



The structure of Atlantic Water at Eurasian continental slope in summer 2007

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Intensive field campaigns during the IPY (2007-2009) allowed unprecedented coverage of Eurasian continental slope by CTD measurements. These data allowed detailed mapping of the warm Atlantic water on its way from Fram Strait to the East Siberian Sea. Fourteen cross-slope sections, carried out by Russian, US and German scientists in August-September 2007 were used to determine position and properties of the warm Atlantic water core. Temperature and salinity data were examined against traditional concept of warm intermediate layer in the Arctic Ocean and in the view of recently introduced new ideas (e.g. seasonal oscillations in AW layer far from Fram Strait). Joined analysis of CTD data with long-term mooring observations demonstrated complex nature of warming-cooling pulses, which enter Arctic Ocean through Fram Strait and effect thermal conditions in Eurasian sector of the Arctic Ocean.