

Geological development and bulk chemistry of the Aoso volcano, Northeast Japan Arc

Naruhisa Toya[1], Masao Ban[2], Yasuyuki Saitoh[3]

[1] Interactive Symbiosphere Sci., Yamagata Univ, [2] Earth and Environmental Sci., Yamagata Univ., [3] TAISEI FOUNDATION.

The volcanic activity of the Aoso volcano can be classified into 3 stages. Stage1 :The eruptive rocks are mainly andesitic lava and pyroclastic flow. A small stratovolcano(SiO₂:54-60) was established, and the upper part of this volcano collapsed, accompanied by an eruption of pyroclastics. Stage2 :The eruptive rocks are mainly dacitic pyroclastic rocks. Pyroclastic products are dacitic pyroclastic rocks(SiO₂:67-69) and pyroclastic fall deposit which consists of dacitic blocks and volcanic bombs(SiO₂:53-54)with dacitic clast. The dacitic rocks include mafic inclusions(SiO₂:53-54). Stage3:Two dacitic lavadomes(SiO₂:65-67) were formed during this stage. The dacitic lava includes remarkable mafic inclusions(SiO₂:52-54).The bulk chemistry of each stage shows distinct features.