



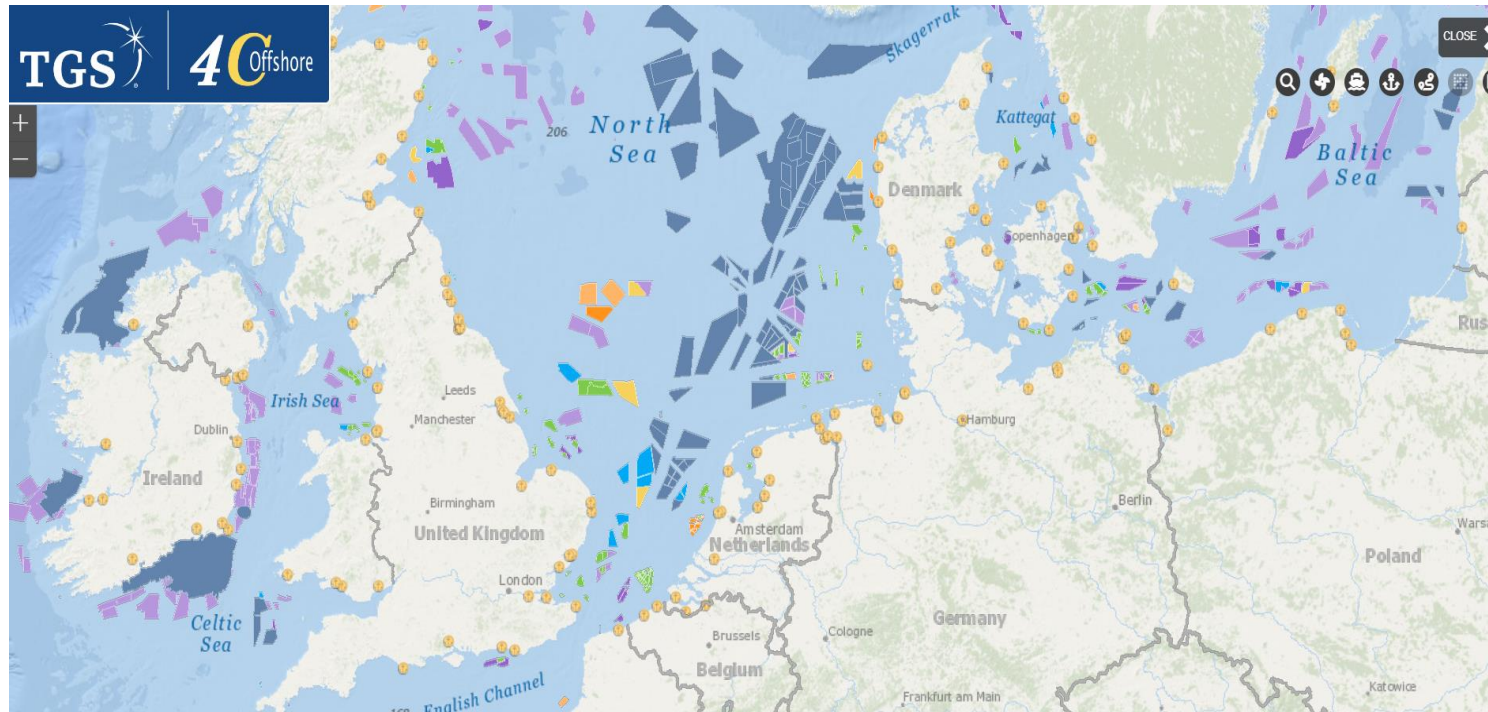
**Integrating Field Studies and novel Data
Collection technologies with AI Algorithms for
Monitoring Human Impact on the Ocean: A
Collaborative Approach with Marine Scientists**

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www.sinay.ai

Why

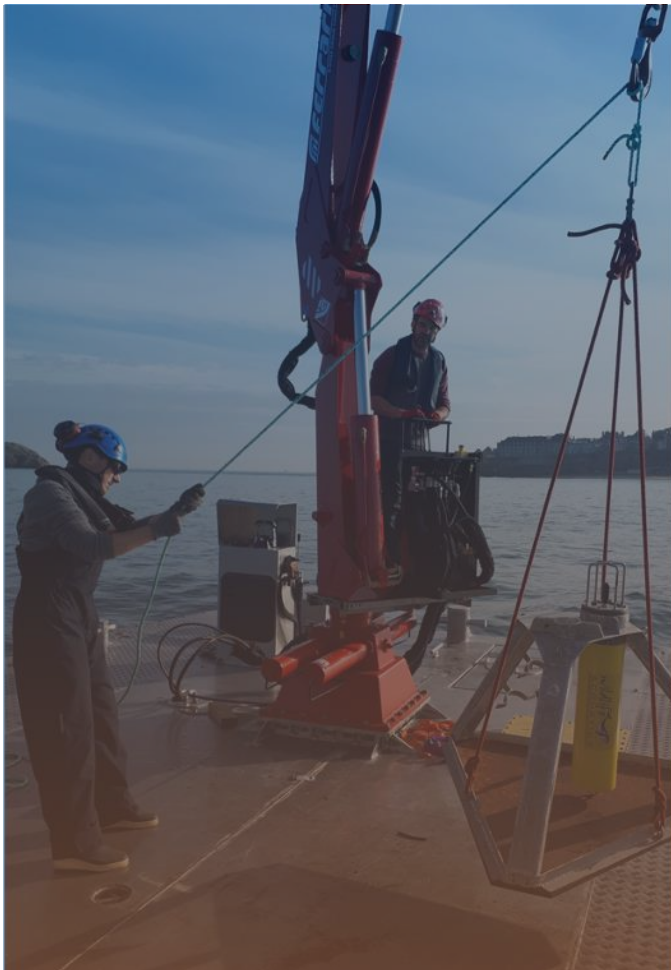
Monitoring anthropogenic impact



- Raise of offshore windfarms - in MW or in number of plants - in last years
- Increasing marine traffic
- Oil & Gas still there
- Fishing
- Ports

We love Data, We love the Ocean, We connect both

A double expertise combining tech & maritime expertise



Studies & Services:

- Acoustics
- Halieutics
- Environment

AI & Algorithms:

- +60 algorithms
- Team of biologists & AI engineers to develop key indicators

Member of scientific networks



Case Study – Marine Mammal Conservation in the MED

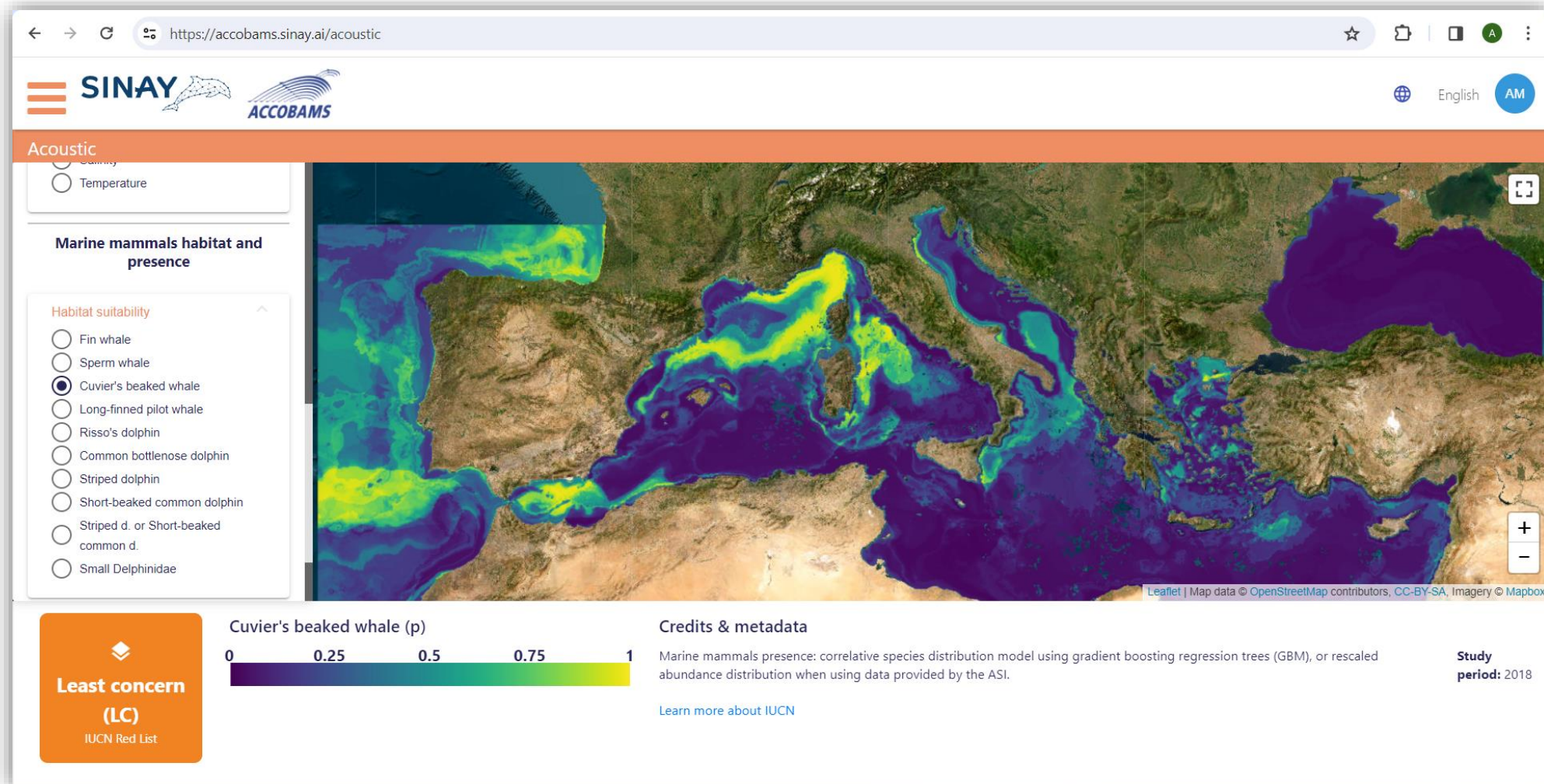


- Field studies : Aerial and boat surveys for marine mammals
- In-situ measurements and Sat-EO for metocean conditions used for modelling the habitat of marine mammals and the propagation of noise from ships
- AIS data for ship data
- Acoustic Propagation modelling
- AI-based Habitat modelling

+ the Scientific Committee and groups of expert of our client for guidance and validation of methods and results

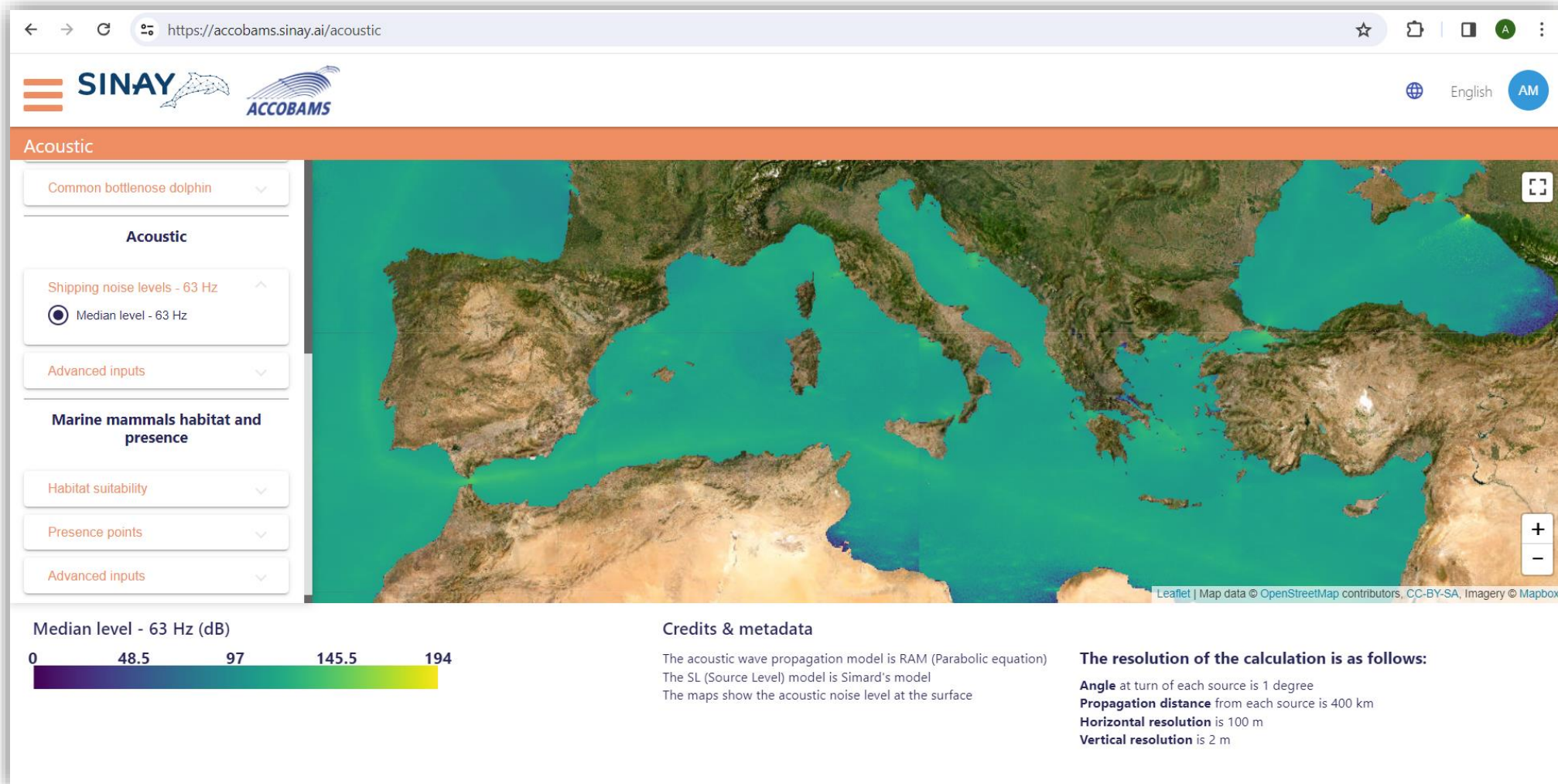
Case Study – Marine Mammal Conservation in the MED

Visualisation of the dolphins and whales Habitat on the Sinay Platform



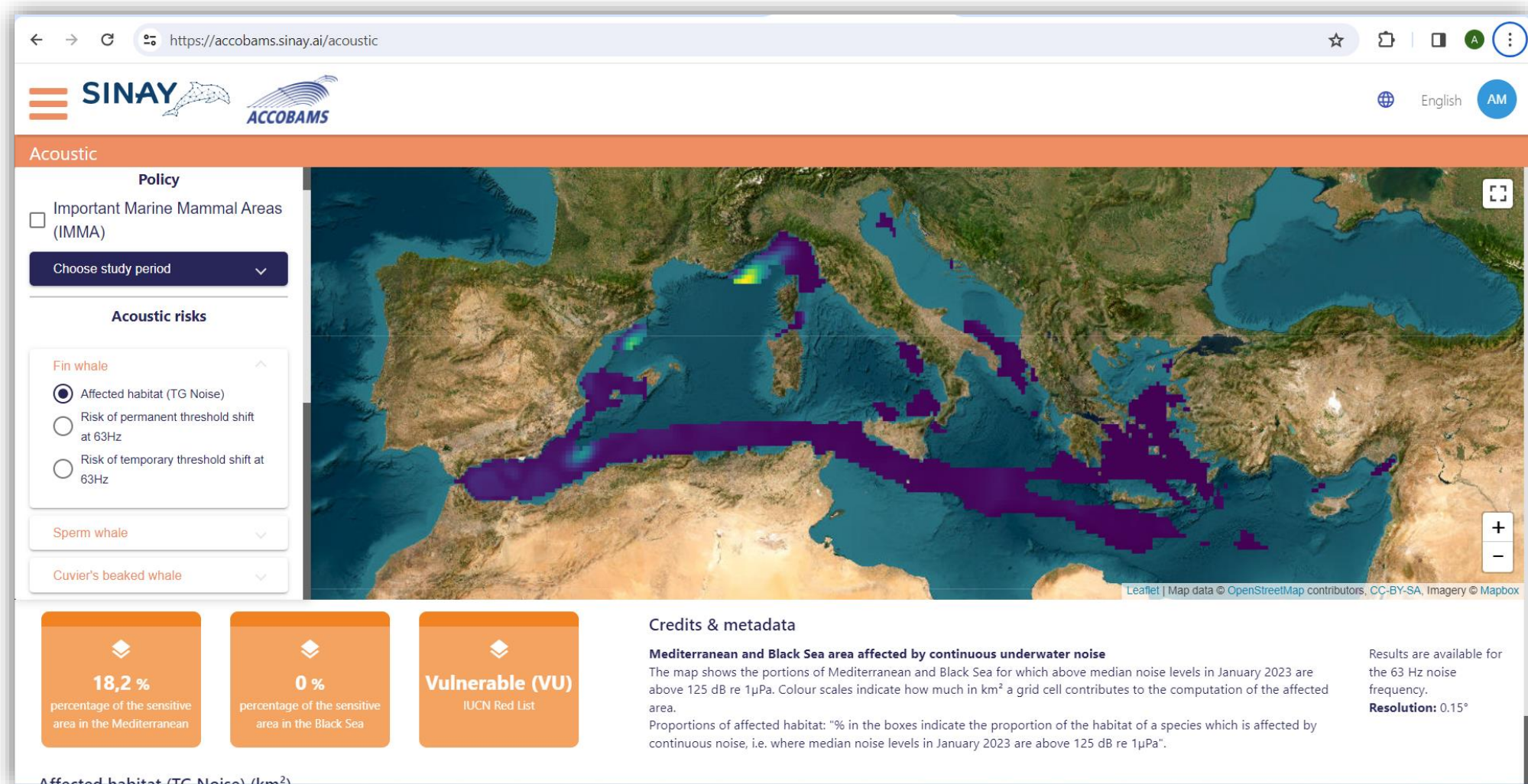
Case Study – Marine Mammal Conservation in the MED

Visualisation of Marine traffic noise on the Sinay Platform



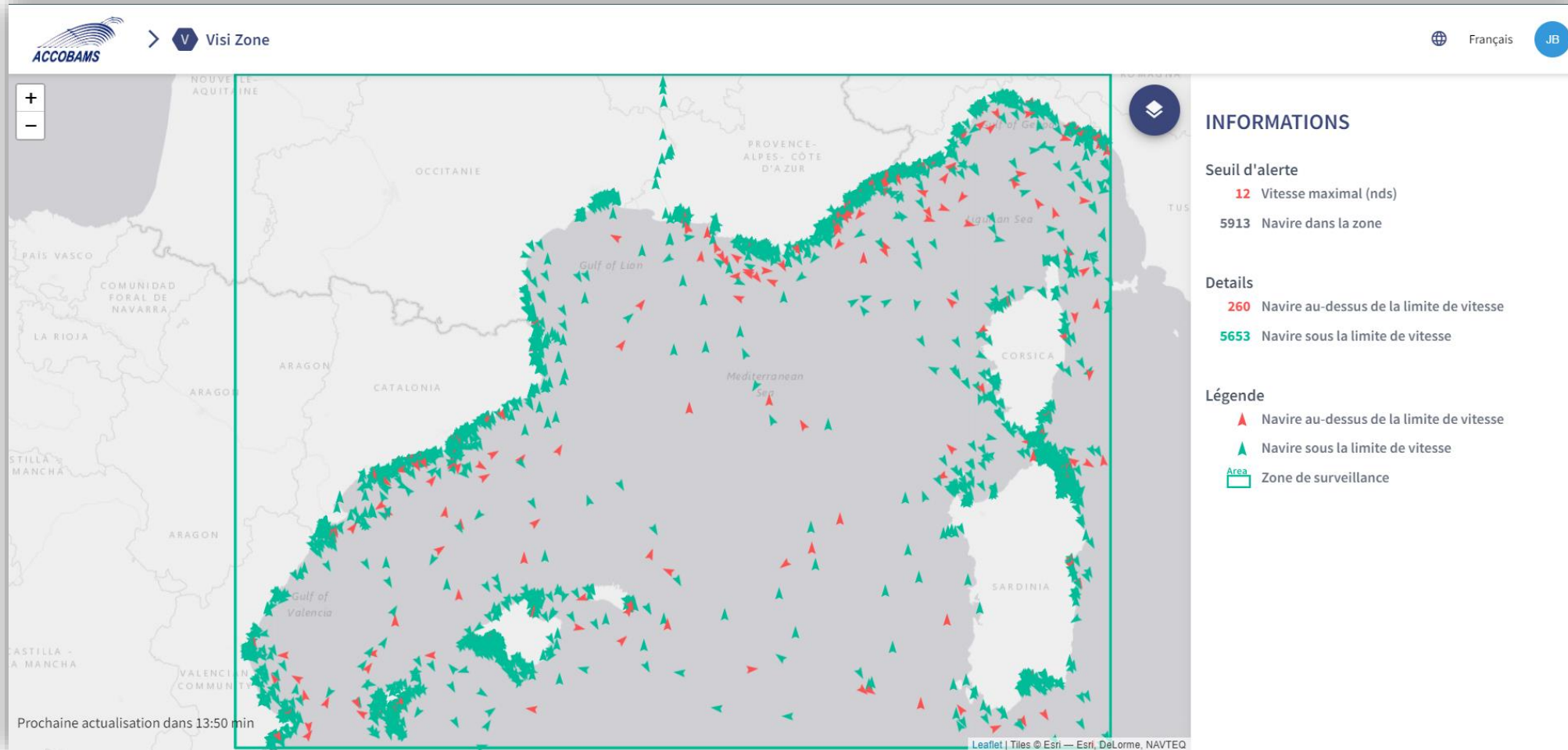
Case Study – Marine Mammal Conservation in the MED

Decision making tool with the Impact Indicators on the Sinay Platform



Case Study – Marine Mammal Conservation in the MED

New features – real time monitoring of vessel speed



Case Study – Marine Mammal Conservation in the MED

Some outcomes



- Assessment of underwater noise pollution on marine mammals under the **UN Environment Program for the Mediterranean** (UNEP/MAP)
- **Implementation of mitigation measures under international regulation rules :**
 - ✓ protected areas (IMO – PSSA)
 - ✓ regulation of noise-generating activities (ACCOBAMS)

Perspective

Bioship: scoring software for transforming global maritime transportation for an ecological future



Why?

- Stringent regulations and growing environmental consciousness among stakeholders and consumers
- Demand for worldwide data to monitor maritime traffic's impact on the environment

How?

- Pioneering software suite designed to score ships' environmental and operational indicators globally and in real-time
- Diverse indicators such as GHG emissions, underwater noise, biodiversity impact, ETA, congestion, and more
- Amalgamating multiple data sources and leveraging advanced data science and AI algorithms