fire

an Open Access Journal by MDPI

IMPACT FACTOR 3.0

CITESCORE 3.1

Detecting, Mapping, and Characterizing Wildfires Using Remote Sensing Data

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)

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, with large uncertainties, although considerable efforts have been devoted to detecting fire occurrences, mapping burned areas, and characterizing fire behaviors during the last several decades. Therefore, this Special Issue aims to collect articles concerning the quantification of wildfires using observations from 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.