

## Estimation of Underground Structures Using Microtremors and Gravity in Tottori Plain

# Tatsuya Noguchi[1], Ryohei Nishida[2]

[1] Civil Eng, Tottori Univ, [2] Civil Eng, Tottori Univ

For a protection of earthquake disaster in Tottori plain, it is necessary that we estimate underground structures. The damages of the 1943 Tottori earthquake occurred by local site effects, which affected the underground structures. In this paper, exploration techniques were used microtremors observation and gravity survey in order to estimate the underground structures. Microtremors were observed by seismic arrays in radius from 3m to 60m, were analyzed by SPAC method. Other observation was that single site observations, the results were analyzed by H/V. Gravity survey was observed at intervals from 200m to 1km in Tottori plain. We estimated the underground structures by analyzing microtremors and gravity data in Tottori plain.