Special Issue

3D Point Clouds for Agriculture Applications

Message from the Guest Editors

The growing availability of 3D data and the development of new technologies of Earth observation at an affordable cost, such as UAVs, allow generating new lines of research in agriculture focused on the estimation, inventory, and management of resources from fruit plantations. Structural tree parameters can be obtained automatically which can be used to predict the necessary inputs (water, fertilizers, and pesticides) and outputs (production, biomass). It is therefore of interest to develop and adapt algorithms for the automatic determination of structural parameters from 3D point clouds. Their application presents new research opportunities, with results that could be applied to improve the competitiveness of agricultural areas. This Special Issue aims to explore the latest advances in the estimation of structural parameters of fruit trees from 3D point clouds and their applications in the agricultural field. Comparisons and analysis using different measurement systems are welcome, such as: vehiclebased laser scanning (VLS); terrestrial laser scanning (TLS), airborne laser scanning (ALS), and unmanned aircraft systems (UAVS).

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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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