



*water*

an Open Access Journal by MDPI



## Application of Remote Sensing and Geographic Information System in Hydrology and Climate Change

Guest Editors:

**Dr. Pedro Pérez-Cutillas**

Department of Geography,  
University of Murcia, 30100  
Murcia, Spain

**Dr. Isabel Banos-González**

Department of Science  
Education, University of Murcia,  
30100 Espinardo, Spain

Deadline for manuscript  
submissions:

**closed (31 July 2023)**

### Message from the Guest Editors

The increase in temperature and evapotranspiration expected under the current global warming scenario, with an overall decrease in precipitation, is changing hydrological responses, with significant implications for water management. Climate change may, therefore, lead to substantial impacts on hydrology and the availability of water resources.

GIS and Remote Sensing provide analysis and modeling tools. The hydrological response to the modification of climatic parameters can be investigated by means of hydrological simulation and spatial modeling analyses, enabling the exploration of different scenarios which are necessary for prevention and decision making. This Special Issue will focus on applications developed from GIS and remote sensing for the research of changes in hydrological processes caused by the effects of climate change. Topics include the geomorphological transformations of watercourses and basins; modifications in land use and land cover; the management and quality of water resources; the effect of natural risks on the surrounding productive activities.

The special issue website at:

[https://www.mdpi.com/journal/water/special\\_issues/hydrology\\_climatechange](https://www.mdpi.com/journal/water/special_issues/hydrology_climatechange)



[mdpi.com/si/106560](https://www.mdpi.com/si/106560)

# Special Issue



*water*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Dr. Jean-Luc PROBST**

Laboratory of Functional Ecology  
and Environment, 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)