

7th international Med-CORDEX Workshop, On line, May 2023 AGENDA

Monday 15th & Tuesday 16th, May 2023

Version: 16 May 2023

WORKSHOP OBJECTIVES:

- have scientific talks and exchanges to raise momentum in the community
- refine the CORDEX-CMIP6 Baseline run protocol
- prepare the CORDEX ICRC conference in Trieste
- start to identify new possible activities within Med-CORDEX
- introduce the new ocean biogeochemistry and coastal risk communities

WORKSHOP ORGANIZERS:

Erika Coppola, Samuel Somot, Bodo Ahrens, Gabriel Jordà, Fabien Solmon, Gianmaria Sannino, Marco Reale, Rosh Ranasinghe, Florence Sevault, Pierre Nabat, Emanuela Pichelli

REGISTRATION:

- Use the registration form <https://forms.gle/9PSSuDhxLke21HPo6> to register.
- Oral scientific contributions (Title/mini-abstract) should be directly submitted to the session chairs (see below)

TECHNICAL ASPECTS:

- Zoom link will be shared to the registered persons
- The session chairs will manage the session introduction, the oral timing, the questions or discussions and the closing session reporting
- Comments and additional questions will be possible through a dedicated open google document:

https://docs.google.com/document/d/1uDovEsVj7_wpXYKlzOxsmfL2-CoZKfbt_xg8vZRIzyMU/edit

USEFUL LINKS

- [Med-CORDEX community zenodo](#) with key documents
- [Med-CORDEX phase 3](#)
- [Med-CORDEX-CMIP6 baseline run protocol](#)
- [Med-CORDEX web](#)
- Med-CORDEX slack: <https://medcordex.slack.com> (ask to be added)
- Med-CORDEX Steering Committee contact: medcordex-sc@meteo.fr
- General Med-CORDEX emailing list: medcordex@meteo.fr

AGENDA - Monday 15th May, Morning

Introduction session [Chair: Erika Coppola, Bodo Ahrens]

- 9.30-9.50: *Welcome coffee, connection to zoom*
- 9.50-10.10: Gabriel Jordà (IEO) on behalf of the Med-CORDEX Steering Committee: *Introduction to the Med-CORDEX workshop*
- 10.10-10.25: Alessandro Anav & Marco Chericoni (ENEA/IUUS) *Dynamical downscaling of MPI-ESM1-2-HR with the ENEA-REG regional Earth system model over the Med-CORDEX region*

New CMIP6-CORDEX baseline runs session [Chair: Erika Coppola, Bodo Ahrens]

- 10.25-10.40: Francesco Maicu et al. (CMCC) *SEAS: a step forward a regional ocean-atmosphere coupled forecasting system for the Southern European Seas*
- 10.40-10.55: Florence Sevault (CNRM) *Mechanisms of heat storage and trend in the Mediterranean Sea in a high emission CMIP6 scenario with the regional climate system model CNRM-RCSM6.*

Break: 10.55 - 11.15

- 11.15-11.25: Gabriel Jordà (IEO) *Rendering of the protocol task team on model spin-up*
- 11.25-11.35: Gianmaria Sannino (ENEA) *Rendering of the protocol task team on sea level representation*
- 11.35-11.45: Samuel Somot (CNRM) *Rendering of the protocol task team on driving GCM selection*
- 11.45-12.00: Andressa Andrade Cardoso (University of São Paulo), Erika Coppola (ICTP), Julia Mindlin (Universidad de Buenos Aires) and Theodore G. Shepherd (U. Reading). *A storyline approach to select the CMIP6 model ensemble to be downscaled for the South America domain*
- 12.00-12.15: Marco Reale (OGS) & Graziano Giuliani (ICTP), *A new version of the Mediterranean RegCM-ES configuration: preliminary results and ongoing spin-up procedure*
- 12.15-12.30: Sofia Darmaraki (FORTH) *On the mixed layer heat budget behind marine heatwaves in the Mediterranean Sea*

AGENDA - Monday 15th May, Afternoon

New CMIP6-CORDEX baseline runs session (going-on) [Chair: Erika Coppola, Bodo Ahrens]

- 2.00-2.20: Daniela Jacob (GERICS) *Coming challenges, place of Med-CORDEX in CORDEX, new FPS application and preview of the ICRC conference*
- 2.20-2.35: Samuel Somot (CNRM) *Summary of the new CMIP6 baseline runs activity*
- 2.35-3.00: *Discussions on the new CMIP6 baseline runs* [Chair: Marco Reale (OGS), Florence Sevault (CNRM)]

Completed FPS activities session [Chair: Gianmaria Sannino, Emanuela Pichelli, Pierre Nabat]

- 3.00-3.15: Erika Coppola (ICTP) *Summary and lessons learned from the FPS-convection*
- 3.15-3.25: Cécile Caillaud (CNRM) *Mediterranean HPEs in a warmer climate as seen by a large convection-permitting model ensemble*

Break: 3.25 - 3.45

- 3.45-4.00: Fabien Solmon (LAERO) *Summary and lessons learned from the FPS-aerosol*
- 4.00-4.10: Vassilis Pavlidis (AUTH) *Using WRF model to investigate aerosol impacts on regional climate over Europe*
- 4.10-4.20: Gabriel Jordà (IEO) *Summary and lessons learned from the FPS-airsea*
- 4:20-4.30: Javier Soto-Navarro (U. Malaga) *Impacts of HR and air-sea coupling in future regional climate projections*
- 4.30-4.40: Camilo Melo (UCM) *On the role of mesoscale structures on air-sea coupling*
- 4.40-5.30: *Discussion on the FPS in particular on lessons learned and recommendations for submitting new FPS* [Chair: Gianmaria Sannino, Emanuela Pichelli, Pierre Nabat]

AGENDA - Tuesday 16th May, Morning

- 9.30-9.45: *Welcome coffee / recap from day 1 by session chairs*

Coastal risk session [Chair: Rosh Ranasinghe, Erika Coppola]

- 9.45-9.50 : Rosh Ranasinghe (IHE Delft/Deltares) *Introduction to the session*
- 9.50-10.05: Michalis Vousdoukas (JRC) *Towards large scale assessments of coastal risks in view of climate change*
- 10.05-10.20: Khin Nawarat (IHE Delft) *Coastal hardening and potential total beach loss at global scale*
- 10.20-10.35: Francesco Dottori (CIMA Foundation) *Methods for large-scale mapping of river flood hazard*
- 10.35-11.10: *Discussions* [Chair: Rosh Ranasinghe+ Erika Coppola]

Break 11.10 - 11.30

Session on new proposed activities [Chair: Samuel Somot, Bodo Ahrens]

- 11.30-11.40: Elena Xoplaki (U. Giessen) *Mediterranean paleoclimate: simulations of the past centuries to past millennia*
- 11.40-11.50: Rihem Jabnoun (INSTM), Ali Harzallah (INSTM) *A Mediterranean Sea model forced by a set of atmospheric and oceanic forcing fields during the period 1950-2100*
- 11.50-12.30: *Discussion on possible new coordinated activities in Med-CORDEX, including at least paleoclimate modelling, ocean stand-alone modelling and storyline approach* [Chair: S. Somot, B. Ahrens]

AGENDA - Tuesday 16th May, Afternoon

Ocean biogeochemistry session [Chair: Marco Reale, Gabriel Jordà, Fabien Solmon]

- 2.00-2.05: Marco Reale (OGS) *Introduction to the session*
- 2.05-2.20: Melika Baklouti (MIO, Université d'Aix-Marseille) *Some past and potentially future characteristics of the Mediterranean Sea studied with the NEMO-MED12/Eco3M-Med model*
- 2.20-2.35: Jean-Claude Dutay (LSCE) *Neodymium budget in the Mediterranean Sea: evaluating the role of atmospheric dusts using a high-resolution dynamical-biogeochemical model*
- 2.35-2.50: Marco Reale (OGS) *Eddy resolving projections for the biogeochemistry of the Mediterranean Sea under two different emission scenarios: main important outcomes and possible applications*
- 2.50-3.05: Ginevra Rosati (OGS) *Biogeochemical and physical drivers of MeHg dynamics in the Mediterranean Sea: insights from a coupled 3D model*
- 3.05-3.30: *Discussions* [Chair: Marco Reale, Gabriel Jordà, Fabien Solmon]

Break: 3.30 - 3.50

Closing session [Chair: Bodo Ahrens, Samuel Somot]

- 3.50-4.10: *Discussions on the new CMIP6 baseline runs (part 2)* [Chair: Marco Reale (OGS), Florence Sevault (CNRM)]
- 4.10-4.40: *Report of the sessions by the chairs (5 minutes/session) take home messages and list of actions*
- 4.40-5.00: *Final discussions* [Chair: Bodo Ahrens, Samuel Somot]

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