GEO Secretariat report

Data and Knowledge Update

Paola De Salvo
GEOSS Coordinator – GEO Secretariat
Executive summary

DATA WORKING GROUP
GEO KNOWLEDGE HUB
GEOSS PLATFORM
FUTURE EVENTS
GEO Data Working Group (DWG)

IN SITU

DATA SHARING – DATA MANAGEMENT PRINCIPLES

LAW AND POLICY
GEO Work Programme activities - survey

Prepared by the DWG, the GEOSS Platform and the GEO Secretariat.

Objective was to assess the GWP activities data related practices, challenges, actions, assess their knowledge about the GEO Data Sharing and Data Management Principles, and needs related to the GEOSS Platform.

Launched in October 2021, using EU Survey (with support from EEA), 22 activities responded.

Results can be accessed here.
### GEO Work Programme Activities Data Analysis

**Questions related to the implementation of GEO Data Sharing and Data Management Principles**

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>How familiar are you with the GEO Data Sharing and Data Management Principles?</td>
<td>4.5%</td>
<td>54.5%</td>
<td>31.8%</td>
<td>9.1%</td>
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<tr>
<td>Are the output datasets from your WP activity aligned with the GEO Data Sharing Principles?</td>
<td>I do not know 18.2%</td>
<td>Partially aligned 31.8%</td>
<td>Yes, fully aligned 50.0%</td>
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<tr>
<td>Are you implementing the GEO Data Management Principles in the output datasets of your WP activity?</td>
<td>I do not know 22.7%</td>
<td>Yes (fully/to a certain extent) 77.3%</td>
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<tr>
<td>Have you ever conducted a self or third-party assessment of compliance with any of these set of principles: GEO Data Sharing and Data Management Principles, FAIR, TRUST, CARE?</td>
<td>No 63.6%</td>
<td>Yes 27.3%</td>
<td></td>
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<tr>
<td>Does your activity need support to implement or improve the adoption of the GEO Data Sharing and Data Management Principles?</td>
<td>No 27.3%</td>
<td>I do not know 18.2%</td>
<td>Yes 54.5%</td>
<td></td>
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<tr>
<td>If your activity implements the GEO Data Sharing and Data Management Principles (fully or to a certain extent), could you estimate the resources (staff/funding/time e.g. 1FTE) used for their implementation?</td>
<td>Not yet 7.1%</td>
<td>5 FTE 7.1%</td>
<td>1FTE 7.1%</td>
<td>1.5FTE 7.1%</td>
<td>0.5FTE 7.1%</td>
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</table>
GEO Work Programme activities – engagement calls

• GEO-TREES
• EO4Health
• GOS4M
• GLOBAL CROP PEST
• GEOGLoWS (TWIGA)
• GEO VENER
• GEOGLAM
• GEO Mountains
• GEO AquaWatch
• GEO Blue Planet

Planned (Sep/Oct):
• GOS4POPS
• GFOI
• GEO BON
• GSNL
• GEO Wetlands
GEO Work Programme activities – engagement calls

- Inventory of data needs, especially in situ (unavailable data, restrictions, formats, accessibility) and key networks with which to engage.
- Understanding of awareness about the Data Sharing and Data Management Principles and the support needed for their implementation.
- Understanding of the law and policy about data used by the activities.
- Gathering feedback about the infrastructure needs for the enhancement of the GEOSS Platform.
The GEO Data Sharing and Data Management Principles subgroup is running a webinar in a every Monday from 16:00 to 17:30 CEST to raise awareness about the GEO principles and their benefits. The webinars are aimed at all Earth observation stakeholders, including data producers, technology providers, scientists, researchers, business developers, decision makers and policy makers. Members of the Earth observation community will discuss their experience implementing the principles, talk through how they tackled challenges and showcase the impact they realized.

- Mondays from 16-17:30 CEST

- 5 September 2022: A Data life cycle
- 12 September 2022: B Data sharing principles
- 19 September 2022: Discoverability (DMP1)
- 26 September 2022: Accessibility (DMP2)
- 3 October 2022: Usability (DMP3-6)
- 10 October 2022: Preservation (DMP7-DMP8)
- 17 October 2022: Curation (DMP9-DMP10)
- 24 October 2022: Data Management Self-Assessment Tool

Progress on the GEO Knowledge Hub
## Planned Roadmap - Presented at PB in 2020

<table>
<thead>
<tr>
<th>July 2021-December 2021</th>
<th>2022-2023</th>
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<tbody>
<tr>
<td><strong>Infrastructure</strong></td>
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<tr>
<td>Development of the Document Submission Knowledge Interface</td>
<td>Fully functional GKH (Operational v2) on a stable/fully supported hosting environment</td>
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<td>GEO Knowledge Hub (Operational v1)</td>
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<td><strong>Content and Engagement with GEO WP Activities</strong></td>
<td></td>
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<tr>
<td>Continue to engage the GEO community by registering additional Knowledge Packages provided by GWP activities.</td>
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<td>Build communities around Knowledge Providers and its EO solutions; &quot;streamline the communication strategy around this&quot;</td>
<td>Enable Knowledge Providers to register and update their Knowledge Packages on their own.</td>
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<td>Conduct an data and knowledge workshop to bring together the GEO community around the GKH.</td>
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<td><strong>Users’ uptake of the GEO Knowledge Hub</strong></td>
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<td>Inform and promote the GKH through webinars with hands-on courses as well as examples of the Knowledge Packages.</td>
<td>Create effective communication tools, such as flyers, websites, webinars, to explain and promote the GKH.</td>
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<td>Inform and promote the GKH through webinars with hands-on courses</td>
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Where are we now?

Operational Platform with User and Knowledge Provider customized Interface & Functionalities

30 Open EO Applications discoverable and re-usable

Link with 2 EO ToolKits (Disasters and Urban)

Contribution from 12 GEO Work Programme Activities (many more in the pipeline)
GEO Knowledge Hub Live Demonstration

GEO Knowledge Hub (earthobservations.org)
Where are we going?

- Advocate GKH uptake through an integrated Users strategy
- Continue the engagement with GEO WP Activities (30 new knowledge packages in the pipeline)
- GKH as impact tool integrated in the National GEOs engagement strategy
- Dedicated Open data and Open Knowledge workshop in 2023
GEOSS Platform

Expert Advisory Group

Plenary Ghana 2022
Open Data and Open Knowledge workshop 2023

The Data Working Group, the GEOSS Platform, the GEO Knowledge Hub are advocating the need to have a technical event to gather the GEO community in 2023

Objectives:

- Highlight ongoing efforts and align the GEO Community to the open and reproducible knowledge vision.
- Allow Data and Knowledge providers meet their targeted users
- Empower targeted users with open EO based applications in the various engagement priorities and main conventions
- Explore and discuss technological advancement that facilitate the open knowledge vision
- Update on technological aspects of GEOSS infrastructure.
- Map the linkages of data & knowledge providers with nexus integrated approach
- Discuss EO data and knowledge gaps and needs
- Leverage the role of the GKH in the capacity development and Impact strategy
Open Data and Open Knowledge workshop 2023

**Where:** Discussions are ongoing to host it in ESA

**When:** Tentative dates 27-31 March 2022 back to back with the CEOS-SIT meeting

**Building the Organizing Committee**
- GEO Secretariat GKH
- Data Working Group
- GEOSS Platform
- Selected GWP Activities
- Funders
- PB: Member(s)
Open Data and Open Knowledge workshop
Initial ideas

- **Open EO Applications** for “Engagement priorities & Conventions”
- **Data Cubes Party**
- **Open EO Data** (Space based) - Global Efforts by domain
- **Open EO Data** (in situ) by domain and EVs
- **Discussion forum**: on Data Sharing and Data Management Principles, towards GEO open knowledge principles
- **In Situ data**: Gaps - How to advance towards better data sharing
- **GEOSS Platform** and GEO Work Programme Activities tighten the linkages
- Role of GKH & Capacity Development & National engagement strategy
- ......

GKH-PB-20
Thank you

Communicate and Collaborate with GEO