GBIF publication of biodiversity monitoring data in Germany with two example datasets from SNSB

Tanja Weibulat

Expert Workshop on GBIF Data Publication in Africa, 11.10.2023

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Germany as GBIF Voting participant

Get data How-to Tools Community About

Germany

A GBIF Voting participant from Europe and Central Asia

Names of countries and areas are based on the ISO 3166-1 standard

GBIF GBIF.DE

SUMMARY DATA ABOUT DATA PUBLISHING PARTICIPATION ALIEN SPECIES MORE... ACTIVITY REPORT

Member status: Voting

GBIF participant since: 2001

GBIF region: Europe and Central Asia

Head of delegation: Christoph Häuser

Node name: GBIF Germany

Node established: 2001

Website: http://www.gbif.de/

Participant node manager: Dagmar Triebel

https://www.gbif.org/country/DE/participation

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GBIF Germany – Network of Subnodes at Natural Science Collections (NSCs)

- 6 Organisations with 8 subnodes, thematic networks and data centers

http://www.gbif.de/homeenglish

Bo

DSMZ

FORSCHUNGS museum KOENIG

MUSEUM FÜR NATURKUNDE BERLIN

SENCKENBERG world of biodiversity

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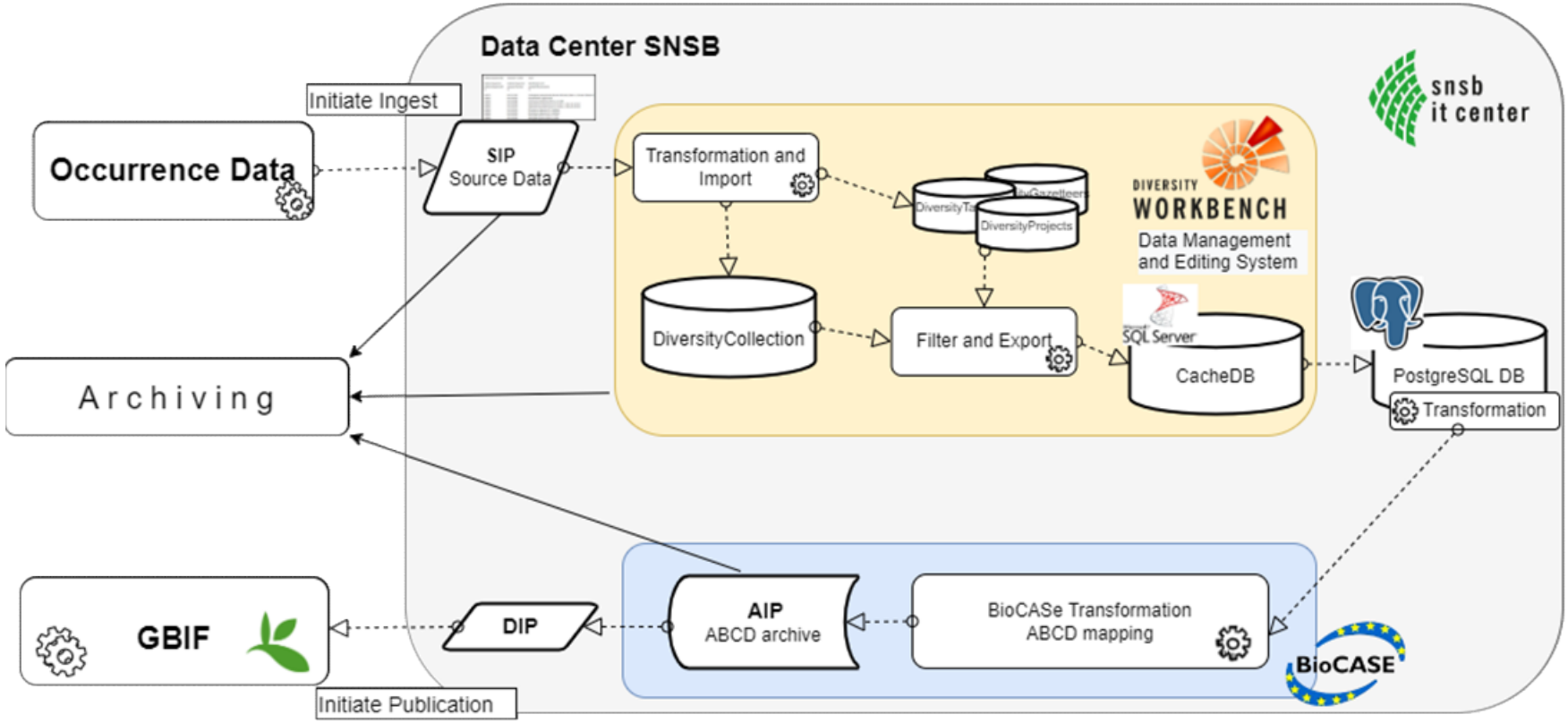
Exemplary data pipeline with FAIR occurrence data for GBIF



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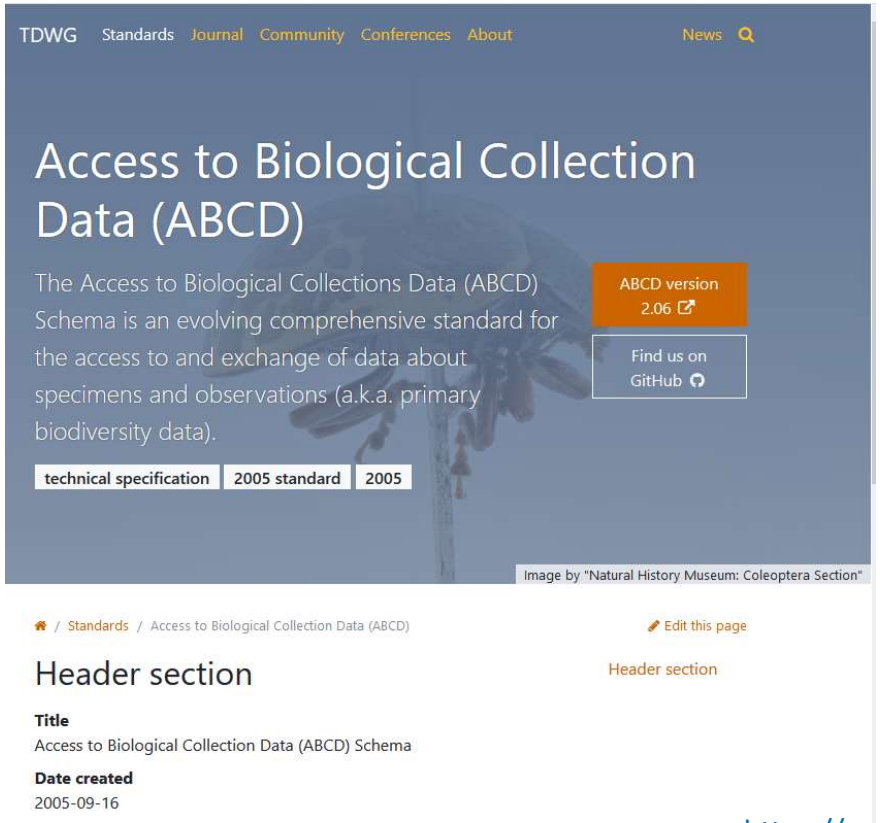
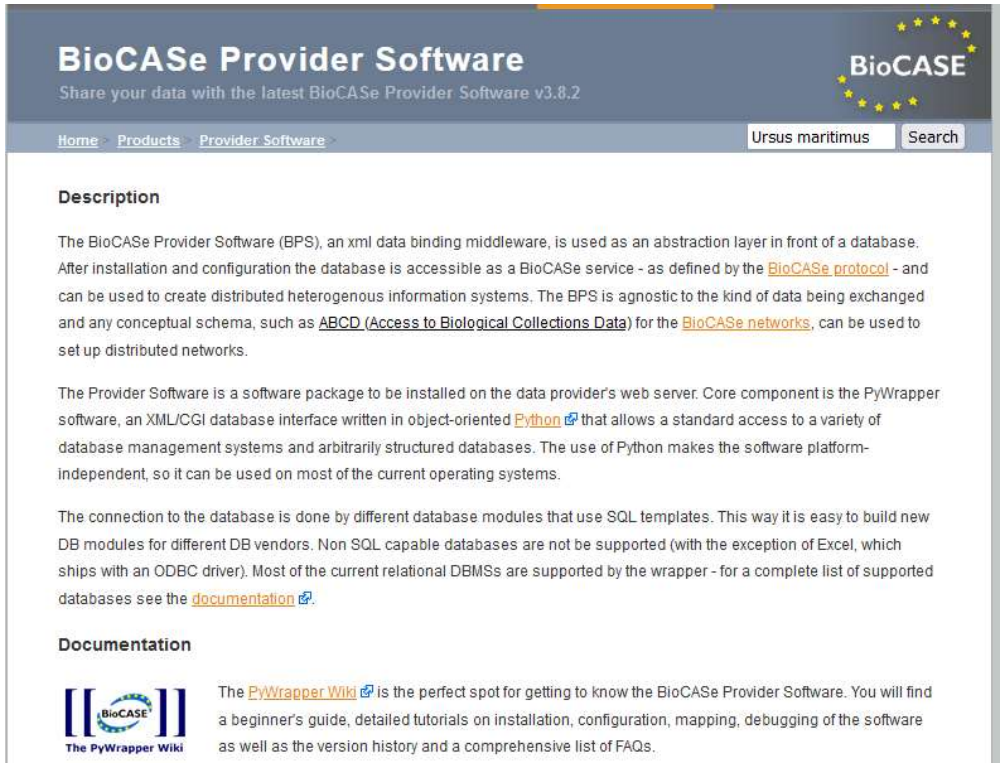
NSCs: Agreed Standard elements and provider software for FAIR data





https://www.biocase.org/products/provider_software/

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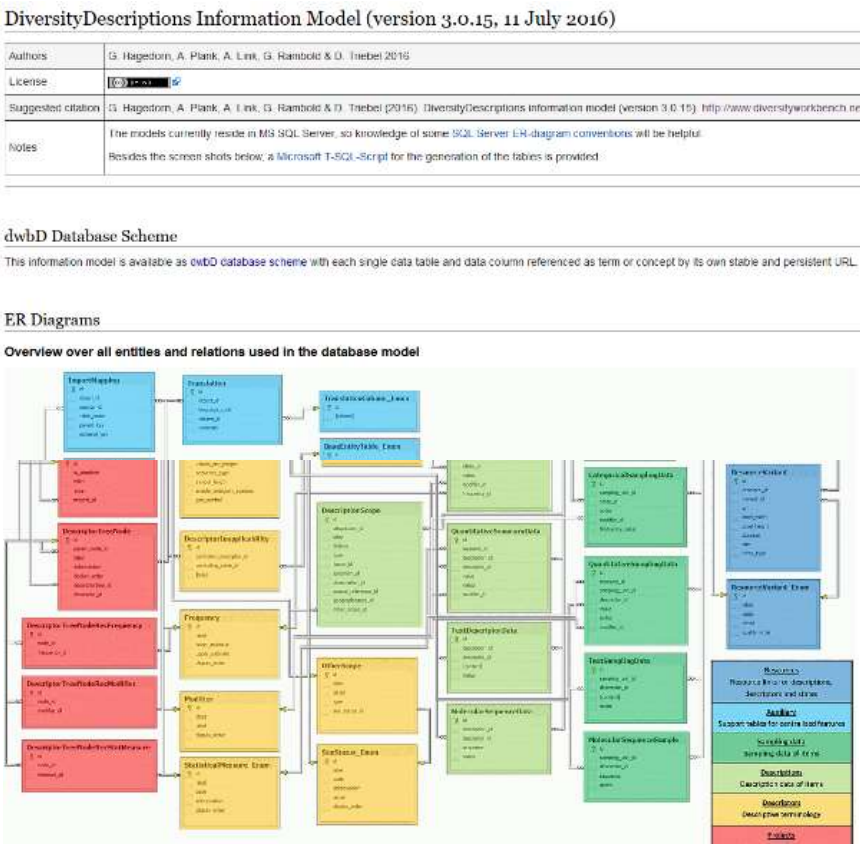
DWB – a set of software tools and db engines



DiversityDescriptions Information Model (version 3.0.15, 11 July 2016)

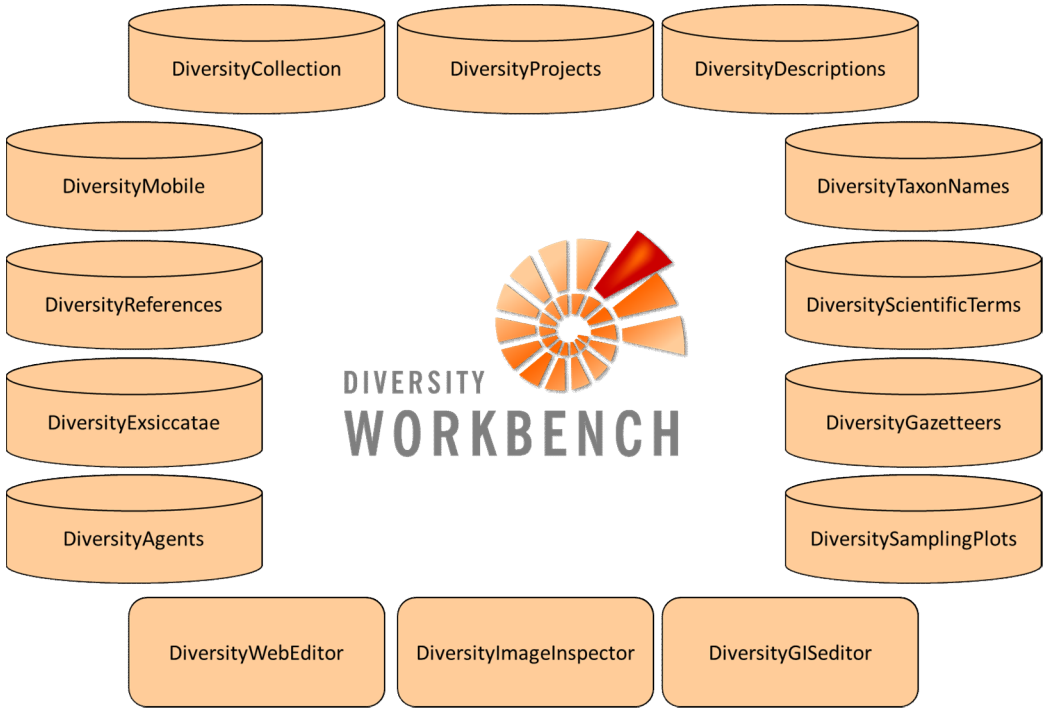
Authors	G. Hagedorn, A. Plank, A. Link, G. Rambold & D. Triebel 2016
License	
Suggested citation	G. Hagedorn, A. Plank, A. Link, G. Rambold & D. Triebel (2016). DiversityDescriptions information model (version 3.0.15). http://www.diversityworkbench.net
Notes	The models currently reside in MS SQL Server, so knowledge of some SQL Server ER-diagram conventions will be helpful. Besides the screen shots below, a Microsoft T-SQL-Script for the generation of the tables is provided.

dwbD Database Scheme

This information model is available as dwbD database scheme with each single data table and data column referenced as term or concept by its own stable and persistent URL.

ER Diagrams

Overview over all entities and relations used in the database model



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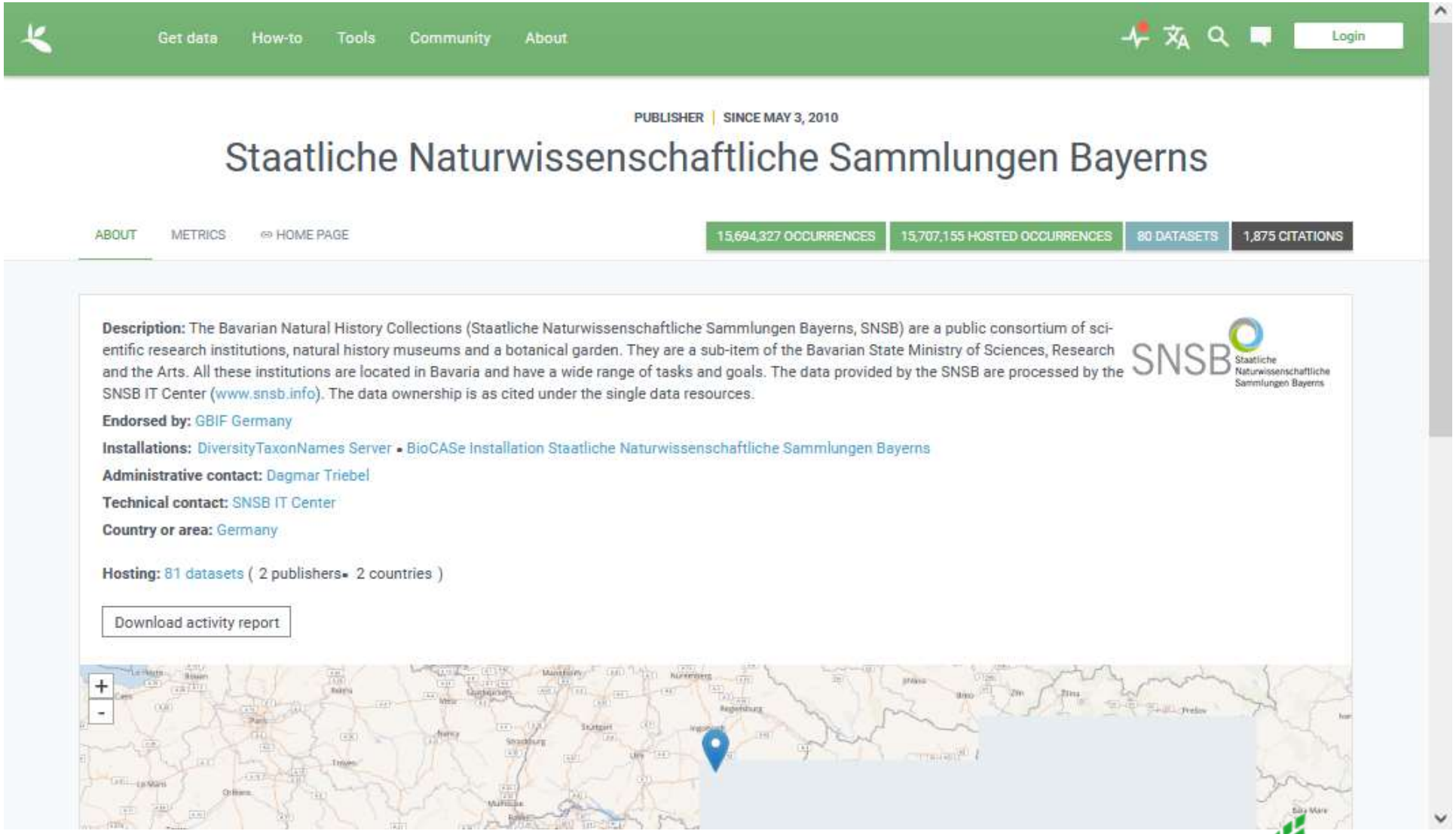
SNSB as GBIF data publisher



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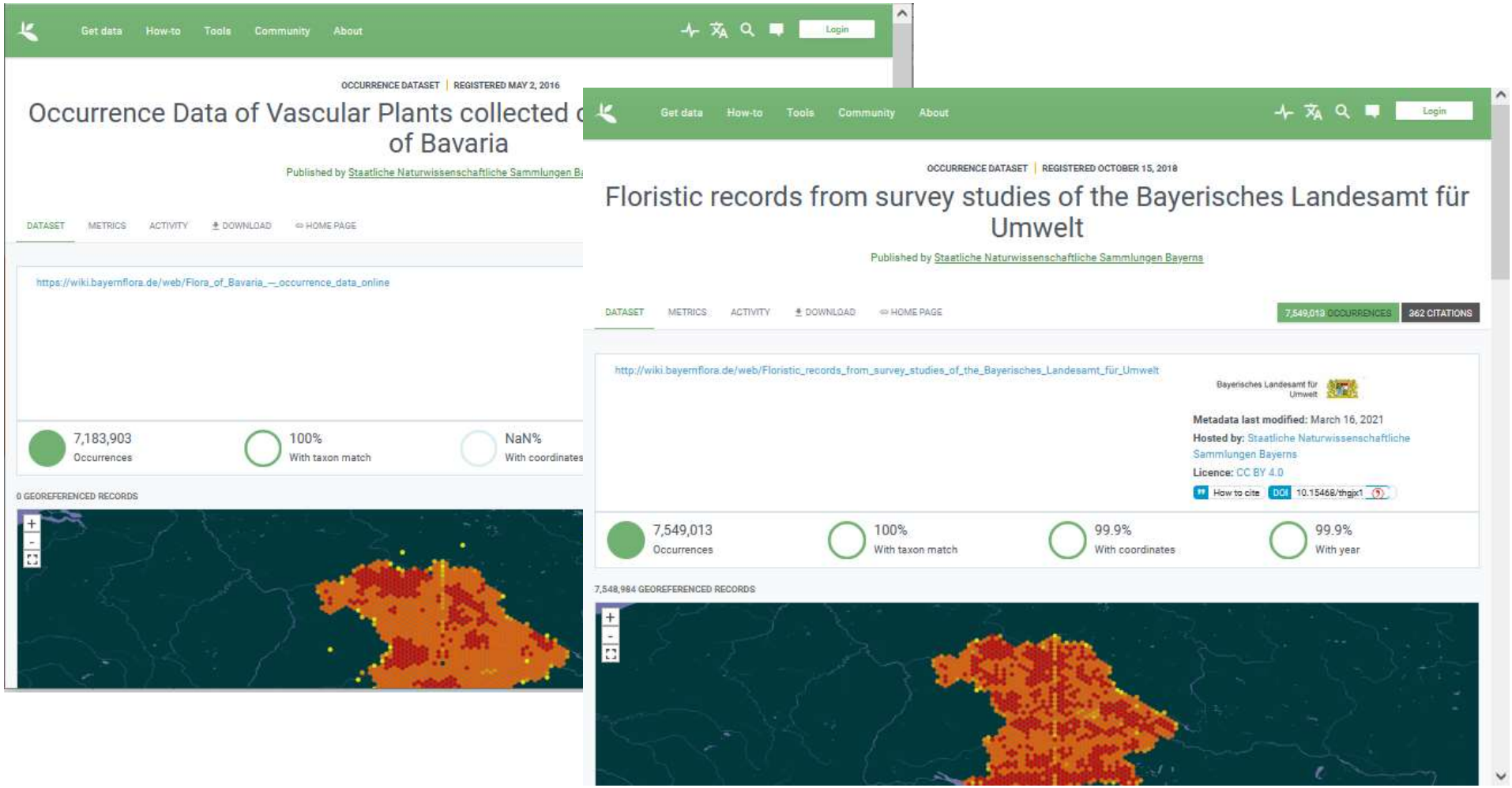
Two examples for monitoring datasets in GBIF



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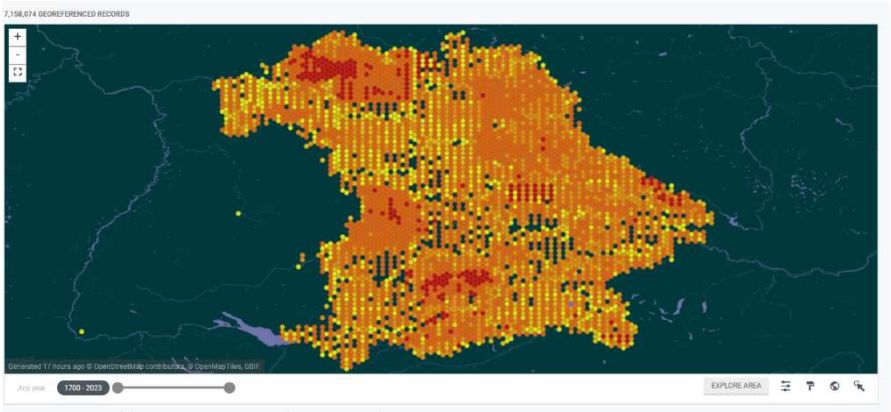
Flora of Bavaria: Two dynamic datasets (GBIF occurrence records “plot”-based)

BFL



https://www.gbif.org/dataset/64dabd3c-4f34-4520-b9dd-d227a0bf1582

7.183.903 records

„Hotspots“

- specialists
- mapping for local flora projects

LfU

https://www.gbif.org/dataset/8ea4250e-0ff0-44f8-812e-bffc3b9ba2a4

7.549.013 records

„Hotspots“

- biotopes (e.g. „Alpenbiotopkartierung“)

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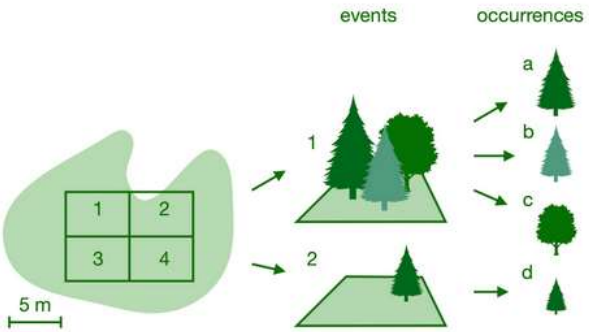
GBIF Classes of datasets

- Resource datasets (metadata-only datasets)
- Checklists
- Occurrence datasets
- Sampling events datasets



Occurrence file

occurrenceID	scientificName	EventID	basisOfRecord	...
a	species A	1	humanObservation	
b	species B	1	humanObservation	
c	species C	1	humanObservation	
d	species A	2	humanObservation	
...				

Event file

EventID	EventDate	samplingProtocol	sampleSizeValue	sampleSizeUnit	...
1	2018-08-03	ad hoc observations	25	square metre	
2	2018-08-03	ad hoc observations	25	square metre	
...					

https://data-blog.gbif.org/post/choose-dataset-type/

Thank you for your attention!

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