

**Service ID** S00193

**Location** Poland, Remote



## Generation and provision of labelled datasets for benchmarking purpose

### Provider service

Lukasiewicz Poznanski Instytut Technologiczny (L-PIT), Poznan Supercomputing and Networking Center (PSNC)

### Link to content

<https://agrifoodtef.eu/catalogue-of-services/generation-and-provision-labelled-datasets-benchmarking-purposes>

### Type of Sector

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

### Accepted type of products

Design / Documentation

### Type of service

Collection of test data, Provision of datasets

### Description

The service provides the ability to deliver to the client model training data sets with labels and metadata, which will later be used to conduct comparative analyses of AI algorithms by the target groups using the technologies under study. The datasets delivered to the client will be configured or customised in advance, as appropriate, according to the requirements and needs of the client of the service. Customisation processes will include configuring and adjusting the data and labelling according to the scopes of field operations, technological processes or communications to which the transferred data assets relate. These data sets include, but are not limited to, satellite and spatial data for remote sensing, phenological data for different crops, or synthetic data to expand training opportunities.

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

Our service provides a wide range of training datasets, together with labels and metadata, designed to allow benchmarking of artificial intelligence algorithms across different target groups in agricultural and environmental sciences. The datasets delivered to the client will either be configured or customised in advance according to the requirements and needs of the service client. Datasets include satellite and spatial data for remote sensing, phenological data for different crops, synthetic data to expand training opportunities, and specialised datasets focused on food processing, animal husbandry and crop production. These diverse offerings support robust model training, fostering advances in agricultural research, food production processes and genetic research in animal and crop production, increasing the effectiveness of artificial intelligence applications in these critical areas.

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

As part of the service, we employ a methodology in line with the guidelines of commonly applicable documents (standards, directives, etc.). Based on this, we will plan and carry out actions leading to the generation and labelling of the relevant datasets. We require a specification of the customer needs. All information is treated confidentially, with the option to sign a Non-Disclosure Agreement (NDA). If the tests related to the datasets' generation processes need to comply with specific industry standards or regulations, kindly inform us in advance. The timeframe and costs are determined individually based on the scope and complexity of the tests. We ensure flexibility and professional support at every stage of the testing process, including both physical and virtual analyses. Please feel free to contact us to discuss the details and tailor the service to your unique needs.

## **Service customisation**

Our service to generate and provide labelled datasets for benchmarking AI algorithms is based on a structured workflow, the time, duration, and other details of which can be adjusted according to the characteristics of a problem at hand and specific customer needs. The customer needs to provide the specifications of the dataset and the labelling formats that they would like to receive. The process is flexible and tailored to specific needs, ensuring professionalism and commitment at every stage of our collaboration. As at, the customer will obtain the datasets together with the annotations.