

## Estimation of local site effect using strong motion-seismograph network at Yokohama city

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In this study, we estimate the local site effects in City of Yokohama by using waveform data from the high-density strong motion seismograph network and the spectral inversion method of Iwata and Irikura (1986).

We select 15 earthquakes with moderate magnitudes, and divide them into two groups according to their depths and epicenters.

The data are processed based on the method of Kato et al. (1998), and TAK in Kawasaki is adopted as a reference site.

Some constraints are introduced to avoid trade-off between the source effect and local site effect.

In the result, the amplitudes of the source terms are to the magnitudes.

Each site has similar amplification factors for the two groups of earthquakes.

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This method can separately derive source effect, path effect, and local site effect from the Fourier spectra of observed waveforms.

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