

Special Issue

Water-Induced Geological Hazard Risk Assessment: Recent Advances and Prospects

Message from the Guest Editor

Water-induced geological hazards, including landslides, debris flows, and rock avalanches, pose a major threat to human life, property, and natural ecosystems. These risks are exacerbated by the increasing frequency and intensity of extreme weather events driven by global climate change. This Special Issue aims to explore recent advances in assessing, predicting, and mitigating water-induced geohazards using multidisciplinary approaches such as artificial intelligence, numerical modeling, field investigations, and remote sensing techniques. Topics of interest include, but are not limited to, the following:

- Mechanisms of water-induced landslides and slope failures;
- Numerical modeling and simulation of geohazard processes;
- Risk assessment and mitigation strategies for water-induced geohazards;
- Field and laboratory investigations of hydrological and geological processes;
- Remote sensing and GIS-based water-induced geohazards mapping and monitoring;
- Case studies on water-induced geological hazards and their impacts;
- Application of artificial intelligence for water-induced geohazards forecasting;
- Deep learning for water-induced geohazards detection.

Guest Editor

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

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