Special Issue

Advanced Remote Sensing for Hydro-Climatic Extremes: Modeling, Characterization, and Risk Analysis

Message from the Guest Editors

We welcome original research articles, reviews, and technical notes on, but not limited to, the following topics:

- Novel Remote Sensing Data Integration and Fusion:
  - Methods for assimilating multi-sensor (e.g., SAR, Optical, LiDAR, GRACE) and multi-platform (satellite, airborne, UAV) data to characterize hydrological state variables (e.g., soil moisture, flood extent, water levels, snow/ice).
  - Downscaling techniques to improve the spatial and temporal resolution of satellite-derived hydrological parameters for local-scale applications.

- Remote Sensing in Hydrological Modeling and Prediction:
  - Utilizing EO products for calibration, validation, and forcing of physical-based, conceptual, or data-driven hydrological and hydraulic models.
  - Advancements in data assimilation techniques to integrate remotely sensed observations into real-time operational flood and drought forecasting systems.
  - Application of remote sensing for model development in ungauged or data-sparse basins.

- Hydro-Climatic Characterization and Extreme Event Analysis:
  - Re
  - Ch
  - De

- Machine Learning and GeoAI for Water Risk:
  - D
  - In

Guest Editors

Dr. Guy Jean Pierre Schumann
RED, RSS-Hydro, L-3670 Kayl, Luxembourg
Dr. William Straka

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 9.4

mdpi.com/si/262810

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

mdpi.com/journal/remotesensing

MDPI

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 9.4

mdpi.com/journal/remotesensing

About the Journal

Message from the Editorial Board

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

Editors-in-Chief

Dr. Prasad S. Thenkabail
Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

Prof. Dr. Dongdong Wang
Institute of Remote Sensing and Geographic Information Systems, Peking University, Beijing, China

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, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank:

JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)