

**Service ID** S00254



**Location** At user's premises, Spain

## Collection of datasets of images and sensor data using ground robots

### Provider service

Gradient Technologies

### Link to content

<https://www.agrifoodtef.eu/services/collection-datasets-images-and-sensor-data-using-ground-robots>

### Type of Sector

Arable farming, Food processing, Greenhouse, Horticulture, Livestock farming, Tree Crops, Viticulture

### Accepted type of products

Other

### Type of service

Collection of test data, Provision of datasets

### Description

The possibility to autonomously gather images and generic sensor data means a quantum leap in the creation of multispectral datasets in an automated and efficient way. A ground robot deployment occurs based on agreed requirements such as study area, measurement granularity, and data type so that it automatically captures all the information needed to generate a rich dataset. This not only makes data collection easy but also reduces human interference, hence reducing the chances of error, thus making the information obtained more valid. After the operation, the data is processed and tidied up to enable further analysis. In that respect, it can deliver faster and more accurate results for the customer, well-treated datasets according to each customer's needs, and at standards that can be further used in artificial intelligence models. With such information, customers will be better informed during the optimisation of their operations by using advanced technologies.

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

This service is ideal for clients who lack the necessary resources to efficiently capture large volumes of data needed to generate datasets. In this way, the client addresses their challenge of creating datasets tailored to their training, analysis, or model validation needs.

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

Gradiant is committed to delivering the agreed-upon data to the client at the conclusion of the measurement campaign. In this way, Gradiant offers flexibility regarding the types of images to be captured as well as the types of sensors used to extract the data (client requirement). Additionally, to validate the execution of the service, all ground robot regulations applicable in the study area must be observed.

## **Service customisation**

This service has no restrictions regarding the time of year it can be provided. After determining the client's needs, the date, duration, and scope will be agreed upon. After completion, the client will receive the resulting data from the measurement campaign in digital format.