

## Seismicity and Ground Deformation Associated with Lava Fountain at Showa Crater of Sakurajima Volcano on 22-23 August 2017

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Continuous lava fountain and following intermittent explosions on August 22-23 is the significant eruptive phenomena of the Sakurajima volcano in 2017. Prior to the lava fountain, inflation of the volcano started from the end of July. Eruption with volcanic ash emission occurred from 11 to 20 in August. Following rapid inflation from August 20, lava fountain occurred from 22h on August 22 and continued to 10 h on the next day. Volcanic tremor and minor infrasound were detected, associated with the lava fountain. Deflation of the volcano was also detected during the fountain and the volume decrease of the pressure source amounted  $1.9 \times 10^5 \text{ m}^3$ . The eruptive rate is significantly higher than eruptive activity with volcanic ash emission. The eruptivity change to intermittent explosions from 11h on August 23. The explosions were followed by “chugging event” with repetition of pulses of volcanic gas and fragment emission. Volcanic tremor and infrasound shows monotone.

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