



**The Swiss geometadata catalogue:
new version (GeoNetwork V4)
& first results of a usability study**

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FOSS4G 2023, Prizren - Kosovo

Agenda

geocat.ch v4

usability study (UI, search)

Datahub

high-quality,
standardized
metadata

GeoNetwork
user community

geocat.ch v4

www.geocat.ch

the **Swiss** geometadata catalogue

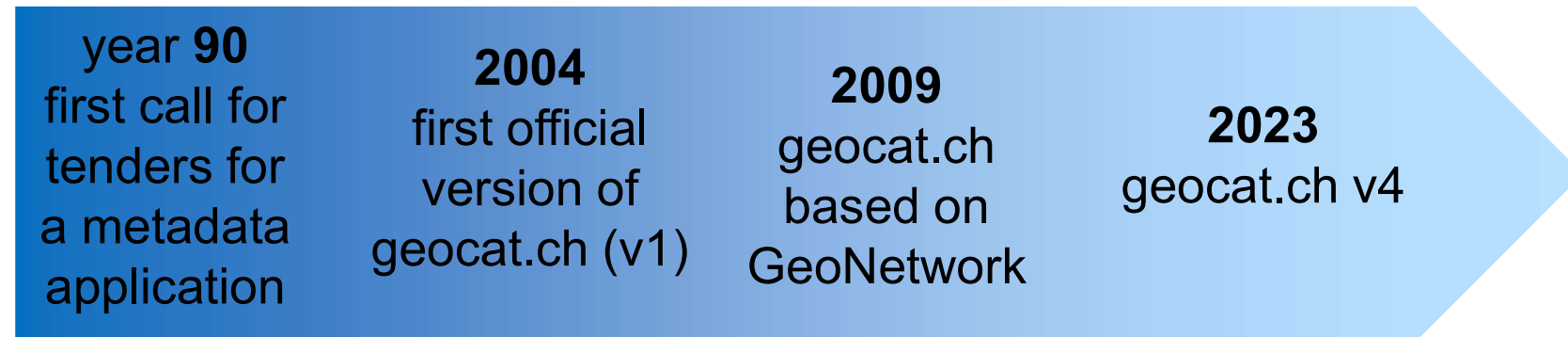
the **central** access point for geodata searches in Switzerland

- administrative data (national, cantonal, communal level)
- not administrative data (private, ...)

geocat.ch must meet the requirements of

- **multilingualism**
- **interoperability** with different platforms
- different **partners**

geocat.ch must comply with the "**once only**" principle

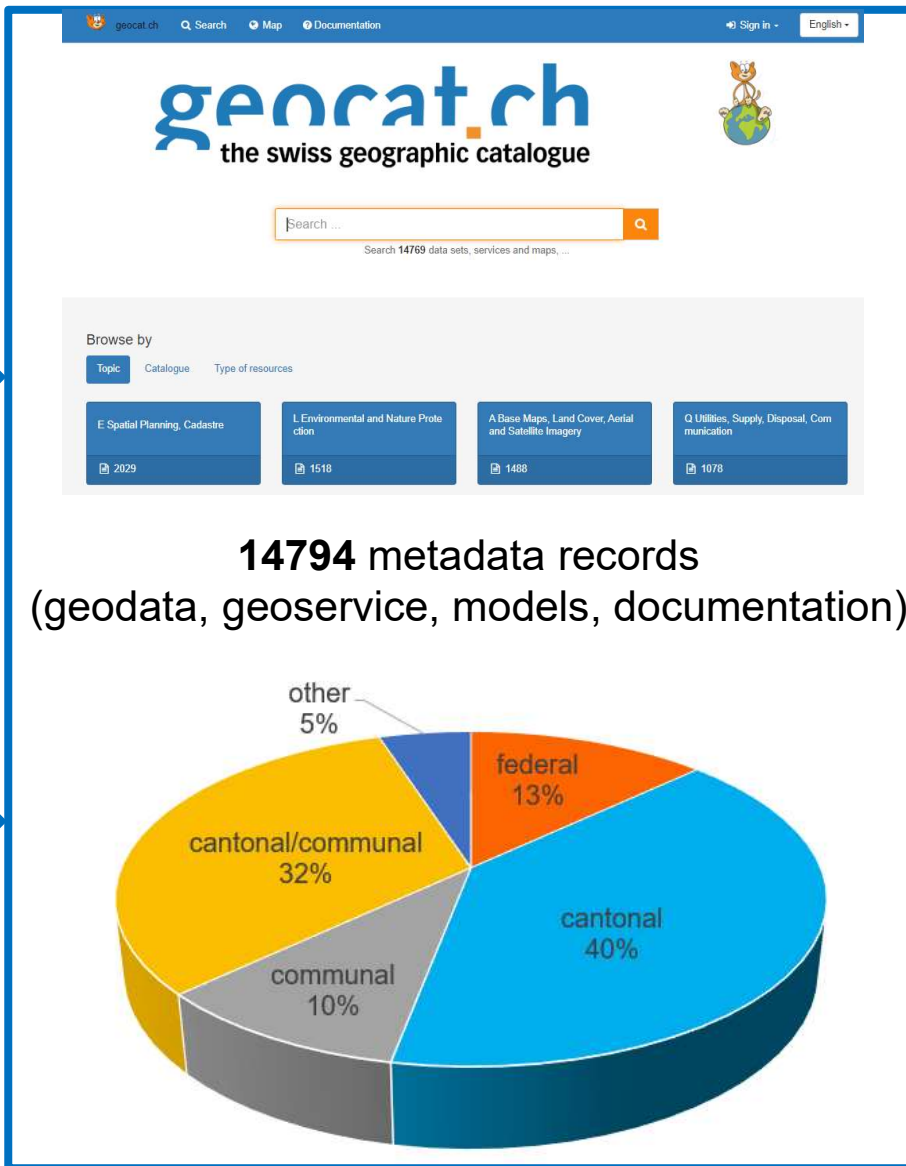
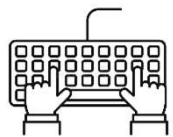


GeoNetwork / geocat.ch v4

- Improved user interface
- Improved performance for searching and indexing (Elasticsearch)
- Separation of the web application into 2 (search service, other)
- Micro-services oriented architecture
- ISO standards (TC211) & OGC standards
- INSPIRE TG2 conformity
- Java 11 support (to be merged)
- ...

geocat.ch v4

6907 metadata from direct partners



geocat.ch
the swiss geographic catalogue

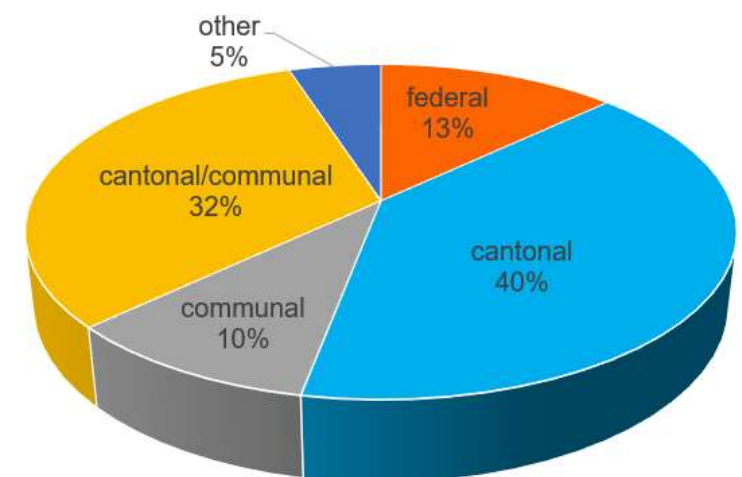
Search 14769 data sets, services and maps, ...

Browse by

- Topic
- Catalogue
- Type of resources

Topic	Count
E Spatial Planning, Cadastre	2029
L Environmental and Nature Protection	1518
A Base Maps, Land Cover, Aerial and Satellite Imagery	1488
Q Utilities, Supply, Disposal, Communication	1078

14794 metadata records (geodata, geoservice, models, documentation)



Administrative Level	Percentage
cantonal	40%
cantonal/communal	32%
communal	10%
federal	13%
other	5%

federal map portal (map.geo.admin.ch)

opendata.swiss portal

INSPIRE geoportal

status at 27.06.2023

7887 metadata from harvesting partners

geocat.ch

the swiss geographic catalogue



Search ...

Search 14769 data sets, services and maps, ...

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search

Aerial images

Map



Active filters

any Aerial images

Filter

Catalogue

Topic

Keywords

Formats

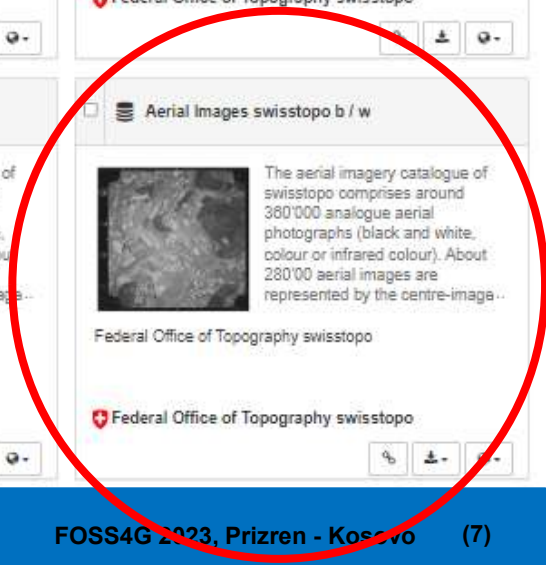
Update frequencies

filters

1 - 30 on 50 Sorted by relevancy

1 Dataset

<p><input type="checkbox"/> SWISSIMAGE and Journey through time – aerial images</p> <p>The Orthophotomosaic SWISSIMAGE is a composition of analogic and digital, black-and-white and colour aerial images. An orthophoto is an aerial image in which the distortions created by the camera and the relief are ...</p> <p>Federal Office of Topography swisstopo</p> <p>Federal Office of Topography swisstopo</p>	<p><input type="checkbox"/> Aerial images cantons</p> <p>In the context of varying projects aerial images are collected and offered on behalf of the cantons. These aerial images can be reported to swisstopo and are published in the "Aerial images cantons" layer. The layer contains.</p> <p>Federal Office of Topography swisstopo</p> <p>Federal Office of Topography swisstopo</p>	<p><input type="checkbox"/> Aerial images third parties</p> <p>Within the framework of various projects of public and private clients, aerial images of Switzerland are collected and offered by third parties. These aerial images can be reported to swisstopo and are published in ...</p> <p>Federal Office of Topography swisstopo</p> <p>Federal Office of Topography swisstopo</p>
<p><input type="checkbox"/> Aerial Images swisstopo infrared</p> <p>The aerial imagery catalogue of swisstopo comprises around 360'000 analogue aerial photographs (black and white, colour or infrared colour). About 280'00 aerial images are represented by the centre-image...</p> <p>Federal Office of Topography swisstopo</p> <p>Federal Office of Topography swisstopo</p>	<p><input type="checkbox"/> Aerial Images swisstopo color</p> <p>The aerial imagery catalogue of swisstopo comprises around 360'000 analogue aerial photographs (black and white, colour or infrared colour). About 280'00 aerial images are represented by the centre-image...</p> <p>Federal Office of Topography swisstopo</p> <p>Federal Office of Topography swisstopo</p>	<p><input type="checkbox"/> Aerial Images swisstopo b / w</p> <p>The aerial imagery catalogue of swisstopo comprises around 360'000 analogue aerial photographs (black and white, colour or infrared colour). About 280'00 aerial images are represented by the centre-image...</p> <p>Federal Office of Topography swisstopo</p> <p>Federal Office of Topography swisstopo</p>



geocat.ch v4

Search:

Aerial Images swisstopo b / w

The aerial imagery catalogue of swisstopo comprises around 283'000 analogue aerial photographs (black and white, colour or infrared colour). About 260'000 aerial images are represented by the colour-image coordinates, the image footprint as well as the attributed metadata and 283'000 images of the collection have already been digitised and can be viewed in their full resolution (as of October 2019). The remaining scanned images will be continuously integrated over the coming years. The aerial images can be ordered as digital files. If available, the orientation elements of the aerial images can be delivered as well.

Spatial extent

Representation type:

API

- [ch.swisstopo.lubis-luftbilder_schwarzweiss](#)
WMS-F/S3 service, layer "Aerial Images swisstopo b/w"
- [ch.swisstopo.lubis-luftbilder_schwarzweiss](#)
WMS-F/S3 service, layer "Aerial Images swisstopo b/w"
- [REST API from geo.admin.ch](#)

Download

- [https://data.geo.admin.ch/ch.swisstopo.lubis-luftbilder_schwarzweiss/data.zip](#)
Download server from geo.admin.ch
- [https://data.geo.admin.ch/ch.swisstopo.lubis-luftbilder_schwarzweiss/](#)
- [Shop](#)

Links

- [map.geo.admin.ch](#)
- [Permalink opendata.swiss](#)
- [Photographies aériennes](#)
- [Preview map.geo.admin.ch](#)

Legal constraints

None/Commented/Attributed/Commented/Attributed/Reference/Required

Contact for the resource

Donee:

- [Federal Office of Topography swisstopo](#)
- [Federal Office of Topography swisstopo](#)

Metadata information

Point of Contact:

- [Federal Office of Topography swisstopo](#)

Updated:

Update frequency:

Metadata language:

Provided by: [Federal Office of Topography swisstopo](#)

Identifier:

Share and comment

Similar dataset

- [Aerial photographs Switzerland \(permetre Strip-...](#)
- [Orthophoto SWISSIMAGE: relectantilorme](#)
- [Plan application d'affectation \(régionale\) \(maître\)](#)
- [SWISSIMAGE - orthophoto - 16cm](#)

geocat.ch v4

geocat.ch Search Map Documentation Sign in English

Search for a place

Layers

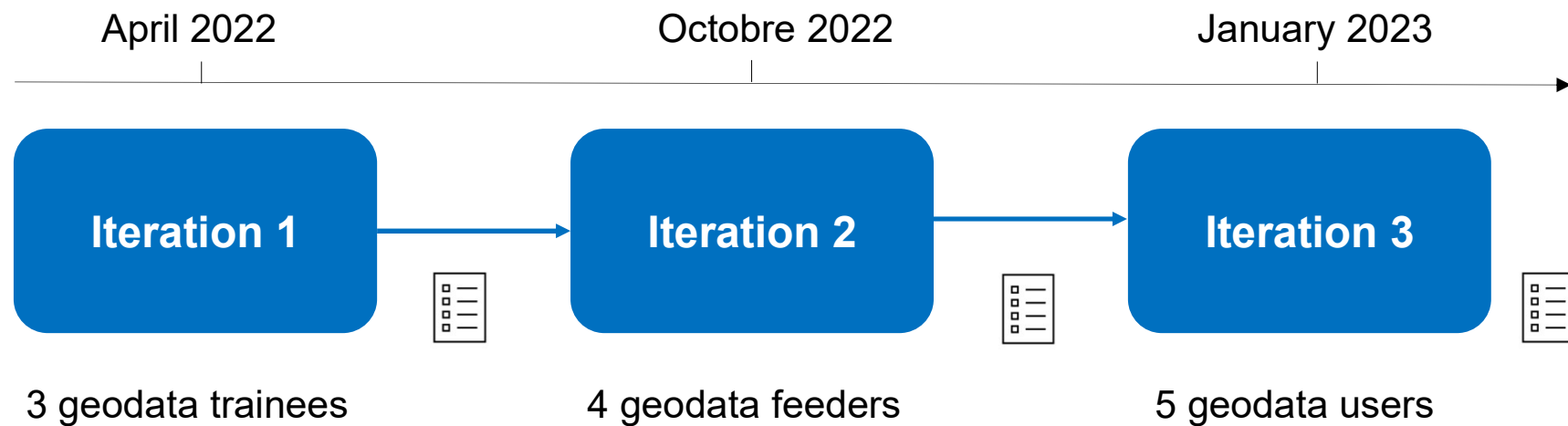
Powered by GeoNetwork 4.2.3.SNAPSHOT About Github API Share and comment

Usability study

Usability tests of the **metadata search (frontend)** at different stages of the project

3 usability test **iterations**

12 participants



Usability study

During the test sessions users highlighted a multitude of **strengths** of the portal, such as :

- + a **“modern” look and feel**
- + very useful **faceted navigation** on the result page
- + **access to datasets via topics**
- + **clearer layout of dataset detail pages**
- + possibility to **display data on the map**
- + presence of **illustrations of the data on the lists**

Usability study

Usability should be further improved e.g. with regard to:

- the integration of the map
- usability of the maps functions
- labelling
- autosuggest menu
- ...

The way data is fed to the platform also has an important impact on the usability

Datahub

Taking into account:

- that **the way in which data is searched for** on the platform has a major impact on the **usability**
- the **future developments of GeoNetwork**

... we are setting up a **Datahub** which:

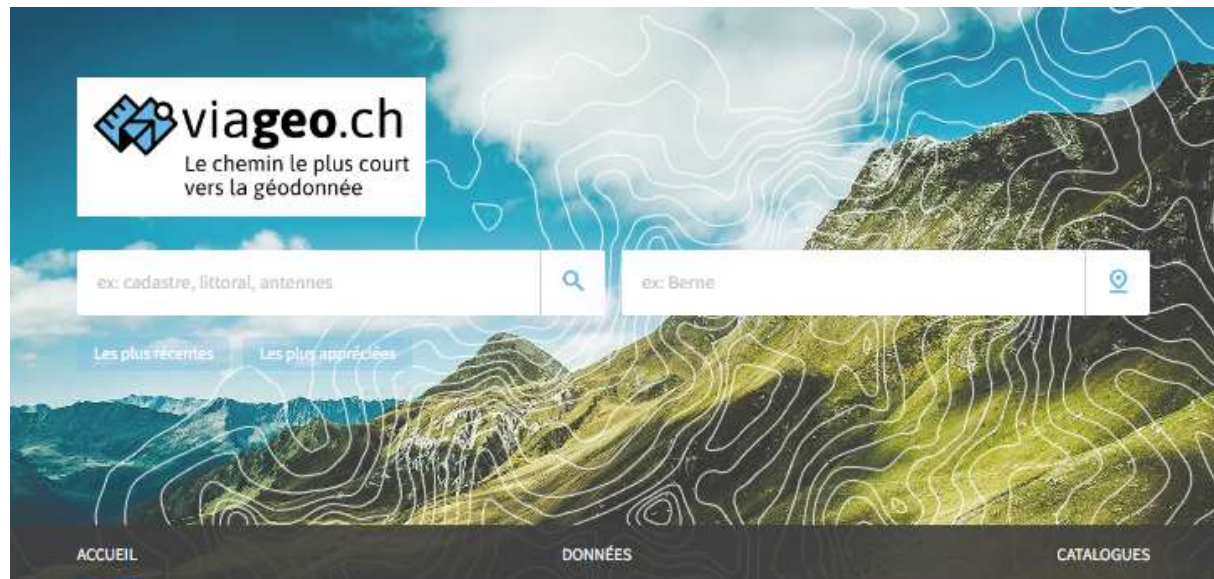
- is based on the **GeoNetwork API & GeoNetwork UI**
- has the advantage of simplifying the data searches, in particular by using a theme and a location: **"what & where"**

Interaction with the map still needs to be discussed and integrated



The screenshot shows the homepage of genrat.ch. At the top, the logo 'genrat.ch the swiss geographic catalogue' is displayed. Below it is a search bar with the text 'ex: cadastre, littoral, antennes' and a magnifying glass icon, and another search bar with 'ex: Berne' and a location pin icon. There are two buttons: 'Les plus récentes' and 'Les plus appréciées'. A navigation bar at the bottom of the header contains 'ACCUEIL', 'DONNÉES', and 'CATALOGUES'. The main content area is divided into two columns. The left column is titled 'Fil d'activité' and features a post from 'viageo.ch' about 'Plan Lumière communal' in Nyon, with a map snippet. The right column is titled 'Quelques chiffres' and shows two statistics: '13260 données' and '65 organisations'.

Datahub



Fil d'activité

 **viageo.ch**
a créé ce jeu de données il y a 3 jours

Plan Lumière communal 0 

Le plan lumière a pour objectif d'améliorer l'éclairage urbain de la ville en tenant compte de différents aspects tels que la sécurité, l'esthétique, l'efficacité énergétique et la mise en valeur du patrimoine. Le plan lumièr...



Quelques chiffres

 **625**
données

 **1**
organisations

High-quality, standardized metadata

The usability study reveals that the efficiency of searching for geodata depends not only on the user interface and the functionalities available, but also very strongly on the **quality of the metadata**.

Metadata must be consistent and of good quality in order to optimize searches.

Various **measures** are taken to achieve this:

- recommendations to partners
- metadata cleaning
- metadata updates
- documentation updates
- process precision

High-quality, standardized metadata

The Swiss standard for geometadata (GM03) is being revised

- Basis is ISO 19115- 2018
- Objective is to simplify, complete, update the current standard and to keep ensuring interoperability
- A working group is drawing up a first version of the new profile (eCH standard)



Vermessung und Geoinformation

GM03 – Metadatenmodell

Ein Schweizer Metadatenmodell für Geodaten

FV (Final Version) Version 2.3

Ausgabe vom 15. April 2005 (deutsch)



GeoNetwork User Community

Meeting on 3rd October 2023

Federal Office of Topography swisstopo, Bern, Switzerland

geocat@swisstopo.ch



Thank you very much for your attention

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Meeting GeoNetwork user community 3rd October 2023

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