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**“IT WAS VERY EXCITING IN THOSE DAYS.
WE WERE EXPLORERS.”**

Marie-Tharp (1920–2006), Oceanographer, Faculty 1948–83

A pioneer of modern oceanography, Tharp was the first to map details of the ocean floor on a global scale. Her observations became crucial to the eventual acceptance of the theories of plate tectonics and continental drift in the earth sciences.

Tuesday, 9th December 2014, 2:00 p.m.

GEOMAR Lecture Hall West (R.B54) | Düsternbrooker Weg 20, 24105 Kiel

The Bremen Observing System in the Subpolar North Atlantic



The subpolar North Atlantic reacts strongly to changes in the external atmospheric forcing. It is expected that global warming will cause significant changes in the circulation and the temperature and salinity features of water masses formed there. This in turn will lead to changes in heat and freshwater fluxes, with consequences for the climate and sea level in Western Europe.

The subpolar North Atlantic also shows natural variability forced for instance by atmospheric modes like the North Atlantic Oscillation (NAO). This makes it difficult to detect trends and separate anthropogenic influence from natural fluctuations. Observed changes between phases of high and low NAO, however, resemble the changes predicted by climate models as a consequence of global warming. Thus, observations now are needed to develop the necessary understanding of the relevant processes.