

# Symposium programme

Version 26 April 2019

Day 0	Sunday, 5 May 2019
18:00 – 20:00	Registration  O Poster set-up  O Booth set up  O Potential small mixer
21:00	End of day 0

## Comments:

Registration should be opened on Sunday night for 2 hours, for people to get familiar with the location and meet colleagues.

Day 1	Monday, 6 May 2019
Session chairs: Fr	aser Davidson and Eric Chassignet
8:00 - 9:00 9:00 - 9:10 9:10 - 9:15	Registration and poster set-up Welcome and overview Sponsor introductions – CMEMS & Mercator Ocean International
Plenary talks (4	0 min slots; includes talk(s) and Q&A)
9:15 – 10:00	GODAE OceanView achievements and future outlook → OceanPredict (40 min: Talk + Q&A) – Pierre Bahurel, Mercator Ocean International
10:00 - 10:30	Break
10:30 – 11:15	Operational Oceanography and GOV: Past, present, and future (45min: Talk + Q&A) – Michel Jean (WMO) and Nadia Pinardi (UniBo)
11:15 – 12:00	Observations for Ocean Prediction (45 min: Talk + Q&A) – Pierre-Yves Le Traon (Mercator Ocean International) and Katy Hill (GCOS-GOOS, WMO)
12:00 – 12:15	Group Photo
12:00 – 12:15 12:15 – 13:15	Croup Photo  Lunch
12:15 – 13:15	·
12:15 – 13:15	Lunch
12:15 – 13:15 Splinter session	Lunch  S DAY 1: Two blocks: A, B of 4 parallel sessions @ 1.75 hours each  Splinter session A (4 parallel sessions – 7 talks each)  1.1: Operational Oceanography: Past, Present and Future  2.1: Observations in the subpolar and arctic oceans  3.1: Forecasts and nowcasts from models of ocean, atmosphere, and ice I
12:15 – 13:15 Splinter session	Lunch  s DAY 1: Two blocks: A, B of 4 parallel sessions @ 1.75 hours each  Splinter session A (4 parallel sessions – 7 talks each)  1.1: Operational Oceanography: Past, Present and Future  2.1: Observations in the subpolar and arctic oceans  3.1: Forecasts and nowcasts from models of ocean, atmosphere, and ice I  5.1: Ocean reanalysis and applications
12:15 – 13:15  Splinter session  13:15 – 15:00	Lunch  S DAY 1: Two blocks: A, B of 4 parallel sessions @ 1.75 hours each  Splinter session A (4 parallel sessions – 7 talks each)  1.1: Operational Oceanography: Past, Present and Future  2.1: Observations in the subpolar and arctic oceans  3.1: Forecasts and nowcasts from models of ocean, atmosphere, and ice I  5.1: Ocean reanalysis and applications  12 min science presentations + 3 min Q&A
12:15 – 13:15  Splinter session  13:15 – 15:00	Lunch  S DAY 1: Two blocks: A, B of 4 parallel sessions @ 1.75 hours each  Splinter session A (4 parallel sessions – 7 talks each)  1.1: Operational Oceanography: Past, Present and Future  2.1: Observations in the subpolar and arctic oceans  3.1: Forecasts and nowcasts from models of ocean, atmosphere, and ice I  5.1: Ocean reanalysis and applications  12 min science presentations + 3 min Q&A  Break  Splinter session B (4 parallel sessions – 7 talks each)  6.3 (special): TBC  2.2: New Observation and data processing methods  3.2: Forecasts and nowcasts from models of ocean, atmosphere, and ice II
12:15 – 13:15  Splinter session  13:15 – 15:00	Lunch  S DAY 1: Two blocks: A, B of 4 parallel sessions @ 1.75 hours each  Splinter session A (4 parallel sessions – 7 talks each)  1.1: Operational Oceanography: Past, Present and Future  2.1: Observations in the subpolar and arctic oceans  3.1: Forecasts and nowcasts from models of ocean, atmosphere, and ice I  5.1: Ocean reanalysis and applications  12 min science presentations + 3 min Q&A  Break  Splinter session B (4 parallel sessions – 7 talks each)  6.3 (special): TBC  2.2: New Observation and data processing methods  3.2: Forecasts and nowcasts from models of ocean, atmosphere, and ice II  5.2: Biogeochemical, waves and storm surge

## Day 2

Session chairs: Fraser Davidson and PN Vinayachandran

8:30 – 8:55 Late registration and poster set-up

8:55 – 9:00 Sponsor introductions - MEOPAR

#### Plenary talks (45 min slots; includes talk(s) and Q&A)

9:00 – 9:45 Numerical Modelling

(45min: Talk + Q&A) – Katja Fennel (DAL) and Eric Chassignet (FSU)

9:45 - 10:30 Data Assimilation

(45 min: Talk + Q&A) – Andy Moore (UCSC) and Stefano Ciavatta

(PML)

#### 10:30 - 11:00 Break

#### Splinter sessions DAY 2: Three blocks C, D, E of 4 parallel sessions @ 1.5 hours each

#### 11:00 – 12:30 Splinter session C (4 parallel sessions – 6 talks each)

- 2.3: Capturing global/basin scale ocean variations through observation and data assimilation
- 3.3: Biogeochemical and ecological applications
- 4.1: Variational, ensemble and hybrid methods in ocean data assimilation I
- 5.3: Global and Regional prediction Systems I

12 min science presentations + 3 min Q&A

#### 12:30 - 13:30 Lunch

#### 13:30 – 15:00 Splinter session D (4 parallel sessions – 6 talks each)

- 2.4: To enhance collaboration between observational communities and OceanPredict (Contribution to OceanObs'19)
- 3.4: Applications and advances in simulating sea ice
- 4.2: Variational, ensemble and hybrid methods in ocean data assimilation II
- 5.4: Global and Regional prediction Systems II

12 min science presentations + 3 min Q&A

#### 15:00 - 15:30 Break

#### 15:30 – 17:00 Splinter session E (4 parallel sessions – 6 talks each)

- 3.5: Small scales
- 4.3: Coastal/regional data assimilation and observation impact (7 talks)
- 5.5: Global and Regional prediction Systems II
- 6.1: Oil spill and drift modelling
- 12 min science presentations + 3 min Q&A

17:00 – 19:00	Poster/ Booth session + drinks
19:30	Evening Function at <u>Murphy's on the water</u> Buffet Dinner & Entertainment
22:00	End of day 2

## Day 3

#### Applications/users/systems/stakeholders

Session chair: Eric Chassignet and Andreas Schiller

08:00 – 08:55 Meeting room open

08:55 – 09:00 Sponsor introductions – DFO/ ECCC

Plenary talks (45 min slots; includes talk(s) and Q&A)

9:00 – 9:45 Ocean Prediction Systems and Services

(45 min: Talk + Q&A) – Byoung-Ju Choi (Chonnam University) and Gregg Jacobs (NRL)

**User applications and Societal Benefit** 

(45 min: Talk + Q&A) – Genevieve Bechard (DFO)

10:30 - 11:00 Break

9:45 - 10:30

Splinter sessions DAY 3: One blocks (F) of 4 parallel sessions @ 1.5 hours each

11:00 – 12:30 Splinter session D (4 parallel sessions – 6 talks each)

3.6: Other advances in numerical ocean modelling

4.4: Biogeochemical and coupled ocean-atmosphere data assimilation

5.6: Verification

6.2: Other applications: navigation, acoustics, storm surges, ecosystems

12 min science presentations + 3 min Q&A

12:30 - 13:30 Lunch

Panel / Town hall discussions

13:30 – 14:30 Plenary discussion panel 1 (5 panel members) – "Enablement and

evolution of Ocean/Environmental Prediction and End use"

chaired by Andreas Schiller

Topic 1.1 Operational Oceanography and end users (13:30 – 14:00)

**Topic 1.2 International Research, Development, Operations** 

coordination: standards (14:00 – 14:30)

14:30 – 15:30 Plenary discussion panel 2 (5 panel members) – "Evolution of Ocean

**Prediction in the next decade – needs and opportunities" –** chaired by

Eric Chassignet

Topic 2.1 Ocean observations and Operational Oceanography (14:30 –

15:00)

Topic 2.2 How best to support oceanographically evolution towards

seamless prediction (15:00 – 15:30)

## 15:30 – 15:40 Short introduction of day 4 activities (co-chairs)

## 15:40 – 17:00 Poster/ Booth session & coffee break

Small side meetings planned during the poster/booth session – further info to be provided.

## 17:00 End of Symposium Part 1

## Forum / training / outreach

08:00 – 09:00 Meeting room open

Hosts / greeters will be around to ensure people go to right session

## **Discussion and training sessions**

## 9:00 – 10:30 Parallel events: Forum/ discussion/ training

Forum	Training sessions	
Room numbers tbc	Room numbers tbc	
International Partnerships in Operational Oceanography	CMEMS (Copernicus Marine Services) Training	Data Assimilation Training session
Discussion on how best to frame OceanPredict in OO context. How to ensure good collaboration / knowledge exchange between GOOS/ETOOFS/ Ocean Predict/ Blue Planet  Implications of Seamless approach by WMO and JCOMM evolution  Expected Attendees: Members of WMO, IOC, JCOMM, GOVST, observation groups.	9:10- 9:30 Introduction to the Copernicus Marine Service (L. Crosnier, Mercator Ocean)  9:30- 10:10 Which ocean parameters are available? (L. Crosnier, Mercator Ocean)  10:10-10:30 Example of use (L. Crosnier, Mercator Ocean)	O9:00 – 09:30 Introduction to data assimilation methods [Laurent Bertino]  O9:30 – 10:00 Observations used for assimilation. [Stéphanie Guinehut]  10:00 – 10:30 Global physical ocean data assimilation [Matt Martin]

## 10:20/10:30 - 11:00 Break

## 11:00-12:30 Parallel events: Forum/ discussion/ training

Forum	Training sessions
Room numbers tbc	Room numbers tbc

Improving Linkages between Operational Oceanography and Industry	CMEMS (Copernicus Marine Services) Training	Data Assimilation Training session
General overview Industry and Ocean Prediction Perspectives.  Discussion on how to improve linkages	11:00-11:30 How to register, download data and browse catalogue (D. Bazin, Mercator Ocean)  11:30-12:15 Hands-on session: ask your question: around a computer, browse the catalogue, view data, register, and start downloading data (D. Bazin, Mercator Ocean)  12:15 -12:30 Free time	11:00 – 11:30  Coastal and shelf- seas physical data assimilation [Pierre De Mey- Frémaux]  11:30 – 12:00 Biogeochemical data assimilation [Stefano Ciavatta]  12:00 – 12:30 Sea-ice data assimilation [Andrea Scott]  12:30 – 13:00 Coupled data assimilation [Dan Lea]

## 12:30 - 13:30 Lunch

# 13:30 – 15:00 Parallel events: Forum/ discussion/ training

Forum	Training session	
Room numbers tbc	Room numbers tbc	
Challenges and Exploitation of Ocean Products	CMEMS (Copernicus Marine Services)  Training sessions	
<b>Discussion</b> on specific challenges faced by users to which OO can fill gaps.  Transformation of OO into decision tools	13:30 – 15:00 Hands-on session1:  Building ocean indicators from  CMEMS products: ocean heat content (M. Drevillon, Mercator Ocean)	

15:30 – 17:00 Parallel events: Forum/ discussion/ training

Forum		Training session
Room numbers tbc		Room numbers tbc
Operational Oceanography and End-user needs/demands		CMEMS (Copernicus Marine Services)  Training sessions
Cross Cutting Theme Project Discussion	Increasing Ocean Prediction Accessibility	15:30 – 17:00 Hands-on session2:  Building ocean indicators from CMEMS products: mean sea level (M. Drevillon, Mercator Ocean)

17:00 End of day 4

## Day 5

## Science Team / Review / Task teams

## 08:00 – 09:00 Meeting room open

## Discussion, training and business meeting

9:00 -12:30 Parallel events – MEOPAR and GOV internal meetings (Break at 10:30 – 11:00)

MEOAPAR meetings or training	OceanPredict community meeting
TBC	GOVST meeting
	→ Cross-cutting project ideas
	OceanPredict international collaborations

#### 10:30 – 11:00 Break

MEOAPAR meetings or training	OceanPredict community meeting - ctd
TBC	GOVST meeting
	Cross-cutting project ideas
	<ul><li>OceanPredict international collaborations</li></ul>

#### 12:30 - 13:30 Lunch

Plenary (90 min)

13:30 – 15:00 GOVST Symposium wrap up – Symposium co-chairs

15:00 End of day 5