

Temporal variability of large-scale geostrophic forcing on the US Virgin Islands: Towards understanding the influence of large-scale phenomena on small scale



<u>larval transport</u>

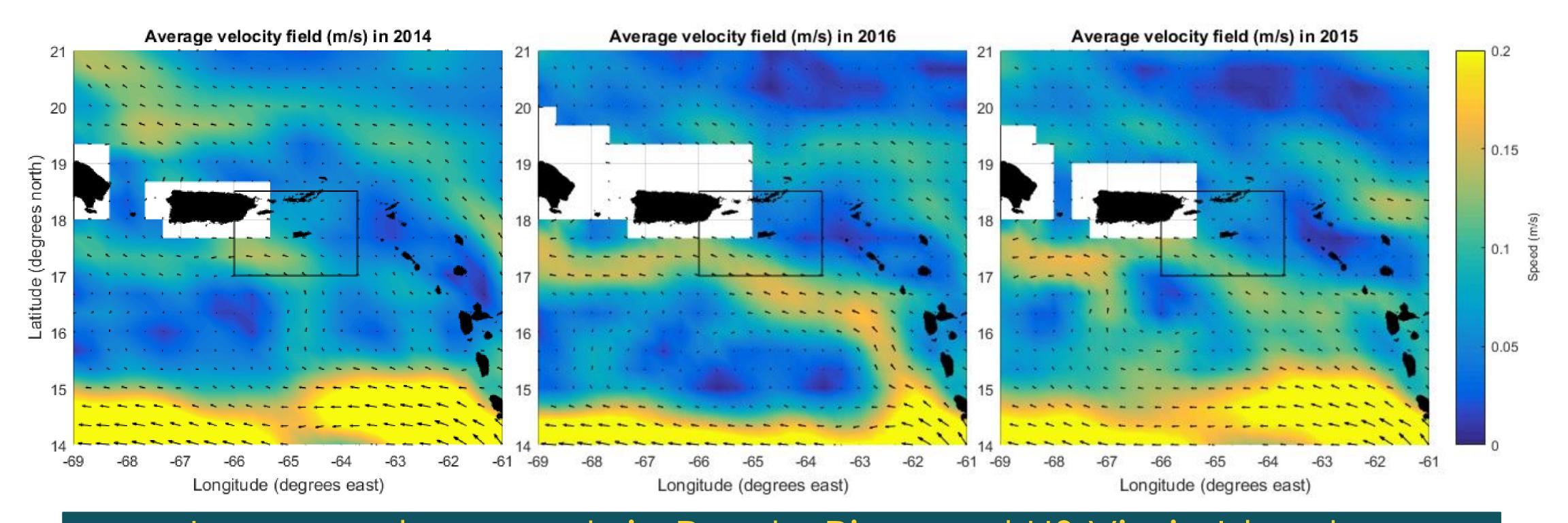
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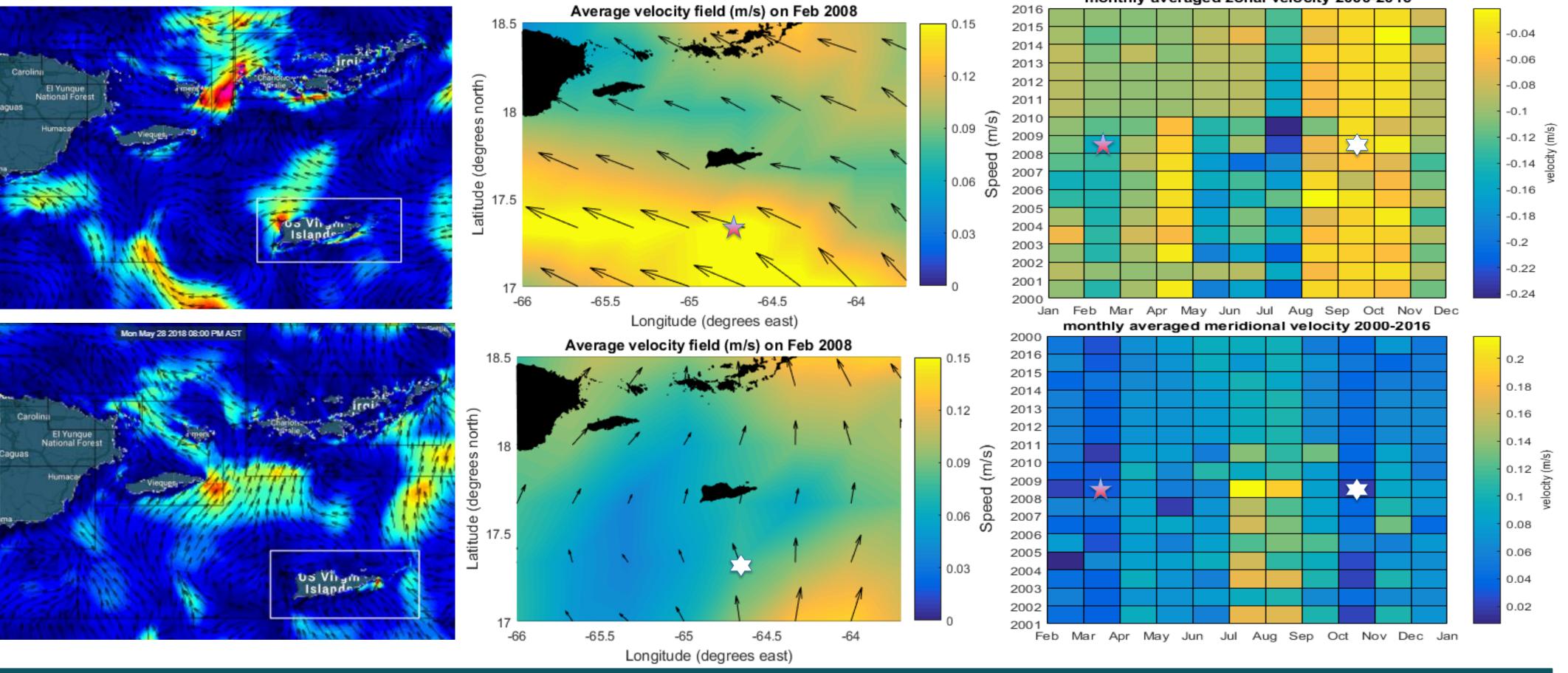


Caribbean OSCAR-derived Currents Overview

Oscar (Ocean Surface Current Analysis Real-time) data are applied to understand the influence of large-scale current forcing on the US virgin Islands. OSCAR-derived currents use geostrophic assumptions on altimetry and wind data collected from various satellites and in situ instruments, and are based on quasi-linear and steady momentum equations. The spatial resolution is 1/3 degree, with 5-day updates.



Large-scale currents in Puerto Rico and US Virgin Islands monthly averaged zonal velocity 2000-2016



Influence of large-scale currents on St. Croix circulation patterns

