Geophysical Research Abstracts Vol. 21, EGU2019-3870-1, 2019 EGU General Assembly 2019 © Author(s) 2019. CC Attribution 4.0 license.



Strong Motion Simulations for the 2017 Mw6.6 Bodrum-Kos Earthquake

Gulum Tanircan and Seda Yelkenci-Necmioglu

Bogazici University, KOERI, İstanbul, Turkey (birgore@boun.edu.tr)

The 2017 Bodrum-Kos Earthquake attracted more interest among the scientific community due to following local tsunami rather than moderate structural damage. Strong ground motions in the near distance have lower PGA than those estimated with the most recent local ground-motion predictive models developed/calibrated for Turkey. Hence investigation of strong motion characteristics of the event is important to better characterize normal faulting earthquakes. High frequency simulation of strong ground motions are performed considering both north dipping and south dipping finite fault, since dipping direction of the event are still questioned. Earthquake source is characterized by a single asperity. Slip distribution results for both mechanisms are retrieved from a joint inversion of geodetic and teleseismic data. Simulations are performed at stations within 70 km epicentral distance. Evalulation of simulations are done through conventional residual analyses. The results of this study will serve to develop a reliable alerting system for coastal populations that will be a product of the Tsunami Last- Mile Project (EC-JRC4ERCC).