eMOLT  Fall 2016 Update

Bottom Temperature Project

Real-time temperature
We finally have the technology to see your bottom temperature in an automated way as soon as the trap is hauled. If you are interested in trying this out, let us know (email: james.manning@noaa.gov). The new system comes with a small micro-computer w/7” inch screen that gets mounted in the wheelhouse (to display the data) and a 10” by 3” box that is mounted & hardwired on top of the wheelhouse (to telemeter data via satellite). You do not have to push any buttons or alter your routine in anyway. We continue to make modifications and, while we do not claim to have the ultimate system yet (ie there may still be bugs), we are getting there. It is just an experiment.

2016 may be another record warm year
As seen in the 3 examples plotted, there is gradual increase in the annual average temperature. For the case of Alex Brown who has been participating since 2001, this last year was the warmest yet. Until this year, his bottom temperatures have been colder than those in Maine because he fishes in a more stratified water.

Mailing probes
When you are done fishing for the year, please remember to mail in your temperature probe to Jim Manning, NOAA, 166 Water St, Woods Hole, MA. 02543 and remember to provide documentation (latitude, longitude, depth) even if it is in the same location/depth as usual so that I can check my records.

Other Projects

Current meters
The current meters that many of you tried a few years ago have now been enhanced with a wireless download and include an internal temperature sensor.

Drifters
More drifters went in the water this year that any other year since we started. With over 50 high schools around New England building drifters in their classrooms, well over 200 units were deployed. You can see where they are located at anytime at http://www.nefsc.noaa.gov/drifter/drift_X.html.

Cameras on traps
We reported in the last email that we might be bringing the camera project back during the Summer of 2016 but that didn’t happen. Part of the problem is dealing with the data. Some of you showed it was easy to collect the data but the difficult, more time consuming, issue is processing the thousands of
images and making some conclusion.

**Unmanned sail boats**
This project, administered by “Educational Passages” in Belfast Maine, is quickly growing into an international sensation after dozens of the 5’ sail boats landing in various European countries in the past few years. Our contribution to the project, other than tracking the units, is to add a solar-powered sensor package on board. We had our first successful crossing of Cape Cod Bay this past week with air and water temperature telemetered during the crossing. The same technology that is installed on these boats can be installed on your lobster buoy if you are interested.

**Weather Stations on Fishing Boats**
As noted in the last few newsletters, the National Weather Service has funded us to install weather sensors on fishing vessels. After the first two experimental units operated for several months and successfully sent us hourly reports, we submitted a final report from the NWS. We will be negotiating with them in the near future to outfit many more boats so let us know if you are interested in having one of this systems on your vessel.

**Questions for you**

*Rotary current diagrams?*
The Marine Chart Division of NOAA is wondering if the rotary current diagrams (see below) that appear on charts only in the Northeast are useful. If not, they might remove them in the future. I would imagine they are useful, no?

*Willing to try some new technology?*
Let us know if you are interested in deploying a:
- realtime temperature sensor on one of your traps with a wheelhouse display
- weather station on your superstructure with a wheelhouse display
- solar-powered microcomputer on one of your surface buoys to telemeter temperature
- drifter for local schools

**Forum Plans**
We hope to see you all at either the Mass Lobstermen Weekend (19-22 January 2017 in Falmouth MA) or the Maine Fishermen Forum (2-4 March 2017 in Rockport ME). We have put in a proposal to have another eMOLT reunion of participants in 2017 similar to the events we had in 2005 and 2010 at the MFF and will let you know in a few months if that comes through.

Finally, I want to thank all the participants who have faithfully been involved with this project on a volunteer basis for so many years. I think you will find that NOAA is coming around to the fact that the fishermen can make a significant contribution to monitoring our marine environment.