



We invite you to participate in the  
**NOAA ADOPT A DRIFTER PROGRAM**  
*A Program for Schools/Teachers/Students*

The National Oceanic and Atmospheric Administration (NOAA) Office of Climate Observation established the *Adopt a Drifter Program* (ADP) in December 2004. As part of this Program, teachers and university professors across the globe, along with their students, are invited to co-adopt a drifting buoy with educators and students in the United States. A drifting buoy (drifter) is a floating ocean buoy equipped with meteorological and oceanographic sensing instruments linked to transmitting equipment where the observed sea surface temperature data are sent to data collecting centers via satellites. An initial global array of 1250 drifting buoys was completed with the official launch and celebration of the 1250<sup>th</sup> buoy deployment from Halifax Harbour, Nova Scotia, on September 18, 2005. Ongoing deployment of drifting buoys continues to be essential to maintain the array at its complete level.

Drifter data are used to:

- track major ocean currents and eddies globally,
- ground truth data from satellites,
- build models of climate and weather patterns,
- track the migratory patterns of marine species,
- predict the movement of pollutants dumped or accidentally spilled into the sea, and
- assist with the forecast path of approaching hurricanes.

Through the ADP, students have access to their adopted drifter's data (e.g., latitude/longitude coordinates, time, date, sea surface temperature) in near real-time as well as data from other select drifting buoys deployed as part of the global ocean observing system. Students can access, retrieve, and create a time series plot of various subsets of drifting buoy data (e.g., SST). They can also track and map each adopted drifting buoy for short and long time periods (e.g., one day, one month, one year).

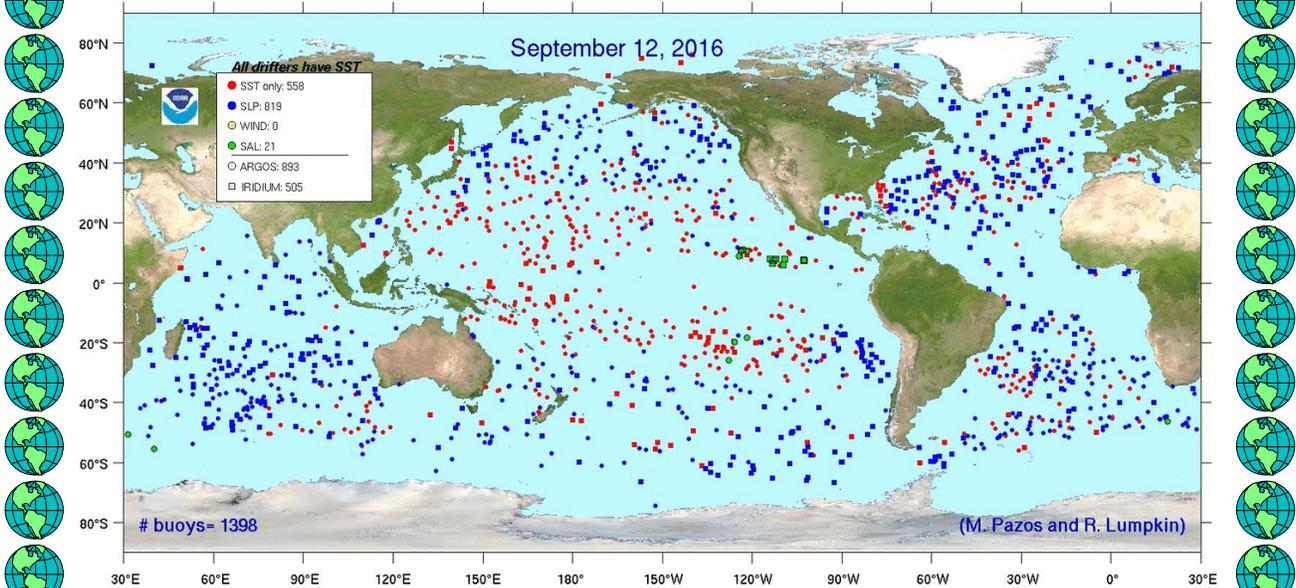
The ADP invites a school from the United States to partner with a school abroad and mutually adopt a drifter to be deployed from a vessel at sea. It is sometimes possible for a teacher from one or both schools to be on board the ship during deployment; this is not a prerequisite for participation in the Program. An educational sticker, school mascot, and/or drawing from each school is adhered to the drifter before deployment and photos are taken to document the activity. The teachers and students receive the World Meteorological Organization (WMO) number of their drifter to access the buoy's data online.

Participating teachers develop lesson plans to encourage their students to apply the drifting buoy data and communicate with their partnering students abroad. Students in the teachers' classes can also access a drifter tracking chart to plot the coordinates of the drifter as it moves freely in the surface ocean currents. Through this Program, teachers and students can more easily make connections between the data accessed on line and other maps showing currents, winds, etc.

Educators and students from all countries are invited to participate in the Adopt a Drifter Program. There is no cost involved for the participating schools. If interested, please contact Emily Smith at [emily.a.smith@noaa.gov](mailto:emily.a.smith@noaa.gov).



### STATUS OF GLOBAL DRIFTER ARRAY



The Data Buoy Cooperation Panel is an international body with a mission to coordinate deployment of drifting and moored buoys worldwide. This September 12, 2016, map shows the status of the drifting buoys as part of the ocean observing system, with 1398 buoys drifting across our ocean's surface. <http://www.aoml.noaa.gov/phod/dac/gdp.html> - Global Drifter Program



Mary Cook (on right), a middle school science teacher from Southside Middle School, Batesville, Arkansas, deployed the first adopted drifting buoy in the Pacific Ocean from the NOAA ship RONALD H. BROWN. The buoy was released off the coast of Chile in December 2004. Mary's students adopted this buoy and nicknamed it "Bob". A children's science book was written in conjunction with Mary's cruise on the RONALD H. BROWN. The book, entitled *Teacher at Sea: Miss Cook's Voyage on the RONALD H. BROWN*, highlights the scientific work conducted on board. If you are interested in reading the book, you can view it online at: <http://teacheratsea.noaa.gov/books/index.html>.

