

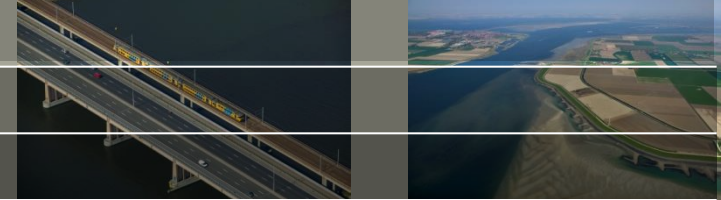


# **Data Services for Chemistry and Biology (DSD 2017)**

Giorgio Santinelli, Willem Stolte

3 november 2017





## Catalog

<https://publicwiki.deltares.nl/display/OET/Data+sharing+initiatives>

### Data sharing initiatives

Created by Gerben de Boer, last modified by Gerrit Hendriksen yesterday at 20:59

#### Inventory of data sharing initiatives

See also: [Data viewers](#).

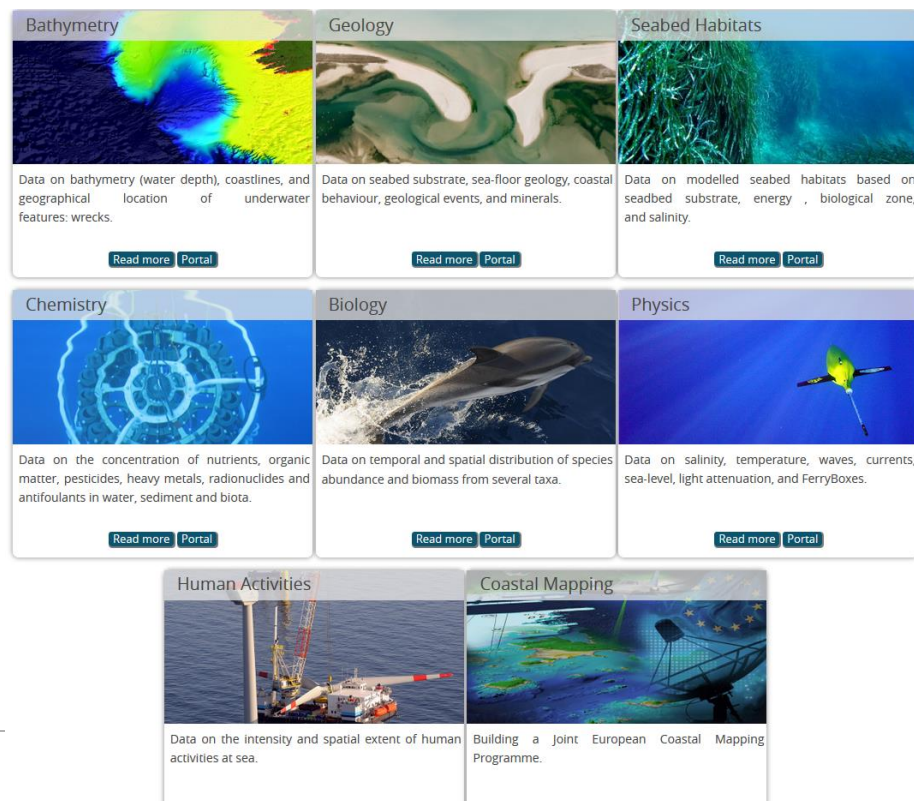
National (Open Data) initiatives:

- Netherlands
  - <https://data.overheid.nl/>
  - nationaal georegister
  - RWS geoweb (ArcGIS rest service)
  - NedDat Hub
  - DINO geological data
  - Rijkswaterstaat watermarkt
  - <http://www.rws.nl/kenniscentrum/databestanden/>
  - noordzeeloket
  - DANS
  - Waterbase (fresh water quantity and quality)
  - Utrecht (TIP)
  - KNMI Data centrum (OPeNDAP), (ADAGUC)
  - <https://opendatanederland.org/>
- United States
- Australia
- Ireland
- Great Britain
  - Elevation data
  - Environmental data
- Portugal
- België
- Frankrijk
- Italië
- Estland
- Spanje
  - <http://www.ign.es/ign/main/index.do?locale=en>
  - <http://www.juntadeandalucia.es/medioambiente/site/redian>
- Cyprus (Bythos online data management system)
- Africa (portal with aggregation of African Open Data)
- European data initiatives
  - ENGAGE Datasets overview of Europe
  - EMODNET

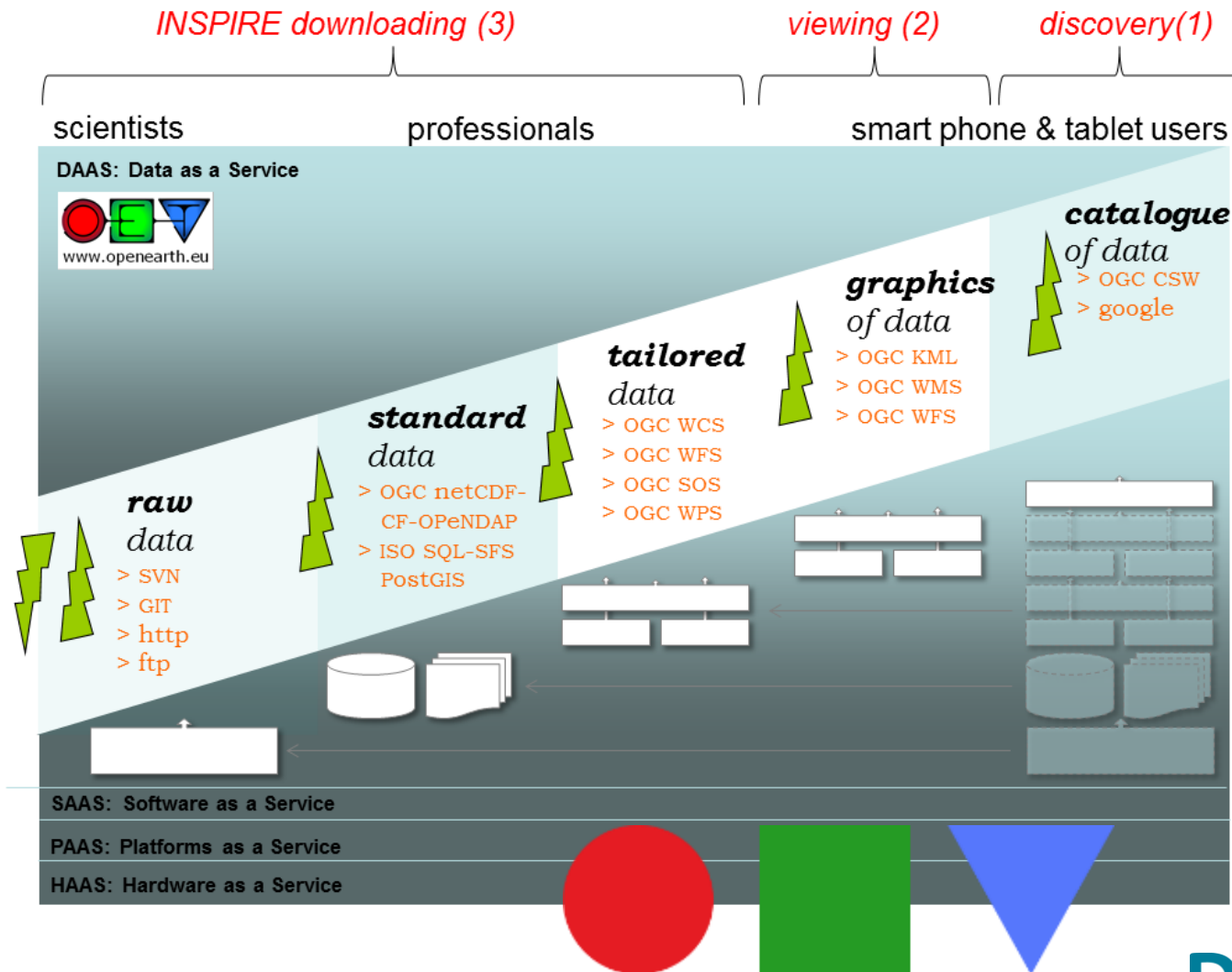
...

- More than 160 organizations assembling marine data, products and metadata
- Quality-assured, standardized and harmonized marine data which are interoperable and free of restrictions on use.
- EMODnet is currently in its third development phase with the target to be fully deployed by 2020

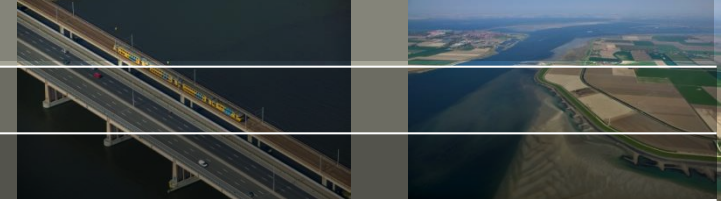
- <http://www.emodnet.eu/>



# OpenEarth



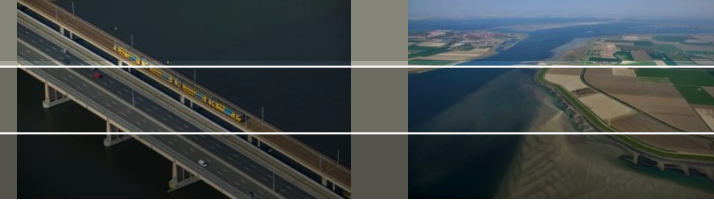
# Exercises



- Bathymetry and Biology data using Web Services
- Working with OBIS (Biological) data
- Working with Chemistry gridded data
- Working with ICES data

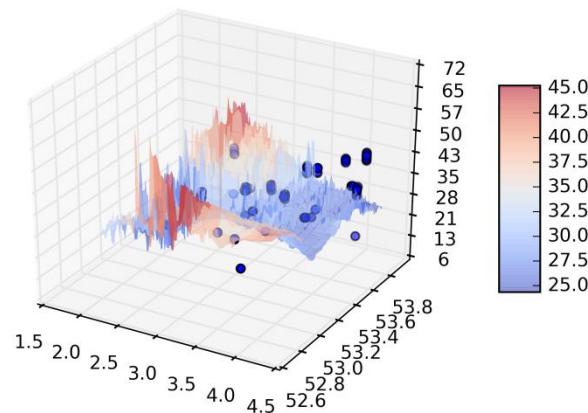


# Bathymetry and Biology data



## Bathymetry and Biology data using Web Services

<https://publicwiki.deltares.nl/display/OET/EMODnet+and+Services>



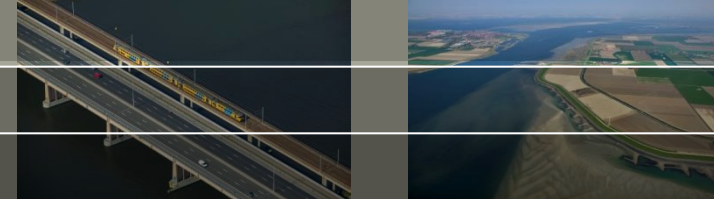
Initiative:

<http://www.opensealab.eu/>



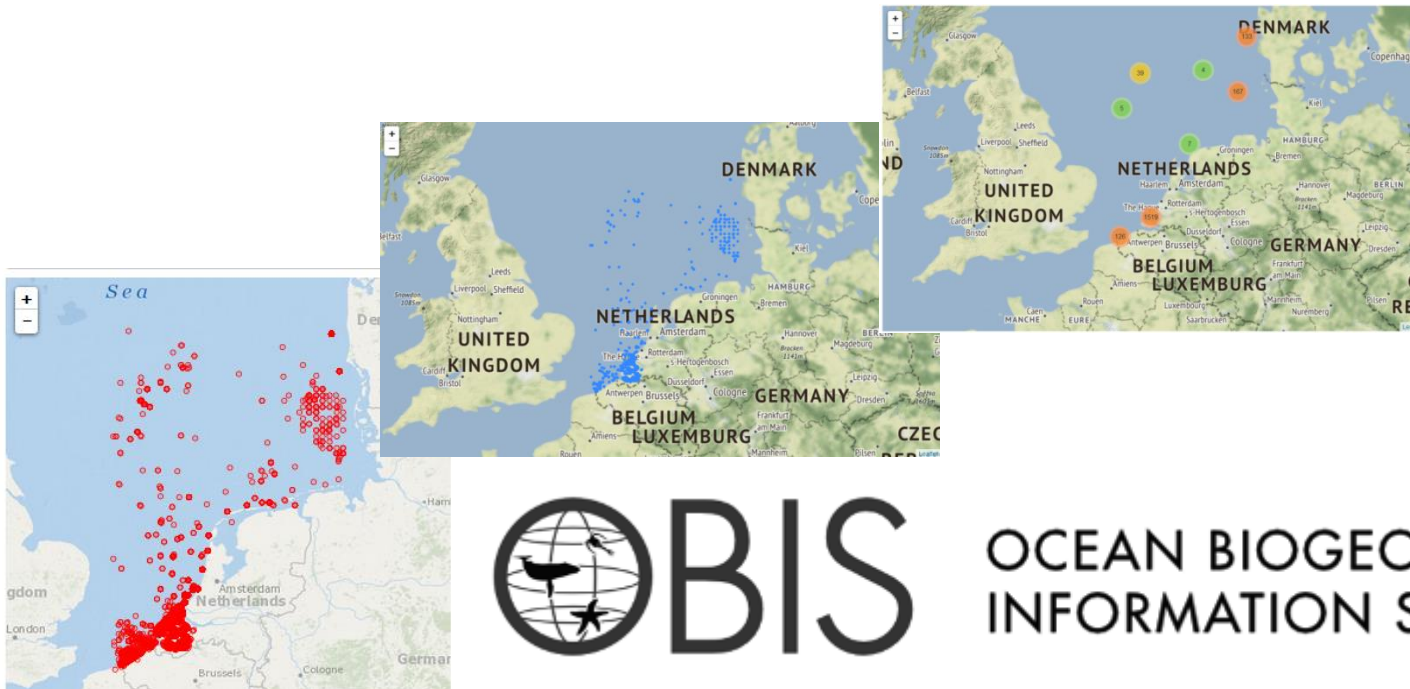
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# Working with Biological Data



Python: Look at notebook in the USB stick

R:markdown

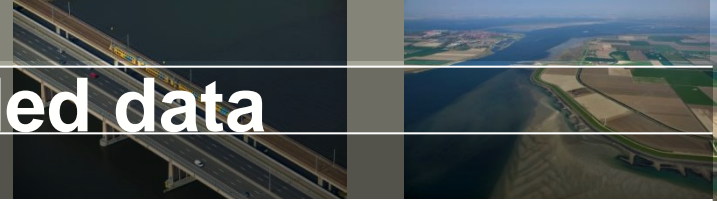


OCEAN BIOGEOGRAPHIC  
INFORMATION SYSTEM

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# Working with Chemistry gridded data



Thredds server for aggregated products from Chemistry.

Aggregated Data Products (ex. NetCDF4). Example:

[http://ec.oceanbrowser.net/data/emodnet-domains/Mediterranean Sea/Autumn \(October-December\) - 10-years running averages/Water\\_body\\_chlorophyll-a.4Danl.nc](http://ec.oceanbrowser.net/data/emodnet-domains/MediterraneanSea/Autumn%20(October-December)%20-%2010-years%20running%20averages/Water_body_chlorophyll-a.4Danl.nc)

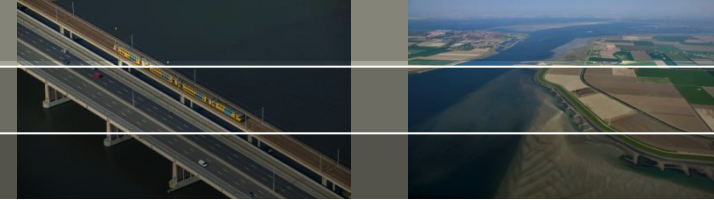
Go to <http://ec.oceanbrowser.net/emodnet/#>

Download NETCDF

or

OPENDAP SERVICE

# Working with ICES data



Explore [ICES](#) data

<https://publicwiki.deltares.nl/display/OET/Querying+ICES+databas+e>

SOAP request:

<https://publicwiki.deltares.nl/display/OET/ICES+SOAP+data+request+using+Python>

<https://publicwiki.deltares.nl/display/OET/ICES+SOAP+data+request+using+matlab> (with OpenEarth)

