



Conservation of Arctic Flora and Fauna



Regional Centre for
Mapping of Resources
for Development



Global Biodiversity
Information Facility



INSTITUT NATIONAL
DE L'INFORMATION
GÉOGRAPHIQUE
ET FORESTIÈRE



Australian Government
Geoscience Australia



GEOSS Common Infrastructure



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



science for a changing world



ISPRA

Istituto Superiore per la Protezione
e la Ricerca Ambientale



GDI-DE

Geodateninfrastruktur Deutschland



International Renewable Energy Agency



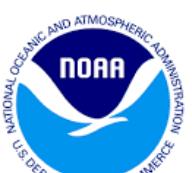
EGASKRO



Data Integration & Analysis System



National
Research
Foundation



UAB
Dep. Biología Animal,
Vegetal y Ecología
Dep. Geog.



DATA.GOV.UK Beta
Opening up Government



Indian Space
Research Organisation



International Data Providers*

Environment



Disasters



Energy



Food & Security



Satellites



Water



Health



Urban



Disaster Resilience



Biodiversity



Biodiversity



Energy



Health



Food & Security



Satellites



Water



Urban



Climate



Regional and National Providers*

Chile



New Zealand



Norway



Russia



France



Germany



India



Italy



Japan



Africa



Brazil



Canada



South Africa



Spain



United Kingdom



USA



...

Private Sector Providers



* a selection of more than 150 providers

- Some numbers on GEOSS Assets:160 brokered catalogs, approx discoverable and accessible more than 400 ml resources

GEO Website



earthobservations.org



GEOSS Portal



geoportal.org



GEO DAB

Discovery and Access Broker (DAB)



OGC CSW 2.0.2 AP ISO 1.0
 OGC CSW 2.0.2 ebRIM EO
 OGC CSW 2.0.2 ebRIM CIM
 ESRI GEOPORTAL 10
 OAI-PMH 2.0
 OpenSearch 1.1
 OpenSearch 1.1 ESIP
 OpenSearch GENESI DR
 CKAN
 CUAHSI HIS-Central
 ESRI REST API 10.3
 OGC WCS
 OGC WMS
 OGC WFS 1.0.0, 1.1.0, 2.0.0
 OGC WMTS
 OGC SOS 1.0.0, 2.0.0, 2.0.0 Hydro Profile
 OGC WPS 1.0.0
 OGC CSW 2.0.0 Core
 OGC CSW 2.0.2 AP ISO 1.0
 OGC CSW 2.0.2 ebRIM/EO AP
 OGC CSW 2.0.2 ebRIM/CIM AP
 IRIS Station
 IRIS Event
 HYRAX THREDDS SERVER 1.9
OAI-PMH 2.0 - Harvesting
 GBIF
 DIF
 HYDRO
 UNAVCO
 CDI 1.04, 1.3, 1.4
 ISO19115-2
 THREDDS 1.0.1, 1.0.2
 THREDDS-NCISO 1.0.1, 1.0.2
 THREDDS-NCISO-PLUS 1.0.1, 1.0.2

INPE
CKAN
 DCAT
 GI-cat
 ESRI GEOPORTAL 10
 NCML-OD
 BCODMO
 NCML-CF
 NetCDF-CF 1.4
 FTP populated with supported metadata types
 WAF Web Accessible Folders
 GeoNetwork (2.2.0 or greater)
 Ecological Markup Language 2.1.1
 NERRS (National Estuarine Research Reserve System)
 HMA CSW 2.0.2 ebRIM/CIM
 HDF
 IADC DB (MySQL)
 GrADS-DS
 FedEO
 ARPA DB (based on Microsoft SQL)
 ESRI Map Server
 SHAPE files (FTP)
 KISTERS Web - Environment of Canada
 Environment Canada Hydrometric data (FTP)
 OpenSearch 1.1
 Earth Engine
 RASAQM
 EGASKRO
 SITAD (Sistema Informativo Territoriale Ambientale Diffuso)
 File System
 GDACS
 GeoRSS 2.0
 Degree catalog service 2.2
 OpenSearch GENESI DR /waterml

Portal

A world map showing satellite imagery of land and sea. The map is centered on Europe and Africa. A red rectangular box highlights the continent of Africa. The map shows various land cover types, including green for vegetation, brown for deserts, and blue for oceans. The map is overlaid with a grid of latitude and longitude lines.

The map includes several interface elements:

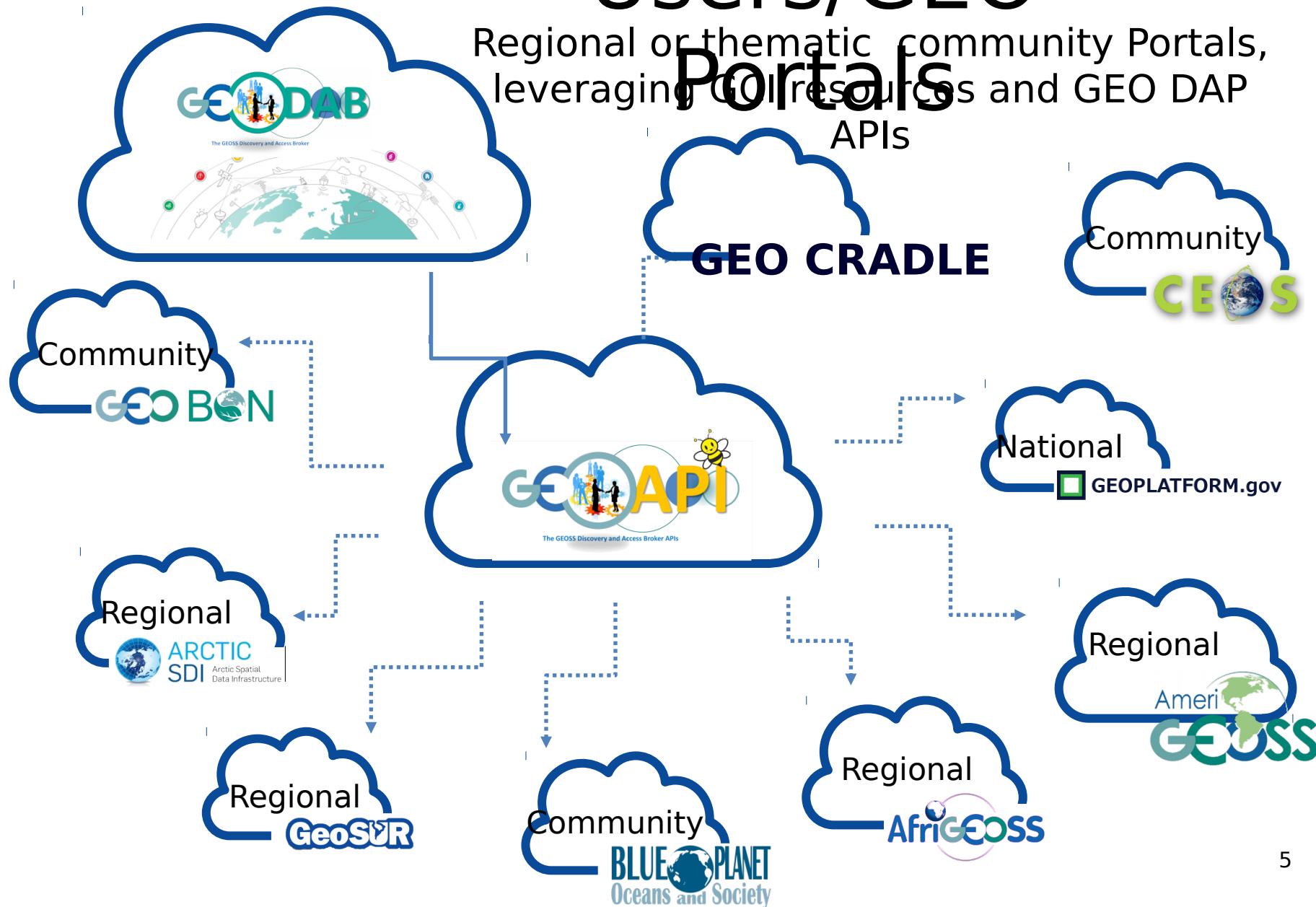
- A vertical menu bar on the left with a blue arrow icon.
- A horizontal toolbar at the top with various icons and links.
- A search bar at the top right with the placeholder "Search".
- A legend on the right side with icons for "Map", "Satellite", and "3D".
- A footer bar at the bottom with "Send Feedback" and "Terms & Conditions" links.

www.Geoportal.o

Users/GEO

Regional or thematic community Portals,
leveraging GEO resources and GEO DAP

APIs





Regional Data Hub



The Regional Data Hub (RDH) will soon provide access to both region-related datasets, portals and services developed by a regional network of raw data providers, intermediate users/service providers, end-users from Industry, Academic and Public Sector from the Region of Interest, and, also, datasets and services directly fed from the GEOSS-portal. Moreover, being the centralised gateway for regional data providers to contribute easily and timely their products to GEOSS, the Regional Data Hub is designed to become the focal node in the region in the context of GEOSS and Copernicus implementation. The RDH will facilitate access to downloadable files of Space-borne data from real-time EO satellite missions acquisitions; data from Airborne campaigns performed in the region; In-situ data; and Models such as Atmospheric and Climate.

The Regional Data Hub and the [Networking Platform](#) are the cornerstone for promoting better sharing of information and knowledge amongst EO

Leveraging GEO DAB APIs

Screenshot of a web browser showing the www.geodab.net/test-apis page. The browser has multiple tabs open, including "geodab | Create Views", "Wmo.int - Calendar - Week of Nov...", "GEO", "GEOSS Portal - YouTube", "ESA WebEx Enterprise Site", and "Dataset Record". The main content area displays the GEO DAB logo and navigation menu.

GEO GROUP ON EARTH OBSERVATIONS

GEO DAB
GEO Discovery and Access Broker

Home APIs Usage Statistics Brokering Reports Publications Success Stories Doc Contacts **FSSI lab**

Create Views

Beta View Management

Use this page to test GEO DAB Views on a subset of GEO DAB content.

Documentation of the use cases demonstrated during the *GEO DAB APIs Workshop* will be added soon.

STEP 1: ENTER/GET API KEY **STEP 2: MANAGE VIEWS** **STEP 3: GET YOUR VIEW**

The *API key* is required to create a new view.
If you don't have an API key fill the form below, click the "GET A KEY" button and check your email

Email	*
Name	*

<http://www.geodab.net/apis>

Documentation material

The screenshot shows a web browser window with the GEO website. The URL in the address bar is <http://earthobservations.org/article.php?id=184>. The page title is "News". The main content area discusses the "First GEO DAB API virtual workshop". It mentions that information from the world's satellites, ocean, land and atmospheric measuring stations, contained in the Global Earth Observation System of Systems (GEOSS), is accessed through the GEO Discovery and Access Broker (DAB). New capabilities of this interface are explored in the first of a series of GEO virtual workshops. The GEO DAB is a middle-ware component which is in charge of interconnecting the heterogeneous and distributed capacities contributing to GEOSS. GEO DAB users are typically software agents, such as web-based or desktop client applications. To build software applications, a set of protocols and tools are needed, known as Application Program Interface (APIs). The objective of the workshop is to provide participants with useful information on how to use GEO DAB APIs to exploit GEO DAB discovery and access functionalities.



First GEO DAB API virtual workshop.

Information from the world's satellites, ocean, land and atmospheric measuring stations, contained in the Global Earth Observation System of Systems (GEOSS), is accessed through the GEO Discovery and Access Broker (DAB). New capabilities of this interface are explored in the first of a series of GEO virtual workshops.

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GEO DAP APIs Virtual Workshop Day 1

- Web Services APIs
- Client Side APIs
- Server Side APIs

[View day 1 video recording here](#)

GEO DAP APIs Virtual Workshop Day 2: GEO DAB API Hands-on

- Demonstration of how to use GEO DAB APIs in Web Applications
- Live demonstration how to create "Views", of the GCI resources.

[View day 2 video recording here](#)

<http://earthobservations.org/article.php?id=184>

GEO GCI - GEO CRADLE Project Collaboration

Data Providers Identified by GEO CRADLE team

Data providers registered and Brokered by the GCI operations team

GEO CRADLE team implemented the GEO DAB APIs VIEWS to subset the requested resources out of the overall GCI content; Spatial subset.

Sustainable way to make sure GEO CRADLE Data Hub will not end up with end of Project



Open Earth Observations for Decision Making CALL FOR APPLICATIONS!



Build on top of **GCI components** to discover and access GEOSS resources focusing on:

- Climate Change
- Disaster Risk Reduction
- Sustainable Development Goals

Create your geospatial application using **GEO DAB APIs** :

<http://www.geodab.net/apis>

Discover the Open EO data through the GEOSS Portal: geoportal.org

Successful applications will be presented at the GEO2017 Plenary,
Washington DC, 25-26 October 2017 at the "GEO In Action" side event!
For any question contact @ the GEO Secretariat: pdesalvo@geosec.org