

## Application of a circular array without a central sensor to an exploration method using microtremors

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**Abstract:** We have developed a new method analyzing dispersion curves using data sets obtained from a circular array without a central sensor. The algorithm of this method is based on Henstridge(1979) in which Aki's method (the space auto correlation method) was developed further.

In order to check the applicability, array observations were made at test sites under which the velocity structures were well examined. As results, the analyzed dispersion curves show good fits to the theoretical dispersion curves in the wavelength range from 2.5r-3r to 20-30r.