Special Issue

Remote Sensing of Soil Moisture and Properties for Agricultural Applications

Message from the Guest Editors

The constant search for higher yields and lower production costs is an objective present in 21st century agriculture. Water is a key input to ensure agricultural production and increase productivity. Compared to other inputs, water is less expensive and more important for agriculture. The water content in the soil must be known so that the farmer can make the best decisions. Soil properties such as texture, soil density, porosity, and infiltration capacity, among others, are also used for this purpose. However, these factors present spatial and temporal variability. Therefore, a more detailed monitoring of these factors is needed, where agricultural producers are resorting to technology. In this context, one of the advances in this area has occurred with the increasing use of aerial and orbital images in agriculture. The images provide information that can be used to determine moisture and other soil characteristics. For this, the use of data science and machine learning techniques plays a prominent role in the process of transforming data into soil information.

Guest Editors

Prof. Dr. Fernando França da Cunha

Department of Agricultural Engineering (DAE), Federal University of Viçosa (UFV), Viçosa 36570-900, MG, Brazil

Dr. Job Teixeira de Oliveira

Department of Agronomy, Federal University of Mato Grosso do Sul, Chapadão do Sul 79070-900, MS, Brazil

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AgriEngineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agriengineering@mdpi.com

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AgriEngineering (ISSN 2624-7402) is an international open access, open-source, and cross-disciplinary scientific journal on the engineering science of agricultural and horticultural production. Our aim is to encourage scientists to publish their experimental and theoretical research, along with the full set of schematics, source-code, and mechanical design models leading to accelerated and rapid dissemination of leading-edge technologies emerging in agricultural, environmental, and agronomic engineering. *AgriEngineering* publishes articles, technical notes, reviews, commentaries, and case/field reports, as well as Special Issues on particular subjects.

Editor-in-Chief

Prof. Dr. Francesco Marinello
Department of Land, Enviroment, Agriculture and Orestry, University of Padova, 35020 Legnaro, Padova, Italy

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