

The Ocean Regimes Notebooks

Andrea Garcia Juan⁽¹⁾, Kevin Balem⁽¹⁾, Loic Bachelot⁽²⁾, Guillaume Maze⁽¹⁾

(1) LOPS (Laboratory for Ocean Physics and Satellite Remote Sensing), Ifremer, France

(2) IRSI (IT Department), Ifremer, France



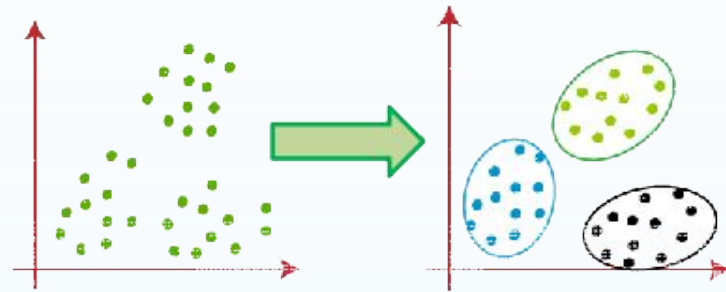
Ocean Patterns & Ocean Regimes



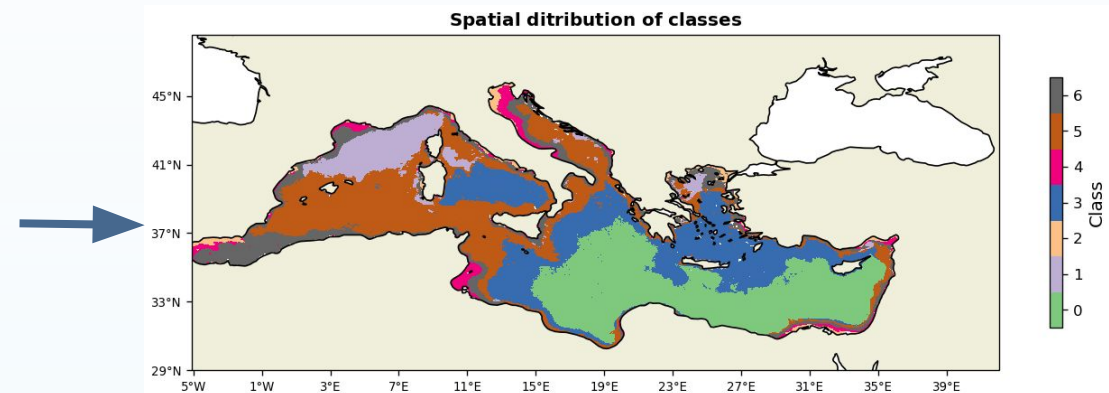
- The Ocean Patterns Indicator (See [previous MEI webinar](#)) :
Unsupervised classification of ocean profiles, identifying coherent “patterns”
- **The Ocean Regimes Indicator :**
Unsupervised classification of ocean time series, identifying coherent “regimes”



GMM training

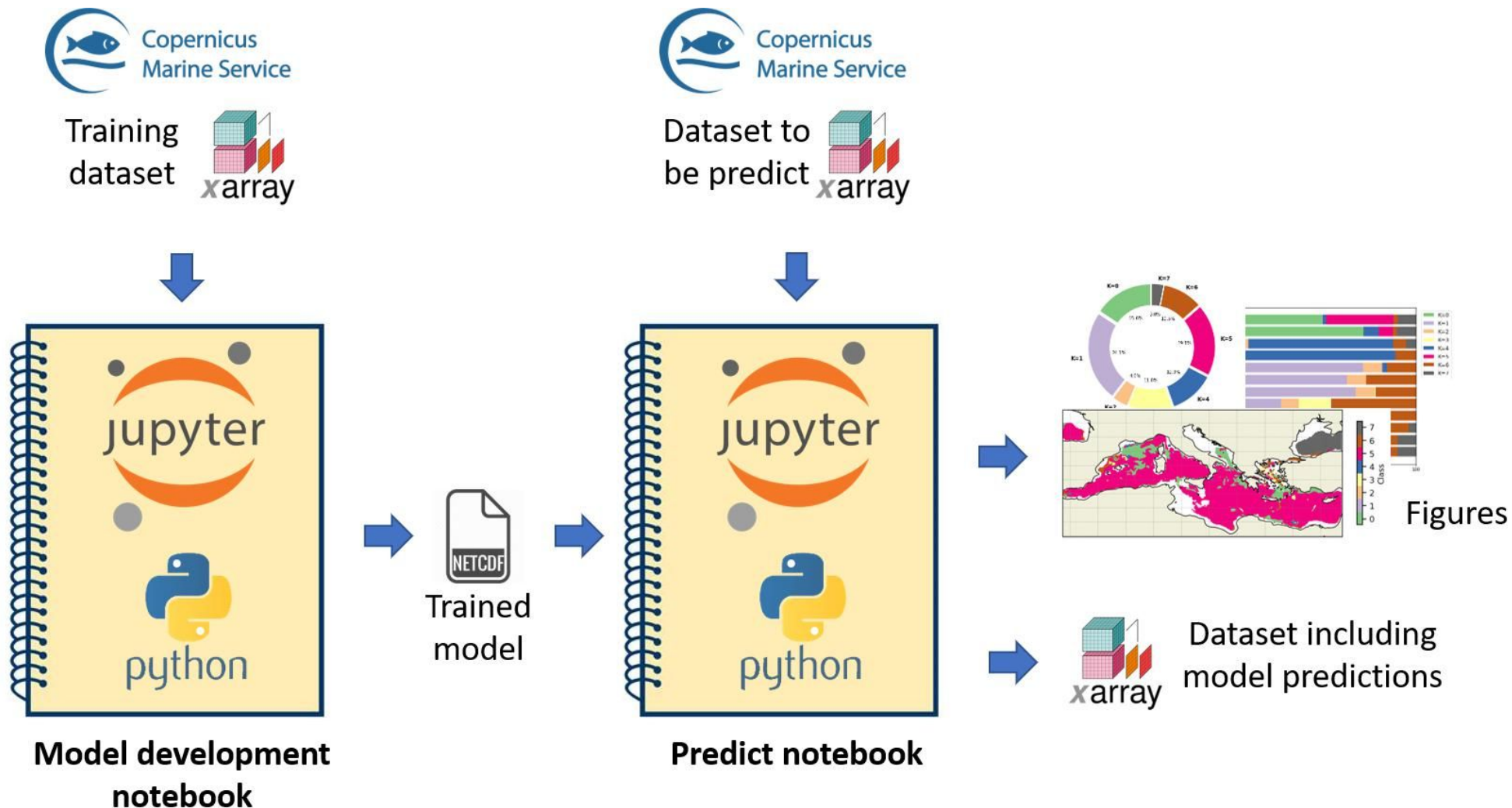


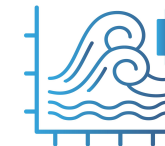
Different groups of time series are identified and characterized in a model.





Model is applied to “predict” a dataset

Jupyter notebooks





Let's take a look at the notebooks



Go to 19 Kevin BALEM

Marine Environmental Indicators HomeSoftware ImporterAnalytics EngineJupyterHubGeoNetworkCatalogueMEI GeneratorCommunicationMembers

Welcome to the Marine Environmental Indicators Virtual Laboratory

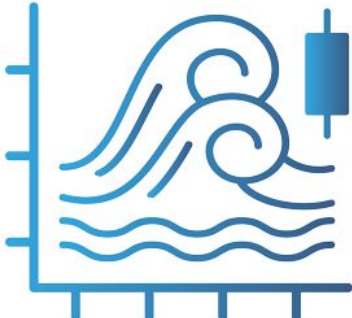
This virtual laboratory provides services to inform the policies and support the achievement of sustainable development. The implemented algorithms are useful to analyse long time-series of marine data and to produce added value information for the assessment of the environment condition.

The available services are :

- [marine environmental indicator \(MEI\) generator](#)
- [ocean patterns and **ocean regimes indicators**](#)
- [storm severity index](#)
- [easy access to carbon data](#)

A detailed description of all the services is available in the [Blue Cloud Demonstrator Users Handbook V2](#), chapter 5. For each service, the document provides specific information related to the target users, the input data sources, the scientific references, and also a step by step guideline allowing users to operate the service.

About



Marine Environmental Indicators Virtual Lab is the implementation of the Blue-Cloud project Demonstrator 3, providing services for Environmental Protection Agencies and international stakeholders addressing EU Marine Strategy Framework Directive (MSFD), UN SDG 13 and UN SDG 14

[Other options ...](#)

Request Support