

Radiocarbon age of the phreatic-eruption deposits from the eastern-craters at the northern flank of Kurikoma Volcano

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The Kurikoma volcano was active in a magmatic-eruption of the Tsurugidake Lavas, and in a phreatic-eruption of the Zettazawa Phreatic-eruption Deposits at the northern flank of the volcano in Holocene. The Tsurugidake effused lava flows at least two times during 7,245-5,650yBP. The forty-seven craters of the Zettazawa Phreatic-eruption Deposits have been found in the eastern, central, and western areas of the northern flank and other sites (Doi,2006). The western craters were formed by the seven phreatic-eruptions which occurred four times during 7,245-3,725yBP, and three times in 815yBP, 120yBP, and AD1944 (Doi,2012).

It is revealed in this study that the eastern craters were formed by at least six phreatic-eruptions. The ages of the first and second eruption are uncertain, but they may be old to a certain extent because their deposits have been weathered. The third and fourth eruptions occurred in 3,710yBP and 2,770yBP, respectively. The fifth and sixth eruptions occurred in 730yBP and 145yBP, respectively, after being dormant two thousand years.

The volcanic activities of the eastern and western craters are similar to each other. The phreatic-eruptions occurred about four times before 3,725yBP or 2,770yBP from both craters, and there were dormant periods of about two to three thousand years after the last eruptions. The historical eruptions started in cal.AD1200's after the dormant periods and followed in AD1744 at the western craters and near the same year at the eastern craters.

Keywords: Holocene volcanic activity, phreatic-eruption, radiocarbon age, Kurikoma Volcano