



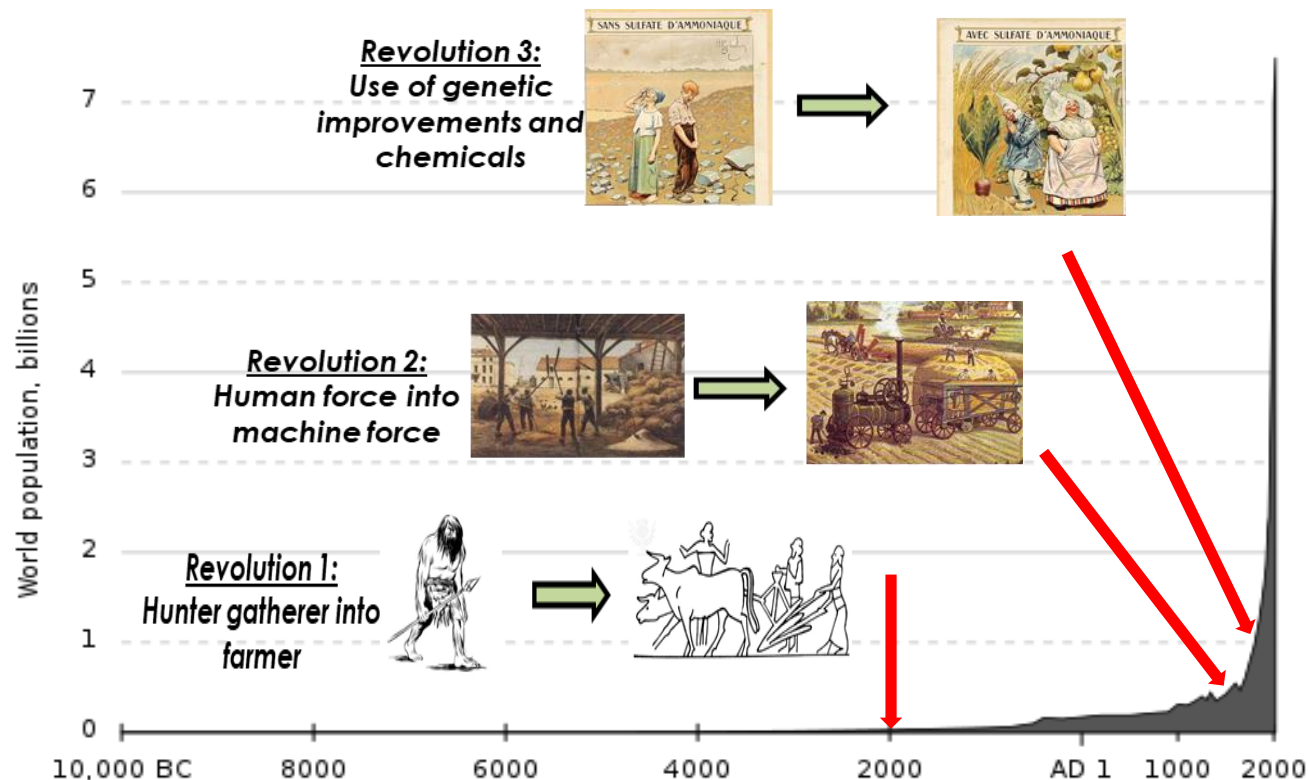
hi-phen

INTEGRATED PLANT PHENOTYPING SYSTEMS

[www.hiphen-plant.com](http://www.hiphen-plant.com)



# Welcome to the digital revolution

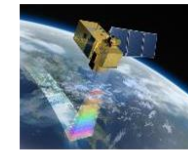


## The 4th agricultural revolution

Measure to optimize

Automatize

Satellite



UAV



IOT

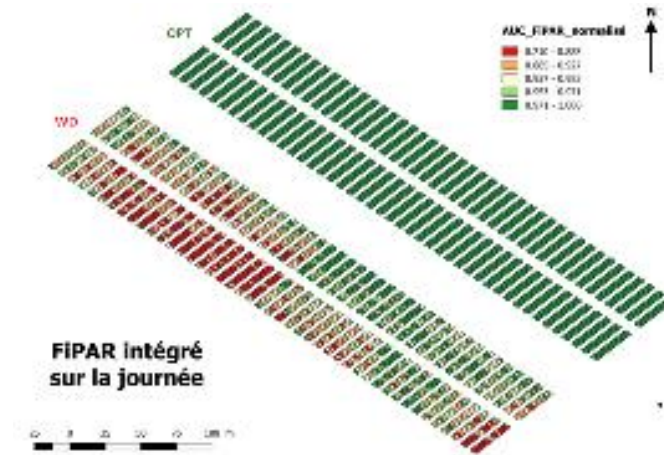


# Exemple: Use case 1

## Customer KPI:

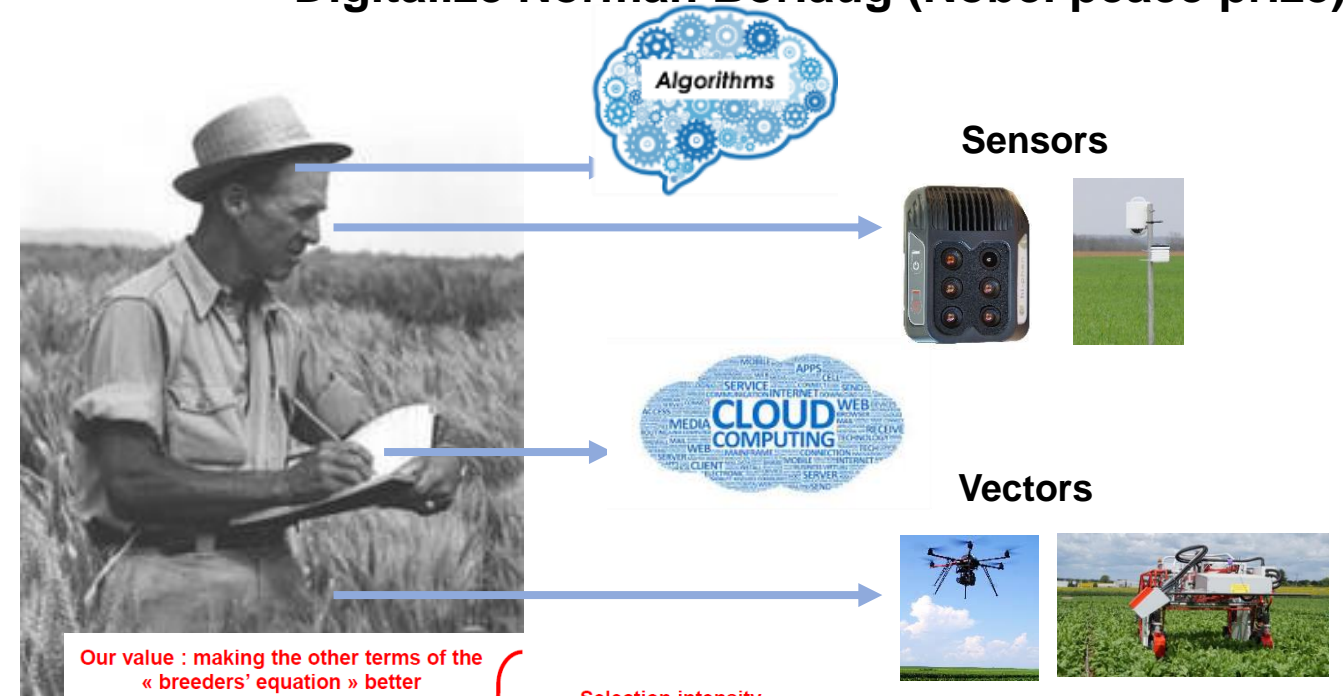
- + overall yield increase for new cultivar
- + better germination
- + better resistance to disease
- + ...

=> Those can be assessed on microplot trials



## Our Solution

### Digitalize Norman Borlaug (Nobel peace prize)



Our value : making the other terms of the « breeders' equation » better



Speed of genetic gain = competitive edge

Major progress from breeding companies in the past 50 years

$$R_t = \frac{i \cdot r \cdot \sigma_A}{y}$$

Selection intensity (points to  $i$ )

Selection accuracy (points to  $r$ )

Genetic variance = diversity (points to  $\sigma_A$ )

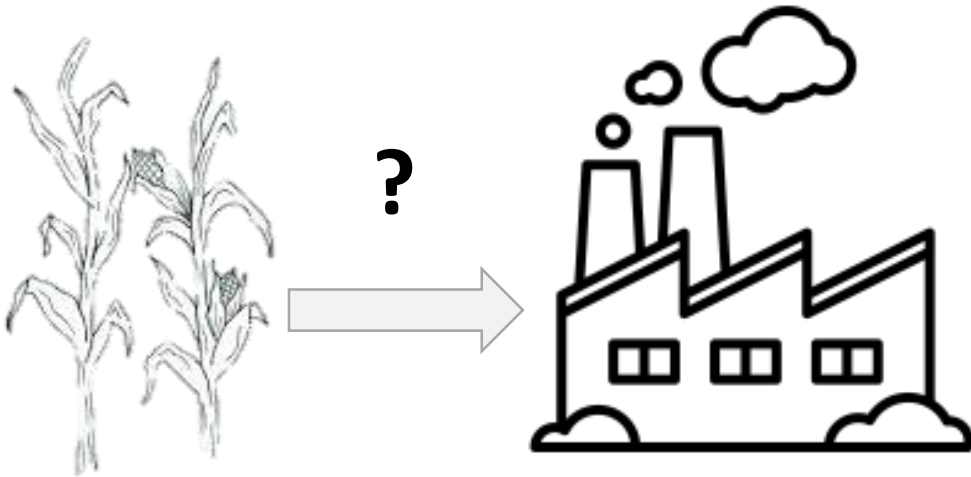
Years per cycle (points to  $y$ )



# Example: Use case 2

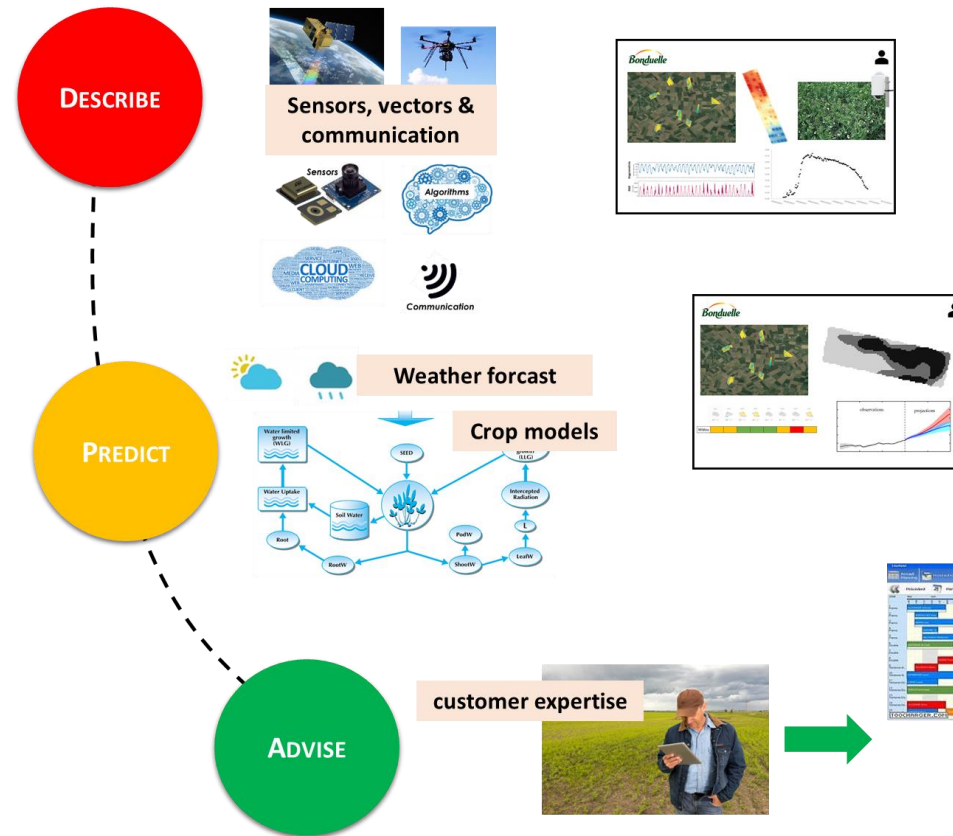
## Customer KPI:

- + Yield increase => less fields for production
- + Improve yield prediction => stable supply
- + Improve yield quality => industrial process



## Our Solution

End to end crop monitoring through the whole life cycle)

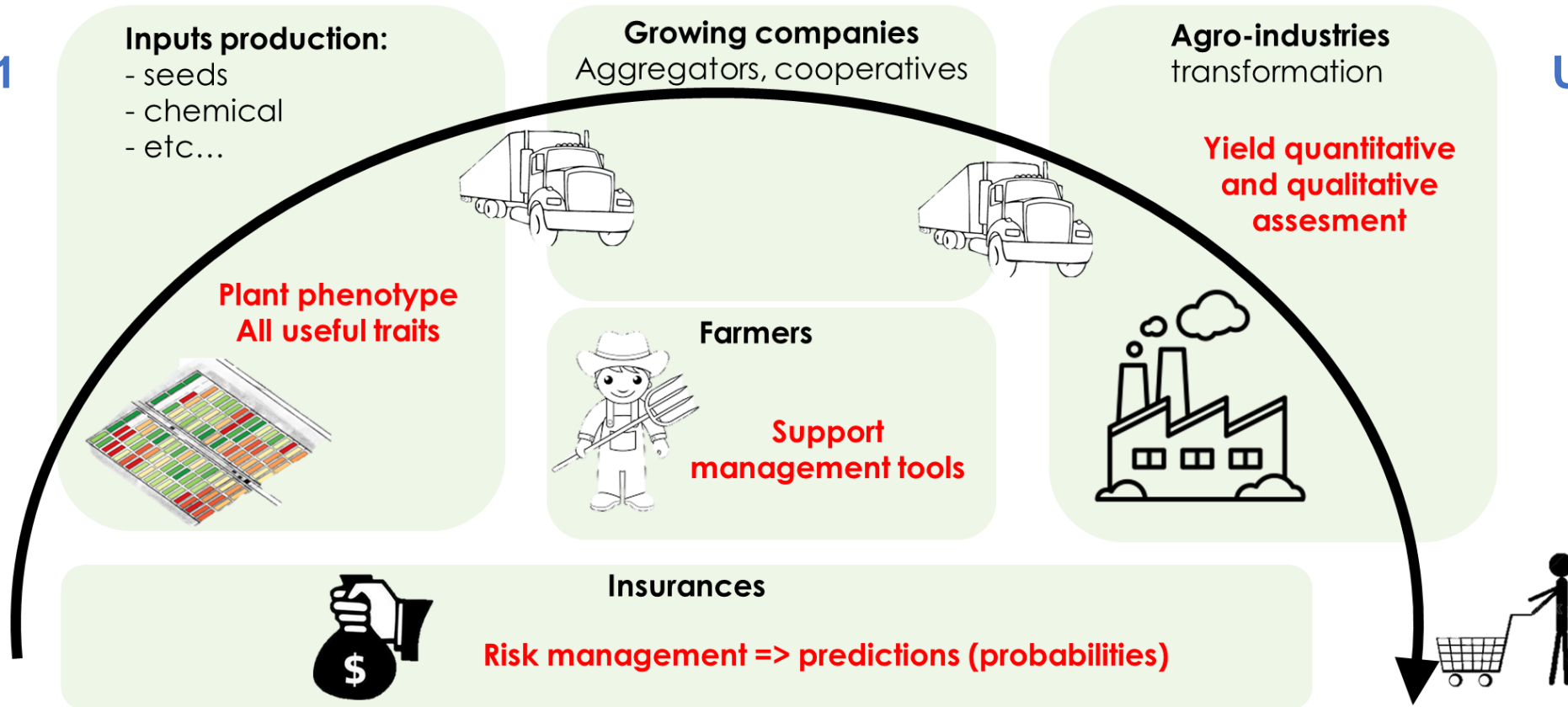


**Our vision of digital farming**



# The main markets on which our technology is used

Use case 1



# How we digitize your field

## Field IoT

*Monitor the dynamic of your crops*



## Phenomobile

*An advanced solution for automatic phenotyping*



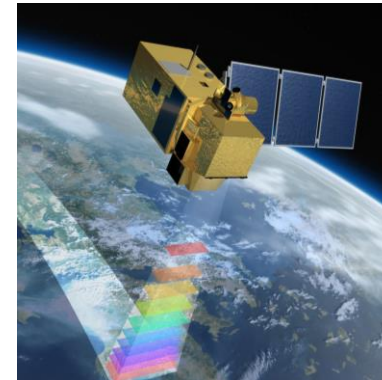
## UAV embedded Airphen

*The best camera for plant monitoring*



## Sentinel-2

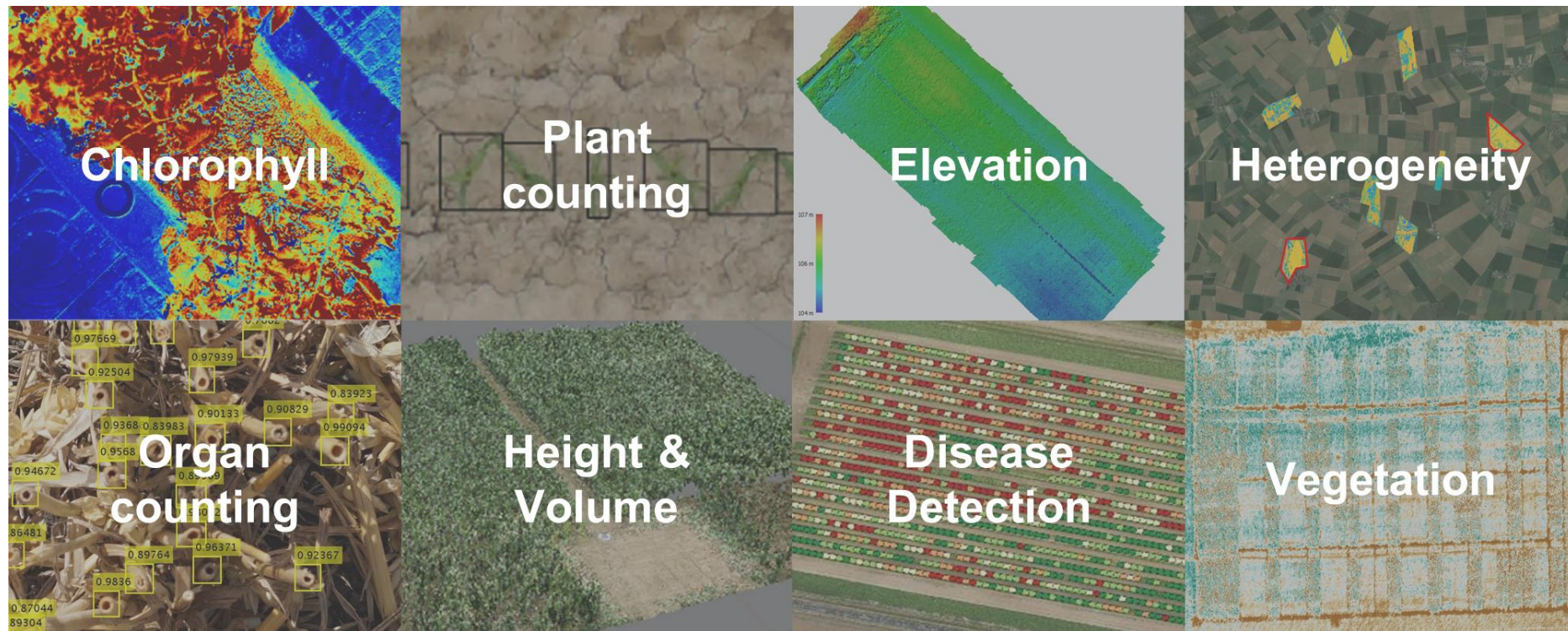
*The european satellite for crop monitoring*



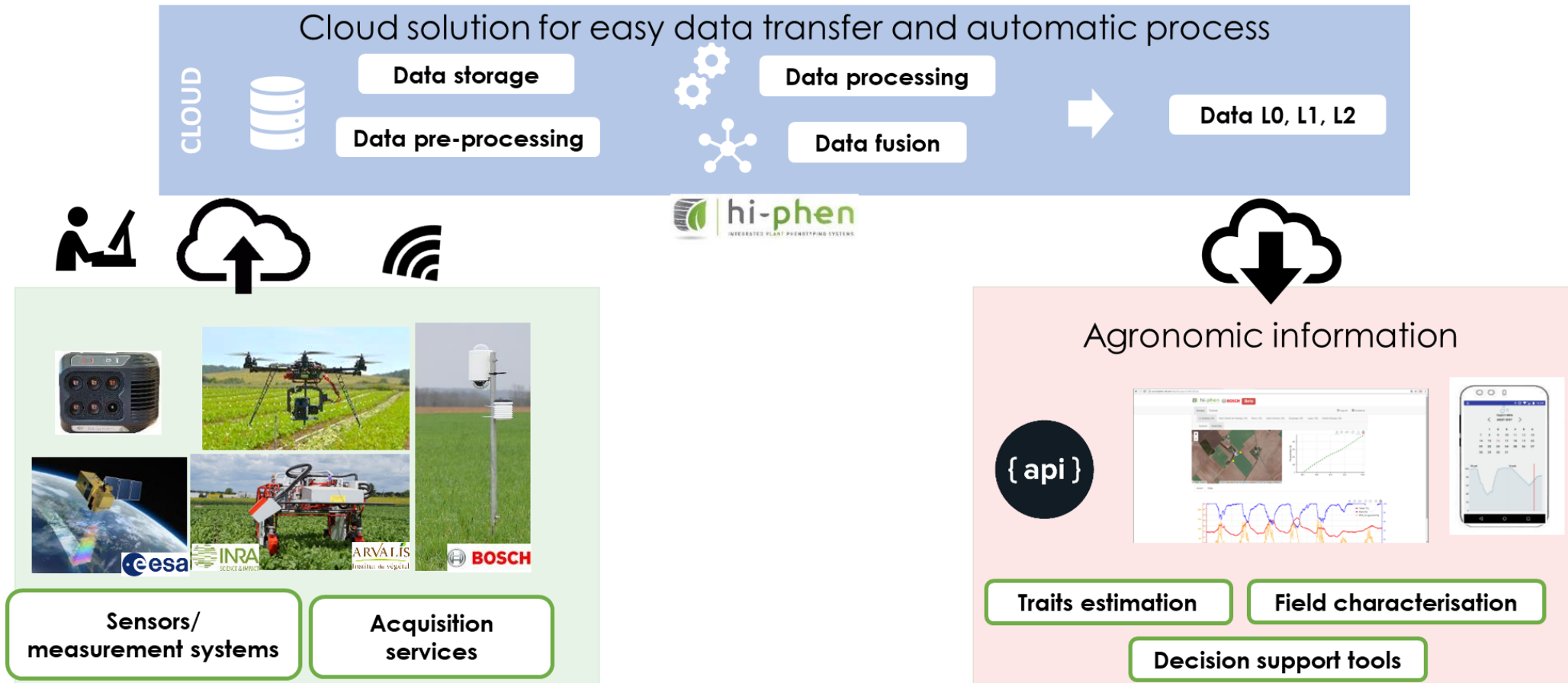
# Sensors are complementary



# Some of the algorithms we use



# The big picture



Our core business is measuring plants using sensors and data processing

# A team of experts



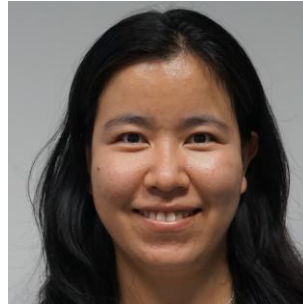
#DataScience



#IoT



#Software



#Algorithms



#Operations



#Datafusion



#Sensors



#Vision

## Founding team



**Alexis Comar**  
CEO  
@Hiphen  
Phd + HEC



**Frédéric Baret**  
Research  
Director  
@INRA  
h-index: 71



**David Gouache**  
Deputy  
Director  
@Terres  
inovia



**Benoit de Solan**  
Expert  
@Arvalis

# Backed by strong partnerships



# Already three years of track record



Universität für Bodenkultur Wien



# Contact us

[www.hiphen-plant.com](http://www.hiphen-plant.com)  
[www.hiphen-iot.com](http://www.hiphen-iot.com)  
[contact@hiphen-plant.com](mailto:contact@hiphen-plant.com)