Special Issue

Satellite Observation of Middle and Upper Atmospheric Dynamics

Message from the Guest Editors

This Special Issue focuses on the latest research advances in utilizing advanced satellite remote sensing techniques—including ultraviolet/visible spectroscopy, infrared radiation, microwave radiation, and occultation—to detect atmospheric wind fields, temperature fields, composition, and wave phenomena in the middle and upper atmosphere. It explores topics such as retrieval methods for high-spatiotemporal-resolution and high-accuracy remote sensing data, multi-source data fusion, the analysis of dynamic processes, and the development and application of novel detection payloads (e.g., airglow imagers, Doppler wind instruments). We sincerely invite scholars in relevant disciplines to contribute research findings to foster collective progress in the field.

- Wind/temperature field retrieval
- Wave activities observed by satellite
- Atmospheric composition detection methods and variation mechanisms
- Advanced detection payload design
- Novel application of multi-source data assimilation
- Satellite observation of turbulence and mixing processes in middle and upper atmosphere
- Remote sensing data assimilation for near-space modeling
- Long-term change in middle and upper atmosphere

Guest Editors

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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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