



ABSOLUT  
Sensing

[absolut-sensing.com](https://absolut-sensing.com)

# SPACE OBSERVATION TECHNOLOGIES TO MONITOR, UNDERSTAND AND PREDICT CLIMATE CHANGE.



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Monitor · Understand · Predict

**A**bsolut Sensing's objective is to **develop technologies to monitor**, understand and predict global changes.

For this, we are redefining **miniaturized remote sensing systems** integrated with Smallsats platforms to provide **planetary intelligence services**.

In order to accelerate the energy transition, ensure the monitoring of our planet and enable **major scientific advances**, we work with both **institutional players** and **large groups**.

Our **expertise** and our **ability to innovate** enable us to design and enable us to design and propose **effective solutions** adapted to the needs of our clients, particularly in the in the field of energy transition.

### OUR MISSION

To minimize global pollution through our GESat project by developing a constellation of satellites capable of accurately measuring industrial methane emissions.

### WHAT WE DO

We ensure a reliable and rigorous reporting of information by proposing a collection and exploitation of space imagery data in near real time.

## OUR COMMITMENTS

### SERVICES PROVISION

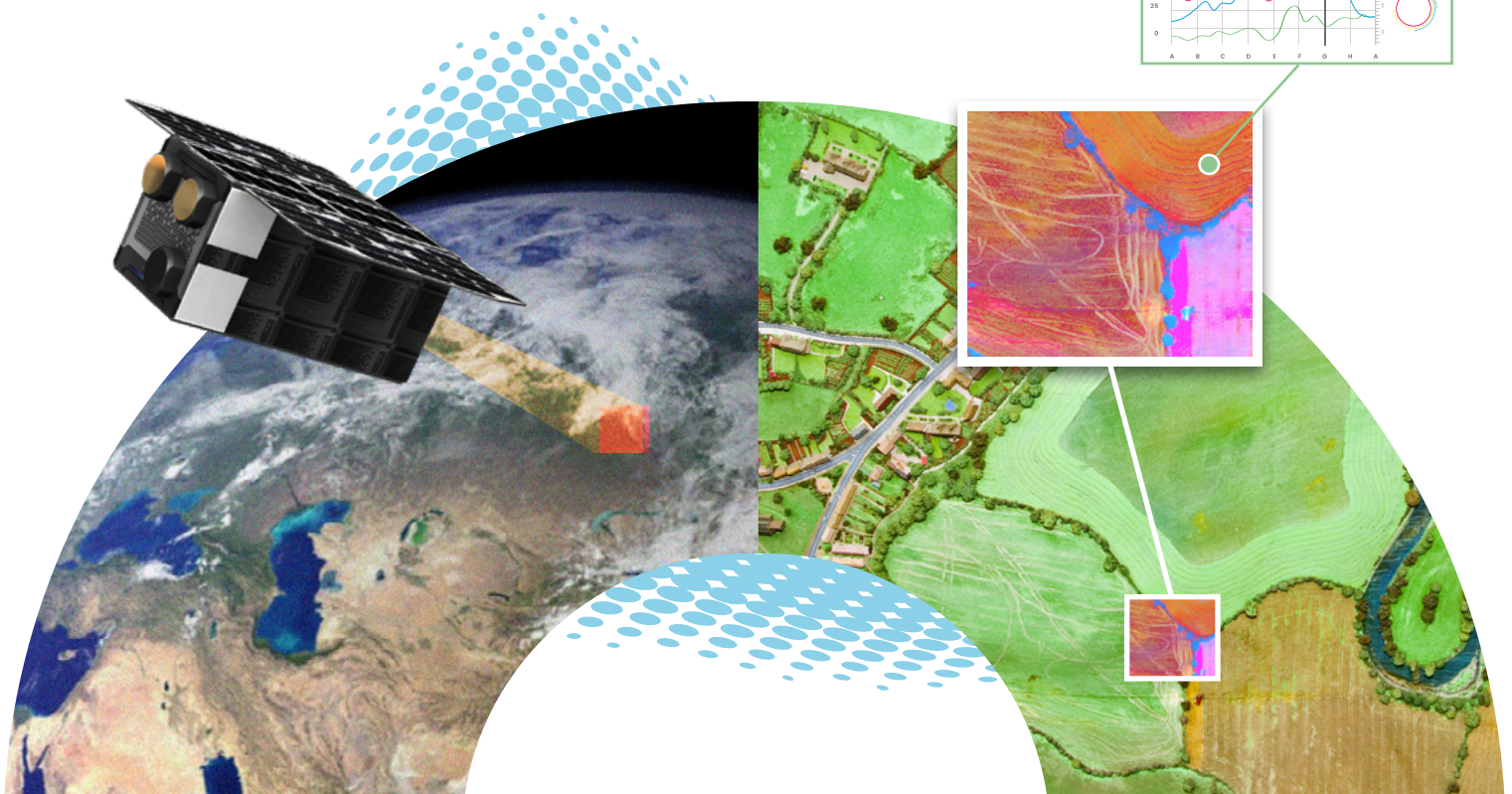
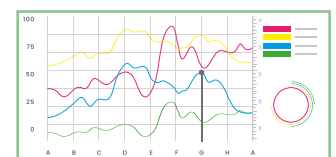
On issues ranging from the development of remote sensing instruments to the integration of data processing chains.

### INSTRUMENTS DELIVERY

For Earth observation. High performance miniaturized hyperspectral space imaging platforms.

## SPATIAL IMAGING

- Global hyperspectral observation technologies.
- Analysis, reporting and consulting services.





# OUR SOLUTIONS



## ENVIRONMENTAL INTELLIGENCE

### PROMOTE AN INTELLIGENT ENERGY TRANSITION

We are developing **remote sensing instruments to measurement of greenhouse gas emissions** (methane, CO<sub>2</sub>) on local, regional and global scales.

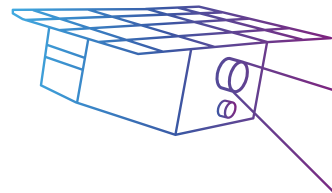
Our OpenSource and GIS hyper-spectral data collection and analysis **solutions** allow us to support emitting companies and regulators in the **fight against global warming**.

#### EMITTING COMPANIES

- Support in the revalorization of resources and reduce greenhouse gas emissions.

#### REGULATORS

- Provision of the necessary means to ensure that the commitments made are respected.
- Establishment of a control system to promote eco-responsible industrialization.



## GEO-INTELLIGENCE

### PROVIDING MAPPING AND CHANGE DETECTION CAPABILITIES

Thanks to our **expertise** in miniaturized hyperspectral instrumentation and associated **data processing chain**, we support **governmental agencies** in their need to **collect information by satellite, drone or aircraft**.

Space-based imaging systems using SWIR/MWIR/LWIR fields can reveal details or features otherwise invisible. Applications include the detection of chemical agents or bacteriological weapons spread in the **atmosphere, water tables and the seabed**.



## PLANETARY INTELLIGENCE

### PREPARE THE EXPLORATION OF NEW PLANETARY SYSTEMS

We believe that it is not necessary to choose between the preservation of the terrestrial ecosystem and the exploration of other planetary systems.

Therefore, we support **space agencies** in the development of characterization systems for celestial bodies, in order to **prepare the future of humanity in space**.

To test new concepts of operations while maximizing **scientific feedbacks**, we propose Smallsat missions complementary to traditional missions.

Our goal is to allow the organization of **inhabited exploration** missions to the Moon and Mars as well as to offer accurate mapping of complex planets.

# OUR TECHNOLOGIES

## CRYASSY

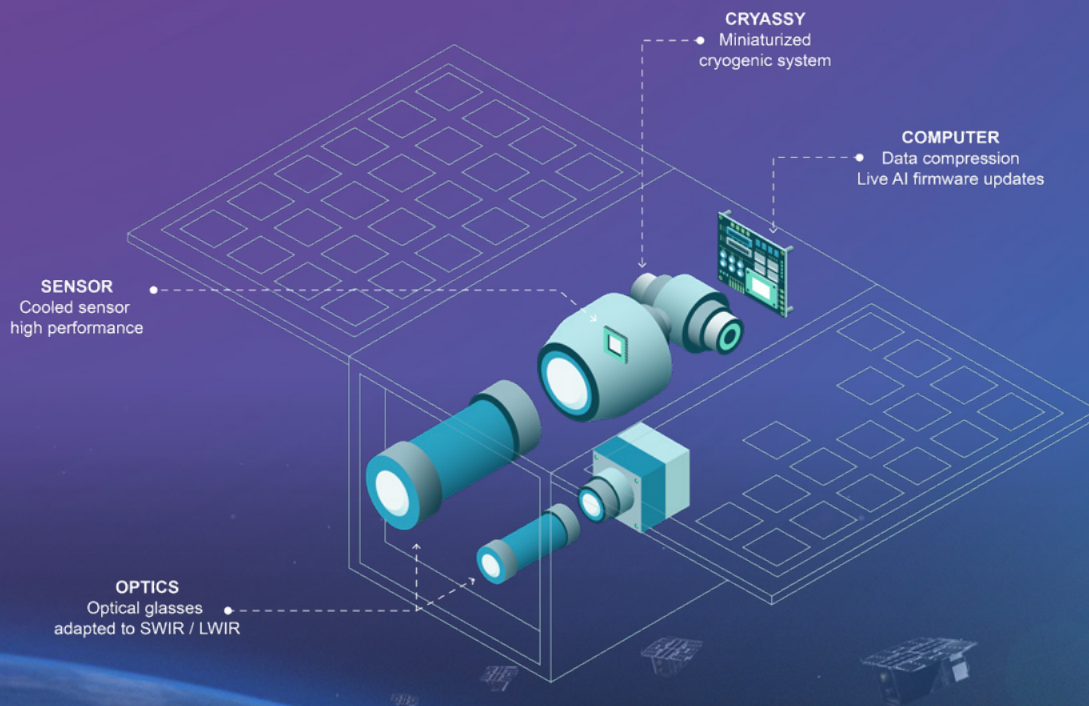
The CRYASSY is a compact cryogenic system developed by Absolut System compatible with CubeSats and designed for **IR observation missions**.

### OBSERVATIONS

- Infrared from SWIR to LWIR
- Multispectral and hyperspectral
- Medium resolution in wide fields
- High resolution in low fields

### IMPROVEMENTS

- Spectral resolution
- Instrument sensitivity
- SNR



## GESAT CONSTELLATION

Absolut Sensing is working on the deployment of a **satellite constellation for methane detection** to respond to the challenge of global warming by measuring industrial pollution.

**By combining Absolut System's cryogenics expertise with artificial intelligence and data processing technologies, Absolut Sensing designs Sensing is designing the technological solutions of tomorrow.**

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