NEWSLETTER

N.º 1

water4ever

December 2017

WATER4EVER was launched at the WATERWORKS2015 meeting, Stockholm, Sweden, on April 6, 2017.

The first technical meeting was held at Instituto Superior Técnico, Lisbon, Portugal, on October 10, 2017.

WATER4EVER as at the Agri Innovation Summit, Oeiras, Portugal, on October 10, 2017.

Optimizing water use in agriculture to preserve soil and water resources

WATER4EVER is dedicated to the protection of water resources and aims to develop innovative tools for precision irrigation by combining modeling and remote sensing methods.

The consortium includes partners from Portugal, Spain, Italy and Turkey.

TÉCNICO LISBOA · INESCTEC · IMAMOTER · İZZET BAYSAL ÜNİVERSİTESİ · deimos ENGENHARIA · isardSAT · Universidad Politécnica de Cartagena

Main objectives

1. To develop an automatic irrigation and fertilization Decision Support System based on online data and on forecast models;

2. To develop catchment models to nest plot scale models and to quantify the effect of agriculture practices on water availability and quality;

3. To develop new monitoring strategies at the plot scale combining new optical sensors installed on fixed and mobile ground platforms for continuous monitoring of crop development and compare results with data acquired by drones and from satellite images;

4. To set up a water and nutrient monitoring strategy able to compute water and nutrient budgets and their effect on crop development and soil preservation;

5. To improve soil process-oriented models at the plot scale for the dynamics of soil organic matter and for its implication on nutrient budgets and crop development and for erosion;

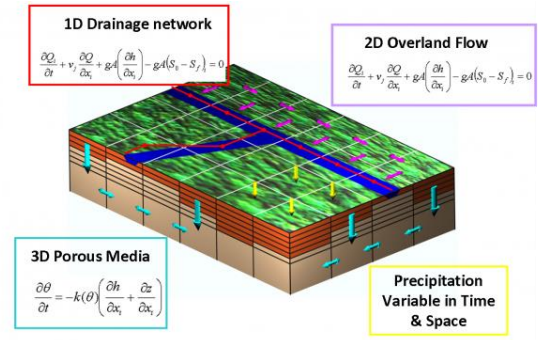
More information at

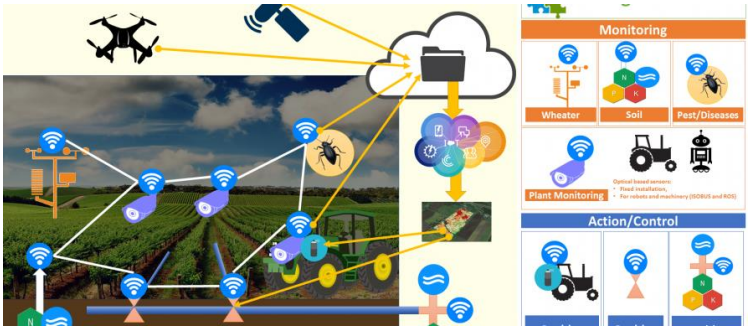
www.water4ever.eu

Innovation tools

MOHID-Land is a physically-based, spatially distributed, continuous, variable time step model for the water and property cycles in the plot and catchment areas (more information at www.mohid.com).

The model will be used for modelling soil water dynamics and nutrient transport in the study areas and improve irrigation water use using remote sensing data.





AgIoT is open source IoT solution that can is interoperable with ISOBUS and FIWARE standards and portable solutions for different contexts application (more information at agiot.inesctec.pt/)

This tool will be used for monitoring different soil and crop physiological parameters (NDVI, LAI, water stress) in the study sites.

IrrigaSYS is a Decision Support Irrigation System that combines hydrological and meteorological modeling tools to improve irrigation water use, providing weekly updates of the water balance as well as irrigation schedules for the following 7 days (more information at irrigasys.maretec.org/).

Acknowledgements

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