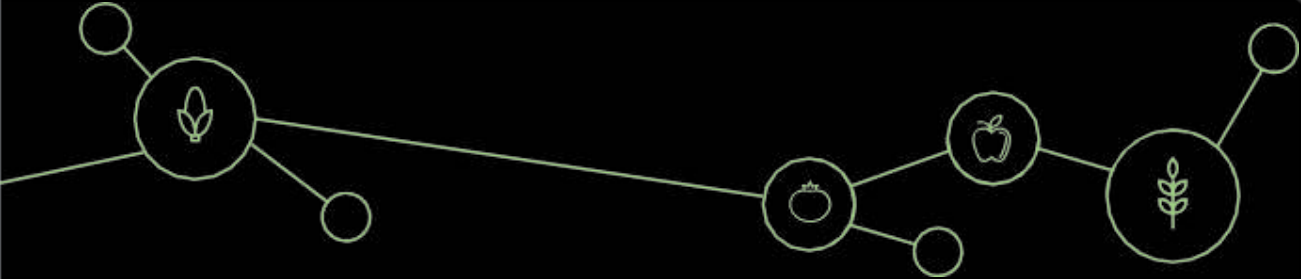
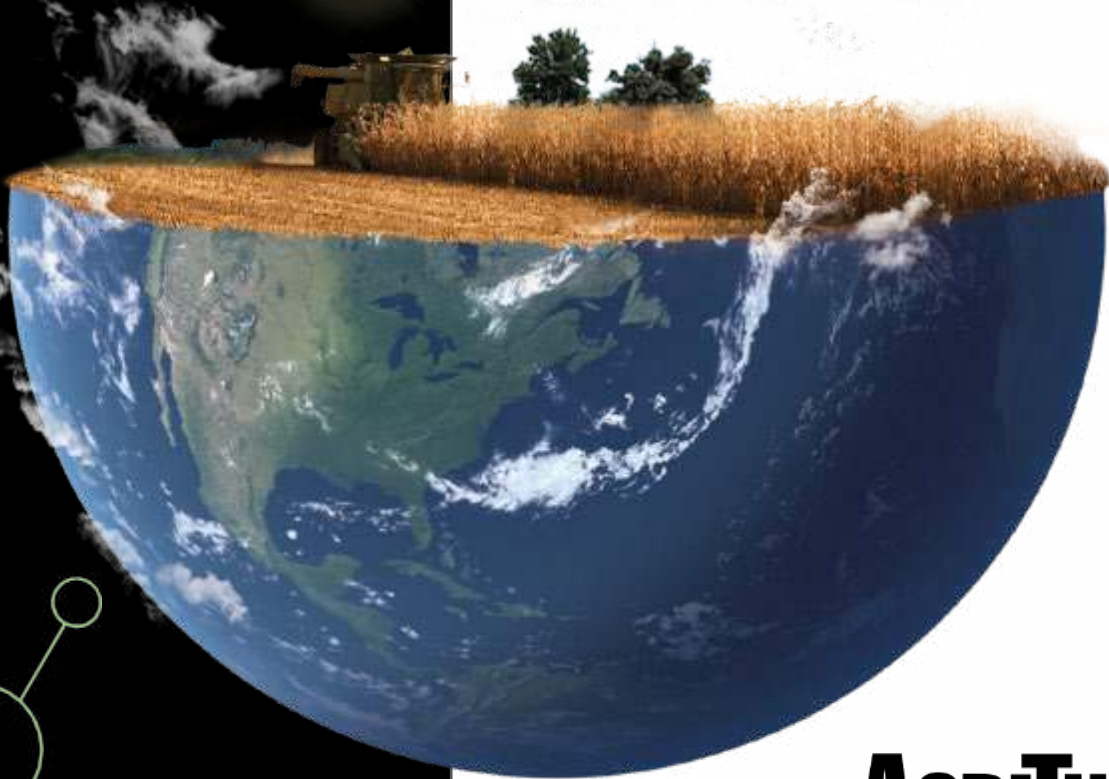


# Business Opportunity: Field-Scale Trials

Luke Samuel, PhD  
Manager of Product Development, AgriThoriTY®

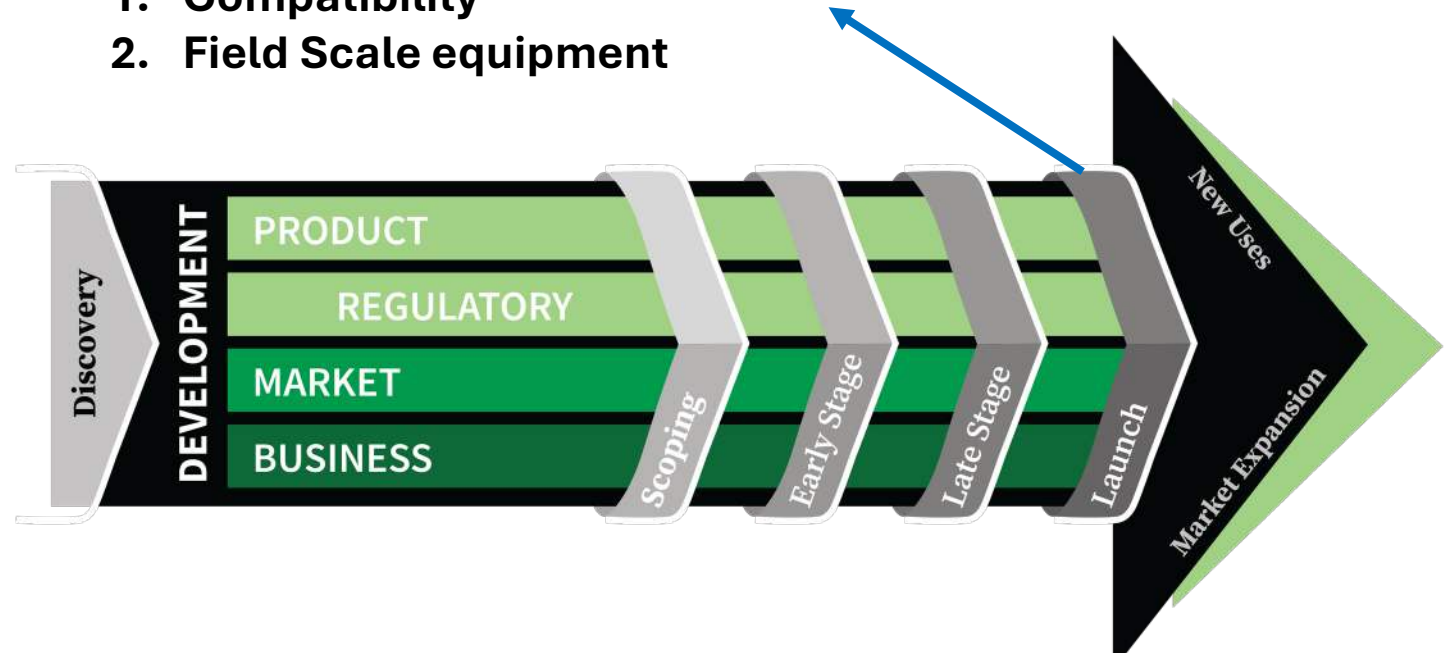


**AGRI**THORITTY®

# Farm-Scale Trials are critical for product introduction

## Why is there interest

1. Real world results
2. Objective measurements
3. Incorporates variability across the field
4. Product performance by environment
5. Pressure test technologies
  1. Compatibility
  2. Field Scale equipment



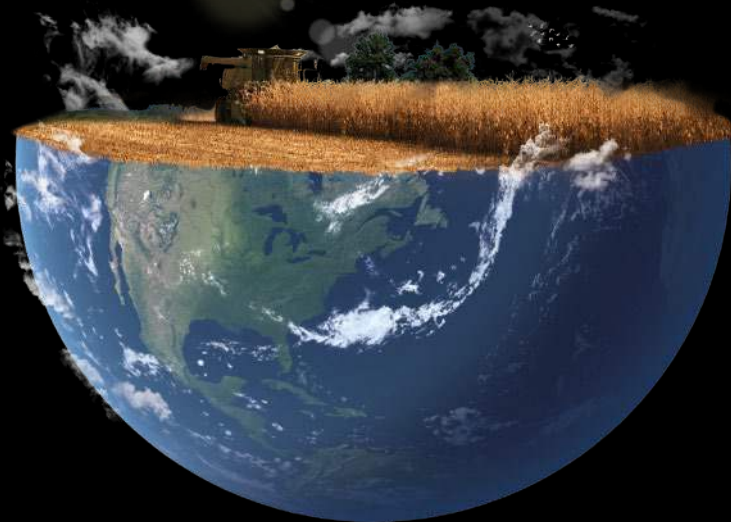
# Is offering field-scale trials right for you?



**AGRI**THORITY®

# Farmer Tested Field Proven

*A stewarded introduction for commercial or pre-commercial agricultural products evaluated by farmers on their fields.*



## Product Knowledge and Market Development

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- Best Management Practices to guide internal and reseller training
- Develop retailer and grower awareness and experience
- Broad acre performance results across key markets
- Replicated data and expertise you can trust

## Farm Ready

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- Product performance across environments
- Farmer equipment and hands-on experience
- Real-world conditions to see how your product performs

# Final Step in Research and Development Program

1. Finalize product positioning and placement
2. Validate small-plot results
3. Product performance and value
4. Determine launch geographies
5. Education and training location



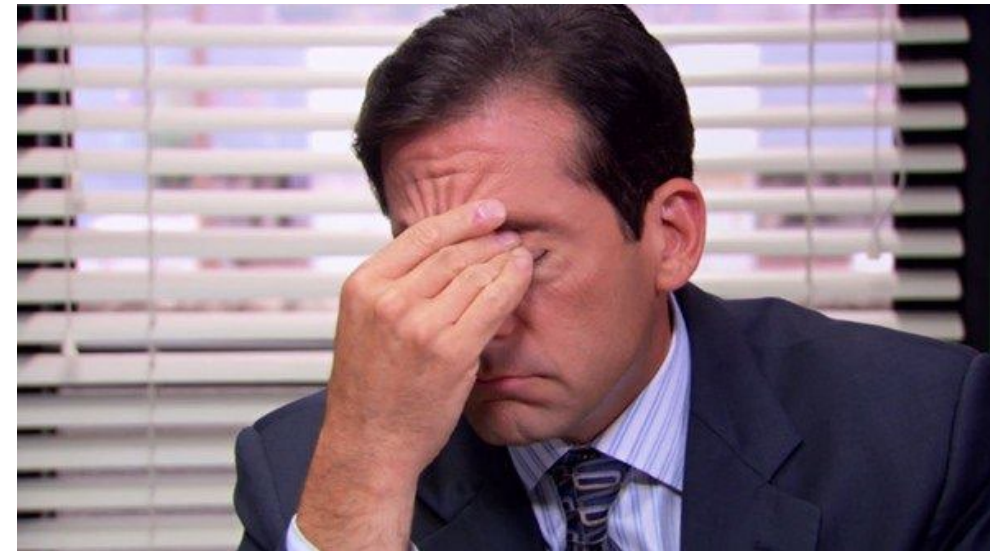
# Field-scale Trials<sup>®</sup> Market Development Program

## Challenges

1. Data, Data, and more Data
2. Real world results
3. Variable performance across the field
4. Commercial equipment
5. Performance is less than “grower standard”

## Risks

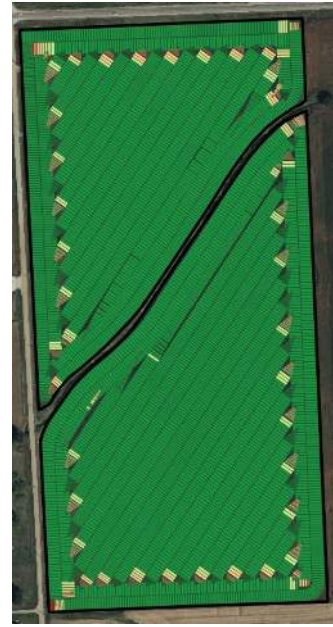
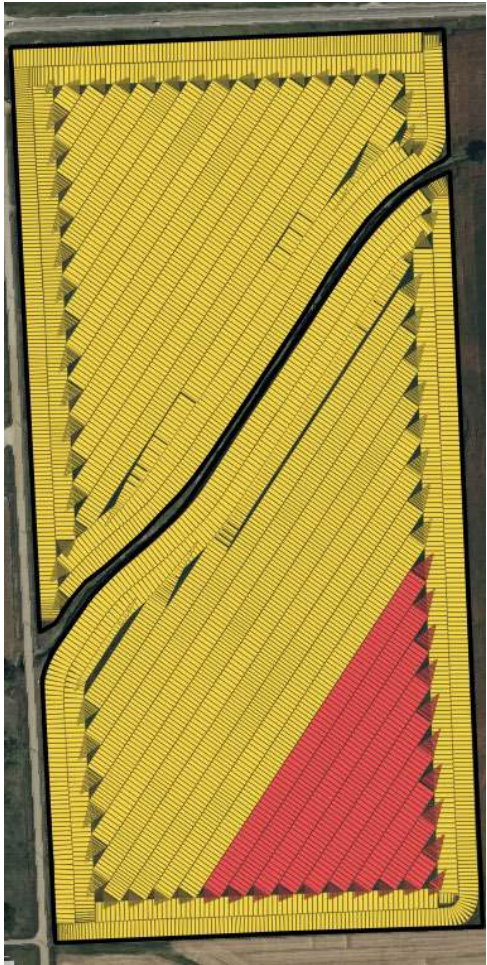
1. Grower executed as designed
2. Digital machine data
  - a. What was planted and where
  - b. What was applied and where
  - c. What was harvested and where
3. KISS principle



# Field Scale Market Development Program

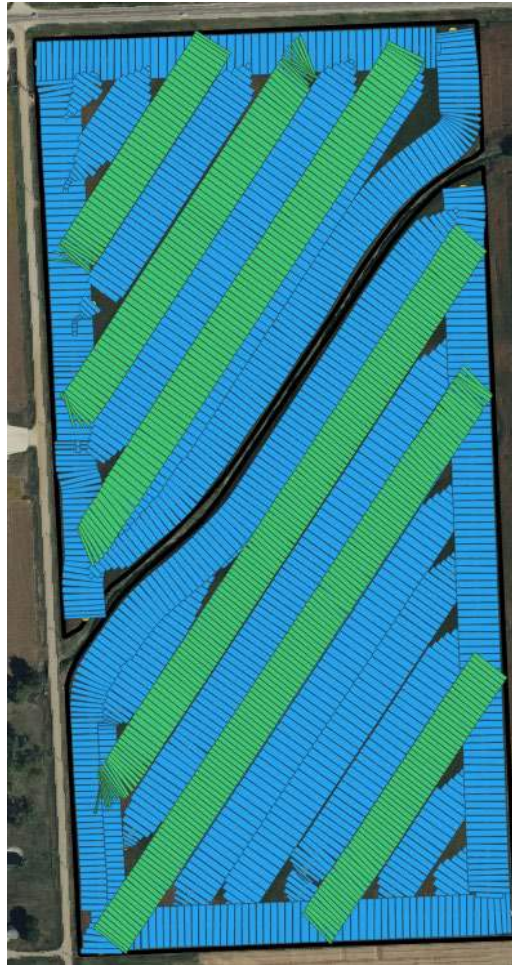
## Planned vs. Actual

Planting Map – Apr/14

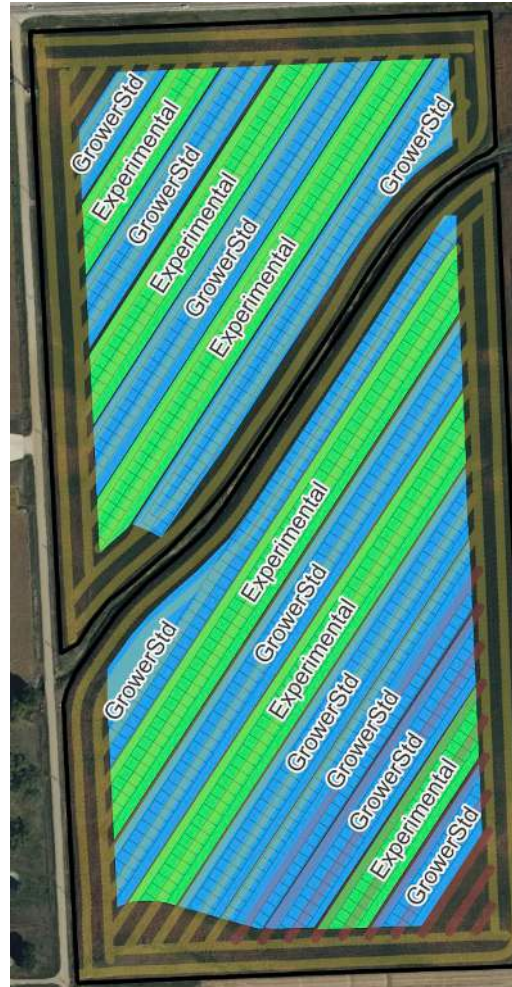


- Seed Rate**
- 71.9 - 88.6
  - 88.6 - 102.5
  - 102.5 - 107.8
  - 107.8 - 115.1
- Planting Map - Variety**
- Favorite variety
  - Second favorite variety

Application Map – Jul/7 T1  
Jul/14 T2



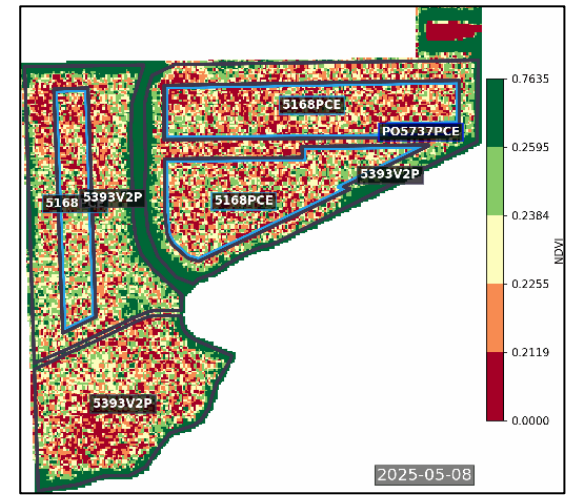
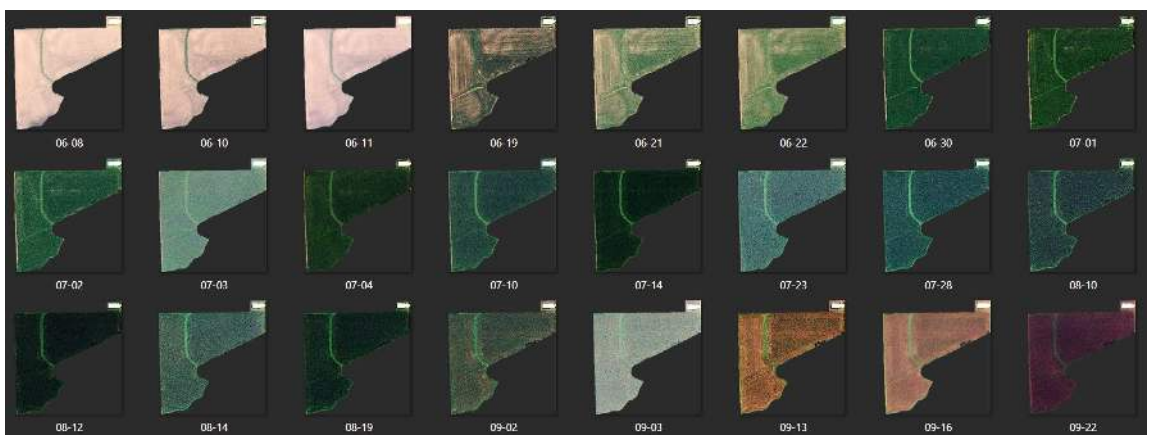
Treatment Map



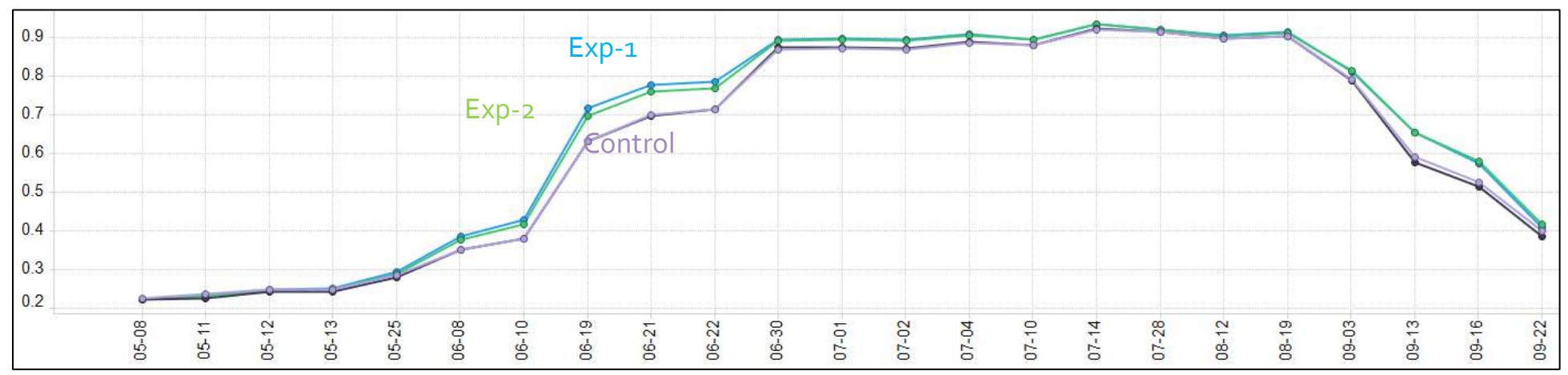
# TrialWerx® Market Development Program

Track treatment responses during the season through **high-resolution, low-cost satellite images**

RGB per date

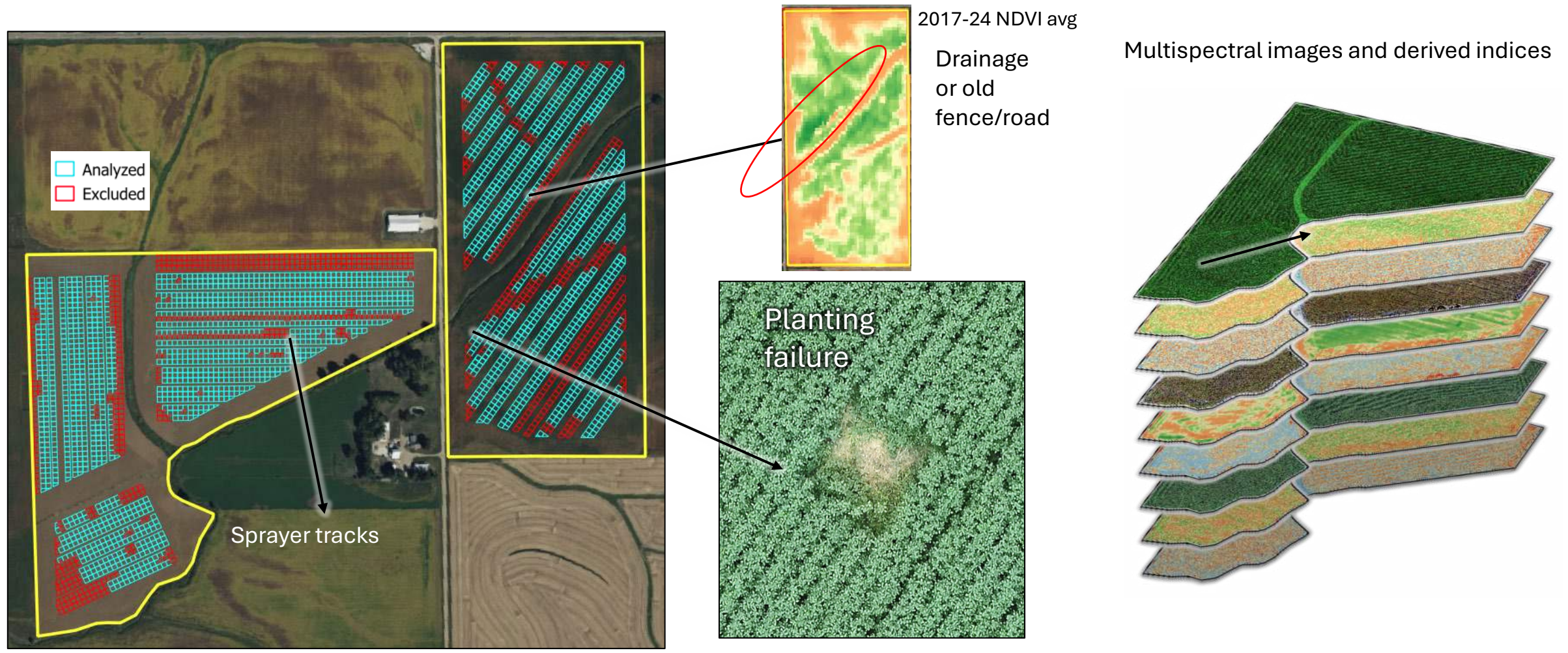


Corn Field - NDVI time trend by Hybrid & Treatment



# Field-Scale Trials Market Development Program

**Data QC: Filter out poor-quality areas from the analysis through high-resolution drone images**



# Field-scale Trials<sup>®</sup> Market Development Program

## Key Measurables

1. Yield
2. Growth and development (Satellite Imagery)
3. Treatment effects at key growth stages (Drone Imagery)

We limit subjective measurements



## Is offering field-scale trials right for you?

- Do you have the capabilities and expertise?
- Do you have the relevant equipment?
- Data analysis
- Time across your organization to successfully complete
- What are the client's expected outcomes?

**Can be successful if planned and executed effectively!**



**Thank you!**

**Luke Samuel**

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