

Environmental Monitors on Lobster Traps and Large Trawlers (eMOLT)



More than one hundred commercial fishing vessels on the Northeast Shelf now have oceanographic sensors installed on their fixed and mobile gear. Some have experimented with tide gauges, acoustic listening devices, cameras, satellite-tracked drifters, current meters, and salinity monitors but the primary focus has been collecting **bottom temperatures**.

While some gear are fitted with internally-recording devices that have returned more than two decades of hourly data from fixed locations, about half the

vessels are fitted with satellite transmitters so that ~20,000 hauls have reported bottom temperatures in realtime. In the past year, several vessels are now equipped with water column profilers to document the vertical stratification of temperature and a few are collecting records of bottom dissolved oxygen. The primary goal is to feed the data to both ocean models and stock assessment models.

While the project was initiated at NOAA's Northeast Fisheries Science Center in 2001, the [Gulf of Maine Lobster Foundation](#) leads the administration/operations along with several partners. The original NOAA eMOLT page is [here](#).

To see list of vessels with recent observed and modeled bottom temperatures. click [here](#).

To see a map of observations from the last month, click [here](#).

To see a map of observations from the last week and how they compare to historical records, click [here](#).

Funding comes from a variety of sources over many years including:

- NOAA's Northeast Consortium
- NOAA's Ocean Technology Transition Program
- NOAA's Northeast Cooperative Research Branch
- NOAA's Integrated Ocean Observing Systems
- Mass Technology Collaborative

For more information on the project, how to get involved, and what instruments are used, contact james.patrick.manning@gmail.com