

Special Issue

Flood Frequency Analysis and Modelling

Message from the Guest Editors

This Special Issue focuses on flood estimation in catchments using flood frequency analysis and different modelling methods.

Flood frequency analysis (FFA) is often adopted to estimate design floods, which are needed for many water resources management tasks. The selection of an appropriate probability distribution-associated parameter estimation procedure, accounting for climate change and uncertainty, is of prime importance in at-site FFA.

Potential topics for this Special Issue include, but are not limited to:

Annual maximum and peaks-over-threshold flood frequency analysis.

Impacts of climate change on flood frequency analysis.

Uncertainty in flood frequency analysis.

Impact of distributional assumptions, parameter estimates, record lengths and outliers on flood frequency analysis.

Bayesian methods and Monte Carlo simulation in flood frequency analysis.

Goodness-of-fit methods for flood frequency analysis.

Bivariate flood frequency analysis using copulas.

Historical and paleohydrologic information in flood frequency analysis.

Entropy-based flood frequency analysis.

Urbanization effects on flood frequency analysis.

Regional flood frequency analysis.

Guest Editors

Dr. Khaled Haddad

School of Engineering, Design and Built Environment, Penrith Campus, Western Sydney University, Building XB, Kingswood, NSW 2751, Australia

Prof. Dr. Ataur Rahman

Renewable Energy and Water Research Group (Sustainability and Resilience Theme), School of Engineering, Design and Built Environment, Western Sydney University, Penrith, Australia



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/154651

Water

Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

[mdpi.com/journal/
water](https://mdpi.com/journal/water)





Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



[mdpi.com/journal/
water](https://mdpi.com/journal/water)



About the Journal

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

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)