



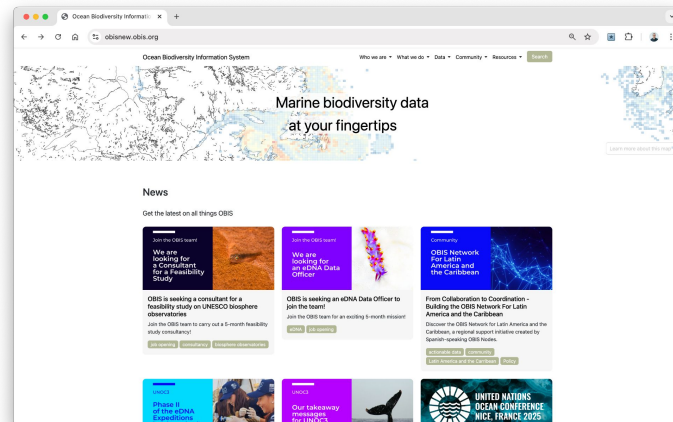
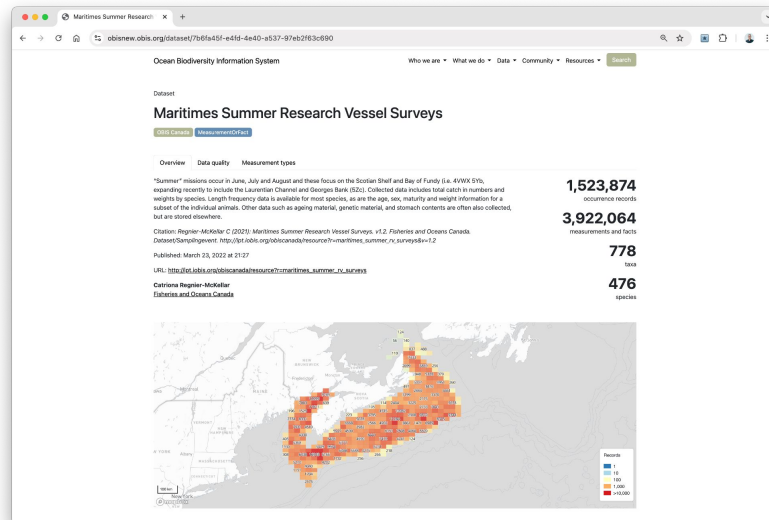
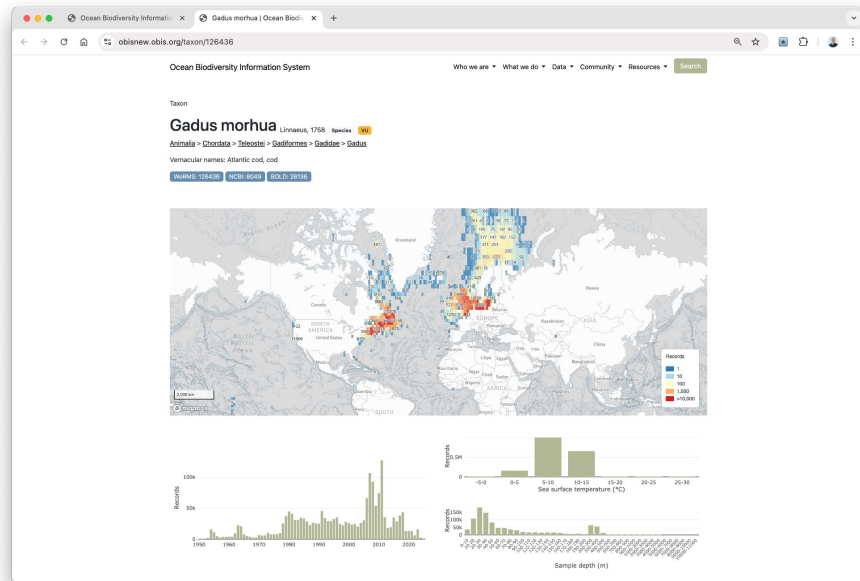
Technical Developments

OBIS EC7



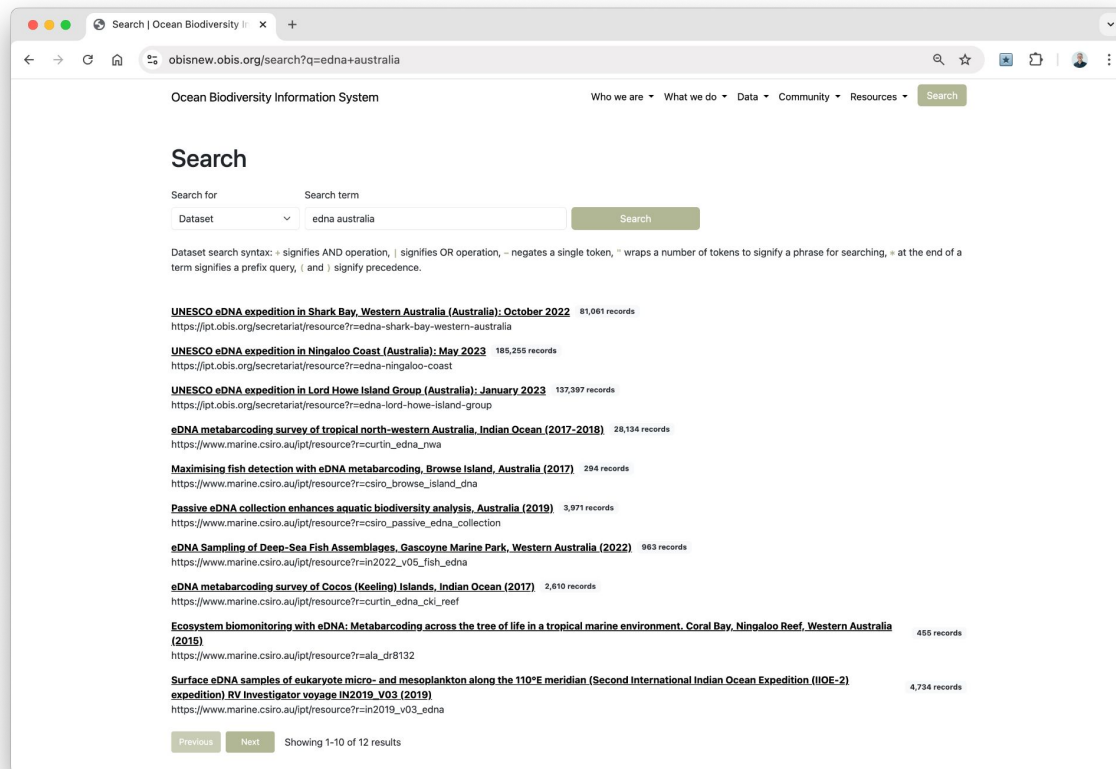
Website refresh

- Simplified docker based architecture
- Styling refresh, cleaner dataset pages



Dataset search

- Faster, better results
- Boolean operators
- Search on more fields, including tags



Dataset tags

- <https://rs.obis.org/obis/vocabulary/DatasetType>
- To be aligned with GBIF DatasetCategory
- Can be used for EOVS and BBNJ SBI tagging

rs.obis.org terms vocabulary

DatasetType

Tracking

identifier <https://rs.obis.org/obis/vocabulary/DatasetType/Tracking>

CitizenScience

identifier <https://rs.obis.org/obis/vocabulary/DatasetType/CitizenScience>

LongTermMonitoring

identifier <https://rs.obis.org/obis/vocabulary/DatasetType/LongTermMonitoring>

EnvironmentalDna

identifier <https://rs.obis.org/obis/vocabulary/DatasetType/EnvironmentalDna>

Metabarcoding

identifier <https://rs.obis.org/obis/vocabulary/DatasetType/Metabarcoding>

Metagenomics

identifier <https://rs.obis.org/obis/vocabulary/DatasetType/Metagenomics>

Dataset tags

The screenshot shows a web browser window with the URL `obisnew.obis.org/search?q=https%3A%2F%2Frs.obis.org%2Fobis%2Fvocabulary%2FDatasetType%2FEnvironmentalDna`. The page title is "Ocean Biodiversity Information System". The search results are displayed under the heading "Search".

Search for: Dataset
Search term: `https://rs.obis.org/obis/vocabulary/DatasetType/Environm`

Dataset search syntax: + signifies AND operation, | signifies OR operation, - negates a single token, " wraps a number of tokens to signify a phrase for searching, * at the end of a term signifies a prefix query, (and) signify precedence.

Marine Microbes from RV Southern Surveyor voyage SS2012_T06, Australia (2012) 76,919 records
https://www.marine.csiro.au/ipt/resource?r=bioplatforms_mm_ss2012_t06

Marine Microbes from RV Aurora Australis voyage K-axis, Australia (2016) 73,640 records
https://www.marine.csiro.au/ipt/resource?r=bioplatforms_mm_kaxis

SCHEMA Sediment 108,268 records
<https://hosted-datasets.gbif.org/mgnify/MGYS00002668.zip>

Ocean Sampling Day (OSD) 2014: AUTHORITY-RAW amplicon and metagenome sequencing study from the June solstice in the year 2014 78,160 records
<https://hosted-datasets.gbif.org/mgnify/MGYS00000462.zip>

Previous Next Showing 1-4 of 4 results

unESCO IODE

Dataset tags

<https://api.obis.org/occurrence?q=https://rs.obis.org/obis/vocabulary/DatasetType/EnvironmentalDna>

▼ {

"total": 7315159,

▼ "results": [

▼ {

"basisOfRecord": "MATERIAL_SAMPLE",
"class": "Pelagophyceae",
"classid": 345500,
"date_end": 1277769600000,
"date_mid": 1277769600000,
"date_start": 1277769600000,
"date_year": 2010,
"decimalLatitude": -17.4962,
"decimalLongitude": 42.2173,
"depth": 5,
"dynamicProperties": {"temperature": "26.340117", "project name": "Tara Oceans expedition (2009-2013)", "geographic location (longitude)": "42.2173", "collection date": "2010-06-29", "environment (biome)": "marine biome (ENVO:00000447)", "environment (feature)": "surface water layer (ENVO:00002042)", "environment (material)": "particulate matter, including plankton (ENVO:xxxxxxx)", "environmental package": "water", "sample collection device or method": "PLANKTON NET, TYPE=Single, MESH_Size_(m)=5, MOUTH_Opening_(m^2)=0.196349, LENGTH_(m)=2.5", "salinity": "9999.0", "geographic location (latitude)": "-17.4962", "instrument model": "Illumina Genome Analyzer IIX", "ENA checklist": "ERC00030"}",
"eventDate": "2010-06-29",
"eventID": "MGYA00166970",
"eventRemarks": "This sample (TARA_N00000442) was collected during the Tara Oceans expedition (2009-2013) at station TARA_058 (latitudeN=-17.4962, longitudeE=42.2173) on date/time=2010-06-29T07:17, using a PLANKTON NET, TYPE=Single, MESH_Size_(m)=5, MOUTH_Opening_(m^2)=0.196349, LENGTH_(m)=2.5. The sample material (particulate matter, including plankton (ENVO:xxxxxxx)) was collected at a depth of 3-7 m, targeting a surface water layer (ENVO:00002042) in the marine biome (ENVO:00000447). The sample was size-fractionated (5-20 micrometres), and stored in liquid nitrogen for later detection of unicellular eukaryote (protist) nucleic acid sequences by pyrosequencing methods, and for later metagenomics/transcriptomics analysis. This sample has replicate sample(s): TARA_N00000421,TARA_N00000422."",
"hab": true,
"identificationReferences": "https://www.ebi.ac.uk/metagenomics/pipelines/4.1",
"identificationRemarks": "SSU rRNA annotated using the taxonomic reference database described here: https://www.ebi.ac.uk/metagenomics/pipelines/4.1. This occurrence appeared in following analyses: SSU taxonomy from analyses https://www.ebi.ac.uk/metagenomics/analyses/MGYA00166970#taxonomic.",

Raw

Parsed

Occurrence free text search

<https://api.obis.org/occurrence?q=BIO-JGOFs>

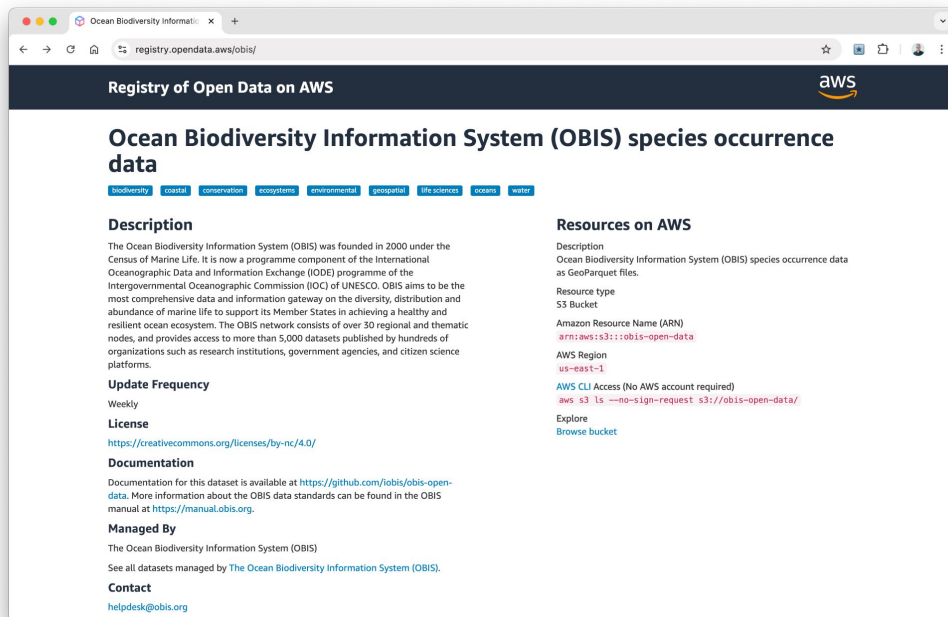
```
{
  "total": 4323,
  "results": [
    {
      "basisOfRecord": "HumanObservation",
      "brackish": false,
      "catalogNumber": "20000001501252",
      "class": "Copepoda",
      "classid": 1080,
      "collectionCode": "BIO-JGOFs 1992",
      "coordinatePrecision": "0.01667",
      "datasetID": "BioChem_BIO_JGOFs_1992",
      "datasetName": "BioChem: Ring net samples collected as part of a JGOFs cruise in the North Atlantic during the fall of 1992",
      "day": "13",
      "decimalLatitude": 34.27,
      "decimalLongitude": -30.25,
      "depth": 60,
      "dynamicProperties": "Sample size = Number per cubic metre; Classification=WoRMS; Verbatim name=Mesocalanus tenuicornis",
      "eventTime": "22:25Z",
      "family": "Calanidae",
      "familyid": 104079,
      "fieldNumber": "92037102043001",
      "genus": "Mesocalanus",
      "genusid": 104153,
      "individualCount": "0.754",
      "infraclass": "Necopepoda",
      "infraclassid": 155876,
      "institutionCode": "Fisheries and Oceans Canada - ISDM",
      "institutionID": "DFO-ISDM",
    }
  ]
}
```

Raw

Parsed

AWS Open Data

- <https://github.com/iobis/obis-open-data>
- <https://registry.opendata.aws/obis/>



The screenshot shows a web browser window displaying the 'Registry of Open Data on AWS' page for the 'Ocean Biodiversity Information System (OBIS) species occurrence data'. The page has a dark blue header with the AWS logo. Below the header, the title 'Ocean Biodiversity Information System (OBIS) species occurrence data' is prominently displayed. A horizontal navigation bar contains several tags: biodiversity, coastal, conservation, ecosystems, environmental, geospatial, life sciences, oceans, and water. The main content area is divided into two columns. The left column contains sections for 'Description' (founded in 2000, part of the International Oceanographic Data and Information Exchange), 'Update Frequency' (Weekly), 'License' (Creative Commons BY-NC 4.0), 'Documentation' (available on GitHub and manual.org), 'Managed By' (The Ocean Biodiversity Information System), and 'Contact' (helpdesk@obis.org). The right column is titled 'Resources on AWS' and includes a 'Description' of the data as GeoParquet files, 'Resource type' as S3 Bucket, 'Amazon Resource Name (ARN)' as arn:aws:s3:::obis-open-data, 'AWS Region' as us-east-1, 'AWS CLI Access' with a command, and links to 'Explore' and 'Browse bucket'.

Registry of Open Data on AWS

Ocean Biodiversity Information System (OBIS) species occurrence data

biodiversity coastal conservation ecosystems environmental geospatial life sciences oceans water

Description

The Ocean Biodiversity Information System (OBIS) was founded in 2000 under the Census of Marine Life. It is now a programme component of the International Oceanographic Data and Information Exchange (IODIE) programme of the Intergovernmental Oceanographic Commission (IOC) of UNESCO. OBIS aims to be the most comprehensive data and information gateway on the diversity, distribution and abundance of marine life to support its Member States in achieving a healthy and resilient ocean ecosystem. The OBIS network consists of over 30 regional and thematic nodes, and provides access to more than 5,000 datasets published by hundreds of organizations such as research institutions, government agencies, and citizen science platforms.

Update Frequency

Weekly

License

<https://creativecommons.org/licenses/by-nc/4.0/>

Documentation

Documentation for this dataset is available at <https://github.com/iobis/obis-open-data>. More information about the OBIS data standards can be found in the OBIS manual at <https://manual.obis.org>.

Managed By

The Ocean Biodiversity Information System (OBIS)
See all datasets managed by [The Ocean Biodiversity Information System \(OBIS\)](#).

Contact

helpdesk@obis.org

Resources on AWS

Description
Ocean Biodiversity Information System (OBIS) species occurrence data as GeoParquet files.

Resource type
S3 Bucket

Amazon Resource Name (ARN)
`arn:aws:s3:::obis-open-data`

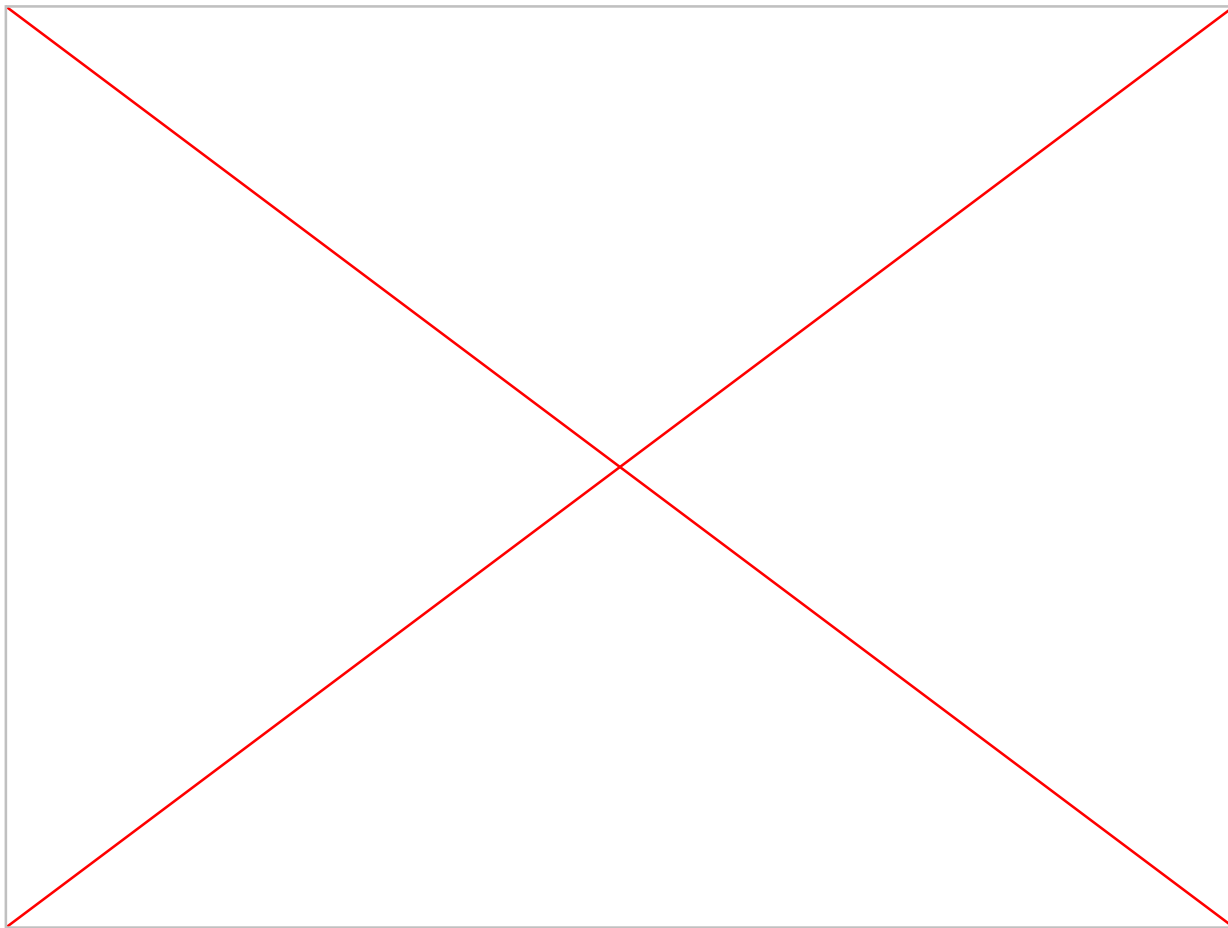
AWS Region
`us-east-1`

AWS CLI Access (No AWS account required)
`aws s3 ls --no-sign-request s3://obis-open-data/`

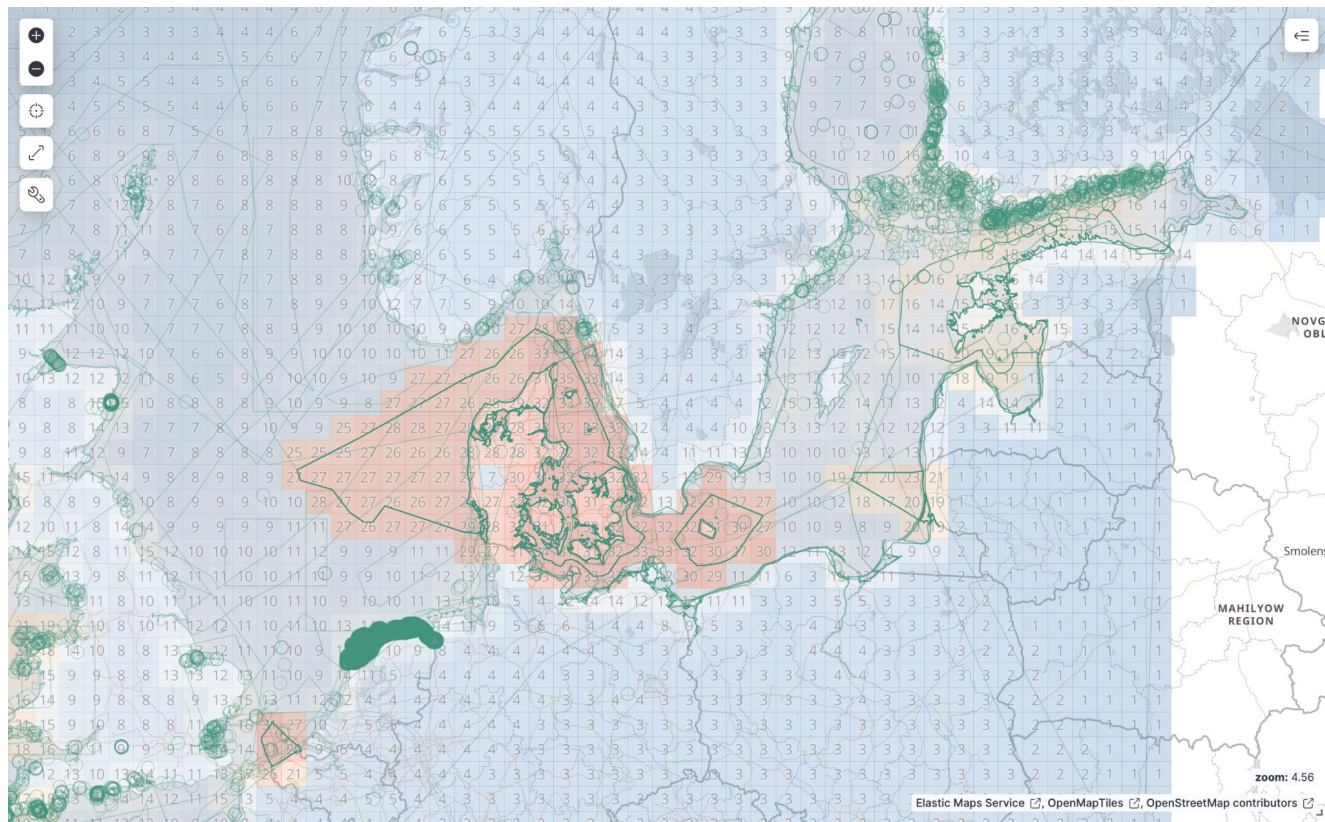
Explore
[Browse bucket](#)

DOI workflow

Request DOIs for
products, papers,
derived datasets



GOOS BioEco portal: ongoing



eDNA data tooling: ongoing

- workflow for creating reference databases
- taxonomic annotation quality control tools (presented at Living Data)

DwC Data Package: ongoing (early)