

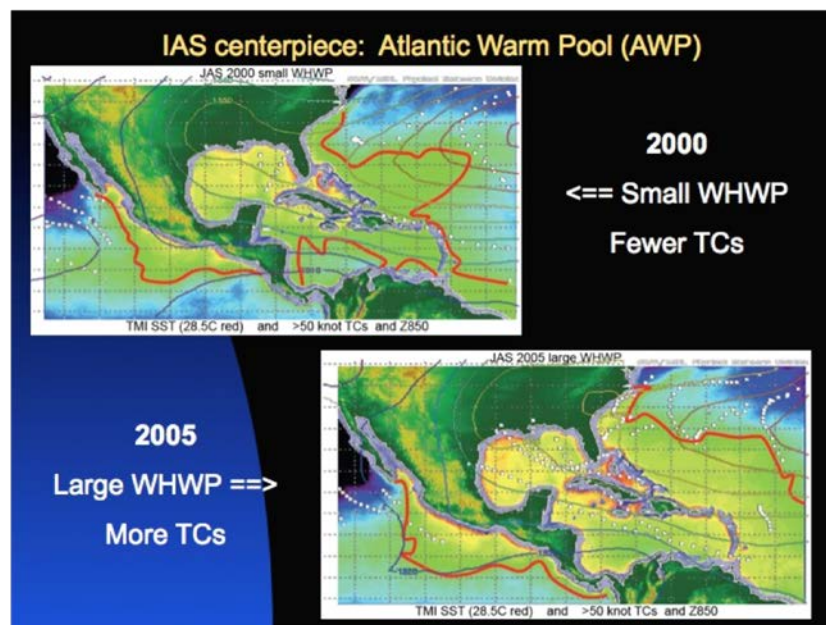
# Intra-American Study of Climate Processes

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The Intra-American Study of Climate Processes (IASCLIP) is scheduled to run from 2009 through 2014, as a new component of CLIVAR VAMOS. The geographic milieu of IASCLIP is the Western Hemisphere warm pool (WHWP) comprised of the Caribbean and Gulf of Mexico, the eastern North Pacific warm waters off the Pacific coast of Central America and the western tropical Atlantic immediately east of the Lesser Antilles, including the islands and land regions in and around the WHWP. The overarching goal of IASCLIP is to estimate and exploit potential predictability of warm-season weather and climate in the region, mainly on intraseasonal to interannual timescales, with an aim to improve our understanding and modeling of relevant physical and dynamical processes. IASCLIP will also seek to link research to societal applications in the region.

Almost yearly, extreme weather and climate events cause damage to economies in the Western Hemisphere mounting in the millions, sometime billions of US dollars. In the United States they occur most often during summer in the form of droughts and tropical cyclones and in late springtime as tornadoes and floods. There is mounting evidence that summer climate depends on tropical Atlantic even more than on the Pacific. The WHWP is the boreal summer heating center for the Western Hemisphere; it is responsible for funneling moisture to all the surrounding regions during the summer season, and controls the summer environment for Atlantic hurricanes.

By orchestrating the efforts of scientists in the U.S., Mexico, Caribbean and Central/South American countries over the 2009-2014 time period, IASCLIP aims to: (1) Promote, coordinate, and organize research activities that aim to understand better the climate and hydrological processes in the IAS region, (2) Improve our ability to represent these processes in global climate models and predict them on subseasonal to interannual timescales, and (3) Facilitate applications of climate forecast products in the IAS region. Scientists at AOML have contributed greatly to IASCLIP.



*The tropical Atlantic SST varies in proportion to the size of the pool of water greater than about 28°C (red contour). Climate impacts accrue as well, the example shown here being the number of tropical cyclone tracks in a hurricane season. Upper left: smaller warm pool (2000) and fewer storm tracks (small dots). Lower right: larger warm pool (2005) and more storm tracks.*