Agrinosis

Data Analytics for Agriculture

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The Problem

Precision AgTech Remote Sensing data is not precise enough nor fast enough to capture scientific details.

Industry Struggles

1. Non-scientific quality data

2. Imaging platforms are either short range, or too expensive

3. Scientific data collection and analysis take too long to provide timely insights to growers

"If you could tell today what water your crop will need tomorrow... no one is doing that."
– E.J. Gallo Winery

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What do you mean "Scientific Quality?"

Repeatable, standardized, actionable data. Current market is garbage in-garbage out that can't be used to obtain actionable intel. Problems with current providers:

1. **Unstandardized data.** Meaning its not actionable, trustworthy, or repeatable information. Current providers are unaware of the problems with unstandardized sensors and data.

2. **Spatial and Spectral accuracy.** Without standards and benchmarks, you cannot do per-plant informatics with current spatial and spectral data. Current providers can't even tell you the error rate on their spatial data. Meaning your incorrect map of data leads to irrigating or spraying the wrong spot.

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Why does that matter?

With standardized scientific data it is possible to produce the kind of AgTech intelligence everyone wants but can't figure out why they can't get it:

- Operational prescriptions – how much water, too much water, more fertilizer, pesticide, in what area

- Accurate crop growth/health history tracking and prediction

- Water consumption forecasting, plant by plant, row by row

- Plant by plant growth/yield predictions

- Specific pest identification

- Specific disease identification

- Fertilizer forecasting

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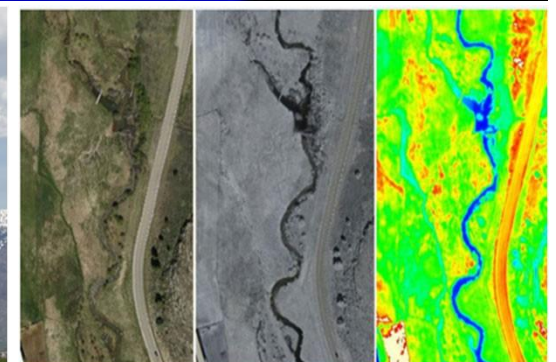Precision Science for Agriculture
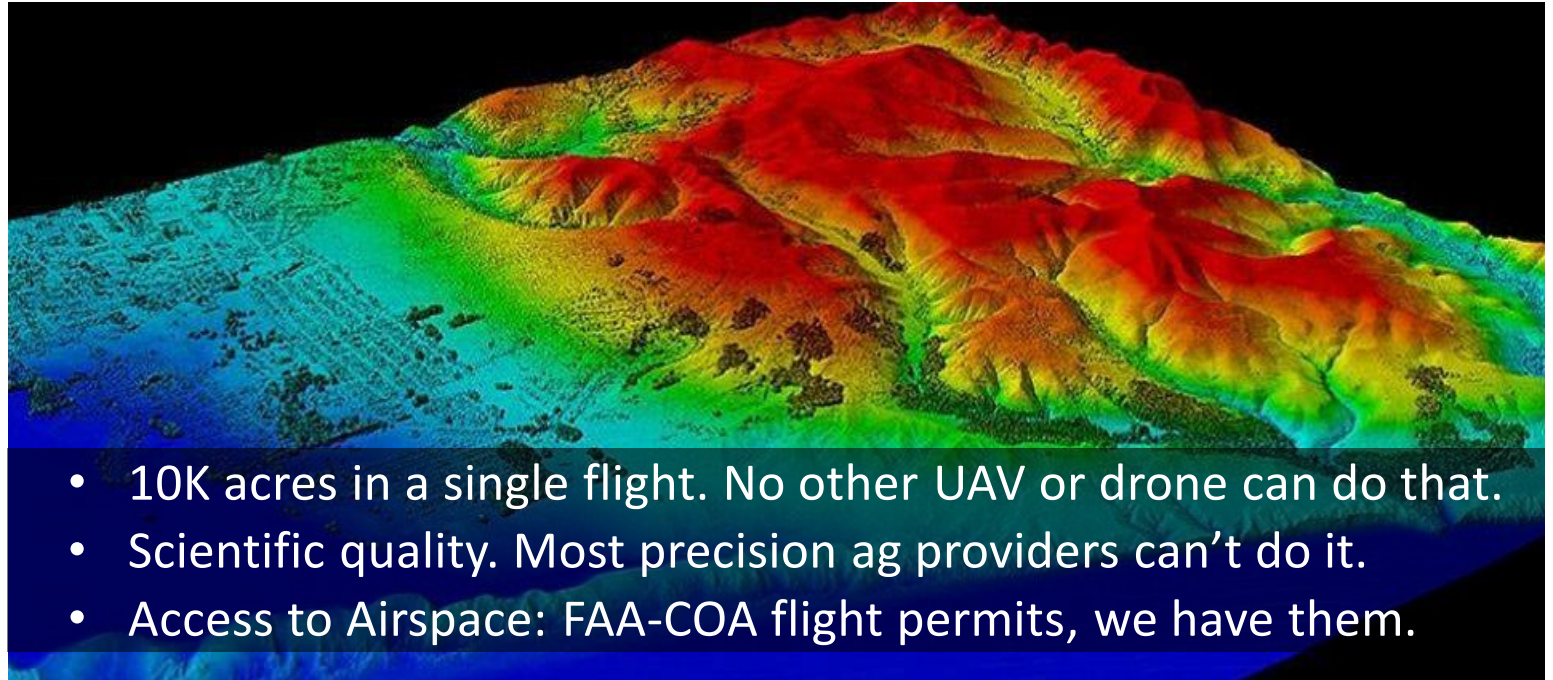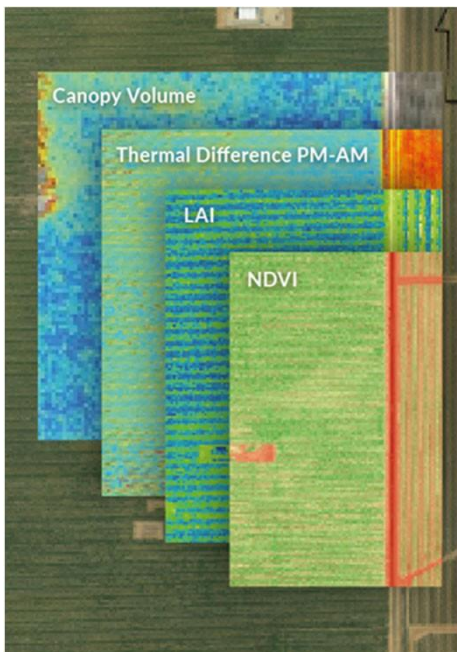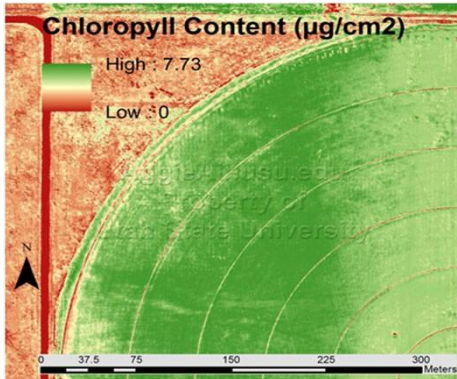
The Team to Fix It

- Over 17 years engineering and research in the AgTech and remote sensing world

- 25+ peer-reviewed publications in scientific journals

- 50 national and international presentations

- Today, Agrinosis is already producing 90,000x the data per acre as LANDSAT 8– which is current the gold standard

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Solution:

Real-time, scientific quality AgTech Intelligence.

This is the holy grail: a dashboard map of a grower's operation listing every ailment and status of every plant.

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UAVs & Remote Sensor Scientific Quality
Data Capture Differentiation

- 10K acres in a single flight. No other UAV or drone can do that.
- Scientific quality. Most precision ag providers can't do it.
- Access to Airspace: FAA-COA flight permits, we have them.

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Agrinosis is fundamentally different

Not Just Imaging-Not just data

- Scientific quality data. Most precision AgTech companies cannot do this.

- Agrinosis provides intel– not just data. What to do on your farm, where and when. First with water consumption, then with pests and diseases.

Our Approach

- Programs for market entry to ensure value to the grower and accuracy of the data.

The Team

- 80+ years combined experience in smart agriculture data science.

- Tight relationships with influential customers and regulators.

IP, relationships, Strategic and Operational Plans

- Two dozen patents in the drone flight control space as well as various aspects of drone platform capabilities as we look to expand applications of our complete system.

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Competitors & Market sentiment

- No one understands the scientific requirements to get this intelligence.

- No one else can do 10K acres in a single flight with a drone.

- Scientific quality data is the missing piece everyone wants and doesn't know they need.

- The precision AgTech and smart farm market sectors are exploding right now.

POTENTIAL COMPETITORS

https://www.taranis.com/drone-farming/

https://airscout.com/

https://sentera.com/

https://www.pix4d.com/industry/agriculture/

https://dronedeploy.com/solutions/agriculture

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Regulation

- We have had regular airspace access from the FAA for 17 years.

- The explosion of demand and evolutionary technology are forcing regulators toward leniency in the space.

- Part of this demand comes from water resources diminishing at an alarming rate. Water abundance will not be what it is today, 10 years from now.

- There are regulations coming in California to restrict water usage and enforce water planning.

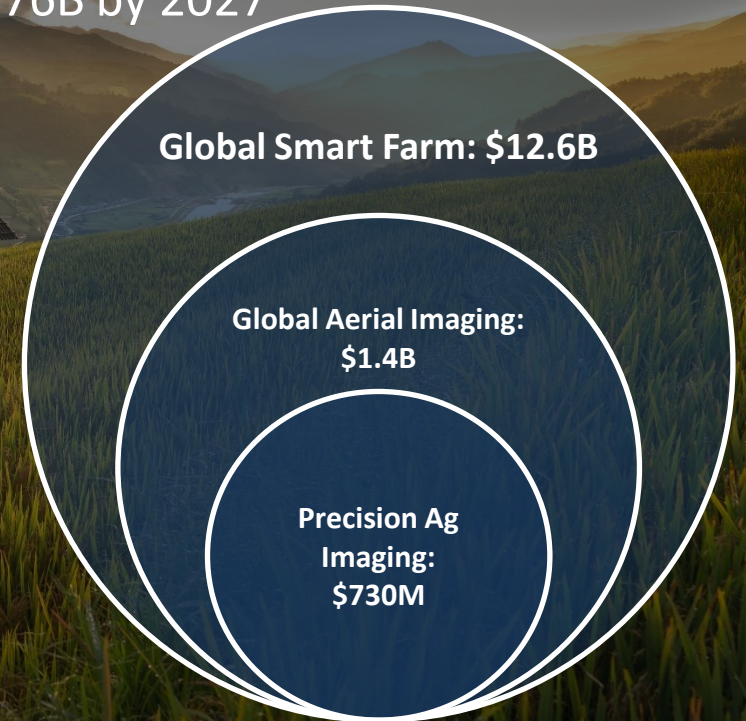- Technology such as ours will be necessary to survive as a growing operation.

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GLOBAL TAM

Precision AgTech imaging market: $730.4M 2019-- CAGR 9% 2020-27*
Global Aerial imaging market: $1.4B 2017 -- $4.13B by 2025*
Smart Farm market: $12.6B 2019 -- $24.76B by 2027*

- International Expansion to avoid seasonal revenue
- Smart farm integration
- Turn-key operation eventually

Global Smart Farm: $12.6B

Global Aerial Imaging: $1.4B

Precision Ag Imaging: $730M

* https://www.coherentmarketinsights.com/market-insight/imaging-technology-market-for-precision-agriculture-market-3928
*https://www.fortunebusinessinsights.com/industry-reports/aerial-imaging-market-100069
* https://www.emergenresearch.com/industry-report/smart-farming-market

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Unit Economics

Based only on what can be sold immediately

- $3.50 per acre flown Revenue
  - Our costs per flight are nearly fixed, so the larger the acreage the better the margin.

- Competition charges $3.50 per acre.
  - We will provide better, scientific-quality data, faster and with additional intelligence.

- Margins will continue to improve as automation and flight crews are established.

- Revenue will increase beyond providing flight data alone as we partner to provide connectivity as a service, imagery as a service, and new kinds of intelligence.

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Go to Market Strategy:

- 1) <u>Influential customers</u> and strategic industry partners for pilot programs.

- 2) <u>Customers of competitors</u> and other image mapping companies' clients with a better product at the same price or cheaper.
  - With 2-3 Influential customers' data we can create general marketing with proof.

- 3) <u>Government contracts</u> will be pursued in conjunction. Regulators in water scarce areas may begin demanding water rationing within 5 years.

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FINANCIAL FORECAST

	2024	2025	2026
	Year	Year	Year
Revenues			
Data Analysis & Reports	$3,024,101	$22,176,000	$38,304,000
TOTAL REVENUE	$3,024,101	$22,176,000	$38,304,000
Cost of Sales			
Data Acquisition & Analysis	$1,296,043	$9,504,000	$16,416,000
Total Cost of Sales	$1,296,043	$9,504,000	$16,416,000
Salaries			
Total C Suite	$216,000	$372,000	$480,000
Total Administrative	$296,928	$1,880,080	$3,215,320
EBITDA	$1,215,130	$10,419,920	$18,192,680
Amortization/Depreciation - Product Development	$1,500	$9,000	$17,000
Income Taxes	$364,539	$3,125,976	$5,457,804
NET INCOME	$849,091	$7,284,944	$12,717,876

Our Ask:

$350,000

$200,000 in the first tranche, with an additional $150,000 in the second tranche as agreed upon.

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Team

David Singer

Five decades of experience working and management experience with both national and international companies developing business relationships and expanding new and existing business opportunities.

Dr. Mark Banish

Dr. Banash has 25-year series of success in research, manufacturing and product development, with an emphasis on technical, operational and regulatory management experience.

Dr. Alfonso Torres

Chief scientist at AggieAir. Professor of ag data science at USU, years of spatial big data analysis. Leader in image analysis for crop forecasting and optimization.

Dr. Cal Coopmans

Director of AggieAir. Expertise in aerial and ground robotics, unmanned systems, embedded/real time systems. Aerospace startup winner.

Stephen Goodman

Mr. Goodman has spent the last 25-years as a financial executive in the private sector and military officer. He has served as Chief Financial Officer and Chief Legal Officer in two publicly traded companies.

Thank You!

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