FT and K-Ar ages of the Middle to Late Pleistocene volcanic products erupted from Rausu-Shiretoko Io Volcano Group

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We report three new radiometric age data of the Middle to Late Pleistocene volcanic products from Rausu-Shiretoko Io Volcano Group, southern Kurile arc, to revise the 1:50,000 scale geological map. A fission track (FT) age, 0.36±0.10 Ma, was obtained from andesite pyroclastic flow deposits (Kamuiwakka Welded Tuff) at the northern flank, indicating that the large-scale eruption occurred the initial stage of the volcano group. Two K-Ar ages, 0.16±0.01 Ma and 0.05±0.01 Ma, were obtained from andesite lava flows at the eastern and southeastern flank of the volcano group, respectively. Considering these ages with previous studies, the volcanic activity of the volcano group occurred while shifting the eruption sites during the Middle to Late Pleistocene. This characteristic continues to the activity during Holocene.

Keywords: Rausu-Shiretoko Io Volcano Group, eruption, chronology, geological map, Kurile arc

