

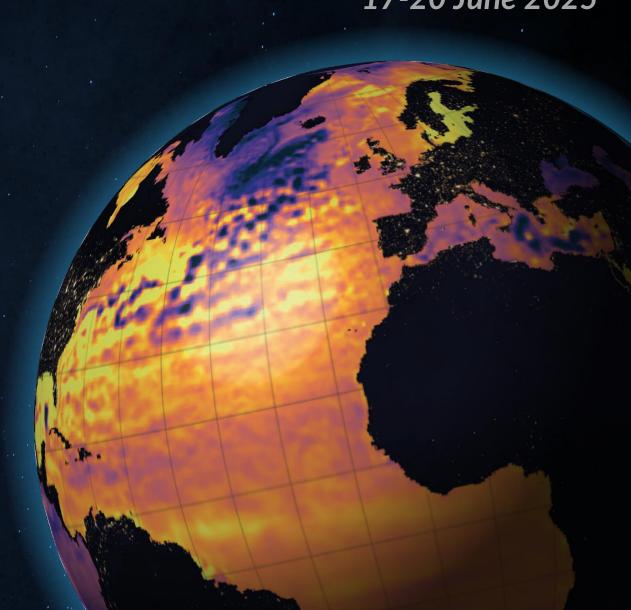


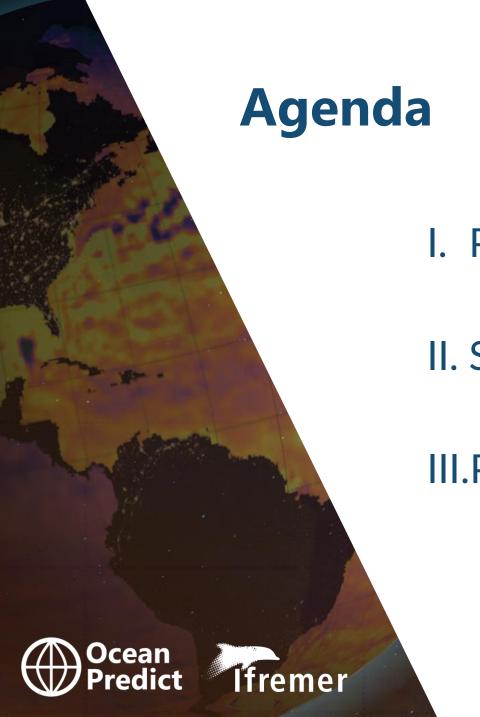
Brest-Plouzané, France 17-20 June 2025

Coastal Ocean and Shelf Seas Task Team -International Coordination Meeting (COSS-TT ICM)

Breakout Session

J Staneva A. Kurapov





I. Procedure

II. Stations

**III.**Persons

## **COSS-TT Working Groups – Brainstorming Format for Future Developments**

Each participant will rotate through three Working Groups, engaging in brainstorming-style discussions on future directions in coastal ocean forecasting and observing.

- Moderators/Rapporteurs remain fixed at each group.
- Participants will be split spontaneously using a simple counting method (e.g., 1–2–3 rotation).
- Early-career scientists are encouraged to speak first at each group.





#### WG1 – Integrated Observation– Modeling Frameworks

**Main Question:** 

What are the key innovations and synergies needed to advance next-generation observation-modeling systems for coastal zones?

- • Prompts:
- What observational data are most critical for high-resolution coupled models?
- • How can we better align observations and model design?
- • What partnerships can support bridging observational gaps?

# WG2 – Al, Data Assimilation & Digital Twins

**Main Question:** 

How can AI/ML and data assimilation enhance adaptive, resilient coastal forecasting systems, contributing to Digital Twins?

- • Prompts:
- • What hybrid DA/AI or physics-informed approaches are most promising?
- What are the main barriers (data, skills, compute resources)?
- • How to ensure transparency and uncertainty quantification in AI-enhanced systems?



### WG3 – Designing Coastal Services for Societal Transformation

#### **Main Question:**

- What service concepts, engagement models, or co-design strategies should drive future coastal forecasting systems?
- • Prompts:
- • How can communication with stakeholders and ocean literacy be improved?
- What use cases (e.g., adaptation, coastal risks) should guide service evolution?
- • What role can citizen science and participatory approaches play?





## Masters of the sessions Joanna/Alex

Convener: Guillaume (logistics, managements)

**Moderators** 

WG1: Huijie/Bruno

WG2: Jianping/Mauro

WG3: Villy/Isabel/Tomasz



Discussions aim to identify:

future developments research needs collaborative opportunities

that support innovation in coastal ocean services.

