SPACEDGE

RESHAPING THE EO VALUE CHAIN

Spacedge® is a hybrid space ecosystem for new mission operational concepts. An Earth Observation and Earth Intelligence service infrastructure that enables a new satellite as-a-service model to access on-demand in-orbit resources. Customers will rely on cutting-edge and cloud-based EO services, providing insights directly on board, making business more efficient and effective.

Thanks to Spacedge's unique ecosystem, users can exploit their preferred set of space components, customizing acquisition and processing workflows.
A dedicated marketplace hosts a variety of apps that can be deployed, configured, purchased, and exploited by the community.
With Spacedge, now you can minimize the time between sensing and information delivery and enable sustainable and continuous Earth monitoring to support your core business.

SATELLITE AS-A-SERVICE.

SPACEDGE
EO SERVICE INFRASTRUCTURE FOR YOUR APP

Deploy, configure, exploit, test your app for:
- Wildfire detection and warning service
- Environmental anomalies & disasters
- Pollution detection and tracking
- Marine plastic pollution
- Climate Change
- ...and many more

Credits: NASA - Unsplash

THE SPACEDGE ECOSYSTEM ALLOWS TO:

- Integrate, deploy, test your technology & applications
- Design innovative & disruptive EO services
- Perform fast & effective IOD/IOV campaigns
- Test, fail, fix and start over to success

MAIN BENEFITS

WIDE AREA MONITORING: autonomous decision onboard will filter out any data that is not useful (cloudy or unchanged data), to optimize the acquisition capabilities and get smoother, lighter and cleaner data collection.

LOW LATENCY: autonomous decision onboard optimizes the detection of events for a near real-time transmission of alerts to the user.

SMALL BUDGET: book your seat onboard and test your application with a low-cost investment.

KEY TECHNOLOGIES

- Security ring: DLT/Blockchain
- Powered by HPC unit with AI acceleration
- Reconfigurable EO sensors & core algorithms on-demand
- Low latency communications

SPACEDGE IS MADE OF

- HPC computing board with AI accelerator
- Security software layer
- Smart multi-spectral optical sensor
- App development kit
- App store

MANAGE YOUR MISSION. NOW.

- Bring your own algorithm or pick your app
- Configure your app onboard
- Turn data into actionable information
- Bring wisdom-knowledge-intelligence in your decisions
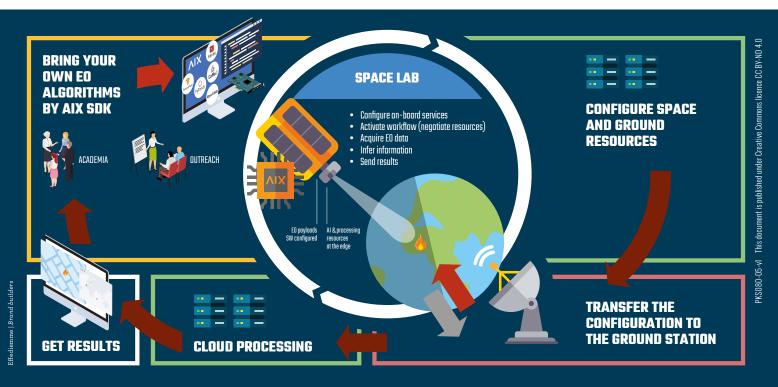- Join the Spacedge open ecosystem

In Orbit Space Lab is the space segment of the Italian Space Agency hybrid laboratory implementing a multi-purpose configurable system based on Planetek's Spacedge. The activity is funded by the complementary fund (national investment) to the NextGenerationEU program.

IN ORBIT SPACE LAB

ASI Agenzia Spaziale Italiana

Funded by the European Union NextGenerationEU

Empowering the ASI's Matera Space Center

BRING YOUR OWN EO ALGORITHMS BY AIX SDK

ACADEMIA

OUTREACH

SPACE LAB

- Configure on-board services
- Activate workflow (negotiate resources)
- Acquire EO data
- Infer information
- Send results

EO payloads SW configured

AI & processing resources at the edge

CONFIGURE SPACE AND GROUND RESOURCES

TRANSFER THE CONFIGURATION TO THE GROUND STATION

GET RESULTS

CLOUD PROCESSING

SPACEDGE

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