

# Delivering Value from Data for Copernicus Services

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Channel Partner Manager

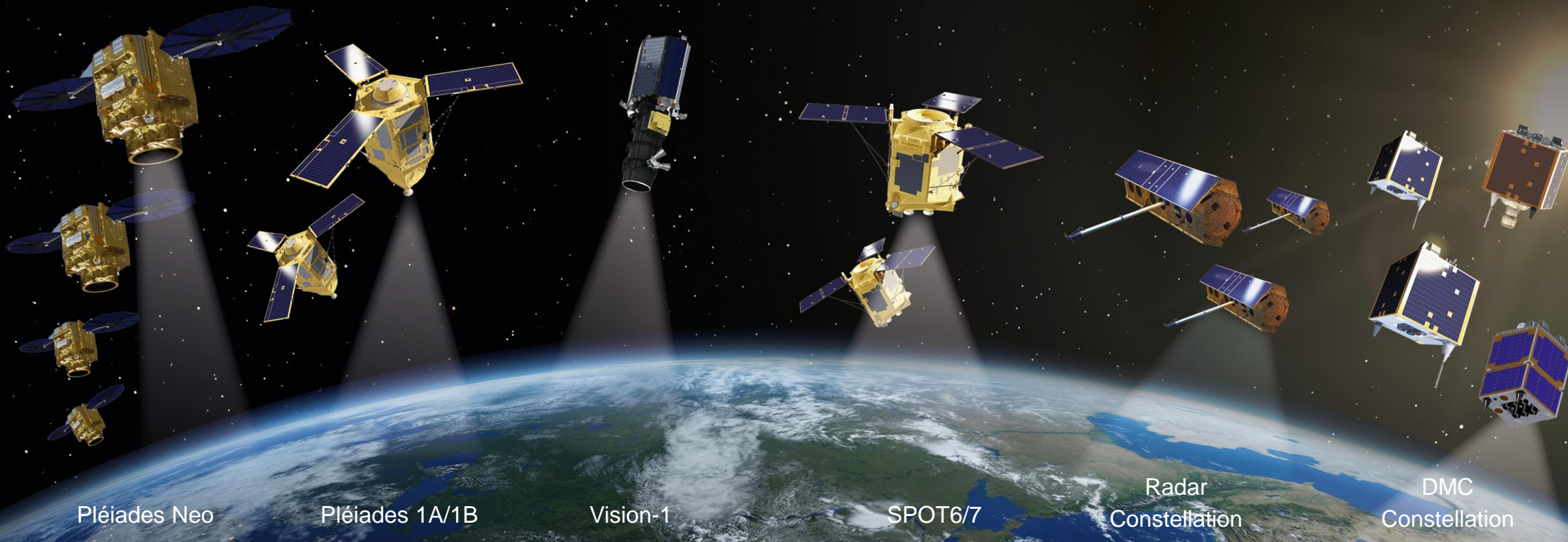
Airbus Defence and Space - Intelligence





# An Unrivalled Constellation

100 BILLION km<sup>2</sup> archive



Pléiades Neo

Pléiades 1A/1B

Vision-1

SPOT6/7

Radar  
Constellation

DMC  
Constellation

**World leader**  
in satellite imagery

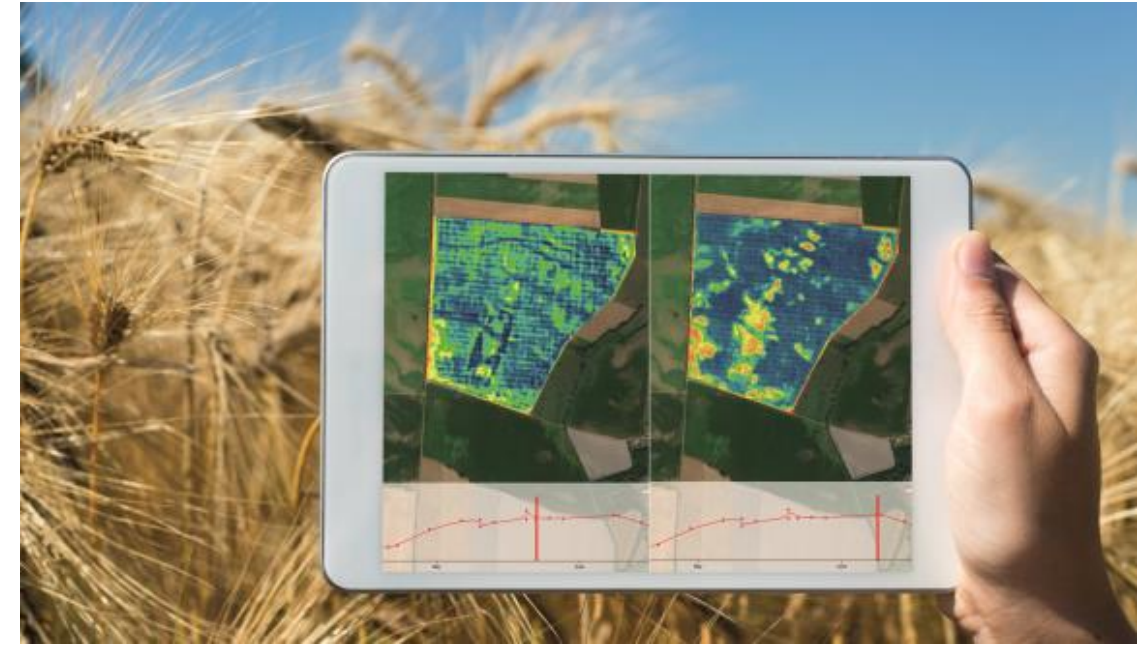
**30 years experience**  
in Earth observation  
and intelligence

The most **comprehensive**  
constellation **commercially**  
**available**

**AIRBUS**

**soCAP: new Airbus API for retrieving crop profiles at field level, automatically, over millions of parcels, and in real time.**

- Made of **time series of biophysical parameters**.
- Built **from all “incoming” imagery**. The API eases the usage of massive amounts of Sentinel 2 data but also Landsat 8 and VHR data.
- Allows **consistent monitoring over time and geographies**, regardless of the sensor. This is thanks to the absolute quantification that biophysical parameters provide.
- **100% cloud-based**: all the imagery is systematically and automatically retrieved, declouded and processed in real time.

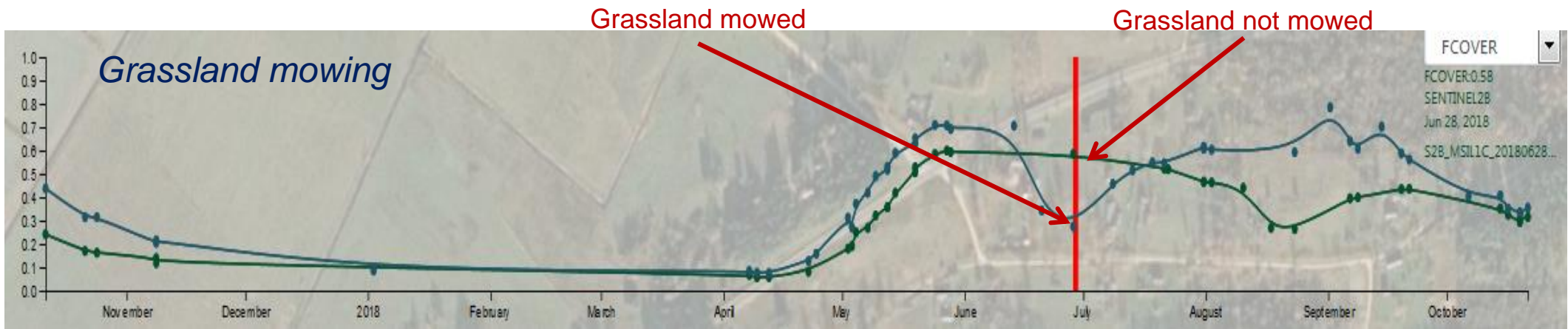
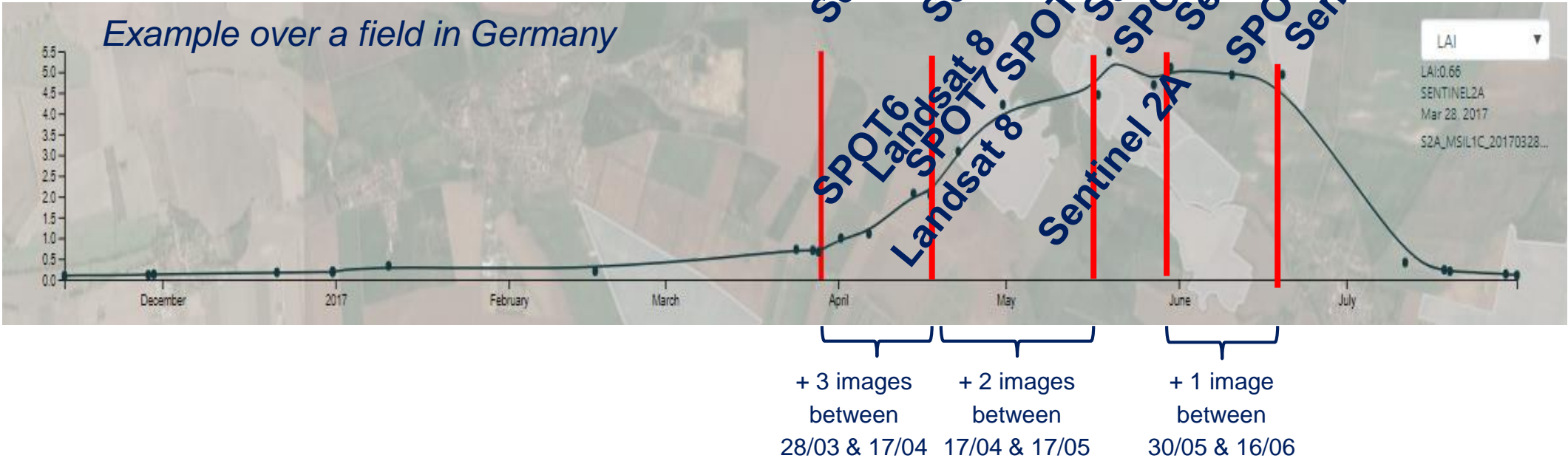


Robust & proven analytics allowing to:

- Identify crops
- Detect farming practices
- Alert on events and unexpected results
- Understand anomalies



# Comparability + increased revisit

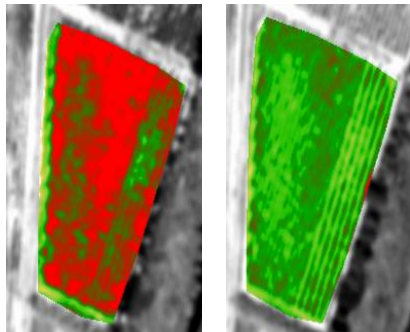


# Biophysical parameters: absolute quantification of plant characteristics

## NDVI

**Relative evaluation** of the differences  
in vegetation development

Sensitive to the light conditions, the  
viewing angle, the sensor

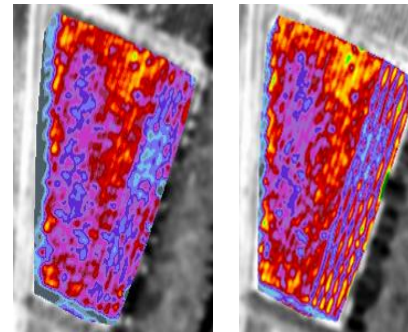


**Requires ground  
measurements calibration  
to access biomass**  
(synchronized with the images)

## Biophysical parameters

**Absolute quantification**  
of the biomass and the nitrogen

Independent from the viewing angle,  
the sensor, and the light conditions



**Unnecessary ground  
measurements**

Biophysical  
parameters

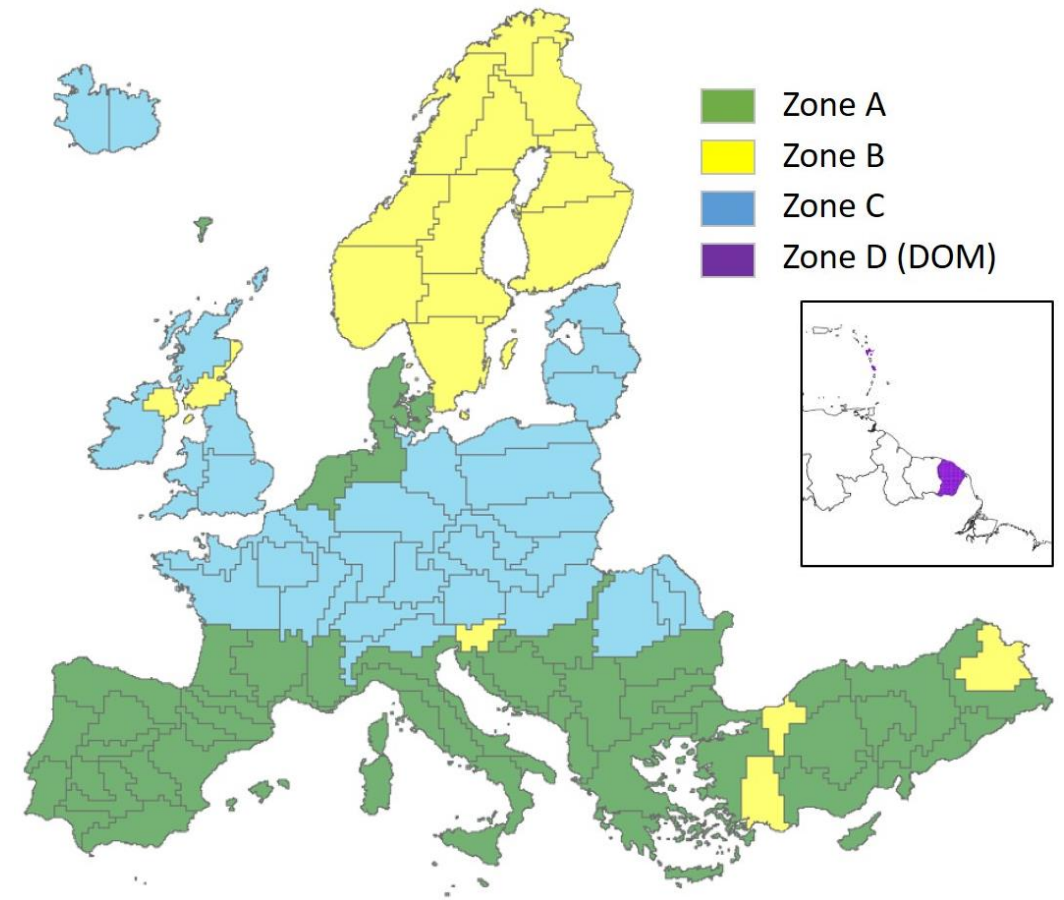


[www.intelligence-  
airbusds.com/en/8542-  
biophysical-parameters](http://www.intelligence-airbusds.com/en/8542-biophysical-parameters)

## VHR\_IMAGE\_2018

### A Services Approach for Reliable Deliveries to the Benefit of the Copernicus Land Service

- Complete and homogenous **39 European countries** EEA-39\* coverage (6.2M km<sup>2</sup>) with **2-4m** multispectral optical satellite data
- Reference year **2018**
- **0% clouds**, cloud shadows and haze
- **1 industrial interface**: 1 company is the Prime and takes the full responsibility



**AIRBUS**

Pléiades  
SPOT

 **deimosimaging**  
an urtheCast company

SuperView-1  
Kompsat 3 & 3A  
Deimos-2  
TripleSat

 **planet.**

Dove

space **4** environment

**IGN**

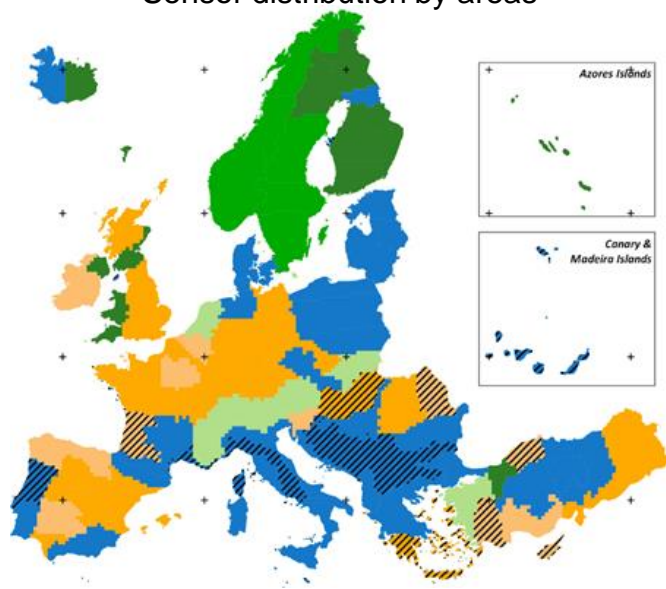
Quality control  
(cloud, geometry,...)

*\*including all islands of those countries plus the French Overseas Departments*

**AIRBUS**



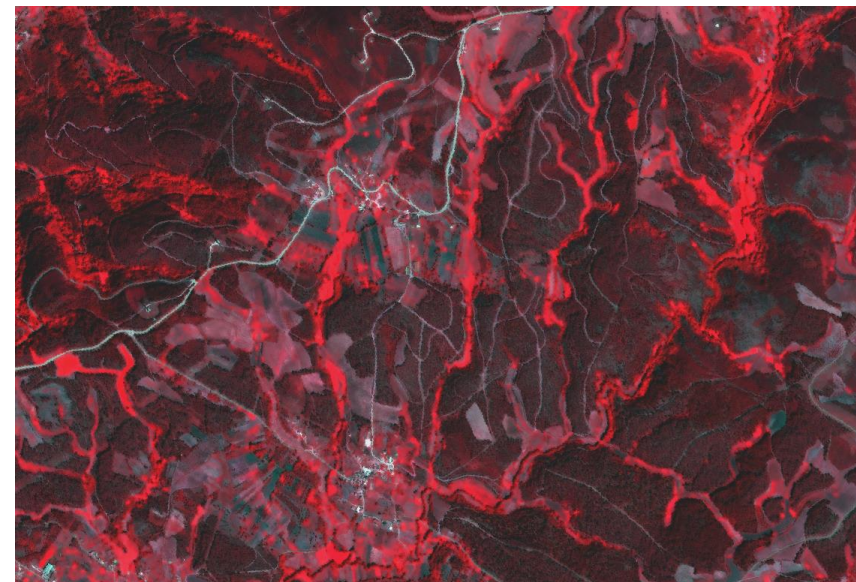
Sensor distribution by areas



Pléiades image acquired 4<sup>th</sup> August 2018 over Lisbon



SPOT6 false colour composite acquired 11<sup>th</sup> August 2018



Kompsat-3A acquired 24<sup>th</sup> June 2018



Superview-1 acquired 17<sup>th</sup> June 2018

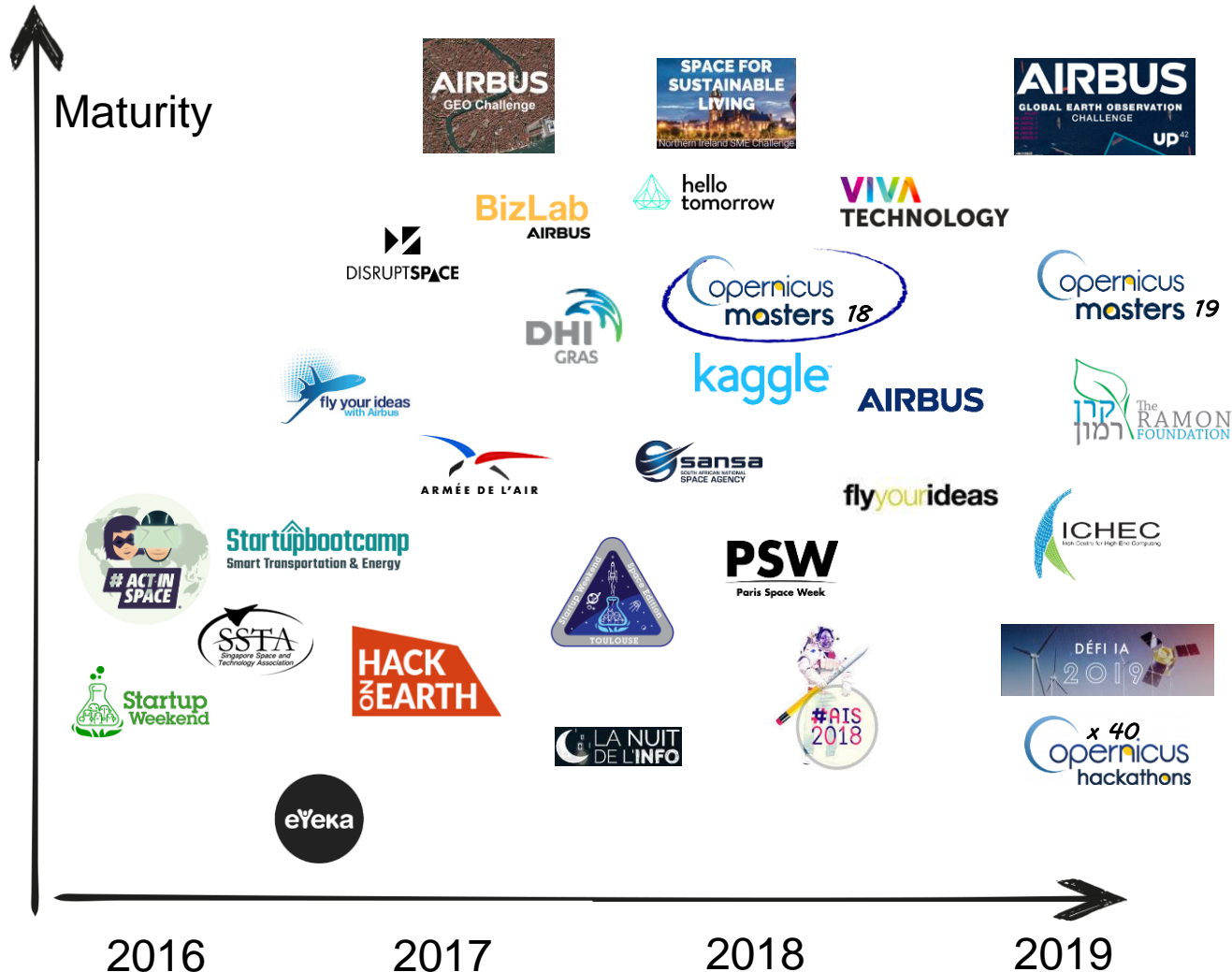


PlanetScope (DOVE) acquired 3<sup>rd</sup> July 2018





# Open Innovation: leveraging multi sources data to deliver new value-added services



## Copernicus Masters 2018

Innovative solutions, developments and ideas for business and society based on EO data

Who: Open

Partners: ESA, Airbus, DLR, CGI, Planet, Baywa, Catapult,...

Where: Worldwide

When: April - November 2018

How long: 3 months

Prize: 100k€ data

Outputs: partnerships

More info: [www.copernicus-masters.com](http://www.copernicus-masters.com)







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The leading innovation platform for  
commercial Earth observation applications



## **AIRBUS** **sobloo** Multi-Data Challenge

Airbus Defence and Space together with sobloo are looking for solutions that use both Copernicus and Airbus Earth observation data to deliver new services and/or applications that provide insight and have impact on areas like Natural Resources Consumption, Agriculture, Forestry, Maritime, Defence & Security and Smart Cities. To do this, participants will receive free access to numerous datasets via the OneAtlas Sandbox Platform and the sobloo platform.

upon the initiative of



partners



Copernicus  
hackathons

Climathon

26.10.2018  
Toulouse

# Copernicus Hackathon & Climathon

Register

[www.booster-nova.com](http://www.booster-nova.com)

A programme of



Climate-KIC is supported by the  
EIT, a body of the European Union



Implemented by



Organized by



business incubation centre  
Sud France



Climate-KIC

Local Partners



AIRBUS

sobloo

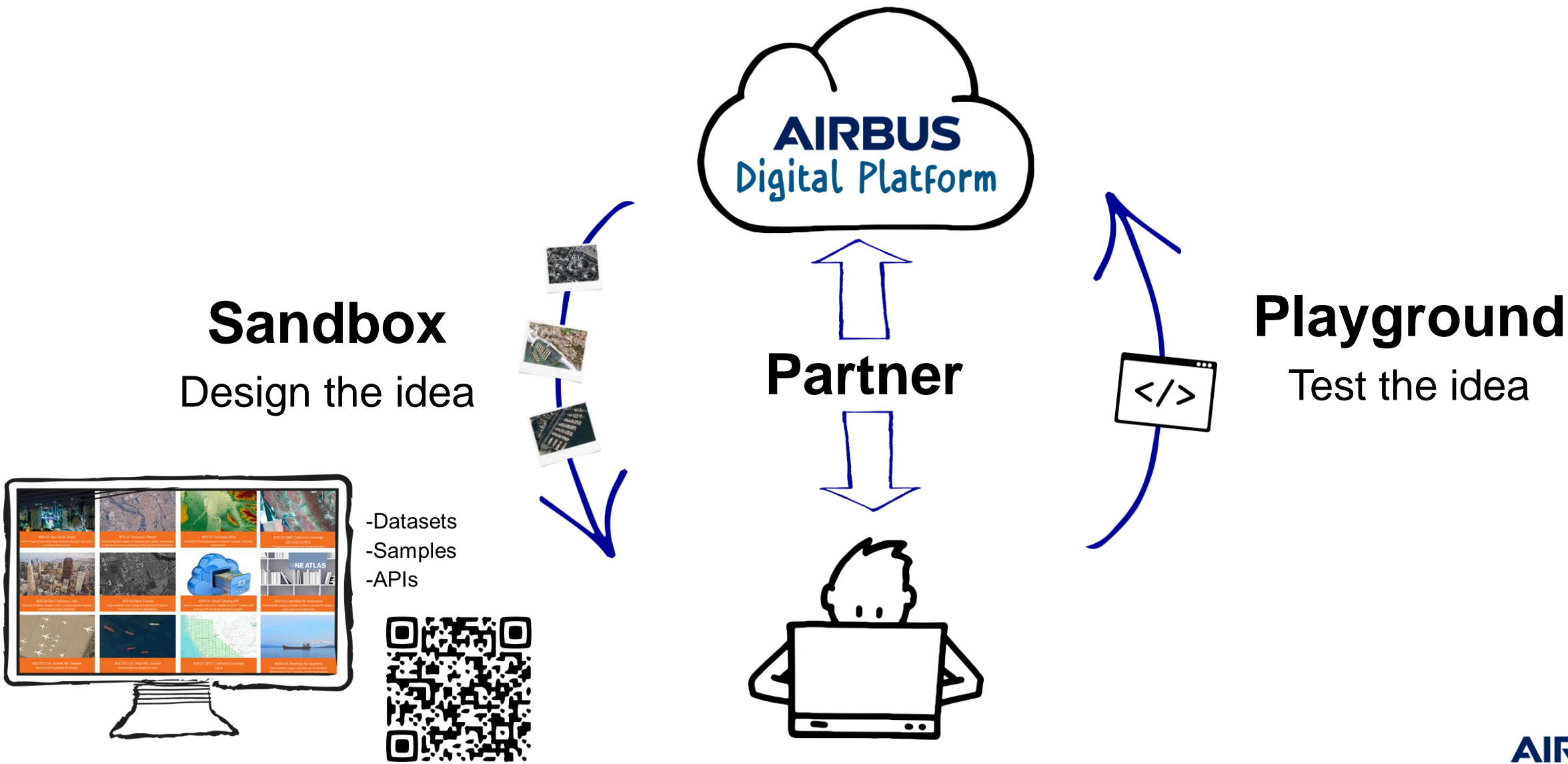


Pitch Me Up





# A 3-Step Approach to foster open innovation



DEFENCE AND SPACE

# Intelligence

Delivering Value  
FROM DATA in  
OUR Digitally  
CONNECTED  
World

VISIT US: [www.intelligence-airbusds.com](http://www.intelligence-airbusds.com)

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**AIRBUS**