



SEISMIC WAVEFORM EVALUATION AT WATERCOURSE CLOSURE SITES FOR THE 2008 IWATE-MIYAGI NAIRIKU EARTHQUAKE BASED ON EMPIRICAL SITE AMPLIFICATION AND PHASE EFFECTS

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ABSTRACT: A great geo-disaster occurred in the 2008 Iwate-Miyagi Nairiku Earthquake. Therefore, evaluation with high accuracy of the strong seismic motion at the damaged sites is very important to analyze the failure mechanism. However, there are no strong motion observation stations near the watercourse closure sites during this earthquake. In this study, the seismic waveforms at Ichinonohara, Nuruyu and Sakashita, where watercourse closure took place, were estimated based on empirical site amplification and phase effects. The estimated seismic motions will be useful for rational safety assessment of natural slopes.

Key Words: Seismic motion, Seismic observation, Microtremor measurement,
Site effects