**Progress Report Title:** Coral Workshop

**Principal Investigator:** John Dunne (Research Oceanographer, GFDL)

**CICS/GFDL Collaborator:** Cheryl Logan (Princeton), Andrew Wittenberg (GFDL), Charles Stock (GFDL), Ryan Rykaczewski (GFDL), Allison Smith (Princeton), John Krasting (GFDL), Jasmin John (GFDL), Vince Saba (GFDL)

**Other Participating Researchers:** Simon Donner (University of British Columbia), Mark Eakin (NOAA Coral Reef Watch), Gang Liu (NOAA Coral Reef Watch)

**Task I:** Administration & Outreach

**NOAA Sponsor:** Brian Gross (GFDL)

**NOAA Goals:** #2 Understand Climate Variability and Change to Enhance Society’s Ability to Plan and Respond

**Objectives:** The goal of this coral project is to develop a globally-robust means of characterizing coral bleaching and to apply the GFDL earth system models to project coral vulnerability to climate change and ocean acidification.

**Methods and Results/Accomplishments:**

Through CICS, the NOAA Coral Reef Conservation Program sponsored a “Coral Vulnerability Workshop” from August 30-September 1, 2010 at Princeton University. The primary focus of the workshop was to provide the cross-disciplinary background necessary to approach this topic and introduce our AOS postdoc, Cheryl Logan, to the various experts at GFDL and Princeton available to provide guidance as she spearheads this project. Approximately 10-15 various members of GFDL and AOS were in attendance at the workshop. Presentations included: 1) Background on GFDL's IPCC class models and their application, 2) Background on state of the art coral bleaching predictions, 3) Physiological mechanisms of coral bleaching, and 4) Observational and representational challenges. The workshop culminated in a Synthesis session in which the core members of the team (Dunne, Logan, Eakin, and Donner) devised a work plan and timeline for developing a new coral bleaching model.