Geophysical Research Abstracts Vol. 17, EGU2015-11722, 2015 EGU General Assembly 2015 © Author(s) 2015. CC Attribution 3.0 License.



The landslide tsunami at Statland, mid-Norway, January 2014

Sylfest Glimsdal, Jean-Sebastien l'Heureux, Carl Harbitz, and Finn Løvholt Norwegian Geotechnical Institute, P.O. Box 3930, 0806 Ullevål Stadion, Norway

A coastal landslide occurred at Statland, Namdalseid county, on January 29th 2014, generating a local tsunami. Although the landslide and tsunami did not cause any human casualties, the induced tsunami gave rise to a considerable local run-up height up to 10 m and local damage to the Statland village. Here, we first present the results of the post-tsunami field survey. Secondly, a joint study of the modeled landslide dynamics, tsunami generation, and run-out is described. The modeling initially involved different hypotheses of the landslide evolution. However, comparing the simulated tsunami run-up for different scenarios with observations, we have attempted to reconstruct the most likely process for the landslide evolution and tsunami generation. To this end, observations of the landslide deposits as well as sea surface withdrawal and tsunami run-up heights are also utilized.