Special Issue

Application of Uncrewed Aerial Vehicles (UAVs) in Vegetation Monitoring

Message from the Guest Editor

The application of Uncrewed Aerial Vehicles (UAVs) in vegetation monitoring has witnessed significant advancements, revolutionizing the way we observe and analyze plant life and condition. UAVs have the capacity to acquire data to monitor vegetation at very high spatial and temporal resolutions, is flexible, and cost-effective. At the same time, UAVs are equipped with advanced remote sensing equipment, which enables accurate observation and flexible deployment to measure vegetation cover, growth status, and terrain features. This Special Issue aims to collect high-quality and innovative scientific papers on the application of UAVs for vegetation monitoring. Specific topics include, but are not limited to:

- 3D monitoring for structural change;
- The monitoring of plant health/fate using imaging spectrometry;
- The application of AI and machine learning models for classification and change detection;
- Multi-modal sensing for monitoring;
- Real-time and near-real time monitoring;
- The development of novel but meaningful metrics for monitoring;
- Automation of monitoring programs;
- UAV data informing monitoring at larger scales (ie satellite).

Guest Editor

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Deadline for manuscript submissions

closed (28 February 2025)

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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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