Special Issue

Geospatial Big Data and Remote Sensing for Urban Analysis

Message from the Guest Editors

The integration of geospatial big data and remote sensing is essential for addressing the complex challenges of modern urban analysis amid rapid global urbanization. Traditional static datasets fail to capture the dynamic, multi-scale complexities of urban systems —such as real-time mobility patterns, land-use changes, and climate vulnerabilities—whereas geospatial big data provide granular, real-time insights into human activities, and remote sensing offers synoptic views of urban structure and environmental dynamics at regional and global scales. This Special Issue highlights synergies between multi-source geospatial big data (mobile phone data, GPS trajectories, IoT sensors, OpenStreetMap, and social media geotags) and high-resolution remote sensing (satellite/UAV imagery and LiDAR). This Special Issue welcomes contributions on the following topics:

- Novel methods for fusing geospatial big data and remote sensing in urban modeling
- AI/ML applications for urban feature extraction, change detection, and trend prediction
- Spatio-temporal analysis of urban mobility, land use, and resilience
- Decision support systems, digital twins, and visual analytics for urban planning

Guest Editors

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About the Journal

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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