

# GeoCAsE 2.0

## The Earth Science Collections Portal

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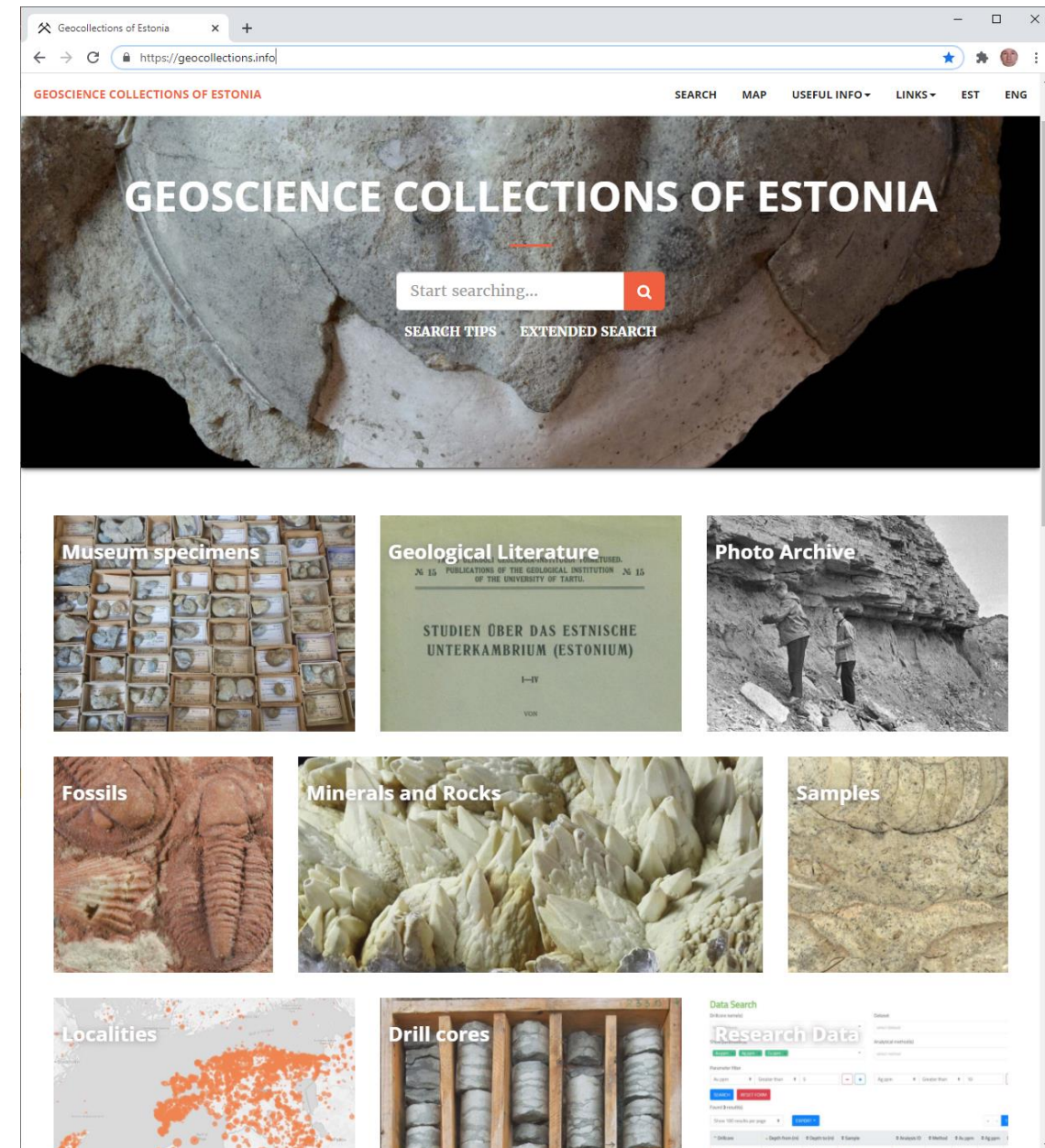


40. Diversity Workbench Workshop  
2020-12-02



# Natural history collections in Estonia

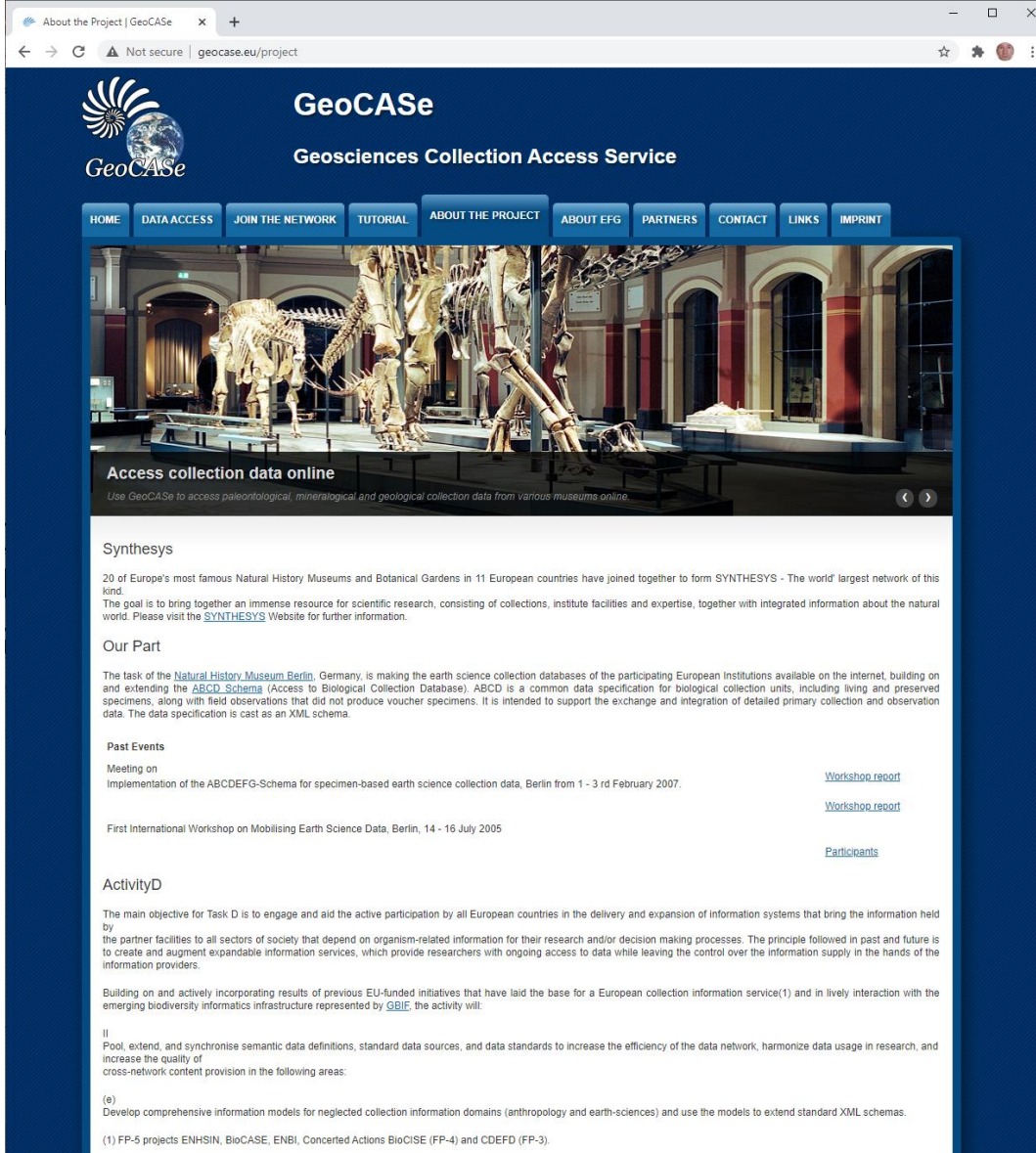
- 3-4 million specimens, 5 main institutions
  - geology ca 0.8 holdings
- Natural History Archives and Data Network (NATARC)
  - A national consortium to provide research infrastructure funding and oversee developments
  - <https://natarc.ut.ee>
  - two data management platforms:
    - **PlutoF** for biodiversity data
    - **SARV** for geoscience collections and data
- Part of GeoCAsE network since 2010



<https://geocollections.info>

# GeoCAsE 1.0

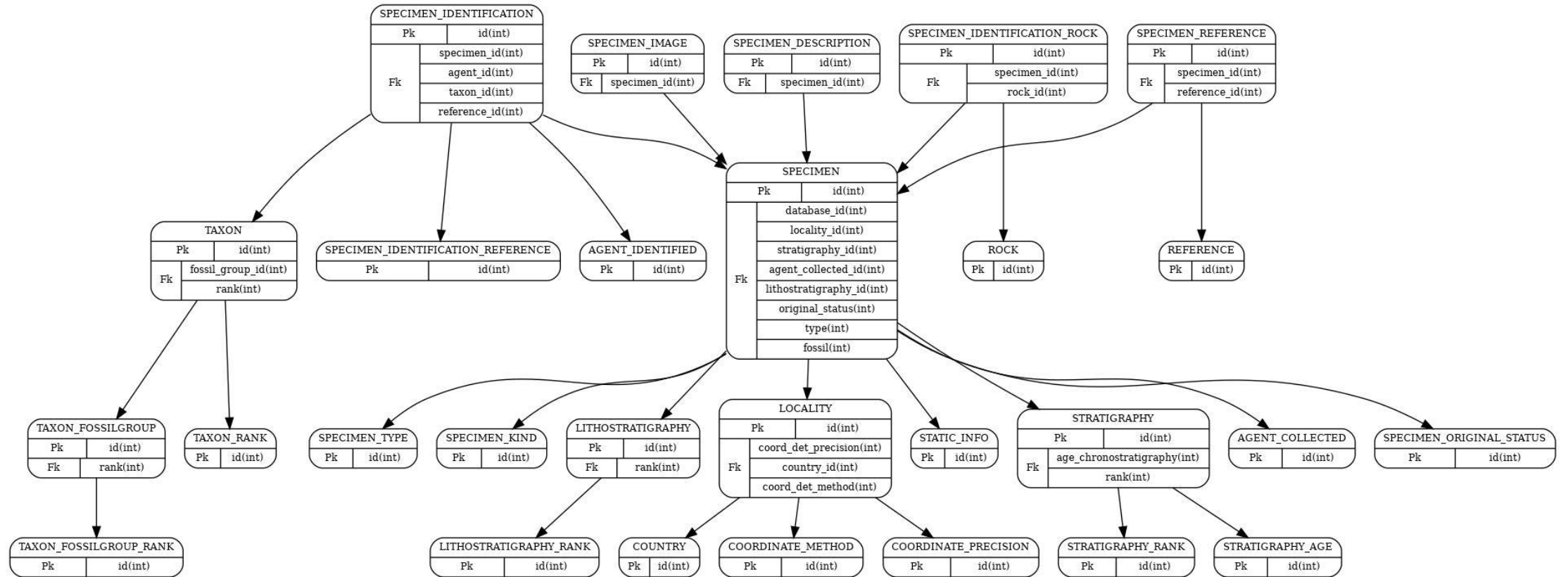
- GeoCAsE - Geoscience Collection Access Service
  - To provide easy access to data on Earth Science specimens across multiple institutions and countries
  - "Sister portal" of BioCAsE, similar to GBIF
  - Development of standards and software started in 2005
  - Data providers joined around 2010
  - Portal upgraded in ~2016
- ABCD + EFG data exchange standard
  - **ABCD** – Access to Biological Collection Data
  - **EFG** – Extension For Geosciences
  - >1800 concepts that can be mapped
  - <https://github.com/tdwg/efg>



The screenshot shows the GeoCAsE website homepage. The browser address bar displays "geocase.eu/project". The page has a dark blue header with the GeoCAsE logo and the text "GeoCAsE Geosciences Collection Access Service". A navigation menu includes links for HOME, DATA ACCESS, JOIN THE NETWORK, TUTORIAL, ABOUT THE PROJECT, ABOUT EFG, PARTNERS, CONTACT, LINKS, and IMPRINT. Below the header is a large image of a museum gallery with skeletons. The main content area includes sections for "Access collection data online", "Synthesys", "Our Part", "Past Events", and "ActivityD".

<http://geocase.eu>

# Mapping local database to ABCDEFG schema



# GeoCAsE 2.0 - the current state

- Issues with GeoCAsE 1.0:
  - A small number of data providers
  - Partly insufficient functionality
- Initiative of the CETAF Earth Sciences Group
  - and within that: GeoCAsE Advisory Board
- Progress
  - First steps in late 2019
  - Defined MVPs
  - Paid software developer time since September 2020 (TalTech)
  - MfN Berlin joined late October 2020
- **MVP 1 (2020)**
  - MVP - minimum viable product
  - Search view
  - Detail view (specimen view)
  - Basic REST API
  - Media cache
  - Review of static pages
  - Replace the old portal in Dec 2020
- **Official launch January 2021**

# GeoCAsE 2.0 - what is ahead?

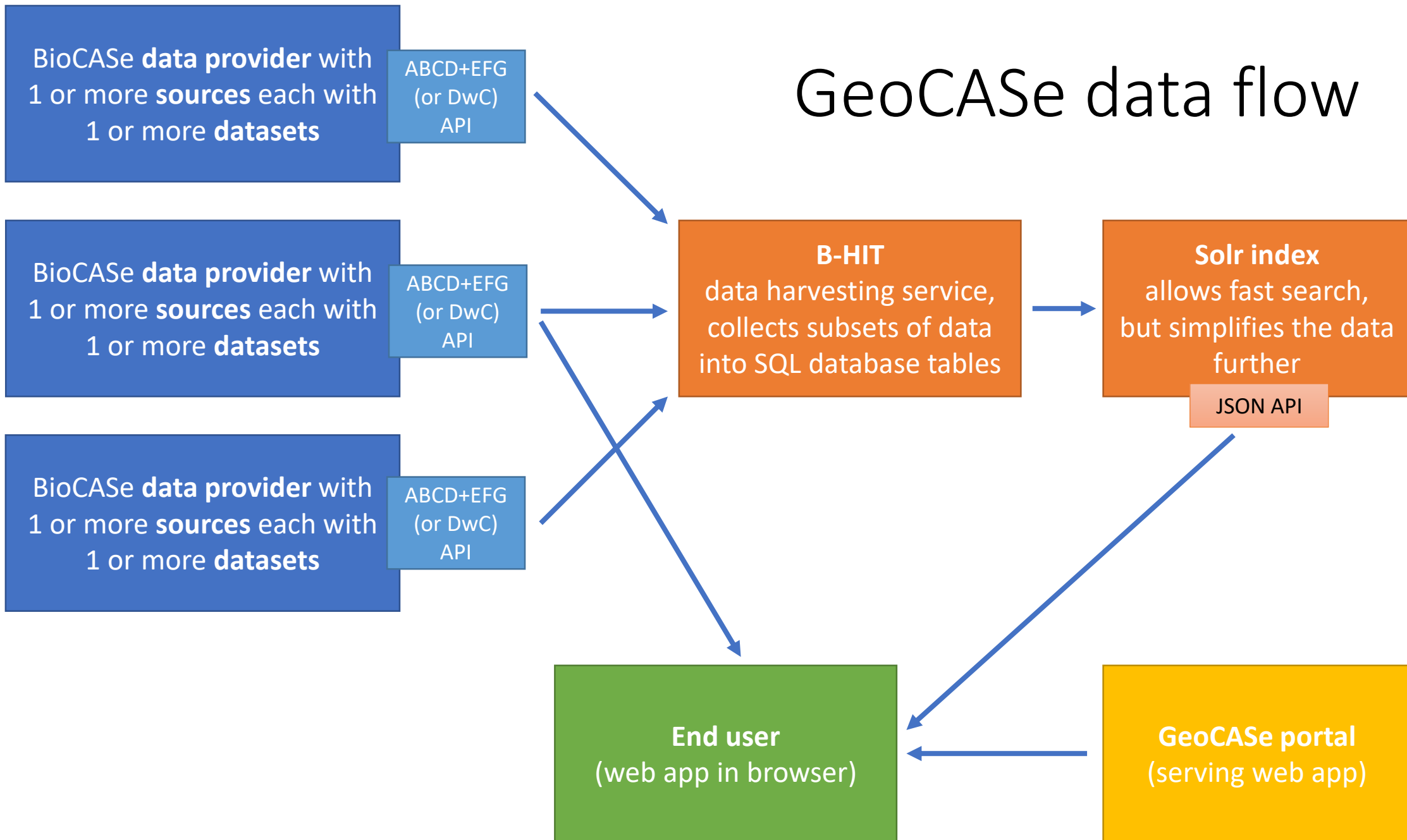
- **MVP 2 (2021)**

- Harmonised fields
  - i.e. unified terms, like country names
- Data enrichment
  - linking with external data sources: MinDat, Global stratigraphy, PBDB, GBIF
- Hierarchical queries
- Map services (including map search)
- Improved REST API
- Data downloads
- Alternative data ingest
  
- New providers + local data refinement and improved ABCD-EFG mappings

- **Beyond 2021**

- Integration into DiSSCo infrastructure
  - DiSSCo = **Distributed System of Scientific Collections**
  - A new EU ESFRI Research Infrastructure
  - <https://www.dissco.eu>
- Stable identifiers
- DOI citable datasets
- GBIF-like functionality
  
- Hopefully, at some point, being part of GeoCAsE will be as natural as it is now providing data to GBIF

# GeoCAsE data flow



# New members to GeoCASE most welcome!

- **Special thanks are due to:**

- Johanna Eder, Naturkunde Museum Stuttgart (SMNS), CETAF ESG
- Falko Glöckler, Museum für Naturkunde, Berlin (MfN)
- Software developers in Tallinn and Berlin: Enar, Jasper and Alex

- **Contact:**

- Olle Hints: [olle.hints@taltech.ee](mailto:olle.hints@taltech.ee)
- Falko Glöckler: [Falko.Gloeckler@mfn.berlin](mailto:Falko.Gloeckler@mfn.berlin)
- Rachel Walcott, Chair of CETAF ESG: [R.Walcott@nms.ac.uk](mailto:R.Walcott@nms.ac.uk)

- **Some links:**

- GeoCASE 1: <http://geocase.eu>
- About ABCD+EFG: <https://www.tdwg.org/community/esp/efg>
- GeoCASE 2 test portal: <https://geocase.geocollections.info>
- GeoCASE 2 API: <https://geocase-api.geocollections.info>
- GeoCASE 2 GitHub pages: <https://github.com/geocollections/geocase-ui>



GeoCAsE 2.0 x Swagger UI x +

geocase-api.geocollections.info/api-docs/

## GeoCAsE API 1.0.0 QA S3

This is a GeoCAsE API mainly used by [GeoCAsE web application](#).

[Olie Hints - Website](#)  
[Send email to Olie Hints](#)  
Apache 2.0

**Servers**

{scheme}://{subdomain}.geocollections.info/{basePath} - Production server ▾

Computed URL: <https://geocase-api.geocollections.info/v1>

**Server variables**

scheme  ▾

subdomain  ▾

basePath  ▾

**default** /v1 - main and /v2 - test ▾

- GET** `/solr` Returns specimens using default Apache Solr response
- GET** `/repeat` Uses provider url to get specimen detailed information directly
- GET** `/mock` Returns mock data



**thumbnail-service** Thumbnail-service aka image server to generate thumbnails of images from various domains. ▾



- GET** `/thumbnail-service/` Lists all the endpoints available.
- GET** `/thumbnail-service/thumbnails` Lists all cached thumbnails in a json array.
- GET** `/thumbnail-service/thumbnail/{url}` Return a cached thumbnail.
- GET** `/thumbnail-service/thumbnail/delete/{url}` Delete a cached thumbnail.

GeoCAsE 2 API: <https://geocase-api.geocollections.info>


GeoCAsE 2.0 SEARCH ABOUT ACCESS PARTNERS RESOURCES

# GeoCAsE 2.0 The Earth Science Collections Portal


Find quickly...  

 This is GeoCAsE 2.0 prototype interface. It has incomplete functionality and data, and is intended for testing purposes only. This box will be replaced by brief introduction about GeoCAsE. 


Total Records <b>1,128,949</b>	Number of Institutions <b>9</b>	Countries with data <b>161</b>
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**FOSSILS**



**MINERALS**






**ROCKS**



**METEORITES**

2020 | GeoCAsE: The Earth Science Collections Portal  
GeoCAsE 2.0 is collaborative effort of the [CETAF Earth Sciences Group](#).  
Data by [partner institutions](#) | Portal software created and hosted by [TalTech](#) and [LMN](#).

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GeoCAsE 2 test portal: <https://geocase.geocollections.info>

GeoCASE 2.0 SEARCH ABOUT ACCESS PARTNERS RESOURCES

geocase.geocollections.info/search?q=fluorite&country="Germany"&providercountry="Estonia"&has\_image=true

75 records found

TABLE IMAGES MAP

Collection	Object ID	Group	Name	Country	Locality	Stratigraphy	Record URI	Image
TUG	175-23		Fluorite	Germany	Zinnwald, Altenberg			
TUG	1608-3992		Fluorite	Germany	Badenweiler			
GIT	757-3321		Fluorite	Germany	Zinnwald, Altenberg			
GIT	757-3322		Fluorite	Germany	Zinnwald, Altenberg			
GIT	757-3382		Fluorite	Germany	Freiberg			
GIT	757-3405		Fluorite	Germany	Freiberg			
TUG	155-124		Fluorite	Germany	Oberkirch			
TUG	1777-57		Fluorite	Germany	Altenberg, Erzgebirge			
TUG	1777-69		Fluorite	Germany	Saxony			
TUG	1608-5690		Fluorite	Germany	Wölsendorf, Oberpfalz			
TUG	1608-5730		Fluorite	Germany	Wölsendorf, Oberpfalz			
TUG	1608-5353		Fluorite	Germany	Clara mine, Wolfach			
TUG	136-56		Fluorite	Germany	Schwarzenberg, Saxony			
TUG	136-55		Fluorite	Germany	Freiberg			
TUG	142-94		Fluorite	Germany	Ehrenfriedersdorf, Ore Mountains			
TUG	142-93		Fluorite	Germany	Ehrenfriedersdorf, Ore Mountains			
TUG	1608-6856		Fluorite	Germany	Rottleberode, Harz			
TUG	1608-6716		Fluorite	Germany	Sachsen			
TUG	147-196		Fluorite	Germany	Zinnwald, Altenberg			
TUG	1608-3918		Fluorite	Germany	Beihilfe mine, Freiberg			
TUG	1608-7002		Fluorite	Germany	Wölsendorf, Oberpfalz			
TUG	1608-6888		Fluorite	Germany	Schönau			
TUG	1608-6889		Fluorite	Germany	Wölsendorf, Oberpfalz			
TUG	135-279		Fluorite	Germany	Strassberg, Harzgerode			
TUG	135-275		Fluorite	Germany	Wölsendorf, Oberpfalz			

Group contains: Group

Stratigraphy contains: Stratigraphy

Locality contains: Locality

Object ID contains: Object ID

SPECIMEN TYPE

GROUP

TYPE STATUS

COUNTRY

- Germany (75)
- Estonia (13)
- Russian Federation (11)
- Switzerland (6)
- + MORE

DATASET OWNER

PROVIDER

PROVIDER COUNTRY

- Estonia (75)
- Germany (43)
- Austria (0)

EXTRA OPTIONS

- Show only data with images
- Show only georeferenced data

RESET SEARCH

Paginate by 25 EXPORT

1 2 3

2020 | GeoCASE: The Earth Science Collections Portal  
 GeoCASE 2.0 is collaborative effort of the [CETAF Earth Sciences Group](#).  
 Data by [partner institutions](#) | [Portal software](#) created and hosted by [TalTech](#) and [MfN](#).

TAL TECH  
 MUSEUM FÜR NATURKUNDE  
 BERLIN

GeoCASE 2 test portal: <https://geocase.geocollections.info>

GeoCAsE 2.0

geocase.geocollections.info/search?q=fluorite&country="Germany"&providercountry="Estonia"&has\_image=true

SEARCH ABOUT ACCESS PARTNERS RESOURCES

Group contains  
Group

Stratigraphy contains  
Stratigraphy

Locality contains  
Locality

Object ID contains  
Object ID

SPECIMEN TYPE

GROUP

TYPE STATUS

COUNTRY 1

Germany (75)  
 Estonia (13)  
 Russian Federation (11)  
 Switzerland (6)  
+ MORE

DATASET OWNER

PROVIDER

PROVIDER COUNTRY 1

Estonia (75)  
 Germany (43)  
 Austria (0)


Show only data with images  
 Show only georeferenced data

EXTRA OPTIONS

RESET SEARCH

75 records found

TABLE IMAGES MAP



The image displays a search results page for GeoCAsE 2.0. The search criteria are 'fluorite' in 'Germany' from 'Estonia' with images. The results are shown in an 'IMAGES' view, displaying 18 individual photographs of fluorite specimens. The specimens exhibit a wide variety of colors, including shades of purple, blue, green, yellow, and brown, and different crystal habits such as prisms, clusters, and masses. The interface includes a left-hand sidebar with various filters and a top navigation bar.

GeoCAsE 2 test portal: <https://geocase.geocollections.info>

GeoCAsE 2.0

geocase.geocollections.info/search?q=fluorite&country="Germany"&providercountry="Estonia"&has\_image=true&paginate\_by=100

SEARCH ABOUT ACCESS PARTNERS RESOURCES

Group contains  
Stratigraphy contains  
Locality contains  
Object ID contains

SPECIMEN TYPE  
GROUP  
TYPE STATUS  
COUNTRY

Germany (75)  
 Estonia (13)  
 Russian Federation (11)  
 Switzerland (6)  
+ MORE

DATASET OWNER  
PROVIDER  
PROVIDER COUNTRY

Estonia (75)  
 Germany (43)  
 Austria (0)

Show only data with images  
 Show only georeferenced data

EXTRA OPTIONS  
RESET SEARCH

75 records found

TABLE IMAGES MAP

50 km

Paginate by 100 EXPORT


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Lam Natur  
MUSEUM FÜR  
NATURKUNDE

GeoCAsE 2 test portal: <https://geocase.geocollections.info>


GeoCASE 2.0 SEARCH ABOUT ACCESS PARTNERS fluorite RESOURCES

← Mineral - TUG 1608-5353  
**Fluorite**  
 Identification: **Chalcedony**



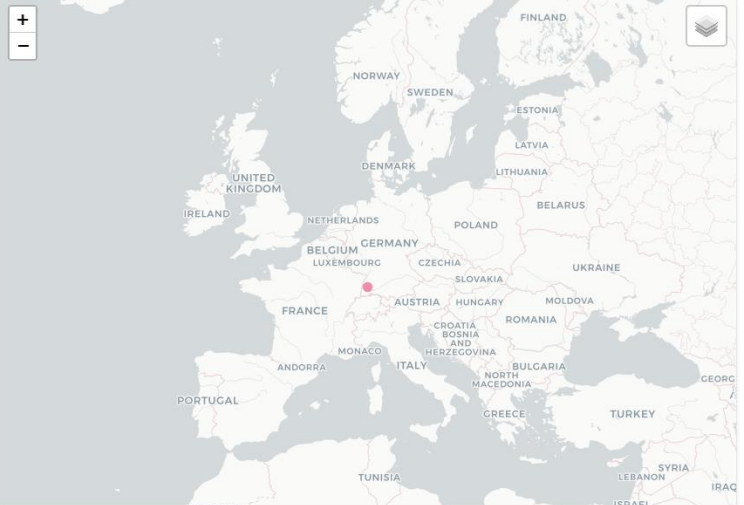
Collection	TUG
Object ID	1608-5353
Country	Germany
Locality	Clara mine, Wolfach
Latitude	48.383348
Longitude	8.246467
Mindat	<a href="https://www.mindat.org/min-1576.html">https://www.mindat.org/min-1576.html</a>
Record URI	<a href="https://geocollections.info/specimen/271770">https://geocollections.info/specimen/271770</a>
Related resource	<a href="https://geocollections.info/file/103243">https://geocollections.info/file/103243</a>

Institution	TUG geological collections
Dataset owner	University of Tartu, Natural History Museum
Contact person	Mare Isakar
Contact e-mail	<a href="mailto:mare.isakar@ut.ee">mare.isakar@ut.ee</a>
Contact phone	+3727375839
Contact address	Vanemuise 46, Tartu, Estonia
Data source country	Estonia
Copyright	© University of Tartu, Natural History Museum
Terms of use	Free for non-commercial usage, provided that University of Tartu, Natural History Museum, and <a href="https://geocollections.info">https://geocollections.info</a> are acknowledged.
Disclaimer	We make efforts to ensure that the data we serve are accurate. However, quality and completeness of every data record cannot be guaranteed. Use the data at your own responsibility.
Acknowledgement	National geological collection of Estonia: <a href="http://www.geocollections.info">www.geocollections.info</a> ; University of Tartu, Natural History Museum
Last Edited	2016-06-06
Last harvested	2020-11-17
Provider name	SARV
GeoCASE ID	50005



TUG 1608-5353

Date: 2016-06-28  
[Link to image](#)



<https://files.geocollections.info/medium/df/27/df2763f38c3-4e5e-97c3-3a93a57c6fdf.jpg>

GeoCASE 2 test portal: <https://geocase.geocollections.info>