

Subsurface structures of Eastern Shimane area, Japan

Masao Adachi[1]; Tatsuya Noguchi[2]; Yuji Muroi[3]; Kouhei Omura[3]; Ryohei Nishida[4]

[1] Yonago Tech. High School; [2] Civil Eng., Tottori Univ; [3] Civil Eng., Tottori Univ.; [4] Civil Engi, Tottori Univ

Microtremor observations and gravity surveys were made to determine the subsurface structures of Eastern Shimane area. This area will be severely damaged by local site effects in the area. The microtremor data of array observations were analyzed by the spatial auto correlation method and F-K method. The subsurface structures were determined by S-wave velocity structure models obtained at the array observation sites and a 2D bedrock configuration based on the horizontal-to-vertical spectral ratios of microtremor. Gravity anomalies were obtained by database and survey data of this study. 2D and 3D bedrock structures with density were determined in the area.