
Validations of the Empirical Prediction Method for Strong Ground Motion Simulations of Nankai Trough earthquakes

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Researchers have pointed out that Nankai Trough earthquakes generates long-period motions that threaten high-rise and base-isolated buildings in Japan. They have predicted strong ground motion of Nankai Trough earthquakes, using the finite difference method as a rigorous approach. However, the finite difference method is extremely difficult for laypeople. MLIT (2015) provides a method that is more user-friendly than other methods for simulation of Nankai Trough earthquakes. Thereby, the method provided by MLIT (2015) might be suitable for the structural design of high-rise or base-isolated buildings in Japan. From the above, we report the simulation of the strong ground motion of Nankai Trough earthquakes using the empirical prediction method provided by MLIT (2015) in this article, and provide instructions for use of the method for the structural design of high-rise and base-isolated buildings in Japan.