejecta and carried out major element compositions of dome lavas and determined eruption ages by means of c-14 method. We propose a revised eruption history of this volcano group and show a hazard map.

Four eruptive periods are identified from our geochemical data. These are consistent with stratigraphic relations. These periods are inconsistent with a classification given by Katsui (1962). Magma discharge rate obtained from volume estimations and age determinations is mostly uniform throughout younger three eruptive periods. The youngest eruption centers concentrate at the north-eastern side of the volcano group. Typical volcanic activities during this period are discharge of tephra falls, pyroclastic flows and ejection of ballistics due to phreatic explosion.