



Symposium programme

Version 8 May 2019

Day 0 Sunday, 5 May 2019

- 18:00 – 20:00** **Registration**
- Poster set-up
 - Booth set up

20:00 **End of day 0**

Day 1 **Monday, 6 May 2019**

Session chairs: Fraser Davidson and Eric Chassignet

- 8:00 – 9:00 Registration and poster set-up
9:00 – 9:10 Welcome and overview
9:10 – 9:15 **Sponsor introductions – CMEMS & Mercator Ocean International**

Plenary talks (40 min slots; includes talk(s) and Q&A)

9:15 – 10:00 **GODAE OceanView achievements and future outlook → OceanPredict**
(45 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**

12:15 – 13:15 **Lunch**

Splinter sessions DAY 1: Two blocks: A, B of 4 parallel sessions @ 1.75 hours each

13:15 – 15:00 **Splinter session A (4 parallel sessions – 7 talks each)**

- 1.1: **Operational Oceanography: Past, Present and Future** **Room B3**
Chair: Fraser Davidson
- 2.1: **Observations in the subpolar and arctic oceans** **Room 501**
Chairs: Greg Smith and Laurent Bertino
- 3.1: **Forecasts and nowcasts from models of ocean, atmosphere, and ice I** **Room 507**
Chair: Lars Hole
- 5.1: **Ocean reanalysis and applications** **Room 503**
Chairs: Chris Harris and Marie Drevillon

12 min science presentations + 3 min Q&A

15:00 – 15:30 **Break**

15:30 – 17:15 **Splinter session B (4 parallel sessions – 7 talks each)**

- 6.1: **OSC, Defence and OceanBestPractice (OBP)** **Room 503**
Chair: Andreas Schiller
- 2.2: **New Observation and data processing methods** **Room B3**
Chairs: Marion Gehlen and Pierre-Yves Le Traon

3.2: Forecasts and nowcasts from models of ocean, atmosphere, and ice II

Room 507

Chair: Dmitry Dukhovskoy

5.2: Biogeochemical, waves and storm Surge

Room 501

Chairs: Susan Allen and Susan Kay

12 min science presentations + 3 min Q&A

17:15 – 19:00 Poster/ Booth session – **Late afternoon icebreaker:** drink and heavy hors d'oeuvres

19:00 End of day 1

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 **Room B3**
Chairs: Yosuke Fujii and Katy Hill

3.3: Biogeochemical and ecological Applications **Room 507**
Chair: Youyu Lu

4.1: Variational, ensemble and hybrid methods in ocean data assimilation I **Room 501**
Chairs: Pierre De Mey-Frémaux and Lars Nerger

5.3: Global and Regional prediction Systems I **Room 503**
Chairs: Ana Aguiar and Greg Smith

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) **Room B3**
Chair: Elisabeth Remy

3.4: Applications and advances in simulating sea ice **Room 507**
Chair: Moninya Roughan

4.2: Variational, ensemble and hybrid methods in ocean data assimilation II **Room 501**
Chairs: Matt Martin and Hans Ngodock

5.4: Global and Regional prediction Systems II **Room 503**
Chairs: Guimei Liu and Simona Masina

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

Room B3

Chair: **Matthieu Le Henaff**

4.3: Coastal/regional data assimilation and observation impact

Room 501

Chairs: **Andy Moore and Anna Teruzzi**

5.5: Global and Regional prediction Systems II

Room 507

Chairs: **Laurent Bertino and Marina Tonani**

6.1: Oil spill and drift modelling

Room 503

Chairs: **Andreas Schiller and Laurence Crosnier**

12 min science presentations + 3 min Q&A

17:00 – 18:30 Poster/ Booth session + coffee/tea

19:00 Symposium Dinner at [Murphy's on the water](#)
1751 Lower Water Street

21:30 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)**

9:45 – 10:30 **User applications and Societal Benefit**
(45 min: Talk + Q&A) – **Genevieve Béchard (DFO) and Shawn Allan (Wood Environment & Infrastructure Solutions)**

10:30 – 11:00 Break

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

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

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| 3.6: Other advances in numerical ocean modelling | Room B3
Chairs: Maarten Buijsman |
| 4.4: Biogeochemical and coupled ocean-atmosphere data assimilation | Room 501
Chairs: Stefano Ciavatta and Dan Lea |
| 5.6: Verification | Room 507
Chairs: Fabrice Hernandez and Yvonnick LeClainche |
| 6.2: Other applications: navigation, acoustics, storm surges, ecosystems | Room 503
Chairs: Andreas Schiller and Laurence Crosnier |

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 **Wrap-up of the first three days of the symposium and short introduction of day 4 activities** (co-chairs)

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

17:00 **End of Symposium Part 1**

Day 4

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	
International Partnerships in Operational Oceanography <i>Room B3</i> <i>Chairs: Fraser Davidson and Andreas Schiller</i>	CMEMS Training (Copernicus Marine Services) <i>Room 501</i>	Data Assimilation Training session <i>Room 503</i>
9:00 – 10:30 <i>Contributors:</i> Albert Fisher (IOC), Pierre Pellerin (ECCC), Douglas Wallace (MEOPAR), Vinay (Ocean Predict), Katy Hill (WMO) <i>Desired Outcomes:</i> Ideas on how OceanPredict fits in or works within the existing or soon to be international frameworks /networks /activities such as IOC, GOOS, International Decade of Ocean Science, GEO, WMO	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):00	09:00 – 09:30 Introduction to data assimilation methods [Laurent Bertino] 09:30 – 10:00 Observations used for assimilation. [Stéphanie Guinehut] 10:00 – 10:30 Global physical ocean data assimilation [Matt Martin]

10:30 - 11:00 Break

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

Forum	Training sessions	
Collaborations / knowledge exchange mechanisms: Ocean Prediction and End user linkages/ service providers.. <i>Room B3</i> <i>Chairs: Gary Brassington and Corinne Bourgault-Brunelle</i>	CMEMS Training (Copernicus Marine Services) <i>Room 501</i>	Data Assimilation Training session <i>Room 503</i>

<p>11:00 – 12:30</p> <p>Contributors: Laurence Crosnier, Mike Smit, Shayla Fitzgibbons</p>	<p>11:00-11:30 How to register, download data and browse catalogue (D. Bazin, Mercator Ocean)</p> <p>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)</p> <p>12:15 -12:30 Free time</p>	<p>11:00 – 11:30 Coastal and shelf-seas physical data assimilation [Pierre De Mey-Frémaux]</p> <p>11:30 – 12:00 Biogeochemical data assimilation [Stefano Ciavatta]</p> <p>12:00 – 12:30 Sea-ice data assimilation [Andrea Scott]</p> <p>12:30 – 13:00 Coupled data assimilation [Dan Lea]</p>
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12:30 – 13:30 Lunch

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

<i>Forum</i>	<i>Training session</i>
<p><i>Collaborations / knowledge exchange: Ocean Prediction and Ocean Obs</i></p> <p><i>Room B3</i></p> <p><i>Chairs: Elisabeth Remy and Greg Smith</i></p>	<p><i>CMEMS Training (Copernicus Marine Services)</i></p> <p><i>Room 501</i></p>
<p>13:30 – 15:00</p> <p>Contributors: Shayla Fitzgibbons, Mike Smit, John Wilkins</p>	<p>13:30 – 15:00 Hands-on session1: Building ocean indicators from CMEMS products : ocean heat content (M. Drevillon, Mercator Ocean)</p>

15:00 – 15:30 Break

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

<i>Forum</i>	<i>Training session</i>
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<p style="text-align: center;">Cross Cutting Theme Projects</p> <p style="text-align: center;"><i>Room B3</i></p> <p><i>Chairs: Eric Chassignet and PN Vinayachandran</i></p>	<p style="text-align: center;">CMEMS (Copernicus Marine Services)</p> <p style="text-align: center;">Training sessions</p>
<p>15:30 – 17:00</p> <p>Contributors: Fabrice Hernandez, Douglas Wallace, Pierre de Mey, Elisabeth Remy, Dany Dumont</p>	<p>15:30 – 17:00 Hands-on session2:</p> <p>Building ocean indicators from CMEMS products : mean sea level (M. Drevillon, Mercator Ocean)</p>

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 GOV internal meetings
(Break at 10:30 – 11:00)

OceanPredict community meeting

GOVST meeting

- *Cross-cutting project ideas*
- *OceanPredict international collaborations*

10:30 – 11:00 Break

OceanPredict community meeting - ctd

GOVST meeting

- *Cross-cutting project ideas*
- *OceanPredict international collaborations*

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