

Jules Verne Trophy



illustrated by
M.P.

the famous project
CIC



CIC

IDEC.SPORT

sopra steria

RICHARD MILLE



PROFESOR & TRANSMISSIONS L'AVANCE



Wild Immersion
1 specimen. No use.



Jules Verne Trophy

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1

INTRODUCTION

The Jules Verne Trophy Educational Kit invites you to embark on a real-life sailing adventure around the world, following the challenge of the 100% female crew of The Famous Project CIC.

This kit is available in two pathways, adapted for young sailors in upper primary school and in middle school, to help them discover the oceans, marine sciences, navigation, and ecological commitment through an ambitious and inspiring project.

The proposed activities are based on real-time race tracking, short educational videos, games, and adapted scientific resources. They aim to develop teamwork, curiosity, reasoning, and awareness of ocean protection through a transversal and inclusive approach.



Welcome aboard! Captain Planet & Elen will be your guides.



2

Presentation of the Jules Verne Trophy



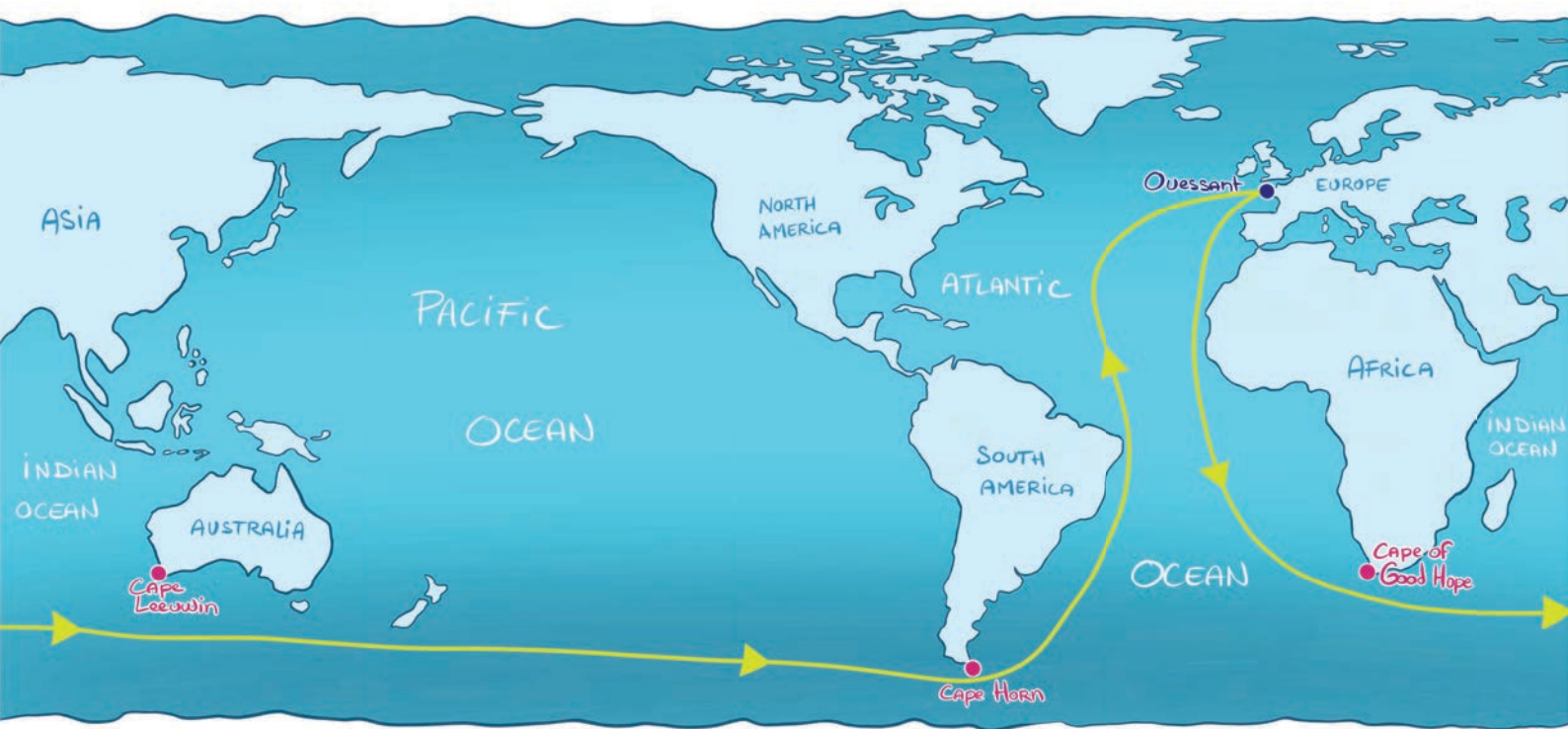
The Jules Verne Trophy is a record for sailing around the world, non-stop and without assistance, passing the three legendary capes: the Cape of Good Hope, Cape Leeuwin, and Cape Horn. Created in 1990 by Yves Le Cornec, it was inspired by Jules Verne's novel

«**Around the World in 80 Days**».

The only rule: Depart from Ouessant, sail around the world via the Southern Oceans without stopping, and return to Ouessant as quickly as possible.

Since its creation, the record has been won by legendary sailors such as Bruno Peyron, Olivier de Kersauson, Loïck Peyron, and Francis Joyon.

This extreme challenge calls upon high technology, meteorology, teamwork, and a deep knowledge of the oceans. It is a symbolic and open record that celebrates both performance and human adventure, as well as international cooperation.



3

The Famous Project CIC (2025)

Why “The Famous Project CIC”?

The Famous Project CIC is led by sailor **Alexia Barrier**.

It brings together an international crew of outstanding women, ready to attempt to break the Jules Verne Trophy record aboard the maxi-trimaran IDEC SPORT.



This project exists to:

Break barriers in high-level sport, proving that women can compete in the greatest oceanic challenges.

Advance science by collecting unique environmental and physiological data, helping to understand the impact of extreme conditions on the human body, as well as assess the health of the oceans.

Inspire and educate, by directly involving schools, young people, and the general public in following the race and the onboard research.

Carry a strong message for the planet, valuing the ocean as a common good to be protected and acting concretely for its preservation.

By uniting sport, science, and education in a single adventure, The Famous Project CIC aims to prove that excellence and positive impact can go hand in hand.



1. Presentation of the Eight Sailors



Alexia Barrier

Skipper and Founder of The Famous Project CIC. She is a visionary and a keen Ocean Advocate helping raise awareness and promote change to better protect our Ocean.

Dee Caffari

Co Skipper for The Famous Project CIC. She has sailed around the world six times already, and will be responsible for the team's safety and medical needs.



Annemieke Bes

Dutch Olympic medallist, and has sailed around the world twice. She will manage the food.

Tamara Echegoyen

Spanish Olympic gold medallist She will focus on performance for the team making sure we are fast.



3.The Famous Project CIC (2025)

Stacey Jackson

Australian born Offshore sailor has raced around the world twice. She is a sail maker and will manage the sail programme for the team.



Molly Lapointe

A sailor of mixed nationality being from both USA and Italy, Molly will manage the smooth running of IDEC Sport whilst we are sailing.

Rebecca Gmuer Hornell

Has both Swiss and New Zealand heritage. Bex is a trained rigger so will manage all the rope work onboard, and will be sailing around the world for her first time.



Deborah Blair

Young British sailor managing the electronics onboard. Debs is the youngest member of the team and this will be her longest time at sea and her first circumnavigation.



2. The Boat: Technical Specifications – Maxi-Trimaran IDEC SPORT

a. General Presentation

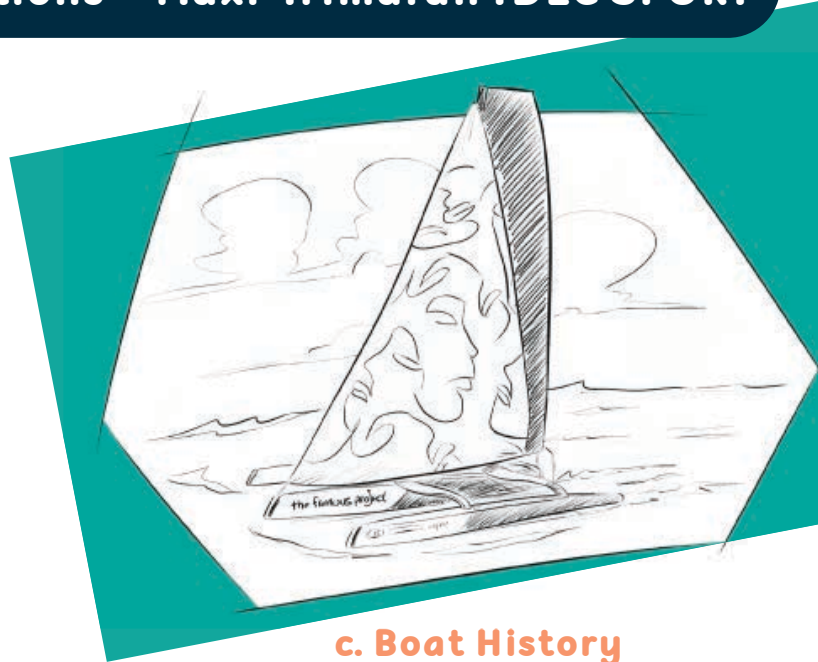
The maxi-trimaran IDEC SPORT is one of the fastest and most versatile sailboats in the world. Designed to break global sailing records, it has sailed under several names: Groupama 3, Banque Populaire VII, Lending Club 2, and IDEC SPORT. Since 2024, it has become the vessel of The Famous Project CIC, led by Alexia Barrier.

b. Technical Specifications

- Architects: VPLP Design
- Builder: Multiplast (France)
 - Launch Year: 2006
 - Length: 31.50 m
 - Beam (Width): 22.50 m
 - Draft: 5.70 m
 - Mast Height: ~41 m
 - Weight: Around 18–19 tons
- Sail Area: Mainsail ~400 m² / Total sail area up to 678 m²
- Structure: Carbon/Nomex – combining lightness and rigidity

d. Record Highlights

- 2007 – Miami–New York Record: 947 nm in 1 day 11 hours
- 2010 – Jules Verne Trophy with Groupama 3: 48 days 7 hours
- 2014 – Route du Rhum with Loïck Peyron: 7 days 15 hours
- 2017 – Jules Verne Trophy with IDEC SPORT: 40 days 23 hours 30 minutes (current record)
- 2018 – Route du Rhum with Francis Joyon: 7 days 14 hours 21 minutes (record)



c. Boat History

- 2006–2013: Groupama 3 – Skipper: Franck Cammas
- 2013–2015: Banque Populaire VII – Skippers: Armel Le Cléac'h, then Loïck Peyron
- 2015: Lending Club 2 – Skipper: Renaud Laplanche (Transpacific record)
- Since late 2015: IDEC SPORT – Skipper: Francis Joyon
- Since 2024: The Famous Project CIC – Skipper: Alexia Barrier



3.The Famous Project CIC (2025)

e. Why this boat is unique

- It has won the Jules Verne Trophy twice (2010 and 2017).
- It won the Route du Rhum under two different skippers.
- It has been used for both solo and crewed races, and now by an all-female crew.
- It can reach speeds of more than 44 knots (~80 km/h).
- It has covered up to 894 nautical miles in 24 hours (37 knots average speed).



f. Suggested Educational Activities

Students, it's your turn!

Math: Compare average speeds with a bicycle, car, and airplane.

Art: Create a simplified model of the trimaran using paper or cardboard.

Math & Science: Track the boat's progress during the Jules Verne Trophy and analyze its performance.

Physics: Reflect on materials — why carbon? why three hulls?



4

Aboard the Jules Verne Trophy: A Unique Scientific Mission

The Human Body, the Ocean, and Technology

The **Famous Project CIC**, led by Alexia Barrier, is not only about breaking sailing records it also carries out a **groundbreaking scientific experiment**: to understand what happens to the **human body and brain** when sailing in extreme conditions for more than 40 days.



Why study sailors at sea?

Navigating at very high speeds on a trimaran like IDEC SPORT, day and night, without stopping, through harsh seas... **is almost like going into space**. Fatigue, cold, noise, lack of sleep, constant shocks — sailors endure a physically and mentally intense challenge.



Datas

Physiological Data (on the Body)

- o **Heart rate** : to monitor effort and recovery.
- o **Skin temperature** : to prevent heat or cold-related issues.
- o **Sweat and stress** : detected through skin sensors.
- o **Sleep and brain activity** : analyzed with small sensors on the forehead or worn at night.
- o **Energy expenditure and diet** : measured with watches, VO₂ max tests, and QR codes on food items.

4. Aboard the Jules Verne Trophy: A Unique Scientific Mission

Environmental Data :

- **Noise on board, light exposure, air temperature, boat impacts...** all these influence sleep, attention, and stress resistance.

Data for Science

Useful Data for Research

- Sensors record everything and send the information to an onboard computer.
- When internet access is available (via satellite), the data is transmitted to scientists on land.
- These studies will also help improve knowledge about sleep, nutrition, and stress in other domains — hospitals, aviation, high-performance sports, and more.



Classroom Questions

- 1 Why do sailors sometimes have to sleep in 20-minute naps?
- 2 Do you think your body could handle 40 days without a fixed bed, regular hours, and constant noise?
- 3 What can we learn by measuring sweat or skin temperature?
- 4 What would happen if the sensors stopped working during the race?
- 5 How could this kind of research be useful in everyday life?

Optional Classroom Activity

Imagine you are a scientist aboard the trimaran.

Write a **short scientific log** describing :

- The living conditions on board today
- What you measured (sleep, stress, noise, etc.)
- Your hypothesis: what do you think it means?

Example: "This morning, sailor X was very tired. Her heart rate stayed high for 6 hours. Maybe the cold and waves increased her stress."



5

The Onboard Computer and Modern Navigation

Onboard the Jules Verne Trophy trimaran, the central computer is essential. Connected to numerous sensors, it allows the crew to:

- Forecast the weather: it receives weather files via satellite and displays wind, storms, and calm zones.
- Monitor maritime traffic using the AIS (Automatic Identification System), which shows the position of other boats to avoid collisions.
- Control the boat's performance: speed, course, energy production, desalination unit, and solar panels.
- Communicate with land: it sends emails, images, and scientific data (such as those from the scientific floats).



The computer provides the data, but it's the sailors who make the decisions. Skipper [Alexia Barrier](#) and co-skipper [Dee Caffari](#) are in charge of the onboard computer and data analysis. They choose the best route and organize the crew's maneuvers. Their decisions are crucial: a good choice can save hours, a wrong one can cost the record.

The Routing Cell on Land

During the Jules Verne Trophy, the crew at sea is supported by a **routing cell** based on land : a **small team of experts** following the race 24/7.

Who are they?

- o **Meteorologists** : specialists in wind, storms, anticyclones, and oceanic phenomena.
- o **Experienced sailors** : often former skippers or crew members of record attempts, capable of reading weather charts and suggesting realistic options.
- o **Engineers or analysts** : who use routing software, compare different routes, and send the most relevant information to the crew.

Their Role

- o They receive **detailed weather files**, more complete than those available onboard.
- o They test **multiple route options** and calculate time consequences (gains or losses).
- o They **advise the crew**, but **Alexia Barrier** and **Dee Caffari** always make the final decisions onboard.

The routing cell can be compared to an air traffic control tower: it doesn't steer the boat, but constantly ensures strategy and safety.



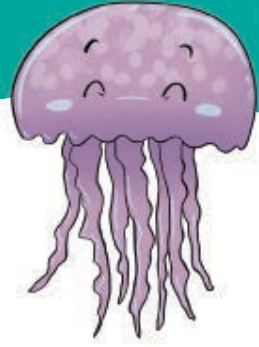
- "I AM A system that lets boats see each other even at night.
Who am I?"
> AIS
- "I travel by satellite and announce wind and storms.
Who am I?"
> Weather file (grib)

Did you know?

- AIS did not exist 30 years ago: sailors had to spot boats visually or by radar! Today, even small sailboats use AIS — but on a trimaran sailing at 40 knots, it's a lifesaving tool.



Marine Megafauna: The Giants of the Ocean



Definition

Marine megafauna refers to large animals living in the oceans, generally visible to the naked eye and weighing over 45 kg. It mainly includes:

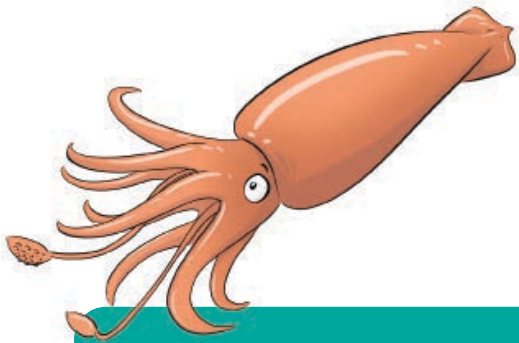
- Marine mammals (whales, dolphins, seals),
- Large pelagic fish (sharks, tunas, ocean sunfish),
- Sea turtles,
- Some seabirds (albatrosses, petrels),
- A few giant invertebrates (giant squids, massive jellyfish).

These species play a vital role in the functioning of ocean ecosystems.

Global Distribution

Megafauna can be found in **all oceans**, but its presence varies depending on:

- Water temperature (polar, temperate, or tropical species),
- Breeding, feeding, or migration zones,
- Depth (surface vs. deep-sea species),
- Biological productivity (areas rich in plankton and fish).



The Jules Verne route crosses:

North Atlantic: common dolphins, pilot whales, sei whales.

South Atlantic: humpback whales, leatherback turtles, black-browed albatrosses.

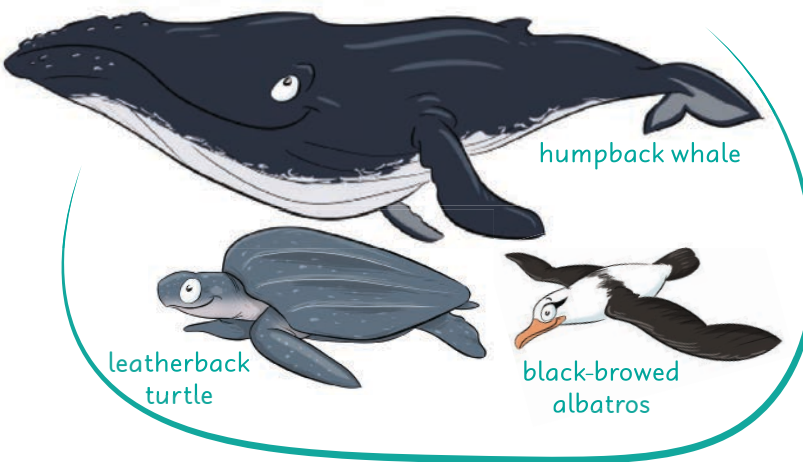
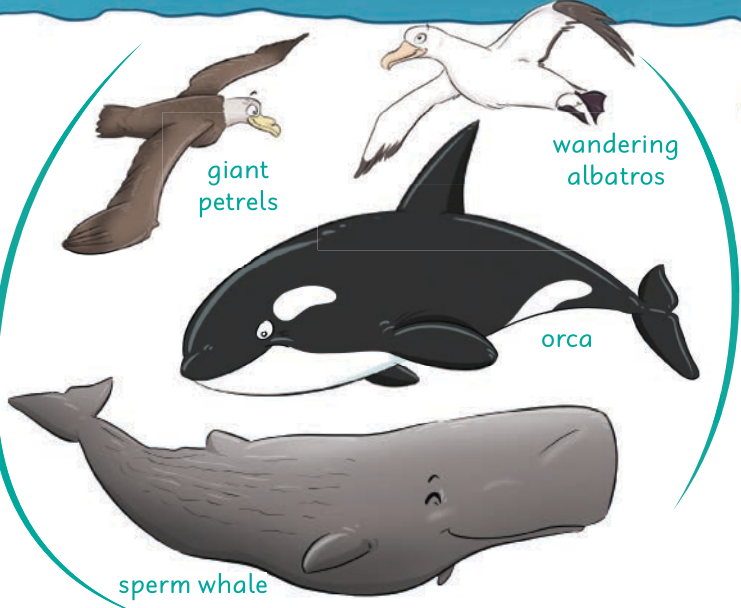
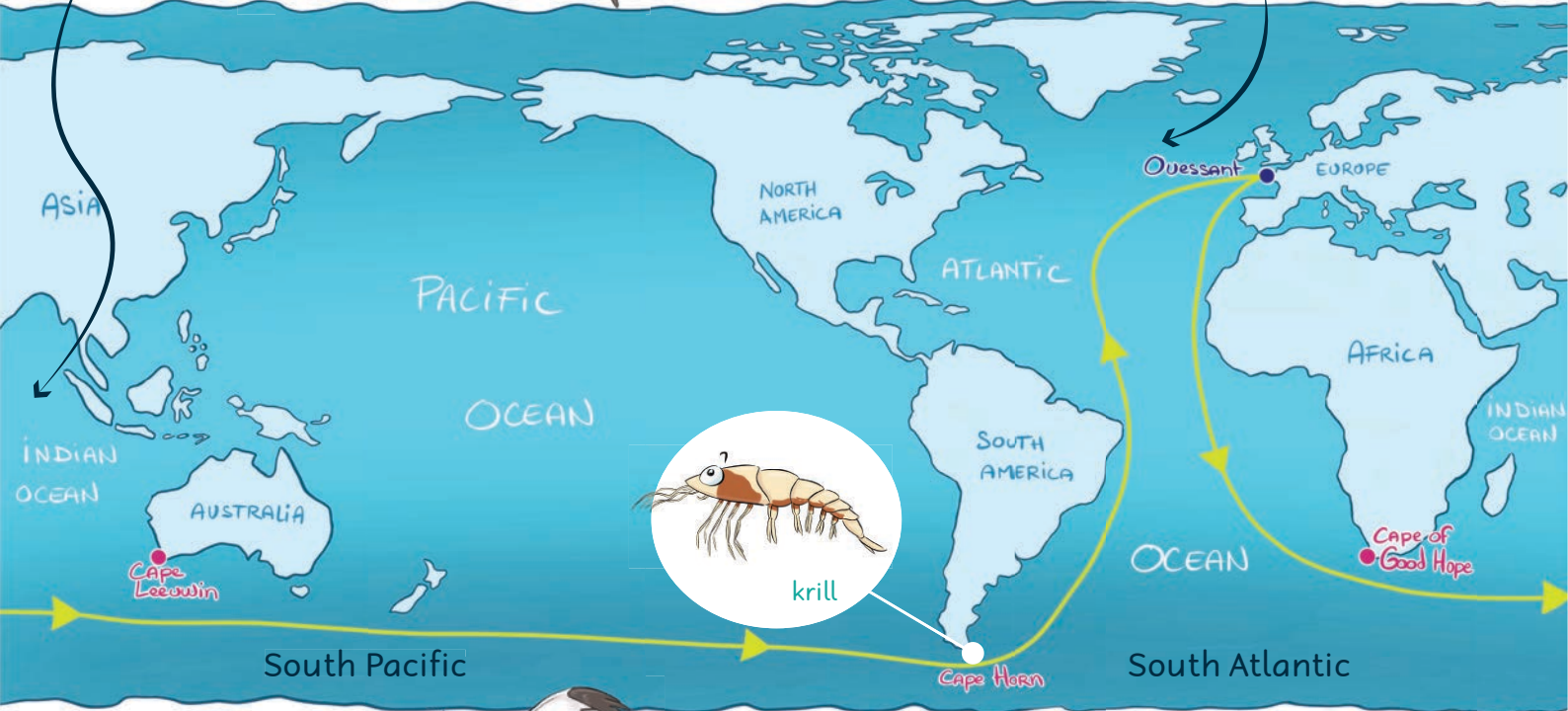
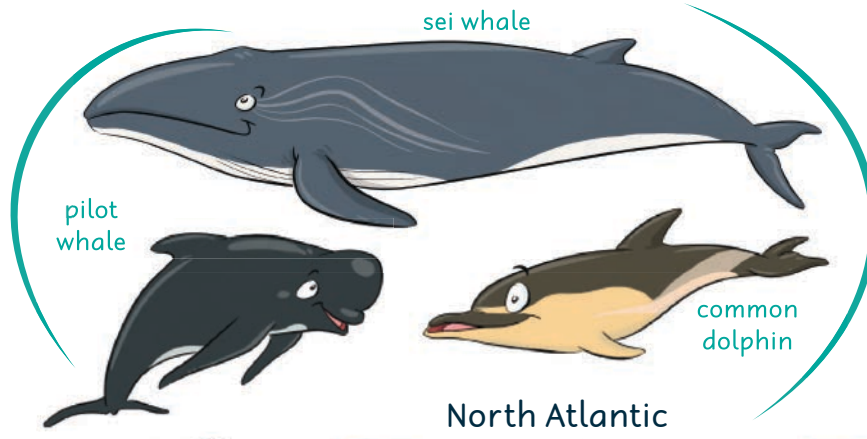
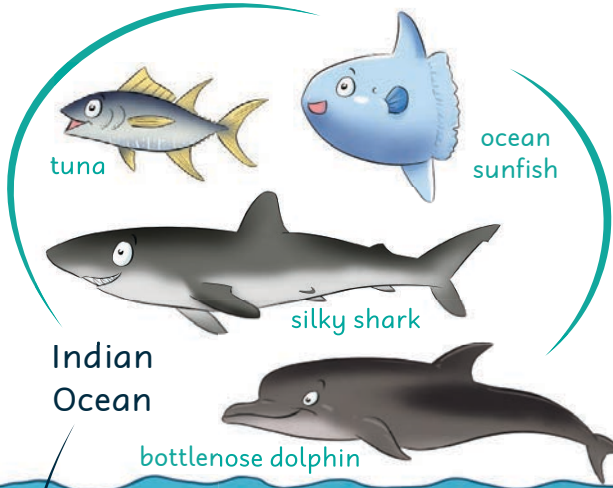
Indian Ocean: tunas, silky sharks, ocean sunfish, bottlenose dolphins.

South Pacific: orcas, sperm whales, giant petrels, wandering albatrosses.

Cape Horn: Antarctic convergence zone, rich in krill and cetaceans.



Distribution

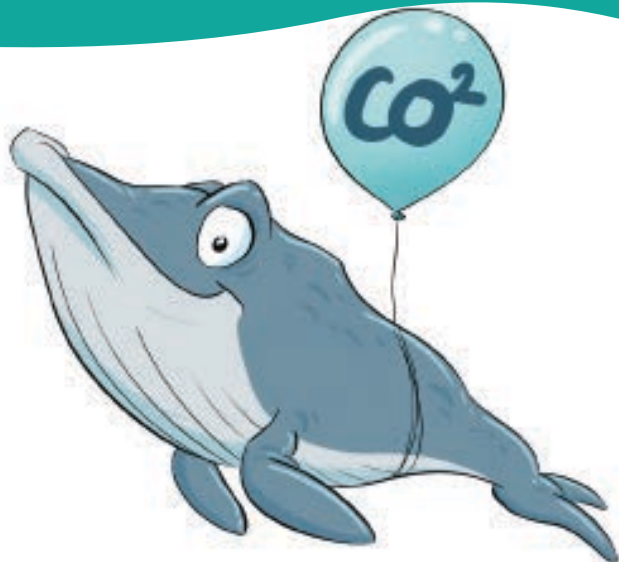


6. Marine Megafauna: The Giants of the Ocean

Ecological Role and Threats

Marine megafauna is essential for :

- **Energy transfer** in marine food webs,
- **Regulating prey populations** (krill, fish, cephalopods),
- **Recycling nutrients** (through feces or carcasses),
- **Stimulating planktonic growth** (whales' "fertilizer" effect on phytoplankton),
- **Dispersing species** (e.g., turtles carrying small organisms on their shells).



Some studies show that **whales contribute significantly to carbon sequestration** by promoting the growth of phytoplankton, a key player in CO₂ absorption

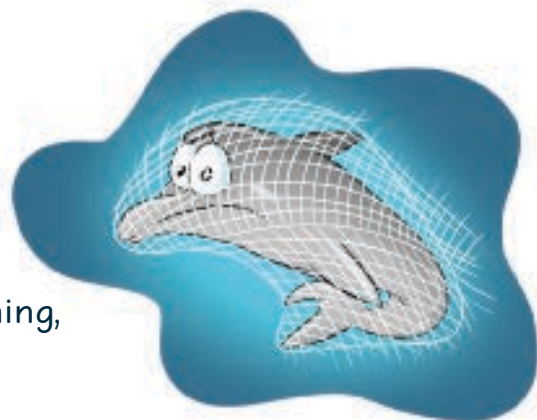
Major Threats

Large marine species are **particularly vulnerable** because they:

- Have long lifespans and late sexual maturity,
- Reproduce slowly (one young every 2–5 years),
- Depend on vast areas for migration and feeding.

Main threats include :

- **Collisions with ships**, especially in busy routes,
- **Underwater noise pollution** (sonars, engines, drilling, offshore wind farms),
- **Plastic pollution** (ghost nets, ingestion),
- **Climate change**: displacement or loss of prey, coral bleaching,
- **Industrial fishing**: accidental catches (bycatch), habitat depletion.



Protection and Conventions

Megafauna species are protected by many **international conventions**:

- **Bonn Convention (CMS)**: protection of migratory species.
- **CITES**: regulation of international trade (e.g., sharks, turtles).
 - **ACCOBAMS** : Mediterranean agreement on cetaceans.
- **Marine sanctuaries**: specific protected zones (e.g., Agoa Sanctuary in the French Antilles).

NGOs such as WWF, Sea Shepherd, and OceanCare work actively to protect these species.



1. What Is an Ocean Current?

Ocean currents are like “rivers in the sea.” They are large-scale movements of water caused by several factors:

- Wind, which pushes the ocean surface.
- The rotation of the Earth (**Coriolis effect**), which deflects the paths.
- Differences in temperature and salinity, which create vertical and horizontal motions (**thermohaline circulation**).
- The shape of continents and the seafloor, which guide and channel the flow.

Currents can be warm (like the **Gulf Stream**) or cold (like the **Humboldt Current**), and they play a key role in:

- Transporting heat across the planet.
 - Regulating the climate.
- Carrying nutrients and supporting marine life.
- Guiding migrations of marine animals (turtles, whales, tunas, etc.).

The Great Southern Currents

In the southern oceans, currents form a vast loop called the **Antarctic Circumpolar Current** — the only one that circles the entire Earth without encountering land. It carries enormous volumes of water and links the Atlantic, Indian, and Pacific Oceans. The fierce winds of the “Roaring Forties” and “Furious Fifties” drive waves and speed up this current.



2. Scientific Floats: How Do They Work?

As part of The Famous Project CIC, Alexia Barrier’s crew will deploy **ARGO floats** in the Southern Ocean.

These are autonomous oceanographic floats designed for marine research. Once released, they drift with the currents and periodically dive to depths of up to 2000 meters.

They are equipped with high-precision sensors that measure:

- Water temperature at different depths.
- Salinity (salt content).
- Sometimes additional parameters (pressure, density, GPS position).

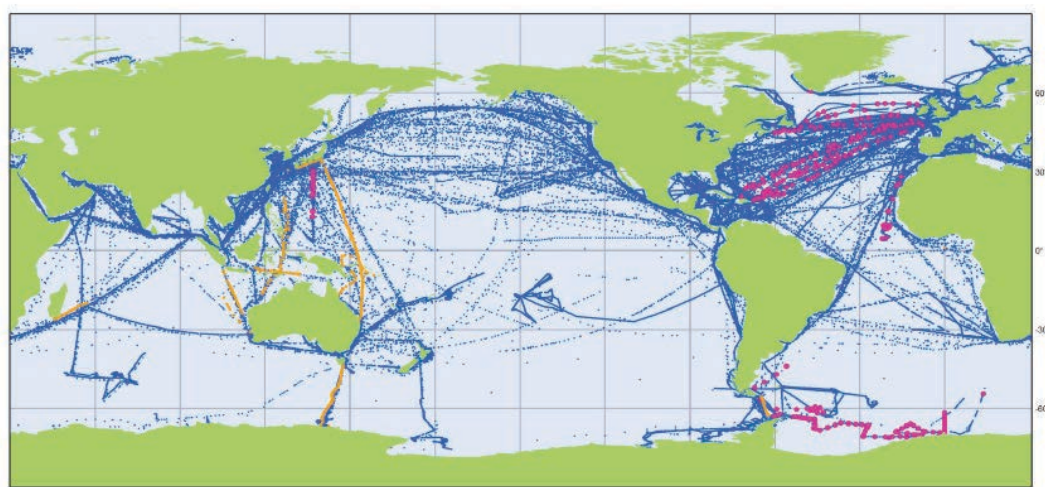
7. Ocean Currents and Scientific Floats

Data Transmission

- The floats record measurements at regular intervals.
- When they resurface, they transmit the data by satellite to oceanographic laboratories.
- The data are made open-access so scientists worldwide can analyze them.

Why It Matters

- ****Climate:**** Understanding how heat moves through the ocean and affects the global climate.
- ****Currents:**** Mapping invisible “rivers” of water around the planet.
- ****Biodiversity:**** Tracking nutrient-rich zones and migration routes.
- ****Weather Forecasting:**** Improving climate models and meteorological predictions.



Ship Observations Team

Monthly Observations

January 2019

Data: GTS Platform/Station metadata: JCOMMOPS

- VOS (171924)
- SOOP-XBT (624)
- ASAP (313)



Generated by www.jcommops.org, 13/02/2019

Did You Know?

- The Antarctic Circumpolar Current moves about 130 million cubic meters of water per second — 100 times more than all the world's rivers combined!
- Scientific floats can drift for many years and travel tens of thousands of kilometers.
- Some floats dive deeper than 2000 meters before resurfacing.

Classroom Questions

- 1 Why are ocean currents compared to “rivers” in the sea?
- 2 What would happen if the Antarctic Circumpolar Current slowed significantly?
- 3 Why is it important to share data with scientists all around the world?

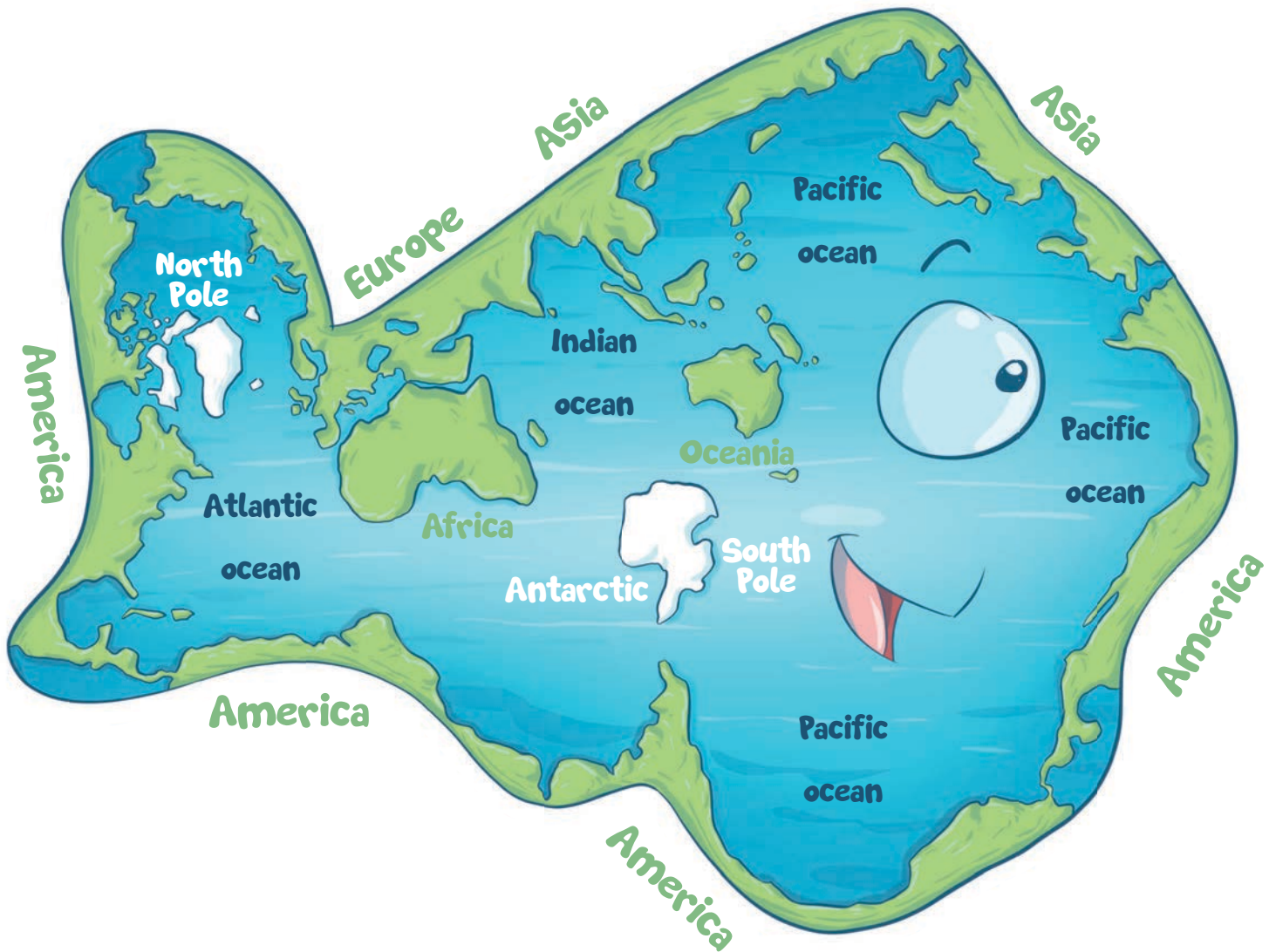
Educational Activity

****Objective:**** Understand a float's trajectory.

- On a world map, trace the likely path of a float released south of Tasmania.
- Identify which oceans it might cross and the climatic zones it would encounter.
 - Discuss: could these data help forecast Europe's climate?

The Fish Map

We've taught you the names of many seas and oceans...
But what do the fish think about that?



So — could it be that there's really only one ocean?

Classroom Interaction: Preparing Questions for the Crew

As part of the Jules Verne Trophy program, registered classes will have the chance to take part in live video exchanges with the all-female crew of The Famous Project CIC — directly from the maxi-trimaran IDEC SPORT while sailing around the world!

To make this exchange dynamic and meaningful, students should prepare interesting and varied questions in advance.

Middle School – Objective

Possible Question Topics:

- o Navigation and weather conditions
- o Technical challenges onboard
- o Scientific aspects (sensors, data, oceanographic floats)
- o Personal experiences of the sailors
- o Environmental impact and message of the project

Examples of Questions

1. How do you plan your navigation strategy with the weather forecasts?
2. What has been your biggest scare since the start?
3. How will the scientific data you collect be used?
4. What is the most amazing thing you've seen at sea?
5. How do you manage fatigue and sleep over such a long period?

Primary School – Objective

Imagine simple, clear, and fun questions to better understand life onboard and the crew's roles.

Examples of Questions

1. Do you sleep in beds that move?
2. Have you seen dolphins or whales?
3. How do you cook on the boat?
4. Do you get cold at night?
5. What's your favorite part of the boat?



Instructions

- Each student should prepare at least two questions.
- Questions will be grouped by theme so that several students can participate.
 - One or two “spokes-sailors” will be chosen to ask the questions live.
- Listen carefully to the answers — they will be used later to write a report to share with the rest of the school.

Subscribe to the 4myplanet newsletter so you don't miss any of the livestreams!

To sign up for the live sessions, write to:
helene.urrutti@4myplanet.fr



Let's go Further!

Find many more videos, inspiring interviews, and extra content here:

www.youtube.com/@4myplanet_asso

www.youtube.com/@thefamousprojectJVT

To sign up for the live sessions, write to:
helene.urrutti@4myplanet.fr

With **Adopt a Float** and **Virtual Regatta**, everyone can experience ocean adventure: following science and playing the great round-the-world race!



Adopt a Float – Follow an Ocean Robot

You can also become an ocean explorer from your classroom! The *Adopt a Float* program allows schools to “adopt” an oceanographic float — a small scientific profiler that drifts with the currents.

- This profiler measures temperature and salinity and sends its data by satellite.
- Participating classes can follow its path on a live map, discover the oceans it crosses, and compare their findings with other schools around the world.
- Each profiler can even be named by the students — becoming a travel companion that shares its discoveries in real time.

More infos

<https://adoptafloat.com>

Virtual Regatta Offshore — Become a virtual sailor

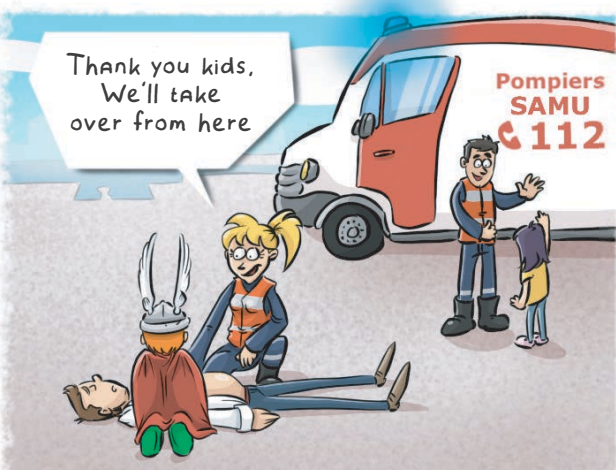
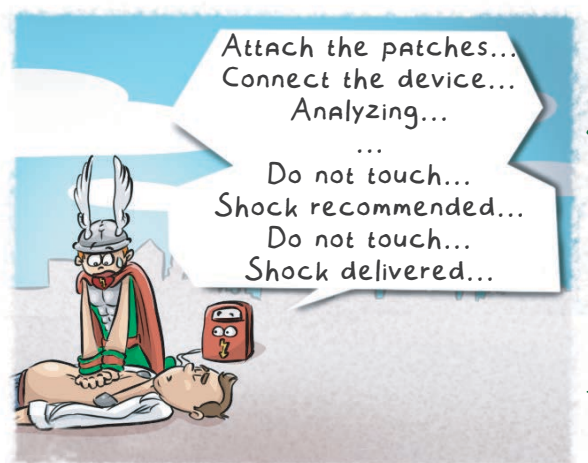
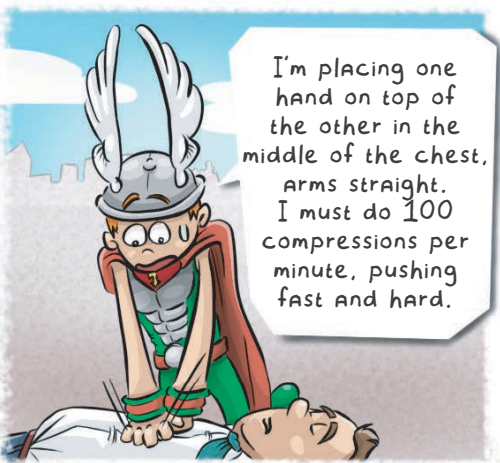
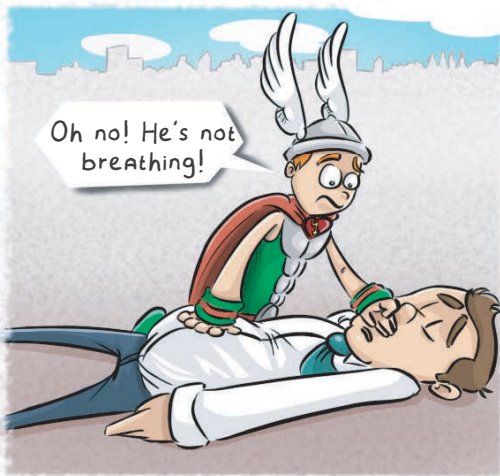
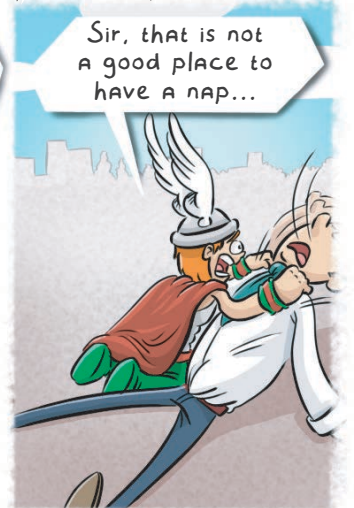
Want to feel like a Jules Verne Trophy sailor? With *Virtual Regatta Offshore*, you can sail around the world from your computer or smartphone.

- Take the helm of a virtual sailboat and choose your route, sails, and weather strategy.
- Sail day and night, in real time, just like the real sailors.
- The challenge: try to beat the time of The Famous Project CIC crew on their world tour!

Join us

<https://www.virtualregatta.com/en/offshore-game/>

Save a Life & A Heart with DEFIBRILLA THOR



Become a Good Samaritan and locate nearby defibrillators by downloading the apps 'Staying Alive' and 'Sauvlife' (Available for Android and iOS).

Train yourself at
www.unions-pompiers.fr

Keep green, print only if necessary. Thank you!