

# The COSS-TT and the Ocean Decade

COSS-TT co-chairs:

Villy Kourafalou (Univ. of Miami, USA) and Pierre De Mey (LEGOS, France)

❑ Major contribution to the Decade:

Contributing to the **CoastPredict** initiative (proposal as a UN Decade Program)  
(<https://www.coastpredict.org/>)

CoastPredict has evolved over several months:

- initial Steering Group (6 people, incl. COSS-TT co-chairs) to a Steering Committee (50 people, >30 countries, incl. COSS-TT and OP), advisory group (incl. OP), management group, ECOPs – executive SC being formed
- open consultation period
- writing groups (incl. COSS-TT co-chairs)
- > 20 Projects

# CoastPredict - Integrated Global Coastal Ocean Observing and Forecasting

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**Theme:** A predicted global coastal ocean where society understands and can respond to changing ocean conditions

**Synergistic Partners: OceanPredict, GOOS, Ocean Visions, EquiSea, Ocean Best Practice System, IODE, CEOS/BluePlanet/COAST,...**

*The basic concept of a Global Coastal Ocean has been defined  
about a decade ago in five Volumes of The Sea  
(Vol. 10 to 14, Harvard Univ. Press)*

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TRANSFORMATIVE: Coastpredict **will re-define** the “coastal ocean”

**PROPOSED STARTING DEFINITION:**

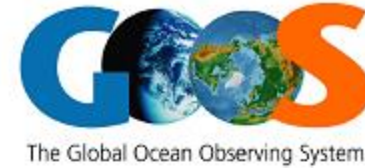
*the coastal ocean - that area, extending inshore from the estuarine mouths to **river catchments affected by saltwater, to the urban settlements** on the one side and on the other side to the **offshore,** from the surf zone to the **continental shelf and slope** where waters of continental origins meet open ocean currents.*

# CoastPredict Main Decade OUTCOMES

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1. Integrated knowledge of the global coastal ocean from events to climate;
  2. Integration of coastal and open ocean observing and modelling systems;
  3. Improved, multidisciplinary and extended range predictive capabilities for the coastal zone;
  4. Innovative and sustainable applications for coastal solutions/services.

# CoastPredict collaboration with GOOS

developing #OceanDecade programme proposals



Connecting to many local stakeholder communities as providers and users of ocean observations, deepening engagement and participation in GOOS

*lead developers: Molly Powers and Kim Currie*

Working across networks and platforms to actively design the system needed to deliver an integrated, responsive, and sustained observing system for climate, forecasts and early warnings, and ocean health

*lead developers: David Legler and Sabrina Speich*



Integrated observations, forecasting and technology to deliver essential information in coastal applications

*lead developers: Nadia Pinardi, Villy Kourafalou, Joaquín Tintoré*

***coastpredict.org***

contact point: **[decade@goosocean.org](mailto:decade@goosocean.org)**

# The COSS-TT and the Ocean Decade

- Current Task Team priorities & activities vs. Decade challenges
  1. Science and expertise to enable and support the development of R/COFS and applications (challenge 8: digital ocean; challenge 6: coastal hazards; other indirectly)
  2. Seamless integration between R/COFS and LOFS via downscaling (challenge 8)
  3. Coastal ocean observing system and integration with models (challenge 7)
    - Started with coastal altimetry, in coll. with CAW (P. Cipollini)
- Links with Decade programmes or projects
  - All activities probably fit within OceanPredict’s “a Predicted Ocean with Impact” programme
  - (Almost?) all activities would fit within CoastPredict -- TBD
    - TT/OP-specific: integration w/ large-scale systems; verification & quality; more?
  - Activity 3 fits with OSEval project (Y. Fujii)
- Open the discussion with TT on above points + possible evolutions
  - By mail within a week
  - Virtual meetings in spring and fall 2021