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Geoscientific Model Development Discussions

Interactive comment on "A regional atmosphere-ocean climate system model (CCLMv5.0clm7-NEMOv3.3-NEMOv3.6) over Europe including three marginal seas: on its stability and performance" *by* Cristina Primo et al.

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To the Editor and Reviewers:

We would like to thank again the reviewers for their thoughtful comments and efforts towards improving our manuscript. We have addressed their concerns and updated the manuscript accordingly. The comments specific to each reviewer were already addressed in previous documents. In the following, we highlight major improvements of this new version: 1) We extended the discussion about the results as suggested

by the reviewers and amended the reference mistakes suggested by Christian Dieterich. 2) The atmospheric model is rigorously described, including details about the parametrization schemes and new references. This version also includes a better description of the lateral boundary data, the initial state of the models, as well as the spin up process of the oceans. Since more effort was addressed in describing the details of the set-up of the experiment, the acknowledgment to Dr. Akhtar changed into a co-authorship in this version. 3) Detailed description of the CPUs configuration of the experiment and the performance analysis with the LUCIA tool. 4) Some figures were modified: Fig.1: label of x-axis (NEMO-NORDIC instead of NEMO-BALTIC). Fig.4b: OISSTv2 Observations added. 5) We kept the analysis of the extremes since we consider it is of interest to show that the system is also stable estimating extreme indices and it shows improvement regarding heat/cold waves. 6) The edit of text has been substantially improved.

We hope the revised version is now suitable for publication and look forward to hearing from you in due course. Sincerely, Cristina Primo

Please also note the supplement to this comment:
https://www.geosci-model-dev-discuss.net/gmd-2019-73/gmd-2019-73-AC4-supplement.pdf

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