



## **The AMOC components off Newfoundland and in the eastern Atlantic**

Monika Rhein (1), Dagmar Kieke (1), Achim Roessler (1), Christian Mertens (1), Tilia Breckenfelder (1), Ilaria Stendardo (1), Reiner Steinfeldt (1), Claus Böning (2), and Arne Biastoch (2)

(1) IUP-MARUM, Bremen University, Institut fuer Umweltphysik, Oceanography, Bremen, Germany  
(mrhein@physik.uni-bremen.de), (2) GEOMAR, Kiel, Germany

The subpolar North Atlantic is a key region for the strength and variability of the Atlantic meridional overturning circulation (AMOC). Due to its high sensitivity to atmospheric changes, the region exhibits large natural variability in circulation and temperature / salinity patterns. Long-term contemporary time series are needed to study the fluctuations and the processes involved and to separate and detect variability caused by anthropogenic warming in the future. We will use shipboard and moored hydrographic observations, Argo and altimeter data combined with the results of a  $1/20^\circ$  ocean model to study the exchange of the main AMOC components between the subtropical and the subpolar regimes.