

Characters of the lava flows of Taisho Eruption of Sakurajima Volcano from Geomorphological study

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In the previous studies of Taisho Eruption (1914-1915) of Sakurajima Volcano, the lava flows divided into three flow-unit stages; the first lava flows, the second lava flows and the third lava flows that have been called as 'Secondary lava flow'(e.g.,Fukuyama and Ono,1981). Distribution and origin of different stages of lava flows, especially those of the 'Secondary lava flow', are investigated in detail in this study: 1)Geomorphological study using aerial photographs revealed the distribution of the 'Secondary lava flow', which had not been properly delineated by the previous works. 2)Some of the second lava flows which did not effuse the 'Secondary lava flow' show no significant decrease in height as compared with those accompanied by the secondary flowage. This may suggest that the 'Secondary lava flow' was produced within the second lava flows, particularly where the lavas had remained unsolid and slightly swelling at the melting frontal part. 3)The photographs collected at the Kagoshima Prefectural Museum indicate that some of the 'Secondary lava flow' were effused several months earlier than previously considered.