Global Drifter Program (GDP)

Drifter Measurements of Surface Currents, Sea Surface Temperature, Winds and Atmospheric Pressure

www.aoml.noaa.gov/phod/dac/gdp.html

Rick Lumpkin
(Rick.Lumpkin@noaa.gov)
National Oceanic and Atmospheric Administration (NOAA)
Atlantic Oceanographic and Meteorological Laboratory (AOML)
Miami, Florida USA
Parts of a drifter

Surface float: includes satellite transmitter and thermometer

Tether: connects surface float and drogue

Holey-sock drogue (sea anchor): centered at 15 meters depth, helps drifter follow the currents instead of being blown by the wind
Global Drifter Array
~1250 buoys worldwide

STATUS OF GLOBAL DRIFTER ARRAY

March 12, 2007

(M. Pazos and R. Lumpkin)
Drifter Operations Center

Objectives:

To maintain a global 5x5 array of Argos tracked lagrangian drifters to meet the need for accurate and global in-situ observation of SST and surface circulation.

These data support:

- Short term climate prediction
- Satellite observation calibration
- Climate research and monitoring
Objectives:
The goal of the Drifter Data Assembly Center is to assemble and provide uniform quality controlled data of research quality for sea surface temperature and surface velocity measurements.
Average drifter speed (color, in meters per second) and direction (arrows) in the Caribbean, Gulf of Mexico and Sargasso Sea
Drifters measure sea surface temperature and near-surface currents. They show where plankton and passive larvae will go when carried by ocean currents, and what temperature changes they will experience.

http://www.aoml.noaa.gov/phod/dac

http://www.aoml.noaa.gov/phod/dac