Special Issue

Application of Remote Sensing-Based Monitoring of Local Climate in Urban Areas

Message from the Guest Editors

Understanding and monitoring the local climate in urban areas is crucial for addressing the challenges posed by rapid urbanization and climate change. Remote sensing-based monitoring has emerged as a powerful tool to collect and analyze valuable data related to urban climate dynamics. This Special Issue aims to highlight the significance of remote sensing in studying local climate patterns and its application in urban planning, environmental management, and climate change mitigation efforts, in order to address climate-related challenges and foster sustainable urban development. By examining the latest research findings and advancements in the field, this Special Issue seeks to advance our understanding of urban climate dynamics and provide insights into sustainable urban development practices. Contributions to this Special Issue are encouraged to cover, but are not limited to, the following themes:

- Urban heat island and local climate zones mapping;
- Vegetation monitoring and green infrastructure;
- Air quality assessment and population mapping;
- Urban resilience and risk management.

Guest Editors

Dr. Lei Ma Dr. Guangjun He Dr. Brian Alan Johnson Prof. Dr. Qian Cao Prof. Dr. Hanfa Xing Dr. Zhaowu Yu

Deadline for manuscript submissions

closed (15 July 2025)



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/178109

Remote Sensing Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 remotesensing@mdpi.com

mdpi.com/journal/ remotesensing





an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



MDPI

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 peerreview 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

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank:

JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)