

Determination of subsurface structure in Kurayoshi plain and North part of Daisen, using microtremor and gravity anomaly

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There were earthquake damages by the earthquake that occurred at the Middle West of Tottori in 1983, 2002 and the Western Tottori earthquake in 2000 in this study area. It is supposed that the damage influenced the subsurface structure. In northern part of daisen, many tourists gather on holidays. So it is important that the information of subsurface structures is obtained for prediction of ground motion in these areas. Microtremor and gravity surveys were carried out in the shore part of Kurayoshi plain and northern part of Daisen. S-wave velocity models are obtained at the array observation 9 sites and predominant period distribution at 3-components observation 140 sites newly. The gravity anomalies were obtained by gravity survey data at 122 sites newly.

Keywords: microtremor, gravity anomaly, subsurface structure, Kurayoshi plain, Northern part of Daisen