

Determination of Subsurface Structure Using Microtremor Array observation in Hsinchu, Taiwan

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To obtain a detailed model of the three-dimensional ground structure, the microtremor surveys have been carried out at nine sites around Hsinchu area, Taiwan using large arrays. Using these data of microseisms, velocity structures to bedrock are estimated and the results at some of the sites are reported preliminarily. The bedrock, whose shear wave velocity is estimated as 3 km/s, is found at about 1-km depth from the surface. It, however, is difficult to explain the gravity anomaly from the obtained velocity structures: especially, we could not find any deep structures in the area of the lowest gravity anomaly, where is observed in south-eastern area.