



THE CLIMATE CORPORATION



An Integrated Approach to Sustainability



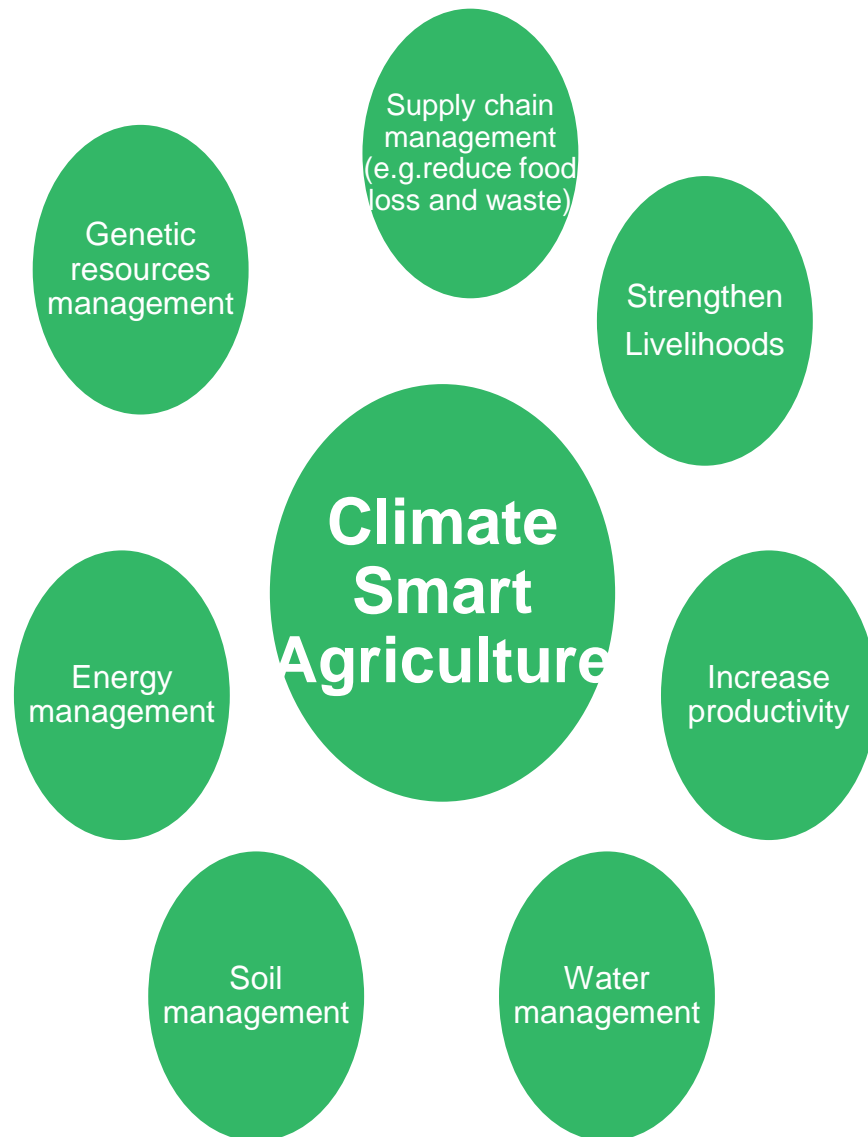
Ravi Sripada
August 07, 2014

Monsanto's Commitment to Sustainable Yield



- Working with farmers to:
 - **Double** the yields of corn, soy, cotton and canola crops from 2000-2030
 - Decrease resource use intensity by **33%** in 2030 compared to 2000
 - Increase farm income levels for including at least **5 million** additional resource-poor farmers by 2020

Elements of Climate-Smart Agriculture



A more systemic approach is needed:

- Landscape level
- Beyond silos (Water-Energy-Food nexus)
- System efficiency (at the farm and beyond the farm gate) at the consumer level

Monsanto /Climate Corp Products Enable CSA

Climate-smart agriculture with new services and products

- o Systems and products (Climate Corp) aim at helping farmers to make agriculture more resilient to climate change.
- o WEMA – Water Efficiency Maize for Africa (Monsanto) - with Gates Foundation: Brings better germplasm resources to farmers in Africa.
- o Newer technologies to produce more with less natural resource utilization (Biotic and Abiotic stress tolerance)

Climate Resilience in Mega Biodiversity Countries

- o Brazil and Indonesia- Working with Conservation International (CI) to bring to small holder farmers newer technologies to produce and conserve more while reducing deforestation.



- o Identify, test, and measure management practices that improve soil health
- o Translate basic soil research findings from USDA and University scientists to commercial production settings
- o Facilitate knowledge sharing from farmer to farmer, as well as support management changes that benefit profitability and sustainability
- o Become a catalyst for understanding and more broadly implementing the practices that work best



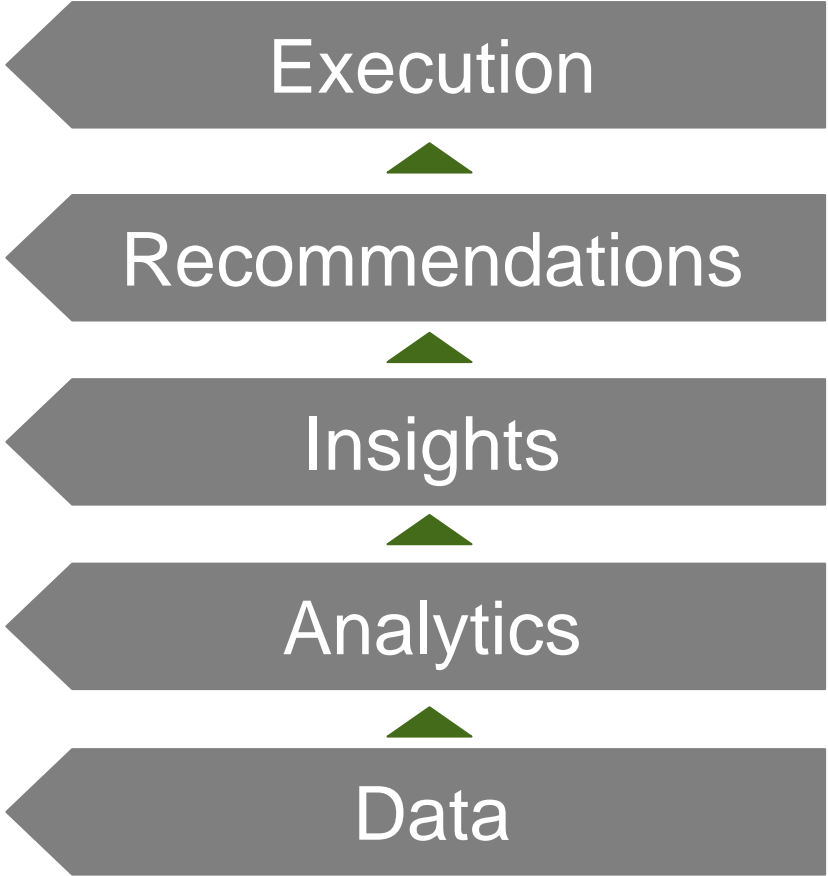
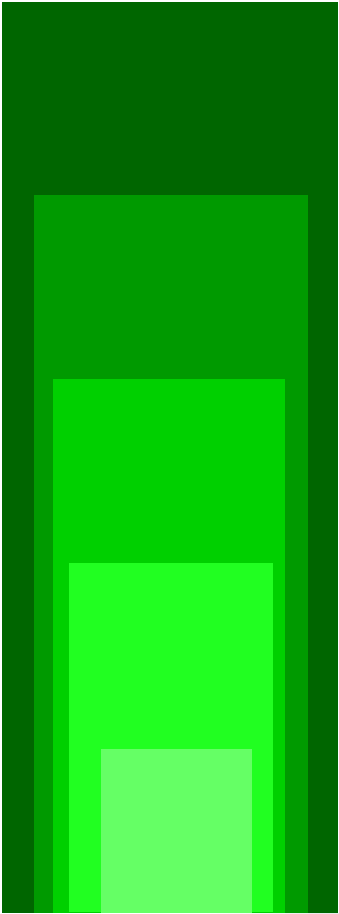
THE CLIMATE CORPORATION

Market leading agronomic insights to
increase yield & reduce risk.



Delivering Real Value for Growers

Value



The Climate[®] Platform

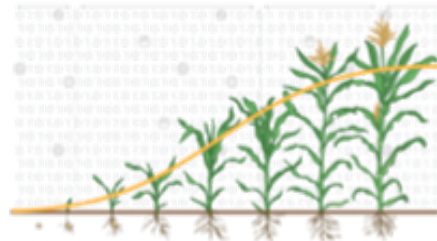
Combination of Climate[®] Technology with science and next generation equipment will create the industry-leading platform for ag-insights

SOLUM

**Precision
PLANTING[®]**



Measurement



Models

**Precision
PLANTING[®]**

FieldScripts[™]



Execution

Yield Modeling

$$y = f(g, e, p) + \varepsilon$$

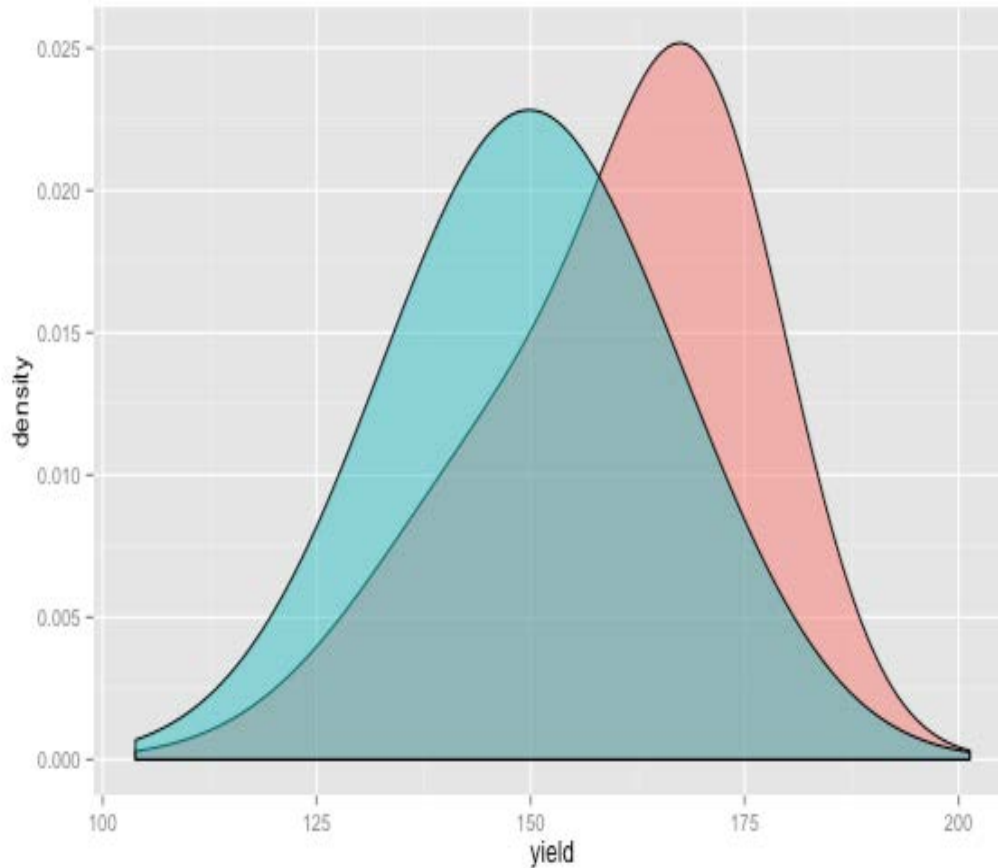
yield

genetics environment practices

variability

Yield is a **function** of **genetics**, the **environment** & farming **practices**, **accentuated by inherent variability in everything.**

Yield Optimization



Yield

Optimized for environment by optimization of genetics and traditional management practices.

Optimized Yield

Optimized for environment by optimization of genetics and management using predictive model.

CLIMATE | BASIC



Field
Workability



Tracker



Notes



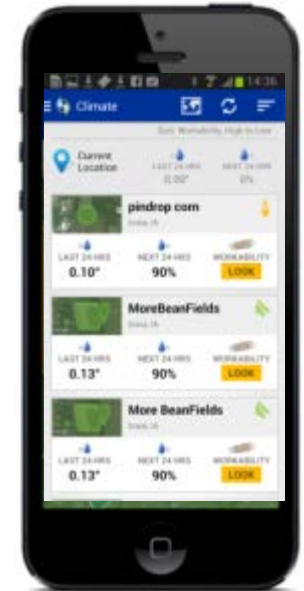
Reports



Weather



Alerts



CLIMATE | PRO



Planting
Advisor

N

Nitrogen
Advisor



Pest &
Disease
Advisor



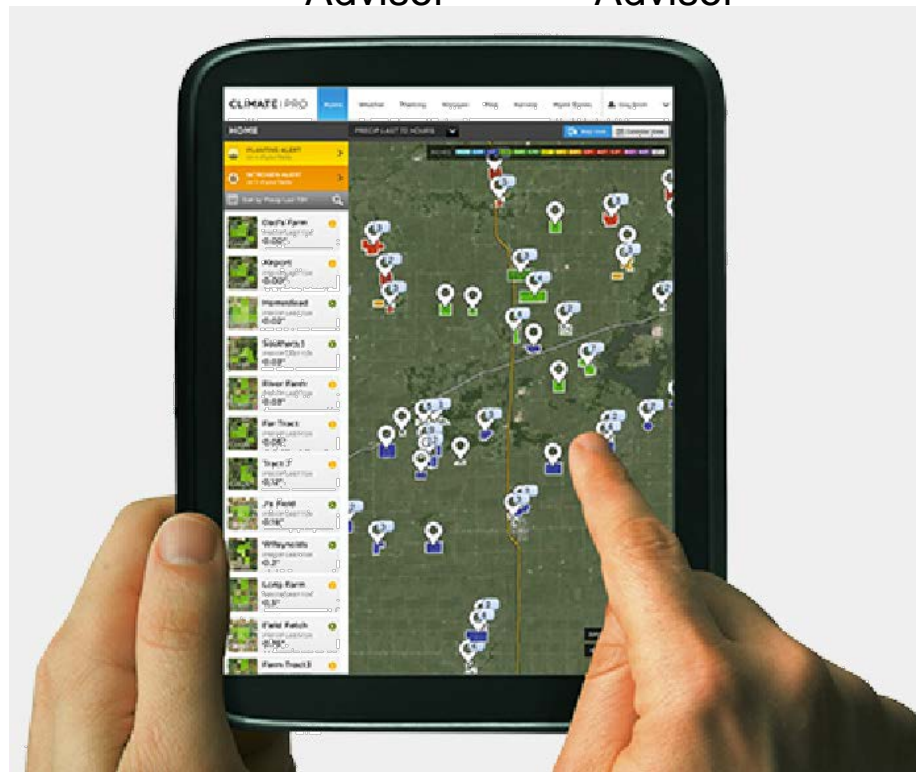
Variable
Rate
Advisor



Harvest
Advisor



Revenue
Advisor



Climate Pro™ Helps Optimize Key Production Decisions for Each Field



Planting Advisor



Nitrogen Advisor



Pest & Disease Advisor



Harvest Advisor



Field Health Advisor



Revenue Advisor



Weather Monitoring

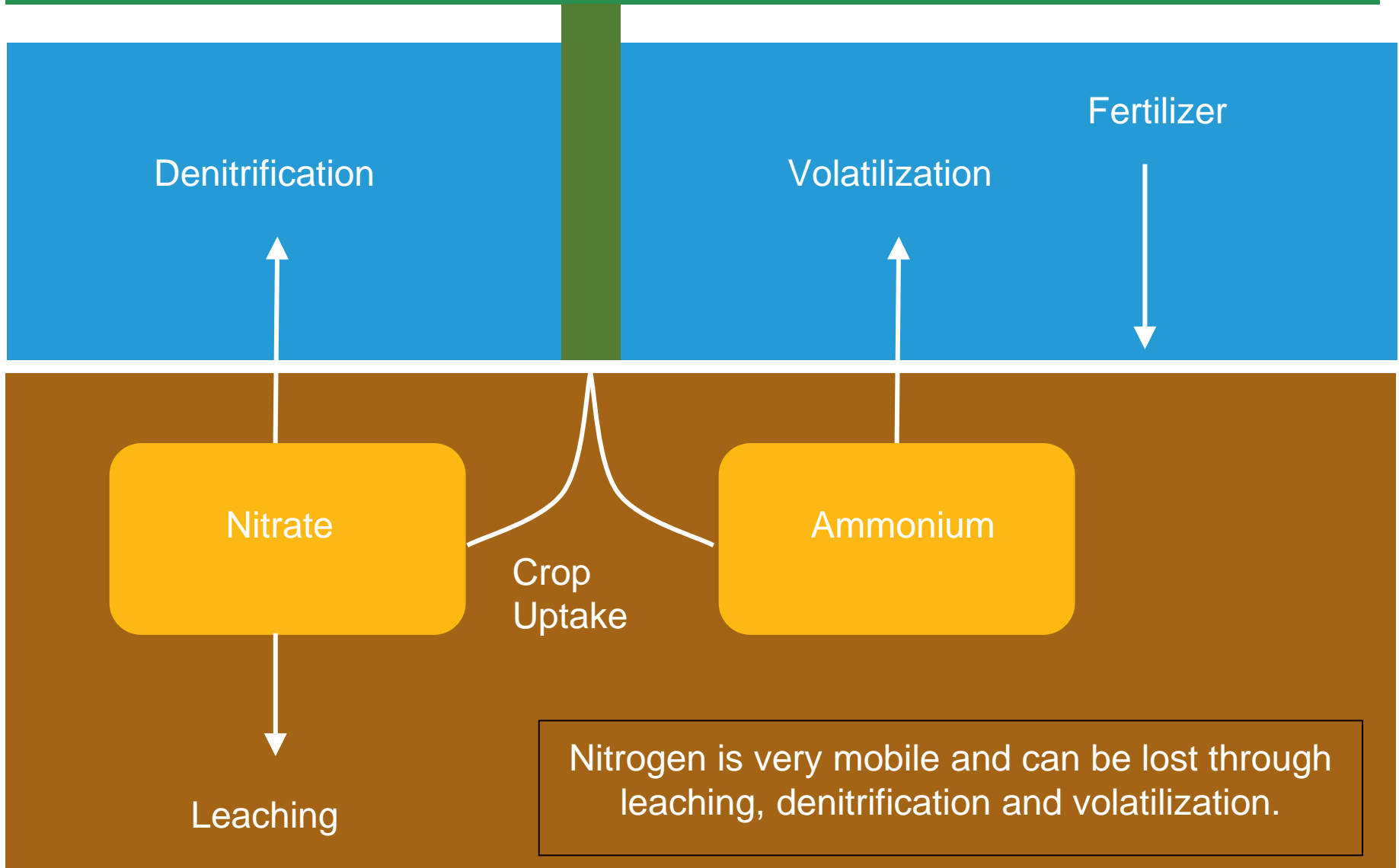


Agronomic Modeling



Weather Simulation

Nitrogen Mobility



Nitrogen Advisor Overview

field level

site specific

daily

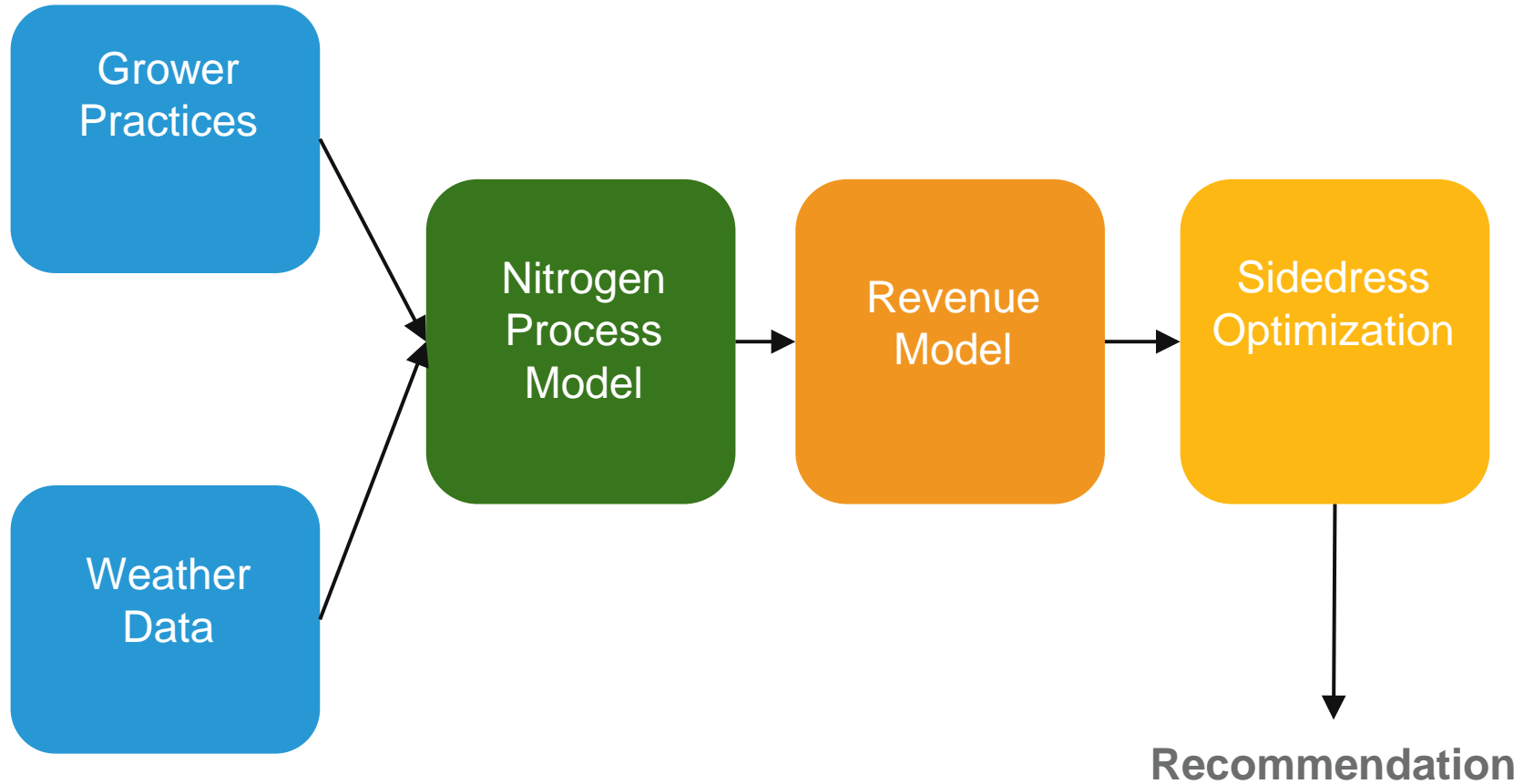
soil properties

weather

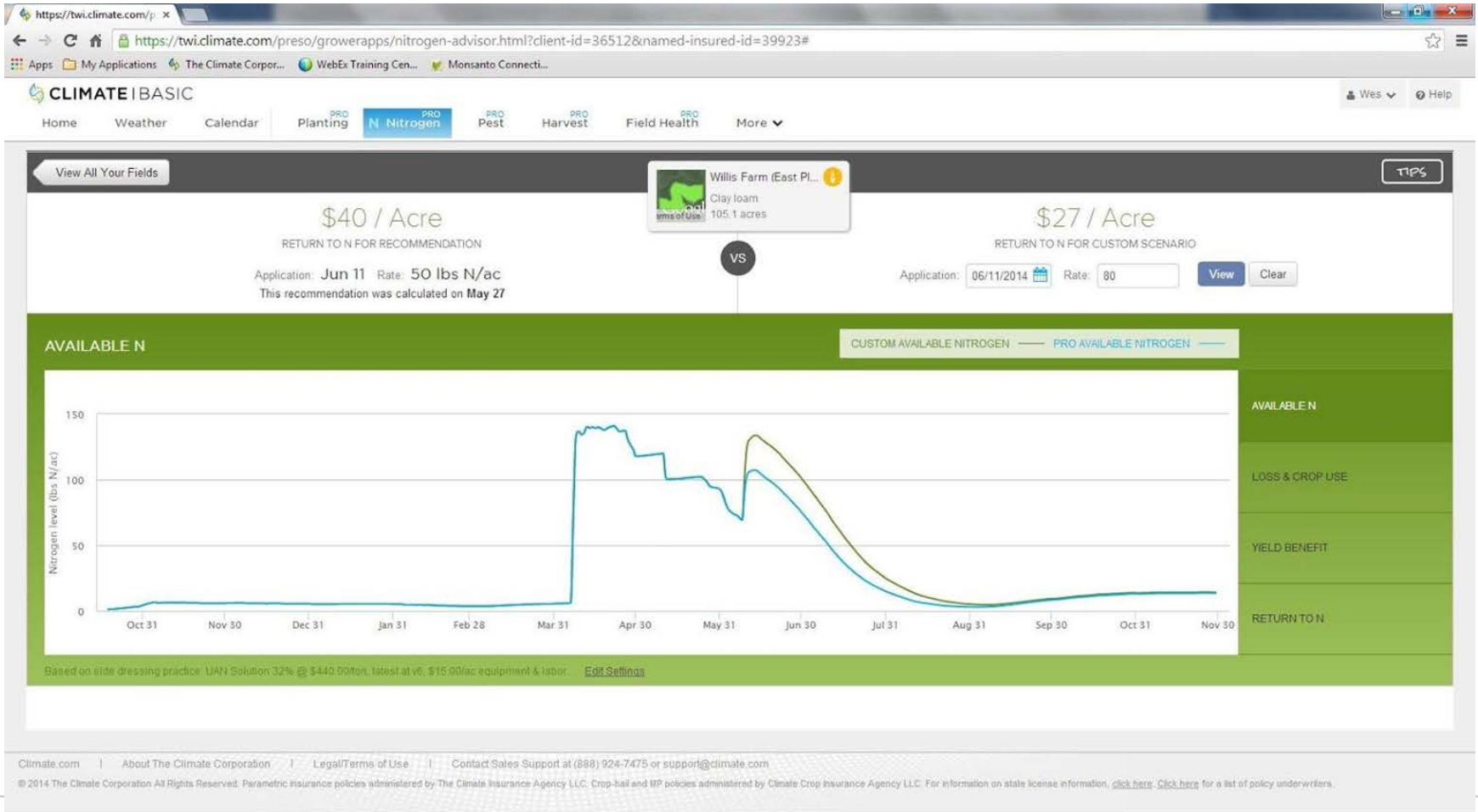
management

conservative

Nitrogen Advisor Overview



Nitrogen Advisor



The Climate[®] Platform

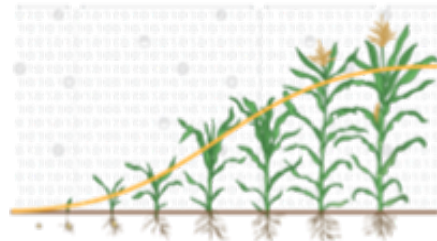
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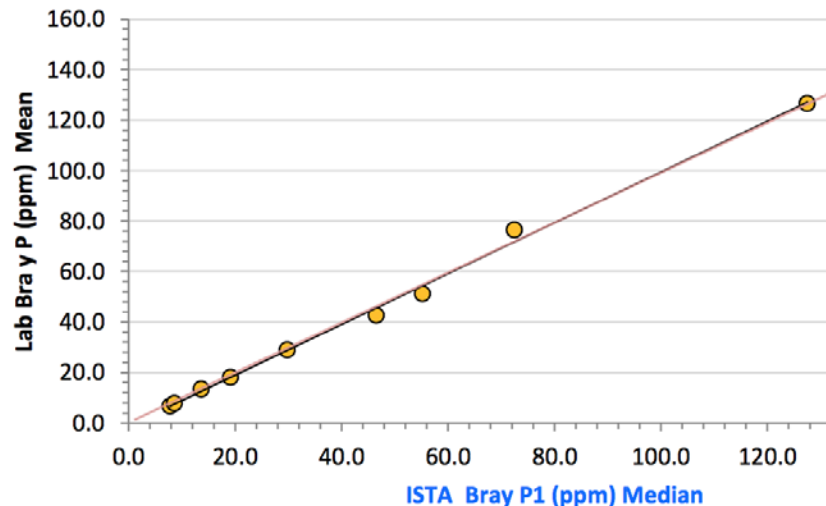
Execution

Solum's Tools – Enhanced Accuracy and New Data Layers



Solum brings new tools for processing & measuring soil:

- RFID Tracking
- LEAN/Six Sigma mentality
- Hardware Design



Equipment: Better Planting

20/20 &
FieldView



vSet & vDrive



DeltaForce

