

eMOLT

Fall 2008 Update

Reminder to return probe(s)...

You should find a eMOLT logsheet enclosed which lists your contact info, site info, and temperature probe serial number(s). Please correct any information (if necessary) and return it with your probe in the enclosed envelope when you are done fishing in 2008. If you fish year round and want a replacement probe immediately, let us know.

Bottom Temperatures: early 2008

We can't label 2008 as being "cold" or "warm" in general. It depends on what time of year you refer to. As documented by Bobby Nudd Jr in 20 fathoms of water off the coast of New Hampshire (Fig 1), for example, 2008 started out to be the coldest (relative to the previous 5 years) and now appears to be one of the warmest! In other words, there was a significant warming during the first half of this year.

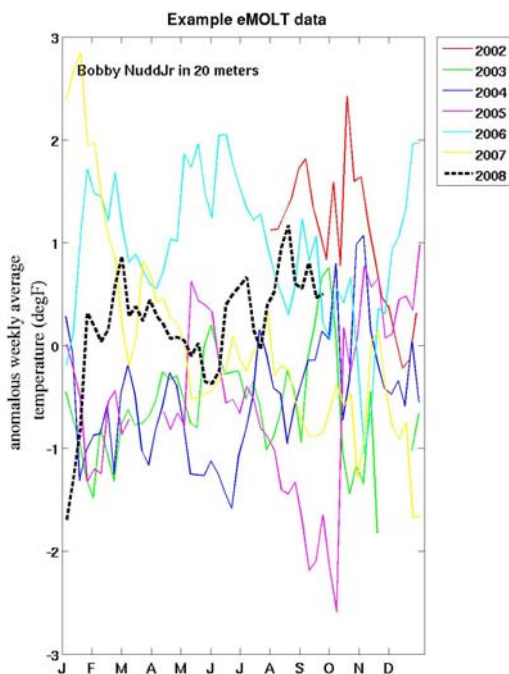


Fig 1. Bobby Nudd's temperature records off in 20 fths off NH showing 2008 (dashed) relative to other years with the mean seasonal cycle removed.

What do these interannual temperature changes mean in terms of catch? We still don't know. If we look at Bobby's catch data (Fig 2), we can see that the catch at this particular site has apparently fallen while the temperatures to not follow any particular trend. Is there something else going on? We don't know. Is this the definitive picture of these variables representing all of New England. No, this is result at one site off NH in 20 fathoms.

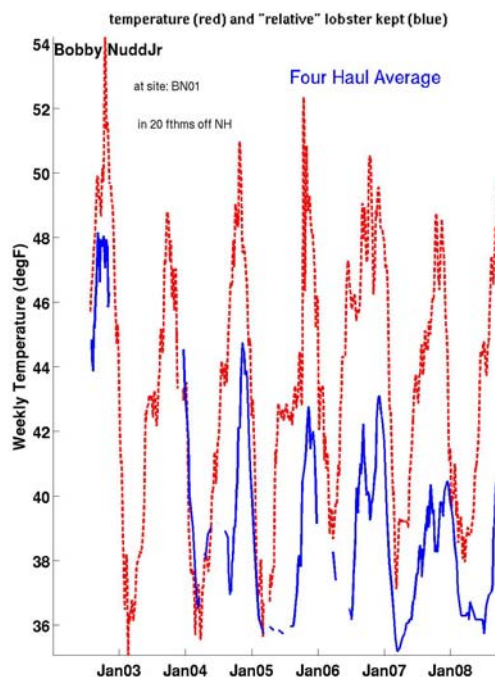


Fig 2. Bobby Nudd's time series of temperature (red) and catch (blue) from 2002 to present.

Real-time Temperature Update

Once again, there is very little to report on the development of a real-time temperature probe. While a few engineers have shown some interest and prototypes that have promise, a ready-for-real-world probe has not been delivered. If it were easy thing it would have been developed by now. One engineer spent some effort on developing a radio system that relayed data from a mooring in Woods Hole Harbor to a PC in my office (by-passing the satellite) but that system is still has power and range limitations.

eMOLT Interns

We are happy to have two computer science students from Cape Cod Community College to help with eMOLT tasks this winter. Joe Letourneau and Tanya Stoyanova will be assisting me a few hours per week each. They will be conducting routine eMOLT chores. One project we hope to accomplish in the next few months is the creation of laminated “site sheets”. We hope to send you a personalized sheet that has a detailed description of your site and your data (including lat/lon, loran, depth, and temperature statistics) on one side and a detailed chart of the sites on the other side. We will ask you to make corrections if needed and send it back. As always, we are on a mission to make sure we have the correct latitude and longitudes associated with each eMOLT site. Look for this “site sheet” to come in the mail in the next few months.

Drifter tracks in 2008

A total of 60+ satellite-tracked drifter deployments (to document surface flow patterns around the Gulf of Maine) were made so far in 2008. With some of them now reaching as far as the Grand Banks, these units have collectively traveled about 30,000 kilometers in 2008 alone. We want to thank several fishermen who helped recover drifters so we can redeploy them in 2009. Several units are still within the Gulf of Maine at the time of this writing and still transmitting. You can view the summary of this years drifters at: <http://www.nefsc.noaa.gov/drifter> .

eMOLT Phase VI: bottom currents

As noted in the last newsletter, we are in the process of developing an inexpensive bottom current meter. Just this past month we selected 10 eMOLT participants (based on where they fished) and mailed each of them one of these instruments to deploy. We asked particular fishermen that worked a) in the vicinity of GoMOOS moorings and/or b) in shallow (30 meters) of water. If these instruments perform well (i.e. compare

well with nearby GOMOOS observations), we hope to propose additional funding to deploy a more extensive array throughout the eMOLT study area and at deeper depths next year. We plan to report on this fall’s pilot study at the Maine Fishermen’s Forum and at the Mass Lobstermen’s Weekend in early 2009. A map of the current meter sites is shown below along with a photo of the instrument’s attachment to a trap.

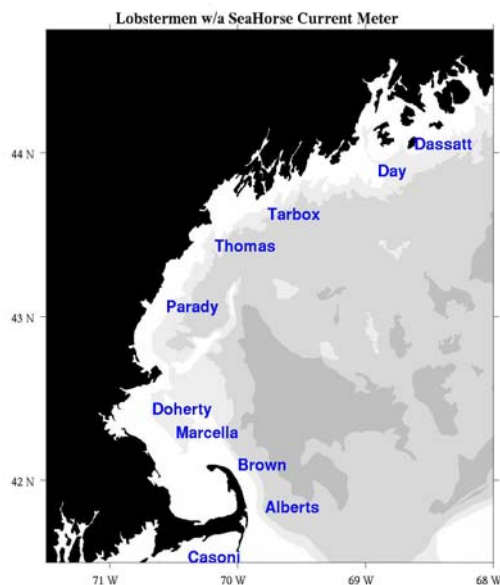


Fig. 3. eMOLT participants involved in bottom-current-meter study in the Fall of 2008.



Fig 4. Seahorse current-meter attachment to lobster trap.

We hope you have a successful Fall season. Thanks for continued eMOLT participation.