PROJECT PRESENTATION

MiniTransat 2020-2021 – Simon Weppe

An Oceanographic MiniTransat with the *MiniOOS*

The MiniTransat ?

Sailing solo across the Atlantic Ocean, with no land communication, on 6.5 metre boats, here is the **Mini Transat** challenge.

Every 2 years, 80 skippers from all over the globe rise to the challenge onboard their little sailboats with the ocean and sky as only company for the **4000 nautical miles** in front of their bows.

*The "**MiniTransat**", that's also:*

- *An **innovation lab** for offshore racing boat designs and technologies*
- *A **mythical** and **initiatory race** that revealed many famous sailors **:** Loïck Peyron, Isabelle Autissier, Michel Desjoyeaux, Ellen MacArthur, Thomas Coville, Yves le Blevec..*
- *A **strong tight-knight sailor's community** sharing the **"Mini Spirit"***

Simon Weppe, 34 yo

A path guided by the Ocean

Growing in Southern Brittany, immersed in strong maritime culture and only a stone throw from famous offshore racing bases of La Trinite-sur-Mer and Lorient, I quickly become passionate about the Ocean and an overall ocean sport enthusiast, surfing, sailing, windsurfing, spearfishing in my local waters. Through the following years, the Ocean also guides my professional life, leading me to Brest, European hub of Ocean Sciences, then to New Zealand to complete a Master of Science in Physical Oceanography. I begin my working life in New Zealand in a science-based consultancy specializing in meteorology and oceanography, which is now part of the *New Zealand MetService*. There, my daily job consists in studying and modelling interactions between marine weather, ocean and coasts. New Zealand, *Aotearoa*, also becomes an amazing playground for ocean sports, surrounded by oceans with no shortage of energy.

During a trip back in South Brittany, an encounter with two charismatic *Mini* skippers plants a seed, which matures a few years and blooms today. That project combines a personal challenge I have dreamt about for years and a desire to contribute to the Ocean science and literacy.

A personal challenge, this will definitely be one, as in spite of my significant ocean time and experience, I am an offshore racing novice. Desire, drive and tenacity will be my tools to rise to the challenge.

Cursus

Bachelor of Science – Physics (France)

Postgraduate diploma in coastal/civil engineering (France)

Master of Sciences – Physical Oceanography (New Zealand)

Experience

Autodidact ocean sport all-rounder over the last 25 years

Offshore racing novice

Motto

“The ocean is a space of rigor and freedom” Victor Hugo

The *MiniOOS*, an Oceanographic Mini

The MiniOOS* concept, when an offshore racing dream wants to become a sporting, scientific and collaborative adventure.

Inspired by the growing implication of sailors in ocean observing programs and keen to bring a scientific contribution through my own MiniTransat project, I have imagined the concept of an Oceanographic Mini, the ***MiniOOS ****, *Mini Ocean Observing System,* able to measure a range of essential oceanic variables during the races (wave, wind, sea surface temperature and salinity) and also provide a platform to test and deploy the next-generation of oceanographic instruments, becoming ever smaller and more versatile, notably compact drifting buoys.

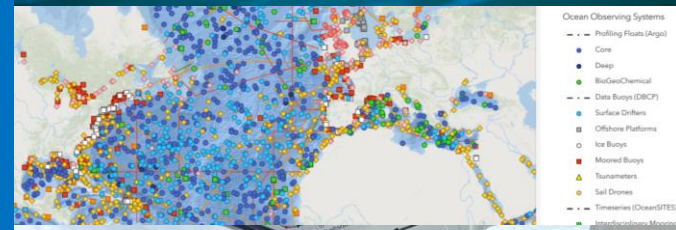
All the collected in-situ data will be open-source and made available to the scientific community for analyses of ocean wave and circulation, data assimilation and verification of numerical forecast models and ground-truthing of satellite data.

Beyond the data collection, the approach also aims to use sailing and offshore racing as communication media to promote ocean awareness and encourage to a more scientific vision of the Ocean which is an essential step for its understanding and protection.

Several scientific teams as well as oceanographic instruments developers have joined the adventure in order to test, validate and promote their technologies and analyses, or more simply, to use the *MiniOOS* to deploy instruments in the middle of the Atlantic Ocean, which remains an area difficult and costly to access with typical oceanographic research vessels.

Exchanges with the Intergovernmental Oceanographic Commission (*IOC/JCOMMOPS*) that coordinates in-situ meteo-oceanic measurements worldwide are ongoing to use this project to kickstart a wider scientific partnership with the *Mini* Class, similar to collaborations in place with the *IMOCA* class (i.e. The Ocean Race, Vendee Globe).

* *Allusion to international Ocean Observing programs such as GlobalOOS, EuroOOS, SouthernOceanOS …*



Le *MiniOOS*

Dimensions

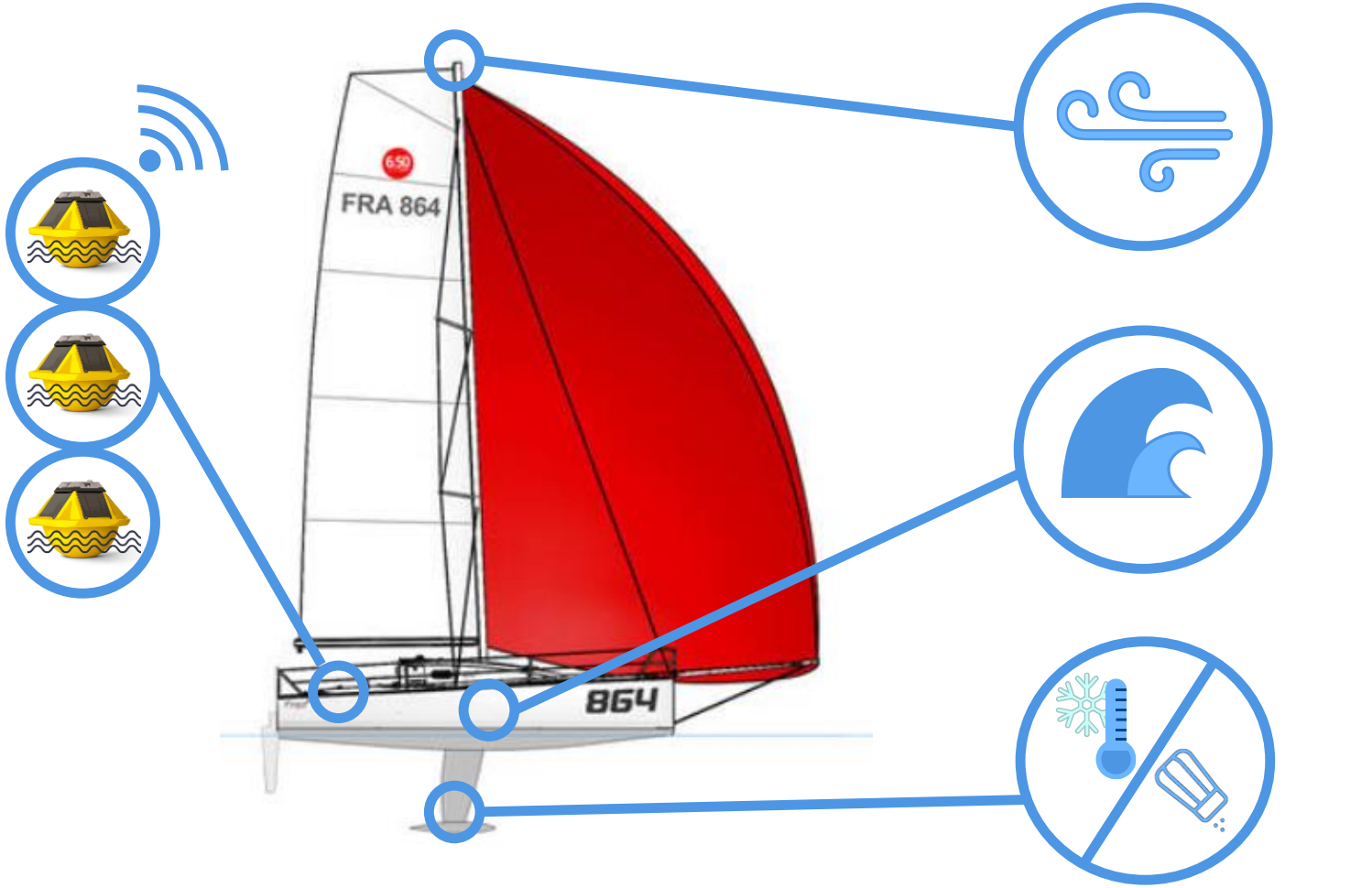
Length :	6.5 m
Width :	3.0 m
Sailing surface :	120 m^2
Living surface h :	4.0 m^2
Deck with seaviews :	10 m^2

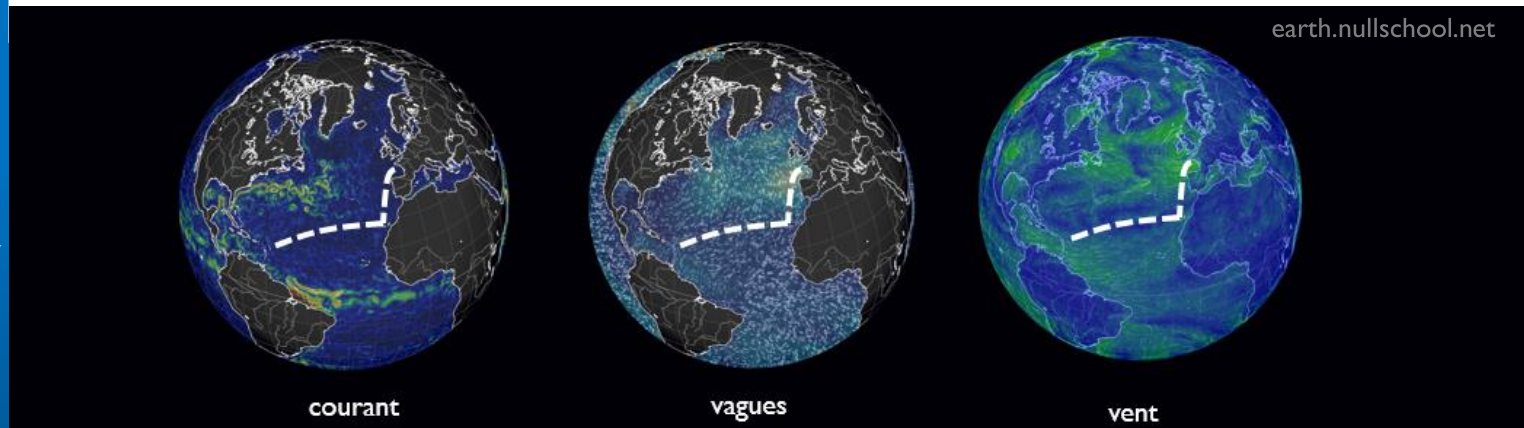
Onboard Equipment

- ✓ Nautical Charts (a lot !)
- ✓ Sextant
- ✓ Cras Ruler
- ✓ GPS
- ✓ Compass
- ✓ VHF
- ✓ Radio
- ✓ Portable Stove
- ✓ Bunk bed
- ✓ 7 oversized sails

Scientific Instrumentation

- ✓ Inertial Measurement Unit (wave measurements)
- ✓ Wind and Pressure sensors
- ✓ CTD sensors (conductivity temperature, depth)
- ✓ Mini drifting buoys to be deployed at sea: Spotter + WAVY
- ✓ Your device ?





MiniOOS Program : 2020-2021

Training
(Base Nautique Lorient)

Boat and Instrumentation setup & testing

+

Qualification round
1000 NM

solo, off race
Brittany – Ireland Loop

+

Races 1500 NM

Solo or double racing

Mini-Fastnet , TransGascogne
Mini en Mai …

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MiniTransat Departure September 2021

2020

- Boat acquisition and first navigations
- Sailing training, boat and oceanographic instrumentation setup. Initial measurements and analyses
- Qualification round of 1000 nautical miles solo sailing (off racing) – compulsory step for the MiniTransat 2021 qualification
- Races: Mini Fastnet (June), TransGascogne (August)

2021

- Boat improvements and reliability - winter 2020-2021
- Mini Circuit Races: Mini en Mai (May), Mini Fastnet (June), Les Sables-Les Acores-Les Sables (July), TransGascogne (August)

- > MiniTransat Departure Septembre 2021 <

Partnerships

To become a reality, the ***MiniOOS*** project needs partners on the financial, technical, scientific and institutional spaces which adhere to the project vision and are willing to support it.

Sailing, offshore racing, and science are powerful communication media that convey strong values of respect, solidarity, tenacity, and innovation.

In that context, the ***MiniOOS*** is a **versatile tool** that provides **:**

- An **original medium for internal and external communication**, with many activations on-land and at sea.
- A **flexible scientific vessel** to collect oceanographic data, deploy, test and validate compact instruments.
- A **platform to showcase latest scientific innovations** in compact ocean observing technologies.
- A way to promote **Ocean Literacy** and **educate the public** to Ocean's essential role on the Earth system and climate.
- An example to stimulate interest on **collaborative science** among professional and recreational sailors.

JEAN BAPTISTE D'ENQUIN / ATM COMMUNICATIONS

JEAN BAPTISTE D'ENQUIN / ATM COMMUNICATIONS

* That boat could very well become the *MiniOOS*, with the bonus of being able to tap into the know-how of its talented previous skipper Amelie Grassi which finished 6th of the last MiniTransat 2019

Annual Budget

Boat — 8 000 – 20 000 €

Purchase 75 000 € HT, including 16 000 € depreciation i.e. 8 000 € / year
Rental 20 000 € HT / year

Technical — 22 000 €

Sails
Electronics and Energy production
Rigging , Technical Equipment

Logistics — 18 000 €

Insurances
Port fees
Boat return by cargo
Race entry fees
Food

Sport — 4 000 €

Training
Travels
Formations (meteo, survival)

Scientific

Essential gear and sensors - made available by scientific partners
Additionnal instruments/sensors- to be discussed

Total — 52 000 €

52 000 euros per year

Patronage Option

Donations to not-for-profit organizations are tax deductible.

(Tax deduction rates vary across countries. In France, 60 % of donations can be deduced from taxed income).

Sponsoring Option

Donations in exchange for advertisement of donors. Donations are tax-deductible.

(Tax deduction rates vary across countries. In France, 100% of sponsoring donations can be deduced from taxed income).

Partnerships

Name Sponsor

The boat exclusively bears your brand's name, logo and colours and becomes your dedicated communication platform.

Main Sponsor — 25 000€

Sponsorship of main part(s) of the boat (e.g. hull, main sail, spinnaker :1,2,3)
Invitations to race departures and ocean excursions.

Secondary Sponsor — 5 000 – 25 000€

Sponsorship of one large part of the boat (e.g. hull or main sail or spinnaker : 1,2, 3).
Invitations to race departures & free use of image and communication around project.

Open Parternship — 1 - 5000€

Your brand is present on the boat (panels 70x30 cm - 50x20cm).

Technical Partnership

Your brand is present on the boat (panels 70x30 cm - 50x20cm).
Free use of image and communication around project.

Scientific Partnership

Your brand is present on the boat (panels 70x30 cm - 50x20cm).
Free use of image and communication around project.
Use of the boat for education and scientific purposes (during races or off-races).

All collected data will be 100% open-source and made available to the scientific community for downstream uses.

1% of collected funds donated to RespectOcean Foundation

RESPECTOCEAN

Partnerships

SOFAR

State-of-the-art compact oceanographic buoys (wave, wind, sea-surface temperature)

jcommops

Joint Technical Commission for Oceanography and Marine Meteorology Observations Programme Support Centre

Sapienza Università di Roma + National Central University

Boat motion measurement and analysis to derive sea-states
Teams led by Paolo De Girolamo (Italie) et *Hwa Chien (Taiwan)*

WAVY – A DRIFTER BY MELOA CONSORTIUM

Innovative solutions for drifting oceanographic buoys
European Consortium MELOA

LA LOUTRE

Graphic Design and Communication Agency based in Plouharnel *(Bretagne, France)*

LES CASIERS – PLOUHARNEL

Co-Working Space based in Plouharnel *(Bretagne, France)*

Join us for the Oceanographic MiniTransat with the *MiniOOS*

Contact

Simon WEPPE

simon.weppe@gmail.com

+33 7 81 43 42 26