

## Special Issue

# Remote Sensing for Modeling and Understanding Land-Atmosphere Interaction Processes

### Message from the Guest Editors

Land-atmosphere interactions play a crucial role in shaping hydroclimatic patterns and ecosystems through the exchange of energy, water, and carbon between land surface and the atmosphere. These interactions are complex and encompass a range of physical and biological processes, including soil moisture, evapotranspiration, runoff, snow cover, vegetation, etc. Understanding and accurately modeling them is key for climate prediction, natural resources management, and addressing environmental challenges. Remote sensing has become an invaluable tool to monitor these processes. This Special Issue aims to bring together the latest advances in remote sensing techniques and their application to the modeling of land-atmosphere interactions. The suggested themes include, but are not limited to, the following:

- Land-atmosphere interactions;
- Soil moisture dynamics;
- Vegetation ecosystems;
- Evapotranspiration processes;
- Land use/land cover change;
- Land-atmosphere heat exchange;
- Carbon cycle and carbon emission monitoring;
- Climate change and weather prediction;
- Monitoring and early warning of extreme events;
- Improvement or validation of land surface model.

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### Guest Editors

Dr. Ren Wang

Prof. Dr. Dagang Wang

Dr. Wenbin Zhu

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### Deadline for manuscript submissions

15 December 2025



## Remote Sensing

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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 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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### Editor-in-Chief

Dr. Prasad S. Thenkabail

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