



Advanced Flood Frequency Analysis and Floodplain Inundation Modelling

Guest Editor:

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submissions:

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Message from the Guest Editor

This special issue welcomes the research papers on developing advanced modelling tools for quantifying changes in precipitation, surface runoff, flood magnitude, floodplain inundation and hydrological connectivity of floodplain wetlands.

This special issue aims to cover, the following research areas:

Precipitation modelling: using various global climate models to assess changes in precipitation under projected future climates;

Streamflow assessment: modelling the changes in streamflow under predicted future precipitation using hydrological and river system models;

Flood frequency analysis: quantifying changes in flood magnitude and frequency under different climate scenarios using statistical/empirical models;

Floodplain inundation modelling: assessing the potential impacts on spatial and temporal changes in flood inundation using hydrodynamic modelling and remote sensing techniques;

Hydrological connectivity: assessing the potential changes in connectivity between rivers and off-stream wetlands using hydrodynamic modelling and GIS based analysis.





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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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