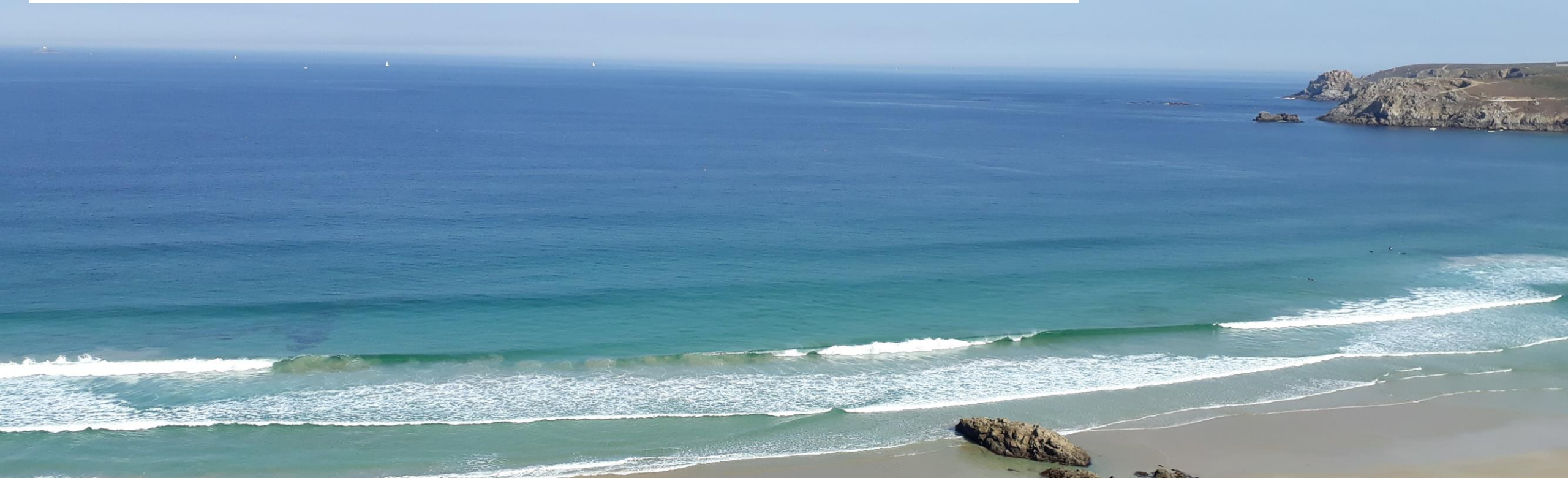


The European Atlas of the Seas

www.european-atlas-of-the-seas.eu

Education for Climate Coalition Challenge

Be a scientist! Mapping climate change at seas & waterways



Workshop, 7 September 2022



Objectives of the challenge



Log in

Home Connect Unlock Develop Re-use About Help Newscorner

Challenge **Let's create our own map | 21 Jun - 4 Sep 2022**

Be a scientist! Mapping climate change at seas & waterways

Share this page



3 ideas
26 participants
6 phases

[See challenge information](#)

Stream Ideas About Events Topics Participants

Participate in and get to experience science & research from behind the scenes of the European Atlas of the Seas!

New [challenge](#) launched for schools across Europe to create the first citizen science map layer in the European Atlas of the Seas



www.european-atlas-of-the-seas.eu

What has happened so far?

Phases

- ✓ **Let's play**
10 Jun - 20 Jun
- ✓ **Let's re-play**
21 Jun - 21 Jun
- **Let's create our own map**
21 Jun - 4 Sep
Which map on climate change shall the community work on together?
VOTE NOW
Permissions: Active
- **Let's be scientists**
7 Sep - 11 Sep
- **Let's explore, collect and report**
12 Sep - 30 Oct
- **Let's create the community map & re-play**
31 Oct - 20 Nov

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ΜΑΡΙΑ ΑΝΑΓΝΩΣΤΙΔΟΥ Nathalie Van Isacker Susanne SZKOLA ΚΟΤΣΙΩΛΗ ΙΩΑΝΝΑ

ΣΟΦΙΑ ΚΟΥΖΟΥΛΗ Χουσερίδης Χρήστος Justyna Plota

Education for Climate Coalition Anestis Papadopoulos Dana Florescu Marzia Vacchelli

+1

[Workshop](#) with teachers (10 June 2022)



What has happened so far?

The composite image consists of three main parts:

- Timeline (Left):** A vertical list of project phases. The first two phases, 'Let's play' (10 Jun - 20 Jun) and 'Let's re-play' (21 Jun - 21 Jun), are highlighted with a dashed blue box and green checkmarks. The third phase, 'Let's create our own map' (21 Jun - 4 Sep), is currently active, indicated by a blue dot and a green 'Active' button. The remaining phases are 'Let's be scientists' (7 Sep - 11 Sep), 'Let's explore, collect and report' (12 Sep - 30 Oct), and 'Let's create the community map & re-play' (31 Oct - 20 Nov).
- Poster (Middle):** A blue poster for the 'BOAT RACE CHALLENGE' under the 'Education for Climate' banner. It features silhouettes of sailboats on a dark blue sea with a large yellow sun in the background.
- Map (Right):** A map of Europe showing numerous yellow star markers placed across various countries, representing data points for the 'European Maritime Day in My Country 2022' project. The map interface includes a legend, a scale bar (0-400km), and navigation controls.

[Workshop](#) with teachers and students (21 June 2022)



What has happened so far?



[Workshop](#) with teachers and students (21 June 2022)



0 0.3

☰

🔍

Layers (

European M
2022
Year: 2022

★

🔄

😊



English



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Give feedback



Boat race

Congratulations for completing the race!

Now you can download your diploma

Your name?

Your boat's name?

[Get your diploma](#)



What is the European Atlas of the Seas?



Tourism



Nature



Sea life



Transport



Sea bottom



Energy



Security



Fishing stocks and quota



Aquaculture



Employment

- Interactive learning tool
- Initiative of the European Commission
- 275 interactive map layers
- Identified data sources
- Custom maps
- Easily accessible
- 24 official languages
- Print & embed tools



This screenshot shows the help menu of the European Atlas of the Seas. The menu is titled "European Atlas of the Seas help" and includes options for "Explore and search", "Layer list and legend", "Print functionality", "Give feedback", and "Video tutorial". The "Video tutorial" option is highlighted with a red dashed oval. A note at the bottom states: "Note: Your selected layers are hidden and the countries map is activated to explain the functionalities of the Atlas. Your selection will appear again when closing the help." The page is powered by EMODnet.



This screenshot shows the quick guide page, titled "Quick guide through the European Atlas of the Seas". It features the European Commission logo at the top and the URL "www.european-atlas-of-the-seas.eu" at the bottom. The background is a blue ocean wave pattern.

This screenshot shows the main page of the European Atlas of the Seas. The page is titled "European Atlas of the Seas" and includes a sub-header "European Commission > Maritime Affairs > European Atlas of the Seas". The main content area contains the text "Explore, collate and create your own sea map. Learn more about Europe's seas and coasts, their environment, related human activities and European policies." Below this, there are several menu items: "Do you need help?", "Teachers corner", "Advanced features", "Legal notice", and "Atlas overview". The "Do you need help?" and "Teachers corner" items are highlighted with red dashed ovals. The page is powered by EMODnet.



Missed it? Look at the guide to the boat race!

Home Lock https://webgate.ec.europa.eu/maritimeforum/en/node/7143 80% ☆

Website of the European Union How do you know? ▾

European Commission

MARITIME FORUM

Search


European Commission > Maritime Forum >

Themes [Home](#) Communities Search F.A.Q. [EU Login](#)

Boat race level 1 (New Skipper)

Published on: Thu, 28/04/2022 - 09:03 [A A](#) [View as pdf](#) [I like it](#)

Discover activities organized across Europe for European Maritime Day in my Country by participating in a virtual boat race that will take you from Finland to Italy!



Note for teachers

This activity will allow students to explore the European Atlas of the Seas' map layer showing [2022 European Maritime Day in My](#)

Related issues

- Boat race level 1

Atlas Teachers Corner

- + Teachers Corner
- + Espace enseignants
- + Espaço dos professores
- Posters
- + Workshops
- Presentations
- Quiz (English)
- + **Boat race level 1**
- + Boat race level 2
- + Treasure Hunt
- + Easter Egg
- + Biodiversity quiz
- + Quiz (Français)

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- Easter Egg

<https://webgate.ec.europa.eu/maritimeforum/en/node/7143>

What has happened so far?

Phases

- Let's play
10 Jun - 20 Jun
- Let's re-play
21 Jun - 21 Jun
- Let's create our own map**
21 Jun - 4 Sep
- Let's be scientists
7 Sep - 11 Sep

Which map on climate change shall the community work on together?

VOTE NOW

Permissions

Active

IDEA
Precipitation
This map is directly linked to climate change!
Let's create our own map ↑ 2 ■ 1 [Read more](#)

IDEA
Water transparency
This map is indirectly linked to climate change!
Let's create our own map ↑ 1 ■ 0 [Read more](#)

IDEA
Water temperature
This map is directly linked to climate change!
Let's create our own map ↑ 7 ■ 2 [Read more](#)

Teachers' online votes to select the topic of the map that will be developed








Which map has the community chosen?

Phases

- ✓ **Let's play**
10 Jun - 20 Jun
- ✓ **Let's re-play**
21 Jun - 21 Jun
- Let's create our own map**
21 Jun - 4 Sep
- Let's be scientists
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[Let's create our own map](#) ↑ 1 ■ 0 [Read more](#)

IDEA
Water temperature
This map is directly linked to climate change!
[Let's create our own map](#) ↑ 7 ■ 2 [Read more](#)



Next step ...

Phases



Let's play

10 Jun - 20 Jun



Let's re-play

21 Jun - 21 Jun



Let's create our own map

21 Jun - 4 Sep

Which map on climate change shall the community work on together?

[VOTE NOW](#)

Permissions



Active



Let's be scientists

7 Sep - 11 Sep



Let's explore, collect and report

12 Sep - 30 Oct



Let's create the community map & re-play

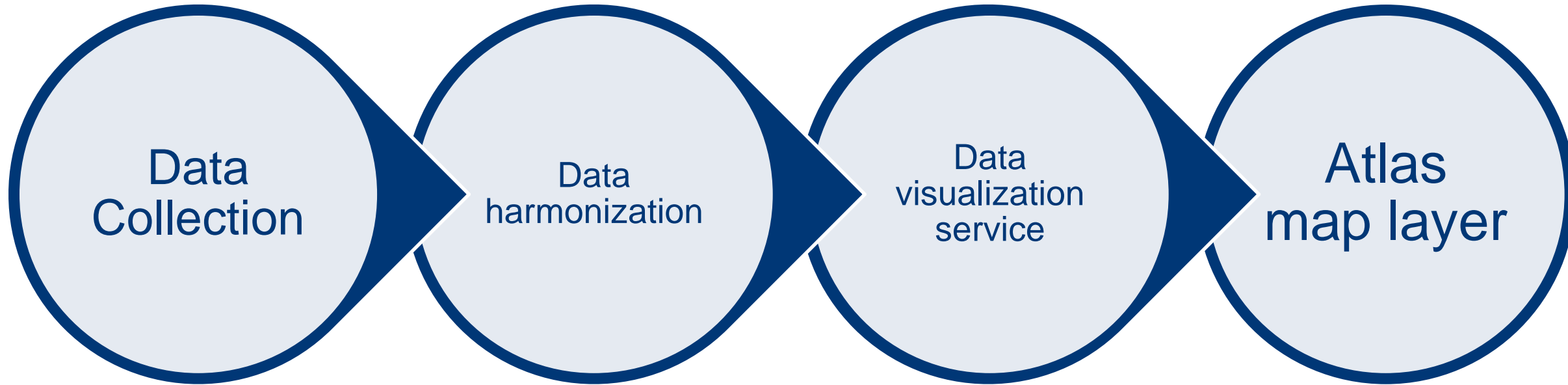
31 Oct - 20 Nov



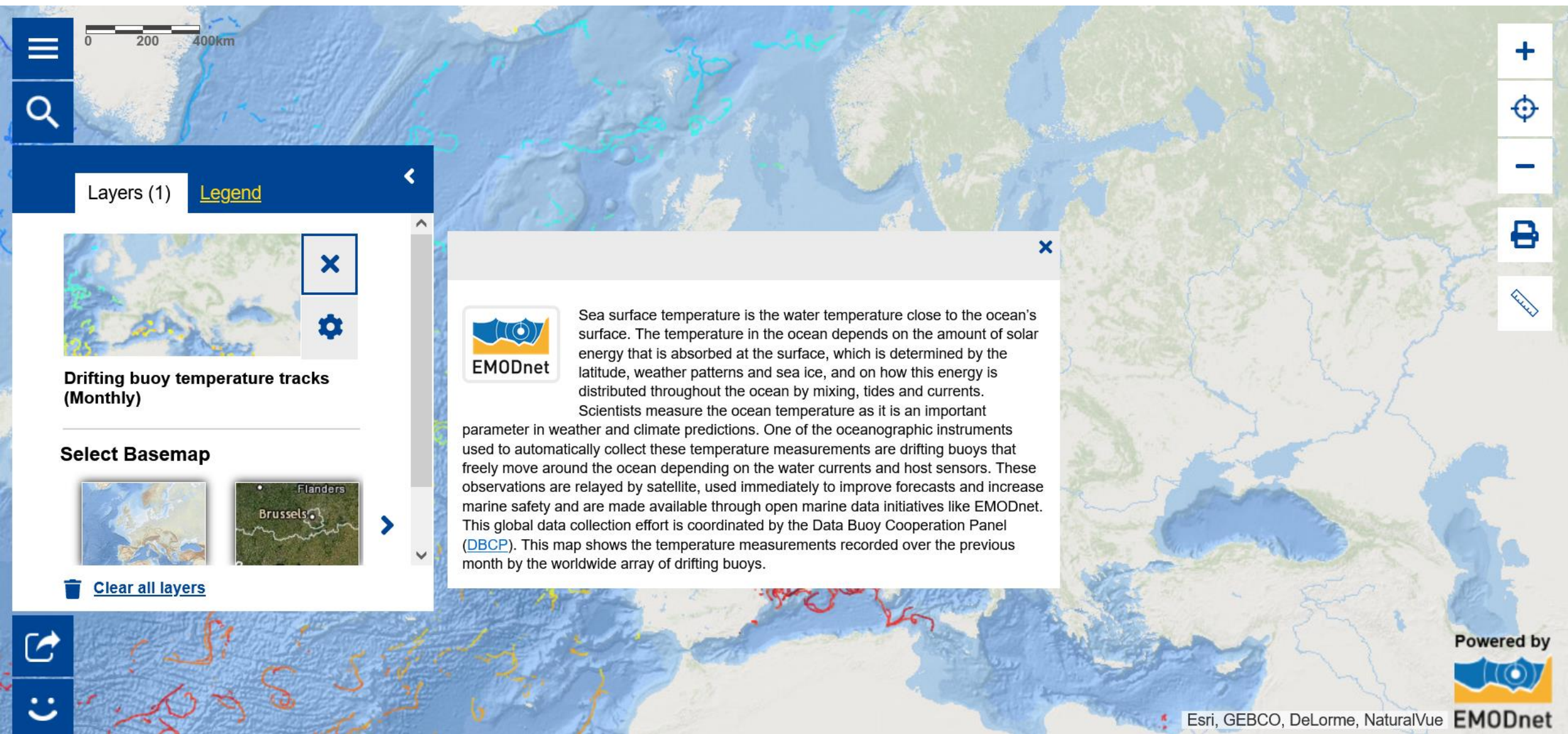
Powered by Esri, GEBCO, DeLorme, NaturalVue EMODnet



How are maps developed?



- Each map layer in the Atlas is the result of **several steps**.
- Each step requires different **competences and skills**.
- The maps in the Atlas are the product of **teamwork**. Experts across Europe are involved in the different steps and are working together to deliver **easy access to high quality information** on the ocean and seas.



Layers (1)

[Legend](#)



Drifting buoy temperature tracks (Monthly)

Select Basemap



[Clear all layers](#)



Sea surface temperature is the water temperature close to the ocean's surface. The temperature in the ocean depends on the amount of solar energy that is absorbed at the surface, which is determined by the latitude, weather patterns and sea ice, and on how this energy is distributed throughout the ocean by mixing, tides and currents.

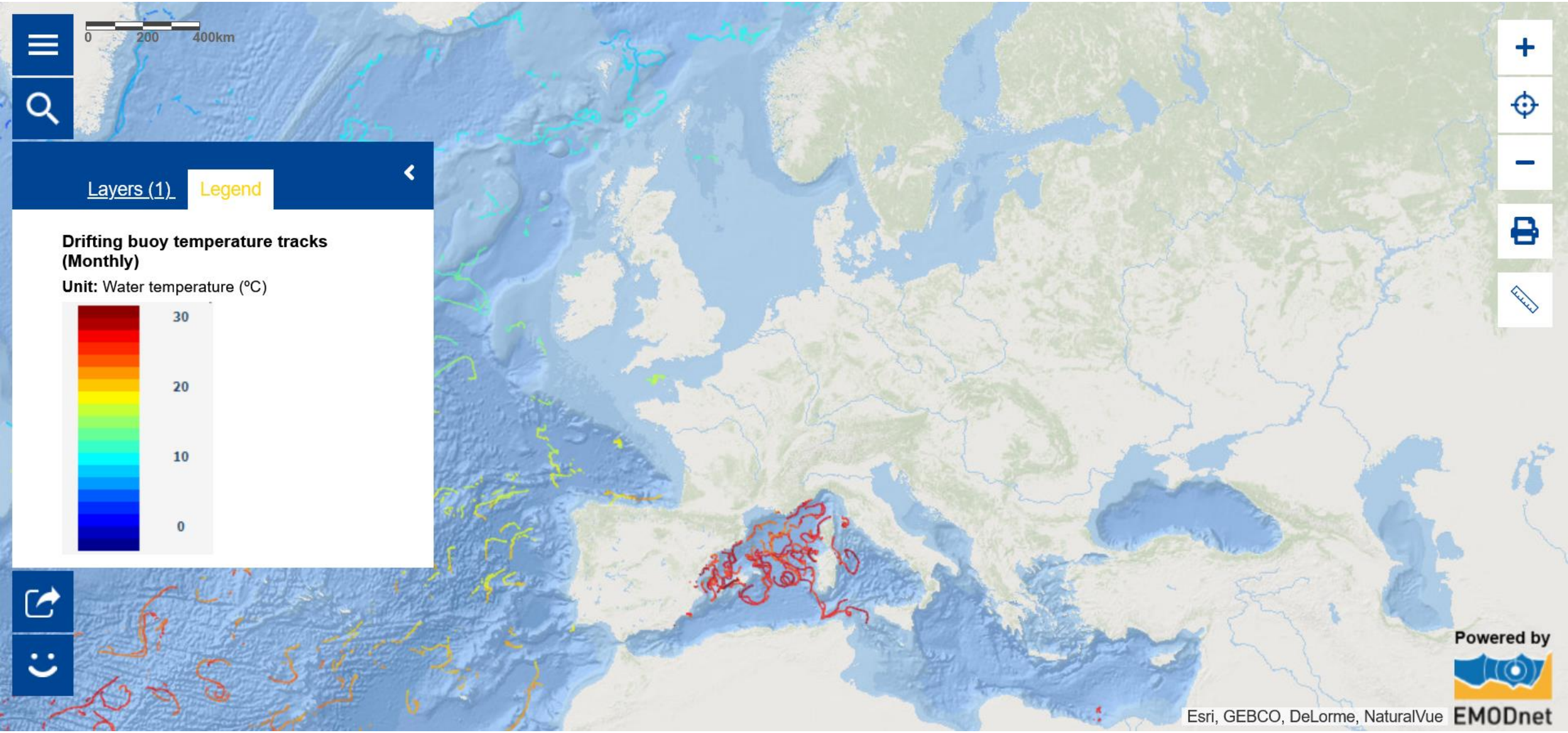
Scientists measure the ocean temperature as it is an important parameter in weather and climate predictions. One of the oceanographic instruments used to automatically collect these temperature measurements are drifting buoys that freely move around the ocean depending on the water currents and host sensors. These observations are relayed by satellite, used immediately to improve forecasts and increase marine safety and are made available through open marine data initiatives like EMODnet. This global data collection effort is coordinated by the Data Buoy Cooperation Panel ([DBCP](#)). This map shows the temperature measurements recorded over the previous month by the worldwide array of drifting buoys.

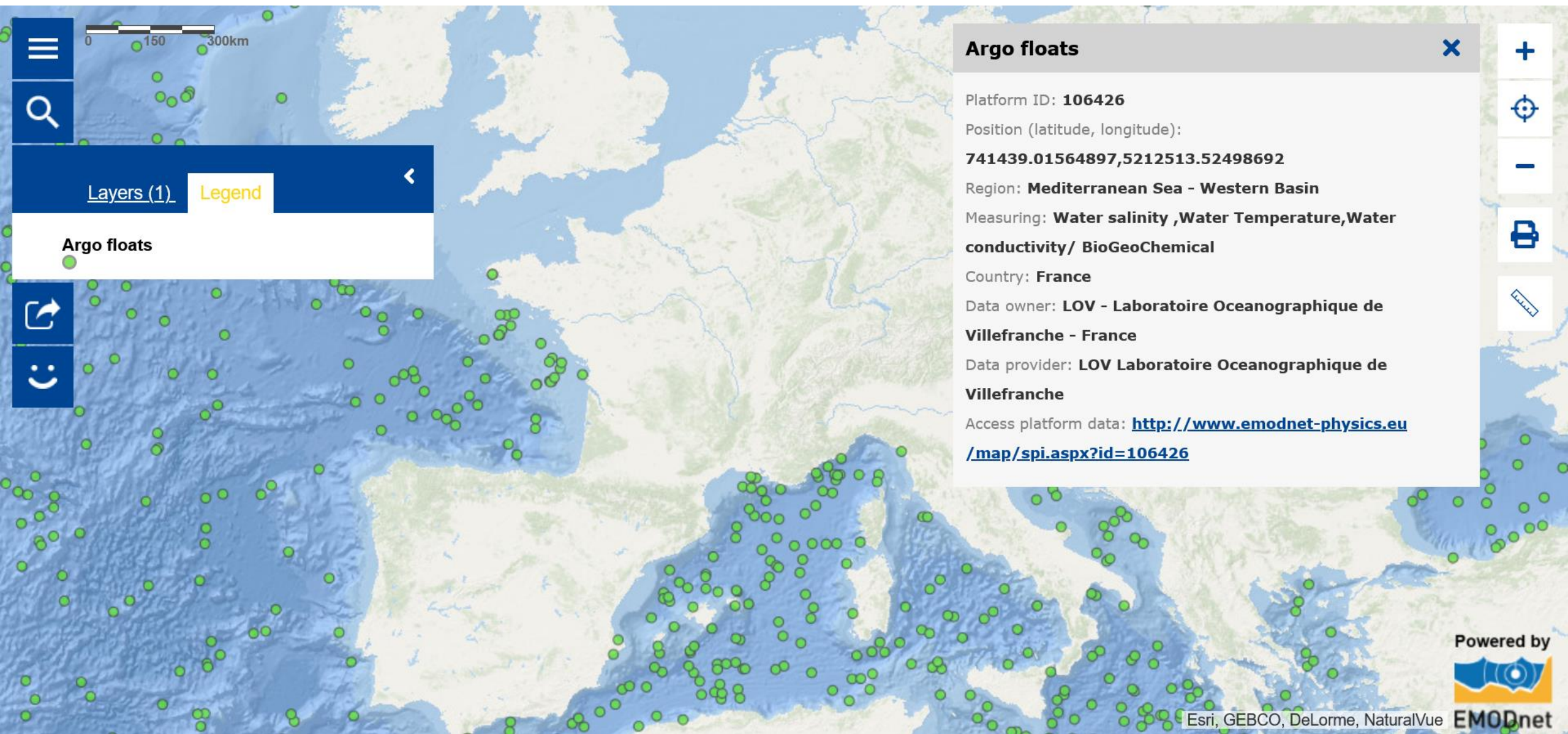
Powered by

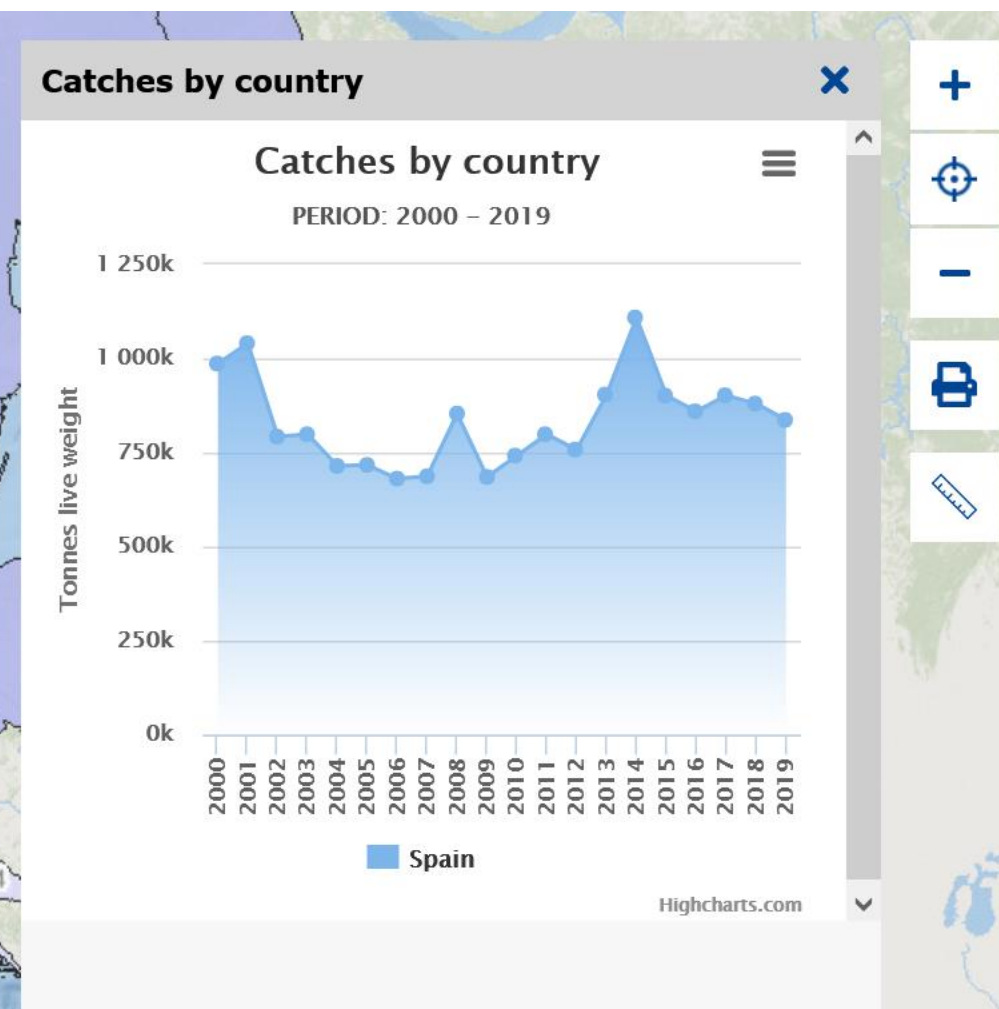
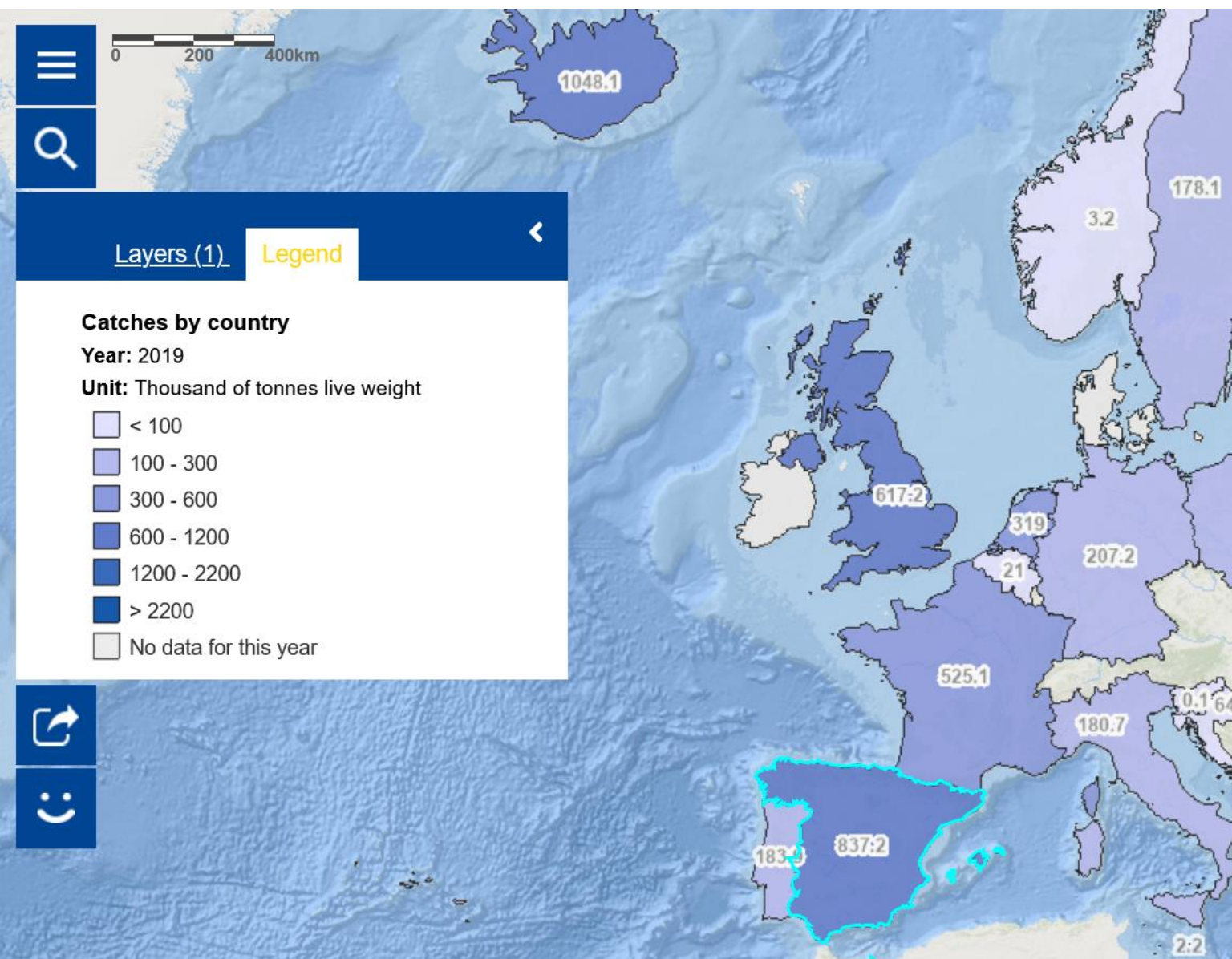


EMODnet

Esri, GEBCO, DeLorme, NaturalVue







What do we need to develop the new map?

- **Data** from measurements that you have made: water surface temperature
- **Information about the collected data**
 - ✓ **Where** was the measurement made?
 - ✓ **When** was the measurement made?
 - ✓ **How** was the measurement made?
 - ✓ **Who** is the data provider?

We need to ensure that data is

- Correct (verified)
- Coherent (e.g., all data is provided in the same unit)
- Complete



FAIR principe

Findable, accessible, interoperable and re-usable

CARE principe

Collective benefit, authority to control, responsibility and ethics



Key guidelines to collecting data

Measurements could be made

- in different locations
- at different times

Information to provide for the map

- Name of the school that provided the data and hyperlink to the school's website (optional)
- Geographical coordinates of the location where the measurement was made
- Water body in which the measurement was made (e.g.; sea, river, lake, pond,...)
- Municipality and country of the location where the measurement was made
- Picture of the location where the measurement was made (optional)
- Date on which the measurement was made
- Time at which the measurement was made
- Measured data - water surface temperature - in the correct unit for the map: degrees Celsius
- How the measurement was made

Additional information not included in the map

- E-mail address of the teacher/school in case we have questions about the data



How to collect and report the data needed for this map together?

Phases

Let's play

10 Jun - 20 Jun

Let's re-play

21 Jun - 21 Jun

Let's create our own map

22 Jun - 6 Jul

Let's be scientists

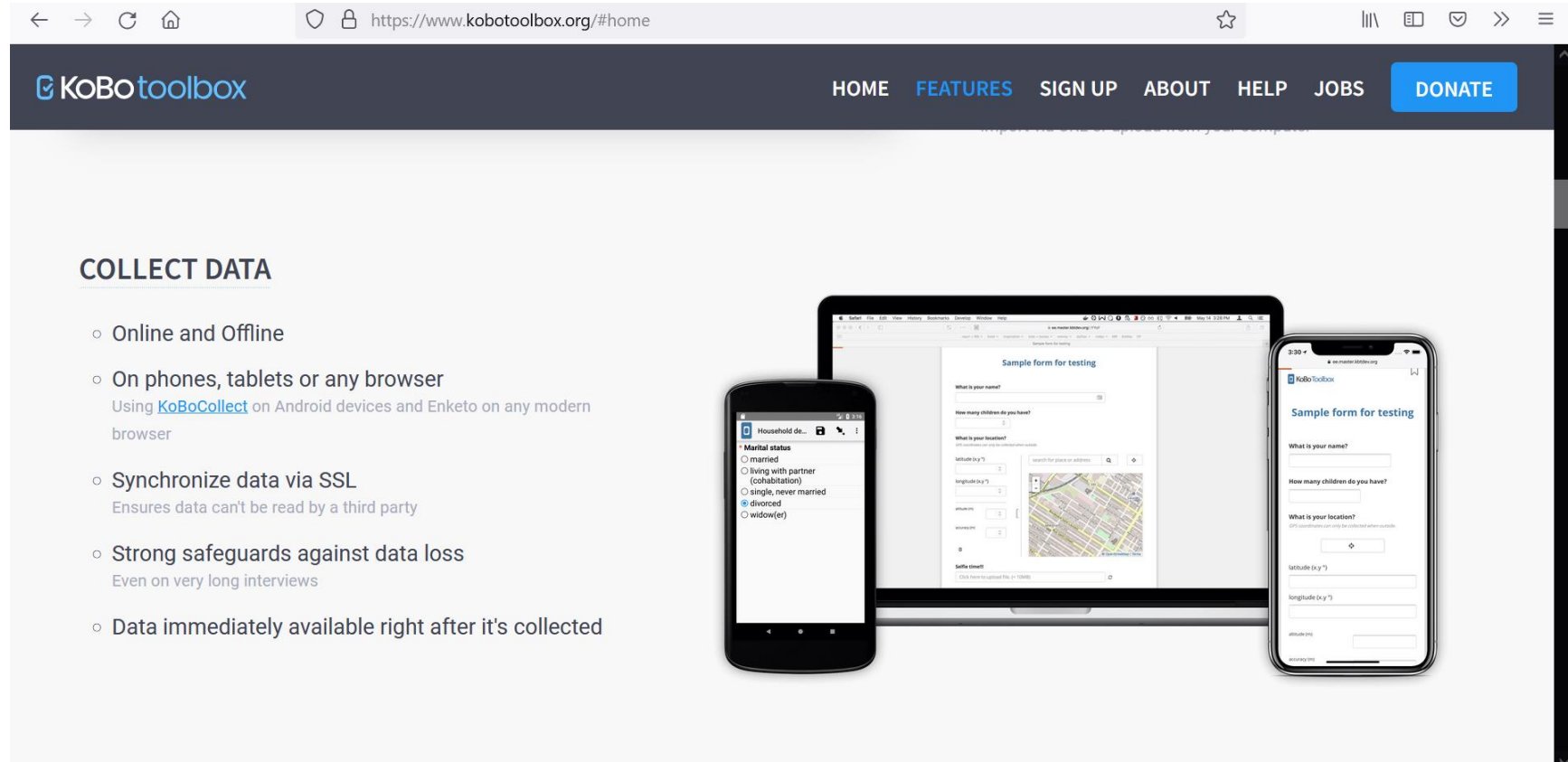
13 Jul - 14 Aug

Let's explore, collect and report

15 Aug - 16 Oct

Let's create the community map & re-play

17 Oct - 6 Nov



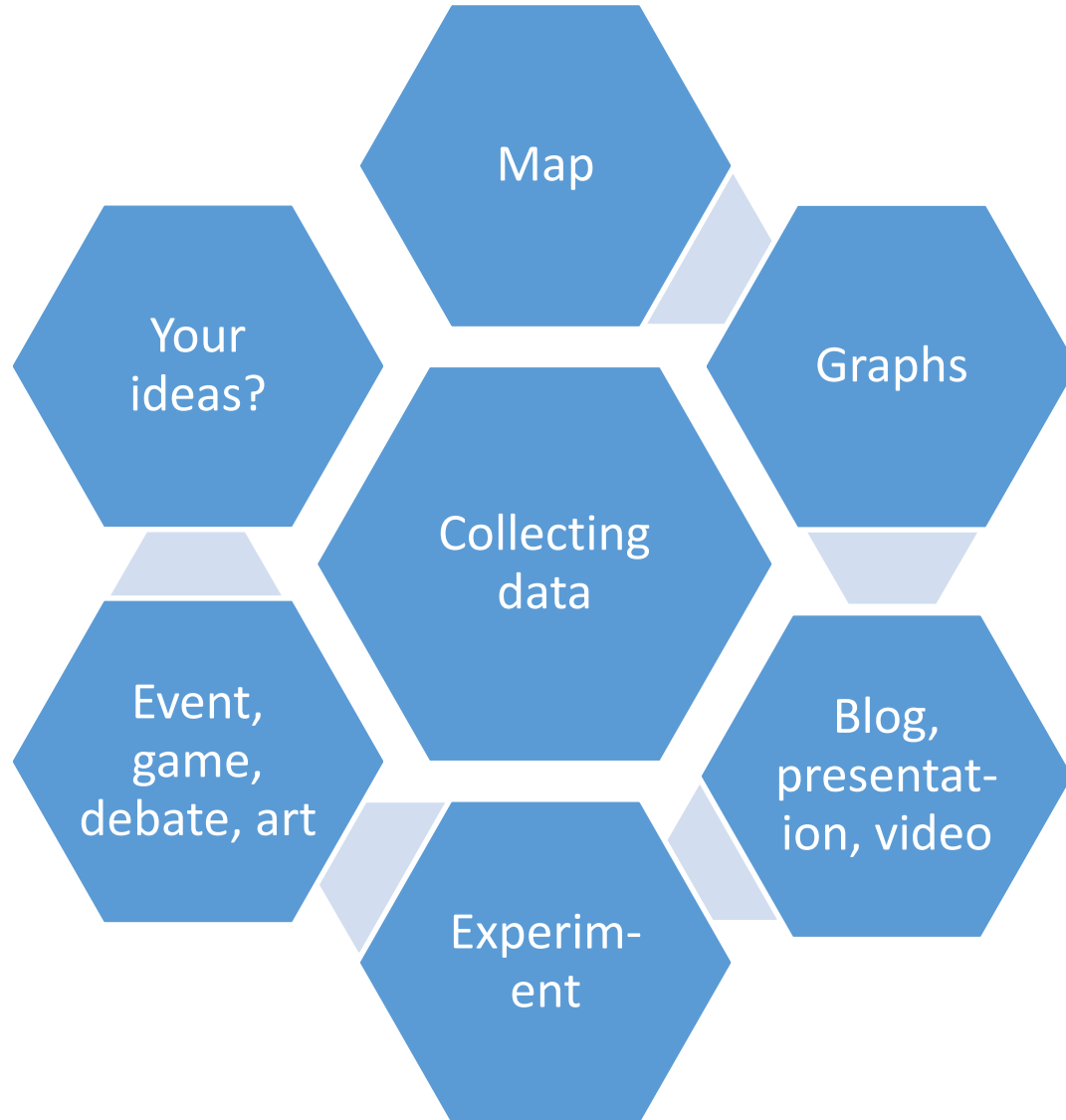
COLLECT DATA

- Online and Offline
- On phones, tablets or any browser
Using [KoBoCollect](#) on Android devices and Enketo on any modern browser
- Synchronize data via SSL
Ensures data can't be read by a third party
- Strong safeguards against data loss
Even on very long interviews
- Data immediately available right after it's collected

Brainstorming: Which school activities to run around exploring, collecting and reporting these data?

- What can we learn by collecting this data?
- What challenges could we face when collecting this data? How can we resolve this?
- How do we expect this data to evolve in the future due to climate change? What are the consequences of this?
- How can we share our findings with others?

Brainstorming: Which school activities to run around exploring, collecting and reporting these data?



Follow the European Atlas of the Seas on Twitter



European Atlas of the Seas
@EuropeAtlasSeas

[@EU_Commission](#) tool to explore, collate & create marine maps in 24 languages!
Learn more about  seas & coasts. Account managed in cooperation with [@EU_MARE](#).

ec.europa.eu/maritimeaffair...  Joined September 2013

1,366 Following 2,540 Followers

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Pinned Tweet

 **European Atlas of the Seas** @EuropeAtlasSeas · Feb 7
DYK that @EuropeAtlasSeas #maps are available in 24 languages?

To change the language:

-  open the menu
-  click on 'English'
-  select the language in the list

european-atlas-of-the-seas.eu

 [#OceanLiteracy](#) [#multilingualism](#) [#education](#) [#EUBlueSchools](#)



EU Maritime & Fish and 9 others

5 6





Questions? Ideas?
nathalie.van.isacker@emodnet.eu

Thank you!





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