Special Issue

GNSS in Real-Time Ionospheric Scintillation Monitoring

Message from the Guest Editors

Ionospheric scintillation represents a major challenge for Global Navigation Satellite Systems (GNSS) across all latitudes. Ionospheric scintillation directly impacts high-precision navigation users, demanding robust risk-mitigation strategies. The growing demand for robust GNSS services in navigation, communication, and monitoring further underscores the urgent need for real-time detection. Traditionally, specialized receivers measure signal fluctuations and compute scintillation indexes, but their limited coverage restricts global monitoring. Recent advances demonstrate that networks of geodetic GNSS receivers, combined with robust detrending techniques and real-time correction products, can provide reliable global monitoring. These developments are crucial for practical applications, offering operational support to industry and enhancing the safety of critical systems. This Special Issue invites contributions on innovative methods, datasets, and applications for real-time monitoring, including GNSS-based techniques, modeling, and forecasting, with the aim of advancing both the understanding and mitigation of scintillation impacts worldwide.

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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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