

Exploration of Underground Structure and Analysis of Seismic data in Central Area of Tottori Prefecture

*Tatsuya Noguchi¹, Hiroshi Ueno¹, Sho Nakai¹, Shoya Arimura¹, Kazu Yoshimi¹, Takao Kagawa¹, Shohei Yoshida¹

1.Department of Management of Social Systems and Civil Engineering, Civil Engineering Course
Graduate School of Engineering, Tottori University

An earthquake (in 1983, M6.2) which caused disasters in Kurayoshi City occurred in central area of Tottori Prefecture. In this study, microtremor and gravity survey were carried out to estimate underground structures in the target area. Furthermore, aftershocks were observed at temporary seismic observatories around focal region and the seismic data (include data of municipalities) were analyzed. S-wave velocity model, microtremor H/V spectrum and a gravity basement structure were obtained from underground explorations. Characteristics of seismic indexes of target observatories were understood from analysis of seismic data.

Keywords: Underground structure, Geophysical exploration, Seismic data, Central Area of Tottori Prefecture