



# Store and publish data with B2SHARE

Philipp Wieder, GWDG

Webinar “Securely store and publish  
research data with DICE service”

February 23, 2022



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

## Your Requirements

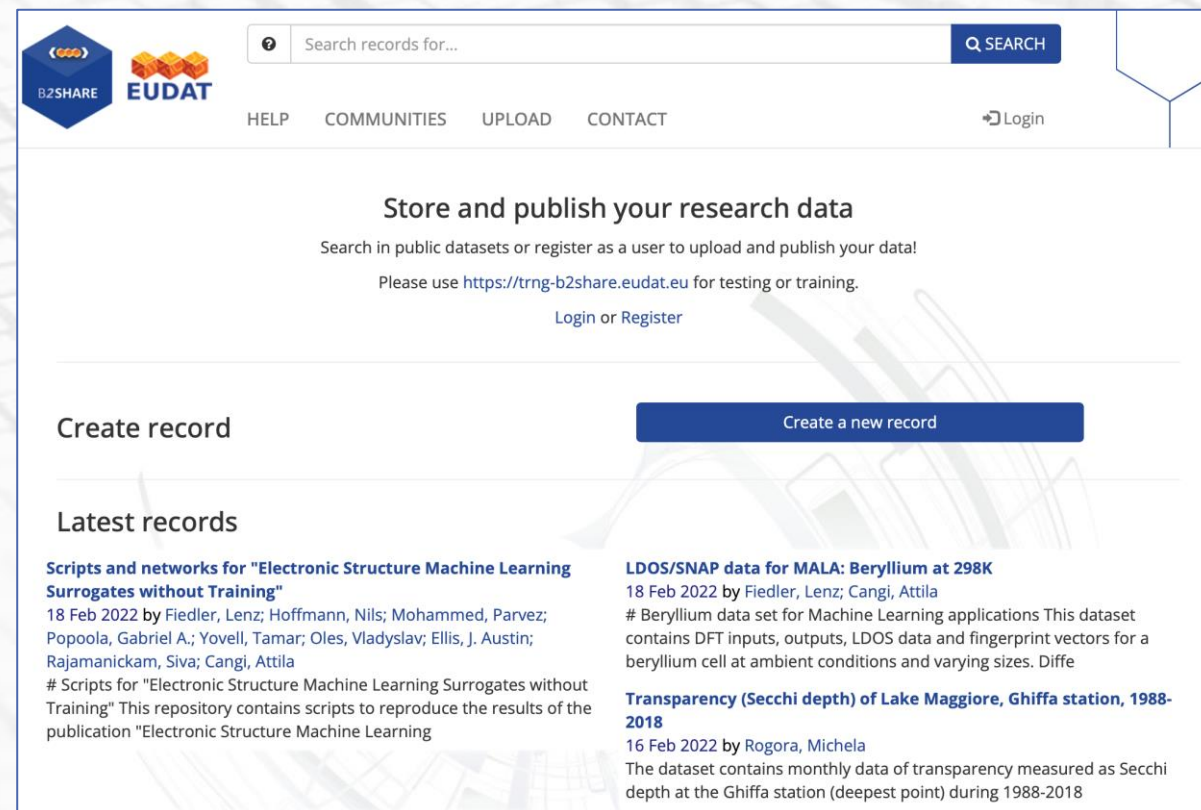
*“I want to be able to refer to my data set (in my publication, on my website, ...)”*

*“I would like to create a data repository for my research community”*

*“I want to maintain concise metadata together with my data objects”*

## B2SHARE offers ...

... a user-friendly, reliable and trustworthy way for researchers, research communities, and scientists to store and publish research data.



The screenshot shows the B2SHARE website interface. At the top, there is a navigation bar with the B2SHARE and EUDAT logos, a search bar with the text "Search records for...", and links for HELP, COMMUNITIES, UPLOAD, CONTACT, and a Login button. Below the navigation bar, the main content area features the heading "Store and publish your research data" followed by the text "Search in public datasets or register as a user to upload and publish your data!" and a link to "Please use <https://trng-b2share.eudat.eu> for testing or training." Below this, there is a "Create record" section with a "Create a new record" button. The "Latest records" section displays two records: "Scripts and networks for 'Electronic Structure Machine Learning Surrogates without Training'" and "LDOS/SNAP data for MALA: Beryllium at 298K".

**Create record** [Create a new record](#)

**Latest records**

**Scripts and networks for "Electronic Structure Machine Learning Surrogates without Training"**  
18 Feb 2022 by Fiedler, Lenz; Hoffmann, Nils; Mohammed, Parvez; Popoola, Gabriel A.; Yovell, Tamar; Oles, Vladyslav; Ellis, J. Austin; Rajamanickam, Siva; Cangi, Attila  
# Scripts for "Electronic Structure Machine Learning Surrogates without Training" This repository contains scripts to reproduce the results of the publication "Electronic Structure Machine Learning

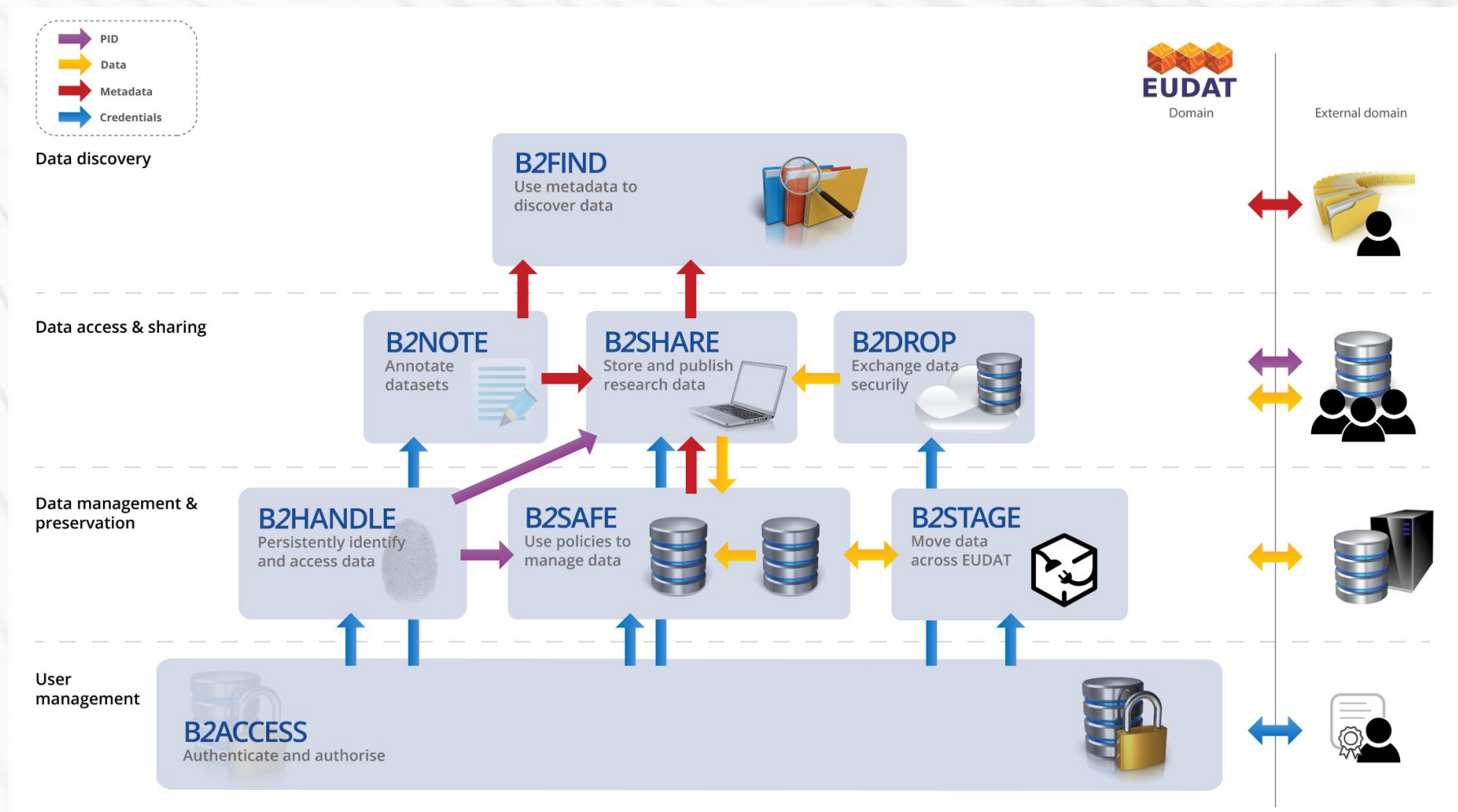
**LDOS/SNAP data for MALA: Beryllium at 298K**  
18 Feb 2022 by Fiedler, Lenz; Cangi, Attila  
# Beryllium data set for Machine Learning applications This dataset contains DFT inputs, outputs, LDOS data and fingerprint vectors for a beryllium cell at ambient conditions and varying sizes. Diffe

**Transparency (Secchi depth) of Lake Maggiore, Ghiffa station, 1988-2018**  
16 Feb 2022 by Rogora, Michela  
The dataset contains monthly data of transparency measured as Secchi depth at the Ghiffa station (deepest point) during 1988-2018



- ▣ Store data safely
- ▣ Register data for long-term preservation
- ▣ Attach metadata
- ▣ Publish data
- ▣ Control access & share data
- ▣ Integrate through API into your application
- ▣ Metadata management
- ▣ Persistent identifiers
- ▣ Support for open access

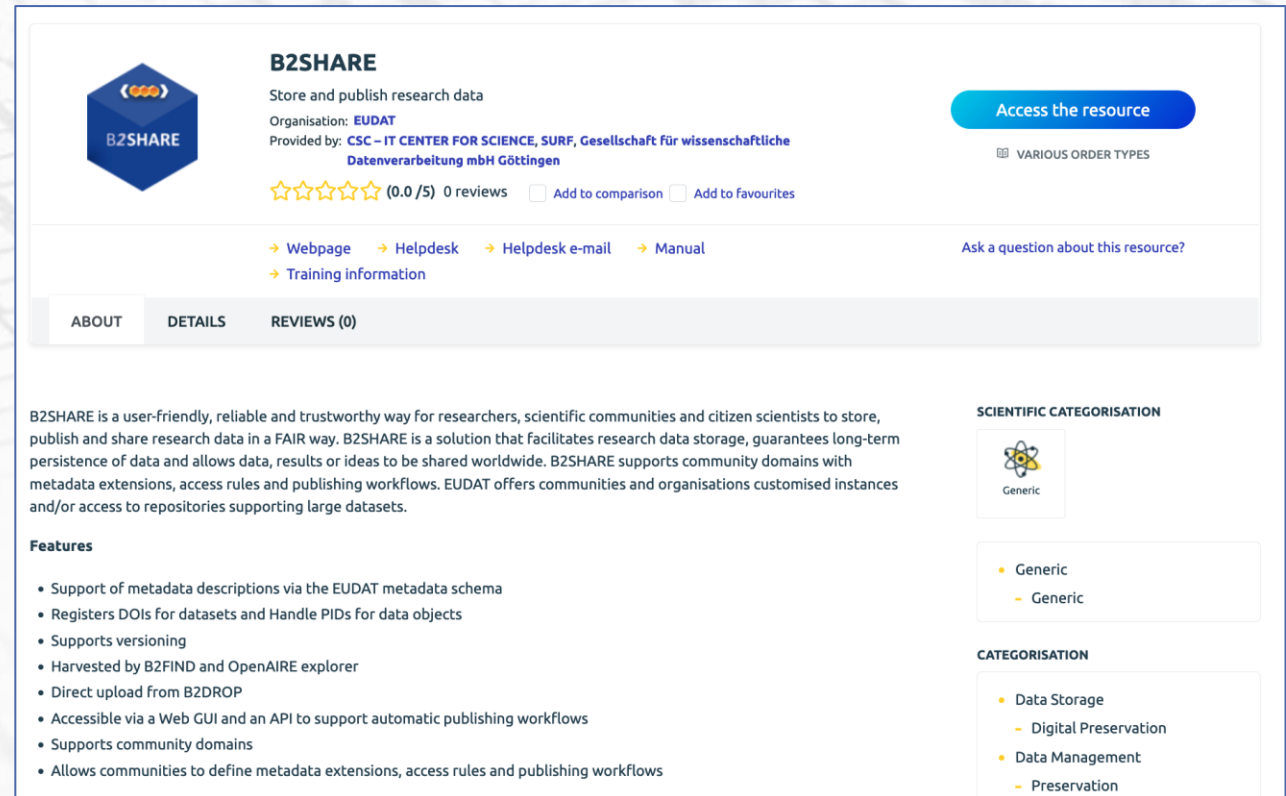
# Integrated Stack



# How to Start?



- General entry point: EOSC Marketplace
- B2SHARE:  
<https://marketplace.eosc-portal.eu/services/b2share>
- Contains
  - General service information
  - Available service flavours
- Request what you need



**B2SHARE**  
Store and publish research data  
Organisation: **EUDAT**  
Provided by: **CSC – IT CENTER FOR SCIENCE, SURF, Gesellschaft für wissenschaftliche Datenverarbeitung mbH Göttingen**

☆☆☆☆☆ (0.0 / 5) 0 reviews ☐ Add to comparison ☐ Add to favourites

➔ Webpage ➔ Helpdesk ➔ Helpdesk e-mail ➔ Manual  
➔ Training information

Ask a question about this resource?

ABOUT DETAILS REVIEWS (0)

B2SHARE is a user-friendly, reliable and trustworthy way for researchers, scientific communities and citizen scientists to store, publish and share research data in a FAIR way. B2SHARE is a solution that facilitates research data storage, guarantees long-term persistence of data and allows data, results or ideas to be shared worldwide. B2SHARE supports community domains with metadata extensions, access rules and publishing workflows. EUDAT offers communities and organisations customised instances and/or access to repositories supporting large datasets.

**Features**

- Support of metadata descriptions via the EUDAT metadata schema
- Registers DOIs for datasets and Handle PIDs for data objects
- Supports versioning
- Harvested by B2FIND and OpenAIRE explorer
- Direct upload from B2DROP
- Accessible via a Web GUI and an API to support automatic publishing workflows
- Supports community domains
- Allows communities to define metadata extensions, access rules and publishing workflows

**SCIENTIFIC CATEGORISATION**

Generic



- Generic
- Generic

**CATEGORISATION**

- Data Storage
  - Digital Preservation
- Data Management
  - Preservation

- Through B2ACCESS
- Register account at <https://b2access.eudat.eu/>
  - Your home organisation
  - ORCID et al.
  - B2ACCESS ID
- Provides access to other B2\* services as well

GO TO EUDAT WEBSITE

WHAT IS B2ACCESS USER GUIDE FAQs CONTACT

No account? Sign up.


Search


User name


Password


Sign in

[Forgotten password?](#)


 Sign in with certificate


 Sign in with Facebook











 Sign in with GitHub

 Sign in with Google

Sign in with INDIGO IAM

 Sign in with Microsoft Live

 Sign in with ORCID

	29 Mayis University
	A'SHARQIYAH UNIVERSITY
	A*STAR - Agency for Science, Technology and Research
	A. T. Still University
	AAF Virtual Home
	aai.lab.maeen.sa
	AAI@EduHr Single Sign-On Service
	Aalborg University
	Aalto University
	Aarhus School of Architecture



# Service Flavours

## For Researchers - Basic

OPEN ACCESS

B2SHARE is a free-to-use public service supporting cross disciplinary research, self-registration for any scientists and researchers, free upload of stable research data, data will receive a DOI...

[Show more](#)

Select an offer

## For Data managers - Premium

ORDER REQUIRED

The B2SHARE - Premium service is the same as the basic service, but provides researchers the option to upload of larger data files and datasets (>20GB) and the customization of metadata extensions.

### TECHNICAL PARAMETERS

Requested resource capacity      **100GB - higher than 1TB**

Max size dataset      **lower than 40GB - higher than 80GB**

Is a specific community domain required      **yes - no**

Is specific metadata required      **yes - no**

Select an offer

## For Communities And Organisations

ORDER REQUIRED

The B2SHARE option for communities and organizations offers the option for dedicated and branded B2SHARE instances which can be customized to community and organizational needs. This support...

[Show more](#)

### TECHNICAL PARAMETERS

Requested total storage capacity      **1TB - higher than 10TB**

How long must the data be stored      **3 years - more than 10 years**

Select an offer

## For Large datasets

ORDER REQUIRED

EUDAT is a network service providers across Europe specialist in large ICT infrastructure supporting research. To researchers and/or communities seeking need to publish and/or make large datasets...

[Show more](#)

### TECHNICAL PARAMETERS

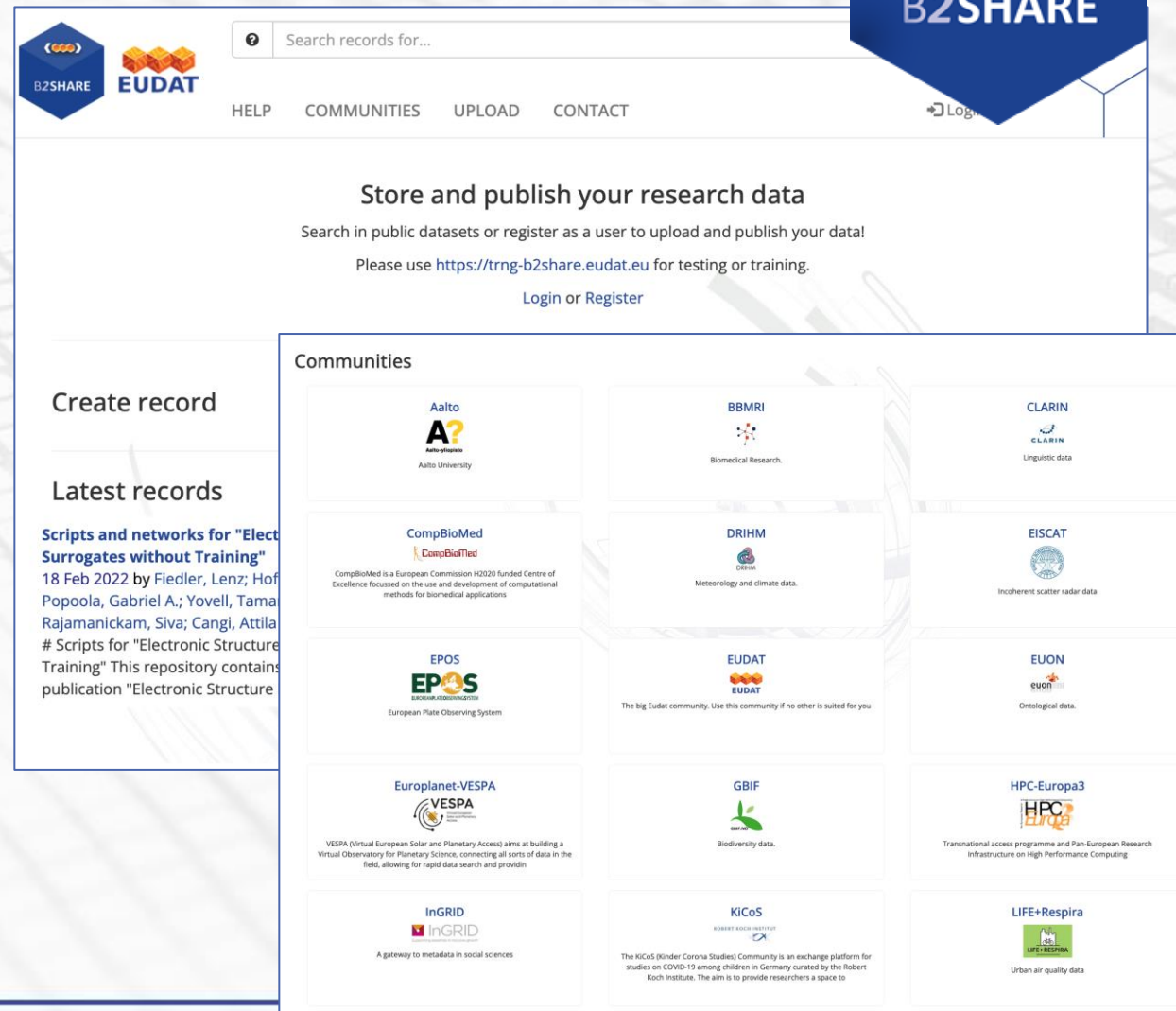
Requested total storage capacity      **50TB - higher than 500TB**

How long must the data be stored      **3 years - longer than 10 years**

Select an offer



- "Catch All" repository
- Open to all researchers
- Already supports a number of communities
- Provides you with all the basic functions
  - DOIs
  - Extensive metadata handling
  - Drafting, sharing, publishing



The screenshot shows the B2SHARE website interface. At the top, there is a search bar with the text "Search records for..." and a "Log in" button. Below the search bar, there are navigation links: "HELP", "COMMUNITIES", "UPLOAD", and "CONTACT". The main heading is "Store and publish your research data". Below this, it says "Search in public datasets or register as a user to upload and publish your data!" and "Please use <https://trng-b2share.eudat.eu> for testing or training." There are links for "Login or Register". On the left side, there is a "Create record" button and a "Latest records" section. The "Latest records" section shows a record titled "Scripts and networks for 'Electronic Surrogates without Training'" by Fiedler, Lenz, Hof, Popoola, Gabriel A., Yovell, Tama, Rajamanickam, Siva, Cang, Attila, published on 18 Feb 2022. The main content area is titled "Communities" and displays a grid of 12 community logos and descriptions:

- Aalto**: Aalto University
- BBMRI**: Biomedical Research
- CLARIN**: Linguistic data
- CompBioMed**: CompBioMed is a European Commission H2020 funded Centre of Excellence focussed on the use and development of computational methods for biomedical applications
- DRIHM**: Meteorology and climate data
- EISCAT**: Incoherent scatter radar data
- EPOS**: European Plate Observing System
- EUDAT**: The big Eudat community. Use this community if no other is suited for you
- EUON**: Ontological data
- Europlanet-VESPA**: VESPA (Virtual European Solar and Planetary Access) aims at building a Virtual Observatory for Planetary Science, connecting all sorts of data in the field, allowing for rapid data search and provision
- GBIF**: Biodiversity data
- HPC-Europa3**: Transnational access programme and Pan-European Research Infrastructure on High Performance Computing
- InGRID**: A gateway to metadata in social sciences
- KICoS**: The KICoS (Kinder Corona Studies) Community is an exchange platform for studies on COVID-19 among children in Germany curated by the Robert Koch Institute. The aim is to provide researchers a space to
- LIFE+Respira**: Urban air quality data

# Deposit Your Data I

» RECORDS » 83747C607C9C42CCB6A1A92D8EC71829 » EDIT

Editing draft version

Delete draft

Add files

Drop files here, or click to select files



Add B2DROP files

Uploaded files

Name

Size

> [sensor.dump](#)

93.89 MB



Basic fields

Community \*



Titles \*

Particulate Matter Time Series



Add Clear

# Deposit Your Data II



Open access \* ☒ True

Embargo date



License



© Select License

Disciplines

3.3.2 → Earth sciences → Environmental science



Identifier \*

3.3.2 → Earth sciences → Environmental science

+ Add

+ Clear

Keywords

sensor data, IoT, time series



+ Add

+ Clear

Contact email

☐ Submit draft for publication

Publication date

When the draft is published it will be assigned a PID and a DOI, making it publicly citable. Please note that the published record's files can no longer be modified by its owner.

This publication will get the following DOI: **10.23728/b2share.83747c607c9c42ccb6a1a92d8ec71829** 

 Save Draft


 Discard Changes



# Specific Offers through DICE



- Place your specific request through the EOSC Marketplace
- We will get into contact with you
- Multiple DICE partners (including GWDG) can help to implement your request
- Well-suited for communities, institutes, projects

 ORDER REQUIRED

### For Communities And Organisations

The B2SHARE option for communities and organizations offers the option for dedicated and branded B2SHARE instances which can be customized to community and organizational needs. This support...

[Show more](#)

#### TECHNICAL PARAMETERS

Requested total storage capacity	1TB - higher than 10TB
How long must the data be stored	3 years - more than 10 years

**Selected offer ✓**

specify parameters. It is necessary to handle your request.

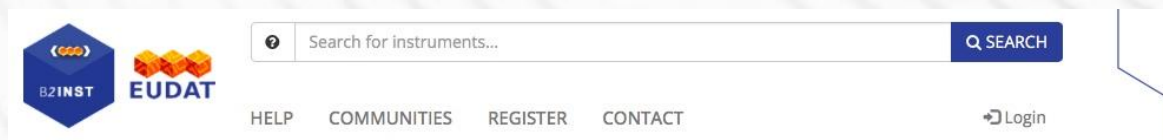
### Parameters

**REQUESTED TOTAL STORAGE CAPACITY**

Please choose storage capacity

**HOW LONG MUST THE DATA BE STORED**

Specify the amount of years



## Register and publish your scientific instruments

Search for scientific instruments or register as a user to register and publish your own instrument!

[Login or Register](#)

## Register instrument

[Register a new instrument](#)

## Latest instruments

### Particle Size Analyzer Beckman LS 13 320 XR (EDYTEM CNRS) (example)

5 May 2021 by Beckman Coulter

Expanded measurement range: 10 nm – 3,500 µm Laser diffraction plus advanced Polarization Intensity Differential Scattering (PIDS) technology enable high-resolution measurement & reporting of real data

### NanoclusterTrap (example)

19 Apr 2021 by Helmholtz-Zentrum Berlin für Materialien und Energie  
 The Nanocluster Trap endstation at BESSY II combines a cryogenic linear radio-frequency ion trap with an applied magnetic field for x-ray magnetic circular dichroism studies of cold and size-selected

### Uwitec Pilot 90 (EDYTEM CNRS) (example)

5 May 2021 by Uwitec Sampling Equipments  
 Interface sediment corer - diam 90mm id190 U-PILOT 90 (EDY)  
<https://www.cybercarotheque.fr/refoutil.php>

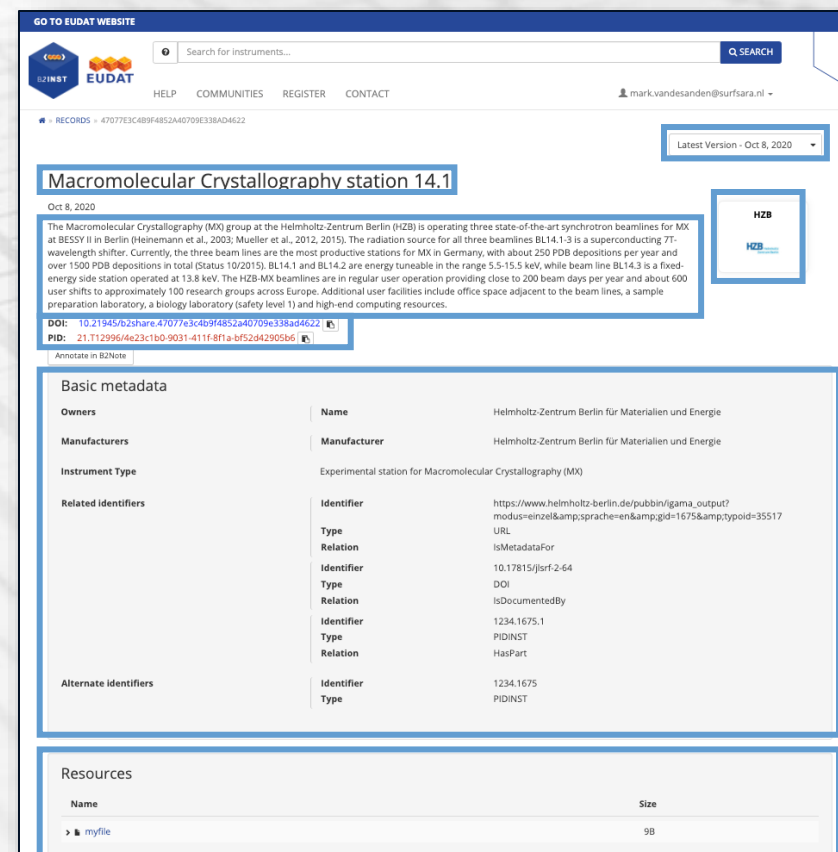
### Pilatus detector at MX station 14.1 (example)

19 Apr 2021 by DECTRIS  
 The Pilatus 6M pixel-detector at the MX station 14.1

### Macromolecular Crystallography station 14.1 (example)

19 Apr 2021 by Helmholtz-Zentrum Berlin für Materialien und Energie  
 The Macromolecular Crystallography (MX) group at the Helmholtz-Zentrum Berlin (HZB) is operating three state-of-the-art synchrotron beamlines for MX at BESSY II in Berlin (Heinemann et al., 2003; Muel

[More instruments ...](#)



➤ **EUDAT CDI**

<https://www.eudat.eu/>

➤ **B2Share @ EOSC Marketplace**

<https://marketplace.eosc-portal.eu/services/b2share/details>

➤ **B2Share user documentation**

<https://eudat.eu/services/userdoc/b2share-usage>

➤ **B2Share Training Suite**

<https://www.eudat.eu/b2share-training-suite>





# Contact Us

## JOIN OUR COMMUNITY



DICEosc



/company/diceosc

## Service-specific Contacts

DICE Support

<https://www.dice-eosc.eu/contact>

GWDG Support for Storage Services

<https://www.gwdg.de/support>

Email

philipp.wieder@gwdg.de