Geophysical Research Abstracts Vol. 20, EGU2018-10132, 2018 EGU General Assembly 2018 © Author(s) 2018. CC Attribution 4.0 license.



First Results from OSNAP: Overturning in the Subpolar North Atlantic Program

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An international effort, Overturning in the Subpolar North Atlantic Program (OSNAP), is a partnership among oceanographers from the US, UK, Germany, the Netherlands, Canada and China whose goal is to measure and understand what drives the Atlantic Meridional Overturning Circulation (AMOC) and its variability. With high-resolution mooring arrays from the Labrador coast to the Scottish shelf, OSNAP provides a continuous record of the full water column, trans-basin fluxes of heat, mass and freshwater in the subpolar North Atlantic and has been operational since 2014. Data from the first 21 months of the full OSNAP observing system has been used to produce the first continuous time series of these variables. In addition to these time series, time mean estimates for all fluxes and attendant uncertainties will be presented, along with comparisons with other contemporaneous AMOC measurements and a discussion of subpolar overturning variability.