

# State of Texas Workgroup

7<sup>th</sup> annual NOAA/NGI Hypoxia Research Coordination  
Workshop:

Building the Cooperative Hypoxia Assessment and  
Monitoring Program  
(CHAMP)

# Members

- Steven F DiMarco (TAMU): LEAD
- Hussein Abdullah (TAMU-CC)
- John “Chip” Breier (UT-RGV)
- David Hala (TAMU-Galveston)
- UT-MSI: TBD

# TX Working Group Purpose

- To identify monitoring elements along the Texas coast and devise a plan to improve, expand, or leverage federal and state efforts related to hypoxia and related stressors

# TX Working Group Goals

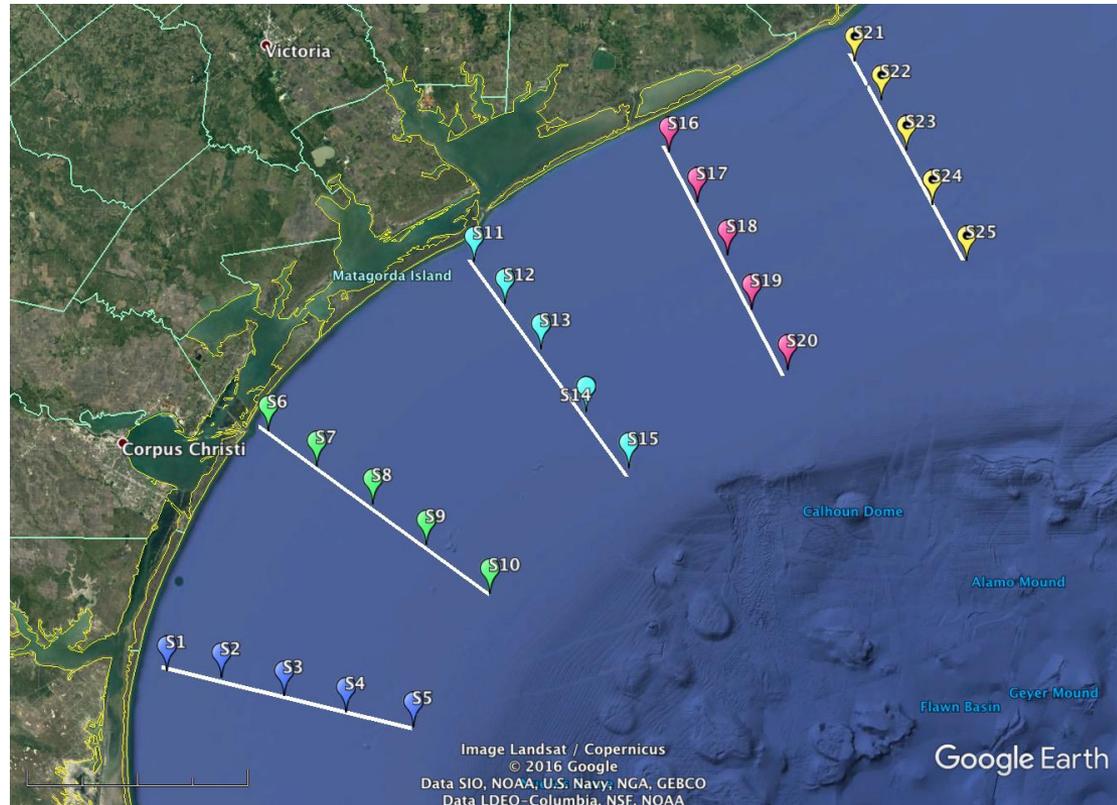
- Identify requirements of hypoxia monitoring plan for Texas
- Identify and Quantify sources of nutrients on the Texas coast
- Identify mechanisms that initiate and control the location, severity, and duration of Texas coastal hypoxia
- Identify mechanisms that differentiate MARS and Texas hypoxia

# TX WG Current Activities

- Texas OneGulf Center of Excellence (WTX)
  - 2018 Field Campaign: Padre Island to Sabine
- NSF RAPID Awards: Hurricane Harvey
  - 5 awards to TAMU
- Repeat Transects: Galveston to FGBNMS
  - TAMU: Observing the Ocean REU
  - June cruise: RV Pelican
  - RV Manta SCS dataset
- Resources: MCH Atlas released (Dec 2017)
  - <http://mchatlas.tamu.edu>
- Resources: <http://pong.tamu.edu/tabswebsite>
- Resources: Texas HF Radar Network, TABS

# WTX Cruises

- Upwelling System
  - June/August/September/Nov
- Water Quality
- Acrobat
- Stable Isotopes
  - O, N
- Texas OneGulf
  - TCEQ/RESTORE



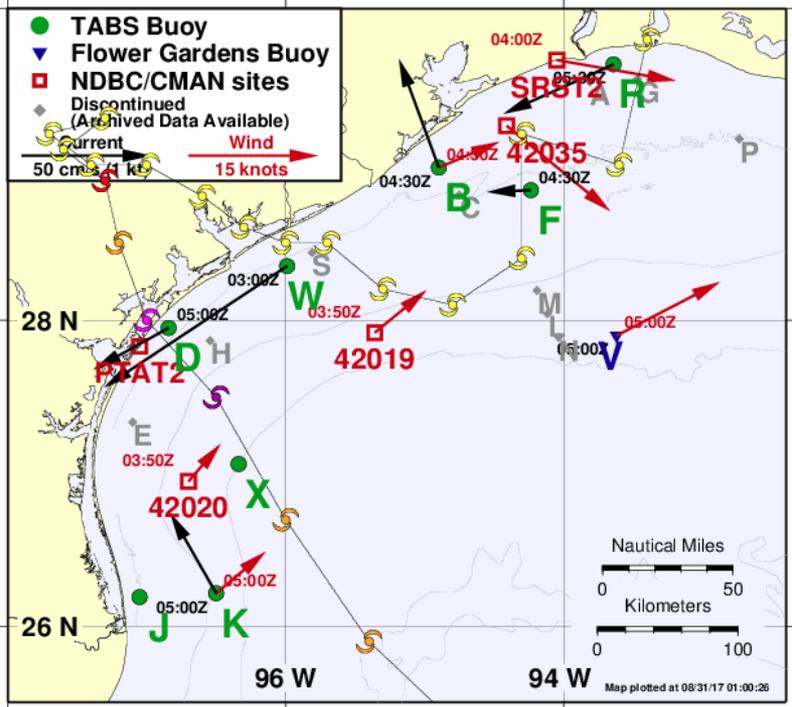
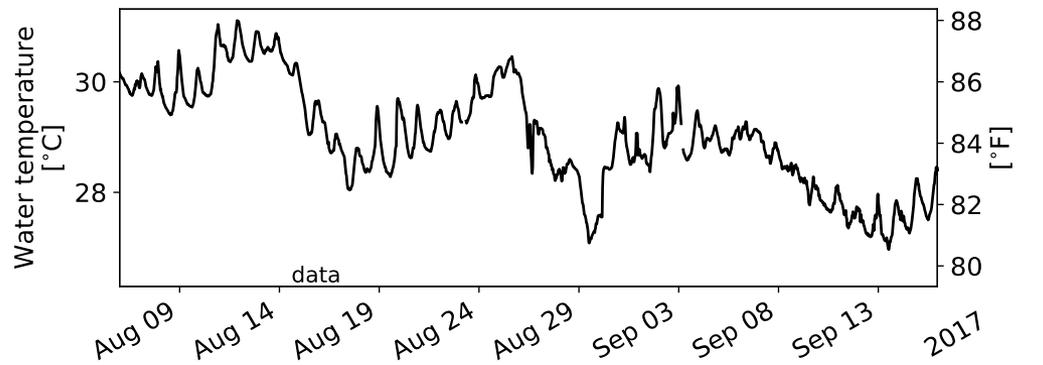
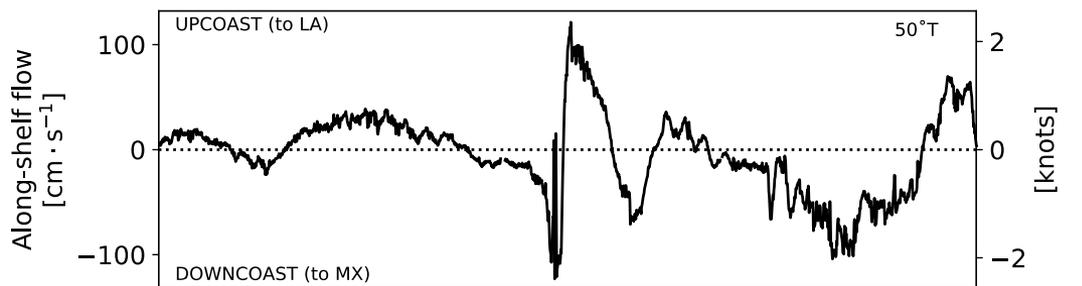
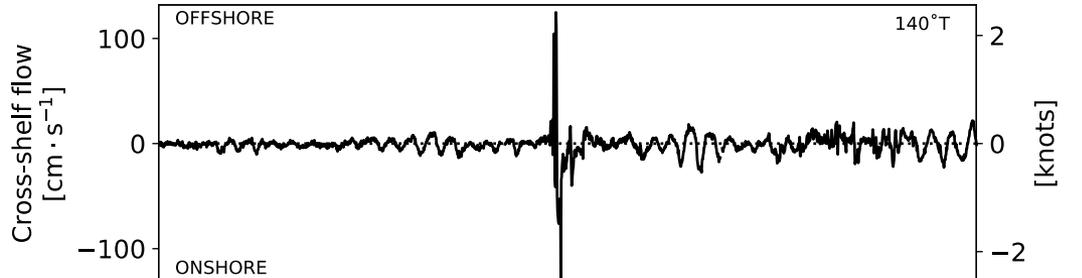
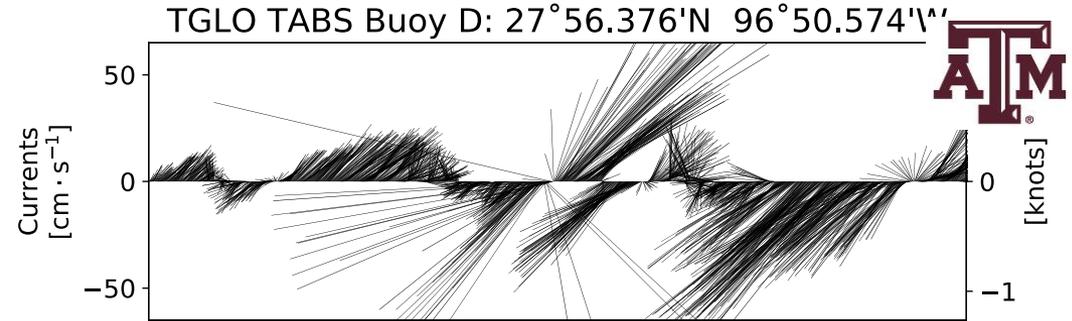
# Hurricane Harvey: 25 August 2017



I-10 near Winnie, TX  
8/29/2017, 1706 CDT  
@DadePhelan

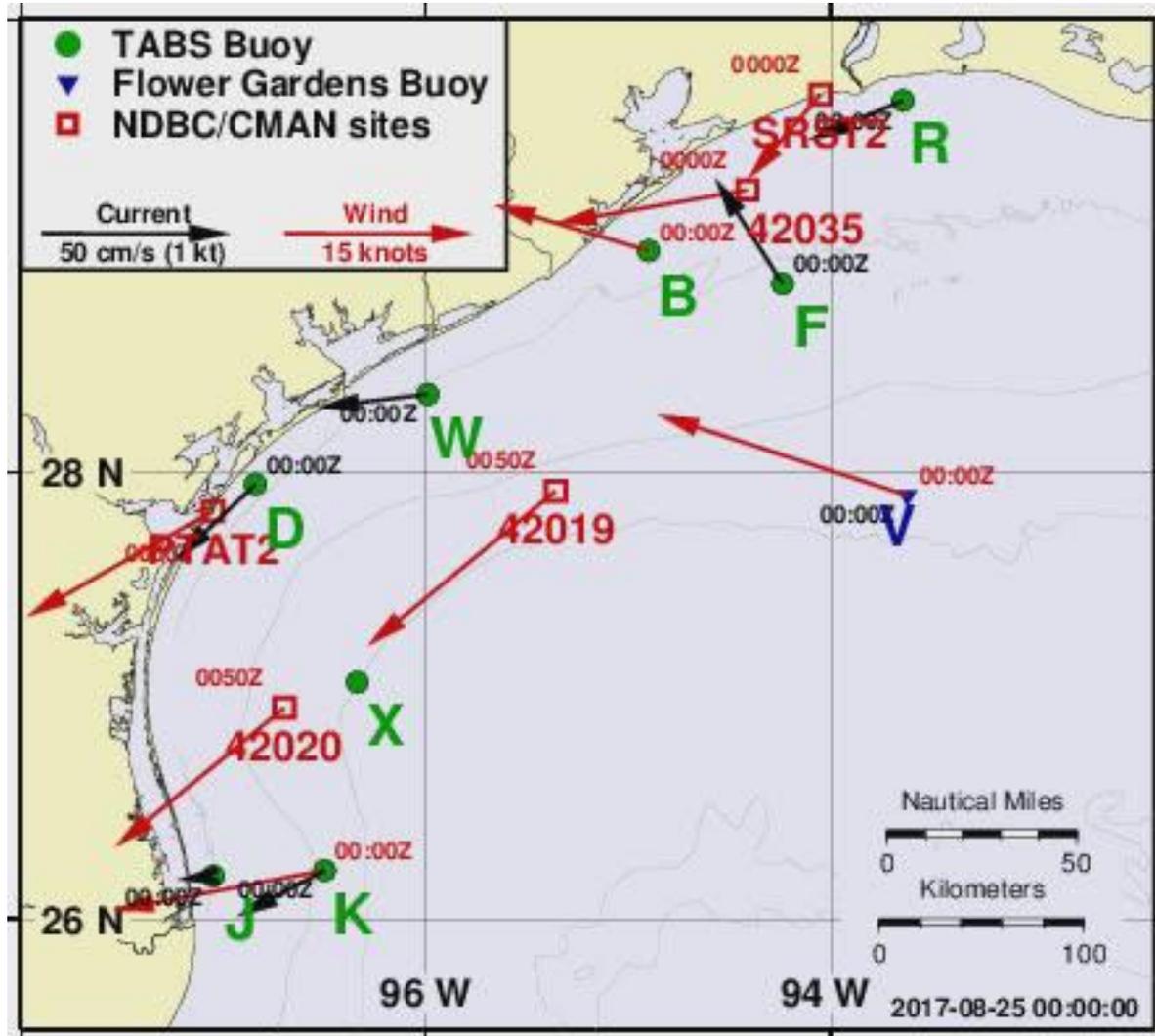


# TABS Observations: Hurricane Harvey

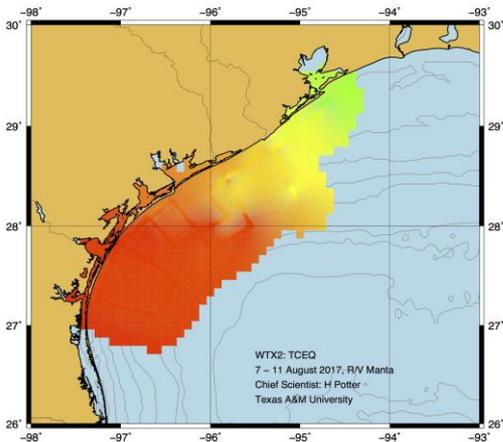
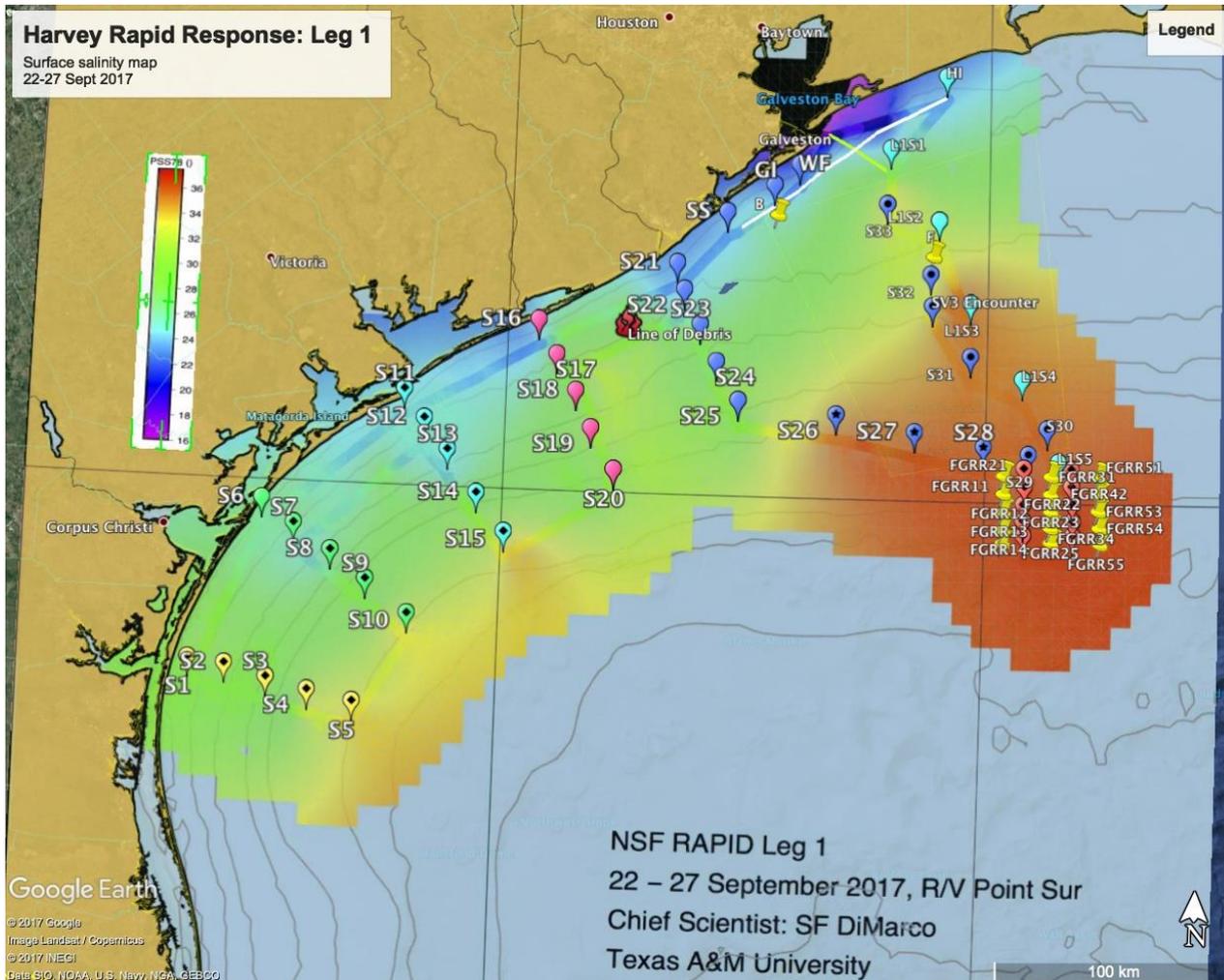
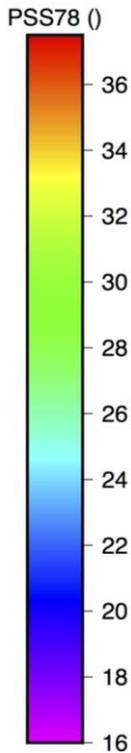


TGLO, GERG, Oceanography, and Texas A&M make no representations or any other warranty with regard to this data. These data are not suitable for navigation purposes.

# TABS Observations: Animation



# Freshwater Distribution



© 2017 Google  
 Image Landsat / Copernicus  
 © 2017 INEGI  
 Data: SIO, NOAA, U.S. Navy, NGA, GEBCO

<http://mchatlas.tamu.edu>

# MCH ATLAS:

**Oceanographic Observations of the  
Mechanisms Controlling Hypoxia Project**

Authors

Steven F. DiMarco

Heather M. Zimmerle

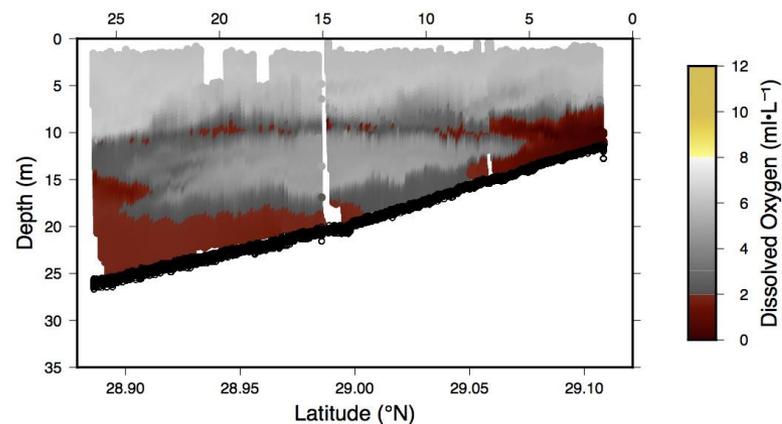
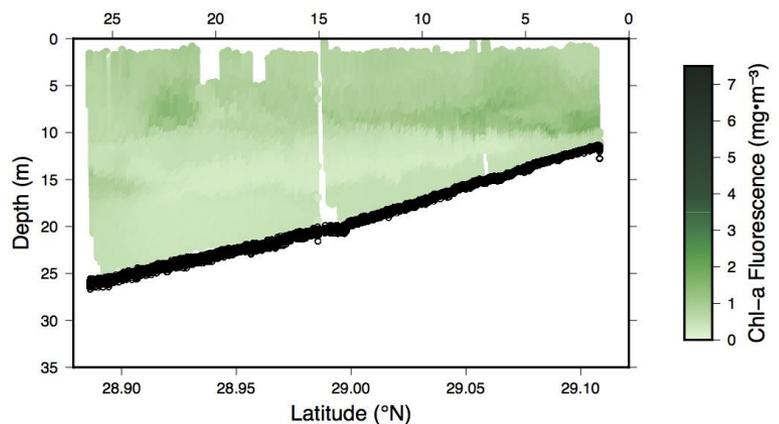
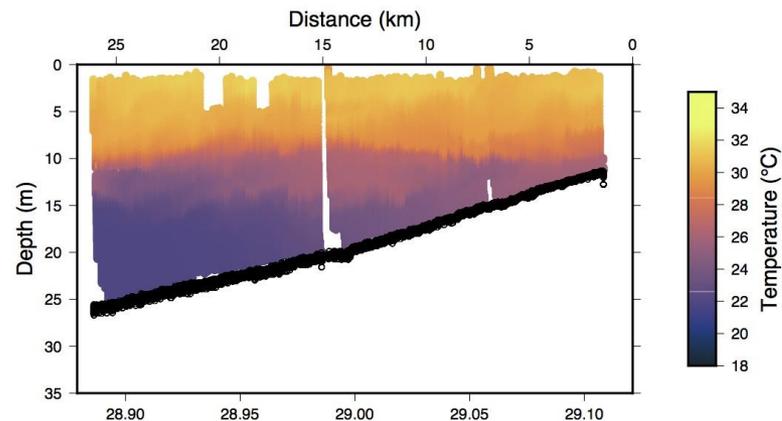
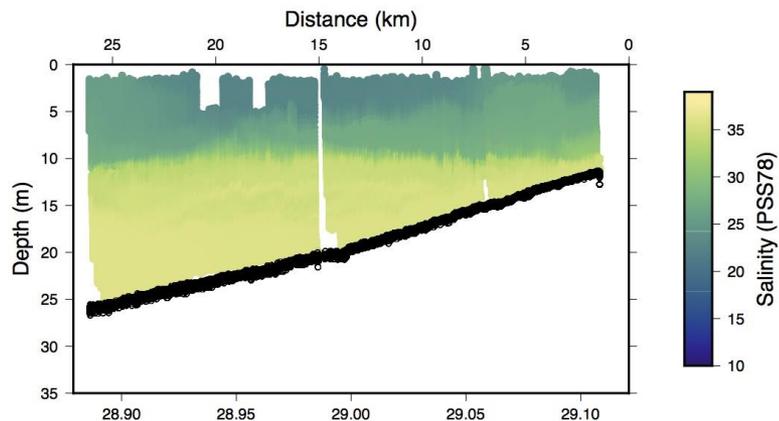
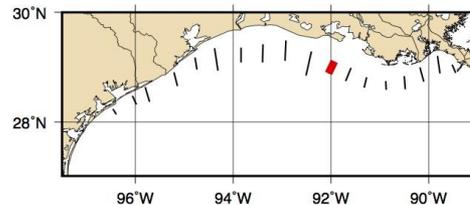


Limited Hard copies are available: see SF DiMarco

# MS07

Line 09

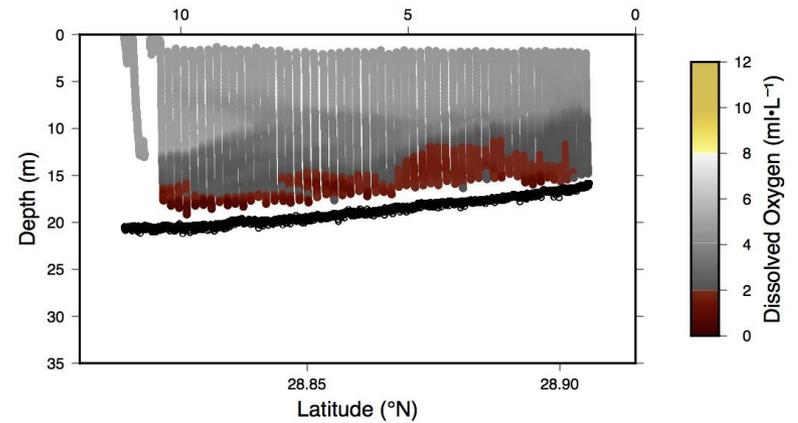
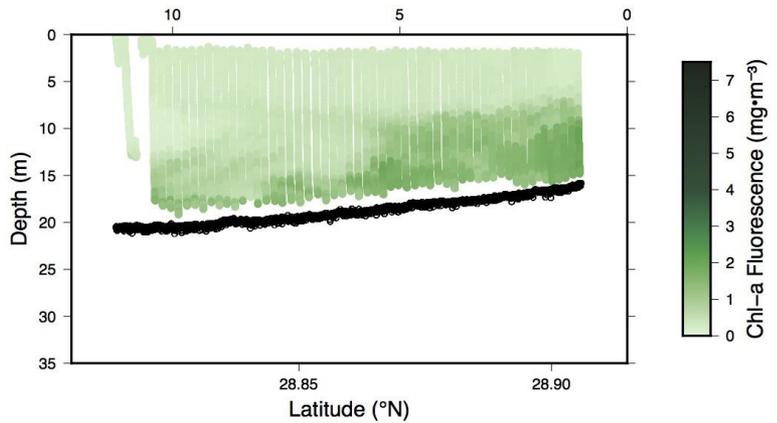
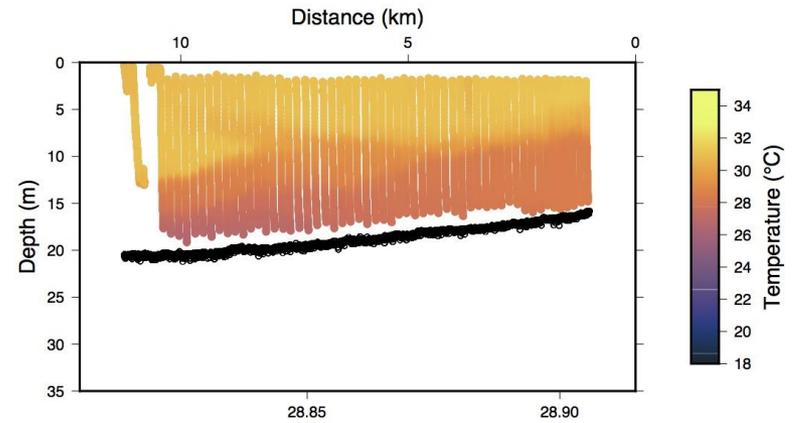
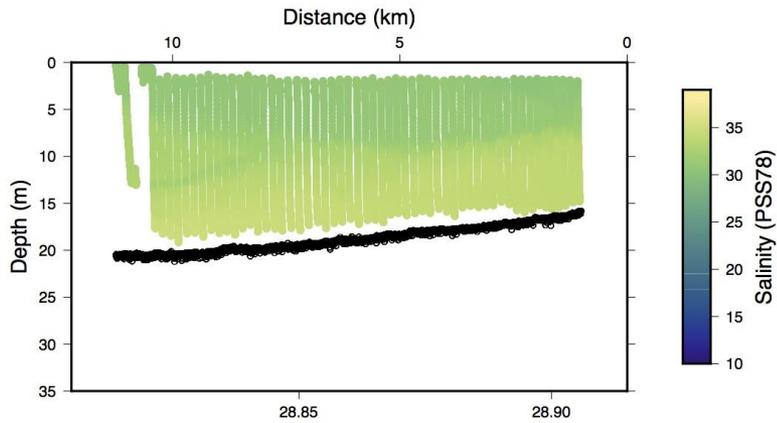
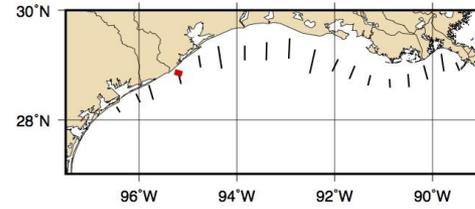
23 Jun 2013



# MS02

Line 02

06 Aug 2010



# TABS: New Website



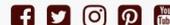
George P. Bush, Commissioner  
Oil Spill Prevention & Response



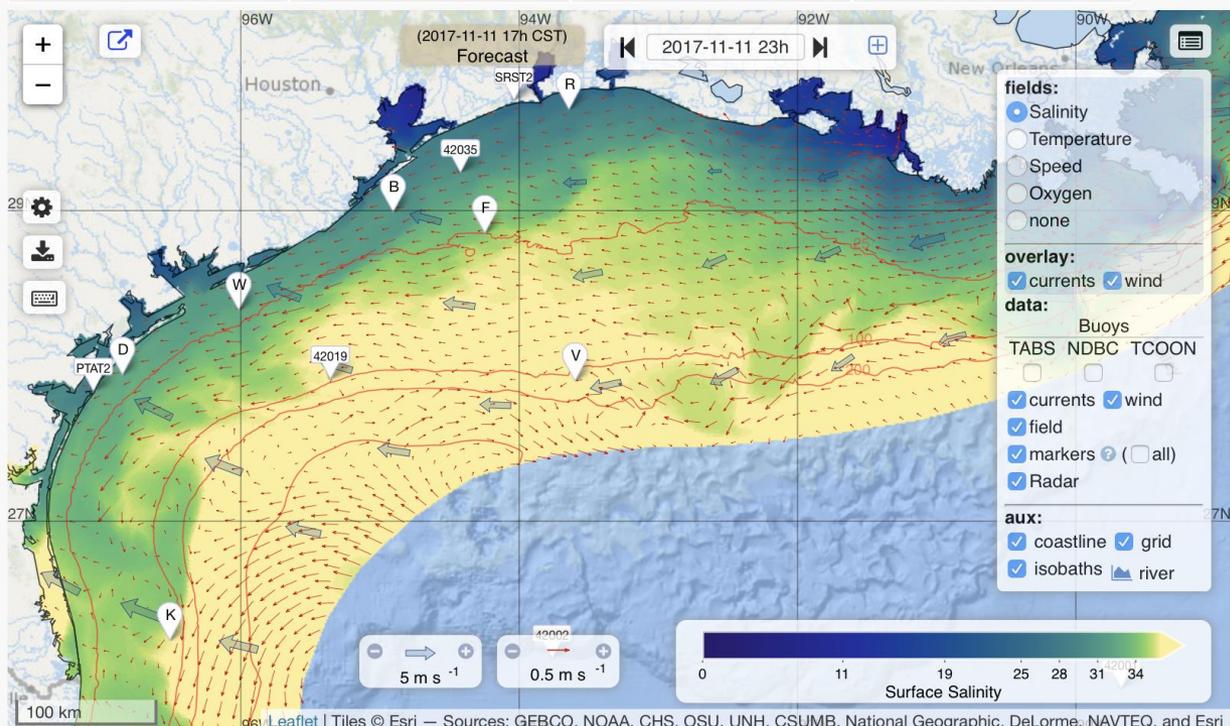
**TEXAS Automated Buoy System**  
Real Time Ocean Observations and Modeling  
Supporting Oil Spill Prevention and Response since 1995



**ENVIRONMENTAL RESEARCH GROUP**  
TEXAS A & M UNIVERSITY



DATA PRODUCTS    MODEL PRODUCTS    OIL SPILL PRODUCTS    MORE



### Recent Last data report

B	Nov 11, 2017 13:30 CST
D	Nov 11, 2017 16:00 CST
F	Nov 11, 2017 16:30 CST
J	Aug 26, 2017 04:30 CDT
K	Nov 11, 2017 16:30 CST
R	Nov 11, 2017 16:30 CST
V	Nov 11, 2017 16:30 CST
W	Nov 11, 2017 16:00 CST
X	Aug 25, 2017 08:30 CDT
42019	Nov 11, 2017 15:50 CST
42020	Oct 13, 2017 17:50 CDT
42035	Nov 11, 2017 15:50 CST
SRST2	Nov 11, 2017 16:00 CST
PTAT2	Nov 11, 2017 16:00 CST

[Fullscreen map](#)

The vectors on the map point toward the direction that the currents or winds are flowing and represent the average for the last three hours of the available data. The date and time at each station indicates the end of the three-hour average.

<http://pong.tamu.edu/tabswebsite>

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- NOAA CSCOR: Glider Implementation Plan
  - July 2018
- Texas OneGulf Center of Excellence (WTX)
  - 2018 Field Campaign: Padre Island to Sabine
- NSF RAPID Awards: Hurricane Harvey
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