Special Issue

Advances in Multi-Frequency GNSS High-Precision Positioning and Navigation Technology

Message from the Guest Editors

This Special Issue seeks to compile high-quality research and review articles that advance the theory, algorithms, and applications of multi-frequency GNSS in high-precision positioning and navigation. We invite submissions addressing, but not limited to, the following themes:

- Multi-frequency GNSS Positioning Models:

RTK, PPP, PPP-RTK algorithms leveraging multi-frequency signals; Inter-system and inter-frequency bias estimation/calibration.

- Ambiguity Resolution and Error Mitigation:

New methods for fast and reliable multi-frequency ambiguity resolution; Ionospheric/tropospheric delay modeling and real-time correction; Multi-sensor integration (e.g., INS, LiDAR) for robust navigation.

- GNSS Integrity and Atmospheric Applications:

Integrity monitoring frameworks for safety-critical systems; GNSS-derived atmospheric products (e.g., ionospheric TEC, tropospheric zenith delays); Crowdsourced GNSS data for weather forecasting and climate studies.

- Emerging Technologies and Datasets:

Low Earth Orbit (LEO) satellite-augmented GNSS positioning; Machine learning/AI-driven approaches for multi-frequency signal processing.

Guest Editors

Dr. Wang Gao

Dr. Rui Shang

Dr. Qing Zhao

Deadline for manuscript submissions

30 September 2025

About the Journal

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.

Editor-in-Chief

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