



Boya multifísica para  
monitoreo eólico,  
meteorológico,  
oceánico y  
ambiental.

**III Congreso Eólico Marino, Cádiz  
Noviembre 2024**

# EOLOS – corporate profile

- **MISION**

Quality **Wind, Metocean and Environmental Data** for the Offshore Wind Industry

- **VISION**

**Data intelligence** to reduce the cost of offshore wind energy

- **TEAM**

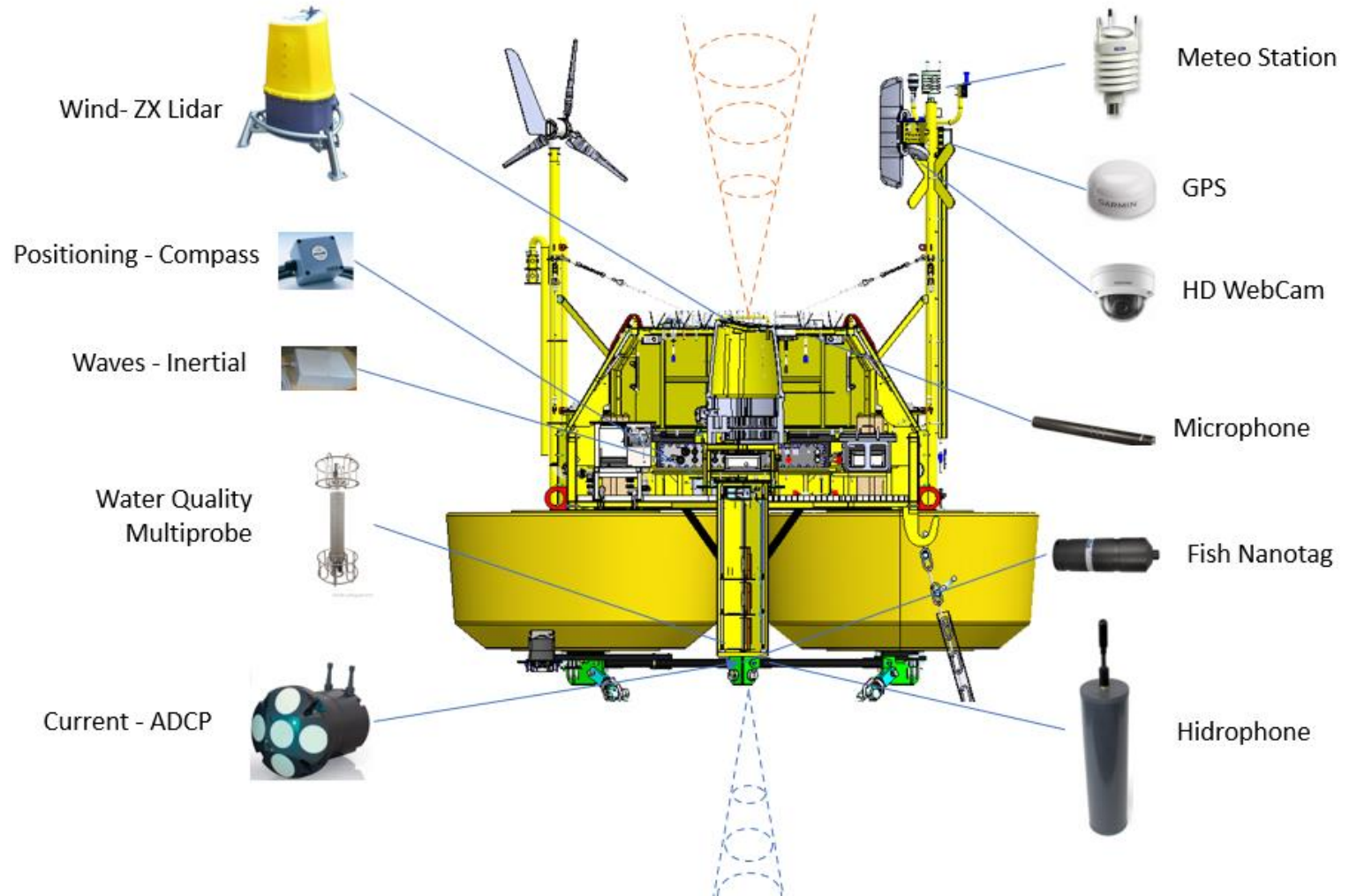
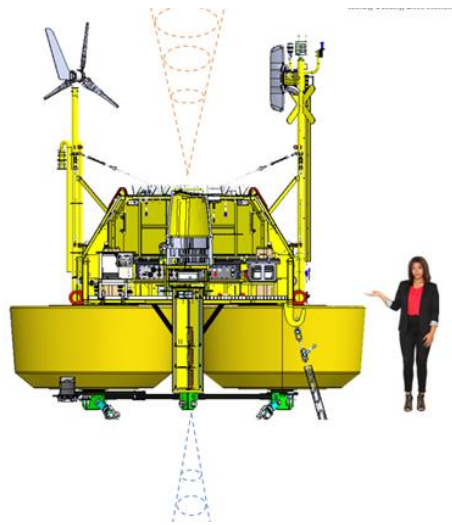
Currently a team of +80 people with headquarters in **Barcelona**, and operations in Europe, North & Latin America, and Asia.



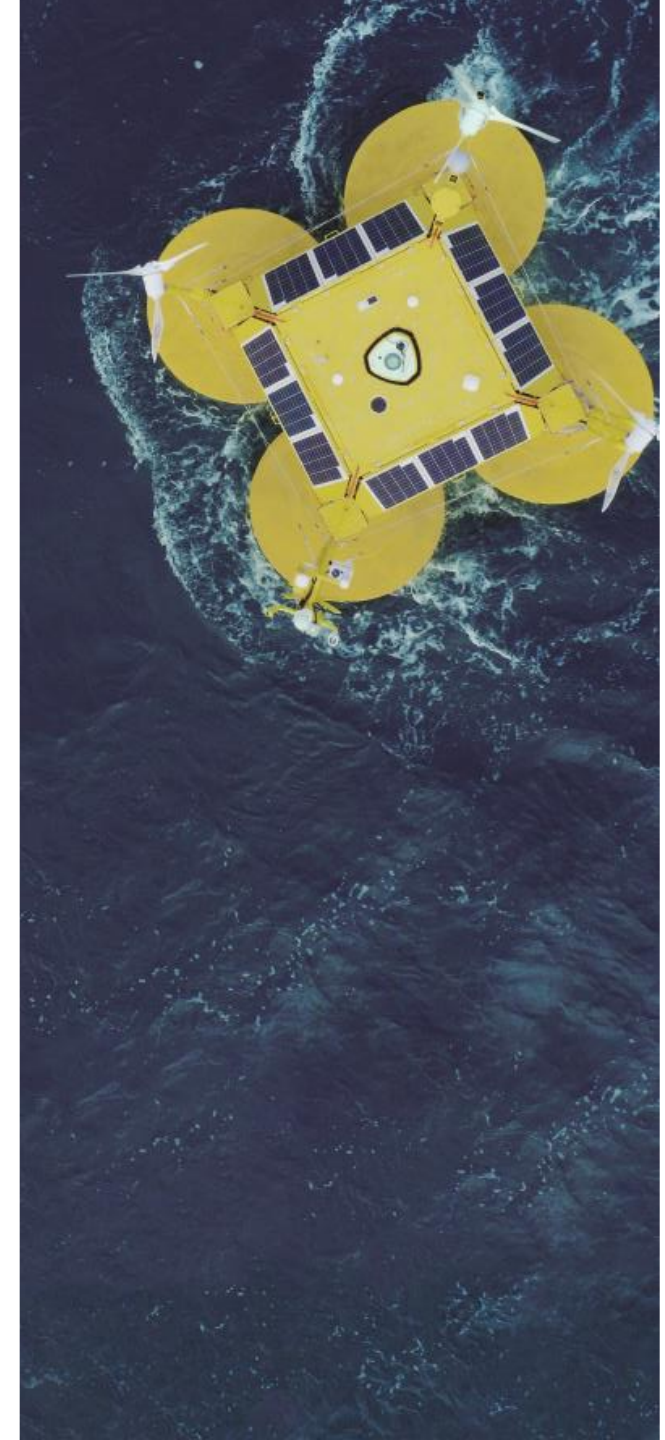
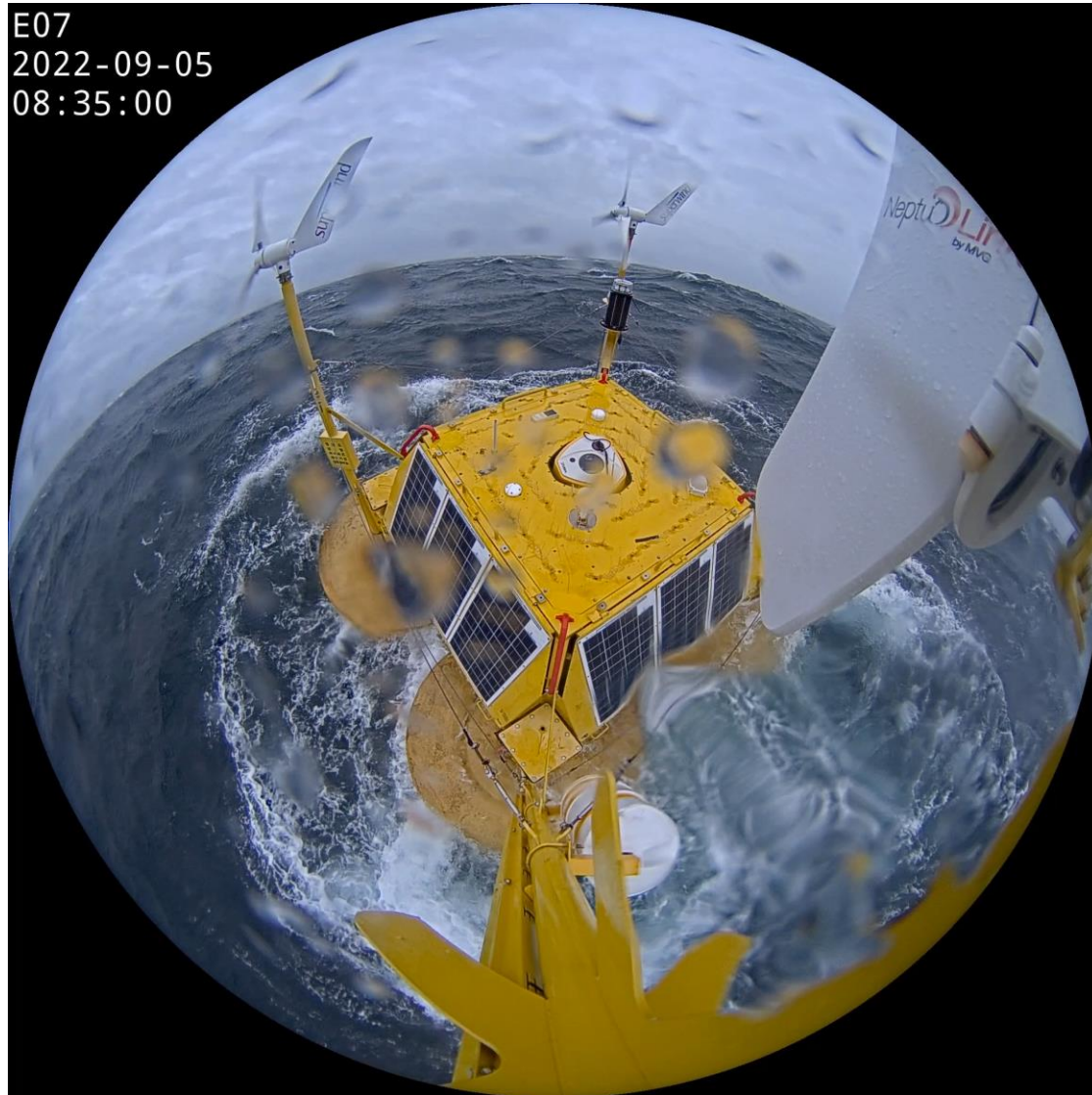
# FLS200 Buoy – Main Sensors

Sensors for 3 main areas of science for Offshore Wind

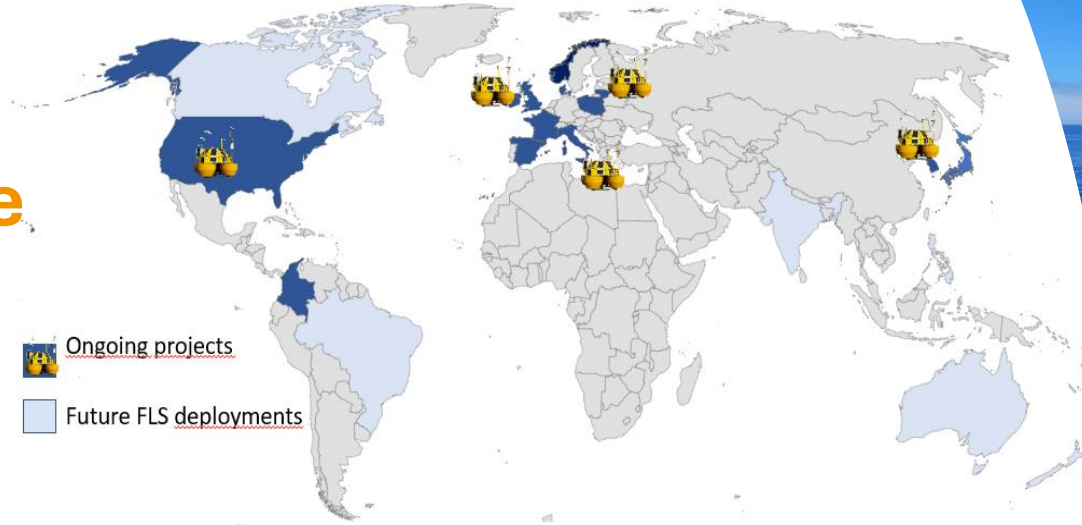
- Wind
- Ocean: current and waves
- Environmental



# FLS200 Buoy During Typhoon Hinnamor, SK 2022



# Global Presence



**eolos**10<sup>th</sup>  
anniversary

Over 10 years of Global Presence in the main Wind Offshore Markets



# Wind Measurements

- ❑ Floating LiDAR **Stage 3** Maturity Level
- ❑ **Wind** Uncertainty 2-4%  $\approx$  Met mast
- ❑ **Motion Compensation** Algorithm
- ❑ **Turbulence Intensity** corrected via Machine Learning Algorithm (patented and **DNV-validated**)

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

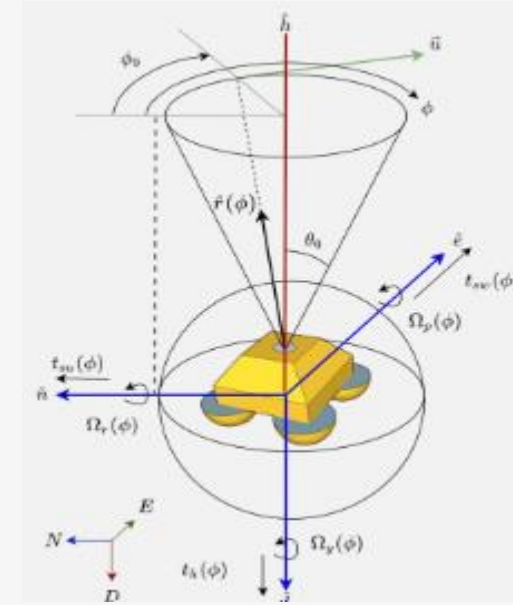
(19) World Intellectual Property Organization  
International Bureau

(43) International Publication Date  
24 October 2024 (24.10.2024)

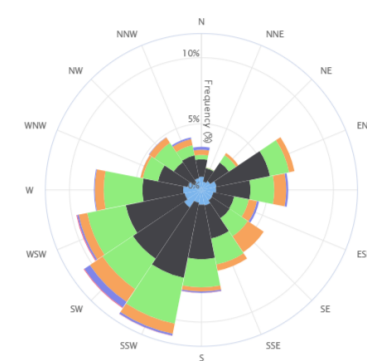


(10) International Publication Number  
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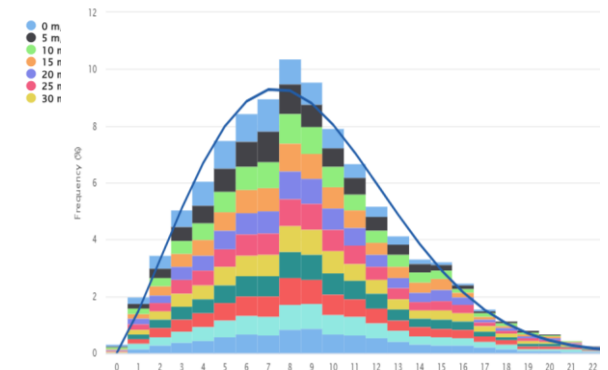
(54) Title: CORRECTION OF TURBULENCE INTENSITY



Wind Rose

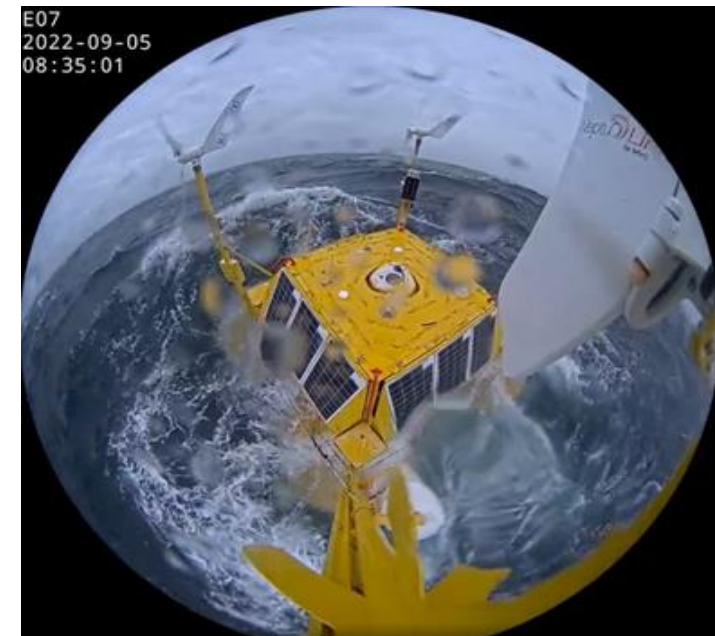
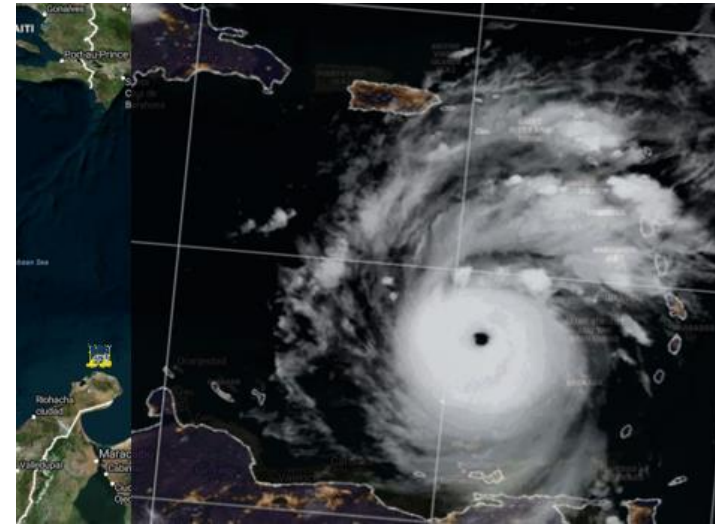
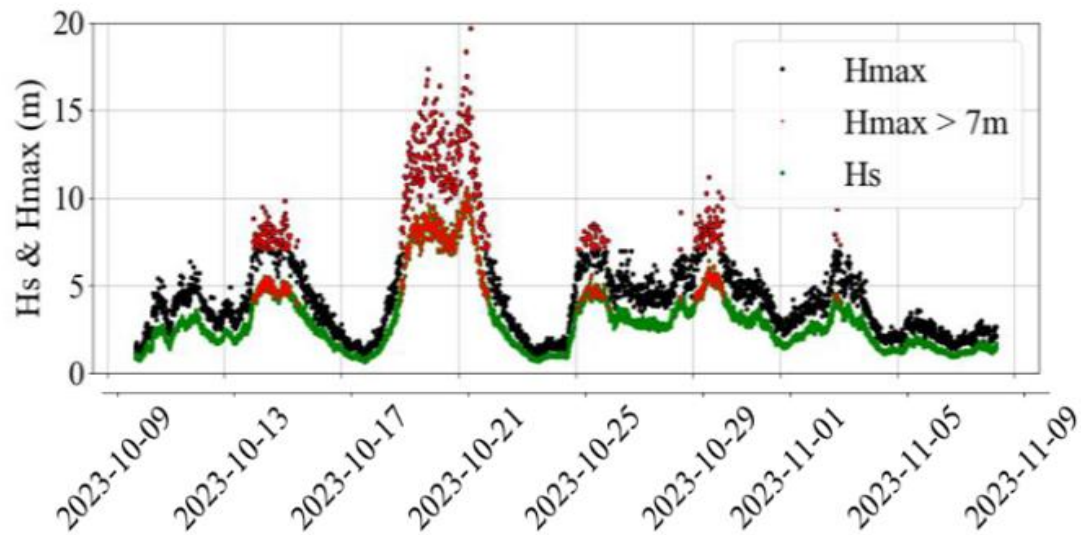


Wind Speed Distribution



# Metocean Measurements

- Wave** measurements
- Current** measurements down to 1.000m
- Wind-Wave** misalignment
- Wave **Spectral** distribution



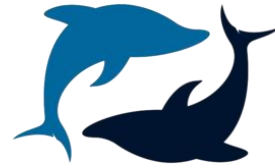
# Environmental Measurements

## ☐ Acoustic Birds and Bats Monitoring



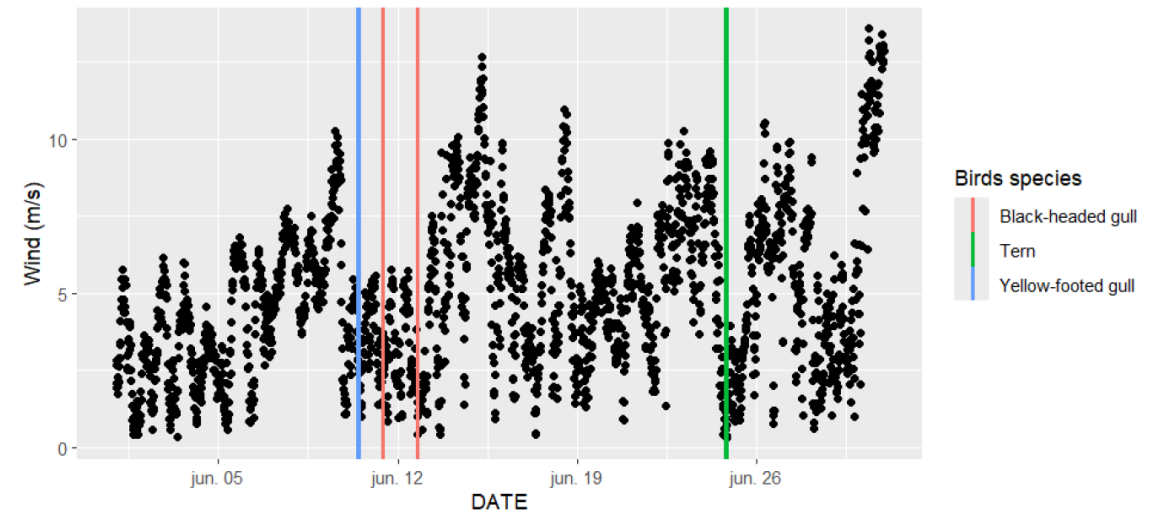
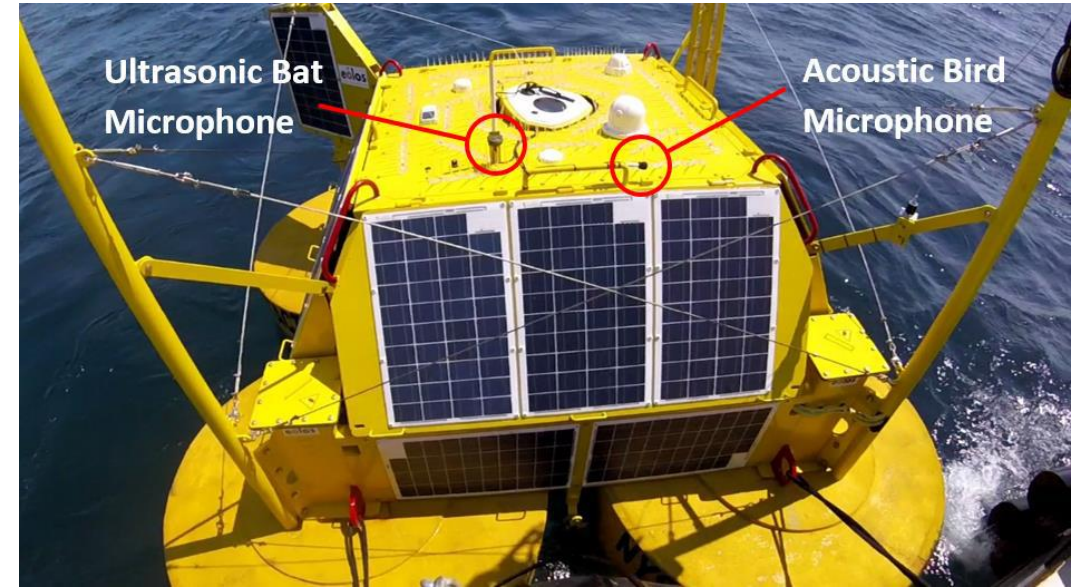
## ☐ Underwater Hydrophones and Noise Monitoring

- Dolphins
- Wales



## ☐ Water Properties

- Conductivity
- Turbidity
- Chlorophyll





**Gracias!**

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