ignitia

ai powered weather intelligence for smallholder climate resilience

November 2025



Google Startups for Sustainable Development







ignitia

Excellent science, packaged for scale and impact



Science



Traction



Impact

Industry-leading AI based weather forecast models

- Al-driven, remote sensing
- Optimised for fast, dynamic heat-driven storms
- High resolution (1km 9km)
- Purpose-built to trigger alerts, advisory, and action

Trusted by 3 million + customers

Global model coverage

Strategic **Partnerships** for resilience









Improves resilience to extreme weather events

Advisory tools reduce carbon emissions

Highly sticky service for end users with **net promoter score of 71**



Solutions

- Al-driven, virtual weather radar for early warning systems
- Climate risk indices for investment due diligence, parametric insurance products, commodity trading, targeting interventions
- Forecasts and weather-triggered advisory for agriculture, logistics, green energy



Partners

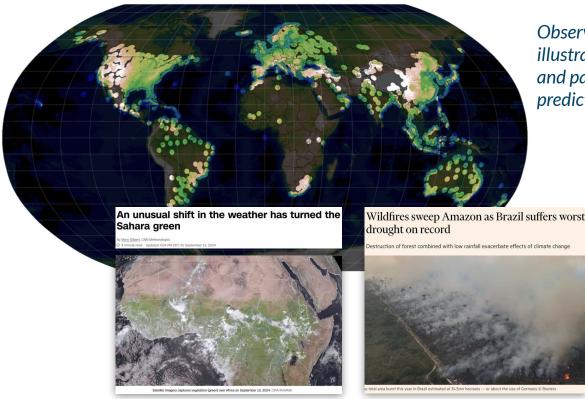


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Development



Extreme weather is humanity's fastest-growing threat and weather models are failing where it matters most

- \$250B-\$2T annual economic losses from extreme weather
- 4 billion people lack access to early warning systems
- Legacy weather models miss rainfall and extremes due to climate change heating up storms

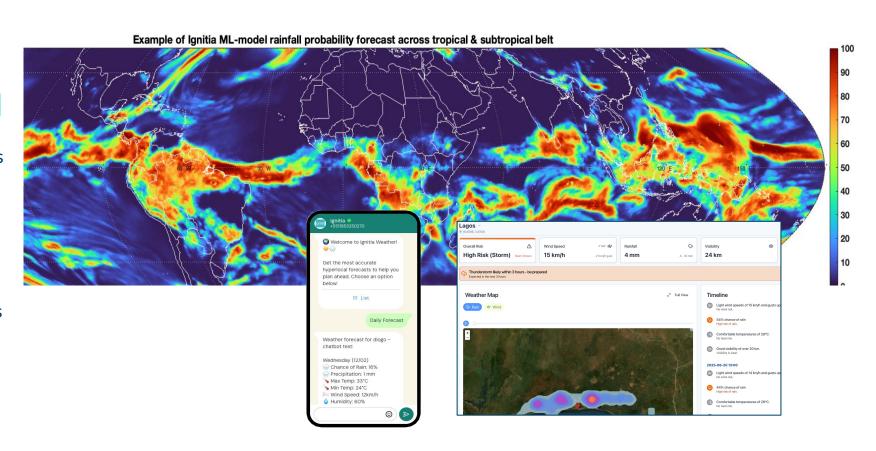


Observations like this radar density illustration are unevenly distributed and past data is no longer as good at predicting the future



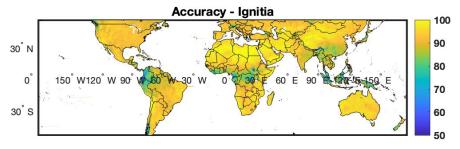
We're building an Al-native weather platform built for our extreme weather future

- Developed physics-informed AI models trained on 15+ years of reforecast and ground truth data
- Virtual storm radar and forecasts out to 6 months without additional hardware
- Delivered for widespread accessibility via WhatsApp, SMS, API, dashboards – reaching users in the last mile that others can't



ignitia stands out by predicting extremes and removing model bias – critical for advisory and action

- Rainfall forecast accuracy leadership: 93 % locations overall;
 100 % of test days best-in-class
- Asset-light: no hardware, e.g. avoids expensive radar for early warning systems
- Reforecasting datasets continuously improves models
- Agentic AI and human-centered design insights drive high Net
 Promoter Score & evidenced based impact

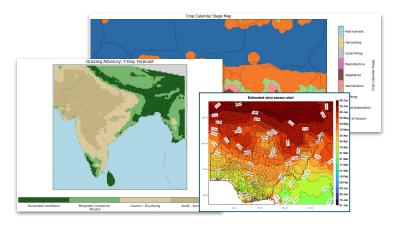




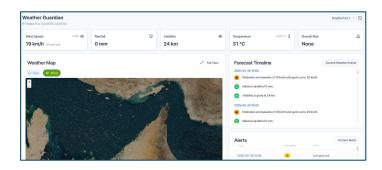
Study Dates: 20230701-20240731	Confidence forecast <20%, >60%	
Metric	ignitia	Altern.
% of days with best accuracy	100%	0%
% of locations with best accuracy	93%	7%
Bias (0 = perfect)	-2%	+33%
Heidke Skill Score	71%	62%
Brier score (lower=better)	0.11	0.15
Accuracy	93%	87%
Reliability (integral)	90%	68%
ROC AUC	90%	88%
CSI	60%	53%
Success rate (SR)	76%	61%
Miss rate (MAR)	26%	19%
False alarm rate (FAR)	24%	39%

ignitia.se

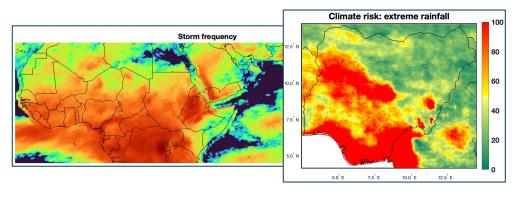
One scientific data platform, multi-sector adaptation solutions.



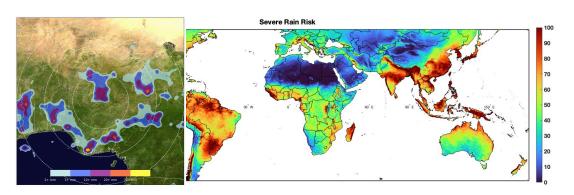
Agriculture: planting dates, rainfall forecasts, regenerative ag advisory



Ports & Logistics: real-time extreme weather alerts for operations



Finance & Insurance: parametric indices, climate risk scores, underwriting data



Governments & Early Warning Systems: national-scale disaster risk reduction

We build products that empower partners to know their risk factors and do something about them

Climate risk scores (9km)

Virtual radar, real-time (1km)

Al-advisor chatbot (9km)

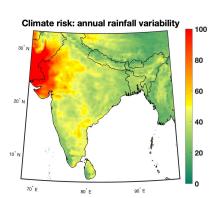
Seasonal outlook & indices (9km)

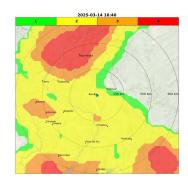
30+ years historical

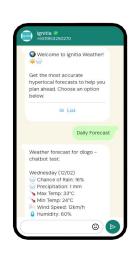
0-3 hours

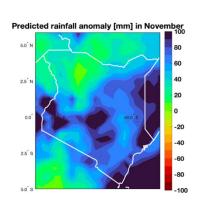
0-14 days

0-6 months







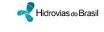


banks, asset managers

ports, logistics, energy, insurers, governments

climate vulnerable populations, farmers

ag-finance, energy, insurers











Public digital good & commercial value added services

→ Supports national EWS and private-sector decision tools

Asset-Light

→ Built for low-bandwidth environments

Partner-Ready Architecture

→ APIs for met agencies, MNOs, agri-businesses, and humanitarian orgs



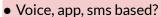
Human centered design has been critical to developing accessible, actionable, and demanded forecast and advisory products

The farmer is getting ready to go to the farm

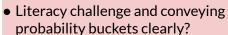
The farmer needs to receive the message on an accessible channel, at the right time

The farmer needs to comprehend what is intended

The farmer builds trust over time

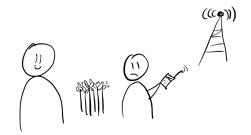


- When does this need to be received?
- How manage network reception, infrastructure challenge?



- How did they understand what we intended to transmit?
- Was the forecast useful in optimizing input application, anticipating seasonal variations, changing on-farm actions?



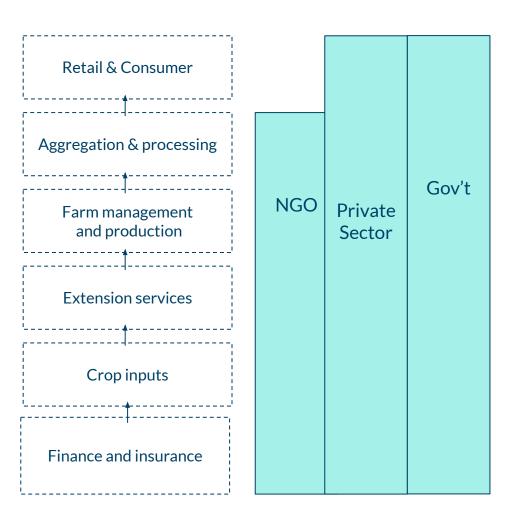








Building sustainable market systems through partnership and evidence based interventions



- The ag supply chain suffers from **overlapping efforts**, with NGOs, governments, and the private sector often duplicating initiatives due to lack of transparency and coordination
- Subsidies often create short-term solutions instead of sustainable market systems. This leads to repetitive 4-5 year NGO projects without forming long-term, sustainable partnerships
- Resources for interventions could be directed toward areas with proven evidence of impact
- Sustainable market systems with public-private partnerships and intentional, coordinated segmentation of public vs commercial goods:
 - traceability (critical to location-based services)
 - financing for digital public goods (data input, processing, and delivery costs) vs commercial services
 - lowering the cost curve for development and distribution of solutions (e.g. SMS, Whatsapp delivery cost subsidy)
 - enabling environment for private sector innovation for value add digital services (engagement with Met offices, government agencies, and digital stakeholders: telcos, social media companies, other channel partners)

ignitia has improved livelihoods and climate resilience for farmers and climate vulnerable populations

Net promoter score -50 -50 71 -100 NPS = % Promoters 9-10 rating % Detractors 0-6 rating

On a scale of 0-10, how likely are you to recommend ignitia to a friend or family member?

15 million

individuals benefited from ignitia's weather data¹

500,000

individuals impacted on avg on a 6 month basis

71%

of users report increased income after using Ignitia

7 in 10

farmers built **climate resilience**and feel better prepared or have actively recovered from a climate event

9 in 10

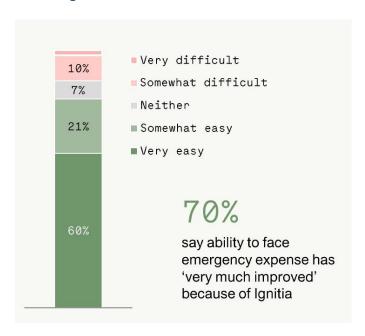
farmers **improved their way of farming** and experienced a better farming season

"I got a **very good yield** because of the SMS I got for weather forecasts. I **planted at the right time** when the rainfall was at its peak" Farmer, 45, Nigeria

We build resilience to climate change and accelerate the digitization of agriculture

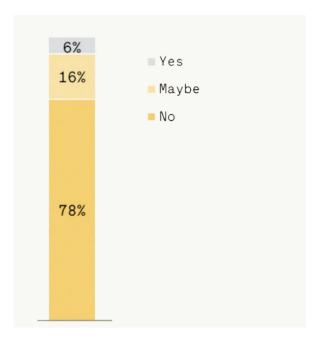
Climate resilience

Ease of accessing funds in case of emergencies



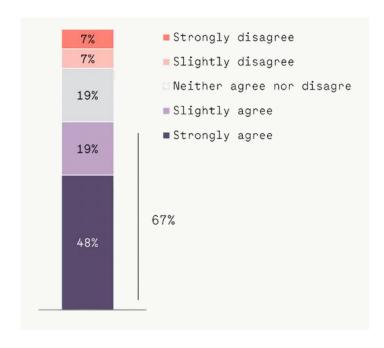
First time access

Could you easily find a good alternative to ignitia?



Digital tool usage

Using ignitia made me feel more confident using other digital tools to support my farming activities



All data from 60db, 2020-2024 (<u>link</u>)

ignitia in numbers

25

team members

3+ million

individual subscribers

14

nationalities

1+ billion

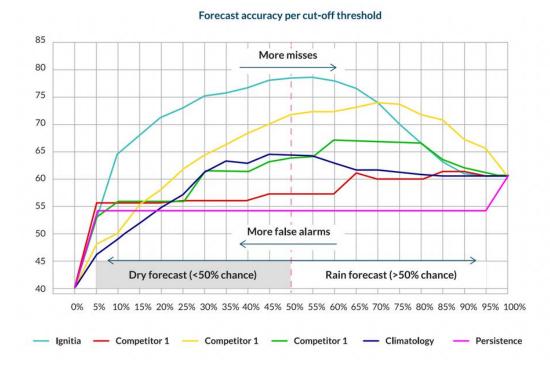
forecasts sent

15+

active countries

88%

global average accuracy



The above graph illustrates ignitia's superior performance against competing weather models. To do this, we carefully remove wet/dry biases from the model by optimizing the balance between misses and false alarms, which enables reliable forecasts. Users who get a forecast will clearly understand if we predict rain or no rain as opposed to receiving a competitors 50% chance, leaving them guessing what will happen.

We have an exceptional team to achieve our vision with experience in physics, AI, and scaling impact ventures



Andrew Lala
CEO
MA International Econ
Council Foreign Relations



Andreas Vallgren
Co-Founder, Chief
Scientist
PhD Fluid Mechanics,
MSc Meteorology



Hafen McCormick
Co-Founder, CIO
Jet Propulsion Lab - NASA
MSc Atmospheric Science



Tugce Alacadagli
Finance Lead
Johnson & Johnson
BSc Economics



Kwabena Frimpong
Director Africa
Esoko, GIZ
MSc Ag. Economics



Theresa Fehle
Chief of Staff
Siemens, Dream VC
MSc Innovation &
Entrepreneurship

Investors and Support from

















Google
Startups for
Sustainable
Development

obrigado tack thanks merci

Contact us as: <u>theresa.fehle@ignitia.se</u> for more information or a demo to put our data to the test.



We package cutting-edge Al-driven weather and climate intelligence into accessible and actionable advisory

