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SVC53-P06

会場:コンベンションホール

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雌阿寒岳,中マチネシリ火砕噴火期 の特異な噴火推移とそのマグマ供給系 Characteristic Eruption Sequence and its Magma Plumbing System at the Nakamachineshiri Stage-I in the Me-Akan Volcano

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Throughout the eruption history of Me-Akan volcano on the Akan caldera, eastern Hokkaido, the largest eruptions occurred about 13000 years ago, which are referred to as Nakamachineshiri eruptive stage-I (Nak-I). Nak-I can be subdivided into two eruption stages. The initial eruptive stage is characterized by pumice-rich pyroclastic flows followed by lava eruptions (Nak-I-E), whereas the following main eruptive stage by continuously eruptive sequence of lava fragment-rich pumice and scoria pyroclastic flows, Plinian pumice and scoria eruption, and pyroclastic flow eruptions (Nak-I-M). This study elaborated multi-stage processes of magma mixing and mingling in the magma plumbing system during Nak-I through mineralogical and petrological analyses of the eruption products. Deposits of Nak-I contain pumice (SiO₂=63wt.%), scoria (SiO₂=55wt.%) and heterogeneous scoria. The core composition of plagioclase phenocrysts of these scoria and pumice shows a same bimodal distribution of compositions such as low-An plagioclase (An=59) and high-An plagioclase (An>70). This indicates that heterogeneous ejecta were exactly mingling products of both mixed mafic and felsic magmas, which were derived from continuous magma mixing of felsic and mafic end-member magmas in a zoned magma chamber.

キーワード: 雌阿寒岳, 中マチネシリ, 噴火推移, マグマ供給系, 火砕流

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