

U.S. Atlantic Meridional Overturning Circulation (AMOC) Update
January 2010

Under the guidance and support of relevant federal agencies (NASA [lead], NOAA, and NSF), the US ocean research community is focused on the 4th near-term priority of the Ocean Research Priorities Plan, the Atlantic Meridional Overturning Circulation (AMOC). Here we report significant events resulting from that effort since the last update:

US AMOC Activities

- George Halliwell and Tony Lee are working with Susan Lozier and the US CLIVAR Project Office to organize this year's AMOC Annual Science Team meeting to be held in Miami, FL from June 7-9.
- As a follow-up to the US AMOC Annual Science Team meeting in Annapolis in May of 2009, a special issue of *Deep-Sea Research* is being edited by Sirpa Hakkinen and Jim Carton. The manuscripts due this month; a total of 20 is expected.
- A workshop for the design of a supolar North Atlantic observing system is currently being planned for April 14-16, 2010, at Duke University, Durham, NC. Susan Lozier is leading this effort, in conjunction with John Toole, Amy Bower, Craig Lee, Bob Pickart and Fiamma Straneo.

New Science Results

- The next swap-out of MOVE instruments at 16°N is currently underway. For that, Uwe Send and colleagues are moving to 2-year deployments, with a new ability for acoustic download of all the subsurface data from ships or gliders.
- A NASA-funded project by Xiao-Hai Yan and Young-Heon Jo is investigating what role, if any, satellite remote sensing could play in the study of deep ocean convection (DOC), and specifically to identify the existence of the surface signatures, before and after the formation of deep convection. They have already found that strong DOC events were developed by north-west wind driven by strong land-air-sea interactions, resulting in forming DOC and thus generating cyclonic flow fields.

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