



The hydrodynamic part of the 3D CEMBS model for the Baltic Sea

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The paper presents a hydrodynamic part of the coupled ice-ocean model 3D CEMBS designed for the Baltic Sea. It is based on the Community Earth System Model (CESM from the National Center for Atmospheric Research). It was adopted for the Baltic Sea as a coupled sea-ice model. It consists of the Community Ice Code (CICE model, version 4.0) and the Parallel Ocean Program (version 2.1). The models are linked through the coupler (CPL7) based on the Model Coupling Toolkit library. The ocean model has 21 vertical levels and horizontal grid of 600x640 cells. Horizontal resolution is approximately 2km. It is forced by atmospheric fields from European Centre for Medium-Range Weather Forecasts and in operational mode from 48-hour atmospheric forecasts provided by the UM model from the Interdisciplinary Centre for Mathematical and Computational Modelling of Warsaw University (ICM).

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