

## **VAMOS and the Atlantic Ocean: Interactions**

**J. Marengo, INPE, Sao Paulo, Brazil, H. Berbery, University of Maryland, MD, USA-VAMOS co-chairs**

**P. Nobre, INPE, Sao Paulo, Brazil-Member CLIVAR ATLANTIC**

For both the North and South American monsoon systems, the Atlantic Ocean plays a pivotal role in the regulation and modulation of climate in various time scales. Activities in the tropical and South Atlantic have been discussed in terms of studies and field programs directed to a better instrumentation for monitoring of climate and oceanic conditions of those sectors of the Atlantic Ocean. Programs such as PIRATA have allowed for a better monitoring of the tropical Atlantic, and the data have been used extensively in model validation and improvement on seasonal to interannual climate prediction, and on studies of climate variability in regions such as Amazonia, Northeast Brazil, and the South American Monsoon System. An activity linked to the continental parts of the SACZ (South Atlantic Convergence Zone) is being described as the WAVES program, in which the role of atmosphere-biosphere-ocean interactions over the south Atlantic/South America on continental rainfall, and proposed coupled modeling and monitoring activities are detailed (See. Paulo Nobre's text on WAVES, and the Nobre et al 2004-White paper).

A recent activity on the tropical Atlantic is the Intra-Americas Sea Climate Impacts Program (IASCLIP), recently endorsed by VAMOS. This is multi-year (2009-2015) research program designed to investigate the interaction of the Intra-Americas Sea (IAS) with the summer climate of the Western Hemisphere, including rainfall and extreme events such as hurricanes, tornadoes, floods and droughts. The IASCLIP Science and Implementation Plan targets key phenomena thought to influence boreal summer climate in the Caribbean, Central and northern South America, and North America, including the Atlantic warm pool (AWP), the North Atlantic subtropical high (NASH), the mid-summer rainfall hiatus (MSD) and the Intra-Americas low-level jet (IALLJ). Implementation is expected to proceed in three stages: diagnostics and model assessments (2009-2011), a field campaign (2011-2012), and program consolidation (2013-2015). Four working groups have been established: (A) diagnostics, simulations and prediction, (B) model development, (C) observations and (D) applications and capacity building; and a Science Steering Committee (SSC) has been formed comprised mainly of the chairs of the working groups. As of August 11<sup>th</sup>, many IASCLIP scientists have submitted proposal letters of intent to the NOAA Climate Program Office in response to the recent announcement of opportunity for the Climate Prediction Program for the Americas (CPPA), which explicitly targets the research goals of IASCLIP. Several groups are already involved in developing large-scale and regional model-based systems for reanalysis, hindcasts and prediction, which will form a nucleus for the activities of the IASCLIP forum for diagnostics, prediction and assessment. The Science and Implementation Plan for IASCLIP, recently endorsed by the VAMOS panel, can be accessed at [ftp://ftp.aoml.noaa.gov/phod/pub/enfield/Visitor\\_temp/IASCLIP\\_S&Iplan\\_spr08\\_v2.pdf](ftp://ftp.aoml.noaa.gov/phod/pub/enfield/Visitor_temp/IASCLIP_S&Iplan_spr08_v2.pdf)