

## Topographic analysis of lava flows on southern slope of Fuji Volcano based on Red Relief Image Maps

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A topographic analysis was made on the lava flows, which are distributed on the southern slope of Fuji Volcano, on the basis of RRIM (Red Relief Image Map) and 1m-mesh DEM made from LIDAR data. Main results are as follows:

The Higashiusuzuka-minami and Fudozawa lava flows erupted from two different eruptive fissures, respectively. While these eruptive fissures opened downward, the fissures of the Obuchimarubi lava flow opened upward.

Volume of the Mizugatsukahinokimarubi, Higashiusuzuka-minami, Obuchimarubi, and Nissawa lava flows is small (0.002-0.013km<sup>3</sup>). Only the volume of the Kotengu lava flow is of intermediate size (0.067km<sup>3</sup>). Assuming effusion rate 100m<sup>3</sup>/s, duration of eruption of these lava flows is estimated to be 2 hours to 1 week. Assuming effusion rate, which was calculated from Gz number, flow length, thermal diffusivity, and flow thickness and width, the duration of eruption is estimated to be 2 days to 1 month.