

ESA viewpoint on Copernicus4Regions

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NEREUS General Assembly, Brussels, 20 April 2023

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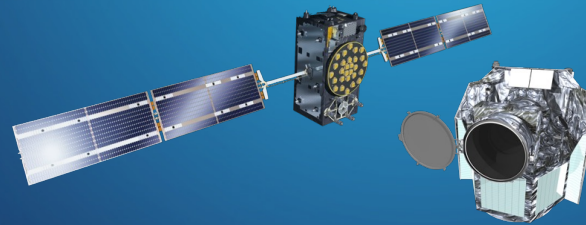


→ THE EUROPEAN SPACE AGENCY

What is the European Space Agency?



**Make Space
for Europe**



Over 80 satellites
developed, tested, and
operated **since 1975**

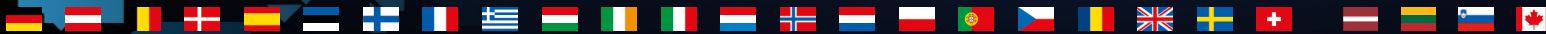


5 500+
ESA Workforce

22
Member States

2022 Budget

€ 7.2 billion =
12 per European

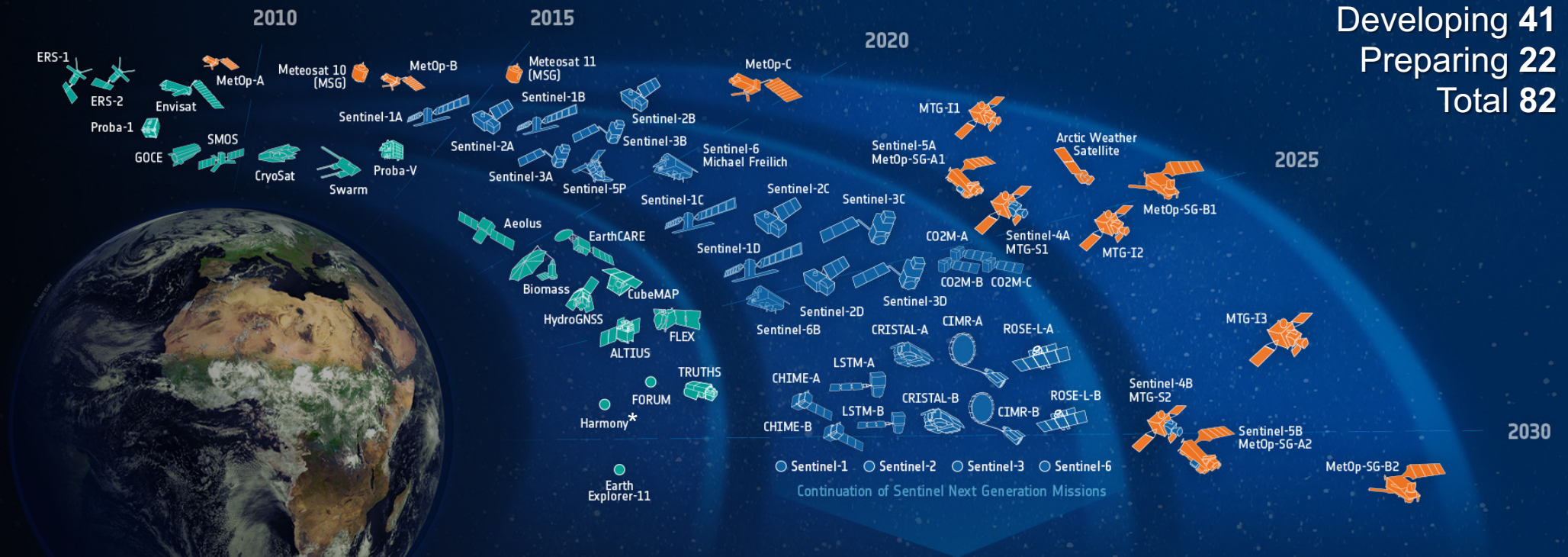


ESA's Earth Observation Missions



Satellites

Heritage	04
Operational	15
Developing	41
Preparing	22
Total	82



*Pending final mission selection



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European Earth Observation System

- Led by the EU
- EU-ESA Collaboration

European response to global needs:

- to manage the environment
- to mitigate the effects of climate change
- to ensure civil security

FULL, FREE AND OPEN
ACCESS TO DATA



- ATMOSPHERE MONITORING
- MARINE ENVIRONMENT MONITORING
- LAND MONITORING
- CLIMATE CHANGE
- EMERGENCY MANAGEMENT
- SECURITY



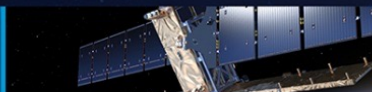
**PROGRAMME OF THE
EUROPEAN UNION**

→ Know more: <https://copernicus.eu>



→ THE EUROPEAN SPACE AGENCY

Copernicus Sentinels: overview



**State-of-the-art
observations**

sentinel-1

→ **RADAR VISION**



**Systematic data
availability**

sentinel-2

→ **COLOUR VISION**



**Full, free and open
data policy**

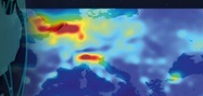
sentinel-3

→ **A BIGGER PICTURE**



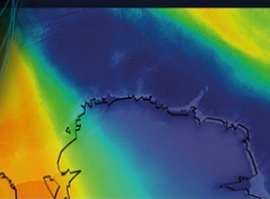
sentinel-4

→ **EUROPEAN AIR MONITORING**



sentinel-5p | sentinel-5

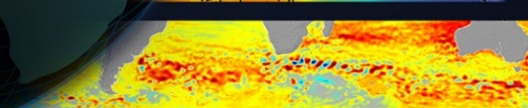
→ **GLOBAL AIR MONITORING**



**Long-term
availability**

sentinel-6

→ **SURFING THE SEAS**



→ Know more: <https://sentinels.copernicus.eu>



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Copernicus Space Component – Evolution



PROGRAMME OF THE
EUROPEAN UNION

co-funded with



CHIME

Copernicus Hyperspectral
Imaging Mission
for the Environment

ROSE-L

L-band Radar
Observing System



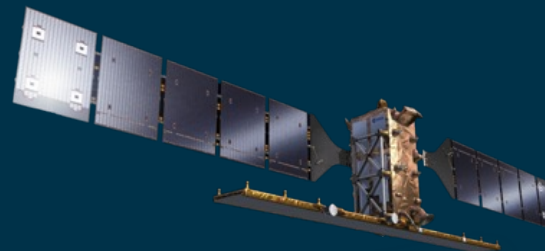
LSTM

Land Surface
Temperature Monitoring

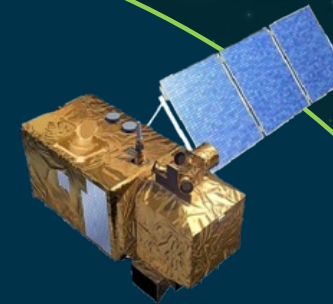


CO2M

Copernicus
Anthropogenic Carbon
Dioxide Monitoring



Sentinel-1 NG



Sentinel-2 NG



CIMR

Copernicus Imaging
Microwave Radiometer



Sentinel-3 TOPO/OPT NG



CRISTAL

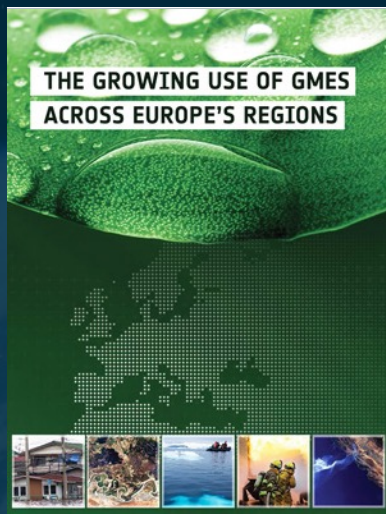
Copernicus Polar Ice
and Snow Topography
Altimeter

+ Sentinels Next Generation



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A long and fruitful cooperation with NEREUS



EP, Brussels, 2018



EP, Brussels, 2020



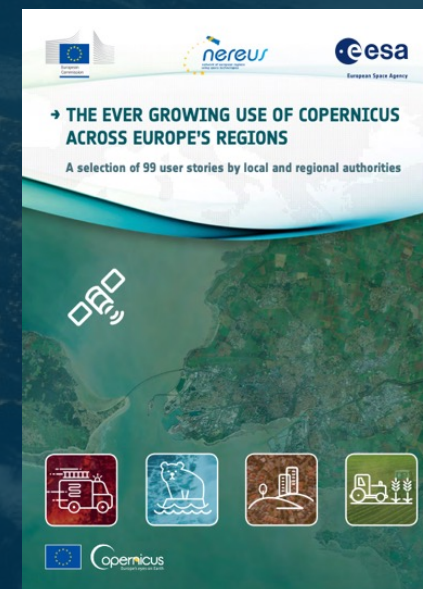
Covid, 2021



EP, Brussels, 2012



EP, Brussels, 2016



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Regions: core users of Copernicus

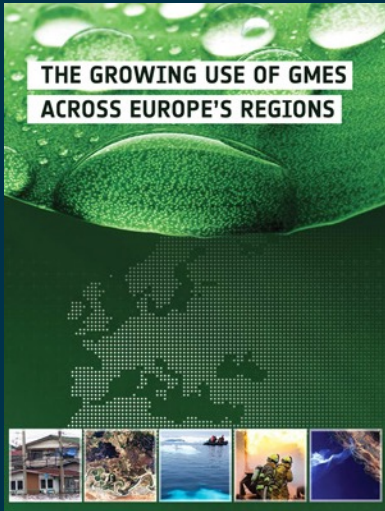


Copernicus core users' means the Union institutions and bodies and European, national, or **regional public bodies** in the Union or Copernicus Participating States **entrusted with a public service mission for the definition, implementation, enforcement or monitoring of civilian public policies**, such as environmental, civil protection, safety, including safety of infrastructure, or security policies, which benefit from Copernicus data and Copernicus information and have the additional role of driving the evolution of Copernicus;

[EU Space Regulation, 2021]



Copernicus4regions: looking backwards

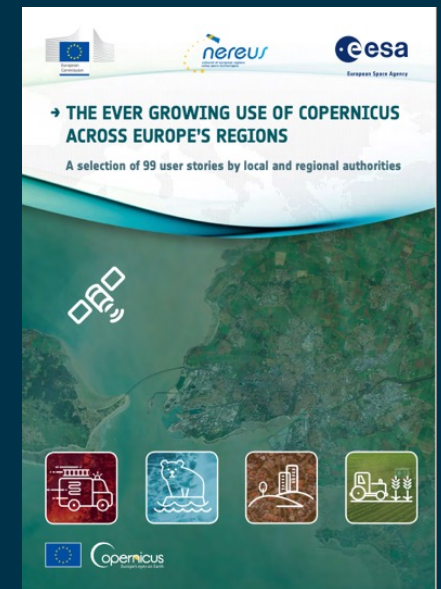


⇒ Local and Regional Authorities represent a heterogeneous user group with specific characteristics and challenges. NEREUS provided an effective partner in interfacing them, also helping to mobilize non-NEREUS regions .

⇒ ESA welcomes NEREUS efforts to promote and showcase the regional uses of Copernicus/EO, in view of increasing the overall uptake of the Programme

⇒ Copernicus4Regions highlights:

- A committed community (centered on the User Stories)
- An open community, bridging the gap between politicians, providers, users and general public



Copernicus4regions: looking forward

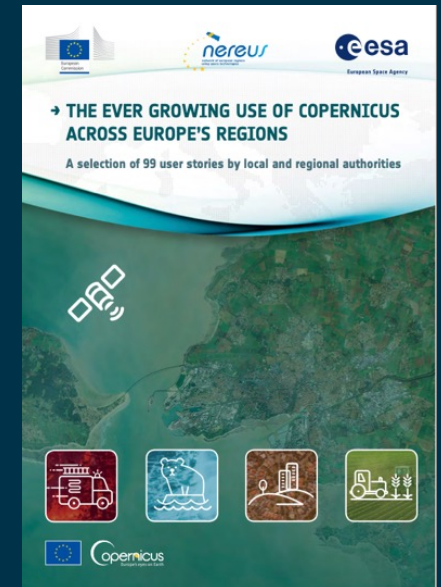


Scope of activity in continuity with Copernicus4Regions but with:

1. Increased focus on awareness at European Parliament
2. Specific attention on promoting awareness and fostering exchanges across LRAs
3. Specific provisions for maintaining and enlarging the Copernicus4Regions user community, with particular attention on the potential of Copernicus to support regions in the implementation of the EU Green Deal

Activity funded by the EU through Copernicus

Long-term activity spanning throughout 2027



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