MOSAiC Central Storage (MCS)

The MCS is the central storage place for your raw data with an automatic back-up of the data. The data are available to the MOSAiC consortium via web access.

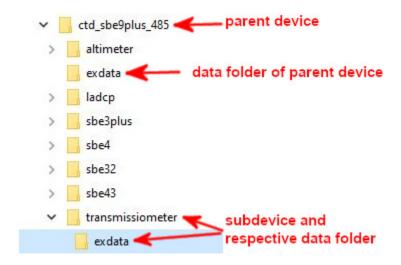
The MCS is divided into two areas, the 'platforms' area and the 'workspace' area. Both areas are automatically connected to the virtual machines (VM) acquired via marketplace.awi.de (see Get virtual machines for instructions). Your own computers can be connected using an sftp-client to access mosaic-dat.org (see Accessing MOSAiC data on land (@AWI)for details).

Platforms area

- The MCS directory structure is closely connected to the SENSOR web and the DShip ActionLog. Directory structure follows the URN assigned to the devices in SENSOR.
- . ONLY devices entered in SENSOR which are set to 'public' can be imported into the MCS directory structure
- ONLY users entered as 'Editors' or 'Data Providers' of the specific device in SENSOR have the right to upload to their respective device directories. This can however not be done directly. Please see Upload MOSAiC data to the MCS on land for instructions how to upload data to the platforms area.
- The platforms area is READABLE by ALL MOSAiC users.

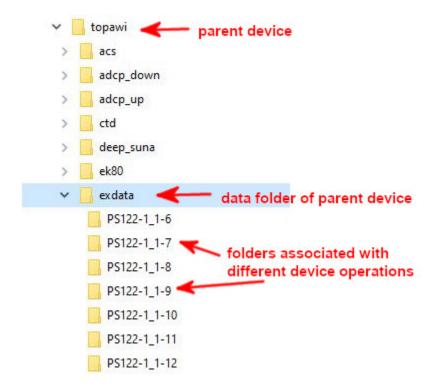
If there are subdevices attached to your device they will appear under the folder of your parent device. Every device and subdevice will have a folder called **'exdata'** were you are supposed to copy your raw data to. It is up to you and your data structure to decide whether raw data will all be stored under the parent device or individually under the folders of the subdevices.

The example here shows the MCS directory structure for the CTD with the shortname 'ctd_sbe9plus_485'. It is found under the platform folder 'vessel' and 'polarstern' (not shown in the example).



For every device operation you logged in DShip (see DShip stepwise manual under DShip ActionLog manual) on board during the expedition a folder with the device operation ID was attached to the 'exdata' folder of your device / subdevice. Raw data obtained during the specific device operation must be uploaded (automatically or manually by Data PI) to the respective subdirectory.

If you need to add a missed device operation after the end of the expedition please refer to Update or add DSHIP-Device Operations for past legs for instructions.



Workspace area

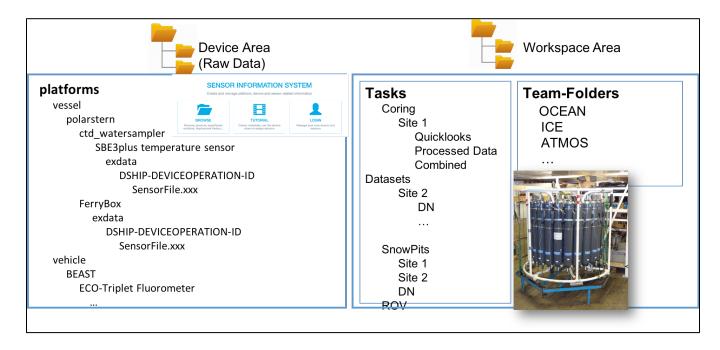
All MOSAiC users have **WRITE** access to the workspace area. There is a back-up of the workspace area too. This is the place to store documents, joined presentations etc. which you want to keep.

Former directory structure MCS Workspace

In the following the former directory structure of the MCS Workspace is described as used during the expedition. This directory structure will be removed during the course of 2021 after all data have been transferred to the new directory structure by the scientific teams. Please refer to the next section for information on the new directory structure.

The public folders which were under \\fs-polarstern.de\poldata\public on board Polarstern are currently available under \fsibhv/projects-dmz/mosaic \\ftasks/public-scientist and will be deleted during the course of 2021.

- . The workspace area had a tasks directory in which scientists on board could share data and cooperate inter-disciplinarily.
- · Quicklooks: Data in folders named "Quicklooks" could be displayed in a web browser on board if annotated accordingly.
- Further there was a Team-Folder in which all scientific teams had a directory in which they could work on data together.



New directory structure MCS Workspace

In the following the new MCS Workspace structure is described which shall be used for collaboration on and exchange of MOSAiC data within the MOSAiC consortium until the public release date January 1 2023. Please organise within your teams and transfer files from the old directory structure (see section above) into the new structure described below.

All MOSAiC users have **WRITE** access to the workspace area beneath the directories listed in bold in the following. The directories listed in bold format cannot be deleted or modified by MOSAiC users. If changes are required please coordinate within your teams or the MOSAiC Project Board. A change request can then be sent to support@mosaic-data.org.

• platforms_processed (same directory tree as in platforms of raw data but without sub folders for device operations for upload of processed data products)

```
 buoys

         SENSOR 1
         Your data

 SENSOR 2
 ...
 pack_ice
 ice_ps
 SENSOR 1
 SENSOR 2
 ...
 vessel
 polarstern
 SENSOR 1
 SENSOR 2
 ...
```

- Teams_Tasks (Overarching modelling and aircraft activities in CrossActivities, otherwise in team folders)
 - 01_Public (General information)
 - PublicPolarstern
 - Maps_FloeNavi
 - Weather
 - Reports
 - OutreachMaterial
 - ... may be extended upon request by an AWI IT Admin (please coordinate within your teams)
 - o **02_ATMOS** (*Team content, to be defined by team*)
 - o **03_ICE** (Team content, to be defined by team, includes Remote Sensing)
 - 04_OCEAN (Team content, to be defined by team)
 - **05_ECO** (*Team content, to be defined by team*)
 - o 06_BGC (Team content, to be defined by team)
 - O7_CrossActivities (Content, to be defined by tasks / sub groups)
 - Logistics+Safety
 - Data
 - Media
 - Modelling

- Aircraft
- CoringLeads

- MicroPlastic
 ... may be extended upon request by an AWI IT Admin (please coordinate within your teams)
- DataProducts (Overarching data products, to be defined over time. Results from merged data sets. Top level directories to be discussed once needed)