Special Issue

Novel Interpretations of Solar-Induced Chlorophyll Fluorescence and Photochemical Reflectance Using Remote Sensing

Message from the Guest Editors

Solar-induced chlorophyll fluorescence (SIF) and photochemical reflectance indices (PRIs) provide opportunities to investigate vegetation dynamics under different environmental conditions. Recent advances in remote sensing techniques have enabled measurements of SIF and PRIs from leaf, canopy, and landscape scales. However, these measurements have been transformed into valuable information, though new applications still require more effort dedicated to the scaling, modelling, and interpretation of SIF and PRIs. Instrumental, atmospheric, structural, and physiological factors are accounted for to establish a quantitative link between SIF, PRIs, and photosynthesis. Potential topics include, but are not limited to, the following:

- Instrumentations and measurement protocols;
- Retrieval algorithms and calibration/validation methods;
- Vegetation stress detection;
- SIF and PRI modelling,as well as radiative transfer models;
- New applications of SIF and PRIs;
- Vegetation dynamics monitoring;
- Gross primary production estimation;
- Scaling from leaf to canopy;
- Relationships among SIF, PRIs, and photosynthesis.

Guest Editors

Dr. Genghong Wu

Dr. Mario Cunha

Dr. Zhunqiao Liu

Deadline for manuscript submissions

15 November 2025

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/186992

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

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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

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