



Satellite Based Crop Scouting for Web and Mobile Applications

ag | knowledge

geo | cledian
spatial architects





Imagine

Inspect farmers fields

Anytime - Globally

Why ag|knowledge ?

- Farmer threaded by pests & diseases
- EO data helps to detect and monitor but access and analysis is difficult
- Currently not integrated into Farm Management Sys.



Informationen für: 2015 📄 Schlagkartei Drucken

Name: Krummholz

Nummer des Schlags: 2

Fläche: 11,7 ha

Kultur: Winterweizen

Sorte: Gourmet E

Aussaatdatum: 7.9.14

Zwischenfrucht:

Sorte:

Outdated maps

Situation at date: CURRENT

Current Nat. Grid: Sec_Takla kandi (018)[018066 - A066]

Filter by anomaly: (None) (None)

Filter by permanent crop: (None)

Filter by link type: (None)

Filter by catalog: (None)

Expiring deed: Back days: 90

Search sheet/parcel/block:

RP Notes:

Search

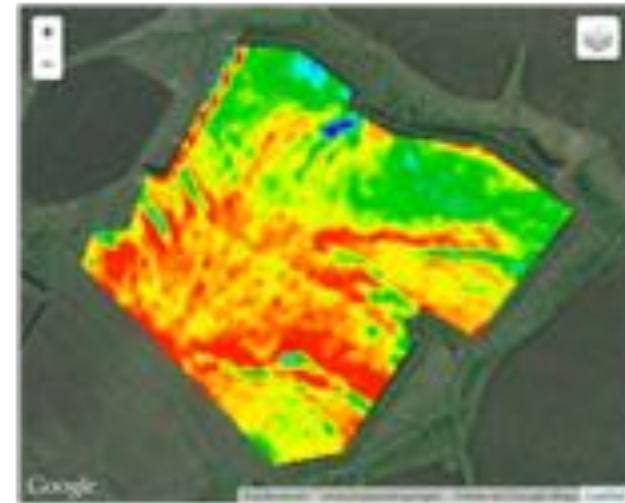
Linked parcels list

	An.	Nat. Grid	SN	Parcel	Block	Peric. Area [SqM]	GIS Area [SqM]	Prop.	Link	Linked area [SqM]	Init date	End date	Prop. documents	Forms	Apps.	Stack	Notes
✓	●	A066	0001	12345		99,882	99,882	1	100%	99,882	20/10/2015		📄	📄	📄	📄	
✓	●	A066	0001	99992		9,983	9,983	1	100%	9,983	21/10/2015		📄	📄	📄	📄	
✓	●	A066	0001	99991		3,492	3,492	1	100%	3,492	21/10/2015		📄	📄	📄	📄	
✓	●	A066	0001	59		28,069	28,069	1	100%	28,069	07/10/2015		📄	📄	📄	📄	SITIFARMER
✓	●	A066	0001	12		7,471	7,471	1	100%	7,471	02/09/2015		📄	📄	📄	📄	
✓	●	A066	0001	20		22,461	22,461	1	100%	22,461	02/09/2015		📄	📄	📄	📄	

Page: 1 of 1. Items found: 6. Items per page: 12 Change

Static information

- Remote field scouting
- Simple integration into ICT systems of farm management systems, mobile apps, governments (IACS)
- Global coverage
- Based on open satellite data

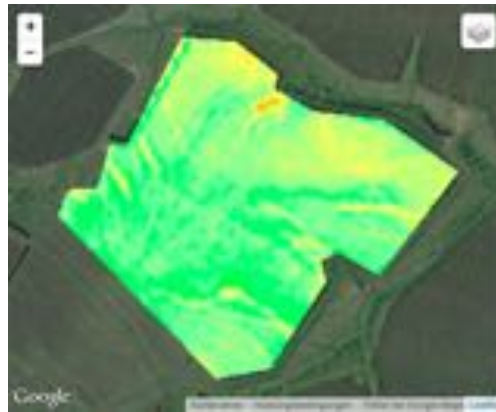


What does it provide ?

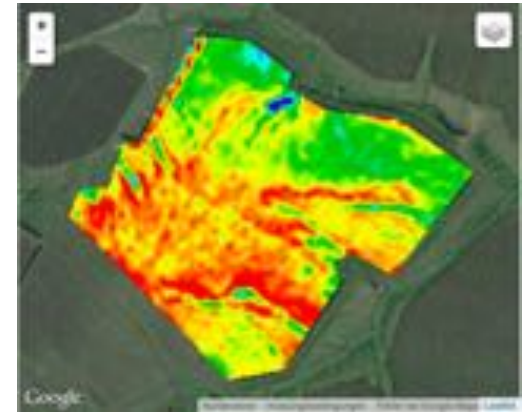
Basic information service:



True color image



Vitality



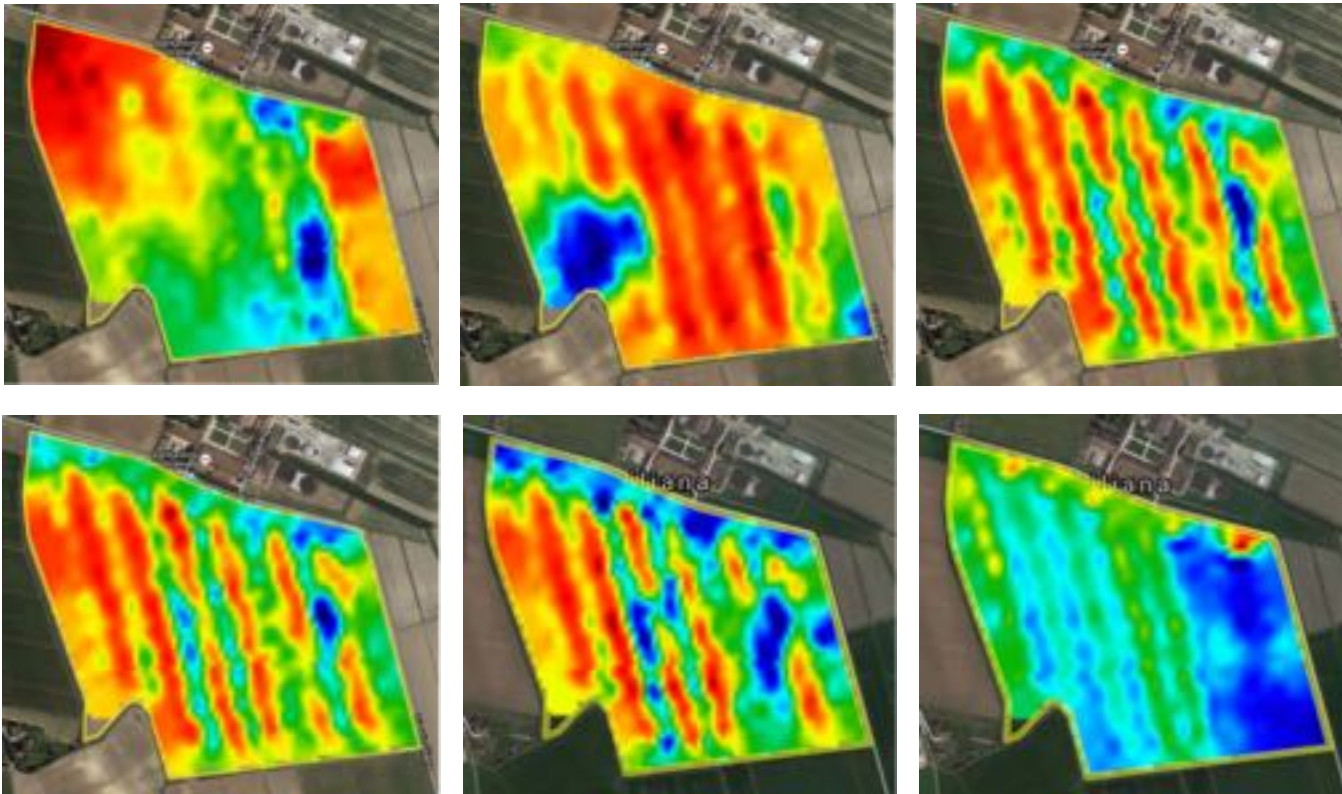
Variability

Update frequency: 1-3 weeks,
available 1 day after acquisition

20-50 images/year

What does it provide ?

Time Series

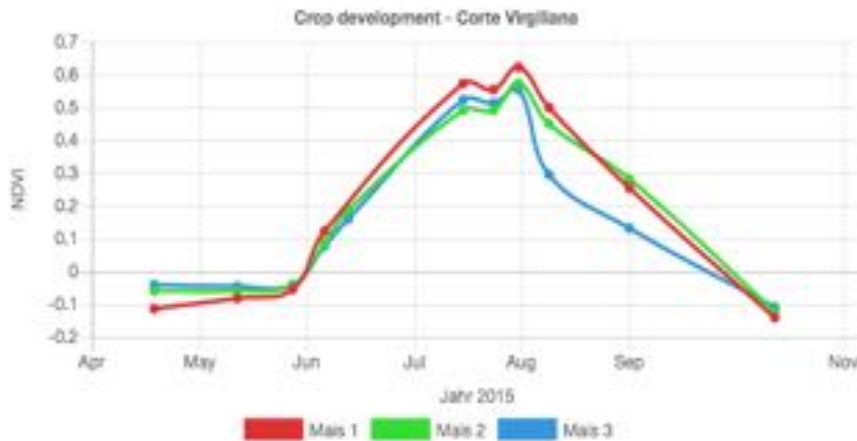


2016-01-13	2016-06-24
2016-01-16	2016-06-28
2016-01-20	2016-07-01
2016-02-12	2016-07-10
2016-02-19	2016-07-11
2016-03-04	2016-07-17
2016-03-20	2016-07-18
2016-03-20	2016-07-26
2016-03-23	2016-07-28
2016-04-12	2016-08-07
2016-04-12	2016-08-11
2016-04-19	2016-08-17
2016-04-21	2016-08-27
2016-04-29	2016-08-27
2016-05-22	2016-09-03
2016-05-30	2016-09-06
2016-06-15	2016-09-09
2016-06-18	2016-09-12
2016-06-24	2016-09-19
	2016-09-26
	✓ 2016-09-29

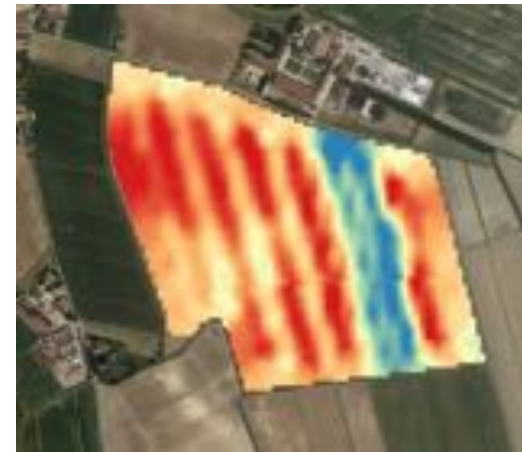
40 images

Analytics services:

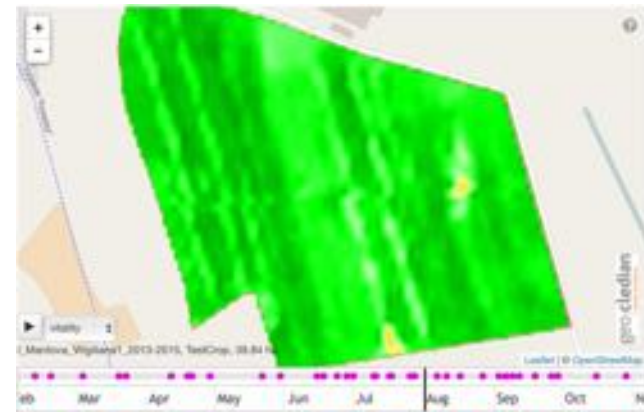
Crop Types



Crop Development

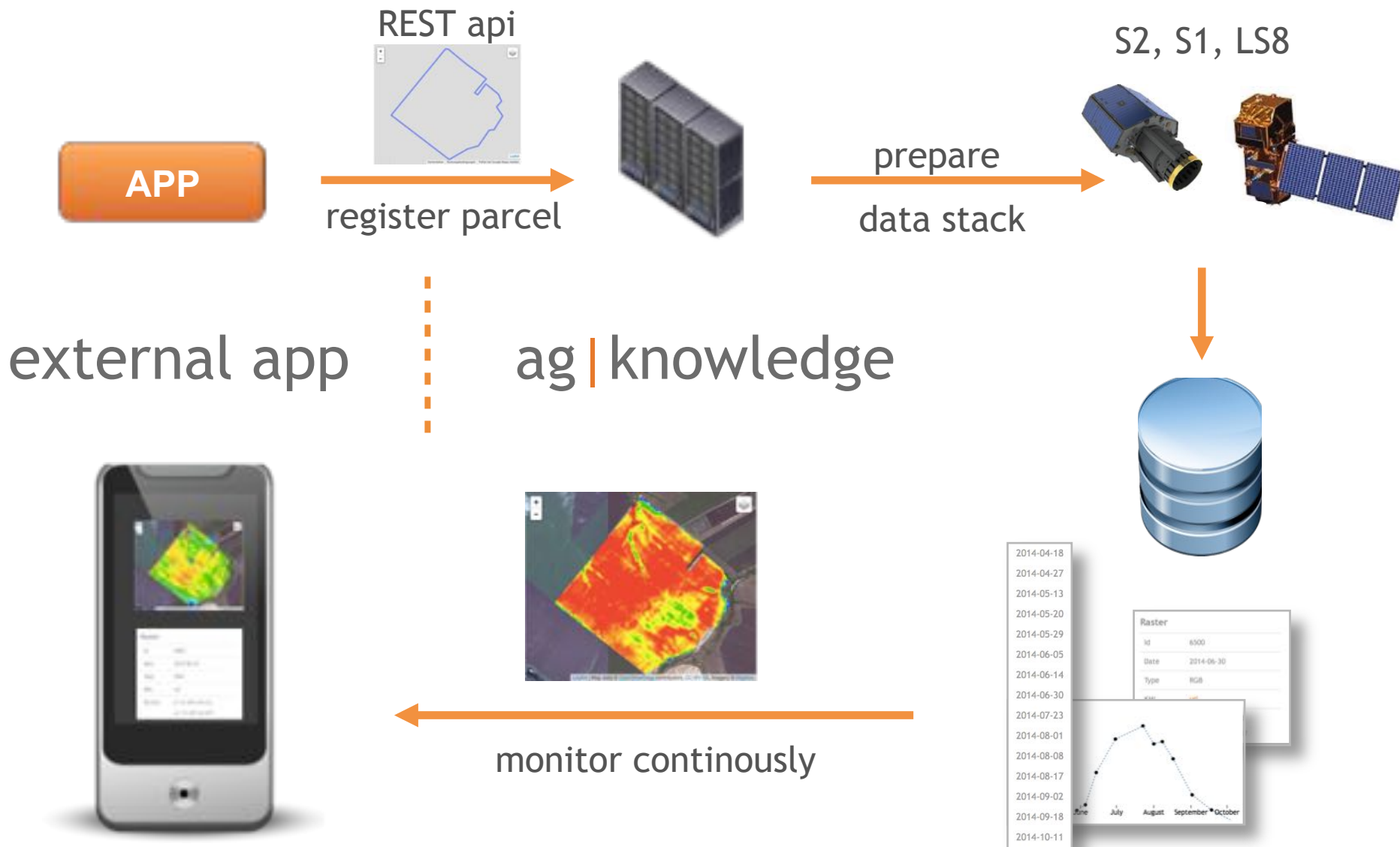


Management Zones



Crop Health

How does it work?



Use Case:

Crop Health Monitoring

- Crop Scouting for Farmer for
 - Pests
 - Diseases
 - Nutrition deficiencies

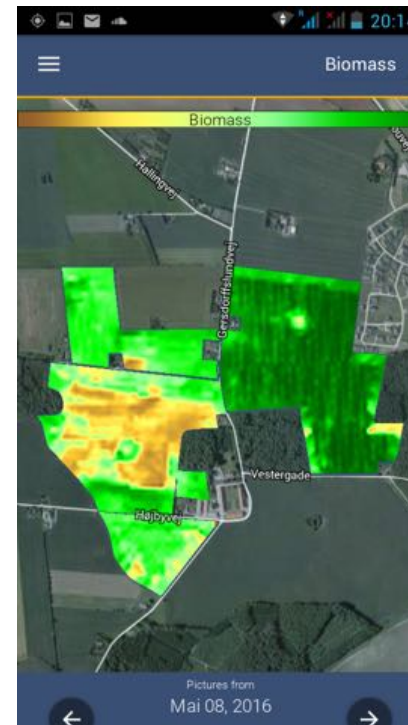
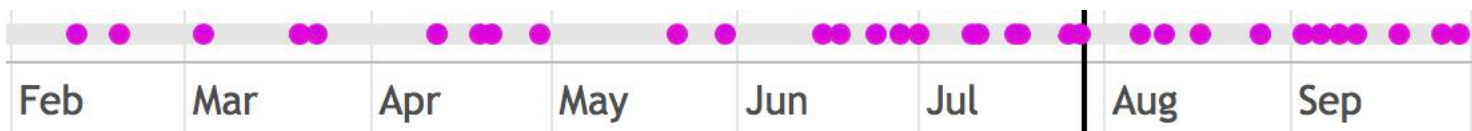


Image updates

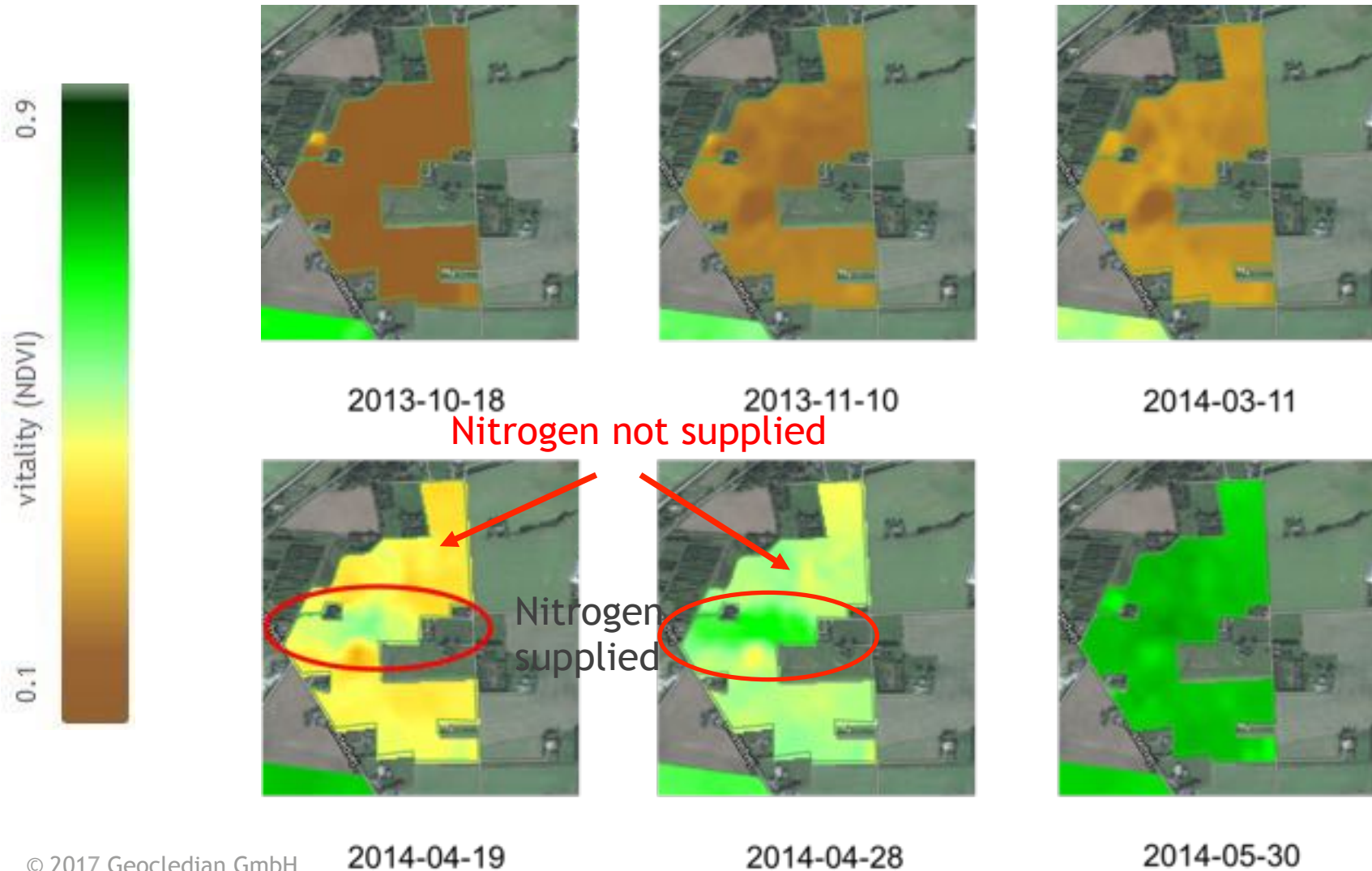


Snail attack



Crop damage in NDVI timeseries

Nitrogen deficiency in winter wheat field



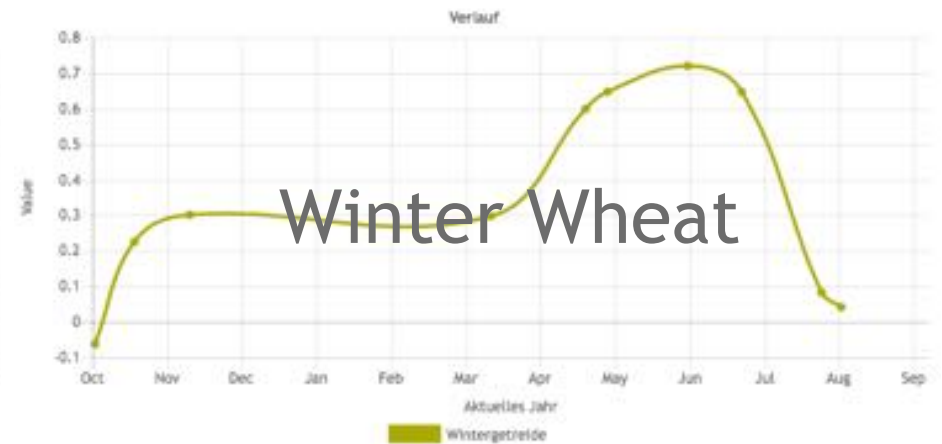
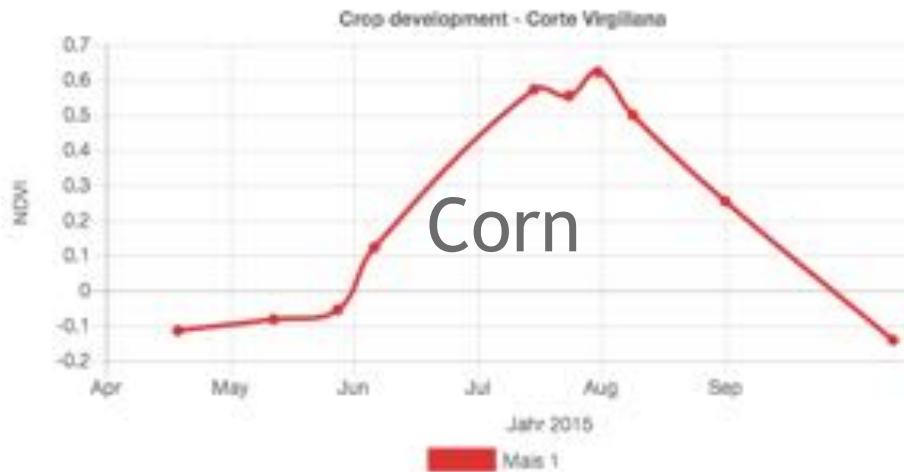
Use Case:

Managing Agricultural Policies Europe

Controls with Remote Sensing - SITI Agri



Crop patterns allow crop type determination



Detection of Crop Rotation

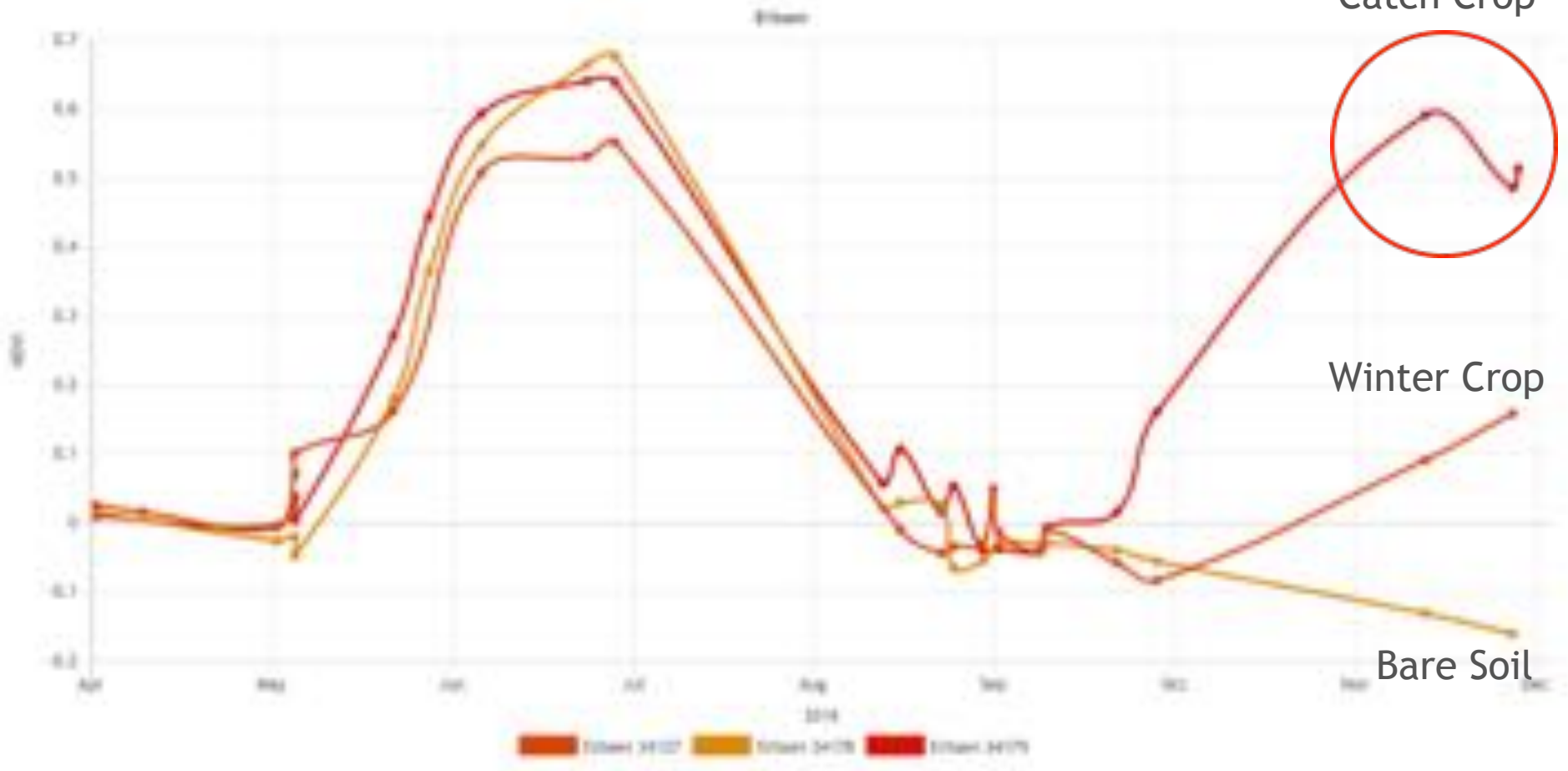
Main Crop: Pulse

Catch Crop

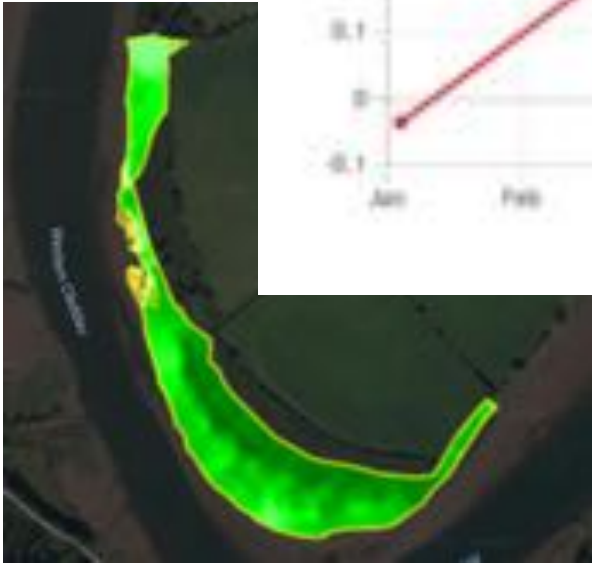
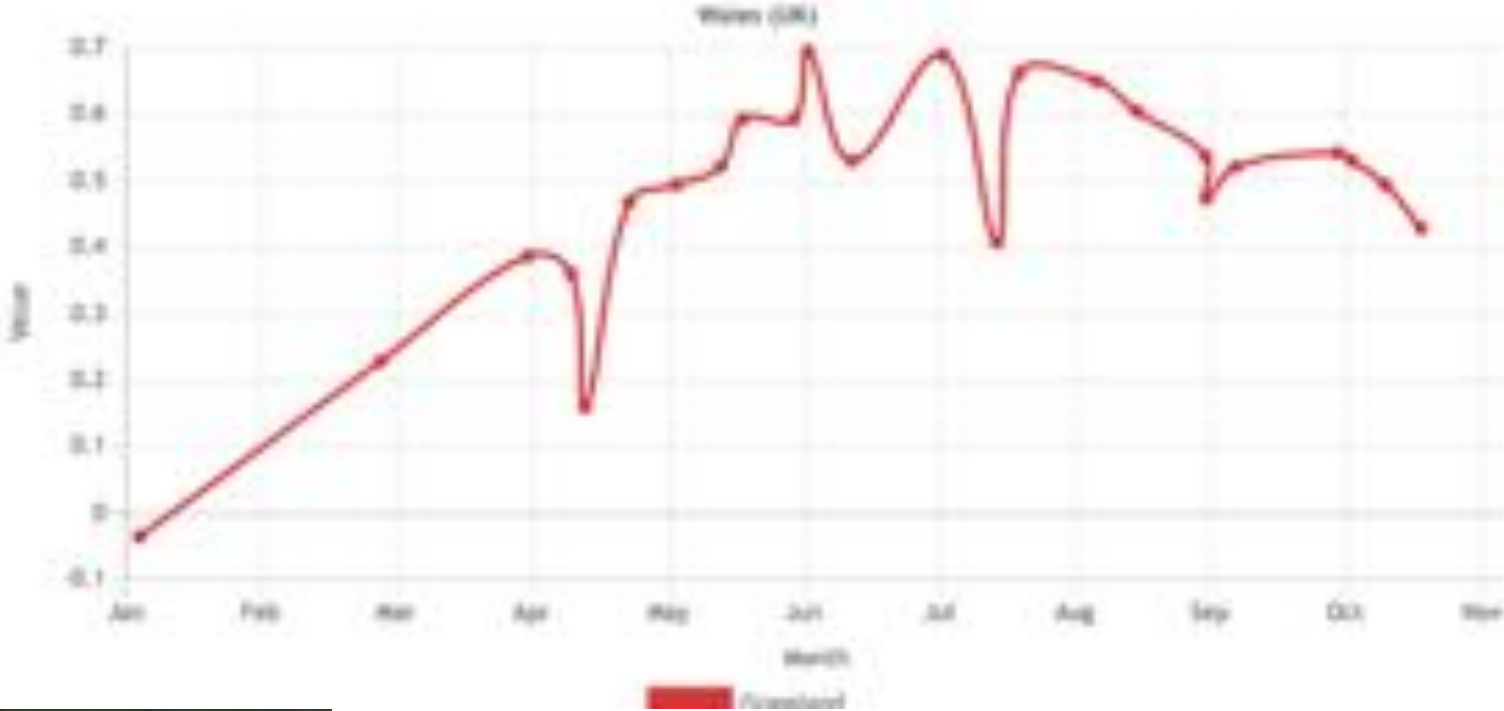


Winter Crop

Bare Soil

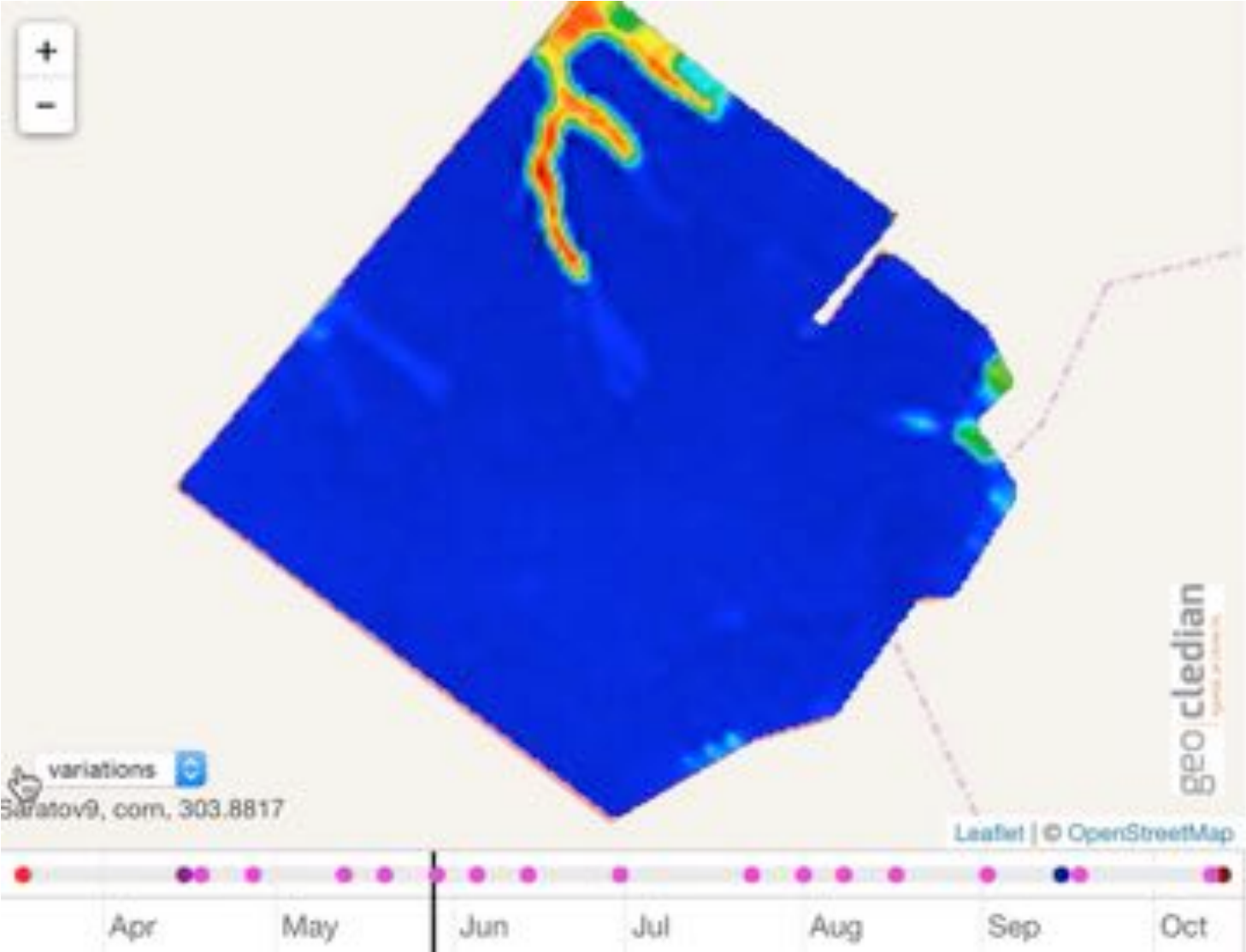


Grassland Pattern



Monitoring Example

Video



- **Live** integration into any ICT-system
- **Monitoring** for any parcel > 0,5 ha globally
- **Continuous updates** (up to 50 times a year)
- Input to a **great range** of applications
- **Cost efficient - fully operational**

Thank you for your attention

Booth K45 - Near Start-up Pavillon

Request free account

More info: <https://sites.google.com/site/geocledian/product-overview>

Product video: https://youtu.be/8_jj3wPI4oM

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