

Special Issue

Exploring Emerging Climatic Changes and Responses in Plant Sciences Using Remote Sensing

Message from the Guest Editors

This Special Issue aims to incorporate applications of remote sensing to analyze variations in plant properties that respond to climate change. By using visible and near-infrared (VNIR) images, it is possible to measure canopy cover, loss, and dynamics. Thermal infrared images and active remote sensing techniques such as LiDAR and radar can provide additional insights into photosynthesis and plant mortality. We invite papers on the following related topics:

- The utilization of high-resolution images to estimate changes in plant traits and functions.
- The use of remote sensing to evaluate alterations in the composition, phenology, and structure of critical plant ecosystems under extreme weather events or water and temperature stresses.
- Advanced application of remote sensing in crop monitoring and urban plant management regarding climatic impacts.

In addition, we welcome review articles discussing the progress of using remote sensing in plant sciences concerning climate change. We also invite works that apply advanced hyperspectral images, the Google Earth Engine, and machine learning algorithms to improve the acquisition of remotely sensed information about plant stress.

Guest Editors

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Deadline for manuscript submissions

closed (30 April 2024)



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About the Journal

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

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