OPOS-WG update

OPST-11 23 September 2025

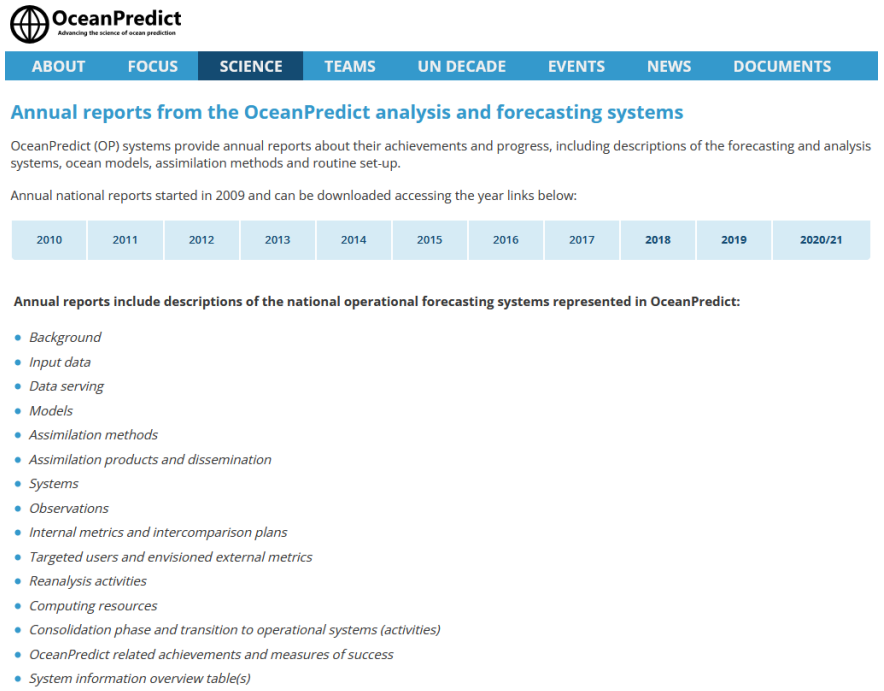
OceanPredict
Advancing the science of ocean prediction

Outline

- National/system reports
- Class 4
- Plans for next meeting

National/system reports

- Annual reports at https://oceanpredict.org/science/operational-ocean-forecasting-systems/system-reports/
- Not been updated since 2021
- Had hoped the DCC Atlas would capture this information for us
- This is not (yet) fully the case
- Plan to revive the reports



OceanPredict
Advancing the science of ocean prediction

ABOUT | FOCUS | SCIENCE | TEAMS | UN DECADE | EVENTS | NEWS | DOCUMENTS

Annual reports from the OceanPredict analysis and forecasting systems

OceanPredict (OP) systems provide annual reports about their achievements and progress, including descriptions of the forecasting and analysis systems, ocean models, assimilation methods and routine set-up.

Annual national reports started in 2009 and can be downloaded accessing the year links below:

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020/21

Annual reports include descriptions of the national operational forecasting systems represented in OceanPredict:

- *Background*
- *Input data*
- *Data serving*
- *Models*
- *Assimilation methods*
- *Assimilation products and dissemination*
- *Systems*
- *Observations*
- *Internal metrics and intercomparison plans*
- *Targeted users and envisioned external metrics*
- *Reanalysis activities*
- *Computing resources*
- *Consolidation phase and transition to operational systems (activities)*
- *OceanPredict related achievements and measures of success*
- *System information overview table(s)*

OceanPredict
Advancing the science of ocean prediction

National/system reports

- Coordinate with DCC, OSEval-TT (who collect info on obs used), and other interested parties
- Long-term sustainable technical solution
- Simpler to complete/update and easier to compare different systems than previous reports
- Promote visibility and unlock collaboration

National/system reports – plan

- OPOS-WG co-chairs draft template (initial draft on next slides)
- Circulate to OPOS-WG members for initial comments
- Meet with relevant parties (DCC, OSEVal-TT & OPST chairs, OPPO)
- OPOS-WG members complete simplified version this year (probably)
- Long-term technical solution implemented as resource allows

OceanPredict
Advancing the science of ocean prediction

New OceanPredict national report template (very draft)

Centre

Enter Centre name

Country

Enter Centre country

Date

Select date this report was filled in

Overview

Free text giving a high-level overview of the Centre's systems and activities

Notable changes since last report

Free text summarising notable changes since last version of report

Systems

Details of each system run by Centre. Click below and then click "+" at the right to add another system.

System name

Name by which system is referred

Version number

Version number of system (if applicable)

Brief description

Free text giving high-level description of the system and its purpose

Components

- ☐ Hydrodynamics
- ☐ Sea ice
- ☐ Waves
- ☐ Biogeochemistry
- ☐ Ecosystem
- ☐ Atmosphere/land
- ☐ Storm surge
- ☐ Tsunami
- ☐ Observation-only analysis
- ☐ Other
  Please specify

Domain

- ☐ Global
  Notes (optional)
- ☐ Regional
  Please specify
- ☐ Coastal
  Please specify

Model(s)

Click below and then on "+" to add details for each system component

Component
Choose an item.
Specify component if "Other"

Model name
Enter model name

Model version
Enter model version

Horizontal resolution and grid type
Please specify

Vertical resolution, number of levels, discretisation
Please specify

Notes
Anything else you wish to note

Atmospheric, boundary, river, land inputs

Click below and then click "+" to add a new field

Input type
Choose an item.
Please specify if "Other"

Field
Name/description of (group of) input field/variable(s)

Source
Model/system from which derived (e.g. ECMWF)

Frequency
Frequency (e.g. three-hourly, daily)

Native resolution
Resolution of original field

Forcing scheme

OceanPredict
Advancing the science of ocean prediction

Scheme (e.g. CORE bulk formulae, Dirichlet)

Notes
Anything else you wish to capture

Assimilation scheme

Overview
High-level overview

Assimilation type
e.g. SEEK filter, 3D-Var

Assimilation scheme name
e.g. NEMOVAR

Assimilation scheme version
Version number if applicable

Notes
Anything else you wish to capture

Assimilated observations

Click below and then click "+" to add a new variable

Variable
e.g. SST

Sources/sensors
Please list

Notes
Anything else you want to capture

Forecast details

Forecast range
e.g. 5 days

Hindcast/analysis length
e.g. 1 day

Update frequency
e.g. daily

Notes
Anything else you wish to capture

Coupling details

Details of coupling between components

Compute resource

Details of computational resource required

Products

Users
List or summary of known/intended users

Data availability
☐ Fully publicly available
☐ Partially publicly available
☐ Not publicly available

Link to data access
Link to products (if available)

Operational Readiness Level (ORL)

Optional to include: ORL for system (unofficially calculated at this stage)
ORL

References

List of reference publications, webpages, etc

Validation and intercomparison

Validation
Details of validation procedures

Intercomparison
Details of intercomparisons

Planned updates

Details of planned updates

Reanalysis activities

Details of reanalysis activities

Research activities

Details of related research activities

Recent publications

List of relevant publications from the past year (or so)

Class 4 operationalisation

- Will pick up discussion with new IV-TT co-chairs
- Fraser now sits on Joint WMO-IOC Collaborative Board (JCB) and is discussing there
- (Keep) watch(ing) this space!

OceanPredict
Advancing the science of ocean prediction

Next OPOS-WG meeting

- Aim to meet in October or November
- Doodle poll will be circulated in due course
- Discuss national reports and share system updates


Thank you!