2019 IEEE INTERNATIONAL WORKSHOP ON

METROLOGY FOR AGRICULTURE AND FORESTRY

IEEE

Università degli Studi di Napoli Federico II

24-26 OCTOBER 2019

PORTICI – ITALY
University of Naples Federico II
Department of Agricultural Sciences

CALL *for* PAPERS

For the special session on:

REMOTE AND PROXIMAL SENSING METRICS FOR THE CHARACTERIZATION OF AGRICULTURAL AND FORESTRY SYSTEMS

ABSTRACT

Remote and proximal sensing techniques are representing an extremely valuable sources of quantitative data for monitoring the most relevant land surface processes, in particular those related to agricultural and forestry systems. This includes the derivation of surface properties of vegetation and soil at various scales of observation, which determine the interaction with electromagnetic radiation. During recent years there has been much progress in understanding land surface-atmosphere processes and their parameterisation in the management of land and water resources. Earth Observations techniques in different regions of the electromagnetic spectrum have been used for about four decades to monitor land surface. Nowadays, the improved technological capability of remote and proximal sensors and platforms, i.e. Copernicus, unmanned aerial vehicles (UAVs) and in-situ spectrometers, together with Big Data analysis provide the opportunity for new observational and modelling perspectives.

Efforts are needed to support the management of agricultural and forestry systems with information and data derived from innovative remote sensing technologies.

This session aims at presenting the innovation of in the fields of acquisition, elaboration and analysis of remote and proximal sensing data for providing quantitative information ("metrics") in support to the management of land and water resources in agro-forestry, with a focus on Earth Observation platforms of the European Space Agency Copernicus constellation and to the integration with in situ observations.

TOPICS

We welcome contributions that:

- soil and vegetation mapping and characterization;
- water resource management in agricultural and forestry;
- canopy and leaf optical models;
- spatio-temporal analysis of time series of agricultural and forestry parameters;
- remote and proximal data assimilation in agro-hydrological models;
- crop yield modelling;
- forestry dynamics and carbon cycle;
- reflectance properties of soils;
- ecosystem and ecological management;
- precision farming and forestry applications;
- remote sensing and ITCs, cloud computing.

ORGANIZERS

Francesco Vuolo
University of Natural Resources and Life Sciences (BOKU), Austria
francesco.vuolo@boku.ac.at

Edoardo Pasolli
University of Naples "Federico II", Italy
edoardo.pasolli@unina.it

Mario Minacapilli
University of Palermo, Italy
mario.minacapilli@unipa.it

Guido D'Urso
University of Naples "Federico II", Italy
guido.durso@unina.it

MORE INFORMATION

www.metroagrifor.org

info@metroagrifor.org