Service ID

Location   Spain

Evaluation of crop classification at parcel scale functionality in an agricu

Provider service

University of Cordoba (UCO)

Link to content

https://www.agrifoodtef.eu/services/evaluation-crop-classification-parcel-scale-functionality-agricultural-crop-management

Type of Sector

Arable farming, Horticulture, Tree Crops, Viticulture

Accepted type of products

Data

Type of service

Collection of test data, Data analysis, Performance evaluation, Test execution

Description

The functionality of crop classification at the parcel level will be assessed using satellite imagery through a platform specialised in agricultural crop management. To evaluate quality, CAP data from prior agricultural seasons will be utilised. This validation process will be applied in Andalusia, Spain, with a focus on the region's agroclimatic conditions and crop phenology.

How can the service help you

The service allows for the evaluation of classification errors, providing insights into areas where the algorithm has failed to detect correctly. This feedback enables continuous improvement of the algorithm by focusing on the parcels that were misclassified.

How the service will be delivered

The service can be customised to accommodate different crops and varied time periods, allowing for flexibility in adapting to specific agricultural needs and schedules.

Service customisation

The service is delivered in three phases: Initial Consultation and Data Gathering, where the provider collects CAP data and other relevant information to evaluate the customer's AI algorithm trained with satellite imagery (1-2 weeks); Analysis Phase, involving statistical analysis to compare CAP data with the AI algorithm's outputs and identify discrepancies (3-4 weeks); and Validation and Reporting, where a detailed report with findings, classification errors, and recommendations is delivered (1 week). Conducted remotely, the entire process takes approximately 5 - 7 weeks, depending on data complexity. Outputs include a comprehensive evaluation of the AI algorithm's performance.