



*water*

an Open Access Journal by MDPI



## Enhancing Hydrological Prediction through Modelling with Large Datasets

Guest Editor:

**Dr. Francis Chiew**

CSIRO Land and Water, Black  
Mountain, Canberra, ACT 2601,  
Australia

Deadline for manuscript  
submissions:

**closed (30 November 2018)**

### Message from the Guest Editor

Dear Colleagues,

Robust prediction of hydrological characteristics (long-term averages, high flow extremes, low flow characteristics, river and floodplain connectivity) are essential for assessments, planning and adaptation in the water and environmental and related sectors. Research through targeted modelling experiments and comparative assessment and characterisation using datasets (streamflow and climate, and physical characteristics) from a very large number of catchments can provide valuable insight and significantly improve hydrological prediction, particularly for ungauged regions. There are increasingly more studies learning from exploring large hydrological datasets, accelerated by faster computing, enhanced digital technology and stronger global collaborative networks. This Special Issue will publish seminal papers on enhancing hydrological prediction through modelling with large data sets. Key areas include predicting hydrological characteristics or signatures, modelling runoff in ungauged catchments and over large regions, hydrological prediction in data sparse regions, predicting impact of development and land use change, ...



[mdpi.com/si/13656](https://mdpi.com/si/13656)

# Special Issue

an Open Access Journal by MDPI

## Editor-in-Chief

### Dr. Jean-Luc PROBST

ECOLAB, Centre National de la Recherche Scientifique (CNRS),  
University of Toulouse, campus  
ENSAT, Auzeville Tolosane,  
France

## 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.

## 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 (*Water Science and Technology*)

## Contact Us

---

Water Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/water](http://mdpi.com/journal/water)  
[water@mdpi.com](mailto:water@mdpi.com)  
[X@Water\\_MDPI](https://twitter.com/Water_MDPI)