Regional Climate System Modelling for the European Sea Regions

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The workshop takes place at the Universitat de les Illes Balears in Palma de Mallorca, the capital of the Balearic islands. With about 500,000 inhabitants, Palma is a bustling mediterranean city with a picturesque historic centre. It looks back on a rich history with various cultural influences, with roman, byzantine and islamic periods. Palma is situated on the south coast of Mallorca on the Bay of Palma, and the beautiful mountain range of the Serra de Tramuntana stretches to the north.

Please check the website for any last minute changes, on the venue, how to get there as well as information on accommodation. Travel funds may be available, please see the website.

www.baltic-earth/mallorca2018
The aim of this workshop is to share recent progress in the understanding of regional climate variability with special focus on coupled effects between sea, atmosphere, land and anthroposphere. In this workshop, we will focus on European seas and their catchment areas like the Mediterranean Sea, Black Sea, North Sea, Baltic Sea and Arctic Ocean - highly sensitive areas where global models fail to give reliable information about changing climate because key processes are not properly resolved.

Coupled atmosphere–sea–ice–ocean models have been developed further in the recent past by using a hierarchy of sub-models for the Earth system. In these Earth system models, regional climate models are combined with sub-models for surface waves, land surface and vegetation, hydrology and ocean biogeochemistry, marine carbon cycle as well as marine biology and food webs. These model systems aim to investigate the impact of climate change on the entire terrestrial and marine environment.

Contributions related to any aspect of the description and modelling of regional climate are welcome. Some of the topics addressed in the workshop will be the description of present and future regional climates, the development and evaluation of regional climate system models and the assessment of extreme and high impact events.

Objectives and expected outcome

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

New regional reanalyses and coupled atmosphere - ice - ocean - land surface/vegetation - biogeochemical/ carbon - food web models are presented and the results of hindcast simulations are compared to observations. The problem of initialization of regional climate system models and the application of ocean synthesis to this purpose are also considered.

Further, model improvement, new data sets for model evaluation and bias correction methods are particularly welcome.

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

Contributions on land-atmosphere, ocean-atmosphere and land-ocean (rivers, wetting and drying) interactions are encouraged. In particular, discussions on benefits (or lack of them) from the use of improved regional climate system models are welcome.

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

Studies of all kind of regional processes including extreme and high impact events are welcome. The focus of the session will be on the basic scientific understanding of those processes and on assessing impacts on key areas with different adaptation potential.

Session 4: Climate change impact studies and uncertainty assessments of projections using coupled model simulations

Dynamical downscaling of Earth System Models, multimodel ensemble studies and multi-stressor approaches are expected. Studies comparing different emission scenarios and scenarios of other drivers of the earth system like environmental stressors and studies analyzing the effects of mitigation measures are welcome.

Call for Papers

Contributions in accordance with the workshop topics as outlined above, both oral or as poster, are welcome. Abstracts in English language, maximum of two pages, including figures, tables or diagrams, are invited to be submitted to the International Baltic Earth Secretariat electronically.

Guidelines and deadlines

Abstracts must be submitted electronically using e-mail. An electronic abstract template including all format definitions is available at the workshop website:

www.baltic.earth/mallorca2018

This template shall be downloaded and used for the preparation of abstracts. Authors are advised to strictly follow the formats given in this template. Other formats or paper/fax copies cannot be accepted.

Abstracts must be submitted to the International Baltic Earth Secretariat at balticearth@hzg.de by 12 January 2018. It should be noted that only a limited number of submitted abstracts can be accepted for oral presentations due to limited time. Therefore the workshop committee reserves the right to allocate orals to posters if necessary.

Abstract Deadline: 12 January 2018
Registration Deadline: 26 February 2018

Credits

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