Press Release

35/2016 | Please note the embargo until Monday, 20 June 2016; 17:00 CEST

Breathing space for the Gulf Stream
Scientists calculate the fate of the Greenland meltwater

20 June 2016/Kiel. **The salinity of the waters around Greenland plays an important role in driving the Gulf Stream. There are concerns that a progressive freshening by the increasing ice losses from the Greenland ice sheet could influence and weaken the current system. New model calculations conducted by an international research team suggest, however, that a large fraction of this meltwater is effectively removed from the most sensitive areas by swift, narrow boundary currents, delaying the influence on the Gulf Stream. The study is published today in the international journal** Nature Geoscience**. .**

into the sea, equivalent to a quarter of t
great importance for the system of oce
density of he waters surrounding Gree
Labrador Sea due an increased influx
current system, including the Gulf Strea

Using a newly developed computer model
Helmholtz Centre for Ocean Research K

Reference:
Böning, C. W., E. Behrens, A. Biastoch, K. Getzlaff, J. L.. Bamber (2016): Emerging impact of Greenland meltwater on deepwater formation in the North Atlantic Ocean. Nature Geoscience, http://dx.doi.org/10.1038/ngeo2740

Background information:
The model computations were performed at the North-German Supercomputing Alliance (HLRN). The study was supported by the cooperative programme RACE (Regional Atlantic Circulation and Global Change, BMBF grant 03F0651B) and the Cluster of Excellence “The Future Ocean” funded by the DFG.

Links:
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Images:
Images are available for download at www.geomar.de/n4534-e

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