Special Issue

Neural Networks and Deep Learning for Satellite Image Processing

Message from the Guest Editors

Over the past decade, the rapid evolution of sophisticated AI technologies has significantly enhanced the precision and speed of analysing satellite remote sensing data, from basic classification tasks to more complex regression challenges. However, despite these advancements, contemporary remote sensing confronts persistent issues akin to those from a decade ago. Challenges persist in areas like the uncertainty surrounding multi-scale land cover mapping, integrating radiative transfer model simulations with deep learning algorithms, and establishing effective learning frameworks tailored to remote sensing tasks. This Special Issue seeks original articles on creating innovative deep learning models for detecting various visual patterns aiding Earth monitoring. We also welcome research submissions on remote sensing change detection, forest canopy attribute retrieval, and ecosystem mapping with deep learning models. Additionally, we encourage in-depth review articles evaluating the effectiveness of cutting-edge deep learning models in remote sensing imagery.

Guest Editors

Prof. Dr. Jinsong Chen

Dr. Shanxin Guo

Prof. Dr. Yanfei Zhong

Dr. Yue Xu

Deadline for manuscript submissions

15 July 2026

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/226569

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

mdpi.com/journal/remotesensing

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/journal/remotesensing

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)