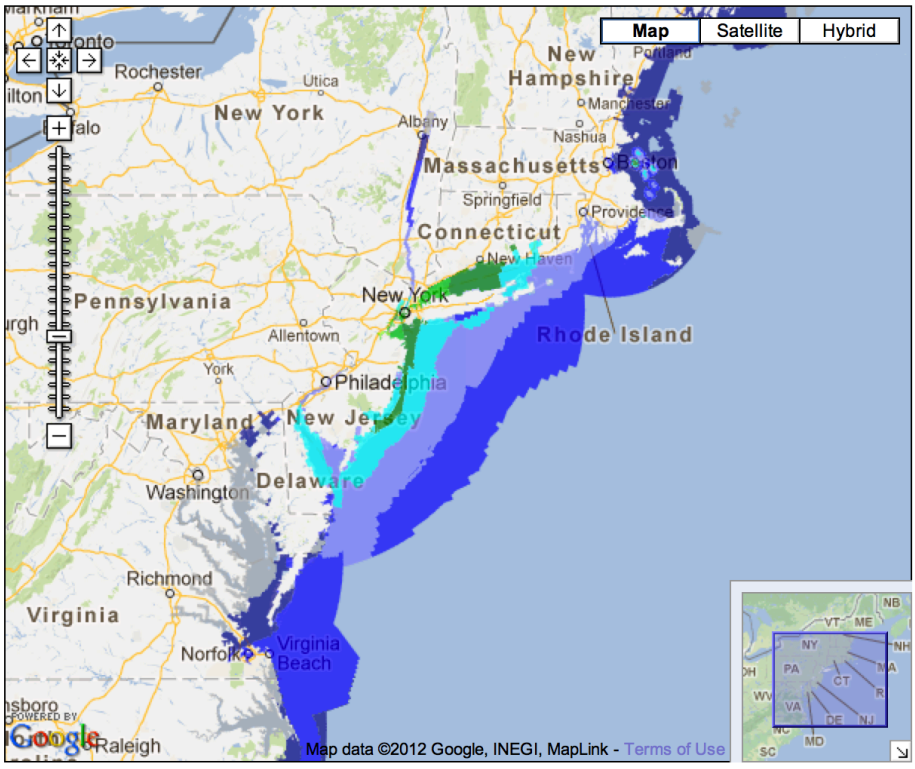
Significant storm surge will impact New York City and surrounding areas during the landfall of Hurricane Sandy. The projected landfall will place NYC in an onshore wind flow through several tide cycles. Given the geometry of the New York/New Jersey coast, water will be funneled into New York Harbor. Our chief meteorologist at WeatherBELL, Joe Bastardi, has been frantically warning the public that the highly perpendicular angle at which Sandy is approaching will allow for a far more significant surge event than Hurricane Irene.

Storm Surge Exceedance

Google Maps Interactive | **Static Images**

Tropical Cyclone Storm Surge Heights
That Have a 1 in 10 Chance of Being Exceeded (NGVD-1929)
Hurricane Sandy (2012) Advisory 25
For the 77 hours from 11 AM EDT Sun Oct 28 to 04 PM EDT Wed Oct 31

Select Level: 10% Chance of Being Exceeded | Load Data



Lat: 39.1471 Lon: -67.5879

Legend

Height above NGVD-29 (feet)

0 to < 2	11 to < 13	23 to < 25
2 to < 3	13 to < 15	25 to < 27
3 to < 5	15 to < 17	27 to < 29
5 to < 7	17 to < 19	29 to < 36
7 to < 9	19 to < 21	
9 to < 11	21 to < 23	

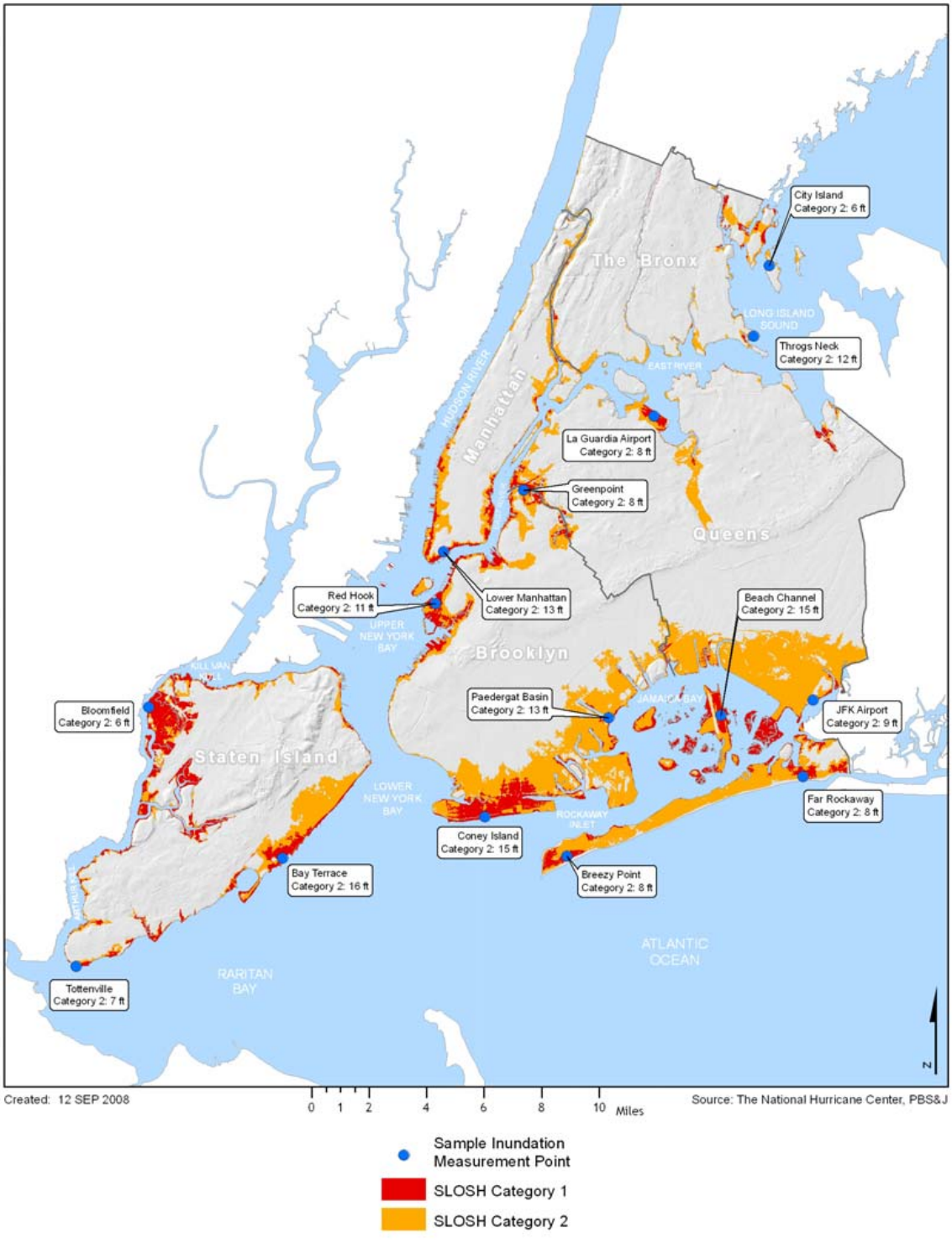
Disclaimer

Historical Data:
NHC this storm
NHC all storms
MDL

SLOSH modeling shows the areas that have the potential to be flooded during this event.

SLOSH Category 2

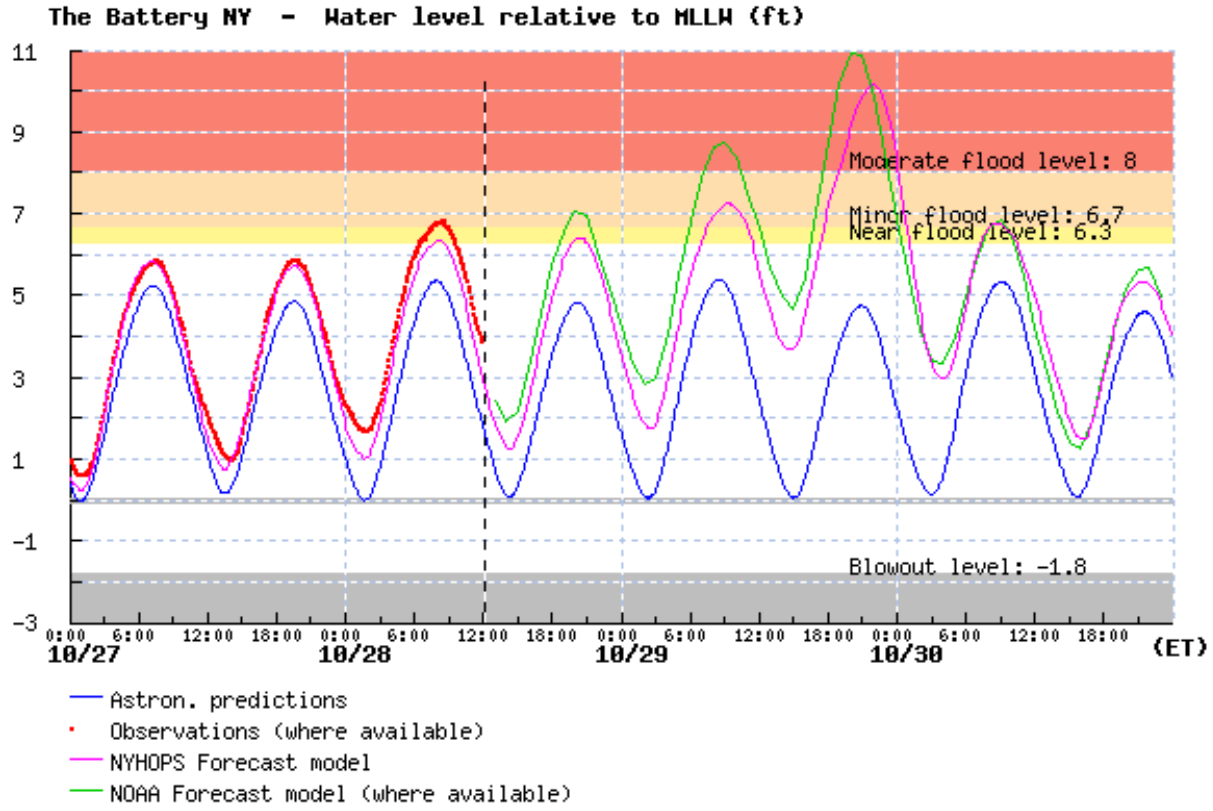
New York City



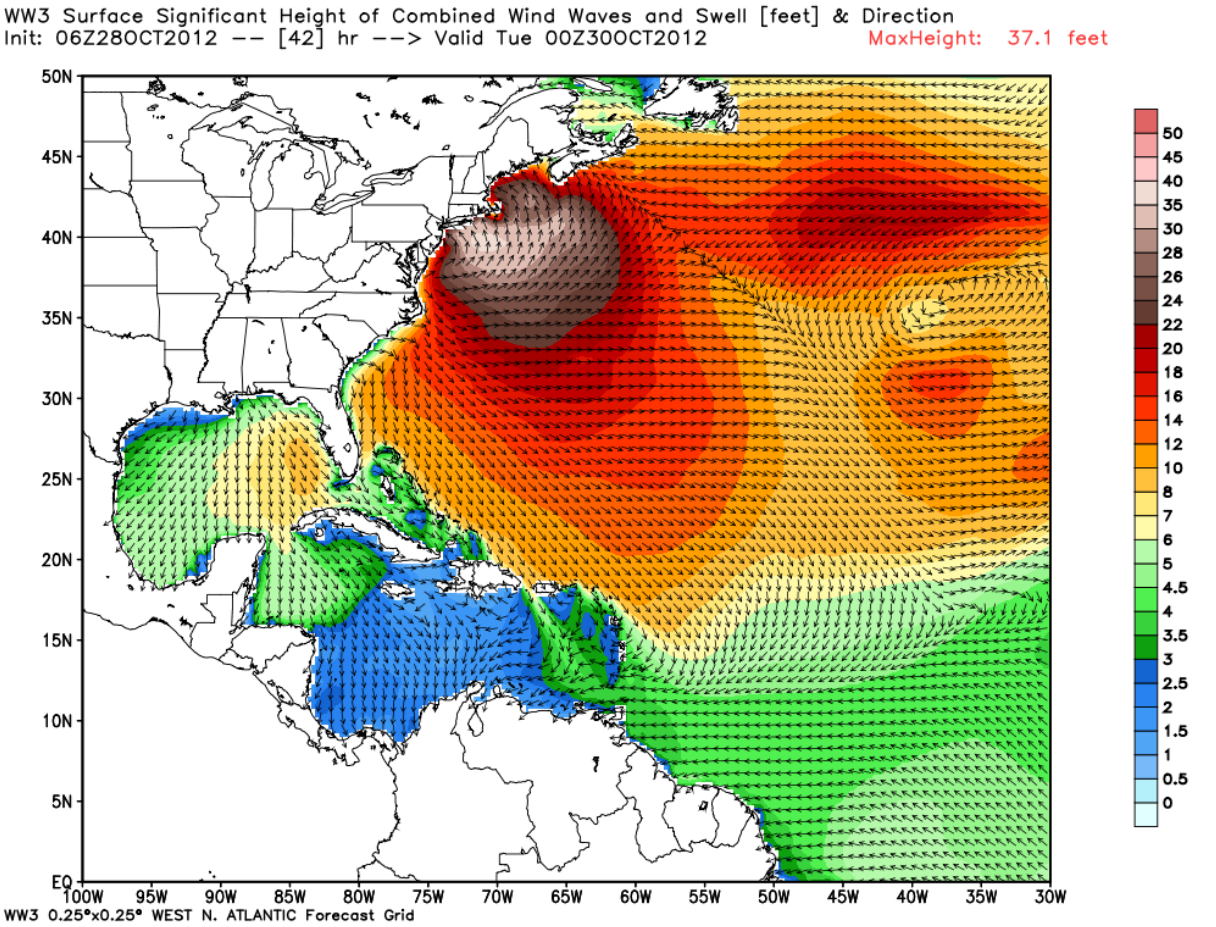
It is important to take note of the unusually low atmospheric pressure of Hurricane Sandy. The Saffir-Simpson hurricane scale is based entirely on maximum sustained winds near the hurricanes center. However, Sandy's structure is not typical of hurricanes that exist in the deep tropics. A typical category 1 hurricane would only have hurricane force extending several tens of miles from the center. Sandy's wind field is not concentrated near the center and hurricane force winds extend over 200 miles from the eye. As a result, significantly more seawater that normal is being driven toward the coast. The central pressure of the storm would be more indicative of a Category 2 or Category 3 hurricane.

NOAA is forecasting over 10 feet of storm surge into New York Harbor. Keep in mind that the storm surge during Hurricane Irene was approximately 3.5-4.6ft. The graphic below depicts just how dire the situation will become.

Similarly, Stevens Institute modeling is also forecasting a historic storm surge for NYC.



There will also be tremendous wave action (swells over 20 feet) superimposed on the rise in sea level.



http://models.weatherbell.com/wave/2012102806/wna/wave_height_dir_wna_15.png

This is a life-threatening situation for the New York and New Jersey coastline. All state and local governments should take maximum precautionary measures to ensure the safety of the people.

Follow us at www.weatherbell.com for storm updates.