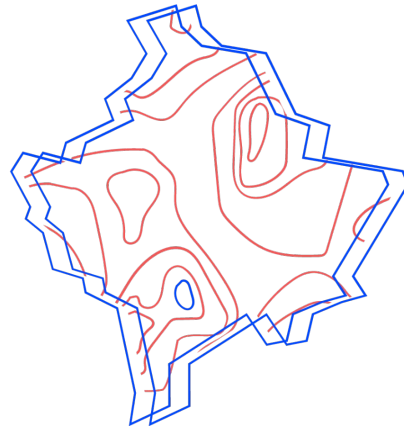


State of GeoNetwork



GeoNetwork
open source



FOSS4G 

Prizren, 2023



Florent Gravin



Jeroen Ticheler

The FOSS metadata catalog

Discover open
data from my Organization

Search datasets, services and maps ...



The latest

The most popular

What is GeoNetwork?

- Very comprehensive metadata editing and management tool
- The glue in a Spatial Data Infrastructure
- The Basic Building Blocks:

ISO TC211 Standards

OGC Standards (Open Geospatial Consortium)

Project history

Started in 2000 at Food and Agriculture Organization (FAO-UN)

- Code and issues on github
 - ~1000 downloads per month
 - Active global developer and user community
- ~85% of the current national INSPIRE end-points

nationalgeoregister.nl

Nationaal georegister

Home Zoeken Kaart Voor ontwikkelaars Over NGR Actueel Inloggen

Home / Zoeken / BRT Achtergrondkaart

Terug naar zoeken < Vorig Volgende >

BRT Achtergrondkaart

Brontype: Dataset

De BRT Achtergrondkaart is afgeleid uit TOP10NL uit de Basisregistratie Topografie (BRT). De BRT Achtergrondkaart is beschikbaar in vier verschillende thema's: standaard, grijs, pastel en water. Vanaf april 2021 wordt het buitenland transparant weergegeven. Hierdoor is het mogelijk om een andere, internationale kaartlaag naar keuze 'onder' de BRT Achtergrondkaart te leggen waardoor het kaartbeeld over de grens doorloopt. De BRT Achtergrondkaart wordt ontsloten in de projecties: EPSG 28992 (RD), EPSG 25831 (ETRS89 UTM zone 31N) en EPSG 3857 (WGS84 WebMercator).

Beschrijving Contact gegevens Downloads, views en links

Downloads, views en links

WMTS view service BRT achtergrondkaart, alle varianten

Deze dataset is gepubliceerd in de view service (WMTS)
https://service.pdok.nl/brt/achtergrondkaart/wmts/v2_07/request=getcapabilities&service=wmts met identificatie WMTS view service BRT achtergrondkaart, alle varianten.

WMTS view service BRT achtergrondkaart, alle varianten. Deze viewservice wordt in oktober 2021 uitgefaseerd en tot die tijd niet meer bijgewerkt.

Deze dataset is gepubliceerd in de view service (WMTS)
<https://geodata.nationaalgeoregister.nl/tiles/service/wmts?request=GetCapabilities> met identificatie WMTS view service BRT achtergrondkaart, alle varianten. Deze viewservice wordt in oktober 2021 uitgefaseerd en tot die tijd niet meer bijgewerkt..

Downloads, views en links

BRT achtergrondkaart Grijs WMTS

De achtergrondkaart PDOK is de kaartlaag waarop locatiegebonden content wordt afgebeeld. De achtergrondkaart moet ervoor zorgen dat de eindgebruiker zich kan oriënteren tijdens het gebruik van geografische applicaties. Data automatisch generaliseerd op basis van TOP10NL.... meer...

BRT achtergrondkaart Pastel WMTS

Contact Help

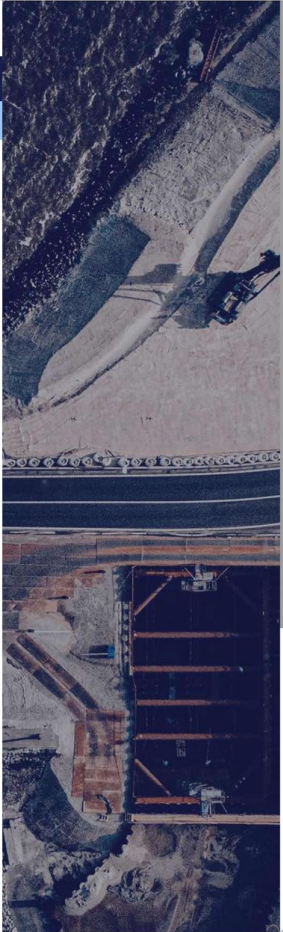
Download Weergave

Overzicht

large_thumbnail

thumbnail

Ruimtelijke dekking



Powerful Metadata Editor

Tiendwegen Categories ▾ Group ▾ Validate Cancel Save & close Save metadata

⬅

Identification info

Title *

Date * Creation ▾ 📅 ⌚ 🕒

Citation identifier

Code *

Abstract *

Purpose


Status Completed ▾

Point of contact

Organisation name	Individual name	Electronic mail address	Role
-------------------	-----------------	-------------------------	------

Validation

Overview





➕ Choose or drop an image here

Associated resources

+ Add ▾

Online resources

Sort by Protocol ▲ Uri Title

-  OGC:WMS
<https://services.rce.gevoorziening.nl/landschapsatlas/tiendwegen>
-  OGC:WFS
<https://services.rce.gevoorziening.nl/landschapsatlas/tiendwegen>

Administrative Interface

The screenshot displays the Geonetwork Enterprise Administrative Interface. The top navigation bar includes 'Search', 'Map', 'Contribute', and 'Admin console'. The user is logged in as 'admin admin ADMINISTRATOR' and the language is set to 'English'. The left sidebar contains a menu with the following items: Summary, Metadata and templates, Users and groups, Harvesting, Statistics and status, Reports, Classification systems, Settings, and Tools. The main dashboard area features a grid of management tools and statistics:

Metadata and templates	Users and groups	Harvesting	Statistics and status	Reports	Classification systems	Settings	Tools
Dataset	Service	service-download	service-view	Feature catalog	service-OGC:WMS		
32	7	4	2	1	1		
RL_623	records in the catalog						
1	41						

OSGeo Project since 2007



GeoNetwork PSC

7 active members

Jo Cook

Jose Garcia

Paul van Genuchten

Florent Gravin

Simon Pigot

François Prunayre

Jeroen Ticheler

1 monthly meeting

Where are we now

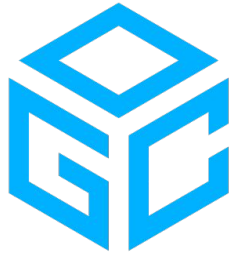
3.12.10

Long term support (sustained through GeoCat GeoNetwork Enterprise)

4.2.4

Last stable branch

Implementing Standards



Open
Geospatial
Consortium®

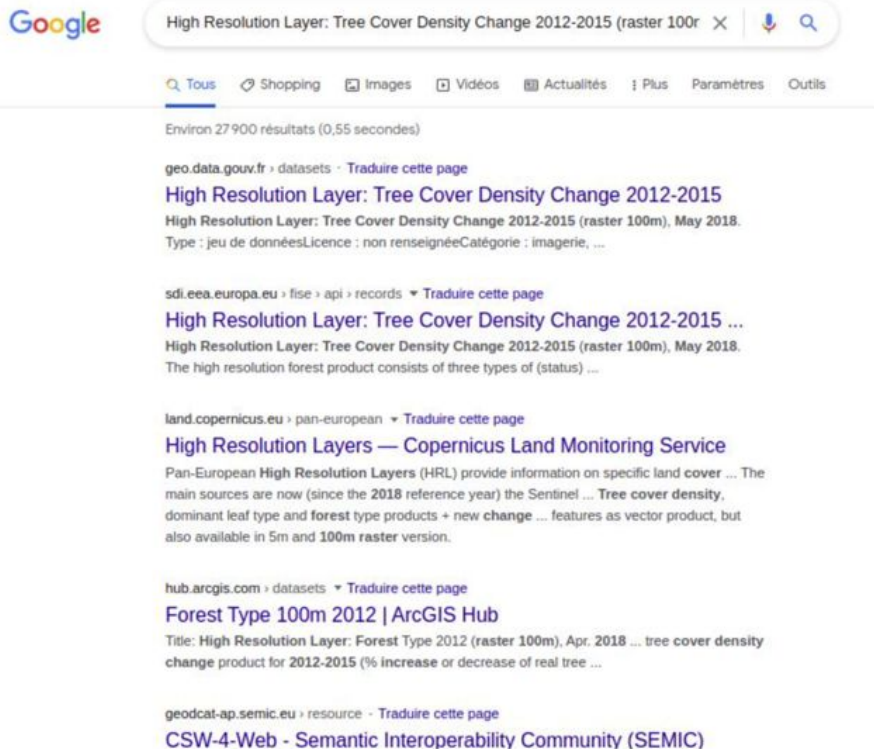


International
Organization for
Standardization

OGC:API Records - Improve discoverability

Search GIS data

→ Find GIS data



The screenshot shows a Google search interface with the following elements:

- Search Bar:** Contains the text "High Resolution Layer: Tree Cover Density Change 2012-2015 (raster 100m)".
- Navigation:** Includes "Tous", "Shopping", "Images", "Vidéos", "Actualités", "Plus", "Paramètres", and "Outils".
- Results:** Lists several search results, each with a source link, a title, and a snippet.
 - Result 1:** Source: geo.data.gouv.fr. Title: **High Resolution Layer: Tree Cover Density Change 2012-2015**. Snippet: "High Resolution Layer: Tree Cover Density Change 2012-2015 (raster 100m), May 2018. Type : jeu de donnéesLicence : non renseignéeCatégorie : imagerie, ..."
 - Result 2:** Source: sdi.eea.europa.eu. Title: **High Resolution Layer: Tree Cover Density Change 2012-2015 ...**. Snippet: "High Resolution Layer: Tree Cover Density Change 2012-2015 (raster 100m), May 2018. The high resolution forest product consists of three types of (status) ..."
 - Result 3:** Source: land.copernicus.eu. Title: **High Resolution Layers — Copernicus Land Monitoring Service**. Snippet: "Pan-European High Resolution Layers (HRL) provide information on specific land cover ... The main sources are now (since the 2018 reference year) the Sentinel ... Tree cover density, dominant leaf type and forest type products + new change ... features as vector product, but also available in 5m and 100m raster version."
 - Result 4:** Source: hub.arcgis.com. Title: **Forest Type 100m 2012 | ArcGIS Hub**. Snippet: "Title: High Resolution Layer: Forest Type 2012 (raster 100m), Apr. 2018 ... tree cover density change product for 2012-2015 (% increase or decrease of real tree ..."
 - Result 5:** Source: geodcat-ap.semic.eu. Title: **CSW-4-Web - Semantic Interoperability Community (SEMIC)**.

OGC API Records

Meeting in London (2022)

Meeting in Bussigny (2023)

Meet with the OGC community

Facets proposal



OGC API Records Part I core (draft)

ogc-api-records microservice

GET {root}/conformance

GET {root}/collections

GET /collections/{collectionId}

GET {root}/collections/{collectionid}/items

GET {root}/collections/{collectionid}/items/{recordid}

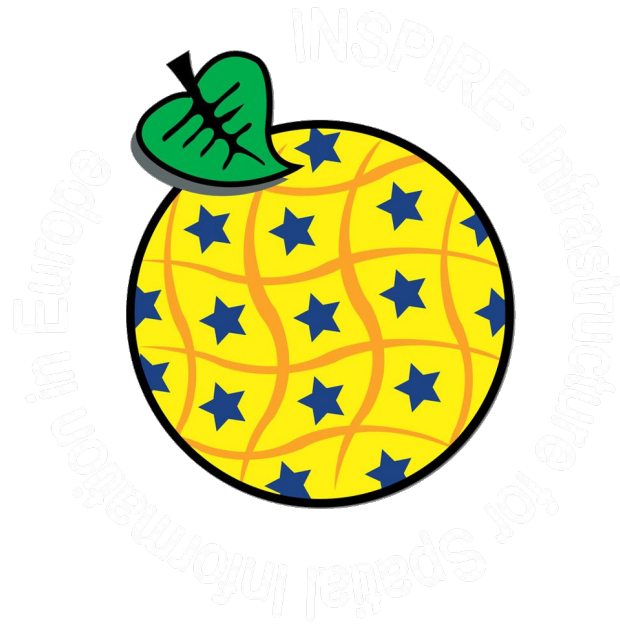


OGC API Records

Output formats

- HTML
- XML (ISO19139, ISO19115-3)
- JSON
- RSS
- DCAT
- Turtle
- Schema.org

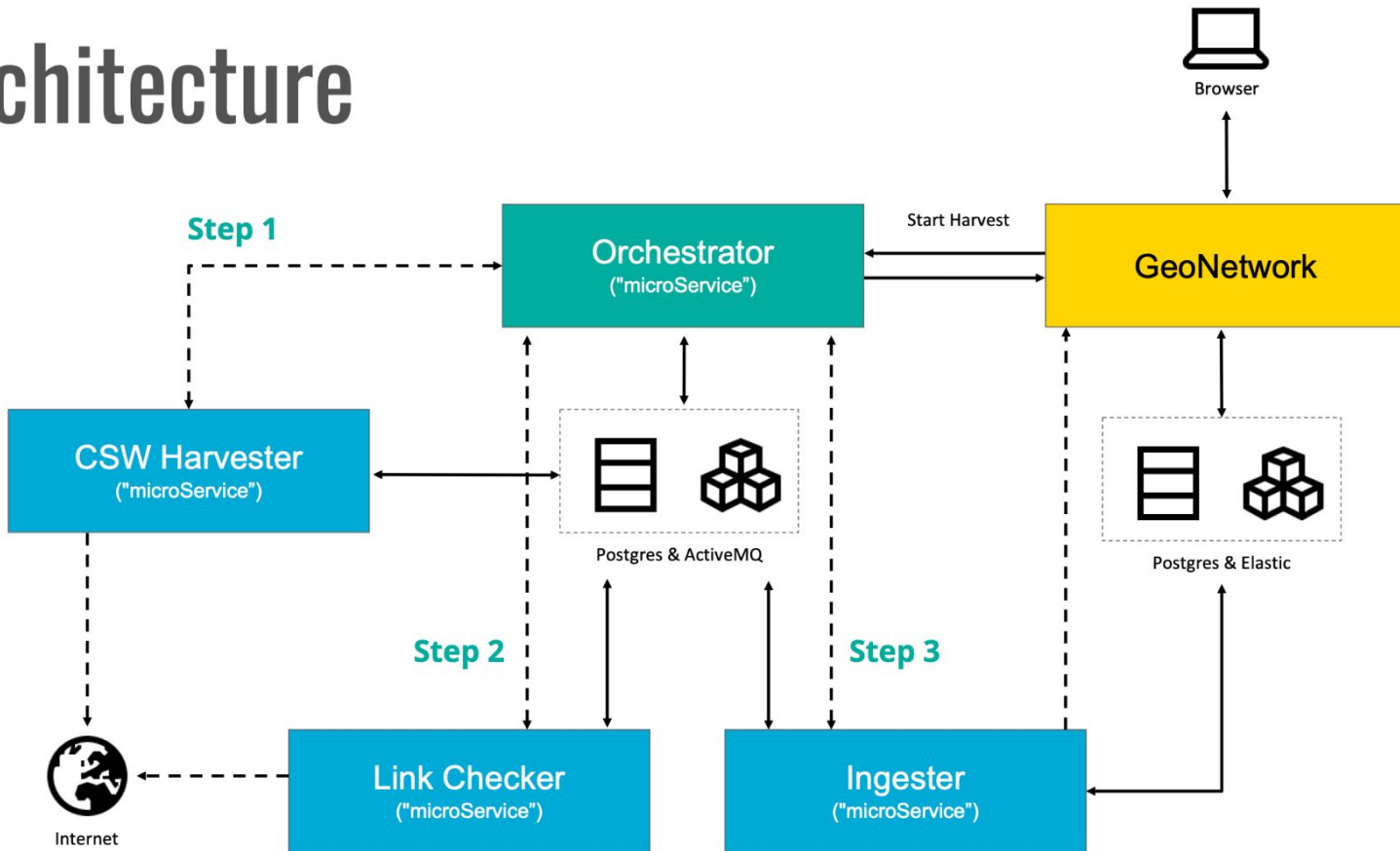
Supporting the INSPIRE Directive



The JRC INSPIRE Portal project

- Project to replace the existing EU Geoportal with GeoNetwork opensource
- 4 new components developed for GeoNetwork 4
- Operational since the last reporting period (December 2022)

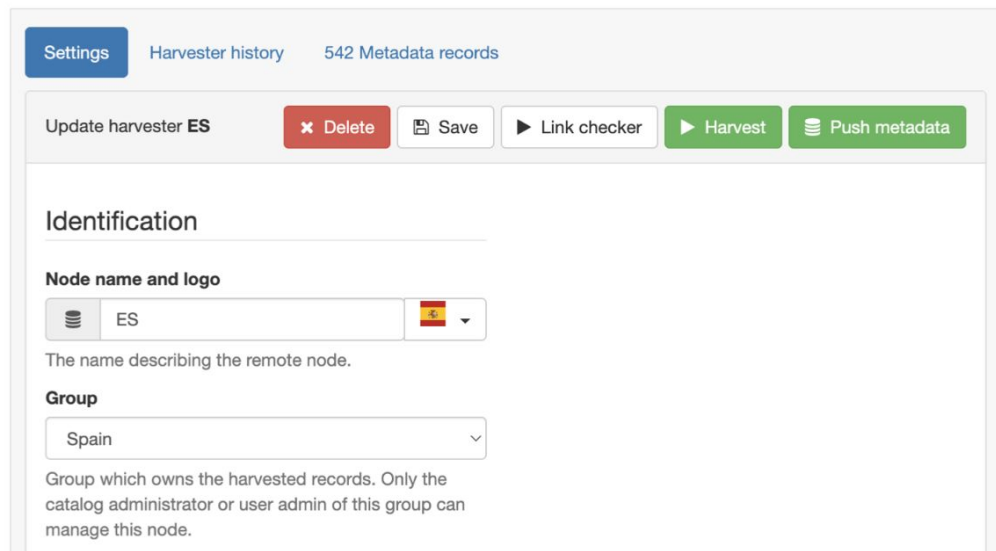
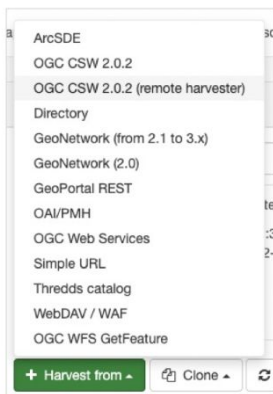
Architecture



Harvester console

Added a new harvester type: Remote CSW harvester, to configure the CSW servers of the member states to harvest

- URL of the server to harvest
- CSW filter configuration
- Error conditions handling
- etc.



Settings Harvester history 542 Metadata records

Update harvester ES Delete Save Link checker Harvest Push metadata

Identification

Node name and logo

ES ES

The name describing the remote node.

Group

Spain

Group which owns the harvested records. Only the catalog administrator or user admin of this group can manage this node.

Harvester console

Provides access to the harvester execution history

The screenshot displays the Harvester console interface. At the top, there are navigation tabs for 'Settings', 'Harvester history' (which is active), and '540 Metadata records'. Below the tabs, the main area is titled 'Harvester history' and contains a list of three execution records. Each record shows the number of records harvested, the time taken, and a 'Log file' download button. The first record shows 540 records harvested in 4047 seconds, dated 'a month ago'. The second and third records show 543 records harvested in 1079 and 796 seconds respectively, both dated 'a month ago'. At the bottom of the list, there is a pagination control showing '1 / 2 of 6 record(s)' with navigation arrows.

Settings **Harvester history** 540 Metadata records

Harvester history ✕ Delete

- 540 record(s) harvested in 4047 seconds**
○ a month ago
 - total: 540Log file
- 543 record(s) harvested in 1079 seconds**
○ a month ago
 - total: 543Log file
- 543 record(s) harvested in 796 seconds**
○ 2 months ago
 - total: 543Log file

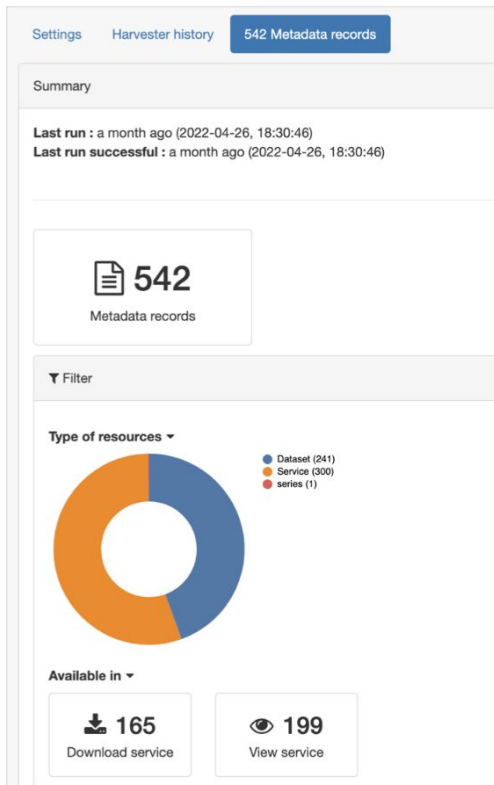
« ‹ 1 / 2 of 6 record(s) › »

Harvester console

And statistics about the metadata harvested, including:

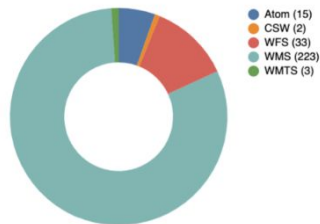
- Date of the harvesting
- Number of metadata records harvested
- Number of metadata per type: datasets / series / services
- Downloadable datasets
- Viewable datasets

Harvester console



Capabilities type. ▾

If > 1 capabilities, then the most common type (WMS/WFS/WMTS/ATOM) is displayed. If there is an equal number, then choose any one.



All the Capabilities Layer links resolved. ▾

PASS if, for any capabilities document, ALL the Capabilities Layer links resolve to a Dataset Metadata record.

 **228**
PASS

 **72**
FAIL

All OperatesOnLinks Dataset Metadata documents match a document. ▾

PASS if ALL of the OperatesOnLinks Dataset Metadata documents match a document linked from the Capabilities Layers (in any capabilities document).

 **235**
PASS

 **65**
FAIL

All OperatesOnLinks resolve to a Metadata document. ▾

PASS if ALL of the OperatesOnLinks resolve to a Dataset Metadata document.

 **294**
PASS

 **6**
FAIL

Other developments for GeoNetwork Version 4

- User interface improvements with better web accessibility support
- Security / library upgrades: Spring 5, JPA 2, Quartz, MySQL, Guava, Log4j2
- OpenAPI support for API documentation
- AngularJS & Bootstrap upgrade
- Java 11 support (to be merged)

Version 4 - Latest Features

- Support for OAuth2 OpenId Connect Single Sign-on

and

- Support for OIDC Bearer tokens

(tested with Azure Active Directory and KeyCloak)

- Many fixes and improvements in the main branch, improving the stability

The vision

User experience first !

Address modern use cases

Data centric

Embrace open data world

Become a data platform



A unique catalog

geonetwork-ui

“From old fashioned SDI to blazing UIs”

“What you’ve ever missed within your SDI”

User Experience centric

Framework to build components & applications for data/metadata purposes.

Eco-system



Core

core-geonetwork

Micro services

geonetwork-microservices

User experience

geonetwork-ui

The Datahub

v1.0.3

- [Activity feed](#)
- Key figures
- Search filters
- Favorites
- Geospatial boost
- Entry by organisation
- [Web components](#)

Coming

- [Dataviz](#)
- Configurable filters
- Edition Dashboard
- Metadata quality widget
- Quick filters (focus)
- Backoffice

Toutes les données publiques des Hauts de France

ex: cadastre, littoral, antennes



Les plus récentes

Les plus appréciées

ACCUEIL

DONNÉES

ORGANISATIONS

Fil d'activité



Conservatoire botanique national de Bailleul

a créé ce Jeu de données hier

Hauts-de-France - Lichens tous statuts - Pression d'inventaire (Période moderne - Par maille 1 km²)

0 ☆

Nombre par commune d'observations de lichens (tous statuts) pour la région des Hauts-de-France, réalisées depuis 2000
Description du contenu Cette couche précise par commune des...



Quelques chiffres



6680
données



552
organisations

Aperçu

CARTE

TABLEAU

GRAPHIQUE

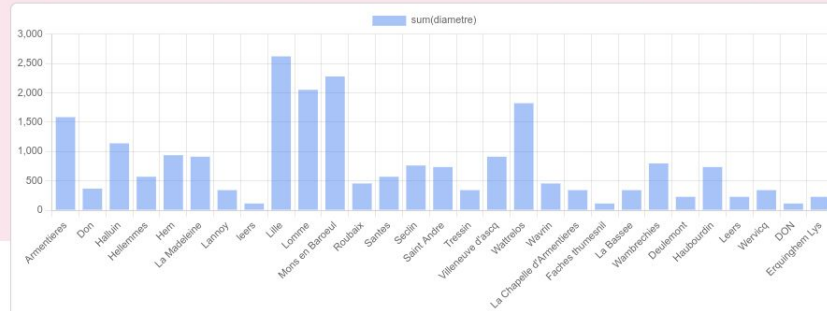
Source de données **csv (csv)**

Type **barre**

Axe X **commune**

Axe Y **diametre**

Agrégation **somme**



<https://mel.integration.apps.gs-fr-prod.camptocamp.com/datahub/wc-embedder.html?e=gn-dataset-view-chart&a=a-f>

Cherchez des données cartographiques en Auvergne-Rhône-Alpes avec le CRAIG

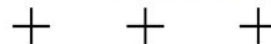
ex: cadastre, littoral, antennes

ACCUEIL

DONNÉES

ORGANISATIONS

The Datahubs



The editor

“Make metadata accessible to everyone”

“Forget about metadata schemas”

“Build your own editor”



The community



**2 Weeks summer code sprint
(20 August - 2 September 2023)**

An aerial photograph of Bern, Switzerland, showing the Aare river winding through the city. The buildings have characteristic red-tiled roofs. A bridge is visible in the foreground, crossing the river. The city is surrounded by lush green trees.

**User meeting
October 3rd
Bern Switzerland**

More on GeoNetwork this week



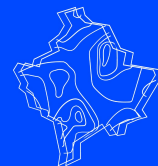
GeoNetwork Orientation and Demo

Today at 15:00–15:30 (Europe/Tirane), Drini

We look at what GeoNetwork is for

We peek under the hood

Look at examples of how GeoNetwork has been extended by organizations



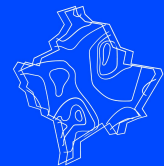
FLOSS4G
Prizren, 2023



[Rethink geo/open metadata edition in GeoNetwork](#)

Friday at 12:00–12:30 (Europe/Tirane),
Outdoor Stage

New alternative UI as a
facade on GN4 editing



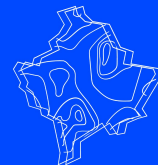
FLOSS4G
Prizren, 2023



[Open Data Analytics API in GeoNetwork](#)

Earlier today 12:00–12:30 (Europe/Tirane),
Drini

GeoNetwork toward a Data platform



FOS4G
Prizren, 2023

Thank you!