



TierraSpec

**Revolutionizing soil-health
analysis & management**

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SOIL HEALTH

Why should we care?

Environment

- 95% of our globally food supply *
- Food security and quality depend on soil health**
- Carbon insetting
 - Soil can absorb 2X atmospheric carbon

* <https://www.weforum.org/agenda/2023/02/soil-degradation-biodiversity-planet/>

** <https://www.fao.org/soils-2015/news/news-detail/en/c/277682/>

A Global Crisis

50%

Global agriculture soil degraded
→ Food security & quality

\$400B

Annual
productivity losses

30%

Ag-based products price
increase

Current Soil Testing Practices



Soil Sampling



Laboratory Testing



Analysis & consulting

Their Downside – lack of scalability



Labor intensive



Time consuming
Weeks



Costly
\$15-21/acre
annually



Insufficient
Low Resolution



TierraSpec

SUPPORTING SOIL HEALTH

**High resolution
satellite data**

+

**Soil
database**
Data validation

+

Predictive AI =



End-to-End Solution Soil Attribute Mapping, Management & insight

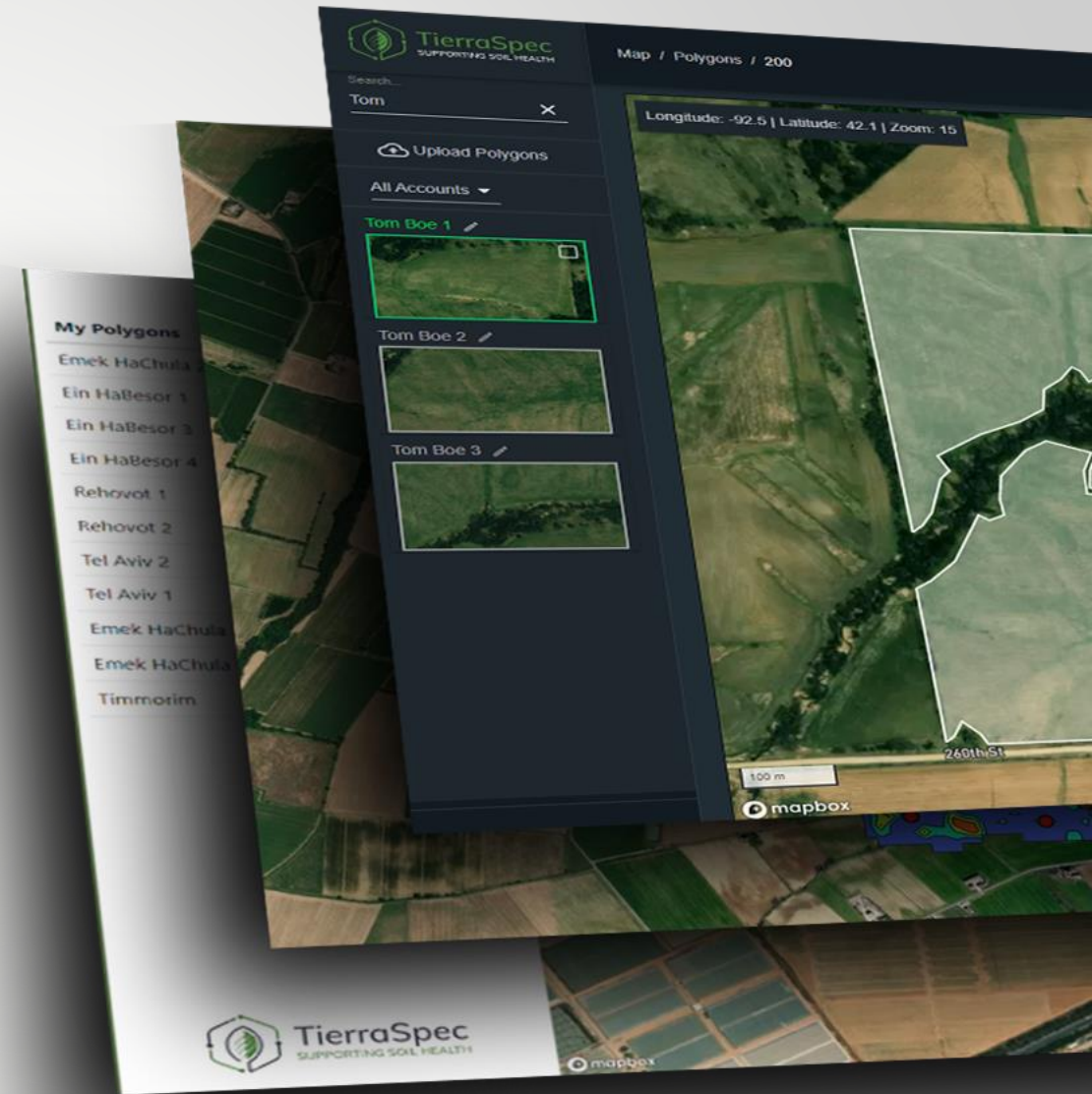
- Remote & On-demand
- Scalable
- Cost effective
- High resolution (30x30m)
- Actionable insight
- Up to 30% saving on fertilizers
- Up to 20% increased yield
- Carbon stock

Soil attributes analysis:

- Soil nutrient analysis
 - Nitrogen, Potassium, Phosphate
- Soil pH, texture (clay, silt, sand)
- Carbon stock and content (carbon credit MRV)
- SOC
- Moisture-testing
- EC - testing

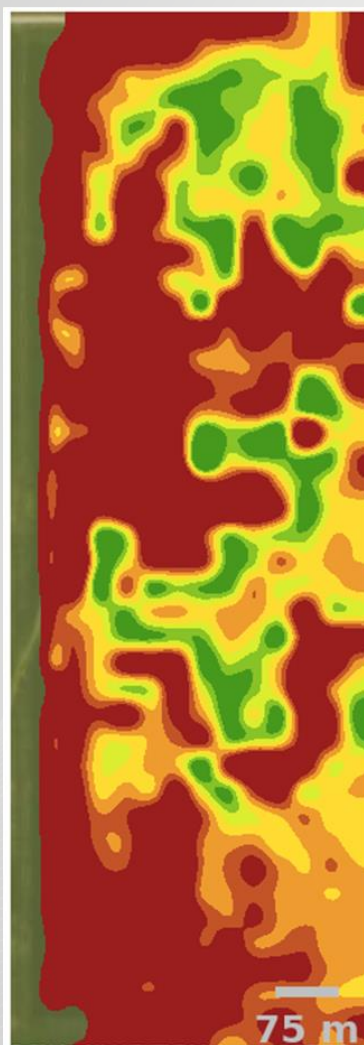
Actionable insight

- Land attribute report
- Sampling optimization strategy
- Soil stratification
- Variable rate dispersion recommendations

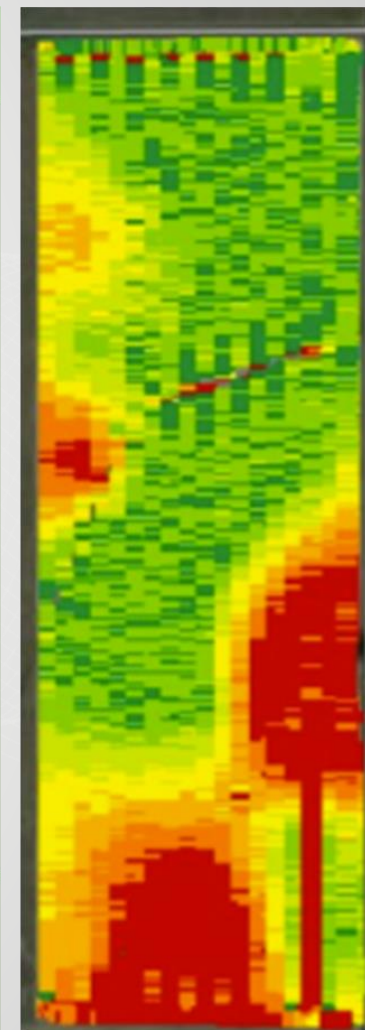


West dirt road – Iowa, USA

Variable rate dispersion recommendations



Tierraspec		Traditional
1%	171.5+	16%
1%	161.4 – 171.5	7%
7%	148.9 – 161.4	8%
12%	135.1 – 148.9	10%
17%	121.2 – 135.1	12%
16%	107-121.2	31%
46%	0-107	16%
12,873	Total fertilizer (lb)	18,377



N:P:K 0:52:0

Target P: 40 ppm

West dirt road – Iowa, USA

Variable rate dispersion recommendations

Fertilizer Application	Phosphorus (lb) (NPK 0:30:0)	Potassium (lb) (NPK 0:0:60)	Lime (lb)
Traditional methods	18,377	37,177	477,289
TierraSpec	12,953	31,609	450,625
Difference	5,424	5,568	26,664
	29% saving	15% saving	5.5% saving

Optimized inputs & significant cost saving



Why TierraSpec

The information you need when you need it

- On-demand end-to-end soil analysis solution
- 90% increase in field resolution
- Up to 80% operational cost reduction
- Data-driven soil management
- Optimization of inputs with up to 30% cost saving
- Carbon insetting

TAM
\$18.5b

- 3.7 billion acres of arable land at \$5 per acre

SAM
\$4.85B

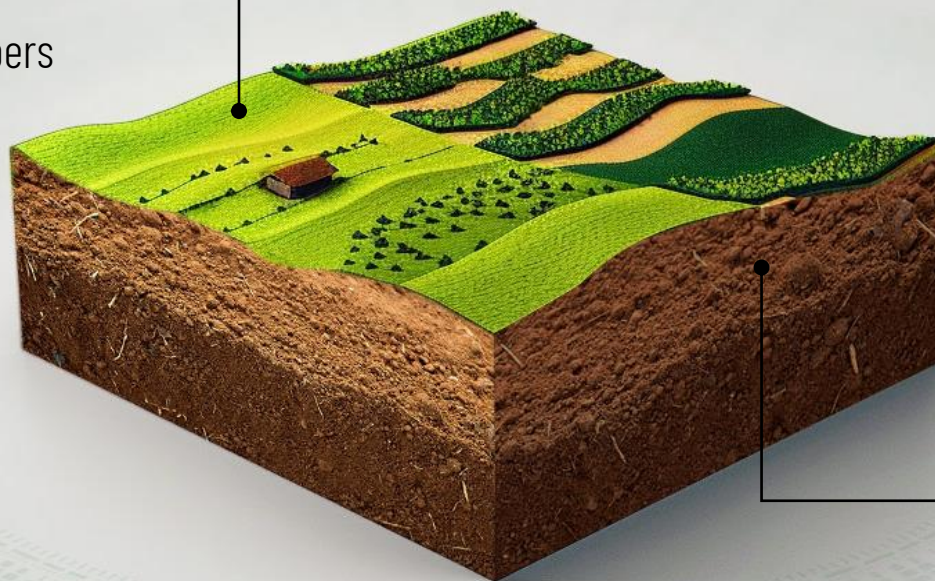
- North America, the EU, and Australia



B2B SaaS Row & Seasonal Crops

Ag. Services

- Retailers/distributors
- Carbon project developers
- Ag. Consultants
- Soil laboratories



Enterprise

- Ag. Input companies
- Processors (food, feed, fiber)

TEAM



Avital Levy-Lior, PhD, MBA
CEO & Co-founder



Prof. Eyal Ben-Dor
CSO & Co-founder



Amit Hazan
Head of SW development



Eitan Fass
Remote sensing & ML



Nathan Weinstein
Remote sensing & ML

Investors:



Join Us

**Unlock The Value Of
Healthy Soil**

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