

***Interactive comment on “Activation of the operational ecohydrodynamic model (3-D CEMBS) – the hydrodynamic part” by L. Dzierzbicka-Głowacka et al.***

**Anonymous Referee #1**

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This manuscript present an effort where a well know community model POP/CICE has been applied for the Baltic Sea. This report present basic information of the model configurations and show few examples of the hindcast simulations conducted. This work could lead to some interesting findings, but unfortunately the manuscript fails in presenting any new results and thus it is useless for the scientific community and I have to recommend a rejection of this manuscript.

Main points

1. Lack of original science. I didn't found any new scientific results from this manuscript. The manuscript is a technical report describing how a freely available community model

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has been implemented on the users computing system. These are important issues to be documented, but the peer-review journal is not a proper place to make it available for the community.

2. There is not a detailed description of the model parameters and how those have been selected (heat fluxes, momentum fluxes, bottom stress, mixing coefficients, parameters of sea ice model ...). The only issue what is shown is that two different mixing schemes has been tested (Richardson vs. KPP), but there is not any information of parameters used in the schemes. It would be desirable to conduct more sensitivity studies in order to find proper model parameters.

3. Validation of the model has been done superficially. Basically, only sea surface temperature has been validated. More important is to show validation of salinity, vertical stratification, water level and ice thickness.

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Interactive comment on Geosci. Model Dev. Discuss., 5, 1851, 2012.