

Special Issue

Applications of Advanced Computational Technologies and Algorithms for Spatiotemporal Analysis in the Artificial Intelligence Era

Message from the Guest Editors

Over the past several decades, multiple data sources, such as nighttime light images, high-resolution satellite images, and new social sensing data (real-time and geotagged social media data), have provided novel opportunities for examining the spatial dynamics of land systems (urban, rural, or coupled). At the same time, the rapid development of new technologies, including artificial intelligence-driven machine learning algorithms, multi-agent systems, natural language processing, and cyberinfrastructure, among many others, have fundamentally changed how scholars investigate the dynamics of land systems. This Special Issue aims to explore the contributions and sustainability of new computational technologies and algorithms in spatiotemporal analysis and modeling. With advanced computational technologies and algorithms such as AI and cyberinfrastructure, scholars are able to examine, simulate, and predict changes in land systems using big spatiotemporal data. This will provide invaluable information for stakeholders and governments and promote the establishment of a sustainable and healthy future.

Guest Editors

Dr. Wenwu Tang
Dr. Minrui Zheng
Prof. Dr. Zhengfeng Zhang

Deadline for manuscript submissions

31 August 2026



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



mdpi.com/si/227118

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

[mdpi.com/journal/
remotesensing](https://mdpi.com/journal/remotesensing)





Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



[mdpi.com/journal/
remotesensing](https://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)