**Data extraction BlueOcean project**

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**Note:** As always, this dataset has been carefully built and checked accordingly. However, it is the user’s responsibility to perform his own verifications.

**Quick description of the dataset**

**1 – The dataset contains 9 files:**

1. “CPR\_Data\_BlueOcean\_14012025.docx”: This document
2. “CPR\_BlueOcean\_ControlMap\_14012025.png”:

Map representing the selected samples from January 1958 to December 2021 (66643 samples)

1. “CPR\_BlueOcean\_Data\_LargeZooplankton\_14012025.csv”: Abundance data for all selected large zooplankton (106 taxa, see CPR\_BlueOcean\_List\_LargeZooplankton\_14012025.csv) and all selected samples in the selected area (45°N to 65°N, -24°E to -6°E).

Rows: All samples for the selected area (66643 samples).

Column 1: Unique sample id. For instance: “240B--27” corresponds to the 27th sample for the 240th transect on the B route.

Columns from 2 to 8: Spatio-temporal coordinates for each sample.

Columns from 9 to 114: Abundance data for all selected large zooplankton (106 taxa).

Note 1: We may notice very small values (10^-10) or any other number with a very small fraction. Sometimes, our analysts can identify the presence of a specific taxa but are unable to quantify it. In that case, they report the taxa as “present”. This is hard-coded in our database as a very small value (10^-10) for statistical reasons.

Note 2: In a given sample, the abundance value of a specific taxon, is set to NaN (Not A Number) when the corresponding Data of Routine Identification (DRI) is posterior to the date of sample collection.

1. “CPR\_BlueOcean\_List\_LargeZooplankton\_14012025.csv”: List of large zooplankton

Rows: All selected taxa (106 taxa).

Column 1 “accepted\_id”: Unique identifier used by the CPR survey

Column 2 "Aphia\_id”: Identifier used by WoRMS

Column 3 "name-CPR”: Unique name used by the CPR survey.

Column 4 "Name\_worms”: Name used by WoRMS corresponding to the “aphia\_id”.

Column 5 "DRI”: Date of Routine Identification. Before that date, un taxon was not on our routine taxa list. For a given taxon, abundances associated with samples taken before the DRI are set to a NaN (Not A Number).

1. “CPR\_BlueOcean\_Data\_SmallZooplankton\_14012025.csv”: Abundance data for all selected small zooplankton (see CPR\_BlueOcean\_List\_SmallZooplankton\_14012025.csv) and all selected samples in the selected area. (60 taxa, 66643 samples).

Note: Same architecture as “CPR\_BlueOcean\_Data\_LargeZooplankton\_14012025.csv”

1. “CPR\_BlueOcean\_List\_SmallZooplankton\_14012025.csv”: List of small zooplankton (60 taxa).

Note: Same architecture as “CPR\_BlueOcean\_List\_LargeZooplankton\_14012025.csv”.

1. “CPR\_BlueOcean\_Data\_Phytoplankton.csv”: Abundance data for all selected phytoplankton (see CPR\_BlueOcean\_List\_Phytoplankton\_14012025.csv) and all selected samples in the selected area. (152 taxa).

Note: Same architecture as “CPR\_BlueOcean\_Data\_LargeZooplankton\_14012025.csv”

1. “CPR\_BlueOcean\_List\_Phytoplankton\_14012025.csv”: List of phytoplankton (152 taxa, 66643 samples).

Note: Same architecture as “CPR\_BlueOcean\_List\_LargeZooplankton\_14012025.csv”.

1. “CPR\_BlueOcean\_Data\_PCI\_14012025”. Values for the Phytoplankton Colour Index (PCI)

Note: Same architecture as “CPR\_BlueOcean\_Data\_LargeZooplankton\_14012025.csv”