



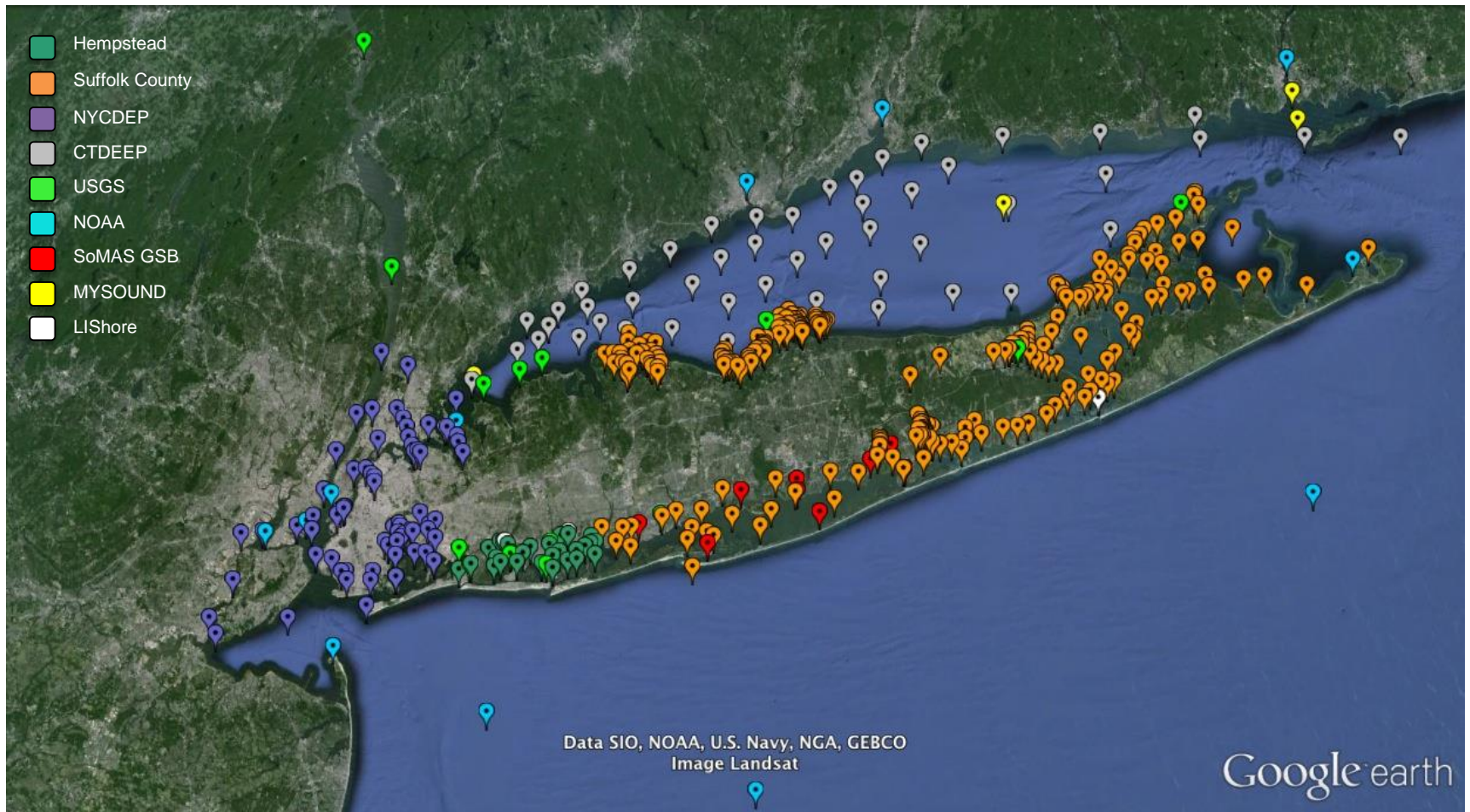
# **Integration of Multiple Monitoring Systems Targeting Coastal Zones**

**SBU participants – Christopher  
Gobler, Jake Thickman, Mark  
Lang, Tom Wilson, Charlie Flagg**

## **Deliverables:**

- Report existing real-time water and ecosystem monitoring systems along the New York State coasts in order to assess storm threats to coastal ecosystems under climate change.
- A database of coastal ecosystem monitoring data as a baseline.
- Software and web interface integrating and accessing continuous coastal ecosystem monitoring data on the NYS RISE web site.

# All Monitoring Locations



# Discrete Monitoring Locations



# Continuous Monitoring Locations



# Monitoring dashboard

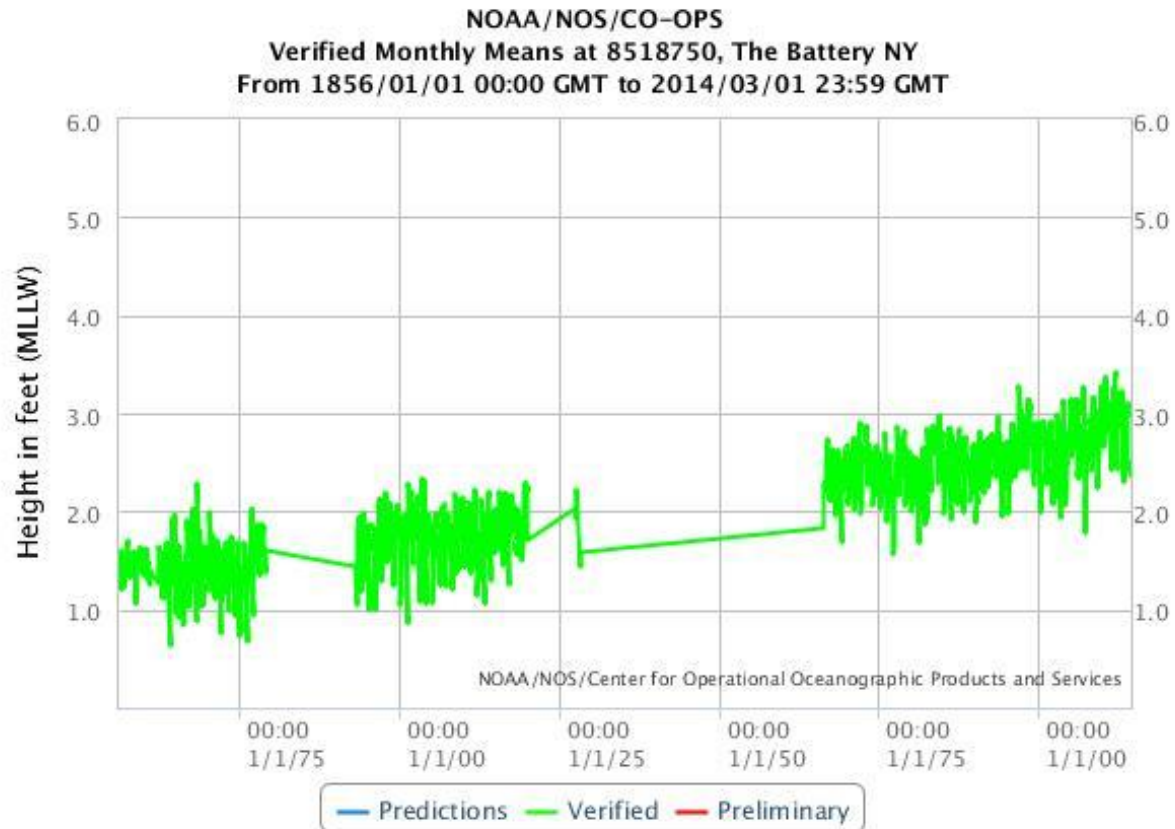


<http://www.nysrise.org/pages/RT-buoys.php>

# >50 parameters monitored by 10 groups

Parameters	Agency									
	Discrete Sampling					Continuous Monitoring				
	NYCDEP	Suffolk County	CTDEEP	Hempstead	NYSDEC	USGS	NOAA	GSB Project	MYSOUND	LiShore
Ammonia	X	X	X							
Barometric Pressure						X	X	X	X	
Biological Oxygen Demand				X						
Brown Tide		X								
Carbon (Dissolved Organic)	X	X	X							
Carbon (Total Organic)		X								
Carbon (Particulate)			X							
Chloride		X								
Chlorophyll-a	X	X	X			X		X		
Chlorophyll-a (Fractionated)		X								
Coliform (Total)		X								
Conductivity		X	X			X				
Dew Point							X		X	
Dissolved Oxygen	X	X	X	X		X			X	
Enterococcus	X									
Fecal Coliform	X	X			X					
Fluorescence	X		X					X		
Humidity						X			X	
Metals		X								
Nitrate (NO3)		X				X				
Nitrite (NO2)		X								
Nitrogen	X	X								
Nitrogen (Dissolved)		X	X							
Nitrogen (Particulate)			X							
NOx		X	X							
Ocean elevation						X	X	X		X
Organic Pollutants		X								
Ortho-Phosphate	X	X	X	X						
Oxidative Reduction Potential	X									
pH	X	X	X			X				
Phosphorous	X	X								
Phosphorous (Dissolved)		X	X							
Phosphorous (Particulate)			X							
Photosynthetically Active Radiation	X							X		
Precipitation						X		X		X
Salinity	X	X	X	X		X		X	X	
Silica (Biogenic)			X							
Silicate	X	X	X							
Sulfate		X								
Suspended Solids	X	X	X							
Temperature (Air)							X	X	X	
Temperature (Water)	X	X	X	X		X	X	X	X	X
Transparency (Secchi)	X	X		X						
Turbidity	X					X		X		
Urea		X								
Wave height							X		X	
Wind	X					X	X	X	X	

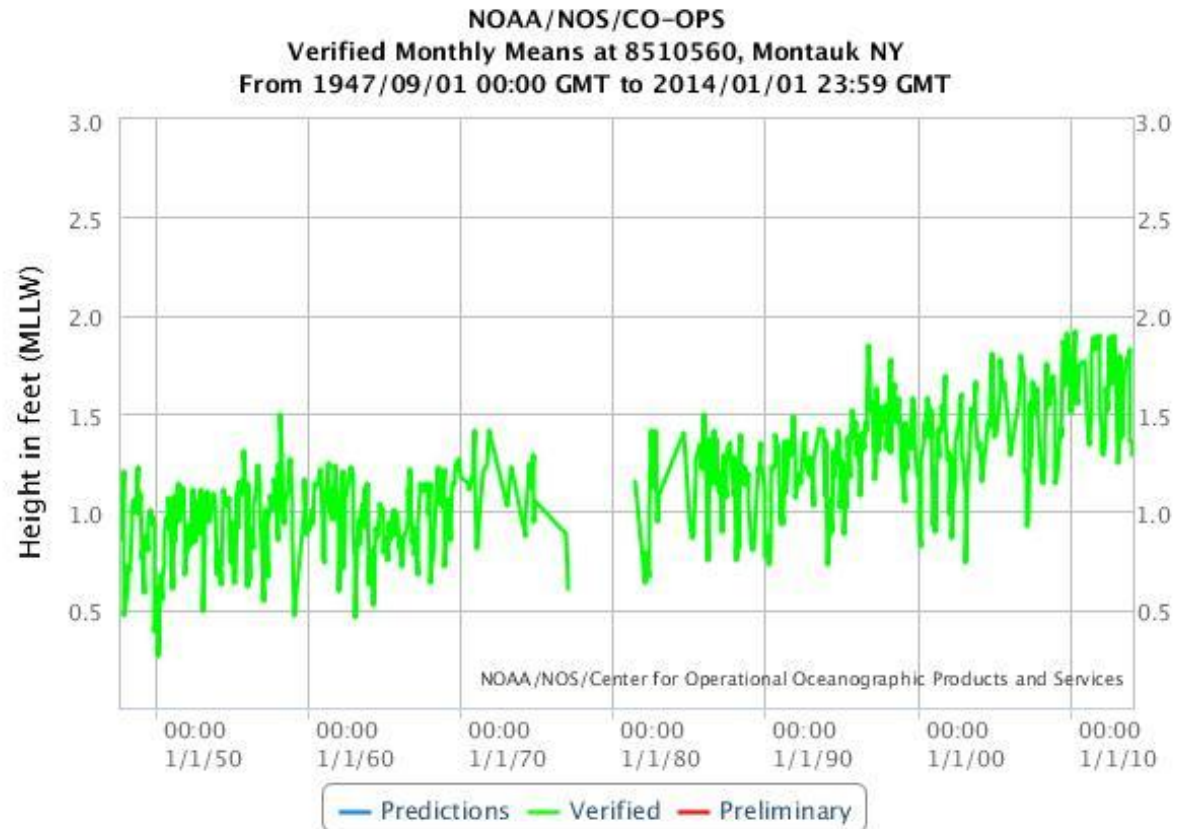
# Climate Signals Sea Level New York City Battery



NOAA buoy BATN6



# Climate Signals Sea Level Montauk



NOAA buoy MTKN6

# CLIMATE CHANGE: Temperature, Great South Bay 1976-2012

