

Estimation of surface geology based on the receiver function analysis using local strong motion data

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Receiver functions (the radial component of ground motion deconvolved with the vertical component) contain S-waves converted from P-waves at the interface. We calculate receiver functions using strong motion data recorded at high-density network of Yokohama City. Then, reproducibility of receiver functions is very good independent of earthquakes. Good correlation was observed between the depth estimated from the receiver function analysis and that obtained from the downhole velocity logging.