Special Issue

Remote Sensing-Driven Digital Twins for Climate-Adaptive Cities

Message from the Guest Editor

Cities today face mounting challenges from rapid urbanization and a changing climate, requiring planning tools that combine accuracy, timeliness, and actionable intelligence. This Special Issue calls for research that leverages remote sensing, from high-resolution optical and LiDAR airborne surveys to multi-temporal satellite constellations, and integrates these data streams into Al-enhanced digital twins. We welcome contributions demonstrating how neural networks, transformer architectures, and graph-based models can extract urban form and function (e.g., building footprints, impervious surfaces, and green corridors) and derive environmental indicators (surface temperature, vegetation health, and soil moisture) at scales ranging from blocks to metropolitan regions.

Guest Editor

Dr. Hossein M. Rizeei 1. Faculty of Engineering and IT, University of Technology Sydney, Ultimo, NSW, Australia 2. McGregor Coxall Australia Pty. Ltd., Sydney, NSW, Australia

Deadline for manuscript submissions

31 January 2026



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/245698

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)