



Flood Frequency and Inundation Modelling

Guest Editor:

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submissions:

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Message from the Guest Editor

This Special Issue aims to provide peer-reviewed studies utilizing probabilistic, hydrological and hydrodynamic modelling techniques for flood frequency and floodplain inundation modelling. This special issue aims to cover, the following research areas:

- Precipitation modelling: using various probabilities modelling techniques to quantify variability and changes in historical precipitation, climate modelling to assess changes in precipitation under projected future climates;
- Streamflow assessment: predicting streamflow in ungauged basin and modelling the changes in flow regimes for future climate and infrastructure development;
- Flood frequency: regional and continental scale flood frequency analysis, variability and trend analysis, uncertainty in flood modelling;
- Floodplain inundation modelling: advances in modelling techniques, impact of climate and infrastructure development on inundation dynamics and frequency of flooding, coupling of remote sensing and hydrodynamic modelling for inundation mapping;
- Ecological impact assessment: Quantifying impacts of changes in hydrological flow metrics on flow dependent ecosystem.





Editor-in-Chief

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Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

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