Special Issue

Machine Learning and GeoAI for Remote Sensing Environmental Monitoring (2nd Edition)

Message from the Guest Editors

The rapid advancement of machine learning and GeoAI has transformed remote sensing applications, enabling automated, high-resolution environmental monitoring and spatial modeling. As ecosystems face increasing challenges from climate change, deforestation, air polver classification, translution, land-use change, and urban expansion, AI-driven methods offer innovative solutions for large-scale, multi-temporal analysis of environmental processes. Remote sensing data, including multispectral, hyperspectral, LiDAR, SAR, and atmospheric observations, combined with deep learning and spatial modeling techniques, provide unprecedented insights into landscape dynamics, cloud formation patterns, air quality variations, transportation networks, and ecosystem health. This Special Issue seeks contributions to AI-driven remote sensing applications for environmental monitoring and spatial modeling. We welcome studies focusing on deep learning, spatio-temporal analysis, multi-source data fusion, transportation-related environmental modeling, and the development of scalable AI frameworks for geospatial data interpretation.

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Deadline for manuscript submissions

30 September 2026

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/235733

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Message from the Editorial Board

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.

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