

## **Determination of subsurface structure of Izumo plain, Shimane using microtremors and gravity anomaly**

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We observed microtremors at 400 sites (3-component single-site), microtremor arrays at 7 sites in the Izumo plain. New gravity data were obtained at about 21 points in the same area. S-wave velocity structure and the distribution of predominant periods were determined by microtremor array observation and H/V (horizontal-to-vertical) spectral ratios, respectively. Bedrock structures were determined by gravity anomaly analysis. Gravity CD-ROM of Japan (2002) and Gravity Database of Southwest Japan (2001) used in the gravity analysis. The structure model (density difference of 0.4g/cm<sup>3</sup>) of maximum bedrock depth was found about 1000m.