

## Special Issue

# Machine Learning of Remote Sensing Imagery for Land Cover Mapping

### Message from the Guest Editors

Land cover is crucial for spatial planning, Earth system modeling, and national development. Land cover mapping, the primary method for obtaining this information, relies on remote sensing's ability to acquire surface data rapidly and at scale. Recent advances in machine learning (e.g., support vector machines, deep learning) in visual image understanding have significantly propelled remote sensing-based land cover mapping. Current methods leverage the characteristics of various data modalities—including visible, hyperspectral, thermal infrared, SAR, and LiDAR—by integrating suitable ML techniques to create specific workflows for general or thematic land cover mapping. These results are applied to human settlement analysis, ecological civilization, and global/national ecological security. This Special Issue invites original research and reviews on ML methods for land cover mapping using remote sensing in diverse scenarios. We welcome contributions on all remote sensing data modalities, all ML methods, and their applications in geography, ecology, and environmental science. Research on multimodal data fusion, cross-modal adaptation, and novel ML methodologies is highly encouraged.

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### Guest Editors

Dr. Huan Ni

Dr. Yue Chang

Dr. Na Liu

Dr. Yifu Ou

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### Deadline for manuscript submissions

31 October 2026



## Remote Sensing

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*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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