

Sedimentary structure beneath southern part of Tottori plain from microtremor observations

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Microtremor observations were conducted in southern part of Tottori plain where heavy damage was observed due to the 1943 Tottori earthquake, MJ7.2. Three components observations were carried out for surveying predominant period distribution in the target area. H/V spectral ratios are used to obtain predominant period at the observation site. Array observations were also executed at two places in the area. SPAC method is applied for 4 stations arrays with diameter 3 to 500 meters. Through the study, predominant period around 0.5 seconds is estimated in the most damaged spot. Depth distribution down to basement is estimated from predominant period of H/V spectral ratios and velocity structure derived from array observation.