Special Issue

Leveraging Multitemporal Remote Sensing Data for Land Use and Land Cover Classification

Message from the Guest Editors

This Special Issue aims to consolidate cutting-edge research that leverages multitemporal remote sensing data for land use and land cover classification. We welcome contributions that integrate multitemporal remote sensing datasets with modern analytical techniques to enhance classification. Studies may employ a range of approaches, from traditional machine learning classifiers to advanced AI models with deep learning architectures, handling variability in data sources, temporal sampling, and spatial detail. Articles may address, but are not limited to, the following topics:

- Algorithmic developments;
- Advanced AI and deep learning models for analyzing multitemporal remote sensing data;
- Integration of spectral indices;
- Multimodal data fusion combining optical, SAR, and other remote sensing data;
- Development of benchmark datasets and evaluation metrics for multitemporal land use and land cover classification;
- Applications of multitemporal analysis in monitoring changes, urban expansion, deforestation, burned areas, mining sites, and agricultural dynamics.

Guest Editors

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Dr. Hazem Ghassan Abdo

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Deadline for manuscript submissions

31 March 2026

About the Journal

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

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