DEFENSE and MONITORING for TOMATO

FORECAST MODELS

CROP OPERATIONS

TOMATODSS
POWERED BY
AGRICOLUS

PRESCRIPTION MAPS

SATELLITE IMAGERY

CROP SCOUTING

Increase yield and quality of tomato

Reduce management cost

Prevent the spread of stress and diseases

Optimize the use of water

Monitor crops health, even remotely

FIELD MAPPING

Geolocate the field on the map and draw it. Features will be immediately hooked. You can enable the cadastral map and enter sheet and parcel information.

Use one of the following methods to create your field.

Draw on map

Locate the plot on the map and draw it manually.

✓ Select

Automatic detection

Locate the plot on the map and enable automatic detection to map the field with just one click.
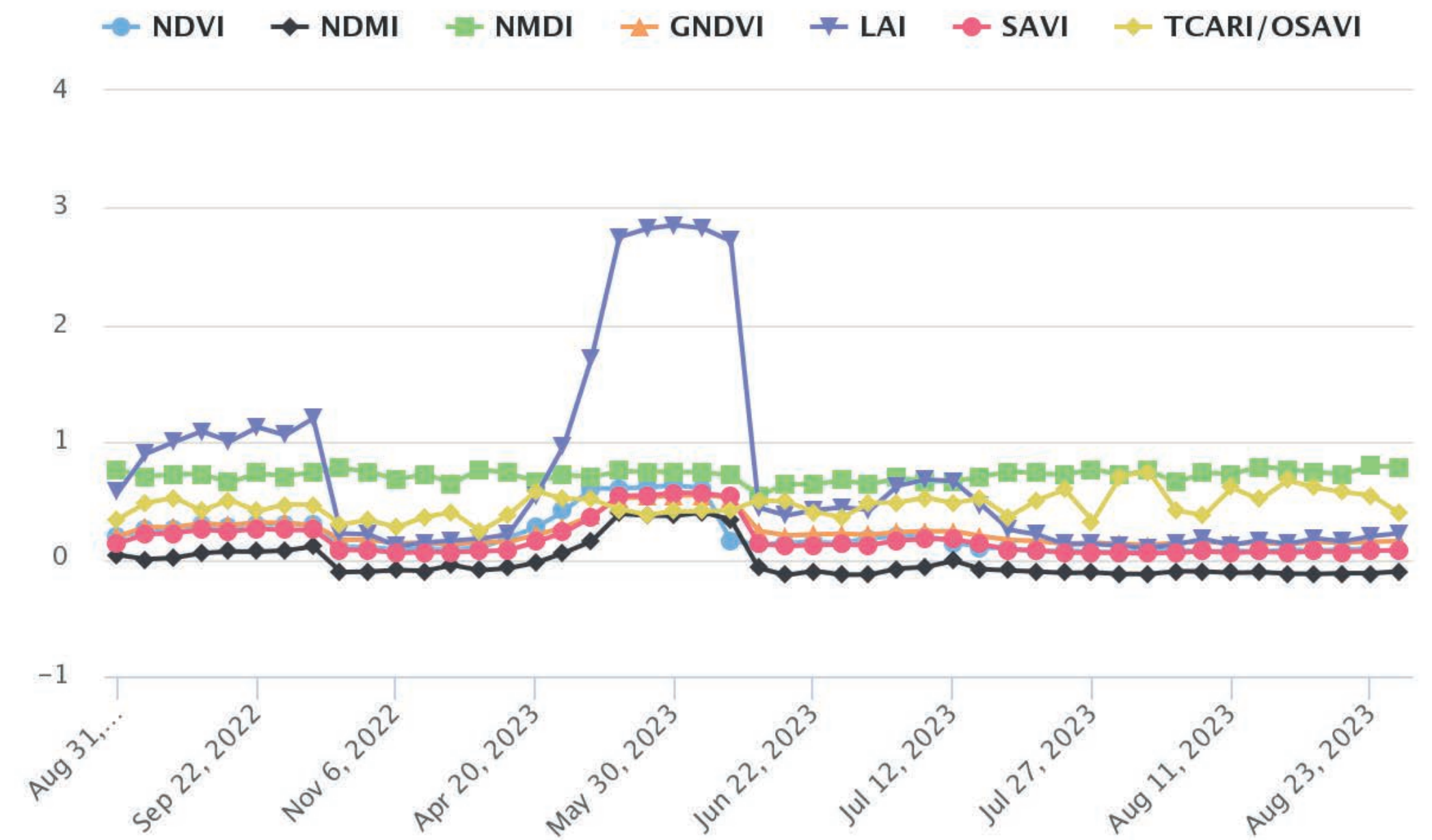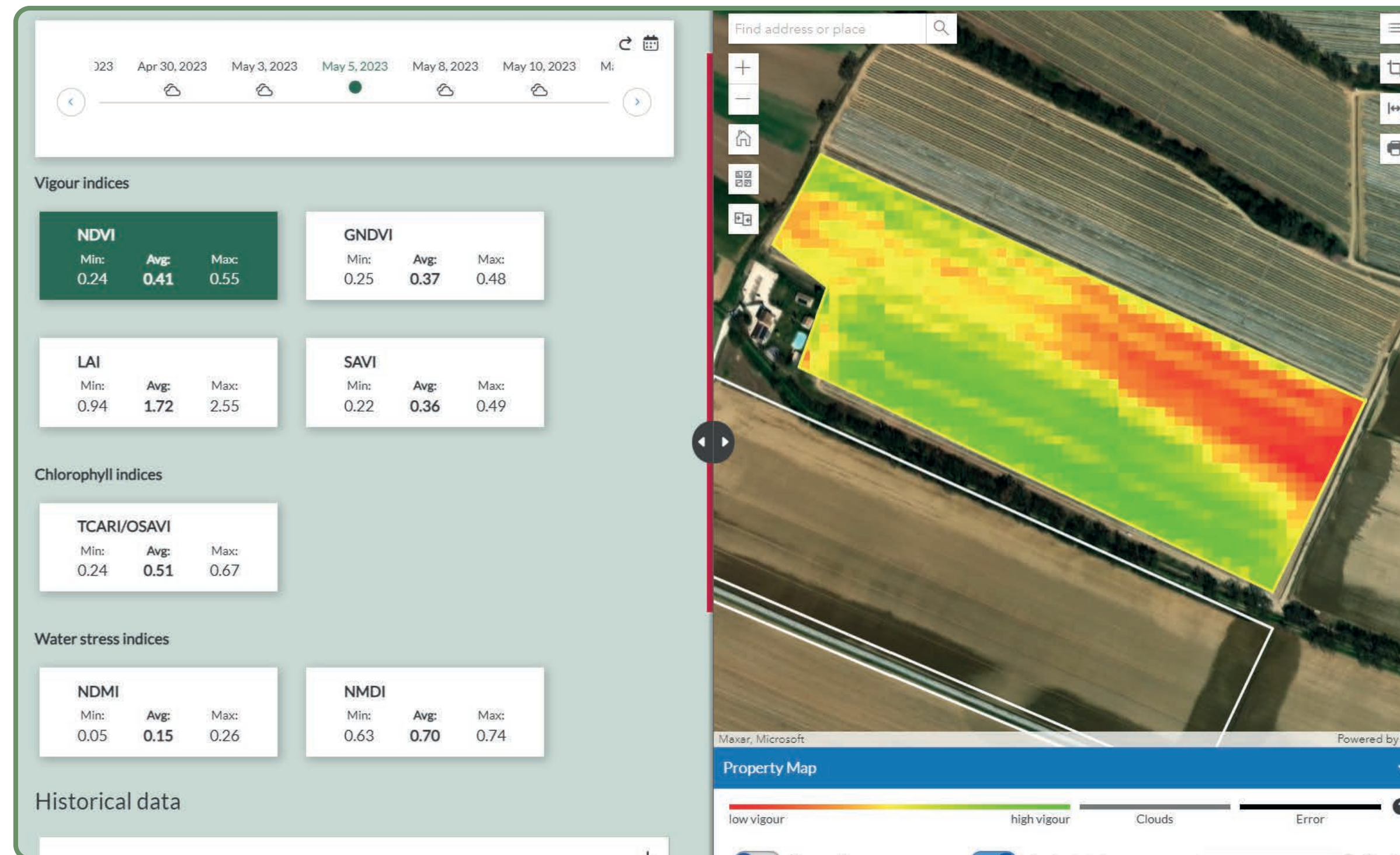
✓ Select

Upload files

Upload a .shp or .kmz file.

✓ Select

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SATELLITE IMAGERY

Consult Sentinel-2 satellite images with vigor, water stress and chlorophyll indices to assess the health of the crop and plan monitoring activities.
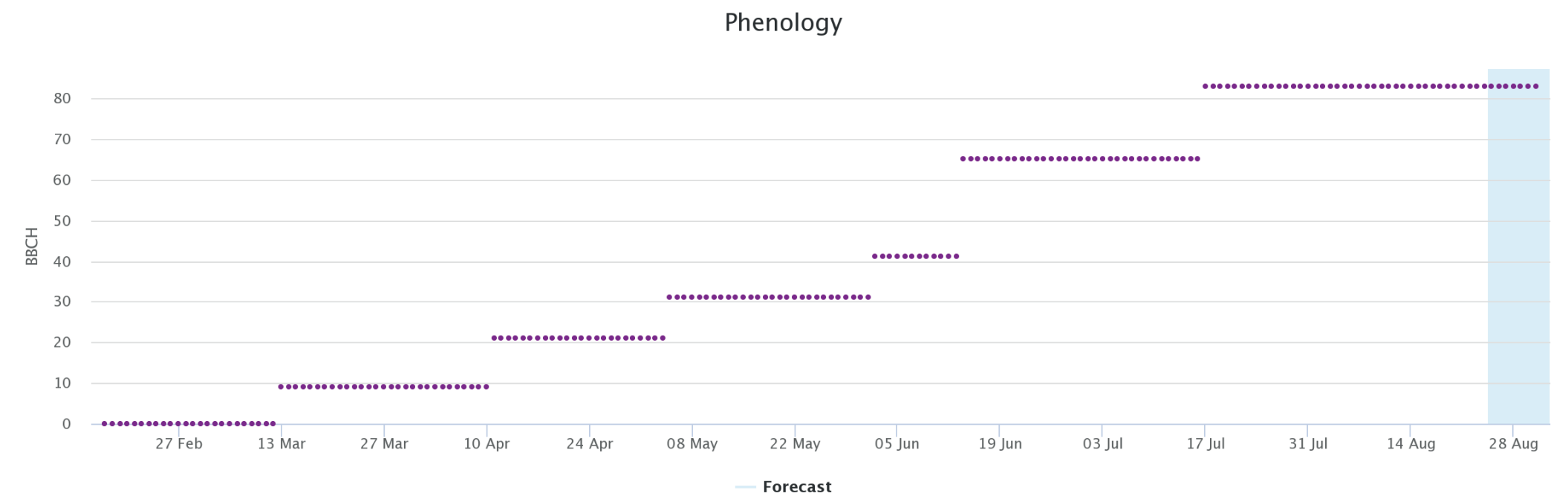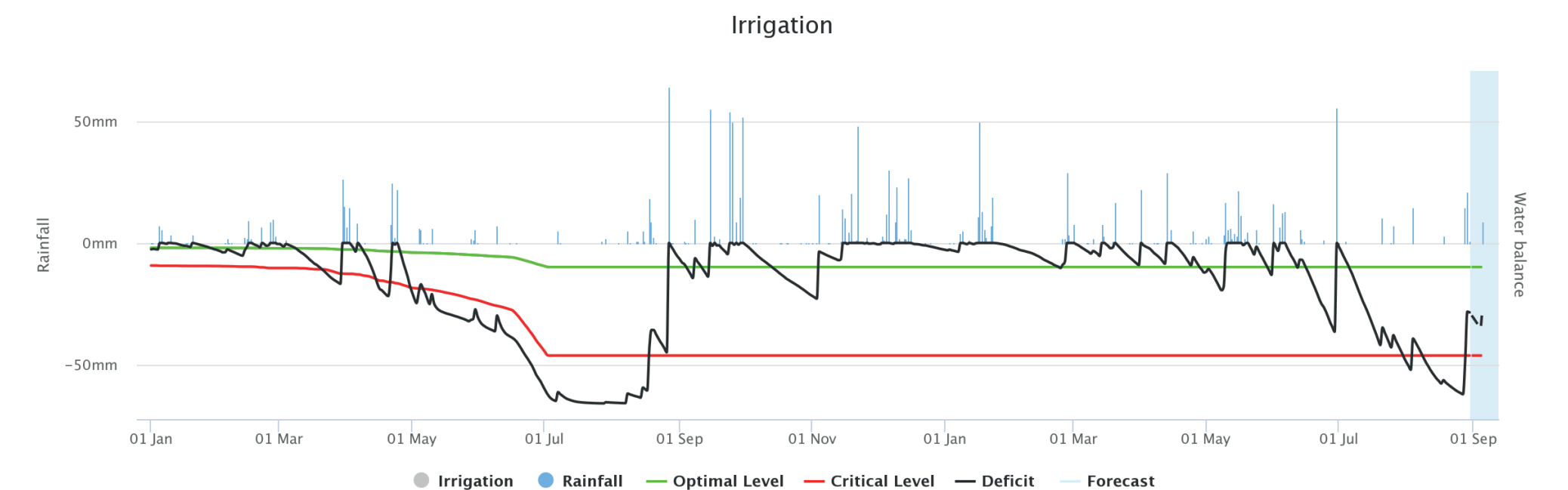
FORECAST MODELS

PHENOLOGY

Prediction of phenology to assess field needs in each development stage.
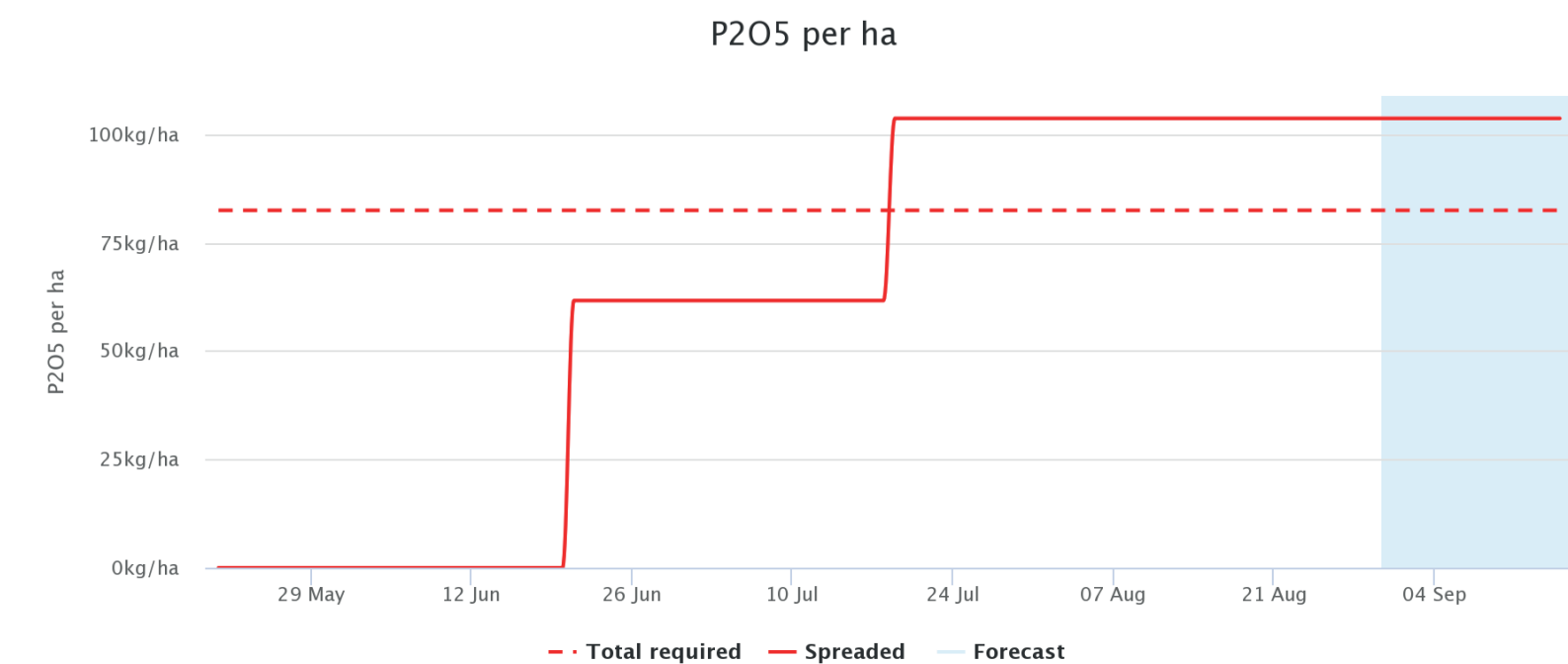
IRRIGATION

Evaluation of water requirements to carry out irrigation when necessary with the right amount of water.
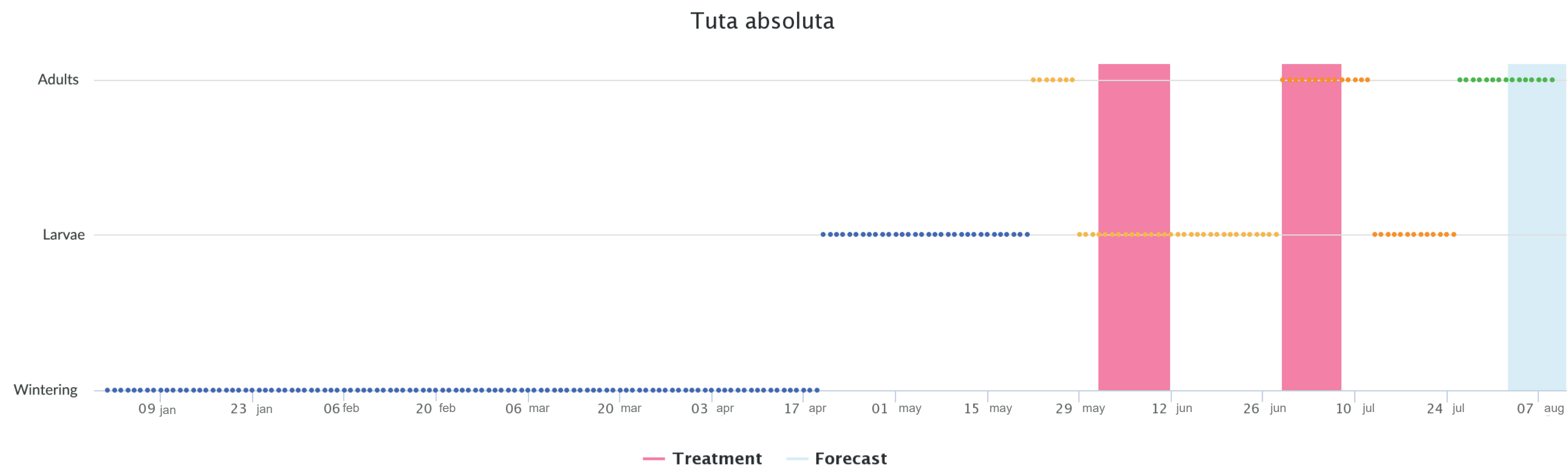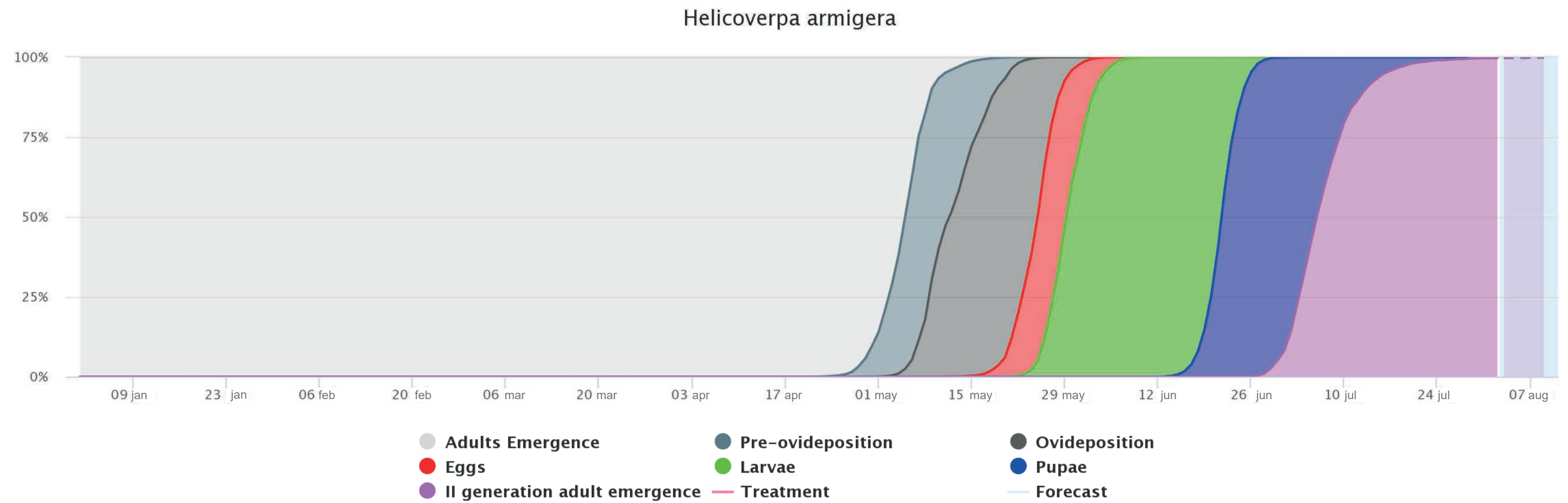
FERTILIZATION

Calculation of the total nitrogen, phosphorus and potassium needs (Kg/ha) required by the crop in order to obtain important suggestions on the doses of fertilizer to be applied.

Helicoverpa armigera

Legend:
- Adults Emergence
- Pre-oviposition
- Oviposition
- Eggs
- Larvae
- Pupae
- II generation adult emergence
- Treatment
- Forecast

Tuta absoluta

- Treatment
- Forecast

## PHYTOPATHIES AND INSECTS MODEL

Prediction of the risk of phytopathies (**Tomato Downy mildew**) and pests (**Tuta absoluta** and **Helicoverpa armigera**) in order to carry out an effective defense.
The defense forecast models interact with the registered treatments.

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DECISION SUPPORT

Suggest operations to be carried out based on collected data.

29 mag   12 giu

No risk
Cotton bollworm (Helicoverpa armigera)

12-HOUR FORECAST
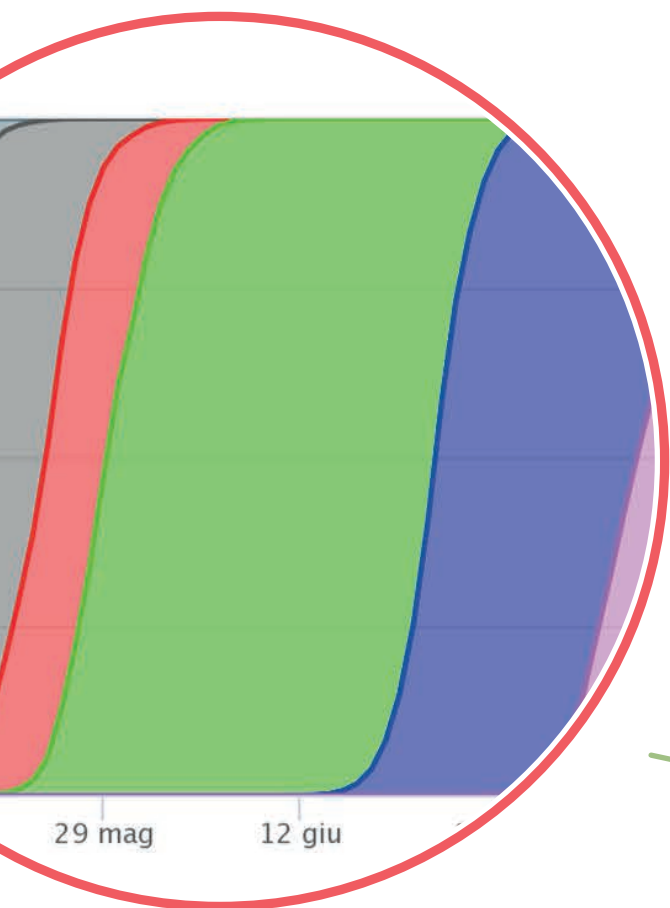
0 % Presence
55.00 % Damage intensity
Fungus

100 % Presence
18.00 % Damage intensity
Insect

next 12 hours forecasting

No risk
Tomato downy mildew

100 % Presence
57.00 % Damage intensity
Bacterium

ESTIMATE OF IRRIGATION REQUIREMENTS FROM FORECAST MODEL

No risk
Tomato Leaf Miner (Tuta absoluta)

0.00 mm
idro requirements

23/06/2023
Irrigation: 0
Rainfall: 0
Optimal Level: −9.88
Critical Level: −46.13
Deficit: −25.05

ALERTS FROM DEFENSE MODELS FOR TOMATO

PREDICTION OF INFESTATIONS OF PLANT DISEASES AND INSECTS

RISK DEGREE LEGEND

⊙ Fruit set (BBCH 71)

**ℹ Medium risk**
Alarm level
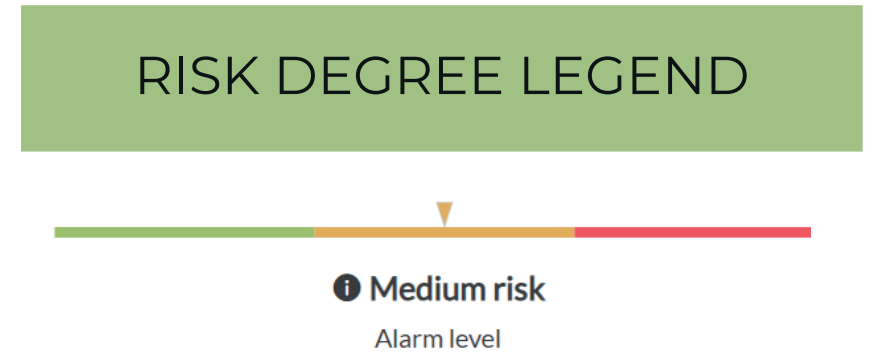
FIELD ACTIVITIES ENTERED BY THE USER AND INTEGRATED INTO THE PHENOLOGY FORECAST MODEL

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SUSTAINABILITY

Monitor the **economic** (yield, production) and **environmental** (water consumption, input control and farm biodiversity) **sustainability indicators** of your farm. You can set the level to be reached for each indicator and monitor how the work is going.

Economic ☆

Environmental ☆

Targets List ☆
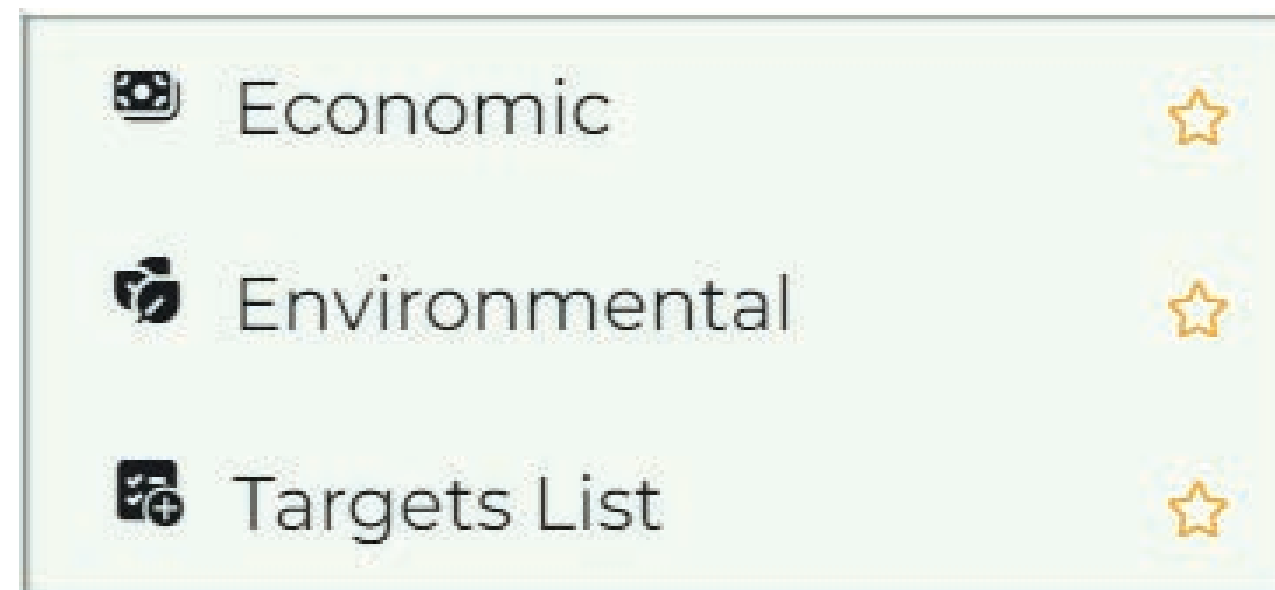
ENVIRONMENTAL INDICATORS ENVIRONMENTAL ❓

vironmental indicators focus on the impact of agricultural practices on the surrounding environment

Water

Indicator	Value	Target	Status	
Total water consumption	20899.38 m³	Less than 459781.50m³	✓	⌄
Average water consumption	7404.53 m³/ha	Less than 7500.00m³/ha	✓	⌄
Water use efficiency	0 m³/t			

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PRESCRIPTION MAPS

Choose the most suitable vegetation index to draw up the prescription map and carry out a variable rate fertilization.

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WORK

TASK MANAGEMENT

Create and assign tasks to be done in the farms to your collaborator in real time.
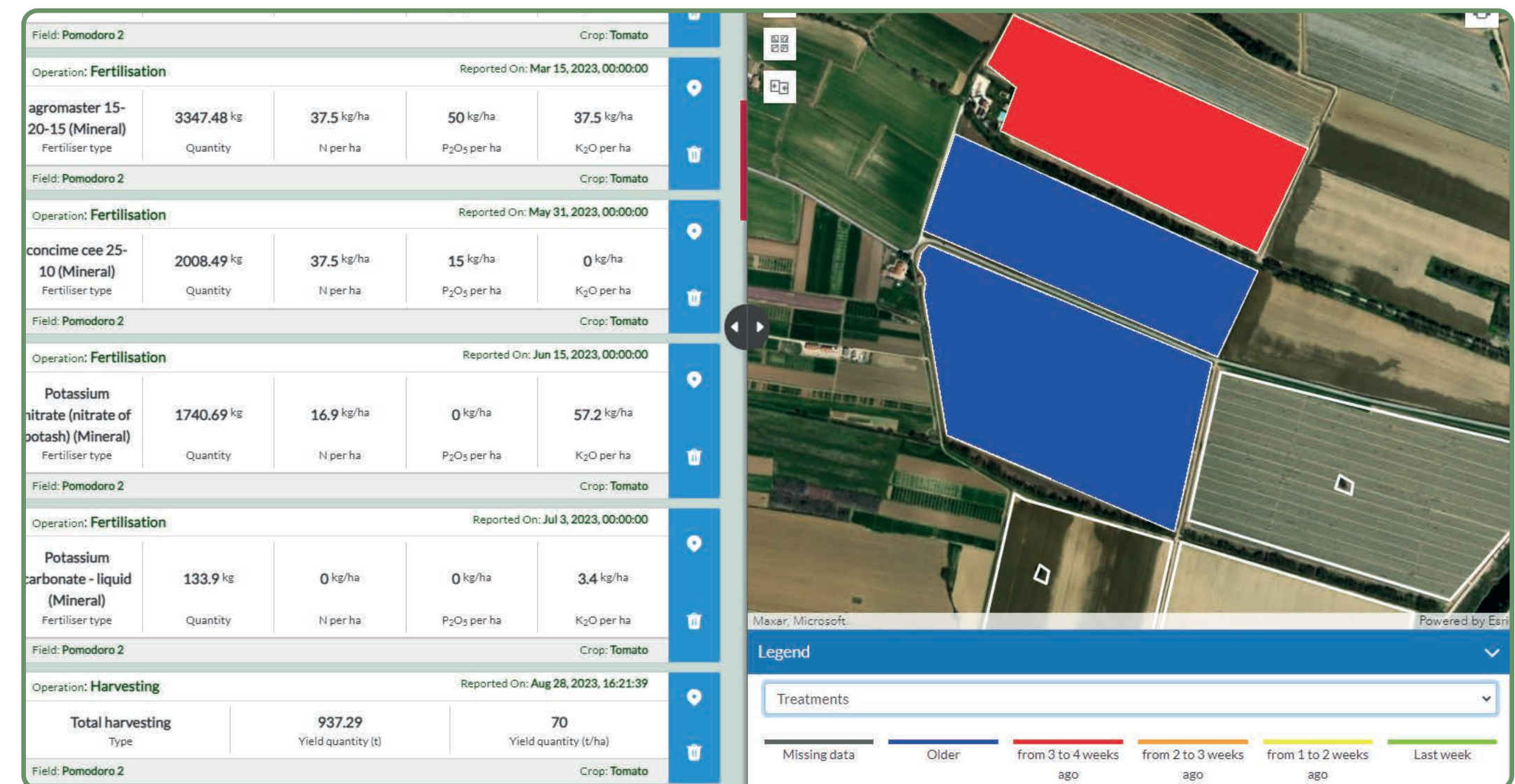
MACHINERY

Register your agricultural machinery, any problems and maintenance carried out. You can also connect them to Agricolus by using Agrirouter.

CROP OPERATIONS

Register where, how and when crop operations (treatments, fertilization, pruning, harvest) have been carried out. You can also access phytosanitary products database.

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Lot code: 001a1

Landing page

https://web.agricolus.co

🔗 Visit page

The QR code on the mask will allow easy access to the web page dedicated to the product traceability. In this way, all detailed product information can be consulted with great convenience

PRODUCTION LOTS

Create and assign to each crop its own production lot to improve **traceability** of operations. A **QR code** is also generated that allows you to access and share the dedicated web page where you can consult all the information on the product.

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CROP SCOUTING

Geolocate and register data from crop scouting by using the mobile App for phytosanitary monitoring and evaluation of crop development.

ISSUES

DAMAGES

TRAPS

CATCHES

PHENOLOGY
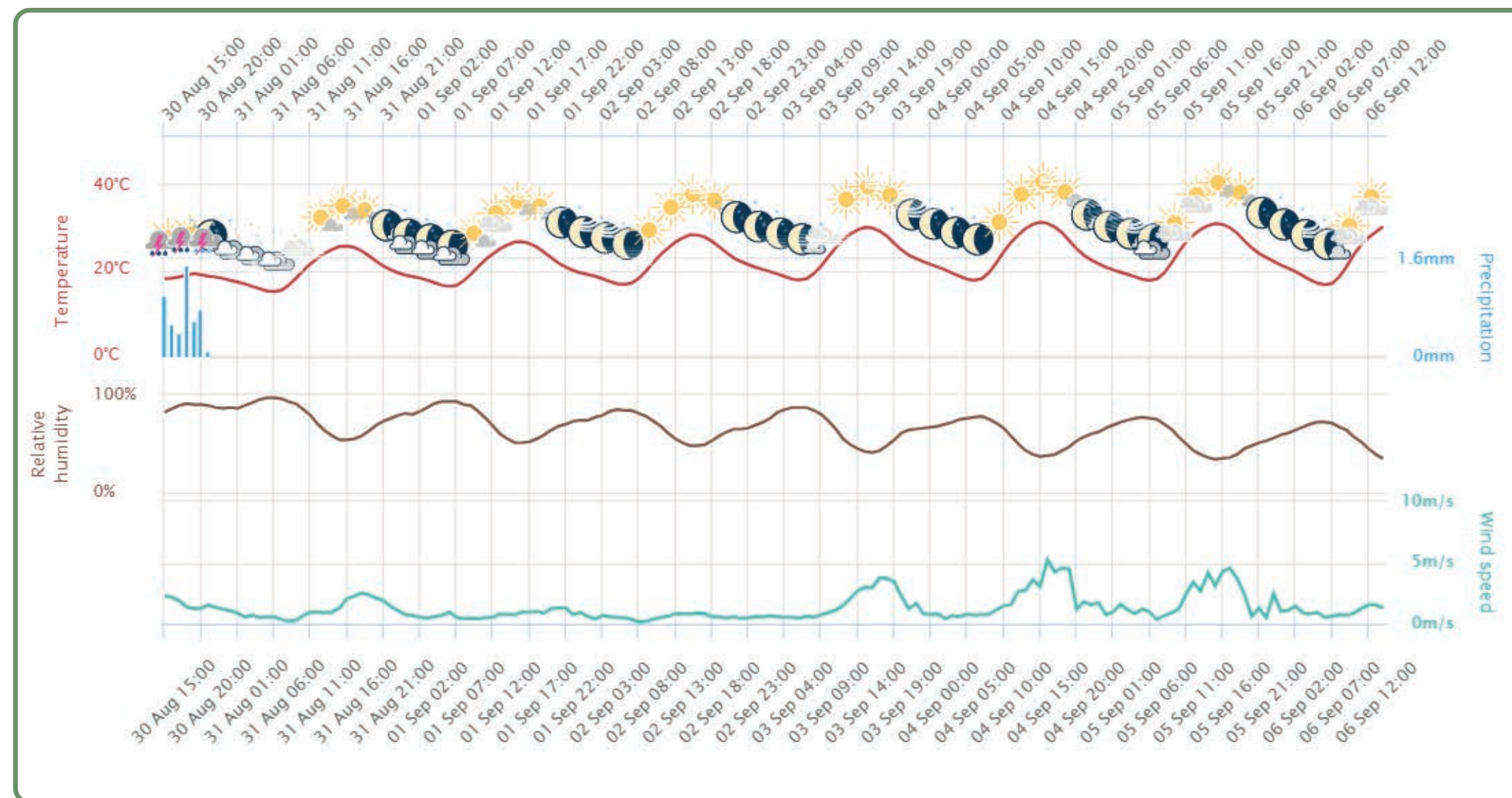
PESTS AND DISEASES

SOIL ANALYSIS

TOMATODSS

WEATHER

WEATHER FORECASTS

Consult professional weather forecasts up to 7 days updated every hour: temperature, humidity, wind speed, rainfall.

WEATHER STATIONS

Virtual weather station included; physical weather stations and sensors can be purchased or integrated, if already present in the company.

30 Aug 09:00
Temperature : 18.24 °C
Temperature (Min–Max) : 16.72 / 20 °C
Precipitation : 0 mm
Cumulative precipitation (30 Aug 00:00–30 Aug 23:59) : 0.60 mm
Leaf wetness : 60 min
Relative humidity : 89.81 %
Relative humidity : 81.04 / 96.3 %
Wind speed : 0.3 m/s
Wind speed (Min – Max) : 0.3 / 0.8 m/s

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