

Improving slip removal from undrogued drifters

Authors: Rick Lumpkin, Shaun Dolk

A daily, gridded surface current product tuned to match drogued drifters as closely as possible is used to remove the slip from undrogued drifters and Argo floats, and generate a homogeneous data set of surface velocities at 15m depth. Error analyses quantifies the increased uncertainty of these velocities from undrogued drifters and floats. Spatial patterns of drogued vs. uncorrected, undrogued velocities reveals the distribution of vertical shear in the upper 15m as well as Stokes drift and direct wind forcing.