寄　書

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浅間山2009年2月2日噴火の経緯と噴出物

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Course and Ejecta of the Eruption of Asama Volcano on 2 February 2009

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Asama volcano erupted in the midnight of 2 February 2009 with the ejection of ash and ballistics. The ash was dispersed toward the southeast, and observed in areas up to the southeast of the Kanto plain in the next morning. The ash fall deposits at the southeastern foot of the volcano were surveyed in order to determine a dispersal axis and detail isopleth contours. Isopleth contours of the ash fall deposit stretch out long from northwest to southeast, and they are denser in the western side of the dispersal axis than in the east. In the summit crater area, the ash is not recognized in the northern side. These indicate that the distribution of ash fall was strongly affected by a wind from the northwest. Based on the isopleth contour map, the total weight of ash fall is estimated to be 27,000–31,000 ton, using a log area (m^2) - log weight (g/m^2) plot. The weight is approximately three fifth of the eruption on 1 September 2004 and the same order as ones on 13 November 2004 and 26 April 1982. Major components of the ash sampled at about 8 km southeast from the source are non-altered and altered lava, individual crystals, and ceramisite, but minor glass particles (less than 1 wt%) are also included in fine grains. The glass particles can be identified as juveniles and divided into two groups based on their shape and glass composition. One is 'dense-type' with rhyolitic composition which is the same as juveniles in the 2004 eruption, and the other is 'vesicular-type' with dacitic composition which is different from any juveniles in the recent eruptions including the 1783 Tenmei eruption. These chemical characteristics of juvenile particles indicate that two-types of magma have recently coexisted beneath Asama volcano and were erupted on 2 February 2009.

Key words: ash fall, Asama volcano, isopleth, components, juvenile

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