International Workshop
OPEN/BIG DATA AND CITIZEN SCIENCE FOR MANAGING THE WATER, FOOD, ENERGY AND ENVIRONMENT NEXUS

Earth Observation transformation: how to serve the planet using Satellites and A.I. today

High-level Panel Debate: "The digital transformation and global water, food, energy and environmental challenges"

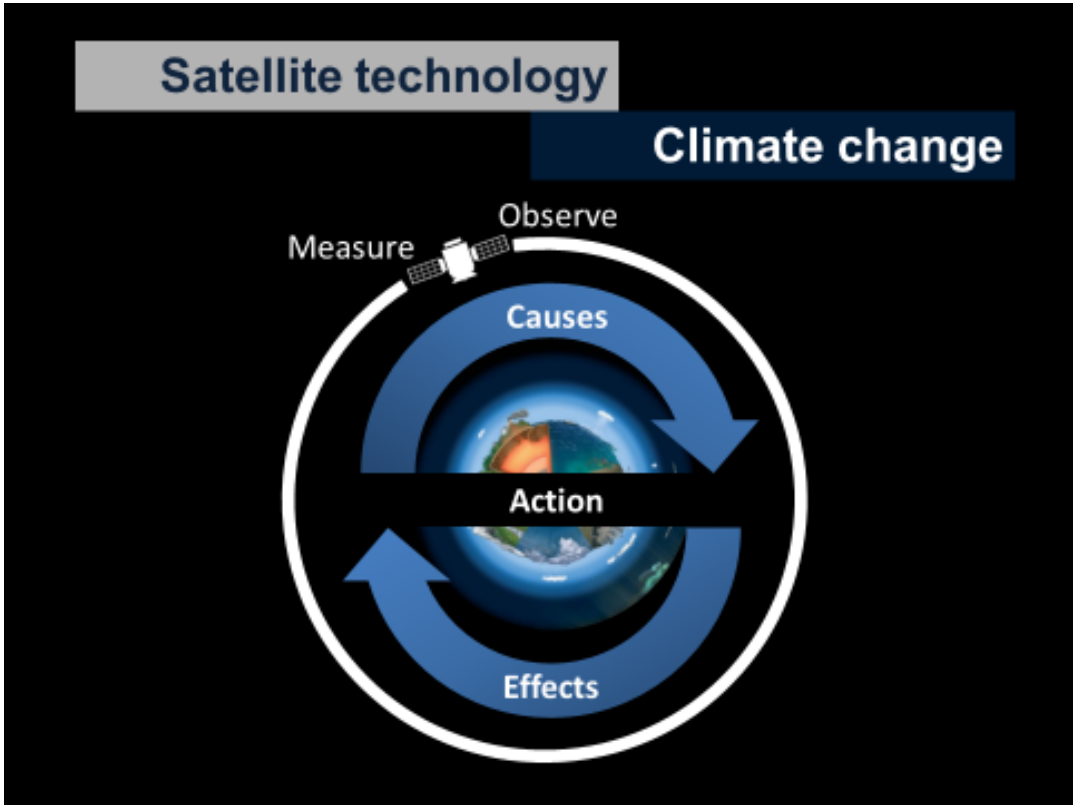
Perugia, 22-11-2018

Pier Francesco Cardillo

e-GEOS

Outlines

- EO for SDGs
- What is in orbit
- The real transformation
- We love Planet Earth

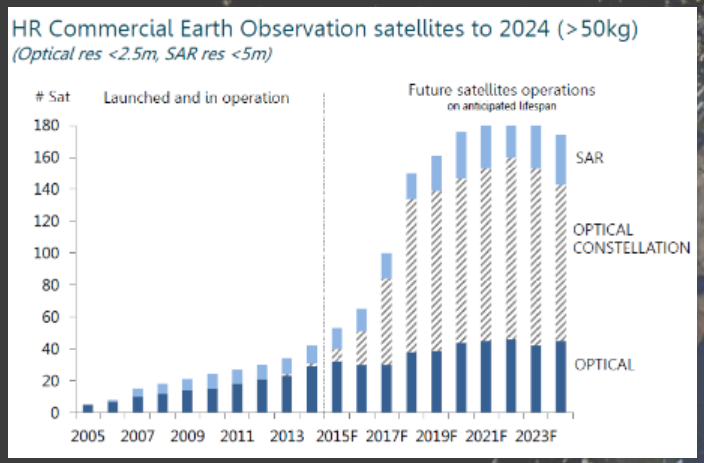


The Space Sector – from exploration to SDGs

- **The Space sector has contributed to open new technological frontiers due to the extreme and demanding nature of operating in deep space environment as well as today to address new missions and innovative requirements and new markets for anew space economy on our planet Earth**

Massimo C Comparini – Space Big Data, Issues for the value chain

Space Economy – Geo Information evolution



many satellites in orbit today…
and the number is growing fast…

680

EO Satellite in orbit (2017)*

>1,740

Satellite expected (2017 – 2024)

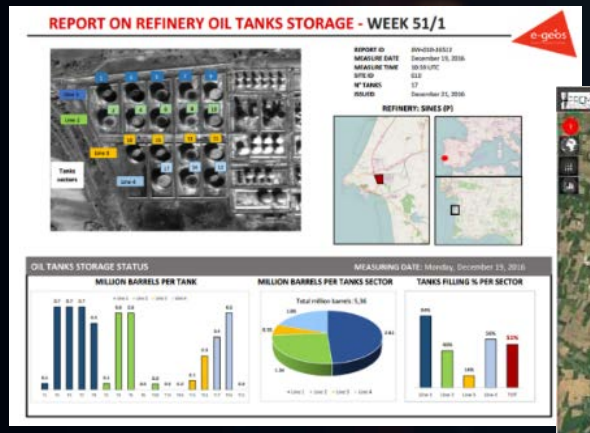
+66%

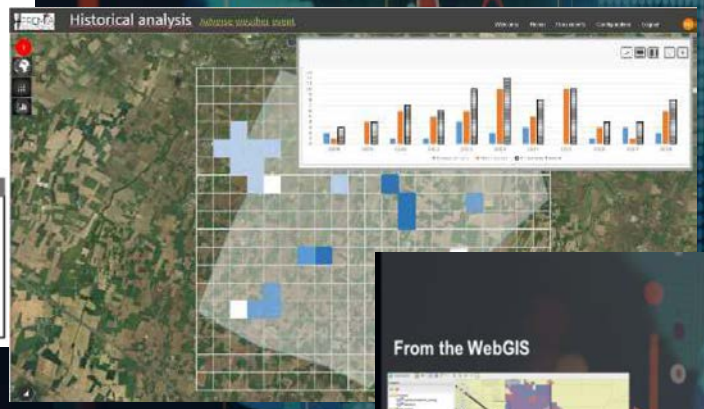
Frost & Sullivan's 2018 first quarter update of the 'Small Satellite Launch Services Market' estimates that over 11,000 small satellites will be launched by 2030. The central value proposition offered by these commercial players to end-users is real-time imagery and seamless global connectivity.

Massimo C Comparini – Space Big Data, Issues for the value chain

Space and Democratization

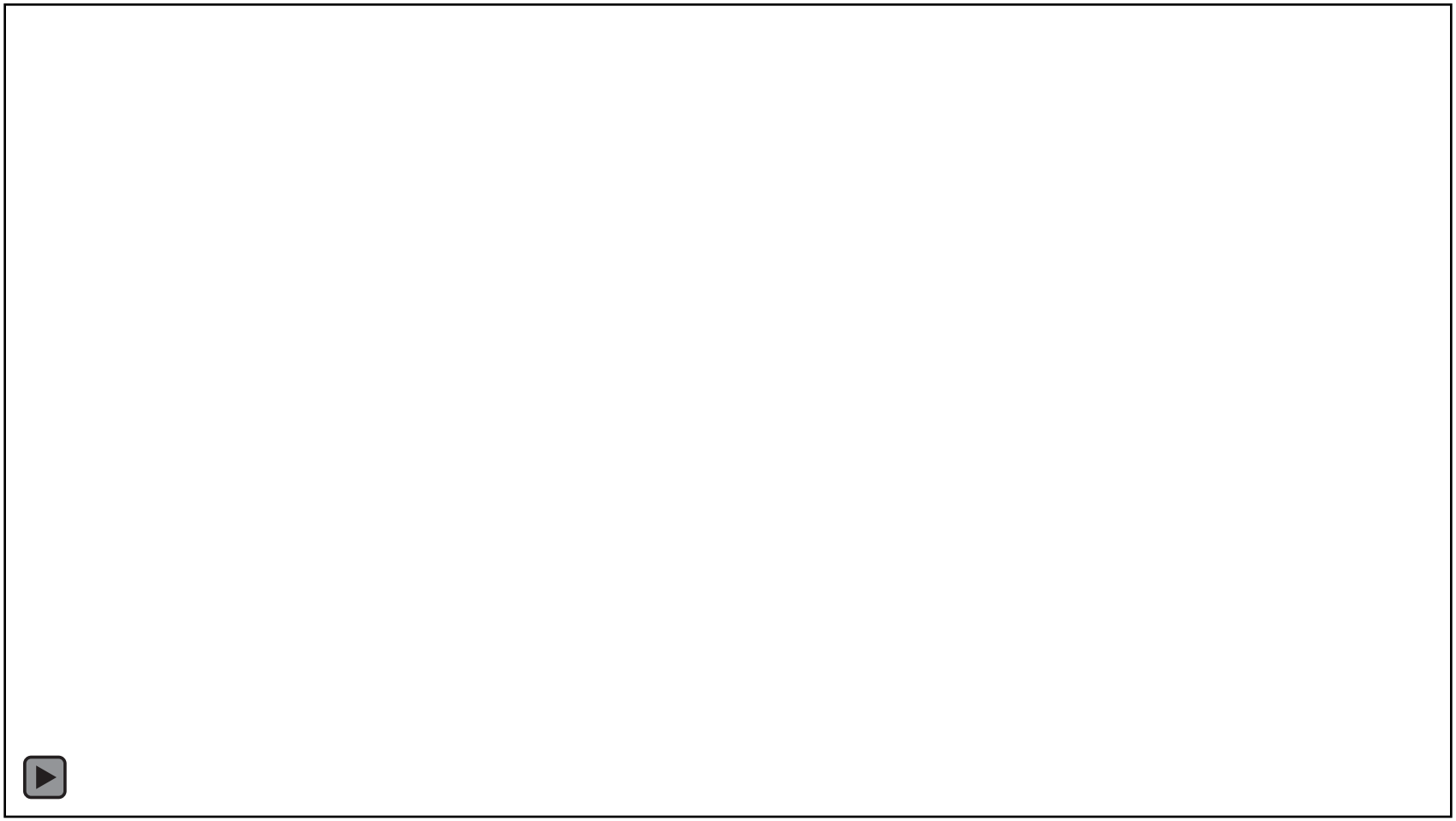
From data → Generating information → To customized Information Products and BDA





Massimo C Comparini – Space Big Data, Issues for the value chain

What is today EO for water resource



Conclusion

- Earth Observation is able to monitor the causes and the impact of the human activities that may affect the presence, the quality and the security of water resources

- New constellation will support the EO specialized platformas to recreate a «real» DIGITALTWIN of cities to prevent impact thanks to a huge improvement in the modelling sector

- Artificial Intelligence i the wider sense will support the modeler to create detailed scenarios and the decision maker to take the best decision to take care about our resurces

Contact info

- www.e-geos.it
- pierfrancesco.cardillo@e-geos.it

love planet earth