Enhancing Real-Time Situational Awareness with EO & Geospatial Data

WORLD GEOSPATIAL FORUM

Adriano Baptista
Senior Advisor
UNIQUE OFFERING

Innovative partnerships with industry leading geospatial companies

Dedicated ground station located in Europe offering local tasking and direct downlink

Near real-time delivery of less than 3 hours for regular orders and 30 minutes for emergency orders

Only satellite imagery provider in Europe to deliver 15 cm spatial imagery

Flexible optimised collection planning up to 15 minutes before pass

Access to 25 orbiting satellites at resolutions 30 cm – 1 m. Combined daily revisit rate of ≈ 10 times
WORLDVIEW-3

31 cm GSD
680,000km² per day

WORLDVIEW-2

46 cm GSD
1,000,000km² per day

WORLDVIEW-1

50 cm GSD
+1,000,000km² per day

GEOEYE-1

41 cm GSD
350,000km² per day
6 Satellites

29 cm Resolution

15 Daily Collection Opportunities from sunup to sundown

8 Spectral Bands (C, B, G, R, RE1, RE2, NIR)

3x Increase in 30 cm Capacity

Launch Begins in 2022
Situational Awareness Levels

IDENTIFICATION or OBSERVATION
- Access to relevant data/information
- Recognize relevance of data/information
- Communication and Visualization of data/information

UNDERSTANDING or COMPREHENSION
- Interpretation of data/information
- Selection of relevant data/information
- Use knowledge and skills to make sense of data

PREDICTION or FORESIGHT
- Projecting/preparing the future based on the information acquired and analysed
Understanding

Tools to transform data into information/knowledge
Enhancing Real-Time SA with EO & Geospatial Data
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- **Increase performance of EO sensors**: New constellations allowing High Temporal, Spatial and Spectral Resolution in order to achieve a more persistent monitoring of critical assets (high-frequency collection combined with near-real-time delivery),
- **Increase variety and availability of geospatial data sources,**
- **Better integration and complementary of different sensors.**

- **New tools**, based on Artificial Intelligence and integrating EO, geospatial data and other data/information that should facilitate the selection, visualization and analysis of relevant information such as:
  - Computer vision (e.g. Automatic detection/recognition of military equipment from satellites, airborne sensors and ground photos)
  - Social media extraction, etc.

- **Development of Situational Awareness platforms** with robust predictive models providing unbiased, near-real time actionable intelligence, to support and facilitate decision-making and action,
THANK YOU!

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