

# Bay Water Quality Monitoring in Virginia

TMAW

January 5, 2012

Ken Moore, VIMS

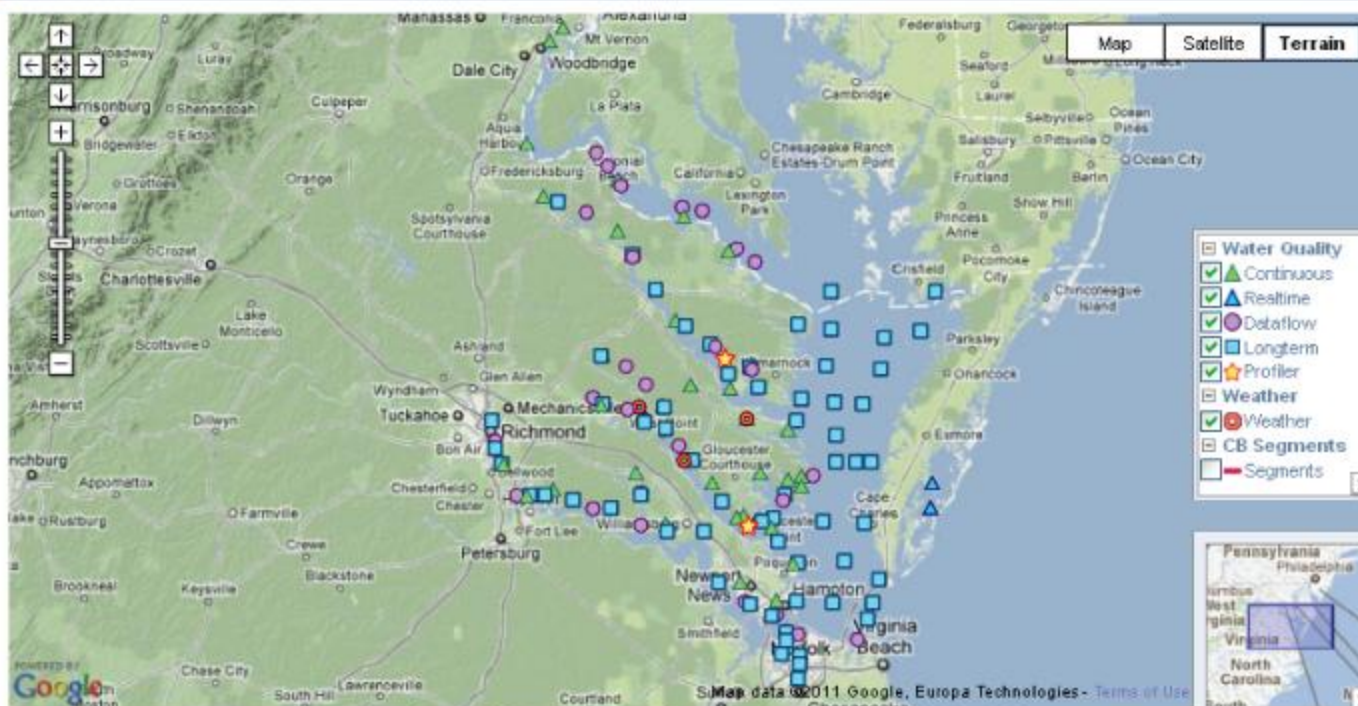
# WILLIAM & MARY

Virginia Institute of Marine Science

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--- To view data, click on the map above or select from the listings below ---

- Select a continuous station -  OR - Select a dataflow cruise -  OR - Select a longterm station -

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# Rappahannock River Vertical Profiler (RPP021.36)

**Location:** 37° 43' 12.72 76°W 34' 0.78

**Tributary:** Rappahannock River

**Salinity regime:** Mesohaline (>5-19 ppt)

**Mean water depth:** 13.8 meters

**Mean tidal range:** 1.30 ft

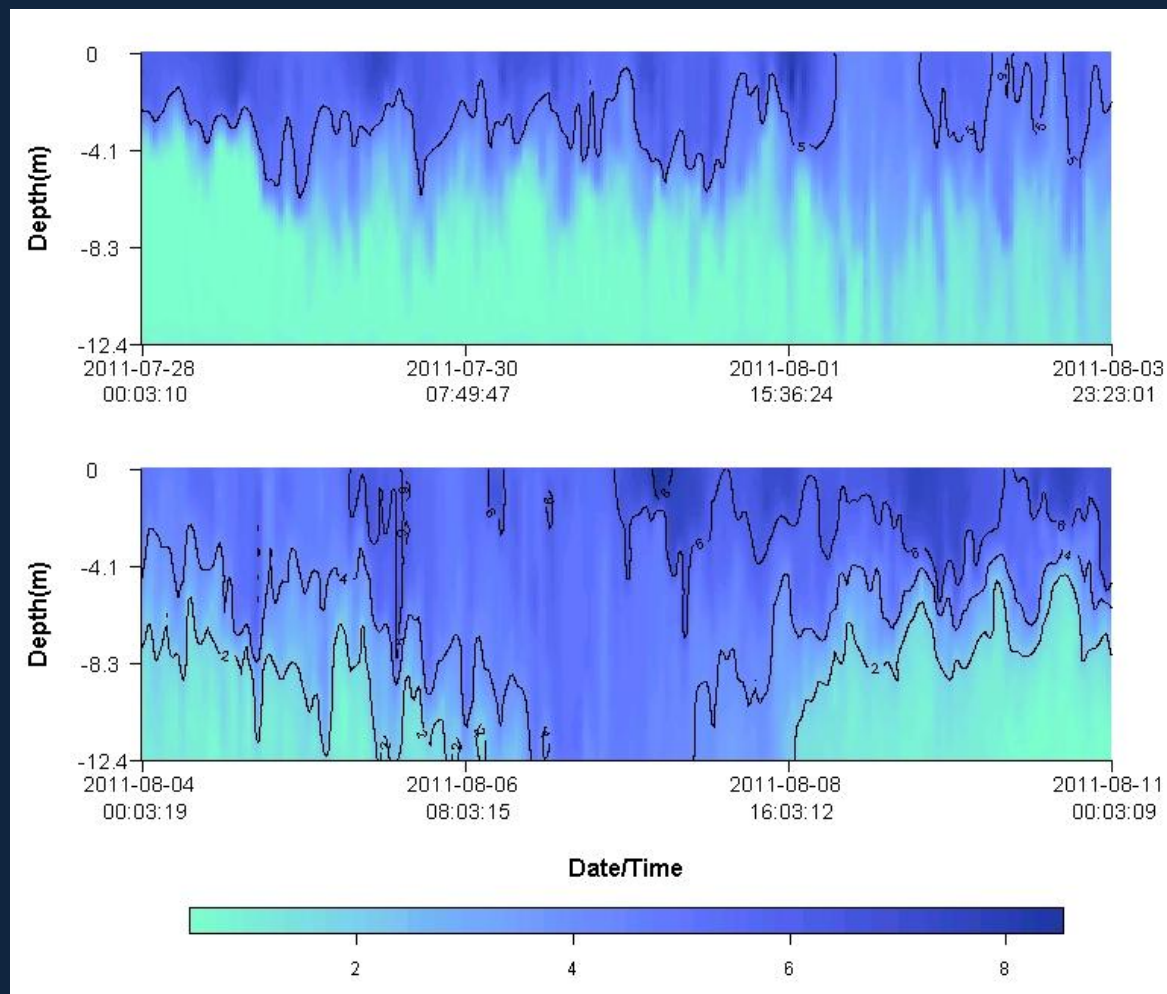
**Adjacent water:** This station is located 21.36 nautical miles from the mouth of the Rappahannock River near the mid channel.

**Landscape:** This station is location downstream of Belle Isle State Park on the Rappahannock River.

**Vertical profile:** 1 meter intervals; Hourly, June - September

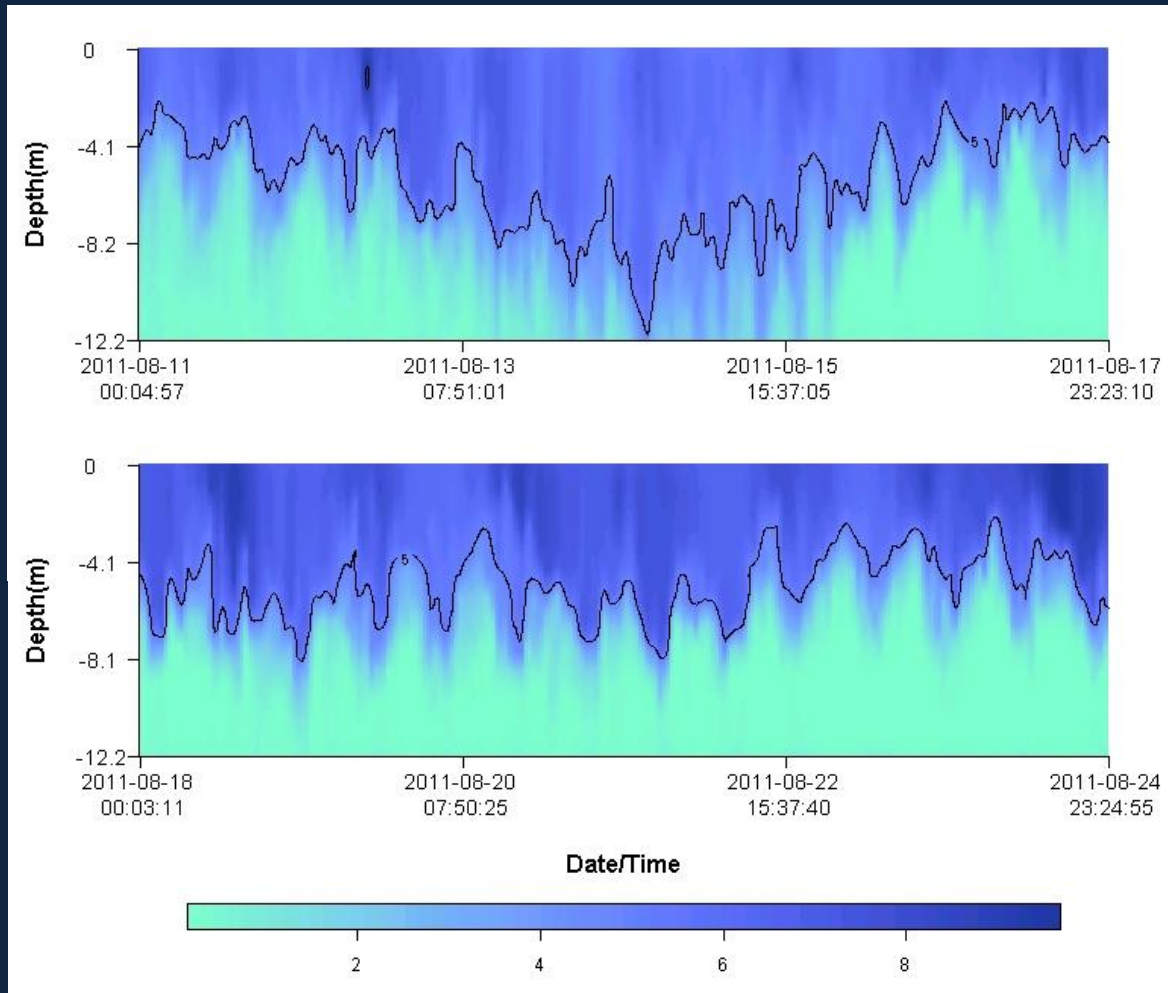


## Rappahannock River Profiler - Jul/28-Aug/11/2011



Dissolved Oxygen (mg/l)

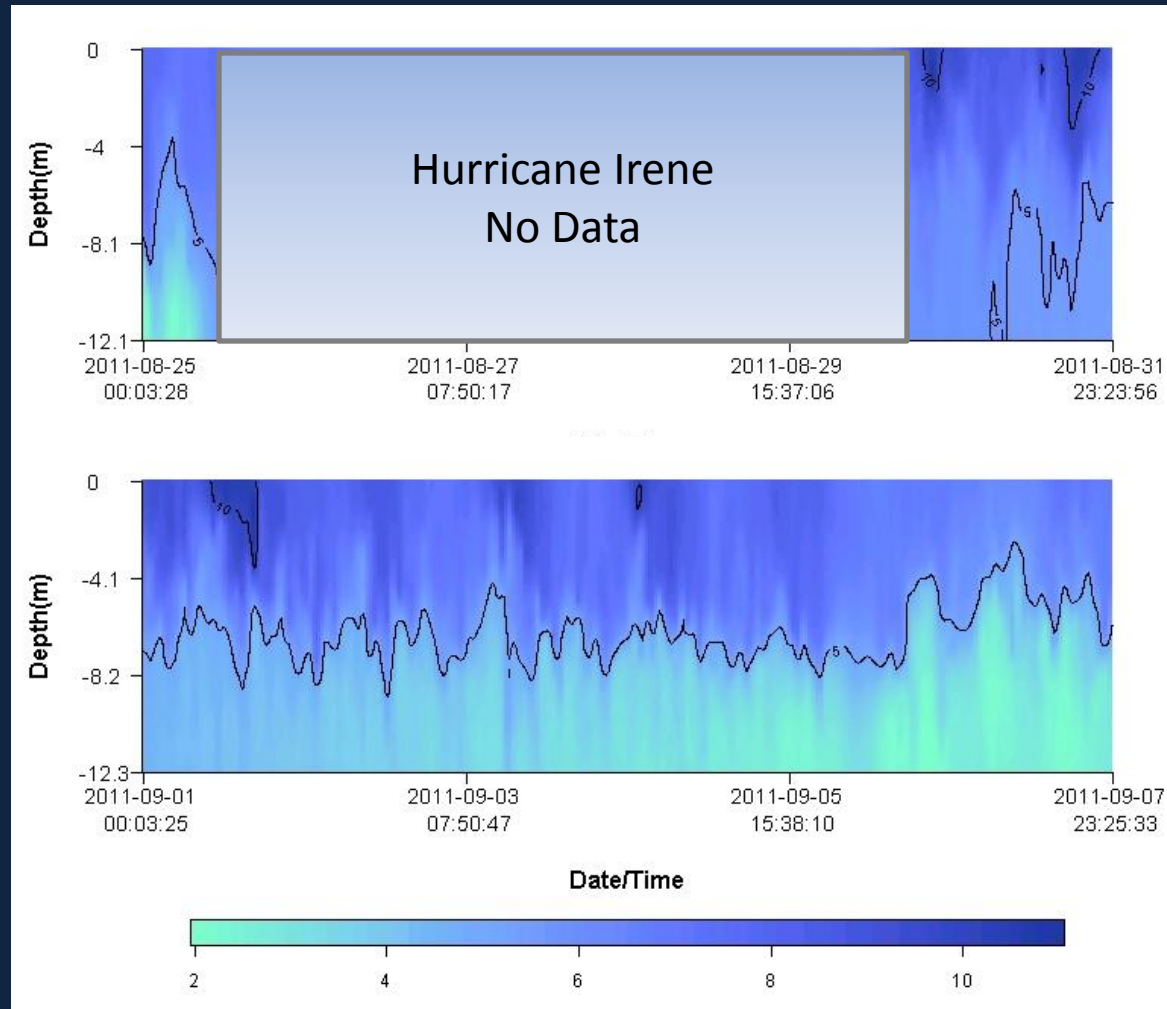
## Rappahannock River Profiler - Aug/11-24/2011



Dissolved Oxygen (mg/l)

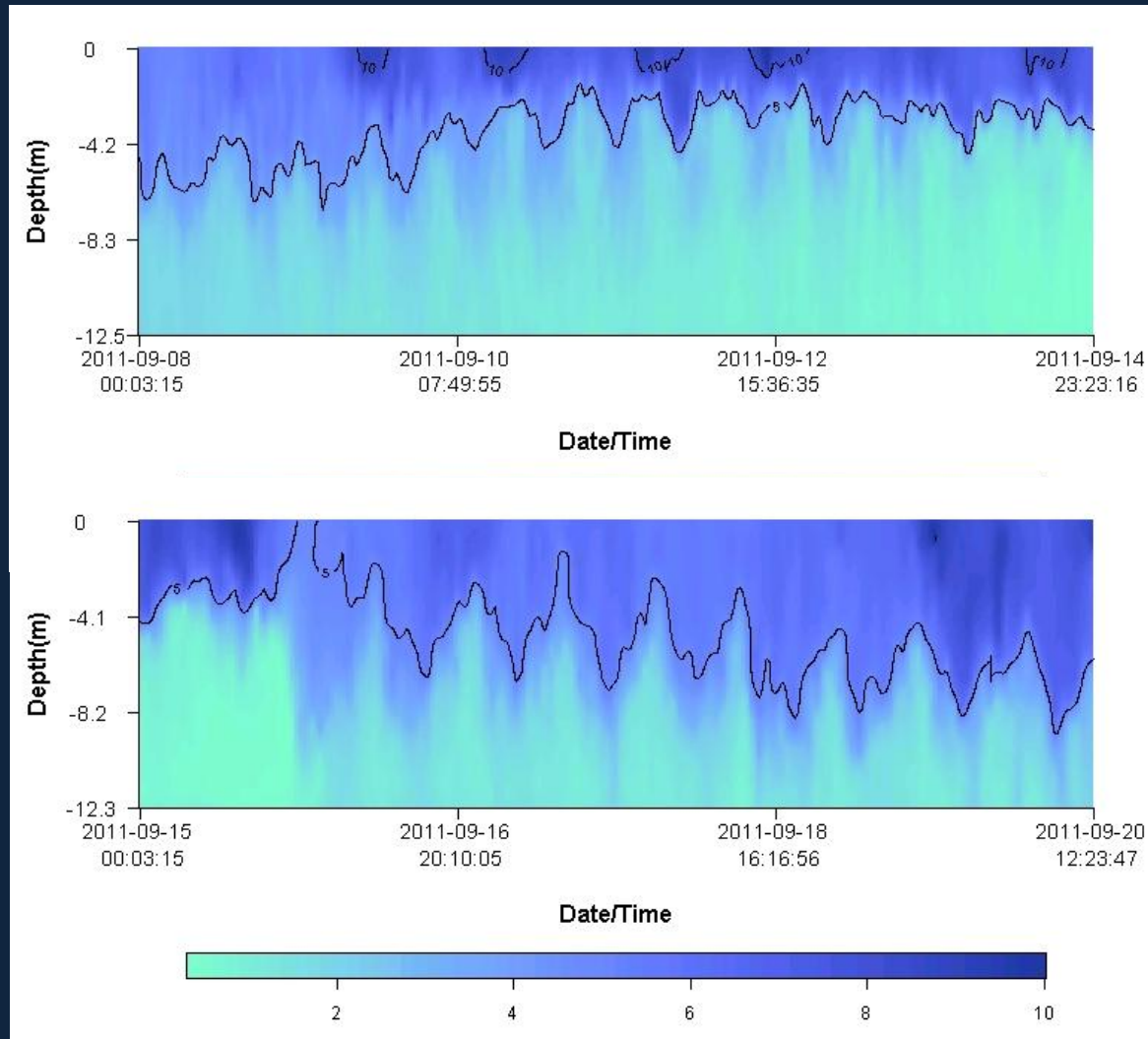


## Rappahannock River Profiler - Aug/25-Sep/7/2011



Dissolved Oxygen (mg/l)

## Rappahannock River Profiler - Sep/8-20/2011



Dissolved Oxygen (mg/l)

## York River Vertical Profiler (YRK004.26)

**Location:** N 37° 13' 35.94" W 76° 28' 43.76"

**Tributary:** York River

**Salinity regime:** Polyhaline (>18 ppt)

**Mean tidal range:** 2.28 ft

**Mean water depth:** 9.5 m

**Adjacent water:** This station is located 4.26 nautical miles from the mouth of the York River near the mid channel.

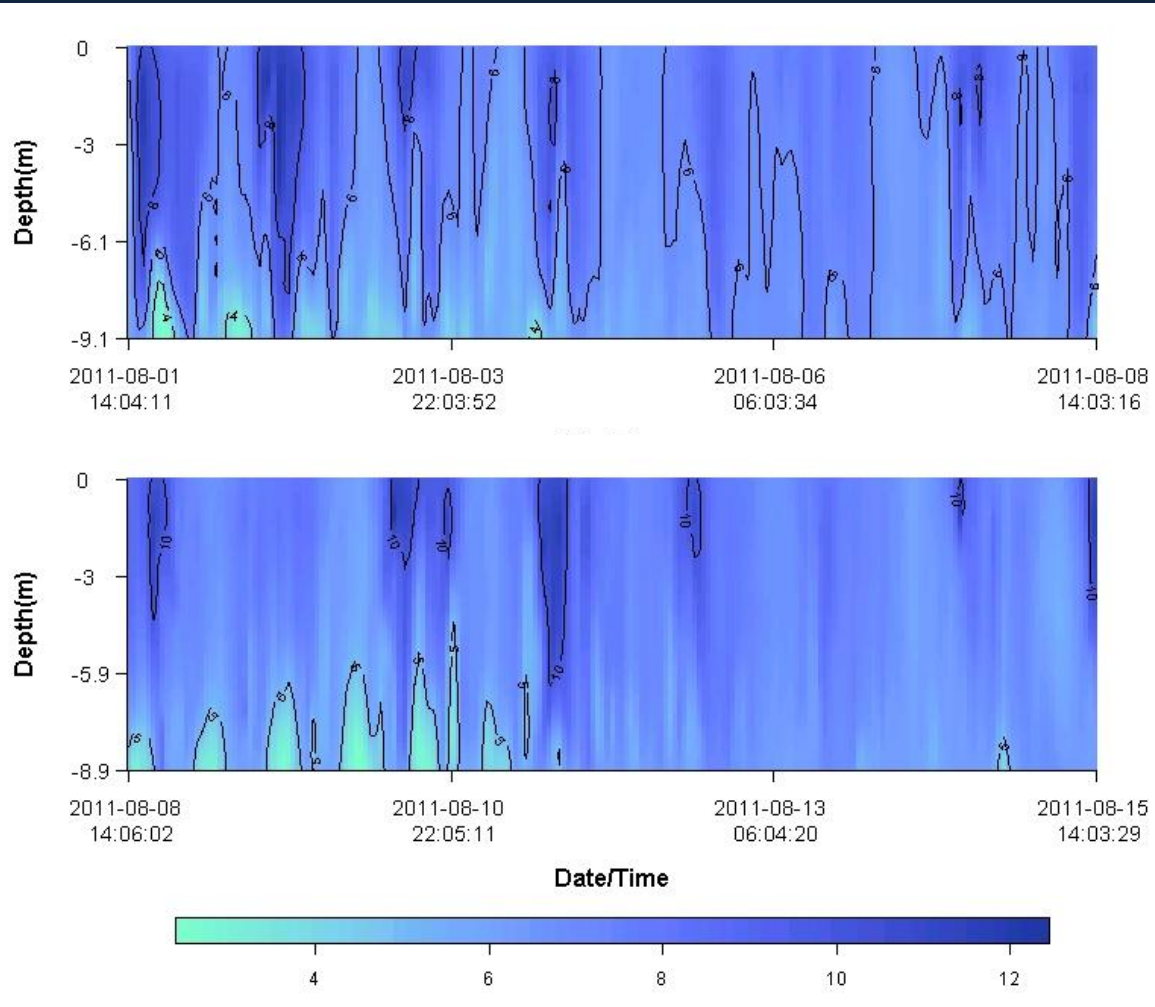
**Landscape:** This station is located at the end of the U.S. Coast Guard Training Center Pier in the lower York River.

**Vertical profile:** 1 meter intervals; Hourly, June - September



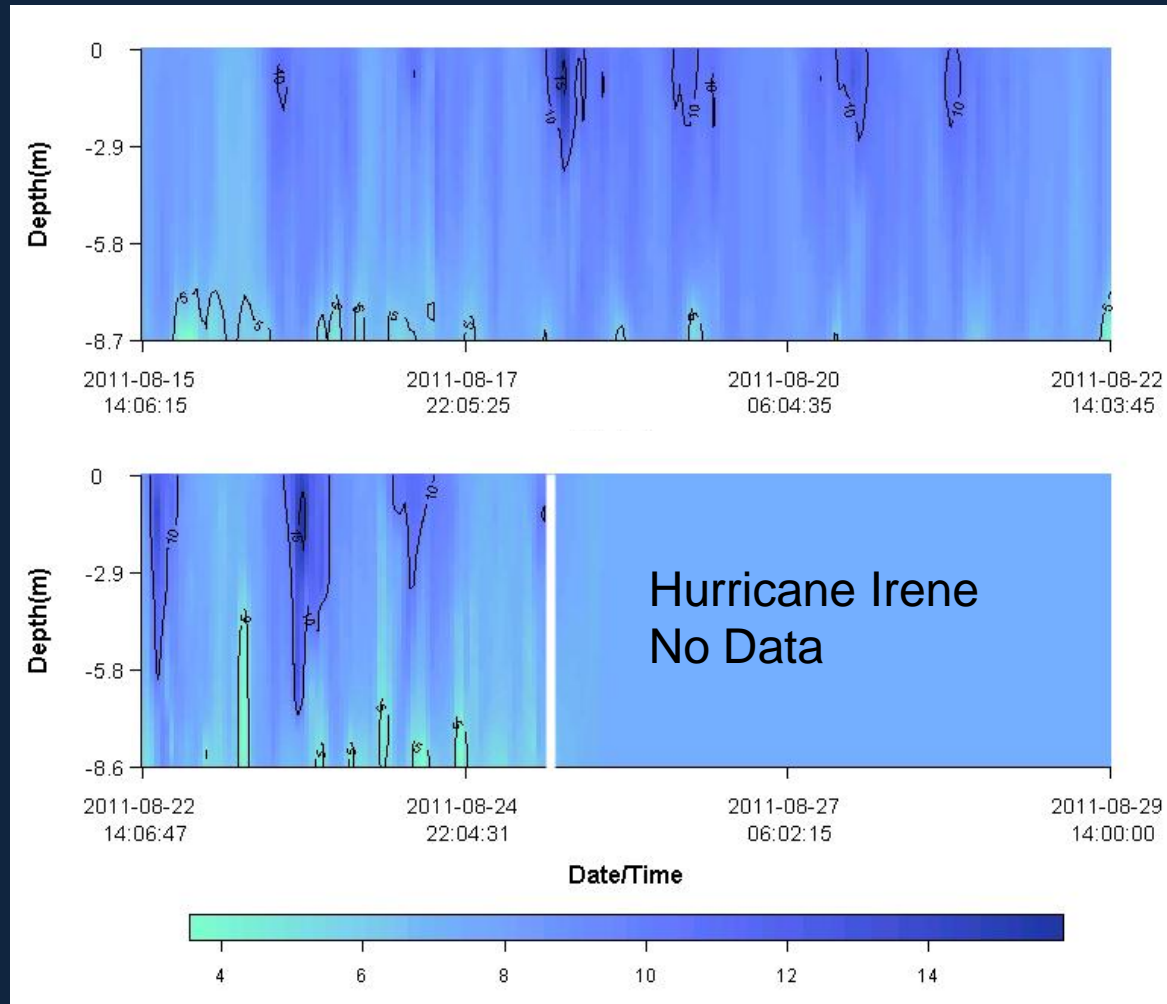


## York River Profiler - Aug/1-15/2011



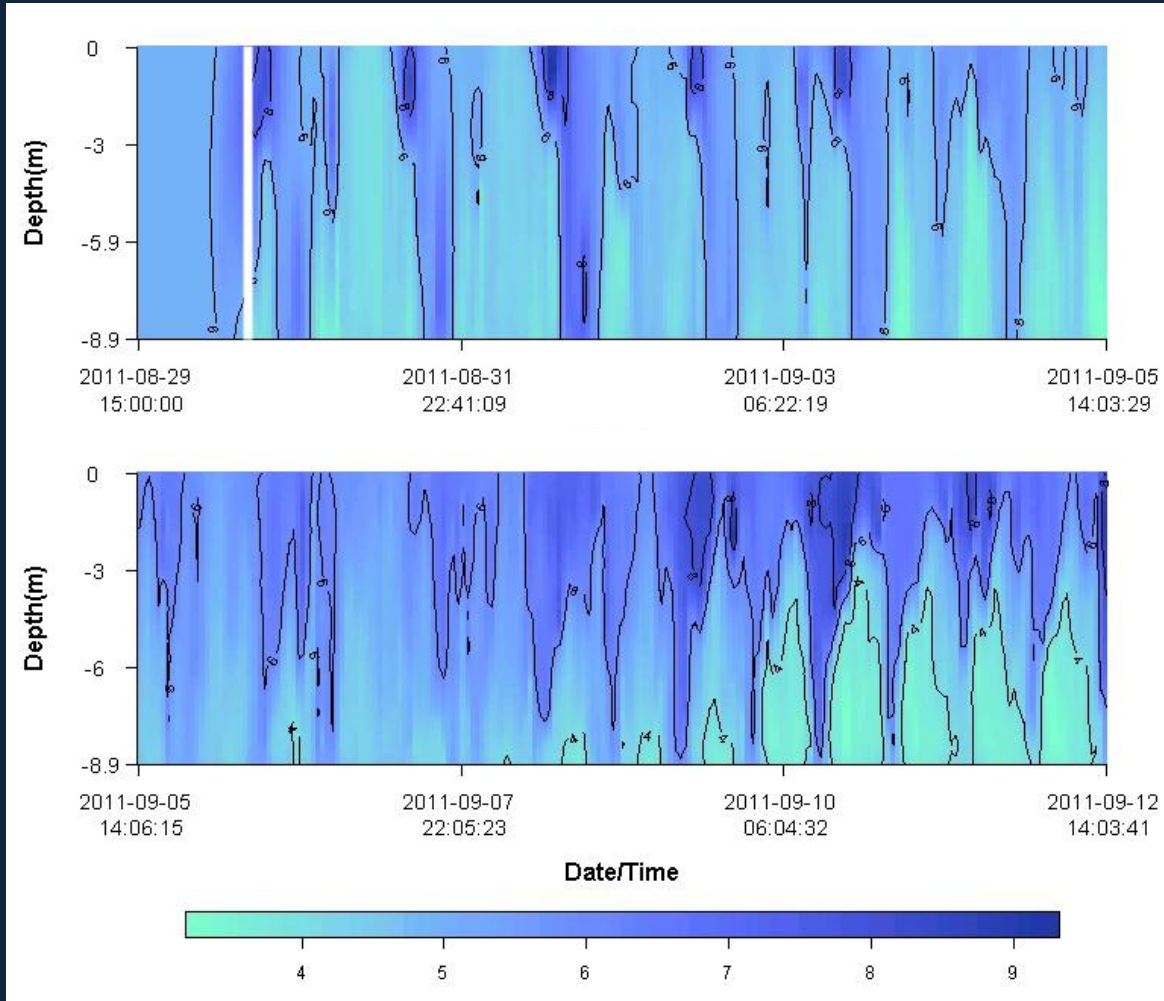
Dissolved Oxygen (mg/l)

## York River Profiler - Aug/15-29/2011



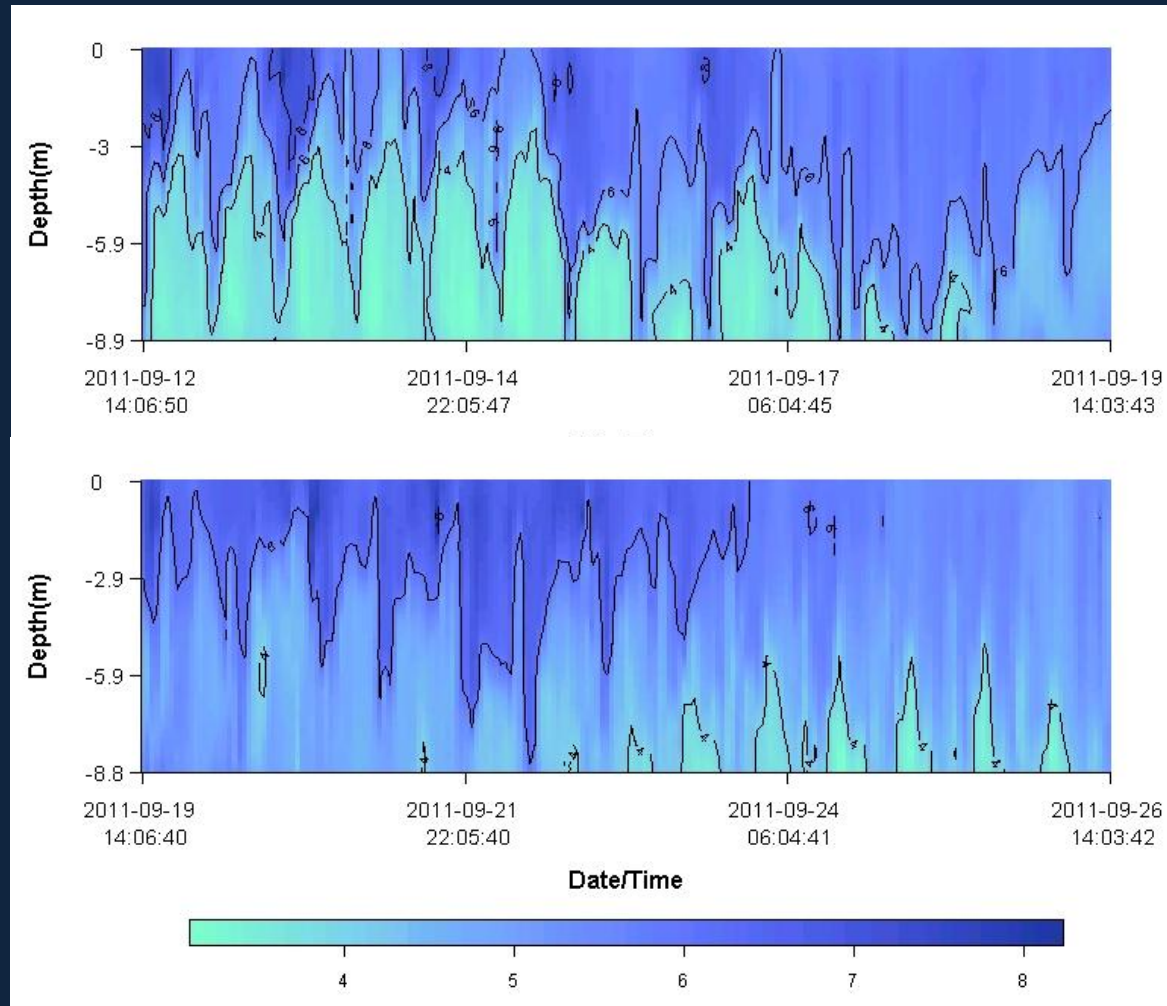
Dissolved Oxygen (mg/l)

## York River Profiler - Aug/29-Sep/12/2011



Dissolved Oxygen (mg/l)

## York River Profiler - Sep/12-26/2011



Dissolved Oxygen (mg/l)



## ConMon Stations

### Continuous Monitoring

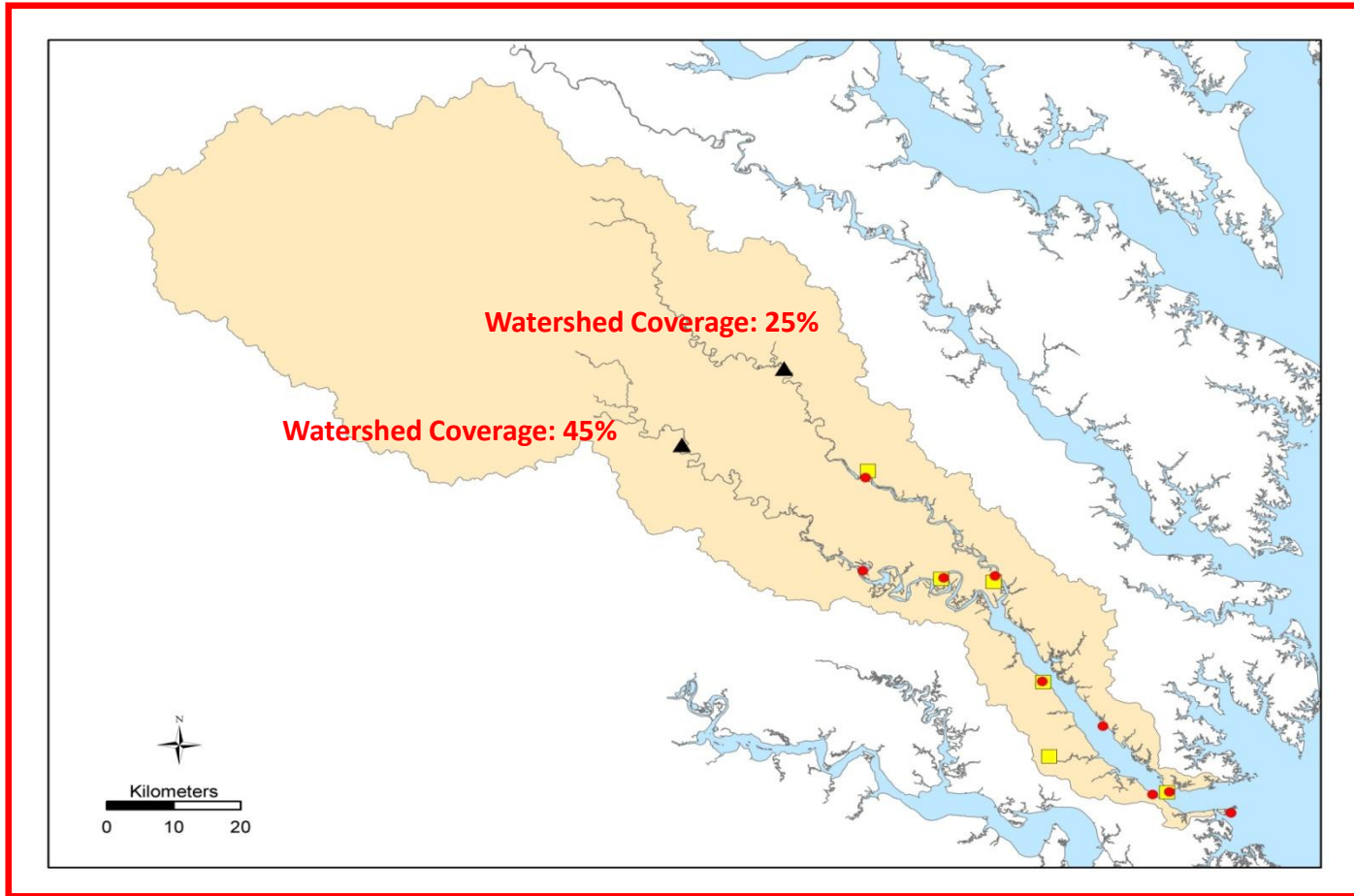
Samples and records every 15 min. (depth, salinity, pH, temp, turbidity, chl).

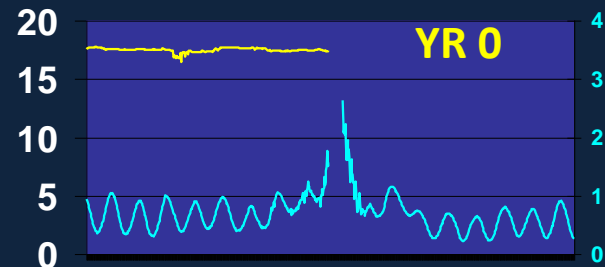
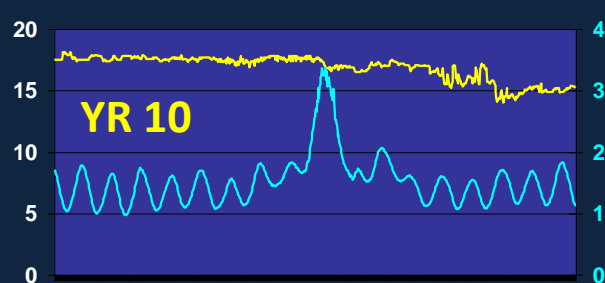
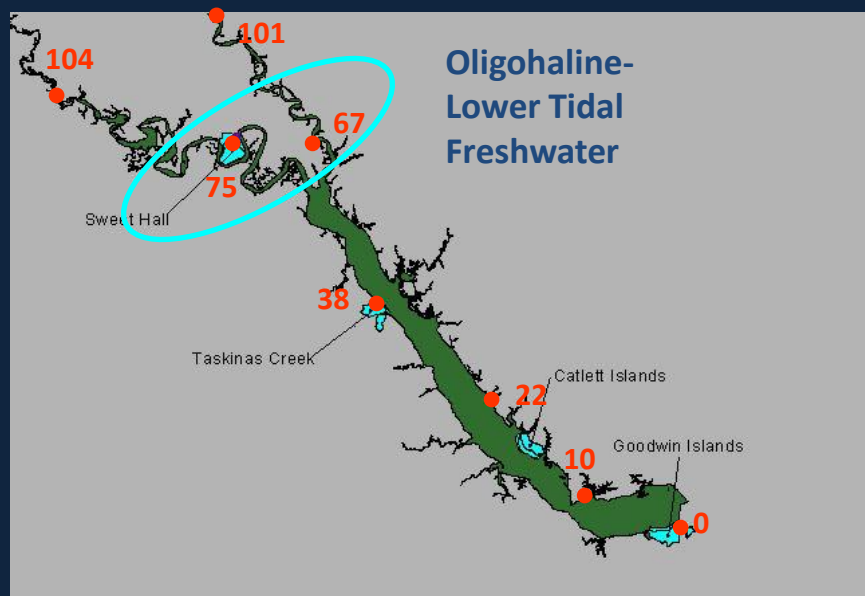
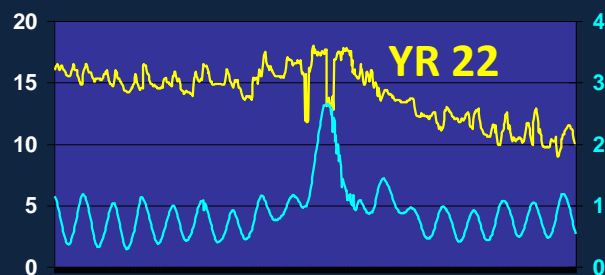
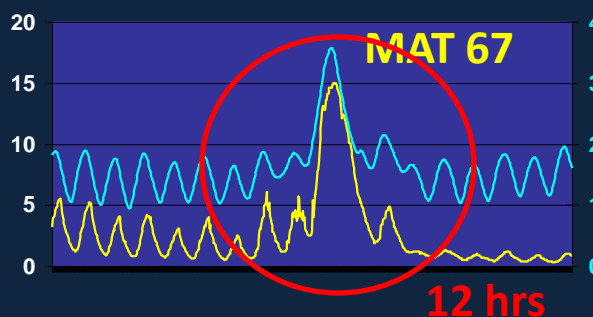
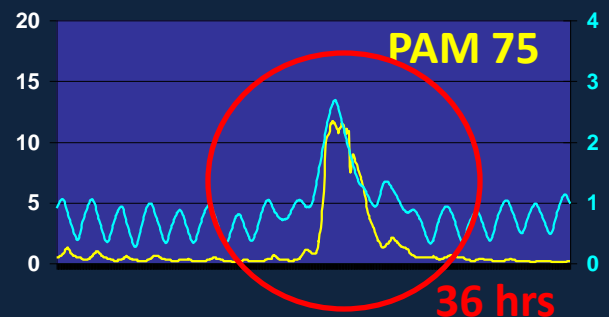
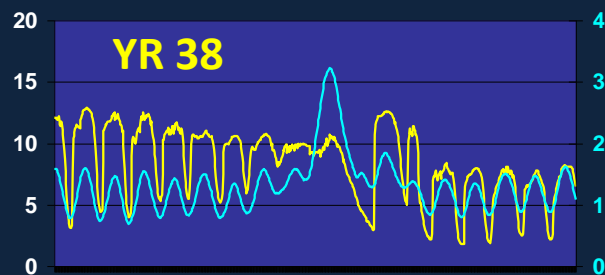
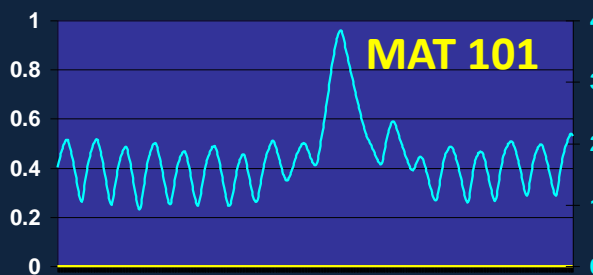
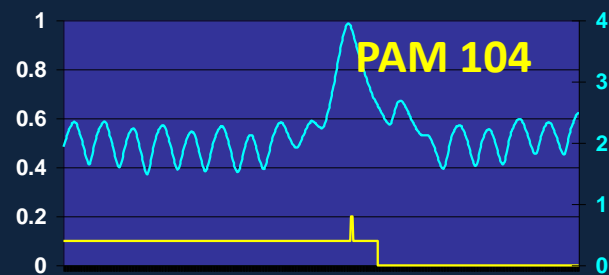


YSI, Inc. 6600 EDS sonde

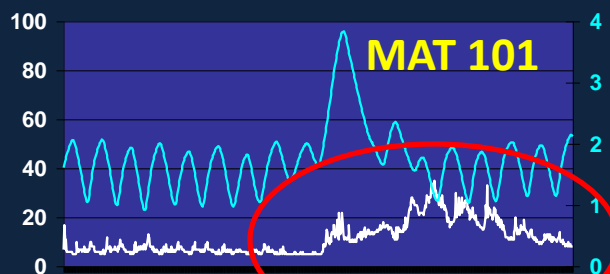
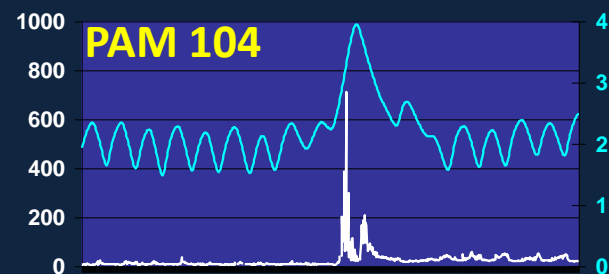


# Environmental Data Collection Stations (Hurricane Isabel)

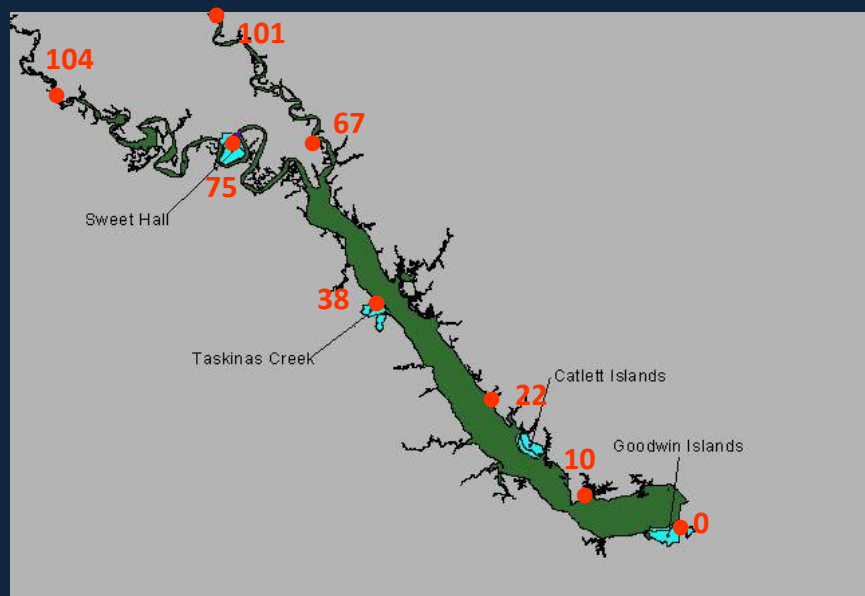
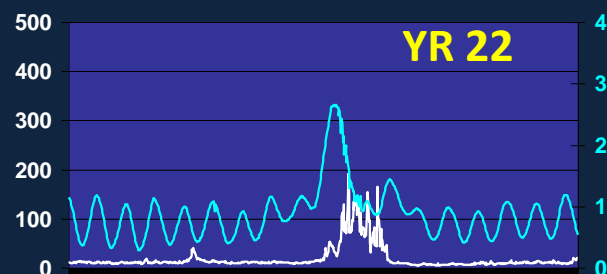
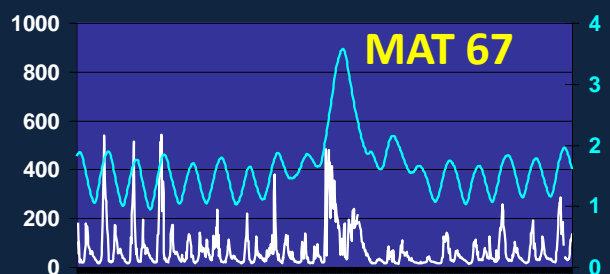
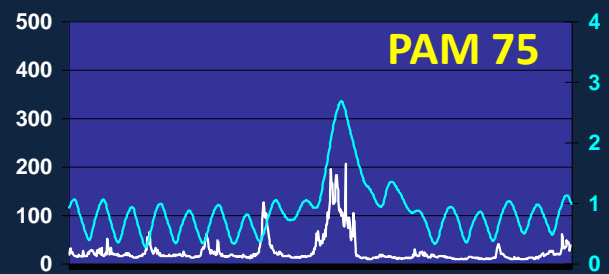
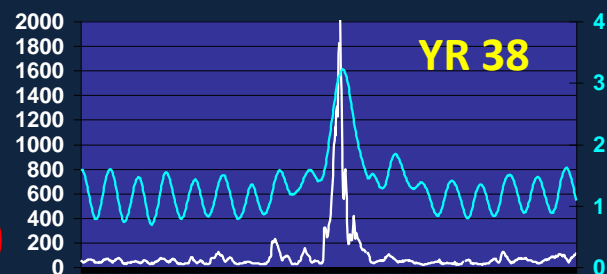




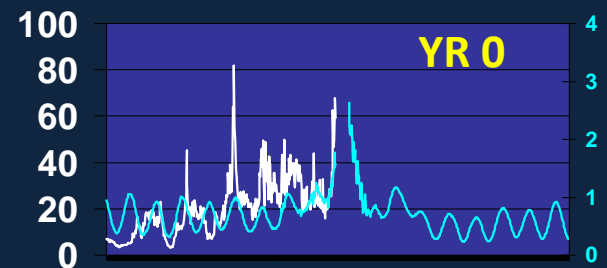
Salt ppt



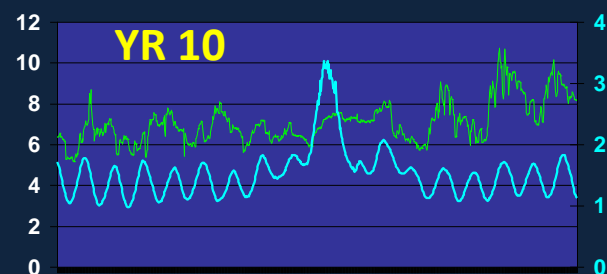
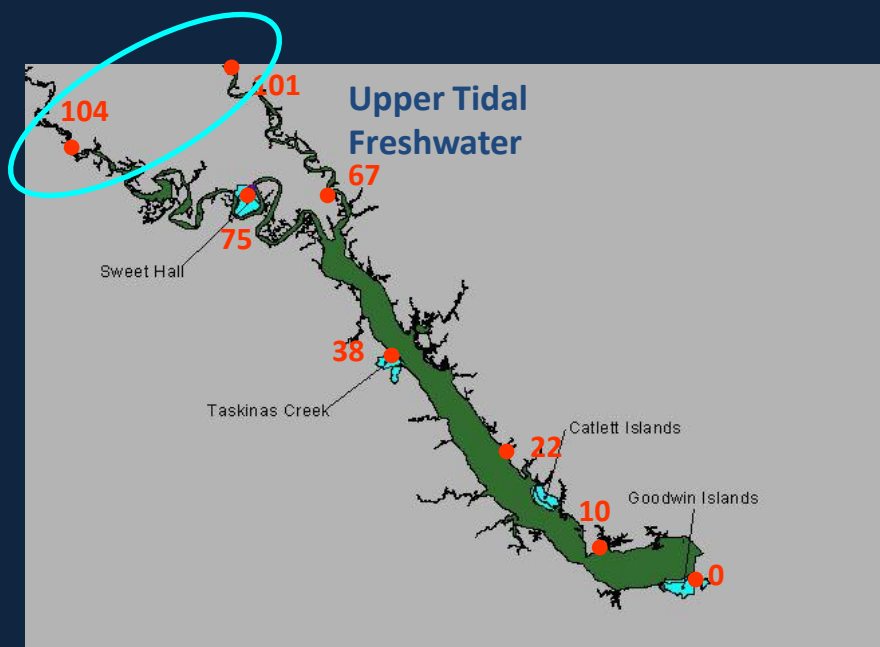
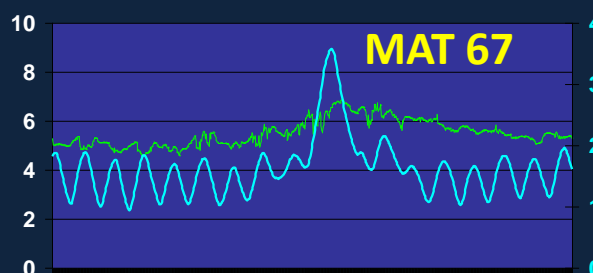
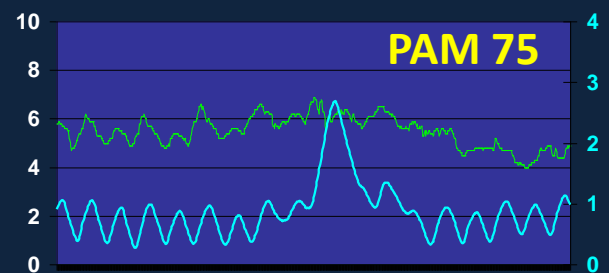
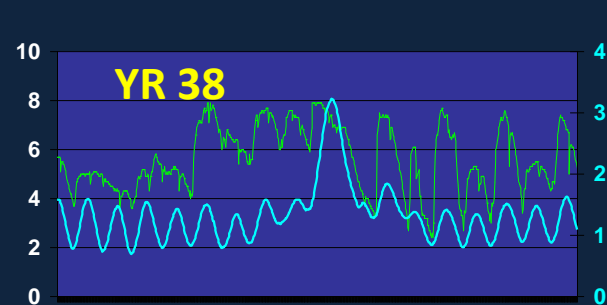
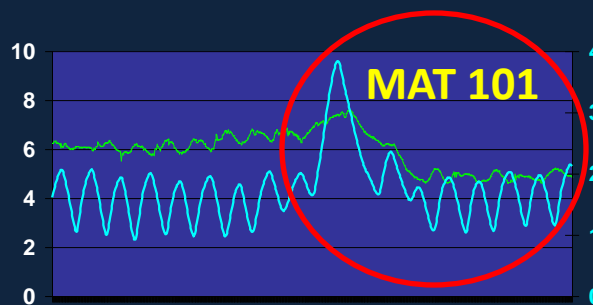
9+ days



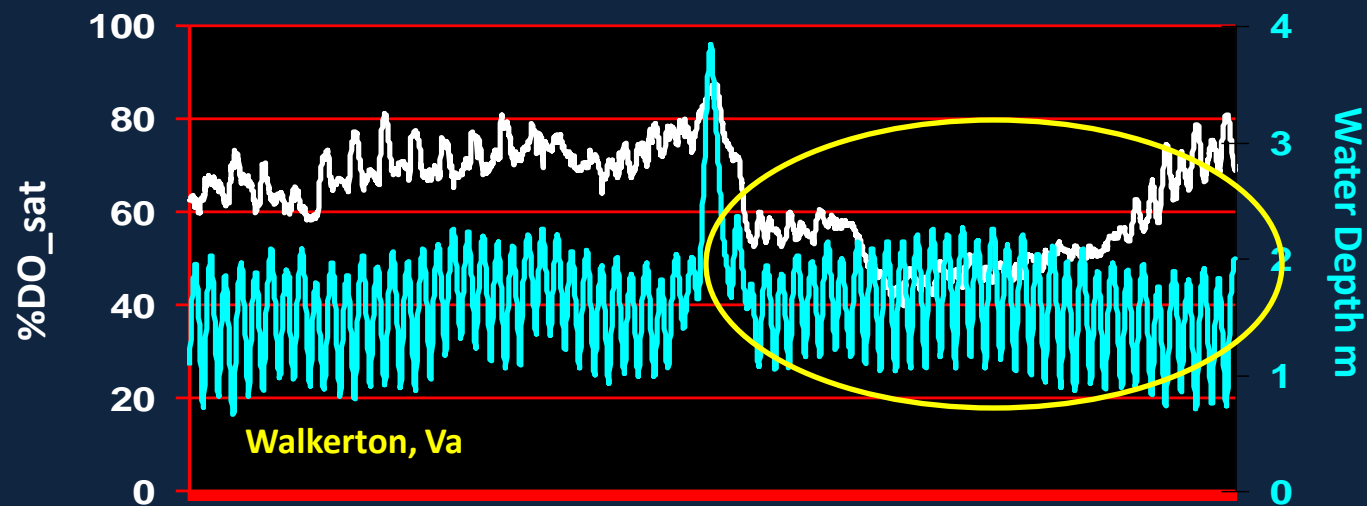
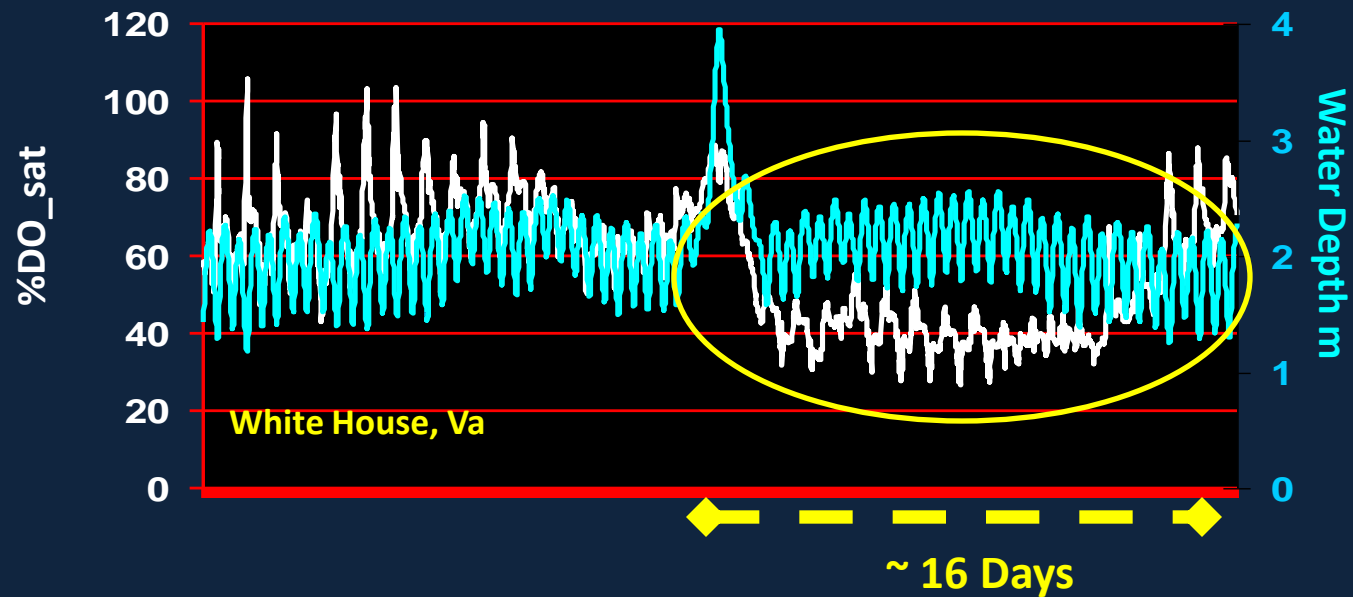
24-36 hrs



NTU



DO mg/L







**Hurricane Isabel**  
NOAA-17 AVHRR - 1km  
September 18, 2003 @ 1607 UTC

Thanks!

CAPE HATTERAS  
CAPE LOOKOUT  
CAPE PEAR