



**ODYSSEA**

Operating a network of integrated observatory  
systems in the Mediterranean Sea

## Project Deliverable Report

Deliverable Number: 13.1

Deliverable Title: Inventory of existing data sources and gaps inventory

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Work Package Number: 13

Work Package Title: Marine Data Availability and Integration



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727277

ODYSSEA Project Information	
Project full title	ODYSSEA: Operating a network of integrated observatory systems in the Mediterranean Sea
Project acronym	ODYSSEA
Grant agreement number	727277
Project coordinator	Georgios Sylaios, DUTH
Project start date and duration	1 <sup>st</sup> June 2017, 54 months
Project website	<a href="http://odysseaplatform.eu/">http://odysseaplatform.eu/</a>

Deliverable Information	
Work package number	WP13
Work package title	Marine Data Availability and Integration
Deliverable number	13.1
Deliverable title	Inventory of existing data sources and gaps inventory
Description	
Lead beneficiary	Sapienza University of Rome
Lead Author(s)	Davide Astiaso Garcia, Marina Amori, Matteo Sforzini, Franco Giovanardi, Fabrizio Cumo, Livio de Santoli, Giuseppe Piras, Daniele Groppi
Contributor(s)	
Revision number	V0.1
Revision Date	
Status (Final (F), Draft (D), Revised Draft (RV))	D

Dissemination level (Public (PU), Restricted to other program participants (PP), Restricted to a group specified by the consortium (RE), Confidential for consortium members only (CO))	
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Document History			
Revision	Date	Modification	Author
0.1		Initial draft	

Approvals				
	Name	Organisation	Date	Signature (initials)
Coordinator				
WP Leaders				

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## Table of Contents

<b>Table of Figures .....</b>	<b>7</b>
<b>Executive Summary .....</b>	<b>8</b>
<b>Introduction .....</b>	<b>9</b>
<b>Methods .....</b>	<b>12</b>
<b>Key definitions .....</b>	<b>12</b>
<b>Data gathering methodology for the inventory of existing data source .....</b>	<b>13</b>
Mediterranean Sea .....	13
Odyssea aims .....	15
Common data vocabularies: SeaDataNet standards.....	16
Map existing datasets .....	17
Section I - Standard Template structure.....	18
Section II – Data Dictionary .....	29
<b>Methodology for data gap analysis .....</b>	<b>30</b>
Whole_Master_Data .....	30
Preliminary_Matrix .....	31
Parameters_Gap_Matrix .....	31
<b>Results .....</b>	<b>32</b>
<b>Inventory of existing data source .....</b>	<b>32</b>
Anthropogenic contamination .....	34
Biota abundance biomass and diversity .....	35
Birds mammals and reptiles.....	37
Carbon nitrogen and phosphorus .....	37
Construction and structures .....	37
Currents.....	37
Dissolved gases .....	38
Marine Volcanism .....	39
Fishes.....	39
Fisheries .....	40
Habitat.....	40
Human activity .....	42
Macroalgae and seagrass.....	42
Meteorology.....	43
Optical properties .....	44
Pigments.....	44
Positioning references and data management .....	44
Rock and sediment lithology and mineralogy.....	45
Rock and sediment physical properties .....	45
Rock and sediment sedimentology .....	45
Sea level .....	45
Sedimentation and erosion processes .....	46
Suspended particulate material.....	46
Terrestrial including bathymetry and undersea features.....	46
Water column temperature and salinity.....	46

Waves.....	47
Other examined dataset .....	47
<b>Data gaps analysis .....</b>	<b>56</b>
Coastal water EU member states .....	62
The Whole basin .....	63
Preliminary matrix.....	66
Parameters_Gap_Matrix .....	67
<b>Conclusions .....</b>	<b>62</b>
<b>References .....</b>	<b>63</b>
<b>Acronym list .....</b>	<b>64</b>

## Table of Figures

Figure 1	Mediterranean south-settling in seas and smaller basins	p 13
Table 1	List of Mediterranean south-settling in seas and smaller basins	p 14
Figure 2	Odyssea objective	p 15
Figure 3	Inventory methodological process	p 16
Figure 4	The set of information managed and available in SeaDataNet	p 17
Table 2	Fields to be refilled for each analysed existing data source	p 19
Table 3	Table for the structure and color of the columns in Part II - Data, in the Master_Data sheet	p 20
Table 4	Data_Typology from SDN: P03 GROUP	p 22
Table 5	Data_Parameters from SDN: P02 GROUP; SDN:P04 GROUP	p 23
Table 6	Data Dictionary	p 28
Table 7	Different gap values characterized by colour	p 30
Graphic 1	Percentage of each platform typology	p 31
Graphic 2	Percentage of each data format typology	p 32
Table 8	Other dataset analyzed	p 43
Table 9	List of the typologies and related code	p 51
Table 10	List of the parameters and the related codes. Occurrence corresponds to the number of times that single parameters appear in the Master_Data sheet	p 52
Graphic 3	Parameters list- occurrence in the database (parameters with N. of times <3 are not represented)	p 55
Graphic 4	Number of platforms per Data_Typology and corresponding number of the Data_Parameter reported for each typology	p 56
Graphic 5	Geographical coverage: N. of occurrences of the monitored sea in the Whole_Master_Data sheet	p 57
Table 11	Data typologies represented in the EU source platforms and number of the monitored parameters, per each typology	p 58
Table 12	“Whole basin” Platform Name	p 58
Graphic 6	Data typologies represented in the “Whole basin” source platforms and number of the monitored parameters, per each typology	p 61
Table 13	Preliminary Matrix	p 63
Table 14	Parameters Gaps Matrix	p 64

## Executive Summary

The main objective of this deliverable is to get an overall view of primary data available from existing Earth Observation Systems and networks maintaining databases for the Mediterranean Sea, identifying temporal and geographic data gaps and pinpointing strategies and models to fill these gaps. Existing data sources have been identified from the analysis of the main projects and information systems available. The collected information was properly organized in a structured format, taking into consideration the ISO and SEADATANET standards.

In order to perform data gap analysis, procedures already experienced in the PERSEUS project were applied and implemented. In particular, a new method to perform the data gap analysis has been developed and applied to the whole Mediterranean basin as case study area, identifying and prioritise geographical and temporal data gaps considering and integrating the biological, geological, chemical and physical parameters.

The obtained results highlighted both the main geographical data gaps subdividing the whole Mediterranean Sea into 23 sub-basins and the temporal data gaps considering data gathered since 1990. Particular attention has been directed to the suitability of data in terms of completeness, accessibility and aggregation, since data and information are often aggregated and could not be used for research needs. The elaborated inventory of existing data source includes a database of 477 data rows originated from 122 data platforms analysed, able to specify for each dataset the related data typologies and its accessibility. The obtained results indicate that 76% of the data comes from ongoing platforms, while the remaining 25% are related to platforms with non-operational monitoring systems. Since the large amount of analysed records includes data gathered in inhomogeneous ways, the prioritisation values obtained for each identified data gap simplify the data comparison and analysis. Lastly, the data gaps inventory contains geographic and temporal information for any missing parameter at the whole basin scale, as well as the spatial resolution of each available data.

Summarizing, the inventory of existing data source includes an excel database with all data gathered by ODYSSEA consortium specifying for each dataset data typology and accessibility (open or non-accessible); moreover, the data gaps inventory contains geographic and temporal information for any missing parameter at the whole basin scale, as well as a prioritization for end-users specific needs and EU policy requirements.



## Introduction

A basic understanding must characterize the development of strategies, economic models, business models and lifestyle choices, to preserve natural environment in all of its many forms and functions and to maintain it in as an equitable "home" for people on a finite planet (WWF, 2016).

The main factors of pressure on the marine environment derive directly from the increase of the human population as well as from the imposing increase of its consumptions and are manifested above all through the widespread urbanization and the progressive artificial modification of the coasts. Tourism, agriculture, fishing, aquaculture, industrial activities, maritime transport are all factors that determine the overall effect causing degradation of natural habitats, producing consequent decrease and loss of biodiversity. This overall effect is mainly due to the following causes:

- nutrient pollution (nitrogen compounds and phosphorus), which causes eutrophication of coastal waters, often accompanied by blooms of toxic algae and phenomena of anoxia (absence of dissolved oxygen);
- pollution from toxic substances, such as trace elements (heavy metals) and organohalogenated compounds, such as DDT and PCBs (polychlorinated biphenyls used for example as additives for pesticides), which accumulate in the food web (the marine food chain) and contaminate tissues of organisms, causing a great variety of disorders among which those of the immune and reproductive functions stand out by gravity;
- oil and hydrocarbon pollution;
- pollution from pathogenic microorganisms;
- impoverishment of species caused by over-fishing, irresponsible and illegal (among many examples, the proliferation of pelagic nets, the indiscriminate use of the trawler, the fishing of fry, the uncontrolled sport fishing);
- disturbance and damage caused to the aquatic fauna by the presence in their environment of an increasing number of various vessels, from watercraft to super-tankers;
- marine litter, and especially plastics and their degradation by-products, the micro-plastics;
- increased levels of underwater noise with both acute and chronic effects on marine life.

Regarding the European regulatory framework, the Water Framework Directive (EC, 2000) - Directive 2000/60/EC of the European Parliament and the Council established a framework for Community action in the field of water policy, introducing an innovative approach in European water legislation, both from the environmental and the administrative-management point of view.

The Directive pursues ambitious objectives: preventing qualitative and quantitative deterioration of water, improving water status and ensuring its sustainable use, based on the long-term protection of available water resources. In parallel, the Marine Strategy Framework Directive (EC, 2008) - Directive 2008/56/EC of the European Parliament and the Council established a framework for community action in the field of marine environmental policy. MSFD acts as an important and innovative tool for sea protection since it is the first binding regulatory framework for EU Member States which considers the marine environment in a systemic perspective, with the objective of maintaining and preserving European seas and oceans' biodiversity.

Both legislative documents require systematic environmental monitoring data to assess the status of aquatic and marine ecosystems, following the classification system introduced. Environmental monitoring is the periodic and systematic detection of chemical, physical and biological parameters, through specific tools, in order to assess the current status or to identify the trends of complex systems.

The main functions of monitoring systems are, in brief:

- the comparison between the expected (reference) and the actual environmental effects, considering the monitoring as a tool for qualifying the environmental report;
- the verification of compliance with the environmental conditions imposed by the current regulatory framework;
- the verification of the compliance of the program implementation with the measures envisaged to avoid, reduce or mitigate the negative environmental effects.

The need to organize marine data collected, through monitoring operations, in-situ or satellite surveys in databases accessible not only to scientific or governmental users, has become more and more evident and necessary in the latest years. The situation in the various European countries is however still very complex, as the existing information systems are fragmented.

Currently, in Europe there are officially many institutional mandates, but next to the institutional reference points, many important research institutions have received the official address of "Data-Centres". The INSPIRE Directive (EC, 2008) - Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 established an infrastructure for spatial information in the European Community.

This Directive provides guidelines for the dissemination of data and metadata based on the following points:

*«Community policy on the environment must aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. Moreover, information, including spatial information, is needed for the formulation and implementation of this policy and other Community policies, which must integrate environmental protection requirements in accordance with Article 6 of the Treaty. In order to bring about such integration, it is necessary to establish a measure of coordination between the users and providers of the information so that information and knowledge from different sectors can be combined. The problems regarding the availability, quality, organisation, accessibility and sharing of spatial information are common to a large number of policy and information themes and are experienced across the various levels of public authority. Solving these problems requires measures that address exchange, sharing, access and use of interoperable spatial data and spatial data services across the various levels of public authority and across different sectors. An infrastructure for spatial information in the Community should therefore be established. Considerable diversity of formats and structures in which spatial data is organized and made accessible in the Community impedes the possibility of formulating, implementing, monitoring and evaluating in an efficient manner the Community legislation which directly or indirectly affects the environment; this requires implementing measures to facilitate the use of spatial data from different sources in all Member States. Such measures should be such as to enable the interoperability of spatial data sets and Member States must ensure that the data or information necessary for the achievement of interoperability are available under conditions that do not restrict their use for that purpose. Implementing provisions should be based, where possible, on international standards and should not lead to excessive costs for Member States» (INSPIRE, 2007).*

On the international scene, it appears of great importance that the marine sector is equipped with an integrated environmental platform, operational and usable, that obeys the international standards required by the various projects. Use of common vocabularies in all meta-databases and data formats is an important prerequisite towards consistency and interoperability. Common vocabularies consist of lists of standardised categories' terms that cover a broad spectrum of disciplines of relevance to the oceanographic and wider community. Using standardised terms of reference solves the problem of ambiguities associated with data mark-up and also enables records to be interpreted by computers. This opens up data sets to a whole world of possibilities for computer aided manipulation, distribution and long term reuse.

It is above all for this reason that the present deliverable considers and capitalizes the outputs of the Seadatanet project, whose purpose was to establish a European framework for the access to distributed systems of marine environmental data.

In order to protect, conserve and manage the marine environment, ODYSSEA aims to collect, integrate and make interoperable the numerous existing systems and platforms managing marine environmental data for the Mediterranean Sea. This deliverable is linked to Task 13.1 (Mapping of existing platforms models and tools) and Task 13.3 (Data gaps analysis) both led by Sapienza University of Rome.

Bearing in mind the above mentioned ODYSSEA goal, the particular aims of this deliverable, that represent the first essential pillar for achieving the overall project objectives, are: i) to analyse the reliability and usefulness of the existing monitoring systems at the Mediterranean basin level, organizing them into a structured inventory and identifying the critical issues and shortcomings considering and integrating biological, geological, chemical and physical properties of the Mediterranean Sea; ii) to elaborate and apply a new method for identifying geographical and temporal marine data gaps and for providing a prioritization of missing data.

The novelty factors of this deliverable, compared with the state of the art, are to analyse and integrate all the main available data on the Mediterranean Basin, considering almost all the data typologies, and consequentially to develop a new and user-friendly methodology to identify and to prioritize the main geographical and temporal data gaps. Indeed, a similar research that analyses the whole Mediterranean Basin as case study area, including also not European coastal and marine waters and considering both main platforms, satellite data and remote sensing analysis, has never been carried out. Consequentially this analysis will facilitate the prioritisation of further studies at smaller scale for filling temporal and spatial gaps involving new site measurements, remote sensing or numerical model outputs.

Indeed, the main aim of this deliverable is to elaborate a new methodology for assessing and prioritising geographical and temporal data gaps for the whole Mediterranean basin starting from an analysis of the existing data sources.

Obviously, the obtained results could not be considered as an exhaustive overview of the whole available Mediterranean data, since the research analyses existing databases accessible to stakeholders, researches and to the scientific community in general and it cannot take into account the confidential and not accessible databases of the national ministries or other institutions of the Mediterranean basin countries. Anyway, research outcomes provide for the first time a useful and interesting framework of the priorities that end users, decision makers, local and national authorities should take into account for improving their marine monitoring systems for prioritise conservation actions in the Mediterranean basin. Furthermore, the elaborated methodology for prioritising data gaps should be replicate to carry out similar researched in different basins, oceans or smaller seas.

## Methods

Sapienza developed an assessment methodology for a basin scale environmental monitoring information system. The starting point was the organization and analysis of the themes treated, on a Mediterranean scale, by a series of input datasets. The sorting of collected data and the assignment of ad hoc scores to the parameters, identified through specific criteria, allowed the implementation of an explicit data gap analysis, which led to the final products of this deliverable.

The general framework has been provided by the "Methodology to assess and communicate the economic benefits of consensus-based standards", developed by the International Organization for Standardization - ISO.

### Key definitions

The definition of key vocabulary terminology has an important role in the assessment framework. These semantic aspects are mainly based on ISO standard definitions.

#### **Data Typology:**

Referred to the prevailing attributes of homogeneous nature related to the marine environment and provided by measurements and observations.

#### **Data Parameters:**

- a variable derived from the observation or from measurements;
- a numerical model output simulating a particular environmental process;
- a geographical representation of an object on a map (i.e. a layer such as a protected area, a coastline or fishing fleet distribution) by a set of vectors (polygon, curve, point);
- a raster (a spatial data model that defines space as an array of equally sized cells, such as a grid or an image).

#### **Data:**

Re-interpretable representation of information in a formalized manner suitable for communication, interpretation or processing (ISO 19115).

#### **Dataset:**

An identifiable collection of data (ISO 19115). It can be a time series, a lithological description of a marine sample, a gridded dataset such as a DTM, a hydrodynamic model output, a GIS dataset or a feature layer of a GIS dataset, a data base or a table of values in a publication. A data set can be constituted of several files (e.g. the set of seismic data files recorded along the same line).

#### **Input Dataset:**

The collection of existing data to be imported in the data gaps analysis.

#### **Assessment criteria:**

The criteria are focused on two questions: "what" and "how" data is made available from the information platform.

#### **Data adequacy:**

Adequacy can be intended as "sufficient to satisfy a requirement or meet a need". From this definition, "adequacy" relates to meeting both requirements, as well as needs, and it is normally applied within the framework of an ISO 9001 based Quality Management System.

## Data gathering methodology for the inventory of existing data source

### Mediterranean Sea

The Mediterranean Sea is the larger semi-enclosed sea on Earth (latitude: 30° - 46°N, longitude: 6°W – 36°E) which lies between Europe, Asia and Africa. It covers about 2.5 million km<sup>2</sup> or 0.82% of Earth's surface. The Mediterranean Sea is a sea connected to the Atlantic Ocean, surrounded by the Mediterranean Basin and almost completely enclosed by land: on the north by Southern Europe and Anatolia, on the south by North Africa, and on the east by the Levant. Although the sea is sometimes considered a part of the Atlantic Ocean, it is usually identified as a separate body of water. Mediterranean Sea is, in oceanography, a mostly enclosed sea that has limited exchange of water with outer oceans and with water circulation dominated by salinity and temperature differences rather than winds.

A main regional subdivision of the Mediterranean Sea includes: the Levant Sea, the Aegean Sea, the Adriatic Sea, the Ligurian Sea, the Tyrrhenian Sea, the Ionian Sea and the western basin with the Balearic and Alboran Seas.

A more detailed partition is shown in **Figure 1** and **Table 1**.

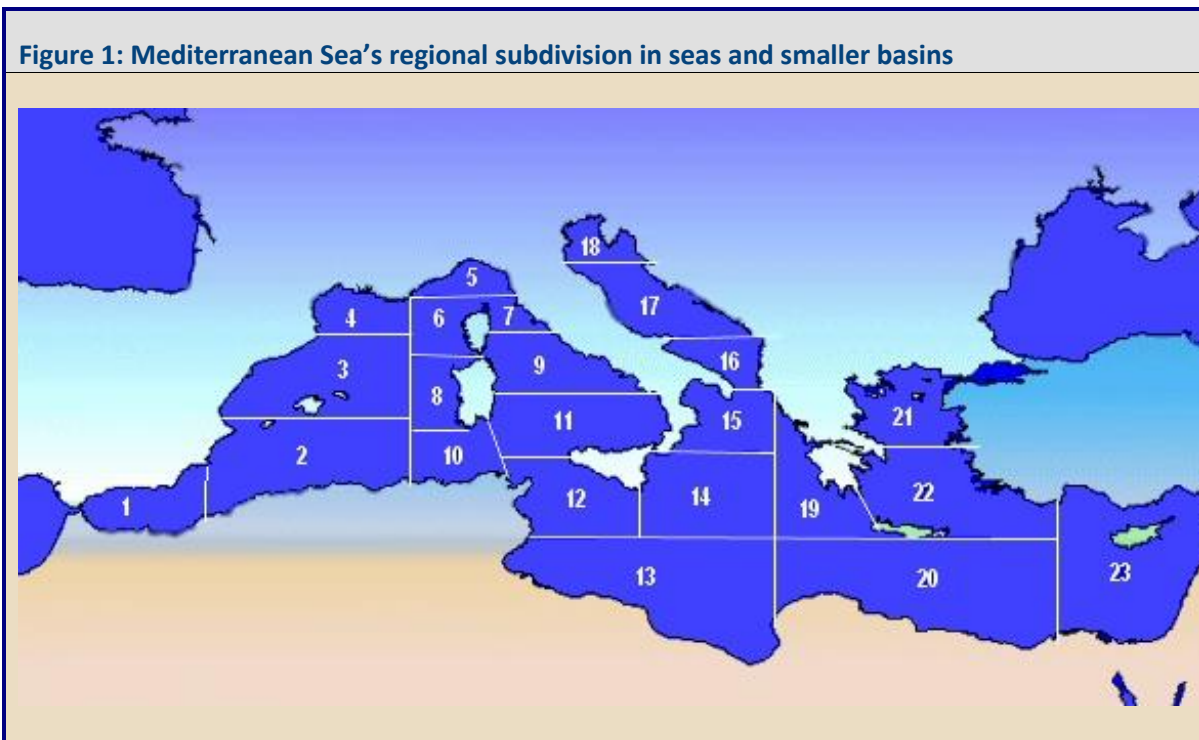
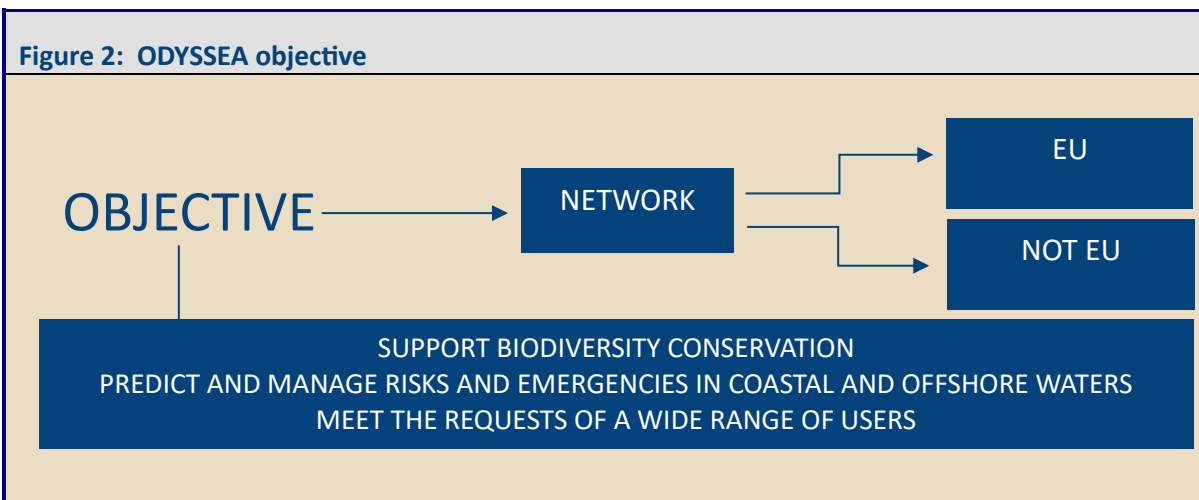


Table 1: List of Mediterranean Sea's regional subdivision in seas and smaller basins	
Sea_Number	Sea_Name
1	Alboran sea
2	Southern Balearic Sea
3	Northern Balearic Sea
4	Gulf of Lion
5	Ligurian sea
6	Corsica sea
7	Northern Tyrrhenian Sea
8	Sardinia sea
9	Central Tyrrhenian Sea
10	Channel of Sardinia
11	Southern Tyrrhenian Sea
12	Strait of Sicily
13	Libyan Sea
14	Southern Ionian Sea
15	Northern Ionian Sea
16	Northern Adriatic Sea
17	Central Adriatic Sea
18	Southern Adriatic Sea
19	Eastern Ionian sea
20	Sea of Crete
21	Northern Aegean
22	Southern Aegean
23	Levant sea

## Mediterranean Sea and ODYSSEA

The central aim of ODYSSEA project is to develop, operate and demonstrate an interoperable and cost-effective platform that fully integrates networks of observing and forecasting systems across the Mediterranean basin, addressing both the open sea and the coastal zone.



ODYSSEA will collect its data from the many databases maintained by agencies, public authorities, research institutions and universities of Mediterranean EU and non-EU countries (Figure 2), integrating existing Earth Observation Systems and networks while building on key initiatives. ODYSSEA will provide an innovative service, merging together data discovery, data organization and processing, operational forecasts and user-oriented services that, when available, will be usually offered separately. A modular and highly versatile platform will be designed and developed to search, collect, retrieve and integrate datasets obtained from an expanded range of existing observational platforms, networks and systems. This multi-platform approach will integrate in-situ measurements (historic, near real-time and real-time), satellite data and operational results of numerical models, allowing the end-user to access and download archived and forecasted data for any region of the Mediterranean Sea.

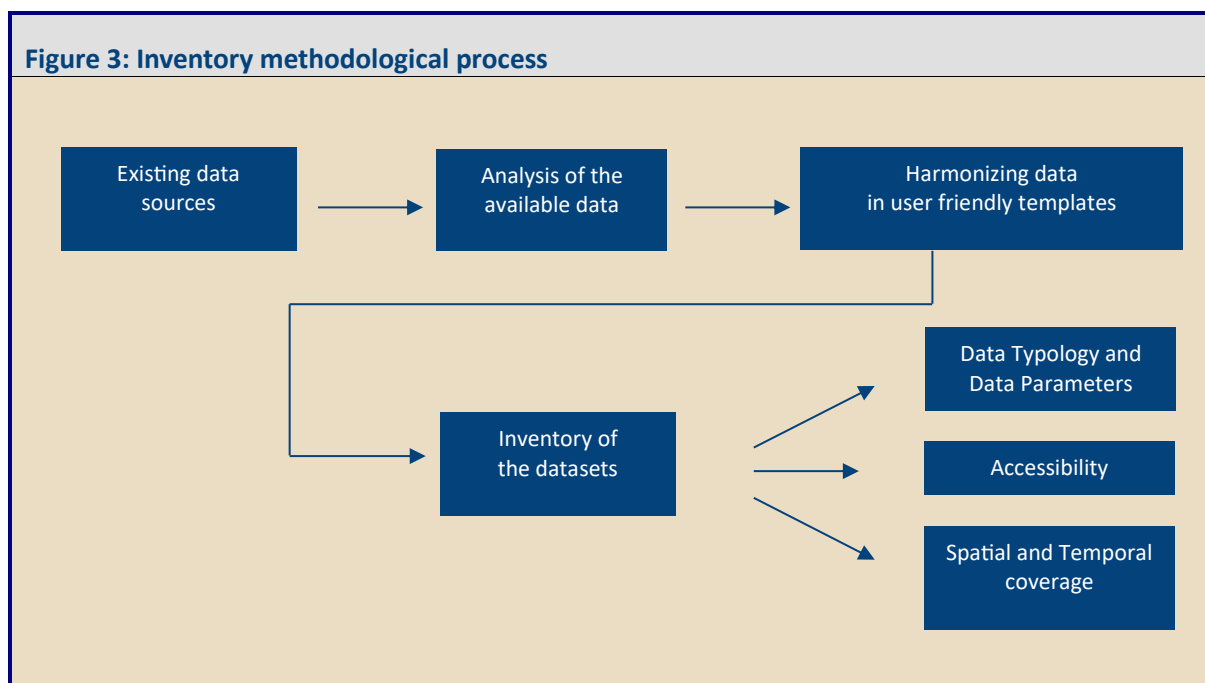
Within Task 13.1 “Mapping of existing platforms models and tools” ODYSSEA partners identified existing data sources of their own country, analysed Earth Observation facilities and networks (platforms with online models, satellite data, in-situ systems, citizen scientist networks) containing Mediterranean status databases maintained by agencies, public authorities, research institutions and universities.

It was therefore necessary to design a structured format in which each row (record) represents a data source and each column represents a data attribute. The records in the table contain a fixed number of fields and all records have the same format.

This method has considerable advantages:

- easy to use;
- significantly narrows the margin of error in the insertion and mapping of data;
- allows data gap analysis to be easily performed;
- allows the rigorous design, which will facilitate all the subsequent work of the platform.

The flowchart (**Figure 3**) reported below describes the methodological process necessary to build up the inventory and achieve the prefixed objectives.



The information and data gathered under these procedures (first level) were managed and dealt using the MS Excel software, to provide second-level information for subsequent uses of the data gaps analysis.

#### Common data vocabularies: SeaDataNet standards

Common vocabularies were set-up and populated by SeaDataNet Project (2006-2011; 2011-2014). SeaDataNet is a distributed Marine Data Infrastructure for the management of large and diverse sets of data deriving from in situ surveys of the seas and oceans. Professional data centres, active in data collection, constitute a Pan-European network providing on-line integrated databases of standardized quality. The on-line access to in-situ data, meta-data and products is provided through a unique portal interconnecting the interoperable node platforms constituted by the SeaDataNet data centres. The SeaDataNet metadata services (**Figure 4**) provide overviews of marine research organisations in Europe and their engagement in marine research projects, managing large datasets, and data acquisition by research vessels and monitoring programmes for the European seas and global oceans.

For communication and cataloguing purposes, Sapienza used the SeaDataNet Common Vocabulary that identifies monitoring groups and categories of characteristics by a code, giving a definition for each code at different levels of aggregation.

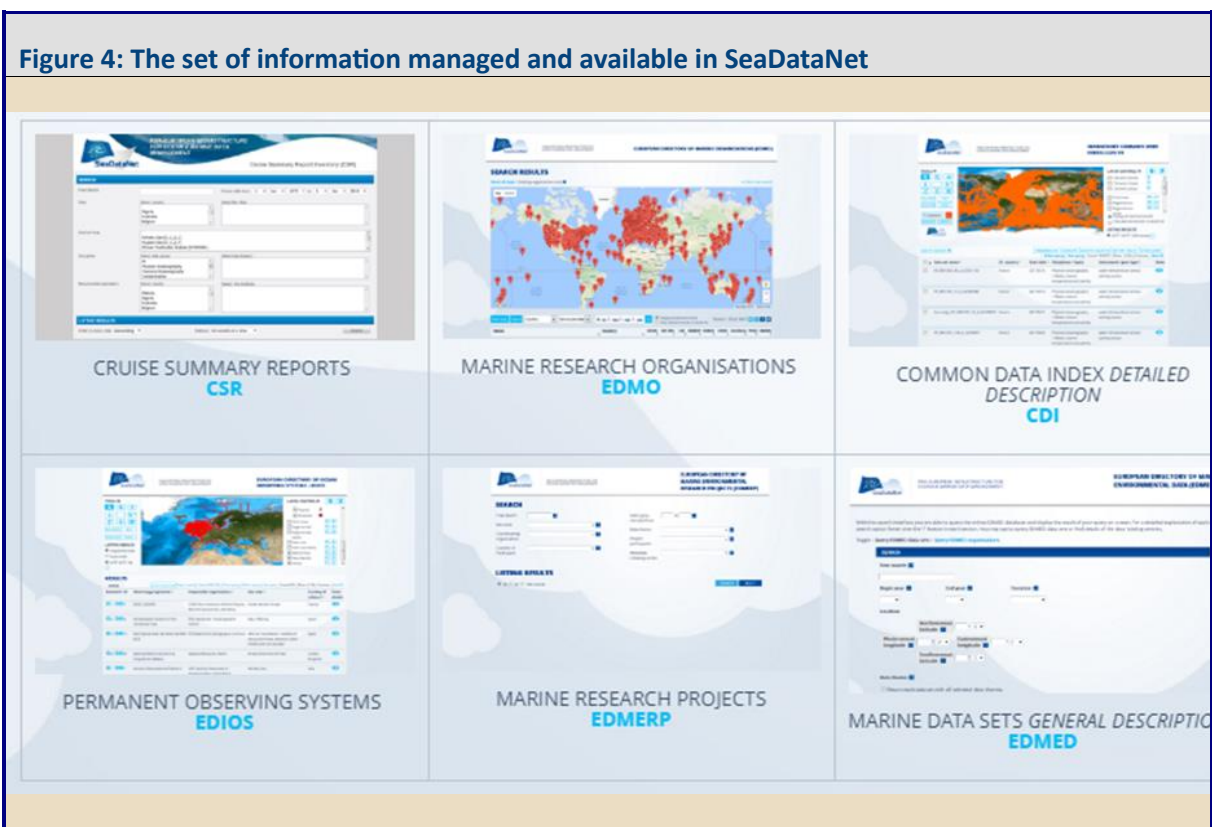
The vocabulary terms utilized are:

P03 SeaDataNet Agreed Parameter Groups - Terms agreed within the EU SeaDataNet community to describe coarse-grained groupings of related measurement phenomena.



P02 SeaDataNet Parameter Discovery Vocabulary - Terms describing fine-grained related groups of measurement phenomena designed to be used in dataset discovery interfaces.

P04 Global Change Master Directory Science Keywords V5 - Concatenated category, topic, term and variable separated by '>'. From Olsen L.M. et. al (2006) NASA/GCMD Earth Science Keywords Version 5.3.3.



### Mapping existing datasets

Chemical, biological, ecological, physical, meteorological and human pressure datasets has been collected considering both the Mediterranean open sea and the coastal zone. All the collected data were included in an explicit inventory of existing data sources specifying for each dataset data typology and accessibility (open or non-accessible).

The main typologies were relative to Earth Observation facilities and networks (platforms with online models, satellite data, in-situ systems, citizen scientist networks) containing Mediterranean status databases maintained by agencies, public authorities, research institutions and universities. Non Mediterranean partners analysed existing data sources coming from international databases and remaining Mediterranean countries.

At this concern, in order to map existing platforms models and tools, Sapienza produced and distributed a template in MS Excel format with the aim of identifying existing data sources of the related country.

Sapienza presented a first draft of this excel template for data collection at ODYSSEA KoM.

During and after the KoM, the first draft of this template was discussed and commented by many partners of the ODYSSEA consortium. Therefore, Sapienza amended and simplified the excel template until a final version reached and shared with the consortium at the beginning of October 2017.

Moreover Sapienza elaborated and shared with the whole consortium a guide to compile the excel template for data gathering that describes the technical specifications to be used for rationalization and organization of information produced.

Some partners sent to Sapienza a certain number of data using the different templates draft shared from June to October 2017. Sapienza elaborated and implemented those data into the final template, highlighting many missing data that should be compiled to allow the data analysis needed for finalizing D.13.1. Therefore, Sapienza asked each representative partner to fill in the missing cells for each line. Furthermore, Sapienza filled in the template with some data already in its possession.

Sapienza, finally, integrated and harmonized all data and information coming from different sources into one user friendly dataset. The collected data were checked, amended and, where necessary, further integrated. This dataset represented the baseline, on which data gap analysis has been carried out. In this phase, explicit reference to the products already provided by the EMODNET project was done, in particular to the list of the main existent marine databases (EMODNET CHECKPOINT). From this important source of information a definitive integration on the base line dataset was performed.

Overall, the meta-database (Master\_Data) contains 122 platforms related to 26 groups (Data\_Tipology) (SDN:P03 GROUP) and 101 categories of characteristics (Data\_Parameter) (SDN:P02 GROUP and SDN:P04GROUP), i.e. monitoring environmental and human activity information. These “descriptors” identify potentially usable information for data gap analysis implementation.

The elaborated excel template for data collection is divided into two sections:

- Section I - describes the Standard Template structure;
- Section II - includes the Data Dictionary related to the fields to be filled in the Standard Template.

### Section I - Standard Template structure

For the Section I, the related excel file includes the two following sheets:

- Master\_Data
- Parameter\_List

Master\_Data sheet is divided into two parts:

- Part I - Head (line 1 and 2)
- Part II - Data (from line 3 onwards)

Parte I (Head) includes in turn, 2 rows in which the following information is respectively given:  
First row - contains the characteristics of the field present in each column:

- text, alphanumeric, numeric, etc ...;
- mandatory, optional, etc ...;
- selectable from list;
- manual entry
- automatic entry depending on the previous field.

Second row - includes the fields to be completed for each analysed existing data source. The fields are listed in **Table 2**.

<b>Table 2: Fields to be refilled for each analysed existing data source</b>	
<b>Fields_Number</b>	<b>Fields_Name</b>
<b>1</b>	Platform Number
<b>2</b>	Platform Number
<b>3</b>	Platform Description
<b>4</b>	Data Provider
<b>5</b>	Platform Name
<b>6</b>	Platform Typology
<b>7</b>	Platform Access
<b>8</b>	Platform Start Year
<b>9</b>	Platform Finish Year
<b>10</b>	Geographical Coverage
<b>11</b>	Data Typology
<b>12</b>	Data Typology Code
<b>13</b>	Data Parameter
<b>14</b>	Data Parameter Code
<b>15</b>	Spatial Resolution
<b>16</b>	Temporal Resolution
<b>17</b>	Data Format

Part II (Data) is the part of information entry.

It includes both fields that can be used to make a selection from a list, or fields that can be used through manual input and can be used automatically. Each of the three types of insertion corresponds to a specific color.

**Table 3** shows the different types of enhancement of the input field.

Table 3: Table for the structure and color of the columns in Part II - Data, in the Master_Data sheet	
Columns	Description
A, B, D,	They include fields that refer to a predefined list from which to select the data of interest. Positioning on the cell to be valorized, to select the value from the associated list, "click" on the arrow that appears to the right of the cell itself. The lists have 2 or more items. Once the field has been selected, selecting the item from the list, if desired and if the data are repetitive, all the cells of the underlying column can be filled through the use of the MS Excel "copy" and "paste" functions.
K, M	They refer to fields that are evaluated in automatic mode. These are the Seadatanet vocabulary codes relevant to the Data_Typology (Groups) field and the Data_Parameters (Categories of characteristics) field.
C, E, F, G, H, I, J, L, N, O, P	They include fields that need manual insertion operations which can be completed, if the data are repetitive, by using the Excel "copy" and "paste" features.

The Parameter\_List sheet is organized in the following way:

Sapienza elaborated for many fields specific lists that contain the options to be entered by an automatic selection using a dropdown menu, in order to facilitate data entering and to significantly reduce the possibility of errors when compiling data.

The default lists are shown here below for each considered field.

#### **Data\_Provider:**

*citizen scientist networks*  
*collecting data from other provider*  
*integrate and disseminate knowledge and expertise*  
*platform*

#### **Platform\_Tipology:**

*online models*  
*in situ system*  
*geographical*  
*monitoring systems and cruises*  
*remote sensing data*  
*numerical models*  
*corine land cover*  
*GIS (Geographic Information System)*

The term “Geographical Platform” refers to a platform with an application programming interface (API) provided by Google Maps, that allows to overlay geo-referenced data with a personalized Google map. It should not be confused with a GIS (Geographic Information System), although the acronym GIS is often used to mean science or studies on geographical information.

The differences between “Online models” and “Numerical models” are not substantial; both platforms provide data of various kind, produced by simulation models. However, the distinction between the two types of platforms was maintained, to respect the original information provided by the respective websites and, in the case of the "numerical models" platforms, to highlight the numerical nature of the outputs that usually refer to projects and services granted by the EC, aimed above all at ocean monitoring and forecasting, e.g. MyOcean projects in the frame of the CMEMS Copernicus Programmes (Copernicus - Marine Environment Monitoring Service).

**Platform\_Access:**

*open*

*non-accessible*

**Platform\_Start Year / Platform\_Finish Year:**

*from before 1990 to 2017 or ongoing*

**Geographical\_Coverage(\*):**

*Whole basin; Northern Alboran Sea; Alboran Island; Southern Alboran Sea; Algeria; Balearic Island; Northern Spain; Gulf of Lion; Corsica; Ligurian Sea and North Tyrrhenian Sea; Southern and Central Tyrrhenian Sea; Western Sardinia; Eastern Sardinia; Northern Tunisia; Gulf of Hammamet; Gulf of Gabes; Malta; Southern Sicily; Northern Adriatic; Southern Adriatic Sea; Western Ionian Sea; Eastern Ionian Sea; Southern Ionian Sea; Aegean Sea; Crete; Northern Levant Sea; Cyprus; Southern Levant Sea; Eastern Levant Sea; Marmara Sea; Black Sea; Azov Sea; Coastal water EU member states; Italy; Southern European Seas; Greece.*

(\*) To the formal list of the 23 regional sub-basins, other names of seas were added, depending on the names used in the various inventoried platforms.

**Spatial\_Resolution:**

*1 arcsec; 3 arcsec; 7.5 arcsec; 30 arcsec; 1 arcminute; 0.004166 degrees; 0.0027 degrees; 0.003 degrees ; 0.06 degrees; 0.1 degrees; 0.12 degrees; 0.125 degrees; 0.2 degrees; 0.25 degrees; 0.4 degrees; 0.5 degrees; 1 degrees; 1 km; 4 km; 25 km; 12mx12m; 500k, 1M, 1.5M based on region; 1:1 000 000 scale (1M); 0.06 degrees, 1.0 km, 4.0 km; 7km, 14 km; 1km, 4km; 4km, 9km; 0,01 degrees, 0,02 degrees; 0,01 degrees, 0,04 degrees; 5 m; 2,5 km; 7,5 km; 30 min spatial cells; 6 raster.*

**Temporal\_Resolution:**

*real time based on station*

*hourly, daily, monthly mean*

*daily, monthly mean*

*monthly mean*

*9-monthly mean*

*3-hourly mean*

*6-hourly mean*

*12-hourly mean*

*48-hourly mean*

*monthly mean or daily instantaneous based on date and dataset (satellite)*

weekly, monthly mean  
annual mean

**Data\_Format:**

vector point; vector polygon; vector shapefile; grib; netcdf; ascii; pdf.

**Table 4** and **Table 5** show the different SDN codes respectively for Data\_Typology and Data\_Parameters.

<b>Table 4: Data_Typology from SDN: P03 GROUP</b>	
<b>Data_Typology</b>	<b>Data_Typology_Code</b>
meteorology	M010
biota_abundance_biomass_and_diversity	B070
birds_mammals_and_reptiles	B015
fish	B020
anthropogenic_contamination	H001
construction_and_structures	H002
fisheries	H004
human_activity	H005
currents	D030
sea_level	D032
water_column_temperature_and_salinity	D025
waves	D034
rock_and_sediment_lithology_and_mineralogy	G045
rock_and_sediment_sedimentology	GSED
terrestrial_including_bathymetry_and_under_sea_features	T001
positioning_references_and_data_management	Z005
habitat	B050
macroalgae_and_seagrass	B055
pigments	B035
dissolved_gases	C015
carbon_nitrogen_and_phosphorus	C005

sedimentation_and_erosion_processes	G060
rock_and_sediment_physical_properties	G040
optical_properties	D015
suspended_particulate_material	G015

For each Data\_Typology a list of *ad hoc* parameters have been considered in appropriate drop down menu, as listed below.

The considered parameters for each data typology has been selected starting from the SEADATANET vocabularies, with particular regards to the following vocabularies: SDN:P02 GROUP, SDN:P03 GROUP, SDN:P04 GROUP.

**Table 5: Data\_Parameters from SDN: P02 GROUP; SDN:P04 GROUP**

<b>meteorology</b>	
air pressure	CAPH
air temperature and density	CDTA
atmospheric humidity	CHUM
wind speed and direction	EWSB
solar radiation	CSLR
<b>biota_abundance_biomass_and_diversity</b>	
fauna abundance per unit area of the bed	FABD
bacteria taxonomic abundance in water bodies	BATX
bacteria taxonomic abundance in sediment	BAUC
biodiversity indices	BDRV
bacteria generic abundance in water bodies	BNTX
bacteria generic abundance in sediment	BNUC
phytoplankton taxonomic biomass in water bodies	CATX
biological detritus in the water column suspended particulate material	EXUV
zooplankton wet weight biomass	GP079
microzooplankton taxonomic abundance in water bodies	MATX
zoobenthos generic abundance	MFAB
zoobenthos taxonomy-related abundance per unit area of the littoral zone	MFLZ
zoobenthos non taxonomy-related wet weight biomass per unit area of the bed	MFWW
zooplankton dry weight biomass per unit volume of the water column	MSBD
microzooplankton generic abundance in water bodies	MZBN
phytoplankton generic biomass in the water bodies	PNTX
phytoplankton taxonomic abundance in water bodies	PATX
plankton abundance per unit volume of the water column	PYTT
shellfish abundance and biomass in water bodies	SABB

shellfish morphology, age and physiology	SATM
virus abundance in water bodies	VIRU
water quality bioindicators	WQBI
zooplankton taxonomy-related abundance per unit volume of the water column	ZATX
zoobenthos taxonomic abundance	ZBTX
zoobenthos taxonomy-related counts	ZOOB
<b>birds_mammals_and_reptiles</b>	
bird behaviour	GP088
bird reproduction	GP004
cetacean reproduction	GP018
seal reproduction	GP025
cetacean abundance	CETA
seal abundance	FOCA
reptile abundance	GP068
bird taxonomy-related counts	BRDA
bird taxonomy-related abundance per unit area of surface	BRDD
reptile reproduction	GP069
<b>fish</b>	
fauna abundance per unit area of the bed	FABD
fish abundance in water bodies	FAXT
fish reproduction	FREP
fish and shellfish catch statistics	FCST
fish morphology, age and physiology	FATM
fish taxonomy-related abundance per unit area of the bed	FBAB
fish taxonomy-related ash-free dry weight biomass per unit area of the bed	FBAF
fish taxonomy-related counts	FCNT
fish biomass in water bodies	FIBM
<b>anthropogenic_contamination</b>	
litter abundance and type	LITT
pollution events	GP001
concentration of polycyclic aromatic hydrocarbons (PAHs) in biota	BCAH
metal concentrations in biota	BCMT
concentration of other organic contaminants in biota	BCOC
concentration of other substances in biota	BCOS
concentration of polychlorobiphenyls (PCBs) in biota	BCPB
bioassay and contaminant biological impact	GP010
industrial discharges	IDIS
acoustic noise in the water column	NOYS
concentration of polycyclic aromatic hydrocarbons (PAHs) in the water column	PCHW



pesticide concentrations in biota	PEBI
concentration of polychlorobiphenyls (PCBs) in the water column	PPWC
pesticide concentrations in sediment	PESD
pesticide concentrations in water bodies	PEWB
concentration of polycyclic aromatic hydrocarbons (PAHs) in sediment samples	SCAH
concentration of other organic contaminants in sediment samples	SCOC

concentration of polychlorobiphenyls (PCBs) in sediment samples	SPCB
concentration of other organic contaminants in the water column	WCOC
radioactivity in the water column	WRAD
<b>construction_and_structures</b>	
hazards to navigation	HZNV
man-made structures	MMST
<b>fisheries</b>	
fishery characterisation	GP087
fishing by-catch	GP080
<b>human_activity</b>	
administrative units	ADUN
industrial activity	IACT
marine archaeology	MARC
marine environment leisure usage	MLES
transport activity	TRAN
unspecified	ZZZZ
fishing effort	FEFF
transport activity	TRAN
<b>currents</b>	
horizontal velocity of the water column (currents)	RFVL
river flow and discharge	RVDS
transport in the water column	VDFC
vertical velocity of the water column	LRZA
wind stress and shear	WSTR
<b>water_column_temperature_and_salinity</b>	
salinity of the water column	PSAL
temperature of the water column	TEMP
skin temperature of the water column	PSST
electrical conductivity of the water column	CNDC
turbulence in the water column	EPSI
structure and stability of the water column	MXLM
density of the water column	SIGT
alkalinity, acidity and pH of the water column	ALKY
concentration of dissolved organic matter in the water column	HMSB
primary production in the water column	PPRD
dissolved metal concentrations in the water column	MTWD
<b>waves</b>	
spectral wave data parameters	WVSP
wave direction	GWDR
wave height and period statistic	WVST
wave height estimates	HEAV
spectral wave data parameters	WVSP

<b>rock_and_sediment_lithology_and_mineralogy</b>	
lithology	LITH
mineralogical composition	CLAY
<b>rock_and_sediment_sedimentology</b>	
sedimentary structure	SSTR
depositional environment	DPEV
sediment accumulation rate	RACC
rock grain size	ROGS
redox potential in sediment	RPOT
concentration of organic matter in sediments	STOM
<b>terrestrial_including_bathymetry_and_under_sea_features</b>	
bathymetry, elevation and undersea features	MBAN
terrestrial mapping	COAS
coastal geomorphology	COGE
seabed photography	SBPH
<b>positioning_references_and_data_management</b>	
horizontal spatial coordinates (tracking included)	ALAT
unspecified	ZZZZ
reference numbers	ACYC
horizontal platform movement	APDA
vertical spatial coordinates	AHGT
platform or instrument orientation	HEAD
<b>habitat</b>	
habitat extent	HBEX
habitat characterisation	HBCH
<b>macroalgae_and_seagrass</b>	
macroalgae generic abundance in water bodies	PU02
macroalgae and seagrass taxonomy-related counts	ACNT
<b>pigments</b>	
chlorophyll pigment concentration in the water column	CPWC
phaeopigment concentrations in the water column	PHWC
<b>dissolved_gases</b>	
dissolved oxygen parameters in the water column	DOXY
oxygen production and respiration in the water column	GOXP
<b>carbon_nitrogen_and_phosphorus</b>	
nutrient fluxes between the bed and the water column	SAMO

particulate total and organic nitrogen concentration in the water column	NTOT
nitrate concentration parameters in the water column	NTRA
nitrite concentration parameters in the water column	NTRI
phosphate concentration parameters in the water column	PHOS
dissolved total or organic phosphorus concentration in the water column	TDPX
ammonium concentration parameters in the water column	AMON
carbon concentrations in sediment	CBSD
particulate total and organic carbon concentrations in the water column	CORG
dissolved organic carbon concentration in the water column	DOCC
nitrogen concentrations in sediment	NTSD
nitrogen concentrations in suspended particulate material	NTSP
phosphorus concentrations in suspended particulate material	PXSP
silicate concentration parameters in the water column	SLCA
total dissolved inorganic carbon (TCO <sub>2</sub> ) concentration in the water column	TCO <sub>2</sub>
dissolved inorganic nitrogen concentration in the water column	TDIN
dissolved total and organic nitrogen concentrations in the water column	TDNT
particulate total and organic phosphorus concentrations in the water column	TPHS
<b>sedimentation_and_erosion_processes</b>	
sediment resuspension	BEST
sediment accumulation rate	RACC
<b>rock_and_sediment_physical_properties</b>	
sediment grain size parameters	MNGS
<b>optical_properties</b>	
transmittance and attenuance of the water column	ATTN
ocean color and earth-leaving visible waveband spectral radiation	R410
light extinction and diffusion coefficients	EXCO
optical backscatter	OPBS
secchi disk depth	SECC
visible waveband radiance and irradiance measurements in the water column	VSRW

<b>suspended_particulate_material</b>	
concentration of suspended particulate material in the water column	TSED

## Section II – Data Dictionary

The Data Dictionary - DD contains the organized list of all data concerning the system and defines them by means of data description of preliminary information entities.

A DD (**Table 6**) has been therefore elaborated, including the organized list of all data imported in the system defined by a description of the relevant values.

<b>Table 6: Data Dictionary</b>					
<b>Field_Name</b>	<b>Description</b>	<b>Type</b>	<b>Characters number</b>	<b>State</b>	<b>Data Entry</b>
Platform_Number	Identifier number of platform	Integer	1-4	Mandatory	Manual
Platform_Description	Description of the thematism of the platform	Text	1-50	Mandatory	Manual
Data_Provider	Refers to the data source processed in the dataset.	Text	1-50	Mandatory	Manual
Platform_Name	Name of the platform	Text	1-50	Mandatory	Manual
Platform_Typology	Platform data acquisition type	Alphanumeric	1-50	Mandatory	Dropdown menu
Platform_Access	Platform access modes	Text	1 – 50	Mandatory	Dropdown menu
Platform_StartYear	Start date of the platform activation	Integer	1 – 4	Mandatory	Dropdown menu
Platform_FinishYear	End date of the platform data acquisition. The field includes item “in progress”, in case the data acquisition of the platform is not completed	Integer	1 – 4	Mandatory	Dropdown menu
Geographical_Coverage	Data geographical coverage	Text	1 – 50	Mandatory	Dropdown menu
Data_Typology	Type of data processed in the platform	Text	1 – 50	Mandatory	Dropdown menu
Data_Typology_Code	SeaDataNet code of data processed in the platform Vocabulary P03.	Alphanumeric	1 – 4	Mandatory	Automatic

Data_Parameter	Data parameter processed in the platform. It depends on the selection of data typology	Text	1 – 50	Mandatory	Dropdown menu
Data_Paramater_Code	SeaDataNet code of data processed in the platform. Vocabulary P02 and P04	Alphanumeric	1 – 4	Mandatory	Automatic
Spatial_Resolution	Data spatial resolution	Alphanumeric	1-50	Mandatory	Dropdown menu
Temporal_Resolution	Data temporal resolution	Alphanumeric	1-50	Mandatory	Dropdown menu
Data_Format	Data format typology	Alphanumeric	1-50	Mandatory	Dropdown menu

### Methodology for data gap analysis

In the ODYSSEA Project DoA (Description of the Activities), it was specifically requested to develop an overall Mediterranean data gaps inventory, starting from the comprehensive information available, in this case the Master\_Data sheet, in order to identify and assess data gaps and lack of information in existing platforms and systems of data collection. It was also recommended to utilize experience from other relevant EU projects (as e.g. PERSEUS project).

Results from the gap analysis are reported in the attached excel file *Odysea\_Gap\_Analysis*.

At this phase Sapienza made reference to the experience already acquired from other relevant EU projects and the procedures already applied and developed for data gap analysis in the MSFD assessment elements of the Southern European Sea countries, as described in the paper of Laroche *et al.* (2013). In the development of this work, in addition to space/time possible data gaps, another element of interest has been considered: the “data suitability”, in terms of relevance, importance and representativeness of the available data contained in the Master\_Data sheet.

### Whole\_Master\_Data

This excel sheet should represent the whole individual templates referred to specific Data\_Typology merged into a unique data matrix (i.e., the base line dataset). In order to process the data, we have made extensive use of the MS Excel “sort and filter” function. In particular, the column data have been ordered depending on two main orders of ranking: 1<sup>st</sup> order: Data\_Typology. 2<sup>nd</sup> order: Data\_Parameter. The various results obtained by sorting the data in this way, allowed graphical representation of the whole information contained in the Master\_Data. The quality of this information, in terms of frequency of occurrence of the Data\_Typology and the Data\_Parameters, referred alternatively to Platform\_Name and to Geographical\_Coverage, has also been evaluated, by means of appropriate explanatory diagrams.

## Preliminary\_Matrix

Data gap analysis starts from a Preliminary\_Matrix, which assigns to each Data\_Typology (rows), the number of Data\_Parameters related to each regional Sea (columns) in terms of occurrences, taking into account also all-inclusive categories, as *whole basin* and *coastal water EU member states* that collect data without distinguishing among individual Mediterranean sub-basins. Each cell of the preliminary matrix was then marked with a score obtained by normalizing the occurrences with respect to the sum of the occurrences per row. We assigned therefore to this sum the meaning of total available amount of data per Data\_Typology, as it is provided by the Whole\_Master\_Data sheet.

## Parameters\_Gap\_Matrix

The Parameters\_Gap\_Matrix was evaluated for each score provided by the preliminary matrix. Parameters\_Gap\_Matrix represents the final output of the data gap analysis.

By means of the adopted procedure, Sapienza has tried to assign an objective value to the concept of goodness of information, evaluating the maximum achievable value for a given Data\_Typology as the sum of the occurrences of Data\_Parameters per each sea registered in the master data sheet, and attributing this data gap as the difference needed to reach the maximum value (100%) of information attainable.

For each Data\_Typology (rows), different data gap values were then obtained, characterized by colour depending on the respective data gap class according to the following scale: (Table 7):

Table 7: Different gap values characterized by colour		
Color gap	Range gap	Score gap
	maximum	1
	high	0,8 - 1
	medium	0,5 - 0,8
	minimum	< 0,5

## Results

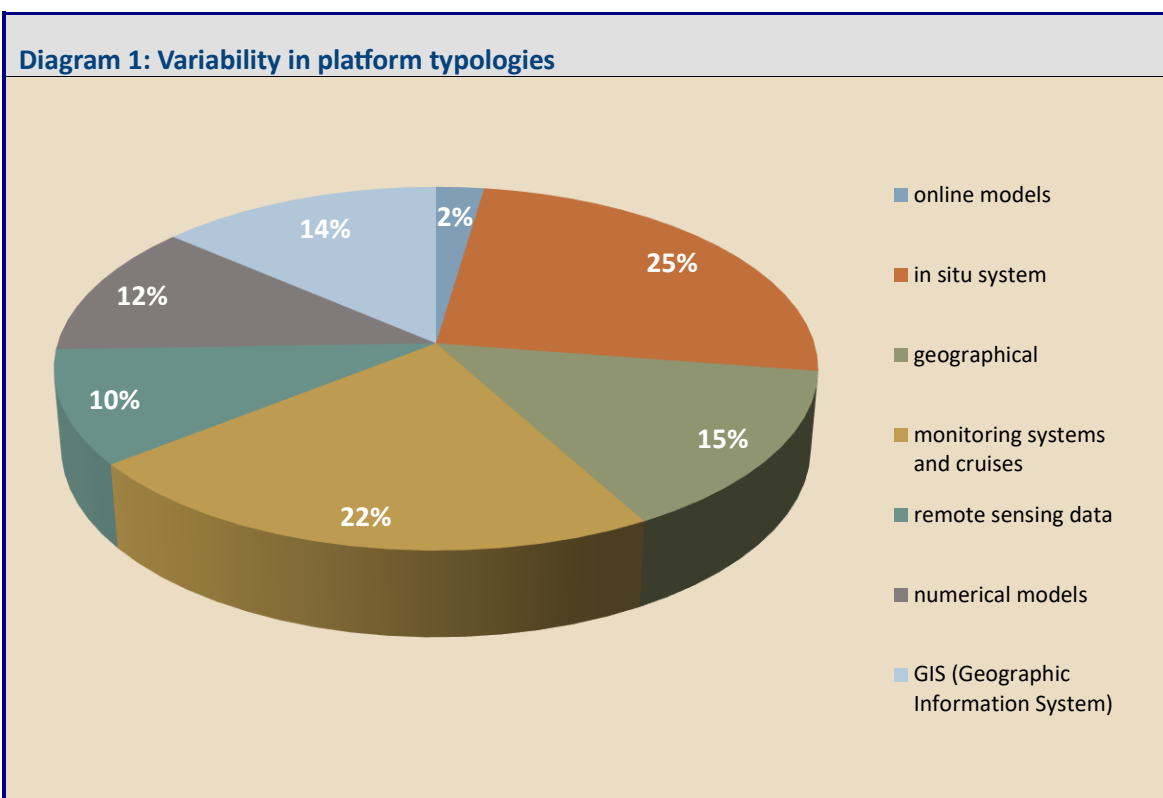
### Inventory of existing data source

All the obtained results of the mapping of existing platforms models and tools have been reported in the MS Excel database representing the inventory of existing data sources (Annex 1).

This inventory contains 477 data rows originating from 122 data platforms analysed. In terms of data accessibility, 34 data sets are not accessible while 403 are open. We were not able to check the remaining 40 datasets originating from remote sensing platform typology.

Moreover, the obtained results indicate that 76% of the data comes from ongoing platforms, while the remaining 25% are related to platforms with non-operational monitoring systems in 2016 or even prior.

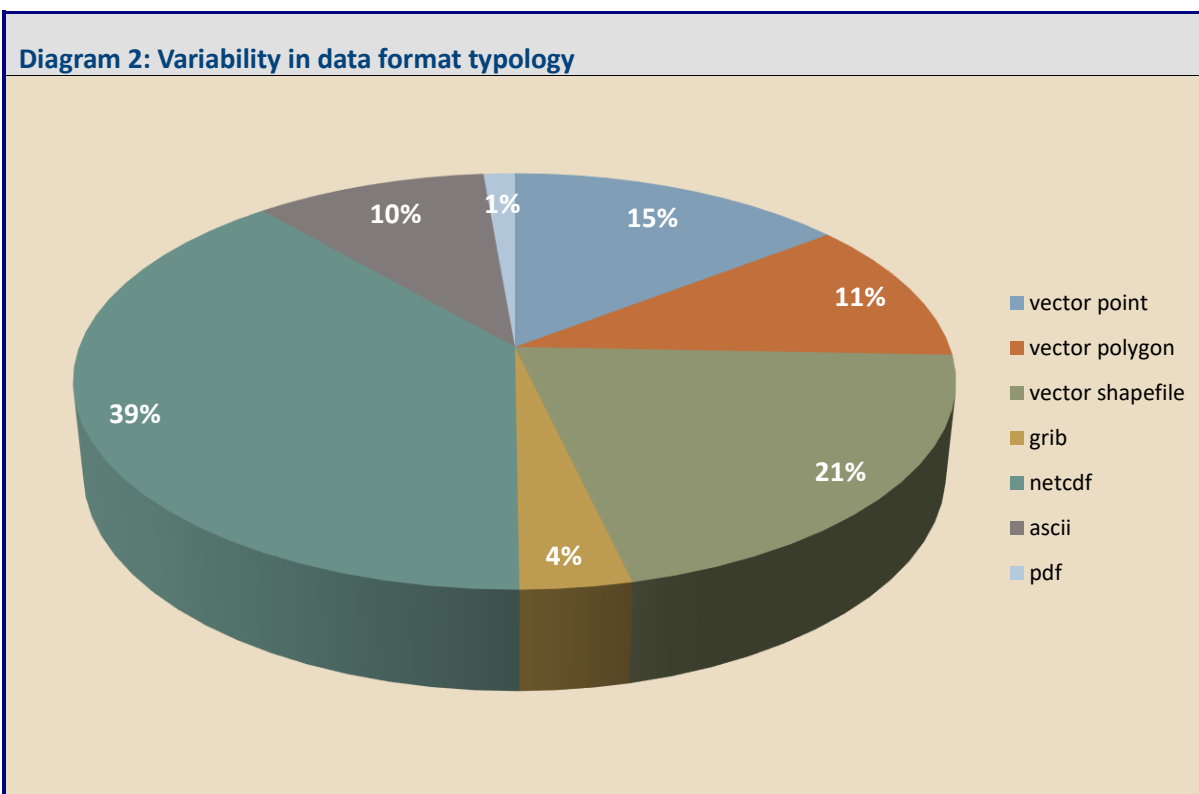
Diagram 1 summarizes the variability in platform typology, pinpointing that almost half of the data originates from monitoring systems and cruises or in-situ systems.



Spatial and temporal resolutions are not specified in most of the datasets of the Mediterranean Sea. More specifically, spatial resolution is reported only at the 16% of the datasets and temporal resolution at the 38% of the total datasets. On the other hand, data format information is reported in the 78% of the data, with details summarised in Diagram 2.







A preliminary assessment of in terms of data geographical coverage indicated that 43% of the total data are available for the whole Mediterranean Basin while the remaining 57% is available only for some specific sub-seas.

An analysis of the datasets collected for each data typology is given below.

### Anthropogenic contamination

Data on human impact originate from the following platforms:

COCONET, DATA.SHOM.FR, EEA – EIONET, MYOCEAN, PANGAEA - Data Publisher for Earth & Environmental Science and SIH - Système d'Informations Halieutiques.

The COCONET WebGIS platform publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.

The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.

The European Environment Information and Observation Network (EIONET) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on

appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.

MyOcean includes a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Marine Programme.

The information system PANGAEA is operated as an Open Access library aimed at archiving, publishing and distributing georeferenced data from Earth System research. The system guarantees long-term availability of its content through a commitment of the hosting institutions.

The SIH « Système d' Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.

#### Biota abundance biomass and diversity

These data comes from the following platforms:

ACCOBAMS, Agence des aires marines protégées, AQUAMAPS for Marine Species, CoL-001 - Catalogue Of Life, EEA – EIONET, EoL-001 - Encyclopedia of Life - Global access to knowledge about life on Earth, GBIF - Global Biodiversity Information Facility, Instituto Español de Oceanografía (IEO), IUCN-001 - Spatial Data for the Red List of Threatened Species, IUCN-003 - Global Distribution of Important Marine Mammal Areas (IMMAs), MYOCEAN, NCEAS-004 - Knowledge Network for Biocomplexity (KNB), OBIS - Ocean Biogeographic Information System , PANGAEA - Data Publisher for Earth & Environmental Science, SeaDataNet, SIH - Système d'Informations Halieutiques, SWOT-003 - Global Distribution of Sea Turtles, VLIZ-006 - World Porifera Database – WDP (sponges), VLIZ-008 - World Register of Introduced Marine Species (WRIMS), WCMC-003 - Global Sea Turtle Species Richness, WCMC-015 - Global Seagrass Species Richness, WCMC-019 - Global Patterns of Marine Biodiversity, WCMC-037 - Species+, WCMC-039 - Ocean Data Viewer (ODV), WoRMS - World Register of Marine Species.

The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) is a legal conservation tool based on cooperation. Its purpose is to reduce threats to cetaceans notably by improving current knowledge on these animals.

The French Agency for Biodiversity pursues the missions of marine environmental protection, initially carried out by the Marine Protected Areas Agency. It supports public policies for the management of marine protected areas, thus creating a network of marine protected areas. Moreover, it gives technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.

AquaMaps includes computer-generated predictions of natural occurrence of marine species, based on the environmental tolerance of a given species with respect to depth, salinity, temperature, primary

productivity, and its association with sea ice or coastal areas. Standardized distribution maps for over 25,000 species of fishes, marine mammals and invertebrates.

The Catalogue of Life is the most comprehensive and authoritative global index of species currently available. It consists of a single integrated species checklist and taxonomic hierarchy.

Encyclopedia of Life gathers, generates, and shares knowledge in an open, freely accessible and trusted digital resource, to increase awareness and understanding of living nature.

GBIF is an open-data research infrastructure funded by the world's governments and aimed at providing anyone, anywhere access to data about all types of life on Earth.

The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and marine research, advising the government on matters this context.

IUCN 001 dataset contains distribution information on species assessed for The IUCN Red List of Threatened Species. The IUCN Red List of Threatened Species (<http://www.iucnredlist.org>) is a dynamic knowledge product derived from the assessment of extinct species, while IMMAS determines Important Marine Mammal Areas in the World's Oceans.

The Knowledge Network for Biocomplexity (KNB) is an international repository intended to facilitate ecological and environmental research.

OBIS is a global open-access data and information clearing-house on marine biodiversity for science, conservation and sustainable development.

SeaDataNet is a PAN-European infrastructure for ocean & marine data management.

The WPD, the World Database of all Recent sponges ever described, is part of the World Register of Marine Species (WoRMS), a global initiative to arrive at a register of all marine organisms.

The World Register of Introduced Marine Species (WRIMS) records which marine species in the World Register of Marine species (WoRMS) have been introduced deliberately or accidentally by human activities to geographic areas outside their native range.

The WCMC-003 - Global Sea Turtle Species Richness dataset shows the global distribution of turtles' species richness while the WCMC-015 - Global Seagrass Species Richness dataset shows the global distribution of seagrass species richness, or global seagrass biodiversity.

The WCMC-019 - Global Patterns of Marine Biodiversity dataset exhibits the global patterns of marine biodiversity (species richness) across 13 major species groups ranging from zooplankton to marine mammals (11,567 species in total).

Species+ developed by UNEP-WCMC and the CITES Secretariat, is a website designed to assist Parties with implementing CITES, CMS and other multilateral environmental agreements (MEAs).

The Ocean Data Viewer (ODV) provides easy access to a range of datasets that are useful for informing decisions regarding the conservation of marine and coastal biodiversity.

Lastly, the World Register of Marine Species aims to provide the most authoritative list of names of all marine species globally, ever published.

#### Birds, mammals and reptiles

These data originated from the following platforms:

ACCOBAMS, Agence des aires marines protégées, BirdLife-001 - Global Distribution of Key Biodiversity Areas, GROMS - Global Register of Migratory Species, PANGAEA - Data Publisher for Earth & Environmental Science, SIH - Système d'Informations Halieutiques.

BirdLife has nine Global Programmes, varying from those which are well-established, to more recently developed ones, each responding to specific conservation issues.

The "Global Register of Migratory Species" contains a first list of 2,880 migratory vertebrate species in digital format, together with their threat status according to the International Red List 2000, and digital maps for 545 species.

#### Carbon nitrogen and phosphorus

These data originated from the following platforms:

EEA – EIONET, EMODNET, Instituto Español de Oceanografía (IEO), MYOCEAN, SESAME.

The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.

SESAME project was an international research project that incorporated a variety of disciplines to explore and study the ecosystem changes of the Mediterranean and the Black Seas as well as their surrounding environments.

#### Marine Construction and structures

These data originated from the following platforms:

COCONET, DATA.SHOM.FR, EEA – EIONET.

#### Sea Currents

These data originated from the following platforms:

CMEMS, CISL Research Data Archive, COCONET, EMODNET, , HyMeX, MarBEF, Marina Platform, MONGOOS – AFS, MONGOOS – ALERMO, MONGOOS – CYCOFOS, MONGOOS – CYPOM, MONGOOS - IBI – MFC, MONGOOS - MFC Currents, MONGOOS – POSEIDON, MONGOOS - PREVIMER – MENOR, MONGOOS – ROSARIO, MONGOOS – SAMPA, MONGOOS - Sicily Channel Regional, MONGOOS -

Western Mediterranean, MYOCEAN, Puertos del Estado (REDEXT), RivDIS - Global River Discharge Database, SeaDataNet, SESAME, SIH - Système d'Informations Halieutiques.

Copernicus Marine Environment Monitoring Service (CMEMS) provides full, free and open access data and information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems.

CISL RDA contains a large and diverse collection of meteorological and oceanographic observations, operational and reanalysis model outputs, and remote sensing datasets to support atmospheric and geoscience research. Ancillary datasets, such as topography/bathymetry, vegetation, and land use, are also available.

HyMeX aims at a better understanding, quantification and modelling of the hydrological cycle in the Mediterranean, with emphasis on the predictability and evolution of extreme weather events, inter-annual to decadal variability of the Mediterranean coupled system, and associated trends in the context of global change.

MarBEF is a platform to integrate and disseminate knowledge and expertise on marine biodiversity, with links to researchers, industry, stakeholders and the general public, based on a network of excellence funded by the European Union consisting of 94 European marine institutes.

MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.

The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.

Puertos del Estado (REDEXT) is a network of buoys characterized by being anchored away from the coastline to high depth (over 200 meters deep). Therefore, the wave measurements of these sensors are not disturbed by local effects. Therefore, each buoy provides representative observations of vast coastal areas.

The ORNL DAAC has divided RivDIS, Version 1.1, into separate station files so that users can readily find information by country, river, and station. We have also generated a set of useful plots and tables for each station.

### Dissolved gases

These data originated from the following platforms:

EEA – EIONET, Instituto Español de Oceanografía (IEO), MYOCEAN.

## Marine Volcanism

These data originated from the following platforms:

ChEssBase-002 - Global Distribution of Hydrothermal Vents and IntRid-001 - Global Distribution of Hydrothermal Vent Fields.

ChEssBase-002 dataset shows the global distribution of hydrothermal vents that were studied in terms of their biology, as part of the Chemosynthetic Ecosystem Science (ChEss) project.

The InterRidge Vents Database is a global database of submarine hydrothermal vent fields. The InterRidge Vents Database is supported by the InterRidge program for international cooperation in ridge-crest studies ([www.interridge.org](http://www.interridge.org)).

## Fishes

These data originated from the following platforms:

Agence des aires marines protégées, ChEssBase-002 - Global Distribution of Hydrothermal Vents, Data Collection (DCR-DCF) for the Common Fisheries, FAO Fish and Aquaculture, FishBase - A Global Information System on Fishes, Instituto Español de Oceanografía (IEO), IntRid-001 - Global Distribution of Hydrothermal Vent Fields, MEDITS surveys, OTN - Ocean Tracking Network, PANGAEA - Data Publisher for Earth & Environmental Science.

Data Collection (DCR-DCF) for the Common Fisheries is, an EU framework for the collection and management of fisheries data in place since 2000. This framework was reformed last in 2008 resulting in the Data Collection Framework (DCF). Under this framework the Member States (MS) collect, manage and make available a wide range of fisheries data.

FAO Fish and Aquaculture have the mission to strengthen global governance and the managerial and technical capacities of members and to lead consensus-building towards improved conservation and utilization of aquatic resources.

FishBase is a global biodiversity information system on finfishes. Its initial goal to provide key facts on population dynamics for 200 major commercial species has now grown to having a wide range of information on all species currently known in the world: taxonomy, biology, trophic ecology, life history, and uses, as well as historical data reaching back to 250 years.

MEDITS is an International bottom trawl survey designed from a European Commission's initiative to produce biological data on demersal resources in the Mediterranean Sea. Nine Mediterranean countries are associated in the programme, which covers all the areas along their coasts from 10 to 800 m depth.

The Ocean Tracking Network is a global aquatic animal tracking, technology development, and partnership platform headquartered at Dalhousie University in Canada.

## Fisheries

Data from the following platforms were used in this analysis:

Agence des aires marines protégées, AQUAMAPS for Marine Species, COCONET, FAO Fish and Aquaculture, Global Fisheries Catch dataset, SIH - Système d'Informations Halieutiques, UBC-009 - Sea around us.

Global Fisheries Catch dataset is a database of global marine commercial, small-scale, illegal and unreported fisheries catch.

The Sea Around Us Project is a scientific collaboration between the University of British Columbia and the Pew Environment Group that began in July 1999.

## Habitat

The following platforms were identified:

ACCOBAMS, CBD-001 - Global Distribution of Ecologically or Biologically Significant Marine Areas, COCONET, EMODNET, FAO-002 - Global Distribution of Vulnerable Marine Ecosystems, GBIF - Global Biodiversity Information Facility, Instituto Español de Oceanografía (IEO), International Maritime Organization IMO-001 - Global Distribution of Particularly Sensitive Sea Areas (PSSA), IUCN - World Database on Protected Areas (WDPA), MAPAMED - Marine Protected Areas in the Mediterranean, Mediseh-001 - Modelled Spatial Distributions of Coralligenous and Maërl Habitats, Mediseh-002 - Modelled Posidonia oceanica distribution, MEDISEH-MAREA, NOAA-001 - Large Marine Ecosystems of the World, PANGAEA - Data Publisher for Earth & Environmental Science, SWOT-001 - Global Distribution of Sea Turtle Nesting Sites, SWOT-002 - Global Distributions of Habitat Suitability for Sea Turtle Nesting Sites, WCMC-001 - Global Distributions of Habitat Suitability for Cold-Water Octocorals, WCMC-006 - Global Distribution of Sea Turtle Feeding Sites, WCMC-007 - Global Distribution of Sea Turtle Nesting Sites, WCMC-013-014 - Global Distribution of Seagrasses, WCMC-024 - Global Distribution of Habitat Suitability for Stony Corals on Seamounts, WCMC-027 - Global Distribution of Saltmarsh, WCMC-027 - Global Map of Marine Critical Habitat as per IFC PS6, WCMC-036 - Marine Ecoregions and Pelagic Provinces of the World, WCMC-16 - World Database on Protected Areas, ZSL-001 - Global Distributions of Habitat Suitability for Cold-Water Octocorals.

CBD-001 - Global Distribution of Ecologically or Biologically Significant Marine Areas, in 2008, the ninth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 9) adopted the used scientific criteria for identifying ecologically or biologically significant marine areas in need of protection in open-ocean waters and deep-sea habitats.

FAO-002 - Global Distribution of Vulnerable Marine Ecosystems dataset shows the global distribution of Vulnerable Marine Ecosystems (VMEs) in relation to deep-sea fishing activities.

International Maritime Organization IMO-001 - Global Distribution of Particularly Sensitive Sea Areas (PSSA) dataset shows the distribution of 13 PSSAs.



The World Database on Protected Areas (WDPA) is the most comprehensive global database on terrestrial and marine protected areas. It is a joint project between the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN), managed by UNEP World Conservation Monitoring Centre (UNEP-WCMC).

MAPAMED (Marine Protected Areas in the Mediterranean) is a GIS database collecting information on marine protected areas of the Mediterranean, and more generally on sites of interest to the conservation of the marine environment. It is developed and jointly administered by the MedPAN association and RAC / SPA.

Mediseh-001 dataset shows modelled spatial distributions of coralligenous outcrops and maërl beds across the Mediterranean Sea, while Mediseh-002 dataset shows the modelled spatial distribution of *Posidonia oceanica* seagrass in the Mediterranean Sea.

MEDISEH-MAREA dataset illustrates Mediterranean Sensitive Habitats.

NOAA-001 - Large Marine Ecosystems of the World dataset shows the boundaries of the 66 Large Marine Ecosystems (LMEs) of the world.

SWOT-001 - Global Distribution of Sea Turtle Nesting Sites dataset contains the known locations of sea turtle nesting sites, for all seven species: hawksbill turtle (*Eretmochelys imbricata*), Kemp's ridley turtle (*Lepidochelys kempii*), leatherback turtle (*Dermochelys coriacea*), green turtle (*Chelonia mydas*), loggerhead turtle (*Caretta caretta*), olive ridley turtle (*Lepidochelys olivacea*), and flatback turtle (*Natator depressus*).

WCMC-001 - Global Distributions of Habitat Suitability for Cold-Water Octocorals dataset contains the global distributions of habitat suitability for seven suborders of cold-water octocorals (*Octocorallia*) found deeper than 50 m: *Alcyoniina*, *Calcaxonia*, *Holaxonia*, *Scleraxonia*, *Sessiliflorae*, *Stolonifera*, and *Subselliflorae*.

WCMC-006 - Global Distribution of Sea Turtle Feeding Sites dataset encompasses the known locations of sea turtle feeding sites, for five of the seven species: hawksbill turtle (*Eretmochelys imbricata*), leatherback turtle (*Dermochelys coriacea*), green turtle (*Chelonia mydas*), loggerhead turtle (*Caretta caretta*), and olive ridley turtle (*Lepidochelys olivacea*).

WCMC-013-014 - Global Distribution of Seagrasses dataset presents the global distribution of seagrass species richness, or global seagrass biodiversity.

WCMC-027 - Global Distribution of Saltmarsh dataset displays the extent of our knowledge regarding the distribution of saltmarsh globally, drawing from occurrence data (surveyed and/or remotely sensed).

WCMC Global Map of Marine Critical Habitat as per IFC PS6 dataset shows the spatial distribution of 'Critical Habitat' (CH), as defined by the International Finance Corporation's Performance Standard 6 (IFC-PS6).

WCMC-036 - Marine Ecoregions and Pelagic Provinces of the World dataset combines two separately published datasets: the “Marine Ecoregions Of the World” (MEOW; 2007) and the “Pelagic Provinces Of the World” (PPOW; 2012).

WCMC-16 - World Database on Protected Areas dataset shows the global distribution of terrestrial and marine protected areas.

ZSL-001 - Global Distributions of Habitat Suitability for Cold-Water Octocorals dataset contains the global distributions of habitat suitability for seven suborders of cold-water octocorals (Octocorallia) found deeper than 50 m: Alcyoniina, Calcaxonia, Holaxonia, Scleraxonia, Sessiliflorae, Stolonifera, and Subselliflorae.

### Human activity

These data originate from the following platforms:

ACCOBAMS, Agence des aires marines protégées, COCONET, Data Collection (DCR-DCF) for the Common Fisheries, DATA.SHOM.FR, DIRM Méditerranée, EEA – EIONET, FAO Fish and Aquaculture, IWC-001 - Ship Strike Database, NCEAS-001 - A Global Map of Human Impacts to Marine Ecosystems, Oceana 2011.

RAC-SPA - Regional Activity Center for Specially Protected Areas, SIH - Système d'Informations Halieutiques. Created by decree on 11 February 2010, the Interregional Directorate for the Mediterranean Sea (DIRM Méditerranée) is responsible for the conduct of state policies on sustainable development of the sea, resource management and regulation of maritime activities.

IWC-001 - Ship Strike is a global database of collisions between any type of vessel and whales, dolphins or porpoises, and an online public data entry system for submitting reports.

NCEAS-001 - A Global Map of Human Impacts to Marine Ecosystems dataset includes synthesis of spatial data on the distribution and intensity of human activities and the overlap of their impacts on marine ecosystems for the management and conservation of the world's oceans.

OCEANA 2011 is the largest international advocacy group working solely to protect the world's oceans.

The Regional Activity Centre for Specially Protected Areas (RAC/SPA) was established by the Contracting Parties to the Barcelona Convention and its Protocols in order to assist Mediterranean countries in implementing the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean.

### Macroalgae and seagrass

These data originate from the following platforms:

ACCOBAMS, EEA – EIONET, MEDISEH-MAREA, WaDNR-001 - SeagrassNet: Global Seagrass Monitoring Network.

SeagrassNet is an expanding, worldwide ecological monitoring program that investigates and documents the status of seagrass resources and the threats to this important and imperilled marine ecosystem.

### Meteorology

Data on meteorology were collected from the following platforms:

AEMET, ARPEGE - Action de Recherche Petite Echelle Grande Echelle, AVISO+ Satellite Altimetry Data, Copernicus Marine Environment Monitoring Service (CMEMS), ECMWF, European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), HIRLAM, WRF, Marina Platform, MYOCEAN, Ocean Biology Processing Group (OBPG)/NASA's Goddard Space Flight Center, PO.DAAC, Puertos del Estado (REDEXT), RMN - Rete Mareografica Nazionale, SKIRON.

AEMET (Agencia Estatal de Meteorología) is the Spain's meteorological agency operating under the Ministry of Agriculture, Food and Environment.

The global numerical weather prediction model ARPEGE (Action de Recherche Petite Echelle Grande Echelle) is a tool for operational weather forecasting at Météo France.

AVISO+ merges the reference portal in altimetry with the historical AVISO website from Cnes and the CTOH website and contains articles, news and tools in four key themes: ocean, coast, hydrology and ice.

Copernicus Marine Environment Monitoring Service (CMEMS) provides full, free and open access data and information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems.

ECMWF is an independent intergovernmental organisation founded in 1975 and supported by 34 states producing global numerical weather forecasts.

EUMETSAT is a global operational satellite agency at the heart of Europe. Its purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to the Member and Cooperating States, to the international partners, and to users worldwide.

NASA's OceanColor Web is supported by the Ocean Biology Processing Group (OBPG) at NASA's Goddard Space Flight Center. Its responsibilities include the collection, processing, calibration, validation, archive and distribution of ocean-related products from a large number of operational, satellite-based remote-sensing missions providing ocean colour, sea surface temperature and sea surface salinity data to the international research community since 1996.

PO.DAAC is located at NASA's Jet Propulsion Laboratory in Pasadena, California. PO.DAAC is tasked with managing data to enable understanding of the world's oceans. PO.DAAC provides data and related information pertaining to the physical processes and conditions of the global oceans, including measurements of ocean winds, temperature, topography, salinity, circulation and currents, and sea ice.

RMN - Rete Mareografica Nazionale - is made up of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.

The SKIRON modelling system is an integrated limited area modelling system developed from the AM&WFG. It is in use in approximately 20 research institutes and weather services worldwide.

### Ocean Optical properties

These data come from the following platforms:

Boussole, Copernicus Marine Environment Monitoring Service (CMEMS), European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), MYOCEAN, NASA – Oceancolor, SeaDataNet.

The purpose of the BOUSSOLE project is to establish a time series of optical properties in oceanic waters in support to bio-optical research, to calibration of ocean color satellite observations, and to validation of the products derived from these observations.

### Pigments

These data originate from the following platforms:

Boussole, Copernicus Marine Environment Monitoring Service (CMEMS), EEA – EIONET, EMODNET, Instituto Español de Oceanografía (IEO), MYOCEAN, NASA – Oceancolor, Ocean Biology Processing Group (OBPG)/NASA's Goddard Space Flight Center, SeaDataNet.

### Positioning references and data management

These data come from the following platforms:

IBAT - Integrated Biodiversity Assessment Tool - Global Biodiversity Decision Support Platform, NCEAS - Global Health Index, TNC-002 - Atlas of Global Conservation, TNC-004 - Mapping Ocean Wealth, UBC-003 - Global Estuary Database, VLIZ-007 - Longhurst Biogeographical Province, WCMC-032 - A Global Map of Natural Capital.

IBAT is a central database for globally recognized biodiversity information including Key Biodiversity Areas and Legally Protected Areas.

The Ocean Health Index evaluates the condition of marine ecosystems according to 10 human goals, which represent the key ecological, social, and economic benefits that a healthy ocean provides.

TNC-002 - Atlas of Global Conservation maps are the result of an unprecedented effort by Nature Conservancy scientists, in collaboration with governments, scientists and conservation organizations around the world - over 80 global maps describing the state of terrestrial, freshwater and marine habitats.

The Ocean Wealth online mapping tool, or mapping portal, contains a robust data-viewing framework with interactive web apps designed to visualize ecosystem services (i.e. the value of coral reefs based on tourism dollars generated by visitors) represented by important coastal habitats or modelling scenarios. Mapping Ocean Wealth aggregates existing science and uses tools and maps to make science more accessible to audiences at all levels.

UBC-003 - Global Estuary Database dataset shows the global distribution of over 1,300 estuaries, including some lagoon systems and fjords.

The VLIZ Maritime Boundaries Geodatabase as a biogeographical tool.

WCMC-032 - A Global Map of Natural Capital dataset shows the global patterns of ecosystem assets, in the marine, terrestrial and freshwater realms. Natural capital comprises both ecosystem assets (such as freshwater) and natural resources (such as fossil fuel deposits).

### Rock, sediment lithology and mineralogy

These data come from the following platforms:

DATA.SHOM.FR and Instituto Español de Oceanografía (IEO).

### Rock and sediment physical properties

A single data (sediment grain size parameters) coming from EMODNET platform.

### Rock and sediment sedimentology

These data come from the following platforms:

DATA.SHOM.FR, EMODNET, SEDNET - Sediment Network, SIH - Système d'Informations Halieutiques.

SEDNET - Sediment Network brings together sediment professionals from science, administration, management, NGOs, consultancy and industry. It interacts with various networks and organizations, especially in Europe, that operate at national or international level and focus on sediment, soil and water and in fields such as science, policy making, management, industry, education etc.

### Sea level

These data originate from the following platforms:

AVISO CLS, AVISO+ Satellite Altimetry Data, Copernicus Marine Environment Monitoring Service (CMEMS), EMODNET, European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), Instituto Español de Oceanografía (IEO), Marina Platform, MYOCEAN, PSMSL - Permanent Service for Mean Sea Level, Puertos del Estado (REDEXT), RMN - Rete Mareografica Nazionale, SeaDataNet.

AVISO CLS includes data of the global mean level of the oceans that is one of the most important indicators of climate change. It incorporates the reactions from several different components of the climate system. Precise monitoring of changes in the mean level of the oceans, particularly through the use of altimetry satellites, is vitally important, for understanding not just the climate but also the socioeconomic consequences of any rise in sea level.

PSMSL is the global data bank for long term sea level change information from tide gauges and bottom pressure recorders.

### Sedimentation and erosion processes

These data comes from COCONET and EMODNET platforms.

### Suspended particulate material

These data come from the following platforms:

CoastColour, EMODNET, HyMeX, MarBEF, MYOCEAN.

The European Space Agency has launched the CoastColour project to fully exploit the potential of the MERIS instrument for remote sensing of the coastal zone.

### Terrestrial, bathymetry and undersea features

These data comes from the following platforms:

COCONET, Corine Land Cover 2006 seamless (EEA), DATA.SHOM.FR, EEA – EIONET, EMODNET, GEBCO - General Bathymetric Chart of the Oceans, GridA-001 - Geomorphology of the oceans, Instituto Español de Oceanografía (IEO), Marina Platform, SIH - Système d'Informations Halieutiques, UBC-004 - Large Seamount Areas, ZSL-002 - Global Distribution of Seamounts and Knolls.

The CORINE Land Cover (CLC) database was finalized in the early 1990s as part of the European Commission program to COOrdinate INformation on the Environment (Corine).

The General Bathymetric Chart of the Oceans (GEBCO) aims to provide the most authoritative, publicly-available bathymetry data sets for the world's oceans.

GridA-001 - Geomorphology of the oceans includes the global seafloor geomorphic features map representing an important contribution towards the understanding of the distribution of blue habitats.

ZSL-002 - Global Distribution of Seamounts and Knolls dataset shows the global distribution of seamounts and knolls identified using global bathymetric data at 30 arc-sec resolution.

### Water column temperature and salinity

These data come from the following platforms:

CMEMS, AQUAMAPS for Marine Species, Boussole, CERSAT IFREMER MEDSPIRATION, Copernicus Marine Environment Monitoring Service (CMEMS), EEA – EIONET, EMODNET, European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), HyMeX, Marina Platform, MONGOOS – AFS, MONGOOS – ALERMO, MONGOOS – CYCOFOS, MONGOOS – CYPOM, MONGOOS - IBI – MFC, MONGOOS - MFC Currents, MONGOOS – POSEIDON, MONGOOS - PREVIMER – MENOR, MONGOOS – SAMPA, MONGOOS - Sicily Channel Regional, MONGOOS - Western Mediterranean, MONGOOS by ISAC CNR, MYOCEAN, Ocean Biology Processing Group (OBPG)/NASA's Goddard Space Flight Center, PO.DAAC, Puertos del Estado (REDEX), RMN - Rete Mareografica Nazionale, SeaDataNet, SESAME.

AquaMaps are computer-generated predictions of natural occurrence of marine species, based on the environmental tolerance of a given species with respect to depth, salinity, temperature, primary productivity, and its association with sea ice or coastal areas. Standardized distribution maps for over 25,000 species of fishes, marine mammals and invertebrates.

The Medspiration Project is a European initiative, funded by ESA (in the frame of DUE program), to combine sea surface temperature (SST) data measured independently by several different satellite systems into a set of data products that represent the best measure of SST, presented in a form that can be assimilated into ocean forecasting models or used for various kinds of application.

PO.DAAC is located at NASA's Jet Propulsion Laboratory in Pasadena, California. PO.DAAC is tasked with managing data to enable understanding of the world's oceans. PO.DAAC provides data and related information pertaining to the physical processes and conditions of the global oceans, including measurements of ocean winds, temperature, topography, salinity, circulation and currents, and sea ice.

## Waves

These data come from the following platforms:

CMEMS, AVISO+ Satellite Altimetry Data, Marina Platform, MONGOOS – CYCOFOS, MONGOOS - MARIA/WAM Central Med, MONGOOS – POSEIDON, Puertos del Estado (REDEX).

## Other examined dataset

In the following table (**Table 8**) a list of platforms are reported, which derives from a punctual analysis of the EMODNET CHECKPOINT inventory.

These platforms has been recorded for the completeness of their information, but not utilized in the data processing for a series of reasons, including:

- lack of certain references (unknown platform name and website), which in fact prevented access to any data;
- reference to operational methods and procedures (e.g. Automatic Identification Systems, Vessel Monitoring Systems, etc.), and therefore not to quantitatively usable data;
- geographical coverage to non-Mediterranean areas;
- explicit reference to the freshwater environment;

- other.

In general the collection of information related to the platforms always involved the origin of the data made available. In particular, platforms related to important international projects, usually collect data from institutional monitoring at a national scale, as provided by different countries and the risk of repeating twice a single source of data is very high.

<b>Table 8: Other dataset analyzed</b>				
<b>Matrix</b>	<b>Group</b>	<b>Category of characteristic</b>	<b>Data Source Name</b>	<b>Website</b>
Human Activities	Anthropogenic contamination	Litter abundance and type	Unknown	Unknown
Human Activities	Construction and structures	Man-made structures	Unknown	Unknown
Human Activities	Human Activity	Administrative units	Unknown	Unknown
Human Activities	Human Activity	Marine archaeology	MNHN data	Unknown
Human Activities	Human Activity	Transport activity	AIS (Automatic Identification System) PREMAR	premar-mediterranee.gouv.fr
Human Activities	Human Activity	Transport activity	PREMAR	premar-mediterranee.gouv.fr
Human Activities	Human Activity	Unspecified	French Army data	Unknown
Human Activities	Human Activity	Unspecified	PREMAR	Premar-mediterranee.gouv.fr
Biology/biota	Positioning, references and data management	Horizontal spatial coordinates (tracking included)	ARGOS wildlife tracking project	argos-system.org
Biology/biota	Birds, mammals and reptiles	Bird counts	MEDPAN	medpan.org
Biology/biota	Biota abundance, biomass and diversity	Cetacean abundance	CETACEANALLIANCE	cetaceanalliance.org
Biology/biota	Biota abundance, biomass and diversity	Fauna abundance per unit area of the bed	WWF	awsassets.panda.org
Biology/biota	Biota abundance, biomass and diversity	Fauna abundance per unit area of the bed	CETACEANALLIANCE	cetaceanalliance.org
Biology/biota	Biota abundance, biomass and diversity	Fauna abundance per unit area of the bed	MEDPAN	medpan.org



Biology/biota	Biota abundance, biomass and diversity	Fauna abundance per unit area of the bed	Unknown	Unknown
Biology/biota	Biota abundance, biomass and diversity	Seal abundance	MEDPAN	medpan.org
Biology/biota	Biota abundance, biomass and diversity	Reptile abundance	MEDPAN	medpan.org
Biology/biota	Habitat	Habitat extent	Unknown	Unknown
Biology/biota	Habitat	Habitat extent	WWF	awsassets.panda.org
Biology/biota	Habitat	Habitat extent	CETACEANALLIANCE	cetaceanalliance.org
Biology/biota	Habitat	Habitat extent	MEDPAN	medpan.org
Biology/biota	Habitat	Habitat extent	Glakoumi, et Al, 2013	IA
Biology/biota	Macroalgae and seagrass	Macroalgae generic abundance in water bodies	WWF	awsassets.panda.org
Biology/biota	Macroalgae and seagrass	Macroalgae generic abundance in water bodies	CETACEANALLIANCE	cetaceanalliance.org
Biology/biota	Macroalgae and seagrass	Macroalgae generic abundance in water bodies	MEDPAN	medpan.org
Marine water	Human Activity	Administrative units	PROTECTEDPLANET	protectedplanet.net
Marine water	Human Activity	Administrative units	MEDPAN	medpan.org
Marine water	Human Activity	Administrative units	FIRST MARINE WORLD HERITAGE	whc.unesco.org
Marine water	Human Activity	Administrative units	RAMSAR	ramsar.org
Marine water	Human Activity	Administrative units	Existing and proposed protected areas, Micheli et, al 2014	
Marine water	Human Activity	Administrative units	WWF	awsassets.panda.org
Marine water	Human Activity	Administrative units	GFCM	gfc.org
Marine water	Anthropogenic contamination	Acoustic noise in the water column	Unknown	Unknown
Marine water	Currents	Transport in the water column	Unknown	Unknown

Marine water	Positioning, references and data management	Unspecified	ARGOS wildlife tracking project	argos-system.org
Seabed	Sedimentation and erosion processes	Sediment resuspension	Unknown	Unknown
Seabed	Rock and sediment lithology and mineralogy	Lithology	Unknown	Unknown
Seabed	Terrestrial (including bathymetry and undersea features)	Bathymetry, elevation and undersea features	Unknown	Unknown
Seabed	Terrestrial (including bathymetry and undersea features)	Bathymetry, elevation and undersea features	Glakoumi, et Al, 2013	IA
Seabed	Anthropogenic contamination	Unspecified	Unknown	Unknown
Air	Meteorology	Wind speed and direction	POSEIDON	poseidon.hcmr.gr
Air	Meteorology	Wind speed and direction	MALTA/Maria ETA Model	capemalta.net
Human Activities	Anthropogenic contamination	Pollution events	REMPEC	rempec.org
Human Activities	Anthropogenic contamination	Pollution events	Unknown	Unknown
Human Activities	Human Activity	Transport activity	AIS (Automatic Identification System)	Unknown
Human Activities	Human Activity	Unspecified	SACOSTA	gis.socib.es
Marine water	Currents	Horizontal velocity of the water column	Unknown	Unknown
Marine water	Water column temperature and salinity	Temperature of the water column	Unknown	Unknown
Marine water	Waves	Wave direction	Unknown	Unknown
Marine water	Waves	Wave height and period statistics	Unknown	Unknown
Marine water	Sea level	Sea level	Idromare	idromare.com
Marine water	Sea level	Sea level	SONEL	sonel.org
Marine water	Sea level	Sea level	UHSLC (University of Hawaii Sea Level Center)	ilikai.soest.hawaii.edu
Marine water	Water column temperature and salinity	Temperature of the water column	HadISST	metoffice.gov.uk

Human Activities	Positioning, references and data management	Reference numbers	AIS (Automatic Identification System)	Unknown
Human Activities	Positioning, references and data management	Reference numbers	GPS Logger Italy	Unknown
Human Activities	Positioning, references and data management	Reference numbers	VMS (Vessel monitoring systems)	Unknown
Human Activities	Positioning, references and data management	Horizontal spatial coordinates	GPS Logger Italy	Unknown
Human Activities	Positioning, references and data management	Horizontal spatial coordinates	AIS (Automatic Identification System)	Unknown
Human Activities	Positioning, references and data management	Horizontal spatial coordinates	VMS (Vessel monitoring systems)	Unknown

Human Activities	Positioning, references and data management	Horizontal platform movement	GPS Logger Italy	Unknown
Human Activities	Positioning, references and data management	Horizontal platform movement	AIS (Automatic Identification System)	Unknown
Human Activities	Positioning, references and data management	Horizontal platform movement	VMS (Vessel monitoring systems)	Unknown
Marine water	Carbon, nitrogen and phosphorus	Ammonium concentration parameters in the water column	UNEP Medpol	unepmap.org
Marine water	Optical properties	Transmittance and attenuation of the water column	Perseus	isramar.ocean.org
Marine water	Optical properties	Phytoplankton generic biomass in water bodies	Perseus	isramar.ocean.org
Marine water	Pigments	Chlorophyll pigment concentrations in the water column	ICES Oceanography	ices.dk
Marine water	Pigments	Chlorophyll pigment concentrations in the water column	Perseus	isramar.ocean.org
Marine water	Carbon, nitrogen and phosphorus	Particulate total and organic nitrogen concentrations in the water column	UNEP Medpol	unepmap.org
Marine water	Carbon, nitrogen and phosphorus	Nitrate concentration parameters in the water column	UNEP Medpol	unepmap.org
Marine water	Carbon, nitrogen and phosphorus	Nitrite concentration parameters in the water column	UNEP Medpol	unepmap.org
Marine water	Carbon, nitrogen and phosphorus	Phosphate concentration parameters in the water column	UNEP Medpol	unepmap.org

Marine water	Water column temperature and salinity	Salinity of the water column	Perseus	isramar.ocean.org
Marine water	Water column temperature and salinity	Salinity of the water column	ICES Oceanography	ecosystemdata.ices.dk
Marine water	Water column temperature and salinity	Skin temperature of the water column	NOAA CLASS	nsof.class.noaa.gov
Marine water	Water column temperature and salinity	Skin temperature of the water column	REMSS (Remote Sensing Systems)	remss.com
Marine water	Water column temperature and salinity	Skin temperature of the water column	HadISST	metoffice.gov.uk
Marine water	Currents	Horizontal velocity of the water column	Perseus	isramar.ocean.org
Marine water	Water column temperature and salinity	Temperature of the water column	Perseus	isramar.ocean.org
Marine water	Water column temperature and salinity	Temperature of the water column	SeaBASS	Seabass.gsfc.nasa.gov
Marine water	Water column temperature and salinity	Temperature of the water column	ICES Oceanography	ecosystemdata.ices.dk
Fresh water	Carbon, nitrogen and phosphorus	Dissolved total and organic nitrogen concentrations in the water column	EUROWATERNET	eea.europa.eu
Fresh water	Carbon, nitrogen and phosphorus	Dissolved total and organic nitrogen concentrations in the water column	WISE	wise-rtd.info
Fresh water	Carbon, nitrogen and phosphorus	Nitrate concentration parameters in the water column	EUROWATERNET	eea.europa.eu
Fresh water	Carbon, nitrogen and phosphorus	Nitrate concentration parameters in the water column	WISE	wiser.eu

Fresh water	Carbon, nitrogen and phosphorus	Nitrate concentration parameters in the water column	MEDAR/MEDATLAS	ifremer.fr
Fresh water	Carbon, nitrogen and phosphorus	Phosphate concentration parameters in the water column	EUROWATERNET	eea.europa.eu
Fresh water	Carbon, nitrogen and phosphorus	Phosphate concentration parameters in the water column	WISE	wise-rtd.info
Fresh water	Carbon, nitrogen and phosphorus	Phosphate concentration parameters in the water column	MEDAR/MEDATLAS	ifremer.fr
Fresh water	Currents	River flow and discharge	Med-Hycos	medhycos.mpl.ird.fr
Fresh water	Currents	River flow and discharge	Water Programme Directory	iucn.org
Fresh water	Currents	River flow and discharge	Water Systems Analysis Group (WSAG)	wsag.unh.edu
Fresh water	Currents	River flow and discharge	NAUSICAA	Ifremer.fr
Fresh water	Currents	River flow and discharge	CSDMS (Community Surface Dynamics Modeling System)	csdms.colorado.edu
Fresh water	Currents	River flow and discharge	ISPRA	ec.europa.eu
Fresh water	Currents	River flow and discharge	FRIEND	unesco.org
Fresh water	Carbon, nitrogen and phosphorus	Dissolved total or organic phosphorus concentration in the water column	EUROWATERNET	eea.europa.eu
Fresh water	Carbon, nitrogen and phosphorus	Dissolved total or organic phosphorus concentration in the water column	WISE	wise-rtd.info
Fresh water	Water column temperature and salinity	Temperature of the water column	Med-Hycos	medhycos.mpl.ird.fr

Fresh water	Water column temperature and salinity	Temperature of the water column	Water Programme Directory	iucn.org
Fresh water	Water column temperature and salinity	Temperature of the water column	MEDAR/MEDATLAS	ifremer.fr
Fresh water	Suspended particulate material	Concentration of suspended particulate material in the water column	Water Programme Directory	iucn.org
Fresh water	Suspended particulate material	Concentration of suspended particulate material in the water column	NAUSICAA	Ifremer.fr
Fresh water	Suspended particulate material	Concentration of suspended particulate material in the water column	CSDMS (Community Surface Dynamics Modeling System)	csdms.colorado.edu
Fresh water	Suspended particulate material	Concentration of suspended particulate material in the water column	European Sediment Network (SedNet)	sednet.org
Fresh water	Suspended particulate material	Concentration of suspended particulate material in the water column	FRIEND	unesco.org

## Data gaps analysis

The following elaborations are related Annex II (Gaps analysis) starting from the contents of the Master\_Data sheet collecting data and information provided by the existing platforms on the Mediterranean basin, as they were registered in the preliminary data survey phase. The objective is to provide a complete framework on the state of knowledge at the basin level, without entering into details on the individual platforms (for which reference is made directly to the master dataset). The aim of summarizing and highlighting the various types of data available is to identify all possible shortcomings (gaps) relative to the degree of spatial and temporal coverage.

The census made it possible to record data relating to 122 surveyed platforms, with 475 records of data corresponding to a relevant number of data typologies, which are listed in the following **Table 9**, in which the respective SeaDataNet code is also reported.

<b>Table 9: List of the typologies and respective SeaDataNet code</b>		
<b>Number</b>	<b>Data_Typology</b>	<b>Data_Typology_Code_P03</b>
1	anthropogenic_contamination	H001
2	biota_abundance_biomass_and_diversity	B070
3	birds_mammals_and_reptiles	B015
4	carbon_nitrogen_and_phosphorus	C005
5	construction_and_structures	H002
6	Currents	D030
7	dissolved_gases	C015
8	earth_science_oceans_marine_volcanism	VOLC
9	fish	B020
10	fisheries	H004
11	habitat	B050
12	human_activity	H005
13	macroalgae_and_seagrass	B055
14	meteorology	M010
15	optical_properties	D015
16	pigments	B035
17	positioning_references_and_data_management	Z005



18	rock_and_sediment_lithology_and_mineralogy	G045
19	rock_and_sediment_physical_properties	G040
20	rock_and_sediment_sedimentology	GSED
21	sea_level	D032
22	sedimentation_and_erosion_processes	G060
23	suspended_particulate_material	G015
24	terrestrial_including_bathymetry_and_under_sea_features	T001
25	water_column_temperature_and_salinity	D025
26	waves	D034

As for the individual parameters, they are listed in the following table (**Table 10**), where, in addition to the Parameters\_Code, the occurrence of each parameter in the master dataset is also provided.

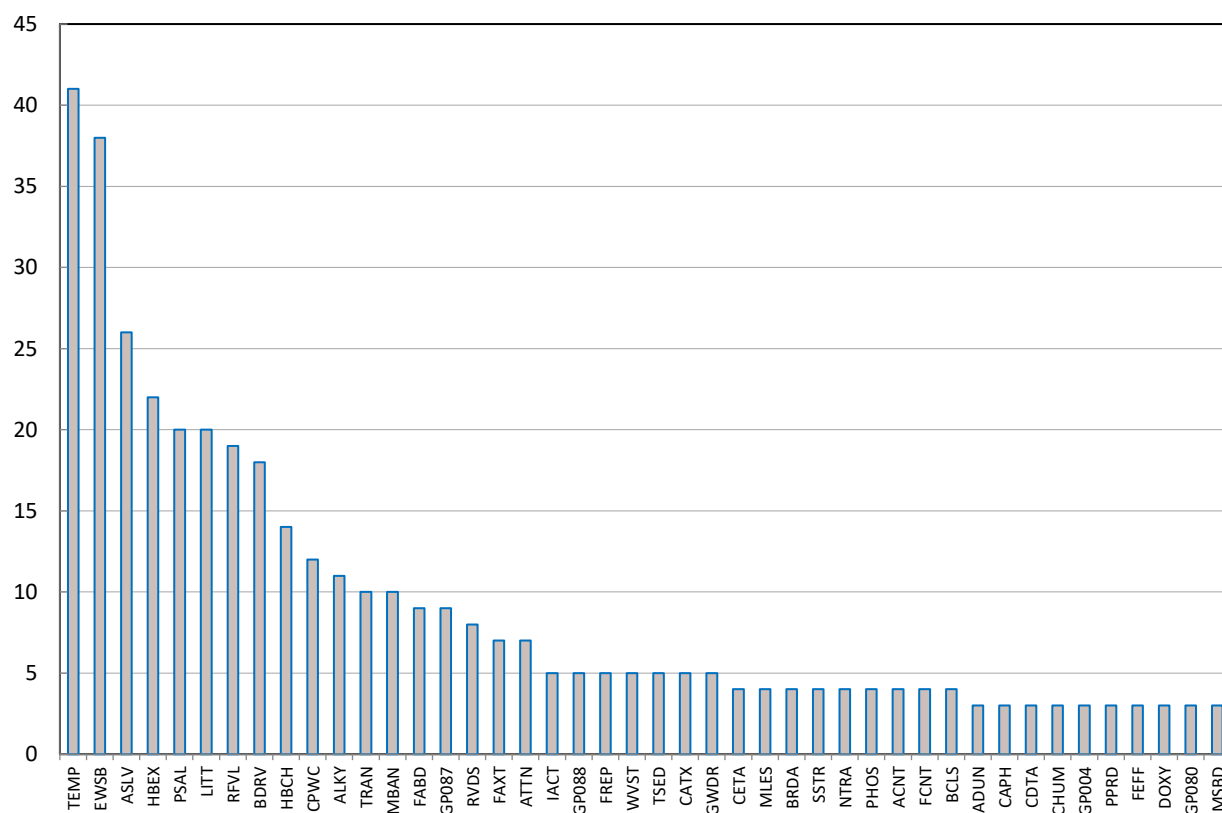
**Table 10: List of the parameters and their respective codes. Occurrence corresponds to the number of times a single parameters appears in the Master\_Data sheet**

N	Data_Typology_ Code_P03	Data_Parameters	Data_Parameter_Co de_P02_Code_P04	Occurrence (as No. of times)
1	D025	temperature of the water column	TEMP	41
2	M010	wind speed and direction	EWSB	38
3	D032	sea level	ASLV	26
4	B050	habitat extent	HBEX	22
5	D025	salinity of the water column	PSAL	20
6	H001	litter abundance and type	LITT	20
7	D030	horizontal velocity of the water column (currents)	RFVL	19
8	B070	biodiversity indices	BDRV	18
9	B050	habitat characterization	HBCH	14
10	B035	chlorophyll pigment concentration in the water column	CPWC	12
11	D025	alkalinity, acidity and pH of the water column	ALKY	11
12	H005	transport activity	TRAN	10
13	T001	bathymetry, elevation and undersea features	MBAN	10
14	B070	fauna abundance per unit area of the bed	FABD	9
15	H004	fishery characterization	GP087	9
16	D030	river flow and discharge	RVDS	8
17	B020	fish abundance in water bodies	FAXT	7
18	D015	transmittance and attenuation of the water column	ATTN	7

19	H005	industrial activity	IACT	5
20	B015	bird behavior	GP088	5
21	B020	fish reproduction	FREP	5
22	D034	wave height and period statistic	WVST	5
23	G015	concentration of suspended particulate material in the water column	TSED	5
24	B070	phytoplankton taxonomic biomass in water bodies	CATX	5
25	D034	wave direction	GWDR	5
26	B015	cetacean abundance	CETA	4
27	H005	marine environment leisure usage	MLES	4
28	B015	bird taxonomy-related counts	BRDA	4
29	GSED	sedimentary structure	SSTR	4
30	C005	nitrate concentration parameters in the water column	NTRA	4
31	C005	phosphate concentration parameters in the water column	PHOS	4
32	B055	macroalgae and seagrass taxonomy-related counts	ACNT	4
33	B020	fish taxonomy-related counts	FCNT	4
34	Z005	biogeographic classification	BCLS	4
35	H005	administrative units	ADUN	3
36	M010	air pressure	CAPH	3
37	M010	air temperature and density	CDTA	3
38	M010	atmospheric humidity	CHUM	3
39	B015	bird reproduction	GP004	3
40	D025	primary production in the water column	PPRD	3
41	H005	fishing effort	FEFF	3
42	C015	dissolved oxygen parameters in the water column	DOXY	3
43	H004	fishing by-catch	GP080	3
44	B070	zooplankton dry weight biomass per unit volume of the water column	MSBD	3
45	VOLC	hydrothermal vents	G867	2
46	T001	terrestrial mapping	COAS	2
47	H001	pollution events	GP001	2
48	H002	hazards to navigation	HZNV	2
49	H005	marine archaeology	MARC	2
50	H002	man-made structures	MMST	2
51	G060	sediment accumulation rate	RACC	2
52	B020	fish and shellfish catch statistics	FCST	2
53	C005	dissolved total and organic nitrogen concentrations in the water column	TDNT	2
54	C005	dissolved total or organic phosphorus concentration in the water column	TDPX	2
55	B020	fish morphology, age and physiology	FATM	2
56	C005	silicate concentration parameters in the water column	SLCA	2
57	B070	phytoplankton generic biomass in the water bodies	PNTX	2
58	D025	skin temperature of the water column	PSST	2

59	B055	macroalgae generic abundance in water bodies	PU02	1
60	G045	Lithology	LITH	1
61	T001	coastal geomorphology	COGE	1
62	H001	concentration of polycyclic aromatic hydrocarbons (PAHs) in biota	BCAH	1
63	H001	metal concentrations in biota	BCMT	1
64	H001	concentration of other organic contaminants in biota	BCOC	1
65	H001	concentration of other substances in biota	BCOS	1
66	H001	concentration of polychlorobiphenyls (PCBs) in biota	BCPB	1
67	H001	bioassay and contaminant biological impact	GP010	1
68	H001	industrial discharges	IDIS	1
69	H001	concentration of polycyclic aromatic hydrocarbons (PAHs) in the water column	PCHW	1
70	H001	pesticide concentrations in biota	PEBI	1
71	H001	concentration of polychlorobiphenyls (PCBs) in the water column	PPWC	1
72	H001	pesticide concentrations in sediment	PESD	1
73	H001	pesticide concentrations in water bodies	PEWB	1
74	H001	concentration of polycyclic aromatic hydrocarbons (PAHs) in sediment samples	SCAH	1
75	H001	concentration of other organic contaminants in sediment samples	SCOC	1
76	H001	concentration of polychlorobiphenyls (PCBs) in sediment samples	SPCB	1
77	H001	concentration of other organic contaminants in the water column	WCOC	1
78	H001	radioactivity in the water column	WRAD	1
79	B070	zooplankton wet weight biomass	GP079	1
80	B070	zoobenthos taxonomy-related counts	ZOOB	1
81	B070	zooplankton taxonomy-related abundance per unit volume of the water column	ZATX	1
82	B070	bacteria taxonomic abundance in sediment	BAUC	1
83	B070	bacteria taxonomic abundance in water bodies	BATX	1
84	B070	microzooplankton taxonomic abundance in water bodies	MATX	1
85	G060	sediment resuspension	BEST	1
86	GSED	depositional environment	DPEV	1
87	G040	sediment grain size parameters	MNGS	1
88	B020	fish biomass in water bodies	FIBM	1

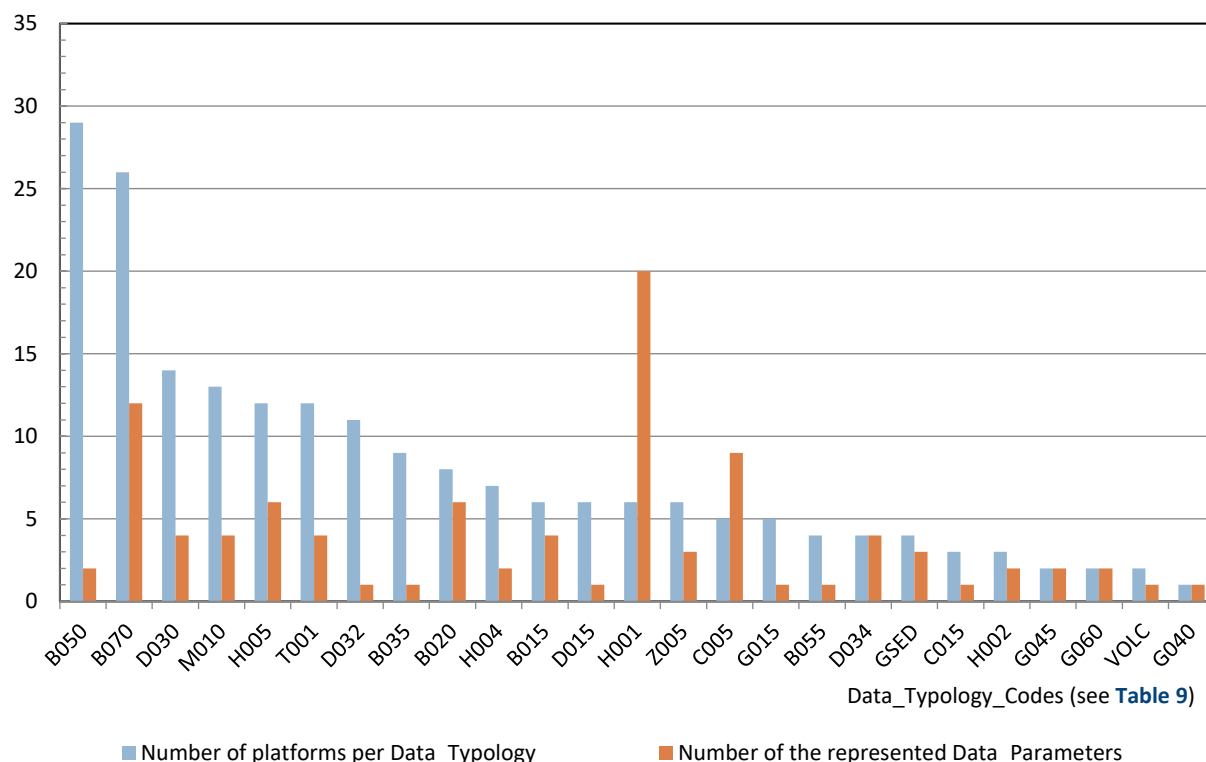
89	C005	nitrite concentration parameters in the water column	NTRI	1
90	T001	seabed photography	SBPH	1
91	G045	mineralogical composition	CLAY	1
92	D034	spectral wave data parameters	WVSP	1
93	H001	acoustic noise in the water column	NOYS	1
94	C005	nutrient fluxes between the bed and the water column	SAMO	1
95	D030	transport in the water column	VDFC	1
96	D025	dissolved metal concentrations in the water column	MTWD	1
97	Z005	platform or instrument orientation	HEAD	1
98	D034	wave height estimates	HEAV	1
99	D030	vertical velocity of the water column	LRZA	1
100	C005	particulate total and organic carbon concentrations in the water column	CORG	1
101	C005	carbon concentrations in sediment	CBSD	1



**Diagram 3: Parameters list- occurrence in the database (parameters with No. of times <3 are not represented)**

**Table 10** and the subsequent graphical representation of the results (**Diagram 3**), show that the most frequent and represented parameters refer to the hydrographic data (temperature and salinity along the water column and sea level) and meteorological (wind speed and direction), with high percentages of occurrence, greater than 8%. Information on ecology of marine habitats is also well represented with frequencies around 5%. It is worth noting that an “emerging pollutant” such as marine litter, occupies

the first places in the ranking (> 4%). The last places in the ranking (<0.5% of the cases), refer to parameters mainly related to the taxonomic aspects, to the presence of contaminants in the biota and sediments, and in general, to all those measures that require complex instruments and procedures for their determination.



**Diagram 4: Number of platforms per Data\_Typology and corresponding number of the Data\_Parameter reported for each typology.**

In the above diagram (**Diagram 4**), the Data\_Typologies are characterized based on the number of platforms providing Data\_Parameters referred to these typologies.

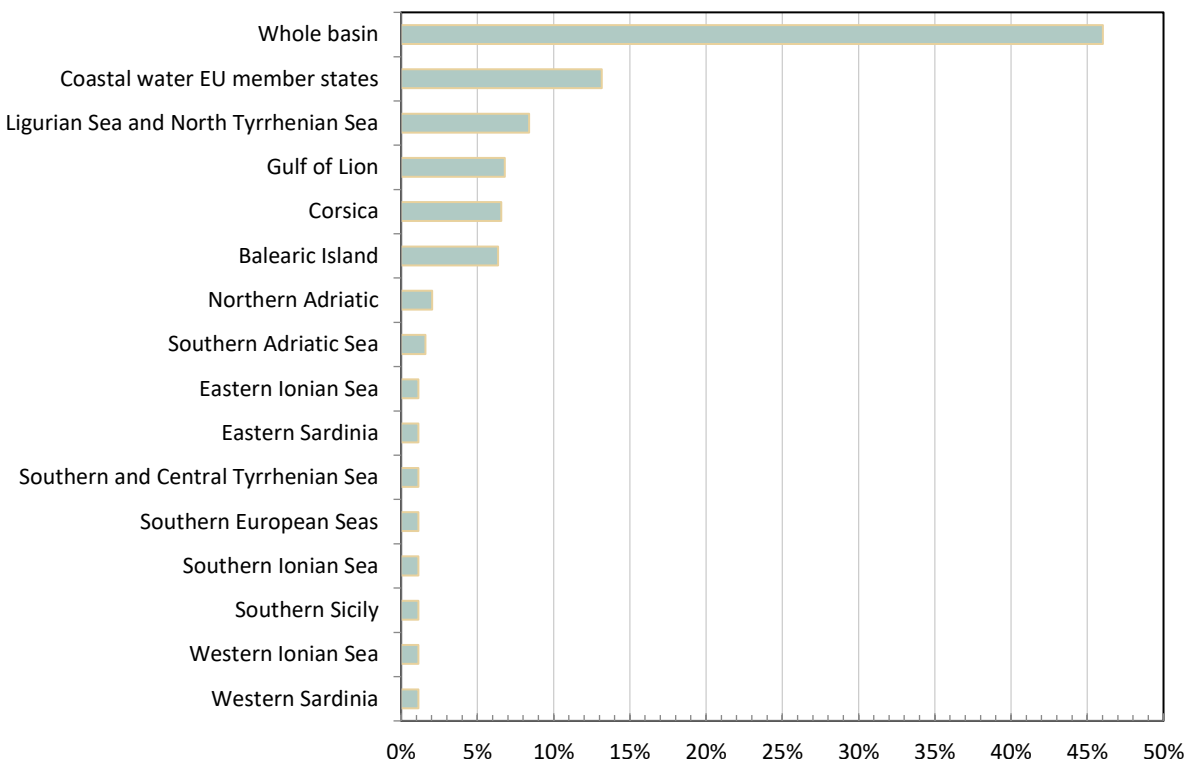
Habitats and biota\_abundance\_biomass\_and\_diversity results as the most frequent Data\_Typologies reported (29 and 26 platforms, respectively), with a number of Parameters\_data referring to these two types of 2 out of 2 and 12 out of 25 for habitat and biota abundance, respectively. Currents, Meteorology, Human Activity, Bathymetry and Sea level are also well represented (No. of Platforms > 10). The last places in the ranking refer to those types related to the geology (mineralogical and physical nature of rocks and sediments) and to the earth's science (volcanism and thermal vents).

A separate discussion deserves the type D025 (water\_column\_temperature\_and\_salinity). The limited number of platforms providing data of this type should not mislead. These platforms are characterized by the maximum geographical coverage (with more sub-basins or to the whole basin extension).

In fact, **Diagram 5** reports on the number of times (% of occurrence) in which individual seas appear in the Whole\_master\_Data.

The disparity between the "Whole basin" and "Coastal water EU member states" categories becomes immediately evident, if compared to the occurrence of individual seas.

On the other hand, this difference arise from the decision taken from the beginning, to consider the geographical coverage referred to several sub-basins or extended to the entire Mediterranean basin as a unique category of its own.



**Diagram 5: Geographical coverage: No. of occurrences of the monitored sea in the Whole\_Master\_Data sheet**

#### Coastal water EU member states

For this geographic category, the only inventories used are:

- 1) The European environment information and observation network (Eionet);
- 2) The EMODnet Data Ingestion portal.

The temporal coverage starts from year 2000 and refers to monitoring programs mostly still in progress. In general the access to the platforms is open. As for the temporal resolution, the data are in general available as monthly means, but in the case of Eionet platform, the original data are directly accessible at the EEA web site.

Information on the spatial resolution is not reported always in detail. The spatial scales may vary depending on the EU member countries, but must respond to the requirements of the European Directives (mainly WFD and MSFD) that prescribe the monitoring of the sea.

The available typologies of data for this category, are shown in the table below (**Table 11** ).

<b>Table 11: Data typologies represented in the EU source platforms and number of the monitored parameters, per each typology</b>		
<b>Data_Typology</b>	<b>Data_Typology_Code_P03</b>	<b>N. of available parameters</b>
pigments	B035	2
habitat	B050	3
macroalgae_and_seagrass	B055	1
biota_abundance_biomass_and_diversity	B070	7
carbon_nitrogen_and_phosphorus	C005	9
dissolved_gases	C015	1
water_column_temperature_and_salinity	D025	6
currents	D030	2
sea_level	D032	1
suspended_particulate_material	G015	1
rock_and_sediment_physical_properties	G040	1
sedimentation_and_erosion_processes	G060	1
rock_and_sediment_sedimentology	GSED	1
anthropogenic_contamination	H001	18
construction_and_structures	H002	1
human_activity	H005	1
terrestrial_including_bathymetry_and_under_sea_features	T001	2

### The Whole basin

This category is represented in a considerable number of platforms.

The sources of data (Platform\_Name) are listed in the following table (**Table 12**)

<b>Table 12: “Whole basin” Platform Name</b>	
<b>N</b>	<b>Platform Name</b>
1	ACCOBAMS
2	AQUAMAPS for Marine Species
3	AVISO CLS
4	AVISO+ Satellite Altimetry Data
5	BirdLife-001 - Global Distribution of Key Biodiversity Areas
6	CBD-001 - Global Distribution of Ecologically or Biologically Significant Marine Areas

7	CERSAT IFREMER MEDSPIRATION
8	ChEssBase-002 - Global Distribution of Hydrothermal Vents
9	CISL Research Data Archive
10	CoastColour
11	CoL-001 - Catalogue Of Life
12	Copernicus Marine Environment Monitoring Service (CMEMS)
13	Corine Land Cover 2006 seamless (EEA)
14	Data Collection (DCR-DCF) for the Common Fisheries
15	ECMWF
16	EoL-001 - Enciclopedia of Life - Global access to knowledge about life on Earth.
17	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)
18	FAO Fish and Aquaculture
19	FishBase - A Global Information System on Fishes
20	GBIF - Global Biodiversity Information Facility
21	GEBCO - General Bathymetric Chart of the Oceans
22	Global Fisheries Catch dataset
23	GRDC (Global Runoff Data Centre database)
24	GridA-001 - Geomorphology of the oceans
25	GROMS - Global Register of Migratory Species
26	HIRLAM, WRF
27	HyMeX
28	IBAT - Integrated Biodiversity Assessment Tool (IBAT)
29	International Maritime Organization IMO-001
30	IntRid-001 - Global Distribution of Hydrothermal Vent Fields
31	IUCN - World Database on Protected Areas (WDPA)
32	IWC-001 - Ship Strike Database
33	MAPAMED - Marine Protected Areas in the Mediterranean
34	MarBEF
35	Marina Platform
36	Mediseh-001 - Modelled Spatial Distributions of Coralligenous and Maërl Habitats
37	CMEMS
38	NASA – Oceancolor
39	NCEAS - Global Health Index
40	NOAA-001 - Large Marine Ecosystems of the World
41	OBIS - Ocean Biogeographic Information System
42	Ocean Biology Processing Group (OBPG)/NASA's Goddard Space Flight Center
43	Oceana 2011
44	OTN - Ocean Tracking Network
45	PANGAEA - Data Publisher for Earth & Environmental Science
46	PO.DAAC
47	PSMSL - Permanent Service for Mean Sea Level
48	RAC-SPA - Regional Activity Center for Specially Protected Areas

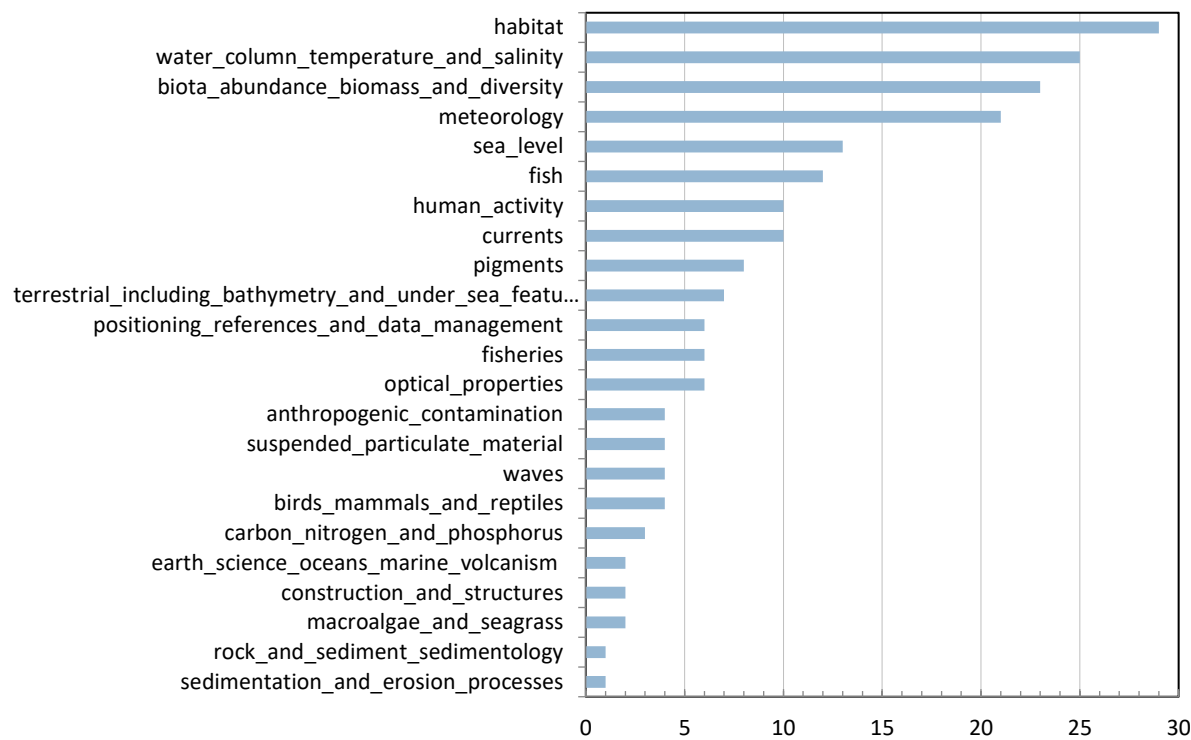


49	SeaDataNet
50	SEDNET - Sediment Network
51	SLBase-001 - SeaLifeBase
52	SWOT-001 - Global Distribution of Sea Turtle Nesting Sites
53	TNC-002 - Atlas of Global Conservation
54	UBC-003 - Global Estuary Database
55	VLIZ-006 - World Porifera Database (sponges)
56	WaDNR-001 - SeagrassNet: Global Seagrass Monitoring Network
57	WoRMS - World Register of Marine Species
58	ZSL-001 - Global Distributions of Habitat Suitability for Cold-Water Octocorals
59	MONGOOS – AFS

About 30% of the “Whole basin” platforms provides data starting from year 2000 and 66% of the monitoring programs referred to these platforms, are still in progress. The access to the platforms with a few exceptions is in general open. Spatial and temporal resolutions of the available data are very varied, depending on the type of parameter considered.

As can be seen from the next diagram (**Diagram 6**), almost all types of data are represented. The sequence of data types by order of importance is very similar to the trend already reported in the previous figure (**Diagram 4**), relating to all remaining platforms. In this case, however, the type D025 (water\_column\_temperature\_and\_salinity), is placed in the leading positions, as expected.

**Diagram 6: Data typologies represented in the “Whole basin” source platforms and number of the monitored parameters, per each typology**



### Preliminary matrix

As discussed above, the procedure adopted to perform the data gap analysis could not start from a punctual examination of data related to the geographical coverage, since a large amount of records in the Whole\_master\_Data refers to the entire Mediterranean basin or in any case to most sub-basins.

The same apply to the temporal coverage. It is a fact that the examined data were provided in a very inhomogeneous manner leading to difficult and time-consuming adaptation of these data. Nevertheless, the temporal coverage provided by most platforms can be considered satisfactory. The individual situations referred to parameter of interests could however be accessed directly from the Whole\_Master\_Data.

As a consequence, data analysis focused on the assessment of the degree or lack of representativeness of the various data types, evaluating this representativeness to the different sub-basins that appear in the dataset.

The first step of the analysis was to order the dataset by sub-basin and by type. From this ranking, a preliminary matrix was obtained, as reported below (**Table 13**). This matrix has two entries: the first (rows) is related to typologies, the second (columns) is relative to the sub-basins, including the “whole basin” category and the “Coastal water EU member states” category. References to sub-basins inadequately represented by the data, with a negligible occurrence in the whole dataset, are not taken into account.

Each cell of this preliminary matrix contains the number of data\_parameters available and related to the corresponding data\_typology (row) referring to the individual sub-basins (column). This preliminary matrix can be considered as an indicator of the “overall information” available, as provided by the Whole\_Master\_Data sheet, and likewise the individual rows of the matrix summarize all information related to each Data\_Typology.

### Parameters\_Gap\_Matrix

This matrix (**Table 14**) represents the final output of the data gap analysis.

It has been obtained by scaling each cell value of the Preliminary\_Matrix by the total amount of available information per each Data\_Typology, i.e., by dividing the content of each cell by the sum of the values per row. The score so obtained represents in some way the punctual value (or the goodness) of the information provided by crossing Data\_Typology with the corresponding seas.

By making the complement to 1 of each of these scores, we will obtain a measure of the data gap that must be filled for those sub-basins in relation to the corresponding Data\_Typology.

In the matrix, the numerical values of data gaps have been highlighted with appropriate colours, to favour the overall presentation of results obtained through this procedure.

### Table 13: Preliminary Matrix

[illegible]

Table 14: Parameters Data Gaps Matrix

		Whole basin	Western Sardinia	Western Ionian Sea	Southern Sicily	Southern Ionian Sea	Southern European Seas	Southern and Central Tyrrhenian Sea	Southern Adriatic Sea	Northern Adriatic	Ligurian Sea and North Tyrrhenian Sea	Gulf of Lion	Eastern Sardinia	Eastern Ionian Sea	Corsica	Coastal water EU member states	Balearic Island
B015	birds_mammals_and_reptiles	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	1,00	0,75	1,00	1,00
B020	fish	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,88	0,83	1,00	1,00	0,83	1,00	0,96
B035	pigments	0,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,92	1,00	1,00	1,00	1,00	0,83	0,92
B050	habitat	0,19	1,00	1,00	1,00	1,00	1,00	1,00	0,97	0,94	1,00	1,00	1,00	1,00	1,00	0,92	0,97
B055	macroalgae_and_seagrass	0,60	1,00	1,00	1,00	1,00	1,00	1,00	0,80	0,80	1,00	1,00	1,00	1,00	1,00	0,80	1,00
B070	biota_abundance_biomass_and_diversity	0,43	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,93	0,93	1,00	1,00	0,93	0,83	0,98
C005	carbon_nitrogen_and_phosphorus	0,84	1,00	1,00	1,00	1,00	0,84	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,53	0,79
C015	dissolved_gases	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,50
D015	optical_properties	0,14	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,86	1,00	1,00	1,00	1,00	1,00	1,00
D025	water_column_temperature_and_salinity	0,56	0,96	0,96	0,96	0,96	0,98	0,96	0,96	0,96	0,91	1,00	0,96	0,96	1,00	0,89	0,96
D030	currents	0,44	1,00	1,00	1,00	1,00	0,94	1,00	1,00	0,94	0,94	0,94	1,00	1,00	0,94	0,89	0,94
D032	sea_level	0,50	0,96	0,96	0,96	0,96	1,00	0,96	0,96	0,96	0,96	1,00	0,96	0,96	1,00	0,96	0,92
D034	waves	0,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,67
G015	suspended_particulate_material	0,20	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,80	1,00
G040	rock_and_sediment_physical_properties	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,00	1,00
G045	rock_and_sediment_lithology_and_mineralogy	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	1,00	1,00	1,00	1,00	0,50
G060	sedimentation_and_erosion_processes	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	1,00
GSED	rock_and_sediment_sedimentology	0,80	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,80	0,60	1,00	1,00	1,00	0,80	1,00
H001	anthropogenic_contamination	0,90	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,80	0,95	1,00	1,00	0,80	0,55	1,00
H002	construction_and_structures	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	0,75	1,00
H004	fisheries	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,83	0,83	1,00	1,00	0,83	1,00	1,00
H005	human_activity	0,63	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,85	0,74	1,00	1,00	0,81	0,96	1,00
M010	meteorology	0,60	0,96	0,96	0,96	0,96	1,00	0,96	0,96	0,96	0,96	0,98	0,96	0,96	0,98	1,00	0,81
T001	terrestrial_including_bathymetry_and_under_sea_features	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,93	0,86	1,00	1,00	0,93	0,86	0,93
VOLC	Earth_science_oceans_marine_volcanism	0,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Z005	positioning_references_and_data_management	0,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00

	maximum	gap = 1
	high	gap = 0,8 - 1
	medium	gap = 0,5 - 0,8
	minimum	gap = < 0,5

## Conclusions

The main goals of this deliverable were the identification of geographical and temporal data gaps in the Mediterranean basin and the elaboration of an innovative methodology to prioritise these gaps.

Analysing the reliability and usefulness of the existing data sources, it was possible to identify their critical issues and shortcomings that are mainly related to data aggregation and accessibility as well as low data frequency and quality in terms of spatial and temporal resolutions.

The assignment of ad-hoc scores to each data gap, identified through the described approach, allowed the implementation of an explicit data gap analysis, which led to the final product of this research: a prioritisation of existing geographical and temporal data gaps in the whole Mediterranean basin. In particular, as regard the elaboration and application of the new developed method for identifying geographical and temporal marine data gaps and for providing a prioritization of missing data, since the large amount of analysed records includes data gathered in heterogeneous ways, the prioritisation values obtained for each identified data gap simplify the data comparison and analysis.

Consequently it could be useful for end-user's specific needs including environmental quality, ecological health and human health monitoring activities due to the multidisciplinary analysis of data parameters that integrates in the elaborated inventory the biological, geological, chemical and physical branches of the total environment.

Lastly, the implementation of all the existing information in a single dataset may be considered as a starting point for further processing and for detailed analysis for fill data gaps with in situ monitoring surveys at smaller scale.

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## Acronym list

CMEMS - Copernicus Marine Environment Monitoring Service  
CNR - National Research Council (IT)  
CNR-ISAC - CNR Institute of Atmospheric Sciences and Climate  
CNR-ISMAR - CNR Institute of Marine Sciences (IT)  
COCONET - Towards COast to COast NETworks of marine protected areas  
COPERNICUS - European Programme for the establishment of a European capacity for Earth Observation  
CSW - Catalogue Service for Web  
CMCC - Euro-Mediterranean Centre for Climate Change (IT)  
EC - European Commission  
EIONet - European Environment Information and Observation Network  
EMODnet - European Marine Observation and Data Network  
EU - European Union  
EUMETNET - European National Meteorological Services  
EU MS - EU Member State  
FAO - Food and Agriculture Organization  
GEBCO - General Bathymetric Chart of the Oceans  
GES - Good Environmental Status  
GEO - Group on Earth Observation Geoportal: type of web portal used to find and access geographical information  
GEOSS - Global Earth Observation System of Systems  
GFCM - General Fisheries Commission of the Mediterranean and Black Sea  
GIS - Geographic information system  
GOOS - Global Ocean Observing System  
GPS - Global Positioning System  
GSA - FAO-GFCM Geographical Subarea  
GT - Gross Tonnage  
ICES - International Council for the Exploration of the Sea  
IMO - International Maritime Organization  
INGV - National Institute of Geophysics and Volcanology (IT)  
INSPIRE - Infrastructure for Spatial Information in the European Community  
IOC - Intergovernmental Oceanographic Commission  
IPCC - Intergovernmental Panel on Climate Change  
IRIS - Integrated Regional monitoring Implementation Strategy in the South European Seas  
ISO - International Organization for Standardization  
MAP: Mediterranean Action Plan  
MERIS - MEdium Resolution Imaging Spectrometer  
MESH - Mapping European Seabed Habitat  
MODIS - Moderate Resolution Imaging Spectroradiometer  
MPA - Marine Protected Areas  
MS - Member States  
MSFD - Marine Strategy Framework Directive  
SHOM - Service hydrographique et océanographique de la marine  
UCY - University of Cyprus (CY)  
UN - United Nations



UNCLOS - United Nations Convention on the Law of the Sea  
UNEP - United Nations Environment Programme  
UNESCO - United Nations Educational, Scientific and Cultural Organization  
VLIZ - Flanders Marine Institute  
VMS - Vessel Monitoring System  
WISE - Water Information System for Europe  
WFD - Water Framework Directive  
WGS84 - World Geodetic System 1984  
WMO - World Meteorological Organisation

# Annexes

## Annex 1 - inventory of existing data sources

- A: *“Text (50) The field requires entering data manually. Refers to the identifier number of platforms. The field is mandatory.”;*
- B: *“Text (50) The field requires entering data manually. Refers to the description of the theme of the platform. The field is mandatory.”;*
- C: *“Text (50) The field requires entering data manually. Refers to the data source processed in the dataset. The field is mandatory.”;*
- D: *“Alphanumeric (50) The field requires entering data manually. Refers to the name of the platform. The field is mandatory.”;*
- E: *“Alphanumeric (50) The field requires choosing from a drop-down menu. Refers to the data acquisition procedures of the platform. The field is mandatory.”;*
- F: *“Text (50) The field requires choosing from a drop-down menu. Refers to the platform data access mode. The field is mandatory”;*
- G: *“Integer (4) The field requires choosing from a drop-down menu. Refers to the start date of the platform activation. The field is mandatory.”;*
- H: *“Integer (4) The field requires choosing from a drop-down menu. Refers to the end date of the platform data acquisition. The field is mandatory.”;*
- I: *“Alphanumeric (50) The field requires choosing from a drop-down menu. Refers to the data geographical coverage. The field is mandatory.”;*
- J: *“Text (50) The field requires choosing from a drop-down menu. Refers to data typology processed in the dataset. The field is mandatory.”;*
- K: *“The field is automatically enhanced depending on the previous field.”;*
- L: *“Text (50) The field requires choosing from a drop-down menu. Refers to the data parameter. The field is mandatory.”;*
- M: *“The field is automatically enhanced depending on the previous field.”;*
- N: *“Text (50) The field requires choosing from a drop-down menu. Refers to the spatial resolution of data. The field is mandatory.”;*
- O: *“Text (50) The field requires choosing from a drop-down menu. Refers to the temporal resolution of data. The field is mandatory.”;*
- P: *“Text (50) The field requires choosing from a drop-down menu. Refers to the data format. The field is mandatory.”.*

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Platform Number	Platform Description	Data Provider	Platform Name	Platform Typology	Platform Access	Platform Start Year	Platform Finish Year	Geographical Coverage	Data Typology	Data Typology Code P03	Data Parameter	Data Parameter Code_P02 Code_P04	Spatial Resolution	Temporal Resolution	Data Format
1	The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) is a legal conservation tool based on cooperation. Its purpose is to reduce threats to cetaceans notably by improving current knowledge on these animals.	platform	ACCOBAMS	in situ system	open	2001	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	fauna abundance per unit area of the bed	FABD			vector shapefile
1	The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) is a legal conservation tool based on cooperation. Its purpose is to reduce threats to cetaceans notably by improving current knowledge on these animals.	platform	ACCOBAMS	in situ system	open	2001	ongoing	Whole basin	habitat	B050	habitat extent	HBEX			vector shapefile
1	The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) is a legal conservation tool based on cooperation. Its purpose is to reduce threats to cetaceans notably by improving current knowledge on these animals.	platform	ACCOBAMS	in situ system	open	2001	ongoing	Whole basin	macroalgae_and_seagrass	B055	macroalgae generic abundance in water bodies	PU02			vector shapefile
1	The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) is a legal conservation tool based on cooperation. Its purpose is to reduce threats to	platform	ACCOBAMS	in situ system	open	2001	ongoing	Whole basin	human_activity	H005	administrative units	ADUN			vector shapefile

	cetaceans notably by improving current knowledge on these animals.														
1	The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) is a legal conservation tool based on cooperation. Its purpose is to reduce threats to cetaceans notably by improving current knowledge on these animals.	platform	ACCOBAMS	in situ system	open	2001	ongoing	Whole basin	birds_mammals_and_reptiles	B015	cetacean abundance	CETA			vector or shapefile
2	The "Agencia Estatal de Meteorología" is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	in situ system	open	ante 1990	ongoing	Northern Alboran Sea	meteorology	M010	wind speed and direction	EWSB		daily, monthly mean	grib
2	The "Agencia Estatal de Meteorología" is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	in situ system	open	ante 1990	ongoing	Southern Alboran Sea	meteorology	M010	wind speed and direction	EWSB		daily, monthly mean	grib
2	The "Agencia Estatal de Meteorología" is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	in situ system	open	ante 1990	ongoing	Balearic Island	meteorology	M010	wind speed and direction	EWSB		daily, monthly mean	grib
2	The "Agencia Estatal de Meteorología" is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	in situ system	open	ante 1990	ongoing	Northern Spain	meteorology	M010	wind speed and direction	EWSB		daily, monthly mean	grib
2	The "Agencia Estatal de Meteorología" is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	numerical models	non-accessible	2006	2015	Balearic Island	meteorology	M010	air pressure	CAPH	0.2 degrees	3-hourly mean	grib
2	The "Agencia Estatal de Meteorología" is the national meteorological service of Spain	platform	AEMET	numerical	non-accessible	2006	2015	Balearic Island	meteorology	M010	air temperature	CDTA	0.2 degrees	3-hourly mean	grib

	accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.			model s							e and density				
2	The “Agencia Estatal de Meteorología” is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	numerical model s	non- acces- sible	2006	2015	Baleari c Island	meteorology	M010	atmospher ic humidity	CHUM	0.2 degre es	3- hourly mean	grib
2	The “Agencia Estatal de Meteorología” is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	numerical model s	non- acces- sible	2006	2015	Baleari c Island	meteorology	M010	wind speed and direction	EWSB	0.2 degre es	3- hourly mean	grib
2	The “Agencia Estatal de Meteorología” is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	numerical model s	open	2006	2015	Baleari c Island	meteorology	M010	air pressure	CAPH	0.06 degre es	3- hourly mean	grib
2	The “Agencia Estatal de Meteorología” is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	numerical model s	open	2006	2015	Baleari c Island	meteorology	M010	air temperatur e and density	CDTA	0.06 degre es	3- hourly mean	grib
2	The “Agencia Estatal de Meteorología” is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	numerical model s	open	2006	2015	Baleari c Island	meteorology	M010	atmospher ic humidity	CHUM	0.06 degre es	3- hourly mean	grib
2	The “Agencia Estatal de Meteorología” is the national meteorological service of Spain accredited to the World Meteorological Organization, which works for the ministry of agriculture, food and the environment.	platform	AEMET	numerical model s	open	2006	2015	Baleari c Island	meteorology	M010	wind speed and direction	EWSB	0.06 degre es	3- hourly mean	grib
3	The “French Agency for Biodiversity” pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency.	platform	Marine Protected Areas Agency	geogra phical	open	2006	ongoi ng	Corsica	fisheries	H004	fishery characteri sation	GP087			vect or poly gon

	Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.													
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	human_activity	H005	industrial activity	IACT		vectors or polygons
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	human_activity	H005	marine environment leisure usage	MLES		vectors or polygons
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	human_activity	H005	transport activity	TRAN		vectors or polygons

	parks, strengthening French potential in international negotiations on the sea.													
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	biota_abundance_biomass_and_diversity	B070	fauna abundance per unit area of the bed	FABD		vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	birds_mammals_and_reptiles	B015	bird behaviour	GP088		vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	birds_mammals_and_reptiles	B015	bird taxonomy-related counts	BRDA		vector polygon

3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	birds_mammals_and_reptiles	B015	bird reproduction	GP004			vectors or polygons
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	fish	B020	fauna abundance per unit area of the bed	FABD			vectors or polygons
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	fish	B020	fish abundance in water bodies	FAXT			vectors or polygons
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Corsica	fish	B020	fish reproduction	FREP			vectors or polygons



	marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.													
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	fisheries	H004	fishery characterisation	GP087		vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	human_activity	H005	industrial activity	IACT		vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	human_activity	H005	marine environment leisure usage	MLES		vector polygon

	potential in international negotiations on the sea.													
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	human_activity	H005	transport activity	TRAN		vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	biota_abundance_biomass_and_diversity	B070	fauna abundance per unit area of the bed	FABD		vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	birds_mammals_and_reptiles	B015	bird behaviour	GP088		vector polygon

3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	birds_mammals_and_reptiles	B015	bird taxonomy-related counts	BRDA			vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	birds_mammals_and_reptiles	B015	bird reproduction	GP004			vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	fish	B020	fauna abundance per unit area of the bed	FABD			vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	fish	B020	fish abundance in water bodies	FAXT			vector polygon

	marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.													
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Gulf of Lion	fish	B020	fish reproduction	FREP		vect or polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	fisheries	H004	fishery characterization	GP087		vect or polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	human_activity	H005	industrial activity	IACT		vect or polygon

	potential in international negotiations on the sea.													
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	human_activity	H005	marine environment leisure usage	MLES		vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	human_activity	H005	transport activity	TRAN		vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	biota_abundance_biomass_and_diversity	B070	fauna abundance per unit area of the bed	FABD		vector polygon

3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	birds_mammals_and_reptiles	B015	bird behaviour	GP088			vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	birds_mammals_and_reptiles	B015	bird taxonomy-related counts	BRDA			vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	geographical	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	birds_mammals_and_reptiles	B015	bird reproduction	GP004			vector polygon
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of	platform	Marine Protected Areas Agency	in situ system	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	fish	B020	fauna abundance per unit area of the bed	FABD			vector polygon

	marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.														
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	in situ system	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	fish	B020	fish abundance in water bodies	FAXT		vector polygon	
3	The "French Agency for Biodiversity" pursues the missions of protection of the marine environment, initially carried by the Marine Protected Areas Agency. Namely: support to public policies for the creation and management of marine protected areas throughout the French maritime domain, the animation of the network of marine protected areas, technical and financial support to marine natural parks, strengthening French potential in international negotiations on the sea.	platform	Marine Protected Areas Agency	in situ system	open	2006	ongoing	Ligurian Sea and North Tyrrhenian Sea	fish	B020	fish reproduction	FREP		vector polygon	
4	AquaMaps are computer-generated predictions of natural occurrence of marine species, based on the environmental tolerance of a given species with respect to depth, salinity, temperature, primary productivity, and its association with sea ice or coastal areas. Standardized distribution maps for over 25,000 species of fishes, marine mammals and invertebrates.	platform	AQUAMAPS for Marine Species	online models	open	2010	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	fauna abundance per unit area of the bed	FABD	0.5 degrees	hourly, daily, monthly mean	netcdf

4	AquaMaps are computer-generated predictions of natural occurrence of marine species, based on the environmental tolerance of a given species with respect to depth, salinity, temperature, primary productivity, and its association with sea ice or coastal areas. Standardized distribution maps for over 25,000 species of fishes, marine mammals and invertebrates.	platform	AQUAMA PS for Marine Species	online models	open	2010	ongoing	Whole basin	fisheries	H004	fishery characterization	GP087	0.5 degrees	hourly, daily, monthly mean	netcdf
4	AquaMaps are computer-generated predictions of natural occurrence of marine species, based on the environmental tolerance of a given species with respect to depth, salinity, temperature, primary productivity, and its association with sea ice or coastal areas. Standardized distribution maps for over 25,000 species of fishes, marine mammals and invertebrates.	platform	AQUAMA PS for Marine Species	online models	open	2010	ongoing	Whole basin	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL	0.5 degrees	hourly, daily, monthly mean	netcdf
4	AquaMaps are computer-generated predictions of natural occurrence of marine species, based on the environmental tolerance of a given species with respect to depth, salinity, temperature, primary productivity, and its association with sea ice or coastal areas. Standardized distribution maps for over 25,000 species of fishes, marine mammals and invertebrates.	platform	AQUAMA PS for Marine Species	online models	open	2010	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	0.5 degrees	hourly, daily, monthly mean	netcdf
4	AquaMaps are computer-generated predictions of natural occurrence of marine species, based on the environmental tolerance of a given species with respect to depth, salinity, temperature, primary productivity, and its association with sea ice or coastal areas. Standardized distribution maps for over 25,000 species of fishes, marine mammals and invertebrates.	platform	AQUAMA PS for Marine Species	online models	open	2010	ongoing	Whole basin	water_column_temperature_and_salinity	D025	primary production in the water column	PPRD	0.5 degrees	hourly, daily, monthly mean	netcdf
5	The global numerical weather prediction model ARPEGE (Action de Recherche Petite Echelle Grande Echelle) is an essential tool for operational weather forecasting at Météo France.	platform	ARPEGE - Action de Recherche Petite Echelle Grande Echelle	numerical models	open	1994	ongoing	Gulf of Lion	meteorology	M010	wind speed and direction	EWSB	7,5 km	9-monthly mean	netcdf



5	The global numerical weather prediction model ARPEGE (Action de Recherche Petite Echelle Grande Echelle) is an essential tool for operational weather forecasting at Météo France.	platform	ARPEGE - Action de Recherche Petite Echelle Grande Echelle	numerical models	open	1994	ongoing	Corsica	meteorology	M010	wind speed and direction	EWSB	7,5 km	9-monthly mean	netcdf
5	The global numerical weather prediction model ARPEGE (Action de Recherche Petite Echelle Grande Echelle) is an essential tool for operational weather forecasting at Météo France.	platform	ARPEGE - Action de Recherche Petite Echelle Grande Echelle	numerical models	open	1994	ongoing	Ligurian Sea and North Tyrrhenian Sea	meteorology	M010	wind speed and direction	EWSB	7,5 km	9-monthly mean	netcdf
5	The global mean level of the oceans is one of the most important indicators of climate change. It incorporates the reactions from several different components of the climate system. Precise monitoring of changes in the mean level of the oceans, particularly through the use of altimetry satellites, is vitally important, for understanding not just the climate but also the socioeconomic consequences of any rise in sea level.	platform	AVISO CLS	remote sensing data	open	1993	ongoing	Whole basin	sea_level	D032	sea level	ASLV	1 arcminute		netcdf
6	The reference portal in altimetry merging the historical AVISO website from Cnes and the CTOH website. Here, you will find data, articles, news and tools to help you discover or improve your skills in the altimetry domain through four key themes: ocean, coast, hydrology and ice.	platform	AVISO+ Satellite Altimetry Data	remote sensing data		1993	ongoing	Whole basin	sea_level	D032	sea level	ASLV	0.25 deg, 6-7 km	monthly mean	netcdf
6	The reference portal in altimetry merging the historical AVISO website from Cnes and the CTOH website. Here, you will find data, articles, news and tools to help you discover or improve your skills in the altimetry domain through four key themes: ocean, coast, hydrology and ice.	platform	AVISO+ Satellite Altimetry Data	remote sensing data		2009	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB		daily, monthly mean	netcdf
6	The reference portal in altimetry merging the historical AVISO website from Cnes and the CTOH website. Here, you will find data, articles, news and tools to help you	platform	AVISO+ Satellite Altimetry Data	remote sensing data		2009	ongoing	Whole basin	waves	D034	wave height and period statistic	WVST		daily, monthly mean	netcdf

	discover or improve your skills in the altimetry domain through four key themes: ocean, coast, hydrology and ice.														
6	The reference portal in altimetry merging the historical AVISO website from Cnes and the CTOH website. Here, you will find data, articles, news and tools to help you discover or improve your skills in the altimetry domain through four key themes: ocean, coast, hydrology and ice.	platform	AVISO+ Satellite Altimetry Data	remote sensing data		1993	2012	Whole basin	sea_level	D032	sea level	ASLV	1/60°, 1/16°	daily, monthly mean	netcdf
7	BirdLife has nine Global Programmes, varying from those which are well-established, to more recently developed ones, each responding to specific conservation issues.	platform	BirdLife-001 - Global Distribution of Key Biodiversity Areas	geographical	open	2005	ongoing	Whole basin	birds_mammals_and_reptiles	B015	bird behaviour	GP088			vector point
8	The purpose of the BOUSSOLE project is to establish a time series of optical properties in oceanic waters, in support to bio-optics research, to calibration of ocean color satellite observations, and to validation of the products derived from these observations.	platform	Boussole	in situ system	open	2000	ongoing	Ligurian Sea and North Tyrrhenian Sea	optical_properties	D015	transmittance and attenuation of the water column	ATTN		hourly, daily, monthly mean	ascii
8	The purpose of the BOUSSOLE project is to establish a time series of optical properties in oceanic waters, in support to bio-optics research, to calibration of ocean color satellite observations, and to validation of the products derived from these observations.	platform	Boussole	in situ system	open	2000	ongoing	Ligurian Sea and North Tyrrhenian Sea	pigments	B035	chlorophyll pigment concentration in the water column	CPWC		hourly, daily, monthly mean	ascii
8	The purpose of the BOUSSOLE project is to establish a time series of optical properties in oceanic waters, in support to bio-optics research, to calibration of ocean color satellite observations, and to validation of the products derived from these observations.	platform	Boussole	in situ system	open	2000	ongoing	Ligurian Sea and North Tyrrhenian Sea	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL		hourly, daily, monthly mean	ascii
8	The purpose of the BOUSSOLE project is to establish a time series of optical properties in oceanic waters, in support to bio-optics research, to calibration of ocean color satellite observations, and to validation of the products derived from these observations.	platform	Boussole	in situ system	open	2000	ongoing	Ligurian Sea and North Tyrrhenian Sea	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	ascii

9	In 2008, the ninth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 9) adopted the following scientific criteria for identifying ecologically or biologically significant marine areas in need of protection in open-ocean waters and deep-sea habitats.	platform	CBD-001 - Global Distribution of Ecologically or Biologically Significant Marine Areas	gis	open	2008	ongoing	Whole basin	habitat	B050	habitat characterisation	HBCH			vector shapefile
10	The Medspiration Project is a European initiative, funded by ESA (in the frame of DUE program), to combine sea surface temperature (SST) data measured independently by several different satellite systems into a set of data products that represent the best measure of SST, presented in a form that can be assimilated into ocean forecasting models or used for various kinds of application.	platform	CERSAT IFREMER MEDSPIRATION	remote sensing data		2004	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	0,01 degrees	daily, monthly mean	netcdf
11	This dataset shows the global distribution of hydrothermal vents that were studied in terms of their biology, as part of the Chemosynthetic Ecosystem Science (ChEss) project.	platform	ChEssBase-002 - Global Distribution of Hydrothermal Vents	geographical	open	2010	2010	Whole basin	EARTH_SCIENCE_Oceans_Marine_Volcanism	#N/D	hydrothermal vents	G867			vector point
12	CISL RDA contains a large and diverse collection of meteorological and oceanographic observations, operational and reanalysis model outputs, and remote sensing datasets to support atmospheric and geoscience research. Ancillary datasets, such as topography/bathymetry, vegetation, and land use, are also available.	platform	CISL Research Data Archive	remote sensing data	open	ante 1990	ongoing	Whole basin	currents	D030	river flow and discharge	RVDS		real time based on station	ascii
13	The European Space Agency has launched the CoastColour project to fully exploit the potential of the MERIS instrument for remote sensing of the coastal zone.	platform	CoastColour	remote sensing data	open	2002	2012	Whole basin	suspended_particulate_material	G015	concentration of suspended particulate material in the water column	TSED	5 m	hourly, daily, monthly mean	netcdf
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access	collecting data from other	COCONET	gis	open	2011	2016	Whole basin	habitat	B050	habitat extent	HBEX			vector shapefile

	and integration of all types of data and information produced by different partners within all WPs.	provider												
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	currents	D030	river flow and discharge	RVDS		vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	terrestrial_including_bathymetry_and_under_sea_features	T001	terrestrial mapping	COAS		vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	anthropogenic_contamination	H001	pollution events	GP001		vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	fisheries	H004	fishery characterisation	GP087		vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	construction_and_structures	H002	hazards to navigation	HZNV		vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	human_activity	H005	industrial activity	IACT		vector shapefile

14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	anthropogenic_contamination	H001	litter abundance and type	LITT			vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	human_activity	H005	marine archaeology	MARC			vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	human_activity	H005	marine environment leisure usage	MLES			vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	construction_and_structures	H002	man-made structures	MMST			vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	human_activity	H005	transport activity	TRAN			vector shapefile
14	The COCONET WebGIS publishes data stored in the Geodatabases with all information available for the Mediterranean and Black Sea. The WebGIS system provides access and integration of all types of data and information produced by different partners within all WPs.	collecting data from other provider	COCONET	gis	open	2011	2016	Whole basin	sedimentation_and_erosion_processes	G060	sediment accumulation rate	RACC			vector shapefile
15	The Catalogue of Life is the most comprehensive and authoritative global index of species currently available. It consists of a single	collecting data from	CoL-001 - Catalogue Of Life	geographical	open	2001	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV		annual mean	ascii

	integrated species checklist and taxonomic hierarchy.	other provider													
15	The Catalogue of Life is the most comprehensive and authoritative global index of species currently available. It consists of a single integrated species checklist and taxonomic hierarchy.	collecting data from other provider	CoL-001 - Catalogue Of Life	geographical	open	2001	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV		monthly mean	ascii
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		2014	ongoing	Whole basin	sea_level	D032	sea level	ASLV	7km, 14 km	daily, monthly mean	netcdf
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		1993	ongoing	Whole basin	sea_level	D032	sea level	ASLV	0.12 degrees	daily, monthly mean	netcdf
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		2013	ongoing	Whole basin	pigments	B035	chlorophyll pigment concentration in the water column	CPWC	1 km	daily, monthly mean	netcdf
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		2013	ongoing	Whole basin	optical_properties	D015	transmittance and attenuation of the water column	ATTN	1 km	weekly, monthly mean	netcdf

16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		1997	2015	Whole basin	pigments	B035	chlorophyll pigment concentration in the water column	CPWC	1km, 4km	daily, monthly mean	netcdf
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		1997	2015	Whole basin	optical_properties	D015	transmittance and attenuation of the water column	ATTN	1km, 4km	daily, monthly mean	netcdf
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		2010	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	0,01 degrees, 0,02 degrees	daily, monthly mean	netcdf
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		2010	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	0,01 degrees, 0,04 degrees	daily, monthly mean	netcdf
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		2012	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	0.12 degrees	daily, monthly mean	netcdf

16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		2012	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	25 km	daily, monthly mean	netcdf
16	The Copernicus Marine Environment Monitoring Service provides Full, Free and Open Access to Data & Information related to the Global Ocean and the European Seas. It provides regular and systematic reference information (observations and models) on the physical state and marine ecosystems	platform	Copernicus Marine Environment Monitoring Service (CMEMS)	remote sensing data		2007	2012	Whole basin	meteorology	M010	wind speed and direction	EWSB	25 km	monthly mean	netcdf
17	The CORINE Land Cover (CLC) database was finalised in the early 1990s as part of the European Commission programme to COoRdinate INformation on the Environment (Corine).	platform	Corine Land Cover 2006 seamless (EEA)	gis	open	1990	1990	Whole basin	terrestrial_including_bathymetry_and_under_sea_features	T001	terrestrial mapping	COAS		hourly, daily, monthly mean	vector shapefile
18	Since 2000, an EU framework for the collection and management of fisheries data is in place. This framework was reformed last in 2008 resulting in the Data Collection Framework (DCF). Under this framework the Member States (MS) collect, manage and make available a wide range of fisheries data	platform	Data Collection (DCR-DCF) for the Common Fisheries	in situ system	open	2000	ongoing	Whole basin	fish	B020	fish and shellfish catch statistics	FCST			
18	Since 2000, an EU framework for the collection and management of fisheries data is in place. This framework was reformed last in 2008 resulting in the Data Collection Framework (DCF). Under this framework the Member States (MS) collect, manage and make available a wide range of fisheries data	platform	Data Collection (DCR-DCF) for the Common Fisheries	in situ system	open	2000	ongoing	Whole basin	human_activity	H005	fishing effort	FEFF			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			



19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Corsica	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Corsica	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Corsica	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SHOM.FR	in situ system	open	ante 1990	ongoing	Corsica	anthropogenic_contamination	H001	litter abundance and type	LITT			

	data, describing the marine, coastal and oceanic physical environment.														
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Corsica	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Corsica	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Corsica	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Gulf of Lion	anthropogenic_contamination	H001	litter abundance and type	LITT			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Gulf of Lion	construction_and_structures	H002	hazards to navigation	HZNV			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Gulf of Lion	human_activity	H005	marine archaeology	MARC			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Gulf of Lion	human_activity	H005	transport activity	TRAN			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Gulf of Lion	rock_and_sediment_lithology_and_mineralogy	G045	lithology	LITH			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Gulf of Lion	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN			
19	The Data.shom.fr portal provides access to the SHOM reference data, describing the marine, coastal and oceanic physical environment.	platform	DATA.SH OM.FR	in situ system	open	ante 1990	ongoing	Gulf of Lion	rock_and_sediment_sedimentology	GSE D	sedimentary structure	SSTR			
20	Created by decree on 11 February 2010, the Interregional Directorate for the Mediterranean Sea (DIRM Méditerranée) is responsible for the conduct of state policies on sustainable development of the sea,	platform	DIRM Méditerranée	monitoring systems and cruises	open	2010	ongoing	Corsica	human_activity	H005	industrial activity	IACT			

	resource management and regulation of maritime activities .														
20	Created by decree on 11 February 2010, the Interregional Directorate for the Mediterranean Sea (DIRM Méditerranée) is responsible for the conduct of state policies on sustainable development of the sea, resource management and regulation of maritime activities .	platform	DIRM Méditerranée	monitoring systems and cruises	open	2010	ongoing	Gulf of Lion	human_activity	H005	transport activity	TRAN			
21	ECMWF is an independent intergovernmental organisation founded in 1975 and supported by 34 states.	platform	ECMWF	online models	open	ante 1990	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB		hourly, daily, monthly mean	netcdf
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	construction_and_structures	H002	man-made structures	MMST		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	terrestrial_including_bathymetry_and_under_sea_features	T001	coastal geomorphology	COGE		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	carbon_nitrogen_and_phosphorus	C005	dissolved total and organic nitrogen concentrations in the water column	TDNT		monthly mean	vector point

	appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.														
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	carbon_nitrogen_and_phosphorus	C005	nitrate concentration parameters in the water column	NTRA		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	carbon_nitrogen_and_phosphorus	C005	phosphate concentration parameters in the water column	PHOS		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	carbon_nitrogen_and_phosphorus	C005	dissolved total or organic phosphorus concentration in the water column	TDPX		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	human_activity	H005	administrative units	ADUN		monthly mean	vector point

	state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.														
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	litter abundance and type	LITT		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of polycyclic aromatic hydrocarbons (PAHs) in biota	BCAH		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	metal concentrations in biota	BCMT		monthly mean	vector point

22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of other organic contaminants in biota	BCOC		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of other substances in biota	BCOS		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of polychloro biphenyls (PCBs) in biota	BCPB		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	bioassay and contaminant biological impact	GP010		monthly mean	vector point

	the environment at national and European level and to monitor the effectiveness of existing policies and measures.														
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	industrial discharges	IDIS		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of polycyclic aromatic hydrocarbons (PAHs) in the water column	PCHW		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	pesticide concentrations in biota	PEBI		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of polychloro biphenyls (PCBs) in	PPWC		monthly mean	vector point

	state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.									the water column				
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	pesticide concentrations in sediment	PESD	monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	pesticide concentrations in water bodies	PEWB	monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of polycyclic aromatic hydrocarbons (PAHs) in sediment samples	SCAH	monthly mean	vector point



22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of other organic contaminants in sediment samples	SCOC		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of polychloro biphenyls (PCBs) in sediment samples	SPCB		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	concentration of other organic contaminants in the water column	WCO C		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	anthropogenic_contamination	H001	radioactivity in the water column	WRAD		monthly mean	vector point

	the environment at national and European level and to monitor the effectiveness of existing policies and measures.														
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	water_column_temperature_and_salinity	D025	alkalinity, acidity and pH of the water column	ALKY		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	water_column_temperature_and_salinity	D025	primary production in the water column	PPRD		monthly mean	vector point

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22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	macroalgae_and_seagrass	B055	macroalgae and seagrass taxonomy-related counts	ACNT		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	biota_abundance_biomass_and_diversity	B070	phytoplankton taxonomic biomass in water bodies	CATX		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	biota_abundance_biomass_and_diversity	B070	zooplankton wet weight biomass	GP079		monthly mean	vector point

22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	biota_abundance_biomass_and_diversity	B070	zoobenthos taxonomy-related counts	ZOOB		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	biota_abundance_biomass_and_diversity	B070	zooplankton taxonomy-related abundance per unit volume of the water column	ZATX		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	biota_abundance_biomass_and_diversity	B070	bacteria taxonomic abundance in sediment	BAUC		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	biota_abundance_biomass_and_diversity	B070	bacteria taxonomic abundance in water bodies	BATX		monthly mean	vector point

	the environment at national and European level and to monitor the effectiveness of existing policies and measures.														
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	biota_abundance_biomass_and_diversity	B070	microzooplankton taxonomic abundance in water bodies	MATX		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	pigments	B035	chlorophyll pigment concentration in the water column	CPWC		monthly mean	vector point
22	The European environment information and observation network (Eionet) aims to provide timely and quality-assured data, information and expertise for assessing both the state of the environment in Europe and the pressures and driving forces acting upon it. This enables policymakers to decide on appropriate measures for protecting the environment at national and European level and to monitor the effectiveness of existing policies and measures.	platform	EEA - EIONET	monitoring systems and cruises	open	2000	ongoing	Coastal water EU member states	dissolved_gases	C015	dissolved oxygen parameters in the water column	DOXY		monthly mean	vector point
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	sedimentation_and_erosion_processes	G060	sediment resuspension	BEST			vector shapefile

		provider													
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	rock_and_sediment_sedimentology	GSED	depositional environment	DPEV			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	habitat	B050	habitat extent	HBEX			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	rock_and_sediment_physical_properties	G040	sediment grain size parameters	MNGS			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	sea_level	D032	sea level	ASLV			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	pigments	B035	chlorophyll pigment concentration in the water column	CPWC			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			vector shapefile

23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	currents	D030	horizontal velocity of the water column (currents)	RFVL			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	carbon_nitrogen_and_phosphorus	C005	dissolved total and organic nitrogen concentrations in the water column	TDNT			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	carbon_nitrogen_and_phosphorus	C005	nitrate concentration parameters in the water column	NTRA			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	carbon_nitrogen_and_phosphorus	C005	phosphate concentration parameters in the water column	PHOS			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	currents	D030	river flow and discharge	RVDS			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	carbon_nitrogen_and_phosphorus	C005	dissolved total or organic phosphorus concentration in the water column	TDPX			vector shapefile

23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	habitat	B050	habitat characterisation	HBCH			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	habitat	B050	habitat extent	HBEX			vector shapefile
23	The EMODnet Data Ingestion portal seeks to identify and to reach out to other potential providers in order to make their data sets also part of the total offer.	collecting data from other provider	EMODNET	gis	open	2009	ongoing	Coastal water EU member states	suspended_particulate_material	G015	concentration of suspended particulate material in the water column	TSED			vector shapefile
24	To increase awareness and understanding of living nature through an Encyclopedia of Life that gathers, generates, and shares knowledge in an open, freely accessible and trusted digital resource.	collecting data from other provider	EoL-001 - Encyclopedia of Life - Global access to knowledge about life on Earth.	geographical	open	2007	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			ascii
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2016	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	300m	real time based on station	netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2016	ongoing	Whole basin	sea_level	D032	sea level	ASLV	300m	real time based on station	netcdf



25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2016	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	300m	real time based on station	netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2016	ongoing	Whole basin	optical_properties	D015	transmittance and attenuation of the water column	ATTN	300m	real time based on station	netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2016	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	1 km		netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2016	ongoing	Whole basin	sea_level	D032	sea level	ASLV			netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2016	ongoing	Whole basin	sea_level	D032	sea level	ASLV	300m, 7 km		netcdf

25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data	2016	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	300m, 7 km	netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data	2007	2014	Whole basin	meteorology	M010	wind speed and direction	EWSB	12,5 km	netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data	2007	2014	Whole basin	meteorology	M010	wind speed and direction	EWSB	25 km	netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data	2016	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	25 km	netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data	2016	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	50 km	netcdf

25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2016	ongoing	Whole basin	sea_level	D032	sea level	ASLV	50 km		netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2015	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	25km, 50km		netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		1999	2009	Whole basin	meteorology	M010	wind speed and direction	EWSB	25km, 50km		netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2011	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	1 km		netcdf
25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2008	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	0,05 degrees	12-hourly mean	netcdf

25	EUMETSAT is a global operational satellite agency at the heart of Europe. Our purpose is to gather accurate and reliable satellite data on weather, climate and the environment around the clock, and to deliver them to our Member and Cooperating States, to our international partners, and to users world-wide.	platform	European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)	remote sensing data		2014	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	12 km to 40 km		netcdf
26	FAO Fish and Aquaculture have the mission to strengthen global governance and the managerial and technical capacities of members and to lead consensus-building towards improved conservation and utilization of aquatic resources.  The Department aims to make a significant contribution to the attainment of the Millennium Development Goals and the targets set by the World Summit on Sustainable Development and the World Food Summit.	integrate and disseminate knowledge and expertise	FAO Fish and Aquaculture	geographical	open	ante 1990	ongoing	Whole basin	human_activity	H005	fishing effort	FEFF			pdf
26	FAO Fish and Aquaculture have the mission to strengthen global governance and the managerial and technical capacities of members and to lead consensus-building towards improved conservation and utilization of aquatic resources.  The Department aims to make a significant contribution to the attainment of the Millennium Development Goals and the targets set by the World Summit on Sustainable Development and the World Food Summit.	integrate and disseminate knowledge and expertise	FAO Fish and Aquaculture	geographical	open	ante 1990	ongoing	Whole basin	fish	B020	fish abundance in water bodies	FAXT			pdf
26	FAO Fish and Aquaculture have the mission to strengthen global governance and the managerial and technical capacities of members and to lead consensus-building towards improved conservation and utilization of aquatic resources.  The Department aims to make a significant contribution to the attainment of the Millennium Development Goals and the targets	integrate and disseminate knowledge and expertise	FAO Fish and Aquaculture	geographical	open	ante 1990	ongoing	Whole basin	fish	B020	fish reproduction	FREP			pdf

	set by the World Summit on Sustainable Development and the World Food Summit.													
26	<p>FAO Fish and Aquaculture have the mission to strengthen global governance and the managerial and technical capacities of members and to lead consensus-building towards improved conservation and utilization of aquatic resources.</p> <p>The Department aims to make a significant contribution to the attainment of the Millennium Development Goals and the targets set by the World Summit on Sustainable Development and the World Food Summit.</p>	integrate and disseminate knowledge and expertise	FAO Fish and Aquaculture	geographical	open	ante 1990	ongoing	Whole basin	fish	B020	fish and shellfish catch statistics	FCST		pdf
26	<p>FAO Fish and Aquaculture have the mission to strengthen global governance and the managerial and technical capacities of members and to lead consensus-building towards improved conservation and utilization of aquatic resources.</p> <p>The Department aims to make a significant contribution to the attainment of the Millennium Development Goals and the targets set by the World Summit on Sustainable Development and the World Food Summit.</p>	integrate and disseminate knowledge and expertise	FAO Fish and Aquaculture	geographical	open	ante 1990	ongoing	Whole basin	fisheries	H004	fishing by-catch	GP080		pdf
27	This dataset shows the global distribution of Vulnerable Marine Ecosystems (VMEs) in relation to deep-sea fishing activities.	platform	FAO-002 - Global Distribution of Vulnerable Marine Ecosystems	gis	open	2003	ongoing	Whole basin	habitat	B050	habitat characterization	HBCH		vector shapefile
28	FishBase is a global biodiversity information system on finfishes. Its initial goal to provide key facts on population dynamics for 200 major commercial species has now grown to having a wide range of information on all species currently known in the world: taxonomy,	platform	FishBase - A Global Information System on Fishes	monitoring systems and cruises	open	ante 1990	ongoing	Whole basin	fish	B020	fish abundance in water bodies	FAXT		ascii

	biology, trophic ecology, life history, and uses, as well as historical data reaching back to 250 years.													
28	FishBase is a global biodiversity information system on finfishes. Its initial goal to provide key facts on population dynamics for 200 major commercial species has now grown to having a wide range of information on all species currently known in the world: taxonomy, biology, trophic ecology, life history, and uses, as well as historical data reaching back to 250 years.	platform	FishBase - A Global Information System on Fishes	monitoring systems and cruises	open	ante 1990	ongoing	Whole basin	fish	B020	fish reproduction	FREP		ascii
28	FishBase is a global biodiversity information system on finfishes. Its initial goal to provide key facts on population dynamics for 200 major commercial species has now grown to having a wide range of information on all species currently known in the world: taxonomy, biology, trophic ecology, life history, and uses, as well as historical data reaching back to 250 years.	platform	FishBase - A Global Information System on Fishes	monitoring systems and cruises	open	ante 1990	ongoing	Whole basin	fish	B020	fish morphology, age and physiology	FATM		ascii
28	FishBase is a global biodiversity information system on finfishes. Its initial goal to provide key facts on population dynamics for 200 major commercial species has now grown to having a wide range of information on all species currently known in the world: taxonomy, biology, trophic ecology, life history, and uses, as well as historical data reaching back to 250 years.	platform	FishBase - A Global Information System on Fishes	monitoring systems and cruises	open	ante 1990	ongoing	Whole basin	fish	B020	fish taxonomy-related counts	FCNT		ascii
28	FishBase is a global biodiversity information system on finfishes. Its initial goal to provide key facts on population dynamics for 200 major commercial species has now grown to having a wide range of information on all species currently known in the world: taxonomy, biology, trophic ecology, life history, and uses, as well as historical data reaching back to 250 years.	platform	FishBase - A Global Information System on Fishes	monitoring systems and cruises	open	ante 1990	ongoing	Whole basin	fish	B020	fish biomass in water bodies	FIBM		ascii
29	GBIF is an open-data research infrastructure funded by the world's governments and aimed at providing anyone, anywhere access	platform	GBIF - Global Biodiversity	geographical	open	1999	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV		vector polygon

	to data about all types of life on Earth.		Information Facility												
29	GBIF is an open-data research infrastructure funded by the world's governments and aimed at providing anyone, anywhere access to data about all types of life on Earth.	platform	GBIF - Global Biodiversity Information Facility	geographical	open	1999	ongoing	Whole basin	habitat	B050	habitat extent	HBEX			vector polygon
29	GBIF is an open-data research infrastructure funded by the world's governments and aimed at providing anyone, anywhere access to data about all types of life on Earth.	platform	GBIF - Global Biodiversity Information Facility	geographical	open	1999	ongoing	Whole basin	habitat	B050	habitat characterization	HBCH			vector polygon
30	The General Bathymetric Chart of the Oceans (GEBCO) aims to provide the most authoritative, publicly-available bathymetry data sets for the world's oceans.	platform	GEBCO - General Bathymetric Chart of the Oceans	geographical	open	ante 1990	ongoing	Whole basin	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN			vector polygon
27	A database of global marine commercial, small-scale, illegal and unreported fisheries catch.	collecting data from other provider	Global Fisheries Catch dataset	monitoring systems and cruises	open	ante 1990	2014	Whole basin	fisheries	H004	fishery characterization	GP087	30 min spatial cells	annual mean	vector polygon
27	A database of global marine commercial, small-scale, illegal and unreported fisheries catch.	collecting data from other provider	Global Fisheries Catch dataset	monitoring systems and cruises	open	ante 1990	2014	Whole basin	fisheries	H004	fishing by-catch	GP080	30 min spatial cells	annual mean	vector polygon
28	The GRDC is an international archive of data up to 200 years old, and fosters multinational and global long-term hydrological studies.	platform	GRDC (Global Runoff Data Centre database)	gis	open	ante 1990	ongoing	Whole basin	currents	D030	river flow and discharge	RVDS		daily, monthly mean	vector shapefile
29	The global seafloor geomorphic features map represents an important contribution towards the understanding of the distribution of blue habitats.	platform	GridA-001 - Geomorphology of the oceans	geographical	open	ante 1990	ongoing	Whole basin	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN			vector shapefile
30	The "Global Register of Migratory Species" contains a first list of 2,880 migratory vertebrate species in digital format, together with their threat status according to the	platform	GROMS - Global Register of	gis	open	2001	ongoing	Whole basin	birds_mammals_and_reptiles	B015	bird taxonomy-related counts	BRDA			vector shapefile

	International Red List 2000, and digital maps for 545 species.		Migratory Species												
31	Meteociel regularly offers KNMI's fine knit HIRLAM 0.1 ° (Dutch weather) over 5 zones (France, Nord-Ouest, Nord-Est, Sud-Ouest, Sud-Est)	platform	HIRLAM, WRF	numerical models	open	ante 1990	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	0.1 degrees	12-hourly mean	netcdf
32	HyMeX aims at a better understanding, quantification and modelling of the hydrological cycle in the Mediterranean, with emphasis on the predictability and evolution of extreme weather events, inter-annual to decadal variability of the Mediterranean coupled system, and associated trends in the context of global change.	platform	HyMeX	online models	open	2007	ongoing	Whole basin	currents	D030	river flow and discharge	RVDS			netcdf
32	HyMeX aims at a better understanding, quantification and modelling of the hydrological cycle in the Mediterranean, with emphasis on the predictability and evolution of extreme weather events, inter-annual to decadal variability of the Mediterranean coupled system, and associated trends in the context of global change.	platform	HyMeX	online models	open	2007	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			netcdf
32	HyMeX aims at a better understanding, quantification and modelling of the hydrological cycle in the Mediterranean, with emphasis on the predictability and evolution of extreme weather events, inter-annual to decadal variability of the Mediterranean coupled system, and associated trends in the context of global change.	platform	HyMeX	online models	open	2007	ongoing	Whole basin	suspended_particulate_material	G015	concentration of suspended particulate material in the water column	TSED			
33	IBAT is a central database for globally recognized biodiversity information including Key Biodiversity Areas and Legally Protected Areas.	platform	IBAT - Integrated Biodiversity Assessment Tool (IBAT) - Global Biodiversity Decision Support Platform	geographical	open	ante 1990	ongoing	Whole basin	positioning_references_and_data_management	Z005	biogeographic classification	#N/D			vector point



34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	online models	non-accessible		Balearic Island	sea_level	D032	sea level	ASLV		Daily, monthly mean	netcdf
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible		Balearic Island	pigments	B035	chlorophyll pigment concentration in the water column	CPWC		Hourly, daily, monthly mean	ascii
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible		Balearic Island	carbon_nitrogen_and_phosphorus	C005	nitrate concentration parameters in the water column	NTRA		Hourly, daily, monthly mean	ascii
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible		Balearic Island	carbon_nitrogen_and_phosphorus	C005	nitrite concentration parameters in the water column	NTRI		Hourly, daily, monthly mean	ascii
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible		Balearic Island	carbon_nitrogen_and_phosphorus	C005	phosphate concentration parameters in the water column	PHOS		Hourly, daily, monthly mean	ascii
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible		Balearic Island	carbon_nitrogen_and_phosphorus	C005	silicate concentration parameters in the water column	SLCA		Hourly, daily, monthly mean	ascii
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice	platform	Spanish Institute of Oceanography (IEO)	monitoring system	non-accessible		Balearic Island	dissolved_gases	C015	dissolved oxygen parameters in the	DOXY		Hourly, daily, monthly mean	ascii

	government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.		aphy (IEO)	s and cruises						water column				
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible			Balearic Island	terrestrial_including_bathymetry_and_under_sea_features	T001	seabed photography	SBPH		Hourly, daily, monthly mean ascii
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible			Balearic Island	rock_and_sediment_lithology_and_mineralogy	G045	mineralogical composition	CLAY		Hourly, daily, monthly mean ascii
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible			Balearic Island	biota_abundance_biomass_and_diversity	B070	phytoplankton taxonomic biomass in water bodies	CATX		Hourly, daily, monthly mean ascii
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible			Balearic Island	fish	B020	fish taxonomy-related counts	FCNT		Hourly, daily, monthly mean vector polygon
34	The Spanish Institute of Oceanography (IEO) is a Spanish public research body dedicated to oceanography and advice government on matters within its competition. Since June 2010 address Balguerías lies with Eduardo Guerra.	platform	Spanish Institute of Oceanography (IEO)	monitoring systems and cruises	non-accessible			Balearic Island	habitat	B050	habitat characterization	HBCH		Hourly, daily, monthly mean vector polygon
35	This dataset shows the distribution of 13 Particularly Sensitive Sea Areas (PSSAs).	platform	International Maritime Organization IMO-001 - Global Distribution	gis	open	2016	2016	Whole basin	habitat	B050	habitat characterization	HBCH		vector shapefile

			n of Particularly Sensitive Sea Areas (PSSA)											
36	The InterRidge Vents Database is a global database of submarine hydrothermal vent fields. The InterRidge Vents Database is supported by the InterRidge program for international cooperation in ridge-crest studies ( <a href="http://www.interridge.org">www.interridge.org</a> ).	platform	IntRid-001 - Global Distribution of Hydrothermal Vent Fields	geographical	open	ante 1990	2011	Whole basin	EARTH_SCIENCE_Oceans_Marine_Volcanism	#N/D	hydrothermal vents	G867		vector point
37	The World Database on Protected Areas (WDPA) is the most comprehensive global database on terrestrial and marine protected areas. It is a joint project between the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN), managed by UNEP World Conservation Monitoring Centre (UNEP-WCMC).	platform	IUCN - World Database on Protected Areas (WDPA)	gis	open	2000	ongoing	Whole basin	habitat	B050	habitat extent	HBEX		vector shapefile
37	The World Database on Protected Areas (WDPA) is the most comprehensive global database on terrestrial and marine protected areas. It is a joint project between the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN), managed by UNEP World Conservation Monitoring Centre (UNEP-WCMC).	platform	IUCN - World Database on Protected Areas (WDPA)	gis	open	2000	ongoing	Whole basin	habitat	B050	habitat characterization	HBCH		vector shapefile
38	This dataset contains distribution information on species assessed for The IUCN Red List of Threatened Species™. The IUCN Red List of Threatened Species ( <a href="http://www.iucnredlist.org">http://www.iucnredlist.org</a> ) is a dynamic knowledge product derived from assessment of species extinct.	platform	IUCN-001 - Spatial Data for the Red List of Threatened Species	gis	open	ante 1990	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV		vector shapefile
39	Determining Important Marine Mammal Areas - IMMAS - in the World's Oceans.	platform	IUCN-003 - Global Distribution of Important Marine Mammal	gis	open	2013	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV		vector shapefile

			Areas (IMMAs)												
40	This is a global database of collisions between any type of vessel and whales, dolphins or porpoises, and an online public data entry system for submitting reports.	platform	IWC-001 - Ship Strike Database	monitoring systems and cruises	open	ante 1990	ongoing	Whole basin	human_activity	H005	transport activity	TRAN			ascii
41	MAPAMED (Marine Protected Areas in the Mediterranean) is a GIS database that gathers information on marine protected areas of the Mediterranean, and more generally on sites of interest to the conservation of the marine environment. It is developed and jointly administered by the MedPAN association and RAC / SPA.	platform	MAPAMED - Marine Protected Areas in the Mediterranean	gis	open	2008	ongoing	Whole basin	habitat	B050	habitat extent	HBEX			vector shapefile
41	MAPAMED (Marine Protected Areas in the Mediterranean) is a GIS database that gathers information on marine protected areas of the Mediterranean, and more generally on sites of interest to the conservation of the marine environment. It is developed and jointly administered by the MedPAN association and RAC / SPA.	platform	MAPAMED - Marine Protected Areas in the Mediterranean	gis	open	2008	ongoing	Whole basin	habitat	B050	habitat characterisation	HBCH			vector shapefile
42	Network of excellence funded by the European Union and consisting of 94 European marine institutes, was a platform to integrate and disseminate knowledge and expertise on marine biodiversity, with links to researchers, industry, stakeholders and the general public.	integrate and disseminate knowledge and expertise	MarBEF	citizen scientist networks	open	2004	ongoing	Whole basin	currents	D030	river flow and discharge	RVDS			
42	Network of excellence funded by the European Union and consisting of 94 European marine institutes, was a platform to integrate and disseminate knowledge and expertise on marine biodiversity, with links to researchers, industry, stakeholders and the general public.	integrate and disseminate knowledge and expertise	MarBEF	citizen scientist networks	open	2004	ongoing	Whole basin	suspended_particulate_material	G015	concentration of suspended particulate material in the water column	TSED			

43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	meteorology	M010	air pressure	CAPH			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	meteorology	M010	air temperature and density	CDTA			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	meteorology	M010	atmospheric humidity	CHUM			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	meteorology	M010	wind speed and direction	EWSB			

43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	sea_level	D032	sea level	ASLV			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			

43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	waves	D034	spectral wave data parameters	WVSP			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	waves	D034	wave direction	GWDR			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	waves	D034	wave height and period statistic	WVST			
43	MARINA Platform is a European project dedicated to bringing offshore renewable energy applications closer to the market by creating new infrastructures for both offshore wind and ocean energy converters. It addresses the need for creating a cost-efficient technology development basis to kick-start growth of the nascent European marine renewable energy (MRE) industry in the deep offshore – a major future global market.	platform	Marina Platform	numerical models	non-accessible	2010	2014	Whole basin	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN			

44	This dataset shows modelled spatial distributions of coralligenous outcrops and maërl beds across the Mediterranean Sea.	platform	Mediseh-001 - Modelled Spatial Distributions of Coralligenous and Maërl Habitats	numerical models	open	ante 1990	2014	Whole basin	habitat	B050	habitat extent	HBEX			netcdf
45	This dataset shows the modelled spatial distribution of Posidonia oceanica seagrass in the Mediterranean Sea.	platform	Mediseh-002 - Modelled Posidonia oceanica distribution	numerical models	open	ante 1990	2013	Whole basin	habitat	B050	habitat extent	HBEX			netcdf
46	Mediterranean Sensitive Habitats	platform	MEDISEH-MAREA	numerical models	open	1994	2012	Northern Adriatic	habitat	B050	habitat characterisation	HBCH	vector data	monthly mean	vector point
46	Mediterranean Sensitive Habitats	platform	MEDISEH-MAREA	numerical models	open	1994	2012	Southern Adriatic Sea	habitat	B050	habitat characterisation	HBCH		monthly mean	vector point
46	Mediterranean Sensitive Habitats	platform	MEDISEH-MAREA	numerical models	open	1994	2012	Northern Adriatic	macroalgae_and_seagrass	B055	macroalgae and seagrass taxonomy-related counts	ACNT		monthly mean	vector point
46	Mediterranean Sensitive Habitats	platform	MEDISEH-MAREA	numerical models	open	1994	2012	Southern Adriatic Sea	macroalgae_and_seagrass	B055	macroalgae and seagrass taxonomy-related counts	ACNT		monthly mean	vector point
46	Mediterranean Sensitive Habitats	platform	MEDISEH-MAREA	numerical models	open	1994	2012	Northern Adriatic	habitat	B050	habitat characterisation	HBCH		monthly mean	vector point
47	An International bottom trawl survey was designed from a European Commission's initiative to produce biological data on demersal resources in the Mediterranean Sea. Nine Mediterranean countries are associated in the programme, which covers all the trawable areas along their coasts from 10 to 800 m depth.	platform	MEDITS surveys	monitoring systems and cruises	open	1994	2016	Gulf of Lion	fish	B020	fish taxonomy-related counts	FCNT		real time based on station	vector point



47	An International bottom trawl survey was designed from a European Commission's initiative to produce biological data on demersal resources in the Mediterranean Sea. Nine Mediterranean countries are associated in the programme, which covers all the trawable áreas along their coasts from 10 to 800 m depth.	platform	MEDITS surveys	monitoring systems and cruises	open	1994	2016	Corsica	fish	B020	fish taxonomy-related counts	FCNT		real time based on station	vector point
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOS - AFS	in situ system	open	2013	ongoing	Northern Adriatic	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOS - AFS	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOS - ALERMO	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOS - ALERMO	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOS - CYCOFOS	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOS - CYCOFOS	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf

48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOS - CYCOFS	in situ system	open	2013	ongoing	Whole basin	waves	D034	wave direction	GWDR		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOS - CYCOFS	in situ system	open	2013	ongoing	Whole basin	waves	D034	wave height and period statistic	WVST		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOS - CYPPOM	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOS - CYPPOM	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOS - IBI - MFC	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOS - IBI - MFC	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOS - MARIAW Central Med	in situ system	open	2013	ongoing	Whole basin	waves	D034	wave direction	GWDR		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean	platform	MONGOS -	in situ system	open	2013	ongoing	Whole basin	waves	D034	wave height and	WVST		hourly, daily,	netcdf

	Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.		MARIAW AM Central Med								period statistic			monthly mean	
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOO S - MFC Currents	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOO S - MFC Currents	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOO S - POSEIDON	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOO S - POSEIDON	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOO S - POSEIDON	in situ system	open	2013	ongoing	Whole basin	waves	D034	wave direction	GWDR		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOO S - POSEIDON	in situ system	open	2013	ongoing	Whole basin	waves	D034	wave height and period statistic	WVST		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOO S - PREVIME	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water	RFVL		hourly, daily, monthly mean	netcdf

	further develop operational oceanography in the Mediterranean Sea.		R - MENOR								column (currents)				
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOSE - PREVIEW R - MENOR	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOSE - ROSARIO	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOSE - SAMPA	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOSE - SAMPA	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOSE - Sicily Channel Regional	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOSE - Sicily Channel Regional	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational	platform	MONGOOSE - Western Mediterranean	in situ system	open	2013	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL		hourly, daily, monthly mean	netcdf

	oceanography in the Mediterranean Sea.														
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOS - Western Mediterranean	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
48	The Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) has been established in 2012 to further develop operational oceanography in the Mediterranean Sea.	platform	MONGOOS by ISAC CNR	in situ system	open	2013	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		hourly, daily, monthly mean	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	pigments	B035	chlorophyll pigment concentration in the water column	CPWC	0.06 degrees, 1.0 km, 4.0 km	hourly, daily, monthly mean	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	dissolved_gases	C015	dissolved oxygen parameters in the water column	DOXY	0.06 degrees	hourly, daily, monthly mean	netcdf

	surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme														
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	anthropogenic_contamination	H001	acoustic noise in the water column	NOYS			
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	ante 1990	ongoing	Whole basin	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL	0.06 degrees	hourly, daily, monthly mean	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	carbon_nitrogen_and_phosphorus	C005	nutrient fluxes between the bed and the	SAMO	0.06 degrees	hourly, daily, monthly mean	netcdf

	concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme										water column				
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	ante 1990	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	0.06 degrees	hourly, daily, monthly mean	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	currents	D030	transport in the water column	VDFC			

	are now continued by the Copernicus Programme														
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	sea_level	D032	sea level	ASLV		real time based on station	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	optical_properties	D015	transmittance and attenuation of the water column	ATTN	1 km	daily, monthly mean	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	phytoplankton generic biomass in the water bodies	PNTX	0.06 degrees	hourly, daily, monthly mean	netcdf



	concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme													
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	pigments	B035	chlorophyll pigment concentration in the water column	CPWC		
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	water_column_temperature_and_salinity	D025	skin temperature of the water column	PSST		

	are now continued by the Copernicus Programme														
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	ante 1990	ongoing	Whole basin	currents	D030	horizontal velocity of the water column (currents)	RFVL	0.06 degrees	hourly, daily, monthly mean	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	water_column_temperature_and_salinity	D025	dissolved metal concentrations in the water column	MTWD	0.06 degrees	hourly, daily, monthly mean	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	water_column_temperature_and_salinity	D025	primary production in the water column	PPRD	0.06 degrees	hourly, daily, monthly mean	netcdf

	concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme														
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	1999	ongoing	Whole basin	carbon_nitrogen_and_phosphorus	C005	silicate concentration parameters in the water column	SLCA	0.06 degrees	hourly, daily, monthly mean	netcdf
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services	platform	MYOCEAN	numerical models	open	2007	ongoing	Whole basin	meteorology	M010	wind speed and direction	EWSB	25 km	monthly mean or daily instantaneous based on date and dataset (satellite)	netcdf

	are now continued by the Copernicus Programme													
49	MyOcean is a series of projects granted by the European Commission within the GMES Program (Seventh Framework Program), whose objective is to define and to set up a concerted and integrated pan-European capacity for ocean monitoring and forecasting. The activities benefit several specified areas of use: Maritime security, oil spill prevention, marine resources management, climate change, seasonal forecasting, coastal activities, ice sheet surveys, water quality and pollution. The series of MyOcean projects ended in 2015, and their services are now continued by the Copernicus Programme	platform	MYOCEAN	numerical models	open	2007	ongoing	Whole basin	suspended_particulate_material	G015	concentration of suspended particulate material in the water column	TSED		
50	NASA's OceanColor Web is supported by the Ocean Biology Processing Group (OBPG) at NASA's Goddard Space Flight Center.	platform	NASA - Oceancolor	remote sensing data	open	ante 1990	ongoing	Whole basin	optical_properties	D015	transmittance and attenuation of the water column	ATTN		
50	NASA's OceanColor Web is supported by the Ocean Biology Processing Group (OBPG) at NASA's Goddard Space Flight Center.	platform	NASA - Oceancolor	remote sensing data	open	ante 1990	ongoing	Whole basin	pigments	B035	chlorophyll pigment concentration in the water column	CPWC		
51	The Ocean Health Index evaluates the condition of marine ecosystems according to 10 human goals, which represent the key ecological, social, and economic benefits that a healthy ocean provides.	integrate and disseminate knowledge and expertise	NCEAS - Global Health Index	geographical	open	2012	2012	Whole basin	positioning_references_and_data_management	Z005	platform or instrument orientation	HEAD		ascii
52	The management and conservation of the world's oceans require synthesis of spatial data on the	platform	NCEAS-001 - A Global	remote sensing data	open	ante 1990	ongoing	Whole basin	human_activity	H005	unspecified	ZZZZ		netcdf

	distribution and intensity of human activities and the overlap of their impacts on marine ecosystems.		Map of Human Impacts to Marine Ecosystems												
53	The Knowledge Network for Biocomplexity (KNB) is an international repository intended to facilitate ecological and environmental research.	integrate and disseminate knowledge and expertise	NCEAS-004 - Knowledge Network for Biocomplexity (KNB)	geographical	open	ante 1990	2015	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			ascii
74	This dataset shows the boundaries of the 66 Large Marine Ecosystems (LMEs) of the world.	platform	NOAA-001 - Large Marine Ecosystems of the World	geographical	open	2013	2013	Whole basin	habitat	B050	habitat extent	HBEX			vector or shapefile
75	OBIS is a global open-access data and information clearing-house on marine biodiversity for science, conservation and sustainable development	platform	OBIS - Ocean Biogeographic Information System	geographical	open	1999	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			vector or point
76	NASA's OceanColor Web is supported by the Ocean Biology Processing Group (OBPG) at NASA's Goddard Space Flight Center. Our responsibilities include the collection, processing, calibration, validation, archive and distribution of ocean-related products from a large number of operational, satellite-based remote-sensing missions providing ocean color, sea surface temperature and sea surface salinity data to the international research community since 1996.	platform	Ocean Biology Processing Group (OBPG)/NASA's Goddard Space Flight Center	remote sensing data		2011	2015	Whole basin	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL	1 degrees	daily, monthly mean	netcdf
76	NASA's OceanColor Web is supported by the Ocean Biology Processing Group (OBPG) at NASA's Goddard Space Flight Center. Our responsibilities include the collection, processing, calibration, validation, archive and	platform	Ocean Biology Processing Group (OBPG)/NASA's Goddard	remote sensing data		2011	2015	Whole basin	meteorology	M010	wind speed and direction	EWSB	1 degrees	daily, monthly mean	netcdf

	distribution of ocean-related products from a large number of operational, satellite-based remote-sensing missions providing ocean color, sea surface temperature and sea surface salinity data to the international research community since 1996.		Space Flight Center												
76	NASA's OceanColor Web is supported by the Ocean Biology Processing Group (OBPG) at NASA's Goddard Space Flight Center. Our responsibilities include the collection, processing, calibration, validation, archive and distribution of ocean-related products from a large number of operational, satellite-based remote-sensing missions providing ocean color, sea surface temperature and sea surface salinity data to the international research community since 1996.	platform	Ocean Biology Processing Group (OBPG)/NASA's Goddard Space Flight Center	remote sensing data		2002	2012	Whole basin	pigments	B035	chlorophyll pigment concentration in the water column	CPWC	4km, 9km	daily, monthly mean	netcdf
76	NASA's OceanColor Web is supported by the Ocean Biology Processing Group (OBPG) at NASA's Goddard Space Flight Center. Our responsibilities include the collection, processing, calibration, validation, archive and distribution of ocean-related products from a large number of operational, satellite-based remote-sensing missions providing ocean color, sea surface temperature and sea surface salinity data to the international research community since 1996.	platform	Ocean Biology Processing Group (OBPG)/NASA's Goddard Space Flight Center	remote sensing data		2002	ongoing	Whole basin	pigments	B035	chlorophyll pigment concentration in the water column	CPWC	1km, 4km	daily, monthly mean	netcdf
76	NASA's OceanColor Web is supported by the Ocean Biology Processing Group (OBPG) at NASA's Goddard Space Flight Center. Our responsibilities include the collection, processing, calibration, validation, archive and distribution of ocean-related products from a large number of operational, satellite-based remote-sensing missions providing ocean color, sea surface temperature and sea surface salinity data to the	platform	Ocean Biology Processing Group (OBPG)/NASA's Goddard Space Flight Center	remote sensing data		2002	ongoing	Whole basin	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP	1km, 4km	daily, monthly mean	netcdf

	international research community since 1996.														
77	OCEANA 2011 is the largest international advocacy group working solely to protect the world's oceans.	platform	Oceana 2011	monitoring systems and cruises	open	2001	ongoing	Whole basin	human_activity	H005	fishing effort	FEFF		monthly mean	netcdf
78	The Ocean Tracking Network is a global aquatic animal tracking, technology development, and partnership platform headquartered at Dalhousie University in Canada.	platform	OTN - Ocean Tracking Network	gis	open	2015	ongoing	Whole basin	fish	B020	fish abundance in water bodies	FAXT			vector shapefile
78	The Ocean Tracking Network is a global aquatic animal tracking, technology development, and partnership platform headquartered at Dalhousie University in Canada.	platform	OTN - Ocean Tracking Network	gis	open	2015	ongoing	Whole basin	fish	B020	fish morphology, age and physiology	FATM			vector shapefile
79	The information system PANGAEA is operated as an Open Access library aimed at archiving, publishing and distributing georeferenced data from earth system research. The system guarantees long-term availability of its content through a commitment of the hosting institutions.	integrate and disseminate knowledge and expertise	PANGAEA - Data Publisher for Earth & Environmental Science	geographical	open		ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			ascii
79	The information system PANGAEA is operated as an Open Access library aimed at archiving, publishing and distributing georeferenced data from earth system research. The system guarantees long-term availability of its content through a commitment of the hosting institutions.	integrate and disseminate knowledge and expertise	PANGAEA - Data Publisher for Earth & Environmental Science	geographical	open		ongoing	Whole basin	habitat	B050	habitat characterisation	HBCH			ascii
79	The information system PANGAEA is operated as an Open Access library aimed at archiving, publishing and distributing georeferenced data from earth system research. The system guarantees long-term availability of its content through a commitment of the hosting institutions.	integrate and disseminate knowledge and	PANGAEA - Data Publisher for Earth & Environmental Science	geographical	open		ongoing	Whole basin	birds_mammals_and_reptiles	B015	bird behaviour	GP088			ascii

		expert ise													
79	The information system PANGAEA is operated as an Open Access library aimed at archiving, publishing and distributing georeferenced data from earth system research. The system guarantees long-term availability of its content through a commitment of the hosting institutions.	integr ate and disse minat e knowl edge and expert ise	PANGAE A - Data Publisher for Earth & Environ mental Science	geogra phical	open		ongoi ng	Whole basin	fish	B020	fish abundanc e in water bodies	FAXT			ascii
79	The information system PANGAEA is operated as an Open Access library aimed at archiving, publishing and distributing georeferenced data from earth system research. The system guarantees long-term availability of its content through a commitment of the hosting institutions.	integr ate and disse minat e knowl edge and expert ise	PANGAE A - Data Publisher for Earth & Environ mental Science	geogra phical	open		ongoi ng	Whole basin	anthropogenic_contamination	H001	pollution events	GP001			ascii
80	PO.DAAC is located at NASA's Jet Propulsion Laboratory in Pasadena, California. PO.DAAC is tasked with managing data to enable understanding of the world's oceans. PO.DAAC provides data and related information pertaining to the physical processes and conditions of the global oceans, including measurements of ocean winds, temperature, topography, salinity, circulation and currents, and sea ice.	platfor m	PO.DAAC	remote sensin g data	open	1996	2003	Whole basin	water_column_temperature_and_salinity	D025	skin temperatur e of the water column	PSST	0.5 degre es	monthl y mean	netc df
80	PO.DAAC is located at NASA's Jet Propulsion Laboratory in Pasadena, California. PO.DAAC is tasked with managing data to enable understanding of the world's oceans. PO.DAAC provides data and related information pertaining to the physical processes and conditions of the global oceans, including measurements of ocean winds, temperature, topography, salinity, circulation and currents, and sea ice.	platfor m	PO.DAAC	remote sensin g data	open	1996	2003	Whole basin	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL	0.5 degre es	monthl y mean	netc df



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81	PSMSL is the global data bank for long term sea level change information from tide gauges and bottom pressure recorders.	platform	PSMSL - Permanent Service for Mean Sea Level	gis	open	ante 1990	2013	Whole basin	sea_level	D032	sea level	ASLV			vector shapefile
81	The buoys of this network are characterized by being anchored away from the coast line to great depth (over 200 meters deep). Therefore, the wave measurements of these sensors are not disturbed by local effects. Therefore, each buoy provides representative observations of vast coastal areas.	platform	Puertos del Estado (REDEXT)	numerical models	open	1996		Balearic Island	waves	D034	wave height estimates	HEAV		Hourly, daily, monthly mean	netcdf
81	The buoys of this network are characterized by being anchored away from the coast line to great depth (over 200 meters deep). Therefore, the wave measurements of these sensors are not disturbed by local effects. Therefore, each buoy provides representative observations of vast coastal areas.	platform	Puertos del Estado (REDEXT)	online models	open	1996		Balearic Island	waves	D034	wave direction	GWD R		Hourly, daily, monthly mean	netcdf
81	The buoys of this network are characterized by being anchored away from the coast line to great depth (over 200 meters deep). Therefore, the wave measurements of these sensors are not disturbed by local effects. Therefore, each buoy provides representative observations of vast coastal areas.	platform	Puertos del Estado (REDEXT)	numerical models	open	1996		Balearic Island	currents	D030	horizontal velocity of the water column (currents)	RFVL		Real time based on station	netcdf
81	The buoys of this network are characterized by being anchored away from the coast line to great depth (over 200 meters deep). Therefore, the wave measurements of these sensors are not disturbed by local effects. Therefore, each	platform	Puertos del Estado (REDEXT)	numerical models	open	1996		Balearic Island	sea_level	D032	sea level	ASLV		Real time based on station	netcdf

	buoy provides representative observations of vast coastal areas.														
81	The buoys of this network are characterized by being anchored away from the coast line to great depth (over 200 meters deep). Therefore, the wave measurements of these sensors are not disturbed by local effects. Therefore, each buoy provides representative observations of vast coastal areas.	platform	Puertos del Estado (REDEXT)	numerical models	open	1996		Balearic Island	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP		Real time based on station	netcdf
81	The buoys of this network are characterized by being anchored away from the coast line to great depth (over 200 meters deep). Therefore, the wave measurements of these sensors are not disturbed by local effects. Therefore, each buoy provides representative observations of vast coastal areas.	platform	Puertos del Estado (REDEXT)	numerical models	open	1996		Balearic Island	meteorology	M010	wind speed and direction	EWSB		Real time based on station	grib
81	The buoys of this network are characterized by being anchored away from the coast line to great depth (over 200 meters deep). Therefore, the wave measurements of these sensors are not disturbed by local effects. Therefore, each buoy provides representative observations of vast coastal areas.	platform	Puertos del Estado (REDEXT)	numerical models	open	1996		Balearic Island	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL		Real time based on station	netcdf
82	The Regional Activity Centre for Specially Protected Areas (RAC/SPA) was established by the Contracting Parties to the Barcelona Convention and its Protocols in order to assist Mediterranean countries in implementing the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean.	integrate and disseminate knowledge and expertise	RAC-SPA - Regional Activity Center for Specially Protected Areas	citizen scientist networks	open	ante 1990	ongoing	Whole basin	human_activity	H005	administrative units	ADUN			
83	The ORNL DAAC has divided RivDIS, Version 1.1, into separate station files so that users can readily find information by country, river, and station. We have also generated a set of useful plots and tables for each station.	platform	RivDIS - Global River Discharge Database	monitoring systems and cruises		ante 1990	1991	Whole basin	currents	D030	river flow and discharge	RVDS		monthly mean	vector point
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly	platform	RMN - Italian National	in situ system	open	2008	ongoing	Ligurian Sea and	meteorology	M010	wind speed and direction	EWSB			

	distributed throughout the country and mainly located within the port facilities.		Seaographic Network					North Tyrrhenian Sea							
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern and Central Tyrrhenian Sea	meteorology	M010	wind speed and direction	EWSB			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Sardinia	meteorology	M010	wind speed and direction	EWSB			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Sardinia	meteorology	M010	wind speed and direction	EWSB			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Sicily	meteorology	M010	wind speed and direction	EWSB			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Northern Adriatic	meteorology	M010	wind speed and direction	EWSB			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Adriatic Sea	meteorology	M010	wind speed and direction	EWSB			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Ionian Sea	meteorology	M010	wind speed and direction	EWSB			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Ionian Sea	meteorology	M010	wind speed and direction	EWSB			

84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Ionian Sea	meteorology	M010	wind speed and direction	EWSB			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Ligurian Sea and North Tyrrhenian Sea	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern and Central Tyrrhenian Sea	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Sardinia	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Sardinia	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Sicily	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Northern Adriatic	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Adriatic Sea	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National	in situ system	open	2008	ongoing	Western Ionian Sea	water_column_temperature_and_salinity	D025	temperature of the	TEMP			

	distributed throughout the country and mainly located within the port facilities.		Seaographic Network								water column				
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Ionian Sea	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Ionian Sea	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Ligurian Sea and North Tyrrhenian Sea	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern and Central Tyrrhenian Sea	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Sardinia	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Sardinia	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Sicily	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Northern Adriatic	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			

84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Adriatic Sea	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Ionian Sea	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Ionian Sea	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Ionian Sea	water_column_temperature_and_salinity	D025	salinity of the water column	PSAL			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Ligurian Sea and North Tyrrhenian Sea	water_column_temperature_and_salinity	D025	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern and Central Tyrrhenian Sea	meteorology	M010	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Sardinia	meteorology	M010	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Sardinia	meteorology	M010	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National	in situ system	open	2008	ongoing	Southern Sicily	meteorology	M010	alkalinity, acidity and pH of the	ALKY			

	distributed throughout the country and mainly located within the port facilities.		Seaographic Network								water column				
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Northern Adriatic	meteorology	M010	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Adriatic Sea	meteorology	M010	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Ionian Sea	meteorology	M010	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Ionian Sea	meteorology	M010	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Ionian Sea	meteorology	M010	alkalinity, acidity and pH of the water column	ALKY			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Ligurian Sea and North Tyrrhenian Sea	sea_level	D032	sea level	ASLV			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern and Central Tyrrhenian Sea	sea_level	D032	sea level	ASLV			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Sardinia	sea_level	D032	sea level	ASLV			



84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Sardinia	sea_level	D032	sea level	ASLV			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Sicily	sea_level	D032	sea level	ASLV			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Northern Adriatic	sea_level	D032	sea level	ASLV			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Adriatic Sea	sea_level	D032	sea level	ASLV			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Western Ionian Sea	sea_level	D032	sea level	ASLV			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Eastern Ionian Sea	sea_level	D032	sea level	ASLV			
84	The Italian National Seaographic Network (RMN) is composed of 36 measuring stations uniformly distributed throughout the country and mainly located within the port facilities.	platform	RMN - Italian National Seaographic Network	in situ system	open	2008	ongoing	Southern Ionian Sea	sea_level	D032	sea level	ASLV			
85	PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT	collecting data from other provider	SeaDataNet	monitoring systems and cruises	open	2006	ongoing	Whole basin	sea_level	D032	sea level	ASLV		hourly, daily, monthly mean	netcdf



85	PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT	collect ing data from other provider	SeaDataN et	monito ring sys tems and cruises	open	2006	ongoi ng	Whole basin	optical_properties	D015	transmitta nce and attenuanc e of the water column	ATTN		hourly, daily, monthl y mean	netc df
85	PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT	collect ing data from other provider	SeaDataN et	monito ring sys tems and cruises	open	2006	ongoi ng	Whole basin	biota_abundance_biomass_and _diversity	B070	phytoplank ton generic biomass in the water bodies	PNTX		hourly, daily, monthl y mean	netc df
85	PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT	collect ing data from other provider	SeaDataN et	monito ring sys tems and cruises	open	2006	ongoi ng	Whole basin	pigments	B035	chlorophyll pigment concentrati on in the water column	CPWC		hourly, daily, monthl y mean	netc df
85	PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT	collect ing data from other provider	SeaDataN et	monito ring sys tems and cruises	open	2006	ongoi ng	Whole basin	currents	D030	vertical velocity of the water column	LRZA		hourly, daily, monthl y mean	netc df
85	PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT	collect ing data from other provider	SeaDataN et	monito ring sys tems and cruises	open	2006	ongoi ng	Whole basin	water_column_temperature_and _salinity	D025	salinity of the water column	PSAL		hourly, daily, monthl y mean	netc df
85	PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT	collect ing data from other provider	SeaDataN et	monito ring sys tems and cruises	open	2006	ongoi ng	Whole basin	water_column_temperature_and _salinity	D025	temperatur e of the water column	TEMP		hourly, daily, monthl y mean	netc df
86	In our network, we bring together sediment professionals from science, administration, management, NGOs, consultancy and industry. We interact with various networks and organizations (see Organization), especially in Europe, that operate at national or international level and focus on sediment, soil and water and in	citizen scienti st netwo rks	SEDNET - Sediment Network	gis	open	2002	ongoi ng	Whole basin	rock_and_sediment_sedimentol ogy	GSE D	sediment accumulati on rate	RACC			

	fields such as science, policy making, management, industry, education etc. We welcome anyone to share and cooperate according to our vision.														
87	SESAME project was an international research project that incorporated a variety of disciplines to explore and study the ecosystem changes of the Mediterranean and the Black Seas as well as their surrounding environments.	platform	SESAME	monitoring systems and cruises	non-accessible	2006	2010	Southern European Seas	carbon_nitrogen_and_phosphorus	C005	nitrate concentration parameters in the water column	NTRA			
87	SESAME project was an international research project that incorporated a variety of disciplines to explore and study the ecosystem changes of the Mediterranean and the Black Seas as well as their surrounding environments.	platform	SESAME	monitoring systems and cruises	non-accessible	2006	2010	Southern European Seas	carbon_nitrogen_and_phosphorus	C005	phosphate concentration parameters in the water column	PHOS			
87	SESAME project was an international research project that incorporated a variety of disciplines to explore and study the ecosystem changes of the Mediterranean and the Black Seas as well as their surrounding environments.	platform	SESAME	monitoring systems and cruises	non-accessible	2006	2010	Southern European Seas	carbon_nitrogen_and_phosphorus	C005	particulate total and organic carbon concentrations in the water column	CORG			
87	SESAME project was an international research project that incorporated a variety of disciplines to explore and study the ecosystem changes of the Mediterranean and the Black Seas as well as their surrounding environments.	platform	SESAME	monitoring systems and cruises	non-accessible	2006	2010	Southern European Seas	carbon_nitrogen_and_phosphorus	C005	carbon concentrations in sediment	CBSD			
87	SESAME project was an international research project that incorporated a variety of disciplines to explore and study the ecosystem changes of the Mediterranean and the Black Seas as well as their surrounding environments.	platform	SESAME	monitoring systems and cruises	non-accessible	2006	2010	Southern European Seas	currents	D030	river flow and discharge	RVDS			
87	SESAME project was an international research project that incorporated a variety of disciplines to explore and study the ecosystem changes of the Mediterranean and the Black Seas as well as their surrounding environments.	platform	SESAME	monitoring systems and cruises	non-accessible	2006	2010	Southern European Seas	water_column_temperature_and_salinity	D025	temperature of the water column	TEMP			
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER	platform	SIH - Système d'Informati	monitoring system	open	2002	ongoing	Gulf of Lion	fisheries	H004	fishery characterization	GP087			netcdf

	perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.		ons Halieutiques	s and cruises										
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Gulf of Lion	human_activity	H005	transport activity	TRAN		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Gulf of Lion	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Gulf of Lion	birds_mammals_and_reptiles	B015	cetacean abundance	CETA		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Gulf of Lion	currents	D030	horizontal velocity of the water column (currents)	RFVL		netcdf

	IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.													
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Gulf of Lion	biota_abundance_biomass_and_diversity	B070	phytoplankton taxonomic biomass in water bodies	CATX		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Gulf of Lion	biota_abundance_biomass_and_diversity	B070	zooplankton dry weight biomass per unit volume of the water column	MSBD		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Gulf of Lion	anthropogenic_contamination	H001	litter abundance and type	LITT		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Gulf of Lion	rock_and_sediment_sedimentology	GSED	sedimentary structure	SSTR		netcdf

	allowing their sustainable exploitation.														
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Ligurian Sea and North Tyrrhenian Sea	fisheries	H004	fishery characterisation	GP087			netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Ligurian Sea and North Tyrrhenian Sea	human_activity	H005	transport activity	TRAN			netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Ligurian Sea and North Tyrrhenian Sea	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN			netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Ligurian Sea and North Tyrrhenian Sea	birds_mammals_and_reptiles	B015	cetacean abundance	CETA			netcdf

88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Ligurian Sea and North Tyrrhenian Sea	currents	D030	horizontal velocity of the water column (currents)	RFVL			netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Ligurian Sea and North Tyrrhenian Sea	biota_abundance_biomass_and_diversity	B070	phytoplankton taxonomic biomass in water bodies	CATX			netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Ligurian Sea and North Tyrrhenian Sea	biota_abundance_biomass_and_diversity	B070	zooplankton dry weight biomass per unit volume of the water column	MSBD			netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2002	ongoing	Ligurian Sea and North Tyrrhenian Sea	anthropogenic_contamination	H001	litter abundance and type	LITT			netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational	platform	SIH - Système d'Informations	monitoring system	open	2002	ongoing	Ligurian Sea and North	rock_and_sediment_sedimentology	GSED	sedimentary structure	SSTR			netcdf

	observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.		Halieutiques	s and cruises				Tyrrhenian Sea						
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	fisheries	H004	fishery characterization	GP087		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	human_activity	H005	transport activity	TRAN		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	birds_mammals_and_reptiles	B015	cetacean abundance	CETA		netcdf

	aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.													
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	currents	D030	horizontal velocity of the water column (currents)	RFVL		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	biota_abundance_biomass_and_diversity	B070	phytoplankton taxonomic biomass in water bodies	CATX		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	biota_abundance_biomass_and_diversity	B070	zooplankton dry weight biomass per unit volume of the water column	MSBD		netcdf
88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries ressource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	anthropogenic_contamination	H001	litter abundance and type	LITT		netcdf



88	The SIH « Système d'Informations Halieutiques/Fisheries Information System » forms an IFREMER perennial and operational observation network of fisheries resource and their associated uses. The SIH squares with one of IFREMER's public service missions, aiming to know, assess, enhance ocean resources' value, and allowing their sustainable exploitation.	platform	SIH - Système d'Informations Halieutiques	monitoring systems and cruises	open	2009	ongoing	Corsica	rock_and_sediment_sedimentology	GSED	sedimentary structure	SSTR			netcdf
89	The SKIRON modeling system is an integrated limited area model in system developed from the AM&WFG. It is in use in approximately 20 research institutes and weather services worldwide.	platform	SKIRON	numerical models	open	1992	ongoing	Greece	meteorology	M010	wind speed and direction	EWSB			
90	SeaLifeBase is a global online database of information about marine life. It aims to provide key information on the taxonomy, distribution and ecology of all marine species in the world apart from finfish.	platform	SLBase-001 - SeaLifeBase	monitoring systems and cruises	open	2008	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			ascii
91	This dataset shows the known locations of sea turtle nesting sites, for all seven species: hawksbill turtle ( <i>Eretmochelys imbricata</i> ), Kemp's ridley turtle ( <i>Lepidochelys kempii</i> ), leatherback turtle ( <i>Dermochelys coriacea</i> ), green turtle ( <i>Chelonia mydas</i> ), loggerhead turtle ( <i>Caretta caretta</i> ), olive ridley turtle ( <i>Lepidochelys olivacea</i> ), and flatback turtle ( <i>Natator depressus</i> ).	platform	SWOT-001 - Global Distribution of Sea Turtle Nesting Sites	gis	open	1993	1999	Whole basin	habitat	B050	habitat extent	HBEX			vector shapefile
92	This dataset shows the known locations of sea turtle nesting sites, for all seven species: hawksbill turtle ( <i>Eretmochelys imbricata</i> ), Kemp's ridley turtle ( <i>Lepidochelys kempii</i> ), leatherback turtle ( <i>Dermochelys coriacea</i> ), green turtle ( <i>Chelonia mydas</i> ), loggerhead turtle ( <i>Caretta caretta</i> ), olive ridley turtle ( <i>Lepidochelys olivacea</i> ), and flatback turtle ( <i>Natator depressus</i> ).	platform	SWOT-002 - Global Distributions of Habitat Suitability for Sea Turtle Nesting Sites	gis	open	1999	2012	Whole basin	habitat	B050	habitat extent	HBEX			vector shapefile
93	SWOT's interactive map hosted by OBIS-SEAMAP, represents the individual work of hundreds SWOT Team members around the world.	integrate and disseminate	SWOT-003 - Global Distribution	gis	open	ante 1990	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			vector shapefile

		knowledge and expertise	n of Sea Turtles												
94	These maps are the result of an unprecedented effort by Nature Conservancy scientists, in collaboration with governments, scientists and conservation organizations around the world - over 80 global maps describing the state of terrestrial, freshwater and marine habitats.	platform	TNC-002 - Atlas of Global Conservation	gis	open	ante 1990	ongoing	Whole basin	positioning_references_and_data_management	Z005	biogeographic classification	#N/D			vector shapefile
95	The Ocean Wealth online mapping tool, or mapping portal, contains a robust data-viewing framework with interactive web apps designed to visualize ecosystem services (i.e. the value of coral reefs based on tourism dollars generated by visitors) represented by important coastal habitats or modeling scenarios. Mapping Ocean Wealth aggregates existing science and uses tools and maps to make science more accessible to audiences at all levels.	platform	TNC-004 - Mapping Ocean Wealth	gis	open	ante 1990	ongoing	Whole basin	positioning_references_and_data_management	Z005	biogeographic classification	#N/D			vector shapefile
96	This dataset shows the global distribution of over 1,300 estuaries, including some lagoon systems and fjords.	platform	UBC-003 - Global Estuary Database	geographical	open	2003	2003	Whole basin	positioning_references_and_data_management	Z005	biogeographic classification	#N/D			vector shapefile
97	This dataset shows over 14,000 large seamounts identified from a mid-resolution bathymetric map, using methods outlined in Kitchingman and Lai (2004).	platform	UBC-004 - Large Seamount Areas	geographical	open	2004	2004	Whole basin	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN			vector shapefile
98	The Sea Around Us Project is a scientific collaboration between the University of British Columbia and the Pew Environment Group that began in July 1999.	integrate and disseminate knowledge and expertise	UBC-009 - Sea around us	geographical	open	ante 1990	ongoing	Whole basin	fisheries	H004	fishing by-catch	GP080			ascii

99	The WPD, the World Database of all Recent sponges ever described, is part of the World Register of Marine Species (WoRMS), a global initiative to arrive at a register of all marine organisms.	integrate and disseminate knowledge and expertise	VLIZ-006 - World Porifera Database (sponges)	geographical	open	2002	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	fauna abundance per unit area of the bed	FABD			ascii
100	The VLIZ Maritime Boundaries Geodatabase as a biogeographical tool.	platform	VLIZ-007 - Longhurst Biogeographical Provinces	gis	open	2006	2006	Whole basin	positioning_references_and_data_management	Z005	biogeographic classification	#N/D			vector shapefile
101	The World Register of Introduced Marine Species (WRIMS) records which marine species in the World Register of Marine species (WoRMS) have been introduced deliberately or accidentally by human activities to geographic areas outside their native range.	platform	VLIZ-008 - World Register of Introduced Marine Species (WRIMS)	geographical	open	2009	2014	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			ascii
102	SeagrassNet is an expanding, worldwide ecological monitoring program that investigates and documents the status of seagrass resources and the threats to this important and imperilled marine ecosystem.	platform	WaDNR-001 - Seagrass Net: Global Seagrass Monitoring Network	monitoring systems and cruises	open	2001	2013	Whole basin	macroalgae_and_seagrass	B055	macroalgae and seagrass taxonomy-related counts	ACNT			ascii
103	This dataset contains the global distributions of habitat suitability for seven suborders of cold-water octocorals (Octocorallia) found deeper than 50 m: Alcyoniina, Calcaxonia, Holaxonia, Scleraxonia, Sessiliflorae, Stolonifera, and Subselliiflorae.	platform	WCMC-001 - Global Distributions of Habitat Suitability for Cold-Water Octocorals	gis	open	ante 1990	2014	Whole basin	habitat	B050	habitat extent	HBEX	6 raster		vector shapefile
104	This dataset shows the global distribution of turtle species richness.	platform	WCMC-003 - Global Sea Turtle Species Richness	gis	open	2002	2002	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			vector shapefile

105	This dataset shows the known locations of sea turtle feeding sites, for five of the seven species: hawksbill turtle ( <i>Eretmochelys imbricata</i> ), leatherback turtle ( <i>Dermochelys coriacea</i> ), green turtle ( <i>Chelonia mydas</i> ), loggerhead turtle ( <i>Caretta caretta</i> ), and olive ridley turtle ( <i>Lepidochelys olivacea</i> ).	platform	WCMC-006 - Global Distribution of Sea Turtle Feeding Sites	gis	open	1993	1999	Whole basin	habitat	B050	habitat extent	HBEX			vector or shapefile
106	This dataset shows the known locations of sea turtle nesting sites, for all seven species: hawksbill turtle ( <i>Eretmochelys imbricata</i> ), Kemp's ridley turtle ( <i>Lepidochelys kempii</i> ), leatherback turtle ( <i>Dermochelys coriacea</i> ), green turtle ( <i>Chelonia mydas</i> ), loggerhead turtle ( <i>Caretta caretta</i> ), olive ridley turtle ( <i>Lepidochelys olivacea</i> ), and flatback turtle ( <i>Natator depressus</i> ).	platform	WCMC-007 - Global Distribution of Sea Turtle Nesting Sites	gis	open	ante 1990	1993	Whole basin	habitat	B050	habitat extent	HBEX			vector or shapefile
107	This dataset shows the global distribution of seagrass species richness, or global seagrass biodiversity.	platform	WCMC-013-014 - Global Distribution of Seagrasses	gis	open	ante 1990	2015	Whole basin	habitat	B050	habitat extent	HBEX			vector or shapefile
108	This dataset shows the global distribution of seagrass species richness, or global seagrass biodiversity.	platform	WCMC-015 - Global Seagrass Species Richness	gis	open	2003	2003	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			vector or shapefile
109	The dataset shows the global patterns of marine biodiversity (species richness) across 13 major species groups ranging from zooplankton to marine mammals (11,567 species in total).	platform	WCMC-019 - Global Patterns of Marine Biodiversity	gis	open		2009	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			vector or shapefile
110	This dataset contains the global distributions of habitat suitability for Stony Corals on Seamounts.	platform	WCMC-024 - Global Distribution of Habitat Suitability for Stony Corals on Seamounts	gis	open	ante 1990	2009	Whole basin	habitat	B050	habitat extent	HBEX			vector or shapefile

111	This dataset displays the extent of our knowledge regarding the distribution of saltmarsh globally, drawing from occurrence data (surveyed and/or remotely sensed).	platform	WCMC-027 - Global Distribution of Saltmarsh	geographical	open	ante 1990	2015	Whole basin	habitat	B050	habitat extent	HBEX			vector point
112	This dataset displays the extent of our knowledge regarding the distribution of saltmarsh globally, drawing from occurrence data (surveyed and/or remotely sensed).	platform	WCMC-027 - Global Distribution of Saltmarsh	geographical	open	ante 1990	2015	Whole basin	habitat	B050	habitat extent	HBEX			vector shapefile
113	This dataset shows the spatial distribution of 'Critical Habitat' (CH), as defined by the International Finance Corporation's Performance Standard 6 (IFC-PS6)	platform	WCMC-027 - Global Map of Marine Critical Habitat as per IFC PS6	gis	open	2015	2015	Whole basin	habitat	B050	habitat characterisation	HBCH			vector shapefile
114	Natural capital comprises both ecosystem assets (such as freshwater) and natural resources (such as fossil fuel deposits). This dataset shows the global patterns of ecosystem assets, in the marine, terrestrial and freshwater realms.	platform	WCMC-032 - A Global Map of Natural Capital	geographical	open	2014	2014	Whole basin	positioning_references_and_data_management	Z005	unspecified	ZZZZ			vector point
115	This dataset combines two separately published datasets: the "Marine Ecoregions Of the World" (MEOW; 2007) and the "Pelagic Provinces Of the World" (PPOW; 2012).	platform	WCMC-036 - Marine Ecoregions and Pelagic Provinces of the World	geographical	open	2007	2007	Whole basin	habitat	B050	habitat extent	HBEX			vector shapefile
116	This dataset combines two separately published datasets: the "Marine Ecoregions Of the World" (MEOW; 2007) and the "Pelagic Provinces Of the World" (PPOW; 2012).	platform	WCMC-036 - Marine Ecoregions and Pelagic Provinces of the World	geographical	open	2012	2012	Whole basin	habitat	B050	habitat extent	HBEX			vector shapefile
118	Species+ , developed by UNEP-WCMC and the CITES Secretariat, is a website designed to assist Parties with implementing CITES, CMS and other multilateral environmental agreements (MEAs).	integrate and disseminate	WCMC-037 - Species+	geographical	open	ante 1990	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV			ascii

		knowledge and expertise												
119	The Ocean Data Viewer provides easy access to a range of datasets that are useful for informing decisions regarding the conservation of marine and coastal biodiversity.	collecting data from other provider	WCMC-039 - Ocean Data Viewer (ODV)	gis	open	ante 1990	2014	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV		vector shapefile
120	The dataset shows the global distribution of terrestrial and marine protected areas	platform	WCMC-16 - World Database on Protected Areas	gis	open	ante 1990	ongoing	Whole basin	habitat	B050	habitat characterisation	HBCH		vector shapefile
121	The World Register of Marine Species aims to provide the most authoritative list of names of all marine species globally, ever published.	collecting data from other provider	WoRMS - World Register of Marine Species	geographical	open	2000	ongoing	Whole basin	biota_abundance_biomass_and_diversity	B070	biodiversity indices	BDRV		ascii
122	This dataset contains the global distributions of habitat suitability for seven suborders of cold-water octocorals (Octocorallia) found deeper than 50 m: Alcyoniina, Calcaxonia, Holaxonia, Scleraxonia, Sessiliflorae, Stolonifera, and Subselliflorae.	platform	ZSL-001 - Global Distributions of Habitat Suitability for Cold-Water Octocorals	gis	open	ante 1990	2012	Whole basin	habitat	B050	habitat extent	HBEX		vector shapefile
122	This dataset shows the global distribution of seamounts and knolls identified using global bathymetric data at 30 arc-sec resolution.	platform	ZSL-002 - Global Distribution of Seamounts and Knolls	geographical	open		2011	Whole basin	terrestrial_including_bathymetry_and_under_sea_features	T001	bathymetry, elevation and undersea features	MBAN		vector shapefile

## Annex 2

Data_Typology	Data_Typology_Code_P03	N of parameters			
water_column_temperature_and_s	D025	37	0,16	B050	Habitat
habitat	B050	30	0,13	D025	water_column_temperature_and_s
biota_abundance_biomass_and_div	B070	24	0,10	B070	biota_abundance_biomass_and_d
currents	D030	21	0,09	M010	meteorology
meteorology	M010	21	0,09	D032	sea_level
sea_level	D032	13	0,05	B020	Fish
fish	B020	12	0,05	D030	currents
waves	D034	10	0,04	H005	human_activity
human_activity	H005	10	0,04	B035	pigments
pigments	B035	8	0,03	T001	terrestrial_including_bathymetry_
terrestrial_including_bathymetry_a	T001	8	0,03	D015	optical_properties
optical_properties	D015	6	0,03	H004	Fisheries
anthropogenic_contamination	H001	6	0,03	Z005	positioning_references_and_data
fisheries	H004	6	0,03	B015	birds_mammals_and_reptiles
positioning_references_and_data_r	Z005	6	0,03	D034	waves
birds_mammals_and_reptiles	B015	4	0,02	G015	suspended_particulate_material
suspended_particulate_material	G015	4	0,02	H001	anthropogenic_contamination
macroalgae_and_seagrass	B055	2	0,008	C005	carbon_nitrogen_and_phosphoru
carbon_nitrogen_and_phosphorus	C005	2	0,008	B055	macroalgae_and_seagrass
construction_and_structures	H002	2	0,008	H002	construction_and_structures
EARTH_SCIENCE_Oceans_Marine_v	VOLC	2	0,008	VOLC	Earth_science_oceans_marine_vo
dissolved_gases	C015	1	0,004	G060	sedimentation_and_erosion_proce
sedimentation_and_erosion_proce	G060	1	0,004	GSED	rock_and_sediment_sedimentolog
rock_and_sediment_sedimentology	GSED	1	0,004		

237



203

		Whole basin	Western Sardinia	Western Ionian Sea	Southern Sicily	Southern Ionian Sea	Southern European Seas	Southern and Central Tyrrhenian Sea	Southern Adriatic Sea	Northern Adriatic	Ligurian Sea and North Tyrrhenian Sea	Gulf of Lion	Eastern Sardinia	Eastern Ionian Sea	Corsica	Coastal water EU member states	Balearic Island
B015	birds_mammals_and_reptiles	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	1,00	0,75	1,00	1,00
B020	fish	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,88	0,83	1,00	1,00	0,83	1,00	0,96
B035	pigments	0,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,92	1,00	1,00	1,00	1,00	0,83	0,92
B050	habitat	0,19	1,00	1,00	1,00	1,00	1,00	1,00	0,97	0,94	1,00	1,00	1,00	1,00	1,00	0,92	0,97
B055	macroalgae_and_seagrass	0,60	1,00	1,00	1,00	1,00	1,00	1,00	0,80	0,80	1,00	1,00	1,00	1,00	1,00	0,80	1,00
B070	biota_abundance_biomass_and_diversity	0,43	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,93	0,93	1,00	1,00	0,93	0,83	0,98
C005	carbon_nitrogen_and_phosphorus	0,84	1,00	1,00	1,00	1,00	0,84	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,53	0,79
C015	dissolved_gases	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,50
D015	optical_properties	0,14	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,86	1,00	1,00	1,00	1,00	1,00	1,00
D025	water_column_temperature_and_salinity	0,56	0,96	0,96	0,96	0,96	0,98	0,96	0,96	0,96	0,91	1,00	0,96	0,96	1,00	0,89	0,96
D030	currents	0,44	1,00	1,00	1,00	1,00	0,94	1,00	1,00	0,94	0,94	0,94	1,00	1,00	0,94	0,89	0,94
D032	sea_level	0,50	0,96	0,96	0,96	0,96	1,00	0,96	0,96	0,96	0,96	1,00	0,96	0,96	1,00	0,96	0,92
D034	waves	0,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,67
G015	suspended_particulate_material	0,20	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,80	1,00
G040	rock_and_sediment_physical_properties	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,00	1,00
G045	rock_and_sediment_lithology_and_mineralogy	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	1,00	1,00	1,00	1,00	0,50
G060	sedimentation_and_erosion_processes	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	1,00
GSED	rock_and_sediment_sedimentology	0,80	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,80	0,60	1,00	1,00	1,00	0,80	1,00
H001	anthropogenic_contamination	0,90	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,80	0,95	1,00	1,00	0,80	0,55	1,00
H002	construction_and_structures	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	0,75	1,00
H004	fisheries	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,83	0,83	1,00	1,00	0,83	1,00	1,00
H005	human_activity	0,63	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,85	0,74	1,00	1,00	0,81	0,96	1,00
M010	meteorology	0,60	0,96	0,96	0,96	0,96	1,00	0,96	0,96	0,96	0,96	0,98	0,96	0,96	0,96	0,98	0,81
T001	terrestrial_including_bathymetry_and_under_sea_features	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,93	0,86	1,00	1,00	0,93	0,86	0,93
VOLC	Earth_science_oceans_marine_volcanism	0,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Z005	positioning_references_and_data_management	0,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00

	maximum	gap = 1
	high	gap = 0,8 - 1
	medium	gap = 0,5 - 0,8
	minimum	gap = < 0,5



		Western Sardinia	Western Ionian Sea	Southern Sicily	Southern Ionian Sea	Southern European Seas	Southern and Central Tyrrhenian Sea	Eastern Sardinia	Eastern Ionian Sea	Southern Adriatic Sea	Northern Adriatic	Balearic Island	Corsica	Gulf of Lion	Ligurian Sea and North Tyrrhenian Sea	Coastal water EU member states	Whole basin	
B015	birds_mammals_and_reptiles	0	0	0	0	0	0	0	0	0	0	0	4	4	4	0	4	
B020	Fish	0	0	0	0	0	0	0	0	0	0	1	4	4	3	0	12	
B035	pigments	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	8	
B050	Habitat	0	0	0	0	0	0	0	0	1	2	1	0	0	0	3	29	
B055	macroalgae_and_seagrass	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	2	
B070	biota_abundance_biomass_and_diversity	0	0	0	0	0	0	0	0	0	0	1	3	3	3	7	23	
C005	carbon_nitrogen_and_phosphorus	0	0	0	0	3	0	0	0	0	0	4	0	0	0	9	3	
C015	dissolved_gases	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	
D015	optical_properties	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	
D025	water_column_temperature_and_salinity	2	2	2	2	1	2	2	2	2	2	2	0	0	5	6	25	
D030	currents	0	0	0	0	1	0	0	0	0	1	1	1	1	1	2	10	
D032	sea_level	1	1	1	1	0	1	1	1	1	1	2	0	0	1	1	13	
D034	waves	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	
G015	suspended_particulate_material	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	
G040	rock_and_sediment_physical_properties	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
G045	rock_and_sediment_lithology_and_mineralogy	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	
G060	sedimentation_and_erosion_processes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
GSED	rock_and_sediment_sedimentology	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	
H001	anthropogenic_contamination	0	0	0	0	0	0	0	0	0	0	0	8	2	8	18	4	
H002	construction_and_structures	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	
H004	Fisheries	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	6	
H005	human_activity	0	0	0	0	0	0	0	0	0	0	0	5	7	4	1	10	
M010	meteorology	2	2	2	2	0	2	2	2	2	2	10	1	1	2	0	21	
T001	terrestrial_including_bathymetry_and_under_sea_features	0	0	0	0	0	0	0	0	0	0	1	1	2	1	2	7	
VOLC	Earth_science_oceans_marine_volcanism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Z005	positioning_references_and_data_management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
		5	5	5	5	5	5	5	5	7	9	28	29	30	37	58	203	441
		0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,02	0,02	0,06	0,07	0,07	0,08	0,13	0,46	1