



WEKEO Coastal Interactions 2024

Post-event report



Implemented by



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Introduction

Here you will find the unanswered questions of the training « WEkEO 4 Coastal Interactions » held the 4th and 6th December 2024. More than 1200 people took part of the event, hence this post-event report.

Please keep in mind that some of the 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 !

General questions

The [Copernicus WEkEO data](#) are free of charge to access, download and visualize. There is data for all around the globe at low and mid-resolution. There is also data in Europe at higher resolution ([Copernicus](#) is a program funded by the European Union).

You can find data from all of the 6 Copernicus Services, for all type of use :

- Copernicus Atmosphere : [Atmosphere | Copernicus](#)
- Copernicus Marine : [Marine | Copernicus](#)
- Copernicus Land : [Land | Copernicus](#)
- Copernicus Climate Change : [Climate change | Copernicus](#)
- Copernicus Security : [Security | Copernicus](#)
- Copernicus Emergency : [Emergency | Copernicus](#)

Data & products

Concerning the data and products available : [Data viewer | WEkEO](#)

- Here you can check the full catalogue of available data
- You can see the exact description of each product
- You can visualize them on a map
- And download them if you wish to

Download the data

How to download the data (wms, api, etc.) : [WEkEO Data Download | WEkEO Help Center](#)

- You will find several articles with the different ways to download the data
 - With the Viewer
 - Via HDA – API

- And the errors you might encounter

Virtual machines and Jupyter Notebooks Catalogue

WEkEO paid subscription & virtual machines : [Computing | WEkEO](#)

Jupyter Notebooks catalogue : [Jupyter Catalog \(wekeo2.eu\)](#)

Calculation and specific parameters

We also had plenty of questions about the different ways of calculating certain parameters (for example biomass calculation, photosynthesis) and so on for your projects. We invite you to look for research papers that will provide you with a full description of their working methods and the calculations/models/data they use. You can look on [ResearchGate](#), [Connected Papers](#), [Google Scholar](#) and many others.

DAY 1 – 4 December 2024

Coastal Hub – Muriel Lux (Mercator Ocean International)

Link to the Copernicus Coastal Hub : [Coastal Hub | Coastal Hub](#)

- Is it possible to upload a KML/shapefile or search the area of interest by geocoding tab ?

At this moment, it is not possible to upload a kml/shapefile to select the area of interest in WEkEO and Coastal hub viewer. The only possibility is to define a rectangle bounding box to subset the data you want to download (through an API or directly from the viewer). We hope this will evolve in the future. Note that it is possible to upload a shapefile (or kml or geojson or WKT) in the Copernicus Marine viewer [Copernicus Marine MyOcean Viewer](#) through the “Import” button and it will be soon possible to download the corresponding data only.

EOCanvas – Anna-Lena Erdmann (EUMETSAT)

Link to the WEkEO EOCanvas : [WEkEO EOCanvas - Serverless Functions for Copernicus Data | WEkEO Help Center](#) (more links in Anna-Lena PDF presentation)

- Is Acolite integrated ?

No. At the moment there is only SNAP and the EUMETSAT Data Tailor implemented. We are open for user requests for specific software. Please send your request to the WEkEO User Support. We will collect requests and decide on software evolutions based on these requests.

- Is your API suited for large scale downloading of Sentinel Data ?

The WEkEO HDA API is well suited for downloading large volumes of Sentinel data. You might want to ask for a quota increase with the user support for a limited amount of time (current quota is ~100 / hour). If you want to process Sentinel data before downloading using eocanvas, you can do so. Be aware that there is a quota of 3 processes/hour in place at the moment, so large scale data processing will take some time.

- How do we get your recommendation for the Innovation Labs ?

The application requirements for the innovation lab are listed here: “The Innovation Lab is open to all WEkEO users from Copernicus Member States and Participating Countries. We seek

innovative, interdisciplinary projects using cloud computing and Copernicus data.” [Innovation Lab | WEkEO](#). If you are eligible to apply, you are very welcome to do so at any time. Questions on the application procedure can be asked to the WEkEO User Support.

User testimony #1 – Bojana Horvat (University of Rijeka)

Link to Bojana’s paper : <https://doi.org/10.3390/land12112014>

User testimony #2 – Jérôme Benveniste (former European Space Agency)

You can access Jérôme ResearchGate profil here : <https://www.researchgate.net/scientific-contributions/Jerome-Benveniste-2122148983>

Useful links:

- [International Journal of Applied Earth Observation and Geoinformation | ScienceDirect.com by Elsevier - International Journal of Applied Earth Observation and Geoinformation | ScienceDirect.com by Elsevier](#)
- [Earth Observation Advanced science Tools for Sea level Extreme Events \(EOatSEE\) - eo science for society](#)
- [ESA Ocean Science Cluster - eo science for society](#)
- [ESA Hydrology Science Cluster - eo science for society](#)
- [ESA Extremes and Disaster Science Cluster - eo science for society](#)
- [eo4society - eo science for society](#)

User testimony #3 – Paolo Ciavola (University of Ferrara)

Link to Paolo’s paper : <https://doi.org/10.5194/nhess-23-3585-2023>

DAY 2 : 6 December 2024

WEKEO Viewer – David Bina (Mercator Ocean International)

- Is it possible to download data products in other projections ?

It is not possible to select another projection in the download process, however, you can use the **eocanvas function to reproject your data before downloading**. This might take a bit more time than the direct download, but you will not have to reproject the data on your local machine.

- Is it possible to remove cloud cover before downloading ?

The eocanvas before downloading. If you require another function for cloud removal, please contact us at support@wekeo.eu.

- Can I work with the data "online" without downloading ?

You can work with the data online on the JupyterHub. This will require "downloading", but only to your JupyterHub environment, nothing will be downloaded to your computer. If you want to process data completely online and only receive the results, the eocanvas service of WEKEO will be interesting for you ([Exploring WEKEO's EOCanvas: A Serverless Solution for Copernicus Data Processing | WEKEO](#)).

- Can we use Shapefile to download data ?

Not for the moment but it could be a nice upgrade to WEKEO. We will keep this in mind 😊

Jupyter Notebooks – Alexandre Homerin (Noveltis)

Link to the tutorial : <https://atlas.mercator-ocean.fr/s/TbEZbZbpGw58QfD>

Link to the video : <https://youtu.be/gkZ-oMBbt4s>

QGIS – Daria Andrievskaia (Noveltis)

Link to the tutorial : <https://atlas.mercator-ocean.fr/s/DReWcxL8qjnXBxa>

Link to the video : <https://youtu.be/Zb6DcoB0gNk>

Simon Millet (Noveltis)

Link to the tutorial : <https://atlas.mercator-ocean.fr/s/yFXmoekZd6AFrAs>

Link to the video : <https://youtu.be/yiiKP7oWW5U>

Thanks again for your participation 😊