Understand the present — Forecast the future

An assessment and forecast of agricultural yield based on trainable dynamic agroecosystem models

The production process model takes the following into account: soil data, topography, meteorological data, various vegetation indices, agricultural equipment and technologies, predecessors, crop characteristics

Crop management service "Cropmap"

- Gross harvest yield forecasting
- Onset and end of phenophases by date (integrated phenology calendar)
- Weather history and forecasting
- Satellite images with different vegetation indices
- Crop biomass and chlorophyll assessment
- Soil moisture and temperature assessment
- Productivity zones (VRA maps)

3 steps to get started

1 Registration and login

The user registers his or her farms/divisions

Gets access to Catalogs with current market prices

Adds Warehouses and orders logistics services

2 Field creation (marking)

The user can draw, select, or download outlines of their fields

Enters crop rotation and soil characteristics data

3 Observation and analysis

Vegetation indices

The onset of phenophases

Productivity zones

Pest alerts

Agricultural equipment and field operations tracking

Market price analysis

The platform allows the user to set norms for the differentiated application of fertilizers, seeds, and crop protection products

For farms of any size

Large agricultural enterprises

- Field segmentation into farms and divisions
- Monitoring and moderation by any user with access

Farmers

- Analysis of the state of fields
- Market price dynamics analysis
- Ability to order logistics services
- Sales process

Consultants, insurers, and bankers

- Remote access to crop information in digitized fields and digital communication format

Risk assessment of an agricultural producer for banks and insurers

The Cropmap analyzes a farmer's ability to grow and sell crops that are under his or her control. The online service can estimate the current potential of the farm, future gross harvest yield, and can calculate income

Two indicators

- Farm productivity: productivity of the land in the context of crops grown on it, while accounting for vegetation indices
- Yield assessment: early-stage assessment of potential yield and dynamics forecasting that accounts for climatic conditions and applied agricultural technologies

Integrations

Data from all sources is aggregated in a single repository

A user can access the data at any time either through a cloud data center (IaaS) or a private cloud for authorized users

Built-in protection of stored and transmitted data

Creation of standard reports (templates) and dashboards (graph sets, informers), visualization-based designer of new report templates. BI tools