

## Special Issue

# Dynamic Disturbance Processes in Permafrost Regions

### Message from the Guest Editors

Dynamic disturbances such as wildfire and permafrost degradation are restructuring the spatial and temporal distribution of snow, water, vegetation, soil carbon/nutrients, and energy dynamics, with implications for local to global feedbacks. The interdependence of these disturbances makes quantifying their impact challenging, yet paramount for improving our predictive capacity as climate change and disturbance regimes intensify. In this Special Issue, we aim to advance knowledge of dynamic disturbance processes that impact high-latitude permafrost ecosystems. We welcome submissions on the application of remote sensing to a broad range of disturbances: (1) Thermokarst (vertical surface subsidence) and thermoerosion (lateral transport of sediments via ground ice melt), (2) thermokarst lake dynamics, (3) coastal and fluvial erosion, (4) wildfire-ecosystem interactions, (5) permafrost vegetation interactions, and (6) anthropogenic disturbances. We particularly encourage applications linking two interacting components that influence periglacial ecosystem dynamics (e.g., wildfire and vegetation; thermokarst and hydrology; climate and thermokarst).

---

### Guest Editors

Prof. Dr. Mark J. Lara

Department of Plant Biology/Department of Geography & Geographic Information Science, University of Illinois at Urbana-Champaign, Urbana, IL 61801, USA

Dr. Simon Zwieback

Geophysical Institute, University of Alaska Fairbanks, Fairbanks, AK 99775, USA

---

### Deadline for manuscript submissions

closed (15 May 2022)



## Remote Sensing

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.2  
CiteScore 8.3



[mdpi.com/si/45712](https://mdpi.com/si/45712)

*Remote Sensing*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[remotesensing@mdpi.com](mailto:remotesensing@mdpi.com)

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





# Remote Sensing

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.2  
CiteScore 8.3



[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)