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# Turning Next Generation Earth Observation into Real World Impact.

7 partners | 4 countries



# PANORAMA

observe | connect | protect

Stay tuned



Find more



Multi-sensor synergies for improved weather-climate-environmental products and applications, to advance European services supporting green transition



Funded by the European Union

# Vision

Our Vision for PANORAMA is to build on the next generation Copernicus Sentinels and EUMETSAT MTG and EPSSG satellites, to design and implement new data products and applications from multi-sensor synergies towards enhancing environmental information.

PANORAMA aims to assess the impact of the new products and applications in atmospheric composition and weather predictions and demonstrate how this information improves environmental European services in support of the GEO priorities and the European Green Deal.

# Goals

- 1** Development of Novel EO Products by creating synergistic satellite products that integrate multi-sensor observations, enhancing the accuracy and utility of parameters.
- 2** Advancement of Applications through integrating innovative algorithms for data assimilation, radiative transfer, and emission estimation using AI/ML.
- 3** Demonstration and validation the above through implementing pilot demonstrators to assess the impact of new EO products on climate, disaster prediction, and energy management.
- 4** Utilization of Cloud Infrastructure by leveraging Copernicus DIAS and European Weather Cloud for high-performance computing and streamlined data accessibility.
- 5** Stakeholder Engagement and Impact Maximization by disseminating results through collaborations with European initiatives and private sectors as well as promoting adoption of EO innovations via workshops, partnerships, and targeted demonstrations.

# Expertise

## Pilot 1



Mineral dust deposition  
over the Atlantic

## Pilot 2



Fire smoke and volcanic  
ash nowcasting in the  
Mediterranean region

## Pilot 3



Aerosol information  
enhancements for climate  
data records in Europe

## Pilot 4



Extreme weather  
forecasting for the  
severe storm "Daniel"

## Pilot 5



Flood forecasting for the  
Karditsa case

## Pilot 6



Solar energy forecasting  
in arid and dust outflow  
regions