# SNSB as GBIF data publisher with DWB-BioCASe data publication pipelines







28.10.2022



Tanja Weibulat

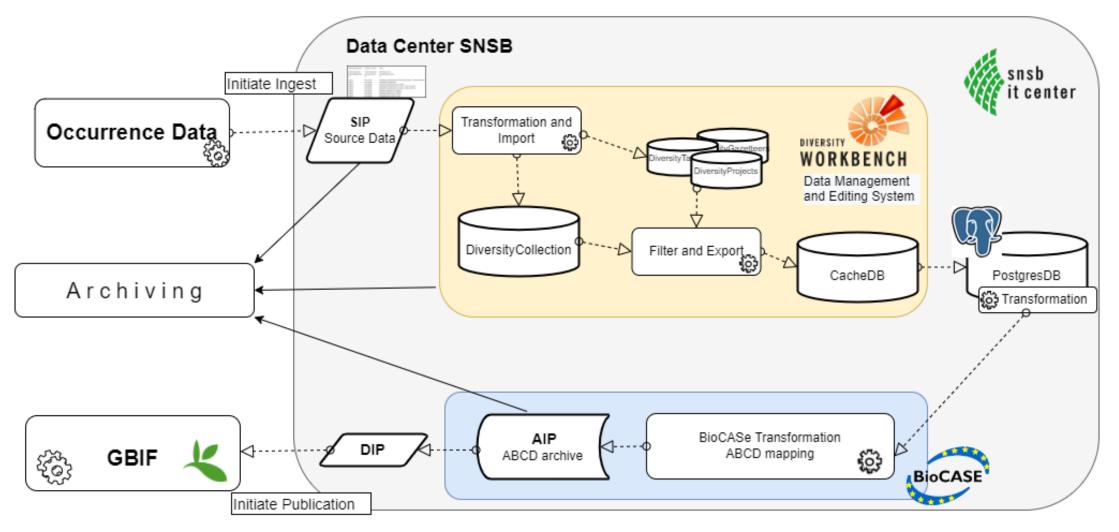


Sammlungen Baverns

Expert Worksh

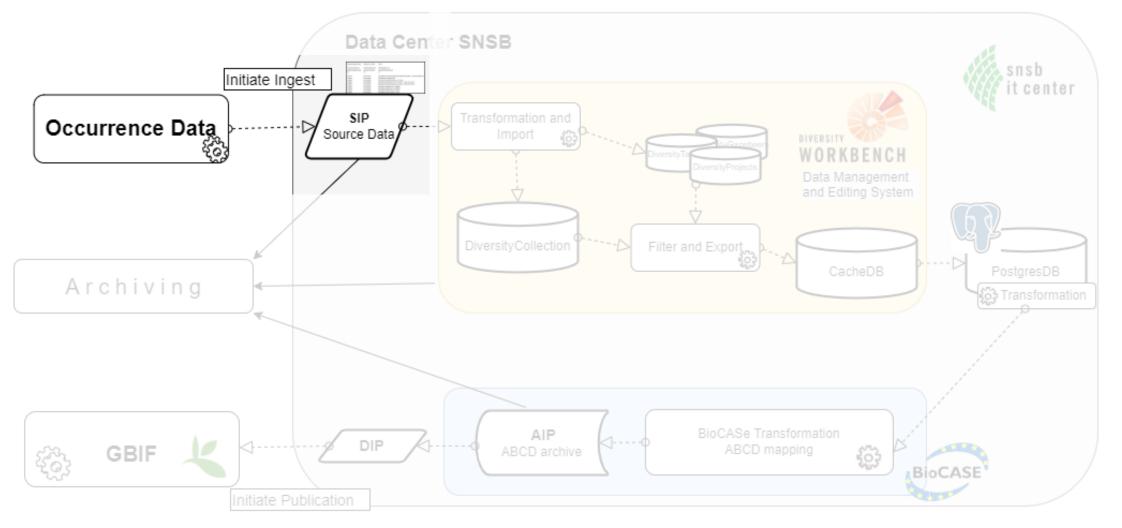
🗶 Get data How-to	Tools Community	About		-/= 🛪 Q		Login	
Staatliche N	Vaturwiss	PUBLISHER   SIN		mlungen Ba	yern	S	
ABOUT METRICS ∞ HOME PAGE	E		15,03	33,228 OCCURRENCES 79 DAT.		6 CITATIONS	
OCCURRENCE CHECKLIST SAMPLING EVENT METADATA				ALL OCCURRENCE CHECKLIST SAMP	PLING EVENT MET	TADATA	
Floristic records from survey studies of the Bayerisches Landesamt für Umwelt	Occurrence dataset			Taxon list of fungi and fungal-like org	janisms from Ger	rmany compiled by the DGf	M Checklist dataset
http://wiki.bayemflora.de/web/Floristic_records_from_survey_studies_of_the_Bayerisches_Landesamt_f %C3%BC_Umweit Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns [7.131.880 occurrences] 44 citations				http://www.diversitymobile.net/wiki/About_%2271 like_organisms_from_Germany_compiled_by_the_ Published by Staatliche Naturwissenschaftliche S 32.676 records	DGfM%22	_fungal-	
Occurrence Data of Vascular Plants collected or compiled for the Flora of Bavaria	Occurrence dataset			Taxon list of animals with German na	mes (worldwide)	compiled at the SMNS	Checklist dataset
http://wiki.bayemflora.de/web/Flora_of_Bavaria_%E2%94%80_occurrence_data_online Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns [7.005.170 occurrences] [158 citations]				http://www.diversitymobile.net /wiki/About_%22Taxon_list_of_animals_with_Gerr Published by Staatliche Naturwissenschaftliche S 18.220 records		wide%29_compiled_at_the_SMNS%	22
IBF Monitoring of Vascular Plants	Occurrence dataset			Taxon list of vascular plants from Bar	varia, Germany c	ompiled in the context of th	Checklist dataset
http://www.diversitymobile.net/wik/IBFplantscoll_About Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns 198.240 occurrences 127 citations The Fungal Collection at the Senckenberg Museum für Naturkunde Görlitz	Occurrence dataset			BFL project http://www.diversitymobile.net //wiki/About_%22Taxon_list_of_vascular_plants_fr Published by Staatliche Naturwissenschaftliche S 13.631 records		_compiled_in_the_context_of_the_Bł	-L_project%22
http://www.gbif-mycology.de/DatabaseClients/GLMcoll/About.cfm				Taxon list of Hymenoptera from Gern	nany compiled in	the context of the GBOL pr	roject Checklist dataset
Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns 158.033 occurrences 215 citations				http://www.diversitymobile.net /wiki/About_%22Taxon_list_of_Hymenoptera_from	n_Germany_compiled_i		
Fungus Collections at Staatliches Museum für Naturkunde Karlsruhe (Herbarium KR)	Occurrence dataset			Published by Staatliche Naturwissenschaftliche S 11.471 records	ammlungen Bayerns		
http://www.smnk.de/en/collections/botany/fungi/ Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns   33.221 occurrences   263 citations	<b>\$</b> #{			Taxon list of Araneae from Germany ( http://www.diversitymobile.net /wiki/About_%22Taxon_list_of_Aranese_from_Get	rmany_compiled_in_the		
The Vascular Plant Collection at the Botanische Staatssammlung München	Occurrence dataset			Published by Staatliche Naturwissenschaftliche S 1.647 records	ammlungen Bayerns		
http://www.botanischestaatssammlung.de/DatabaseClients/BSMvplantscoll/About.html Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns				Taxon list of mosses from Germany of	compiled in the co	ontext of the GBOL project	Checklist dataset

# **Dataflow of occurrence data**



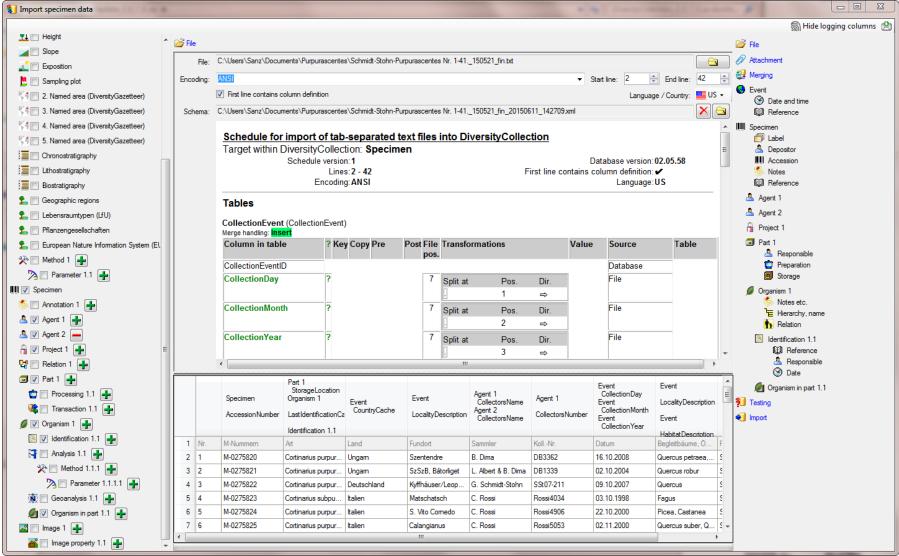


### Data Management System Diversity Workbench





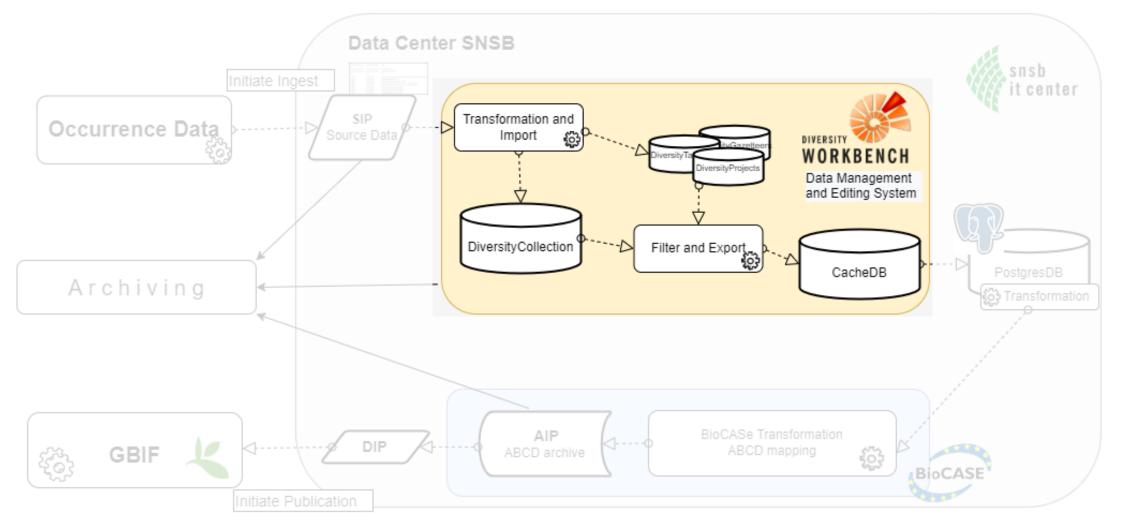
# **Diversity Workbench Import Wizard**







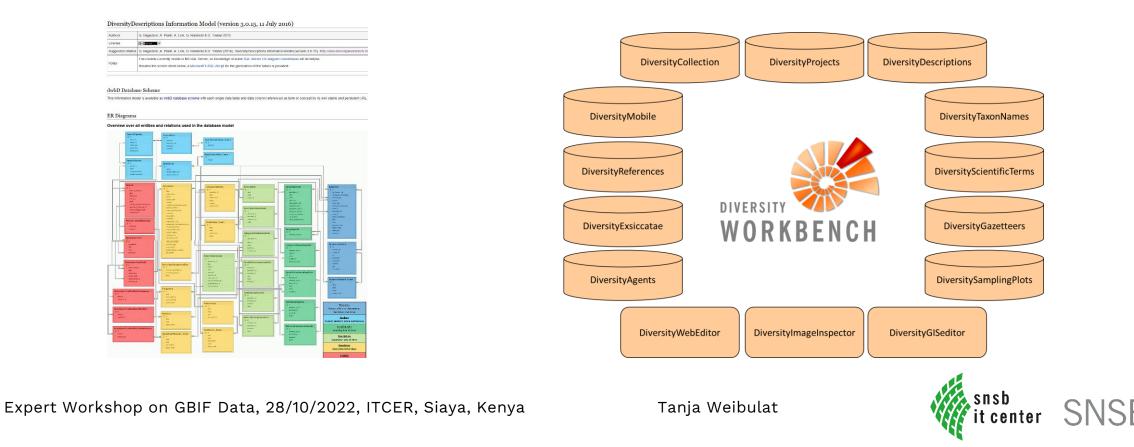
### Data Management System Diversity Workbench



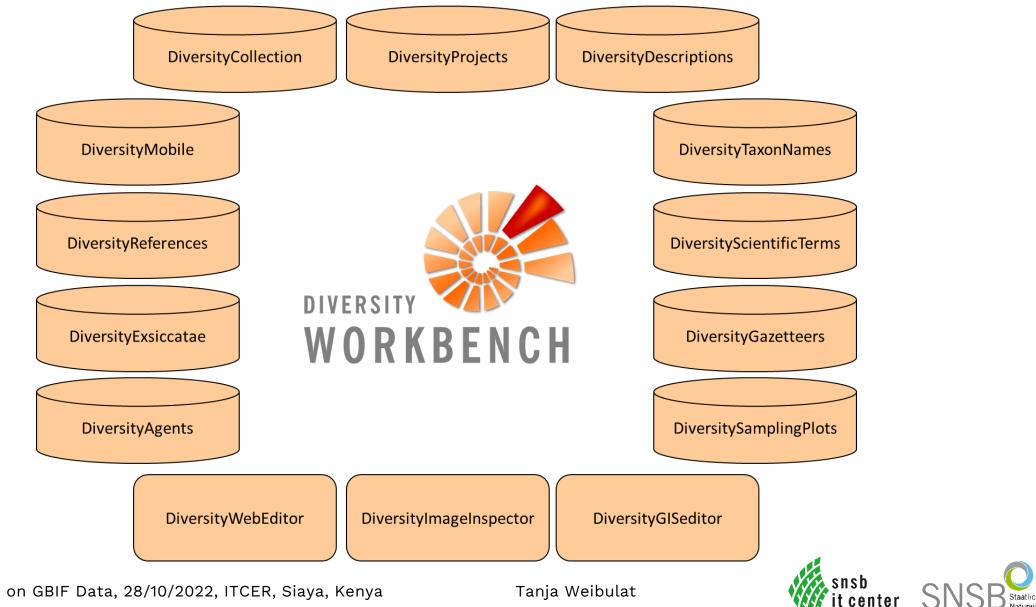


# DWB – a Set of Software Tools

- 11 SQL relational data bases for the management of research and collection data
- Software Implementation is mainly done at the SNSB
- Concept development / modelling in cooperation with other teams

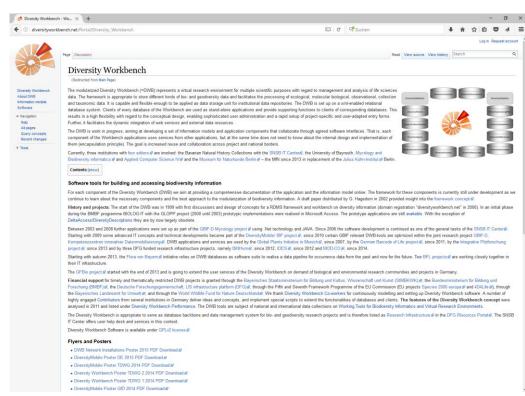


## **DWB – a Set of Software Tools**



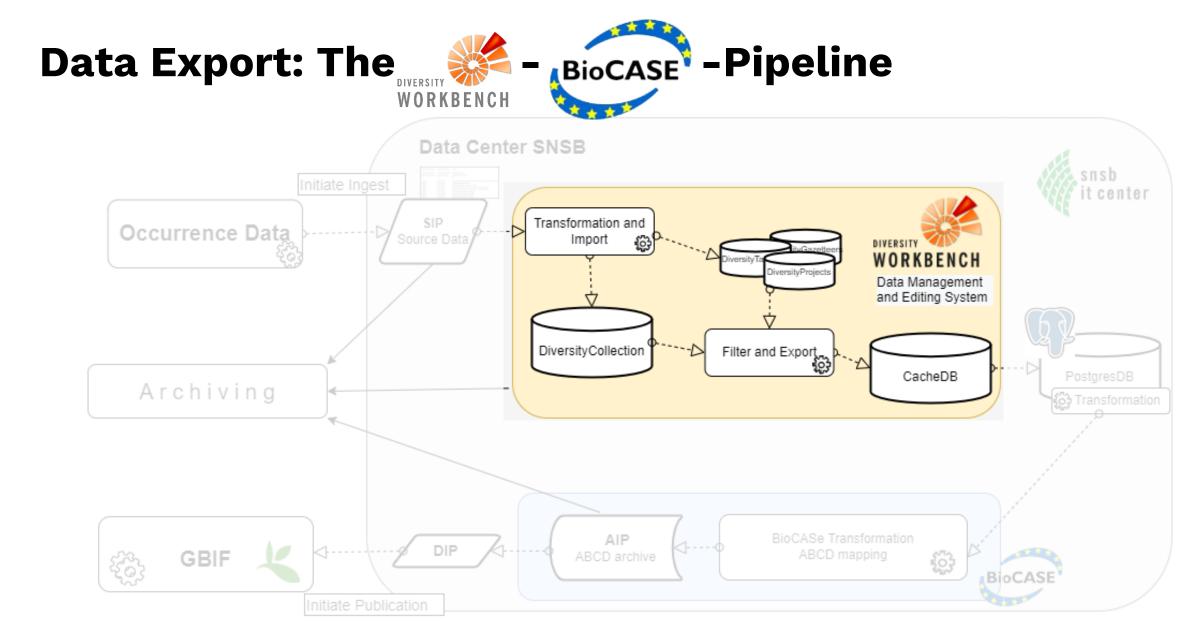
# DWB – Agile Software Development

- .... for more than 20 years
- Software is open access www.diversityworkbench.net
- Open source implementation with more than 2 Mio code lines
- Software design, data model and ER schema are innovativ and published open access
- Agile software development with test of software by more than 30 committed users
- Workshops since more than 15 years





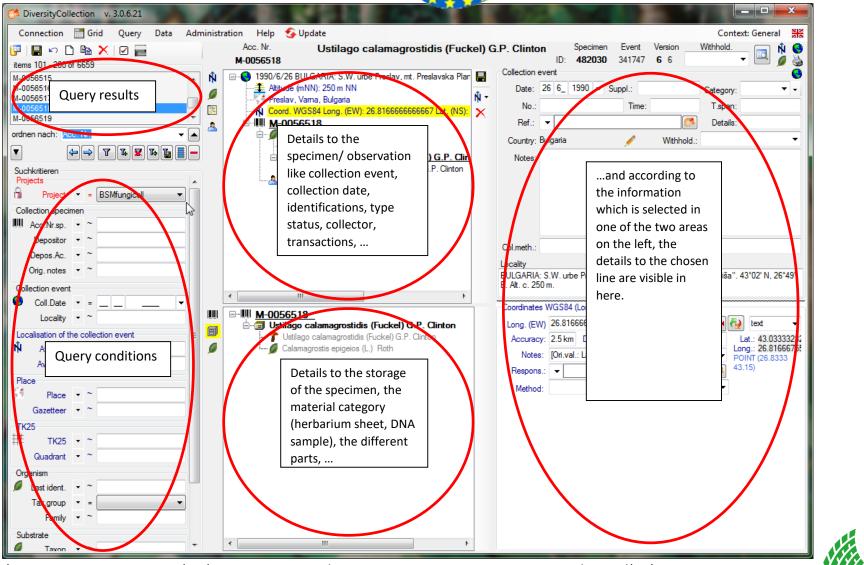






# Data Export: The

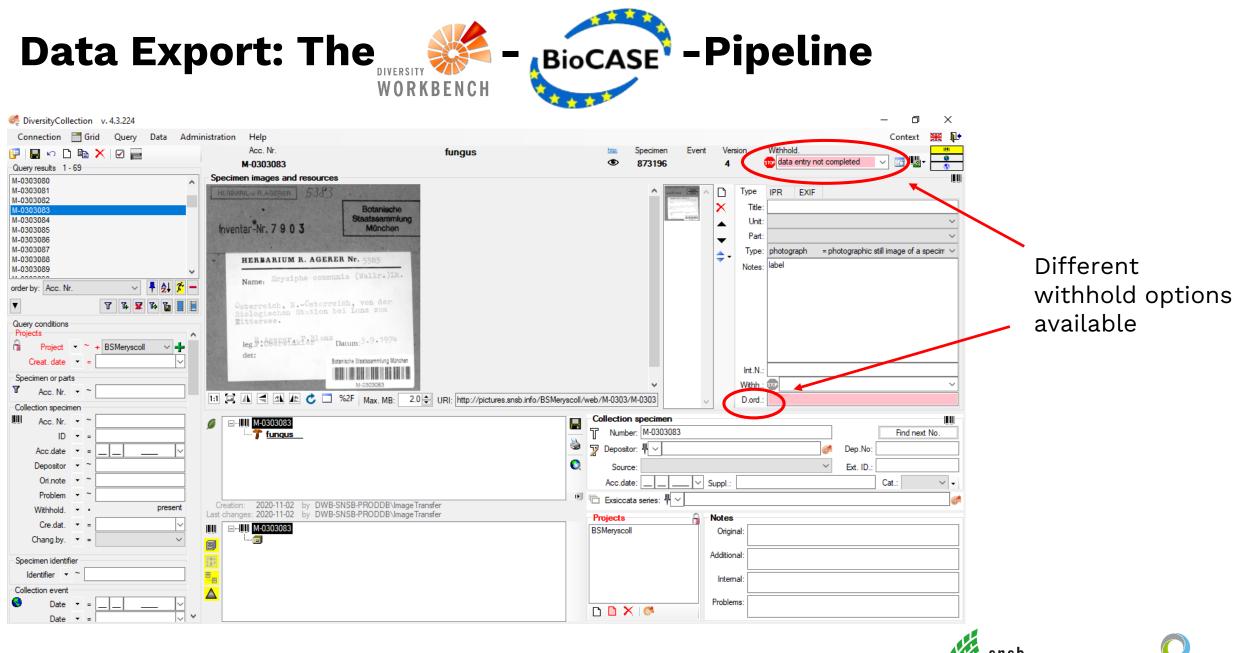




Expert Workshop on GBIF Data, 28/10/2022, ITCER, Siaya, Kenya

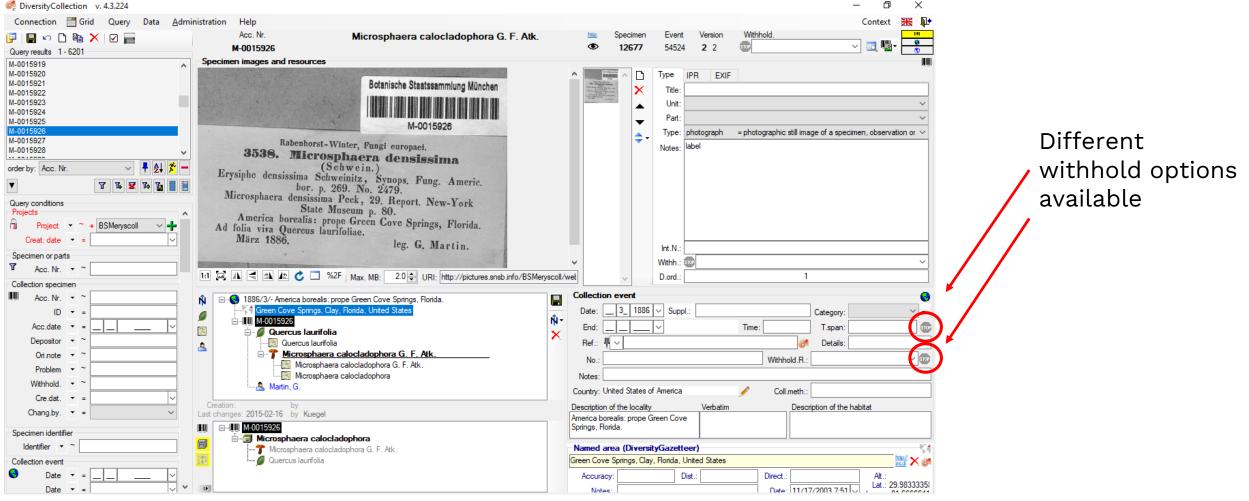
Tanja Weibulat









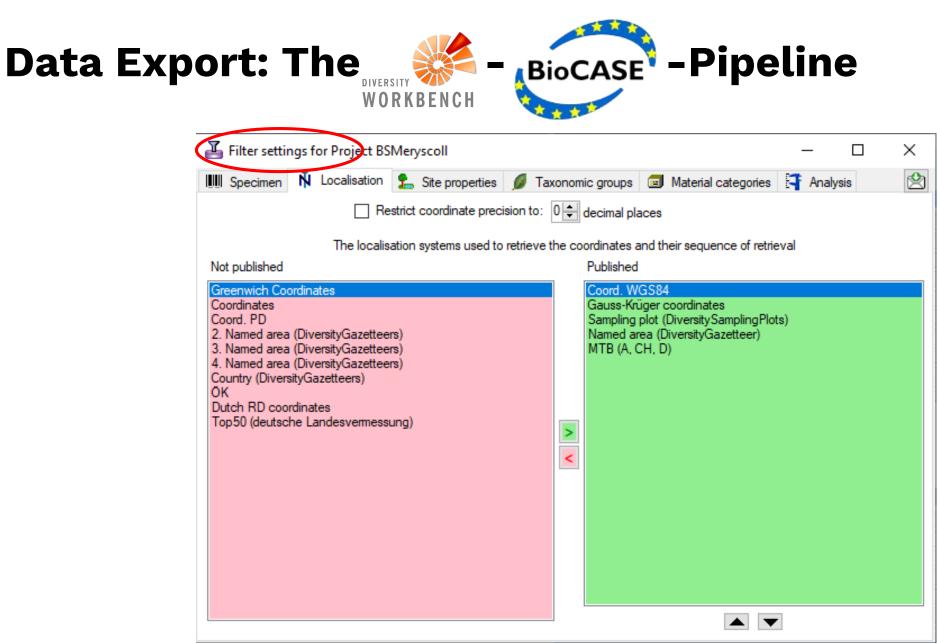






📩 Cache database												-		$\times$
🈏 Update, Sources	🔒 Projects 🚨 Anon	n. collectors	🛃 Protoc	ol ۶ Diagnostics	🥯 BioCASe 🔋 🚺	Old version						Transfer all data	<b>₩ - ∰</b>	l 🗟 🖄
Projects published via	the cache database and th	the current por	stgres datab	Jase		E 🕨 (	🕼 Div	versityCollectionCache_BSMe	eryscoll				Add p	oroject 🚽
DiversityCollection		/	▶ Diversi	sityCollectionCache01		P	Div Div	versityCollectionCache_BSM .153.18.210, 5432 as Weibu	eryscoll on lat	P	Packages			
BSMeryscoll 6201 datasets Last update: 2022-03-14 15:11:19		10 3 <b>d</b> oi	😿 613	) Tu We Th Fr Se 01:00:00 32 datasets st transfer: 22-06-22 06:30:54		[		Su 00:00:00           Image: Su 00:00:00			ABCD			^
	69 datasets withheld	<del>se</del> >	K 🔏 Ve	ersion 33	🌀 View content	4	8	× Version 24	🍕 View content		8 🚯			
								DiversityCollectionCache	_BIOTAlichencoll _BSMfungicoll _JMRCfungicoll _IBForthopteracoll _2 _BSMenyscoll _BSMfungicoll _BSPGpiscescoll		ABCD			
BSMfungicoll 14875 datasets Last update: 2022-04-06 17:22:20		0909 doi	<ul> <li></li></ul>	NOTHING PLANNED 36 datasets st transfer: 22-06-22 06:29:10 ersion 33	S View content		AT AT	Image: Second stable       Image: Second stabl	S View content	₩2	2 2			-
		<u> </u>				0	<u> </u>	ML <sup>2</sup>			0 -0			





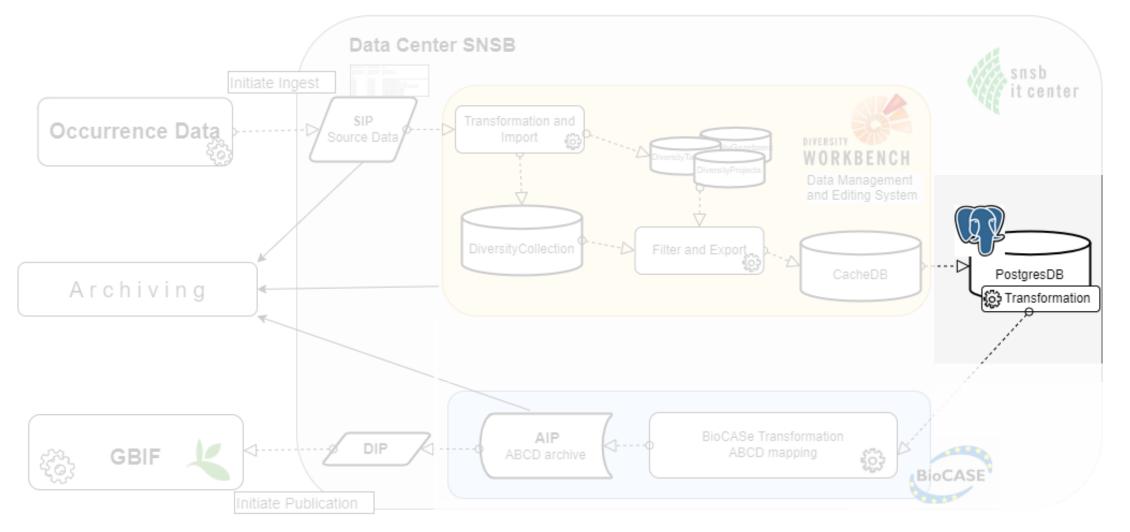


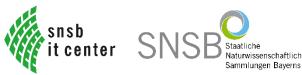


📩 Cache database												-		$\times$
🈏 Update, Sources	🔒 Projects 🚨 Anon	n. collectors	🛃 Protoc	ol ۶ Diagnostics	🥯 BioCASe 🔋 🚺	Old version						Transfer all data	<b>₩ - ∰</b>	l 🗟 🖄
Projects published via	the cache database and th	the current por	stgres datab	Jase		E 🕨 (	🕼 Div	versityCollectionCache_BSMe	eryscoll				Add p	oroject 🚽
DiversityCollection		/	▶ Diversi	sityCollectionCache01		P	Div Div	versityCollectionCache_BSM .153.18.210, 5432 as Weibu	eryscoll on lat	P	Packages			
BSMeryscoll 6201 datasets Last update: 2022-03-14 15:11:19		10 3 <b>d</b> oi	😿 613	) Tu We Th Fr Se 01:00:00 32 datasets st transfer: 22-06-22 06:30:54		[		Su 00:00:00           Image: Su 00:00           <			ABCD			^
	69 datasets withheld	<del>se</del> >	K 🔏 Ve	ersion 33	🌀 View content	4	8	× Version 24	🍕 View content		8 🚯			
								DiversityCollectionCache	_BIOTAlichencoll _BSMfungicoll _JMRCfungicoll _IBForthopteracoll _2 _BSMenyscoll _BSMfungicoll _BSPGpiscescoll		ABCD			
BSMfungicoll 14875 datasets Last update: 2022-04-06 17:22:20		0909 doi	<ul> <li></li></ul>	NOTHING PLANNED 36 datasets st transfer: 22-06-22 06:29:10 ersion 33	S View content		AT AT	Image: Symplectic Symplecti Symplecte Symplectic Symplectic Symplectic Symplectic Symplecti	S View content	₩2	2 2			-
		<u> </u>				0	<u> </u>	ML <sup>2</sup>			0 -0			

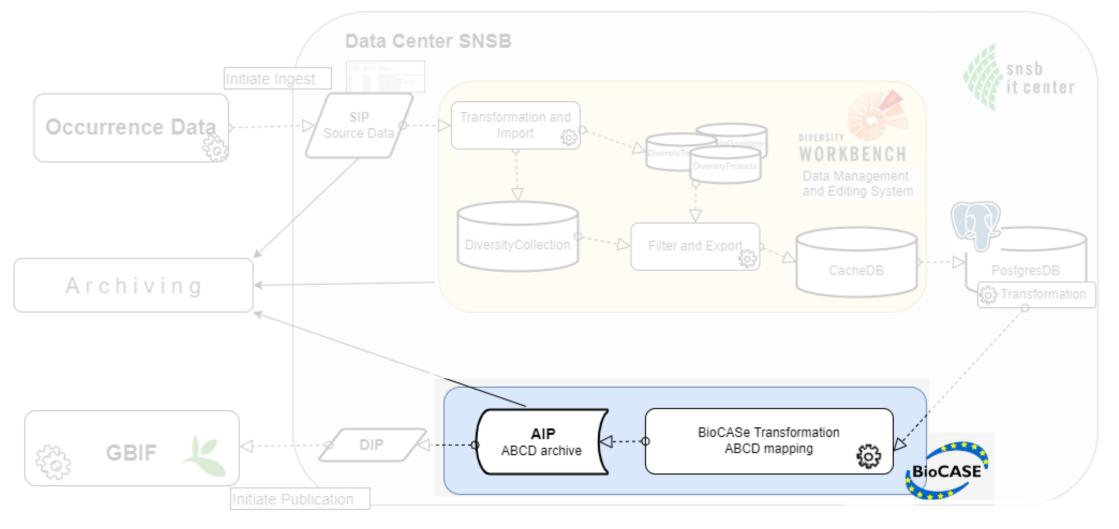


# **BioCASe Transformation / ABCD Mapping**





# **BioCASe Transformation / ABCD Mapping**





### **BioCASe Provider Software**

← → ⊂ ŵ	🖸 🔏 biocase.snsb.info/wrapper/configtool/mapping.cgi?dsa= 80% 🛛 \cdots 🖾 🏠 💷 🖹
BioCASe Co	onfiguration Tool - BSMfungicoll
Home   Overview   Settin	ngs   DB connection   DB structure   Archiving & Filtered export   QueryForms   Help   Report a Bug
Mapping - ABCD_ http://www.tdwg.org,	2.06.xml /schemas/abcd/2.06
Generated	2005-07-06 14:39:18.15 by PyWrapper v2.0.0
Modified	2020-07-02 10:27:37
<b>Record definition</b>	/DataSets/DataSet/Units/Unit
Root table alias	Unit 🗸
Static table aliases	5 Metadata
	Refresh Save Revert Test Mapping!
	or add new concepts by xpath identifier:
	ntacts Contact <sup>co</sup> dress <sup>©</sup> Mapping1: ContentContact.Address(text) <sup>©</sup> <sup>©</sup>
Ema	
Nan	ail  Apping1: ContentContact.Email(text)
Pho	Mapping1: ContentContact.Phone(text) 00
- Metadata - Descri - Re	p1: Metadata.DatasetGUID(text) presentation @language Mapping1: "en" Details Mapping1: Metadata.Description_Representation_Details(text) Mapping1: Metadata.Description_Representation_Title(text) WRI Mapping1: Metadata.Description_Representation_URI(text) Mapping1: Metadata.Description_Representation_Representation_Representation_RepresentAtion_RepresentAtion_RepresentAtion_RepresentAtion_RepresentAtion_RepresentAtion_RepresentAtion_RepresentAtion_RepresentAti
- TDDC+-	

Expert Workshop on GBIF Data, 28/10/2022, ITCER, Siaya, Kenya

Tanja Weibulat



## **BioCASe Provider Software**



#### BioCASe Configuration Tool - BSMfungicoll

Home | Overview | Settings | DB connection | DB structure | Archiving & Filtered export | QueryForms | Help | Report a Bug

#### Database connection

The connection to the database is OK. E Edit Connection parameters

#### Database Structure

You have configured 13 table aliases. Edit DB structure

#### Schemas

These are the XML schemas supported by this datasource and the number of elements mapped. Click on the name to edit the mapping:

ABCD\_2.1.xml : 115 concepts mapped from 1470 of NS http://www.tdwg.org/schemas/abcd/2.1

1 XML archive(s) for this schema, last modified on 2022-09-27.

ABCD\_2.06 v Transfer mappings from ABCD\_2.1.xml to new schema

ABCD\_2.06.xml : 107 concepts mapped from 988 of NS http://www.tdwg.org/schemas/abcd/2.06

1 XML archive(s) for this schema, last modified on 2022-09-27.

ABCDEFG\_2.06 V Transfer mappings from ABCD\_2.06.xml to new schema

Map your DB to a new schema: --select-- v Create

**Recycle bin:** Restore a schema mapping to reactivate the schema, or press purge to permanently delete the file. *Recycle bin is empty.* 

#### DarwinCore Archives

No DarwinCore archives created so far.

Expert Workshop on GBIF Data, 28/10/2022, ITCER, Siaya, Kenya

Tanja Weibulat



## **BioCASe Provider Software**



### **BioCASe Configuration Tool - BSMfungicoll**

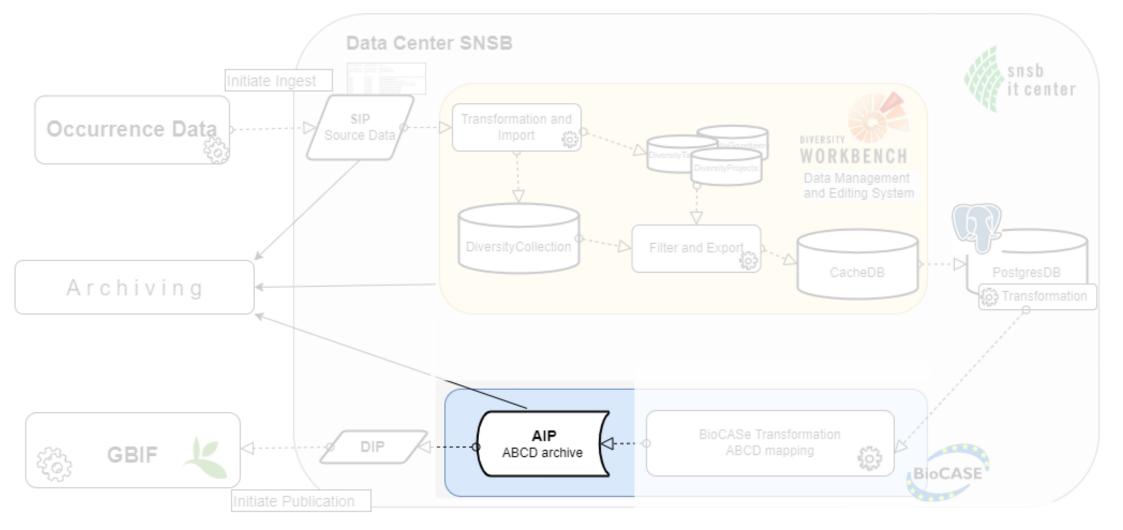
Home | Overview | Settings | DB connection | DB structure | Archiving & Filtered export | QueryForms | Help | Report a Bug

### **Existing Archives**

Schema/File Name	Recs Dro	p Last modified	Size	
<ul> <li>ABCD_2.06 The Fungal Collection at the Botanische Staatssammlung Munchen.ABCD_2.06.zip</li> </ul>	9,059	Log 22-09-27 13:19	1 M	DwC 🖬 DwC 🖬
<ul> <li>ABCD_2.1 The Fungal Collection at the Botanische Staatssammlung Munchen.ABCD_2.1.zip</li> </ul>	9,059	Log 22-09-27 12:43	1 M	DwC 🖬 DwC 🖥

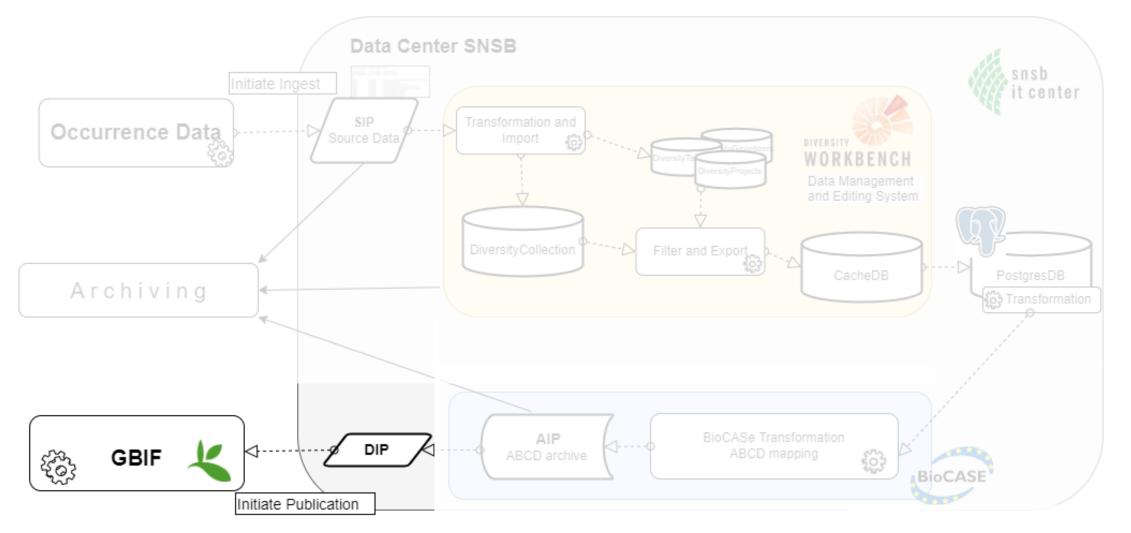


# **BioCASe Transformation / ABCD Mapping**





# **BioCASe Transformation / ABCD Mapping**







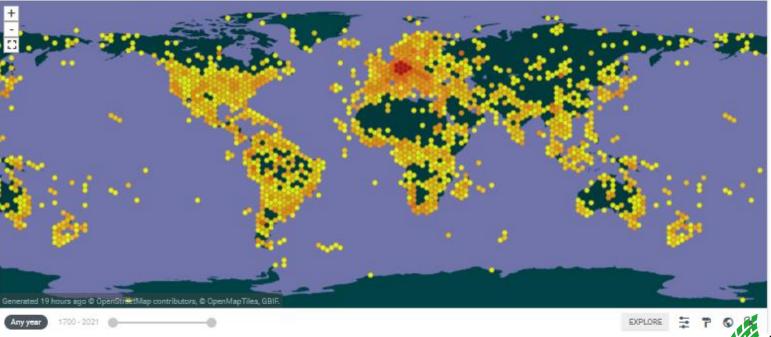
Tanja Weibulat



Sammlungen Baverns

Staatliche Naturwissenschaftliche Sammlungen Bayerns











Expert Workshop on GBIF Data, 28/10/2022, ITCER, Siaya, Kenya

Tanja Weibulat



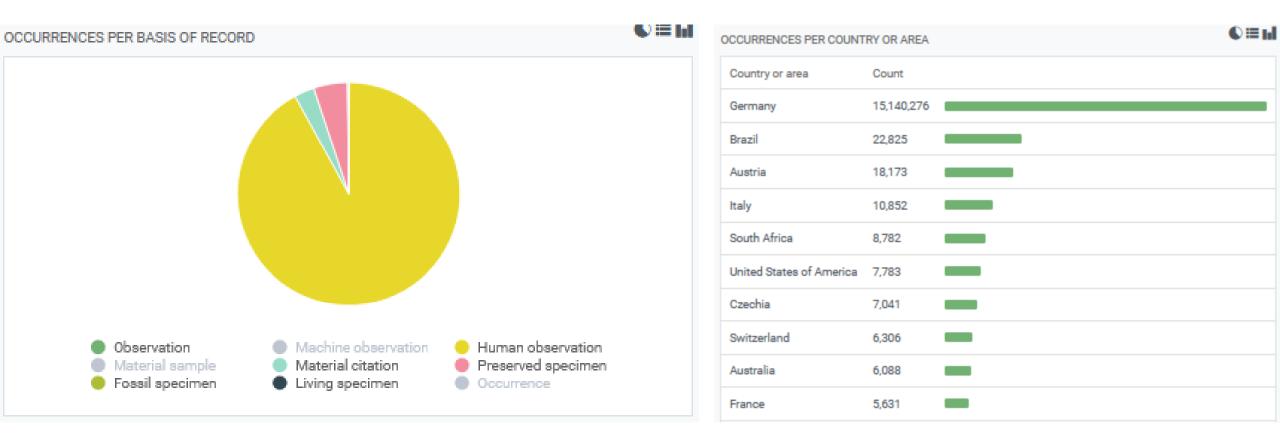
ĸ	Get data How-to	Tools	Community	About	-≁ ≯	άQ	-	Login
<	Datasets	2		SEARCH DATASETS 47 RESULTS				
Search		Q	ALL OCCU	JRRENCE CHECKLIST SAMPLING EVENT METADATA				
Publisher		~				DOWNLO	AD AS TSV	r
<ul> <li>Staatliche Nat Bayerns</li> </ul>	urwissenschaftliche Sammlur	ngen		Floristic records from survey studies of the Bayerisches Landesamt für Un	nwelt	Occurrenc	æ dataset	
Host		Ý		http://wiki.bayernflora.de/web/Floristic_records_from_survey_studies_of_the_Bayerisches_Landesa %C3%BCr_Umwelt	mt_f	Y.		
Publishing countr	y or area	×		Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns 7.549.013 occurrences 256 citations		7	· ·	
Project		×		7.349.013 occurrences 236 citations				
Licence		~		Occurrence Data of Vascular Plants collected or compiled for the Flora of	Bavaria	Occurrenc	e dataset	
				https://wiki.bayernflora.de/web/Flora_of_Bavaria_%E2%94%80_occurrence_data_online Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns 6.929.847 occurrences 460 citations				
				IBF Monitoring of Vascular Plants		Occurrenc	e dataset	
				http://www.diversitymobile.net/wiki/IBFplantscoll_About Published by Staatliche Naturwissenschaftliche Sammlungen Bayerns 198.240 occurrences 334 citations				

Expert Workshop on GBIF Data, 28/10/2022, ITCER, Siaya, Kenya

Tanja Weibulat



Staatliche





# **Dataflow of occurrence data**

