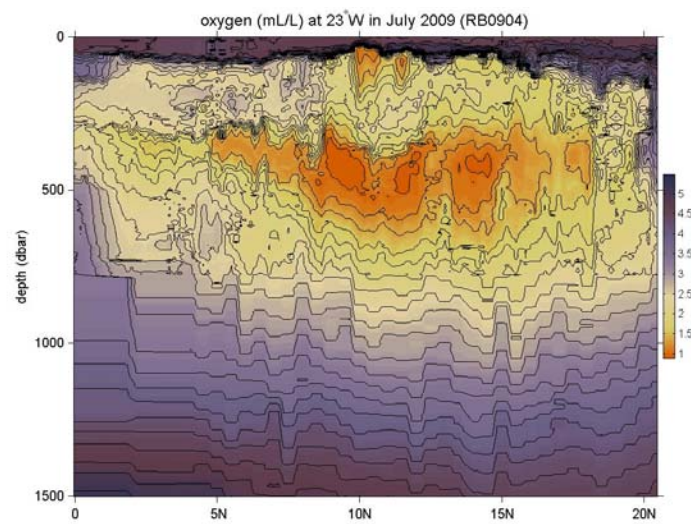
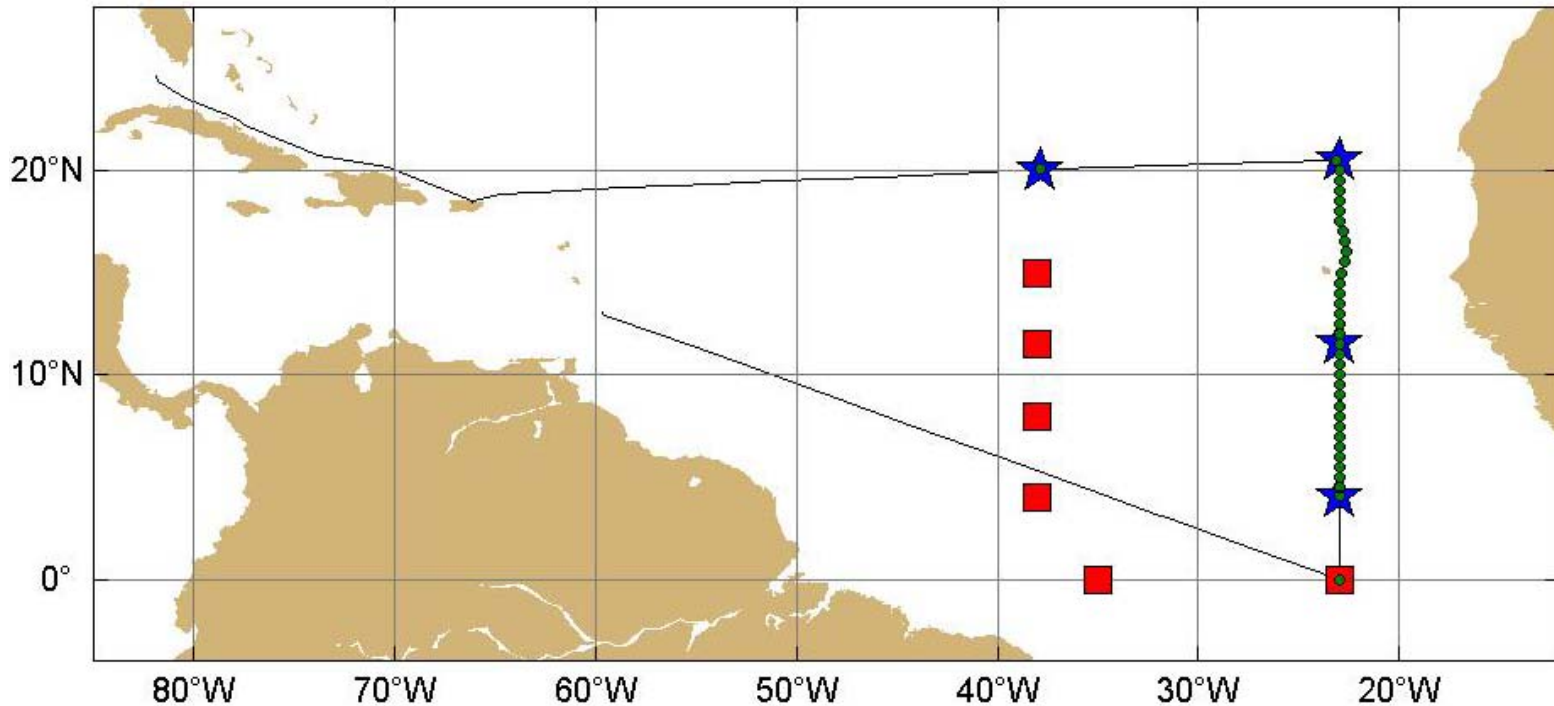




PIRATA Northeast Extension (PNE) cruises, 2009—2011



2009 (11 July—11 August)



Cruise track of the R/V *Ronald H. Brown* during RB-09-04 (black), with CTD stations (green bullets), PNE mooring sites (blue stars), and the PIRATA backbone sites (red squares) superimposed.

ATLAS mooring operations

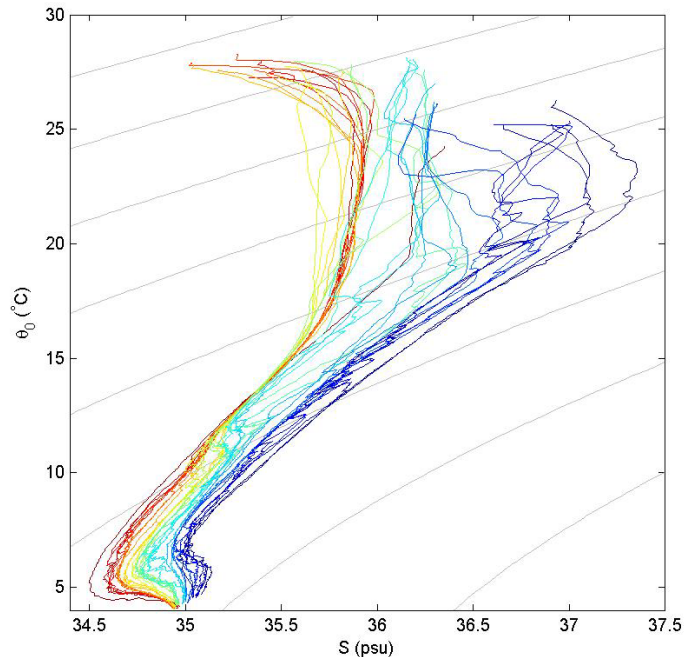
Summary of Mooring Operations		
Site	Mooring ID #	Operation
0 23W	PM779A / PM822A	Tube Swap
4N 23W	PM730A/PM831	REC/DEP
11.5N 23W	PM784A/PM832	REC/DEP
20.5N 23W	PM788A/PM833	REC/DEP
20N 38W	PM787A/835	REC/DEP

Noteworthy Operational Details:

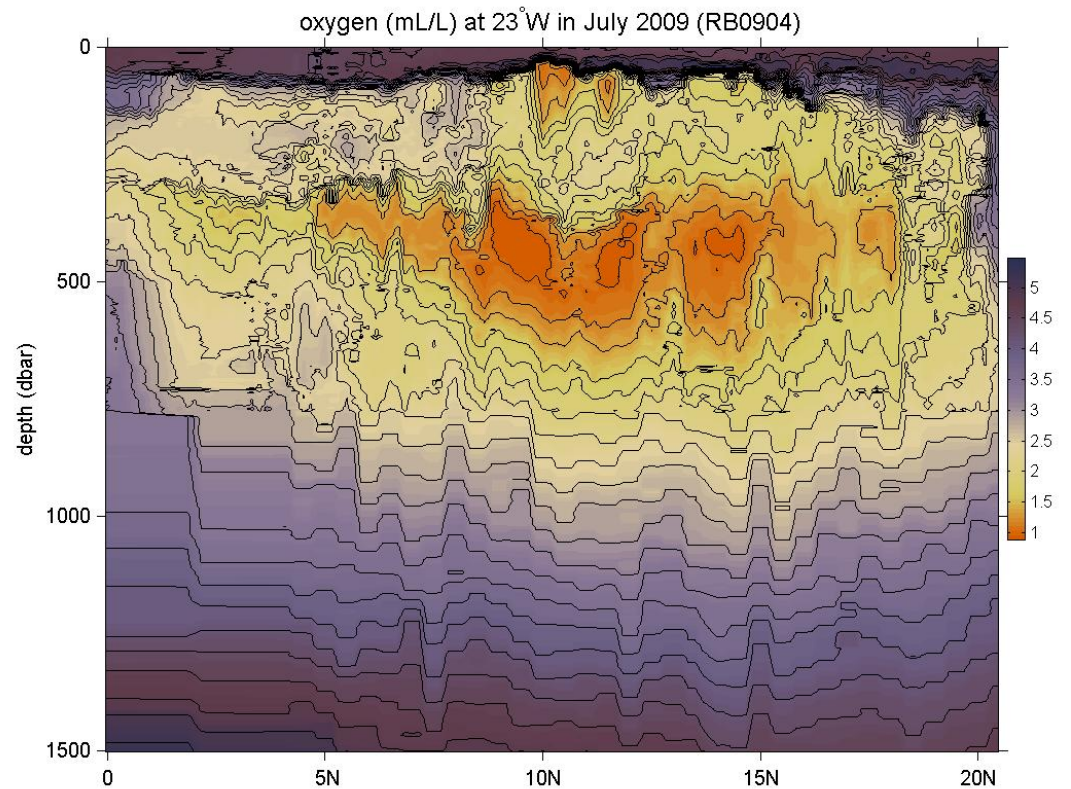
During operations at 0 23W and 4N 23W we experienced difficulty receiving Dep Mode data from the buoy. Reception range was spotty even at 0.2 nm. We were lucky to get 1 or 2 incomplete hits (i.e. partially filled AGOS Buffers on TWEEZERS). The usual fixes were tried (move antenna, change cables, change ARGOS receiver, reboot computer, clean and reseal all connectors, etc). None of the previous had any effect on improving the reception range. At 11.5N 23W we again went through the usual fix list, but this time we moved the antenna higher (on top of CTD winch house). We received all buoy data via ARGOS and TWEEZERS. This move of the antenna (we think) seemed to correct the spotty reception issue.

-- J. Michael Strick and Corey Martin, PMEL

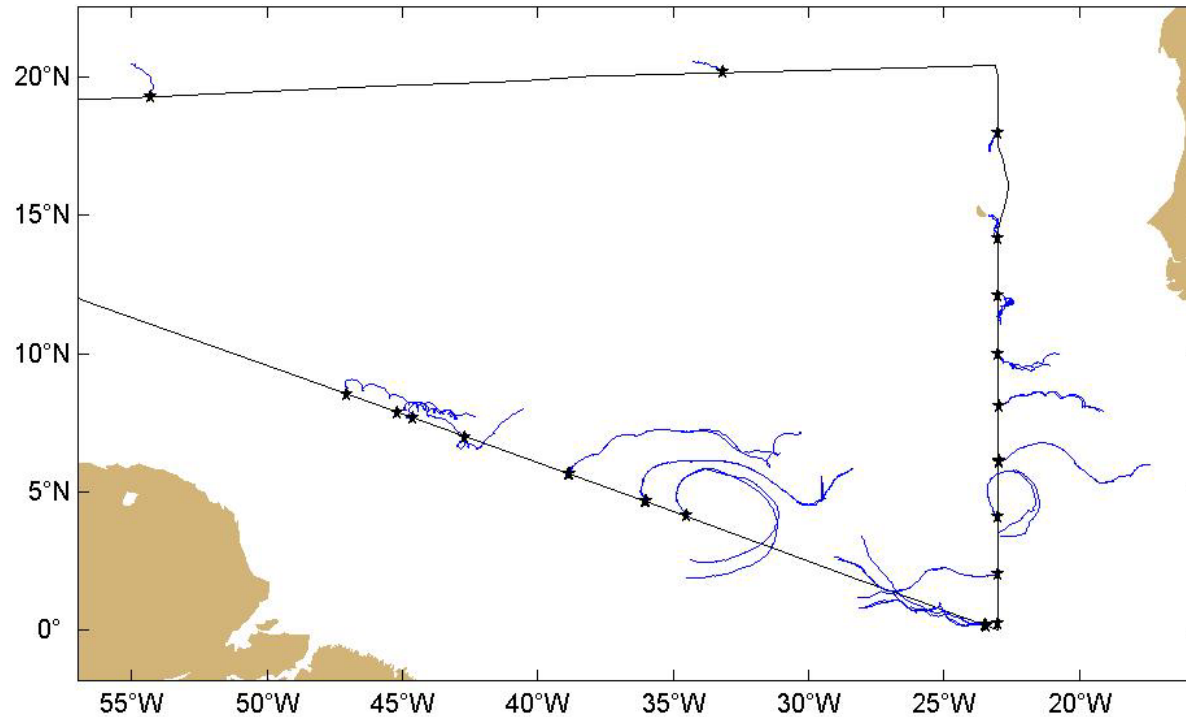
36 CTD casts



Salinity vs. potential temperature along the 23°W section. Colors indicate latitude, ranging from red (equator) to blue (20.5°N). Gray lines indicate constant density values.



Drifter deployments



32 drifters deployed during PNE2010. No floats, due to pressure problems.

XBT: 154 casts

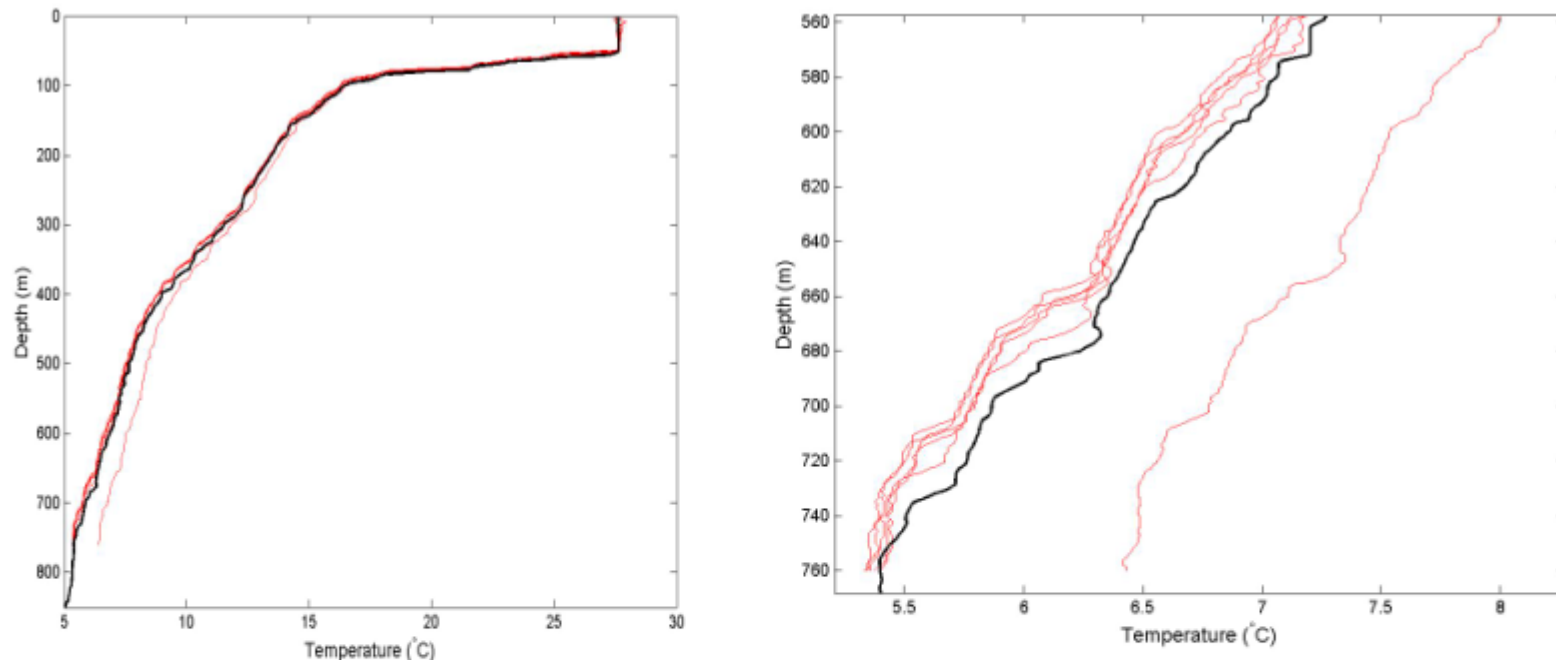
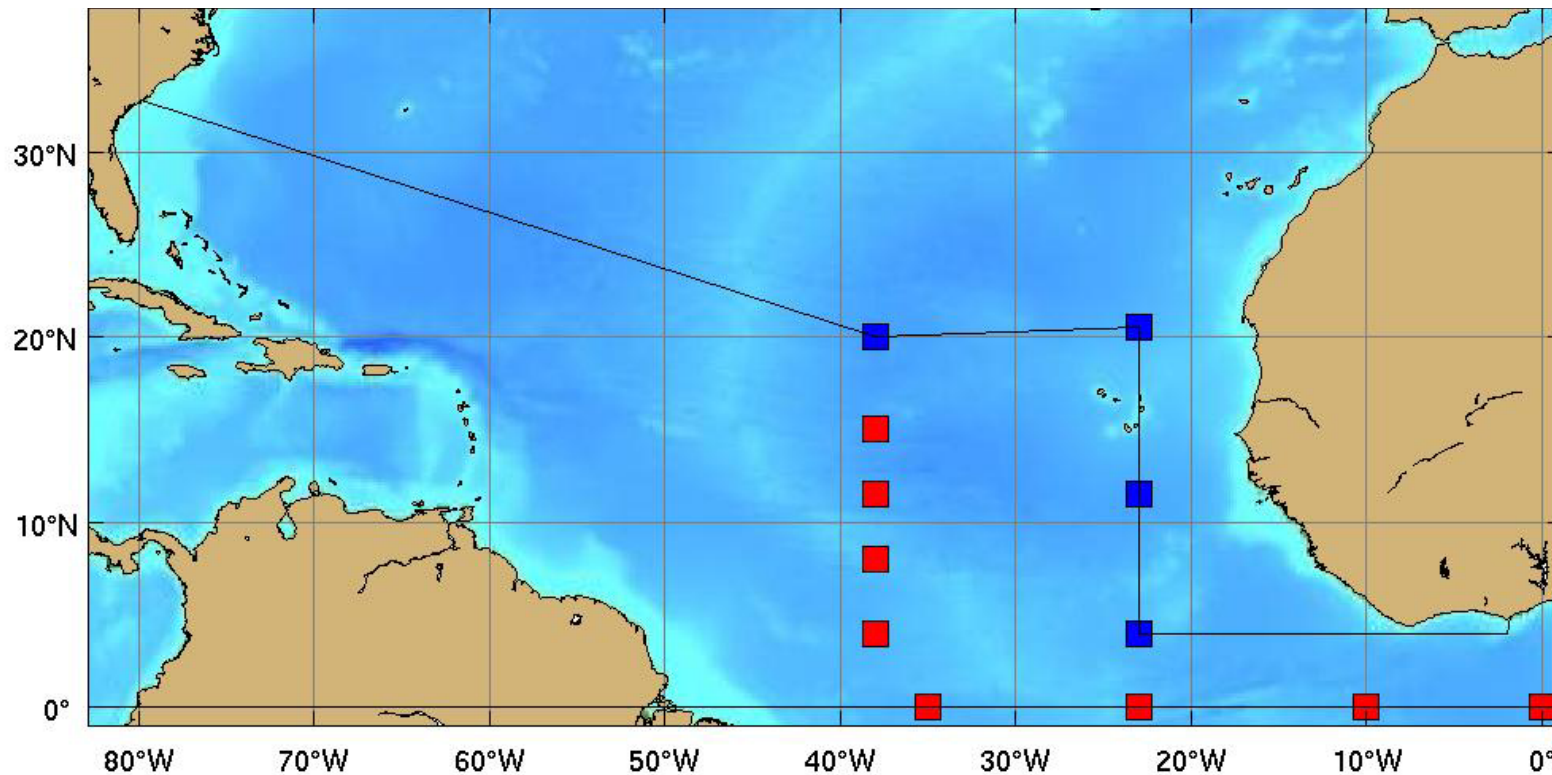


Fig. 7: comparison plot of 5 XBT temperature profiles (red) and CTD temperature vs. depth (black) at 4°N, 23°W. The right-hand panel shows a closeup at the bottom of the XBT casts. All XBTs underestimated depth by 7—28m, and one (serial number 552666, batch 4/86(1)) had a linearly increasing bias with depth (1.2°C too warm at 645m depth).

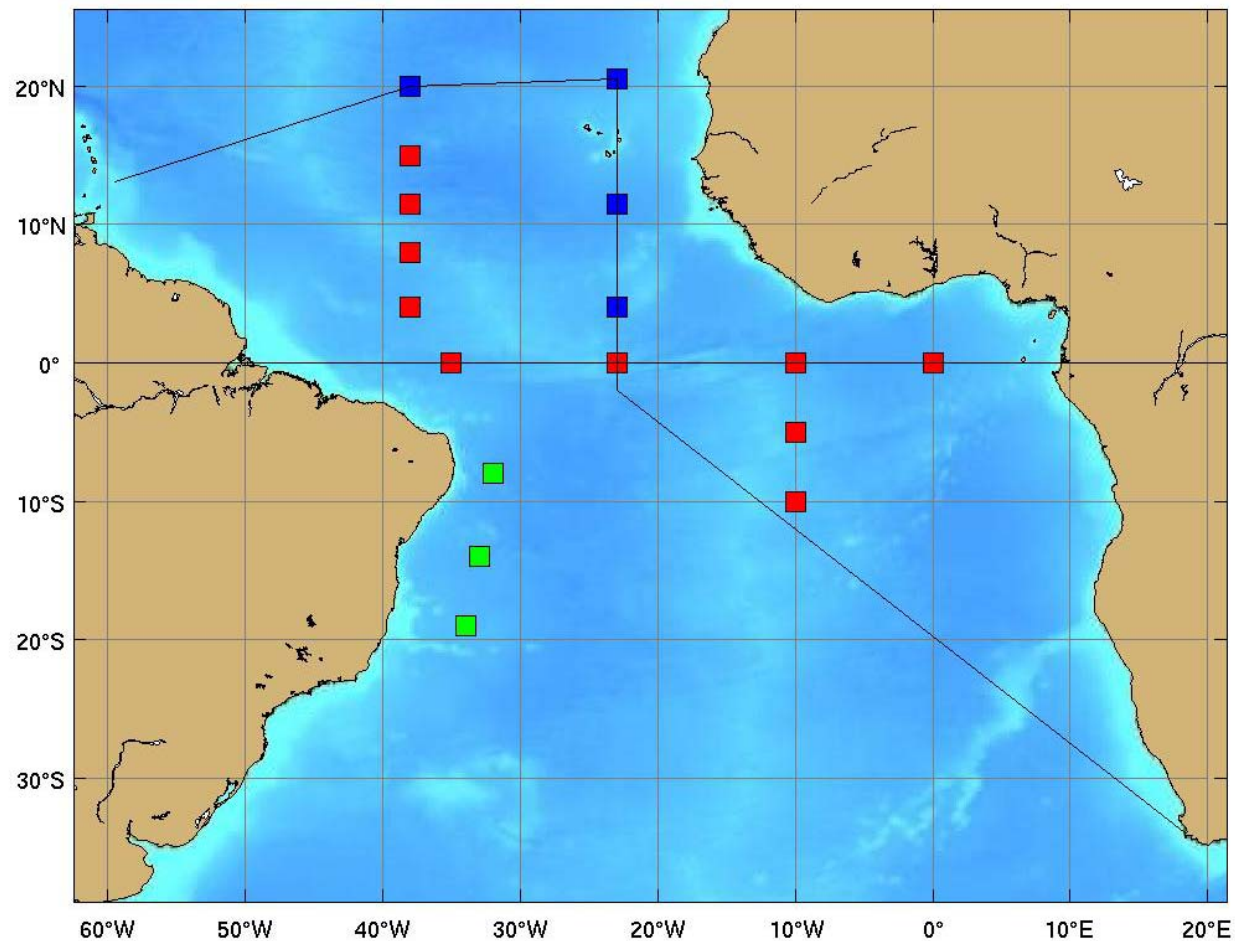
2010 (26 April—26 May)

Chief scientist: Claudia Schmid, AOML



Planned cruise track of the R/V *Ronald H. Brown* during PNE2010, Ghana to Charleston.

2011 (planned for mid-summer) Chief scientist: Rick Lumpkin



Planned cruise track of the R/V *Ronald H. Brown* during PNE2011, Cape Town to Barbados.

