

Determination of subsurface structure in urban area of Tottori city using microtremors.

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Serious damages occurred by the strong ground motions during the 1943 Tottori earthquake in Tottori city. Microtremor observations were carried out in the area, a subsurface determined structure by Noguchi et al. (2003),(2006). In this study, the predominant period at 226 sites were obtained from 3-componet observation records. As a result, H/V spectra were classified from spectral shape and vale. A predominant period distribution map was obtained. In north of Tottori station, predominant period was long; 0.8~1.1 second and sediment layer was thick; 35~48m. In south of Tottori station, predominant period was short; 0.1~0.3 second and sediment layer was thin; 11~15m.

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