

# OCEAN AND ENVIRONMENTAL TECHNOLOGIES AND SERVICES

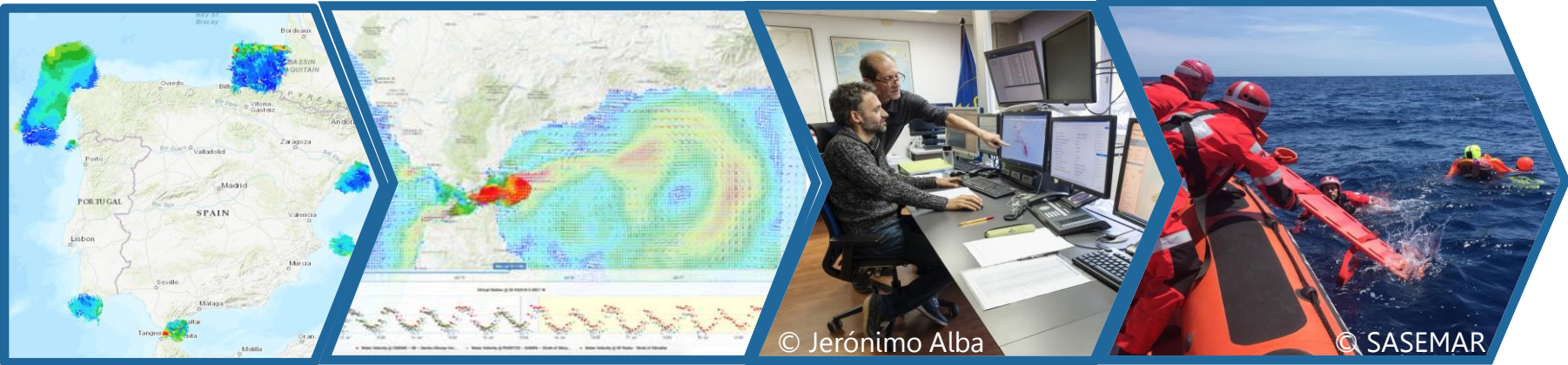
## Part 1 : Ocean Focus

Wednesday 20 October  
9:00 AM to 01:15 PM





# IBISAR service: Supporting operations and emergency response at sea



Emma Reyes Reyes (Head of HF radar Facility, SOCIB)





# Impact of the major disasters

**Prestige oil tanker oil spill  
(Spain, NOV 2002)**



**Offshore oil rig Deepwater Horizon  
(Gulf of Mexico, APR- 2010)**



▲ Photo: by U.S. Coast Guard via Getty Images

◀ Photo: by [Miguel Riopa](#) / AFP

**Increase society  
awareness**



**Op. Oceanography  
starts in Spain**



24

partners

4 M€

budget

**Change in Laws  
& Regulations**





# IBISAR: market and users

## Markets:



COASTAL  
MONITORING



SAFETY  
& DISASTER

## Geographical areas:



IBERIAN-BISCAY  
-IRISH  
REGIONAL SEAS



IBISAR

- Why?
- What?
- How?
- Benefit?

End users need **reliable** ocean current predictions  
**View, compare & assess** model skill  
Guide users to select the **most accurate** ocean forecast  
Facilitate **decision-making** at sea

## End users targeted:



SAR  
operators



Maritime  
traffic

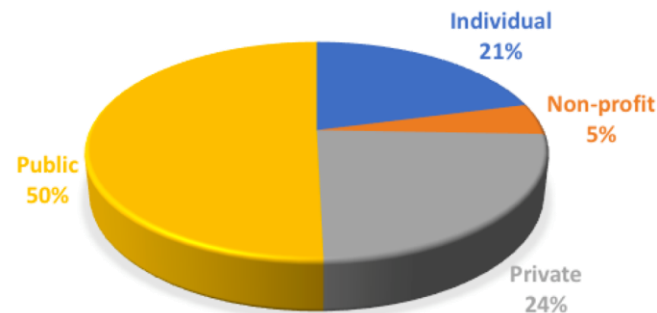


Modellers

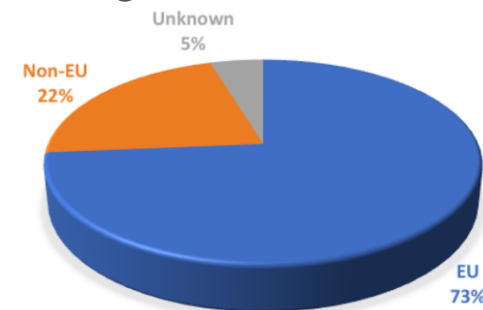


Emergency  
responders

Organization Type



Organization Country



Condition of use and accessibility: **freely accessible** under registration on [www.ibisar.es](http://www.ibisar.es)

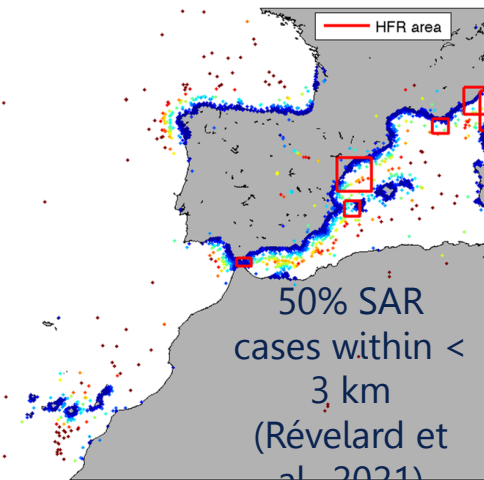
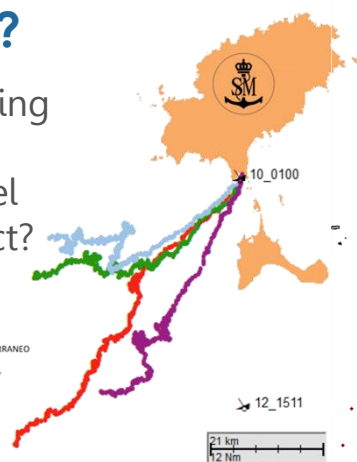


# IBISAR: elements & methodology

## Why IBISAR?

Broad & growing portfolio:  
Which model should I select?

- COPERNICUS IBI
- COPERNICUS MEDITERRANEO
- WMOP ROMS
- HYCOM GLOBAL NAVY
- BAHAYA



## 3 elements

### Catalogue

In-Situ



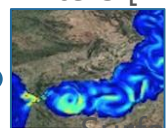
Drifters [IBI]



6 HF radars

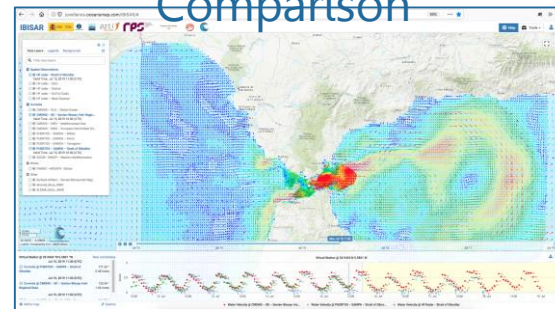
8

Models

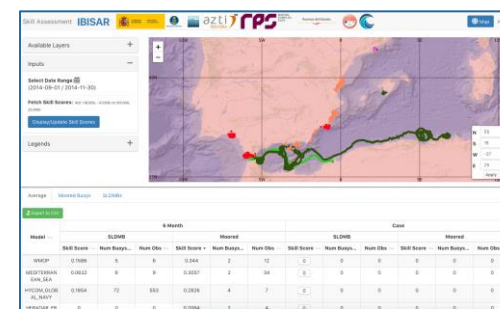


Surface current forecast

### Visualization & Comparison



### Skill Assessment



## 3 steps

Trajectory simulation

Trajectory comparison

Model ranking  
(Liu and Weisberg, 2011)



# IBISAR: Public-private partnership

## Coordinator:



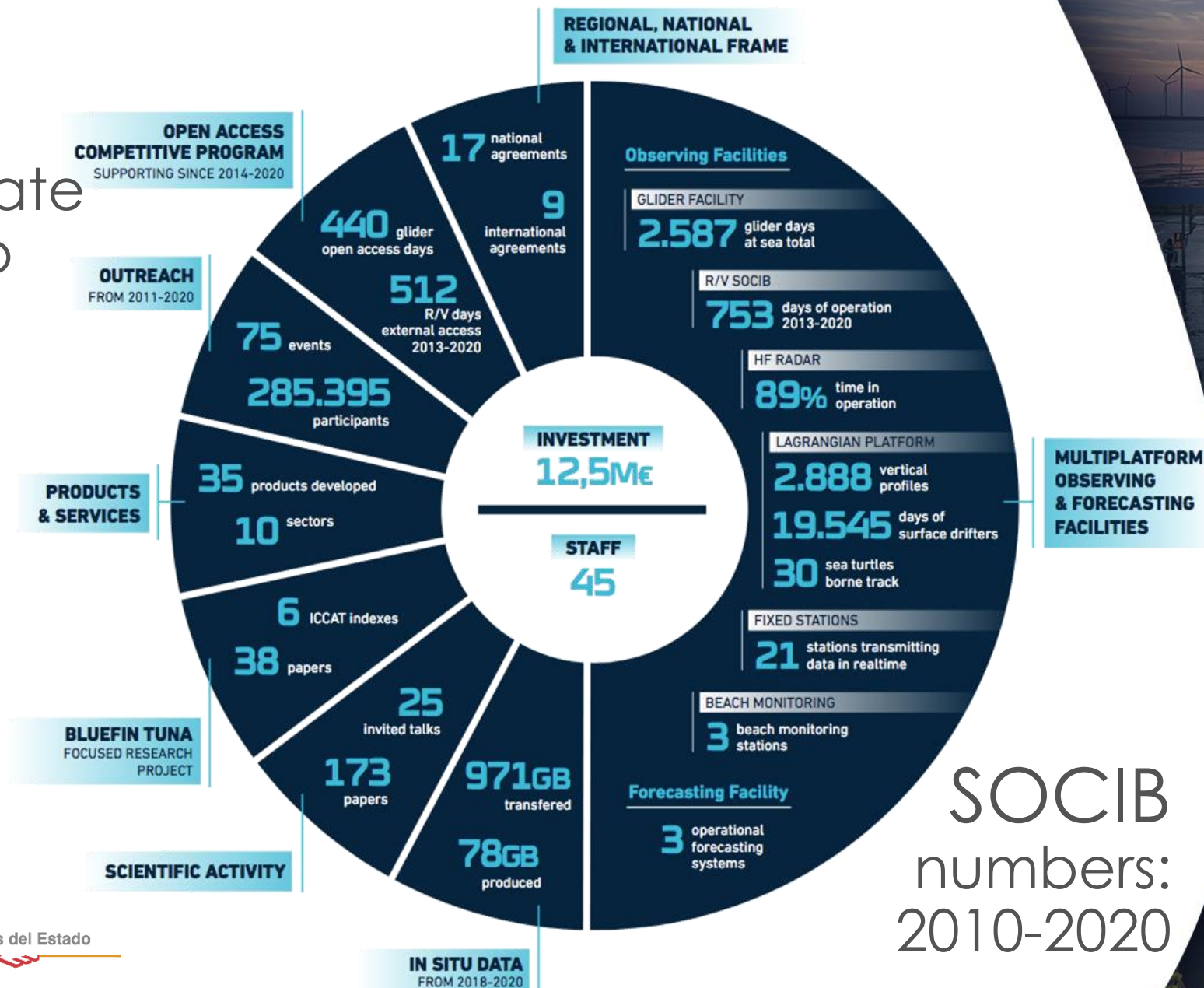
## Co-contractors:



## Collaborators:



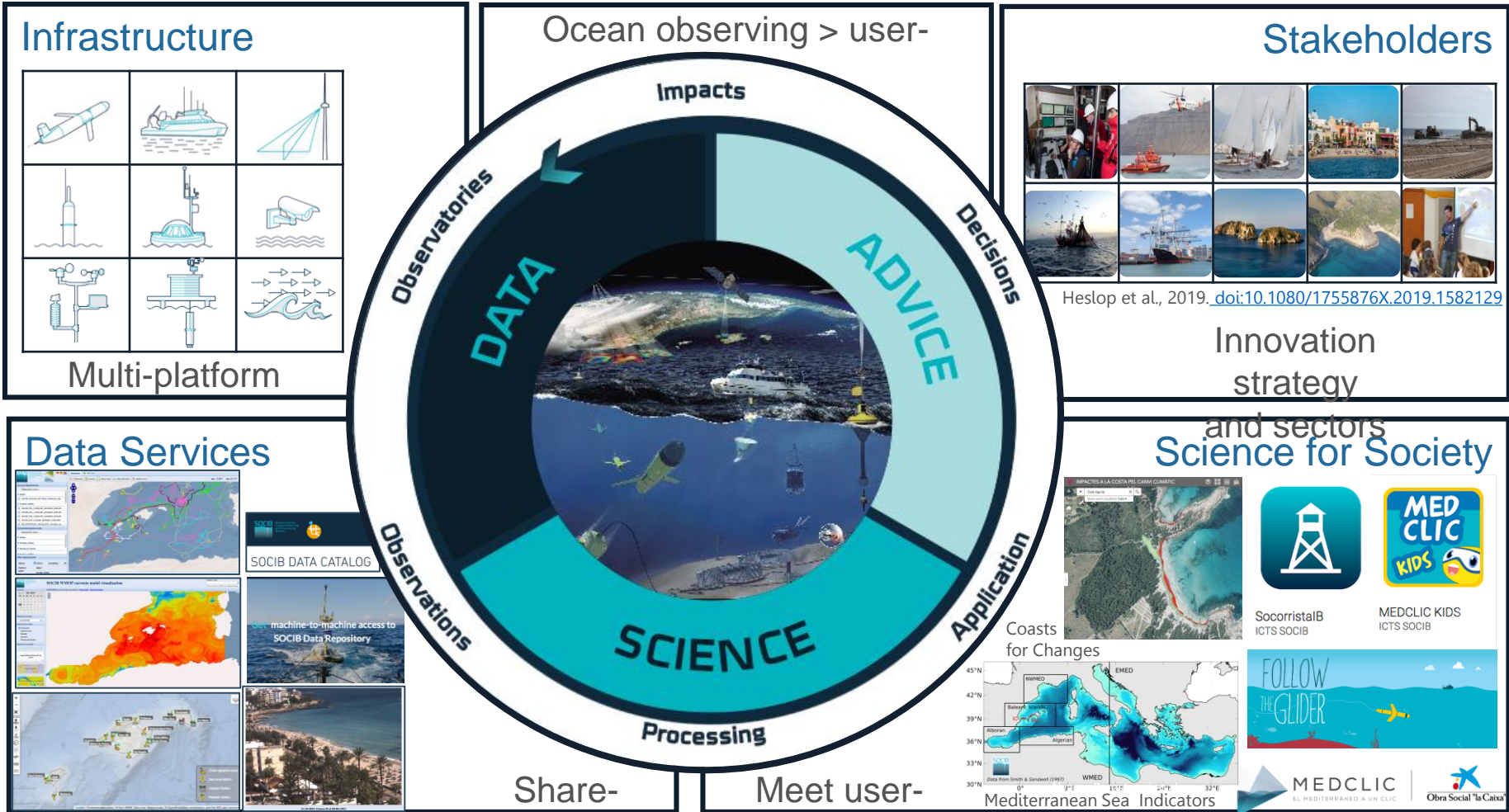
OCEAN AND ENVIRONMENTAL  
TECHNOLOGIES AND SERVICES



SOCIB  
numbers:  
2010-2020



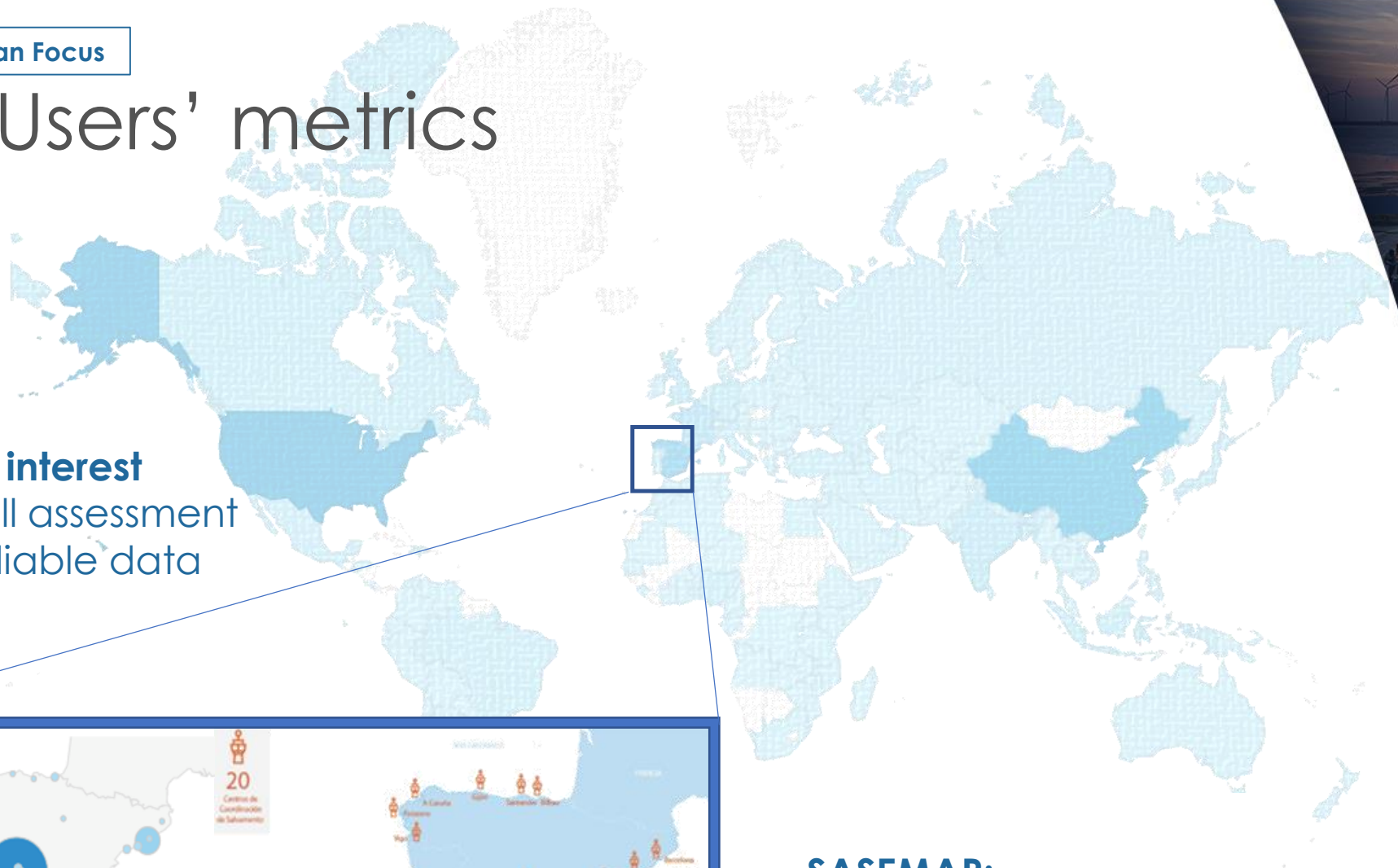
# SOCIB: Operational monitoring, data and services for ocean health and climate



Science excellence with impact in the society



# Users' metrics



## Global interest

- in skill assessment
- in reliable data



## SASEMAR:

- IBISAR's key user in Spain





# Benefits for our end users

-  Regularly **updated catalogue**
-  **Easy** interpretable **metrics**
-  **Single** access **point**
-  Minimize **response time**
-  Allocate **resources** effectively
-  Optimize **search area** planning
-  Support **preparation** of response at sea



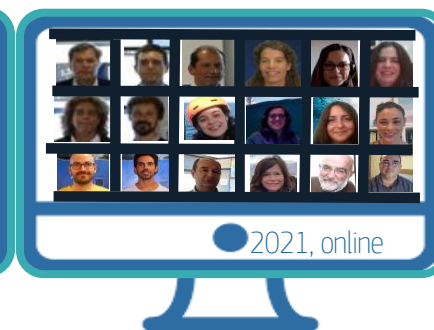
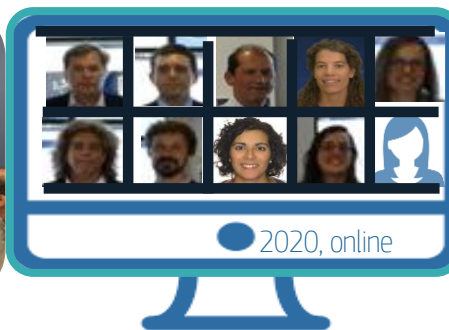


# End-user engagement

## Participation in **training activities** with SASEMAR



## Celebration of **annual meetings** with SASEMAR



## SOCIB **Outreach activities**: general public



Open Days



Science fairs



Exhibitions



Educational materials



# SOCIB's strategy 2021-24

3

DRIVERS

6

OBJECTIVES

24

STRATEGIES

112

OUTCOMES

157

INDICATORS

Our  
VISION

- To become a **strategic marine infrastructure** in the field of marine **R&D&I**, nationally and internationally recognized in the **observation** of the **Mediterranean Sea and the global ocean**

Future  
INVESTMENTS

- To **renew, enhance and extend** SOCIB's **technical capabilities** to keep ensuring the highest level of **scientific excellence** with **impact on society**.

Contacts

SOCIB & IBISAR



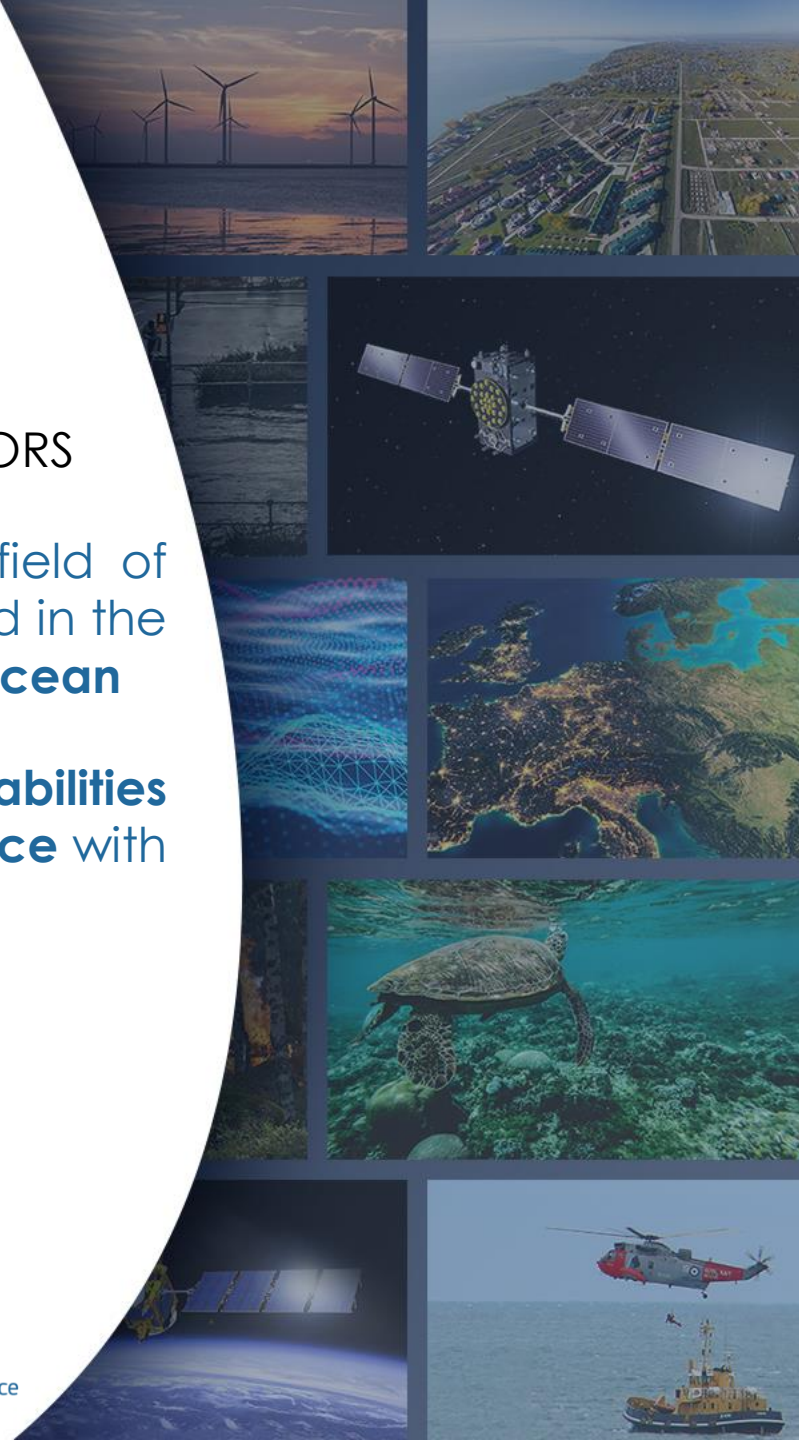
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# Thank you very much for your attention

