

Driving Earth Intelligence for Mountainous regions: *Empowering the Youth and leveraging GEO Knowledge Hub*

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with support from Sam Amos, Madeeha Bajwa and Wenbo Chu from **GEO Secretariat**

What's ?

Earth Intelligence for ALL

GEO is a global partnership involving 117 governments and over 162 organizations from academia, business, United Nations and civil society.

GEO brings together Earth Observation providers and users to promote **free, open and equitable access** to EO data and *Earth Intelligence* solutions.

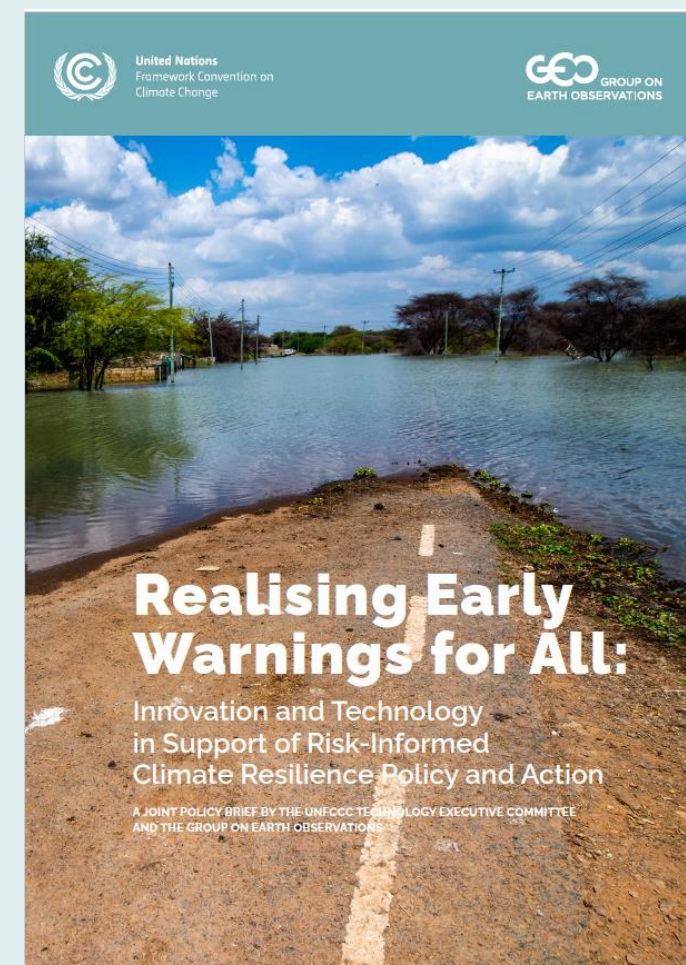
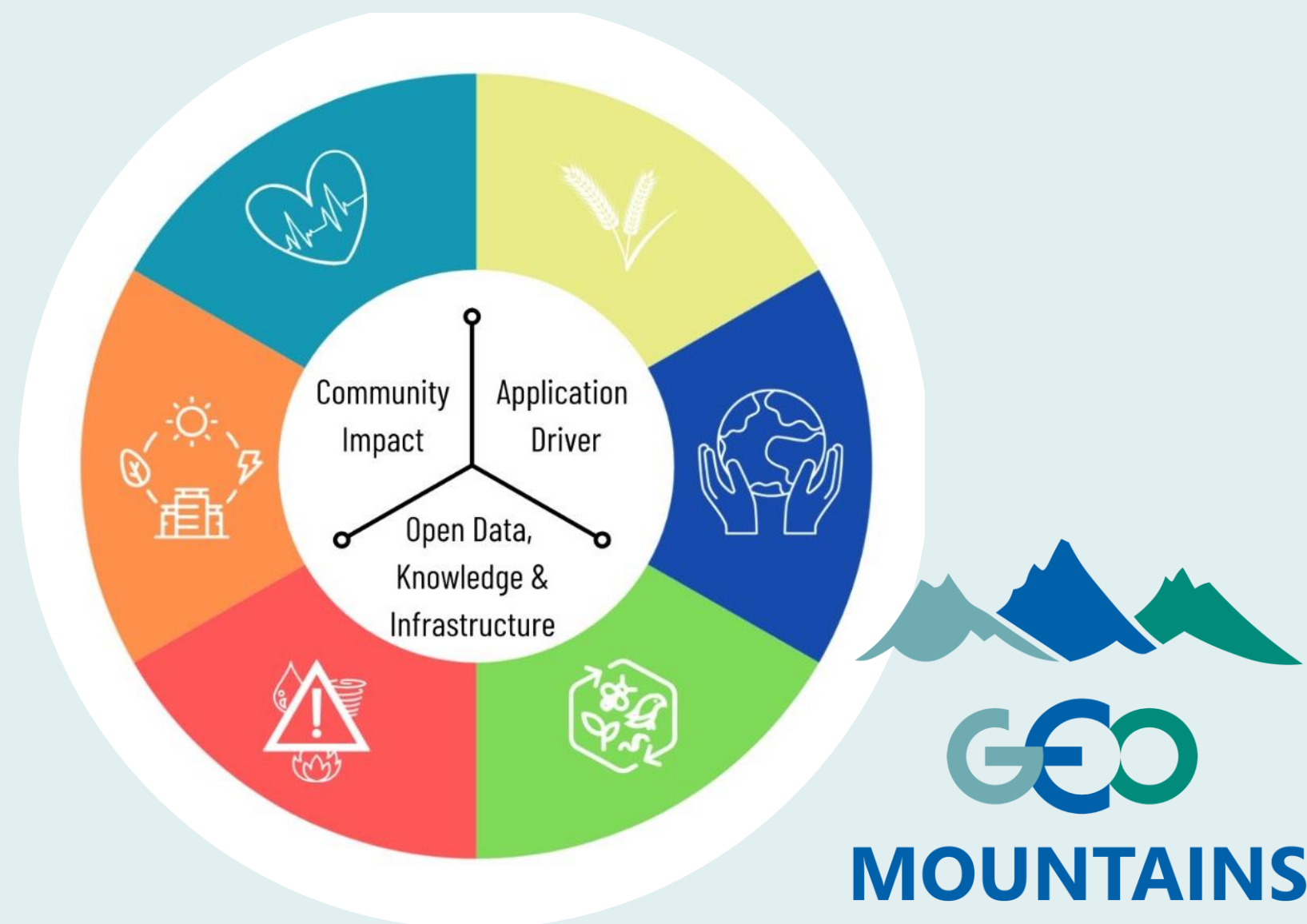
By sharing this wealth of information and research, we ensure that **decisions made for the Earth's future are based on the best available knowledge.**

GEO as enabler

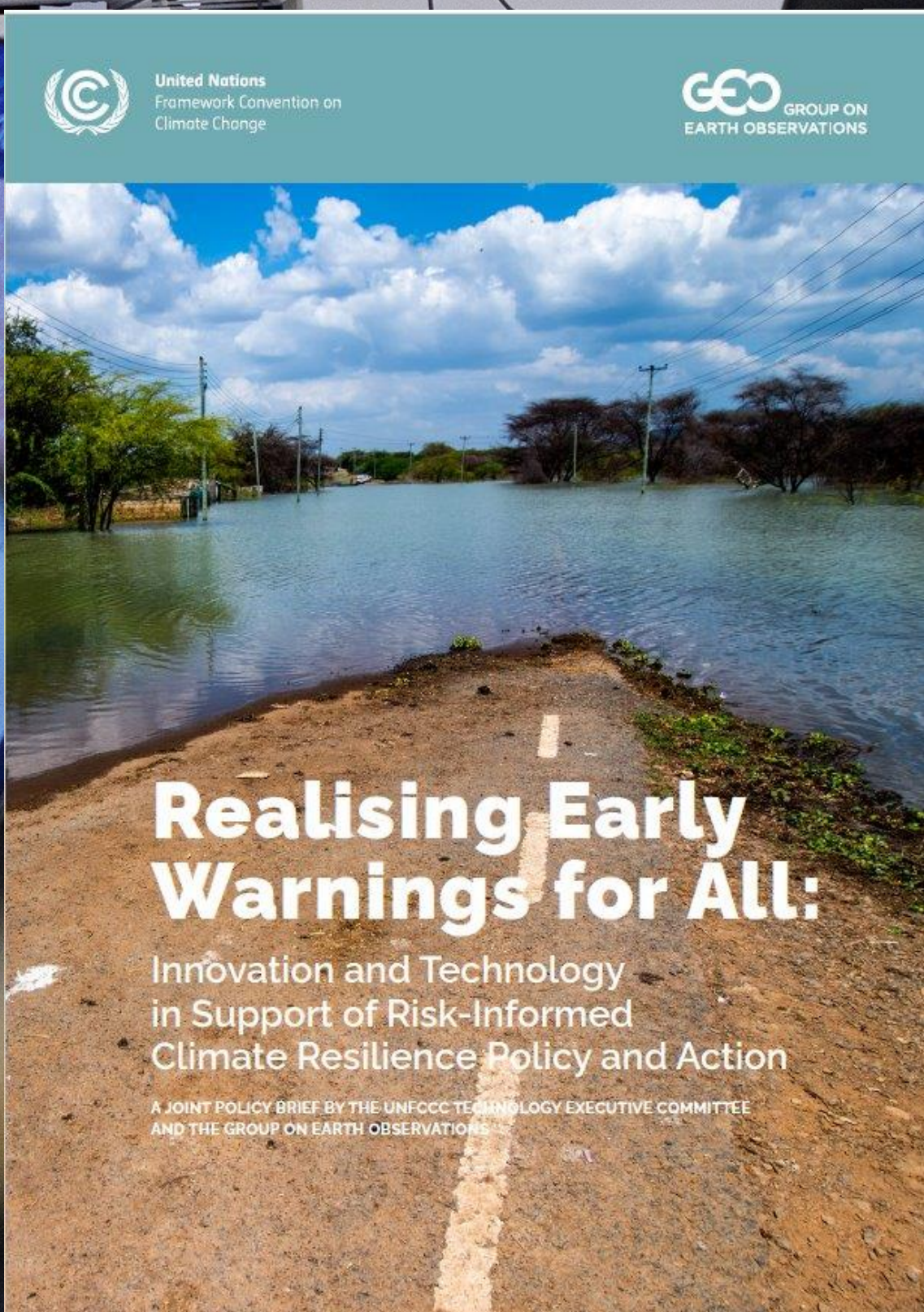
*Co-developed
solutions*



Policy

Infrastructure



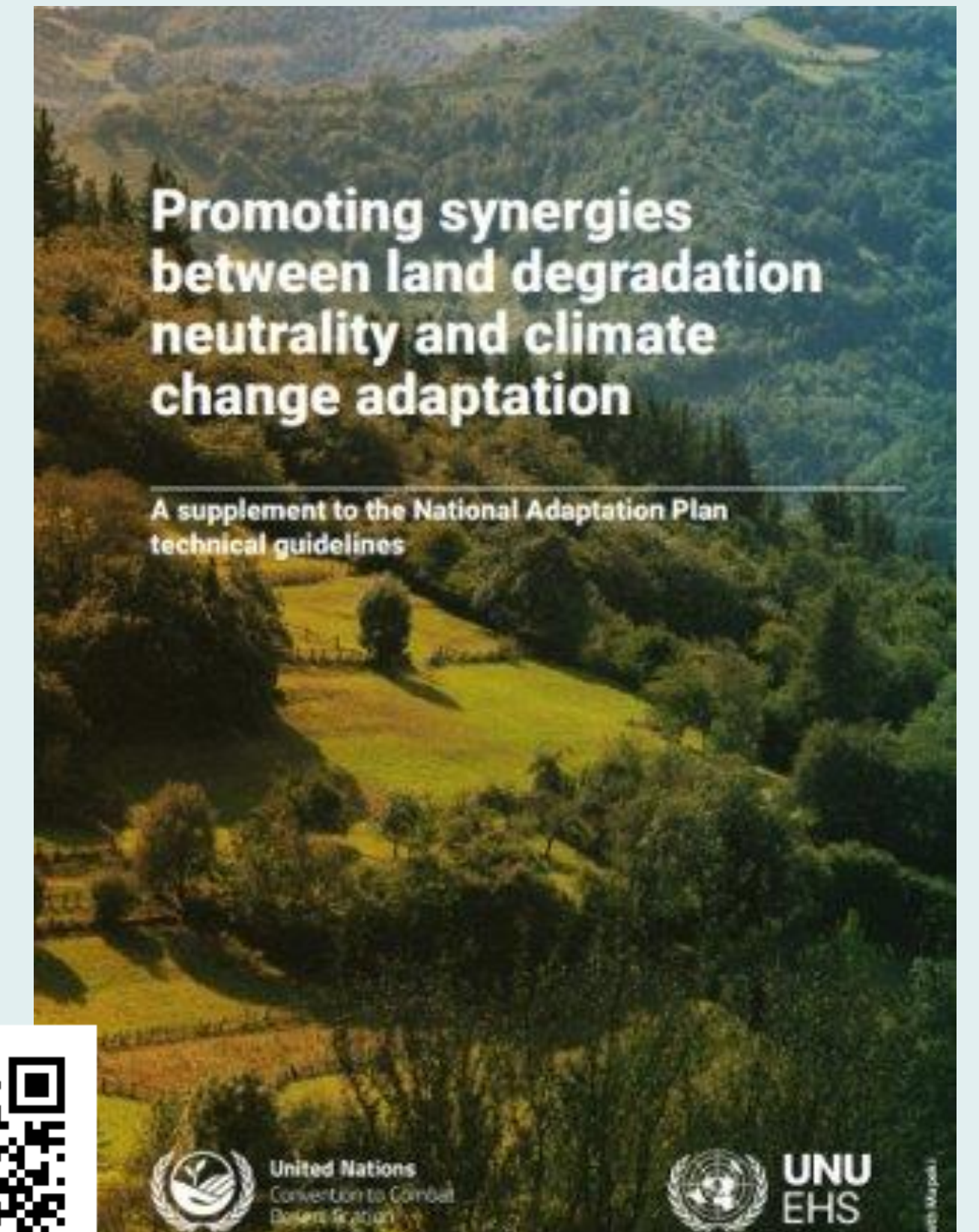
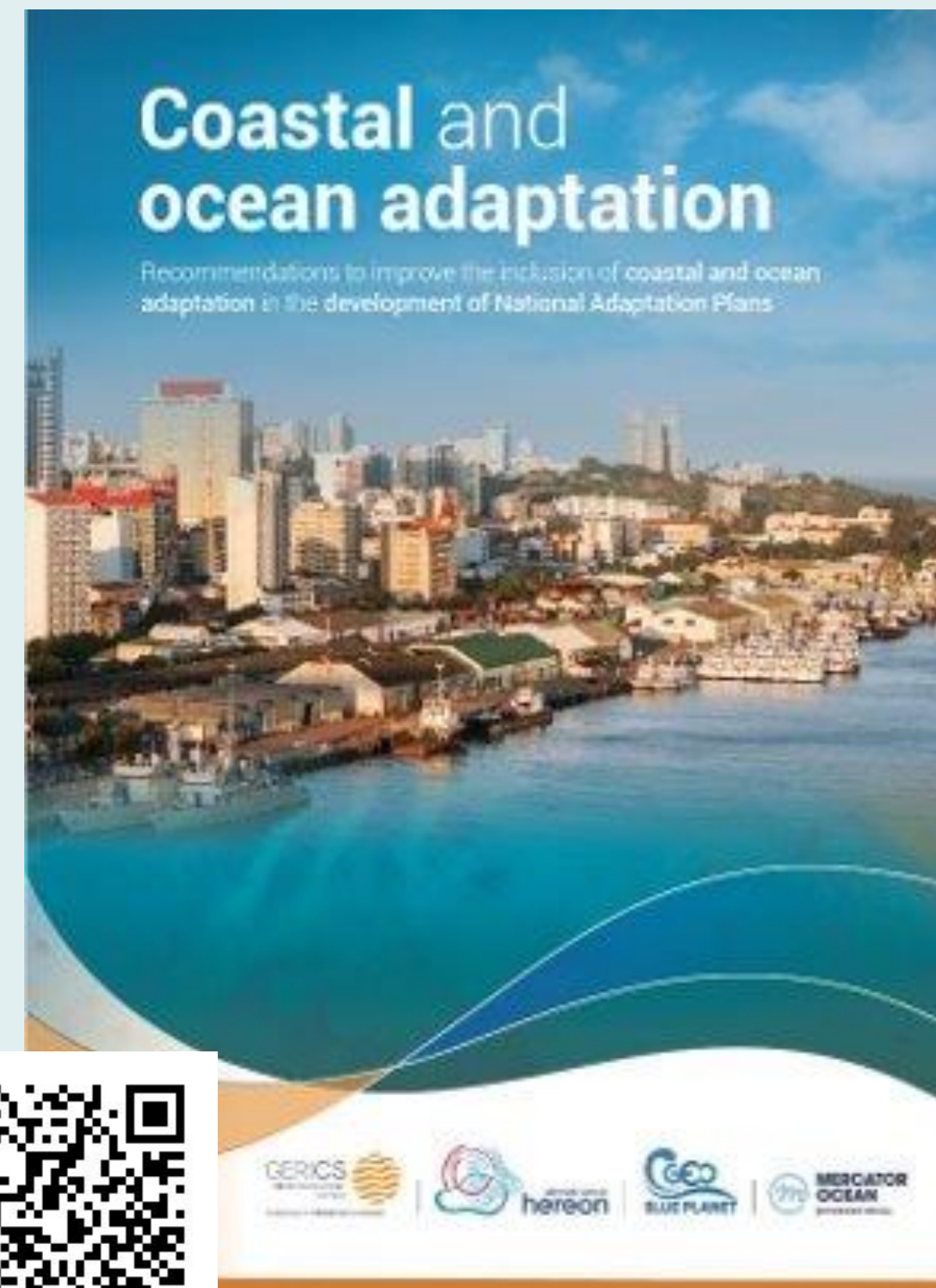
Policy support at UN Conventions



		ADVANCE VERSION	
United Nations		FCCC/SBSTA/2024/10	
		Distr.: General 27 March 2025 Original: English	
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Subsidiary Body for Scientific and Technological Advice			
Report of the Subsidiary Body for Scientific and Technological Advice on its sixty-first session, held in Baku from 11 to 16 November 2024			
<hr/>			
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NAP Technical Guidelines Supplements by GEO initiatives & partners



Post-2025 GEO Mandate

1

Co-produce transformative programmes that provide trusted Earth intelligence

2

Increase global equity through accessible Earth intelligence

3

Integrate new technologies and innovations into Earth intelligence services

4

Increase the participation of young people

5

Invest in integrated activities to raise awareness and resources for Earth intelligence

The **GEO Youth Community of Practice**, or **GEO-YOUTH**, is a youth-led initiative in the Group on Earth Observations (GEO).

- We work on:
- Creating paid and volunteer opportunities for youth
 - Advancing youth decision making and representation in GEO
 - Capacity building and peer-to-peer learning
 - And more!

GEO-YOUTH CoP

Aims to involve youth in Work Programme activities through:

- Mentorship Programs
- Networking events
- Youth Ideathons e.g. **with GEO mountains**
- Capacity Building
- Thought-leadership / blog series
- Funding opportunities

**GEO-YOUTH is an
Enabling
Mechanism in the
GEO Programme.**

What we've done so far

Hosted Q&A sessions to hear from young leaders in Earth Observations

Early-career speakers
April 1, 3PM CET

Letwin Pondo
Co-founder, GEO-Connect

Yu Zhao
Doctoral Researcher, KTH Royal Institute of Technology

Lena Waldmeier
Communications and Stakeholder Engagement, GIZ

GEO Youth Community of Practice

Coordinated the GEO Youth Ideathon 2025, where 12 young people developed solutions for local businesses while in Italy for the Global Forum



GEO Work Programme Mentorship Program

GEO Youth Community of Practice
MENTORSHIP PROGRAM
Young minds shaping Earth Intelligence

Mentors inspire and empower young people by sharing their knowledge, expertise, and leadership through the GEO Work Programme. Mentees gain guidance, strengthen their skills, and expand their professional networks through meaningful collaboration.

The programme promotes knowledge exchange, innovation, and capacity development across the GEO community. Learn, share, collaborate, and grow with the GEO Youth Community of Practice.

REFINE YOUR OWN SKILLS
BE A LEADER WITHIN THE GEO COMMUNITY
EXPAND YOUR PROFESSIONAL NETWORK
GAIN NEW PERSPECTIVES
CREATE A LASTING IMPACT

More Info:
✉ info@geo-youth.org
🌐 www.earthobservations.org

Organized GEO's first plenary session on Youth at the GEO Global Forum 2025



Join the Youth Community of Practice

- Monthly meetings
- Networking and skill-building
- Leadership opportunities

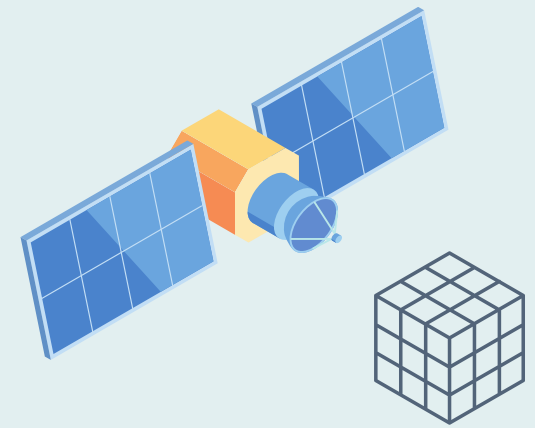


What is the GEO Knowledge Hub?

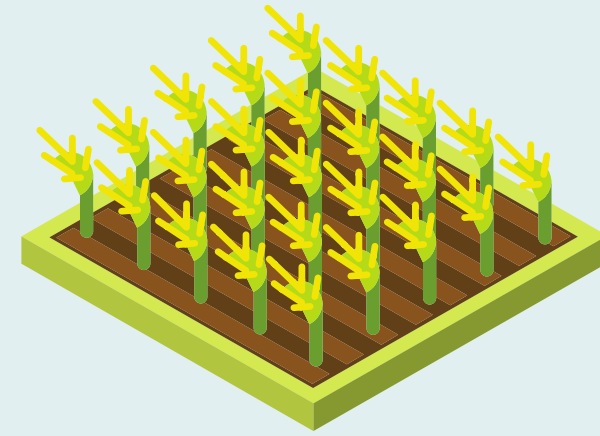
The **GEO Knowledge Hub** is a central cloud-based digital library created to **preserve, disseminate, and support** the reuse of EO Applications developed by the **GEO Community**.

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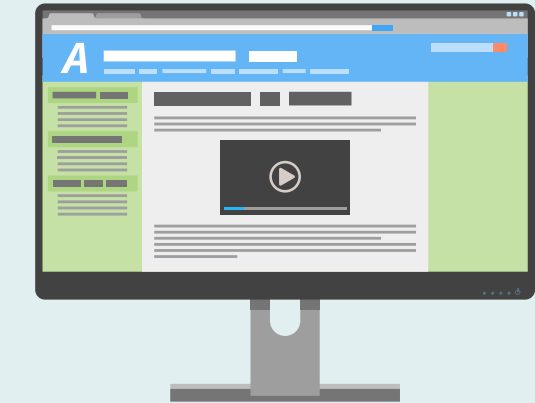
Satellite data
and datacube



In situ



Tools



Services

A lot of **scattered** Earth Observation data and knowledge!



EO Derived



Methodology

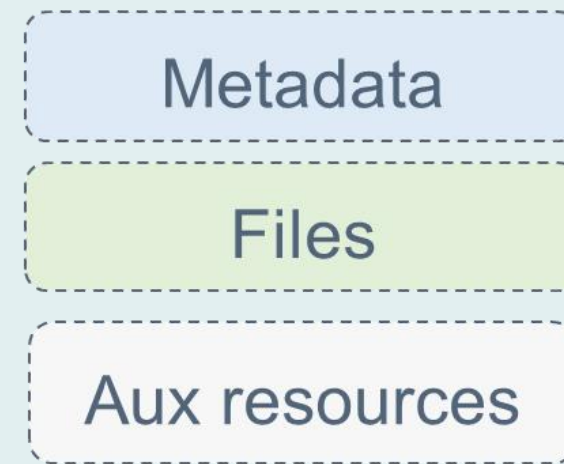


Training materials

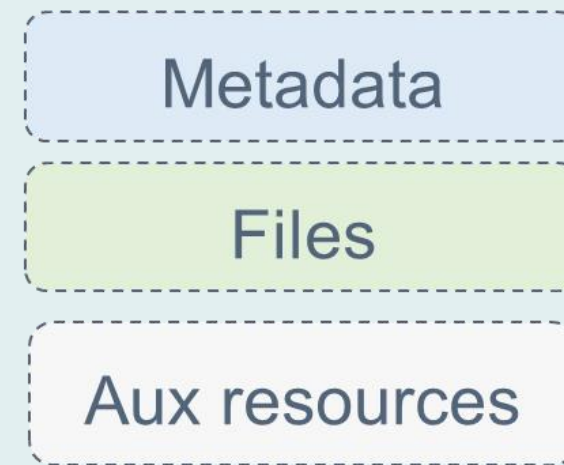
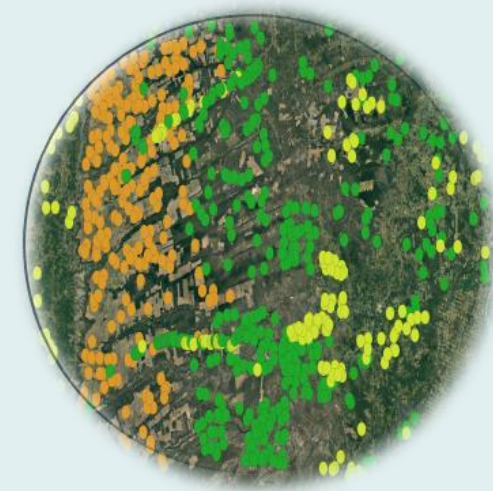


Platforms

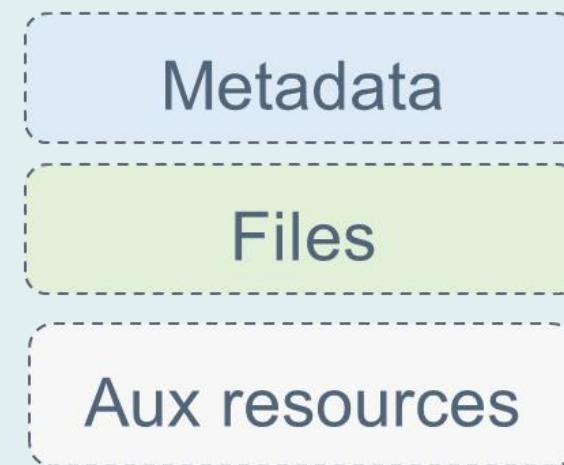
Knowledge Package and Resources



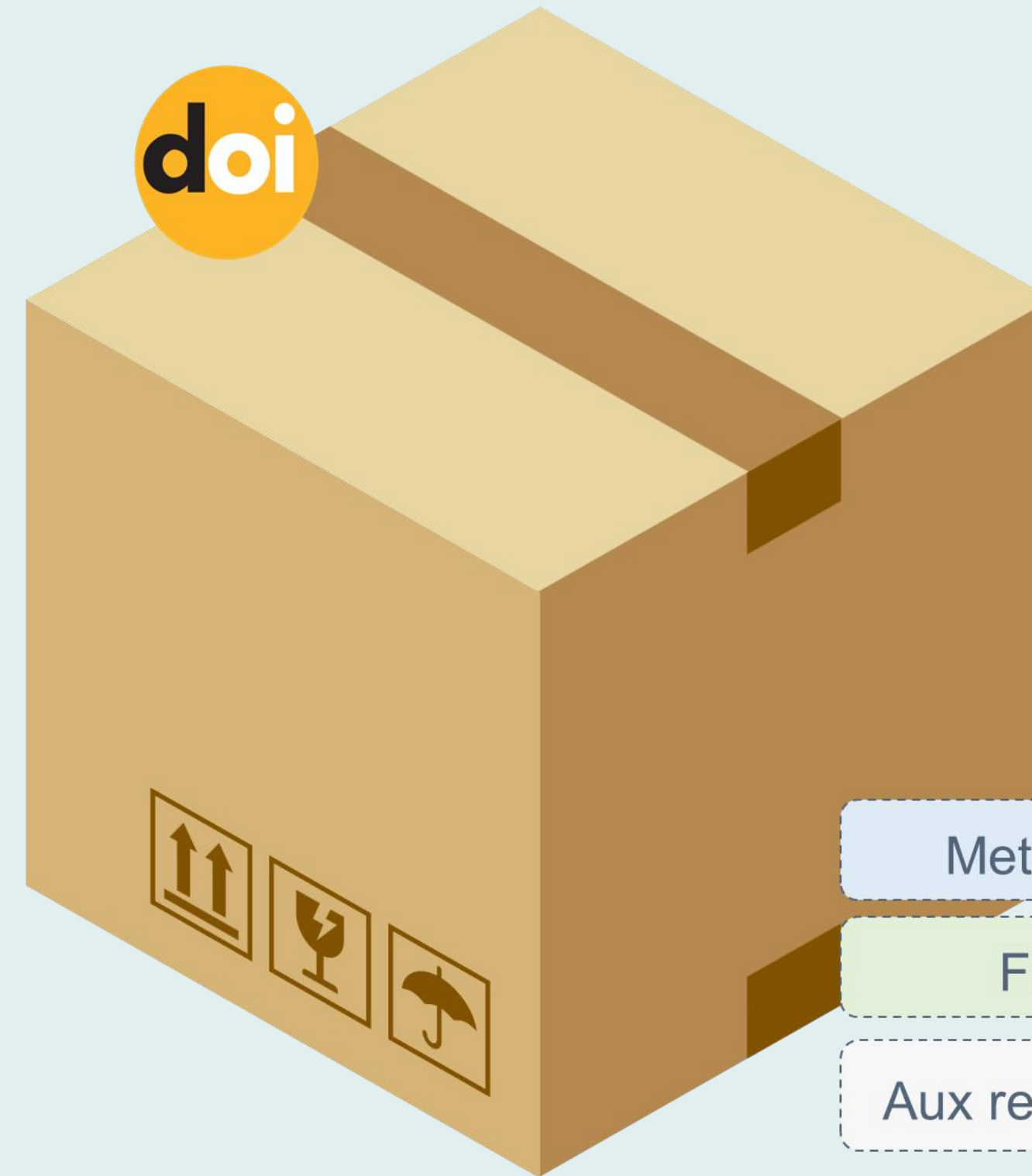
Satellite imagery



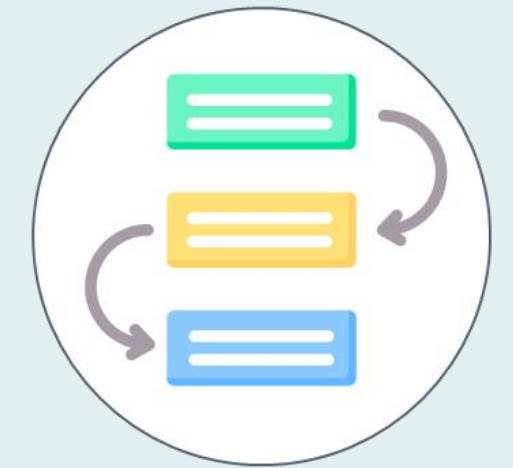
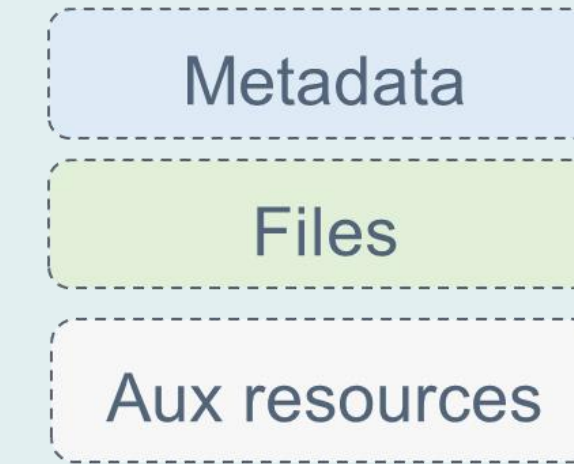
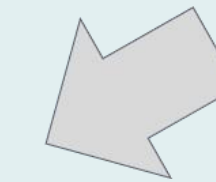
In-situ data



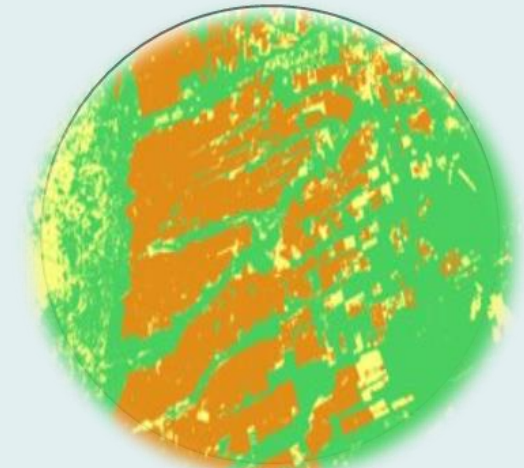
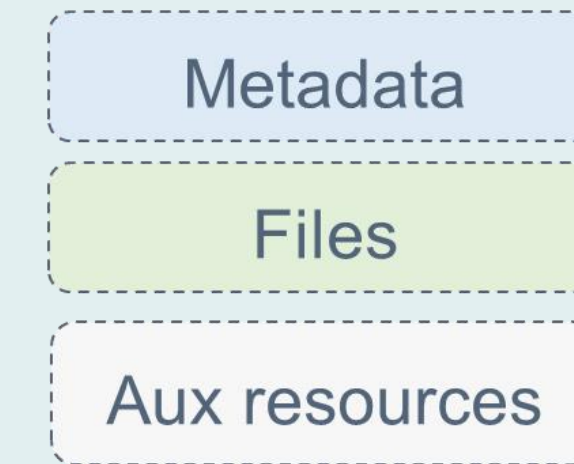
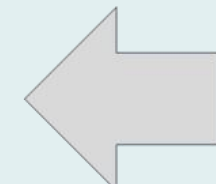
Processing scripts



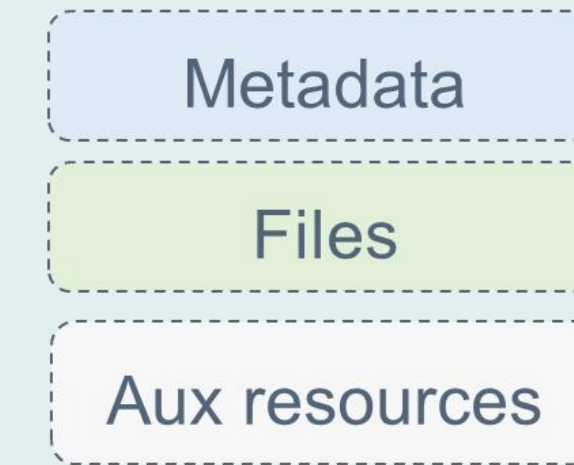
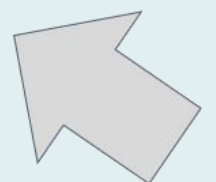
Knowledge Package



Workflow



Data results



Articles & notes



2 result(s) found

Sort by Best match

Category

☐ Open

Record Type

☐ Knowledge Package

GEO Work Programme Activities


☐ Global Network for Observations and Information in Mountain Environments (GEO-MOUNTAINS)

Target Audience

☐ Agriculture and Forest Departments

☐ Environmental Protection Agencies

☐ Hydrologist

 Open

August 2, 2022 (v2)

Knowledge Package

GEO-MOUNTAINS


2

Human populations in the world's mountains: Spatio-temporal patterns and potential controls

GEO Mountains

Supplementary Information (data, code, and figures) for "Human populations in the world's mountains: Spatio-temporal patterns and potential controls (Thornton et al. 2022; <https://doi.org/10.1371/journal.pone.0271466>). The project involved collaboration between GEO Mountains, GEO Human Planet, and other organisations. The code provided enables t...

Uploaded on October 29, 2022

 Open

January 28, 2025 (1)

Knowledge Package

GEO-MOUNTAINS

2

OEMC project use case: High resolution Snow Water Equivalent in selected mountain regions

Eurac Research

We propose to produce a snow water equivalent (SWE) product at a spatial resolution of 20 meters. The product will be available for selected mountain basins in South Tyrol on a daily temporal resolution, updated on a yearly basis. We rely on a multi-sensor EO SWE reconstruction method using Sentinel-2, MODIS, potentially Sentinel-1 and in-situ ...

Part of [EuroGEO](#)

Uploaded on March 14, 2025

1

1

1

< 1 >

10 results per page

Communities



Type

☐ Project

☐ Organization

Visibility

☐ Public

9 result(s) found

Sort by Newest



Project **Public**

AI4EO - Artificial Intelligence for Earth Observations

Artificial Intelligence for Earth Observations (AI4EO) Enabler within GEO aims to integrate AI into Earth Intelligence by establishing a network of AI experts across the GEO community. The Enabler's scope...

<https://earthobservations.org/groups/artificial-intelligence-for-earth-observations>

Created:
16.03.2026



Project **Public**

GEO-LDN

GEO-LDN is a stakeholder-driven initiative launched during the 2018 GEO-Week in Kyoto, Japan, responding to a request by the UNCCD's COP13.

<https://geo-ldn.org/>

Created:
11.02.2025



Project **Public**

Eiffel Project

H2020 project EIFFEL is a game changer in the domain of climate change adaptation and mitigation by harvesting the benefits of the GEOSS data. The project offers to the Earth Observation community th...

<https://www.eiffel4climate.eu/>

Created:
30.04.2024



Organization **Public**

Food and Agriculture Organization

GEO Communities in the GEO Knowledge Hub

Published April 14, 2026 | Version v1

GEO-YOUTH

Knowledge Package

Open

GEO Knowledge Hub for Youth webinar series

GEO Knowledge Hub 

Citation

Style

APA

GEO Knowledge Hub. (2026). GEO Knowledge Hub for Youth webinar series. GEO Knowledge Hub.
<https://doi.org/10.60566/qa0j1-nwg55>



Description

This webinar series aims to engage youth across the Earth observation community by providing hands-on learning opportunities, showcasing tools and applications from the **GEO Knowledge Hub**, and creating a space for young professionals to connect and exchange perspectives.

The goal is to share and leverage the wide range of **open applications** available within the **GEO Knowledge Hub**, developed by global experts to provide youth with the tools needed to solve real-world problems. These webinars go beyond theory, featuring existing open-source applications and reproducible workflows that address critical socio-environmental issues.

The **first webinar took place on 25 March at 2:00 PM CET**, focusing on *"What is the GEO Knowledge Hub?"* and introducing participants to the platform and its applications.

Need training?

Versions

Version v1
(Apr 14, 2026)

Any question ?

 Ask the provider

Feedback space

 Learn the community experience with this content

GEO Theme

Thank you!

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GROUP ON
EARTH OBSERVATIONS