

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
Department of Marine Science
Stennis Space Center

February 3, 2006

This report outlines the activities of The University of Southern Mississippi's Department of Marine Science for November-December 2005.

SPECIAL PROGRAMS OR ACTIVITIES

Stephan Howden wrote and submitted a new ad for the DMS Remote Sensing Faculty position in November.

The Annual DMS Holiday gala was held at the home of Steven and Maura Lohrenz on December 16. SSC Colleagues from NRL joined DMS faculty, students and staff for the festivities.

RESEARCH GRANTS AND CONTRACTS

Stephan Howden was informed in December that his Central Gulf of Mexico Observing System (CenGOOS) grant would continue to be funded.

Alan Shiller had a grant funded entitled "SGER: Repair and upgrade of high resolution ICP-MS facility at The University of Southern Mississippi." A.M. Shiller, PI. NSF Oceanographic Instrumentation. \$34,046. 15 Dec 2005 – 30 Nov 2006.

PROFESSIONAL ACTIVITIES

Stephan Howden sent an electronic version of a paper he reviewed on November 17. The paper was submitted to the journal of the Marine Technology Society.

Dr. Howden's November activities of the Central Gulf of Mexico Observing System (CenGOOS) began with his attendance for CODAR training in Santa Cruz, CA on November 1; then, from November 2-4, he participated in the Quality Assurance of Real-Time Data Workshop III at Scripps Institute in La Jolla, CA. The workshop was sponsored by the NOAA Coastal Services Center. He also had an initial meeting with FEMA rep Mac Caves on November 8. Howden sent boat specifications to the USM Purchasing department to be submitted out for bids on November 11 – a sole source requisition was prepared for the CODAR system. On November 15, he shipped SBE37 and SBE9plus to SeaBird, the FLNTUS to Wetlabs and the DCS to Aanderaa. These instruments are being returned for calibration, repair or replacement. He visited Port

Bienville with LT(jg) Dave Taggart (USM hydrographic science alumni and Naval Fleet Survey Team member) to ascertain the extent of damage to our SUTRON tide gage. Unfortunately, the tide gage appears to be a total loss, with the exception of the metal case. (Dave is a member of the Fleet Survey Team that is currently working on the post-Katrina Pearl River project.) Howden had a second meeting with FEMA representative Max Caves on November 17 to discuss lost and damaged equipment. He submitted more bid specifications to the USM Purchasing department for a new buoy on November 21.

Dr. Howden's December CenGOOS activities entailed submissions of 1) a revised budget and statement of work for year 2 of the multi-year CenGOOS grant from NOAA, since the award amount was less than what was outlined in the funded 3 year proposal; 2) purchase requisitions for a new buoy, boat and CODAR system; 3) final FEMA reports on the tide gage, Horn Island GPS station, NAVO Boat Operations Branch GPS station and CenGOOS buoy USM3m01 that was submitted to FEMA representative Mac Caves; and 4) a request for a 9-month no-cost extension to our contract with the Minerals Management Service. In addition, he participated in discussions for a Land-Sea Initiative proposed by Dr. Shiller and joined the Radiowave Operators Working Group, a working group for operators of high-frequency radar instruments that measure sea surface currents.

Dmitri Nechaev submitted proposals to NSF and NPRB in December 2005.

Charles Meador continues to work on the development of a B.S. degree in Marine Science. He finalized a draft Degree Plan that has been submitted to the DMS Curriculum Committee for review and has met with USM and Navy representatives on the progress of this effort.

VISITORS

Al Bick from the National Geospatial Intelligence Agency met with DMS faculty, students and other SSC personnel about possible job opportunities in the marine intelligence field on November 3.

PRESENTATIONS AND MEETINGS

Shiller, A.M., G.R. Aiken, J. Finlay, 2005. Trace Elements in Rivers of Central Alaska and Their Potential Response to Climate Change. Presented at AGU Fall Meeting, San Francisco, Dec. 2005. Abstract published in *Eos Trans. AGU*, 86(52), *Fall Meet. Suppl.*, Abstract H24B-05.

Dr. Chi-Kuei Wang gave a DMS seminar entitled "Shallow Bottom Fluorescence in the Bathymetric LIDAR Signal" on December 9.

PUBLICATIONS

Panteleev G., P. Stabeno, V.A. Luchin, D. A. Nechaev, M. Ikeda. Summer transport estimates of the Kamchatka Current derived as a variational inverse of hydrophysical and surface drifter data, was accepted for publication in Geophysical Research Letters.

UPCOMING EVENTS –

Vladimir Kamenkovich, Chair of the DMS Recruitment Committee, will participate with DMS graduate students in the USM Recruitment Fair scheduled for January 20 on the Hattiesburg Campus.

Dr. Bill Philpot will present “Sun glint removal and atmospheric correction of a glint-contaminated spectral image” at a DMS seminar set for January 20 at the George Knauer Building.

DMS Graduate Students are planning to participate in the Science Fair to be held at the Little Oak Middle/Boyett, Jr. High School in Slidell on January 27.