



an Open Access Journal by MDPI

Thermal Remote Sensing for Monitoring Terrestrial Environment

Guest Editors:

Prof. Dr. Jie Cheng

Faculty of Geographical Science, Beijing Normal University, Beijing 100875, China

Prof. Dr. Qiao Wang

 Institute of Remote Sensing Science and Engineering, Faculty of Geographical Science, Beijing Normal University, Beijing 100875, China
Satellite Environment Application Center, Ministry of Environmental Protection, Beijing 100101, China

Deadline for manuscript submissions: closed (31 October 2023)



mdpi.com/si/126902

Message from the Guest Editors

Dear Colleagues,

It is well known that everything above absolute zero (-273.1 °C) emits radiation in the thermal infrared range of the electromagnetic spectrum. Based on this fact, thermal infrared (TIR, 3–14 μ m) remote sensing detects the transmitted surface-leaving radiation and the emission by the atmosphere. The surface–atmosphere coupling allows the estimate of a number of environmental variables, including land surface temperature (LST), land surface emissivity, air temperature, water vapor, trace gases, the component of surface radiation, and energy balances, etc.

In this Special Issue, we will compile state-of-the-art methods for estimating TIR variables, monitoring the terrestrial environment, and detecting thermal anomalies. Potential topics include but are not limited to the following:

Thermal environment, Urban heat island; Heatwave; Geological mapping; Land cover classification; Landscape thermal responses; Thermal anomaly; Coal fire; Warm water discharge; Active fire detection; Anthropogenic heat emission; Land surface temperature and emissivity; Air temperature; Water vapor; Surface radiation and energy budget.







an Open Access Journal by MDPI

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

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.

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)

Contact Us

Remote Sensing Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/remotesensing remotesensing@mdpi.com X@RemoteSens_MDPI