

# SEANOE

a publisher of scientific data in the field of marine sciences

## About SEANOE

SEANOE (<http://www.seanoe.org>) is a publisher of scientific data in the field of marine sciences. It is operated by Sismer.

Data published by SEANOE are available for free. They can be used in accordance with the terms of the Creative Commons license selected by the author of the data. SEANOE contributes to Open Access / Open Science movement for a free access for everyone to all scientific data financed by public funds for the benefit of research.

An embargo limited to 2 years on a set of data is possible; for example to restrict access to data of a publication under scientific review.

Each data set published by SEANOE has a DOI which enables citation in a publication in a reliable and sustainable way.

## SEANOE DOI Example

The 2014 Greenland-Portugal GEOVIDE water masses data (GO-SHIP A25 and GEOTRACES GA01)

Date: 2018-04-12  
Temporal extent: 2014-05-15-2014-06-30  
Author(s): Garcia-BaÑez Maribel, Pérez F, Lherminier Pascale, Zunino Rodriguez Patricia, Mercier Hérif, Tréguer Paul

Abstract: The GEOVIDE cruise was carried out coast to coast between Portugal and Newfoundland via the south tip of Greenland following the OVIDE line in the western part and crossing the Labrador Sea in the western part. The classical hydrographic rosette was cast 163 times at 78 different geographical positions called stations. While the CTD-02 probe acquired continuous profiles of the physical variables (pressure, temperature, salinity and dissolved oxygen), 22 Niskin bottles were closed at different levels during the upcast to provide samples for biogeochemical analysis. After calibration, we find precision for pressure, temperature, salinity and dissolved oxygen that fit the GO-SHIP international quality requirements. In parallel, but not simultaneously, a trace-metal rosette (TMR) was cast 53 times, also acquiring profiles of physical variables, and equipped with 24 Gyrlo bottles adapted for the sampling of trace metals. Depending on the number of operations, stations were identified as "Short" (one single CTD cast), "Large" (3 CTD casts), "Large" (up to 6) and "Super" (up to 11). All along the track of the ship, current magnitude and direction was measured by Ship-Acoustic Doppler Current Profilers, down to 1000m depth. This dataset reports for the water mass proportions (from 0 to 1, i.e. from 0 to 100%) for the classical rosette for the following water masses: East North Atlantic Central Water of 10°C (ENAC10) and of 12°C (ENAC12); Subarctic Mode Water of 8°C (SPM8) and of 10°C (SPM10); Labrador Sea Water (LSW); Subarctic Intermediate Water of 6°C (SAIW6) and of 4°C (SAIW4); Mediterranean Water (MW); Iceland-Scotland Overflow Water (ISOW); Denmark Strait Overflow Water (DSOW); Polar Intermediate Water (PIW); and North-East Atlantic Deep Water (NEADWL). The dataset also contains the changes in oxygen due to the remineralisation of organic matter (DO2inc) in µmol kg<sup>-1</sup>.

File	Size	Format	Processing	Access
Water masses in the 2014 GEOVIDE cruise	207 KB	CSV	Processed data	Open

## SEANOE highlights

SEANOE offers a solution for articles publisher that *strongly recommend* to cite datasets in articles. SEANOE is recommended by Elsevier, PLOS, ...

SEANOE offers a fast responding service : if a dataset is well described, it should get a DOI within 24 hours.

The Landing Pages are optimized for a better visibility on Google and Google Dataset Search.

A survey of dataset DOI citations in articles is performed with Google Scholar. Article references are displayed on the dataset Landing page and the couples Dataset DOI / Article DOI are provided to Datacite.

A system of fragment (#) allows to manage and cite a specific versions within a single global DOI :

Argo (2018). Argo float data and metadata from Global Data Assembly Centre (Argo GDAC) - Snapshot of Argo GDAC of august 8st 2018. <https://doi.org/10.17882/42182#58012>

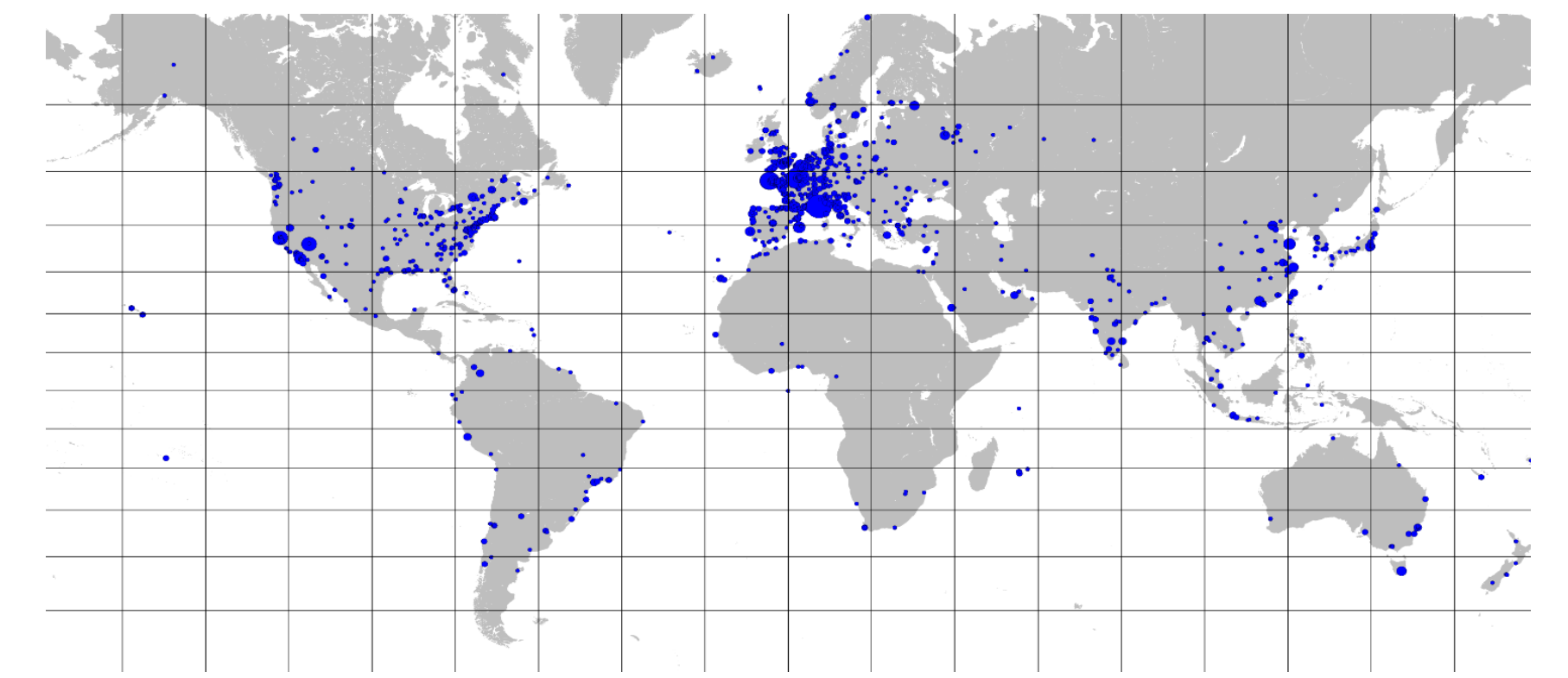
IMDIS 2018 – Barcelona  
5-7 November 2018  
Fred Merceur<sup>1</sup>, Michèle Fichaut<sup>1</sup>  
1: Ifremer, France

## Assessment of 3 years management of SEANOE

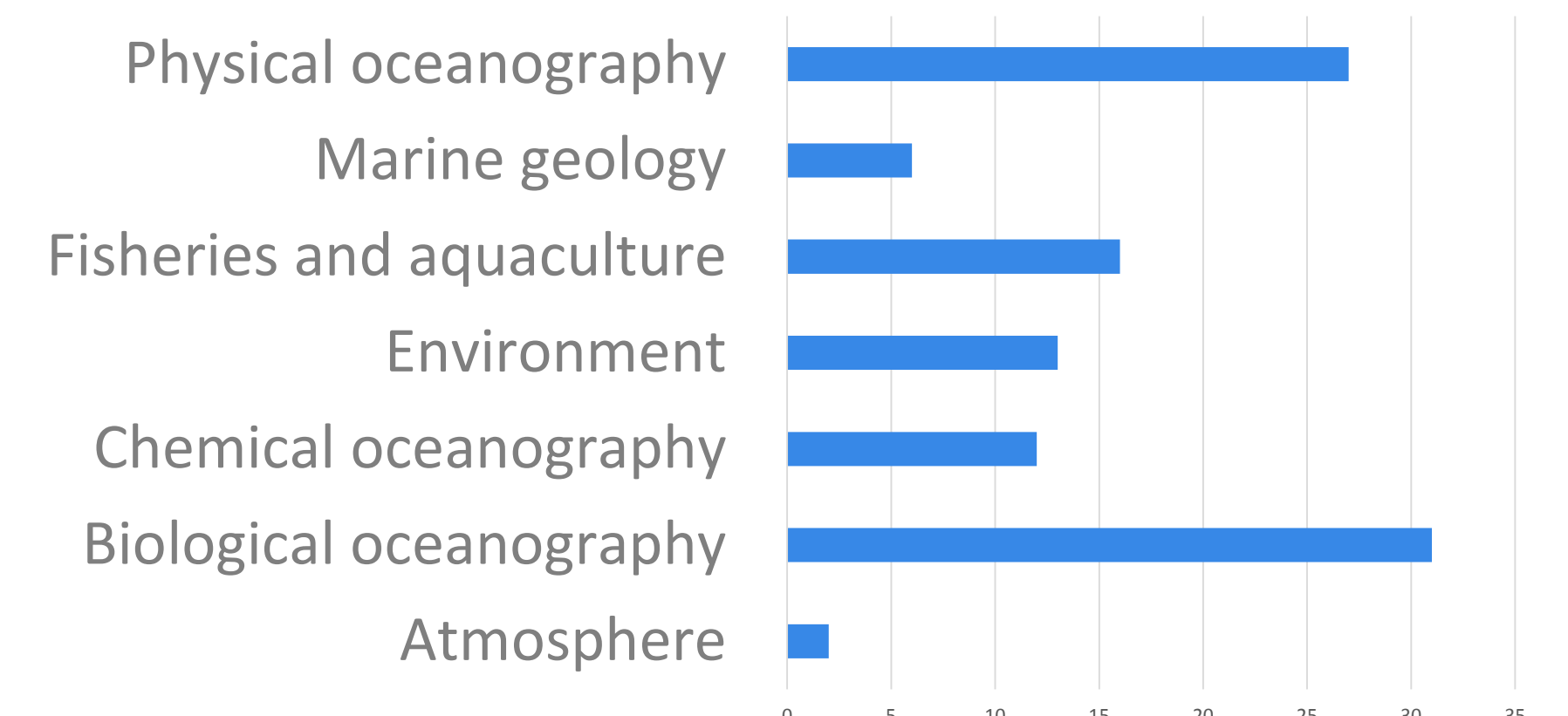
### Key points

- 400 datasets have been published since the launch of SEANOE (2015).
- Many scientists are not used to publish and share the data associated to articles: when authors of scientific papers at Ifremer are suggested to publish their publications' datasets, the positive return is less than 1%.
- Since 2018, authors, by themselves, publish around one dataset per week.
- Most of these spontaneous publications are associated to the increasing number of publishers (e.g : PLOS ONE, Elsevier, ...) requiring that the data used in a publication is cited and freely accessible online.
- Most authors are happy with SEANOE. They highlight the simplicity and the speed of the publication process as well as the quality of Landing Pages.
- Searches in Google are at the origin of most of the dataset downloads.

### Dataset files downloads in 2017



### Dataset's disciplines



## Towards a linked information architecture



1, 2 : SEANOE is optimized for Google and Google Dataset Search

3 : SEANOE datasets records are indexed by OpenAire and Eudat B2FIND through the OAI-PMH protocol

4, 5, 6, 7 : bi-directional links with publishers such as Elsevier and Taylor & Francis via Dacite and Scholix.

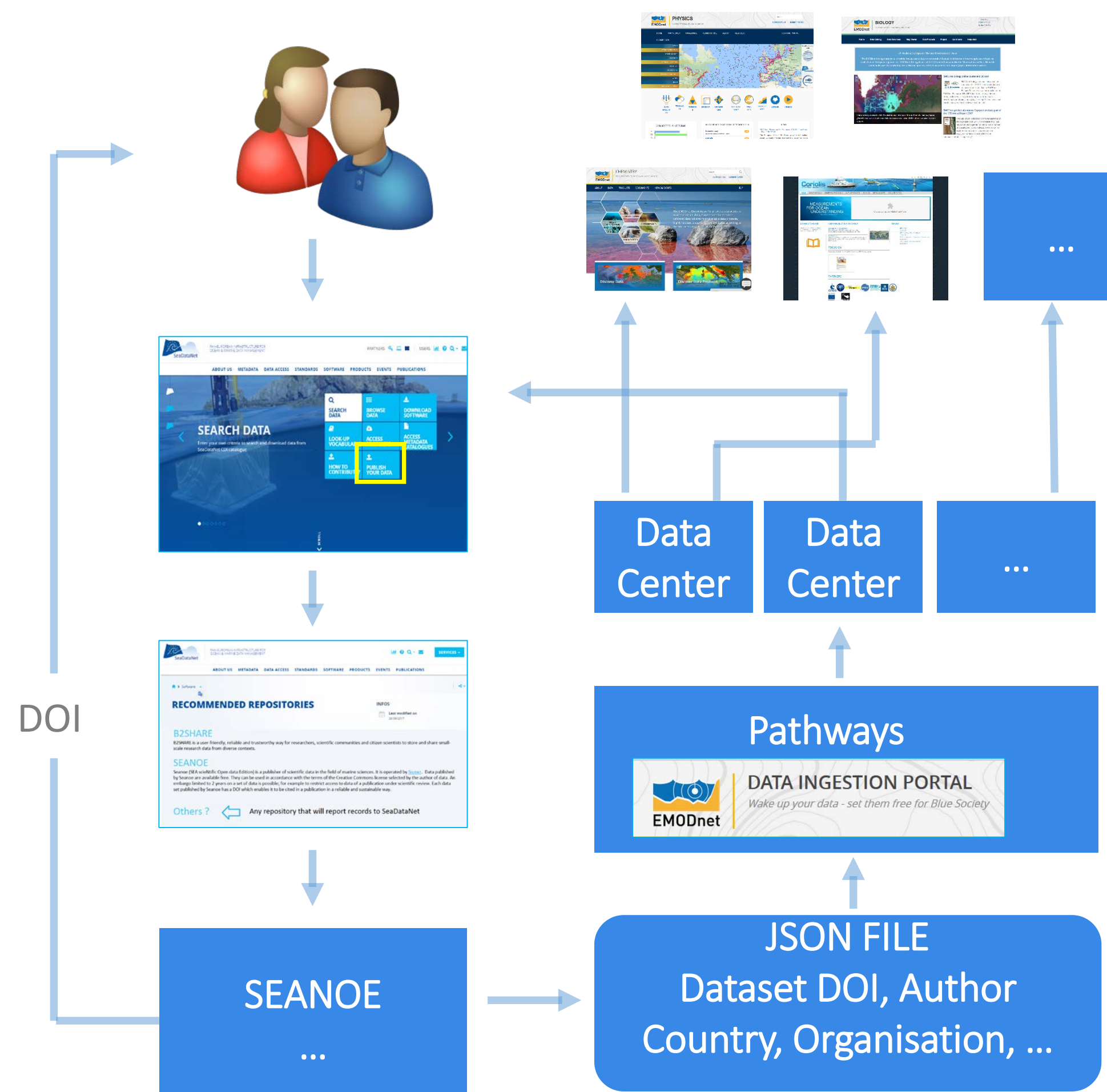
8 : bi-directional links with Authors Orcid through Datacite

9 : bi-directional links with French Oceanographic cruises DOI (e.g : <https://doi.org/10.17882/56665>)

10 : bi-directional links with IGSN (e.g : <https://doi.org/10.17882/56031>)

11, 12 : bi-directional links with Archiver and Ifremer's people finder

## Duplication of SEANOE datasets in EMODnet Ingestion



The automatic duplication of the data published in SEANOE to EMODnet data ingestion portal is under study. It would allow reporting to Marine European data centers the existence and the availability of datasets published in SEANOE. Then the data centers will be able to ingest them into other international databases such as SeaDataNet and EMODnet thematic ones, if the dataset falls into their domains of interest.

This project is facing to a license issue. Most of datasets published in SEANOE are available under the CC-BY creative commons license. This means that the authors ask to be cited when the dataset is used. This may not be compatible with systems such as SeaDataNet that do not handle metadata on authors, but only on originator organisations.