



Baltic Earth

MedCORDEX-Baltic Earth-COST Workshop

Regional Climate System Modelling for the European Sea Regions

14 - 16 March 2018
Palma de Mallorca, Spain

Programme
as of 22 February 2018

Day 1: Wednesday, 14 March	
8:30	Registration
9:00 - 9:10	Welcome and Opening Introduction to the Workshop Gabriel Jorda and Markus Meier
9:10 - 9:25	Baltic Earth and Integrated Earth System Modeling for the Baltic Sea Region Meier H.E.M.
9:25-9:40	The MedCORDEX -2 Initiative Gabriel Jorda

Topic 1: Development and evaluation of regional climate system models and reanalyses

9:40-10.10	<u>SOLICITED</u>: A 15-year history of coupled regional climate modelling for the Mediterranean: success stories and current challenges Somot S
10:10 - 10:30	A regional coupled Earth system model to study climate variations in the regions of the Baltic Sea Brunnabend S-E, Frauen C, Placke N, Börgel F, Meier HEM
10:30 - 10:50	A North Sea-Baltic Sea regional models: coupling of ocean and atmosphere through a dynamic wave interface Staneva J, Schrum C, Behrens A, Grayek S, Wiese A, Ho-Hagemann H, Rockel B, Geyer B, Breivik Ø, Bidlot J, Fegnollio-Marc L
10:50 - 11:10	The Regional Earth System Model of IPSL (RegIPSL), a contribution to MEDCORDEX Polcher J, Pennel R, Arsouze T, Bastin S, Fita L, Béranger K, Stéfanon M, Drobinski P
11:10-11:30	<i>Coffee Break</i>
11:30 - 11:50	The Regional Climate System CNRM-RCSM6: description and first results of a 1980-2013 hindcast simulation Sevault F, Somot S, Adloff F, Waldmann R, Alias A
11:50 - 12:10	Modeling the Mediterranean circulation: skills and flaws of present day models Soto-Navarro J, Jordà G
12:10 - 12:30	Assessment of biogeochemical models in the NW Mediterranean Ramirez-Romero E, Jordà G, Calalan I, Segura-Noguera M, Amores A
<i>Topic 2: Studies on the added value of air-sea coupling and/or high resolution</i>	
12:30-13:00	<u>SOLICITED</u>: Coupled Regional Climate Modelling Systems: Pros and Cons Ahrens B, Pothapakula PK, Leps N, Akhtar N, Primo Ramos C
13:00-14.30	<i>Lunch Break</i>

14:30-14.50	<p>Coordinated Experiments of coupled Atmosphere-Ocean Regional Climate Models for North Sea and Baltic Sea regions</p> <p>Ho-Hagemann H and the Coordinated Experiments team (HZG, AWI, DWD, IOW, SMHI)</p>
14.50-15:10	<p>Role of atmospheric forcing resolution in the long-term seasonal variability of the Tyrrhenian Sea circulation from a set of ocean hindcast simulations (1997 - 2008)</p> <p>de la Vara A, Galan del Sastre P, Arsouze T, Gallardo C, Angel Gaertner M</p>
15:10-15:30	<p>A global integration technique for a better description of the Mediterranean water cycle using satellite data</p> <p>Pellet V, Filipe Aires, Simon Munier, Gabriel Jordà, Wouter Dorigo, Jan Polcher, Fuxing Wang, Luca Brocca, Stefania Camici, Christian Massari</p>
15:30-16:30	<p><u>Poster Presentation</u></p>
16:30-16:50	<p>Coffee Break</p>
16:50-17:10	<p>Role of air-sea coupling in the simulation of moisture sources over the Mediterranean Basin</p> <p>Batibeniz F, Ashfaq M, Turuncoglu UU, Onol B</p>
17:10-17:30	<p>Role of the ocean thermal structure in the modulation of heavy precipitations over the Ligurian Sea</p> <p>Meroni A, Renault L, Parodi A, Pasquero C</p>
17:30-17:50	<p>Cascading ocean basins: numerical simulations of the circulation and inter-basin exchange in the Azov-Black-Marmara-Mediterranean Seas system</p> <p>Stanev E</p>
17:50-18:10	<p>The comparison of observational data with the results from ROMS model in the Porsanger fjord, Norway.</p> <p>Aniskiewicz P</p>
18:10	<p>END DAY 1</p>

Day 2: Thursday, 15 March

9:00-9:20	Modeling study of the Svalbard fjord - Hornsund Jakacki J, Przyborska A
9:20-9:40	Mesoscale eddy properties in the Mediterranean sea from high-resolution models. Amores A, Jordà G
9:40-10:00	First evaluation of a high resolution model of the Central Mediterranean Sea Harzallah A, Mehra A, Thiaw W
10:00-11:10	<u>ROUND TABLE</u>
11:10-11:30	Coffee Break
<i>Topic 3: Regional process studies and extreme and high impact events</i>	
11:30-12:00	<u>SOLICITED</u>: Effects of ocean-atmosphere coupling in regional climate models on the simulation of medicanes: present climate representation and future projections Gaertner MA, Gonzalez-Aleman JJ, Gutierrez J, De la Vara A
12:00-12:20	Climatology, precipitation types and atmospheric conditions of extreme precipitation events in western Turkey Baltaci H
12:20-12:40	Long-term variability of extreme storm surges in the German Bight Lang A, Mikolajewicz U
12:40-13:00	Sensitivity of Mediterranean Sea function to uncertainties in the surface freshwater forcing Jordà G, Martinez-Asensio A, Amores A, Sevault F, Somot S
13:00-13:20	Is there a need for coupled chemistry/climate simulations for modelling Mediterranean heat waves? The role of atmospheric aerosols Jiménez-Guerrero P, Palacios-Peña L, Jerez S, Gómez-Navarro J, López-Romero J, Lorente-Plazas R, Montávez J

13:20-14:50	Lunch Break
14:50-15:20	<u>SOLICITED:</u> The future regime of Atlantic nutrient supply to the Northwest European Shelf Mathis M, Elizalde A, Mikolajewicz U
15:20-15:40	Exploring future scenarios for the NW Mediterranean Sea for the horizon 2030. Consequences for marine productivity and resources exploitation Macias D, Piroddi C, Garcia-Gorriz E, Stips A
15:40-16:00	Drought assessment and projection under climate change in northern Tunisia Mathlouthi, M, Fehthi L
16:00-16:20	The climate change signal for temperature and salinity in the Western Mediterranean Sea in a regionally coupled ocean-atmosphere model Cabos W, Sein D, Parras I, Izquierdo A
16:20-16:40	Coffee Break
16:40-17:00	The individual role of temperature and salinity change for different trophic levels in global climate scenarios downscaled for the Baltic Sea and North Sea Gröger M, Andersson H, Dieterich C, Meier HEM, Wåhlström I, MacKenzie B
17:00-17:20	Projected Changes in Baltic Sea Upwelling in Climate Change Scenarios Dieterich C, Gröger M, Schimanke S, Meier HEM
17:20-17:40	Future droughts in Southern Ukraine – reasons and possible consequences for water resources and agriculturek Khokhlov V, Yermolenko N, Zamphirova M
17:40-18:00	Wrap-Up of the plenary sessions
18:00	END OF PLENARY SESSIONS

Day 3: Friday, 16 March

Outbreak sessions MedCORDEX/Baltic Earth

9:00 - 10:30	Breakout meetings 1
10:30 - 11:00	Coffee Break
11:00 - 12:00	Breakout meetings 2
12:00 - 13:00	Overall workshop discussion and wrap-up
13:00	Lunch and End of the meeting

Poster presentations

Topic 1: Development and evaluation of regional climate system models

Integration of Engineering Data of ocean floor in Environmental and Ecosystem Modeling with Geophysics Precursors Invading Impact of Global Warming on Deep Sea Creatures

Hadi N, Glaser S, Ziran Z

Closing the water balance in a regional coupled system model over the North and the Baltic Sea

Hagemann S, Ho-Hagemann H

Comparison of satellite and in situ soil moisture measurements for modelling

Mačiulytė V

Preliminary results of the RegCM-ES model with an active biogeochemical component (BFM) over the Med-CORDEX domain

Reale M, Giorgi F, Solidoro C, Di Biagio V, Mariotti L, Farneti R

Topic 2: Studies on the added value of air-sea coupling and/or high resolution

The high-resolution simulations of WRF model in two high-latitude fjords: Porsanger and Hornsund.

Aniskiewicz P, Stramska M

Activities with COSMO-CLM and NEMO for the North and Baltic seas at DWD

Brauch J, Dröse M, Stegert C, Van Pham T, Früh B

Adaptation of the MIKE 3d model for the fjord Hornsund

Przyborska A, Jakacki J

Topic 3: Regional process studies and extreme and high impact events

Comparison of regional and global oceanic reanalyses in the Mediterranean Sea

Beuvier J, Drévillon M, Lellouche J-M, Garric G, Drillet Y

The Impact of Water Constituents on Radiative Heat Transfer in the Open Ocean and Shelf Seas

Cahill B, Fischer J, Graewe U, Burchard H, Wilkin J, Warner J, Ganju N

Haline convection due to sea ice brine rejection in the Northern Baltic Sea

Gieße C, Meier HEM

Global warming, new energy balance, new atmospheric circulation and extreme meteorological phenomena in Western Mediterranean

Karrouk M-S

Regional model of forming catastrophic spring runoff in condition climate change on the plain rivers Black sea basin in Ukraine

Ovcharuk V, Gopchenko E

Assessing the climate Impacts of the Atlantic Multidecadal Variability on the Mediterranean basin

Sanchez-Gomez E, Qasmi S, Cassou C, Boe J