

## Densely microtremor observation to estimation of subsurface structure at Shikano fault due to the 1943 Tottori earthquake, Japan

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The Shikano and Yoshioka fault occurred by the 1943 Tottori earthquake. A geological structure was considered based on previous studies from trench surveys, field surveys, and questionnaire surveys. In this study, we conducted densely microtremor surveys to estimate a subsurface structure and to understand strong ground motion characteristics in closely area of faults.

As a result, microtremor H/V spectra and the distribution of the predominant period were obtained. It was found that the H/V shape was different according to topography and sediment conditions. Furthermore, the H/V shape was different on both sides of the fault surface displacement point, and that it was different in the direction of the horizontal component. The dispersion curve characteristics of the phase velocity were not different according to the fault surface displacement point.

Keywords: microtremor observation, characteristics of ground motion, Shikano fault, 1943 Tottori earthquake