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The XIV Congress of the International Association for Engineering Geology and the Environment



Session 3-2

Submarine landslides and tsunamis: integrating numerical and physical modelling with field observation for prediction of the impact on coastal cities

Conveners



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Brief Introduction of the Session:

Submarine landslides and the associated tsunamis are devastating natural disasters and can have significant impact on the infrastructure especially for coastal cities. Over the past 20 years, since the Papua New Guinea tsunami of 1998, the hazard from submarine landslide (SL) tsunamis and their different mechanisms have been increasingly better realised and understood [1]. Over the past 2 to 3 years advances have also been made mainly because of improvements in numerical modelling based on older tsunamis such as Grand Banks in 1929, Messina in 1908, and Storegga at 8150 BP. The way the new understanding was gained demonstrated the critical importance of seabed mapping to identify these mechanisms as well as the development of new numerical modelling methodologies.

This session is proposed to bring together researchers in diverse areas working on different aspects of understanding and predicting SL tsunamis, with an aim to stimulate cross-disciplinary ideas for better prediction of the potential impact on coastal cities. The scope includes but not is not limited to:

- Numerical modelling of SLs, tsunamis or the full process of SL generated tsunamis
- Laboratory-scale physical modelling SLs tsunamis, using flumes, tanks etc.
- Seabed mapping techniques related to SL tsunamis
- Evaluation or simulation of the impact of SL tsunamis on coastal city infrastructure, for example, buildings, ground, and underground facilities.
- Case studies of past SLs and tsunami events

[1] Tappin, D. R. Submarine Landslides and Their Tsunami Hazard. *Annu Rev Earth PI Sc* 49, 541–68 (2021).

IMPORTANT DATES



Abstract for Oral Presentation and Poster Submission Deadline

Jun. 30, 2023



Early Bird Registration Deadline

Aug. 10, 2023



Online Registration Deadline

Sept. 21, 2023

◆ SUBMISSION ◆

► For the full-length submission

The submission system is now open for full-length papers. The deadline for submission of full-length paper has been extended to May 31, 2023. Please read the guidelines for paper submittal prior to submitting your full-length paper.

Please read the guidelines prior to submitting your full-length paper or long abstract at <https://www.iaeg2023.org/cfp.html>

► For the abstract submission

The abstract submission system for oral presentations and posters is open! If you would rather prepare an abstract for an oral or poster presentation, rather than submitting a full paper, please submit your abstract for consideration by June 30, 2023.

Please read the guidelines prior to submitting your abstract at <https://www.iaeg2023.org/cfa.html>



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