Validating Crop Models Using Proximate Sensor Technology

Provider service

University of Cordoba (UCO)

Link to content

https://agrifoodtef.eu/catalogue-of-services/validating-crop-models-using-proximate-sensor-technology

Type of Sector

Arable farming, Tree Crops, Viticulture

Accepted type of products

Data, Physical system

Type of service

Collection of test data, Data analysis, Desk assessment, Provision of datasets, Test design, Test execution, Test setup

Description

This service provides a comprehensive network of proximate sensors at the Rabanales Experimental Farm to monitor and model crop growth and environmental conditions. The sensor setup includes devices that measure humidity, radiation, electrical conductivity, NDVI, temperature, and other key parameters. Data collected from these sensors enables detailed evaluations of crop development, helping clients understand productivity potential and refine complex agricultural models for eco-efficient crop management.

How can the service help you

Agronomists and agricultural technology developers can gain critical insights into crop-environment interactions, enabling more accurate productivity predictions and informed crop management decisions.

How the service will be delivered

Clients can customise the service by focusing on specific crop types, selecting particular environmental parameters, or customising the frequency of data collection. Clients may request additional modelling support for complex system simulations.

Service customisation

The service is delivered on-site at the Rabanales Experimental Farm in Spain, where sensor data is collected and analysed. Deliverables include data sets on crop-environment variables, analysis reports, and modelling support. Clients may specify particular data points or modelling parameters for a tailored evaluation.