



OceanPredict

Advancing the science of ocean prediction

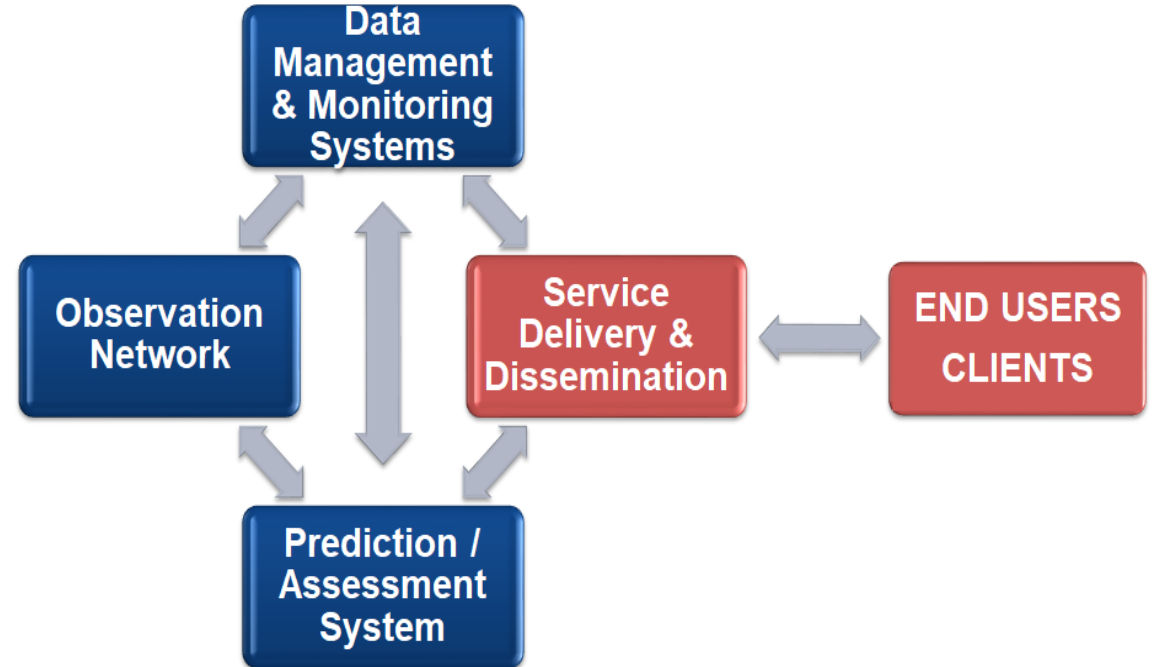
AGENDA

- Discuss forming a OceanPredict Systems working group
- Identify the chair or co-chairs to lead the group
- Explore how this group would work within OP and with TTs, as well as interact with the ForeSea Steering Committee (as time allows)
- Questions in preparation for OPST 5

From GODAE OceanView (GOV) to Ocean Predict

GOV furthered ocean prediction systems: capacity, science, transition to ops, demonstrate value of ocean obs for predictions. Emphasis on prediction R&D prediction with linkages to other components of operational oceanography.

OceanPredict: Emphasis on Ocean Prediction science and advancement as an integral component of Operational Oceanography and ... Earth Prediction Systems.



Operational oceanography:
From Schiller et al 2018 GOV summer school

OceanPredict – relevant Task Team activities

Data Assimilation Task Team (DA-TT)

- Support in defining diagnostics to assess the impact of observations in the different real time OP systems (as suggested by E Remy)

Observing System Evaluation (OSEval-TT)

- Develop an “Observation impact annual review/OIAR”
- See also Yosuke’s talk

Marine Ecosystem Analysis and Prediction Task Team (MEAP-TT)

- Review of impacts of DA methods on biological/biogeochemical model

Coastal and Shelf Task Team (COSS-TT)

- The impact of observations on large-scale & open-ocean systems can be checked in coastal and shelf seas via nesting & downscaling

Coupled Prediction Task Team (CP-TT)

- Facilitate exchange of national and international programs on coupled prediction in an Earth Systems Modelling context with a focus on the role of and impact on oceans

Intercomparison and validation Task Team (IV-TT)

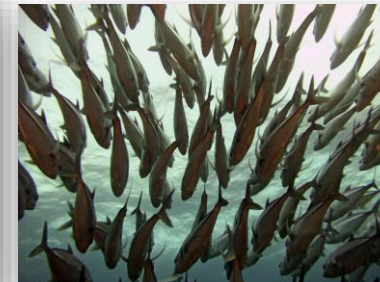
- Metrics

OceanPredict – participants and clients

Ocean Forecasting Centers, Government, and University Research Groups: UKMet, CMEMS, Mercator-Ocean, CONCEPTS (ECCC...), BlueLink, INCOIS, KHOA, JMA, REMO (Brazil), NOAA, US NAVY, HYCOM Consortium, ECCO, US universities, NERSC, NMEFC ...
NB: Meteorological Agencies play strong role in Ocean Forecasting

Ocean Observing system agencies and science groups: ESA, EUMETSAT, CNES, NASA, GOOS, OOPC, CGOS, Argo, OSTST, GHRSSST, etc.

End users/Applications: Fishing, Coast Guards (Search and Rescue, Environmental Response, Operations), Environmental Consultants, Navy (Acoustics, Operations, Briefings...), Fish Management, Hydrographic Services, Offshore Resource Extraction, Navigation...



New 2021 National Systems Group

- Each system has a representative on OPST
- Should system reps get together to:
 - Form a community of practice
 - Develop dashboards for overall forecast system advances
 - Discuss common challenges
 - Exchange on Successes
 - Address needed standards for accelerated inclusion of new research by OPST Task Teams

Advantages:

- Enable to provide overview of all systems to various tasks teams
- Enable feedback to task teams from national systems to be more cohesive.
- Enable to discuss annual system reports, and help provide needed coordination across value chain (obs to end users)

How would the national group work within OPST and TT

- There is a rep per national systems in OPST
- Task Teams have 2 co –chairs that are part of OPST
- Focus of the systems is broader than task teams
- Focus of each system is more national
- There could be a lot of benefits if national systems collaborate, exchange and help build consensus on needed standards and processes
- At OPST there can be a status overview of all prediction systems in general:
 - General uptake of TT development
 - General update on progress on dissemination, new data platforms used
 - ...
- National systems could/would still present individually at OPST (maybe every 2nd meeting?) .

A national rep group could

- Provide information to and collaborate with ET-OOFS
- Leverage ETOOFS to help with standards and best practices
- Provide a common platform approach for Digital Prediction Dissemination
- Oversee routine evaluations put in place by IV-TT
- Solve issues related to dissemination and discovery of prediction system output

Do we see value in a National Rep Working group?

YES

Benefits

- Develops a communication channel for systems reps.
- Share/resolve common issues among operational systems
- Further empowering information sharing on OP website
<https://oceanpredict.org/science/operational-ocean-forecasting-systems/ocean-products-services/>

Impact and Enablement

- Improve national systems report process and impact.
 - Combine/package national reports
- Develop best practices for tech transfer procedures?
- Develop common process for implementation of Class-4 inter-comparisons (and others) for each system.
- Sharing information about system upgrades

Discussion: challenges

- **Find National Systems working group leads:** Volunteers welcome. Vinay/Fraser to ask among rep groups.
- **Identify, agree and implement the ToR/group purpose (group members in collaboration with OPST**
 - How to collaborate despite model/assimilation/coverage diversity of systems?
 - Account for diversity of sharing ability (public vs some navy only systems)?
 - Clarify any overlaps / interactions / dependencies with TT's and ET-OOFS

National/System Rep working group scope: OPST discussion

- A. What level of diversity should NR WG cover?
 - a) National Reps already include some diversity (Regional, Global, Different Models, Different DA, BGC...)
 - b) Regional/coastal systems?
 - c) BGC?

- B. What level of maturity NR WG include only “operational” systems ?