



**Enabling UAV Capacity in the Pacific** 

Drone Services Fiji is committed to supporting the United Nations Sustainable Development Goals (SDGs), aligning our business with global efforts for positive change. We focus on:

**SDG 4 – Quality Education:** Empowering individuals with access to advanced UAV technology.

SDG 8 - Decent Work and Economic Growth: Contributing to the growth of the UAV industry in the Pacific.

SDG 9 – Industry, Innovation, and Infrastructure: Advancing UAV technology for mapping and infrastructure needs.

**SDG 13 – Climate Action:** Supporting sustainable development and environmental conservation with precise data collection solutions.

contact: hello@droneservices.com.fj



# Unlock greater understanding of the physical world

The only fully productized GeoAI system for monitoring physical assets



Ever increasing launch rate of Earth Observation satellites is driving an unprecedented growth in accessible geospatial data for analysis and monitoring

6x

**cheaper** in 10 years

**200**TB

of Earth
Observation
imagery
collected daily

10x

improved frequency (near real time) and resolution (≤30cm) 190%

increase in EO
satellite launches
over the next decade





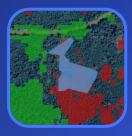


















## GeoAl intersection of geospatial data and Al

AI unlocks critical insights embedded in geospatial imagery - accessing information otherwise impossible to obtain:



Enables large scale extraction of **information** from geospatial imagery using advanced AI algorithms.



No need for dedicated large teams of data scientists and engineers.



No heavy IT infrastructure **needed** thanks to auto-scaling cloud computing.



## Picterra

If you can see it, we can detect it



#### From Earth Observation imagery to Actionable Insights with Al

- Founded in 2016 in Switzerland
- 100+ enterprise clients globally
- 30,000+ Machine Learning models

















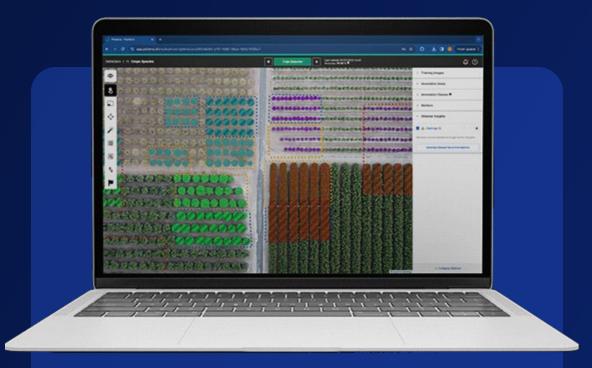


## Picterra

How it works



**Input Earth Imagery**Drone, Aerial, Satellite



Automate imagery analysis accurately and in real-time



Output reports & dashboards



#### Enterprise **software**



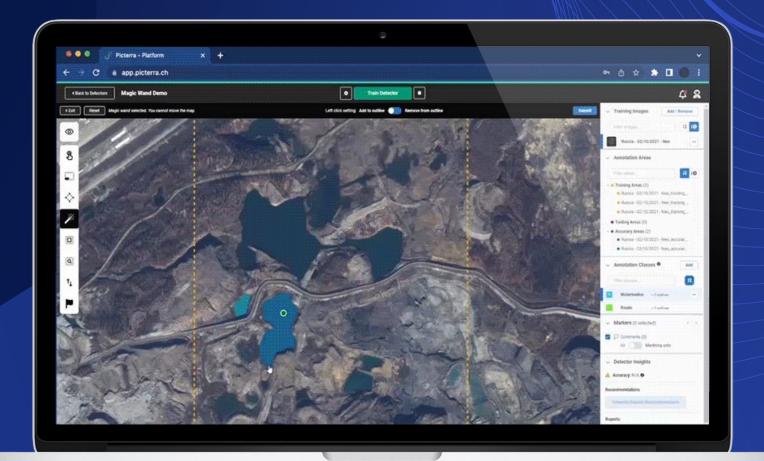
Cloud-based for speed and scalability



Intuitive and collaborative UI



Secure and robust





#### The Geospatial Value Chain

Upstream • · · · · Downstream • · · · Downstream

#### **Data Acquisition & Data Infrastructure**

Data collection

Data pre/post processing

Data distribution



ICEYE AIRBUS







#### Tech-enabling Software for Data Processing & Analytics

Data management Remote sensing & GIS

ML & data science

Software engineering





**Q** Palantir

VA PIX4D

**Bentley**®

#### Data Applications & Services

Business intelligence

Business apps









### Unlocking new solutions across industries

#### FORESTRY, **WOOD & PULP**

Tree inventory Seedling detection Survival assessment

#### MINING

Cracks & erosion, water bodies localisation Haul roads mapping Mines rehabilitation

#### **MANUFACTURING**

Supply Chain Optimization Inventory Management Damage Prevention & Security Environmental Insights

#### **COMPLIANCE** Farming Practices, Land Monitoring,

Emissions, Water management

**GOVERNMENT &** 

#### **FMCG**

Sustainable supply chain management, ESG reporting

#### **ENERGY & UTILITIES**

Renewable energy, energy infrastructure monitoring

#### FINANCIAL INSTITUTIONS

Commodity Monitoring Infrastructure Developments Real Estate

#### **TRANSPORTATION & LOGISTICS**

Railways, roads & highways, ports other transportation networks and intelligent systems

distribution networks, oil and gas





## GeoAl in Governments

Monitoring natural disasters and intelligence

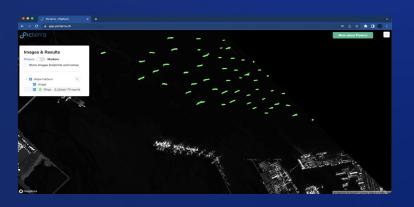
Floods and Wildfires

Country-wide assessments

Border Security Urban Developments









## GeoAl in Forestry

Forestry Management and Carbon Markets

Forest Health & Inventory

Carbon Stock Estimates

Invasive Species Detection Deforestation Risks

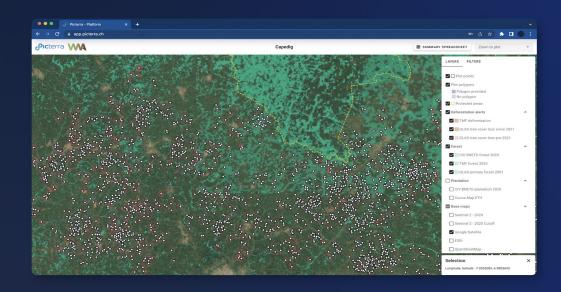






## GeoAl in Soft Commodities

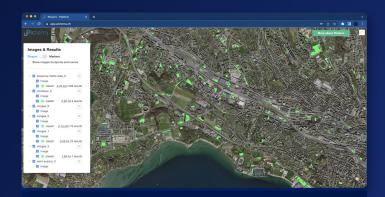
Deforestation and Sustainable Farming





#### Customer stories: Climate & environmental protection

**Safeguarding** the environment, **protecting** habitats and incentivising responsible development



Renewable energy solutions

#### 10.000+ parking lots

in urban areas identified with optimal conditions for solar energy generation, using a combination of aerial and satellite imagery.

Energy production and distribution company



Providing insights that support the reduction of emissions

#### 25,000 slurry tanks

detected in a few hours across Denmark, providing estimates on Ammonia pollutions.







## Improving coral conservation

#### 4 types of coral species

distinguished and mapped (Orbicella, Millepora, Diploria, Acropora), using 1 cm resolution drone imagery.

Global environmental non-profit operating in 76 countries & territories



#### **Customer stories: Forestry & carbon markets**

#### Manual, in-person forest monitoring is too expensive & unscalable



Scaling forest management practises to accelerate decarbonization efforts

#### 80,000 saplings

and 115,000 empty holes that are irrigated/oxidized and ripe for re-growth across 10,000+hectares detected with a single model.

Forestry management for carbon farming company in New Zealand



## Optimizing forestry cycle monitoring with Picterra

#### +50.000 hectares

of forest monitored using drone data at 1 cm resolution, providing insights on harvesting, soil preparation, plantation, and survival analysis of the forest.

Learn more: Full case story





## Detecting invasive species to stop widespread outbreaks

#### ~6000 tree ferns

identified in Hawaii that are invasive to the environment. Detection via 3cm aerial imagery allowed for targeted interventions to prevent further spread.

Global environmental non-profit operating in 76 countries & territories



#### Customer stories: FMCG & agriculture

Supply chain traceability & monitoring at scale require efficiency, auditability, and precision



#### Deforestation change detection for EUDR compliance

#### 6,500 parcels

monitored + quality & EUDR risk assessed in Ivory Coast. Expanding due diligence and deforestation compliance across further Walter Matter sourcing locations.



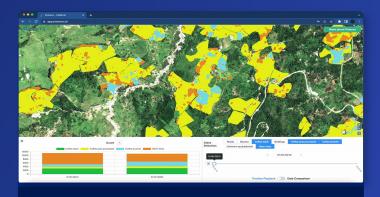


## Hedgerows and identification of biodiversity markers around agricultural lands

#### >130,000 km2

Monitoring the entirety of England to detect hedgerows as key indicator of biodiversity improvement in agricultural landscapes. Input data: 25 cm resolution aerial imagery combined with RGB & nDSM data.

Government agency in charge of agricultural subsidies



## Increase visibility and traceability into farming practices at scale & measuring sustainability KPIs

#### 150,000 farms

supported with sustainable farming practices across 15 countries. Satellite imagery used to provide insights on shading and adult/ juvenile coffee and banana trees.

Global producer of premium brand coffee operating in 81 countries





## Thank you

Find out more at

picterra.ch

YouTube

**n** LinkedIn

