

Geophysical Research Abstracts,  
Vol. 10, EGU2008-A-09296, 2008  
SRef-ID: 1607-7962/gra/EGU2008-A-09296  
EGU General Assembly 2008  
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## **A global finite-element sea ice and ocean model**

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Modeling large-scale ocean circulation on unstructured grids suggests a number of advantages like variable resolution and continuous representation of coastlines. However, it is still in its early phase because of numerical challenges in creating an efficient and stable code. Here the utility of unstructured grid modeling is demonstrated in several studies performed with Finite-Element Ocean circulation Model (FEOM) coupled to a sea ice model.