

Special Issue

Remote Sensing and Land Surface Process Models for Permafrost Studies

Message from the Guest Editors

Permafrost is an essential component of the cryosphere and occupies about 22% of the land surface of the Northern Hemisphere. Under global warming and extreme events, extensive degradation of permafrost has been widely observed in recent years. The hydrothermal processes are complex due to strong land–atmosphere interactions in the permafrost regions. Remote sensing technology and land surface process models have been providing the effective means of understanding permafrost change processes and their impact on the environment. A combined multi-source data, remote sensing technology and model approach provide an opportunity to further understand processes and mechanisms in the interactions between permafrost, climate, ecological and hydrological processes. This Special Issue invites contributions dealing with the remote sensing technology and land surface process model for permafrost change processes and its environmental effects on different spatial and temporal scales, monitoring their dynamics, exploring the mechanisms of permafrost change process, and improving simulation accuracy based on the integrated use of remotely sensed data and in situ measurements.

Guest Editors

Dr. Guojie Hu

Dr. Wenxin Zhang

Dr. Jie Chen

Deadline for manuscript submissions

closed (20 January 2023)



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



mdpi.com/si/122824

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)