Special Issue

Remote Sensing for Power Line Corridor Surveys

Message from the Guest Editors

Power lines are one of the largest industrial assets in the world. Continuous observations of the power lines and the corridors surrounding them can enable real-time preventive maintenance. Fusion of optical satellites, visual and thermographic cameras, SAR, and LiDAR data enables near real-time detection of hazardous conditions. Future challenges will require the development of new detection technologies and machine learning models on remote sensing imagery to increase power grid reliability, prevent power outages, and minimize the potential for wildfires. We encourage original manuscripts, focusing on scalable and accurate power line corridor monitoring technology, including, but not limited to:

- Vegetation detection in power line corridors using optical satellite, SAR, and LiDAR imagery;
- Development of new imaging techniques including drones and autonomous vehicles;
- Detection of hazard conditions in corridors;
- Remote sensing of power lines, towers, and substations;
- Integration of remote sensing data in outage prediction;
- Multi-Sensor fusion for power line detection;
- Generation of 3D power line corridor map;
- Detection and assessment of faults in power line components.

Guest Editors

Dr. Levente Klein

Dr. Andre Dias

Dr. Mohammad Awrangjeb

Deadline for manuscript submissions

closed (31 December 2022)



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/57940

Remote Sensing Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 remotesensing@mdpi.com

mdpi.com/journal/ remotesensing





an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



MDPI

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 peerreview 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)