



European long-term ecosystem, critical zone and socio-ecological systems research
infrastructure PLUS

Guidelines for data collection

Technical Document

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DATA PROVISION (B2SHARE)

If data are available at an open accessible repository, please provide basic metadata (sign post metadata) and the link to the file location. If data are not located in an open repository, the data need to be provided via an accessible cloud repository either provided by the data provider or using B2DROP as supported cloud store. In this case basic metadata need to be provided via the eLTER Catalogue / DEIMS SDR and the URL to the data file or the directory with the data files need to be provided. Data are checked and collected from there by the data team and uploaded to the safe repository.

How to provide the data?

In order to submit data three different options can be used. There is either a file-based upload on B2SHARE via DEIMS-SDR, upload your data on B2DROP or you provide the data for downloading (via Cloud or Server) and provide the link. Please select the most appropriate option for your data.

Technical information can be provided by

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Submission to B2SHARE

B2SHARE allows the upload of data files to a web repository. B2SHARE is developed and by the EUDAT2020 project in order to provide a common data infrastructure for European research data. eLTER H2020 is using the services provided by the EUDAT2020 project in order to share and publish data files. When uploading data files to B2SHARE a PID (Persistent Identifier) is created to allow an unambiguous identification of the file including a resolution service for the PID.

B2SHARE supports an open data policy, allowing implementing a retention period. A data file uploaded to the B2SHARE repository needs to be accompanied by a metadata record in DEIMS-SDR describing the observation context.

This procedure includes two steps:

- Uploading the data file to B2SHARE providing basic metadata
- Creating a dataset metadata record on DEIMS-SDR providing the link (PID) to the data file in the 'Online distribution link' field

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Naming convention for data files

The naming convention for files is:

Template: [Data Topic] _ [LTER Site Code] _ [Name of the file]

Example: *temperature_LTER_EU_AT_003_zoeb_temp2015*

- How to upload a data file

When uploading data files two different options are available: (a) using DEIMS-SDR as an interface to upload data to be B2SHARE or (b) directly using the B2SHARE repository. In order to ensure proper versioning of files it is recommend to use B2Share itself (b).

This requires the following steps (which are described in the following in more detail):

- Create a user account on B2ACCESS (only needs to be done once)
- Upload one or multiple data file(s) to B2SHARE
- Copy the PID link of uploaded data file
- Create a dataset metadata record on DEIMS-SDR and copy the PID link into the field 'Online Distribution Link'

- How to upload files to B2SHARE?

- Go to LTER Europe instance of B2SHARE:
 - <https://b2share.fz-juelich.de/>
- Click on "Register"

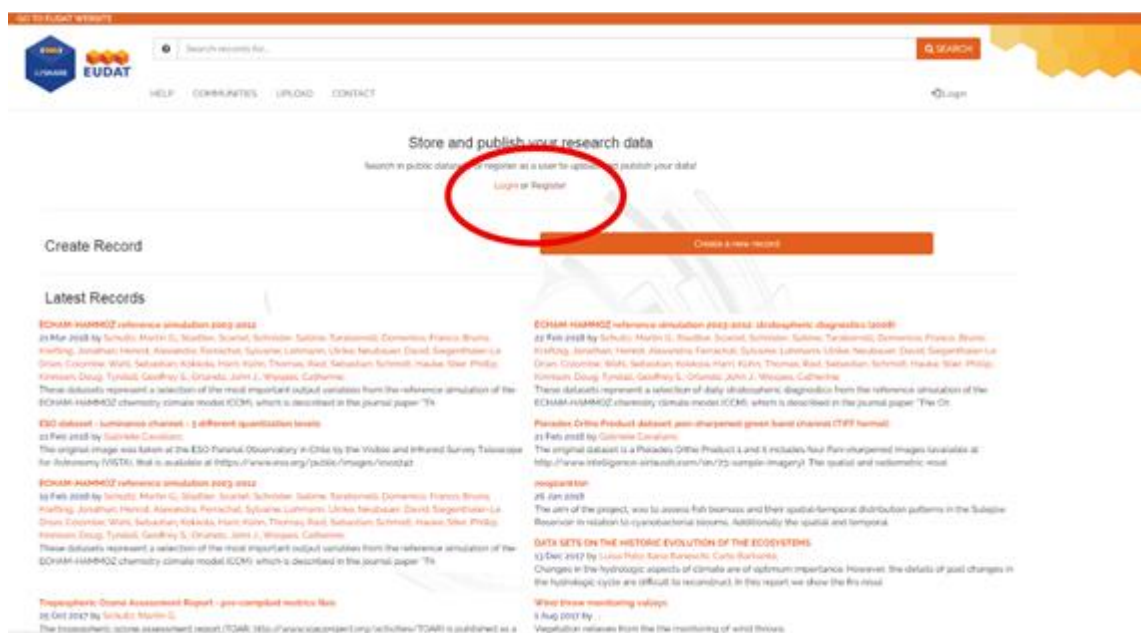


Figure 1 B2Share Landing Page

- Register a B2Access Account or go there directly
 - <https://b2access.eudat.eu/home/>

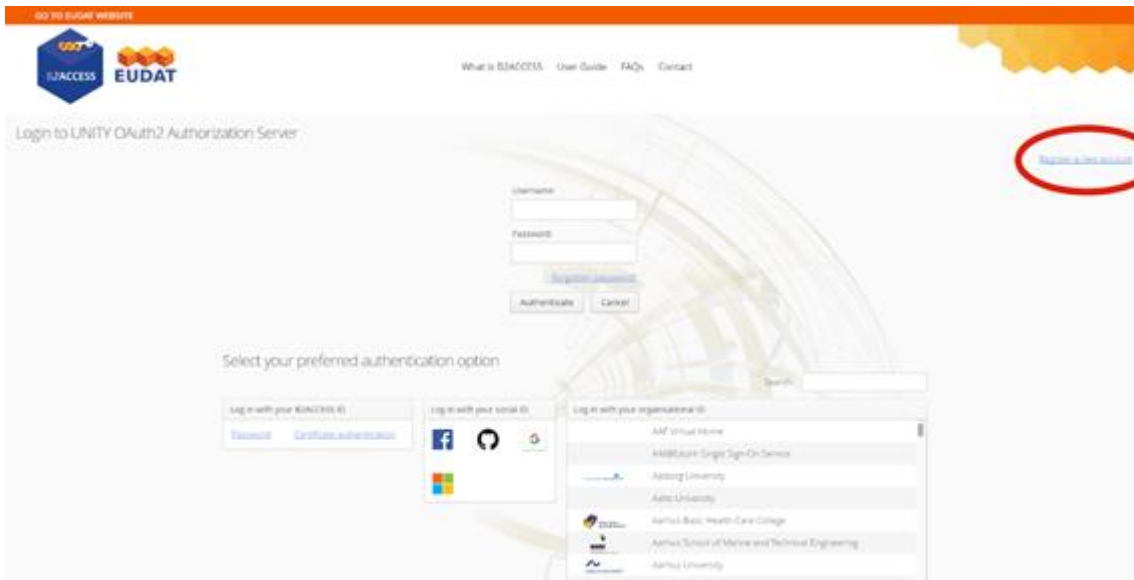


Figure 2 B2Access Landing Page

- Choose the type of B2Access Account you want
- Fill in the required fields

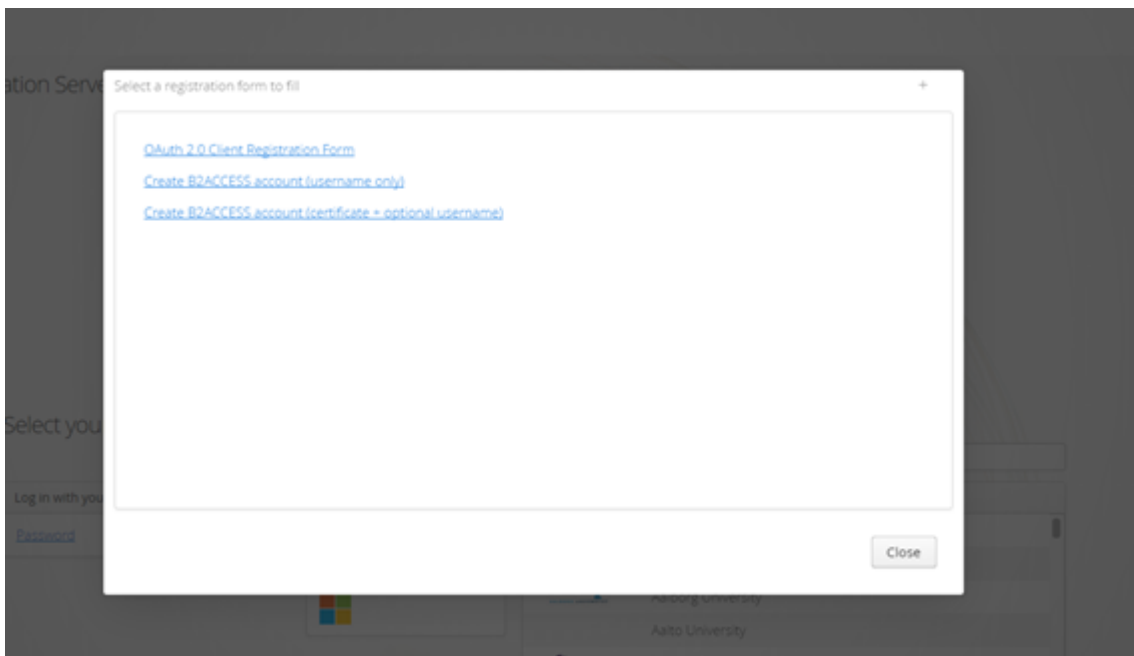


Figure 3 B2Access Account Creation

Figure 4 B2Access Account Creation (certificate + optional username)

- After having successfully created the account go back to B2Share
- Log in

Figure 5 B2Share Login

- Click on “Create new record”
- Upload your file(s)
- Fill in the required fields
- Select the **ILTER** domain
- Provide a link with additional information about the dataset, e.g. the link to the DEIMS-SDR metadata record UUID

- Tick the checkbox at the bottom and click “Save and publish”
- After a deposit was made B2Share will process the record and create a persistent identifier (PID), which is resolvable and will always link to the location of the file (see Figure 12 B2Share PIDs)
- **Copy the PID link and insert it to the ‘Online Distribution Link’ of your dataset metadata record on DEIMS-SDR**
 - There is a PID for the landing page of the record and
 - A PID for each file within a record (Click on the small arrow in front of the file name to get it).

Figure 6 B2Share PIDs

● Direct data upload using DEIMS-SDR

- In order to upload files to the EUDAT2020 file repository B2Share you can also use DEIMS-SDR. Within the metadata form there is the “b2share” field. This “field” is a compilation of multiple sub-fields where you can upload a file to DEIMS-SDR temporarily, describe it with basic metadata and then send it to a b2share instance. After a successful upload the deposit URL will be saved to the metadata record. Alternatively, you can manually add already existing URLs/PIDs to the field.
- After a successful transmission there will be a record on the used B2Share instance and there will be a metadata record on DEIMS-SDR that is including the corresponding links to the deposition of B2Share.