GOMECC-4 weekly update- Week 1

Greetings from the Gulf of Mexico.

The fourth Gulf of Mexico Ecosystems and Carbon Cruise, GOMECC-4, is officially underway!! We left the Navy Base port at Key West aboard the NOAA Ship *Ronald H. Brown* on September 13th and began our journey by heading north along the Florida East coast to our first line along latitude 27N. After a brief and successful test cast we began our set of closely knitted stations. By the end of that line we had shaken off the rust, got our sea legs, and everyone was in a groove with plenty of backed up samples to keep us busy during our transit south towards our next line off of Tampa, FL. Along the way we stopped quickly to collect samples by Biscayne National Park, as part of AOML's ongoing collaboration with the National Park Service to monitor Ocean Acidification conditions at select parks along the East coast and Gulf of Mexico.

The first station in the Tampa line was the deepest in the set, and we spent most of one day there, performing a CTD cast, plankton tows, and our first ever sediment core extraction in the GOMECC program. All operations were successful and we had a good time watching our core experts, Emily Osborne (AOML/NOAA) and Ben Ross (FAU) extract the sediment samples from the core tubes. Business ideas were floated around about selling deep Gulf of Mexico mud for facial treatments at wild prices per jar.

Figure 1: Sediment corer safely recovered after being deployed to 3,200 m (left), and Dr. Emily Osborne (AOML/NOAA, right) checking the integrity of the cores after recovery of the instrument. Photo credit: Grace Owen (University of Miami).

On Sunday September 19th, as we completed our Tampa Line, we picked up 2 additional scientists via small boat operation from Clearwater, FL. We are missing one more scientist who

will join us later on, but in the meantime and with a little bit of good will from our outstanding science party, we now have enough people to collect and analyze our samples.

Figure 2: Small boat operation to pick up two additional scientists for our crew. Photo credit: Leticia Barbero (University of Miami/CIMAS)

As of the writing of this update, we have completed 18 stations and collected over 30 sets of discrete underway samples at 2 hour intervals during our transits. Our next transect begins off the coast of Panama City, FL, and with a 12hr transit in between, our science crew is ready to get caught up on sample analysis. Everyone is in high spirits, equipment is behaving nicely, and weather has been fantastic. Chief Bosun has finally set up the famous kiddie pool on the aft deck, now for some poolside R&R as we transit to the next station!

Onwards,

Leticia Barbero and Andy Stefanick, chief scientists GOMECC-4