Special Issue

Deep Learning for Multi-Source Remote Sensing Image Interpretation: Exploring, Rethinking, and Limiting Breakthroughs

Message from the Guest Editors

Remote sensing image interpretation, which is pivotal for environment, resource, and target monitoring, has experienced a profound transformation with the infusion of deep learning techniques. Deep learning algorithms possess the outstanding capacity to extract intricate patterns and features from extensive remote sensing image datasets, thereby facilitating more precise and efficient interpretation than conventional approaches. This Special Issue aims to leverage the powerful feature learning and data processing capabilities of deep learning technology to explore remote sensing image interpretation in new tasks and scenarios, thus broadening application fields and guiding research directions, enabling academic achievements to better serve practical demands. Articles may address, but are not limited to, the following topics:

- Multi-source remote sensing image processing;
- Remote sensing image generation;
- Multimodal remote sensing image interpretation model;
- Target characteristic analysis;
- Radar signal processing
- New task dataset and benchmark for remote sensing image interpretation.

Guest Editors

Dr. Xin Zhang

Dr. Xueyao Hu

Prof. Dr. Yang Li

Prof. Dr. Fernando José Aguilar

Dr. Muhammad Yasir

Deadline for manuscript submissions

closed (15 August 2025)

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/227821

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

mdpi.com/journal/remotesensing

MDPI

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/journal/remotesensing

MDPI

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)