

School of Coastal and Marine Systems Science at Coastal Carolina University: A Systems Science Approach to Resource Management

Karen Fuss, Paul Gayes and Rich Viso



SCHOOL OF COASTAL AND MARINE SYSTEMS SCIENCE

Focuses on a systems approach that integrates the earth, atmosphere and ocean to help society effectively manage its critical coastal natural resources

Ph.D. Program

- Facilitates students to work with faculty on original research expanding and applying knowledge of coastal systems.
- Emphasis is on developing predictive capabilities for coastal environmental systems and infusing an appreciation of associated environmental policy development.

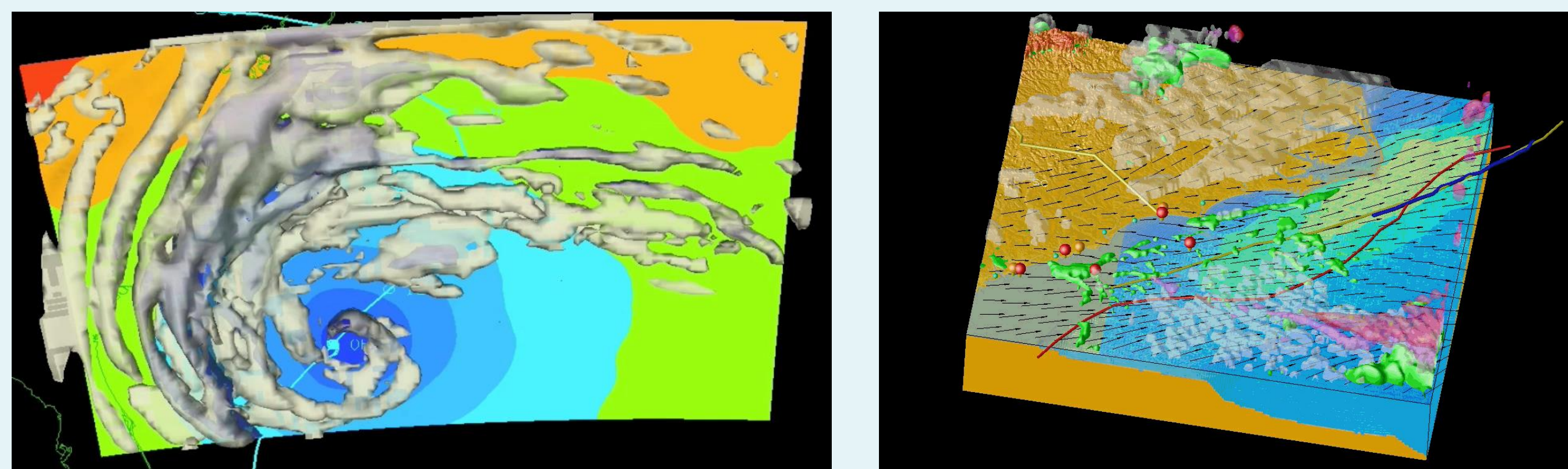
www.coastal.edu/scmss

Master's Program

- The Master's Degree in Coastal Marine and Wetland Science consists of two distinct degree tracks:
- A track culminating in an original research thesis or
 - A professional track culminating in a professional internship experience.

Current Research

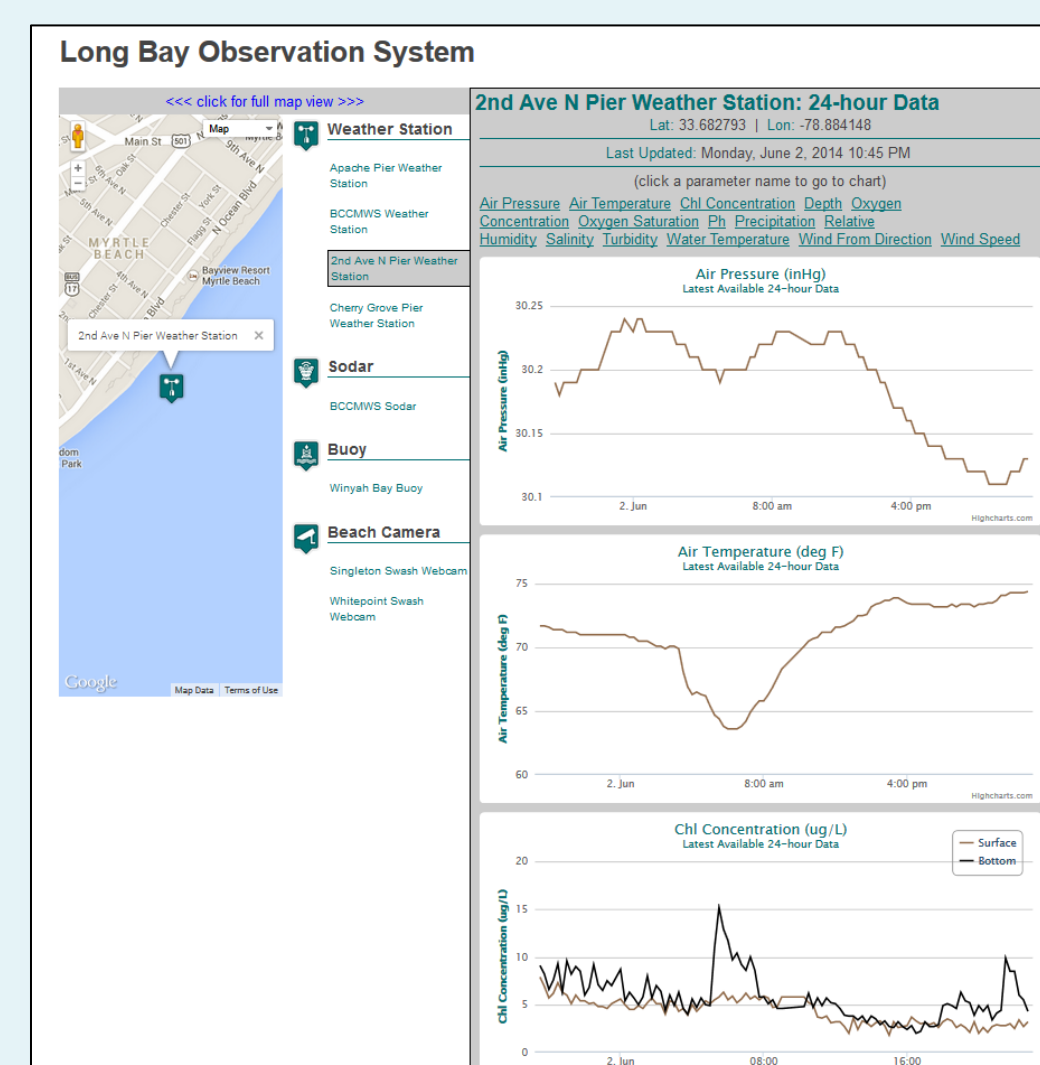
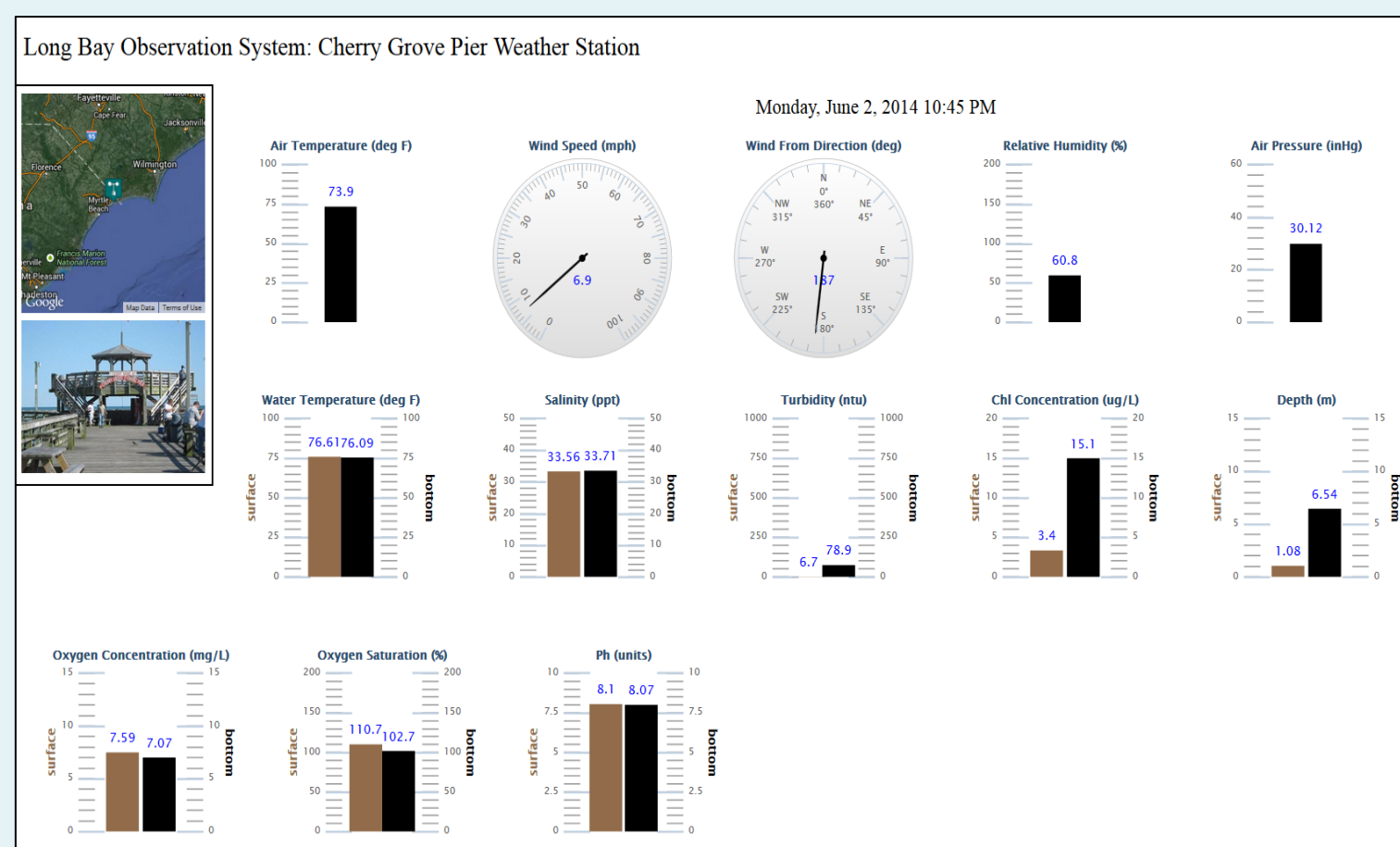
HUGO (Hurricane Genesis & Outlook) is a modeling tool to forecast storm landfall probabilities along the US Atlantic and Gulf Coasts.



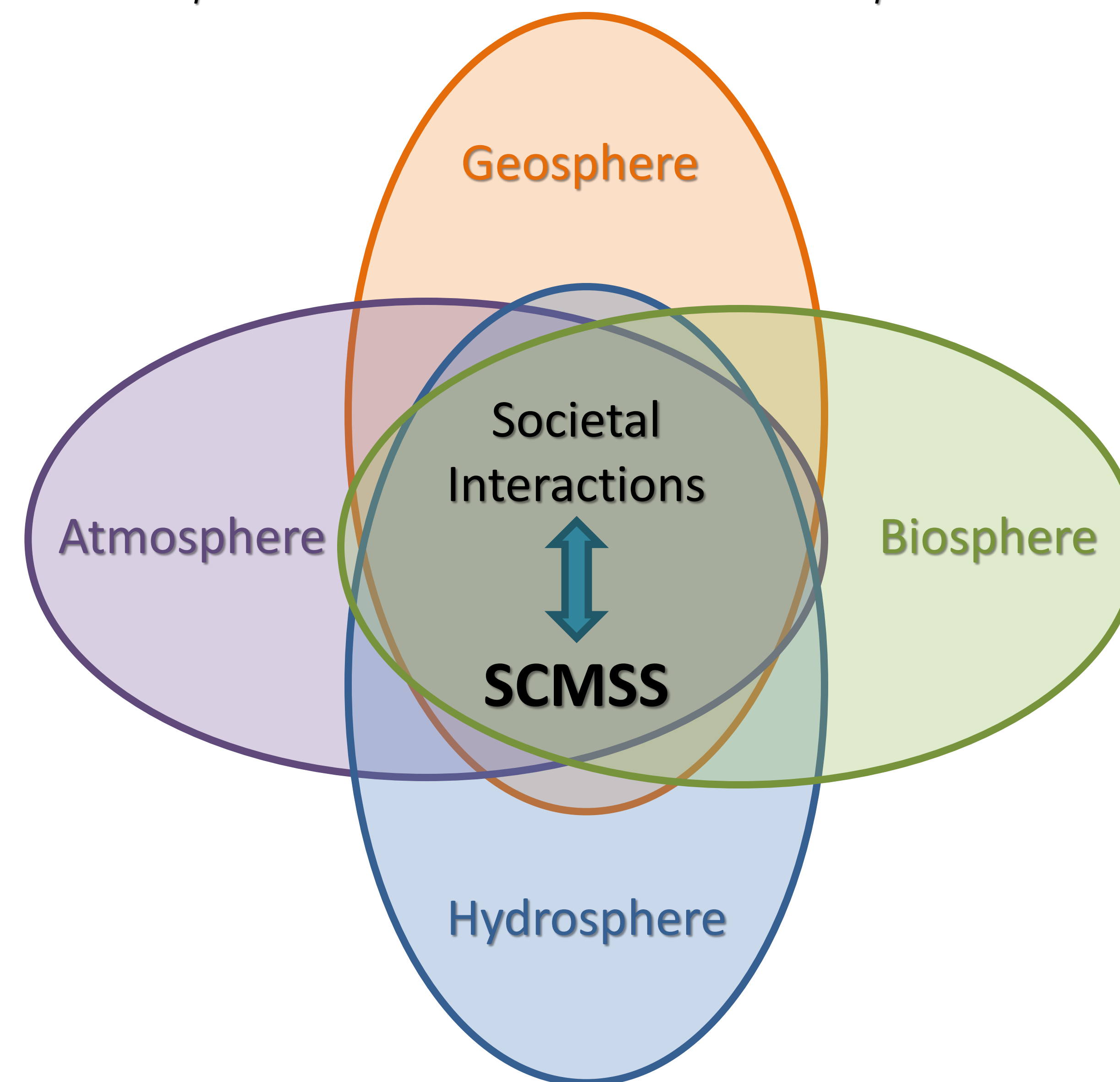
Arctic exploration to study past abrupt climate shifts and relate those to present and future climate changes.



Hypoxia monitoring using water quality and biological monitoring in Long Bay on the Grand Strand in coastal South Carolina.



The School aims to interpret the interactions between earth and sea processes and human society.



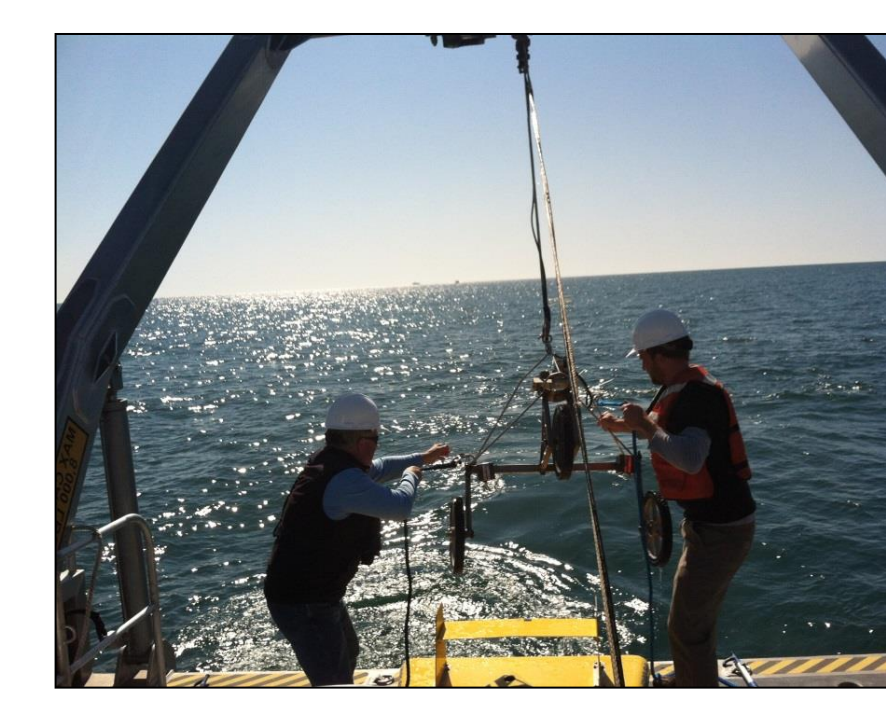
Center for Marine and Wetland Studies: Facilities and Equipment



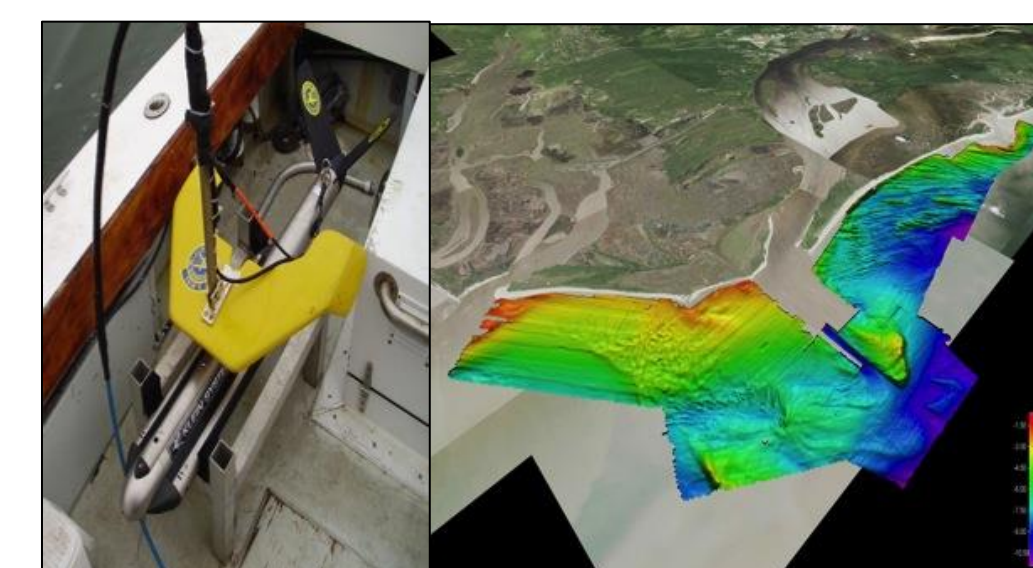
Environmental Quality Lab



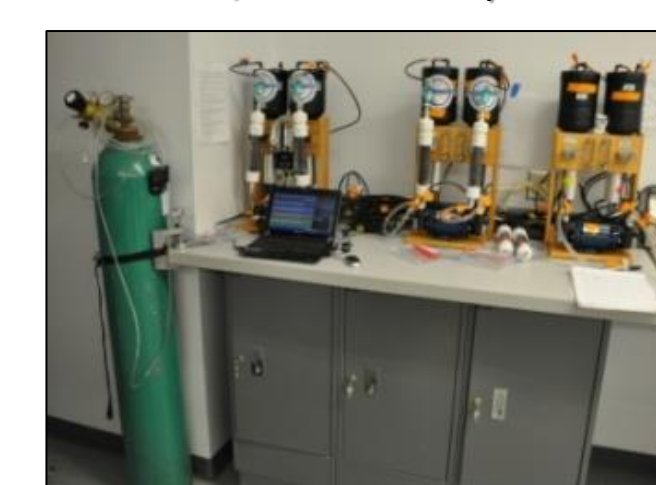
54' R/V Coastal Explorer



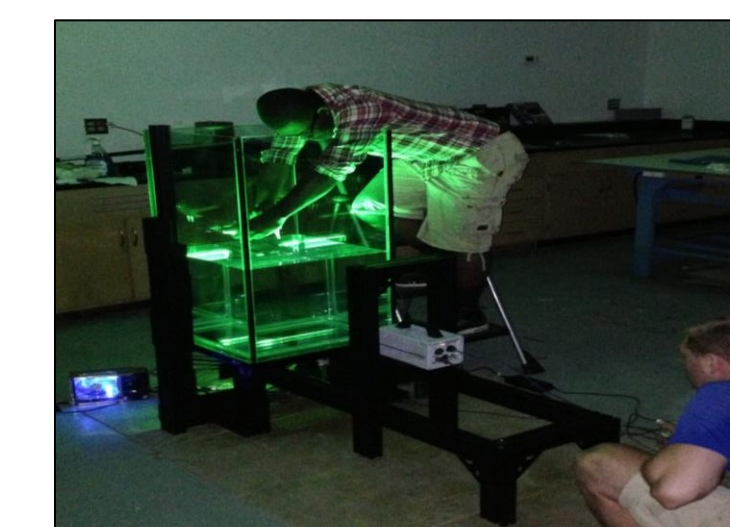
Edgetech 512i CHIRP Sub-bottom Profiler



Applied Geophysics and Imaging



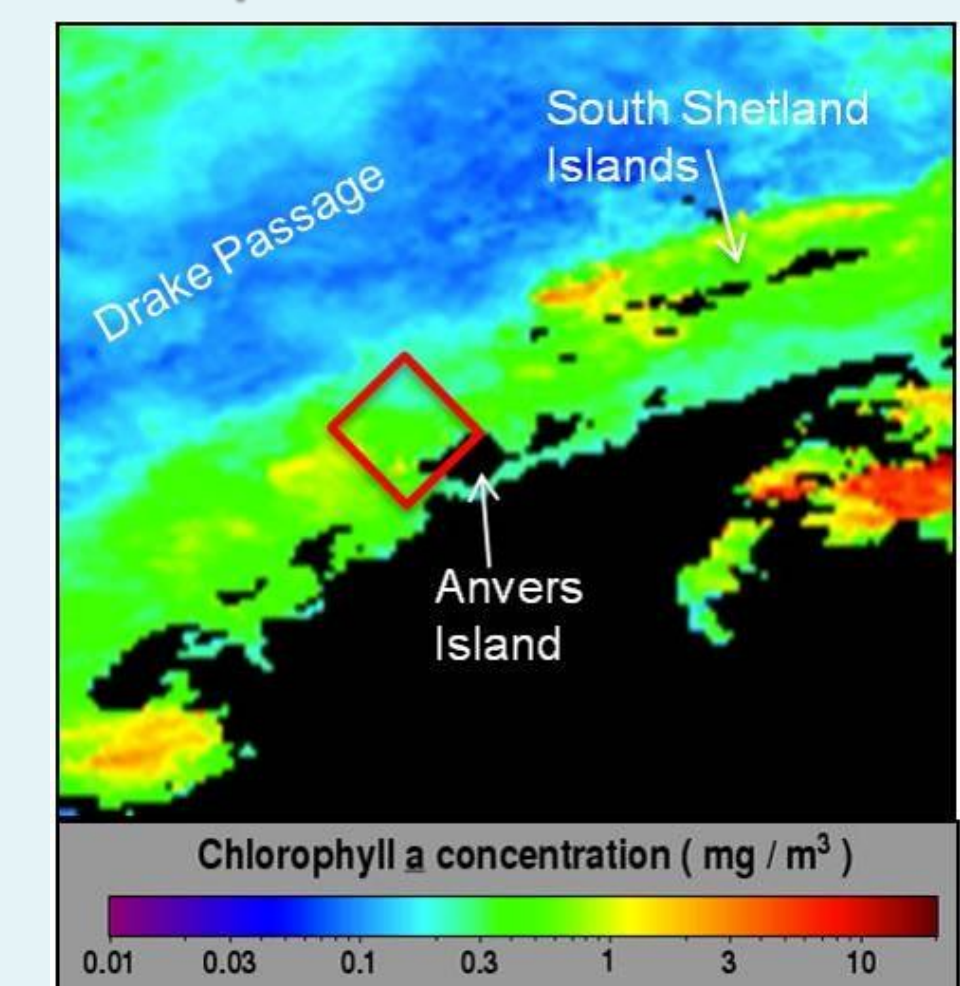
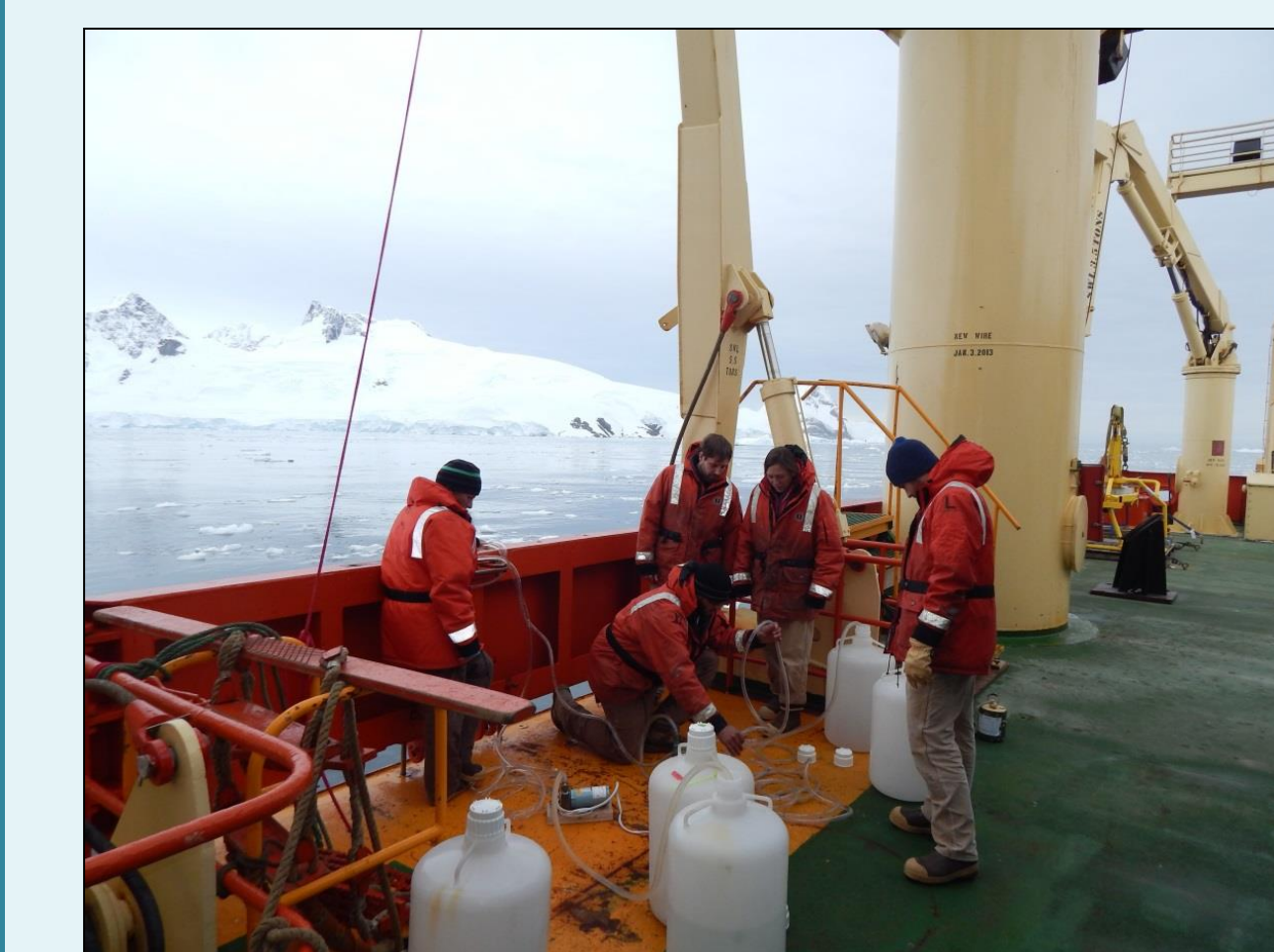
Submarine Groundwater Discharge Measurement Facility



Turbulence Imaging Lab

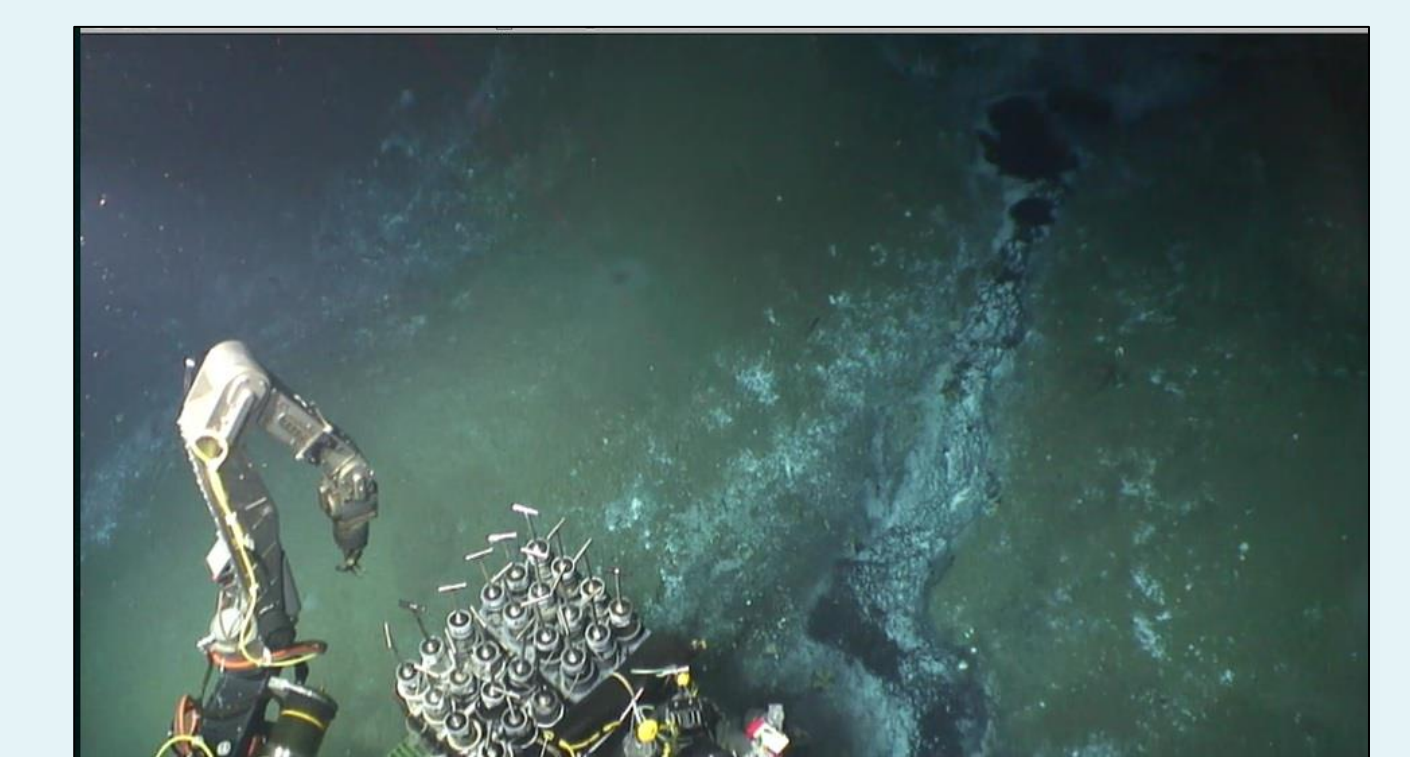
Current Research

Role of transport pathways of Antarctic ice melt in iron delivery to phytoplankton in the Southern Ocean and future climate implications.



<http://oceancolor.gsfc.nasa.gov/>

Studying extreme benthic communities in brine seeps and oil and gas seeps in the Gulf of Mexico.



Oceanic processes (air-sea interactions, currents and turbulence) interact with biological, geological and chemical processes that define the coastal environment.

