

Special Issue

Application of Machine Learning Models for Flood Forecasting

Message from the Guest Editor

Flooding is widely acknowledged as one of the most devastating natural disasters on Earth. Many researchers have dedicated significant efforts to studying topics related to flooding, with the goal of producing outcomes that can help alleviate the impact of this phenomenon. However, the frequency and severity of flooding events have increased due to climate change. While this has resulted in more flood events and damage, it has also led to the availability of more data that can aid researchers in improving flood-related studies. The recent advancements in machine learning models and their diverse applications have captured researchers' attention. One key advantage of machine learning models is their ability to make predictions based solely on the presence of past flood data, removing the need for extensive geographical parameters and observations for calibration and validation. Consequently, the application of machine learning models has become the latest trend in flood-related research. This Special Issue will delve into various machine learning models for flood simulations and their applications in disaster mitigation and prevention.

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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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