

# EuroGEO Workshop 2024

## PROGRAMME OF DAY-2

8-10 October 2024

Krakow Poland, Holiday INN | An IHG Hotel

### DAY 2 - One EuroGEO: European contribution to GEO

TIME	TITLE	ROOMS
08:00 – 09:00	<b>WELCOME COFFEE &amp; REGISTRATION</b>	Coffee: <b>Patio</b> (Ground Floor) Registration: <b>Lobby</b> (Ground Floor)
09:00 – 10:00	<a href="#"><u>INSTITUTIONAL OPENING</u></a>	<b>Degas</b> (Floor -2)
10:00 – 10:45	<a href="#"><u>EUROGEO PRIORITIES – OUTCOMES OF DAY I</u></a>	<b>Degas</b> (Floor -2)
10:45 – 11:15	Coffee break Poster session; Screen exhibition	Coffee: <b>Patio</b> (Ground Floor) Poster Session: <b>Patio</b> (Ground Floor) Screen exhibition: <b>Lobby</b> (Floor -2) & <b>Lobby</b> (Ground Floor)
11:15 – 12:45	<a href="#"><u>EUROGEO AS A CATALYST: COPERNICUS, DESTINE AND EUROPEAN EO SYNERGIES</u></a>	<b>Degas</b> (Floor -2)
12:45 – 14:00	Complimentary onsite lunch	<b>Hotel's Restaurant</b> - Please follow the instructions of the personnel
14:00 – 15:30	<a href="#"><u>EUROGEO TOWARDS EARTH INTELLIGENCE FOR ALL</u></a>	<b>Degas</b> (Floor -2)
14:00 – 15:30	Private project meeting	<b>IEEE GRSS Renoir - II</b> (Ground Floor)
15:30 – 16:00	Coffee break Poster session; Screen exhibition	Coffee: <b>Patio</b> (Ground Floor) Poster Session: <b>Patio</b> (Ground Floor) Screen exhibition: <b>Lobby</b> (Floor -2) & <b>Lobby</b> (Ground Floor)



16:00 – 17:30	<b>PARALLEL SESSIONS</b>	
	<a href="#">Engagement of National Data and Platforms to EuroGEO</a>	<b>Degas</b> (Floor -2)
	<a href="#">Exploring prospects towards “in situ data space”</a>	<b>Renoir - I</b> (Ground Floor)
	<a href="#">EuroGEO and Regional GEOs</a>	<b>Renoir - II</b> (Ground Floor)
	<a href="#">Strengthening stakeholders' engagement for success: empowering the EuroGEO Initiative</a>	<b>Renoir III + IV</b> (Ground Floor)
17:30 – 19:00	<b>Cocktail reception, organised by the Polish Space Agency</b> 	<b>Lobby</b> (Floor -2) <b>Patio</b> (Ground Floor) <b>Lobby</b> (Ground Floor)

## DAY 2 - Expected outcomes

This day leverages on the concepts of cooperation, coordination, and consolidation of the European assets and initiatives that form the European contribution to GEO, which should be formulated through its revised implementation plan.

## DAY 2 – Institutional opening

09:00 – 10:00 // Room: Degas (Floor -2)

<b>Thierry Ranchin</b>	EuroGEO Secretariat, Mines Paris PSL
<b>Joanna Drake</b>	Deputy Director General, European Commission, RTD
<b>Michał Goszczyński</b>	Deputy Director, Department of Innovation and Development in Ministry of Science and Higher Education, Poland
<b>Grzegorz Wrochna</b>	President of the Polish Space Agency
<b>Michel Rixen</b>	European Commission, DEFIS
<b>Ernest Acheampong</b>	GEO Secretariat
<b>Mark Dowell</b>	European Commission, JRC



## DAY 2 – EuroGEO priorities

10:00 – 10:45 // Room: Degas (Floor -2)

Founded in 2017, EuroGEO – the European caucus of GEO - has made significant progress in its contribution to GEO, by successfully launching and completing various initiatives. While GEO is pivoting from an initial vision of a Global Earth Observation System of Systems to Earth Intelligence; similarly the context of the EuroGEO initiative has significantly changed (see background below).

These changes call for a revision of the EuroGEO vision and objectives. After a short presentation of the context and of the revised EuroGEO objectives; the panelists would provide their perspective and introduce the sessions scheduled DAY 2 and how these contribute to shaping the future of EuroGEO.

Chairs: **Franz Immler**, **Jean Dusart**, European Commission.

Introduction by **EuroGEO Secretariat**.

Panelists:

- ▶ **Emmanuel Pajot**, Secretary-General, EARSC. “Copernicus & DestinE contributions to EuroGEO”
- ▶ **Lefteris Mamais**, Evenflow. “EuroGEO towards Earth Intelligence for All”
- ▶ **Marie-Françoise Voidrot**. Session “Engagement of National Data and Platforms to EuroGEO ”
- ▶ **Jean-Philippe Aurambout**, European Environment Agency. Session « Exploring prospects towards “in situ data space”
- ▶ **Thibaud Valentin**, DG INTPA. Session “EuroGEO and Regional GEOs”
- ▶ **Haris Kontoes**, NOA / BEYOND - GEO CRADLE. Session “EuroGEO and Regional GEOs”
- ▶ **Annalisa Donati**, Secretary General, EURISY. Session “Stakeholder Engagement; Capacity Development and Youth”

## Background. Changes in the EuroGEO environment.

Since the start of EuroGEO, Earth Observation has turned into a global EUR 3 Billion market of which 80% is downstream services. To support the Green Deal and Digital Transformation, the evolution of Copernicus is planned along four key priorities : “Agile, resilient, expanded and secure Earth observations streams”; “Boosting data spaces capabilities, interoperability and AI big data analytics”; “Service digital uplifting from data to knowledge and decision making”; “Effective policy uptake and downstream mass adoption”.

The EU landscape has strongly evolved. Within the EU Space Programme, Copernicus – earmarked as one of the major contributions of Europe to GEO has expanded is structuring the EO Community through e.g., Space Networks, User Forums, National Offices and Thematic activities.

A major development in the EuroGEO ecosystem is also the recent advent of Digital Twins of the Earth, on the European level developed e.g. by the DestinE initiative, but also National Digital Twins currently developing in European Member States. These new developments provide a full ecosystem of data lakes - that combine satellite-based Earth Observation, modelled data, in situ data; computing capabilities, Artificial Intelligence, and onboarding capabilities for direct end user interaction.



## Background. Proposed revised vision for EuroGEO:

"EuroGEO promotes, showcases and stimulates Combination, Coordination and Cooperation to serve European and international policies and users through Earth Intelligence leveraging European excellence"

## Proposed revised EuroGEO objectivess:

- ▶ Actively stimulate and monitor the European contribution to GEO; and increase GEO benefits for Europe, including through enhanced communication and engaging with Regional GEOs and through National and European cooperation programmes.
- ▶ Act as a Coordination forum of European and National initiatives relevant both to the GEO work programme and European priorities. Building on an integrated and collaborative community to reduce the fragmentation of actions and of the European EO ecosystem; both supporting the implementation of the Green Deal and GEO engagement priorities as #OneEuroGEO.
- ▶ Address the grand distance between policy needs, end-user requirements, and technology providers through the Combination or integration of activities to reach critical mass of use; and Cooperation beyond individual programmes and user communities in Europe.
- ▶ In this endeavour, ensure a large participation of both demand (institutions, public entities, international conventions) and solution providers, Copernicus Hubs, the private sector and platforms/twins within its Action Groups. GEO instruments and Regional GEOs should be part of the discussion.
- ▶ Support Action Groups mobilised as agents of change embedding the notion of Earth Intelligence to the produce and scale up of sustainable and operational solutions in support of policies and end users, through the dissemination and adoption of best practices in co-design, R&I support, data and knowledge management, support to incubation and demonstration, along the notion of 'conveyor belt'.

## DAY 2 – EuroGEO as a catalyst: Copernicus, DestinE and European EO synergies

11:15 – 12:45 // Room: Degas (Floor -2)

Chair: **Emmanuel Pajot**, Secretary-General, EARSC

This session aims to discuss the benefits, synergies, and coordination mechanisms between EuroGEO, Copernicus, and DestinE. The panel will delve into how EuroGEO can support the uptake of Copernicus and DestinE, and conversely, how EuroGEO can act as a forum for increased interaction between the EuroGEO community, the Copernicus EEs and DestinE key implementing partners.

Bringing together representatives from five of the Copernicus Services (Climate, Atmosphere, Land, Marine, and Emergency) as well as from ESA, EUMETSAT, and EUSPA, and moderated by relevant EO industry representatives from EARSC and Serco, this panel reflects the changing EuroGEO/GEO priorities, aiming to bring together the whole European EO community to address key common challenges through operational and concrete solutions.





**Discussion Part I: Copernicus and EuroGEO**

Moderator: **Emmanuel Pajot**, Secretary-General, EARSC

Panelists:

- ▶ **José Miguel Rubio Iglesias**, Expert - Copernicus In Situ, EEA
- ▶ **Stijn Vermoote**, Head User Outreach and Engagement Section, ECMWF
- ▶ **Michele Melchiorri**, co-leader of the GEO Human Planet initiative & CEMS Exposure Mapping Component, DG JRC
- ▶ **Audrey Hasson**, Mercator Ocean International

**Discussion Part II: “In conversation with DestinE”**

Moderator: **Vincent Saleh**, Data Platform Product Manager, Serco France

Panelists:

- ▶ **Vincent Gabaglio**, International Relations Officer, EUMETSAT
- ▶ **Stijn Vermoote**, Head User Outreach and Engagement Section, ECMWF
- ▶ **Franka Kunz**, DestinE Earth Science Model Engineer, ESA

## DAY 2 – EuroGEO towards “Earth Intelligence For All”

14:00 – 15:30 // Room: Degas (Floor -2)

Chairs: **Lefteris Mamais**, Evenflow; **Emmanuel Pajot**, EARSC.

To achieve the goal of “Earth Intelligence for All”, it is essential that developed Earth Observation (EO) solutions meet user needs and support policy implementation. EuroGEO is dedicated to this objective by offering a range of services to community practitioners. These services must consider the current barriers and opportunities for the adoption of fit-for-purpose EO solutions.

This session will bring together contributions from different stakeholder groups and activities to provide a comprehensive overview of the challenges in bringing EO research and innovation (R&I) solutions to the market. Through an interactive discussion with multiple stakeholders, we aim to gather insights, recommendations, and best practices to address these challenges. The session will focus on issues related to EO solutions in the context of EU policies, data infrastructure management, co-design, funding sources, and more.

We will begin with an introduction to EuroGEOsec and its WP3—Maximisation of R&I impacts, followed by two back-to-back panel discussions, each lasting around 30 minutes. The first panel, chaired by Emmanuel Pajot (EARSC), will examine the challenges EO solutions face in complying with EU regulations and meeting user needs. The second panel, led by Lefteris Mamais (Evenflow), will explore the difficulties of bringing EO solutions to market, with a focus on sources of funding for R&I. The session will conclude with a wrap-up highlighting key insights and takeaways.



Participating in the session will give you the opportunity to:

- ▶ Learn about market needs and trends from representatives of different sectors, including the steps necessary to address identified challenges.
- ▶ Connect and exchange with key stakeholders on new applications, new business opportunities, exciting visions of future products and services, and recommendations for future research and development of EO solutions.
- ▶ Have your voice heard and contribute to the shaping of the future EuroGEO Secretariat when it comes to innovation and market development

## Panels and invited speakers

### 1st panel: Challenges EO solutions face in complying with EU regulations and meeting user needs

Chair: **Emmanuel Pajot** (EARSC)

- ▶ DG RTD: **Mark Dowell**
- ▶ ECMWF: **Stijn Vermoote**
- ▶ UK Department for Science, Innovation and Technology: **Hannah Keen**
- ▶ Netherlands Space Office: **Coco Antonissen**

### 2nd panel: Difficulties of bringing EO solutions to market, with a focus on sources of funding for R&I

Chair: **Lfteris Mamais** (Evenflow)

- ▶ Nova School of Business and Economics: **Luis Filipe Lages**
- ▶ PROTECT/PCP WISE representative: **Stefka Domuzova** (Climate-KIC)
- ▶ Orbify: **Jakub Dziwisz**
- ▶ NOA: **Evangelos Gerasopoulos**

## DAY 2 – Parallel sessions

16:00 – 17:30

### Parallel session 1: Engagement of other European & National data and platforms to EuroGEO

// Room: Degas (Floor -2)

Chairs: **Chairs Marie-Francoise Voidrot, OGC; Albana Kona, JRC**

This session brings together a panel of representatives from national Earth observation infrastructures, along with a representative from Copernicus, a flagship provider of very operational and sustainable



Earth observation services. The focus will be on fostering synergies between national initiatives and exploring ways to enhance collaboration within the EuroGEO community to benefit from the different types of infrastructure whatever their operational levels.

As national platforms might support the transition from research-driven infrastructures to operational services, there is a growing opportunity to align these efforts with Copernicus and broader EuroGEO objectives. The discussion will address how the EuroGEO Secretariat can support these transitions by facilitating networking and collaboration, enabling the development of an ecosystem of services that are operational for business development around Copernicus core services. The goal is to raise awareness about the different types of infrastructures and initiatives, discuss how to increase their FAIRness to make them Findable- Accessible Interoperable, and Reusable, and also discuss how to better support innovation.

## Key themes

- ▶ Strengthening connections between national data platforms and Copernicus to build a robust, interconnected service ecosystem.
- ▶ Enhancing the accessibility of these infrastructures to the broader EuroGEO community.
- ▶ Exploring pathways for transforming research initiatives into operational services that drive innovation and business opportunities.

The session chair will introduce the landscape of the National Infrastructures actors and current known involvement in GEO (EuroGEO where applicable) linking back to the ongoing EuroGEO Secretariat project activities.

## Panel: "Setting the scene of National Infrastructures "- 40 mn

- ▶ **Mikko Strahlendorff**, Finnish Meteorological Institute
- ▶ **Wolfgang zu Castell**, NFSDI4Earth
- ▶ **Radoslaw Gurdak**, POLSA
- ▶ **Pr John Remedios**, UK NCEO
- ▶ TBC, Data Terra
- ▶ TBC, Copernicus Data Space Ecosystem
- ▶ TBC, OpenEarth Monitor

## Discussion - 40 mn

- ▶ Can EuroGEO support National Infrastructures?
- ▶ Can EuroGEO support collaboration between National Infrastructures?
- ▶ Can EuroGEO support the transition from Research to Innovation and operations or Business?
- ▶ How can the National Infrastructures support a broader Copernicus Ecosystem?
- ▶ How can the National Infrastructures support the EuroGEO Community?



Wrap up - 10mn

## Parallel session 2: Exploring prospects “towards in situ data spaces”

// Room: Renoir - I (Ground Floor)

Chairs: **Jean-Philippe Aurambout**, European Environment Agency, European Commission; **Lionel Menard**, MINES Paris PSL / ARMINES

The goal of this session will be to trigger discussions looking at how we could move from our current ways of working with in-situ data, towards “in-situ data spaces”.

This session will start by presenting a vision of what a possible “in-situ data space” could look like in an ideal future.

It will then explore where we are, currently through inspiring testimonies from in-situ practitioners: from small consortiums to institutional players to the private sector. We will then present the tools GEO currently has at its disposition to help identify and match the user’s needs for in-situ data with potential providers, their potential, and limitations.

Following these short presentations, the Chairs will invite the audience to contribute by providing insights, and testimonies on how we can get there: what can we learn from existing work, and how to scale up toward an in-situ data space.

It will finally discuss how we can move forward and define concrete actions EuroGEO can take to get us closer to our vision to provide actionable recommendations and identify points we commit to resolve before the next EuroGEO workshop.

### Agenda:

TIME	TOPIC	SPEAKER
16:00 – 16:05	<b>A vision towards an in-situ data space?</b>	<b>Jean-Philippe Aurambout</b> - EEA
16:05 – 16:20	<b>Where are we at?</b>	<b>Maude Perier-Camby</b> - Vortex-io <b>Laurent Mortier</b> - ENSTA - AMRIT Project <b>Eija Juurola</b> - ACTRIS ERIC – ACTRIS RI
16:20 – 16:35	<b>What tools do we have now?</b>	<b>Mattia Santoro</b> - CNR - GPOT <b>Alba Brobia</b> - CREAM - G-reqs <b>Lionel Menard</b> - MINES Paris PSL - libinsitu
16:35 – 17:10	<b>How do we get there?</b>	<b>Helen Glaves</b> - BGS - Intro (5mn.) <b>All</b> - Discussion
17:10 – 17:30	<b>Actions to help us move forward as EuroGEO</b>	<b>All</b> - Discussion



## Parallel session 3: EuroGEO and Regional GEOs

// Room: Renoir - II (Ground Floor)

Co-Chairs: **Thibault Valentin**, DG INTPA; **Haris Kontoes**, NOA / BEYOND - GEO CRADLE; **Wenbo Chu**, GEO Secretariat.

EuroGEO, other regional GEOs, and the GEO community at large are key fora to ensure information sharing within the EO ecosystem and facilitate coordination and cooperation. Many stakeholders at EU level and beyond conduct internationalization and outreach activities around EO data and services in a wide array of applications. To this end, the session will feature EU and GEO-related projects and flagships for building capacity and advancing the use of EO for the benefit of scientists and decision-makers in the neighboring regions and globally.

The session will emphasize the role of the European contribution to GEO and set forward roles for the EuroGEO as a facilitator for engaging users in the co-design process and finding synergies with the other regional GEOs. Last, yet importantly the session will emphasize, where possible, on the exploitation of initiatives, and infrastructures, and build upon the wider scientific community and funding in support of regional cooperation and the concept of the post-2025 GEO Work program.

For the sake of example, it is worth mentioning that the EuroGEO has put forward the concept of co-design as an effective tool for developing user-driven applications and methodologies “with and for the users”. In the same period, the GEO-CRADLE initiative has set the standard for recognizing user needs and putting forward the so-called ‘maturity indicators’ methodology (EOMI), which is being rolled out by several actors in Africa, Latin America, and Asia territories, thus allowing the stakeholders, public and private, to self-assess their maturity and prioritize their investments in the support of decisions and business creation.

How then the today's advancement of EO methodologies and intelligence be more systematically identified and promoted within GEO and what is the role of EuroGEO in it? And how EuroGEO can build the proper synergies with the regions so as to be effectively involved and served by the existing assets in EO?

TIME	TOPIC	SPEAKER
16:00 – 16:10	<b>Role and synergies across Regional GEOs in supporting user uptake of Earth Intelligences derived from EO initiative</b>	<b>Wenbo Chu</b> , GEO Secretariat, TBC
16:10 – 16:20	<b>CopPhil</b> (Copernicus Centre in the Philippines), <b>SCOPE Digital</b> (EU-ASEAN Sustainable Connectivity package), <b>CopLAC</b> , and <b>EU-Africa Space Cooperation Programme</b>	<b>Thibault Valentin</b> , EC DG INTPA
16:20 – 16:30	<b>Copernicus Core Services for Regional Support and SDGs</b> (e.g. CEMS, CLMS, CAMS, C3S, etc)	<b>Mark Dowell</b> , EC DG JRC, TBC

16:30 – 16:40	<b>Leveraging GEO-CRADLE and e-shape legacy through EuroGEO in collaboration with Regional GEOs in Africa and the Pacific; EO Maturity Assessment and Capacity Development</b>	<b>Haris Kontoes,</b> NOA/BEYOND
16:40 – 16:50	<b>The role of EARSC in engaging the Private Sector from the Regions in the implementation of GEO and Copernicus</b>	<b>Francesca Piatto,</b> EARSC
16:50 – 17:30	<b>Open discussion and wrap-up</b>	<b>All</b>

### Questions to panelists:

3 or 4 guiding questions from the pool:

- ▶ What fora and processes are the most suitable for coordination and cooperation to learn about others' initiatives and create synergies among regions?
- ▶ What are the gaps encountered in furthering cooperation with potential partners and what measure would help reduce those?
- ▶ How the European Commission supports EO uptake outside of the EU through public institutions and how does cooperation with the EU in the Regions in the field of EO materialise, i.e. examples of INTPA initiatives?
- ▶ How could the role of EuroGEO to be strengthened to facilitate the interface with the other Regional GEOs and act as a convener and exchange platform for EO assets developed in EU and sustained with entities outside Europe? If feasible, which thematic areas of GEO WP, business and/or policy sectors would this process put in priority for the benefit of societies?

## Parallel session 4: Strengthening stakeholders' engagement for success: empowering the EuroGEO Initiative

// Room: Renoir III + IV (Ground Floor)

Chairs: **Annalisa Donati**, Secretary General, EURISY; **Ernest Acheampong**, Capacity Development Coordinator, GEO Secretariat.

### Session description:

The EuroGEO initiative builds upon the e-shape project, the European Commission's flagship endeavor to strengthen the research-to-business Earth Observation (EO) component. This initiative has successfully cultivated a community of over 800 stakeholders spanning academia, industry, institutions, and user communities. Fully aligned with the strategic objectives of the Group on Earth Observation, EuroGEO aims to leverage Europe's EO capabilities to address societal challenges, foster entrepreneurship, and support sustainable development.

EuroGEO, operating from 2024 to 2026 under the EuroGEOsec project, has been established around a holistic stakeholder engagement approach integrating existing EO actors and associated participants including the Copernicus Entrusted Entities, DestinE, the European Union Space Programme Agency (EUSPA), as well as research institutions and public and private entities, to unify the community around the regional GEO.

This session will explore European ongoing engagement activities with established stakeholders and networks, as well as with prospective participants interested in joining the dynamic EuroGEO and GEO communities. The session's major goal is to encourage dialogue, favor interaction, and foster collaboration among existing and potential stakeholders potentially benefiting from active participation in the EuroGEO community. By bringing together a varied set of voices, the session seeks to ultimately highlight the importance of an enhanced approach to transversal information and knowledge sharing to ensure the diverse needs of stakeholders are effectively addressed, the resources are optimally utilised and the efforts are not duplicated. The session will provide an overview of the GEO strategy as well as examples of national perspectives and approaches to meet the above objectives. The session will additionally emphasise through experiences the importance of capacity development, particularly in light of the recent release of the European Commission's Career Launch Pad, a crucial tool to match current job offers and demands in the space and EO sectors, as highlighted in the GEO Cape Town Ministerial Declaration.

Finally, the session will formulate recommendations for the new EuroGEO Implementation Plan, contributing to the GEO post-2025 agenda.

### Invited speakers:

- ▶ Co-chair and moderator, **Annalisa Donati**, Secretary General, EURISY
- ▶ Co-chair and panelist, Ernest Acheampong, Capacity Development Coordinator, GEOsec
- ▶ **Stanislaw Lewinski**, Head of EO, POLSA
- ▶ **Dr. rer. nat. Martyna A. Stelmaszczuk-Górska**, EOTecDevnet
- ▶ **Michel Rixen**, Copernicus Programme Officers and EuroGEO representative, DG DEFIS
- ▶ **Emmanuel Pajot**, Secretary General, EARSC

### Cocktail reception

17:30 – 19:00 // Room: Lobby (Floor -2) Patio (Ground Floor) Lobby (Ground Floor)

Organised by the Polish Space Agency

