

Eruption history and petrography of Akanfuji in the Me-akan volcano, eastern Hokkaido, Japan

SATO, Eiichi^{1*} ; WADA, Keiji²

¹Institute for Promotion of Higher Education, Kobe University, ²Hokkaido University of Education at Asahikawa

Me-akan volcano is located in the Akan volcanic field, eastern Hokkaido, and ~250 km inland from the Kuril trench. The volcanic activity of Me-akan volcano began at least a few tens thousand years ago, and eight volcanic bodies with different peaks have been formed.

Akanfuji (1476 m), which is the newest volcanic body in the Me-akan volcano, started its eruptions about 2.5 ka, and the volcanic activity continued for 1,500 years. The eruption products of Akanfuji are composed of scoria fall deposits and lava flows. The scoria fall deposits are distributed from northeast to south from present vent. We described the scoria fall deposits to interpret the complex depositional sequence. As a result, 17 scoria fall layers were recognized for 1,500 years.

Akanfuji had erupted basalts through its history. Two types of basalts (types I and II) are recognized on the basis of phenocrysts assemblage. Type I is orthopyroxene (opx) bearing olivine (ol)-crynopyroxene (cpx) basalt and Type II is cpx bearing ol-opx basalt. They were formed by mixing between different types of basaltic magmas on the basis of the textural and mineralogical evidences.

Keywords: Me-akan volcano, Akanfuji, Eruption history, basalt, magma mixing