

Wetlands Solutions *for the Future*

Learning from ALFAwetlands and
REWET Projects

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 Brussels, Belgium



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WETSET: A Central Hub for European Wetland Data

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What is WETSET?

WETSET is a comprehensive open access European data index designed to centralize information on wetland datasets from European, national, and regional databases. It aims to streamline research and assessment efforts by providing a central platform for accessing diverse wetland data.

What is the purpose of WETSET?

The main purpose of WETSET is to address the challenges researchers, conservationists, and managers face in efficiently locating and utilizing necessary data for wetland research projects, which often come from various sources with different structures, formats, languages, standards, and access protocols. Ultimately, WETSET aims to foster informed decision-making and contribute to the sustainable future of European wetlands.

What is in WETSET?

WETSET content is the result of the comprehensive characterisation of three different EU Wetlands data sources:

- **European Statistics datasources**
- **National and Regional datasources**
- **Previous European research projects results**

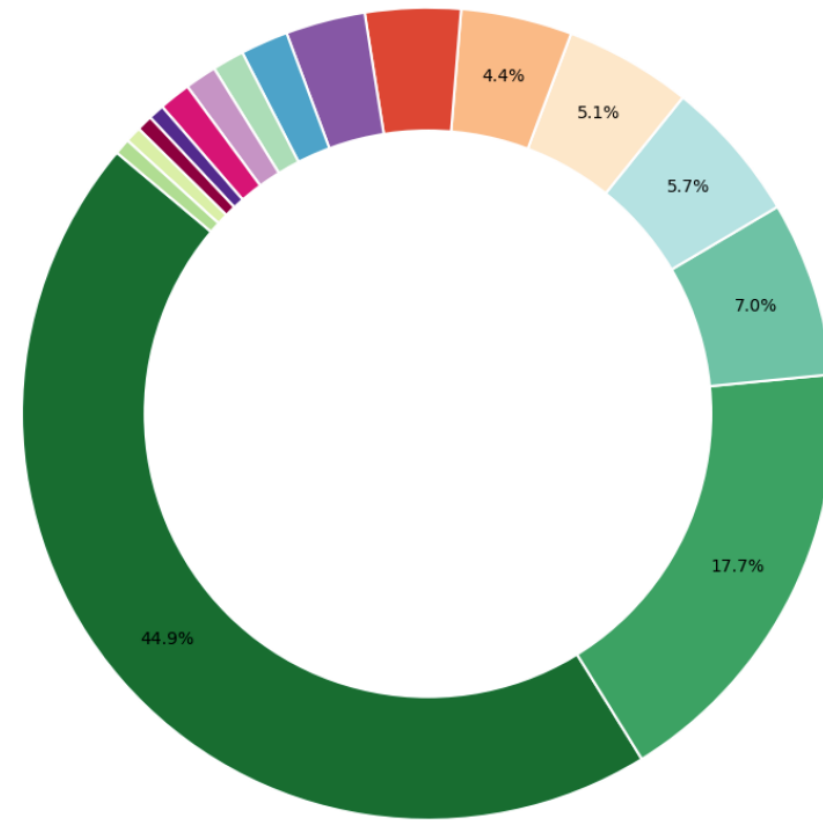
Methodology

The methodology for dataset identification and characterisation involved five key steps

1. **Database Identification:** Selecting relevant European and international databases (e.g., Copernicus, ESDAC, GBIF).
2. **Metadata Selection:** Defining relevant metadata fields based on the Wetland Monitoring Ontology (WMO), including dataset descriptions, access constraints, and data licenses.
3. **Dataset Identification:** Applying search criteria to identify datasets related to inland wetlands, peatlands, and floodplains, focusing on map and tabular data with key variables.
4. **Quality Control:** Assessing and filtering datasets for usability and relevance.
5. **Statistical Analysis:** Performing descriptive statistical analysis to characterize datasets and identify trends and gaps.

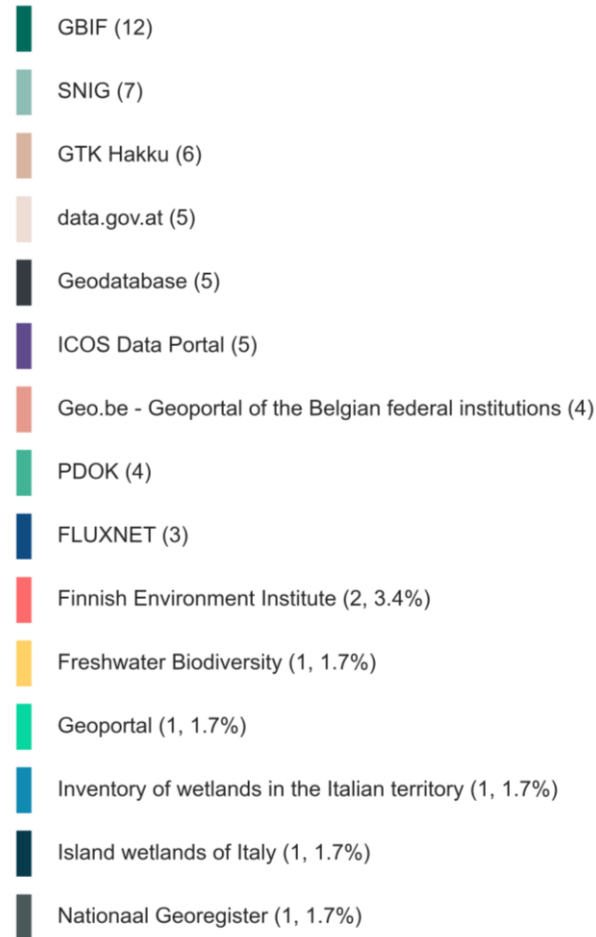
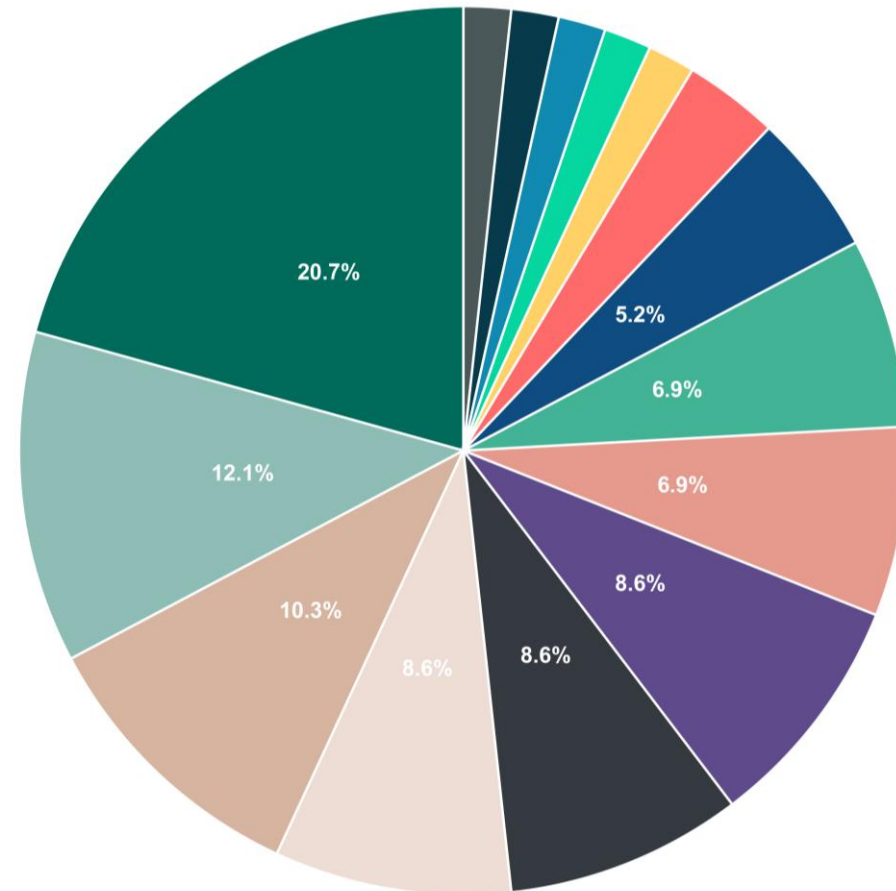
European statistics datasources in WETSET

WETSET contains the characterisation from 150 datasets from 16 differets EU statistics datasources:



National and Regional datasources in WETSET

WETSET contains the characterisation from 58 datasets from 15 differets National and Regional datasources:



Previous European research projects results in WETSET

WETSET contains the characterisation from 29 relevant results from 17 different previous EU projects

(MERLIN, iMETLAND, UPWATER, AquaNES, WATERAGRI, MULTISOURCE, Verify, MEMO2, PeatlandN2O, GreenFeedBack, HydroSocialExtremes, 4C, CReScenDo, METLAKE, e-shape, ECOPOTENTIAL, GeoERA):

- 13 Public Deliverables
- 16 Peer reviewed articles
- And 5 Public Datasets from 5 different projects (MERLIN, iMETland, WATERAGRI, CreScenDo and METLAKE)

What is in WETSET?

WETSET content is the result of the comprehensive characterisation of:

- 150 European Statistics datasources
- 58 National and Regional datasources
- 34 Previous European research projects results

242 datasets

What can you do in WETSET?

Traditional Dataset List

WETSET

 Datasets  Map  Compare Help

RegisterLog in

 Search Filters

Dataset type

☐ Map

☐ Tabular

☐ Map & Tabular

☒ All

Producer

Producer...

Publisher

Publisher...

Access Constraints

Access Constraints...

Data license

Data license...

Temporal extent

From year:

0

To year:

0

Datasets available

Search for datasets...

Search

Datasets found: 242

Sort by temporal extent ↑

Sort by most viewed ↑

Sort by recently added ↑

3D Soil Hydraulic Database of Europe at 1 km and 250 m resolution

Producer: JRC

Creation date: 25/4/2025

Last update: 1/1/2017

Dataset type: **MAP**

Temporal extent: N/A - N/A

Formats available: GeoTIFF

A validation workflow for Treatment Wetland Performance data

Temporal extent: N/A - N/A

 Start guide

1

What can you do in WETSET?

Traditional Dataset List

WETSET [Datasets](#) [Map](#) [Compare](#) [Help](#) [Register](#) [Log in](#)

Search Filters

Dataset type

☐ Map ☐ Tabular

☐ Map & Tabular

☒ All

Producer

Producer...

Publisher

Publisher...

Access Constraints

Access Constraints...

Data license

Data license...

Temporal extent

From year:

0

To year:

0

Datasets available

Search for datasets...

Datasets found: 242

Sort by temporal extent ↑

Sort by

3D Soil Hydraulic Database

Producer: JRC

Creation date: 25/4/2025

Last update: 1/1/2017

Dataset type: **MAP**

A validation workflow for Treatment Wetland Performance data

Temporal extent: N/A - N/A

You can find datasets by:

- Scrolling through the dataset list
- Using the search bar to look for a specific dataset
- Applying filters based on properties like dataset type, producer, publisher, topic, and location

What can you do in WETSET?

Dataset Comparator

Dataset Comparison

Select up to 3 datasets. Once selected, clear a slot with X to replace it.

Dataset 1: ETC NRT Fluxes, Lompolojankka × Dataset 2: Regional peatland carbon storage × Dataset 3: Soil Organic Carbon (SOC) Projections for Europe ×

Export CSV Print / Save as PDF Fields ☐ Show only differences

Select extra fields to show

- ☒ Access constraints (Core)
- ☐ Dataset type (Core)
- ☒ Description (Core)
- ☐ External ID (Core)
- ☒ Formats (Core)
- ☐ Funding source (Core)
- ☒ Issued (Core)
- ☐ Keywords (Core)
- ☒ Languages (Core)
- ☒ Last update (Core)

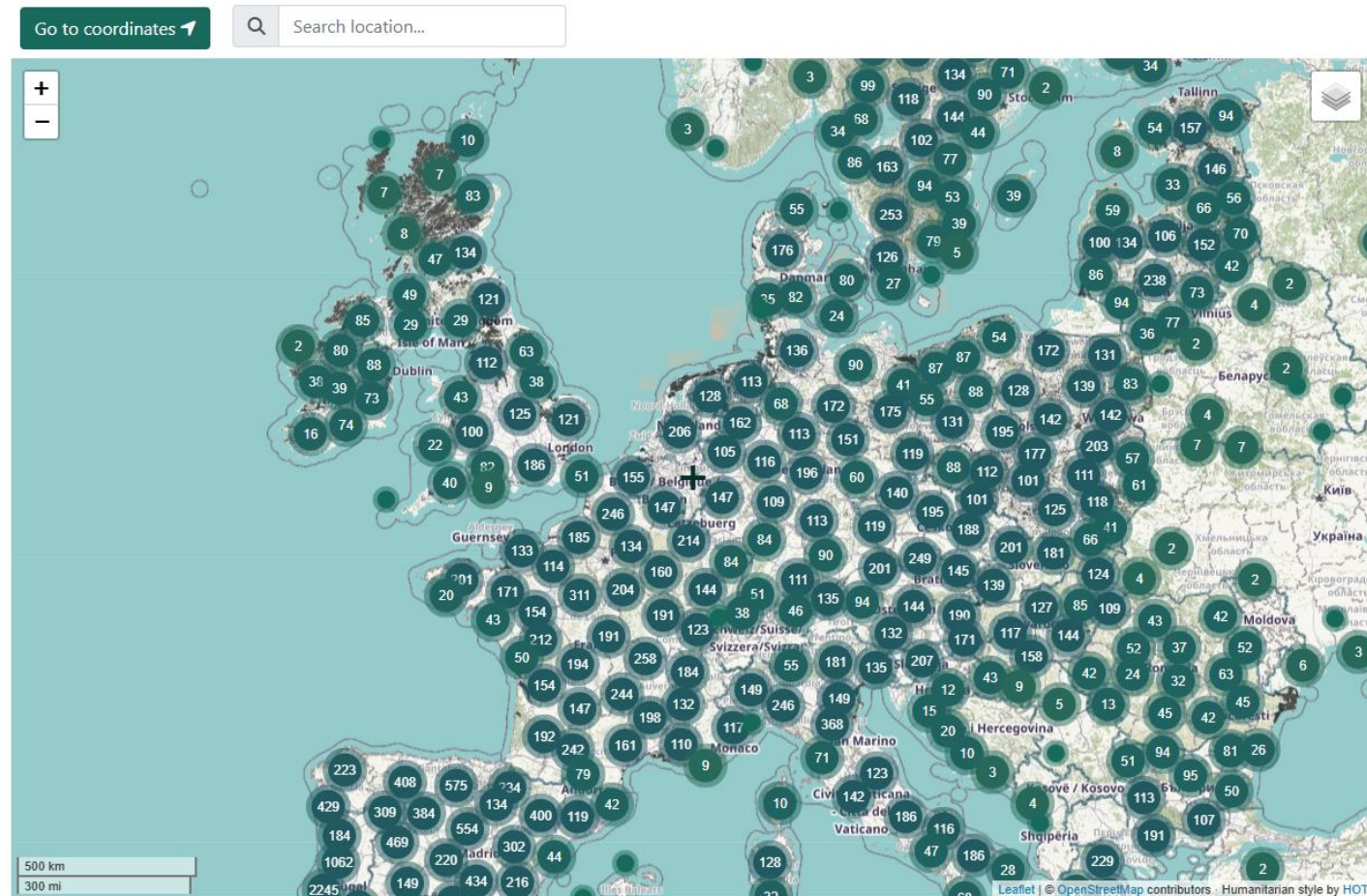
	ETC NRT Fluxes, Lompolojankka	Regional peatland carbon storage	Soil Organic Carbon (SOC) Projections for Europe
Access constraints	Open access. No registration	Open access. No registration	Open access. With registration and delayed access
Description	ed, daily-growing (by data object deprecation) half- e fluxes, all the quality tests results, storage fluxes tion calculated by the ICOS ETC starting from the rts from the last respective L2 release.	The data is a raster data describing the size of the peat carbon storage in peatlands, where the pixel value represents the amount of peat carbon storage in a 1 km2 area (ton C/km2). The data includes undrained and forest-drained peatlands, agricultural peat fields and peat extraction areas. The data is based on the peat layer thickness measurements and peat analysis data of the GTK, as well as the data of the Superficial deposits of Finland 1:200 000, the peat layer thickness measurements of the experimental areas of the NFI of the Luke and the Topographic Database and 0.5 p/m2 laser scanning data of the NLS. Based on the data, a general understanding of the size of the carbon stock contained in the peat of peatlands can be obtained for the whole of Finland. Data is suitable for land use and conservation planning of peatlands at the provincial level. The data is not suitable for detailed site-specific planning. The layer files of ArcGIS and QGIS are included in the product.	This dataset consists of a number of data layers (raster GRID maps) that are associated to the peer-reviewed publication "Assessment of soil organic carbon stocks under future climate and land cover changes in Europe" . Layers cover the current Soil Organic Carbon Stocks (2016) and the projected Soil Organic Carbon Stocks by 2050, for various Climate Scenarios (CCSM4, HadGEM2-AO , IPSL-CM5A-LR MRI-CGCM3) and Representative Concentration Pathways (RCPs).
Formats	CSV	TIFF	-
Issued	2025-03-10	2025-04-25	2016-01-01
Languages	English	Finnish	English
Last update	2025-03-10	2023-11-07	2016-01-01
License	CC BY 4.0	CC BY 4.0	CC BY 4.0
Producer	Ecosystem Thematic Centre	Geological Survey of Finland	JRC
Publisher	ICOS	Geological Survey of Finland	JRC
Temporal extent	2024-11-04 to 2025-03-09	- to -	- to -
Title	ETC NRT Fluxes, Lompolojankka	Regional peatland carbon storage	Soil Organic Carbon (SOC) Projections for Europe
Contact person	Euro...	Euro...	Euro...

You can:

- compare up to three different dataset
- choose the fields to compare
- only see the differences
- and export/save as PDF

What can you do in WETSET?

WETSET Interactive Map Viewer



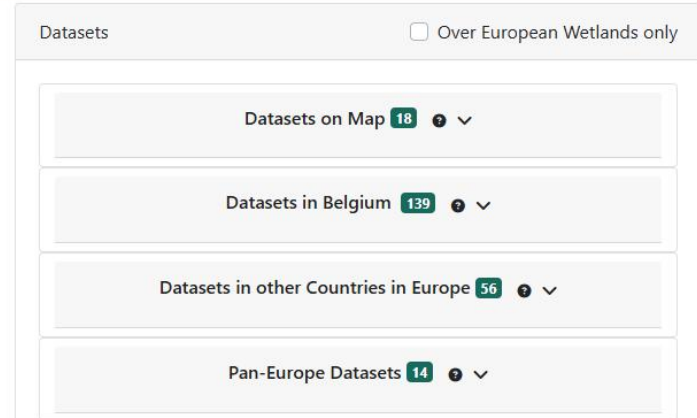
Datasets	☐ Over European Wetlands only
Datasets on Map	18
Datasets in Belgium	139
Datasets in other Countries in Europe	56
Pan-European Datasets	14

What can you do in WETSET?

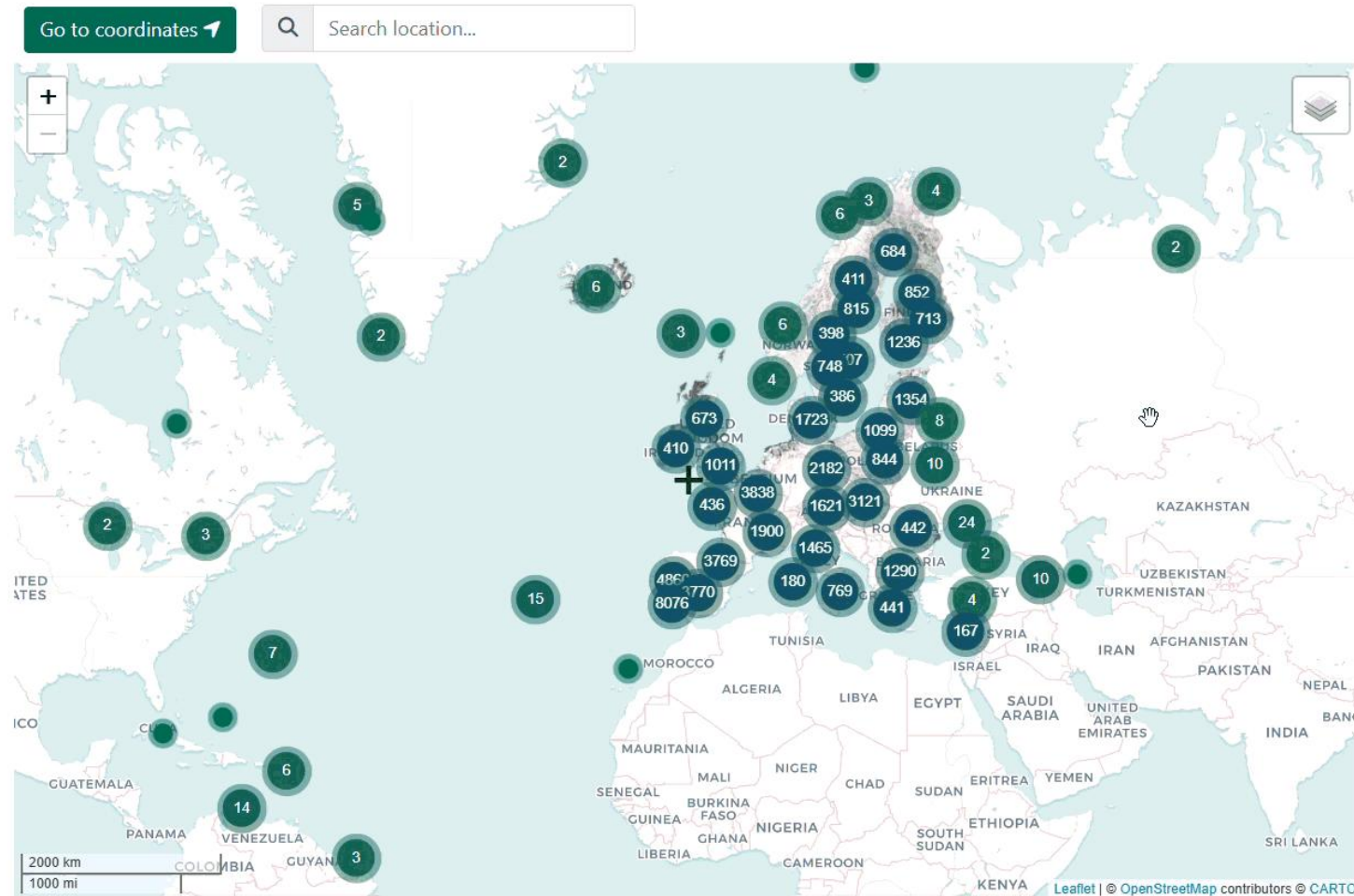
WETSET Interactive Map Viewer

❖ Groups of datasets defined:

1. **Datasets on Map:** This section shows datasets that have geographic markers or polygon boundaries visible within the current map view. Pan or zoom the map to discover more datasets.
2. **Datasets in [Country]:** This section contains locally produced datasets from this geographical location (the one you are pointing at with the crosshair) and continental databases where datasets from this geographical location are featured in.
3. **Datasets in other Countries in Europe:** This section contains datasets from other territories in Europe that have specific country-level coverage detail.
4. **Pan-Europe Datasets:** This section contains datasets covering Europe broadly, without specific country-level geographic detail (For example, rasters).



WETSET Interactive Map Features



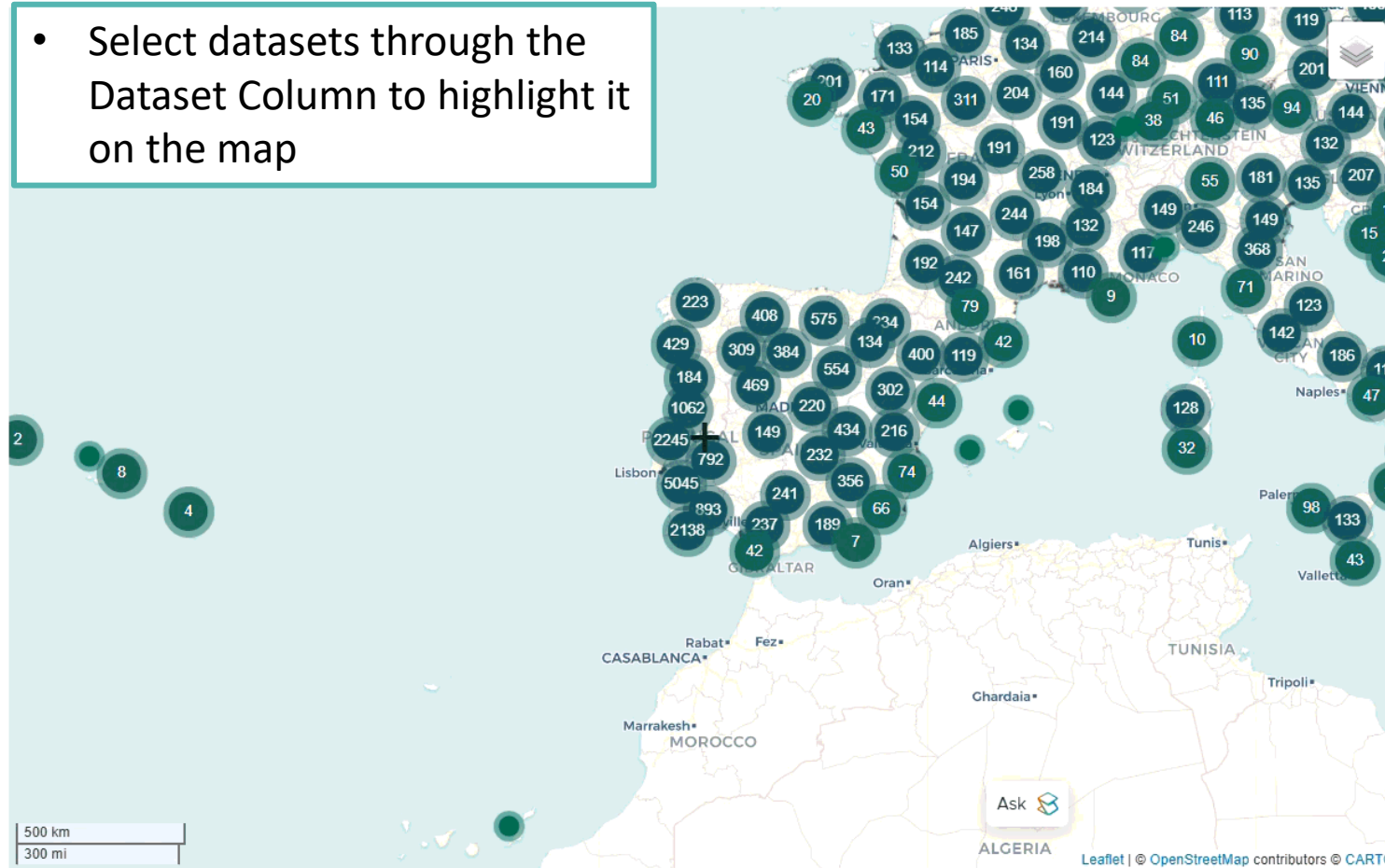
- Navigate through the datasets intuitively; drag to move, zoom in, zoom out.
- Points represent coordinates where a dataset contains information, they are organised in clusters for enhanced visibility

WETSET Interactive Map Features

Go to coordinates ↗

Search location...

- Select datasets through the Dataset Column to highlight it on the map



Datasets

☐ Over European Wetlands only

Go to dataset →

Monitoring of colonial waterfowl species (2013–2014)

Producer: ICNF, CEMPA

Temporal extent:
20/2/2013 - 31/7/2014

Dataset type:

TABULAR

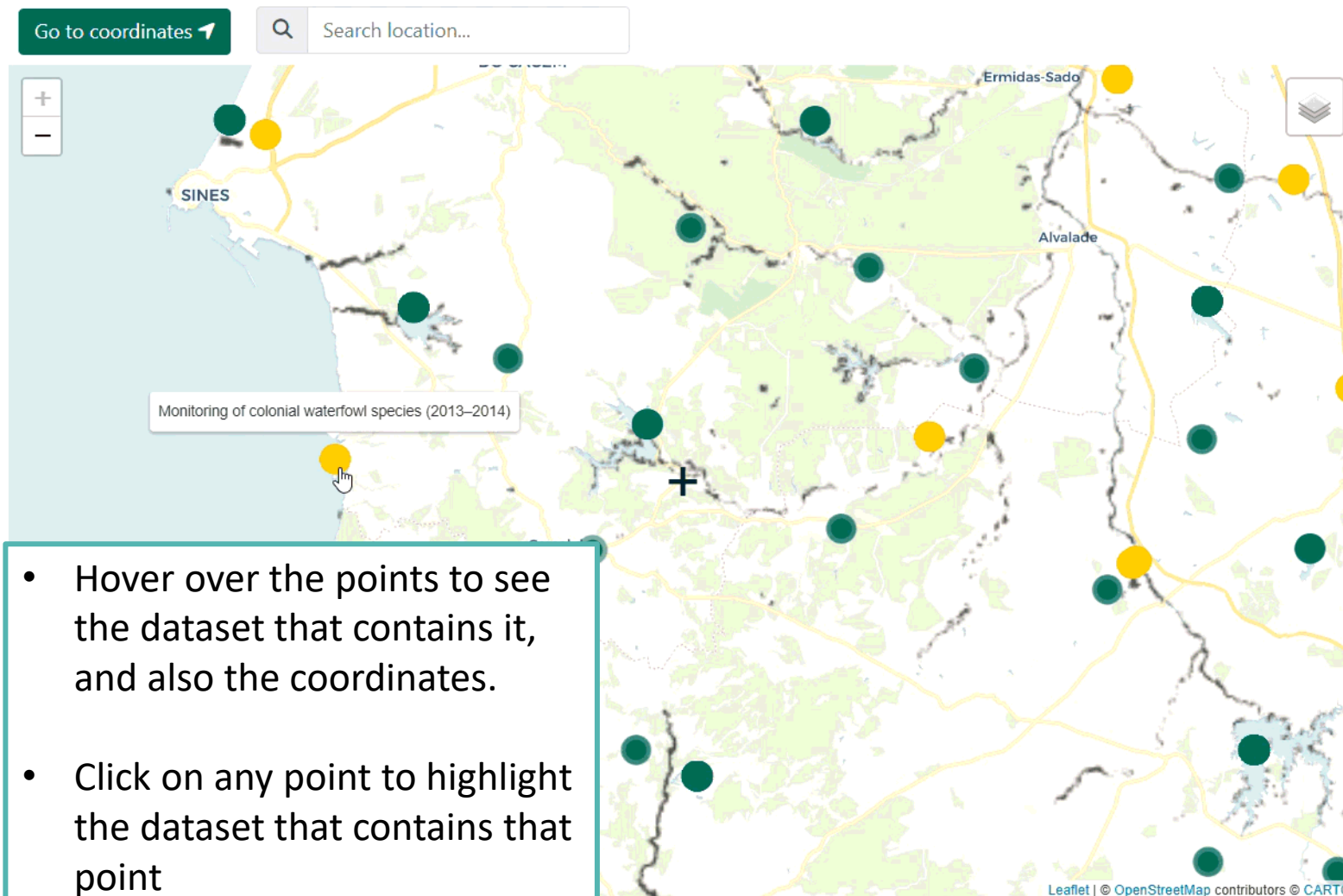
Go to dataset →

Monthly gridded data product of northern wetland methane emissions based on upscaling eddy covariance observations

Producer: Large international collaboration (Univ. Helsinki, FMI, Lund Univ., Univ. Eastern Finland, MPI-BGC, San

Temporal extent: N/A - N/A

WETSET Interactive Map Features



- Hover over the points to see the dataset that contains it, and also the coordinates.
- Click on any point to highlight the dataset that contains that point

Datasets

☐ Over European Wetlands only

☐ Show only selected

Wintering wildfowl in Portugal – 1992-1993

Producer: ICNF - Instituto da Conservação da Natureza e das Florestas

Temporal extent: 10/1/1992 - 31/3/1993

Dataset type: **TABULAR**

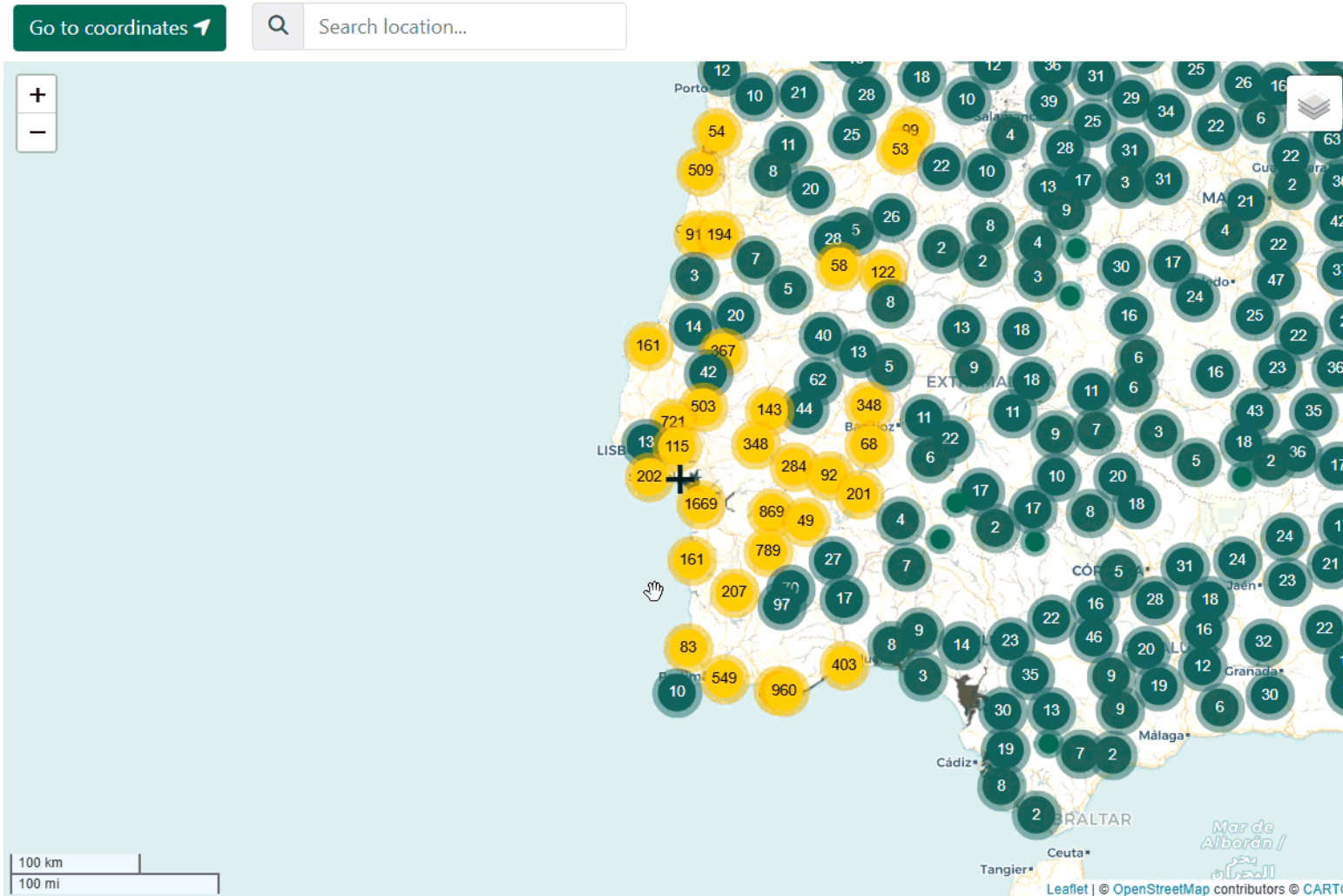
[Go to dataset →](#)

Datasets in Portugal **144** ⓘ ▼

Datasets in other Countries in Europe **57** ⓘ ▼

Pan-Europe Datasets **15** ⓘ ▼

WETSET Interactive Map Features



Datasets ☐ Over European Wetlands only
☐ Show only selected

- “Show only selected” box will hide the rest of non-highlighted datasets for better visibility

Producer: JRC

Temporal extent: N/A - N/A

Dataset type:

MAP & TABULAR

Go to dataset →

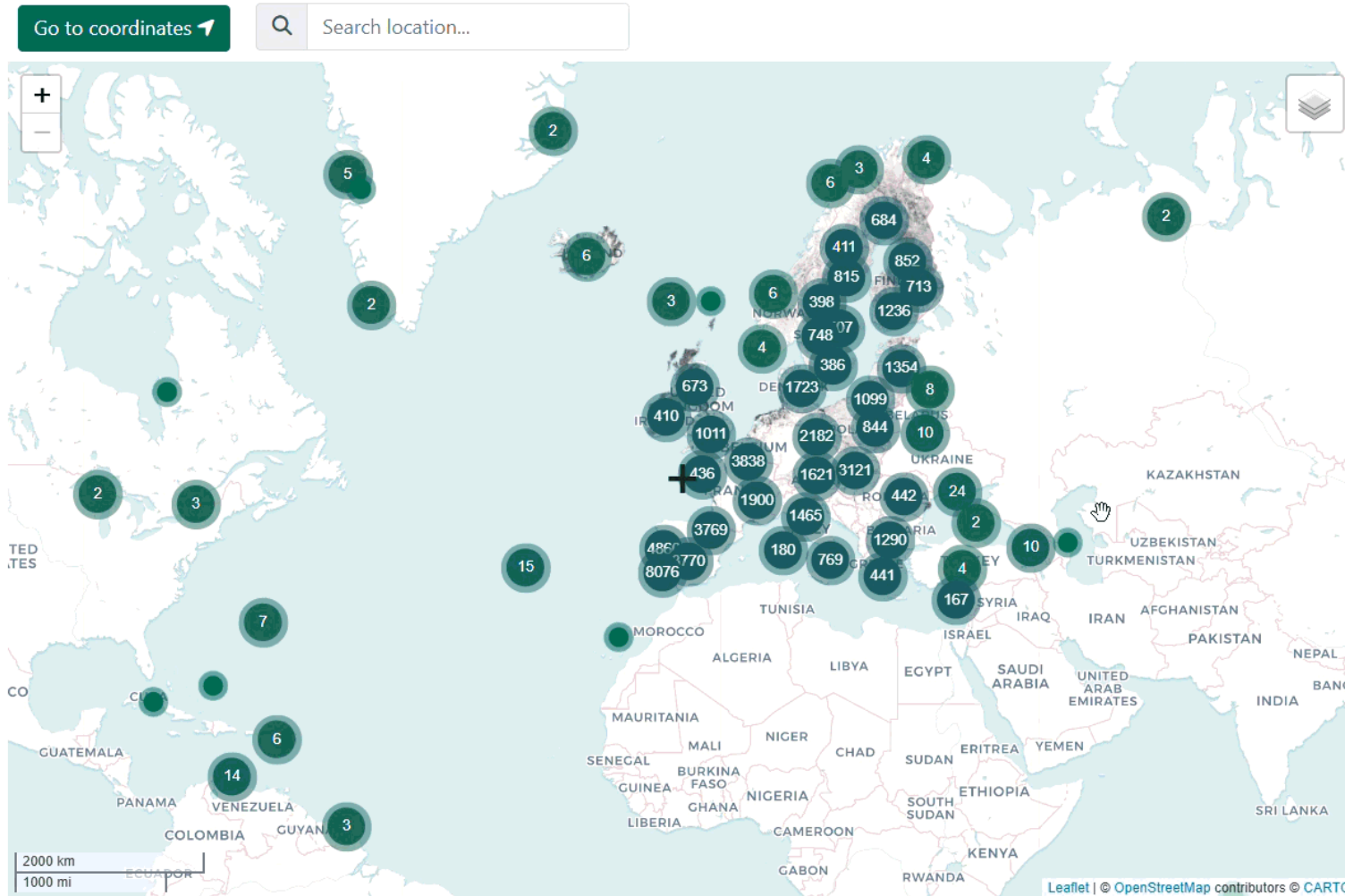
Modeling Biomass Production in Seasonal Wetlands Using MODIS NDVI Land Surface Phenology

Producer: Estación
Biológica de Doñana
(CSIC).

Temporal extent: N/A - N/A

Dataset type:

WETSET Interactive Map Features



Datasets

☐ Over European Wetlands only

Datasets on Map 31

Bird census counts at the Zwin Nature Park

Producer: Zwin Nature
Park / Wouter Faveyts

Temporal extent:
4/1/2018 - 31/12/2024

Dataset type:

TABULAR

[Go to dataset →](#)

- “Over European Wetlands only” will only show the points of information that falls inside a wetland territory (According to the European Wetlands Map, produced by ALFAwetlands and WET HORIZONS)

Submit your data (metadata) to WETSET

- Any registered user can register a new dataset. Registered users can submit draft versions that need to be reviewed and validated by a **Data Manager** or **Admin** before they are published.
- When you *add* a new dataset, you are creating a dataset characterization. This involves filling out a form with key metadata such as the title, publisher, spatial and temporal extent, and a link to where the data can be accessed.
- The platform then acts as a central hub, allowing researchers and other stakeholders to easily find and understand the data's relevance without having to search multiple, dispersed sources.

THANK YOU

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