

A renewed GeoNetwork-based data catalogue for the Spanish NODC/CEDO

E Tel (1), L Sanz-Pinilla, G Gonzalez-Nuevo, M Ruiz-Villarreal.
(1). Contact: elena.tel.@ieo.csic.es



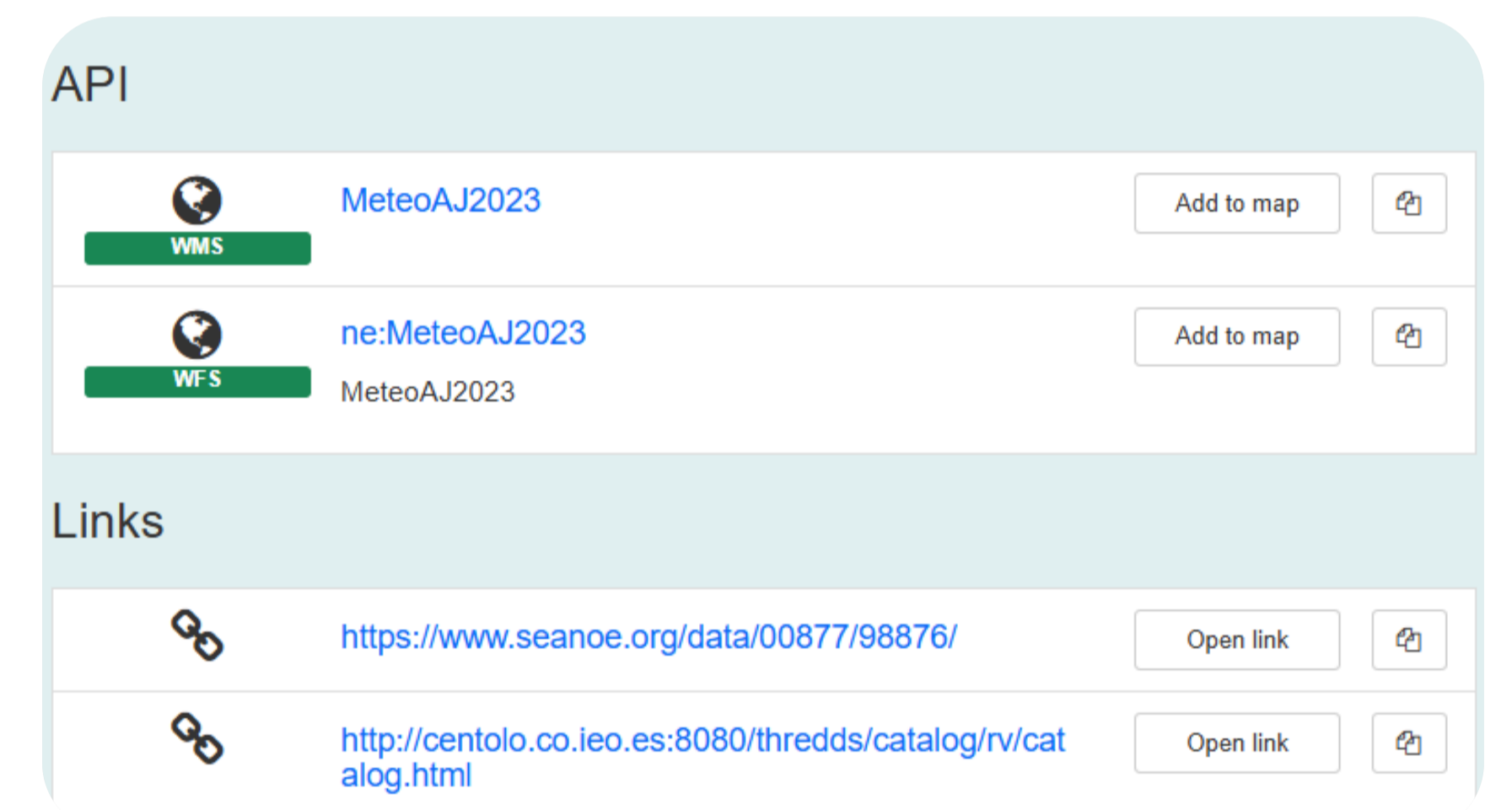
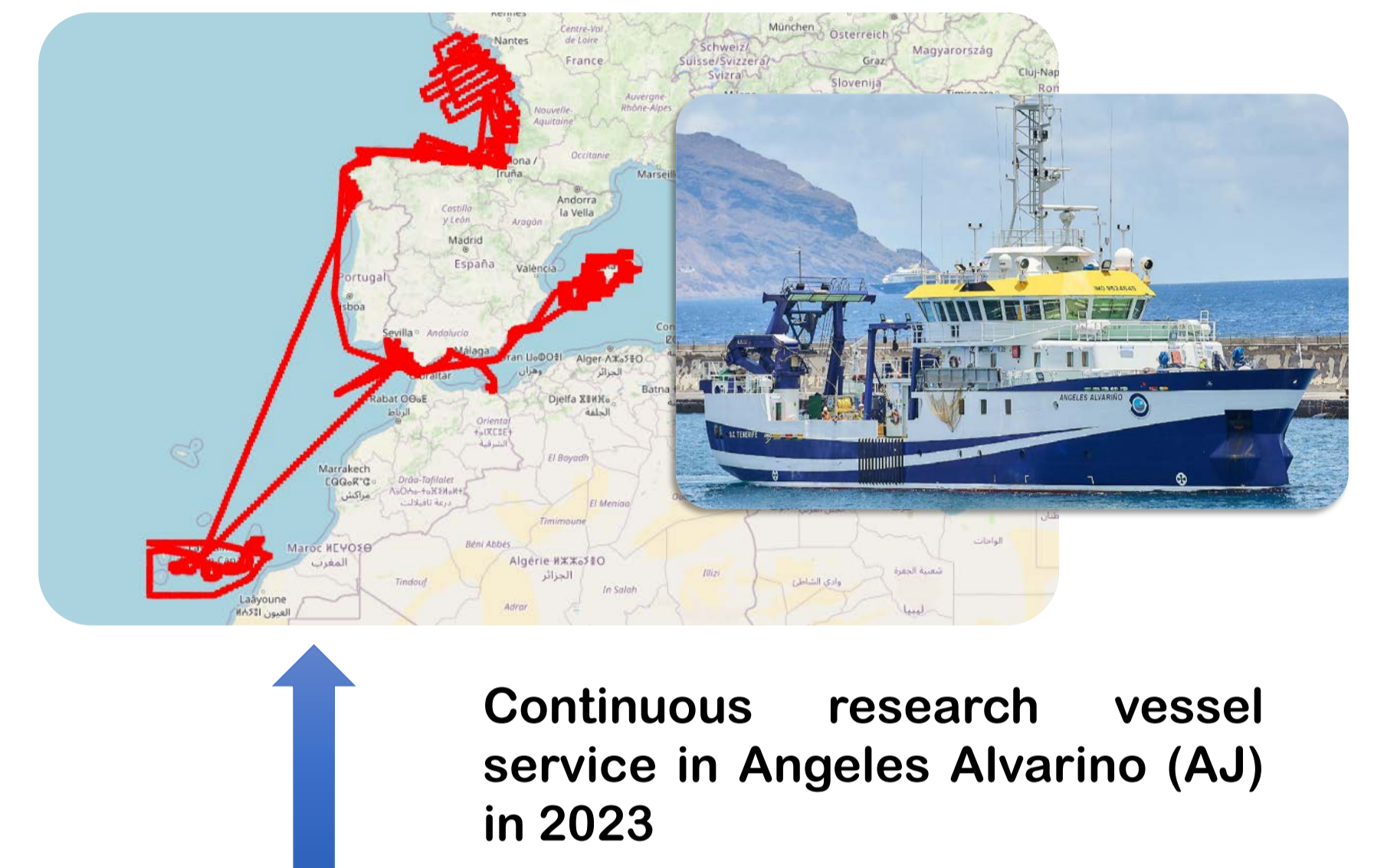
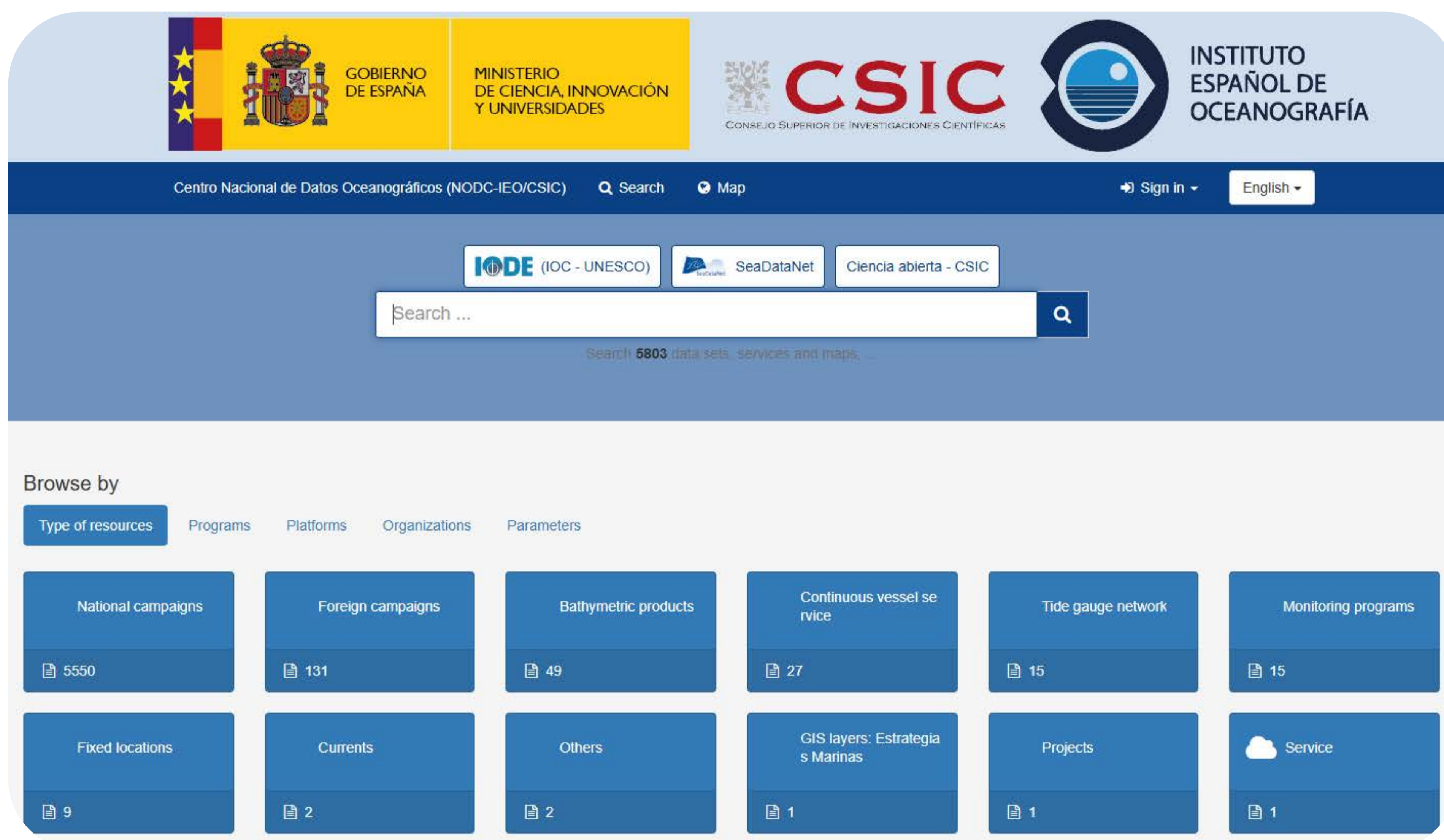
The Spanish Institute of Oceanography (IEO) has transitioned from printed catalogues to the current digital services to better serve its different users.

In 2016, the first catalogue using GeoNetwork technology was implemented, which was recently upgraded to 4.2, enabling automated connections between different catalogues and links to SeaDataNet for data access.

<http://nodc.ieo.es:8080/geonetwork>

Since the beginning of the IEO research activity in 1914, more than 5500 national surveys have been catalogued. It also provides access to information from fixed stations and systematic monitoring programs. Nowadays, these observations include:

- Temperature time series from Marine Aquaculture Facilities.
- Moorings.
- Tide-gauge data.
- Ocean-meteorological buoys.
- Automatic sampling systems onboard of research vessels.

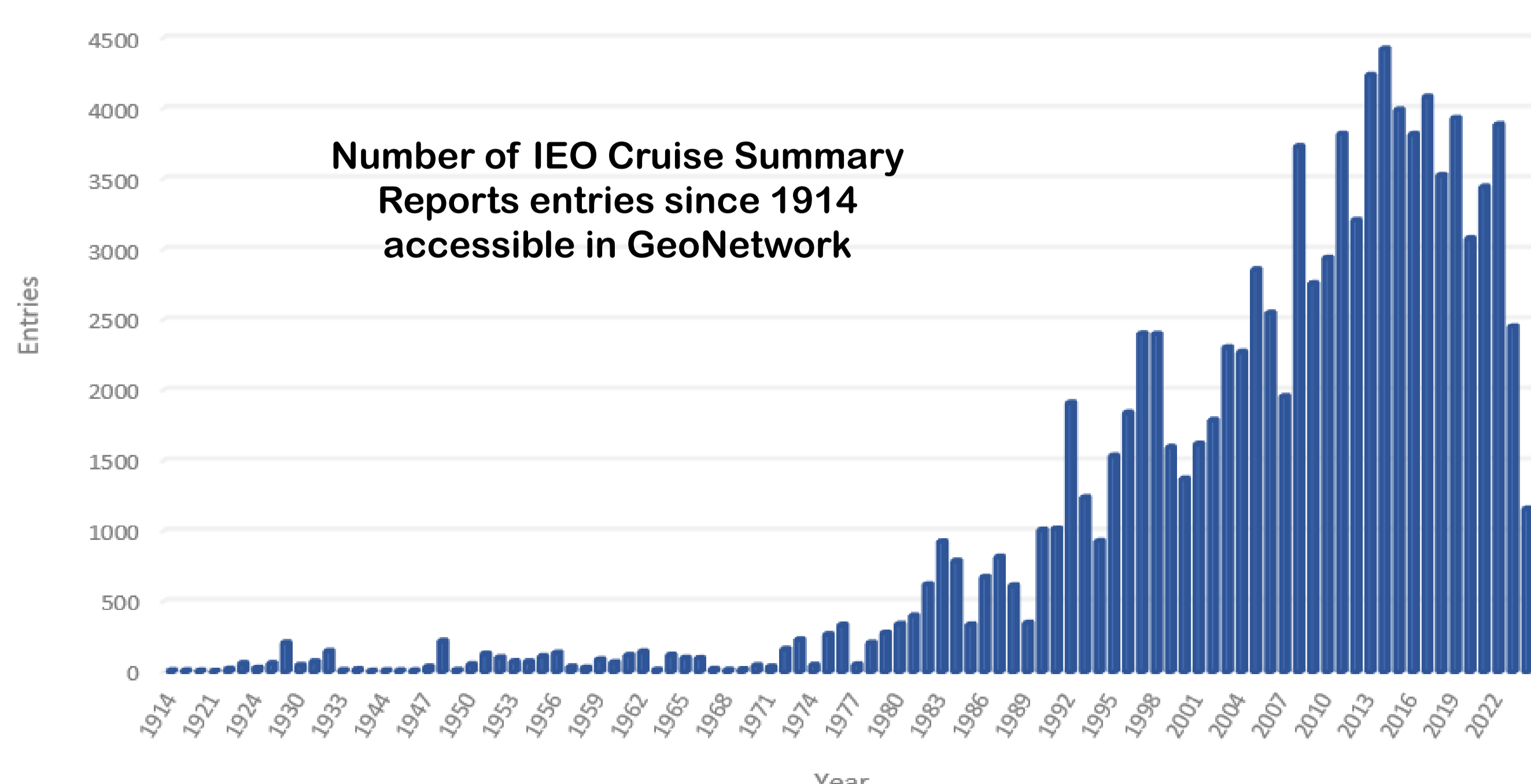


Implementation

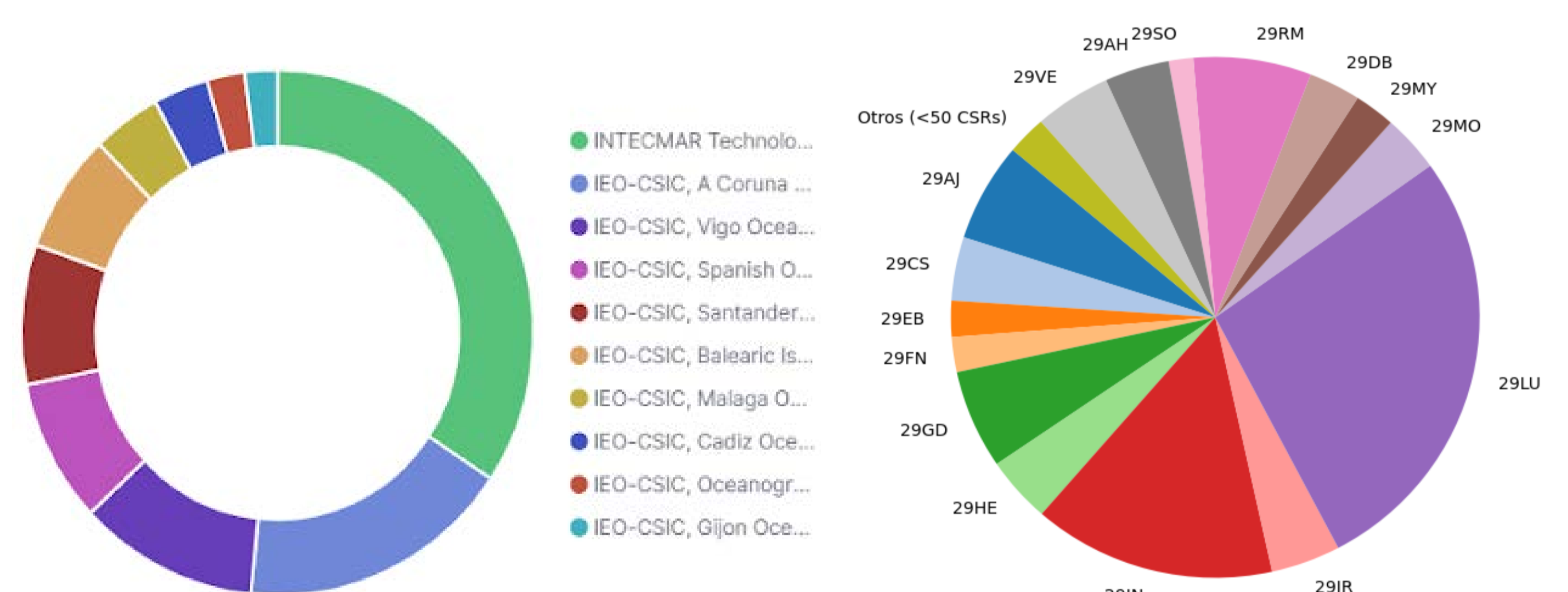
This data infrastructure requires a restructuring of the information maintained in the NODC to improve search options and enable more automated filtering capabilities. Additionally, a continuous revision of the entries is necessary to ensure proper functioning.

Systematic managing of all the custodied information can be optimized. GeoNetwork allows to automatize these processes by providing two implementations, the CSW standard and a REST API.

The catalogue is designed to provide easy access to data with just a few clicks in a user-friendly way.



IEO data entries distribution by **Organization** responsible for the resource and by **Research Vessel** used for the oceanographic survey



Additionally, GeoNetwork enables machines to retrieve information efficiently, facilitating data harvesting and interoperability between institutions without the need for custom development for each metadata catalogue.

By using this tool, the IEO has successfully connected the information of its existing catalogues (e.g., the IEO-Coruña geoportal: <https://centolo.co.ieo.es/geonetwork>). The same technology is used, to develop a joint IDEMAR catalogue under the framework of the PTI Oceans+.

The institute metadata repository not only **centralizes the available information** but also makes it more **accessible and usable for the scientific community and the general public**.



International Ocean Data Conference 2025
Santa Marta (Colombia), 11 March 2025



EMODnet
European Marine Observation and Data Network

