CALL FOR PAPERS

**IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing Special Issue on
"Advancing Urban Remote Sensing for Sustainable and Resilient Cities"**

This special issue is timely and highly relevant in addressing the urgent need for innovative solutions in urban sustainability. The rapid urbanization, increasing complexity of cities and lack of policy-relevant urban data present a critical challenge for both scientific research and urban planning and management. The integration of advanced remote sensing technologies, artificial intelligence, and geospatial analytics offers transformative potential for tackling urban issues and new opportunities for shaping resilient, sustainable urban landscapes.

This special issue builds on the momentum generated by JURSE 2025, which is technically co-sponsored by the IEEE Geoscience and Remote Sensing Society (GRSS), By focusing on the above-mentioned cutting-edge topics and linking it to urban challenges and the production of policy-relevant data, this special issue aims to contribute valuable insights that are directly aligned with the technical and scientific priorities of the GRSS community. It will provide GRSS members with an opportunity to engage with the latest research at the intersection of urban sensing, remote sensing, and AI, fostering collaboration across disciplines and regions. The expected outcomes of this special issue will further enhance the visibility of the GRSS membership's contributions to solving global urban sustainability challenges.

As cities continue to grow and evolve, the need for advanced remote sensing technologies to monitor, analyze, and support sustainable urban development has never been more critical. The convergence of geospatial data, artificial intelligence, and urban sensing presents unique opportunities to address pressing challenges, such as climate change adaptation, infrastructure resilience, environmental sustainability, or social equity. This special issue, inspired by the discussions and innovations presented at JURSE 2025, aims to showcase groundbreaking research in urban remote sensing that contributes to the development of more sustainable and resilient cities. We welcome contributions that explore novel Earth observation techniques, advancements in sensor technologies, AI-driven urban analytics, and interdisciplinary approaches to enhance our understanding of urban environments. Contributions can be extended papers that were presented at JURSE 2025 as well as submissions that relate to the listed topics below. By fostering collaboration among researchers, practitioners, and policymakers, this special issue seeks to promote the role of remote sensing in shaping the cities of the future. We welcome original research, case studies, and review articles that contribute to advancing the field of urban remote sensing and its role in fostering sustainable urban development.

Topics of interest include, but are not limited to:

- Emerging Data and Sensor Technologies
- Advanced Algorithms and Analytical Methods
- Urban Form and Structure Analysis
- Urban Deprivation and Spatial Inequalities
- Environmental Monitoring and Resilience
- Societal and Policy Implications
- GeoAI for Sustainable Urban Development in the Global South
- Urban Applications of Synthetic Aperture Radar (SAR and InSAR)
- Multimodal and Multitemporal Data Fusion
- AI-Driven Urban Sensing for Sustainability

Schedule

September 1, 2025	Submission system opening
December 20, 2025	Submission system closing

Format

All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on http://mc.manuscriptcentral.com/jstars, using the Manuscript Central interface and select the "**Advancing Urban Remote Sensing for Sustainable and Resilient Cities**" special issue manuscript type. Prospective authors should consult the site https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9082768 for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please visit http://www.ieee.org/publications_standards/publications/authors/author_templates.html to download a template for transactions. Please note that since Jan. 1, 2024, IEEE J-STARS, as a fully open-access journal, is charging a flat publication fee $1,496 per paper.

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