

TIE Event, 06/08/2025: Advances and Applications in Earth Observation for SDGs Accelerating Earth Intelligence in the context of GEO

Introduction to GEO and Regional GEOs

Haris Kontoes, National Observatory of Athens / IAASARS / BEYOND



TIE Event, 06/08/2025: Advances and Applications in Earth Observation for SDGs. Accelerating Earth Intelligence in the context of GEO



Event Code - TIE.06

Date: Wednesday 6th August 2025

Time: 10:30-11:45

Part A: Presentations (50 mins)

Location: Plaza Auditorium

[10.30-10.35] Introduction to GEO and Regional GEOs – **Haris Kontoes** (5 mins)

[10.35-10.40] The Digital Earth Pacific – **Andiswa Mlisa** (5 mins)

[10.40-10.45] Australian perspectives in GEO – **Megan Lewis** (5 mins)

[10.45-10.52] The Earth Observations for Sustainable Development Goals (EO4SDG) GEO Enabling Mechanism, and the role of GRSS Remote Sensing Environment, Analysis and Climate Technologies (REACT) Technical Committee (TC) in supporting it – **Irena Hajnsek** (7 mins)

[10.52-11.07] The Artificial Intelligence for Earth Observation (AI4EO) GEO Enabling Mechanism, and the synergies with GRSS Image Analysis and Data Fusion (IADF) Technical Committee (TC) – **Yifang Ban and Claudio Persello** (14mins)

[11.07-11.14] GRSS contribution in Education and Capacity Building for GEO: the GEO-CRADLE GEO Enabling Mechanism – **Alexia Tsouni** (7 mins)

[11.14-11.20] The GRSS Education portfolio in GEO. Fostering AI4EO literacy and education for qualifying scientists in using Earth Intelligence - **Carlos Lopez Martinez** (7 mins)

Part B: Panel discussion (25 mins)

[11.20-11.45] Regional needs for Capacity Building and Applications. Synergies of GRSS with local stakeholder and GEO community

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Dr Haris KONTOES
Research Director of IAASARS/NOA
National Observatory of Athens
(NOA)



Prof. Megan Lewis, Adjunct
Professor in Environmental
Remote Sensing, University of
Adelaide



Sachindra Singh, Team
Leader, Earth and Oceans
Observations Programme,
The Pacific Community (SPC)



Prof. Dr. rer. nat. Irena Hajnsek,
Prof for Earth Observation, ETH
Zürich, Institute of Environmental
Engineering



Prof. Dr. Yifang Ban, Prof and
Director of Geoinformatics
Division, KTH Royal Institute of
Technology in Stockholm



Prof. Claudio Persello, Adj
Prof at the Univ of Twente,
Faculty of Geo-Information
Science and EO(ITC)



Msc Eng. Alexia Tsouni,
Research Assistant,
BEYOND Center, National
Observatory of Athens



**Assoc Prof Carlos Lopez
Martinez**, BarcelonaTech (UPC),
Spain

The Group on Earth Observations (GEO)

- ❑ At its core, GEO is a **global alliance**, a cooperative forum and operates through **collaboration among its member countries and participating organizations (among which GRSS)**, each with their unique perspectives and data sets.
- ❑ By sharing the wealth of information and research, GEO ensures that decisions made for Earth's future are based on the best available knowledge, fostering an **all-inclusive user-centric approach to planetary care**.

GEO's Member National Governments	GEO's Participating Organisations	Current Work Programme Activities
100+	150+	~50

The Group on Earth Observations (GEO)

Mission and Vision

Our mission:

GEO co-produces user-driven Earth intelligence solutions that inform decisions and accelerate action on global, societal, and environmental challenges, leveraging its unique position as an established intergovernmental body with a strong and inclusive partnership.

Our vision:

A world where trusted Earth intelligence is universally accessible and empowers society to achieve a sustainable future.

Our offer:

GEO empowers anyone to use and contribute to Earth intelligence to make better decisions for people and the planet.



Regional GEOs

**African Group on Earth
Observations →**

AFRIGEO

AfriGEO

Strengthens Earth observation applications
and capacities across Africa.

**Americas Group on Earth
Observations →**

AMERIGEO

AmeriGEO

Enhances collaboration and Earth observa-
tion initiatives in the Americas.

**Asia-Oceania Group on Earth
Observations →**

AOGEO

AOGEO

Promotes Earth observations for sustainable
development in Asia and Oceania.

**European Group on Earth
Observations →**

EUROGEO

EuroGEO

Addresses Europe-specific challenges
through Earth observation solutions.

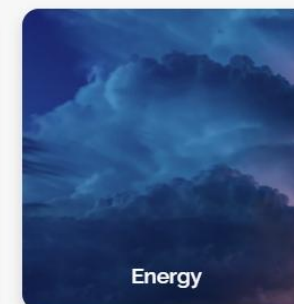
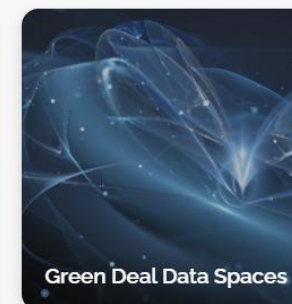
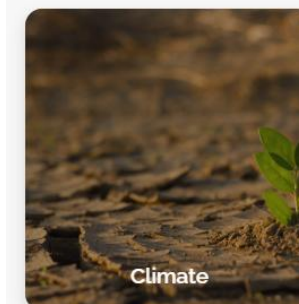
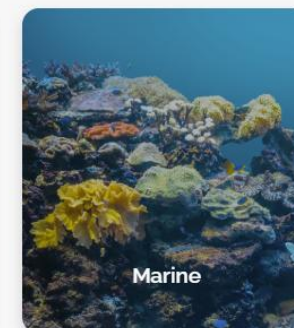
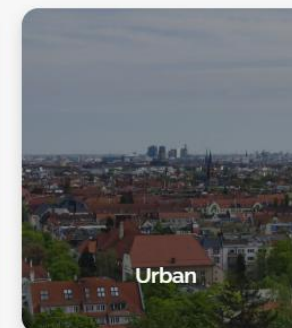
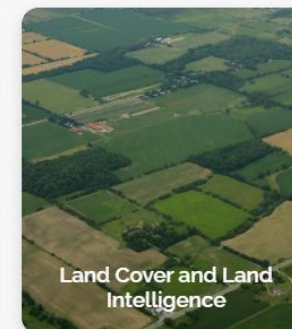
EuroGEO aims to the:

- **Coordination of GEO-relevant activities undertaken in Europe** to ensure a coherent European contribution to the GEO
- **Implementation of user-driven research and innovation agenda** to maximise uptake and engagement of EO applications addressing the GEO
- **Supporting cooperation among individual European and national programmes and user communities** (e.g. Copernicus, ESA, NMHIs, European observing networks and Research infrastructures, etc.);
- **Cooperation with other Regional GEOs**, in particular with view to sharing data, applications and good practices globally

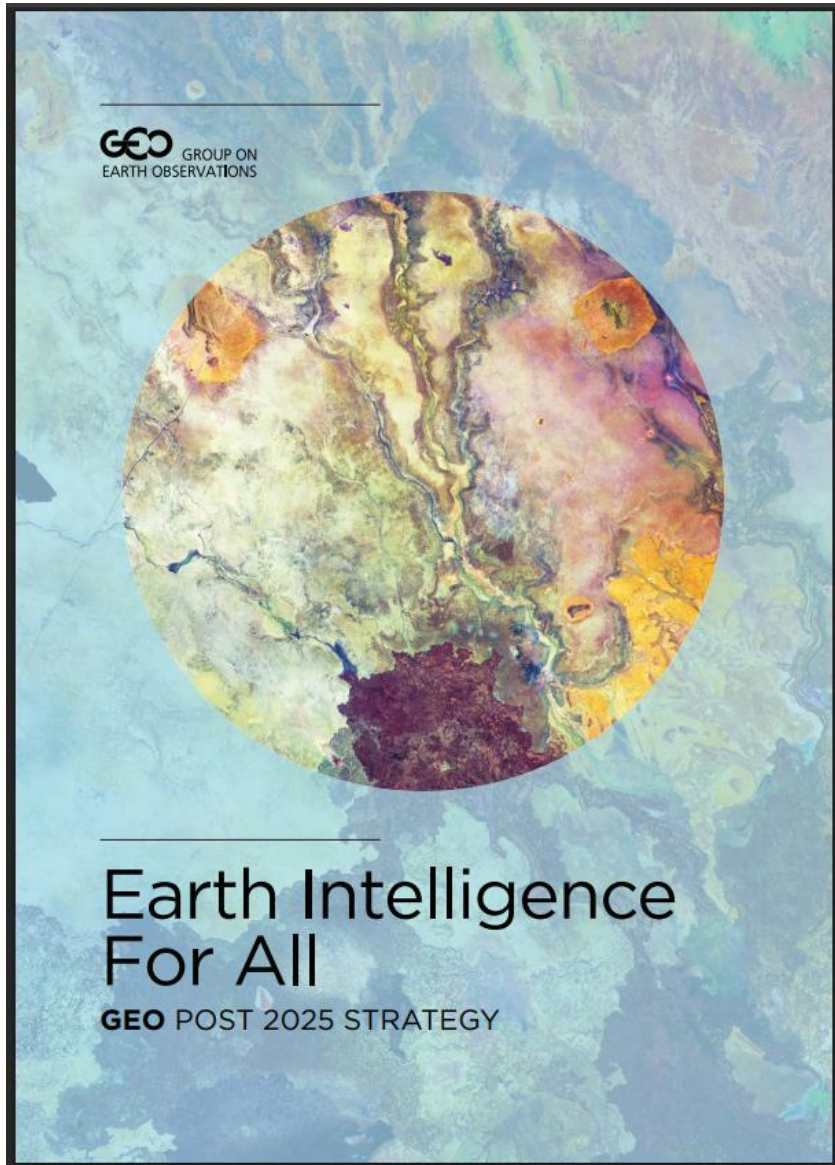
EuroGEO Action Groups
National Observatory of Athens / IAASARS / BEYOND
Coordinator: Haris Kontoes, kontoes@noa.gr

Action Groups are voluntary bottom-up groups that are overseen by the EuroGEO Coordination Group, to either develop the selected EuroGEO application pilots or conduct other actions foreseen in the EuroGEO roadmap. These groups comprise representatives identified by the supporting Caucus' members depending on the relevance of their activities. Action Groups report to the Coordination Group and, when appropriate, directly to the GEO High Level Working Group.

9 thematic areas

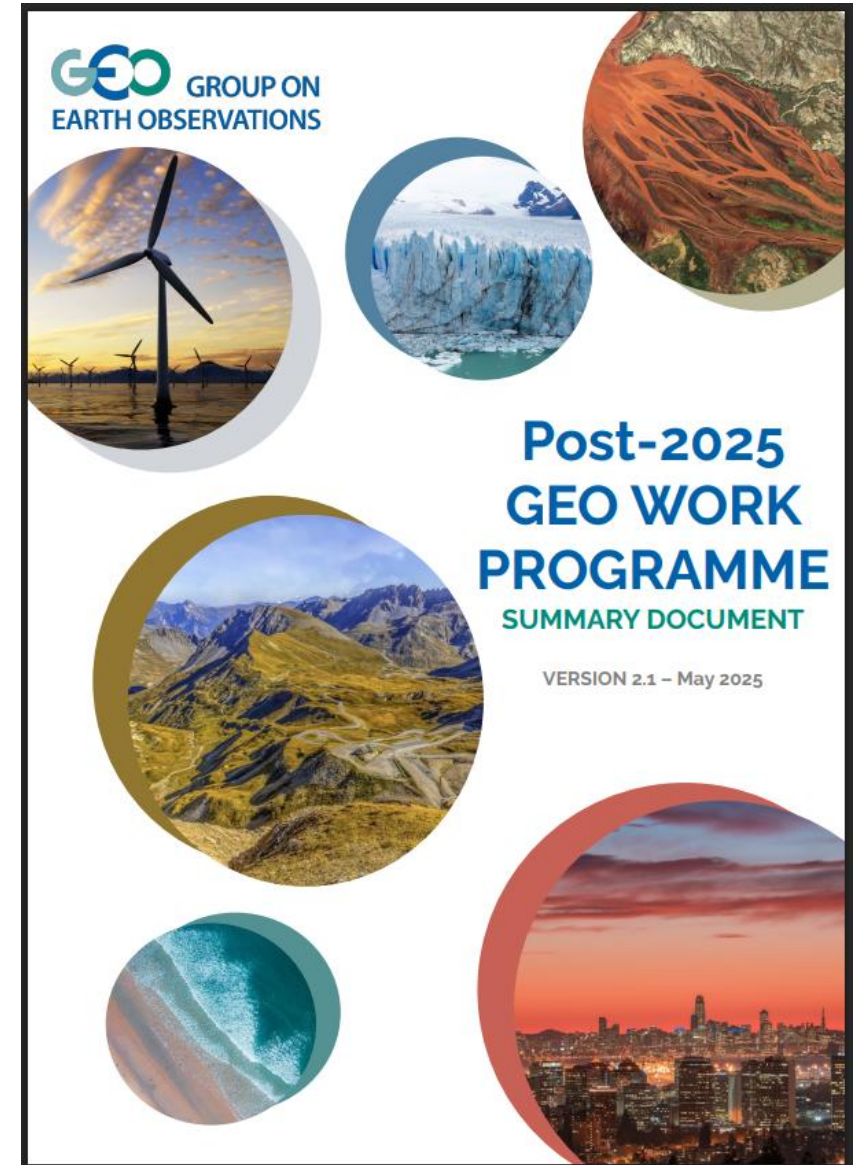


Post-2025 GEO Strategy & Work Programme

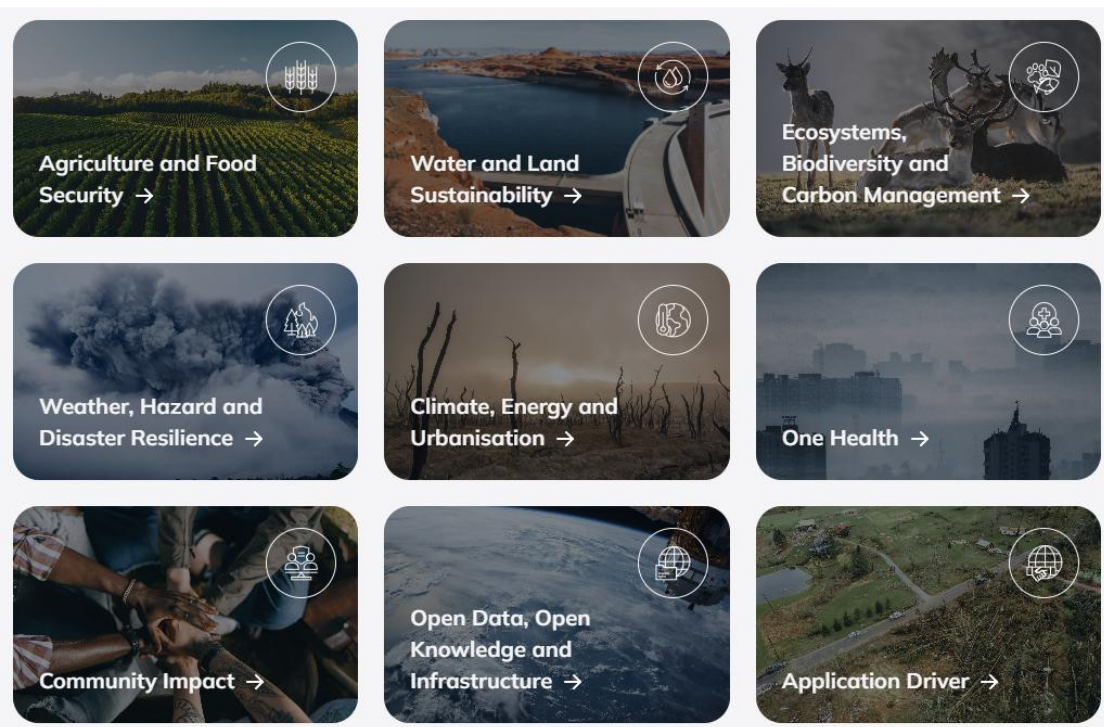


The **post-2025 GEO Strategy** envisions a world where Earth Intelligence is universally accessible, driving systemic shifts needed to accelerate the achievement of all **Sustainable Development Goals** and fostering a sustainable future for people and the planet.

The **post-2025 GEO Work Programme** was approved by the GEO-20 Plenary in Rome on 7 May 2025.



- ❑ GEO leads global initiatives that explore our planet's ecological health, climate challenges, disaster readiness, resource optimization, urban sustainability, and public health priorities. By integrating Earth observations with global frameworks like the **United Nations 2030 Agenda for Sustainable Development**, the **Paris Agreement on Climate Change**, and the **Sendai Framework for Disaster Risk Reduction**, GEO demonstrates its commitment to fostering a healthy, sustainable, and resilient world.



THEMATIC FOCUS AREAS

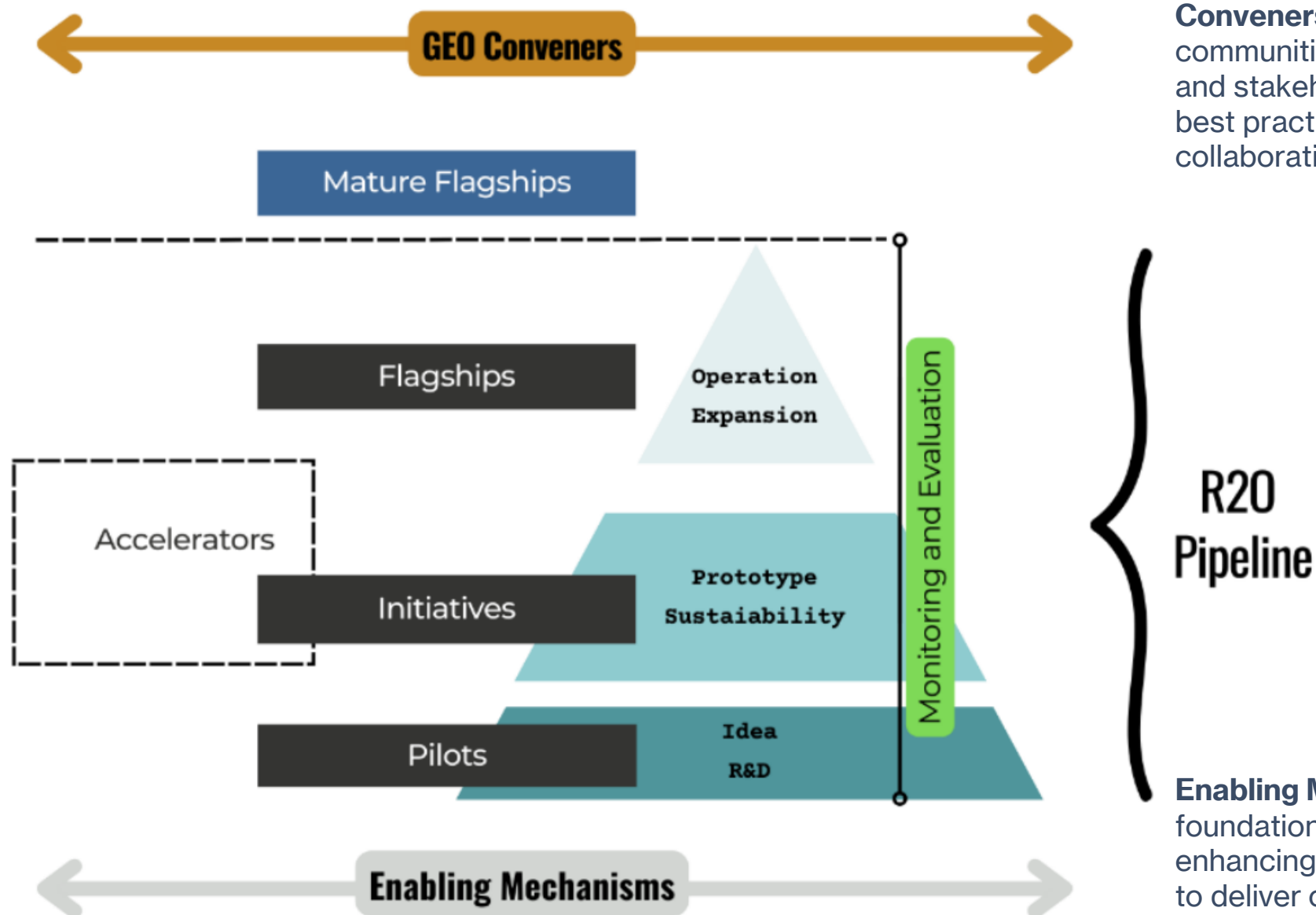
- AGRICULTURE & FOOD SECURITY
- WATER & LAND SUSTAINABILITY
- ECOSYSTEMS, BIODIVERSITY & CARBON MANAGEMENT
- WEATHER, HAZARD & DISASTER RESILIENCE
- CLIMATE, ENERGY & URBANIZATION
- ONE HEALTH

CROSS-CUTTING AREAS

- COMMUNITY IMPACT
- OPEN DATA, KNOWLEDGE & INFRASTRUCTURE



Post-2025 GEO Work Programme



Conveners serve as communities of practice or communities of interest, bringing together partners and stakeholders to exchange knowledge, share best practices, and foster connections and collaborations within and across Focus Areas.

Enabling Mechanisms are activities that either provide foundational support across all R2O Pipeline activities, enhancing their growth along the pipeline and capacity to deliver operational products and services, or serve the entire GEO community or regional aspects of it.

THANK YOU!

Haris Kontoes

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<http://beyond-eocenter.eu/>

<https://earthobservations.org/>



Heart Island
Greece