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ÁREA DE CONSERVACIÓN

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COCO**
COSTA RICA

Herrera Esteban

SINAC- COSTA RICA

Coco Marine Conservation Area



European Pavilion
**Digital
Ocean**

Nice | France
2 - 13 JUNE 2025

Monitoring, Control, and Protection

Cocos Marine Conservation Area –
2025



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Coco Marine Conservation Area

- Coco Marine Conservation Area (ACMC) is located in Eastern Tropical Pacific, 500 km southern of Costa Rica coast.
- ACMC is in charge of managing two marine areas: Cocos Island National Park and Bicentennial Management Marine Area.
- Conservation of endemic species, critical endangered species, commercial species
- Conservation of cultural and historic heritage
- Multiple international denominations



Cocos Island National Park



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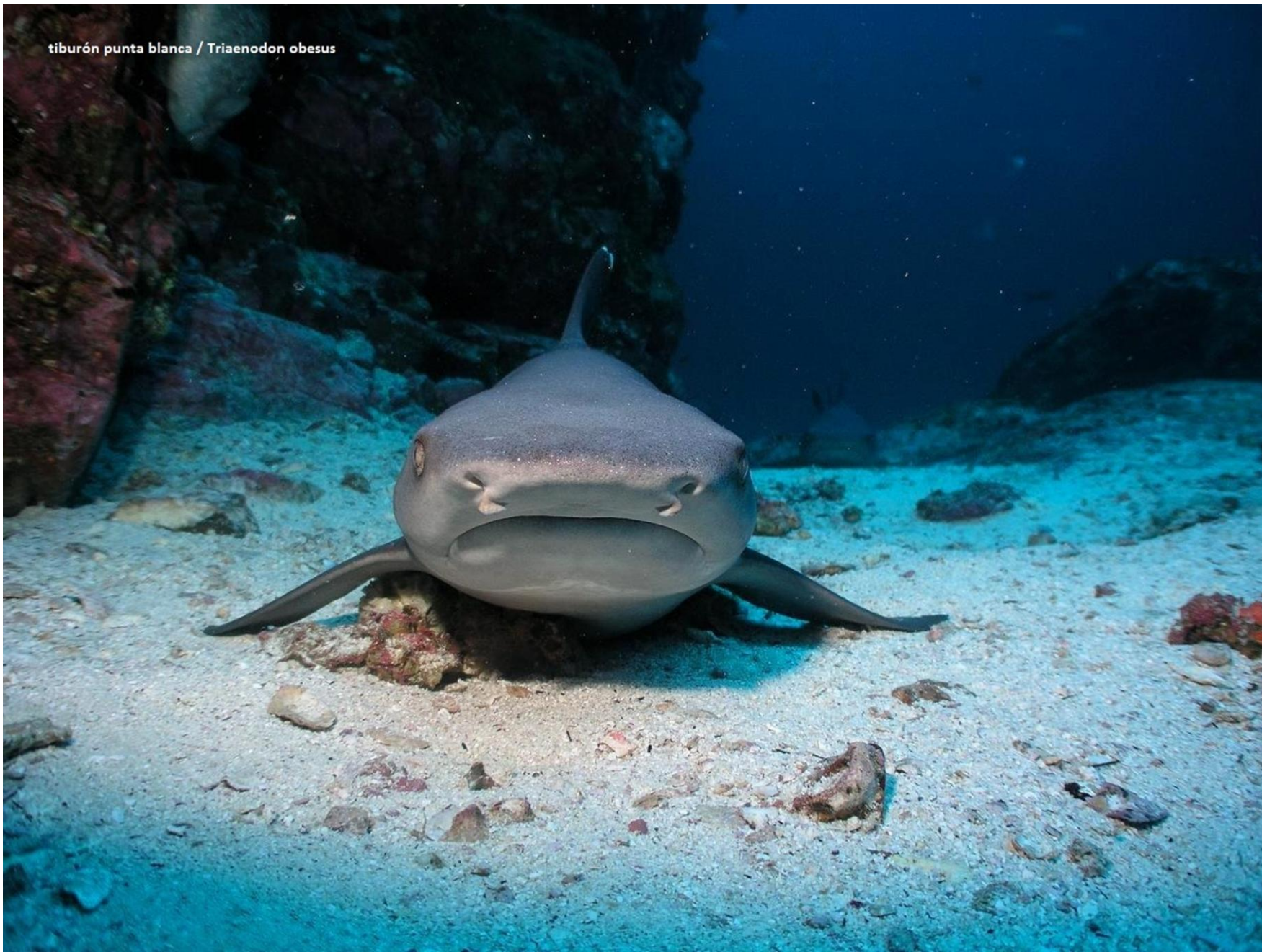


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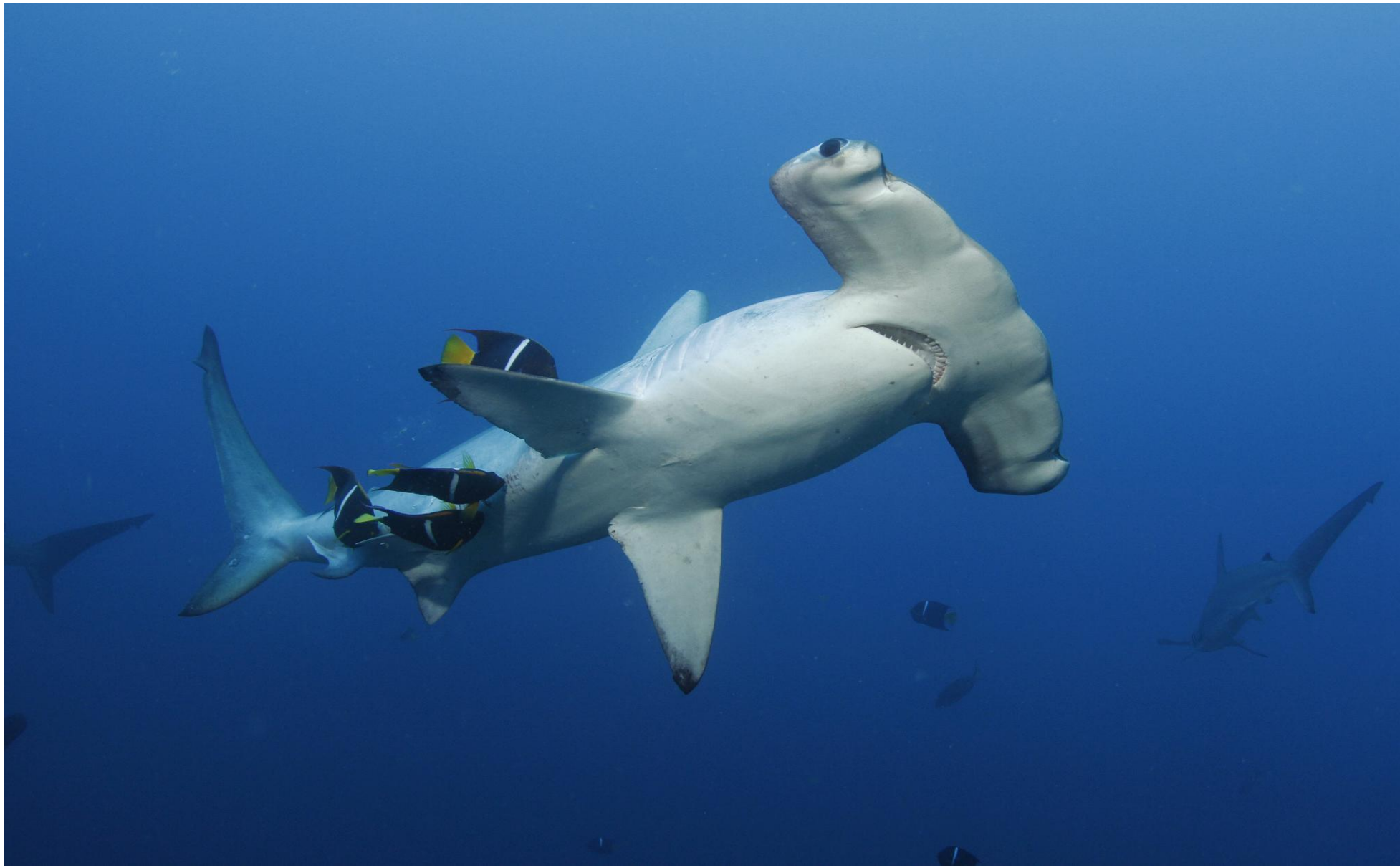
tiburón punta blanca / *Triaenodon obesus*



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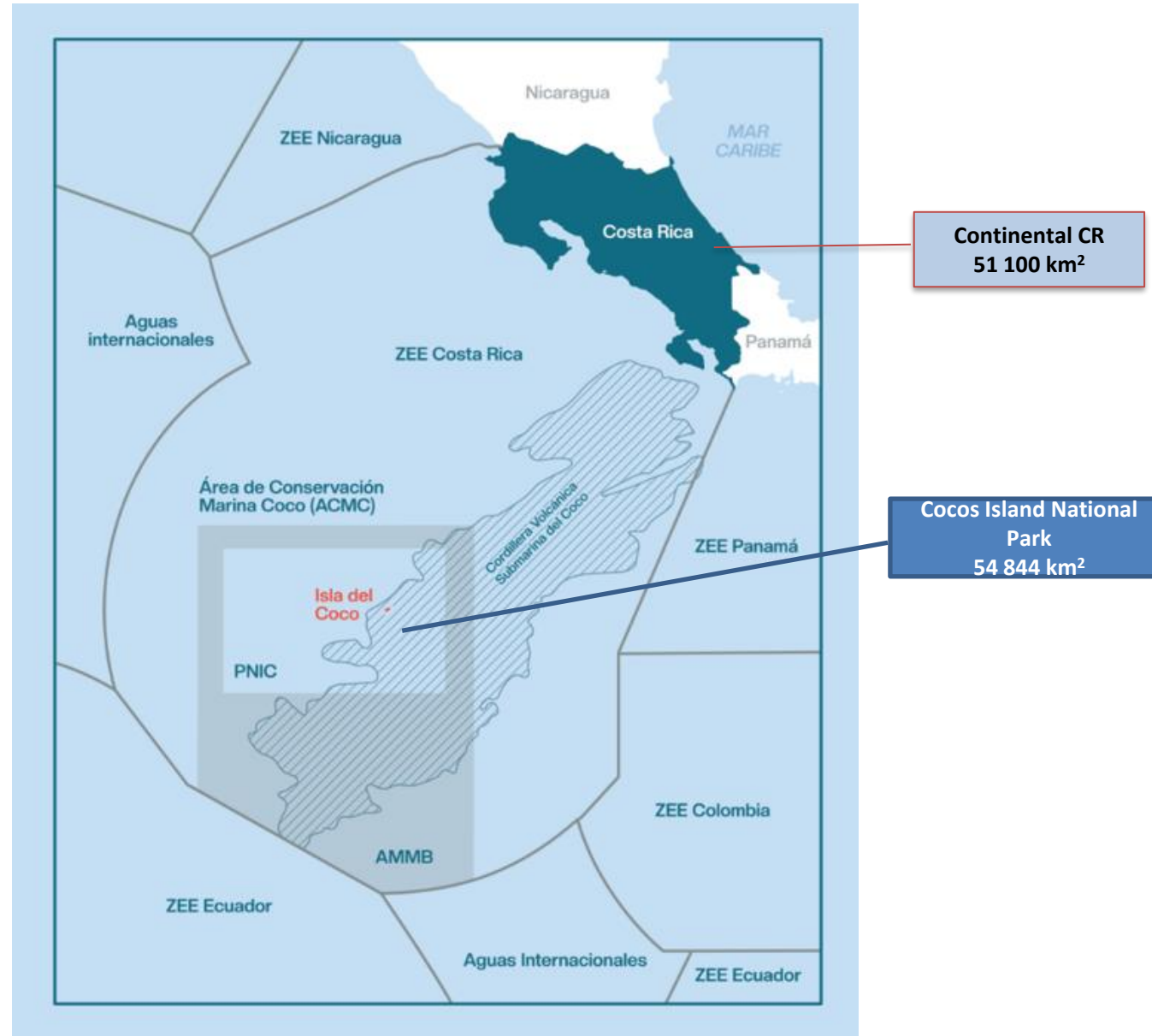
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Protected Area Expansion

In 2021, the area of Cocos Island National Park was expanded from 2,000 km² to more than 54,000 km².

The Bicentennial Marine Management Area was also established, covering over 106,000 km².



Challenges of Expansion

Traditional patrol methods using boats and human crews became impractical due to the vast area.



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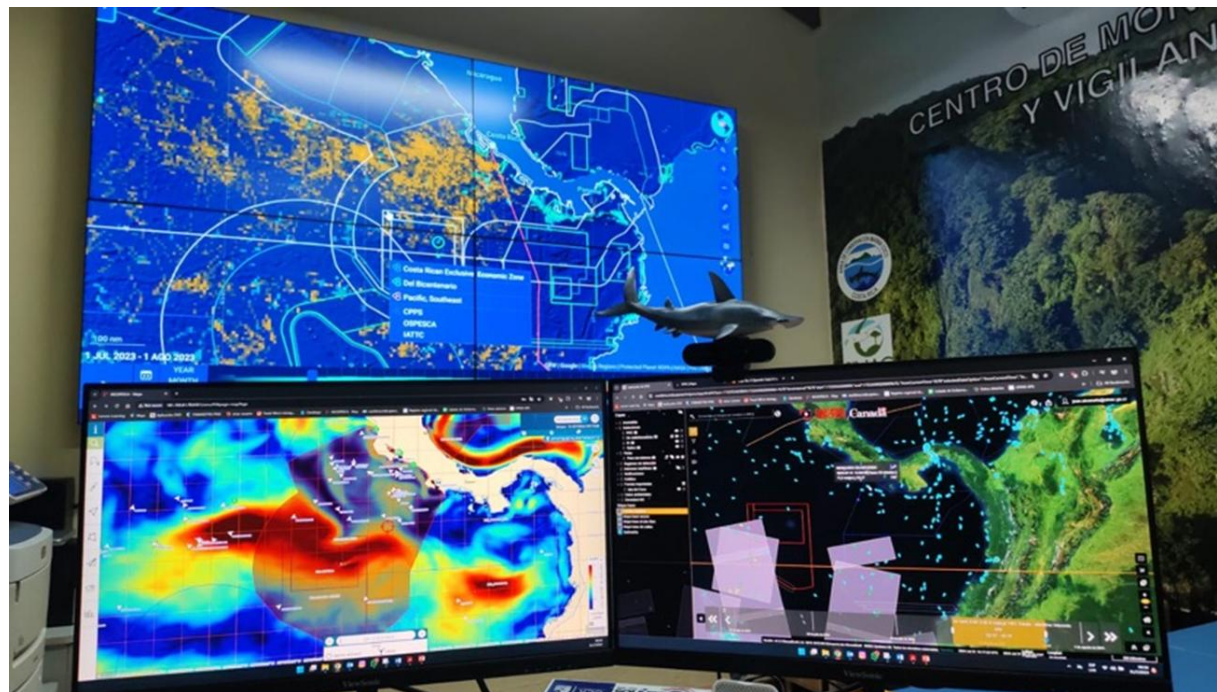
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Establishment of the Monitoring Center

In 2023, the Monitoring, Control, and Surveillance Center was established thanks to donor support.

Satellite platforms help monitor vessel movements near and inside marine protected areas.

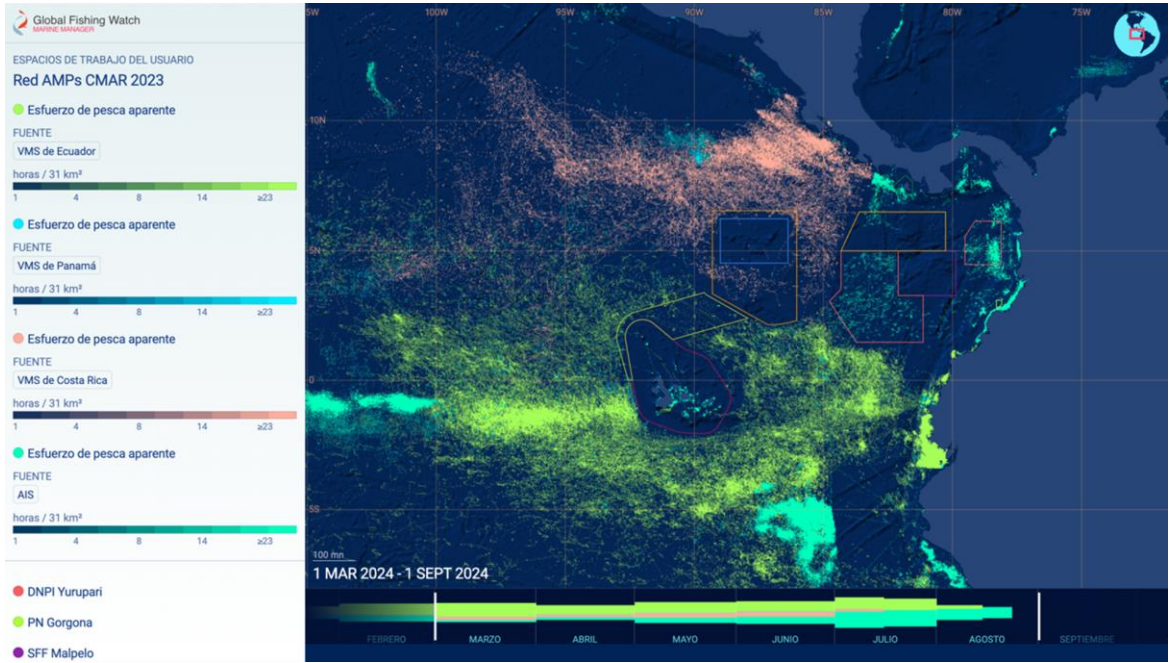
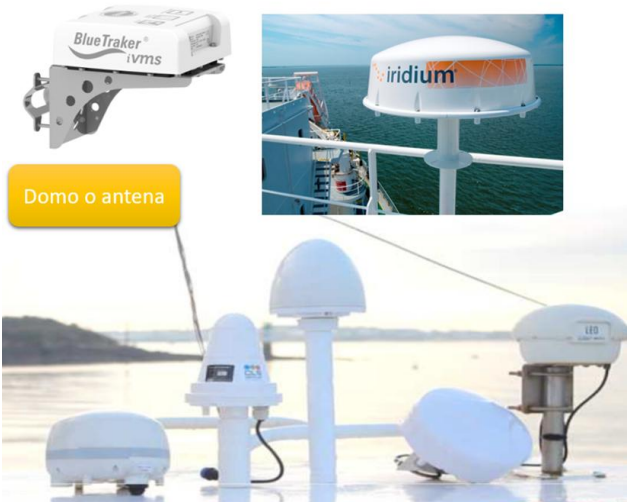


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Monitoring Center Operations

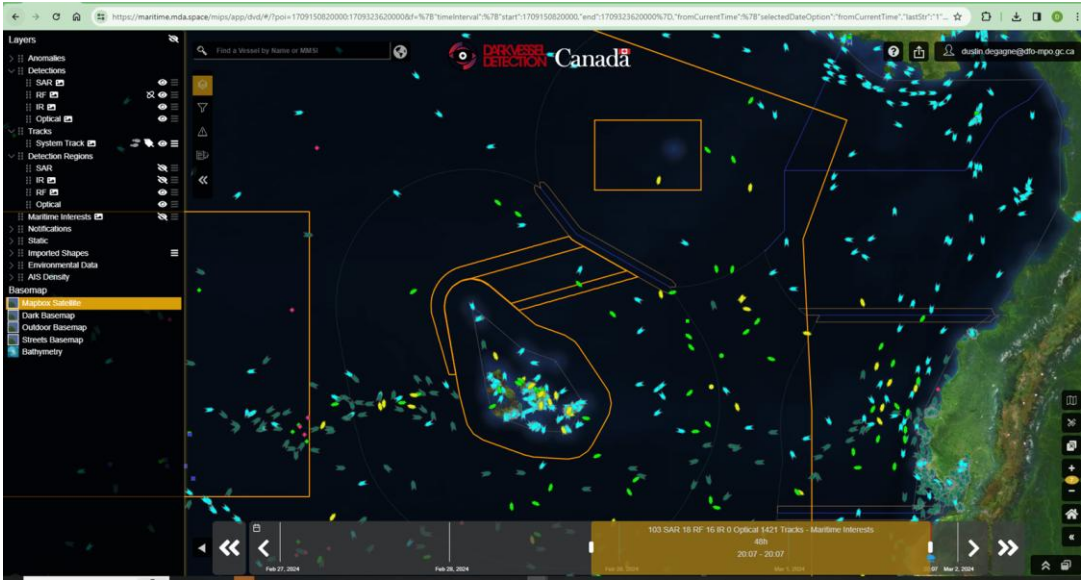
Staffed by two people using platforms to track vessels with AIS and VMS technologies.



Advanced Detection Technologies

In early 2024, a radar was installed at Cocos Island to monitor over 40 nautical miles.

Dark vessel detection (DVD) identifies ships with deactivated or hidden tracking systems.



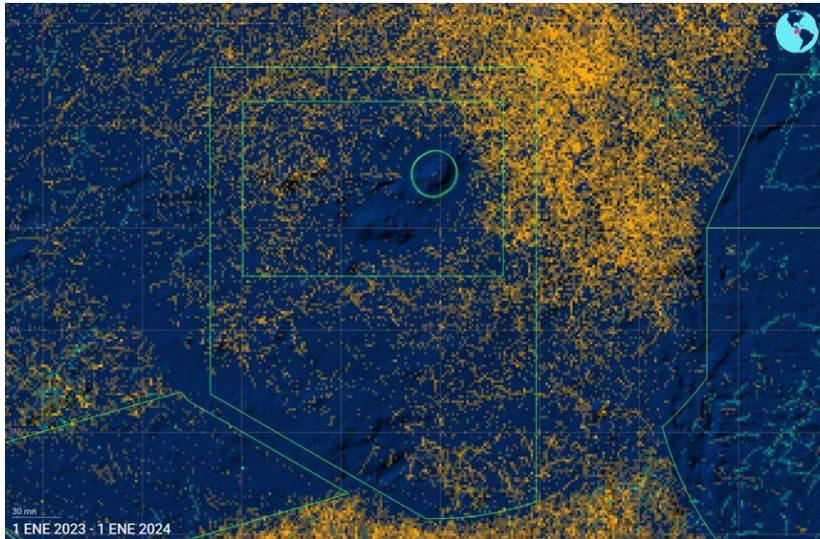
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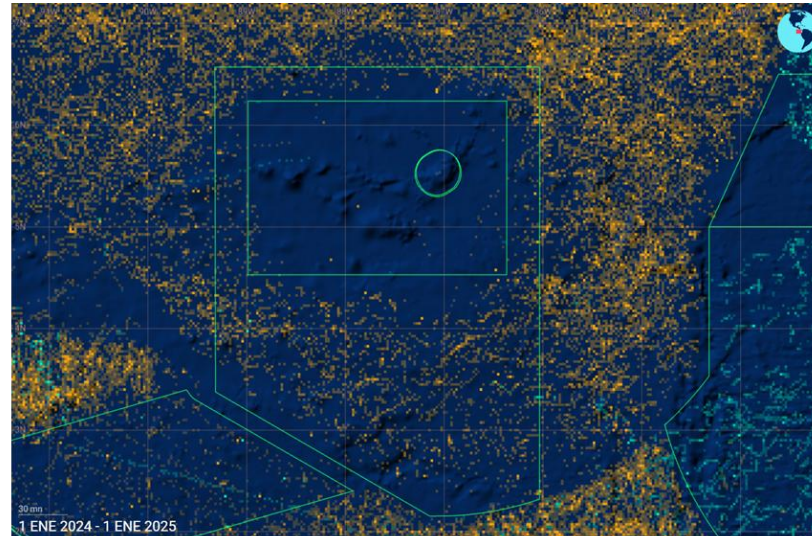
Impact on Fishing Activity

Fishing effort in Cocos Island National Park was reduced by 90% when comparing 2023 to 2024

2023



2024



Interceptor Vessel Plans

Efforts are underway to acquire a fast and secure interceptor vessel for field response.



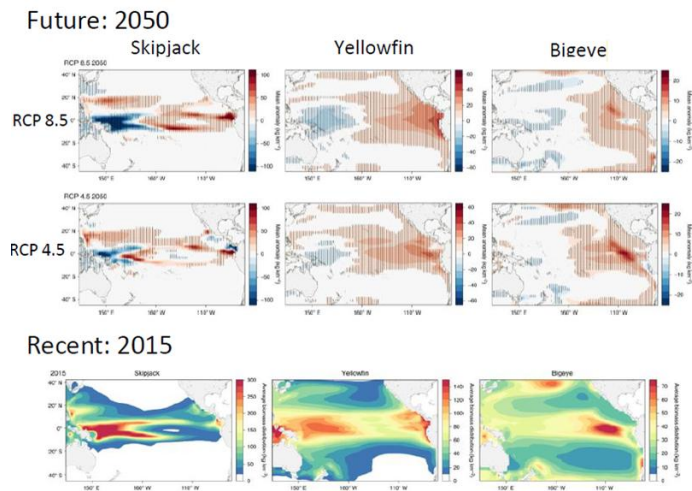
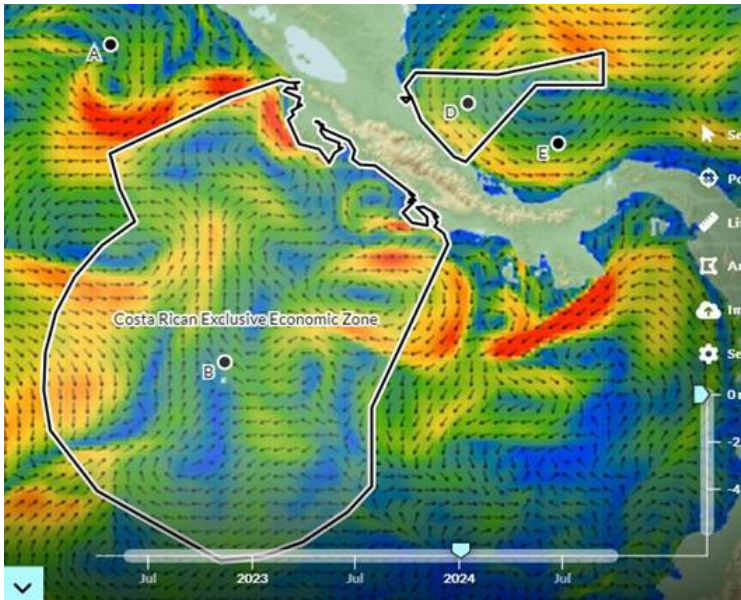
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OCEAN PREDICTION FOR COSTA RICA (OP4CR)

Working with Mercator on ocean prediction to track pelagic species and improve monitoring efforts.



Bell et al. (2021) Nature Sustainability vol. 4: 900–910





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Thank you

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