

GEO Discovery and Access Broker (GEO DAB) – CEOS Interoperability

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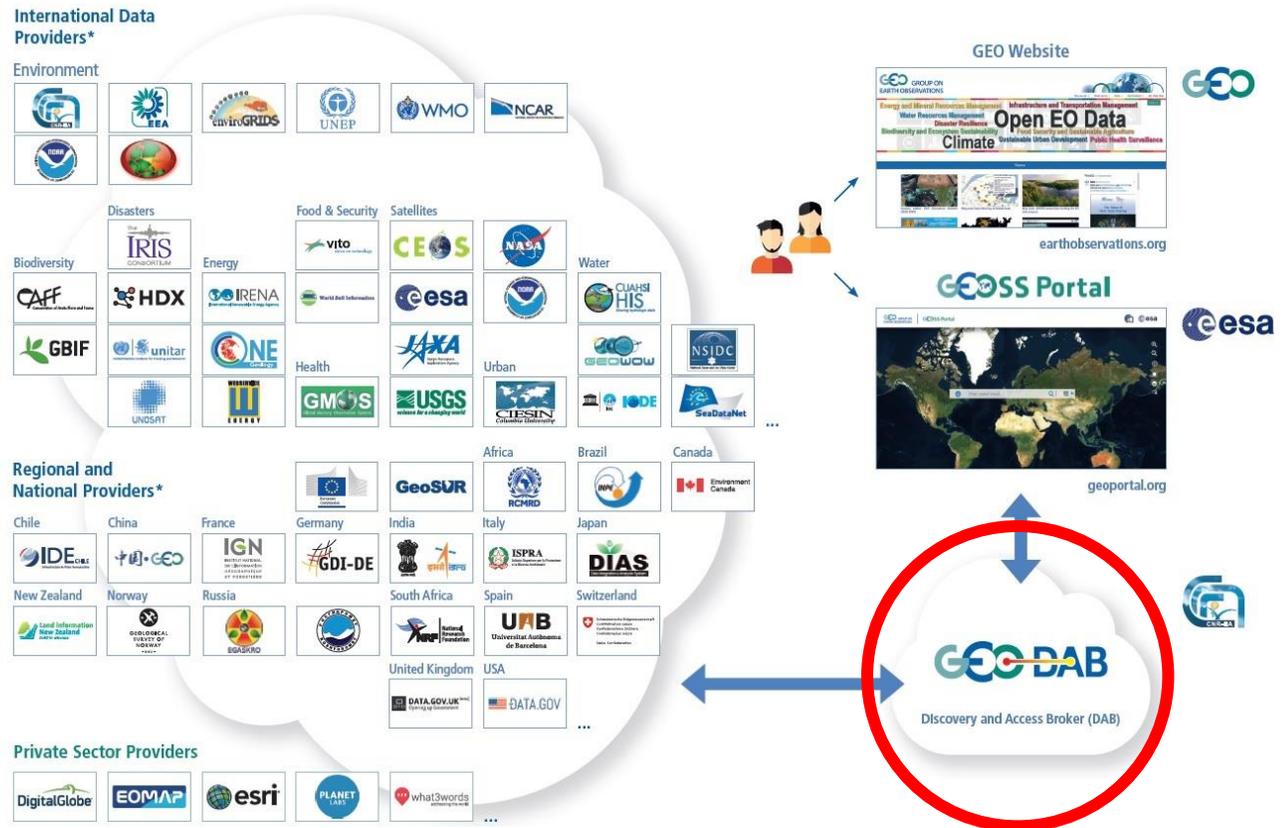
CEOS WGISS-52 – 19/10/2021

OUTLINE

1. GEO DAB Introduction
2. GEO DAB – CEOS Catalogues Interoperability
 - a) IDN
 - b) CWIC
 - c) FEDEO
3. Possible enhancements

GEO DAB 1/2

- ❖ GEO Discovery and Access Broker (GEO DAB) is a brokering framework interconnects hundreds of heterogeneous and autonomous supply systems
- ❖ GEO DAB connects GEOSS User's requests to the resources shared by the GEOSS Providers
- ❖ Simplify cross and multi-disciplinary discovery, access and use of disparate data and information



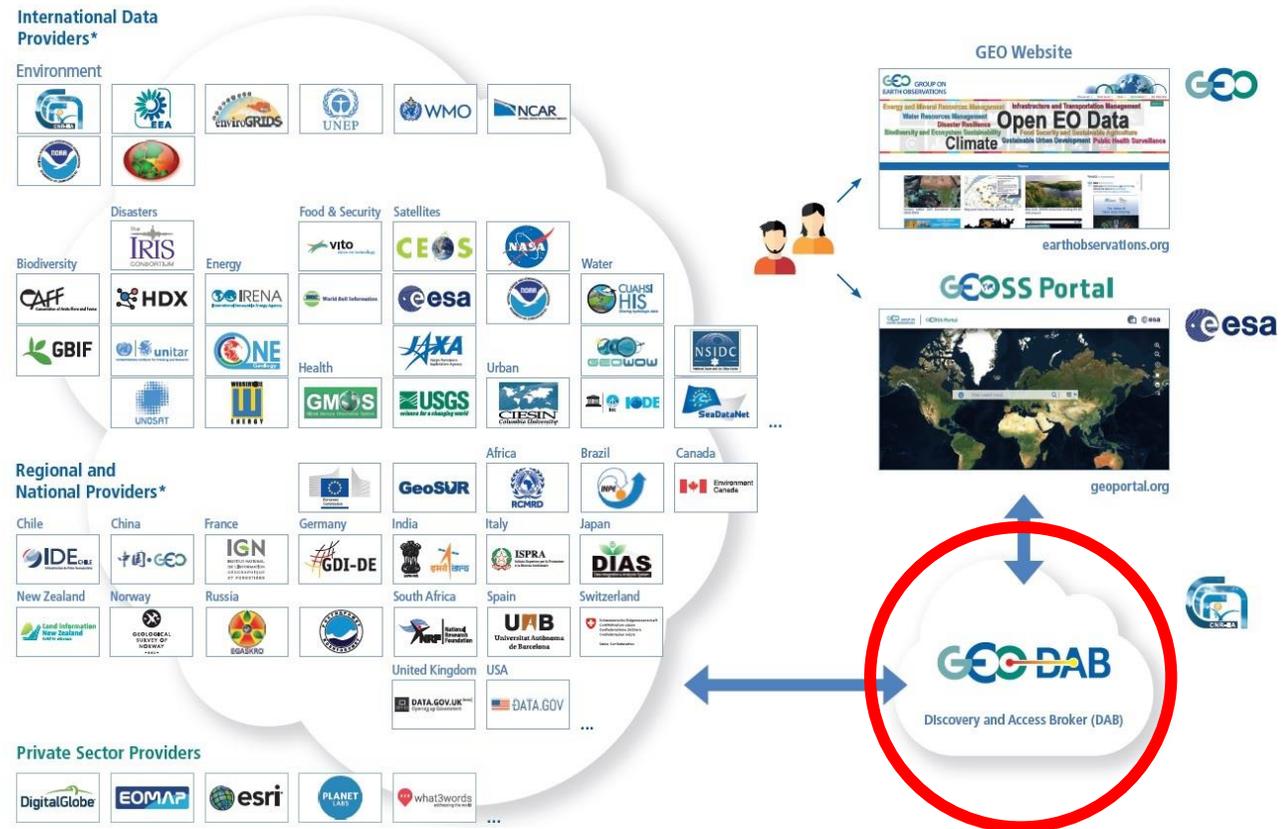
GEO DAB 2/2

Main functionalities

- ❖ Harmonized Data **Discovery**
- ❖ Harmonized Data **Access**
- ❖ Advanced **Filters**
 - ❖ Views and configurable ranking
- ❖ Support of two levels query
- ❖ Exposes **Standard Interfaces and Web APIs**

Last implemented functionalities

- ❖ **Bulk Download**
- ❖ **Nested Views**

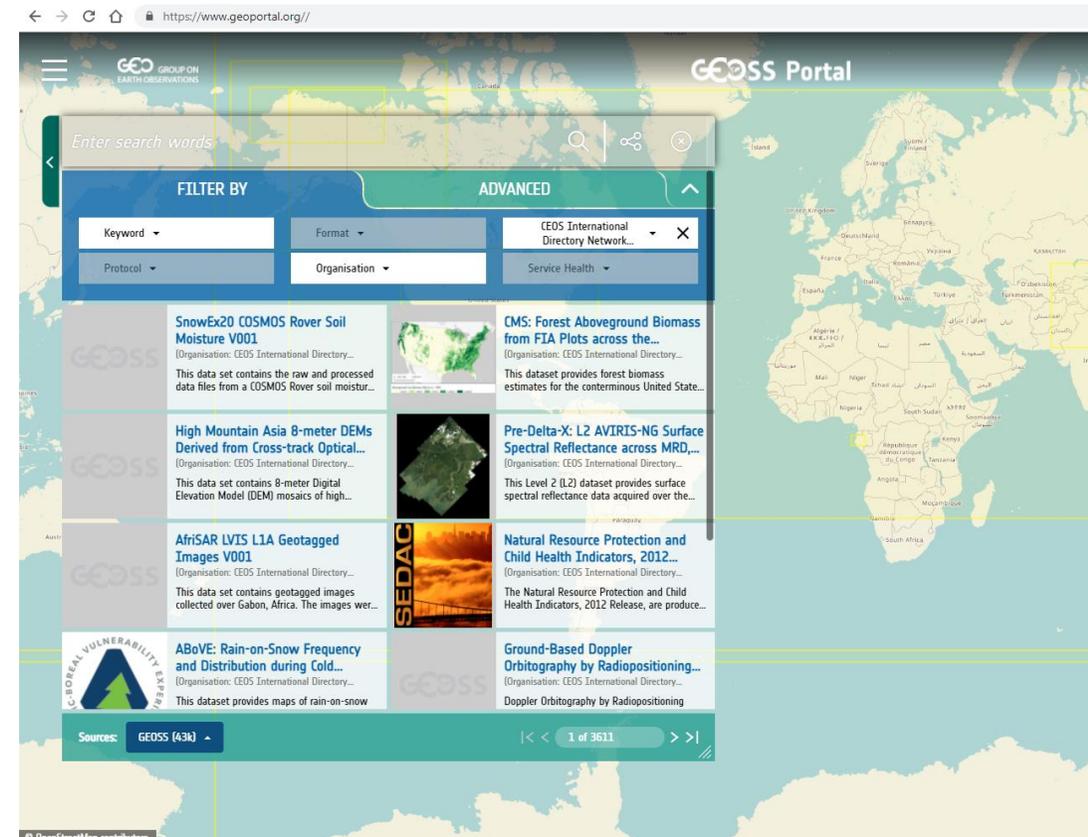


GEO DAB – IDN Interoperability

- ❖ Label: **CEOS International Directory Network (IDN)**
- ❖ Endpoint: *<https://cmr.earthdata.nasa.gov/>*
- ❖ Protocol: **OpenSearch**

First-level Query: **Collections (all collections excepts CWIC) Harvested**

Second-level Query: **Granules Distributed**

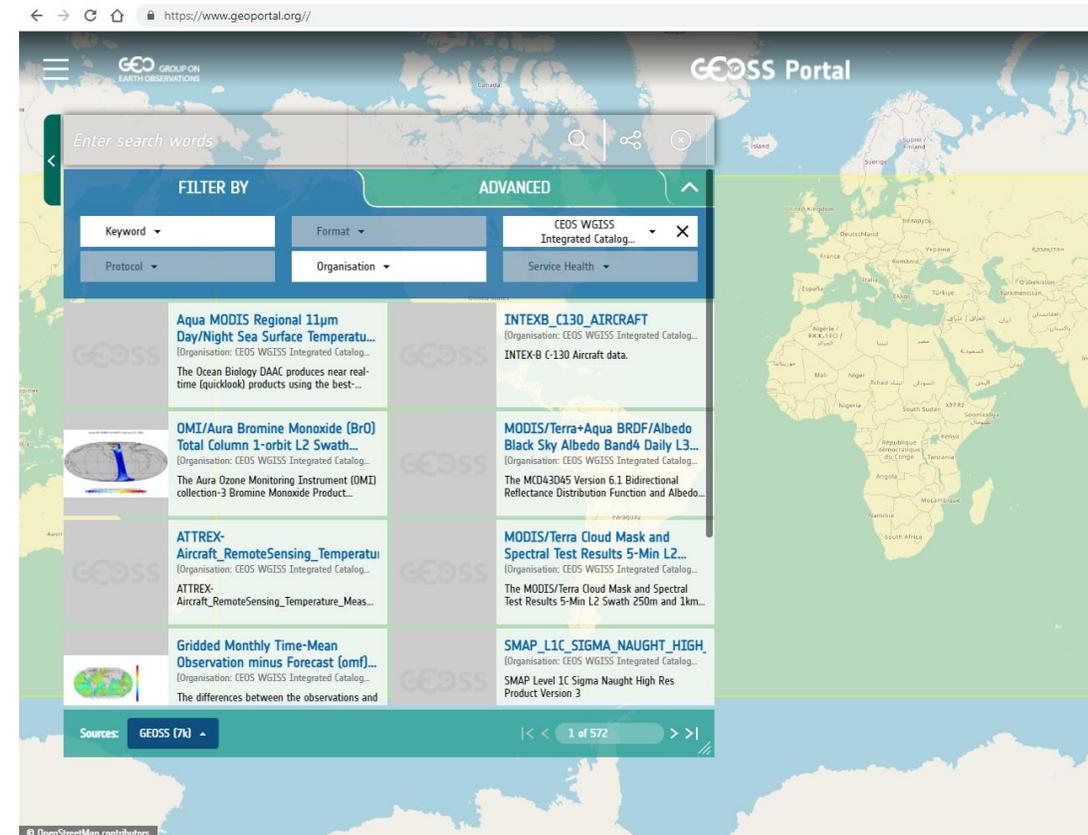


GEO DAB – CWIC Interoperability

- ❖ Label: **CEOS WGISS Integrated Catalog (CWIC)**
- ❖ Endpoint: *<https://cmr.earthdata.nasa.gov/>*
- ❖ Protocol: **OpenSearch**

First-level Query: **Collections (only CWIC) Harvested**

Second-level Query: **Granules Distributed**

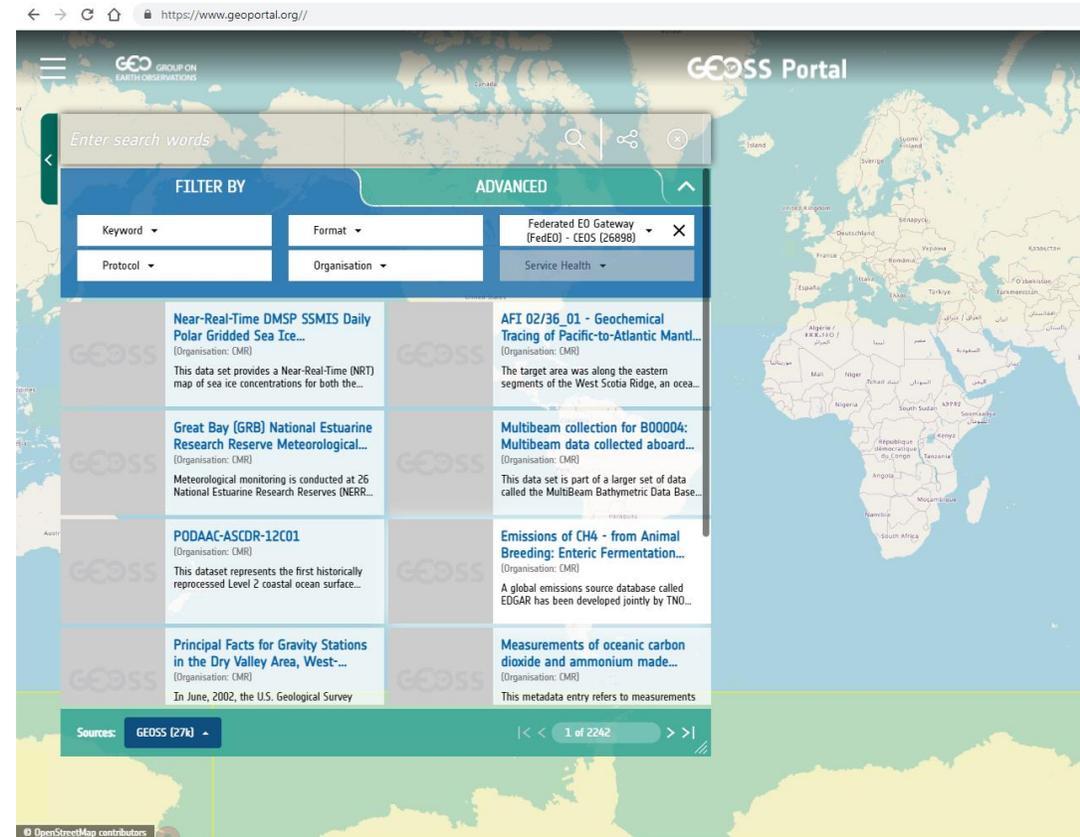


GEO DAB – FEDEEO Interoperability

- ❖ Label: **Federated EO Gateway (FedEO) - CEOS**
- ❖ Endpoint: ***https://fedeo.esa.int/opensearch/***
- ❖ Protocol: **OpenSearch**

First-level Query: **Collection Harvested**

Second-level Query: **Granules Distributed**



POSSIBLE ENHANCEMENTS

- ❖ Avoid Empty Collections
 - ❖ Sometimes opening a Collection leads to have 0 results
- ❖ Collection level OpenSearch responses provide a 'Product metadata' link which seems to contain additional information about the Collection; this information could be used to enrich current mapping of information metadata
 - ❖ Sometimes these links return a JSON format instead of the declared XML format
- ❖ Custom filters on granules search
 - ❖ Enhance second-level query capabilities by leveraging additional parameters

CONTACTS

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Thank you for
your attention!

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