

NOAA Ship Ronald H. Brown A16N Leg 2 Scientific Report 04
John Bullister, Chief Scientist, Rolf Sonnerup, Co-Chief Scientist

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We are currently at Station 97 (~16°N 29°W).

It has been a tough week out here.

The tropical depression that we had been monitoring during the previous week continued to develop and became Tropical Storm Humberto earlier this week. By mid-week its intensity increased and it became Hurricane Humberto (the first hurricane to develop in a remarkably quiet season so far). The path of Humberto was projected to almost perversely follow along our station line at 29°W from 20°N to 15°N (see black dots on attached figure by Katie Kirk), a remarkably bad coincidence.

To avoid the path of the oncoming storm, at about 20.5°N RHB diverted eastward about 200 miles from the line. We then steamed southward about 180 miles to a point near the Cape Verde Islands, and as Humberto continued to move northward, RHB steamed back to the line at about 17.5°S and occupied stations northward behind the storm, where conditions allowed us to work safely.

By following this path, we did not encounter any significant direct effects of the hurricane and were able to continue some work under acceptable conditions.

Due to the loss of time in avoiding the hurricane, we will need to increase the distance between some of the remaining stations to complete the section with the remaining time. This should still allow us to complete the major goals of the program.

At about 19:24 GMT on 14 September 2013 at Sta 96 (17°N 29°W), with about 2872 meters of CTD cable out, the cable parted and the rosette package (see attached photo) was lost. Before Station 96, we had been having winding problems with the aft winch for the past dozen or so stations and decided to switch the rosette package to the forward winch. Unfortunately, although the CTD cable appeared in excellent conditions on the outer layers of the drum of this winch, the inner layers of the cable were extremely corroded. Based on the condition of the remaining cable on the aft winch, this winch will be unusable for the remainder of the cruise.

We quickly outfitted the backup rosette during the next several hours and attached this package to the aft winch. We have been able to complete several stations since then and will continue on with our plans to complete the section.

We will continuously and closely monitor the winding on this winch for the remainder of the cruise.

We are hoping for better luck in the upcoming week.



