COOPERATIVE INSTITUTE FOR MARINE AND ATMOSPHERIC STUDIES



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http://www.rsmas.miami.edu/groups/cimas/

The Cooperative Institute for Marine and Atmospheric Studies (CIMAS) was established in 1977 in the University of Miami's Rosenstiel School of Marine and Atmospheric Science (RSMAS). CIMAS serves as a mechanism to promote synergisms between University scientists and those in NOAA. CIMAS research is largely partnered with NOAA Research, NOAA Fisheries, and recently with NOAA Satellites and Information Service. CIMAS scientists collaborate primarily with scientists at the Atlantic Oceanographic and Meteorological Laboratory and the Southeast Fisheries Science Center, both are located on Virginia Key in close proximity to the CIMAS/RSMAS campus.

CIMAS carries out research in six theme areas: (1) **Climate Variability** - Investigate the dynamics of the ocean and the atmosphere and the ways in which they interact on interannual and longer-scales and the link to climate variations; (2) **Fisheries Dynamics** - Enhance our understanding of fisheries and ecosystem dynamics so as to improve the management of fisheries and marine protected species; (3) **Regional Coastal Ecosystem Processes** - Carry out research on the ecological health of coastal ocean ecosystems in the Southeast U.S. so as to lead to better management strategies; (4) **Human Interactions with the Environment** - Study human interactions and impacts on the environment so as to provide a scientific basis for environmental decision-making; (5) **Air-Sea Interactions and Exchanges** - Understand the energy exchanges and interactions between the atmosphere and the oceans and the consequent effects on atmospheric and ocean mixing and circulation; and (6) **Integrated Ocean Observation** - Study the integration of modeling and physical measurements in the ocean and the atmosphere so as to achieve optimal designs of observing systems.

Annually, CIMAS scientists publish approximately 100 scientific publications, of which 70% appear in peer-reviewed publications. A large portion of the research conducted by CIMAS scientists is carried out in the context of the South Florida Ecosystem Restoration initiative. That initiative is a unique long-term program. It seeks to reverse the damage caused by the massive diversion of the water flows associated with rapid population growth and the consequent impact on the Everglades and on coastal ecosystems. Other major programs focus on a wide range of weather and climate-related issues, ranging from studies of the factors affecting hurricane activity to preparing forecasts of the impact of ENSO cycles on agriculture in the southeast US.

CIMAS's research activities assist NOAA in three of its Mission Goals: 1) Protect, restore, and manage the use of coastal and ocean resources through an ecosystem approach to management; 2) Understand climate variability and change to enhance society's ability to plan and respond; and 3) Serve society's needs for weather and water information.