

**Service ID** S00237

**Location** Spain



## Validation and testing of UAV-remote sensing products

### Provider service

University of Cordoba (UCO)

### Link to content

<https://agrifoodtef.eu/catalogue-of-services/validation-and-testing-uav-remote-sensing-products>

### Type of Sector

Arable farming, Horticulture, Tree Crops, Viticulture

### Accepted type of products

Data, Design / Documentation, Physical system

### Type of service

Collection of test data, Data analysis, Performance evaluation, Provision of datasets, Test design, Test execution, Test setup

### Description

This service provides comprehensive field testing for proximal remote sensing technologies mounted on UAVs (drones), including RGB, multispectral, hyperspectral, thermal, and LiDAR sensors. The service allows for the precise assessment of plant traits across a variety of agricultural environments. Clients can validate the performance and accuracy of remote sensing tools under real-world conditions, facilitating better crop monitoring, phenotyping, and data collection to support data-driven agricultural decisions.

## **How can the service help you**

For developers and users of remote sensing technology, this service allows for rigorous field validation and testing of sensor performance across different plant trait assessments. By utilising UAVs, customers can capture high-quality, detailed imagery and data that inform plant health, growth, and other critical traits with precision, aiding in improved resource allocation and management decisions.

## **How the service will be delivered**

Options for customisation include the selection of specific sensor types or combinations, as well as the focus on certain plant traits. Any limitations regarding flight regulations or specific crop cycles are coordinated with the client in advance.

## **Service customisation**

The service is conducted on-site in Spain, with UAVs equipped with various sensor types (RGB, multispectral, hyperspectral, thermal, and LiDAR). Deliverables include processed data sets, sensor performance metrics, and analysis reports. Clients need to provide UAV-compatible sensor systems ready for testing and comply with any regulatory requirements for UAV operations.