S3-022 Room: IC Time: June 6 13:48-14:06

Source model and strong motion simulation of the Tottori-Ken Seibu earthquake using the empirical Green's function method

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We attempted a source characterization and strong motion simulation of the 2000 Tottori-ken Seibu earthquake by the forward modeling using the empirical Green's function method. The source was modeled as a multiple shocks, which regarded asperity as a sub event. Asperity was placed in two large slip area based on slip distribution by wave inversion analysis. The synthesis wave was able to reproduce pulse found to a velocity wave and envelop of an acceleration wave. As a result, the observation records that included surrounding the source area can explain by strong motion to generate from two sub-events to be located in the south side and upward of hypocenter. And it is considered that size of asperity was able to almost explain by empirical rule proposed by Somerville et al.