



iFADO Miniboat Fleet: Generating Atlantic Ocean Linkages

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Executive Director, Educational Passages

iFADO Final Workshop: June 1, 2023

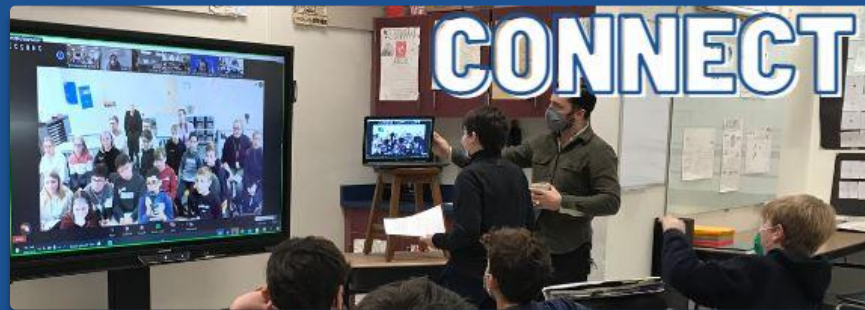


This project has received funding from the European Union's Interreg Atlantic Area programme under the grant EAPA_165/2016

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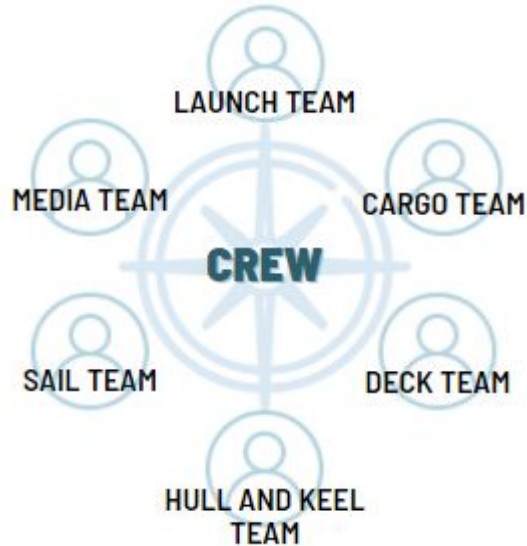
CONNECTING PEOPLE AROUND THE WORLD
TO THE OCEAN AND EACH OTHER THROUGH
UNIQUE GLOBAL EXPERIENCES

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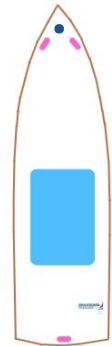
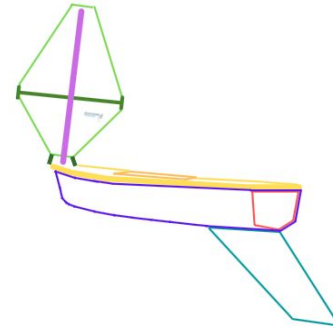
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EDUCATIONAL PASSAGES MINIBOAT [NOUN]

STUDENT-BUILT, UNCREWED (1.5m)
SAILBOAT THAT IS TRACKED BY GPS

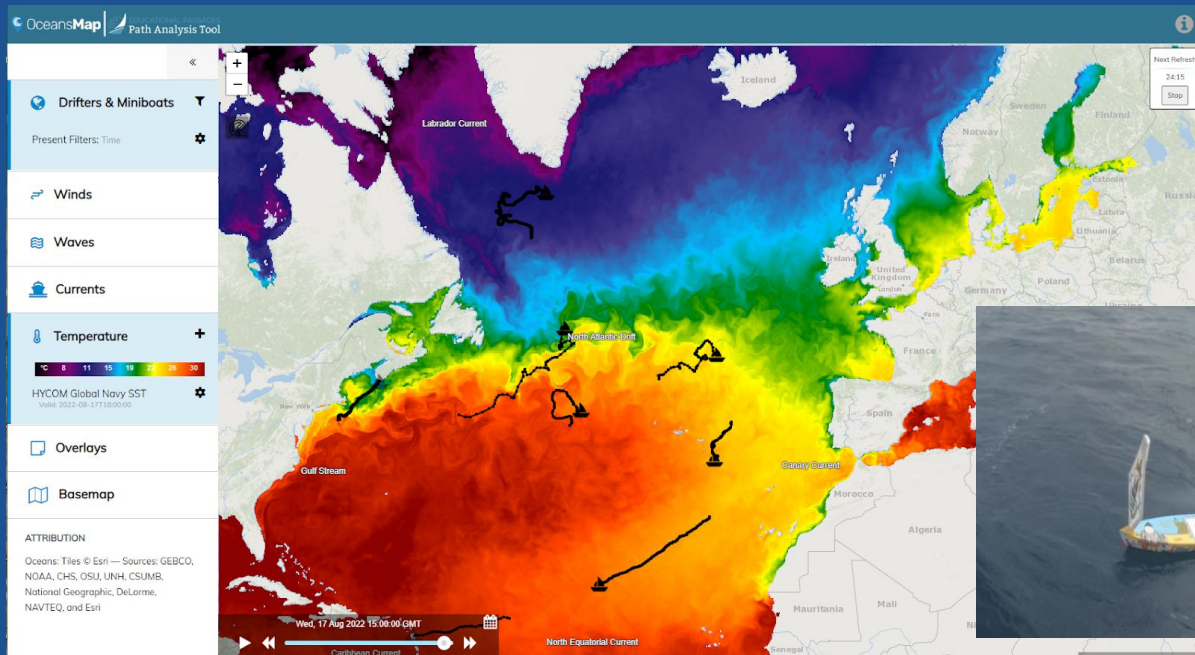


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- ★ 193 MINIBOATS LAUNCHED
- ★ 310+ VOYAGES (=ADVENTURES)
- ★ 1,850,000 km+ TRACKED
- ★ 75% LANDING RATE (*that we know of)
- ★ 30+ COUNTRIES LANDED

... CONNECTING THOUSANDS OF
PEOPLE AROUND THE WORLD



EDUCATIONALPASSAGES.ORG/EVENTS/ATSEA



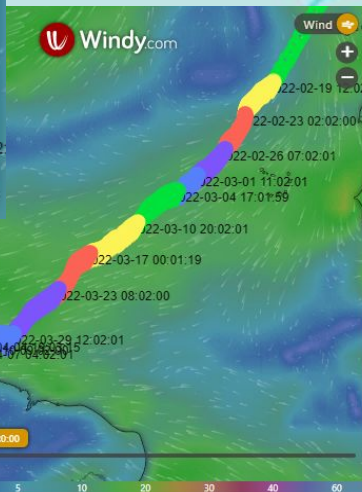
SCIENCE IN ACTION

WITH MINIBOATS & MAKER BUOY SENSOR PACKS

FULL S.T.E.A.M. AHEAD!

COLLECT

EP-006 2022-02-20 03:02:00 UTC
days (relative to launch) 23.6
latitude 23.47065
longitude -24.61765
inst. speed (kts) 3.0392156862745097
computed ave. speed (kts, since last update) 3.01
dist (NM, since last update) 9.03
cum. dist (NM, since start) 1,987.168
heading (deg) 321.88235294117646
max pitch (0: Upright, 90: On Side) 79
air temp (F) 67.29411764705883
water temp (F, at 1 ft depth) 70.82352941176471
battery voltage 4.1
collection interval (min) 60
collection duration (min) 2
days since last reboot 252



Collecting to Connect

Student-built Miniboats Contributing to Ocean Science Research

The Educational Passage Project (EPP) offers youth the chance to give the opportunity to youth to build a small, simple, and easy-to-use miniboat. The miniboat is designed to collect data on ocean temperature, salinity, and depth. The miniboat is built using a simple, easy-to-use kit. The miniboat is built using a simple, easy-to-use kit. The miniboat is built using a simple, easy-to-use kit.



THE JOURNAL OF OCEAN TECHNOLOGY

—www.thejot.net—

Collecting to Connect

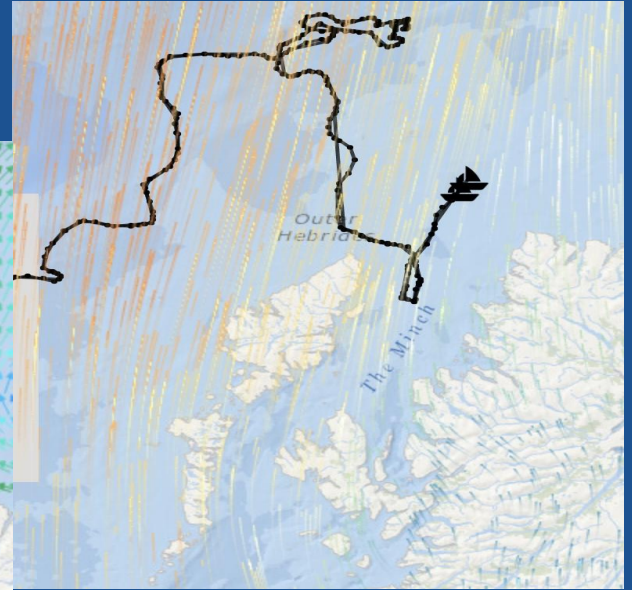
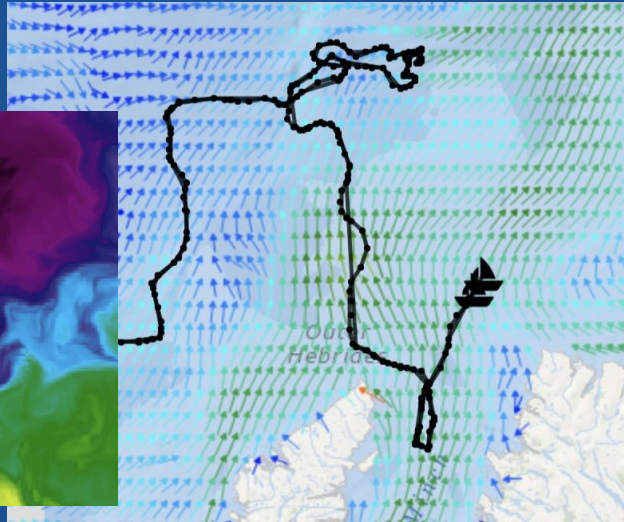
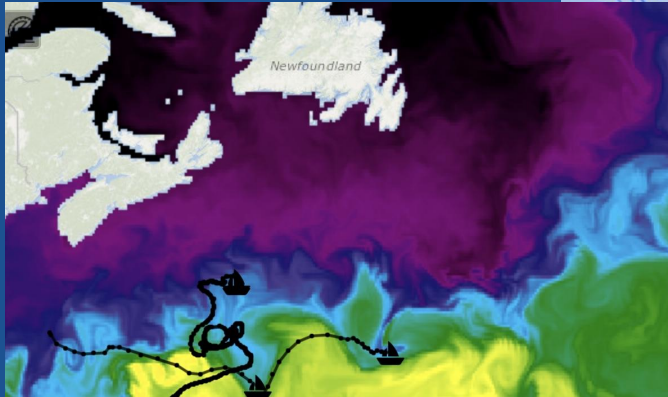
Student-built Miniboats Contributing to Ocean Science Research

by Cassandra Stymiest, Aimee Bonanno, Andrea Gingras, Sarah Nickford, Alexis Johnson, and Greg Rowe

WIND AND OCEAN CURRENTS IN ACTION: HOW DO WE MAKE INFORMED PREDICTIONS

Be curious and ask questions. What else do I need to know that could help make an informed prediction?

Data and Forecasts!



explore.educationalpassages.org

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Next Generation Science Standards

- Earth's Systems
- Engineering Design
- Waves
- Motion and Stability
- Energy
- Earth and Human Activity
- Ecosystems

Ocean Literacy Principles and Fundamental Concepts

- #1: The Earth has one big ocean with many features.
- #3: The ocean is a major influence on weather and climate.
- #6: The ocean and humans are inextricably interconnected.
- #7: The ocean is largely unexplored.

Common Core Math and ELA

- Skills and Concepts
- Solving real-world problems

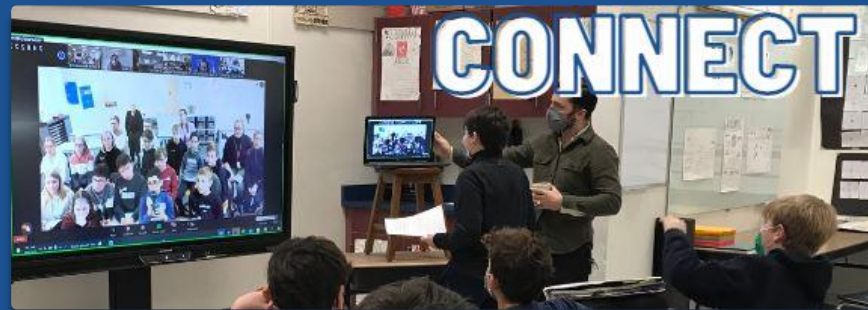
Overall Skills Presented:

- Ocean Science
- Geography
- Math and Geometry
- Graphing
- STEAM Integration
- Physics
- Data Science
- Research
- Language
- Art
- Interpersonal Development

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DR. JEFF SCHILL
SEA EDUCATION ASSOCIATION

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REPAIR & RE-LAUNCH



HVES Cruiser | Harbor View Elementary



EDUCATIONAL PASSAGES

MINIBOAT PROGRAM





How it's going ☐



educationalpassages.org/ifado/

iFADO MINIBOAT FLEET (so far)

	Launch Date	Land	distance (km)	Total days
Seoltóir Na Gaillimhe (Galway :	6/2/21	7/18/21	2.459	45.62
iFADO I	2/17/22	quiet 2/20/22	167	3.26
KES Kraken	2/19/22	4/6/22	3.985	45.47
KES Kraken - sensors			4.179	
TUGA da Costa Azul	3/17/22	4/6/22	1.444	20.41
iFADO II (Buche salado I)	6/3/22	8/4/22	5.055	61.89
iFADO III (Buche salado II)	5/5/23	at sea	696	25.41
iFADO III - sensors			745	
Korrigan	5/15/23	5/15/23	19	0.21
Korrigan - sensors			6	
iFADO IV (Mar, Salitre y Lava)	5/19/23	at sea	428	11.26
iFADO IV - sensors			438	
			16.994	164.65
			As of 2023-05-30 21:32:07 GMT	



Korrigan miniboat

School

The mini boat project was proposed to the 4 classes of 5th grade (12 years old) and all the subjects studied have been linked to the miniboat:

- communication in French
- construction of a compass rose in geometry
- drawing contest for the mini boat sail in plastic arts
- history of oceanography...

90 students were involved in the project.

What the students say about their school:

« Our school's name is St Vincent.

It's in France, in the city of Brest in Brittany.

There are around three hundred students in the school.

It is a school group : there are the Kindergarten, the Primary and the Secondary school.

We learn many languages : French, English, Spanish, German, Chinese, Latin and Greek.

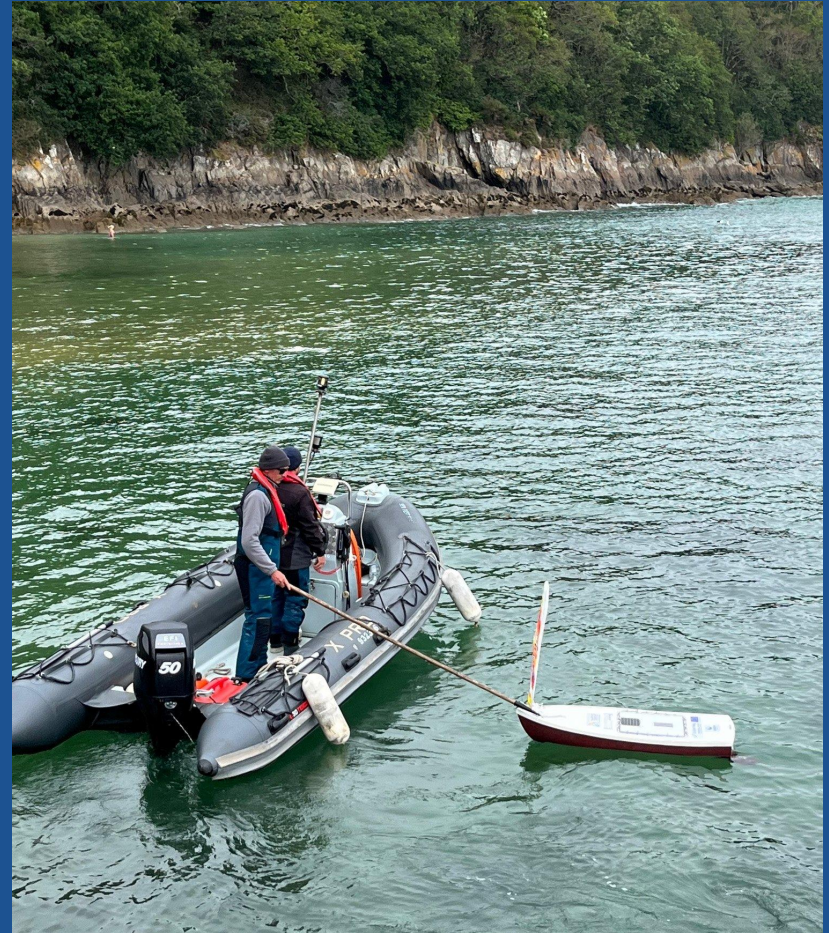
Our traditional dishes in Brittany are kig a farz and crepes. »



SAINT VINCENT GROUPE SCOLAIRE
MATERNELLE - PRIMAIRE - COLLÈGE
ÊTRE ET SAVOIR. DEVENIR

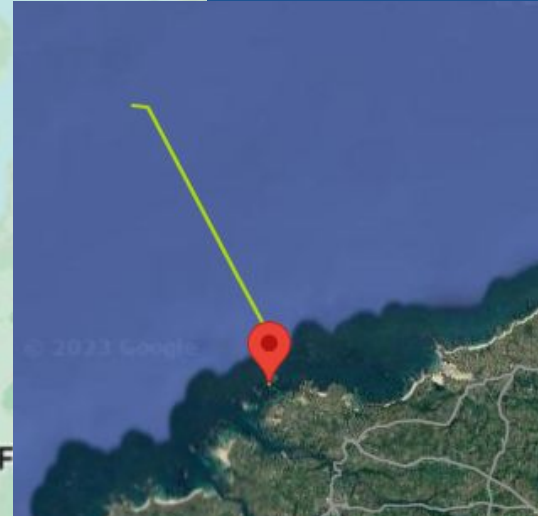


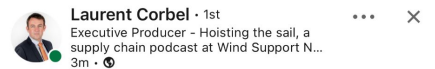
WORLD OCEAN DAY 2022: BUOYANCY TEST



MAY 15, 2023: LAUNCH (AND LANDING) DAY

- ▶ May 15, launched by the Navy at 15:00 GMT
- ▶ Landed by 18:01 GMT
- ▶ The next day the Coast Guard recovered it for us





When Brittany meets New England!

Cassie Stymiest, Educational Passages is working with the Pôle Mer Bretagne Atlantique on the launch of the Korrigan!

More details on the project in the comment

#brittany #education #connectkids



THANK YOU AND CONGRATULATIONS, Project iFADO FOR:

- ★ SUPPORTING AND STRENGTHENING THE EDUCATIONAL PASSAGES MINIBOAT PROGRAM
- ★ CONNECTING STUDENTS AND THE PUBLIC TO YOUR RESEARCH
- ★ INSPIRING FUTURE LEADERS
- ★ BUILDING CONFIDENCE IN STEAM DISCIPLINES
- ★ PROVIDING COMMUNITY IMPACT AND OUTREACH
- ★ ACTIVELY CONTRIBUTING MORE DATA FOR OCEAN SCIENCE

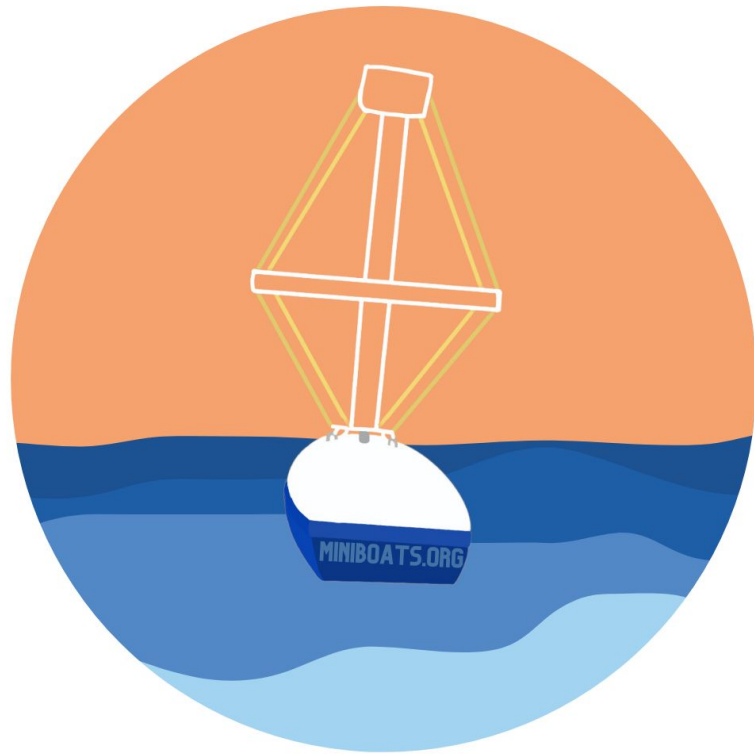




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