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CHENGDU, CHINA

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

Session 8-3

## Debris flow dynamic process and its effects on landform



### Conveners



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### Brief Introduction of the Session:

The short-term landscape evolution in mountain regions is mainly affected by a variety of earth surface processes such as debris flows. Debris flow is a gravity-driven mass movement characterized by its wide grain size distribution and by the complex interactions of its solid and fluid components. In the course of its motion, it will erode bed surface materials thereby changing local topographic features and at the same time gain additional mass that further enhances its mobility and destructive potential. The high fluidity of debris flow allows it to move rapidly over a wider inundation area, threatening people and infrastructures downstream. The study of the dynamics of debris flows, along with the characterization of the associated erosion/deposition processes, is of paramount importance for hazard assessment and landform evolution.

A growing number of researchers with diverse backgrounds are studying debris flows and its effects on landforms. A series of exciting achievements have been obtained through experiments, numerical simulations, and field monitoring. However, much work still needs to be done to obtain a complete understanding of debris flows due to the complexity of its dynamics and of the topographic and geomorphic conditions over which it occurs.

In this session, we bring together scientists from different countries and backgrounds who are interested to further the understanding on the physical processes of debris flows and their influence on landform evolution. This topic will discuss the following issues, but not limited to:

- Mechanisms on how debris flows influence channels, modulate sediment transport, and ultimately shape landscapes
- New models to refine our understanding of the controls on erosion and sediment transport dynamics
- Predictive models for how landscapes respond to forcing from debris flows
- New physical and numerical simulation methods associated to debris flow dynamics

### 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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