



Precision Agriculture, Horticulture and Forestry: Extracting Canopy Information from Drone Imagery for Management and Decision-Making

Guest Editors:

Dr. David R. Green

UCEMM, Department of
Geography, School of
Geosciences, University of
Aberdeen, Aberdeen AB24 3UF,
UK

Dr. Johannes Fahrent rapp

Research Fellow at Research
Group for Horticulture of Institute
of Natural Resource Sciences,
Zurich University of Applied
Sciences ZHAW, Grüentlstrasse
14, CH-8820 Wädenswil,
Switzerland

Deadline for manuscript
submissions:

closed (31 March 2023)

Message from the Guest Editors

The rapid evolution of drones, UAVs, UGV and drone-related technologies including software has seen the development of many environmental applications in recent years. Precision agriculture and horticulture have been one such area that has seen a growing role for image acquisition and processing, and more recently 3D models. Drones have been applied to monitor crop area, to estimate yield, crop water and nutritional status, extract forest canopy information, as well as to oversee and monitor animals on farmland.

This Special Issue, therefore, welcomes scientific papers from authors working in the field of drone applications in precision agriculture, horticulture, and forestry. It will bring together studies presenting results on crop monitoring, applications working with drones as a practical tool such as the application of fungicides, and drone applications in forestry and livestock, focusing on the extraction of information from UAV imagery for crop management and decision support systems. It will cover technical developments of drones, their sensors, applications, and case studies.

Prof. Dr. David R. Green

Dr. Johannes Fahrent rapp

Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Diego González-Aguilera

Cartographic and Land
Engineering Department, Higher
Polytechnic School of Avila,
University of Salamanca, Hornos
Caleros, 50 05003 Avila, Spain

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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [Ei Compendex](#) and [other databases](#).

Journal Rank: JCR - Q1 (Remote Sensing) / CiteScore - Q1 (Aerospace Engineering)

Contact Us

Drones Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/drones
drones@mdpi.com
[X@Drones_MDPI](#)