

Special Issue

Remote Sensing of Extreme Heat Events, Urban Heat Islands, and Public Health Impacts: Integrating Hydrological and Atmospheric Dynamics

Message from the Guest Editors

The escalating temperatures in urban environments due to anthropogenic activities have significant public health implications. Urbanization, pollution, and changes in atmospheric composition and land cover exacerbate these health risks. Key phenomena like heatwaves and urban heat islands, which are closely linked to hydrological changes, demand innovative monitoring and modelling approaches. This Special Issue explores the potential of earth observation data in understanding and mitigating the impacts of extreme heat on public health, highlighting interdisciplinary approaches that integrate hydrology, atmospheric science, and urban planning. Themes: the monitoring and modelling of extreme heat, heatwaves, and hydrological changes using earth observation data; an assessment of urban heat islands, their hydrological impacts, and public health consequences; the development of adaptation and mitigation strategies in urban settings, incorporating hydrological considerations; and interdisciplinary approaches combining hydrology, atmospheric science, and public health.

Guest Editors

Prof. Dr. Yuei-An Liou

Dr. Shih-Chun Candice Lung

Dr. Kim Anh Nguyen

Deadline for manuscript submissions

31 December 2025



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



mdpi.com/si/221305

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

[mdpi.com/journal/
remotesensing](https://mdpi.com/journal/remotesensing)





Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



[mdpi.com/journal/
remotesensing](https://mdpi.com/journal/remotesensing)



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 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.

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)