



The RAPID-MOC 26°N monitoring array

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The RAPID-MOC project maintains an array of moorings across the North Atlantic at a latitude of 26°N to monitor the strength and structure of the Atlantic Meridional Overturning Circulation (AMOC). It has greatly improved our understanding of the variability of the system from sub-seasonal, seasonal and, most recently, interannual timescales. The array was first deployed in 2004 and is currently funded until 2015 to provide a decade long timeseries of the strength and structure of the AMOC. Here we present the array as it is currently deployed along with a brief summary of scientific results obtained from the first 8 years of data.

The AMOC is an important component of the global climate system. At 24-26°N It is responsible for approximately 25% of the global (oceanic and atmospheric) poleward heat transport of these latitudes. At mid-latitudes there is a substantial transfer of heat to the atmosphere and therefore any changes in the amount of heat transported by the AMOC will have significant impacts on global climate. Coupled ocean-atmosphere climate models predict that the AMOC will decrease as CO₂ builds up in the atmosphere.