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THE CCLME ALIEN SPECIES DATABASE AS A LAYER OR AS A TOOL?: DISCUSSING POSSIBILITIES AND DECISION-MAKING

CONCLUSIONS

WORKSHOP ON “THE CCLME ALIEN SPECIES DATABASE: HOW TO PRESENT THE DATA GATHERED IN THE CCLME ECO-GIS VIEWER”

Organized within the project

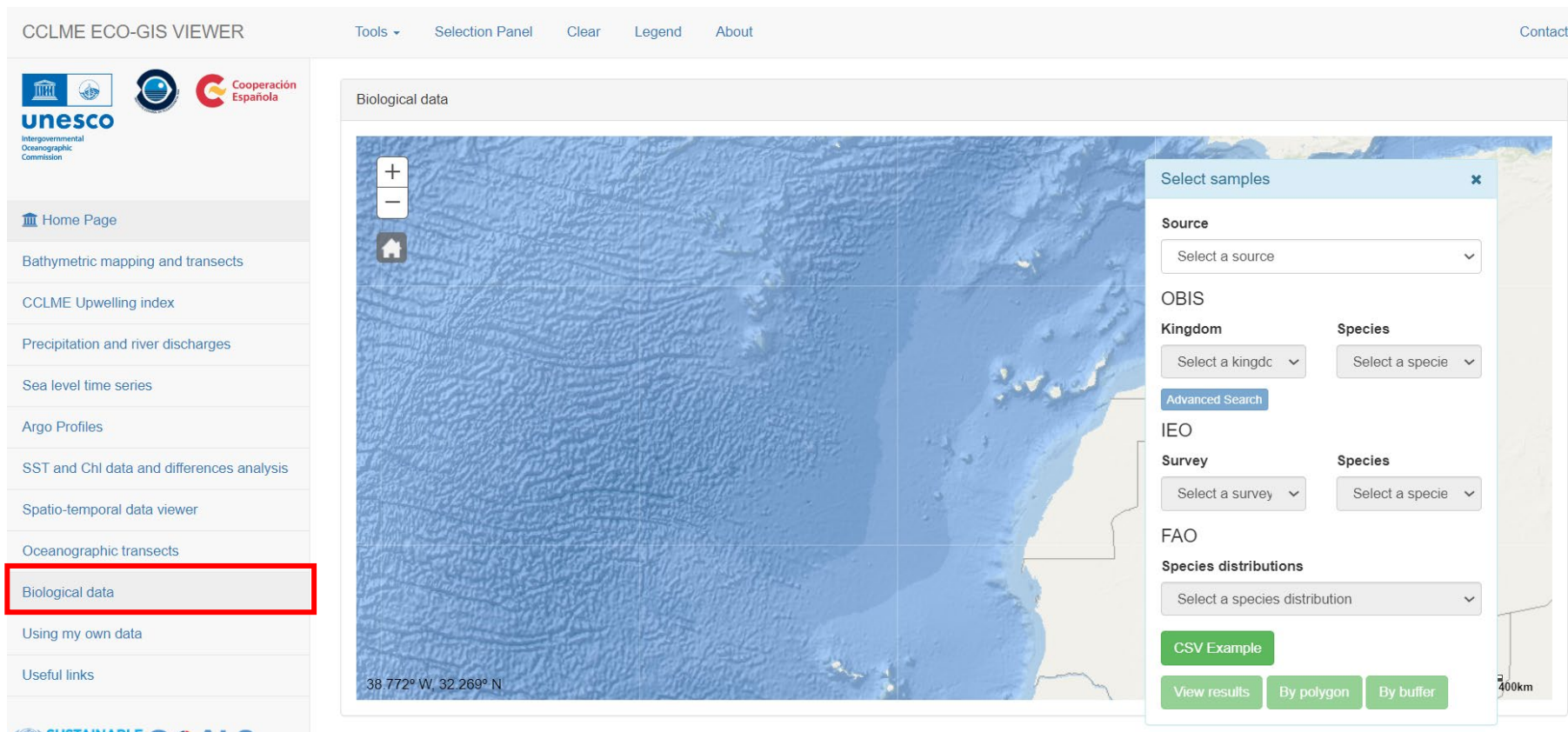
*Invasive alien species and other ocean stressors: Furthering the scientific knowledge and capacity basis
in the Canary Current Large Marine Ecosystem*

20 November 2023 – On-line

Conclusions

The CCLME Alien Species Database as a layer

It is proposed to add the CCLME Alien Species Database as an additional layer in “Biological data” Analytic tool (<http://www.ideo-cclme.ieo.es/Home/BiologicalData>), named: **IOC CCLME Alien Species**.



CCLME ECO-GIS VIEWER

Tools Selection Panel Clear Legend About Contact

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Home Page

Bathymetric mapping and transects

CCLME Upwelling index

Precipitation and river discharges

Sea level time series

Argo Profiles

SST and Chl data and differences analysis

Spatio-temporal data viewer

Oceanographic transects

Biological data

Using my own data

Useful links

Biological data

Select samples

Source
Select a source

OBIS

Kingdom
Select a kingdc

Species
Select a specie

Advanced Search

IEO

Survey
Select a survey

Species
Select a specie

FAO

Species distributions
Select a species distribution

CSV Example

View results By polygon By buffer

38.772° W, 32.269° N

400km

This would allow comparison of alien species occurrences with data from other sources:

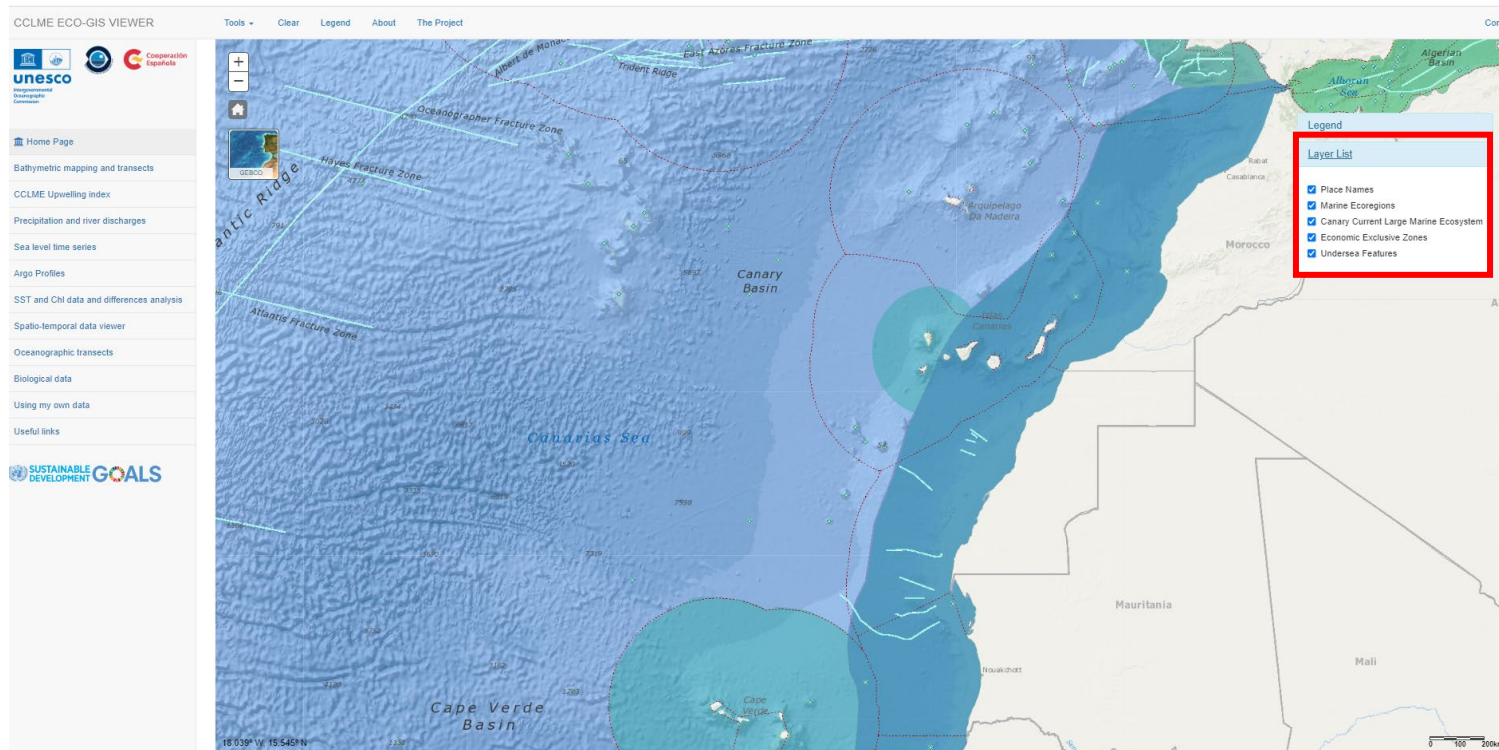
- OBIS
- IEO fisheries surveys
- FAO maps of species distribution

Conclusions

Adding additional layers as static layers

In order to highlight the importance of the Ballast Waters Management Convention and see whether there is a connection between the transport of alien species (e.g. ballast waters, hull fouling, etc.) and their occurrences, it is proposed to add two additional static layers:

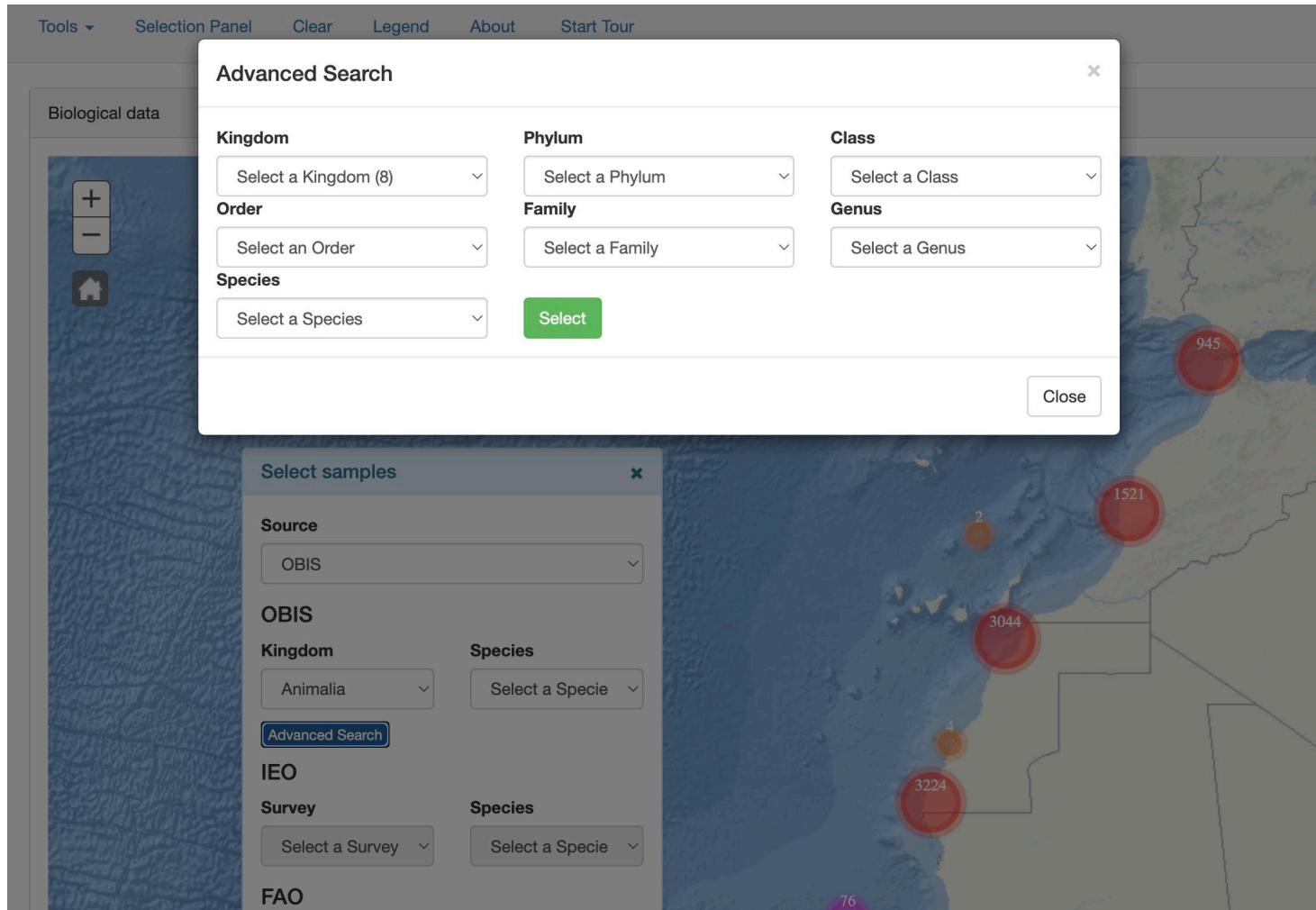
- **Main harbours in the region**, if possible, indicating if ballast water implementations are applied.
- **Marine traffic routes**, at least main regular ones. i.e. marinetraffic.com (real time view), EmodNET traffic density maps, or other visualization options.



At the left, examples of static layers already available in the CCLME Eco-GIS Viewer (Home Page)

Conclusions

How to search the data: Terms agreed



The screenshot displays a web application interface with a map of the Mediterranean region. A white 'Advanced Search' dialog box is open, featuring several dropdown menus for taxonomic levels: Kingdom (8), Phylum, Class, Order, Family, Genus, and Species. A green 'Select' button is positioned next to the Species dropdown. A 'Close' button is located at the bottom right of the dialog. In the background, a 'Select samples' panel is visible, showing options for Source (OBIS), Kingdom (Animalia), and Species. An 'Advanced Search' button is highlighted in blue within this panel. The map shows several red circular markers with numbers (945, 1521, 3044, 3224, 76) and a blue bar at the top with navigation options like 'Tools', 'Selection Panel', 'Clear', 'Legend', 'About', and 'Start Tour'.

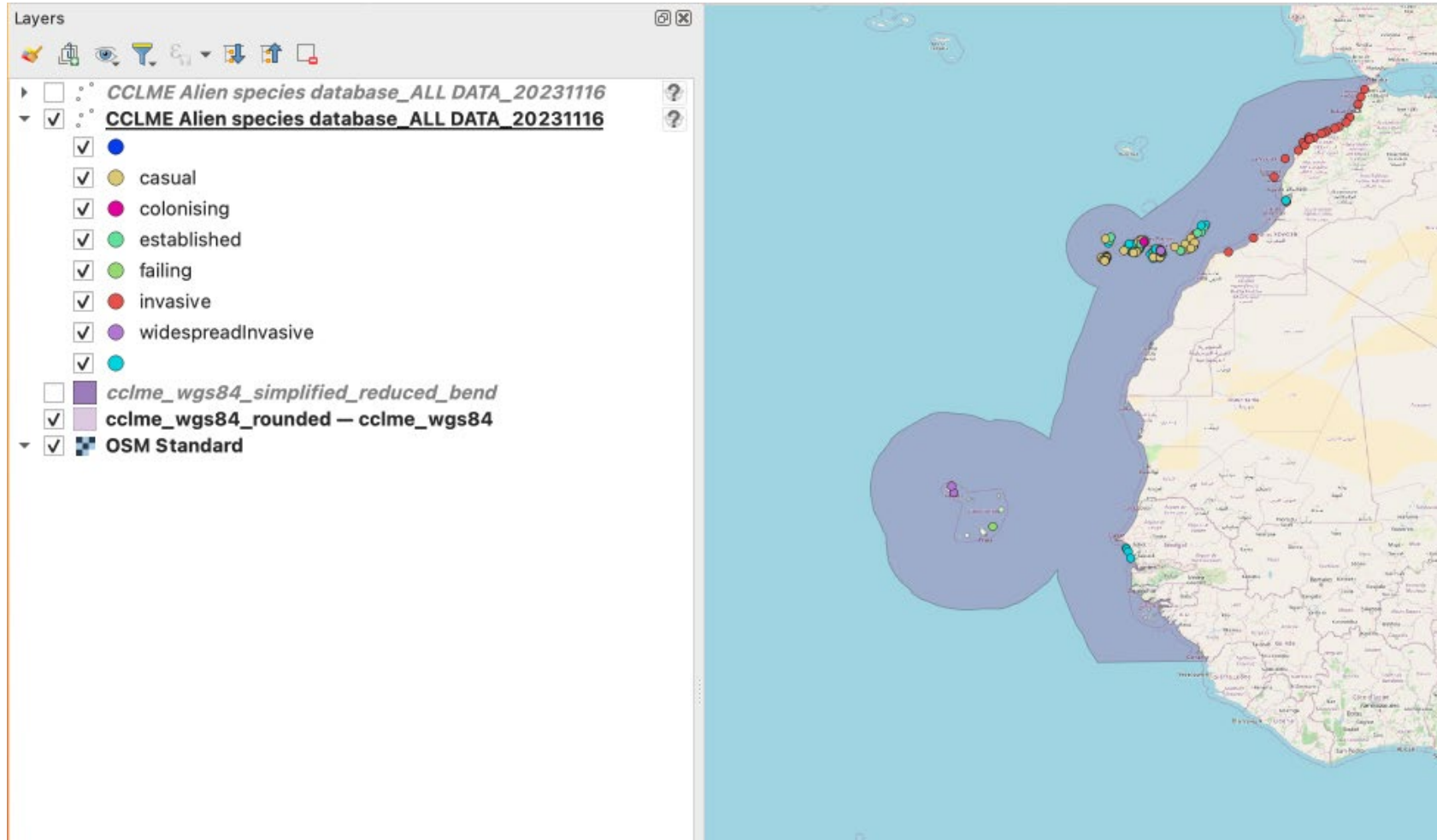
The selection panel should allow an Advanced Search via an additional panel (at the left, example of Advanced Search for one of the layers available within the Analytical tool 'Biological data').

It is proposed to use the following terms:

- taxonomy (**Phylum**, **Class**, etc.)
- **establishmentMeans**
- **degreeOfEstablishment**
- **pathway**
- **eventDate** (Year only)

Conclusions

How to present the data: Option 1, using color code



It is proposed to use the term **degreeOfEstablishment** (https://rs.gbif.org/vocabulary/dwc/degree_of_establishment_2022-02-02.xml).









Conclusions

How to present the data: Option 1, using color code



degreeOfEstablishment

Eligible concepts and proposed color code
(**in bold** the concepts included in the CCLME Alien Species Database so far):

Released	
Failing	
Casual	
Reproducing	
Established	
Colonizing	
Invasive	
Widespread invasive	

Provided that we are working on an alien species database, and considering the definitions presented at the Darwin Core Terminology (https://rs.gbif.org/vocabulary/dwc/degree_of_establishment_2022-02-02.xml), it seems that the following concepts are unlikely to be used:

- Native
- Cultivated
- Captive

Therefore, they are not included in the color code.

Conclusions

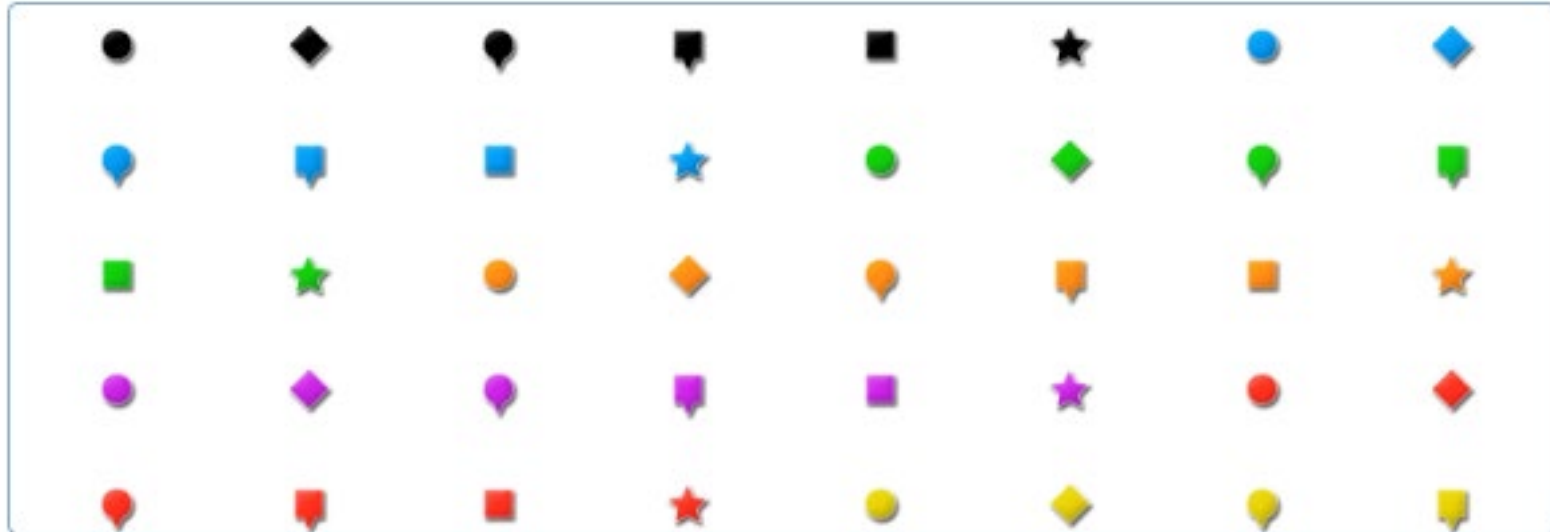
How to present the data: Option 2, color code + shape

No decisions were taken during the meeting.

Option for consideration: Present the Database records with **colored symbols**:

one term (e.g. **establishmentMeans**), can be depicted with different **colors**

and the other (e.g. **degreeOfEstablishment**) could be depicted with different **shapes**



6 possible shapes:      

or vice versa...

Example: e.g.  = **invasive** and introduced ()

If agreed, need to define which color and which shape for the respective values.

Conclusions







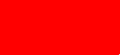

OPTION 2: Using color code + shape

However, when using the shapes, **choice is limited to the 7 colours** you can see in the square at the left. We have 8 possible terms (see the proposed color bar).

establishmentMeans



degreeOfEstablishment

Released	
Failing	
Casual	
Reproducing	
Established	
Colonizing	
Invasive	
Widespread invasive	

Therefore, it is proposed to use color code only (option 1), applied to the term **degreeOfEstablishment**.

Conclusions

The use of time filtering capabilities + pathway

It is important to know the **year of the first record** and the **pathway** to implement **management** measures.

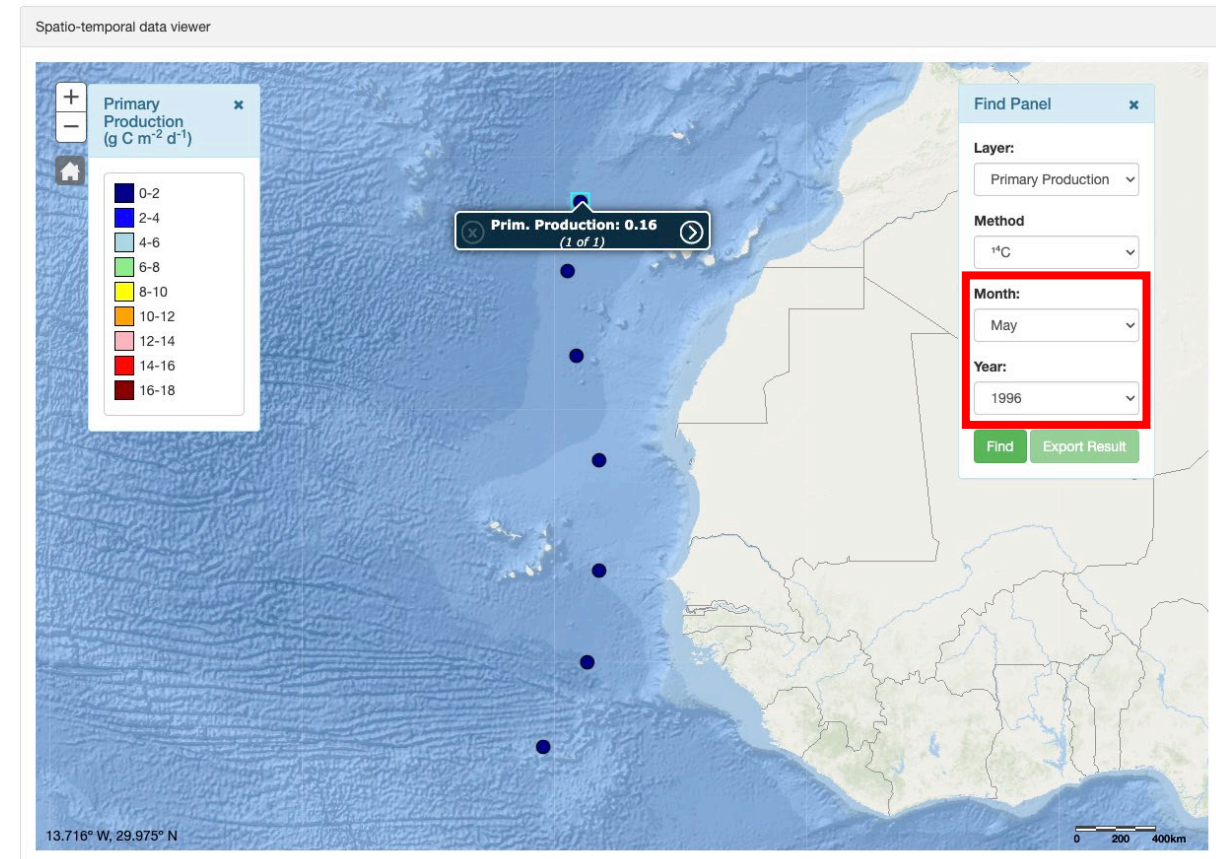
It is proposed to do a search by **eventDate** (Year), allowing filtering by **pathway**.

event date: important to analyze trends.

pathway: to see the human activity at the origin of the occurrence, e.g. marine traffic, aquaculture, etc.

Feasibility is to be checked.

At the right, example of layer with time filtering capabilities



Conclusions

Use of DOIs

It is proposed to prospect the possibility of associating DOIs to the different products, as per the guidance provided at: https://manual.obis.org/data_sharing.html#adding-a-doi-to-datasets

6.4.1 Adding a DOI to datasets

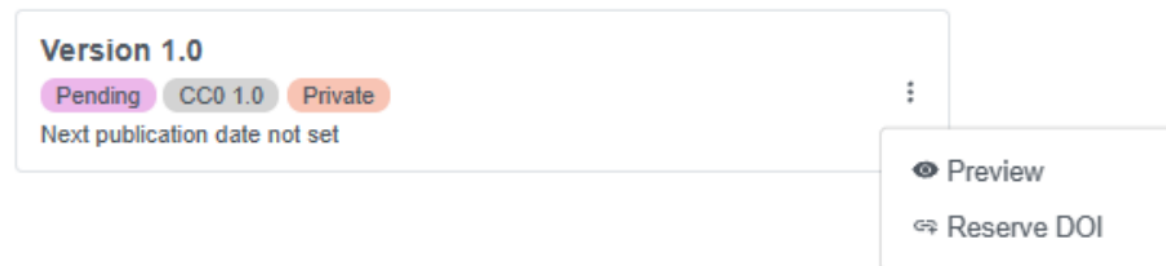
DOIs are important for tracking your dataset. Fortunately you can easily reserve a DOI for your dataset if the IPT administrator has configured the IPT accordingly.

As the IPT administrator, you must enable the capacity for users to reserve DOIs. To do this you first need a [DataCite account](#) associated with an Organization. Only one DataCite account can be used to register DOIs in this manner (i.e. IPT users do not need an account). The IPT's archival mode, configurable on the IPT settings page, must also be turned on (note that enabling this mode will use more disk space) to enable this feature. For more information see the [IPT administration manual](#).

Once this has been configured, a data provider or admin can easily reserve a DOI for a dataset. First log in to the IPT, navigate to the Manage Resources tab, then select the dataset for which you wish to reserve a DOI. On the overview page for the dataset, scroll to the Publication section, click the three vertical dots and select "Reserve DOI".

Publication

A preview of your pending published version compared with the current version if existing.



Screenshot indicating how to reserve a DOI for your dataset

Conclusions

CCLME Eco-GIS Viewer: further finetuning



Possibility to organize a one full-day hands-on workshop. An opportunity to:

- Showcase the improvements in the CCLME Eco-GIS Viewer
- Collect your feedback and spot any details before launching the communication campaign

If you are interested, please let us know so that we can fix a date:

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You can already check some of the improvements, the ones already promoted to production, available at <http://www.ideo-cclme.ieo.es>

Kindly share any comments or ideas with us. Feel free to share your previous experiences as user of the portal, any gaps or need of improvements identified, etc.

If it is more convenient for you, we could discuss your feedback during a quick call.

Conclusions

CCLME Alien Species database: filling data gaps

Need to keep populating the CCLME Alien Species Database with published data, to fill existing gaps.

If you are willing to contribute to the database with published data, please let us know, so we can check if the reference(s) are already included.

i.deniz-gonzalez@unesco.org



Conclusions

Next project meeting



Workshop on “The CCLME Alien Species Database: progress and decision-taking”.

We propose:

A follow up workshop to present progress on the CCLME Alien Species Database.

Discussion will focus on the issues encountered while populating the database, taking decisions to be taken on board in the gathering of any further registers.

It will also be an opportunity to present the developments on data representation as per agreed in this meeting, and to provide feedback on this new data service.

- Proposed date: **11 December 2023 (11h – 14:00h CET).**



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THANK YOU

