Special Issue

Recent Advances in Deep Learning-Based High-Resolution Image Processing and Analysis

Message from the Guest Editors

This Special Issue aims to highlight the latest developments and innovations in the field of high-resolution satellite or aerial images, covering a broad spectrum of topics on deep learning-based imagery processing and analysis methods. The scope includes, but is not limited to, the following:

- Large multi-modality models for earth observation tasks.
- Generalizable deep learning methods for high-resolution image classification, object detection, and change detection.
- Transferring computer vision models for robust high-resolution image interpretation.
- Efficient deep learning architectures for large-scale high-resolution image analysis.
- Semi-supervised and unsupervised methods for image segmentation and change detection.
- Multi-source remote sensing image fusion, image registration methods.
- Remote sensing foundation models and their applications.
- Large vision-language model for remote sensing image understanding.
- Large-scale high-resolution remote sensing image datasets.
- Generative models in remote sensing.

Guest Editors

Dr. Chenxiao Zhang

Dr. Zhuo Zheng

Dr. Nour Aburaed

Deadline for manuscript submissions

15 November 2025

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

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

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)