

SVC063-20

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Ellipse approximation method for prompt determination of ash fall distribution -a case study for Sakurajima volcano (2)-

Yasuhisa Tajima^{1*}, Shinjiro Tsurumoto², Takao Yamakoshi³, Keiji Tamura³, Akira Kubota⁴

¹NIPPON KOEI CO.,LTD., ²Ohsumi Office of River and National High, ³PWRI, ⁴Kagoshima University

Sakurajima volcano has erupted over 500 times in the year 2009. We measured the weight of ash fall at thirty locations around the volcano and estimated the distribution of ash fall using the ellipse approximation isopach (EAI) method. Concurrently, we continuously monitored the weight of ash fall using Kohai-hyeto metres. It is required that we ensure that the results obtained from using the EAI method and the Kohai-hyeto metres are in correlation. We estimated ash fall distributions using the EAI method during the 9th April and 3rd October eruptions of Sakurajima volcano. At that time, the ash plumes moved in a direction away from observation points. Next, we compared the total weight of the ash fall for one month obtained using Kohai-hyeto metres with that estimated from using EAI methods in October 2009. Both results were similar. We now verify these correlations.

Keywords: ash fall, isopach, vulcanian, ellipse approximation, volume, Sakurajima volcano