

Determination of hypocenter of Aso volcano tremor using short period seismic arrays

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To examine the nature of ASO volcano tremor,two seismic arrays were deployed by Tokyo University,Kyoto University,and Tokyo Institute of Tecnology, in 1999.The radius of the semicircular arrays was 100m, and each array had 29 short period seismometers.Location of the arrays were 740m west and 780m north of the first crater. We classified seismic tremors into two types; continuous tremor and isolated tremor.For each array we determined the direction and apparent velocity of the isolated tremor by using semblance coefficient, and located the epicenter of the isolated tremor within 300m of the first crater. Next, we determined the time lag between two arrays, and determined the epicenter of the isolated tremor at 300m west and 300m north of the first creter.