Special Issue

Advances in UAV-Based Remote Sensing for Climate-Smart Agriculture

Message from the Guest Editors

This Special Issue aims to gather cutting-edge advances of UAV research and development to directly support CSA. The scope of this Special Issue includes, but is not limited to, the following areas:

- Crop breeding and phenotyping:

Advanced approaches that leverage UAV data (e.g., hyperspectral, multispectral and LiDAR sensors) for real-time monitoring of phenotypic traits (e.g., leaf chlorophyll/nitrogen content, plant height, phenology and biomass) in breeding trails, accelerating the development of climate-resilient crop varieties.

- Precision agricultural managements:

Investigations into the use of UAVs for site-specific managements and early detection of climate-induced stress (e.g., drought, flooding, pests, and lodging). This includes enabling variable-rate applications of seeding, fertilizer and water, and adaptations strategies of cover cropping and tillage, reducing cost and waste while maintaining/maximizing yield.

- Emissions and environment impact assessments:

Applications that integrate UAV with radiative transfer models, process-based models, and AI for mapping soil carbon, monitoring methane emissions, and quantifying carbon sequestration.

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About the Journal

Message from the Editor-in-Chief

Drones is the only international open-access journal about the science, policy and technology of drones and its applications. Nowadays, the proliferation of drones is a reality for local policy makers, regulatory bodies, mapping authorities, startups and consolidated companies. There are many uses and benefits of drones: from the emergence of new sensors and the evolution of new platforms; to the development of specific software and the emergence of new applications. *Drones* publishes reviews, regular research papers, communications and short notes, without restriction on the length of papers. *Drones* seeks to provide a central forum for scholars engaged in drones' research and applications.
There is a need for high quality papers in this area and the *Drones* Editorial Board are widely recognized international leaders. *Drones* journal guarantees a serious peer review and a rapid publication across the whole discipline of drones.

Editor-in-Chief

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