

14C age of the Hijiori pyroclastic flow deposit, Northeastern Honshu, Japan

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Hijiori caldera is located about 15 km north east of Gassan volcano. The dacite pyroclastic flow deposit from the hijiori caldera piles up around the Dozan river, the Harai river, and the Sawauchi river, with thickness of 100m or more. The associated pumice fall is distributed from tens of km east of this caldera. The eruption age of the hijiori caldera pyroclastic flow has been reported as about 10,000 years ago (14C age; Ui, et al., 1973). The reported 14C age is just on the borderline of the definition of the "active volcano" (the volcano that have had the activity within about 10,000 years, by the Meteorological Agency). The reported 14C age assumes that amount of 14C in atmosphere constant, however, its annual change is known to exist after the research that examined samples with known age. And now it is general to improve the precision of 14C age determination by correcting it. Therefore, I re-examined the 14C age of Hijiori pyroclastic flow deposit. The activity of the Hijiori caldera is divided into 5 stages (Murakami and Kawaguchi, 1994). Charcoal or carbonized plant was taken from depositional boundary of between the base of pyroclastic flow deposit (the stage 1 and 4) and the depositional surface. The obtained 14C calendar age, after the correction, are distributed for 11220-12580 years (YBP; 2 sigma). There was no remarkable differences in 14C ages between the activity stage 1 and 4. Although the Hijiori caldera is older than 10,000 years, the examination as to whether it satisfies the definition of "active volcano" should stand in the aspects other than the age .