

Service ID S00121

Location Italy



Testing of remote sensing technology

Provider service

Fondazione Edmund Mach (FEM)

Link to content

<https://agrifoodtef.eu/catalogue-of-services/testing-remote-sensing-technology>

Type of Sector

Tree Crops, Viticulture

Accepted type of products

Data, Physical system, Software or AI model

Type of service

AI model training, Collection of test data, Data analysis, Performance evaluation, Provision of datasets, Test execution

Description

Field testing of remote sensing technologies (i.e., MODIS, Sentinel data, PRISMA) for the assessment of plant physiology traits (canopy temperature, vigour) or diseases. FEM will provide time series of NASA-MODIS and ESA-Copernicus satellite data, experimental fields, and instruments (i.e., spectroradiometers Spectral Evolution RS-5400, ASD Fieldspec PRO FR, etc.) to collect ground-truth data for the validation of remote-sensing models. In particular, FEM has 20 years of daily MODIS Land Surface Temperature images and weekly MODIS NDVI-EVI vegetation index maps. FEM has also been acquiring Sentinel-2 multispectral data at 10 m spatial resolution since 2017.

How can the service help you

The availability of ground-truth data is crucial for the calibration of remote sensing-based solutions. In addition, the expertise gained by FEM researchers over the years and the already available datasets will also be useful to improve the level of knowledge of the customers.

How the service will be delivered

Requirements and feasibility of services will be assessed individually.

Service customisation

Field activities at FEM's experimental facilities will be carried out during the growing season. Data, models, and reports will be provided digitally.