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Coordinating an Observation Network of Networks EnCompassing saTellite and IN-situ to fill the Gaps in European Observations

## Deliverable D4.4 Observation inventory

Version 1

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 $Project\ title: Coordinating\ an\ Observation\ Network\ of\ Networks\ EnCompassing\ sa Tellite\ and\ IN-situ\ to\ fill\ the\ Gaps\ in\ European\ Observations$ 

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Project title: Coordinating an Observation Network of Networks EnCompassing saTellite and IN-situ to

fill the Gaps in European Observations
Theme: SC5-18a-2014. Coordinating European Observation Networks to reinforce the knowledge base for climate, natural resources and raw materials

## **Executive Summary**

WP4 developed the ConnectinGEO Observation Inventory (OI) and released it online. The OI can be used as a data source by different analysis tools, which create plots, reports, or summary statistics useful for the ConnectinGEO gap analysis.

The OI can be accessed by client applications implementing GEO DAB supported interfaces<sup>1</sup> and/or the specific extension developed to support the required complex queries.

To facilitate a basic exploration of the OI, a simple Web Client was developed. The URLs of OI service and the simple Web Client are provided in the reminder of this document.

<sup>&</sup>lt;sup>1</sup> http://www.geodab.org





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#### 1 Introduction

The ConnectinGEO Observation Inventory was created and populated using the current metadata information available in the GEO Discovery and Access Broker (DAB). Its aim is to facilitate the analysis of the observations and measurements that are currently registered in GEO DAB.

The ConnectinGEO deliverable D4.4 "Observation Inventory" is an e-infrastructure and therefore classified as a deliverable of nature "Other". This document reports the main information concerning the deliverable. More information about the infrastructure architecture and development is available in the deliverables D4.2 "Observation inventory description and results report "and D4.5 "Observation inventory database description and results report".

## Observation Inventory

The Observation Inventory (OI) is deployed on AWS Cloud and can be accessed by client applications using GEO DAB supported interfaces2. Besides, an ad-hoc extension to the GEO DAB APIs was introduced in order to use JavaScript for submitting complex queries (i.e. with nested logical operators) to the OI. This is described in ConnectinGEO D4.2.

The intent of the OI is to allow client applications run complex queries in order to generate statistics about available observations. As an example, a simple Web Client was developed to interrogate the OI. This makes it easy to execute a basic exploration of the OI content. The O can be queried by combining available queryables defined in ConnectinGEO Deliverable 4.1.

The Web Client makes use of the above-mentioned extension of the GEO DAP APIs to submit complex gueries to the OI.

Some basic examples are also provided to show how to use the OI for generating statistics about available observations useful for the gap analysis (Figure 1).

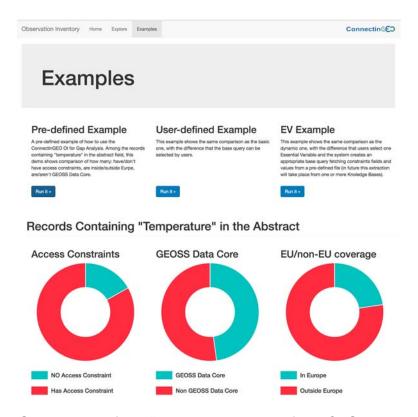


Figure 1 – Screenshot of the "Example" section of the OI Simple Web Client

<sup>&</sup>lt;sup>2</sup> http://www.geodab.org



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#### 2.1 Observation Inventory URLs

The base URL of the Observation Inventory OpenSearch service is (this is meant to be used by machines)

http://oi.geodab.eu/gi-cat/services/opensearch?

The Simple Web Client is available at

http://oi.geodab.eu/oi-client-beta/home/index-dev.html

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