Special Issue

Satellite Remote Sensing Techniques for Ionospheric and Thermospheric Observations

Message from the Guest Editors

The ionosphere plays a crucial role in the propagation of radio waves, while the neutral thermosphere exerts an aerodynamic drag force on satellites. Monitoring both the ionosphere and thermosphere is essential for understanding their interactions and mitigating their impacts on various space instruments. To capture the spatial and temporal variations of the ionosphere and thermosphere, it is essential to monitor key parameters such as ion/electron density and temperature, the density and height of the ionospheric F2 peak, total electron content (TEC), ionospheric plasma irregularities and scintillation, as well as thermospheric neutral density, and winds. Satellite remote sensing techniques encompass a variety of methods, including multi-constellation and multi-frequency observations, the use of new signals in global navigation satellite systems (GNSS), radio occultation, space-based radio beacon and radar sounding, dual-frequency altimetry and GNSS reflectometry, optical imaging, and various other spaceborne instruments. Advancement of modern satellite remote sensing technologies enables unprecedented precision and detail in observing the ionosphere and thermosphere.

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Deadline for manuscript submissions

15 February 2026

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/230102

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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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