

Stratigraphy and chronology of large scale pyroclastic flow deposits erupted from Shiobara caldera, in Northeast Japan

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Middle pleistocene pyroclastic flow deposit erupted from Shiobara caldera located in the north foot of the Takahara volcano, distributed mainly on the southeastern side.

This pyroclastic flow deposit as known as Tatenokawa tuff (Suzuki, 1952), Otawara pyroclastic flow deposit (Koike, et al., 1985), each are considered single eruption event. Suzuki, et al. (2004) was obtained about 0.30-0.33Ma by wide spread tephra and fission track age.

So we present detailed field, petrographic and whole-rock chemical data on the deposit.

As a result, it is consist of three different pyroclastic flow deposits (From the lower, KN-pfl, KT-pfl, TN-pfl.) erupted about 0.6Ma-0.3Ma. These are collectively means Otawara pyroclastic flow deposits (OT-pfls).

These subsequences suggest that Shiobara caldera formed by multiple large pyroclastic eruptions.