

## **SIMULATION OF STRONG GROUND MOTIONS OF WENCHUAN EARTHQUAKE BY STOCHASTIC FINITE-FAULT METHOD**

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### **ABSTRACT**

The 2008 Wenchuan earthquake ( $M_s = 8$ ; May 12, 2008; Sichuan, China) had caused a great loss to both life and property. We compute the accelerograms of Wenchuan strong motions by the stochastic finite-fault method and obtain the isolines of peak ground acceleration. This study provides a reasonable interpretation of the causes and degree of the structural destruction caused by the strong ground motions during this event. This also improves the stochastic finite-fault method by incorporating the structural aseismic capability.

**KEYWORDS:** Wenchuan, Stochastic Finite-Fault Method, Near-Fault Strong Ground Motion

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