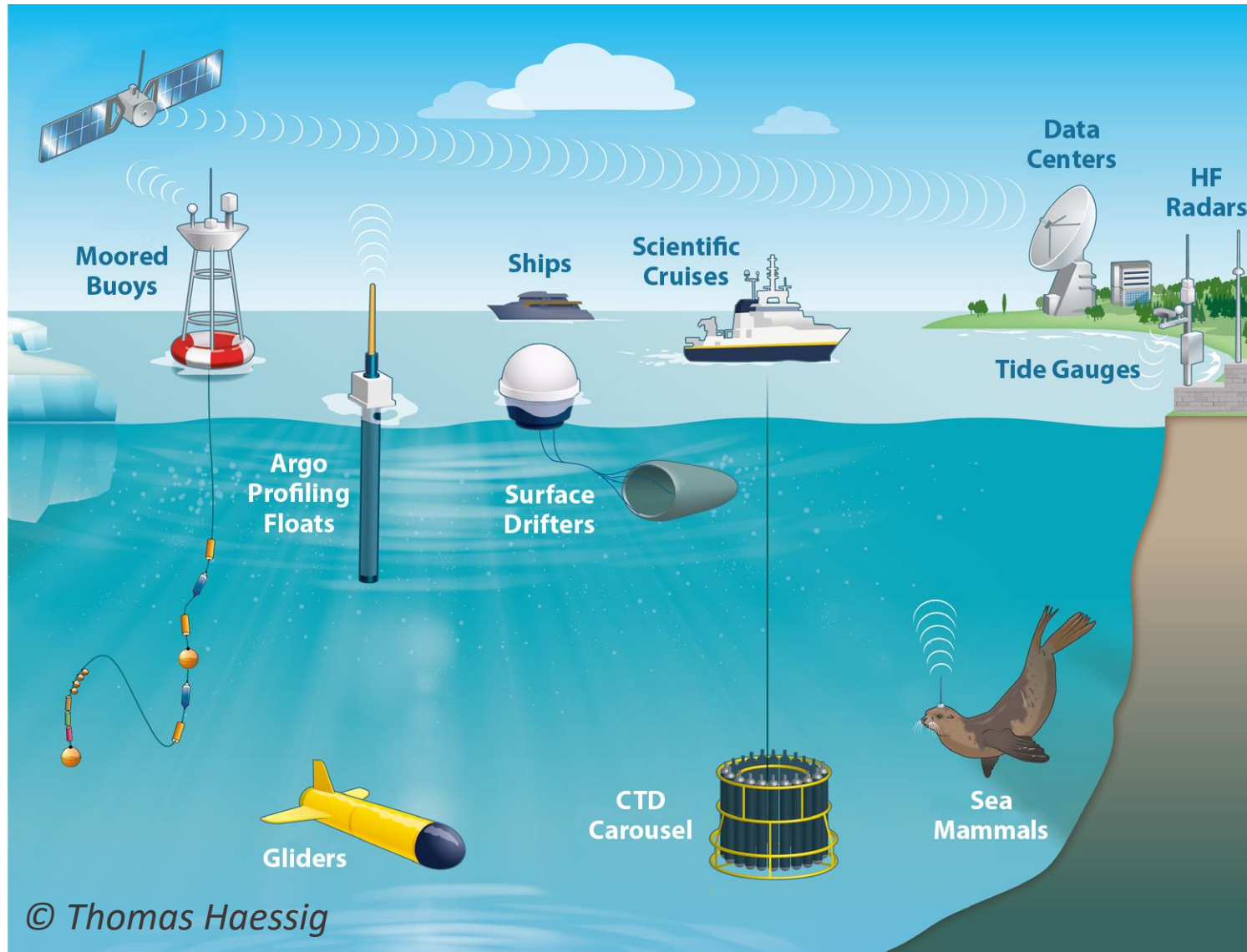


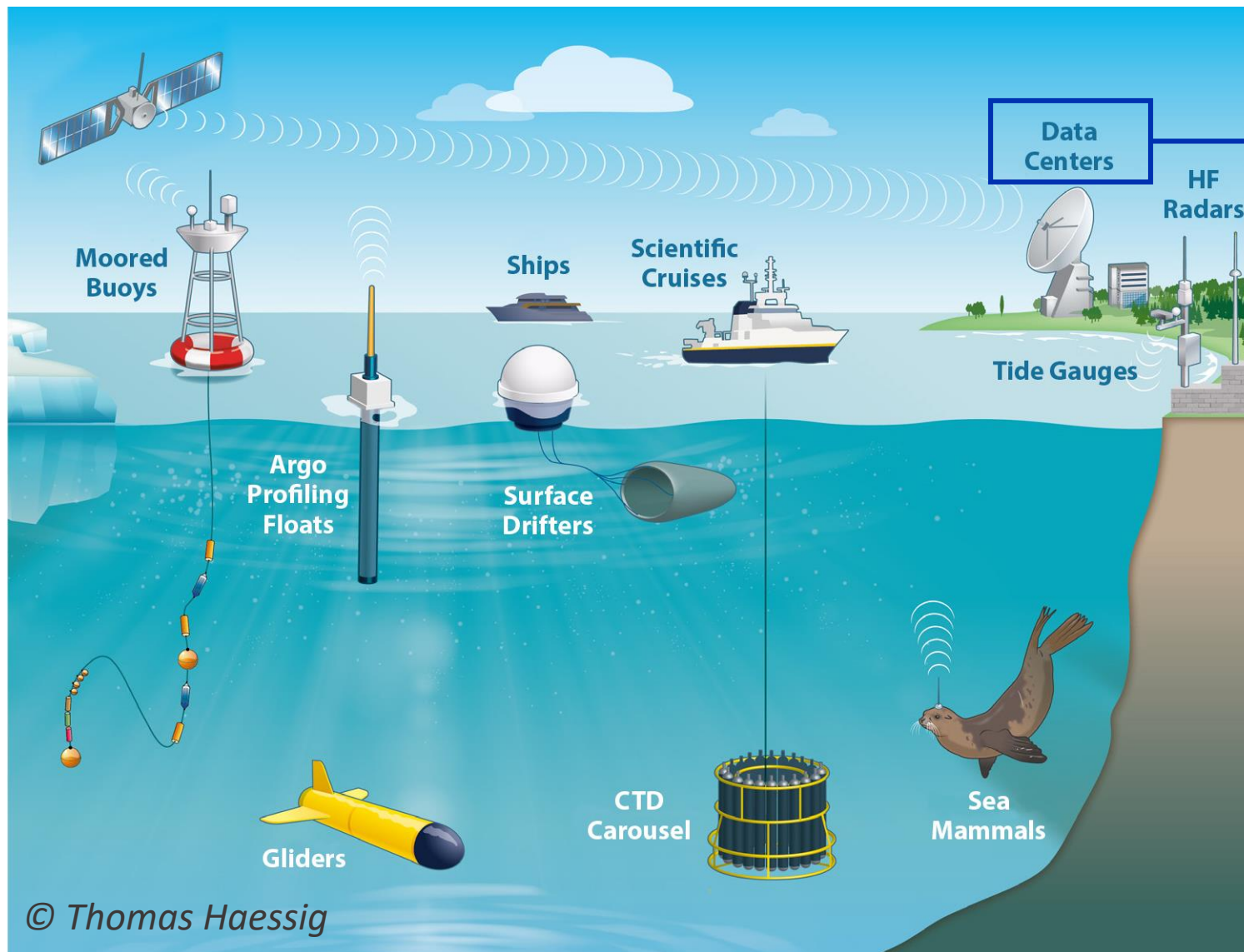
Blue-Cloud Virtual Labs for demonstrating cross-domain web-based open science

Patricia Martin Cabrera
Flanders Marine Institute



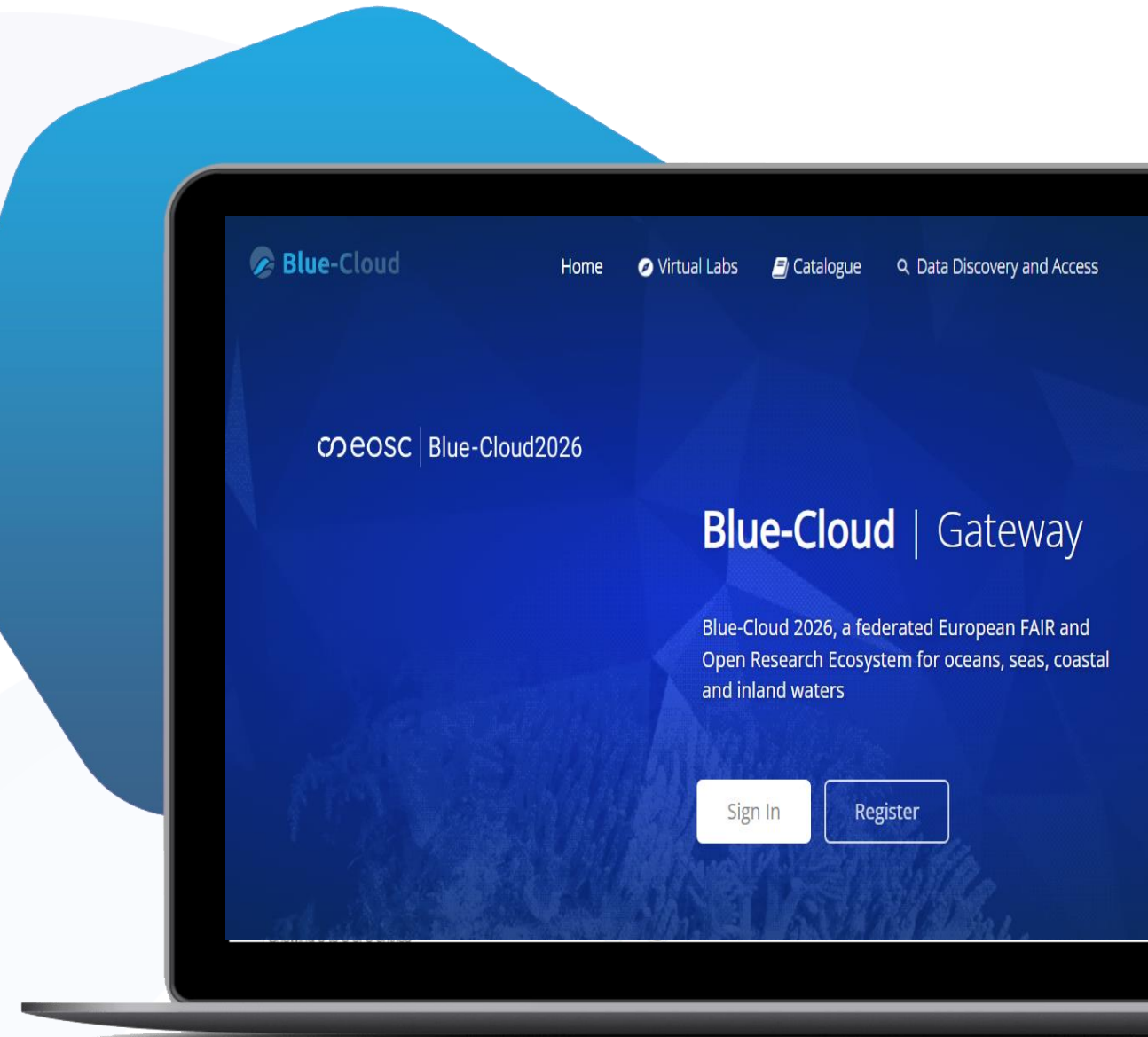
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- Discovery and access to multidisciplinary data sources
- Easier integration of data sources
- Heavy computation analyses
- Integration of algorithms and methods
- Access to re-usable methodologies
- Collaborative environment

Federated European Ecosystem to deliver FAIR & Open data, analytical services, instrumental for deepening research of oceans, EU seas, coastal & inland waters.



Blue-Cloud services

Explore the Data Discovery and Access Service and get access to about 10 million datasets from leading European marine data infrastructures.

Exploit data and derived data products in the Virtual Labs, where you can execute methods and perform collaborative research tasks.

Browse the Catalogue featuring datasets and products resulting from the Blue-Cloud Virtual Laboratories and learn about methods used to generate them.


Browse the Data Discovery Access Service

Login to the Blue-Cloud VLab

Access the Catalogue

Federating key European data management infrastructures, to facilitate users in finding and retrieving multi-disciplinary datasets from multiple repositories





Pioneering innovative services for Marine Research & the Blue Economy

DATA DISCOVERY & ACCESS SERVICE

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Geographic search

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
West


East

South

SEARCH

RESET

Blue Data infrastructures		Level 2 Search
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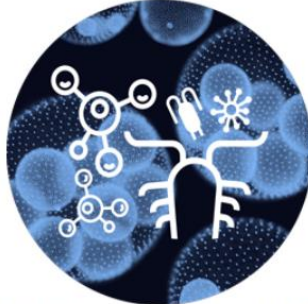
Blue-Cloud 2026, a federated European FAIR and Open Research Ecosystem for oceans, seas, coastal and inland waters

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Infrastructure to provide a range of services and to facilitate orchestration of computing and analytical services for constructing, hosting and operating Virtual Labs for specific applications

[CarbonPlanktonDynamics](#)
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[JupyterHub](#)
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About Coastal Currents From Observations VLab



This VLab consists of the expansion of the Nutrient-Phytoplankton-Zooplankton-Detritus (NPZD) model developed in the Blue-Cloud Zoo and Phytoplankton EOY demonstrator VLab. The current version of the model does accurately predicts phytoplankton and zooplankton biomass dynamics. The NPZD model runs in in nitrogen units. In this VLab, the model is converted to run in carbon units, allowing to integr ...

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Other options ...

JupyterHub

JupyterHub enables the exploitation of computational environments and resources without burdening users with installation and maintenance tasks. This JupyterHub environment is (i) preconfigured with libraries and packages to ease the execution of common data analytics tasks, and (ii) provides access to the Workspace enabling sharing of resources much easier.

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56

items

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5

types

Browse by Virtual Labs



Blue-Cloud (35)



Zoo-Phytoplankton
EOV (7)



Marine
Environmental
Indicators (7)



PlanktonGenomics (3)



Blue-Cloud Lab (3)



Fisheries Atlas (1)

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Service (16)



Dataset (5)



Provider (2)



Method (1)



Zoo-Phytoplankton EOV

The zoo-phytoplankton Essential Ocean Variables (EOV) demonstrator provides a methodology to generate: zooplankton products based on in situ observations of abundance of... [read more](#)

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Spatiotemporal analysis of plankton drivers in the Belgian part of the North ...

Dataset

This archive contains the data, scripts, model output and supplementary information to Otero et al. (2022), 'Spatiotemporal analysis of plankton drivers in the Belgian part of...

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Zooplankton EOVS

Service

The zooplankton EOV service provides its users with a methodology to generate zooplankton products based on in situ observations of abundance of six zooplankton species in a...

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Phytoplankton EOVS

Service

The phytoplankton Essential Ocean Variables (EOV) service aims to provide a methodology to generate global open ocean three-dimensional (3D) gridded products of (1) chlorophyll...

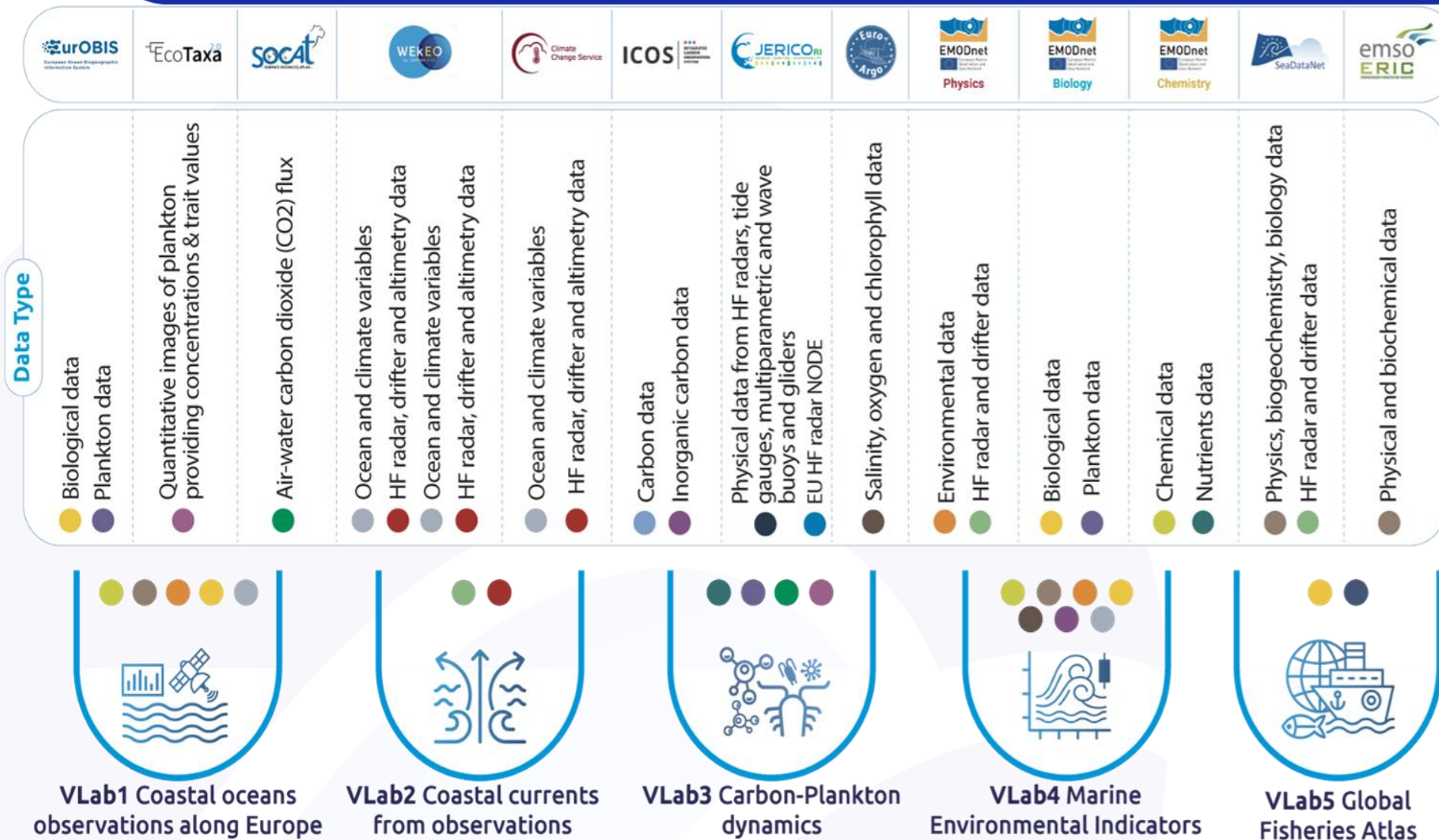
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Modelling phyto & zoo -plankton interactions

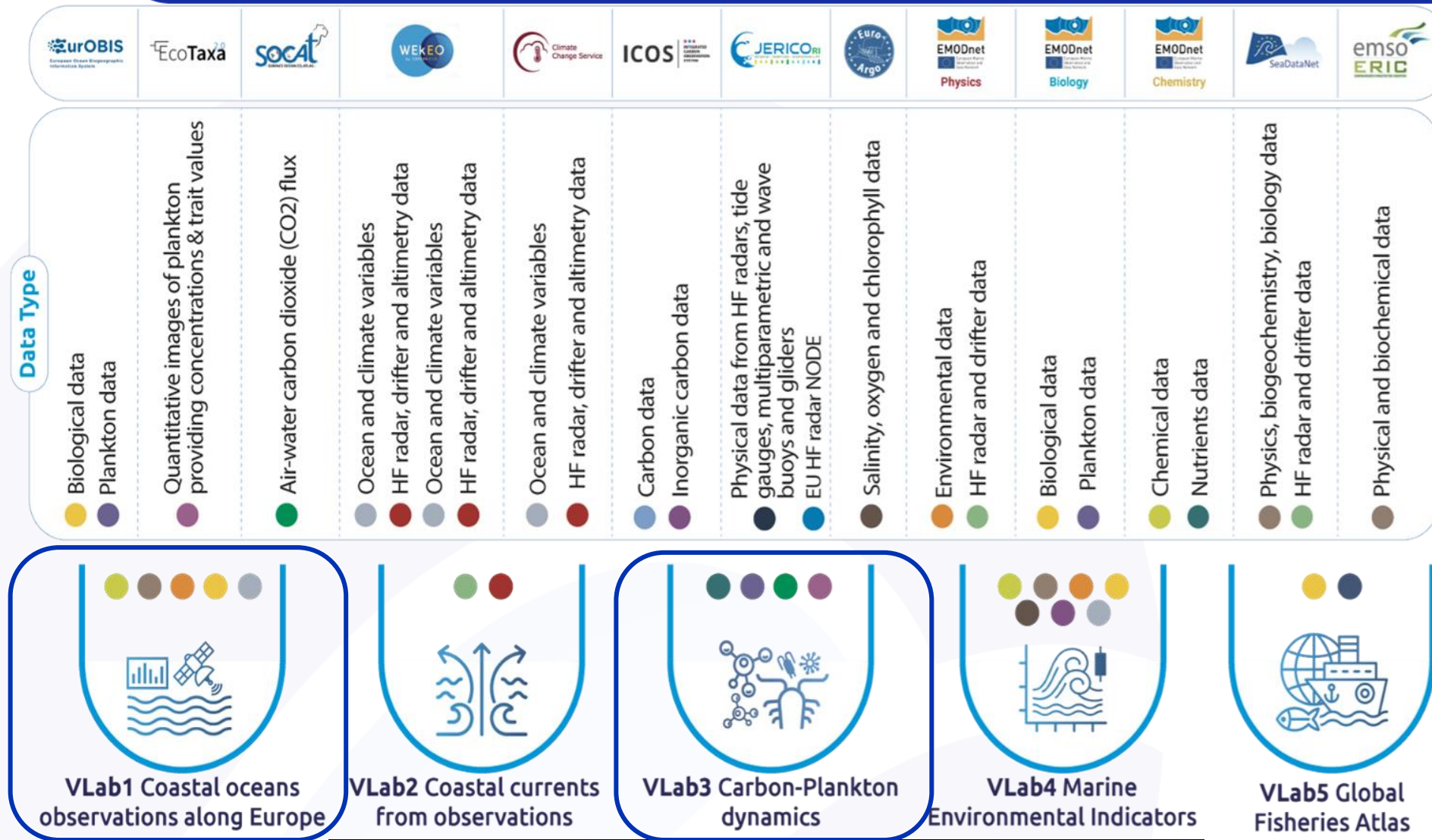
Service

This service provides a workflow to run a mechanistic model using near real-time data to quantify the relative contributions of the bottom-up and top-down drivers in...

5 V Labs to showcase Blue Cloud services and its potential in promoting Blue Economy



5 V Labs to showcase Blue Cloud services and its potential in promoting Blue Economy



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