



**CALL FOR PAPERS**  
**IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing**

**Special Issue on**

**“Advances in Remote Sensing Applications for Local Climate Zone Characterization in Urban Environments”**

This Special Issue aims to showcase the latest developments in the application of remote sensing techniques for Local Climate Zone (LCZ) characterization in urban environments. LCZ classification provides a comprehensive framework for understanding the local climate and microclimatic variations within urban environments. This Special Issue seeks to explore the diverse applications of remote sensing in capturing, monitoring, and analyzing the dynamic features of LCZs to improve our understanding of urban climate dynamics and enhance sustainable urban development.

We invite researchers to submit original research articles, reviews, and technical notes that address the application of remote sensing in LCZ characterization. Manuscripts should present innovative methodologies, explore theoretical frameworks, and showcase practical applications that contribute to the advancement of understanding local climate dynamics in urban environments, especially in the following topics:

- Validation and accuracy assessment of LCZ classification using remote sensing data.
- Novel remote sensing methods for LCZ classification and mapping.
- High temporal resolution remote sensing monitoring, in-situ monitoring, and mobile monitoring for LCZ.
- Integration of multi-sensor remote sensing data for detailed LCZ characterization.
- Remote sensing contributions to urban energy balance modeling within LCZ contexts.
- Remote sensing applications for assessing green spaces and water bodies in different LCZs.
- Coupling multi-sensor remote sensing data to analyze the exposure risk of LCZ.
- Applications of machine learning and artificial intelligence in remote sensing-based LCZ studies.

**Schedule**

May 1, 2024, Submission window opening

December 31, 2024, Submission window 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 “**Advances in Remote Sensing Applications for Local Climate Zone Characterization in Urban Environments**” 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 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](http://www.ieee.org/publications_standards/publications/authors/author_templates.html) to download a template for transactions. Please note that as of Jan.1, 2024, IEEE J-STARS, being a fully open-access journal since 2020, charges a flat publication fee \$1,496 per paper.

**Guest Editors**

Jun Yang, Northeastern University, China ([yangjun8@mail.neu.edu.cn](mailto:yangjun8@mail.neu.edu.cn))

Xiangming Xiao, University of Oklahoma, USA ([xiangming.xiao@ou.edu](mailto:xiangming.xiao@ou.edu))

Zhi Qiao, Tianjin University, China ([qiaozhi@tju.edu.cn](mailto:qiaozhi@tju.edu.cn))

Xiao Liu, South China University of Technology, China ([xiaoliu@scut.edu.cn](mailto:xiaoliu@scut.edu.cn))