Recent Pelagic *Sargassum* Bloom in the Tropical North Atlantic

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Sargasso Sea COVERAGE Mapping Workshop, 20-22 March 2016, Key West
Loop Current and Associated Eddies

Gulf of Mexico
Sailfish

Swordfish
Pelagic *Sargassum* Influx in Tropical Atlantic Nations
San Andrés, Colombia
Oct. 2014
Erick Castro
Sierra Leone
August 2011

West African coastlines impacted by *Sargassum* in 2011 (Sierra Leone and Benin); first documented account.
QUESTIONS

- Why the mass influx of *Sargassum*; Why now?
- Source/origin?
- Transport into the region?
- Local/regional productivity/nutrification event?
- Climate change?
- Duration: singular, annual or episodic event?
Pelagic Sargassum Reporting Website

Gulf Coast Research Laboratory (GCRL) web site to accommodate the reporting of sargassum masses along Caribbean shorelines & in adjacent waters.

http://www.usm.edu/gcrl/sargassum/sargassum.observation.form.php

Report Caribbean Sargassum
Pelagic *Sargassum* Landings In Eastern Caribbean
Backtracks for 1 Year using HYCOM ocean model

www.usm.edu/gcrl/sargassum/sargassum.observation.form.php
North Atlantic Oceanic Connections
Vectors calculated from NOAA/AOML satellite drifters
1979-2014

North Equatorial Recirculation Region (NERR)
Connection: NERR and North Atlantic
Sargassum Arrived in the NERR from Where?

Satellite surface drifters released 1979-2014
Satellite surface drifters released 1979-2014
Validated backtrack model results
NERR: Recirculation, Retention, Growth
Invasion Prediction Using Drifter Currents
And starting locations from C. Hu May 2011
Using HYCOM currents
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- Association of Caribbean Fisherfolk