Geophysical Research Abstracts
Vol. 13, EGU2011-6341, 2011
EGU General Assembly 2011
© Author(s) 2011

Towards a coupled climate model with a finite-element sea ice-ocean representation

Thomas Jung, Sergey Danilov, Kerstin Fieg, Wolfgang Hiller, Jens Schroeter, Dmitry Sidorenko, and Qiang Wang
AWI, Bremerhaven, Germany (Thomas.Jung@awi.de)

A Finite-Element Sea-ice Ocean circulation Model (FESOM) has been developed at AWI, which allows a regional focus through the use of unstructured grids while avoiding nesting and open boundaries. The presentation starts with a short description of FESOM and some of its applications. This is followed by a discussion of issues such as numerical overhead and scalability. In the second part, recent efforts of coupling FESOM to the global atmospheric model ECHAM5 will be described. Emphasis will be put on coupling issues in the framework of the OASIS4 coupler.