

## Petrological study of the ejecta from 2004 Sept.1 vulcanian eruption of the Asama volcano

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### 1.INTRODUCTION

The eruptive activity at Asama Volcano, central Japan, started with vulcanian eruption on September.1 2004. The volcanic events of the 2004 eruption are recorded in various documents. But in the proximal area, the distribution and details about these ejecta are not well known. The purpose of this study is to investigate the petrochemistry of the ejecta and get the information about its juvenile magma and mechanism of the vulcanian eruption.

### 2.METHOD

(a)Map down the many volcanic bombs, specially bread crust bombs in Yunotaira area (South-west of Kama-yama crater).  
(b)Analyze the bulk-rock chemistry to distinguish from the other deposits and also the contents of water dissolved in rhyolitic glass in rinds on bread crust bombs, by using the method applied in [1].

### 3.RESULT

The first point to be clarified is the volume of essential magma erupted. In the recent research [3], the distribution of the volcanic bombs was investigated by using IKONOS high-resolution satellite imagery. Also deposits were observed in the north-western and southwestern flanks. Data of 130 points in [3] are examined, and bread crust bombs are found only in 10 points(about 8% of the total points). These are located in the distance of within 1016 to 2019m from the crater rim and mostly 1406m. Bread crust bombs include a few samples that are not pointed in the figure in [3]. It is because some bombs did not make impact craters.

Based on our analysis and other research [2], we defined the juvenile materials of Sept.1 eruption. It is clear that the deposits of Sept.1 eruption have a fresh surface or scorched evidence. Also from chemical data, the SiO<sub>2</sub> content in juvenile materials varies from 60.92 to 61.24wt%, and the K<sub>2</sub>O content from 1.27 to 1.31wt%, being comparable to the chemistry of essential materials by [2].

### 4.REFERENCES

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Bull Volcanol Soc Jpn., 51, 1, 63-73