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



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



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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 peerreview 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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