

## Special Issue

# Middle and Upper Atmosphere Remote Sensing: Theory and Observations

### Message from the Guest Editors

The middle and upper atmosphere, encompassing the stratosphere, mesosphere, thermosphere and ionosphere, serves as the interface between the lower atmosphere and outer space. This region hosts interactions among solar radiation, atmospheric dynamics and electromagnetic processes. It shields the biosphere, influences space assets, and mediates climate signal propagation. Key phenomena include gravity waves, planetary waves, tides, sudden stratospheric warmings and ionospheric disturbances. Despite its significance, this region remains under-sampled. Ground-based and spaceborne sensors are essential tools for probing it, enabling continuous monitoring of temperature, wind, density and composition. Advancing remote sensing theory is critical. This Special Issue aims to gather innovative research on remote sensing theory, instrumentation and observations for this region. Contributions bridging retrieval algorithms with applications and exploiting multi-instrument synergies are encouraged. Research on data harmonization, trend detection and model-observation integration is welcome.

### Guest Editors

Dr. Qixiang Liao

Prof. Dr. Zheng Sheng

Prof. Dr. Xiaogang Huang

Dr. Peng Guo

### Deadline for manuscript submissions

31 March 2027



## Remote Sensing

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Impact Factor 4.3  
CiteScore 9.4



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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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