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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Thanks for your paper. A good contribution. There are two citations in the section on the regional climate system models where I have added some comments.

p2, l26: Hordoir et al. (2018) coupled the NEMO-NORDIC model to CCLM

I think this should be: Pham et al. (2014) coupled the NEMO-Nordic model to CCLM

p4, l24: This is the so-called NEMO-NORDIC (Hordoir et al., 2018),

The model version discussed in Hordoir et al., 2019 is quite different from the one used in the present study. They use NEMO 3.6 with a lower effective resolution than the NEMO-Nordic coupled to CCLM. The NEMO-Nordic version based on NEMO 3.3 which is used here has been described by e.g. Dieterich et al., 2019 and Gröger et al., 2019.

- Dieterich, C., Wang, S., Schimanke, S., Gröger, M., Klein, B., Hordoir, R., Samuelsson, P., Liu, Y., Axell, L., Höglund, A., and Meier, H. E. M.: Surface Heat Budget over the North Sea in Climate Change Simulations, Atmosphere, 10, https://doi.org/10.3390/atmos10050272, 2019.

- Gröger, M., Arneborg, L., Dieterich, C., Höglund, A., and Meier, H. E. M.: Summer Hydrographic changes in the Baltic Sea, Kattegat and Skagerrak projected in an ensemble of climate scenarios downscaled with a coupled regional ocean-sea ice-atmosphere, Climate Dynamics, accepted, 2019.

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2019-73, 2019.