

# Archiving Directory Structure

## Introduction (base directory)

O2A data is archived. The data structure for archiving is described here.

The SENSOR's parameter codes (URNs, Uniform Resource Names), e.g. `vessel:polarstern:hydrosweep_ds3` describes the base storage directory for this specific device. This base directory is defined by the metadata description in [sensor.awi.de](https://sensor.awi.de).

Examples for base directory:

```
vessel:polarstern:hydrosweep_ds3
towed_systems:loki_10001_02
```

Subdevices of a base device are described in the sensor URN by adding the sub devices "Short Name" to the base device URN. For example

```
towed_systems:loki_10001_02:microflu-chl_1228
```

Base device and subdevices are named **items** for simplicity reasons. Any nesting of items is possible. There is no restriction for nesting.

Examples for different level of nesting in Sensor URNs:

```
(type:item:item)      vessel:polarstern:hydrosweep_ds3
(type:item:item:item) vessel:polarstern:tsk1:sbe38

(type:item)            towed_systems:loki_10001_02
(type:item:item)       towed_systems:loki_10001_02:microflu-chl_1228
```

Sensor URNs describe the data storage location in our archive. E.g. temperature data from the sbe38 sensor, from termosalinograph keel 1 tsk1, on vessel polarstern, are stored under the root directory `/vessel/polarstern/tsk1/sbe38/`. Picture data from loki\_10001\_02 are archived under `/towed_systems/loki_10001_02/`. This is the base-directory.

## Data structure below Sensor URN base directory

The base-directory is given by the sensor URN. Expedition data is located under the base directory and an **`/exdata/`** marker directory. The level below **`/exdata/`** describes the expedition and if applicable the science activity and device operation. Following schema have to be used for naming this subdirectory:

```
expedition_scienceactivity-deviceoperation
```

For example **`PS85_444-2`** describes expedition or event related data for expedition PS85 from science activity 444 and device operation 2. Splitting these information in nesting folders is not supported.

Examples

```
/vessel/polarstern/hydrosweep_ds3/exdata/PS122.1/

/towed_systems/ofos_1/digital_camera/exdata/PS121_49-1/
```

 Hint: underscore ( `_` ) is ambiguous if used for "expedition\_**leg**" vs. "expedition\_**scienceactivity**". Therefore underscore ( `_` ) has not be used in the expedition name for legs. Use point ( `.` ) instead instead for defining expeditions with several legs. For example PS122.1 instead of PS122\_1.