

Newsletter plan

This is the first of what I imagine to be a near-monthly 1-page “newsletter” on drifter issues. Now that there are a few dozen labs using the SMCC/eMOLT drifters, we should probably try to compile our notes. If you have anything you would like to share with others (photos, funny stories, bad experiences, etc), please send it along to james.manning@noaa.gov. Keep in mind that most of the information regarding the drifters is now linked from the real-time website <http://www.nefsc.noaa.gov/drifter> but these periodic newsletters will provide your information on “what's new”. If you want to be removed from the mailing list or you want some of your colleagues to be added, let me know. This first issue is going out to all users that have deployed, or plan to deploy, this fall.

Check transmissions for a day or two before deployment

Given that the transmitter technology is constantly evolving and not all of these units work flawlessly, it is a good idea to set your transmitter outside the day before you deploy it under a clear sky view to make sure you are getting good fixes.

Set transmitters outdoors after shutting them off to verify they are indeed off

Those of you who were at the workshop in August should put your transmitters outdoors to make sure they were properly turned off. There was at least one case where the transmitter was left on which probably resulted in a 20-30% battery loss. A transmitter makes 3 attempts to get a fix with each sampling period so, if it is hidden from the satellite, the battery will run down 3-times faster.

Watch for fiberglass rods wearing due to buoy stick chaffing

We recovered several fiberglass rods this summer which, after having been at sea for a multiple weeks, were worn down at the point of contact with the plastic buoy stick. This might have been due to the holes in the buoy sticks being too small so that they didn't swing easily with wave movement.

Refrain from enabling the “advanced configuration” motion sensor

After experimenting with this function on a couple units attached to my bicycle, I found that it didn't work as it was supposed to. So, we may need to wait for another generation of transmitters before implementing this setting. We have however made use of the advanced configuration in order to get “48 samples per day”.

Hose-clamps vs cable -tie transmitter mounts

In our quest to minimize the cost of drifters, we recently started using heavy cable ties to secure the transmitters (where we used stainless hose clamps in the past). Last month, there was at least one documented case of the cable tie breaking. While this may have been due to the unit crashing on the rocks, it is worth noting nevertheless. If you experience any faults like this, PLEASE let us know.

Marine Advanced Technology Education (MATE) deployments

We are very excited to have expanded the use of these drifters around the country thanks to a NSF-funded workshop in August where nine schools each went home with two drifters. As noted on the real-time site, UMaine Machias and Cape Fear CC, for example, have already made deployments.

Documenting your deployments

One of the links under the real-time website allows you to document your deployment. Based on the information you enter it is suppose to give you the “deployment ID”. If you want to know this deployment ID BEFORE you deploy, see the “deployment ID convention” link that is under the “construction and technology” notes. Please keep in mind that these websites are constantly under development in our attempts to automate things as much as possible.