9.º FÓRUM
GESTÃO DE DADOS
DE INVESTIGAÇÃO

CENTRO NACIONAL DE DADOS OCEANOGRÁFICOS

NATIONAL OCEANOGRAPHIC DATA CENTER (NODC)

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Agenda

- Necessidade
- Infraestruturas de dados
- NODC
- Futuro

1. Necessidade de um NODC

International Oceanographic Data and Information Exchange (IODE))

IODE NODCs and ADUs

IODE International Oceanographic Data and Information Exchange National Oceanographic Data Centre **NODC**

IODE International Oceanographic Data and Information Exchange Associate Data Unit **ADU**

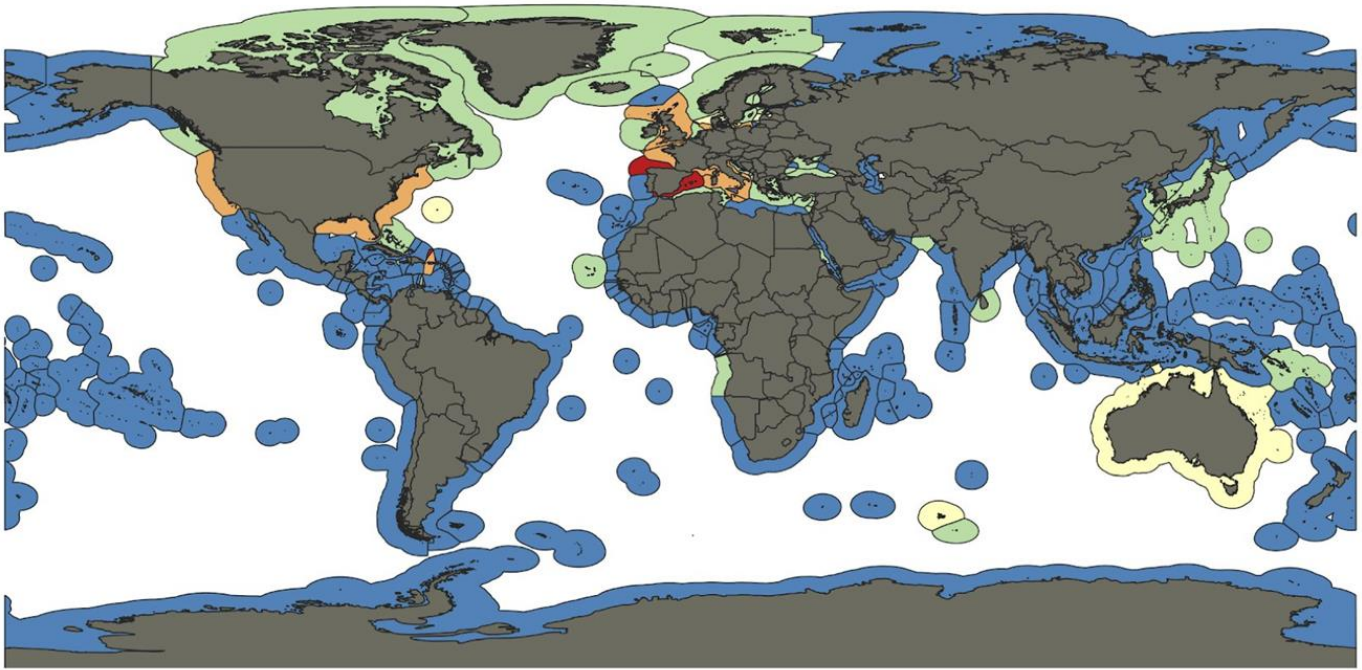
IODE National Oceanographic Data Centres (NODC) and IODE Associate Data Units (ADU) List

	Portugal	1971	NODC (est. 26/10/2022) (former NODC, 1986 – no longer operational)	National coordinator for data management: **Nunes Paulo**, Instituto Hidrográfico Lisboa	30/10/2022

unesco

https://www.iode.org/

Preencher a lacuna e dados e conhecimento sobre o Oceano



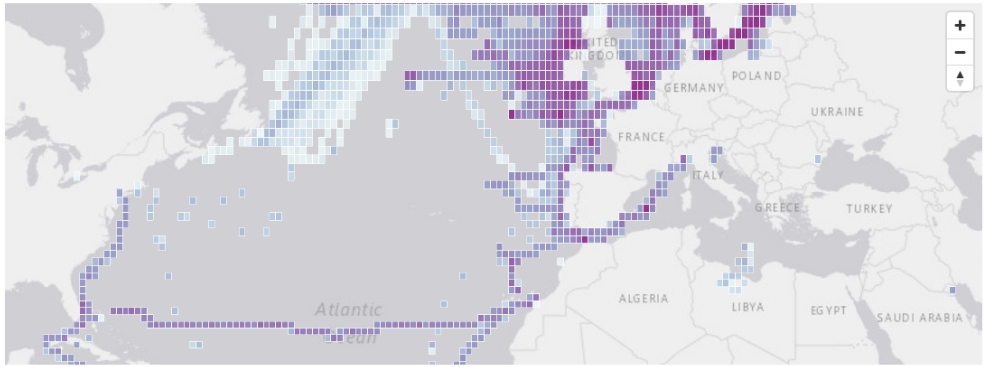
Number of data stations with oceanographic data in the World Ocean Database (for 2018)
Map created by Cristian Muñoz (UN IODE) and Tara Baris using data available as of February 1, 2021 see Boyer et al. (2018). NCEI Standard Product: World Ocean Database (WOD). NOAA National Centers for Environmental Information.

Esforço articulad
Exemplo: ODS 14.3.1 | Indicador: Acidez marinha média (pH)

SDG 14.3.1 data portal

Instructions FAQ My datasets Data Sign in

Welcome to the SDG 14.3.1 data portal



This SDG 14.3.1 Data Portal is a tool for the submission, collection, validation, storage and sharing of ocean acidification data and metadata submitted towards the Sustainable Development Goal 14.3.1 Indicator: Average marine acidity (pH) measured at agreed suite of representative sampling stations.

In 2015, the United Nations adopted the 2030 Agenda and a set of Sustainable Development Goals (SDG), including a goal dedicated to the ocean, SDG 14, which calls to "conserve and sustainably use the oceans, seas and marine resources for sustainable development". The Intergovernmental Oceanographic Commission (IOC) of UNESCO was identified as the custodian agency for the SDG Target 14.3: "Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels", and the associated SDG Indicator 14.3.1 ("Average marine acidity (pH) measured at agreed suite of representative sampling stations").

Thanks to the cooperation and support received by the Commission in the past years from its International Oceanographic Data and Information Exchange Programme (IODE), international ocean acidification experts (including data managers) and the Global Ocean Acidification Observing Network (GOA-ON) the indicator methodology was developed and is now freely available.

The SDG Indicator 14.3.1 Methodology provides the necessary guidance on how to conduct ocean acidification observation, what to measure and how, providing best practice and methods approved by the scientific ocean acidification community. It further offers support on how to and what kind of data sets to submit to IOC, to ensure the production of quality controlled global and possibly regional products.

The full text of the SDG 14.3.1 Indicator Methodology, the data template, the metadata template and the metadata instructions file can all be found and downloaded here:

- Indicator methodology
- Metadata template
- Data template

https://oa.iode.org/

Esforço articulado
Evolução da observação oceanográfica: de local a global

. Um Oceano Global

. Redes de plataformas e sensores

. Observatórios multidisciplinares

. Harmonização e partilha de dados

. Dados *FAIR*

New technology platforms collected more data on the oceans in 2018 than was gathered during the entire twentieth century. Tanhua et al. (2019)

2. INFRAESTRUTURAS DE DADOS

Infraestruturas de Dados

14 LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

- Decisão
- Visualização
- Análise
- Interoperabilidade
- Disponibilidade

Seamap 2030

4 075 166 km²
44x área emersa

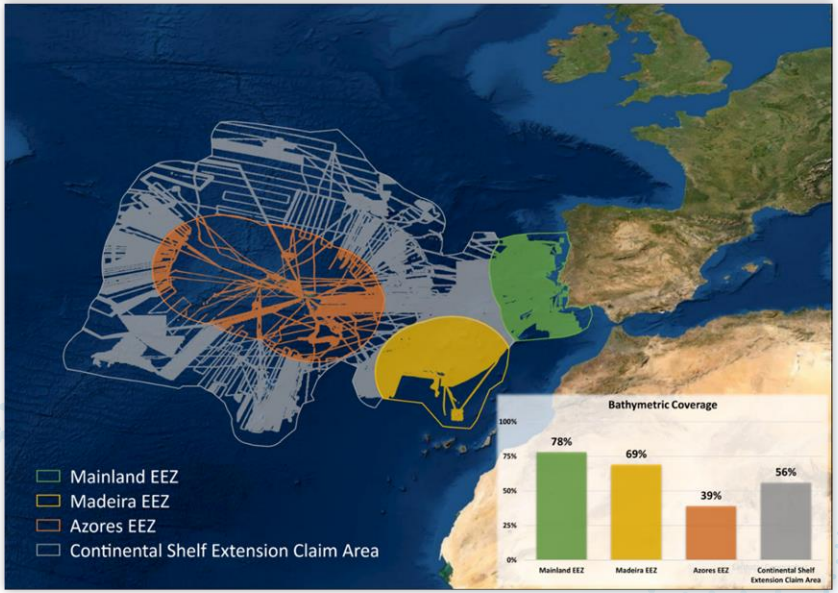
Total
cobertura ano 2020 - **55%**

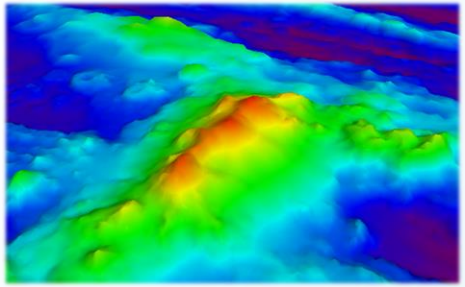
Cobertura Completa
Maior Resolução

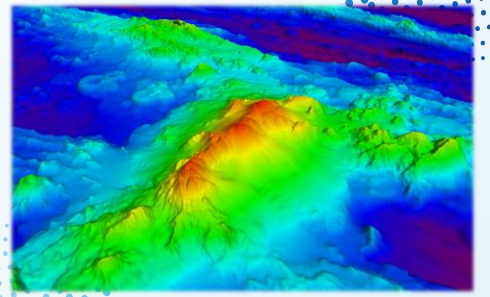
2021 2030 United Nations Decade of Ocean Science for Sustainable Development

THE NIPPON FOUNDATION-GEBCO SEABED 2030

SEAMAP 2030







Dados Seamap 2030

https://gridmar.hidrografico.pt

THE NIPPON FOUNDATION-GEBCO SEABED 2030

THE NIPPON FOUNDATION · GEBCO · IHO · International Hydrographic Organization · unesco

RESOLUÇÕES

Prof. 50m-250m – Res. 32m
Prof. 250m-1000m – Res. 64m
Prof. 1000m-2000m – Res. 128m
Prof. 2000m-4000m – Res. 256m
Prof. +4000m – Res. 512m

IPMA Instituto Português do Mar e da Atmosfera

Atmosfera

- Propriedades do ar
- Meteorologia

Hidrodinâmica

- Correntes
- Agitação
- Nível do mar

Biologia

- Plancton
- Peixes
- Moluscos Bivalves
- Organismos gelatinosos
- Outros animais marinhos
- Crustáceos
- Cetáceos
- Pradarias de ervas marinhas
- Macroalgas

Geologia

- Propriedades do substrato
- Batimetria/topografia
- Sismos

Física/química

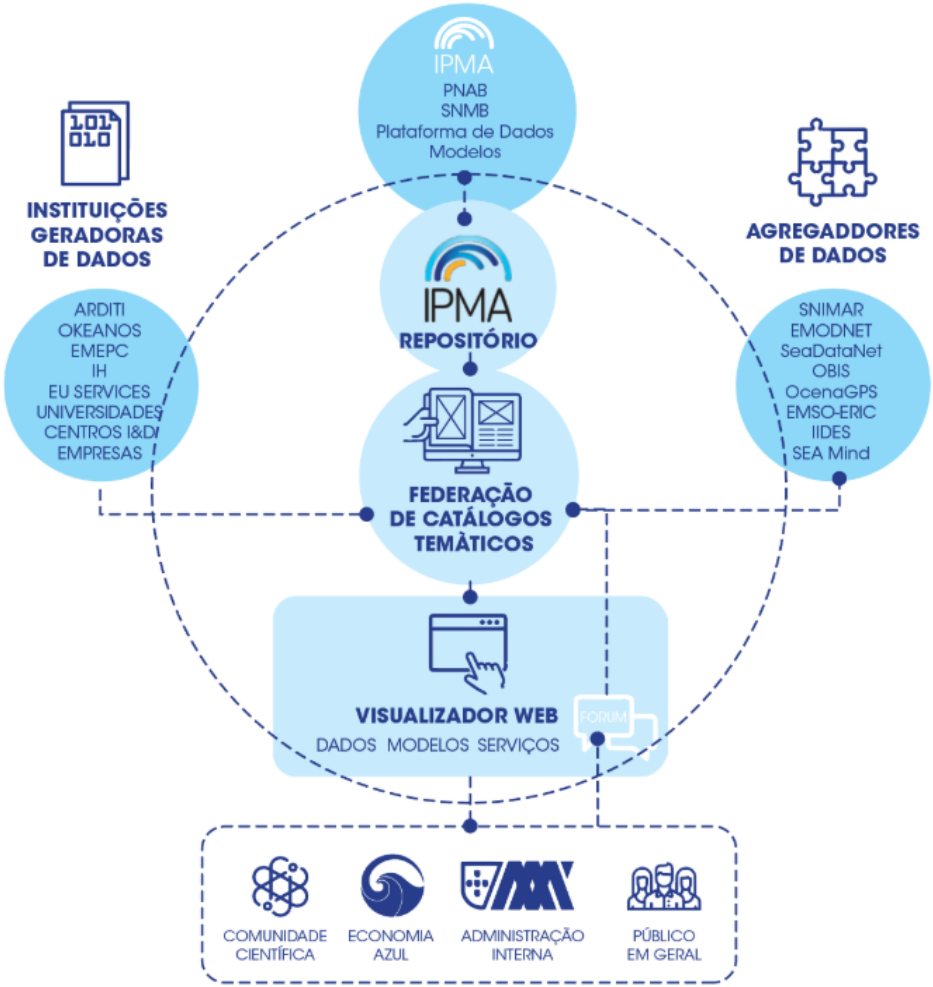
- Propriedades da água
- Lixo/poluição marinha

SOMOSATLÂNTICO
WE ARE ATLANTIC

Repositório de dados do MAR - IPMA

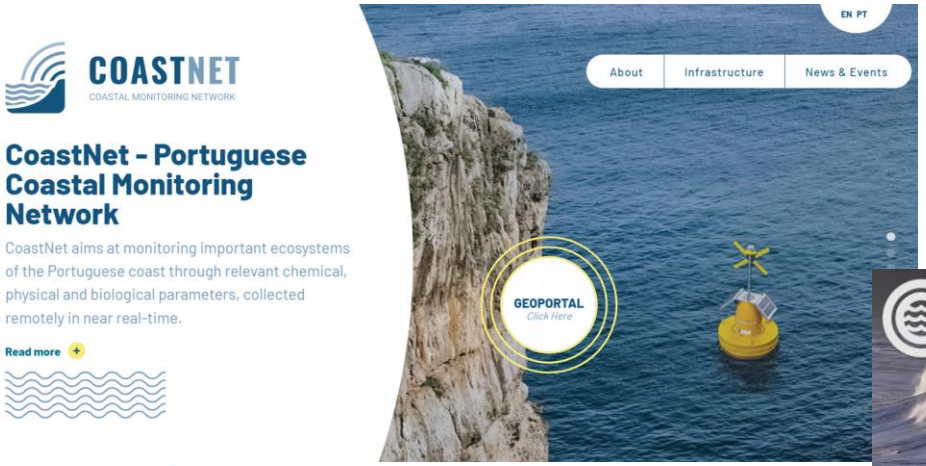
Federação de catálogos temáticos

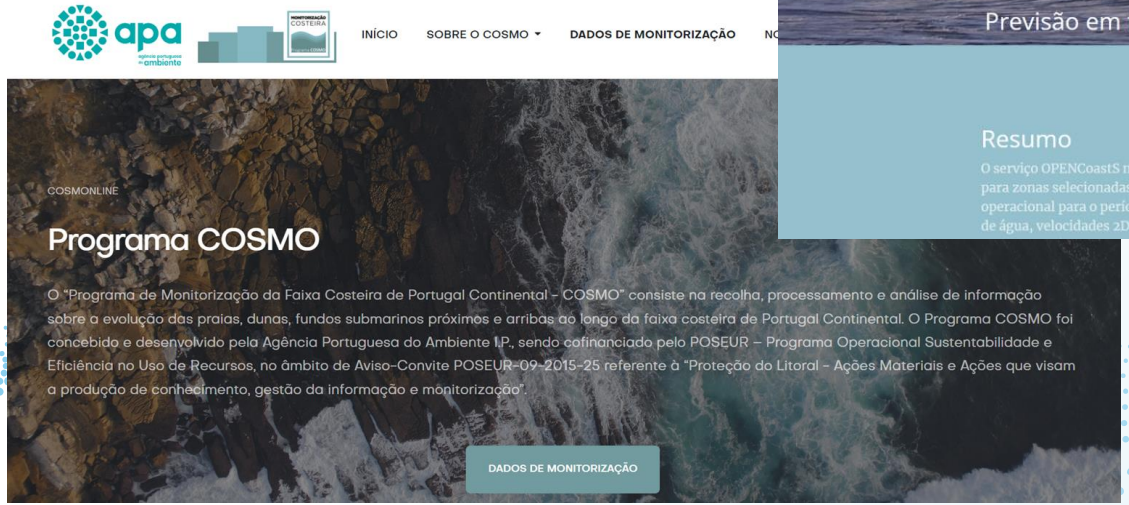
Visualizador *WEB* (interface)
. Dados *in situ*
. Modelos
. Serviços temáticos
. Fórum



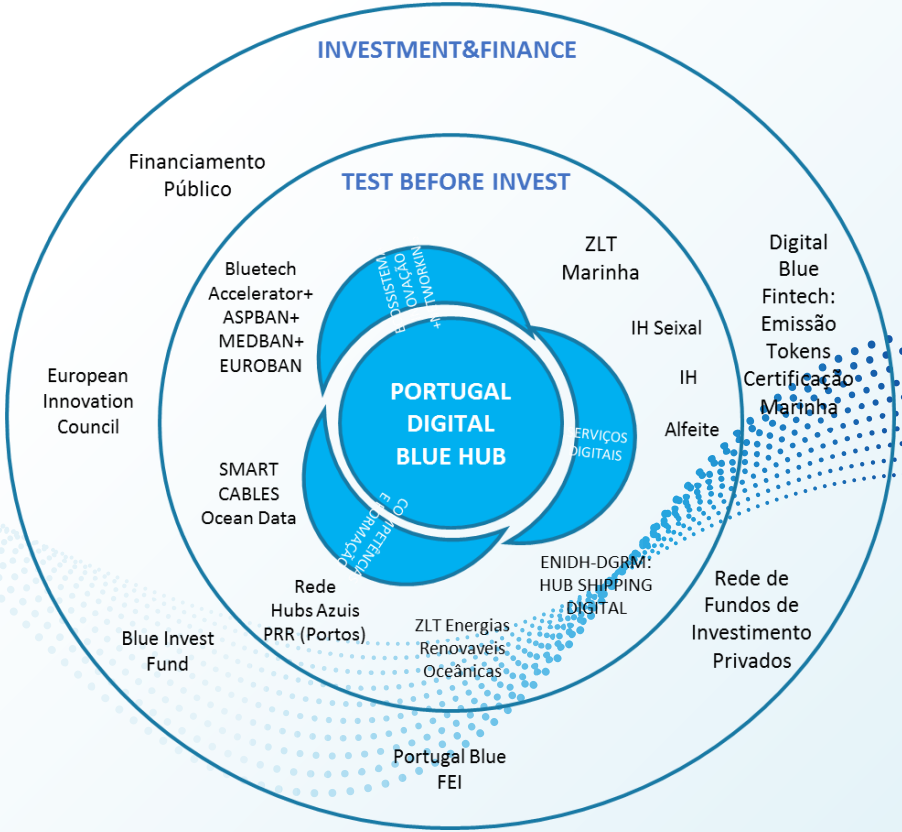
IPMA Instituto Português do Mar e da Atmosfera

Outros esforços nacionais

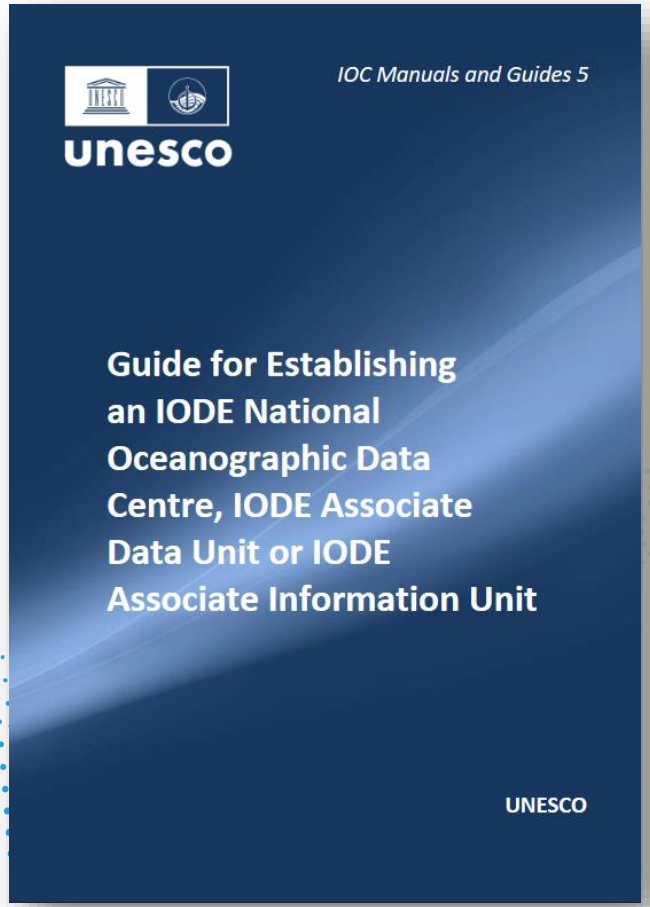




Dados como catalizador económico
Blue Economy Innovation Hub



3. NODC



Missão e responsabilidades:

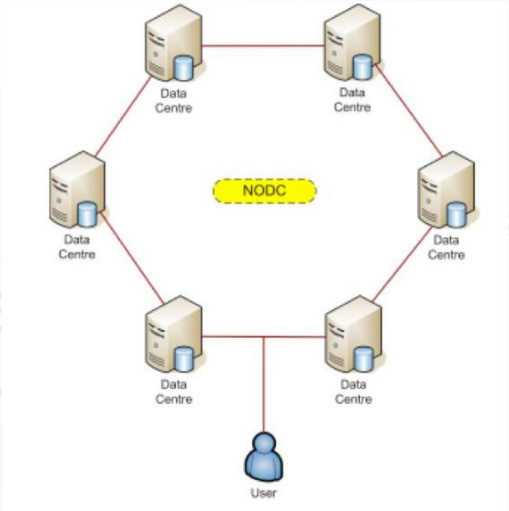
Reunir os dados oceanográficos por programas e projetos nacionais, regionais e internacionais;

Realizar rotinas de controlo e verificação de qualidade dos dados de acordo com as boas práticas e normas específicas associadas;

Garantir a salvaguarda e a preservação dos dados e metadados;

Garantir o acesso aos dados de acordo com a *IOC Oceanographic Data Exchange Policy.*

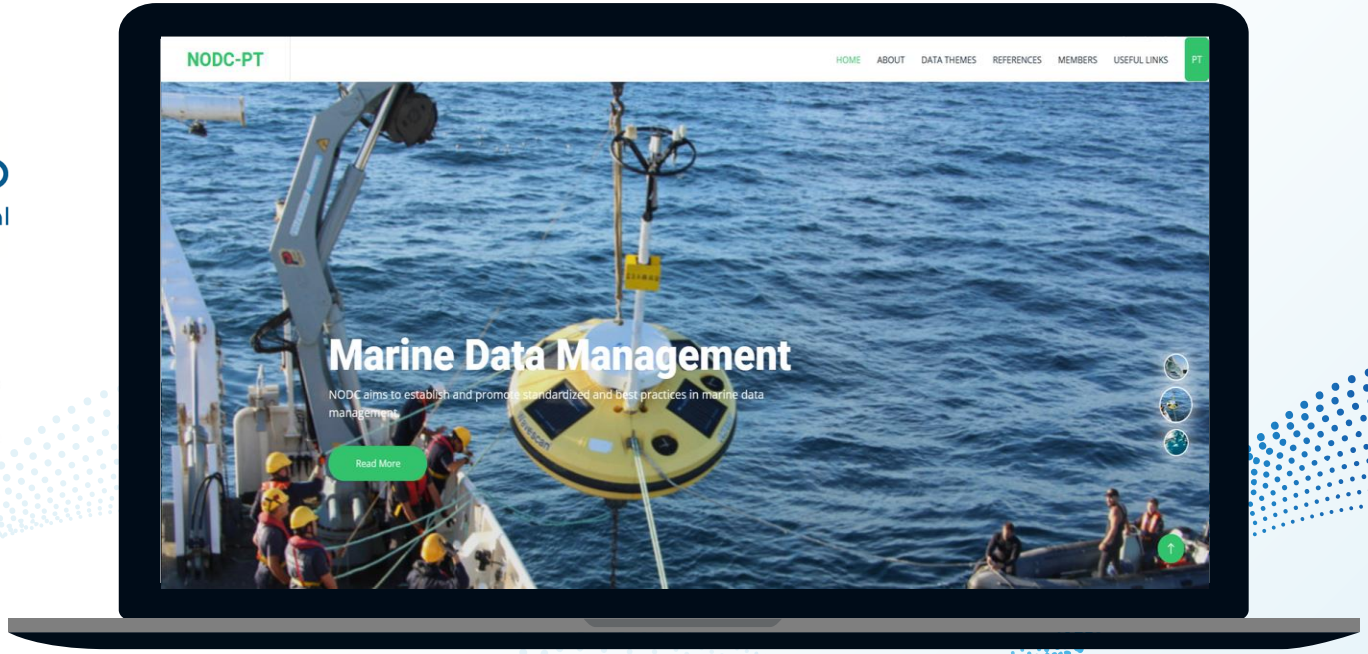
Distributed Data Center Model



NODC Portugal

hidrográfico
marinha · portugal

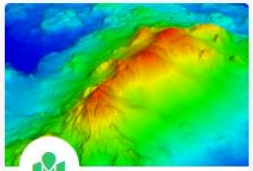
IPMA
Instituto Português
do Mar e da Atmosfera



https://nodc-portugal.pt/

Mission

Support national and international marine knowledge



Bathymetry

Datasets on bathymetry and ocean seabed elevation.

Read More →

Biology

Datasets on marine species and marine habitats.

Read More →

Marine Chemistry

Datasets on salinity, temperature, pH and other chemistry parameters.

Read More →

Marine Geology

Datasets on sea-floor geology, geological events, and mineral resources.

Read More →

Seabed Habitats

Datasets on seabed habitats and seabed communities.

Read More →

Human Activities

Datasets on marine human activities and uses.

Read More →

Ocean Physics

Datasets on waves, currents, sea-level, and other ocean parameters.

Read More →

Marine Meteorology

Datasets on weather and associated oceanographic conditions.

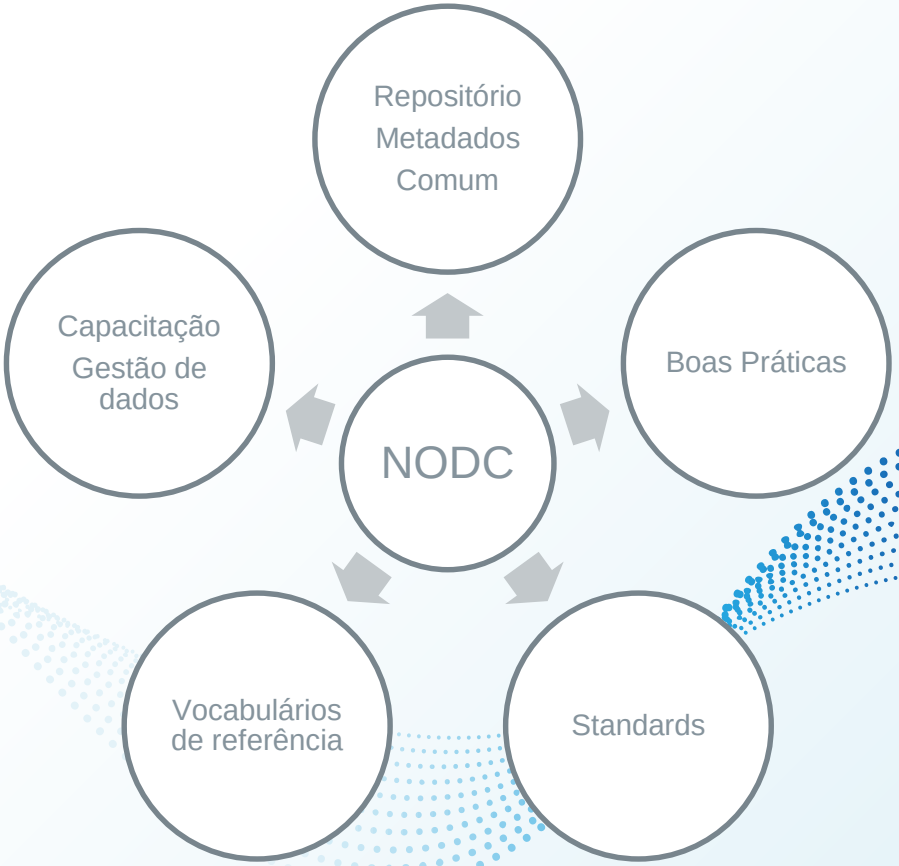
Read More →

Marine Pollution

Datasets on harmful substances to the marine environment.

Read More →

NODC



Benefícios

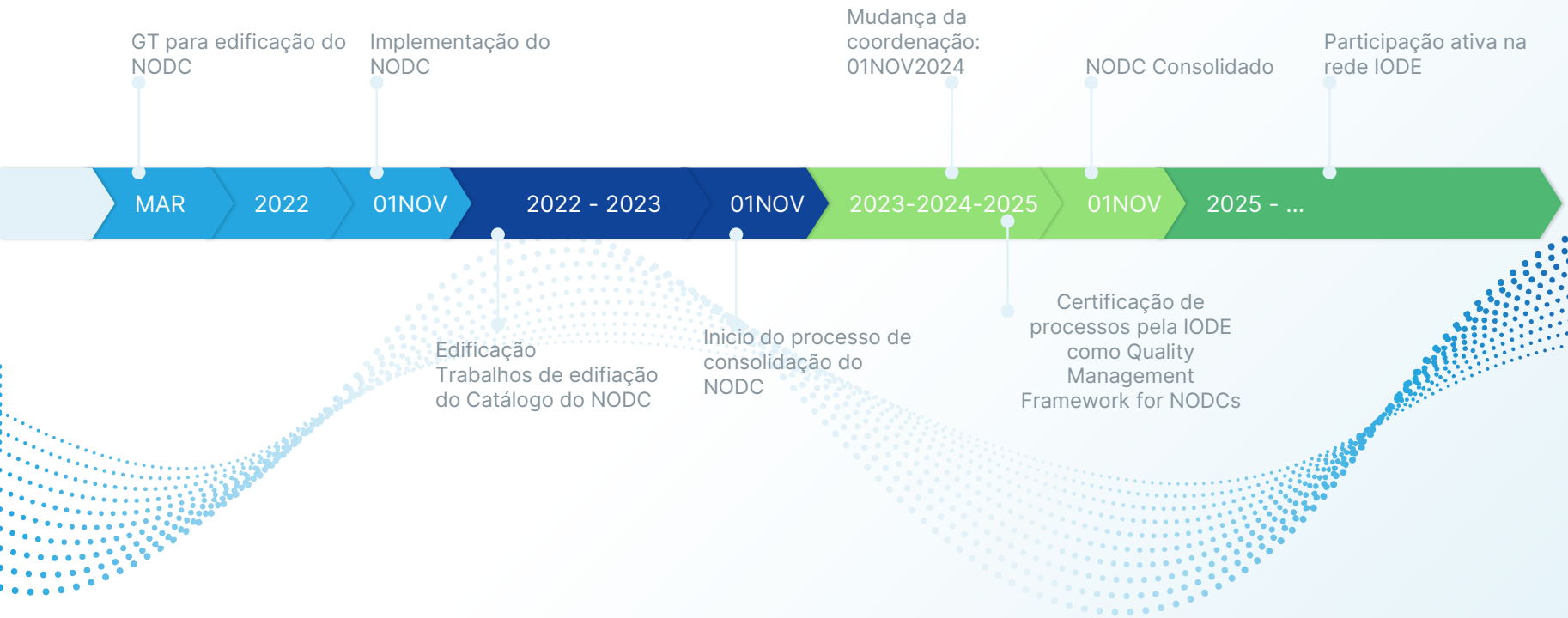
- Economia Azul
- E-Navigation
- Resposta a Emergências
- Alterações Climáticas
- Planeamento e ordenamento do Espaço

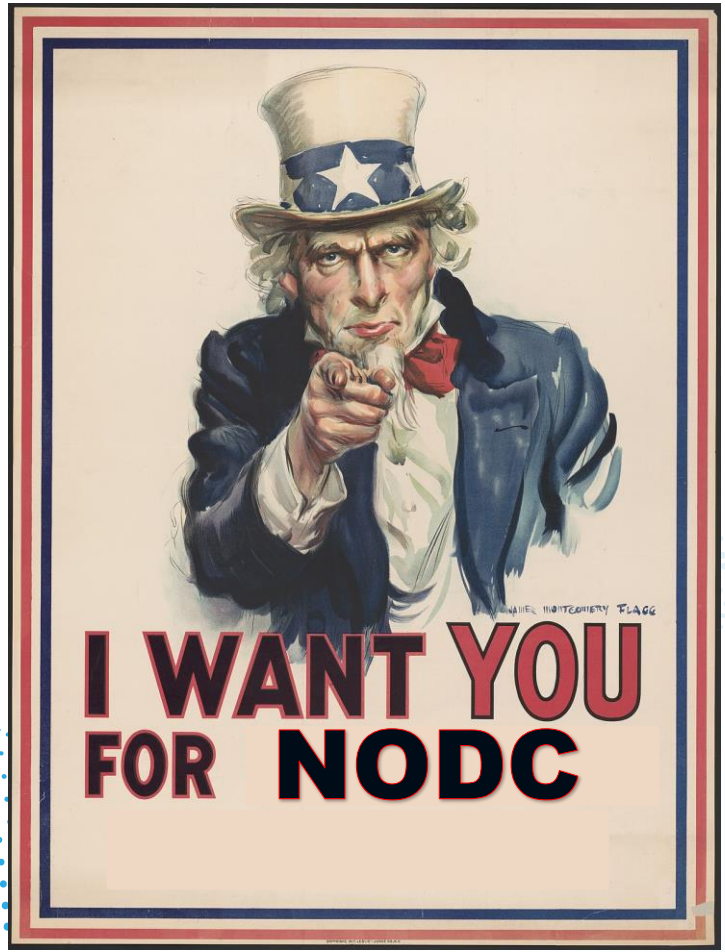
4. FUTURO

Roadmap


Protocolo entre o IH e IPMA para alavancar a criação do NODC + Site
1
Aprovação dos Termos e referência do NODC + Formalização junto IOC/IODE
2
Política de dados do NODC
3
Catálogo do NODC + Estratégia DTO
4
Reconhecimento nacional como IEEN
5
Certificação pela IODE como Quality Management Framework for NODCs
6

Calendário


GT para edificação do NODC
Implementação do NODC
Mudança da coordenação: 01NOV2024
NODC Consolidado
Participação ativa na rede IODE
MAR
2022
01NOV
2022 - 2023
01NOV
2023-2024-2025
01NOV
2025 - ...
Edificação
Trabalhos de edifiação do Catálogo do NODC
Inicio do processo de consolidação do NODC
Certificação de processos pela IODE como Quality Management Framework for NODCs



Criar a rede:

- Criar uma rede nacional de produtores de dados oceanográficos
- Promover a partilha e as boas práticas
- Contribuir para o esforço internacional
- Potenciar o benefício do conhecimento

9.º FÓRUM
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DE INVESTIGAÇÃO

Muito obrigado!

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