

## U.S. Atlantic Meridional Overturning Circulation (AMOC) Update July 2008

Under the guidance and support of relevant federal agencies, the US ocean research community has launched a focused effort to address the 4<sup>th</sup> near-term priority of the Ocean Research Priorities Plan, the Atlantic Meridional Overturning Circulation (AMOC). Here we report significant events resulting from that effort during the past year:

- The U.S. CLIVAR office facilitated the formation of an AMOC Planning Team consisting of experts drawn from academic institutions and government laboratories with research specialties spanning ocean and atmosphere observations and modeling. These experts, including some already engaged in AMOC-relevant projects brought their experience to bear in the preparation of an Implementation Strategy for future AMOC research activities. The principal stated objectives are: **1) design and implementation of an AMOC monitoring system; 2) assessment of AMOC's role in the global climate; and, 3) assessment of AMOC predictability.** The Implementation Strategy is available as U.S. CLIVAR Report no. 2007-2.
- As recommended in the Implementation Strategy, the federal agencies engaged in funding AMOC research formed an AMOC Science Team (AMOCST) consisting initially of 12 leading investigators who are funded to pursue AMOC-relevant topics. The role of the AMOCST is to help accelerate integration across agencies and disciplines, establish splinter groups to work on subtopics, assist the agencies in building the AMOC case and updating the Office of Management and Budget, organize a regular (e.g., yearly) AMOC meeting, and develop opportunities to leverage U.S. investments through international collaborations. The AMOCST held its inaugural meeting in March 2008.
- The AMOCST engaged the international community at the 30 June – 2 July meeting of the U.K.'s RAPID program. RAPID will reach its planned conclusion later this year, but the U.K. has already committed funds for a follow-on program (RAPID-WATCH). RAPID-WATCH will deemphasize paleoclimate and increase investment in modeling and forecasting while maintaining a substantial focus on observations of the AMOC. Thus, RAPID-WATCH will constitute a continued opportunity for international collaboration. The AMOCST will be represented at the upcoming July 2008 CLIVAR Summit and will engage the international CLIVAR Atlantic Implementation Panel at its September 2008 meeting where AMOC will be a special focus topic.
- A community-wide AMOC Science Meeting is planned for Spring 2009. It will be open to all interested parties, both U.S. and international. It will be timed to closely coincide with a major cruise involving European scientists, and a goal is to develop initial input to a white paper describing U.S. AMOC observing plans in advance of the OceanObs'09 meeting.

Jerry Miller, U.S. CLIVAR Office, 10 July 2008