Marine Data 4 Asia

Training Workshop
24 & 26 June 2025

PROGRAMME OF THE EUROPEAN UNION

Copernicus
Europe's eyes on Earth

Copernicus Marine Service

Implemented by
MERCATOR OCEAN INTERNATIONAL

MERCATOR OCEAN
INTERNATIONAL
2 avenue de l'Aérodrome de Montaudran, 31400 Toulouse, FRANCE
Tél : +33 5 61 39 38 02 - Fax : +33 5 61 39 38 99
Société civile de droit français au capital de 2 000 000 € - 522 911 577 RCS Toulouse - SIRET 522 911 577 00024

marine.copernicus.eu
mercator-ocean.eu

SOMMAIRE

Introduction

Here you will find the unanswered questions of the training workshop "Marine Data 4 Asia 2025" held the 24th and 26th of June 2025. More than 1000 people took part of the event, hence this post-event report. You can also have a look at the replays on our YouTube Channel here.

Please keep in mind that some questions asked were very similar, as a result we've summarized the different topics you covered in the Q&A 😊

We thank you again for your presence and hope to see you again!

1) Session #1 – Products & Use Cases

General questions about the Copernicus Marine Service

Some useful links :

- Home | CMEMS
- Products catalogue : Copernicus Marine Data Store | Copernicus Marine Service
- Past use cases : Use Cases | CMEMS
- Everything you need as a user : User Corner | CMEMS
- Tutorials from past events : E-learning materials | CMEMS

- Is the data freely available or do we need to pay? Can it be use for commercial purposes or to inform policy makers ?

The vizualisation, the access and the download of data are totally free: Access data | CMEMS.

Once it is downloaded, you can do whatever you want with the data, you just need to cite the Copernicus Marine Service in your work (the citations are pre-made on each product to facilitate the task).

- How can you be sure about Copernicus data accuracy ?

Copernicus data come from several sources : satellite, in-situ and model data. All of them are tested, updated, scientifically-driven data. Useful information, such as error levels of observations or indicators on the reliability of forecasts is provided consistently and effectively.

- Do I need to be part of an institution to have access to your software and data ?

Not at all. The data are accessible to everyone, it doesn't matter if where and with who you work. All the data are free of charge to access and download, everything is open source.

MyOceanPro Viewer Demonstration : MyOcean Viewer | CMEMS

- Can we save our progress or history to continue our work later or to make some corrections or edits?

Yes, in MyOcean Pro Viewer, you can save your work progress. The tool allows you to save graphs in your session, which means you can continue your work later or make corrections and edits as needed. Additionally, you can minimize and expand graph windows, which can be useful for managing your workspace and focusing on specific data or analyses.

- What is the programming language used to analyze the ocean data using Myocean Viewer? Are the results justifiable?

Most of MyOcean is in JavaScript/TypeScript, including the data analysis the user refers to. There is a small amount of Python in the viewer, which is the part that creates the netCDF subset files.
The only data analysis done are statistics : averages (geographic and temporal), minimum, maximum, very basic calculation.
We'd like to see examples of calculations that could be questioned.

User testimony #1 – Raj Kumar (Ozone Spac Edtech)

Link : https://www.researchgate.net/profile/Raj-Kumar-48

User testimony #2 – Lars Hole (MET Norway)

Link : https://doi.org/10.3390/jmse11050925

User testimony #3 – Shihe Ren (National Marine Environmental Forecasting Center of China)

Link : https://meetingorganizer.copernicus.org/EGU2020/EGU2020-2521.html

2) Session #2 – Practical session

General questions

- How do I download CMEMS data directly using R?

You can refer to this article to look into this in detail! https://help.marine.copernicus.eu/en/articles/8638253-how-to-download-data-via-the-copernicus-marine-toolbox-in-r

- How can I look at bathymetry data ?

A lot of Copernicus Marine products provide a bathymetry dataset (i.e. sea floor topology). You can download this dataset to do the analysis.

- On https://jupyterhub-cmems.mercator-ocean.fr/, is it possible to download other Copernicus data such as ERA5 data?

It's not possible to download ERA5 data directly from a Copernicus Marine environment. We invite you to go on the WEkEO JupyterHub (Workspace) and use the HDA API to download other Copernicus services data. Don't hesitate to contact the WEkEO User Support if you need more help.

The Copernicus Marine Toolbox

Some useful links :

- Copernicus Marine Toolbox - Introduction | Copernicus Marine Help Center
- Copernicus Marine Toolbox - Installation | Copernicus Marine Help Center

- Is there a way to find the dataset id straight from the toolbox without going to the homepage?

You can use the « describe » function. E.g. copernicusmarine describe -p GLOBAL_ANALYSISFORECAST_PHY_001_024 -r dataset_id

Jupyter Notebooks – Alexandre Homerin (Noveltis)

All of the questions were answered during the event. You can watch the replay if you wish or download the tutorial if you didn't yet 😊 : Jupyter Notebook tutorial

QGIS – Daria Andrievskaia (Noveltis)

All of the questions were answered during the event. You can watch the replay if you wish or download the tutorial if you didn't yet 😊 : QGIS tutorial

R Studio – Simon Millet (Noveltis)

All of the questions were answered during the event. You can watch the replay if you wish or download the tutorial if you didn't yet 😊 : R Studio tutorial

Thanks again for your participation 😊