Special Issue

Global Monitoring of Inland Water Using Remote Sensing and Artificial Intelligence

Message from the Guest Editors

Inland water bodies around the world, such as lakes, reservoirs, rivers, canals, and ponds, play a crucial role in sustaining life, providing human well-being, supporting ecosystems, and ensuring water security for millions of people worldwide. However, in recent years, these valuable resources are under increasing pressure under the background of climate change, population growth, urbanization, and industrial activities. Remote sensing and artificial intelligence (AI) have emerged as powerful tools in addressing these above mentioned challenges. Remote sensing technologies, encompassing optical, thermal, radar, and lidar sensors aboard satellites and other platforms, offer the capability to acquire frequent, synoptic, and multidimensional data across large geographic areas over a long period with a given revisit frequency. When coupled with widely used AI techniques, such as machine learning and deep learning, these remote sensing datasets can be efficiently processed and analyzed to extract and invert valuable information (such as water area, water level, water storage, water quality, and wetland area) from inland water bodies across the globe.

Guest Editors

Dr. Nan Xu

Dr. Xin Li

Dr. Junfeng Xiong

Dr. Linyang Li

Dr. Armin Moghimi

Dr. Arfan Arshad

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

mdpi.com/journal/remotesensing

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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 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.

Editor-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

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