Circular Blobs at the Delaware Bay Mouth

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Abstract

Simulated particle trajectories from archives of synoptic high frequency radar velocities can be used to study time-dependent kinematic parameters for surface currents. For a specific time period a circular blob will be initialized with the HF radar surface current velocity field. The analysis will include time series of blob perimeter, area and circulation for several days within the footprint. The deformation, divergence and vorticity will be ascertained by the corresponding blob parameter. Ultimately we hope to gain more knowledge of the surface current variability at the Delaware Bay Mouth through estimates of these kinematic variables.