Special Issue

Quantifying and Validating Remote Sensing Measurements of Chlorophyll Fluorescence

Message from the Guest Editors

At the canopy and ecosystem scale, the remote sensing of solar-induced (chlorophyll) fluorescence (SIF) has provided new insights into fluorescence dynamics across landscapes and plant types, as well as bringing new challenges. The selection of the Fluorescence Explorer (FLEX) as the next European Space Agency's Explorer 8 mission has stimulated new research at all scales: the leaf, canopy, ecosystem, and global. It has also stimulated new physically- and process-based models to describe the radiative transfer processes and magnitudes related to the linked energy pathways for fluorescence, reflectance, and thermal vegetation properties. Papers are welcome that address: fluorescence retrieval methods; methods to quantify and to validate remotely acquired dynamic (diurnal and seasonal) fluorescence observations; improved understanding about the links between fluorescence and photochemistry; new datasets offered for community evaluations; and model simulations that provide new approaches and/or insights. Discouraged are papers primarily describing sensor systems or unvalidated, qualitative mapping observations.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2018)



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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 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.

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