

webODV Data Extractor HowTo

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This document describes briefly the basic functionality of the webODV Data Extractor.

General

We restrict the number of your webODV data extractor sessions or instances to **4**, i.e. you can only use this number of extractor instances simultaneously, e.g. in different browser tabs. For downloading data in the background we restrict the number of processes to **4**. Your session will be automatically closed after 1 h of inactivity. If this happens, we will save the current state of the extractor and inform you by a pop-up message. At the moment the current state of the extractor will be saved in your browser, i.e. it will be restored in a follow up session in the same browser as long as you do not delete your browser's cache.

1. Select cruises / domain / time range

EMODnet | CHEMISTRY
Data & products on marine water quality

HELPDESK DATA PROTECTION NOTICE

webODV emodnet_chem > eutrophication > Arctic > Eutrophication_Arctic_profiles_2021.odv

1. SELECT CRUISES / DOMAIN / TIME RANGE 2. Select variables 3. Download 4. Exit

Click *Zoom in* to define a sub-region, *Apply* to select the sub-region, or *Zoom out* to return to full domain. Select *Time Range* in the format mm/dd/yyyy.

CRUISES
869 ITEMS SELECTED

MAP DOMAIN
ZOOM MODE ZOOM OUT
FULL RANGE GLOBAL

TIME RANGE
from: 01/01/1850
to: 12/31/2021

RESET
PAGE GLOBAL

SELECTION STATUS
Stations: 114642 of 114721
Output variables: 10 of 16

EXPORT IMAGE
Download

DATA PREVIEW
Scatter plot

SELECTED VARIABLES (OR)
Water body dissolved oxygen con
Water body dissolved oxygen satu
Water body phosphate
Water body silicate
Water body nitrate
Water body nitrite

STATION INFO

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To extract data you have to follow the four steps indicated on the top pager bar. The pages do not have to be visited by order, rather you can jump between them. Click with the left mouse button or use the keyboards arrow keys for navigation.

SELECTION STATUS

This info box informs about the number of selected stations and output variables. A download of data with selecting zero stations or variables is not possible and error messages will appear in the case.

EXPORT IMAGE

Download the current map as a high quality .png image.

DATA PREVIEW

Switch to the visualisation layout and create a scatter plot of the data. Select x and y axes variables, set axes ranges and hide/show outliers.

The screenshot displays the webODV interface for data preview. The top navigation bar includes the EMODnet logo and 'CHEMISTRY Data & products on marine water quality'. The breadcrumb trail indicates the current location: 'webODV emodnet_chem > eutrophication > Arctic > Eutrophication_Arctic_profiles_2021.odv'. A progress bar shows four steps: '1. Select Cruises / Domain / Time Range', '2. Select variables', '3. Download', and '4. Exit'. A 'GO BACK' button is located below the progress bar. The main content area is divided into three sections. On the left, the 'AXES VARIABLES' section shows 'ITS-90 WATER TEM' selected for the X-axis and 'DEPTH' for the Y-axis. The 'AXES RANGES' section shows X-axis ranges from -10 to 40 and Y-axis ranges from 4000 to 0. A 'FULL RANGE' button is at the bottom of this section. The central section contains a map of the Arctic region and a vertical scatter plot of 'Depth [m]' from 0 to 4000. On the right, the 'SELECTION STATUS' section shows 'Stations: 114642 of 114721' and 'Output variables: 10 of 16'. Below it is an 'EXPORT IMAGE' button with a 'Download' link. At the bottom right, the 'SELECTED VARIABLES (OR)' section lists variables such as 'Water body dissolved oxygen con', 'Water body dissolved oxygen satn', 'Water body phosphate', 'Water body silicate', 'Water body nitrate', and 'Water body nitrite'.

SELECTED VARIABLES (OR)

This list shows the currently selected variables, whereas the actual selection takes place on page two. The OR or AND in brackets indicates the selection mode and is explained below in the context of variable selection.

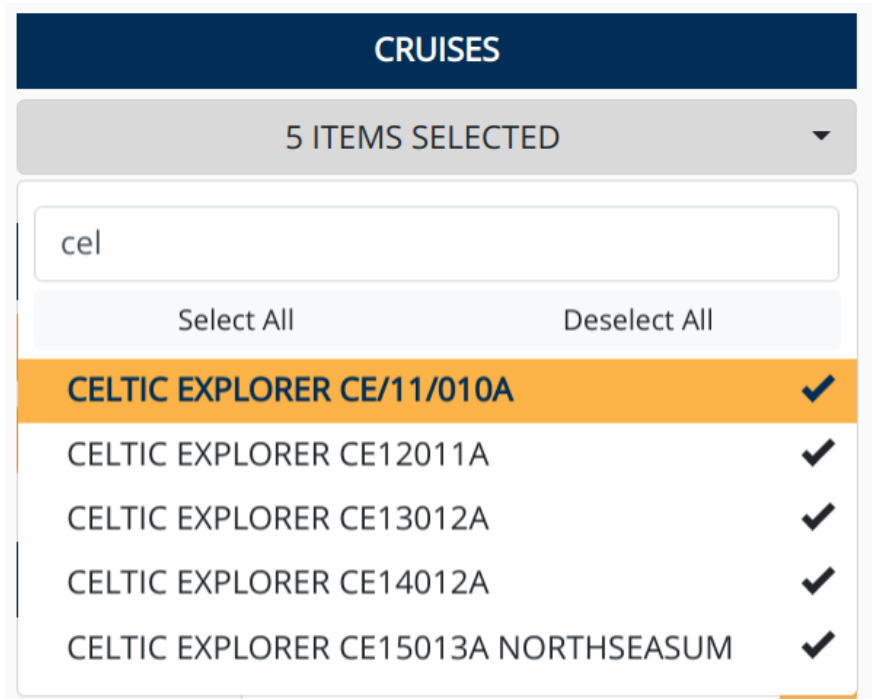
STATION INFO

This dropdown menu provides information (meta data) about a clicked station (blue dot) in the map.

CRUISES

A dropdown for selecting and deselecting cruises by names. Options are to *Select All* or *Deselect All*.

Additionally a search function is provided as explained below:



To start with the search function it makes sense to first *Deselect All*. Then the list of search results is updated in real-time while typing. A click on *Select All* checks then only the search results, which is the desired selection.

MAP DOMAIN

A click on *ZOOM MODE* activates the interactive zoom function within the map. The size of the new zoom rectangle can be changed by moving edges or corners of the rectangle with clicking and dragging the mouse. New rectangles can be created by clicking into the map, while holding the left mouse button and dragging.

ZOOM OUT automatically zooms out of the selected region. *FULL RANGE* creates a map including all stations, but no “station free” area. *GLOBAL* displays a global map.

TIME RANGE

Select a date in the format mm/dd/yyyy by directly editing within the field or use the calendar widget. Range: 01/01/1850-12/31/2021. Click on the widget's top line to switch between years, click again to switch between decades and so on.

RESET

Finally, two reset buttons are provided. The *Page* button resets the current page to default values, whereas the *Global* button resets all settings of the Extractor back for this dataset.

2. Select variables

The screenshot shows the webODV interface for the 'CHEMISTRY' section. The breadcrumb path is 'webODV emodnet_chem > eutrophication > Arctic > Eutrophication_Arctic_profiles_2021.odv'. The interface is divided into several panels:

- LOGIC:** Radio buttons for 'OR' (selected) and 'AND'.
- TREEVIEW:** Buttons for 'Collapse all', 'Expand all', 'Check all', and 'Uncheck all'. A 'RESET' button is also present with a 'Global' option.
- VARIABLES:** A central panel with a world map and a search bar. Below the search bar is a list of variables with checkboxes:
 - Water body dissolved oxygen concentration
 - Water body dissolved oxygen saturation
 - Water body phosphate
 - Water body total phosphorus
 - Water body silicate
 - Water body nitrate
- SELECTION STATUS:** Shows 'Stations: 14945 of 114721' and 'Output variables: 10 of 16'.
- DATA PREVIEW:** A 'Scatter plot' button and a small plot showing data points.
- SELECTED VARIABLES (OR):** A list of selected variables, some of which are grayed out (disabled):
 - Water body dissolved oxygen con
 - Water body dissolved oxygen satu
 - Water body phosphate
 - Water body silicate
 - Water body nitrate
 - Water body nitrite

The second page provides the variable selection for the final download. Disabled gray items indicate that these variables are not available for the station selection. Two modes are available for the variable selection:

OR mode: In this case all stations in the map are shown, which have data for one **OR** more of selected variables.

AND mode: Only stations are shown, that have data for **ALL** of the selected variables.

Note that the stations in the map change dynamically according to the selected variables.

Additional variables, hidden here in the treeview on page 2, will be provided automatically in the final downloaded file, which are important and needed for further analyses. These additional variables are e.g. depth, temperature, salinity, time or sediment grain size parameters, depending on the type of collection.

4. Download

EMODnet CHEMISTRY
Data & products on marine water quality

HELPDESK DATA PROTECTION NOTICE

webODV emodnet_chem > eutrophication > Arctic > Eutrophication_Arctic_profiles_2021.odv

1. Select Cruises / Domain / Time Range 2. Select variables 3. DOWNLOAD 4. Exit

Download data in different formats.

DOWNLOAD

ASCII SPREADSHEET (.TXT)

ODV COLLECTION (.ODV)

NETCDF (.NC)

RESET

Global

SELECTION STATUS

Stations: 14945 of 114721
Output variables: 10 of 16

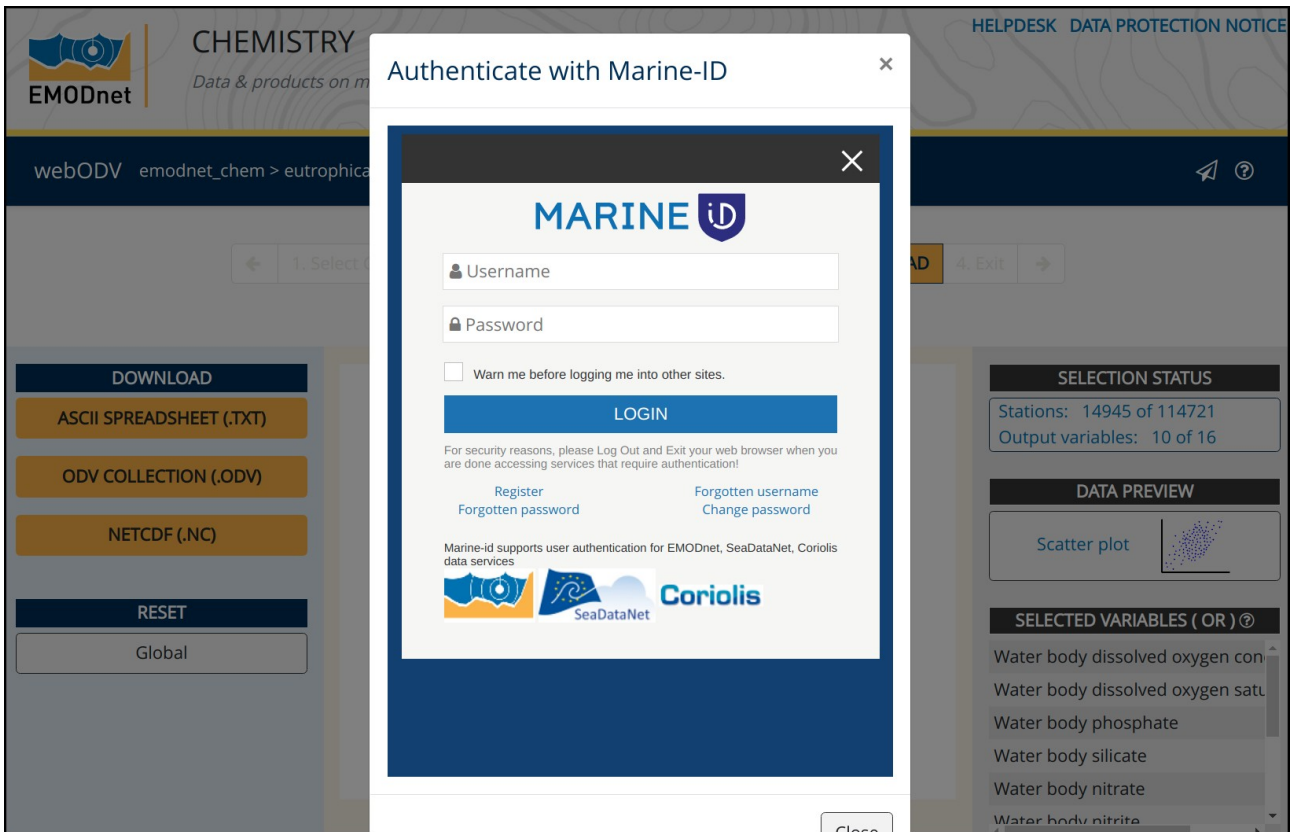
DATA PREVIEW

Scatter plot

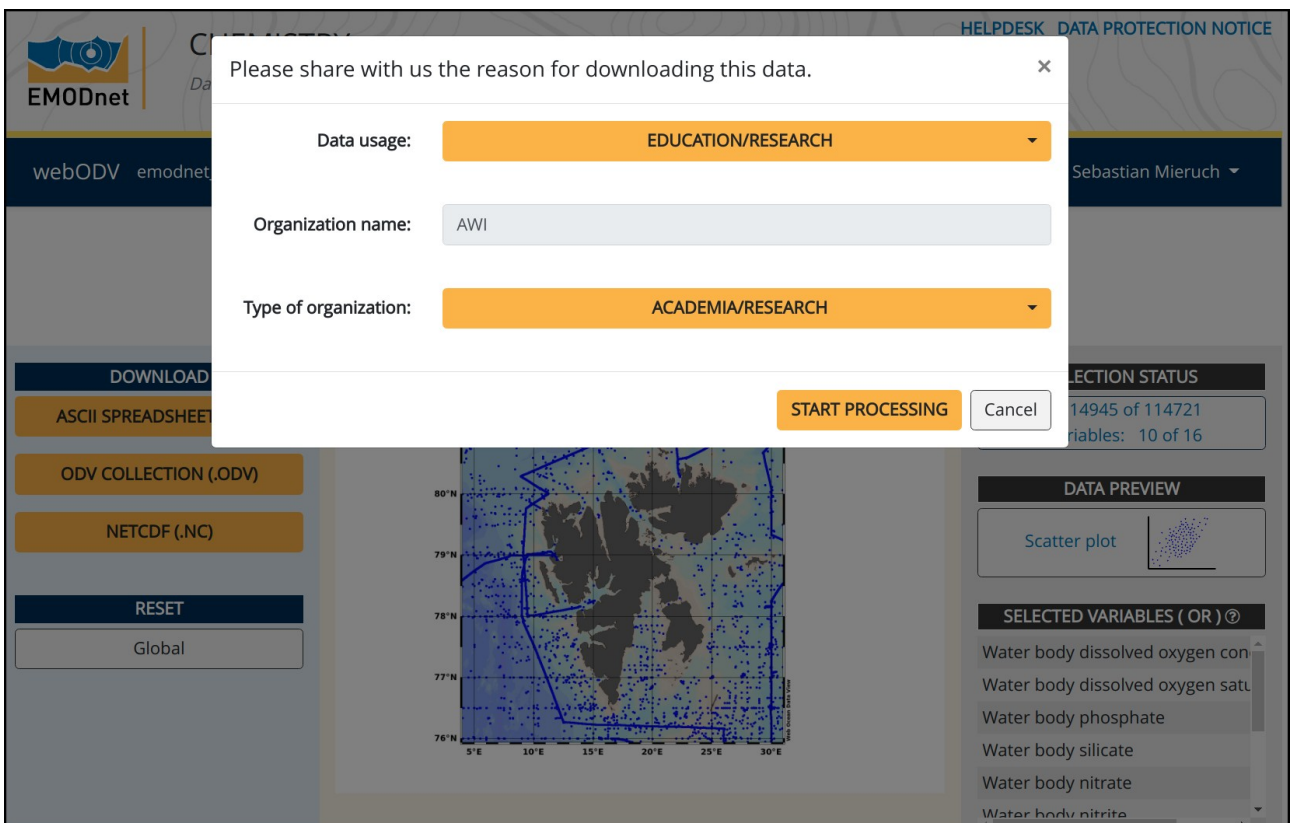
SELECTED VARIABLES (OR) ?

- Water body dissolved oxygen con
- Water body dissolved oxygen sat
- Water body phosphate
- Water body silicate
- Water body nitrate

The download page allows to download the selected data in different formats, ASCII SPEADSHEET (.txt), ODV COLLECTION (.odv) or NETCDF (.nc). Prior to downloading the data, users have to authenticate with MarineID, which is shown in a pop up:



In the user is not already registered at MarineID, account creation is now possible. After login in, we will ask for the reason of downloading this dataset as shown below:



By hitting the “START PROCESSING” button, the download process starts in the background. As soon as the data are ready for download the user is informed by email, which includes the download

link. Note that the email address provided at MarineID is used. Finally the data can be downloaded as a .zip file.

5. Exit

The last page simply brings the user back to the webODV homepage.