



# The Benefits of 1m Resolution Sentinel-2 Imagery and Field Boundaries for Paying Agencies

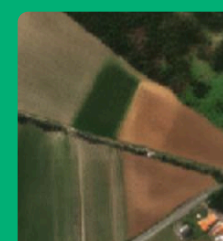
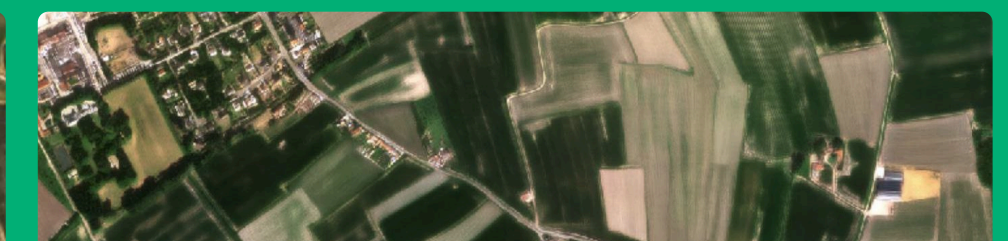
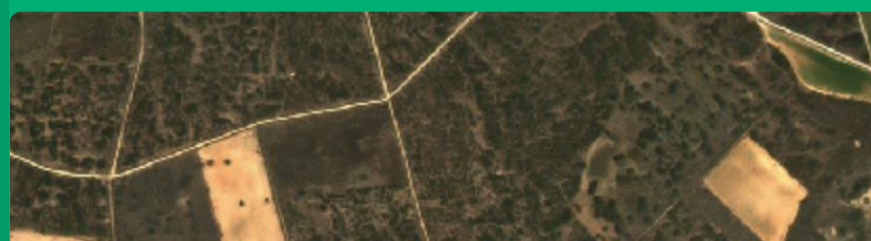
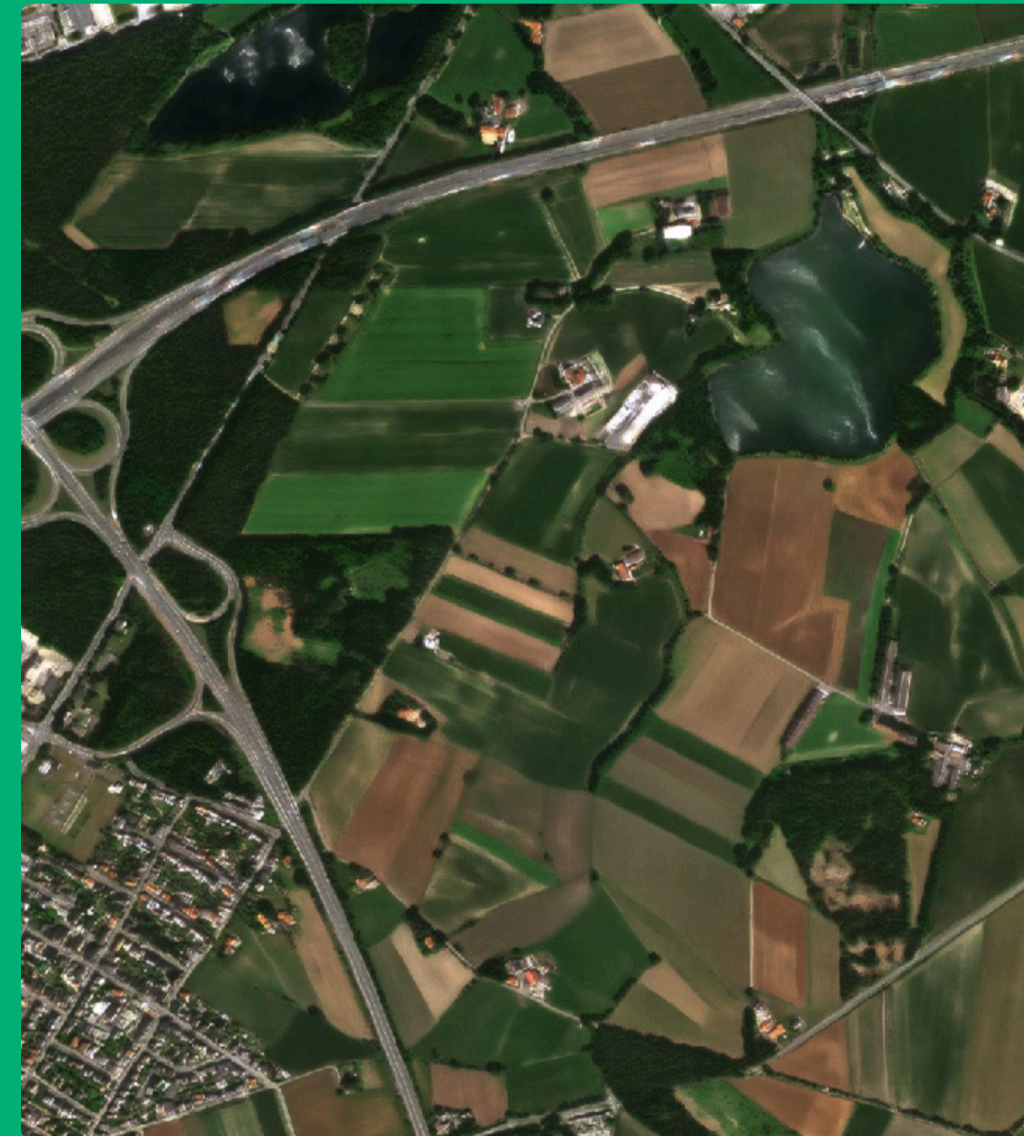


## OUR MISSION

Building agricultural intelligence tools to help farming communities boost crop yields & optimise production

## PREPARED BY

Nils Helset  
CEO & Co-founder





# Introduction from DigiFarm



**Nils Helset,**  
Co-founder & CEO  
nils@digifarm.io

LinkedIn 



15th generation and farmer from Hamar, Norway, started DigiFarm in 2019 for solving key problem in lack of adoption and automation in agriculture, extensive experience with NLR/NMBU and NIBIO.



# Company Organization

## Core Team



**Nils Helset** 🇳🇴  
Co-founder & CEO



**Konstantin Varik** 🇪🇸  
Co-founder & CTO



**Santiago Nullo** 🇺🇸  
Lead GIS Engineer



**Ben Rizo** 🇮🇩  
Partnerships Lead



**Leonardo Ibarra** 🇧🇷  
Product Manager



**Ubavka Angjelkovska** 🇲🇰  
Data Processing Lead



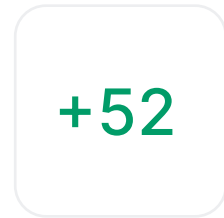
**Alexei Melnitchouck** 🇨🇦  
Digital Farming & Precision Ag Evangelist



**Girish Pallagatti** 🇮🇳  
Infrastructure Lead



**Stefan Naskovski** 🇲🇰  
Head of Field Delineation



**+52**  
Skilled team members

## External Advisory Board



**Caspar Olenhusen** 🇩🇪  
AgriFoodTech Specialist



**Jørgen Ole Haslestad** 🇳🇴  
Former CEO of Yara



**Sverre Bisgaard** 🇳🇴  
Former Founder & CEO of Kongsberg Norspace



**Åsmund Langeland** 🇳🇴  
Head of Precision Ag-tech, Norwegian Ag Advisory



**Linn Dybdahl** 🇳🇴  
Project Leader, NCE Heidner Bioeconomy Cluster



**Dennis Diaconescu** 🇷🇴  
B2B Start-up & Product Leader

**May, 2020**  
3 Team Members

**May, 2021**  
6 Team Members

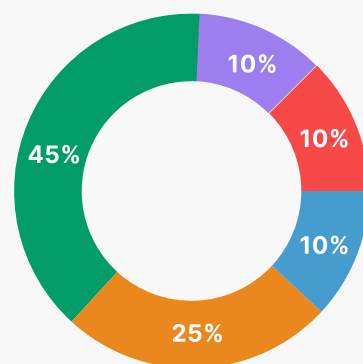
**May, 2022**  
25 Team Members

**May, 2023**  
58 Team Members

**+3**

**+19**

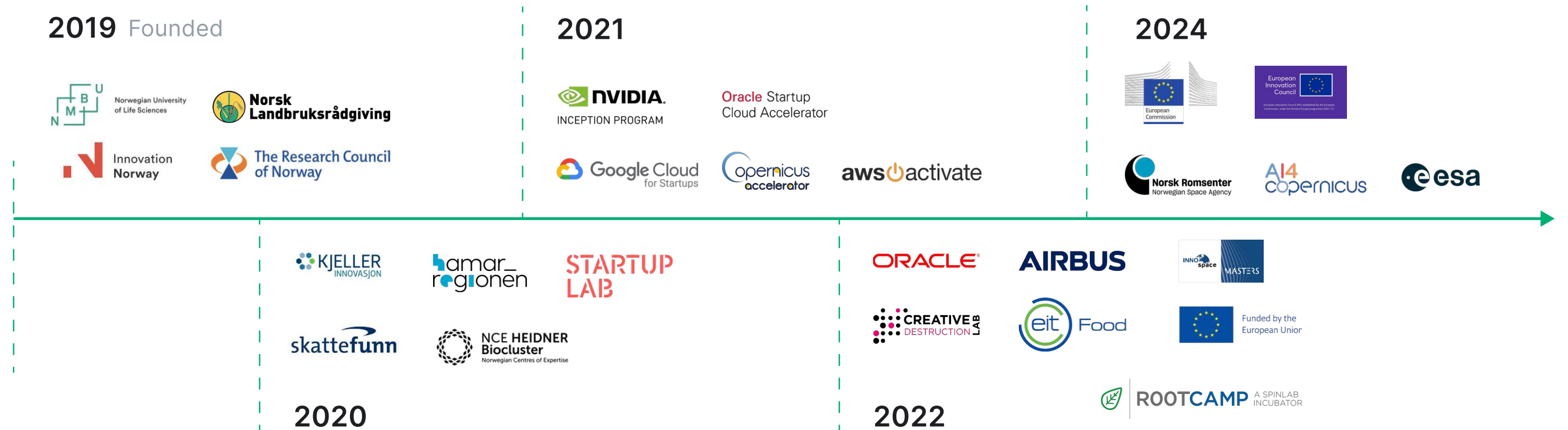
**+33**



- Data Science & Software Development
- Sales
- Strategy
- Marketing, Design & PR
- Research & Development



# Company History



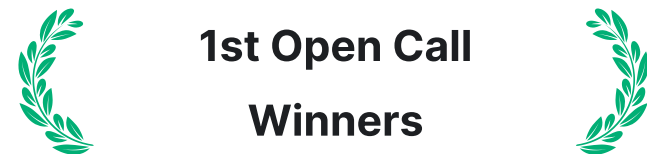


# Key Milestone & Achievements



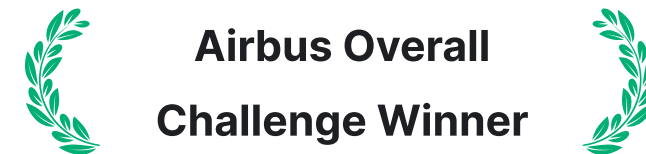
**Top 20 European Space Startup**

DigiFarm nominated as top 20 European space-startup by European Space Agency in 2023



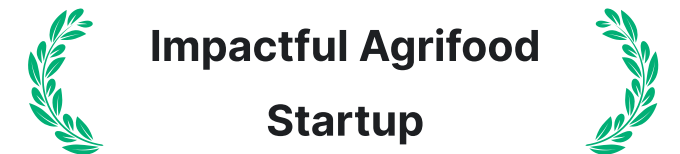
**1st Open Call Winners**

Winner of the 1st & 2nd Open Call of the the AI4Copernicus challenge in 2023



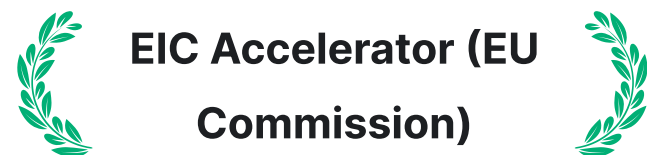
**Airbus Overall Challenge Winner**

Overall winner from 7 years of INNOSpace Masters and Airbus Challenge by DLR in 2023



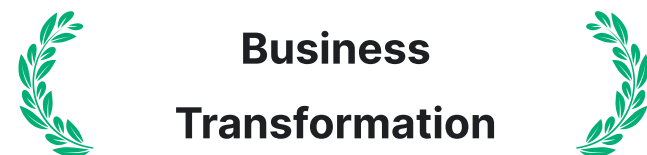
**Impactful Agrifood Startup**

Thrilled to be a part of the EIT FAN 2021 Program as a Impactful Agrifood Startup.



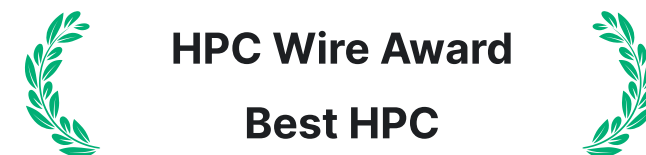
**EIC Accelerator (EU Commission)**

Awarded Europe's deep-tech funding program from EIC Accelerator among over 3,000+ applicants and 3% acceptance rate, funding by EIB and EU



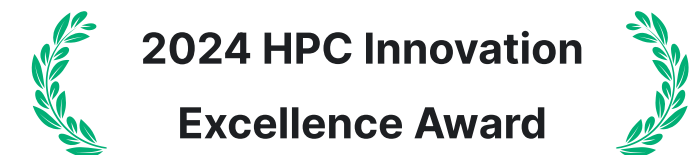
**Business Transformation**

The Award for organizations who have created value by leveraging OCI in 2022



**HPC Wire Award Best HPC**

Won the HPC Wire Award in 2024 for Best HPC Collaboration Academy/Government/ Industry and also HPC Innovation Excellence Award



**2024 HPC Innovation Excellence Award**

For outstanding achievements that were supported by the use of high performance computing



# Clients & Partners





# Partners in the Govt. sector



Greece



Latvia



Estonia



Lithuania



Greece



Austria



Sweden

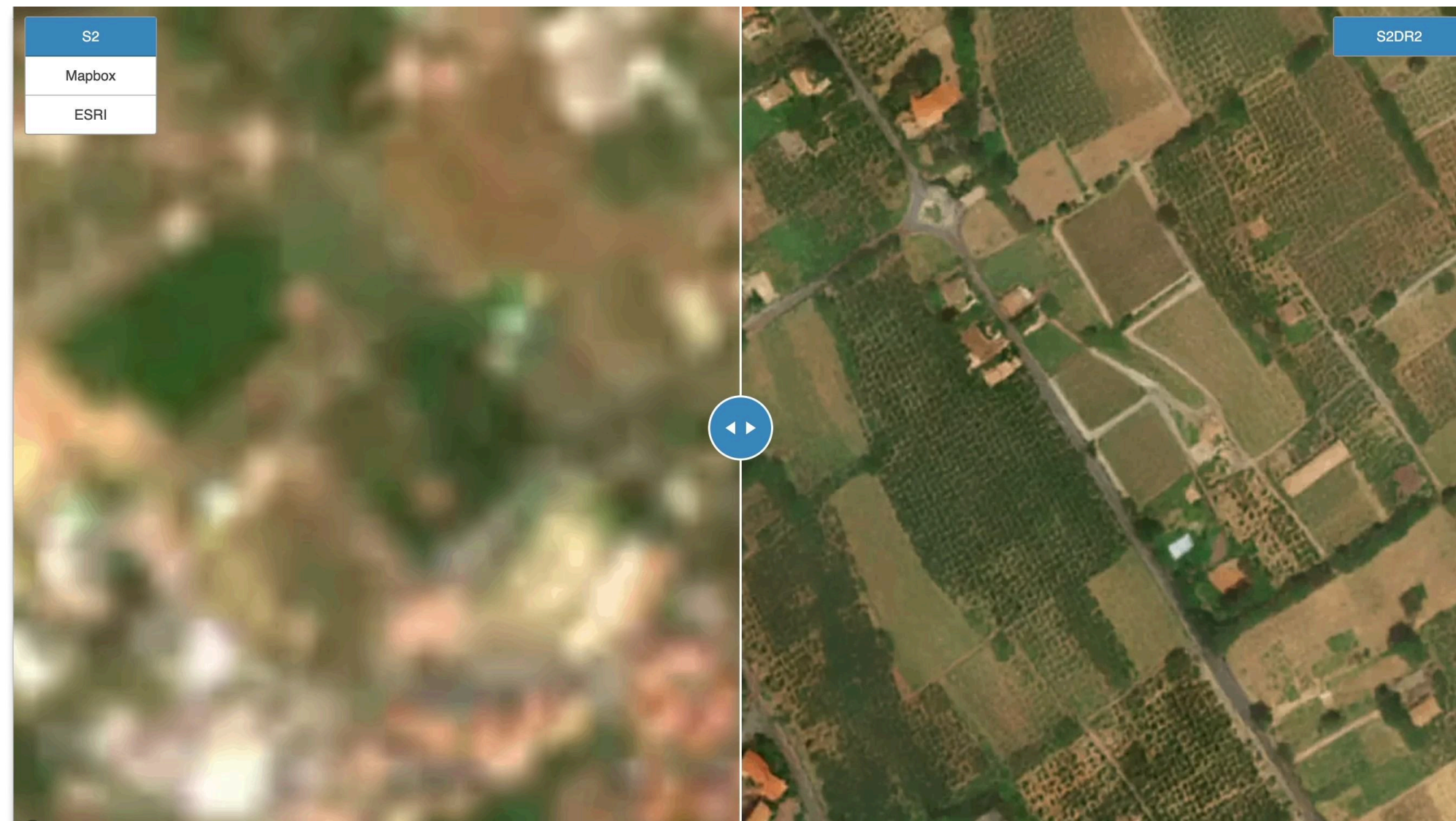


Macedonia



PRODUCT

# Deep Resolution Imagery (1m) | Overview



✓ 10x Deep Resolution

✓ Worldwide

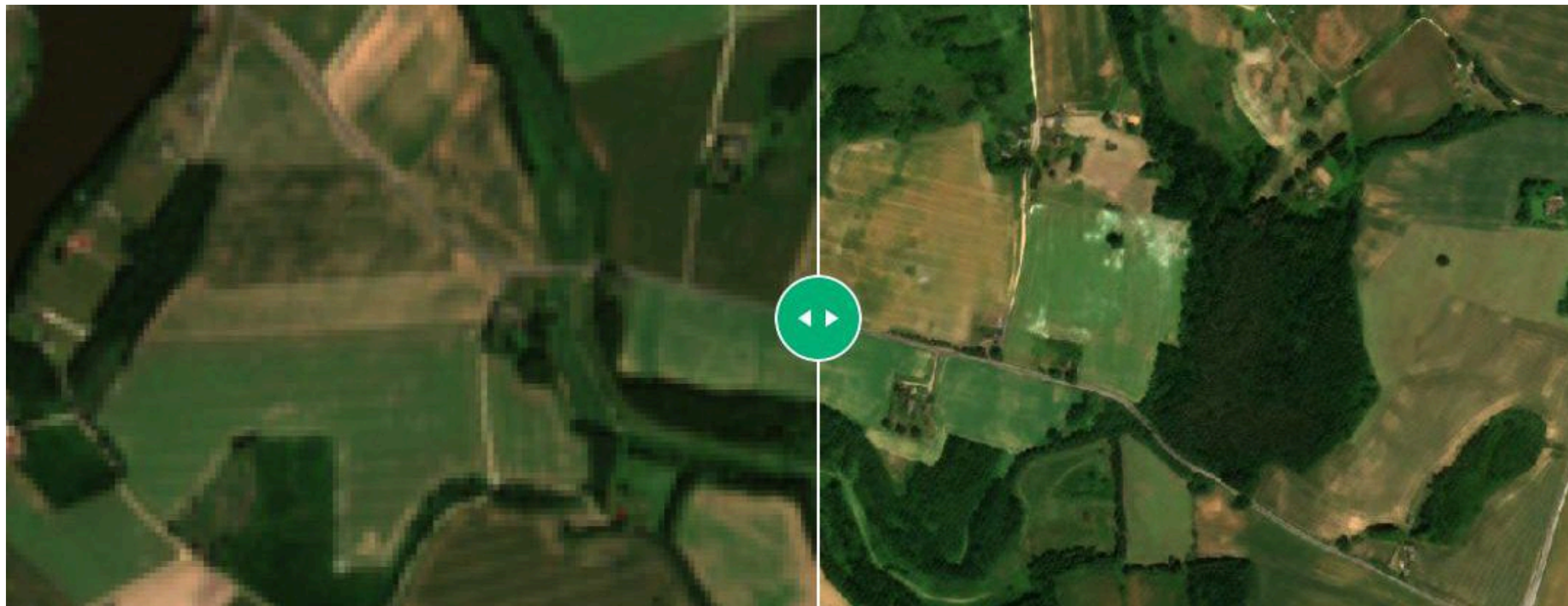
✓ API and Dashboard

✓ Any Size Images

✓ On demand



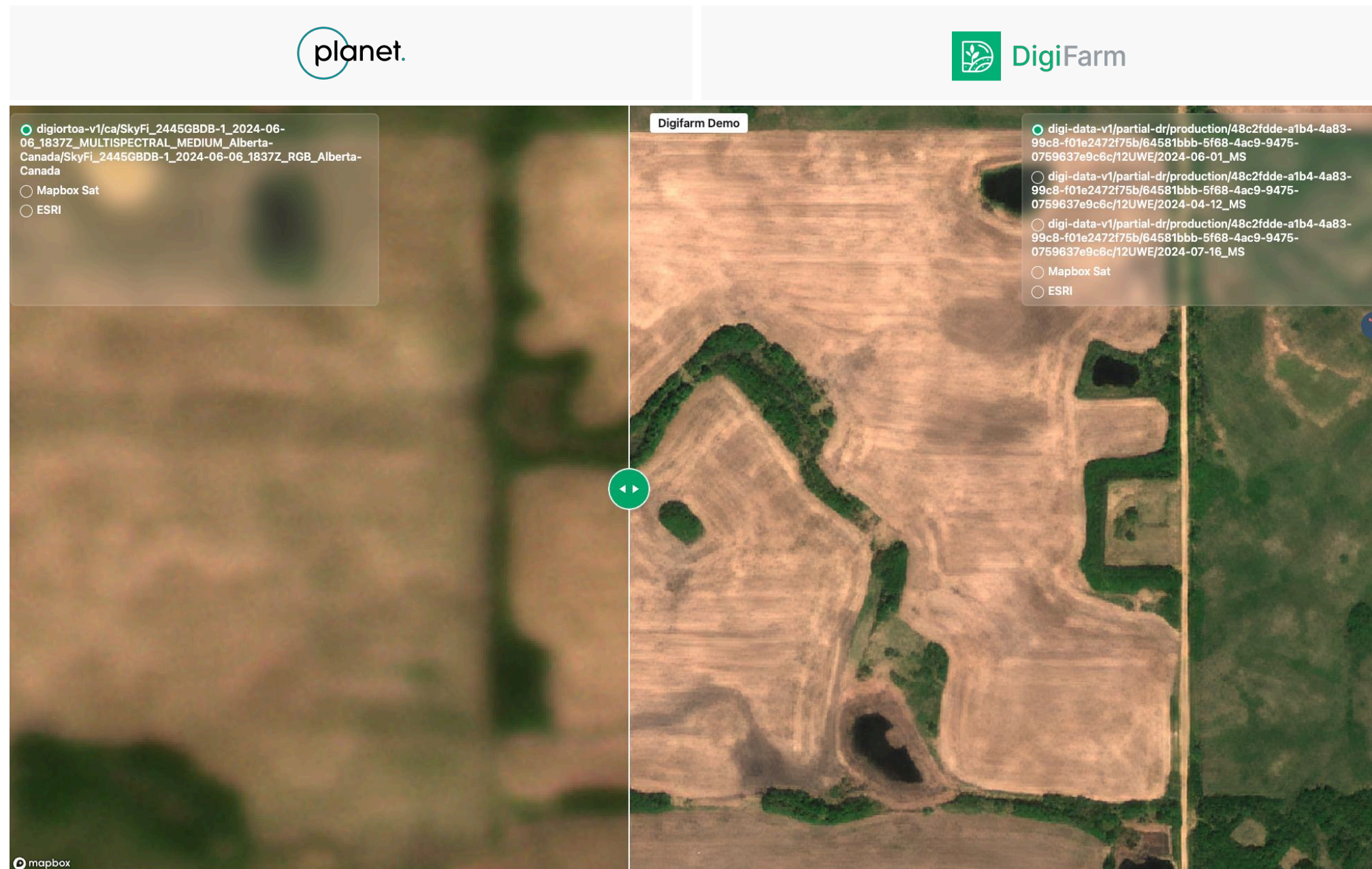
# Sentinel-2 at 10m vs DigiFarm's Deep-Resolution S2 at 1m in Lithuania



*Screenshot on the left above shows PlanetScope data at 3.7m resolution (8 bands) vs on the right DigiFarm's Deep-Resolution Sentinel-2 at 1 meter per pixel resolution (12 bands) in Alberta, Canada, which was part of the reason we won the AFSC tender over Planet.*



# Is it just as good as commercial grade SatEO data?

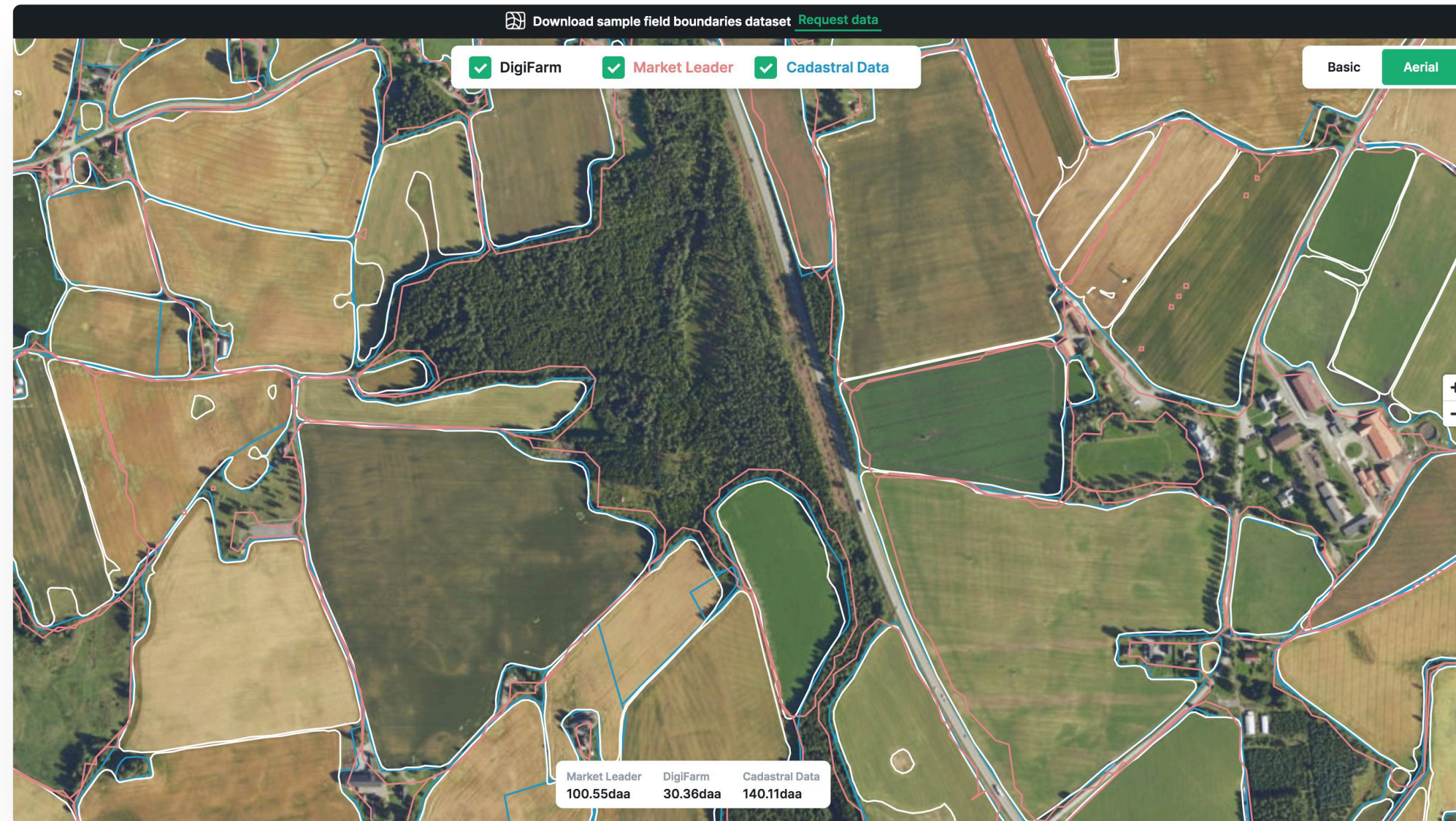


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PRODUCT

# Automatic Field Delineation Model



✓ 4M+ hectares of training data

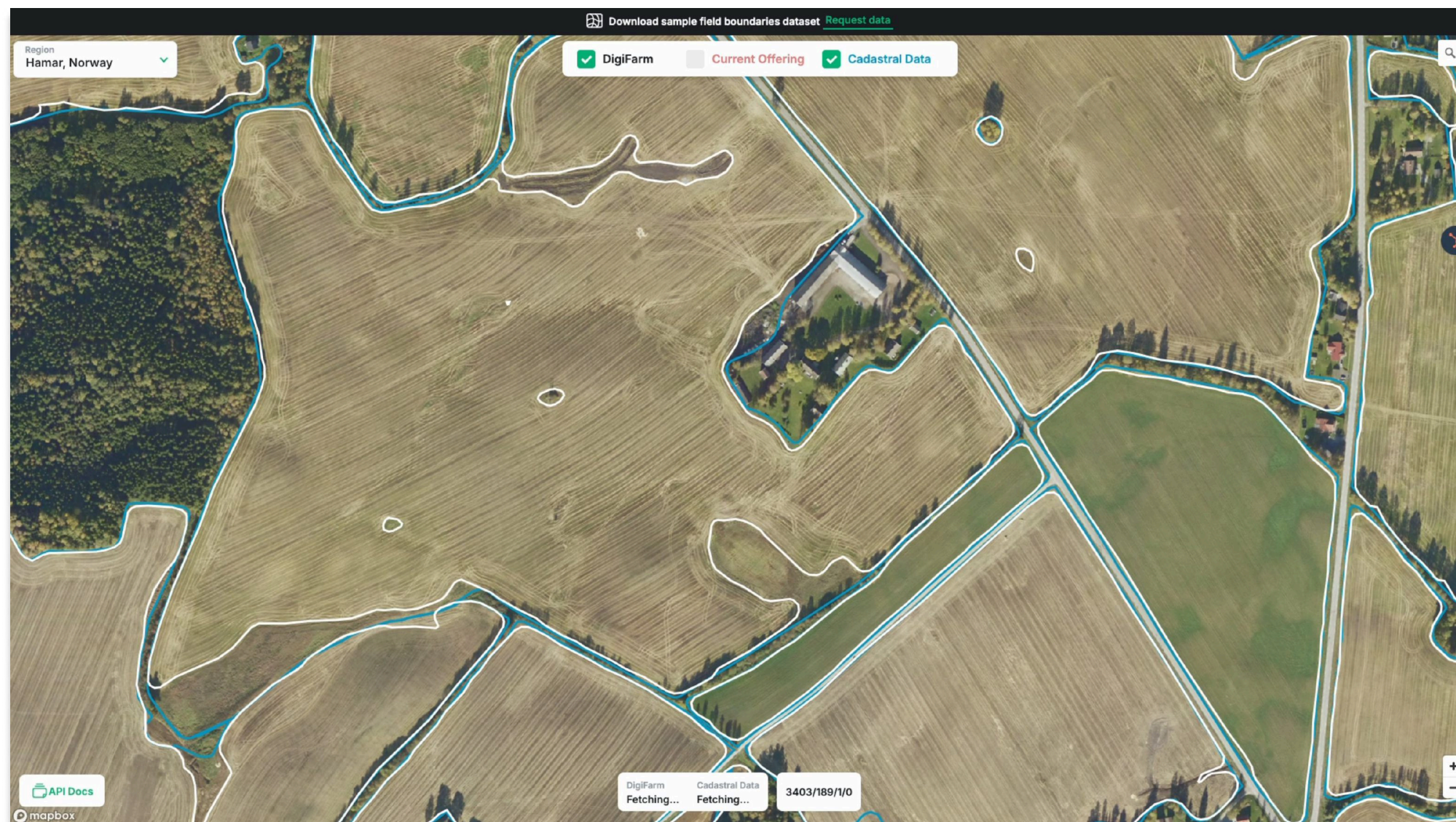
✓ 8+ Years Of Data

✓ 0.94+ IoU score

✓ 12-15% higher accuracy

# DigiFarm Automatically Delineated Field Boundaries


Farmen Gard | 0403, 189/1



# Example LPIS vs DigiFarm's delineated parcels



**Purple boundaries** = LPIS data derived from subsidy applications

 **DigiFarm** White boundaries = DigiFarm at 1m (super resolution)



## All precision agriculture starts with field boundaries....

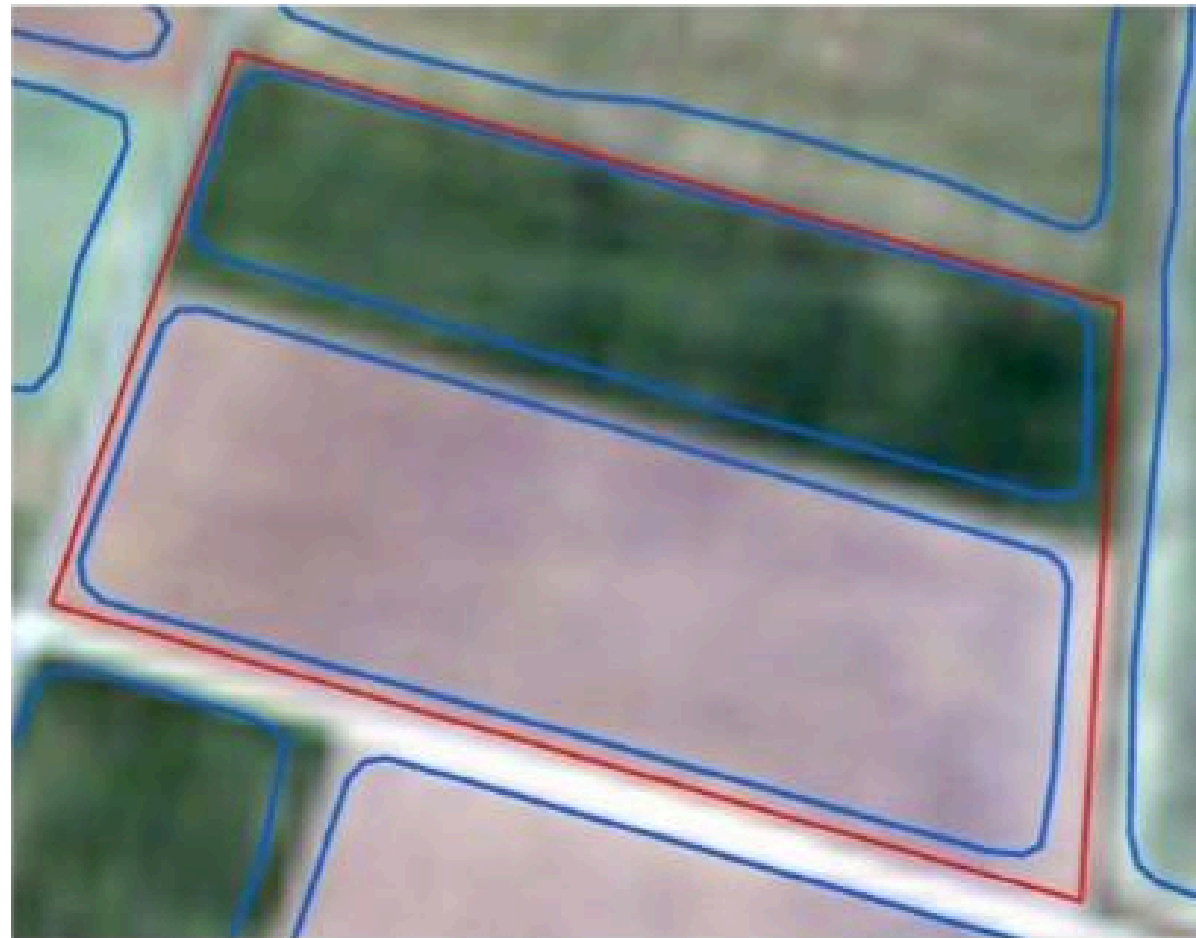


**“...On average, the robot’s GPS track deviated only 30-40 cm from the actual physical edge of the field – a testament to the accuracy and reliability of DigiFarm’s boundary generation technology derived from Satellite imagery data and AI...”**



# Examples on added benefit of in-season delineation

\*click to open



Different crop fields declared as one field

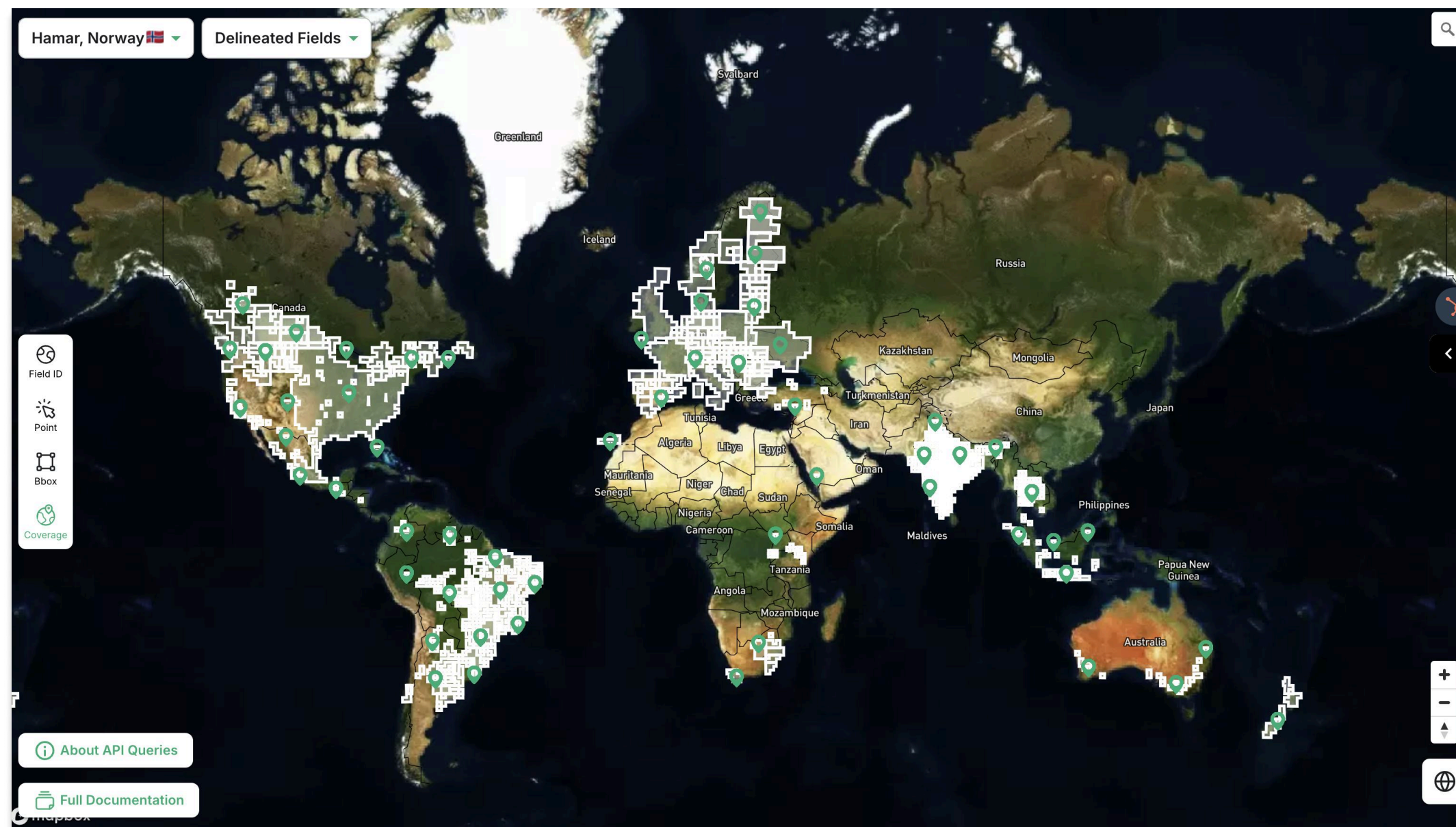


Homogenous field declared with different crop types



# Automatically delineated field boundaries

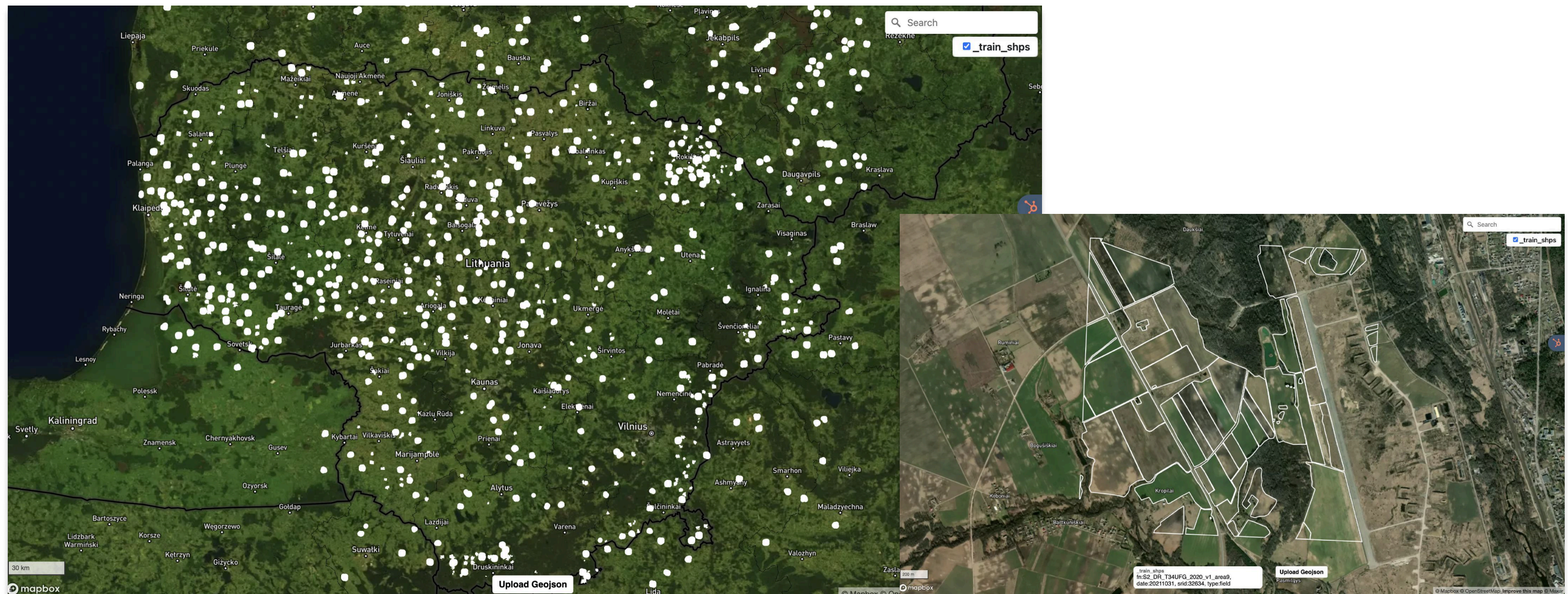
Current coverage: **750+ mill. ha's**





# Importance of training data for model training

Training data is crucial, we have a team of 28 GIS-engineers who have created over **5.5 million** manually drawn hectares over the last **4 years in 30 countries, incl. 187,551 hectares in Lithuania.**



# NMA | Field Boundaries Examples



# NMA | Field Boundaries Examples

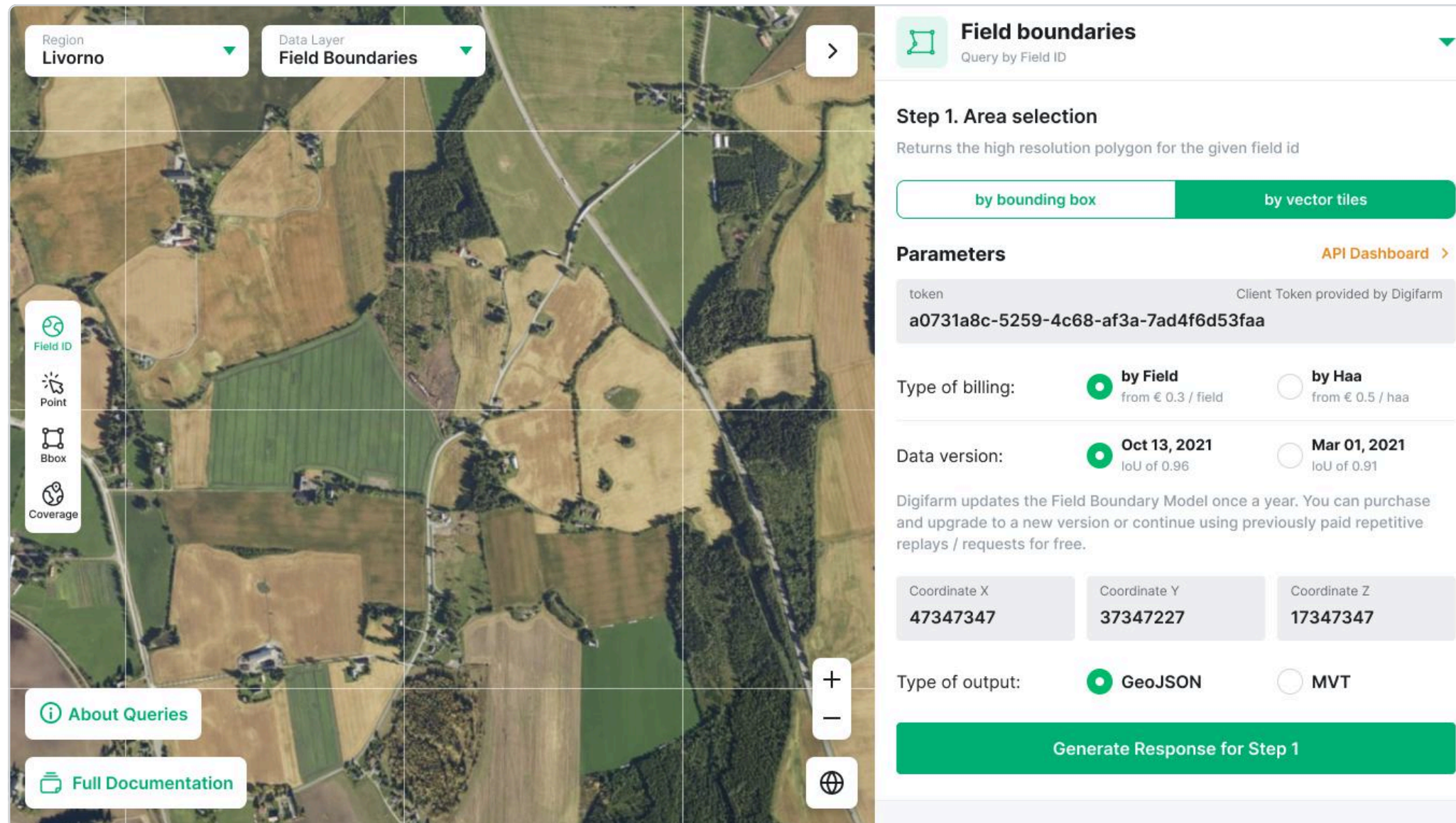


# NMA | Field Boundaries Examples



# Simple & Powerful API Delivery

\*click to open



Region: Livorno | Data Layer: Field Boundaries

### Field boundaries

Query by Field ID

**Step 1. Area selection**  
Returns the high resolution polygon for the given field id

by bounding box | **by vector tiles**

**Parameters** [API Dashboard >](#)

token: Client Token provided by DigiFarm  
**a0731a8c-5259-4c68-af3a-7ad4f6d53faa**

Type of billing:  **by Field** (from € 0.3 / field) |  **by Haa** (from € 0.5 / haa)

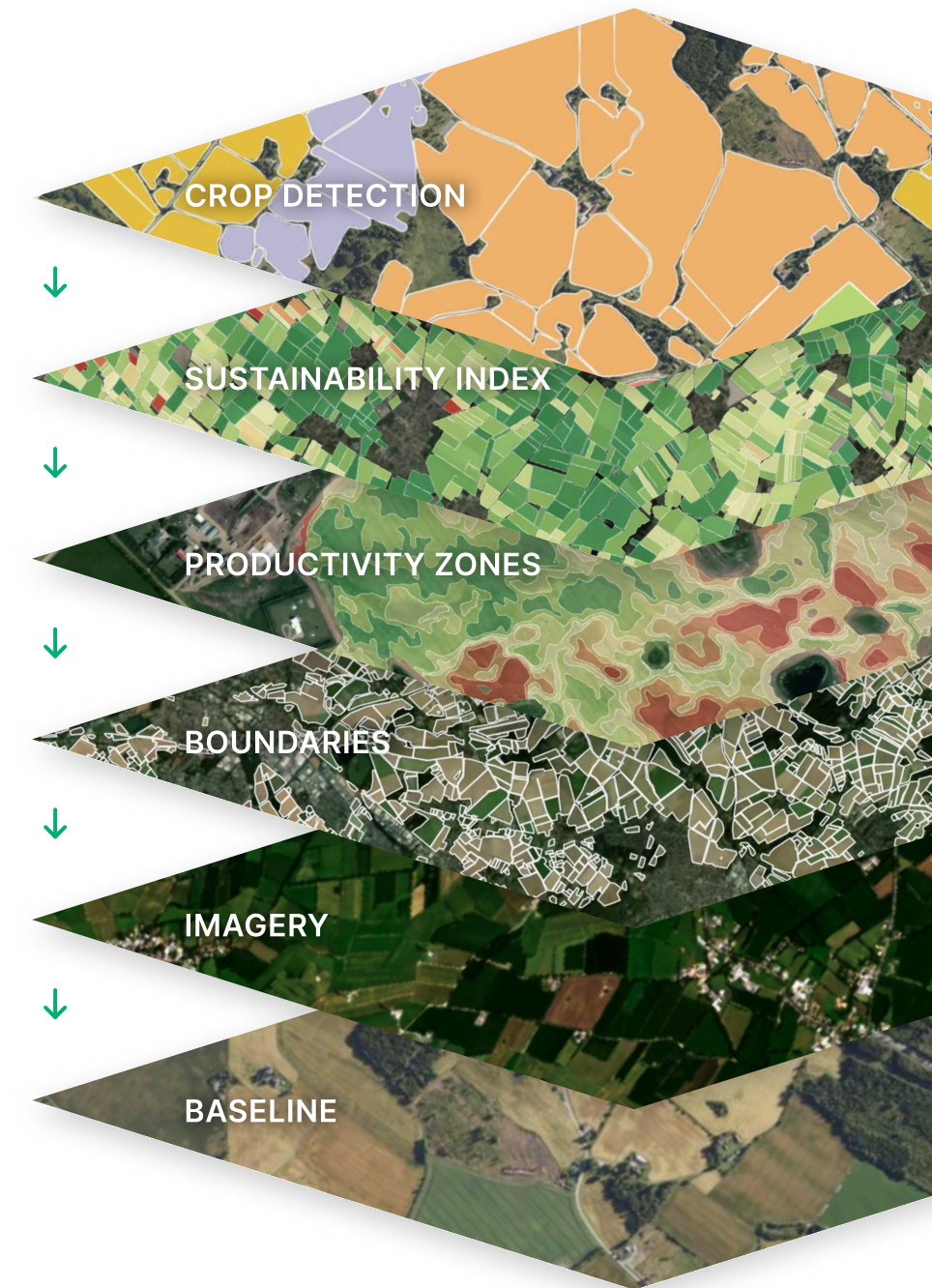
Data version:  **Oct 13, 2021** (IoU of 0.96) |  **Mar 01, 2021** (IoU of 0.91)

Digifarm updates the Field Boundary Model once a year. You can purchase and upgrade to a new version or continue using previously paid repetitive replays / requests for free.

Coordinate X: **47347347** | Coordinate Y: **37347227** | Coordinate Z: **17347347**

Type of output:  **GeoJSON** |  **MVT**

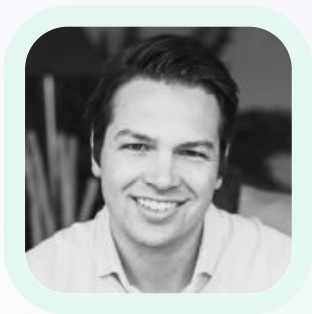
**Generate Response for Step 1**





## Open discussion and Q&A

Thank you for the opportunity to present and participate in project



**Nils Helset,**  
Co-founder & CEO  
nils@digifarm.io  
LinkedIn [👉](#)



26.09.2025



We build agricultural intelligence tools to help farming communities boost crop yields & optimise production

PREPARED BY

Nils Helset  
CO-FOUNDER & CEO

Detecting the world's most accurate field boundaries.

## Get in touch with us

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## Partners who trust us

