

Double beam analysis of volcanic tremors at Aso volcano

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We have revealed that the source of long period tremors (LPTs) which has been continually emitted from Aso volcano, consists of an inflation of an inclined tensile crack and an isotropic expansion.

The occurrence of LPTs are often correlated with the occurrence of another type of volcanic tremor with a shorter period. However, only few studies have been made at relating these two.

For further investigation of the source of LPTs, we installed short-period seismic arrays in Nov. 1999. Two semicircular Aki-Chourt type array were set about 800m north and 500m west of the active crater.

The hypocenters of the short period tremors obtained using semblance method are much the same as those of LPTs, while their depth are a little shallower than that of LPTs.