BIOSCOPE:
A farmers' perspective to remote sensing

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Luxembourg Earth Observation and Integrated Applications Day

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1

I need to spray, but how much?

2

Let's measure the actual state

3

Spray according to instructions

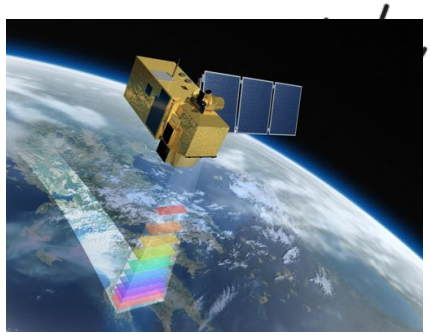
4

Evaluate impact and quality

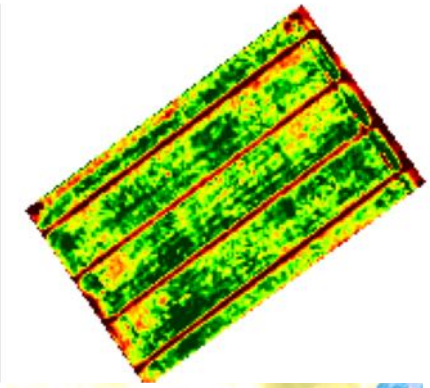
AeroVision

bio scope

BIOSCOPE



Precision Agriculture depends on monitoring crops and soils and take action accordingly. BIOSCOPE provides farmers with crop maps based on fresh imagery that seamlessly feed into daily activities and machinery.



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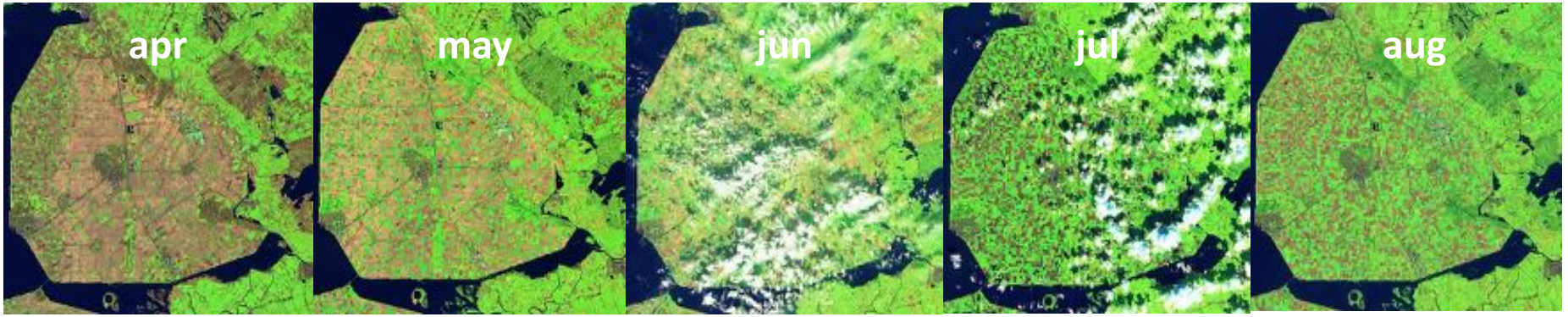
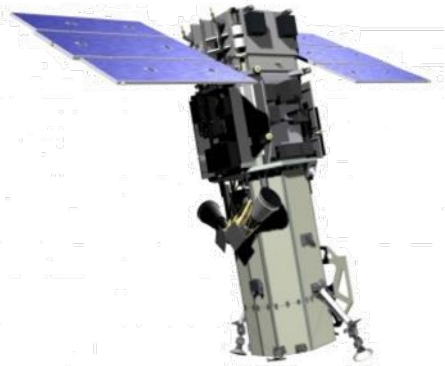
bio scope

The Challenge:



Imagery is a great tool to monitor crops. And farmers need a timeliness supply and carefree access to fresh imagery. Satellites are a great candidate (price/quality) but cannot be guaranteed because of persistent cloud cover.

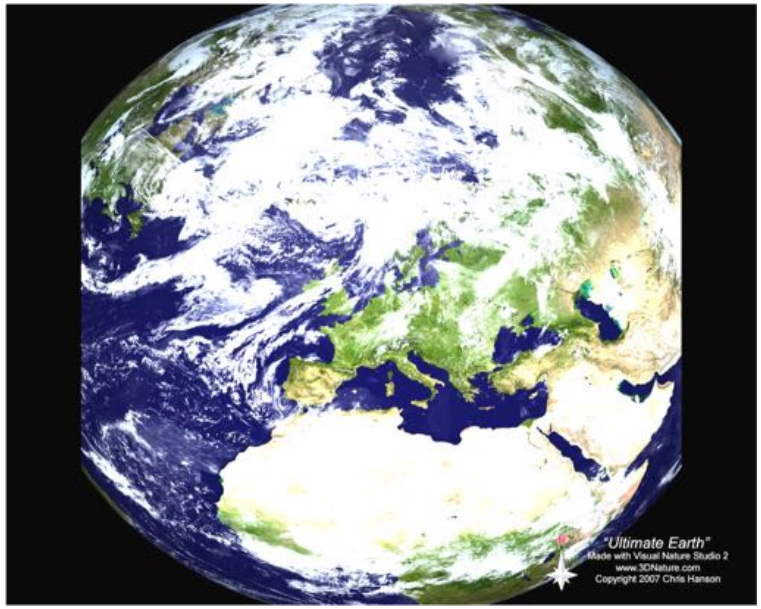
The promise of Precision Agriculture can be filled in by a continuous supply of relevant data, readily usable by farmers.



AeroVision

SATELLITES WHEN POSSIBLE,

DRONES WHEN NEEDED



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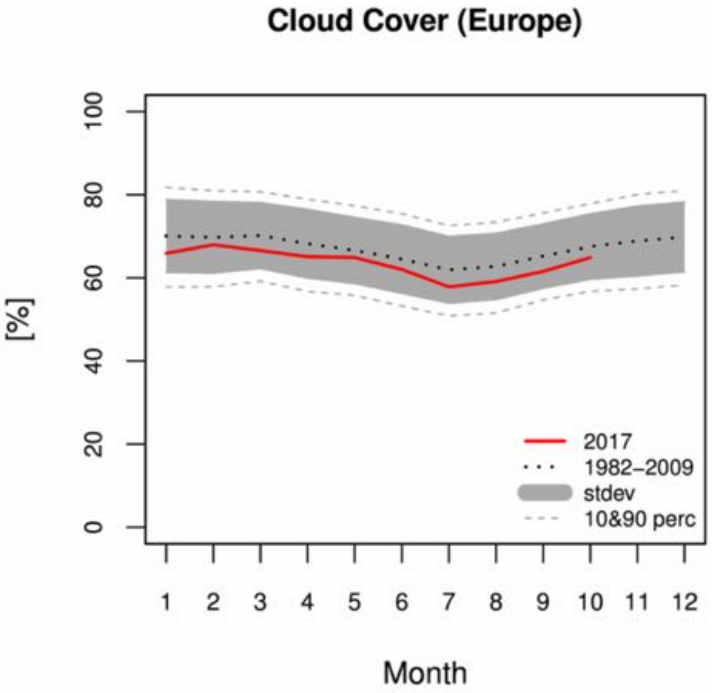
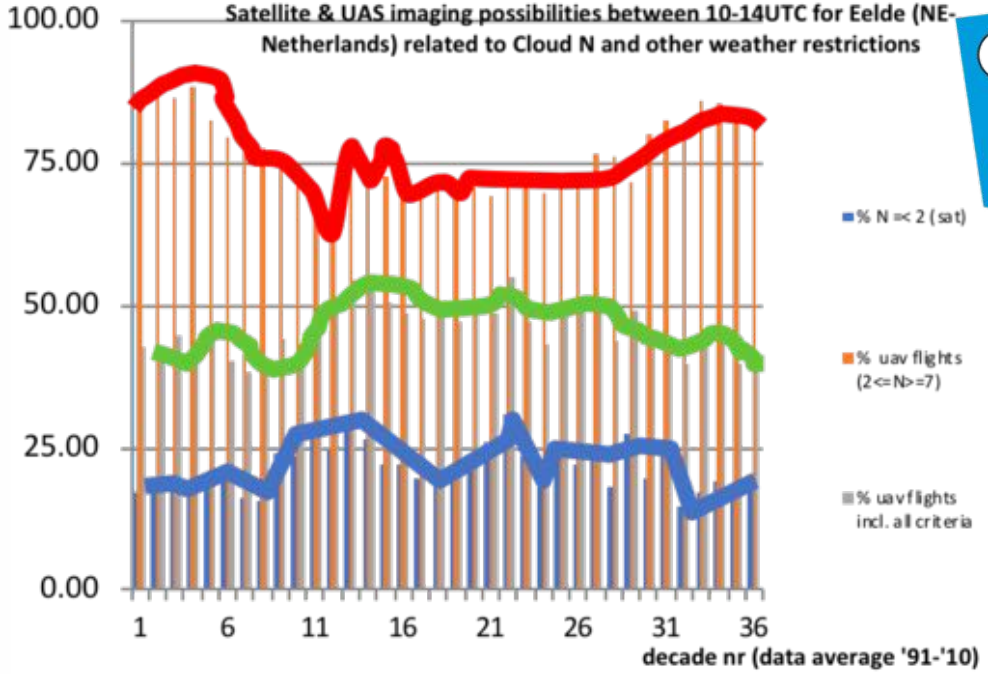
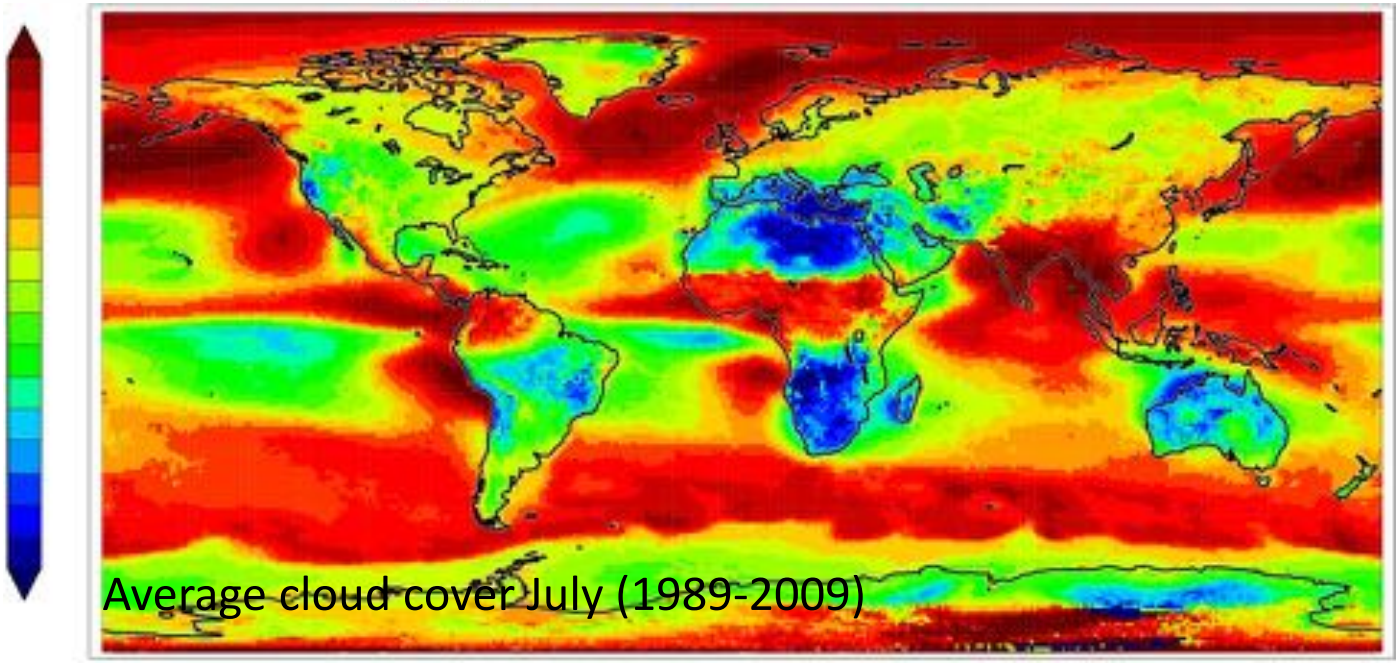
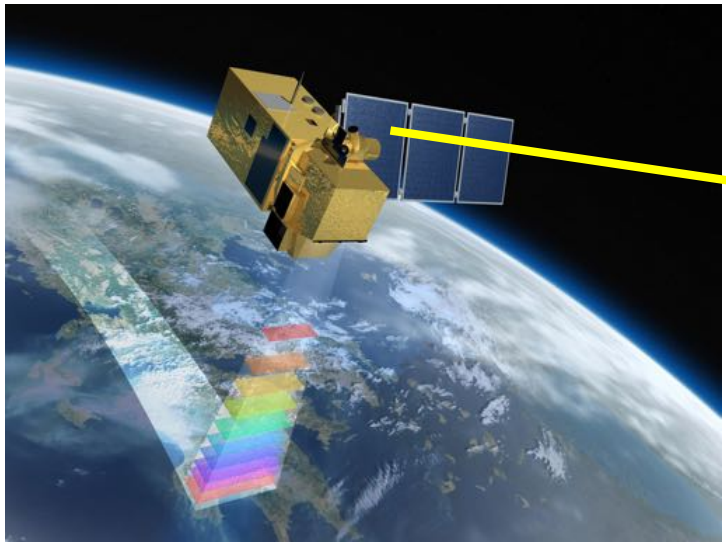


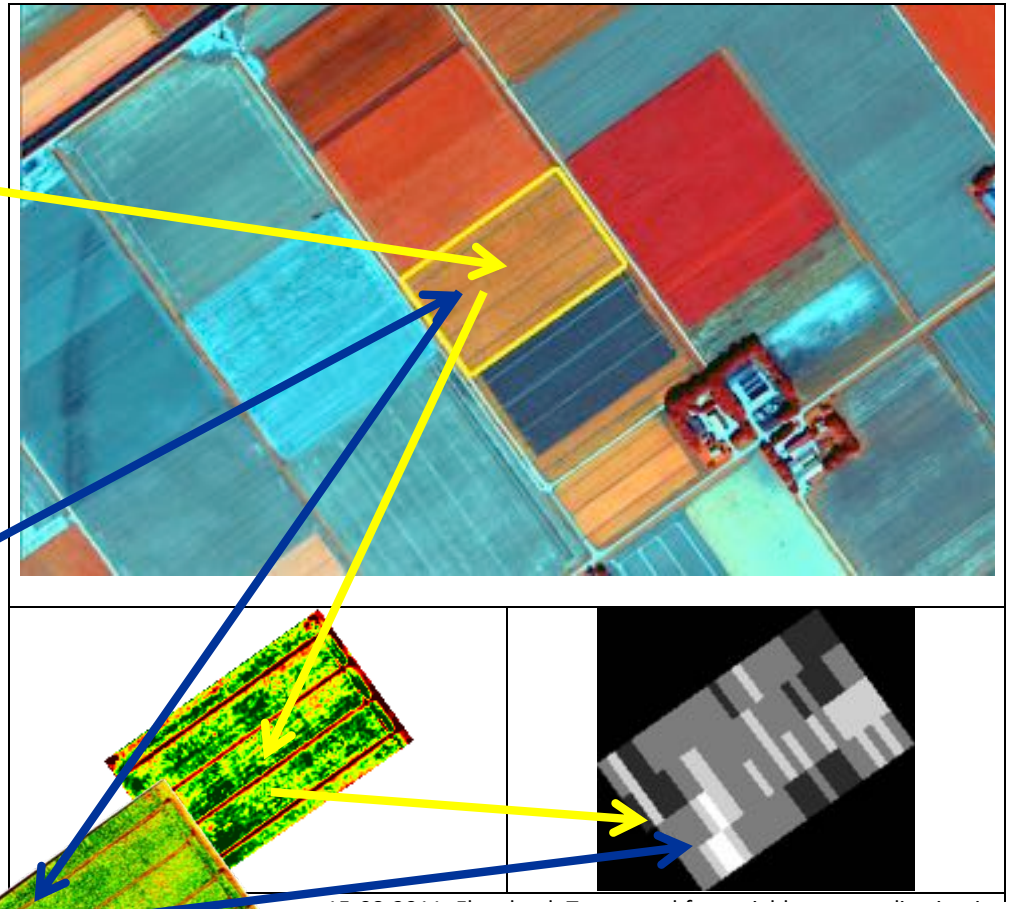


Source: van der Wal & Abma (2013)



Source: www.smhi.se





Biomass (above ground)

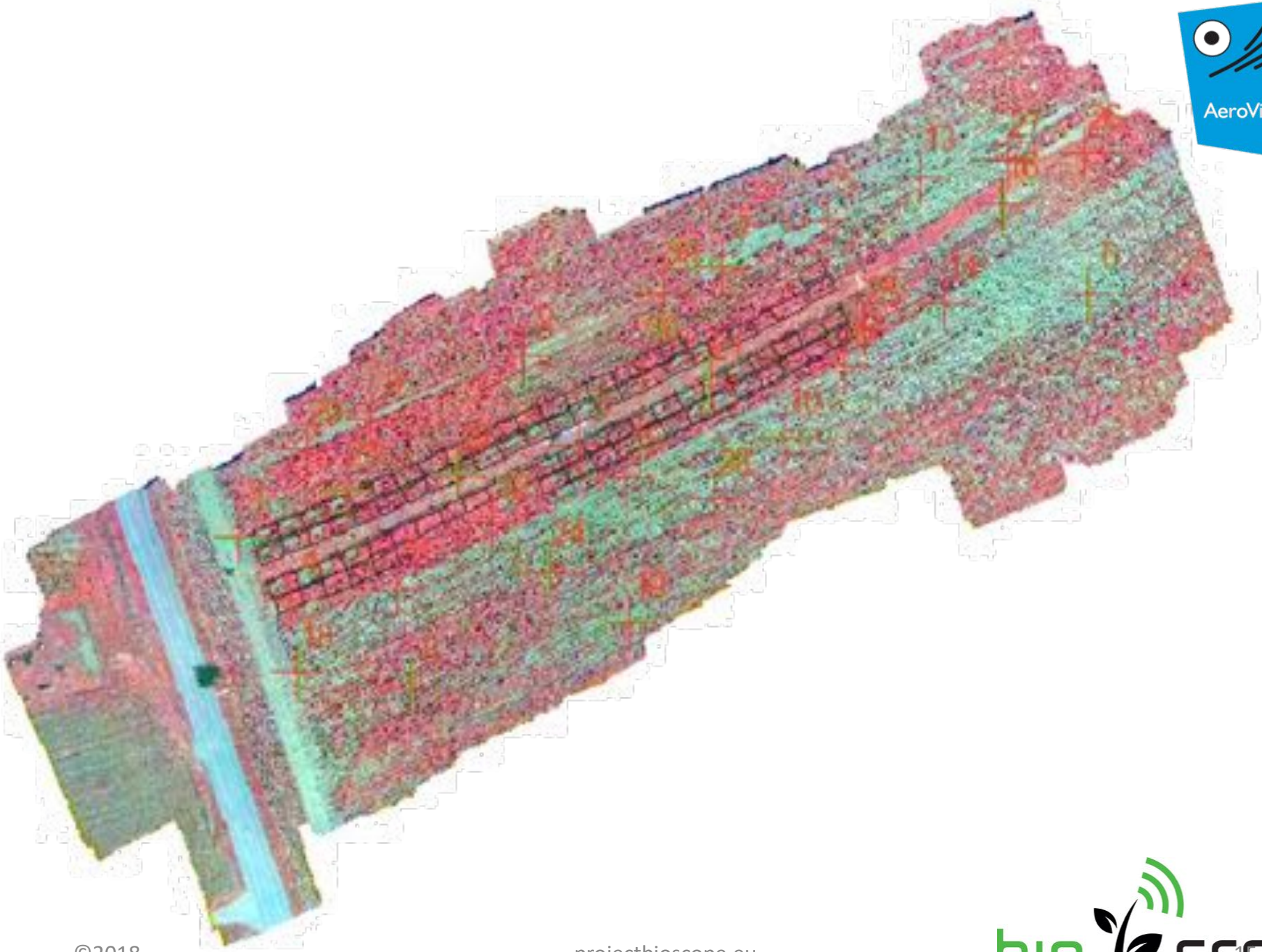
Chlorofyl / leaf nitrogen content

Task map generation and supply

- eBee integrated – so larger areas;
- Within 24 hr corrected and analysed;
- Total spectral curve in 40 bands;
- Combination of VI's to better indicate cause-effect relations;
- Simulate all satellite sensors.





Benefits from a farmer's perspective

- We provide all ~~imagery~~ maps in 1 standard;
- Demand driven, so no 'one size fits all';
- As deep as possible in farmer's workflow:
  - Task map products;
  - Scouting products;
  - Soil and vegetation indices;
- Centralised repository – farmer is in control;
- Always fresh. Always available. Always ready to use.

Thank you for your attention!

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TerraSphere

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