

THE ROLE OF METEOROLOGICALLY AND TIDALLY DRIVEN FLOWS IN THE ESTUARINE RECRUITMENT OF FALL-WINTER SPAWNED LARVAL FISH AND POST-LARVAL BROWN SHRIMP

Recruitment Corridor

Valuable and productive Northern Gulf fisheries depend on the recruitment of larva from offshore winter spawning sites into estuarine nursery grounds

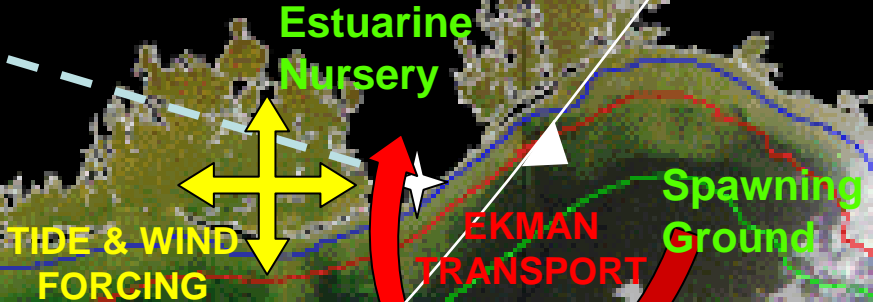
- Wind forced and tidal generated currents are hypothesized as critical components of the **Recruitment Corridor**.
- Our goal is to determine the relative role of wind and astronomical tidal currents.
- Potential to predict consequences of changing environmental conditions, coastlines & climate.



PORT FOURCHON TIDAL PASS
 ICHTHYOPLANKTON SAMPLING
 LSU Coastal Fisheries Institute

Acoustic Doppler Current Profiles
 Fixed Moorings and Surveys
 LSU Coastal Studies Institute

Linking Scales and Testing Hypothesis
 Lagrangian Individual Based Particle Tracking - Matlab
 NRL NGOMNFS – Raster maps – Velocity vectors, Temperature, & Salinity
 NOAA, SEFSC



Brown shrimp (*Farfantepenaeus aztecus*)



Gulf menhaden (*Brevoortia patronus*)



NOAA
 Office of Oceanic and Atmospheric Research
 Northern Gulf Institute

Background Image: REMSS QuickScat Wind Vectors
 April 26, 2007, 1801 UTC
 LSU Earth Scan Lab

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