

# Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

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SSS023-P28

Room:Convention Hall

Time:May 24 16:15-18:45

## Determination of subsurface structure of Tottori dunes and around Koyama Pond in Tottori Plain from Microtremor Observat

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Microtremor observations were conducted in the area of the north / the east bank level of Koyama Pond and Tottori dunes in Tottori Plain. The area has been developed since late 20th century. Three components observations were carried out for surveying predominant period distribution in the area. H/V spectral ratios are used to obtain predominant period at observation sites. Array observations were also executed in the area. Alternatively, SPAC method and CCA method are applied for 4 or 5 stations arrays with diameter 2.5 to 50 meters. Through the study, obtained predominant period distribution agrees well with past topographies. Subsurface structures derived from array observation consist with borehole data, previous explorations, and the predominant periods coincide with analysis result mentioned above. Following the results, we are interested in the underground structure beneath Koyama Pond. It is important to reveal the structure to conduct simulations of wave propagation in this area.

Keywords: Microtremor, Tottori dunes, Koyama Pond, subsurface structure