Special Issue

3D Modelling and Mapping for Precision Agriculture

Message from the Guest Editors

An effective precision agriculture (PA) management approach relies on accurate knowledge of the agricultural environment, with the aim of timely and properly performing site specific operations. Recent solutions for PA are based on unmanned vehicles, both ground (UGVs) and aerial (UAVs), that can profitably perform crop scouting and monitoring tasks, and even accomplish several management operations in an autonomous way.

In this context, the contribution of 3D models of crops to the improvements of PA practices is rapidly growing. Indeed, point clouds of agricultural environments can be profitably exploited to retrieve information on the crop status, geometries, field yield, and other valuable agronomical indices.In order to mine valuable information for agricultural purposes from 3D point clouds, specific computing frameworks are usually required, many of which are based on artificial intelligence (AI) and machine learning (ML) methods.

The goal of this Special Issue is to present an up-to-date overview of the recent achievements in the field of 3D modelling and mapping in agriculture, as well as to identify the obstacles still ahead.

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Deadline for manuscript submissions

closed (15 March 2023)

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 8.6

mdpi.com/si/70054

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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.

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