Special Issue

Mapping the Blue: Remote Sensing in Water Resource Management

Message from the Guest Editors

Water is a vital yet vulnerable resource, increasingly threatened by climate change, population growth, and intensive agriculture and industry. Sustainable water management is now a global priority. Advances in remote sensing and GIS offer powerful tools to monitor and analyze water systems across scales. These technologies enable mapping of surface water, wetlands, soil moisture, evapotranspiration, and flood dynamics, proving essential for hydrological research and management. This Special Issue invites contributions on recent advances in remote sensing and GIS applications for water resource management. We welcome original research, reviews, and case studies on new methods, datasets, and applications within remote sensing theory, techniques, and interdisciplinary approaches. Topics of interest include novel algorithms, multi-source data fusion (optical, SAR, thermal, LiDAR), and AI or big data use in hydrology. Submissions highlighting operational monitoring, early warning, and policy-relevant solutions are especially encouraged.

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Message from the Editor-in-Chief

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 peerreview 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.

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