

## Special Issue

# Detecting, Mapping, and Characterizing Wildfires Using Remote Sensing Data

### Message from the Guest Editors

Wildfires have a profound influence on ecosystem structure and function, energy feedbacks to the climate system, regional socioeconomic conditions, and future land use planning. Quantifying wildfires remains challenging, although considerable efforts have been devoted during the last several decades. Therefore, this Special Issue aims to collect articles concerning the quantification of wildfires using observations from satellite (including PlantScope, Landsat, Sentinel-2, MODIS, VIIRS, and geostationary satellites), airborne sensors, and unmanned aerial vehicles. The specific topics include:

- New algorithms of detecting actively burning fires and mapping burned areas, particularly in areas dominated by small and/or cool fires and frequently obscured by clouds.
- Evaluation and validation of existing and emerging fire products using fine resolution fire observations and ground-based fire measurements.
- Characterization of fire behaviors at landscape scale.
- Characterization of diurnal cycles of fire activity and long-term fire regimes at regional and global scales.
- Examination of long-term variations of regional and global fire activities.

### Guest Editors

Dr. Fangjun Li

Geospatial Sciences of Excellences, Department of Geography & Geospatial Sciences, South Dakota State University, 1021 Medary Ave, Wecota Hall 115, Brookings, SD 57007, USA

Dr. Xiaoyang Zhang

Geospatial Sciences Center of Excellence, South Dakota State University, Brookings, SD 57007, USA

### Deadline for manuscript submissions

closed (31 March 2023)



## Remote Sensing

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 8.6



[mdpi.com/si/73617](https://mdpi.com/si/73617)

*Remote Sensing*  
Editorial Office  
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 4.1  
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)