

# Agenda

COSS-TT meeting Montreal 2-4 May 2023

Day 1: 2 May 2023 (Tue)		
8:30 – 9:00		Registration (Badges, posters up, meeting dinner participation, etc.) Local hosts
9:00 – 9:10		Welcome (Announcements, practical info, meal and social arrangements, Local hosts
9:10 – 9:20		Host presentation / ECCC intro Greg Smith
9:20 – 9:40		Meeting objectives Pierre De Mey-Frémaux, Villy Kourafalou and Alex Kurapov
Session 1: Science in support of Coastal Ocean forecasting		
Chair: Byoung-Ju Choi		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)
Rapporteur: Alexander Kurapov		
9:40 – 9:55	1.1	1.1 Observation impact in Australia's Western Boundary Current System: from the coherent jet to the eddy field Colette Kerry, UNSW, Australia (REMOTE)
9:55 – 10:10	1.2	Vertical mixing and inertial motions by high frequency wind variability in the stratified Yellow Sea during the summer 2010 Byoung-Ju Choi, Chonnam National University, Republic of Korea
10:10 – 10:25	1.3	Dynamics paradigm of geostrophic cross-isobath transport over a highly variable shelf topographic regime Jianping Gan, Hongkong University, China (REMOTE)
10:25 – 10:40	1.4	Variability of Marine Heat Waves over different coastal environments: applications in South Florida and NE Mediterranean Sea Yanniss Androulidakis, Aristotle University of Thessaloniki, Greece (REMOTE)
10:40 – 11:10		Coffee break
11:10 – 11:25	1.5	River-coastal-ocean continuum modeling in Western Mediterranean Italian coasts: Assessment of near-river dynamics and salt wedge intrusion Ivan Federico, CMCC, Italy (REMOTE)
11:25 – 11:40	1.6	New Findings on Dynamics of River plumes in Coastal Ocean Peter Zavialov, P.P.Shirshov Institute of Oceanology, Russia (REMOTE)
11:40 – 11:55	1.7	Predicting future coastal sea level rise: statistical models based on local observations versus climate model predictions Tal Ezer, Old Dominion University, USA
11:55 – 12:10	1.8	The importance of the land-sea breeze in driving coastal dynamics of the southern Benguela upwelling system Giles Fearon, University of Cape Town & SAEON, South Africa
12:10 – 12:25	1.9	Evaluation of the NEMO coastal model of the St. Lawrence estuary Simon St-Onge Drouin, DFO, Canada (REMOTE)
12:25 – 13:45 (80 min)		Lunch break
13:45 – 14:00	1.10	A New High-Resolution Ocean Forecasting system for the Baltic Sea Vasily Korabel, DMI, Denmark
14:00 – 14:15	1.11	Doing science with the operational model outputs: analyses of El Nino related anomalies over the continental slope off Oregon Alexander Kurapov, NOAA, USA
14:15 – 14:30	1.12	Adding Baroclinicity and Sea Ice Effects to a Global Total Water Level Forecast Model Pengcheng Wang, ECCC, Canada
14:30 – 14:45	1.13	Forcing mechanisms of the circulation on the Brazilian Equatorial Shelf Alessandro Aguiar, State University of Rio de Janeiro, Brazil (REMOTE)
14:45 – 15:15		Session 1 discussion and 2-min poster introductions
Session 3: Seamless integration between Coastal and Regional systems (R/COFS under COSS-TT) and Large scale systems (LOFS under OceanPredict) (90 min)		
Chair: Jennifer Veitch		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)
Rapporteur: Mike Herzfeld		
15:15 – 15:30	3.1	Nologin Oceanic Weather System: delivering operational services for the Copernicus Marine and developing coastal downstream applications in the European North East Atlantic. Marcos Garcia Sotillo, Nologin / NOW (Nologin Ocean Weather systems), Spain
15:30 – 16:00		Coffee break
Session 2: Coastal and Regional (pre-)operational ocean forecasting systems and applications		
Chair: Chris Edwards		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)
Rapporteur: Naoki Hirose		
16:00 – 16:15	2.1	Operational forecasting models for Irish regional and coastal waters and their applications Tomasz Dabrowski, Marine Institute, Ireland
16:15 – 16:30	2.2	Port-scale forecast models and relocatable modelling on the Pacific coast of Canada Michael Dunphy, DFO, Canada
16:30 – 16:45	2.3	Developing additional products based on the West Coast Operational Forecast System (WCOFS) Christopher Edwards, University of California, Santa Cruz, USA
16:45 – 17:00	2.4	Oceanographic and Meteorological Models in Search and Rescue Cristina Forbes, United States Coast Guard, USA
17:00 – 17:15	2.5	Coastal prediction at ECCC - Overview of modelling systems and applications Jean-Philippe Paquin, ECCC, Canada
Day 2: 3 May 2023 (Wed)		
9:00 – 9:05		Short intro to day 2 Pierre De Mey-Frémaux, Villy Kourafalou and Alex Kurapov
Session 2: Coastal and Regional (pre-)operational ocean forecasting systems and applications		
9:05 – 9:20	2.6	Intercomparison and ensemble project of all regional prediction models in Japan Naoki Hirose, RIAM, Kyushu University, Japan

9:20 - 9:35	2.7	A comprehensive monitoring and forecasting system applied for cross-sea immersed tube tunnel constructions	Lunyu Wu, NMEFC, China
9:35 - 9:50	2.8	Operational forecasting systems for maritime emergency in China: an integrated decision support for maritime emergency response and management	Miaoyin Zhang, NMEFC, China
9:50 - 10:05	2.9	CoastFLOOD: a reduced complexity, high-resolution, flood model for coastal inundation due to storm surges	Christos Makris, Aristotle University of Thessaloniki, Greece (REMOTE)
10:05 - 10:35		<b>Coffee break</b>	
<b>UN Decade session (100 min)</b>			
<b>Chair: COSS-TT co-cahirs</b>		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)	
<b>Rapporteur: COSS-TT co-cahirs</b>			
10:35 - 10:50	UN-1	SynObs	Yosuke Fujii, MRI-JMA (REMOTE)
10:50 - 11:05	UN-2	CoastPredict/FLAME project	Joanne Hopkins, NOC, UK (REMOTE)
11:05 - 11:20	UN-3	CoastPredict/PredictOnTime project	Giovanni Coppini, CMCC, Italy (REMOTE)
11:20 - 11:35	UN-4	CoastPredict/GlobalCoast and DCC Coastal Resilience	Villy Kourafalou, University of Miami
11:35 - 11:50	UN-5	DCC Ocean Prediction (& links with ForeSea & OceanPredict)	Mauro Cirano, IGEO/UFRJ, Brazil a & Enrique Alvarez, MOI/DCC-OP
11:50 - 12:35	<b>Discussion on UN Decade programmes in collaboration with COSS-TT</b>		
12:35 - 14:15	<b>Lunch break &amp; group photo</b>		
<b>Session 2: Coastal and Regional (pre-)operational ocean forecasting systems and applications</b>			
<b>Chair: Chris Edwards</b>		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)	
<b>Rapporteur: Naoki Hirose</b>			
14:15 - 14:30	2.10	An update on the research, research-to-operation and operational services at the NOAA National Ocean Services Storm Surge Modeling Team	Saeed Moghimi, NOAA/UCAR
14:30 - 14:45	2.11	Port-scale forecast models on the Atlantic coast of Canada	Stephanne Taylor, DFO, Canada
14:45 - 15:00	2.12	Continued Development of a Daily Operational Model for the Mississippi Sound and Bight	Kemal Cambazoglu, The University of Southern Mississippi, USA (REMOTE)
15:00 - 15:30	<b>Session 2 discussion and 2-min poster introductions</b>		
15:30 - 16:00	<b>Coffee break</b>		
<b>COSS-TT Business meeting</b>			
<b>Chair: COSS-TT co-cahirs</b>		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)	
<b>Rapporteur: COSS-TT co-cahirs</b>			
16:00 - 17:30	COSS-TT business meeting including a brief presentation by Tal Ezer on Special Issue organisation		
Time tbc	Meeting dinner		
<b>Day 3: 4 May 2023 (Thu)</b>			
9:00 - 9:05		<b>Short intro to day 3</b>	Pierre De Mey-Frémaux, Villy Kourafalou and Alex Kurapov
<b>Session 3: Seamless integration between Coastal and Regional systems (R/COFS under COSS-TT) and Large scale systems (LOFS under OceanPredict)</b>			
<b>Chair: Mauro Cirano</b>		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)	
<b>Rapporteur: Jennifer Veitch</b>			
9:05 - 9:20	3.2	Multigrid nested ocean ensembles using stochastic modelling	Vassilios Vervatis, National and Kapodistrian University of Athens, Greece (REMOTE)
9:20 - 9:35	3.3	A kilometric scale nested configuration over the Iberian - Biscay - Ireland area: assessment and impact on ocean dynamics	Theo Brivoal, Mercator Ocean international / CNRM, France (REMOTE)
9:35 - 9:50	3.4	South Africa's Operational Ocean Forecasting Developments	Jennifer Veitch, South African Environmental Observation Network, South Africa
9:50 - 10:20	<b>Session 3 discussion</b>		
10:20 - 10:50	<b>Coffee break</b>		
<b>Session 4: Synergy between altimetry and modelling in coastal regions</b>			
<b>Chair: Marie-Isabelle Pujol</b>		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)	
<b>Rapporteur: Greg Smith</b>			
10:50 - 11:05	4.1	Influence of the assimilation of sea surface height data on the ocean state in the North- and Baltic Seas	Sophie Vliegen, AWI, Germany (REMOTE)
11:05 - 11:20	4.2	Toward Higher resolution along-track Level-3 sea level altimetry products	Marie-Isabelle Pujol, CLS, France (REMOTE)
11:20 - 11:35	4.3	Project CleanArctic: Use of absolute dynamic topography data to improve estimates of plastic drift in the Arctic	Gregory Smith, ECCO, Canada
11:35 - 12:05	<b>Session 4 discussion</b>		
12:05 - 14:00 (115 min)	<b>Lunch break</b>		
<b>Session 5: Machine Learning</b>			
<b>Chair: Alex Kurapov</b>		Talks are 10 min + 3 min questions; 2 min speaker change (15 min slot)	
<b>Rapporteur: Emil Stanev</b>			
14:00 - 14:15	5.1	A deep learning-based technique for long-term prediction of sea surface temperature: over the Aegean, Ionian and Cretan Seas (NE Mediterranean Sea)	Marios Krestenitis, Information Technologies Institute, Greece (REMOTE)
14:15 - 14:30	5.2	The Synergy of Data from Profiling Floats, Machine Learning and Numerical Modeling: Case of the Black Sea Euphotic Zone	Emil Stanev, Hereon, Germany (REMOTE)
14:30 - 14:45	5.3	Shelf-open sea exchange processes across the narrow shelf of the southeastern Mediterranean Sea	Steve Brenner, Bar Ilan University, Israel
14:45 - 15:15	<b>Session 5 discussion</b>		
15:15 - 15:45	<b>Coffee break</b>		
<b>Closing session : Summaries by session chairs/rapporteurs and closing remarks (5 min summaries)</b>			

15:45 - 15:50	Session 1 summary	Alex Kurapov (NOAA)
15:50 - 15:55	Session 2 summary	Naoki Hirose (Kyushu University)
15:55 - 16:00	Session 3 summary	Jennifer Veitch (SAEON)
16:00 - 16:05	Session 4 summary	Greg Smith (ECCC)
16:05 - 16:10	Session 5 summary	Emil Stanev (Hereon)
16:10 - 16:25	<b>Wrap up, thanks and close</b>	Co-chairs
<b>16:25</b>	<b>End of meeting</b>	
Time tbc	Evening walk	

Posters			
Session	Name	Affiliation	Abstract title
1	Pedro Paulo Freitas (1)	Federal University of Pará, Brazil	Pathways of oceanic water intrusion into the Amazon Continental Shelf
1	Pedro Paulo Freitas (2)	Federal University of Pará, Brazil	COASTAL-TRAPPED WAVES ALONG THE EAST-SOUTHEASTERN BRAZILIAN CONTINENTAL MARGIN: PROPAGATION AND MODAL STRUCTURES
1	Merrick C Haller	Oregon State University	The Newport (OR) Model Testbed in Support of Fundamental Research for Forecasting US Pacific Northwest Coastal Processes
2	Ji Lei	DFO-ECCC	Progress on the Operationalization of Canada's OPP Port Ocean Prediction Systems and Dynamic Hydrographic Products by CHS
2	Sergey Skachko	ECCC	A new daily SST analysis system at ECCC
2	Miaoyin Zhang	NMEFC, China	The Construction and Application of the MaCOM Model: A Chinese-Approach to an Independent, Globalized, Digitized Modernization of Ocean Forecasting