

عنوان مقاله:

NUMERICAL EVALUATION OF SEISMIC BEHAVIOR OF RUBBLE MOUND BREAKWATER RESTED ON LIQUEFIABLE SEABED SOIL LAYER

محل انتشار:

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خلاصه مقاله:

This paper presents the numerical modelling of the seismic behaviour of rubble mound breakwater on liquefiable seabed foundation. Numerical simulations are conducted using explicit finite difference method and non-linear UBCSAND model. The model can capture pore water pressure build up and seismic liquefaction behaviour during effective stress based analyses. Rayleigh damping is incorporated in the model to increase the level of hysteretic damping. The calibration of constructed numerical model against centrifuge test data are presented. Afterwards, the seismic response of a rubble mound breakwater rested on a liquefiable soil layer with varying thickness is evaluated and discussed. The obtained results show that deeper failure occurs in thicker liquefiable layer beneath the breakwater

کلمات کلیدی: Rubble-mound, Breakwater, Liquefaction, Seismic deformation, Earthquake

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