

A study of source, path and site effects by using strong motion data from intermediate-depth events

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We estimated source spectra, Q-value and site amplification using K-NET strong motion data and FREESIA-NET broadband data from intermediate-depth events occurring in the eastern part of Hokkaido. The spectral amplitude of estimated source spectrum is larger than that of the source spectrum based on omega square model in the high-frequency range. The Q-value in the oceanic side of near the volcanic front shows frequency-dependence, but in the continental side, Q-value is constant. The site amplifications are comparable to the surface geology map in the low-frequency range.