GAMAYA
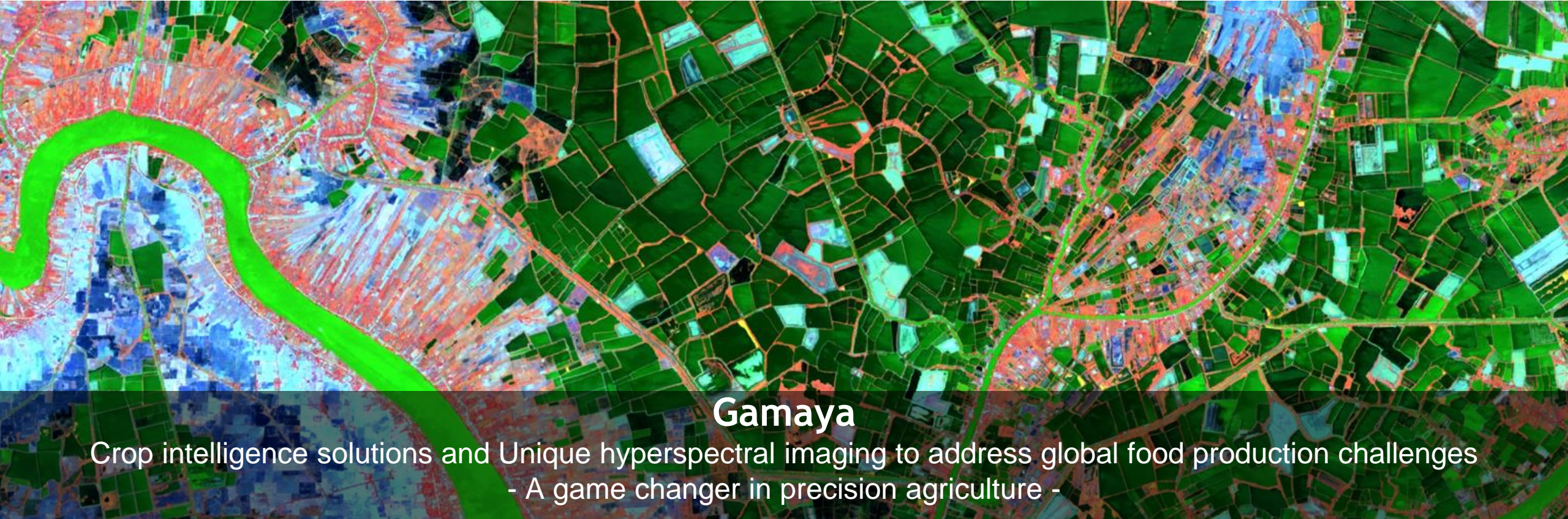## KNOW YOUR LAND

Gamaya
Crop intelligence solutions and Unique hyperspectral imaging to address global food production challenges
- A game changer in precision agriculture -

ELT

June 10th 2020

Gamaya overview

Gamaya is a leading agronomic intelligence platform company, providing its partners with a range of complete solutions based on remote sensing, artificial intelligence and unique hyperspectral capabilities
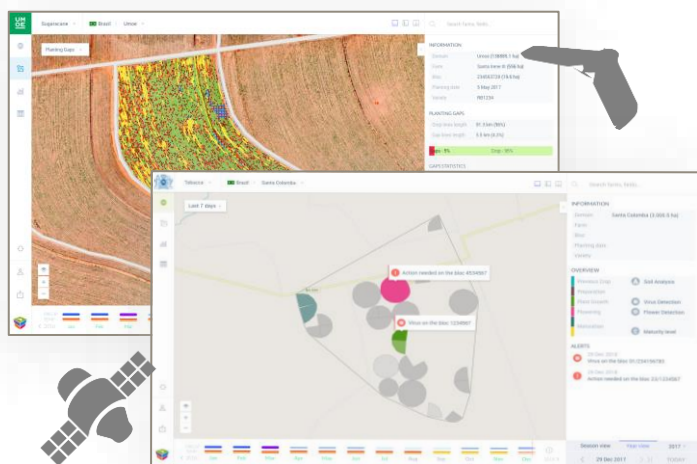

Gamaya offers an **advanced crop analytics service platform**

- Expertise in complete range of imaging technology (RGB to HSI; drone to satellite)
- Strong crop and environmental modelling capabilities
- Advanced data processing capabilities

Gamaya leverages **unique Hyperspectral (HSI) capabilities**

- Advanced innovation in camera technology / hardware (patented)
  - *World smallest HSI camera: a portion of the size with greatly improved quality*
  - *Specifically designed for Agricultural uses*
- Perfection of accurate calibration methodology (patented)
  - *Each camera is specifically calibrated in labs, proprietary process*
  - *Years of experience using hyperspectral in open fields*
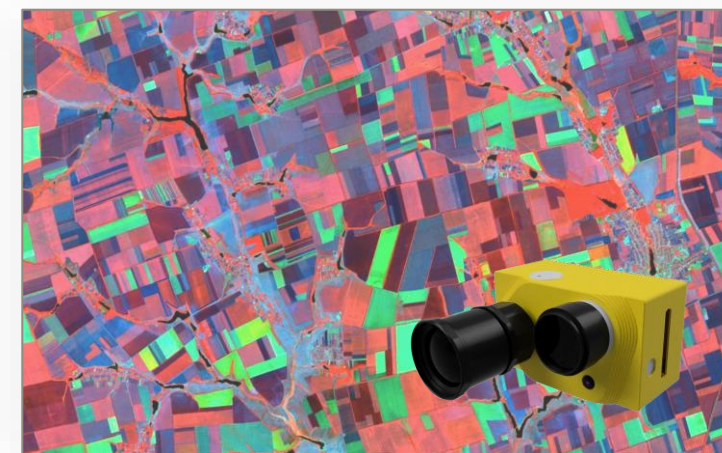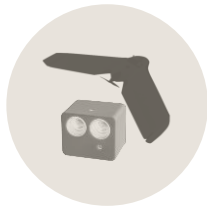
Gamaya - Environmental Intelligence Platform

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Gamaya offers compelling solutions for agriculture, enabled by hyperspectral imaging and artificial intelligence
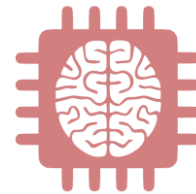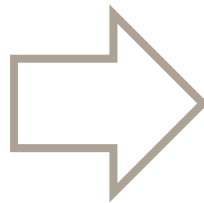
MULTI-SCALE SENSOR FUSION

DECISION SUPPORT AND AUTOMATION

Crop Model and Spectral Signature Database

Satellite Observations

Airborne Hyperspectral Imaging

Weather Stations

Gamaya AI Engine

Monitoring and Heuristics

Field Robotics

Agricultural Machinery

Gamaya - Value Creation Opportunities For Partners

Many High Potential Targets (Strategic Market Opportunities) Identified and Addressable

CROPS
- Sugarcane
- Tobacco
- Corn
- Soybean
- Wheat
- Cotton
- Coffee
- Citrus
- etc ...

AG. NEEDS
- Planting Efficiency
- Nitrogen Deficiency
- Disease Detection
- Nematodes
- Soil Health
- Water Stress
- Yield Forecasting
- Crop Monitoring
- etc ...

GEOGRAPHY
- North America
- South America
- Western Europe
- Eastern Europe
- Africa Middle East
- Southern Asia
- Eastern Asia
- Specific Countries
- etc ...

SMO Target Example

INCREASE YIELD - REDUCED COST - EFFICIENCY - SUSTAINABILITY

MAIN BENEFICIARIES

- LARGE AGRI PRODUCERS, COOPERATIVES
- AGROCHEM., BIOTECH., FERTILIZER INPUT CO.
- AG MACHINERY PRODUCERS
- AG. SERVICES CO., FARM MANAGEMENT PLATFORMS
- FOOD PROCESSORS, SOURCERS
- COMMODITY TRADERS, FEDERAL AGENCIES
- BANKS, CERTIFICATION, INSURANCE CO.

GAMAYA

Significant value creation across agricultural industry value chain

- 25-70%   over fertilization and overspraying due to preventive, uninformed methodology
- 20-50%   losses due to weeds, disease, pests, etc.
- 50%   cost savings on water

EFFICIENCY GAINS

- Less fuel
- Less fertilisers
- Less chemicals
- Less water
- More efficient manual Labor

SUSTAINABILITY GAINS

- Better yield
- Better quality
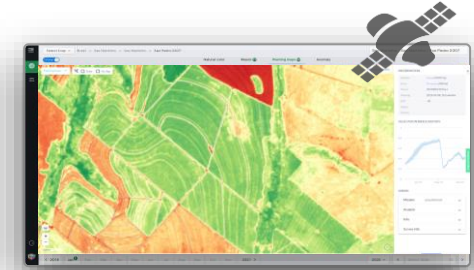- Sustainable environment
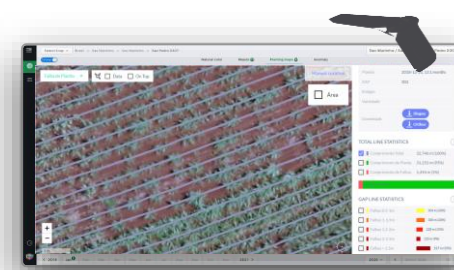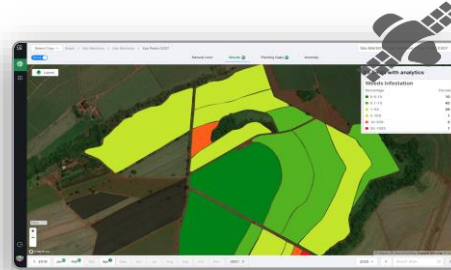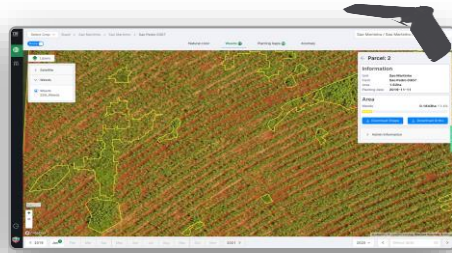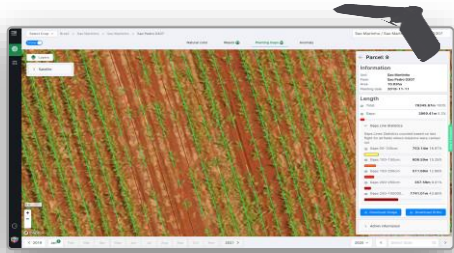- Better business strategy

SUSTAINABLE DEVELOPMENT GOALS

Gamaya - Example: Current Sugarcane Portfolio: CANEFIT 2020

A complete solution with large-scale & in-field analytics to improve farm efficiency from planting to harvest

Planting Lines & Gaps	Weeds Detection	Weeds Infestation Monitoring	Precision Harvest Lines*	Crop Monitoring & Anomaly Detection*
Automated planting gap diagnostic and line detection	In-field accurate detection and mapping of weeds, classification options*	Large-scale infestation monitoring of weeds	Accurate harvest lines detection for autopilot	Holistic performance indicators and crop growth monitoring and alerts
Quality control during operations and optimized re-planting decisions to maximise farm ROI	Timely and targeted application of herbicides, resulting in better control and reduced use of input	Prioritization of fields for targeted scouting and optimized weed management	Precision and guidance in harvesting operations to minimize crop damage	Optimum and early detection of anomalies to support field operational and scouting planning