# Special Issue

# GIS Modelling of Evapotranspiration with Remote Sensing

## Message from the Guest Editors

Evapotranspiration (ET) can be estimated from the complex surface energy balance equations. This process plays a decisive role in various water resource management activities, including the required irrigation water, vegetation–atmosphere interactions, and terrestrial ecosystem productivity over a range of spatial and temporal domains. However, the reliable estimation of ET, characterized by complex vegetation–atmosphere interactions, is limited by scarce data availability and a lack of expertise in conceptualizing the real field scenario. This Special Issue provides an opportunity for budding researchers to publish their research outcomes related to remote sensing applications in evapotranspiration mapping. This Special Issue invites research articles including but not limited to:

- Catchment-scale Evapotranspiration monitoring
- MODIS ET product for vegetation monitoring
- GIS-based crop planning
- Remote sensing-based hydrological water balance assessment
- Spatiotemporal vegetation health monitoring
- Evapotranspiration modeling under scarce data availability scenario
- Modeling evapotranspiration with soil moisture estimates

## Guest Editors

Dr. Sonam Sandeep Dash

Dr. Pooja P. Preetha

Dr. Han Chen

## Deadline for manuscript submissions

closed (31 May 2025)

**Hydrology**

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**Impact Factor 3.2**
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*Hydrology*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
hydrology@mdpi.com

mdpi.com/journal/hydrology

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# About the Journal

## Message from the Editor-in-Chief

*Hydrology* is the study of the waters of the Earth. *Hydrology* has close ties with hydraulics, hydrogeology and the multiple sciences that study the atmosphere, the land surface, the soil and the subsoil, and ranges from complex problems of risk, forecasting and optimization of water resources to interactions with ecological, urban, social and economic systems. The purpose of *Hydrology* is then to provide a journal where research results and real-world problems can be presented and discussed in order to bridge the traditional gaps between the academic world and the professionals and decision makers. Therefore, *Hydrology*, invites authors to submit their original theoretical, field, experimental, and numerical studies on hydrology with strong emphasis on multidisciplinary approaches and interdisciplinary topics, which cross the typical boundaries of our science.

## Editor-in-Chief

Prof. Dr. Ezio Todini
Italian Hydrological Society, Piazza di Porta San Donato 1, 40126 Bologna, Italy

## Author Benefits

### High Visibility:

indexed within Scopus, ESCI (Web of Science), PubAg, GeoRef, and other databases.

### Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Oceanography)

### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.7 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).