

Modeling of Landslide-Generated Tsunamis in Georgia Strait, Southern British Columbia

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Abstract : In this study, we will use modern numerical modeling approaches to estimate tsunami risks to the southern coast of British Columbia from landslides. Wave generation is to be simulated using the NHWAVE model, which solves the Navier-Stokes equations due to the more complex behavior of flow near the landslide source; far-field wave propagation will be simulated using the simpler model FUNWAVE_TVD with high-order Boussinesq-type wave equations, with a focus on the accurate simulation of wave propagation and regional- or coastal-scale inundation predictions.

Keywords : FUNWAVE-TVD, landslide-generated tsunami, NHWAVE, tsunami risk

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