



DICE

Data Infrastructure Capacity for EOSC

Data Discovery with B2FIND

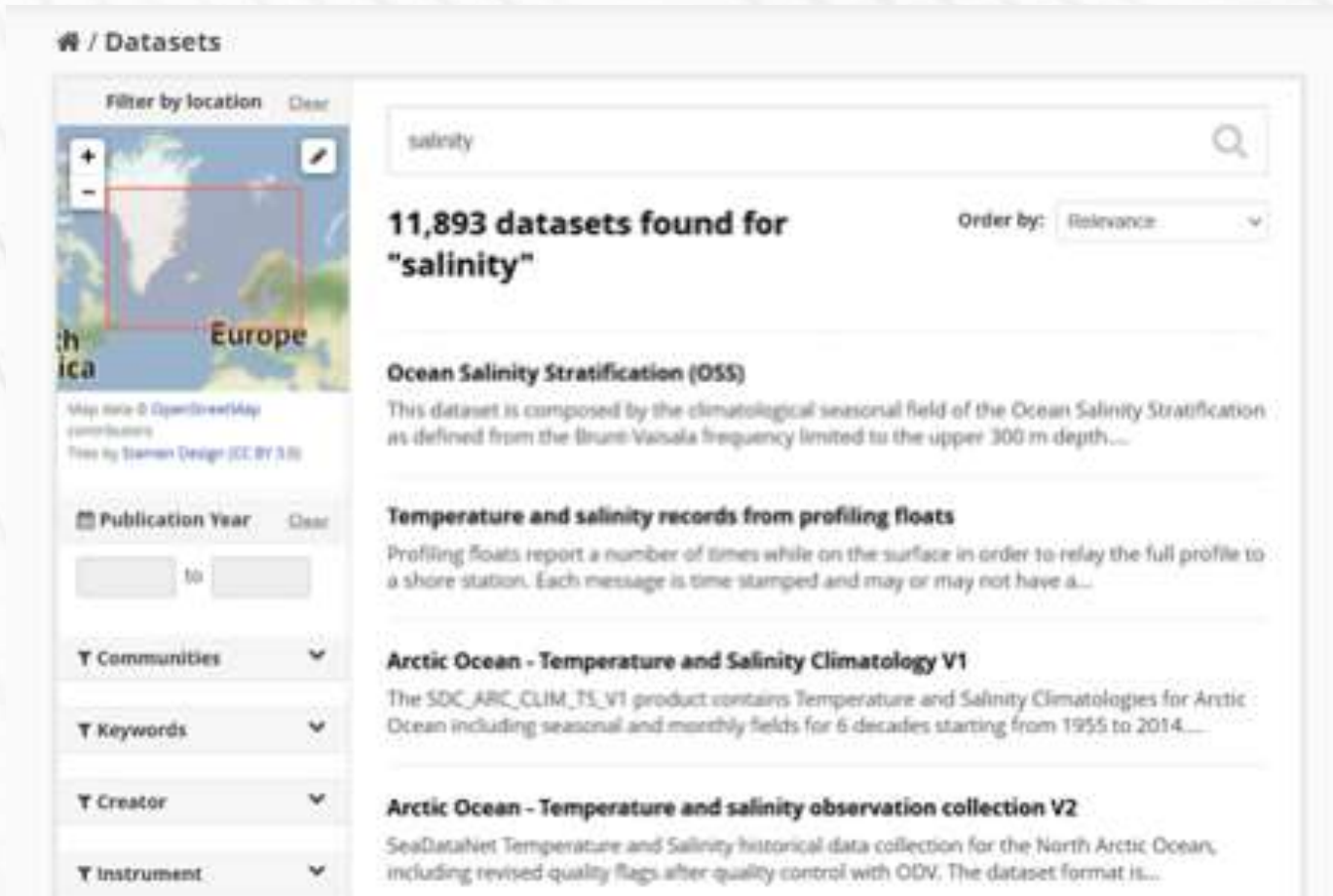
Claudia Martens

B2FIND

martens@dkrz.de



The DICE project has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-2018-2020 under Grant Agreement no. 101017207



The screenshot shows the B2FIND discovery portal interface. At the top left, it says "/ Datasets". Below this is a search bar containing the text "salinity". To the left of the search bar is a map filter titled "Filter by location" with a red box highlighting Europe. Below the map are several filter options: "Publication Year" (with a date range selector), "Communities", "Keywords", "Creator", and "Instrument". To the right of the search bar, it displays "11,893 datasets found for 'salinity'" and an "Order by: Relevance" dropdown menu. Below this, three dataset entries are listed:

- Ocean Salinity Stratification (OSS)**
This dataset is composed by the climatological seasonal field of the Ocean Salinity Stratification as defined from the Bruno Vasala frequency limited to the upper 300 m depth...
- Temperature and salinity records from profiling floats**
Profiling floats report a number of times while on the surface in order to relay the full profile to a shore station. Each message is time-stamped and may or may not have a...
- Arctic Ocean - Temperature and Salinity Climatology V1**
The SDC_ARC_CLIM_TS_V1 product contains Temperature and Salinity Climatologies for Arctic Ocean including seasonal and monthly fields for 6 decades starting from 1955 to 2014...
- Arctic Ocean - Temperature and salinity observation collection V2**
SeaDataNet Temperature and Salinity historical data collection for the North Arctic Ocean, including revised quality flags after quality control with ODV. The dataset format is...

- **discovery portal for research data**, allows freetext and faceted search **across scientific disciplines**
- **48 Communities** on productive machine, ~ **1,5 mio records**
- enables findability of data stored in **EUDAT data centres**, other **research infrastructures** or **data provider**
- central indexing tool for **EOSC-hub**, discovery service in **EOSC**, service in **DICE**

what is special?

The effort we put in Community needs!

Harvesting

supported channels

- ❖ OAI – PMH
- ❖ CSW
- ❖ Rest API
- ❖ [SparQL]

Search options

- free text search
- faceted search e.g. spatial/temporal coverage, Instrument, Discipline, Publisher, ResourceType, ...
- narrow down results

Mapping

supported md standards

- ★ Dublin Core
- ★ Datacite
- ★ OpenAire
- ★ **EUDAT Core**
- ★ ISO 19139/19139, FGDC
- ★ DDI 2.5
- ★ community specific

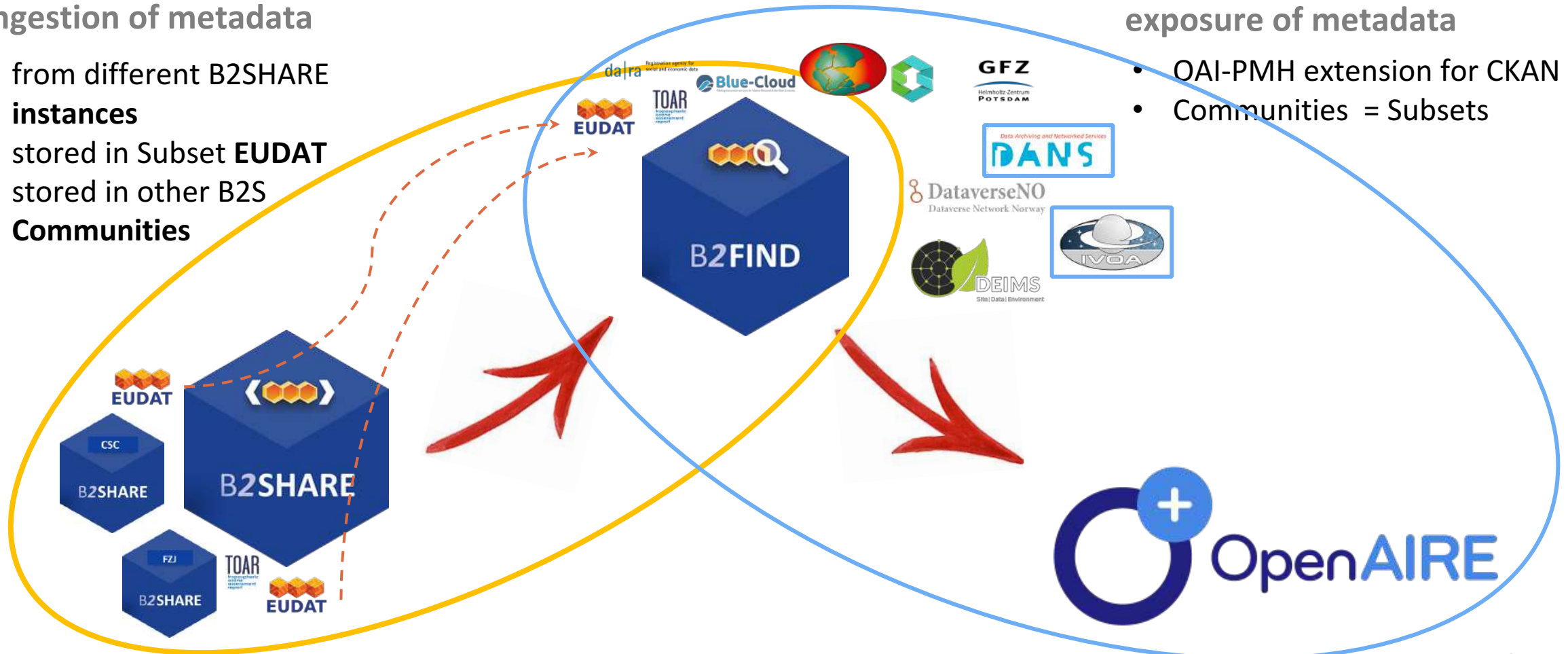


ingestion of metadata

- from different B2SHARE instances
- stored in Subset EUDAT
- stored in other B2S Communities

exposure of metadata

- OAI-PMH extension for CKAN
- Communities = Subsets



PIDs across services

B2SHARE

Spatio-temporal analysis of historic and projected flood formation in the Rhine River basin - Result figures

by Rottler, Erwin; Bronstert, Axel; Bürger, Gerd; Rakovec, Oldrich;
Jan 25, 2022

Description: Repository accompanying the manuscript "Rhine flood stories: Spatio-temporal of historic Rhine River flood formation".

The genesis of riverine floods in large river basins often is complex. Streamflow originating from precipitation and snowmelt and different tributaries can superimpose and cause high water levels threatening cities along the river banks. We developed an analytical framework that captures and shares the story behind historic and projected streamflow peaks in the large and complex basin of the Rhine River. Our analysis includes hydrological simulations with the mesoscale Hydrological Model (mHM) forced with an ensemble of climate projections. The spatio-temporal analysis of the flood formation includes the assessment and mapping of antecedent liquid precipitation, snow cover changes, generated and routed runoff, flood extent and the excess runoff from major sub-basins up to ten days before a streamflow peak.

This repository holds all result figures (black and white figure theme) exported for the investigated streamflow peaks at gauges Cologne, Kaub, Worms and Speyer. Furthermore, we provide a Docker image with a web application that enables the interactive investigation of all runoff peaks.

R-scripts used to analyse simulation results including the web-based viewer are available at: <https://github.com/ERottler/rhine-flood-genesis>

Disciplines: 3.3.13 → Earth sciences → Hydrology

Keywords: Rhine River flood formation; mHM

DOI: [10.23728/b2share.d7595d0f30bd4335b0e5c1d9da474d37](https://doi.org/10.23728/b2share.d7595d0f30bd4335b0e5c1d9da474d37)
PID: [11304/7d4b2739-a892-4831-baea-5acbd9aa6700](http://hdl.handle.net/11304/7d4b2739-a892-4831-baea-5acbd9aa6700)

Name	Size	
figures_black.zip	3.10 GB	  
figures_white.zip	3.16 GB	  
instructions_docker.txt	507 B	  
rhine-flood-genesis.tar	8.32 GB	  

Basic metadata	
Open access	Tr
License	Cr
Publication Year	Clear
Contact email	ro
Publication date	ja

B2FIND

/ Datasets

Filter by location Clear



Map data © OpenStreetMap contributors
Tiles by Stamen Design (CC BY 3.0)

Filter by time Clear

Start: -0342-08-13

End: 1504-12-31 18:20:41

Communities

Filter 9-1

EUDAT (872)

Search datasets...

872 datasets found

Communities: EUDAT

Soil moisture observation in a forested headwater catchment

Dataset accompanying the publication "Soil moisture observation in a forested headwater catchment: combining a dense cosmic-ray neutron sensor network with a hydrological model".

Spatio-temporal analysis of historic and projected flood formation in the Rhine River basin - Result figures

Repository accompanying the manuscript "Rhine flood stories: Spatio-temporal of historic and projected Rhine River flood formation". The genesis of riverine floods in large river basins often is complex. Streamflow originating from precipitation and snowmelt and different tributaries can superimpose and cause high water levels threatening cities and communities along the river banks. We developed an analytical framework that captures and shares the story behind major historic and projected streamflow peaks in the large and complex basin of the Rhine River. Our analysis is based on hydrological simulations with the mesoscale Hydrological Model (mHM) forced with an ensemble of climate projections. The spatio-temporal analysis of the flood formation includes the assessment and mapping of antecedent liquid precipitation, snow cover changes, generated and routed runoff, flood extent and the excess runoff from major sub-basins up to ten days before a streamflow peak.

Access the university. A spatial Heckman probit model

Dataset accompanying the publication "Equal opportunities to access higher education: An application with a spatial Heckman probit model" (Matheron, 2014).

Spatial spillover effects of agricultural transport costs

Dataset accompanying the publication "Spatial spillover effects of agricultural transport costs in Peru" (Land 2022, 11, 58). The role of agricultural transport costs in the spatial spillover effects of agricultural transport costs in Peru.

HRV Data

Time dependence of heart rate variability during treadmill running.

CINECA infrastructure and resources for OGS users

Set of presentations given to OGS users on resources available at CINECA.

/ Datasets / Spatio-temporal analysis ...

Social

Twitter

Facebook

Dataset Communities

Spatio-temporal analysis of historic and projected flood formation in the Rhine River basin - Result figures

DOI PID

Repository accompanying the manuscript "Rhine flood stories: Spatio-temporal of historic and projected Rhine River flood formation".

The genesis of riverine floods in large river basins often is complex. Streamflow originating from precipitation and snowmelt and different tributaries can superimpose and cause high water levels threatening cities and communities along the river banks. We developed an analytical framework that captures and shares the story behind major historic and projected streamflow peaks in the large and complex basin of the Rhine River. Our analysis is based on hydrological simulations with the mesoscale Hydrological Model (mHM) forced with an ensemble of climate projections. The spatio-temporal analysis of the flood formation includes the assessment and mapping of antecedent liquid precipitation, snow cover changes, generated and routed runoff, flood extent and the excess runoff from major sub-basins up to ten days before a streamflow peak.

This repository holds all result figures (black and white figure theme) exported for the investigated streamflow peaks at gauges Cologne, Kaub, Worms and Speyer. Furthermore, we provide a Docker image with a web application that enables the interactive investigation of all runoff peaks.

R-scripts used to analyse simulation results including the web-based viewer are available at: <https://github.com/ERottler/rhine-flood-genesis>

Rhine River flood formation mHM

Identifier	
DOI	https://doi.org/10.23728/b2share.d7595d0f30bd4335b0e5c1d9da474d37
PID	http://hdl.handle.net/11304/7d4b2739-a892-4831-baea-5acbd9aa6700
Source	https://b2share.eudat.eu/api/records/d7595d0f30bd4335b0e5c1d9da474d37
Metadata Access	https://b2share.eudat.eu/api/oai2d?verb=GetRecord&metadataPrefix=oai_dc&identifier=oai:b2share.eudat.eu:b2rec/d7595d0f30bd4335b0e5c1d9da474d37
Provenance	



JOIN OUR COMMUNITY



DICEosc



/company/diceosc

All services for free! (until June 2023)

Request via the EOSC Portal

B2HANDLE

[B2HANDLE - EOSC Marketplace](#)

B2SHARE

[B2SHARE - EOSC Marketplace](#)

B2FIND

[B2FIND - EOSC Marketplace](#)

B2DROP

[B2DROP - EOSC Marketplace](#)

B2ACCESS

[B2ACCESS - EOSC Marketplace](#)