



FarmiSpace

Geo-Innovation
for **Food Security**:
Advancing Agriculture through
Geospatial Technologies

Emily Chih | DATAYOO



Food security has become a national-level challenge

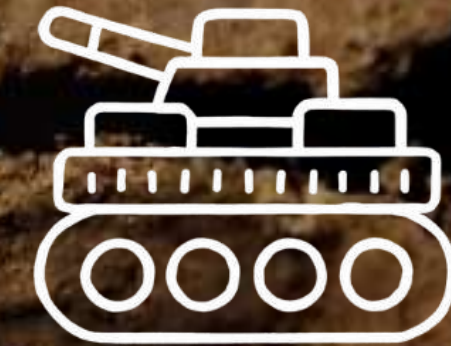
According to the Food and Agriculture Organization (FAO), **638-720 million people** worldwide were affected by **hunger** in 2024, and **over 2.3 billion people** experienced moderate to severe **food insecurity**.



Population Growth
Food Demand Increased



Climate Change

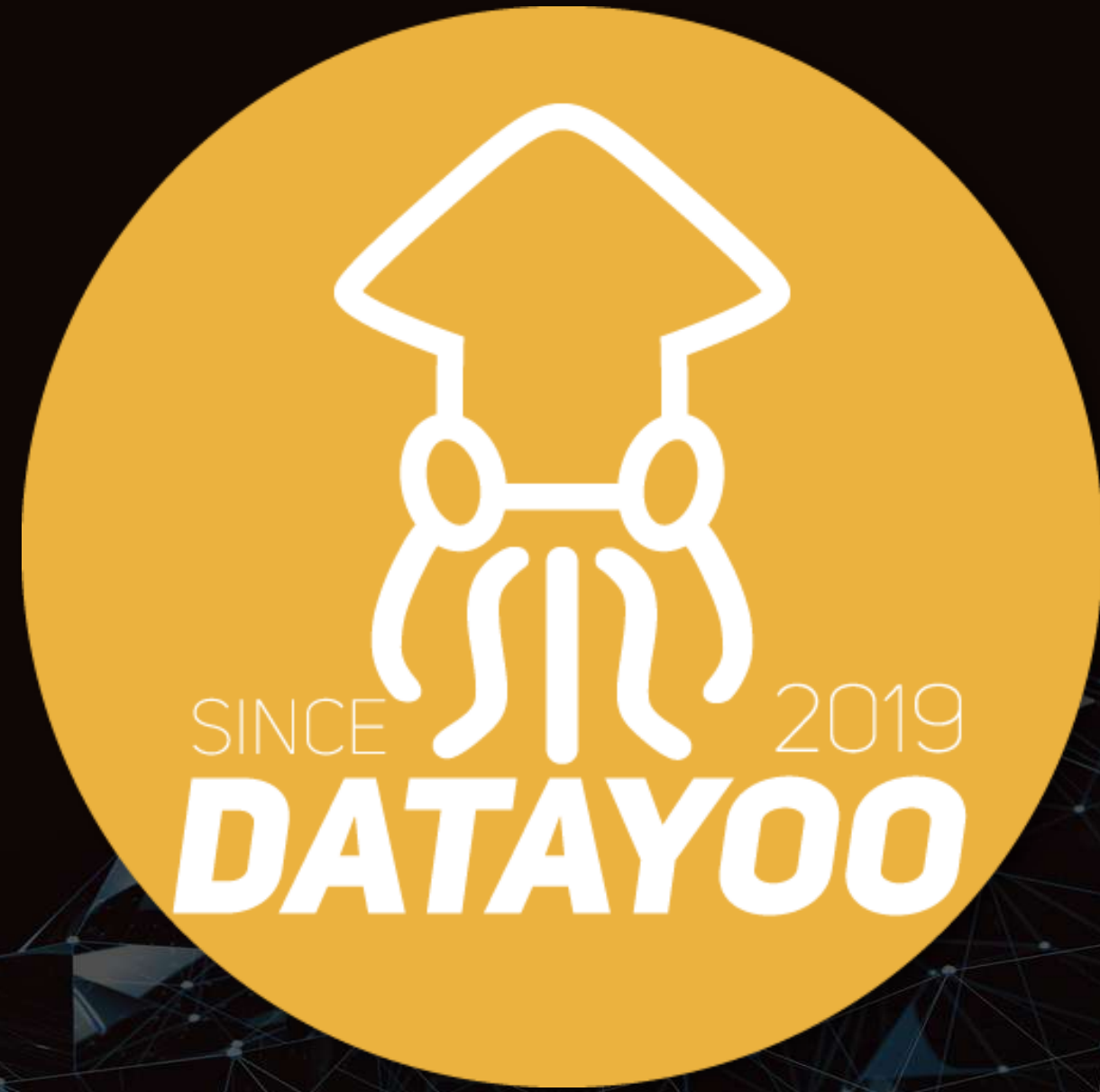


Wars & Pandemics

Governments Need Large-Scale Crop Management Technology

The Future is Starving. The Economic Toll of Shrinking Arable Land





DATAYOO

EMPOWER AGRICULTURE WITH AI

We help farmers worldwide to uncover **the hidden value** of data.



GPS Location



Satellite



Sensors



Image Recognition



Weather

6+
Invention
Patents

80%-99%
Yield Prediction
Accuracy

189+
Crop Types
Supported

18%-30%
Helped Increase
Revenue

Traditional
Agriculture highly rely on
physical equipments...

HIGHER COST

MAINTENANCE

POINT-BASED DATA



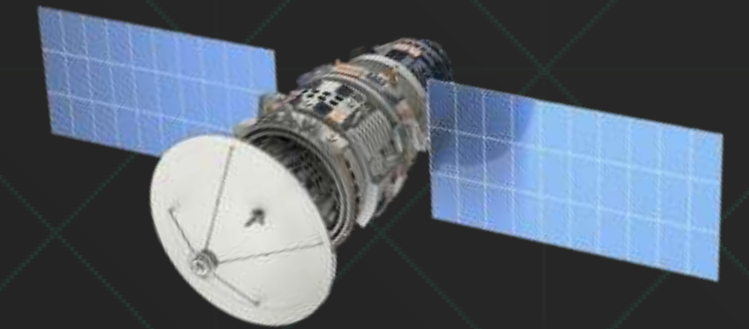
You only get **indirect data** such as
temperature, weather, soil...etc.
NOT the CROPS



FarmiSpace

Get instant insights from your land, in just a few clicks.

A SaaS platform uses **AI technology & satellite** to monitor crops remotely



NO SENSORS NEEDED!



Crop
Water
Content



Crop
Health



Crop
Biomass



Crop
Nitrogen



NDVI



Soil Moisture
-15/-30cm



Soil Moisture
Surface



Water
Body



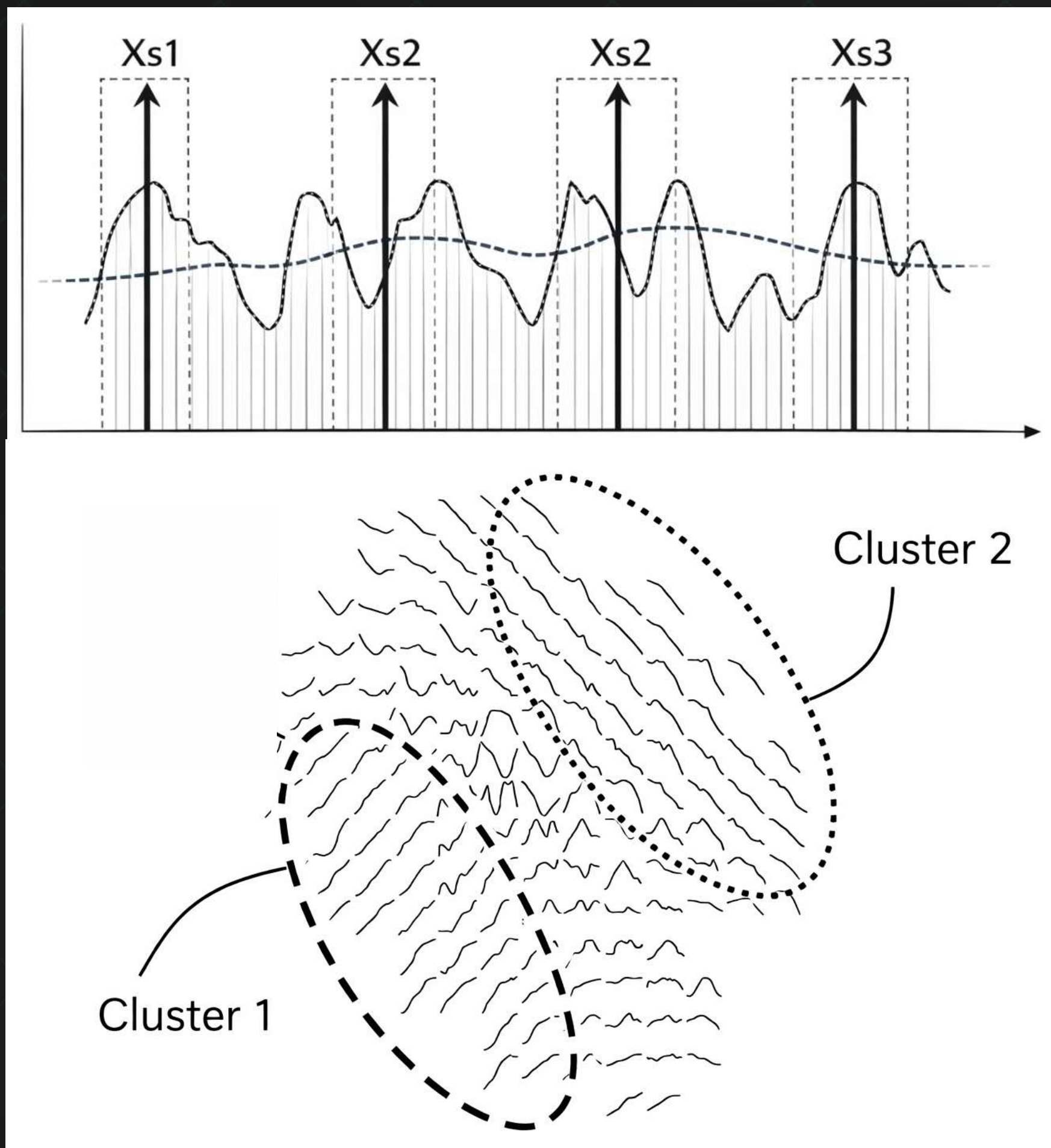
Canopy
Index



Seedling
Monitoring

Our Proprietary Spectral Technology – SPRI

Spectral Pattern Reconstruction Intelligence



Unlike image-based classification, SPRI models **long-term spectral patterns** and signatures to reconstruct latent crop indices and predict yield.



Crop Type Identification



Growth Stage Analysis



Acreage Estimation



Yield Forecasting



FarmiSpace

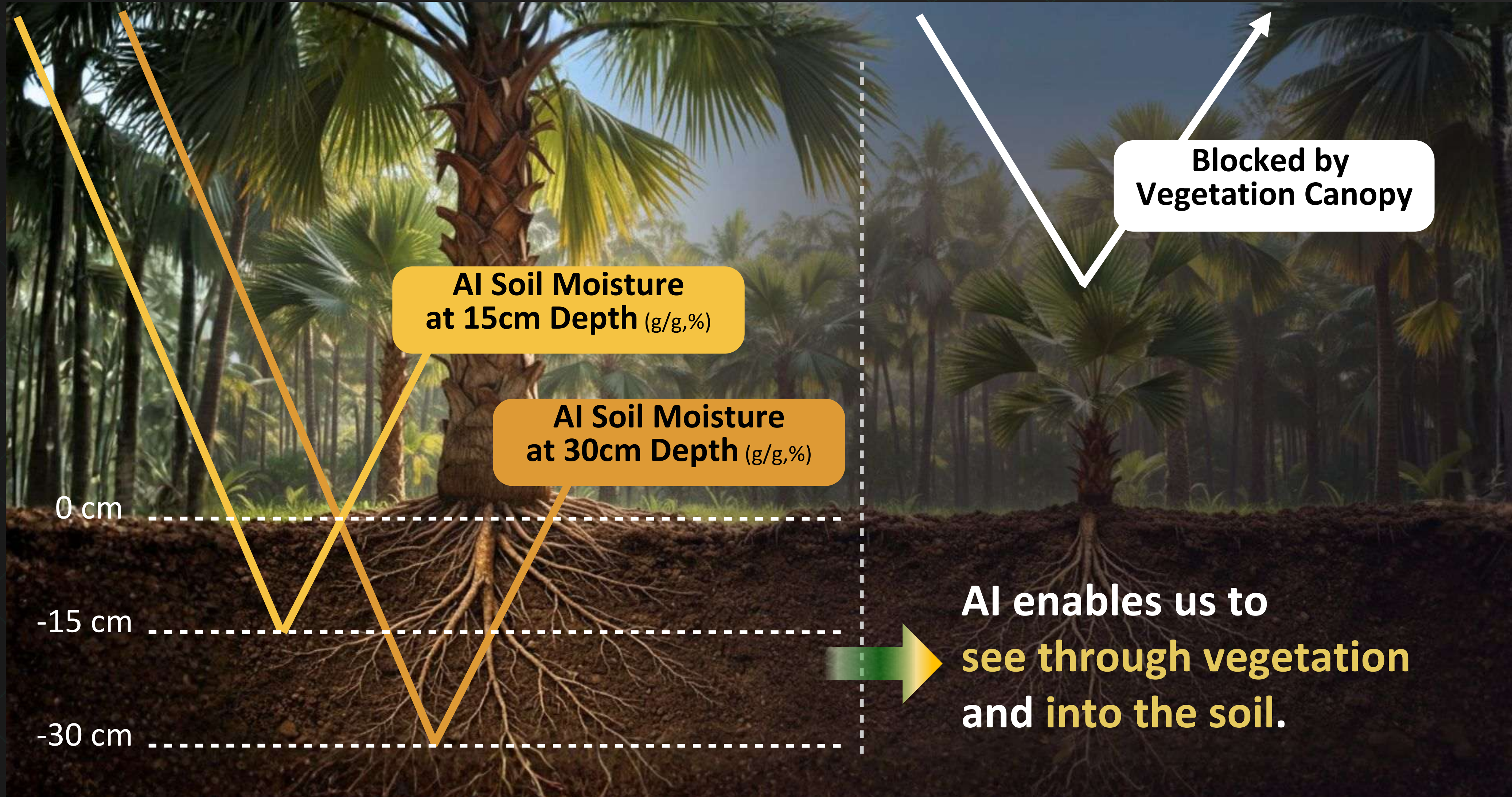
Proprietary AI x Satellite data

VS



Other Satellite Services

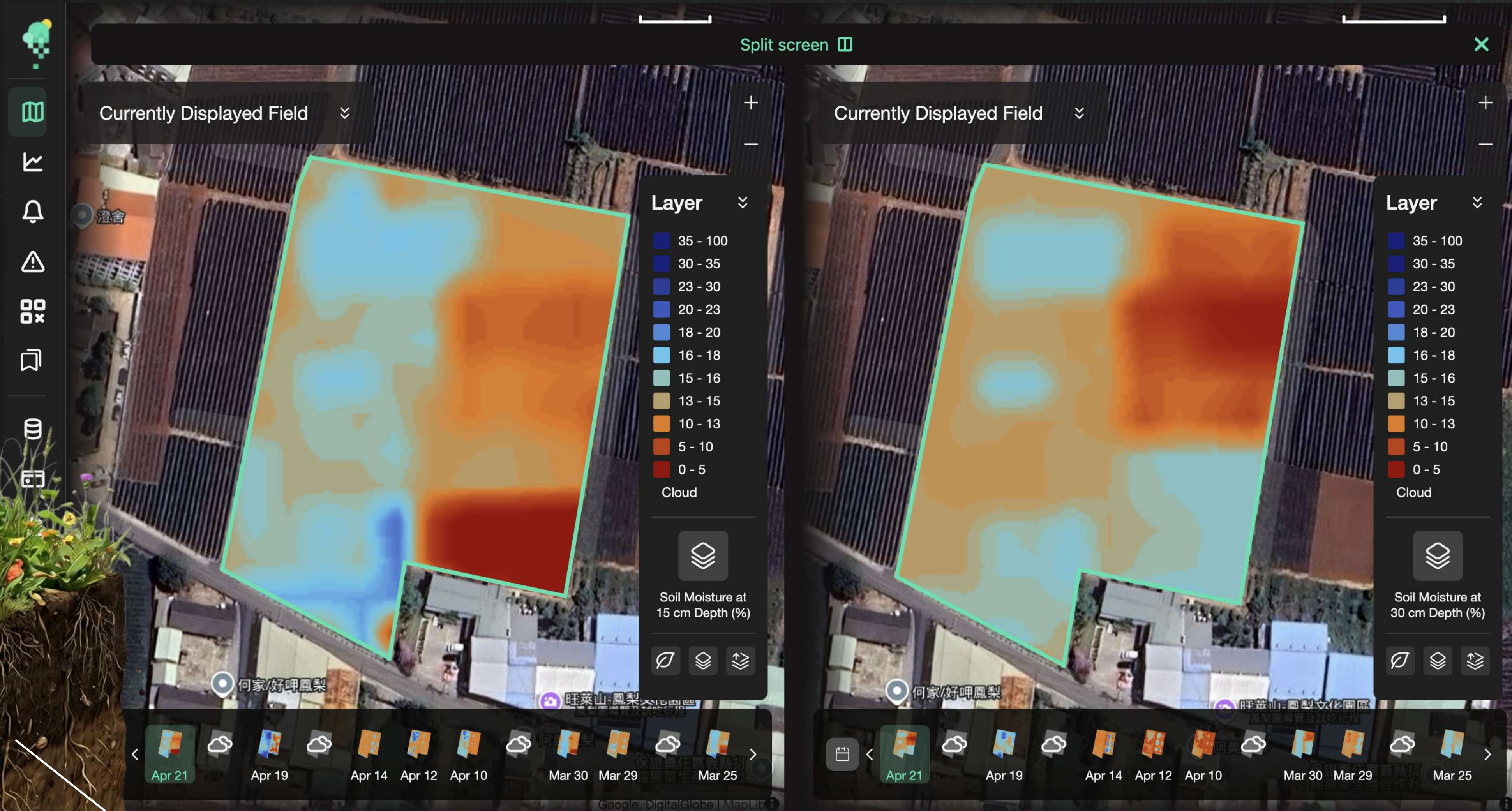
Satellite raw data



Achieving 93%-96% average accuracy



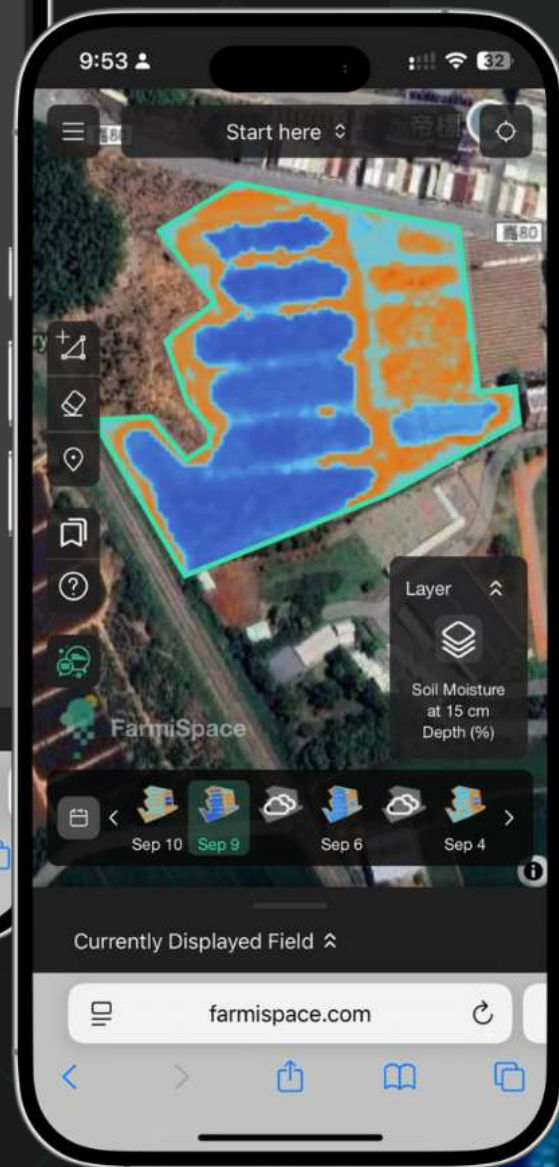
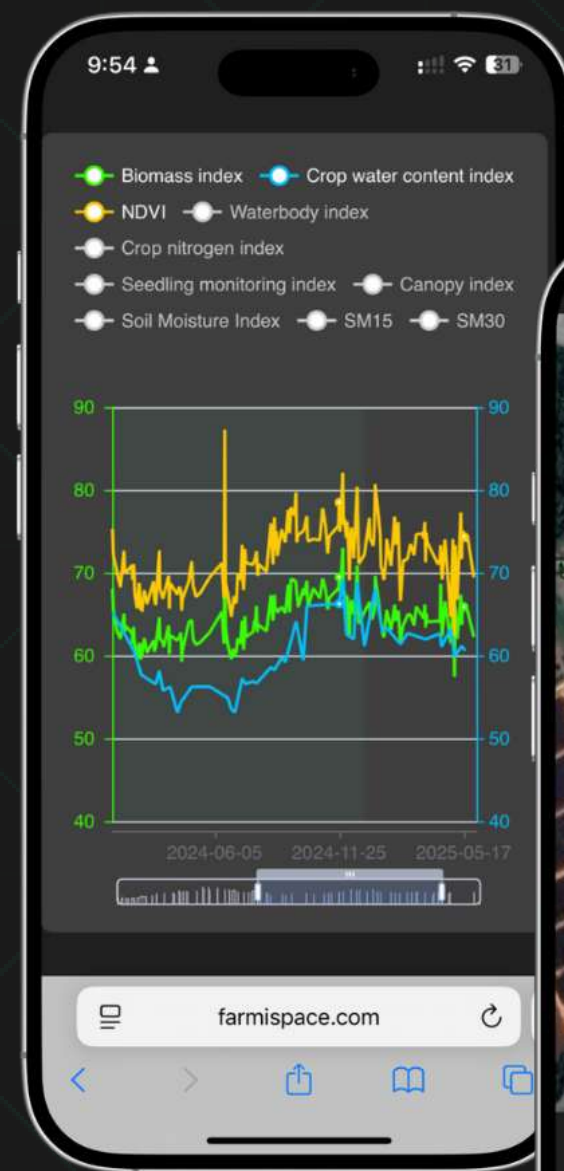
Soil Moisture & Root Water Uptake



-15 cm: Rapid Uptake

-30 cm: Drought Buffer

AI Subsurface Soil Moisture Released with the World's Leading Satellite Operator



planet

Soil Moisture Index

See through the land with AI Learning x Spectrum Data

With FamiSpace, you can "see" water under the soil up to 30cm deep.

Accuracy rate: 96%up

Pineapple Farm

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A global technology breakthrough, unveiled in **September 2025**



Safeguard National Food Security in Rice Fields



FarmiSpace's detection of early infected areas achieved a **98%** overlap with manual surveys.

Detecting Banana Disease Months Earlier



Crop
Water
Content

Correlation with Panama Disease

2023-03-19

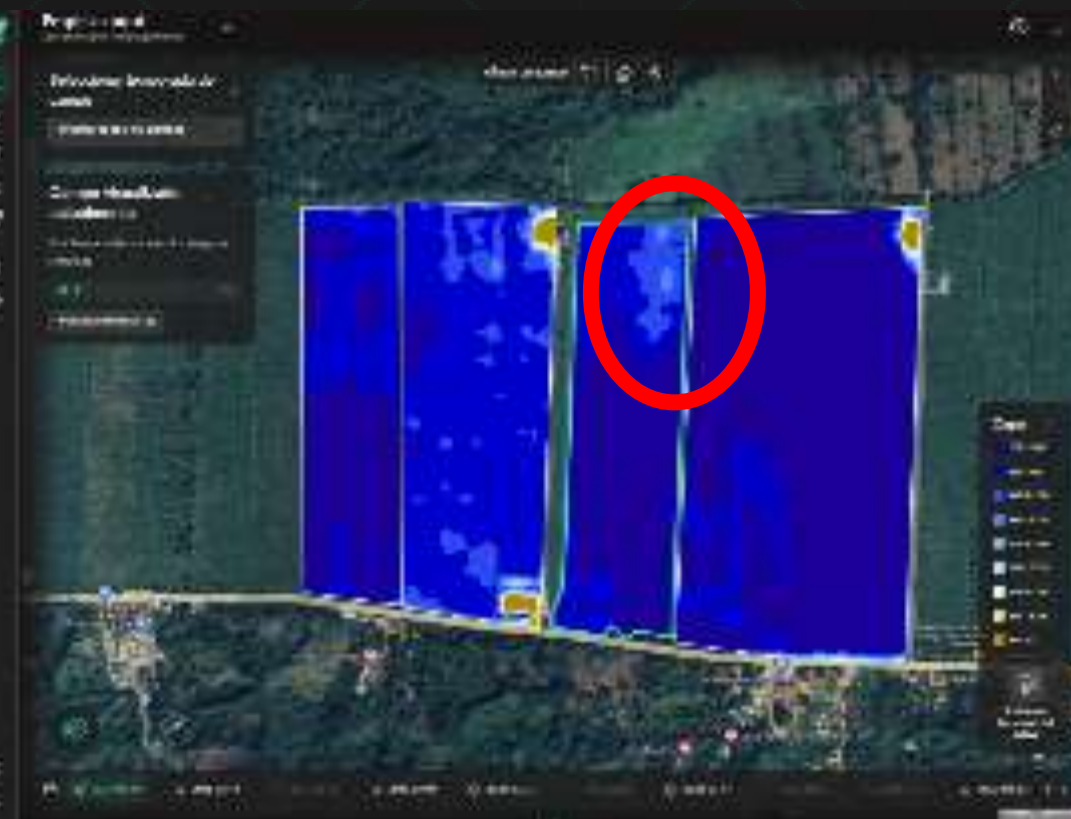
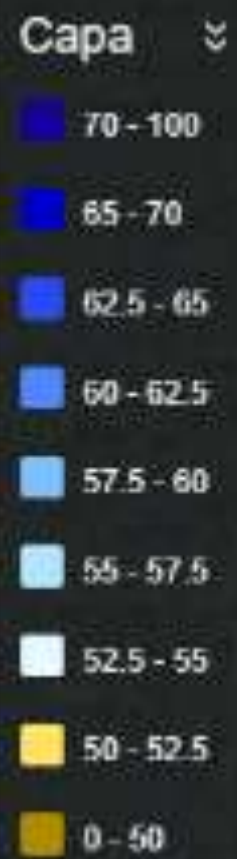
2023-05-23

2023-06-27

Farmer's
discovery point

Santa Marta,
Colombia

200ha+ Banana
farm



1. Infection Begins:
Small areas show early symptoms.



2. Disease Spreads:
The infection expands rapidly.



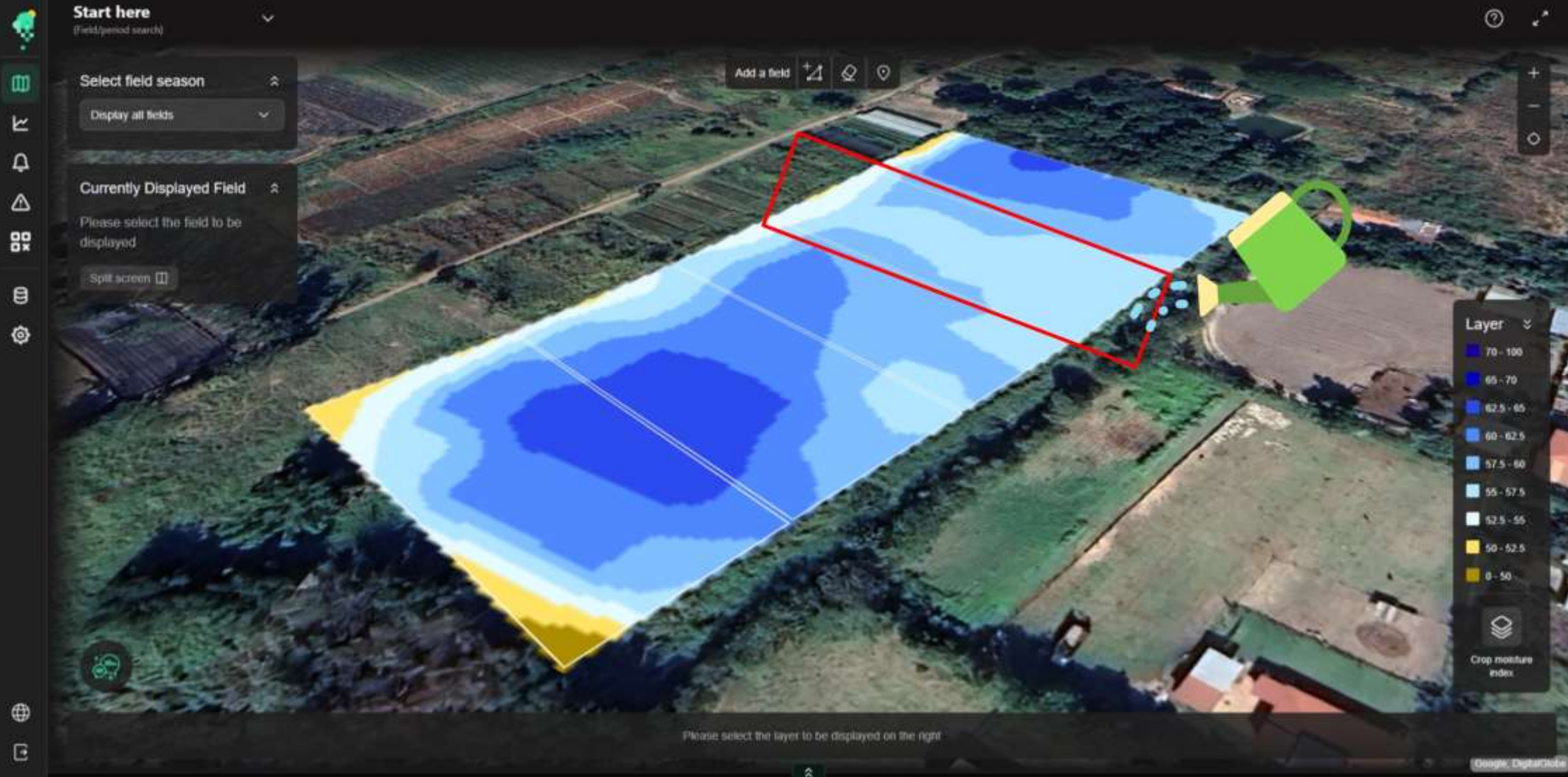
3. Plantation Lost:
All infected trees had to be cut down.



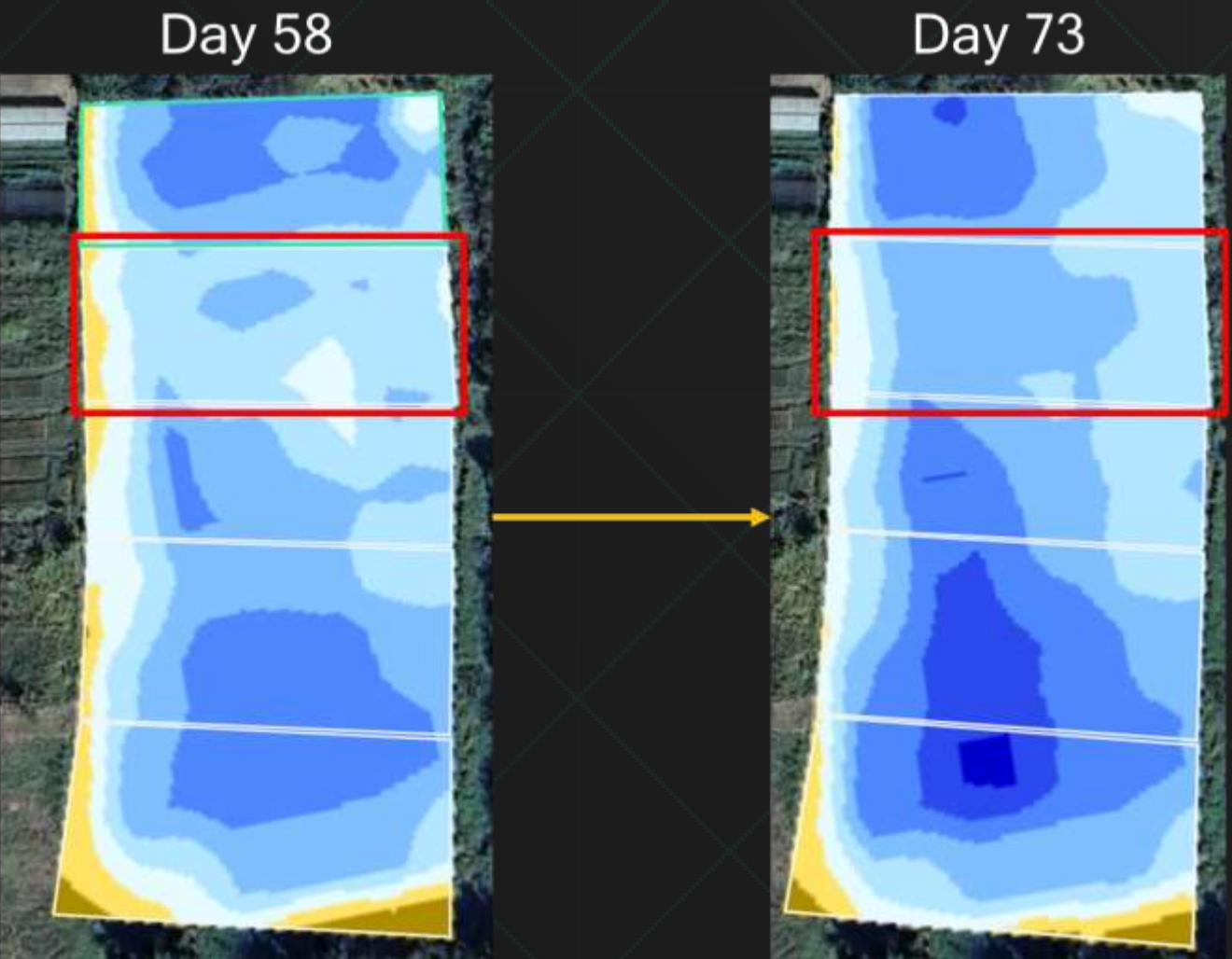
Losses could be reduced with FarmiSpace alerts **3 months earlier.**



Case: Precision Irrigation & Pesticide Application in Guatemala

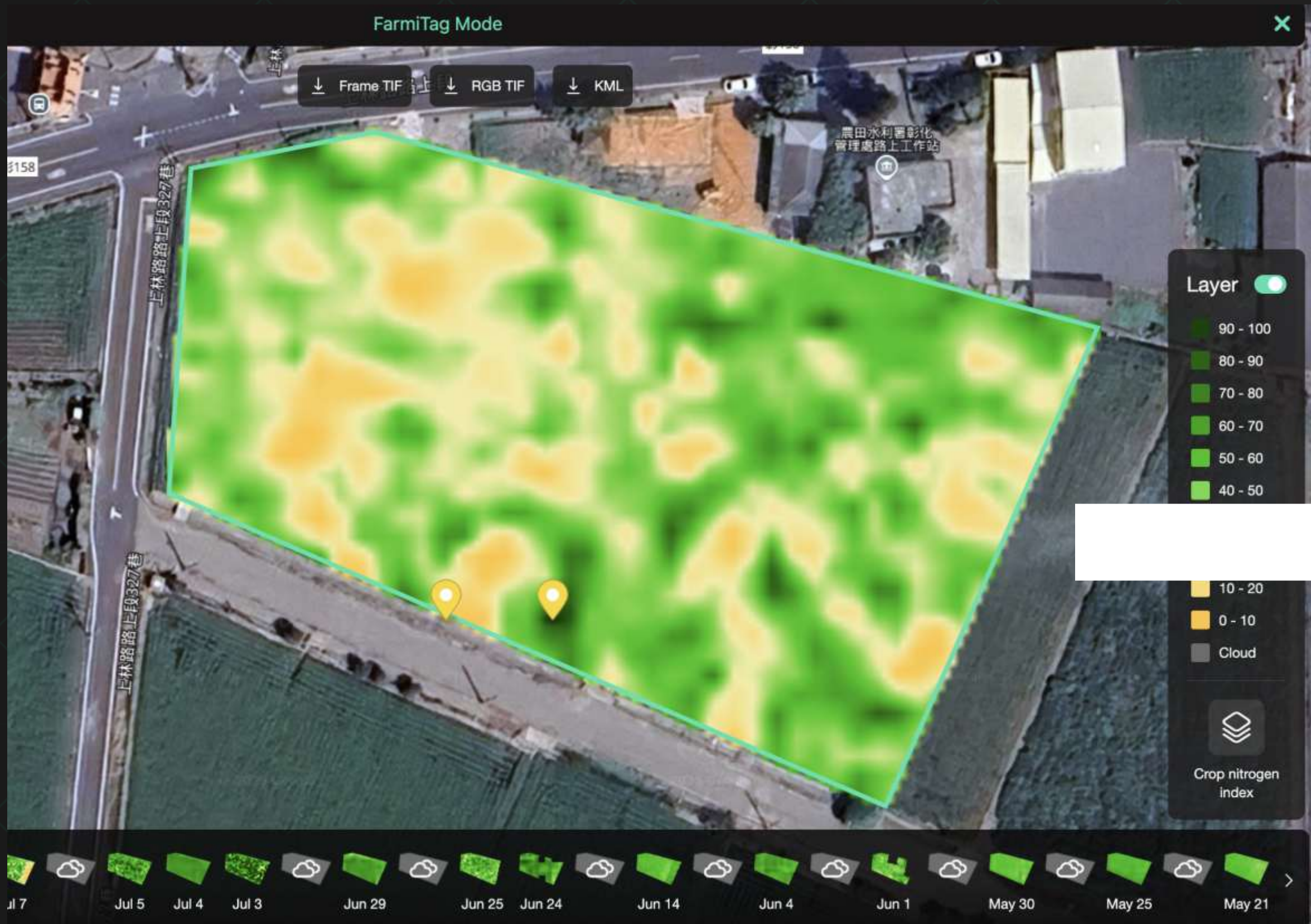


80%
Water Savings



Growth Rate Increased by
2.33x

FarmiTag: Outline Areas in different levels for you



TIF, KML export format available



Revolutionize Traditional Land Use Surveys

Traditional land surveys depend on *manpower-intensive field inspections*. Even with satellite imagery, crop identification at scale remains limited.

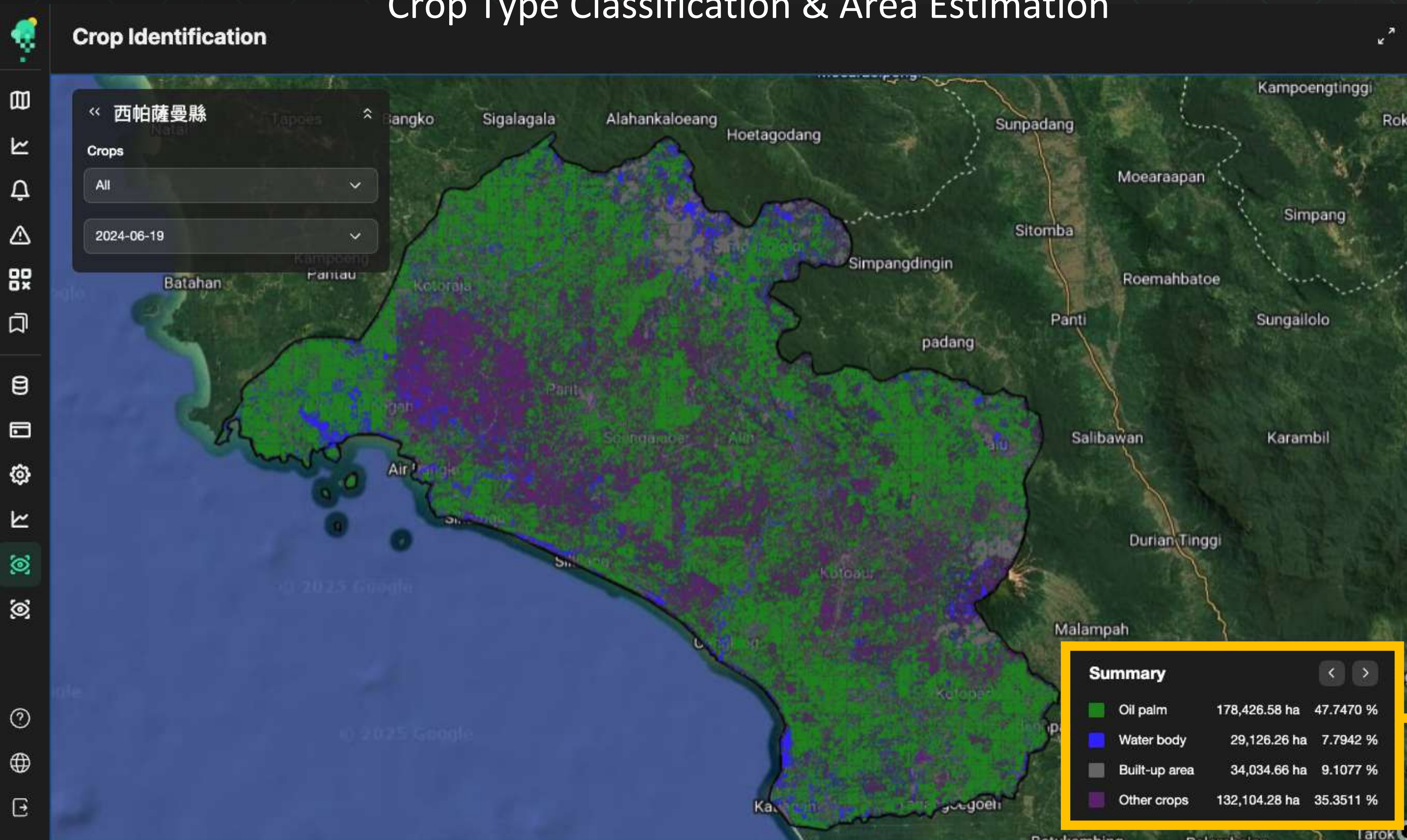


This is where **spectral intelligence** becomes the game changer.



FarmiScan: AI-Based Crop Identification

Crop Type Classification & Area Estimation



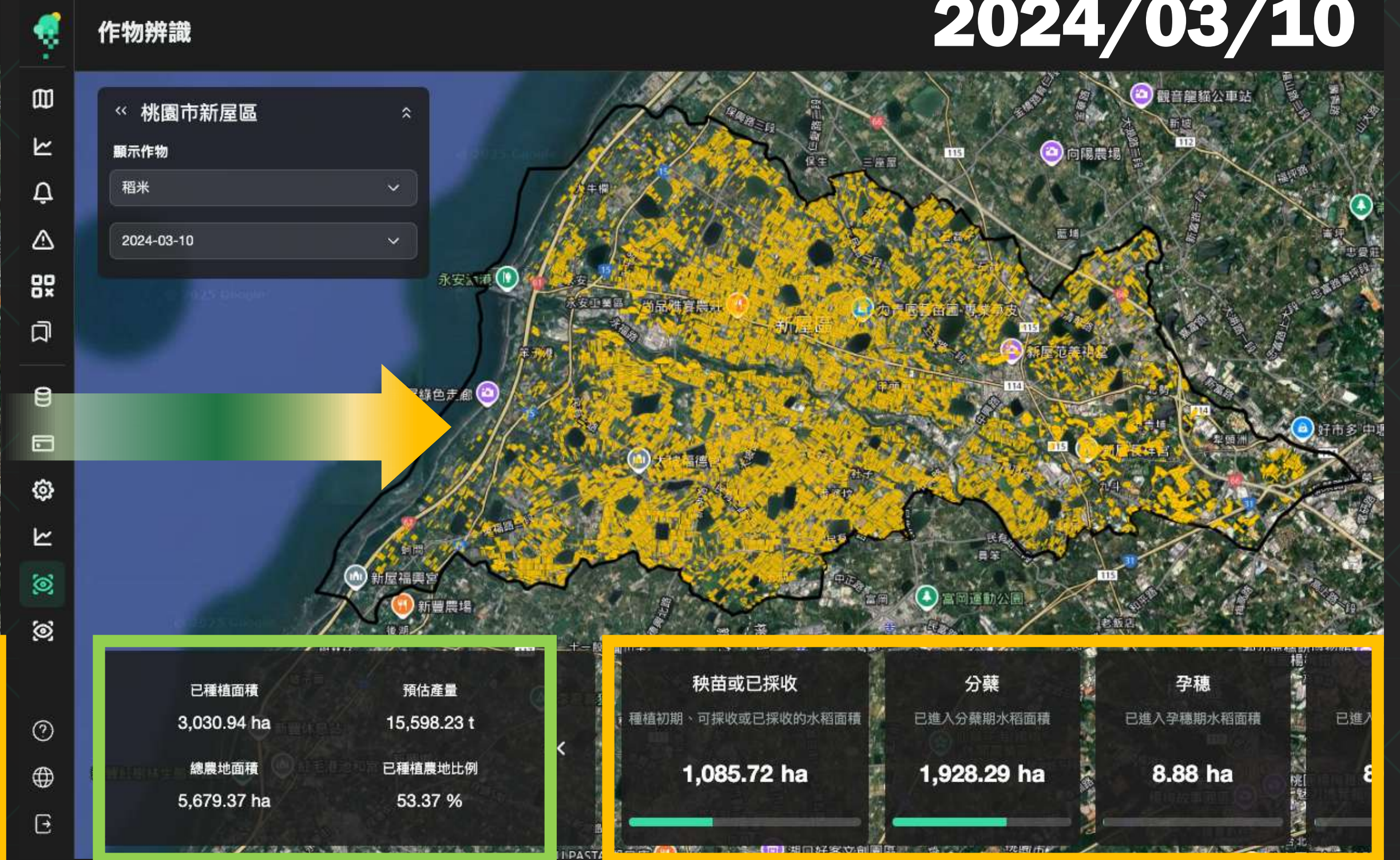
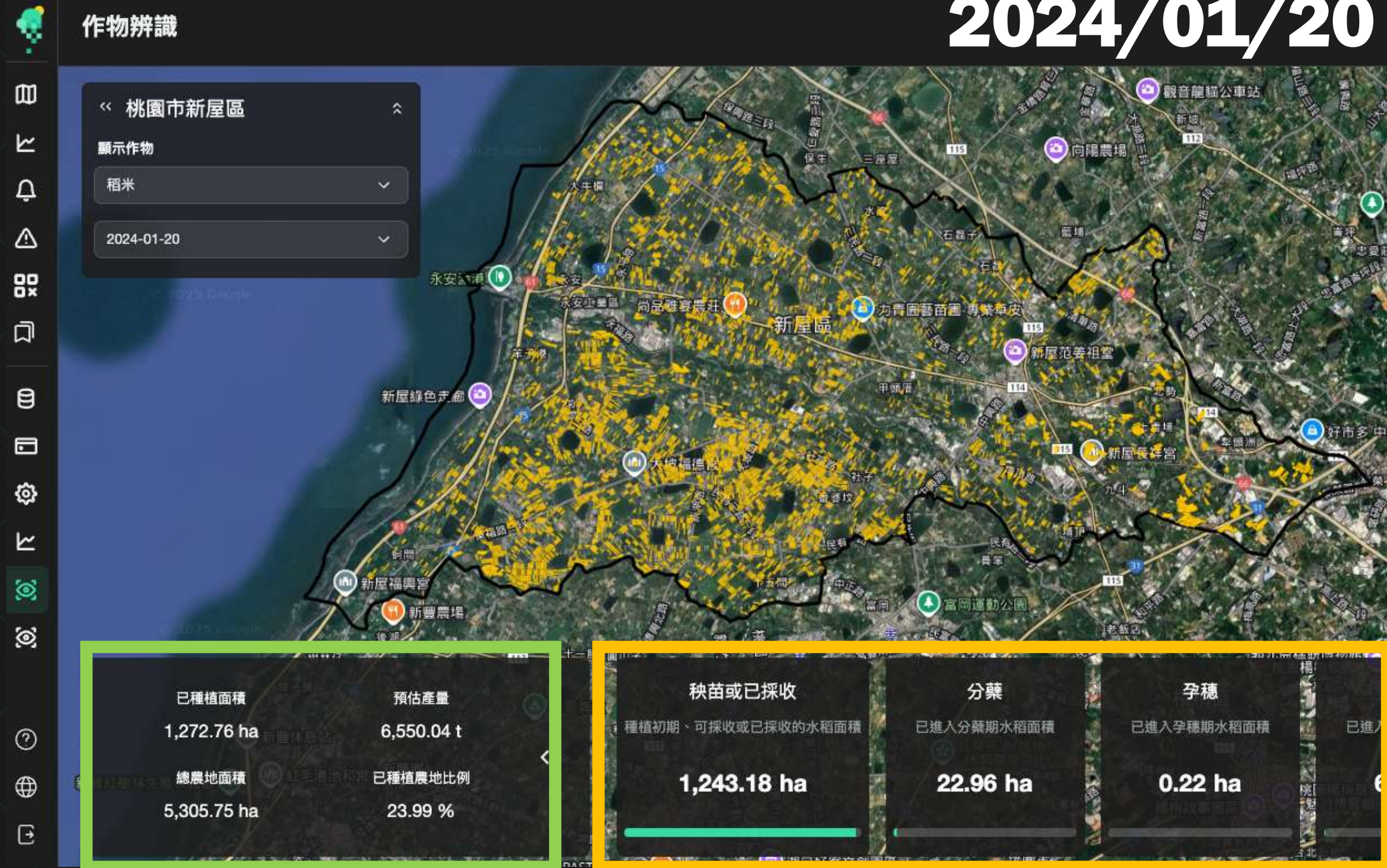
Up to
90% Time Savings
Compared to traditional
manual field surveys

Powered by **SPRI**
Quickly generates
crop type distribution
and area statistics
for large-scale regions

FarmiScan : AI Crop Identification- Growth Stages

2024/01/20

2024/03/10



Yield Analysis

Growth Stage Analysis

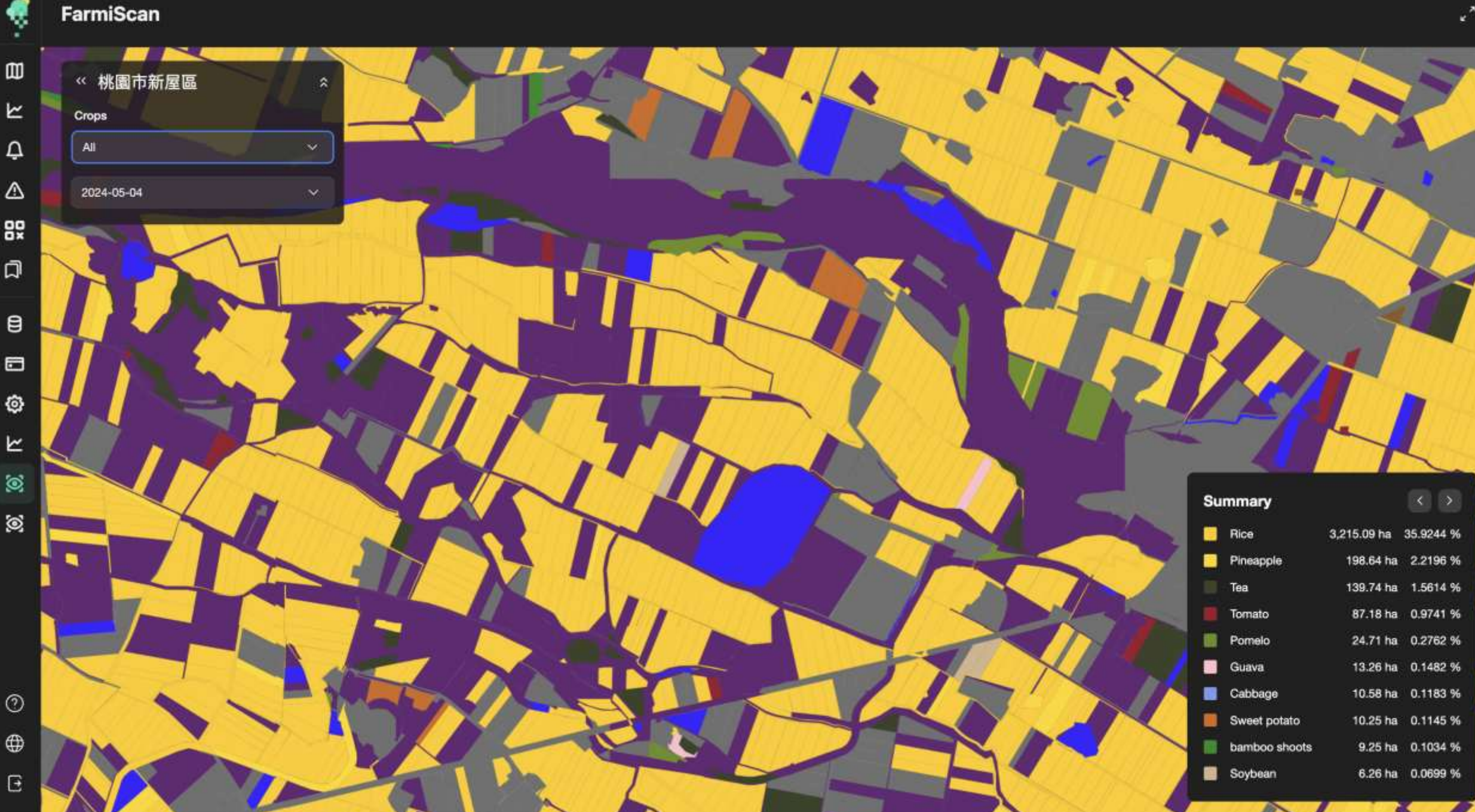
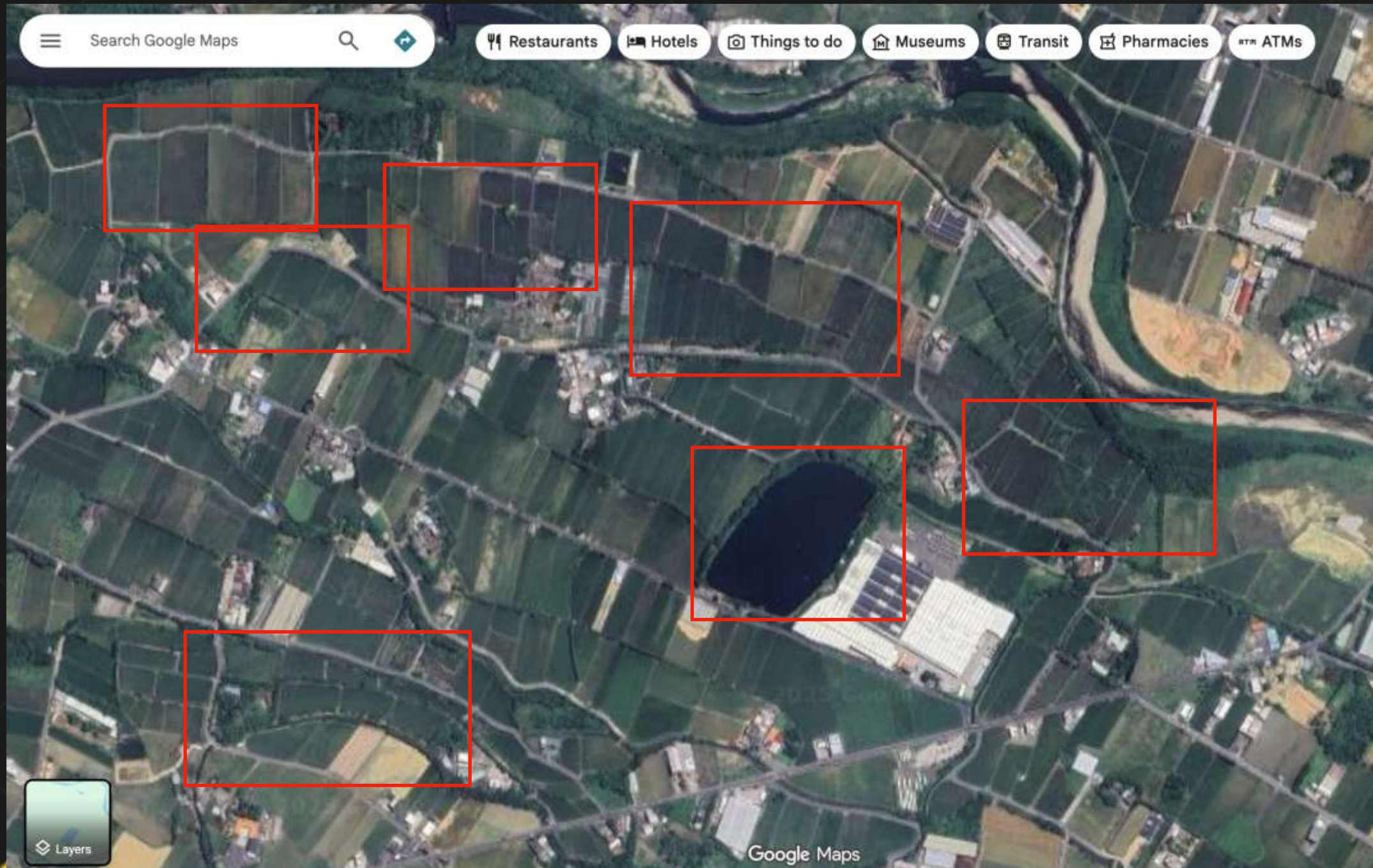
Compare crop conditions over time to enable smarter **resource allocation**, accurate **yield assessment**, and stronger **food security decisions**.



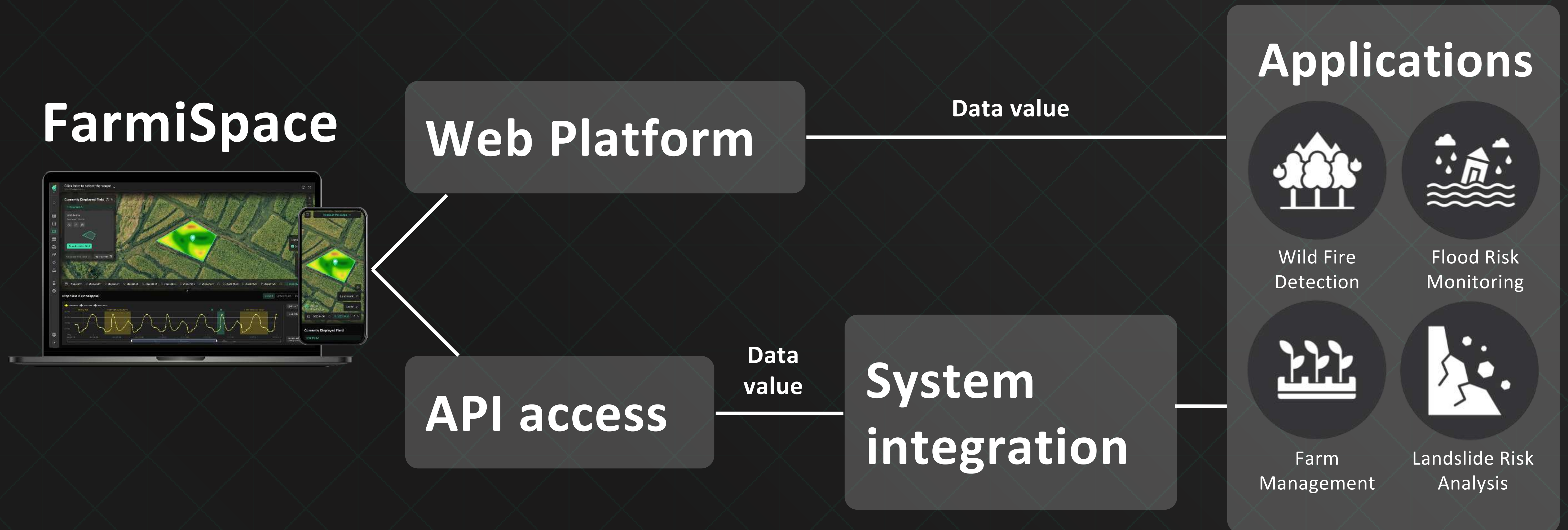
Higher Accuracy than Image Recognition

existing
Image Recognition
50-60% accuracy

Spectral Pattern
Recognition Intelligence
89-99% accuracy



Workflow of leveraging FarmiSpace's Data



Global Impact

Monitoring

2.6B

Hectares

→ 20% of the World

USERS

32+

COUNTRIES



Proven Success Across the Globe



Champion of the Singapore Agri-Food Tech Incubation Programme

-2024.11



Won global Top 5 in Entrepreneurship World Cup out of 10,000+ participants at Biban 2025

-2025.11





**Empowering the world's agriculture with AI
isn't just our vision—it's DATAYOO's promise.**



FarmiSpace

