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## Examination of integrated velocity model of shallow and deep structure in Chiba Prefecture

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In this study, a detailed microtremor measurement is executed in respect in the whole area of Chiba Prefecture, and it is examined to upgrade an existing velocity structure model from the S wave velocity structure of the obtained ground and the H/V spectral ratio by microtremor measurement of single point and microtremor array measurement the purpose is to examine it concerning the ground amplification characteristic in detail. It is one of the important problems to construct about the ground model who is appreciable of seismic ground motion characteristics of the wideband of about 0.1-10 seconds to upgrade the estimation of strong ground motion. It is indispensable to integrate the shallow and deep structure model by whom modeling has been separately executed up to now, and to advance constructing of the model who can reproduce the record of seismic observations. In order to overcome the above problem, we executed a lot of microtremor measurements in and around the sedimentary basins. And we are studying the upgrade of the integrated subsurface structure model by using the phase velocities of the Rayleigh waves and H/V spectrum ratio obtained from the microtremor measurements together with the establishment of the technique itself. In this study, the S wave velocity structure, Q value, and the amplification characteristic were examined in detail.

The method for construction of more best shallow and deep integration structure model is scheduled to be examined by analyzing collaboration inversion by assuming present shallow and deep integration structure model to be an early model, and using the result of the microtremor array and the microtremor of a single point in the future.

Keywords: Integrated structure model, strong-motion, microtremor measurements, S-wave velocity, Q-value