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Landslide model: verification and validation

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A high-resolution model solving for dynamics of a stack of shallow layers in curvilinear coordinates has been developed for simulating landslides that can serve as source of tsunami waves. A brief description of the model, with a focus on its verification and validation, is offered.

The key issue in modeling landslides is wetting and drying. The original algorithm of solving this problem is discussed.

Model results pertaining to simulation of landslide propagations of the Storegga and Lituya Bay are presented.