



Space4Food Expo2015  
Milan June 11



**MY FIELD** ACRES : 72,5

**CHECK** DETECTED ISSUES : DISEASE  
GROWTH STAGE : FLOWERING  
CROP SCOUTING : SEE MAP

# TODAY'S TECHNOLOGY FOR TOMORROW'S FARMER

In a nutshell ...



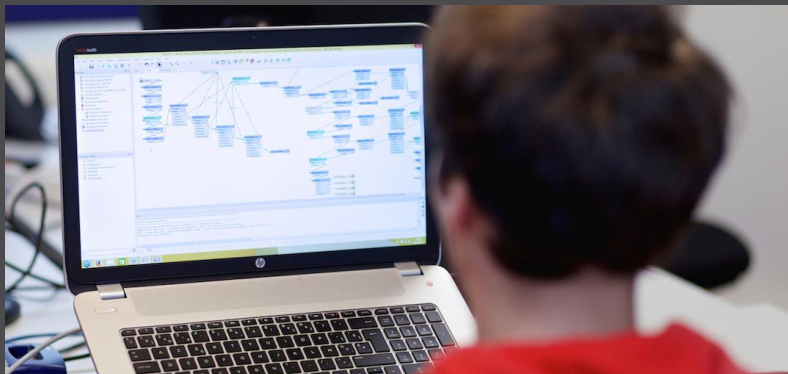
# SOLID PARTNERS.

## FLEXIBLE SOLUTIONS!

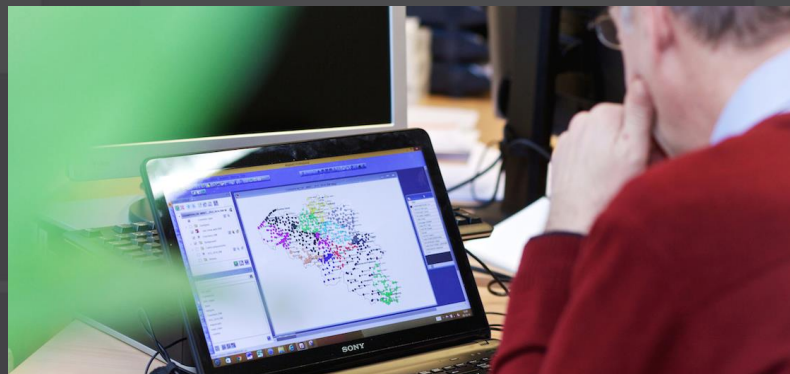
- ▶ Independent SME
- ▶ Created in 1994
- ▶ Based in Leuven and Gembloux (BELGIUM)
- ▶ 50 people
- ▶ Turnover of 7 M EUR
- ▶ Long track record in agriculture

A unique profile

## GIS & AUTO DATA PROCESSING



## GIS APPS DEVELOPMENT



## EARTH OBSERVATION

## LOCATION INTELLIGENCE





EC FP4 SABRES (1998)  
EO & FarmMS

A TEAM OF AGRONOMISTS!



# UNLOCK VALUE FROM IMAGERY



# TURNING IMAGERY INTO SMART AND ACTIONABLE INSIGHT

Our goal in agriculture



**OPTIMIZED YIELD WITH MINIMIZED EFFORT**



IDENTIFY THE ZONES WITHIN  
YOUR FIELDS THAT REQUIRES  
**SPECIAL ATTENTION**





Specific expertise



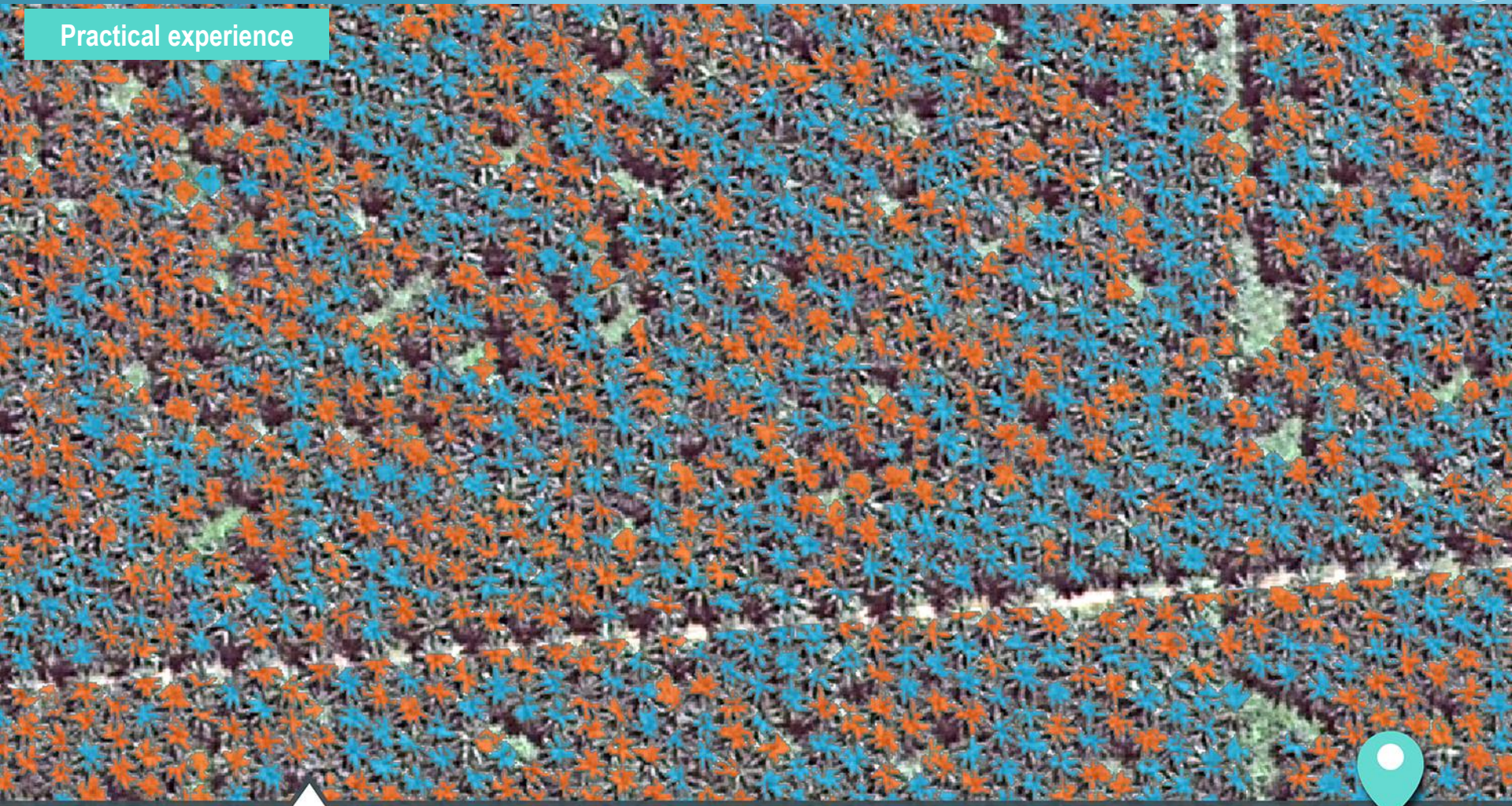
**INDUSTRIAL AGRICULTURE. VHR EO DATA. HIGH FREQUENCY.**

Practical experience



# SEED PRODUCTION CROPS

Practical experience



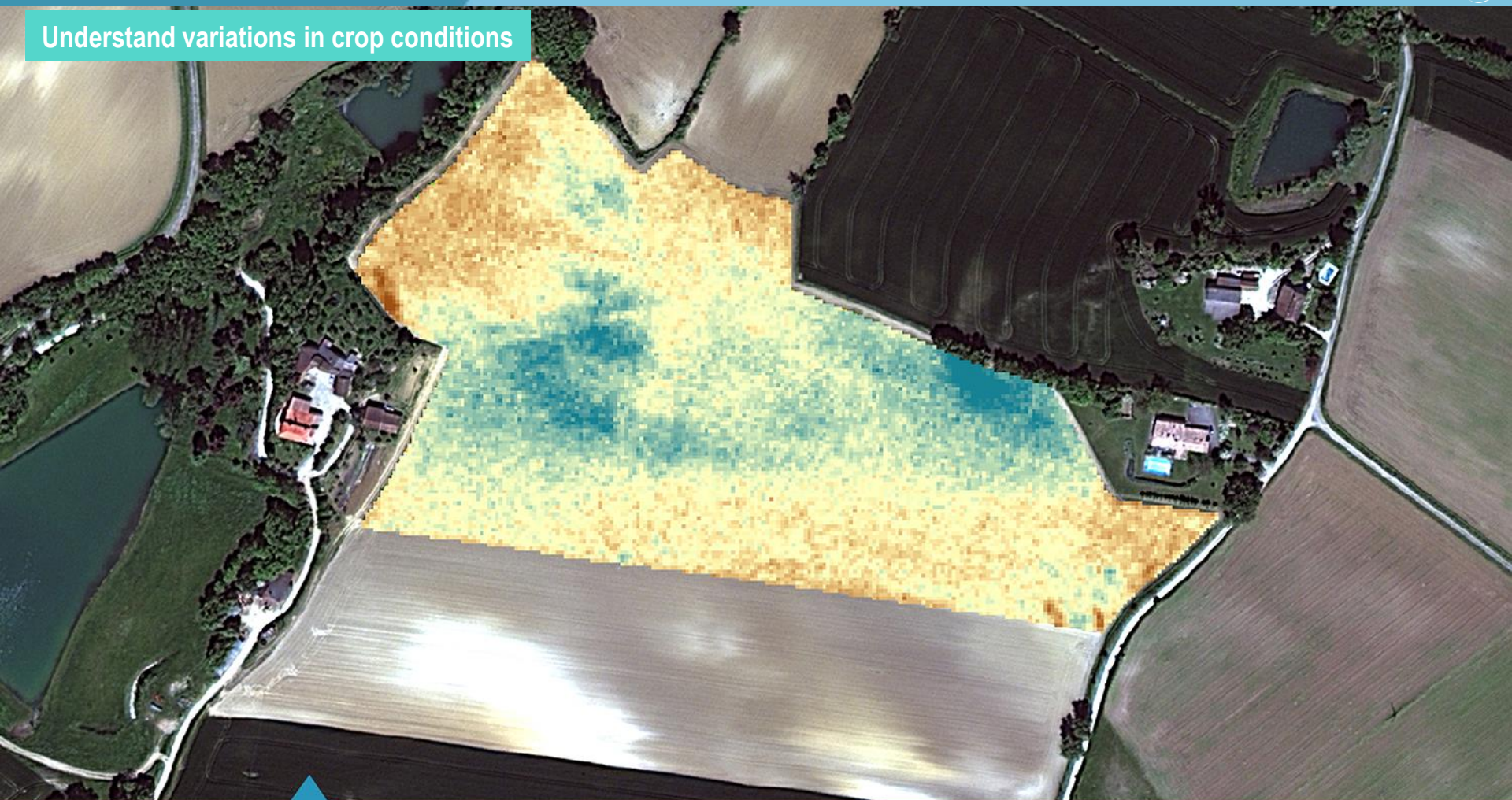
# TROPICAL PLANTATIONS

Practical experience



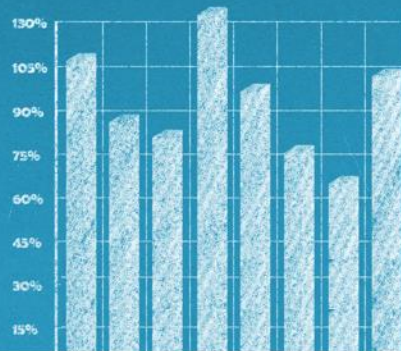
# ORCHARDS

Understand variations in crop conditions



# SOIL PROPERTIES

## Applications



**Not only maps but QUANTITATIVE ANALYSIS (metrics) coupled with topographic analyses (slope and exposure)**

**Demonstrated impact on vegetation**

- ▶ **Production plan optimisation**
- ▶ **Parcels selection**
- ▶ **New farmers selection**
- ▶ **Irrigation management**

Understand variations in crop conditions



# WATER STRESS

Understand variations in crop conditions



# WEED DEVELOPMENT



Understand variations in crop conditions



# PESTS

Understand variations in crop conditions



# DISEASES

## Main Assets

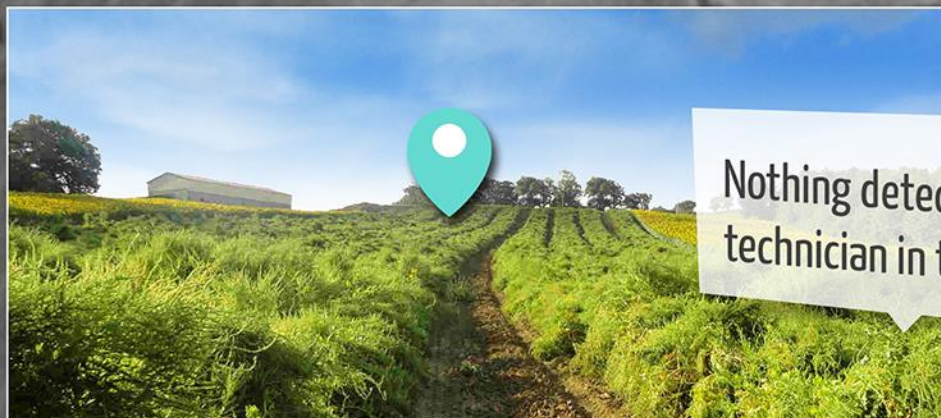
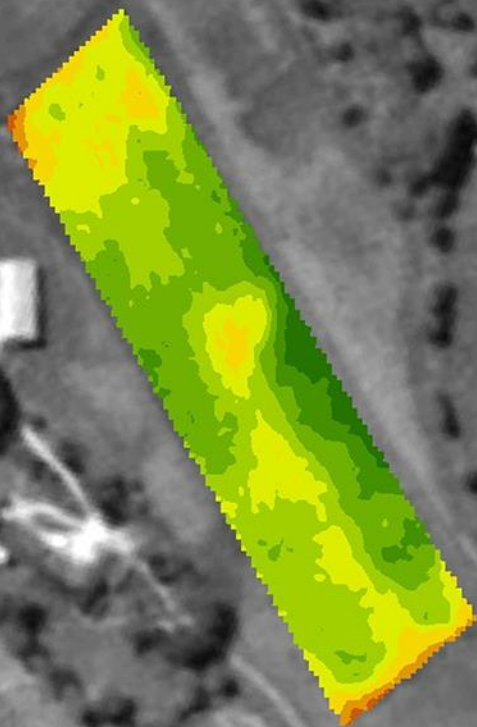


- ▶ **Relevant and objective information**
- ▶ **Complete vs partial overview**
- ▶ **More information, more often**

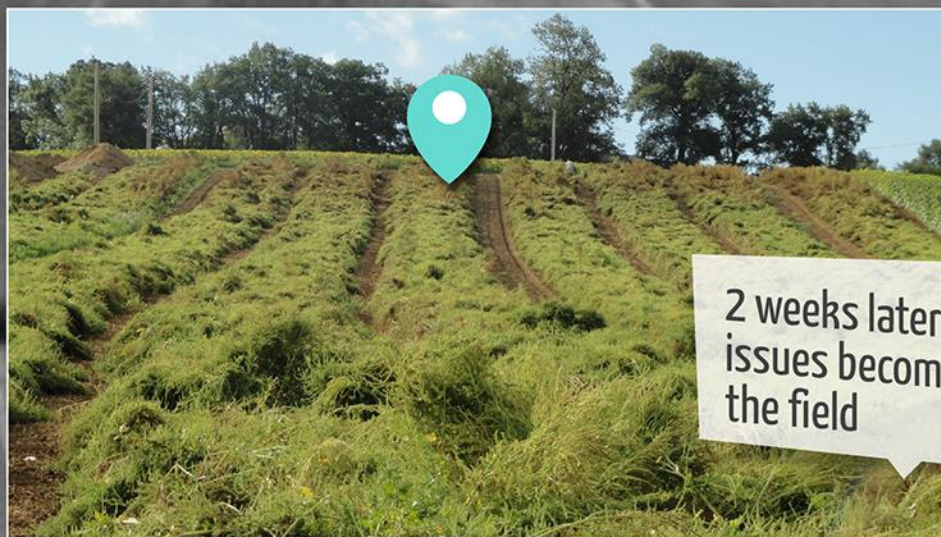
## Applications

- ▶ **Crop conditions monitoring (NRT analysis of repetitive collections)**
- ▶ **Targeted field scouting (when and where required)**
- ▶ **Site specific crop management**
- ▶ **Irrigation management**
- ▶ **Optimal use of inputs (fertilizers, etc)**
- ▶ **Detection of crop management practices & impact assessment**
- ▶ **Harvest and logistics optimisation**

Early warning



Nothing detected by the technician in the field



2 weeks later crop issues become visible in the field

# ANOMALY DETECTED IN THE SATELLITE IMAGE

How GIM differentiates ?

# BEYOND DATA & MAPS.

## DECISION AGRICULTURE.

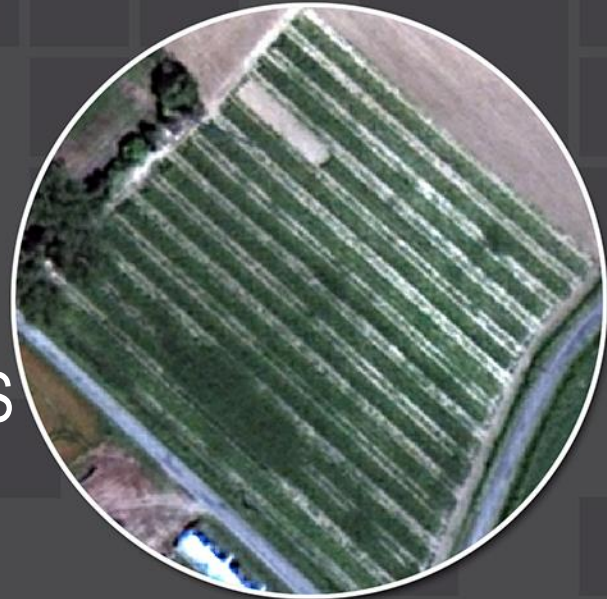


Specific information

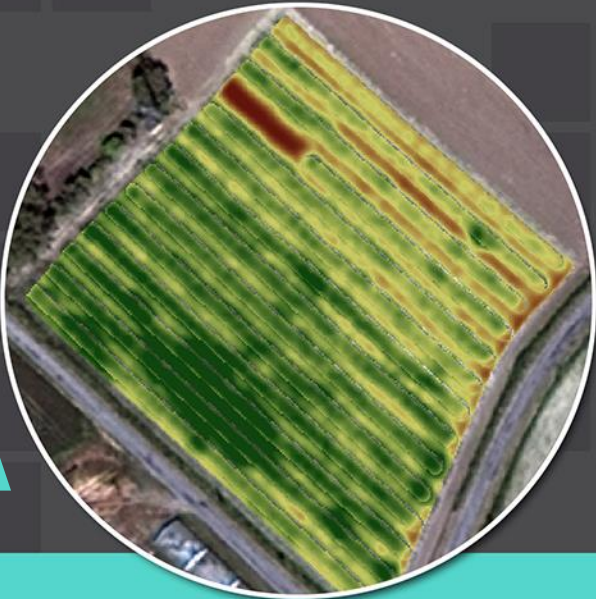
# THE FARMER'S VIEW



# THE SATELLITE'S VIEW



# THE PROCESSED DATA



# THE SMART INSIGHT



Support Decision

# INSIGHT + INTEGRATION

> TARGETED CROP SCOUTING

for BETTER DECISIONS



Integration is key !

TYPE & FORMAT.

MOBILE, V.R.A., Farm M.S., ...

## The farmer's decisions

THE  
RIGHT  
INPUT



THE  
RIGHT  
TIME

THE  
RIGHT  
AMOUNT



THE  
RIGHT  
LOCATION



In other words ...

SELECTIVE

SITE-SPECIFIC

ECO-FRIENDLY

Exciting Future

SkyBox Imaging

OmniEarth

ESA Sentinels

PLANET LABS

Landsat Data Continuity Mission

RapidEye+

PROBA

WorldView-4

UrtheCast

DAURIA AEROSPACE

UAS

NEW SOURCES. BETTER RESOLUTION.  
IMPROVED REPETITIVITY.

More opportunities!

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THANK YOU !