



Active Weather Threat Halloween Week Nor'easter October 28th – 31st 2012

Prepared 1130 AM EDT – Wednesday, October 24, 2012

Gary Szatkowski

NOAA's National Weather Service

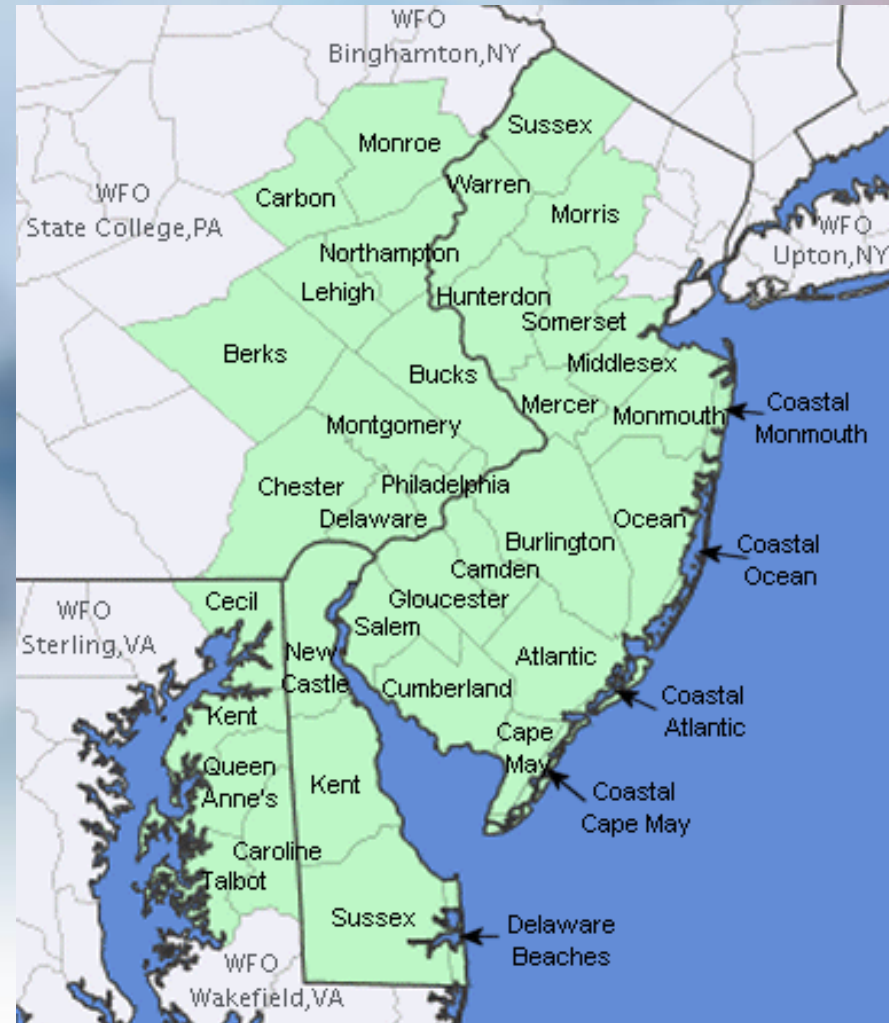
Philadelphia/Mt. Holly NJ Forecast Office

Weather.gov/phi



Purpose of Briefing

- Briefing #2 for event
- Promote situational awareness for emergency management community & partners
- Provide guidance for planning efforts
- Briefing applies to Mount Holly service area – shaded in green on map

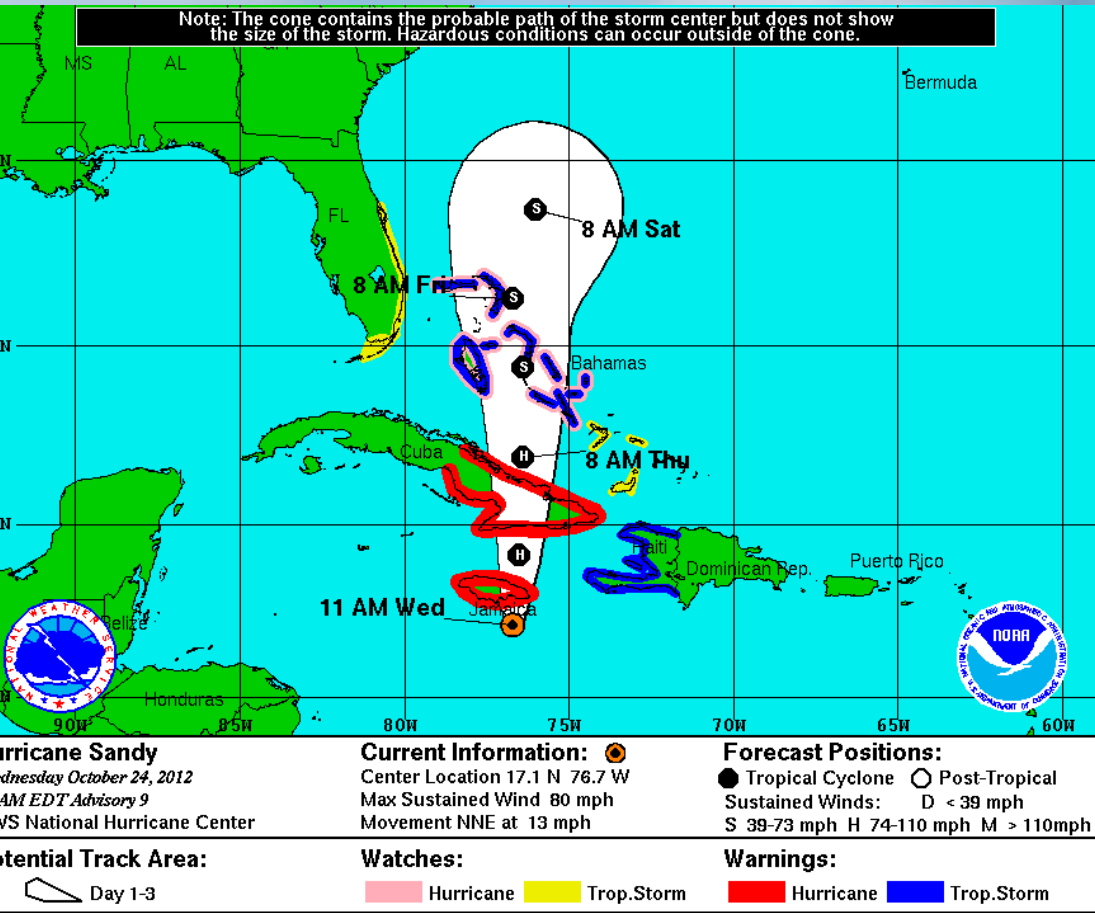


Executive Summary

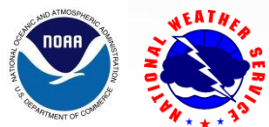
- Potential continues for a very dangerous autumn storm system to affect the region early next week.
- This storm will be associated with what is currently Hurricane Sandy. This storm, if it moves toward us, will bring multiple threats to the region:
 - Strong damaging wind gusts
 - Extremely heavy rainfall
 - Major flooding along streams and rivers
 - Major coastal flooding (full moon occurs on October 29)
- The eventual track of this storm will determine the area which is impacted. This far out in time, there is considerable uncertainty with the storm track. **However, the likelihood of the storm affecting our region has increased over the past 24 hours.**
- Next briefing package will be issued on Thursday, October 25th.
- Monitor our website at weather.gov/phi.



Current status of Hurricane Sandy



- Sandy is now at hurricane strength.
- It will continue to move northward.



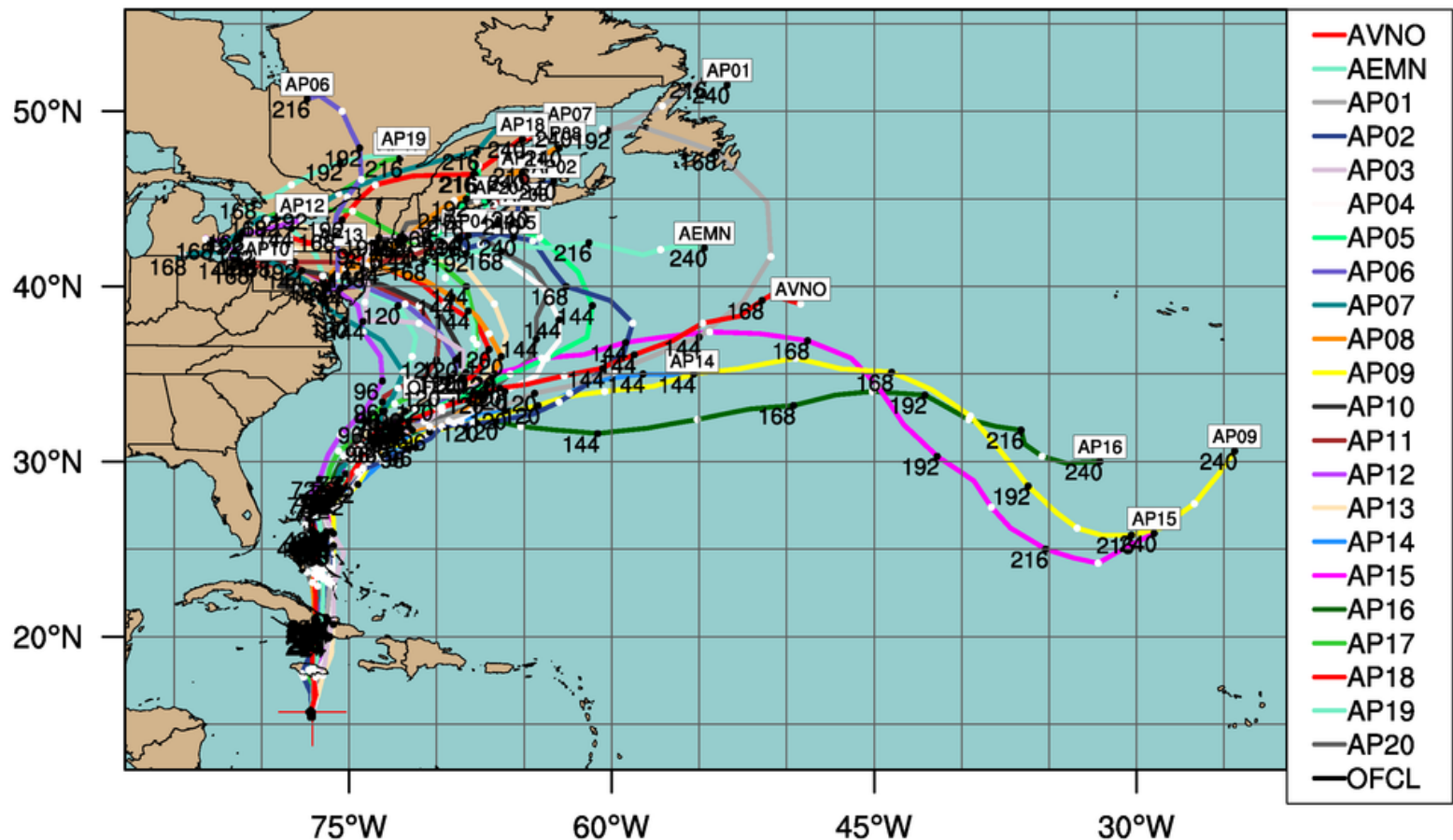
Numerous Ensemble Members Still Move Remnants of Sandy to the East Coast Early Next Week

TROPICAL STORM SANDY (AL18)

NCEP GFS Ensemble track guidance initialized at 0600 UTC, 24 October 2012

Current Intensity: 55 kt

Current Basin: North Atlantic

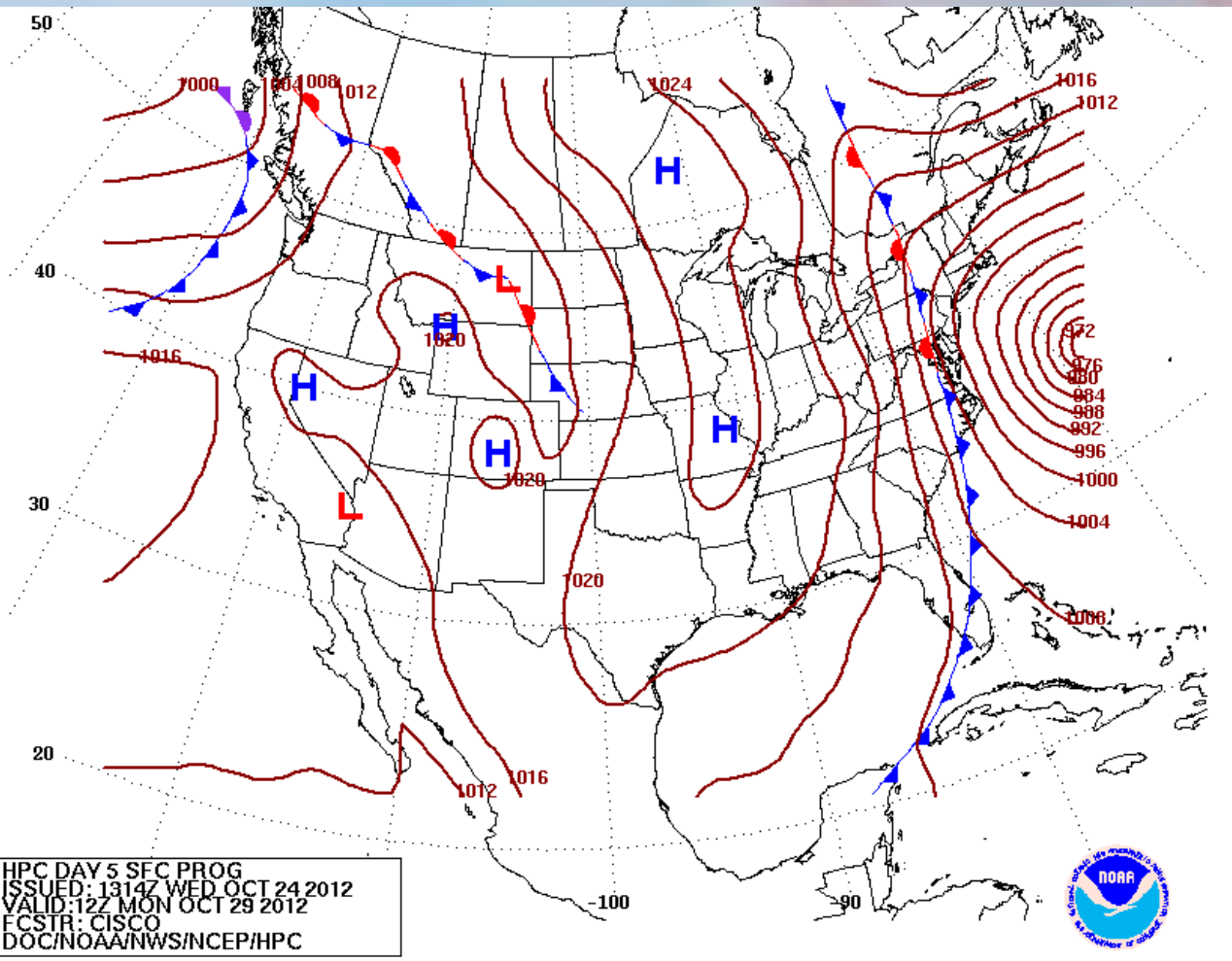


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Plot generated at 1349 UTC 24 October 2012



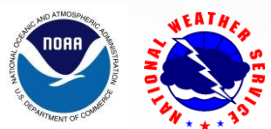
The following maps show the latest forecast for the storm system track early next week

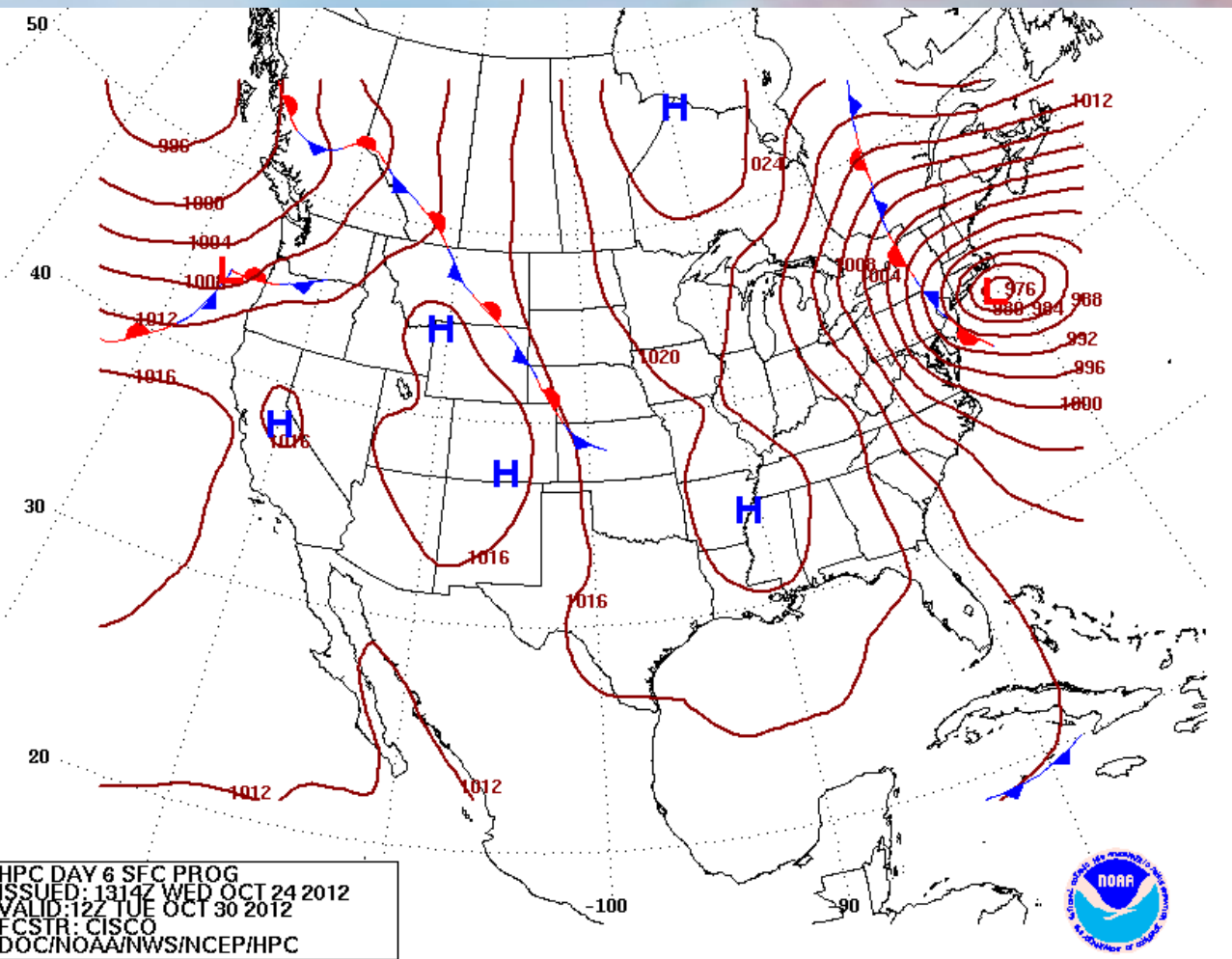


Map on the left is valid 800 AM EDT Monday October 29th.

Storm center is east of Virginia.

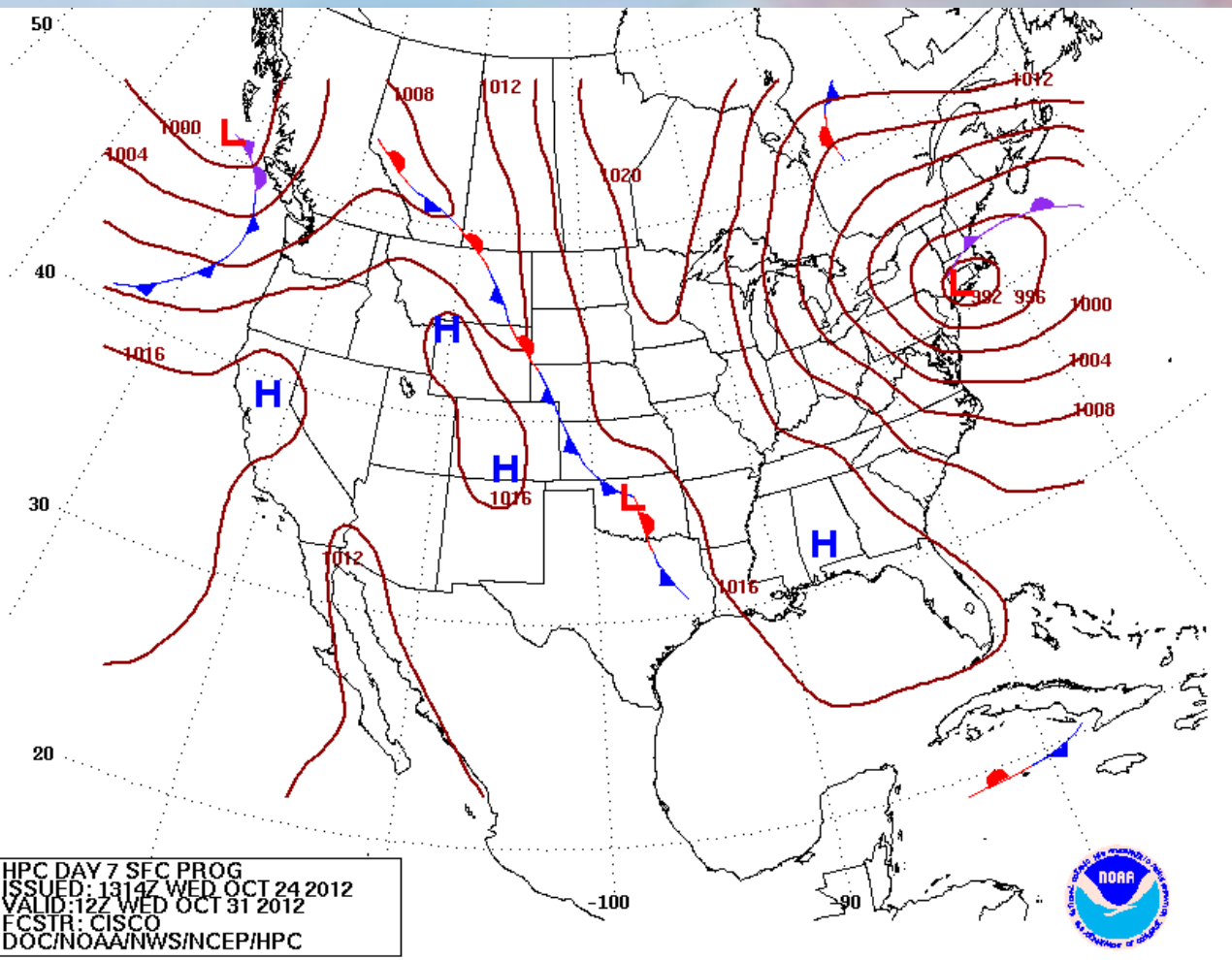
The storm could still have winds of 60-70 mph at this time.





- Map on the left is valid 800 AM EDT Tuesday October 30th.
- Storm center is near southern New England.





- Map on the left is valid 800 AM EDT Wednesday October 31st
- Storm center is over southern New England



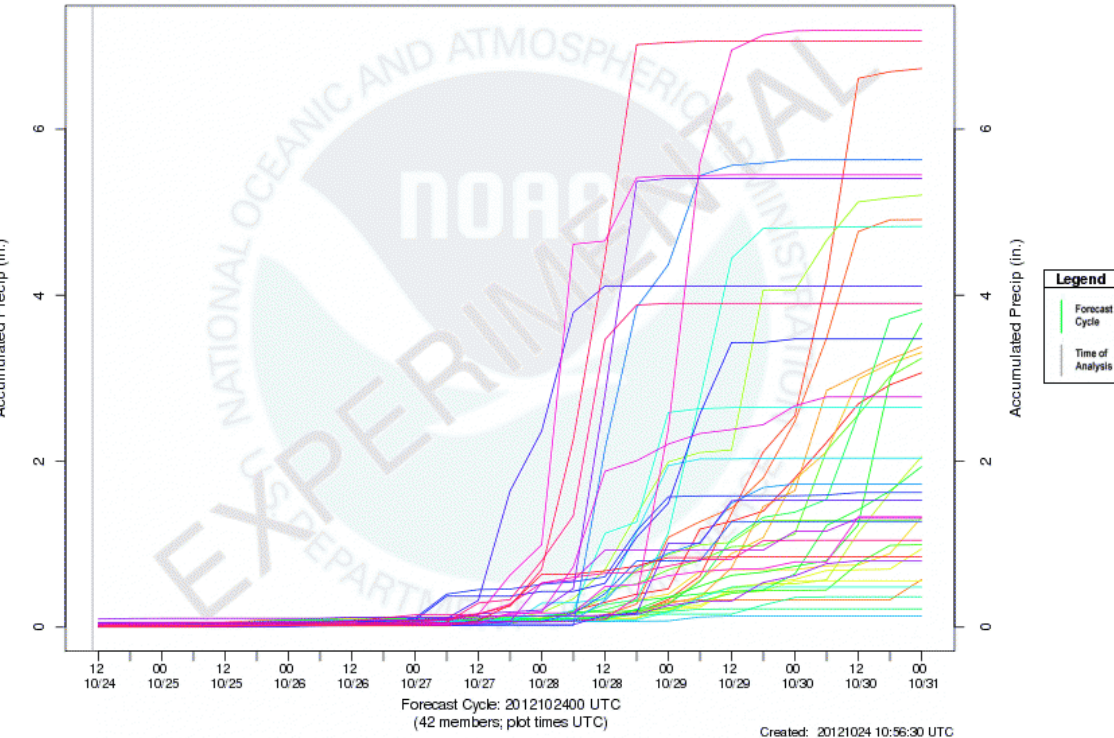
Note about the preceding maps

- Remember that the forecast maps are guidance, not gospel.
- The storm center could easily track closer to the coast or further out to sea.
- The takeaway message is that our region could be close to the path of a very dangerous storm.



Our inland flooding forecast tools

NAEFS-based Local Basin-average Accumulated Precip. Traces
Neshaminy Creek at Langhorne, PA (LNGP1)
Analysis for the period 10/24/2012 12 UTC - 10/31/2012 00 UTC

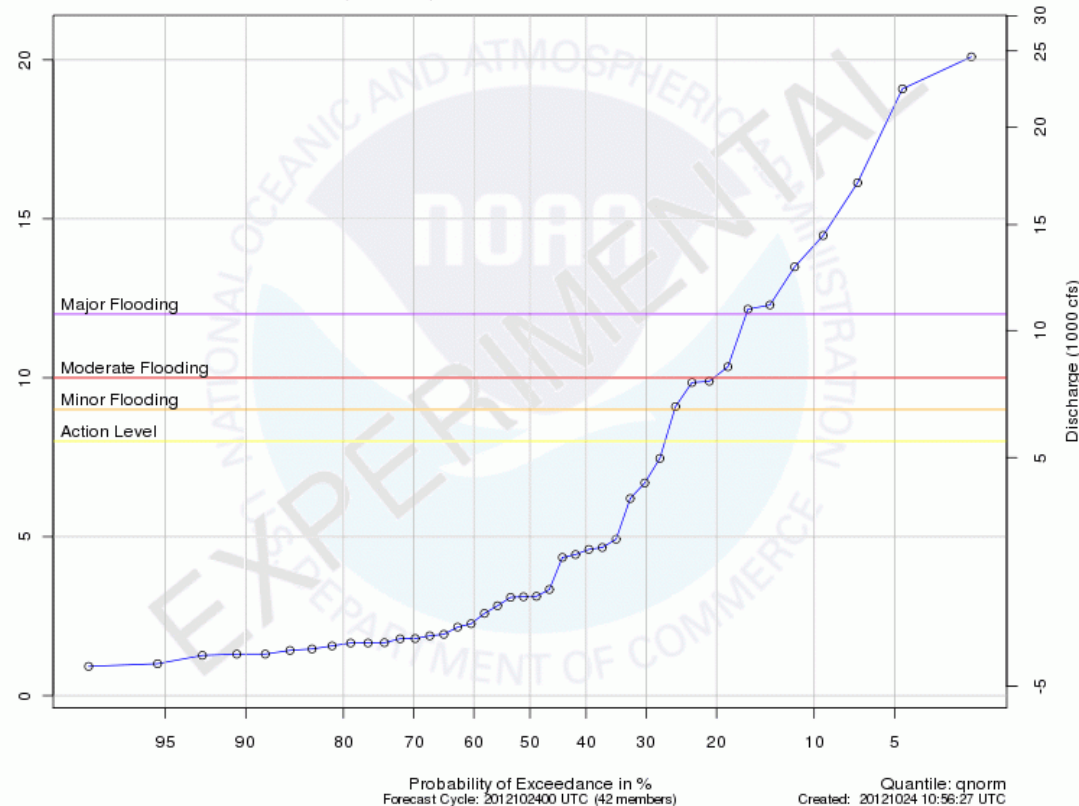


- On the left is an 'ensemble' graphic showing potential rainfall over the next 7 days.
- This 'ensemble' has 42 potential model solutions regarding how much rain may fall.
- 10 of the ensemble members show 4+ inches of rain; 3 of those members shows 6+ inches of rain.
- Ensemble forecasts are a way to measure risk or forecast confidence.

Our inland flooding forecast tools

- The graphic on the left now shows the risk of flooding over the next 7 days, given the potential rainfall shown on the previous slide.
- 11 of 42 ensemble members shows river flooding occurring at this location, and 7 of those are in the major flooding category.
- Using this to assess risk, there is a roughly 15% chance of major river flooding from this event.
- Again, this is a forecast tool to assess risk over a 7 day period.

NAEFS-based Stage Simulations Probability of Exceedance Plot
Neshaminy Creek at Langhorne, PA (LNGP1)
Analysis for the period 10/24/2012 12UTC - 10/30/2012 12UTC



Things to focus on about this storm

- A very large region will be affected by very strong winds.
- Reflecting its tropical beginnings, very heavy rainfall will occur with the storm.
- The storm will be slow moving. This worsens the impact for coastal flooding as it will affect multiple high tide cycles. This worsens the potential for heavy rainfall inland and increases the risk of major river flooding.
- The area affected will be determined by the track of the storm. There is still considerable uncertainty about the track of the storm. **However, the threat to our region from the storm has increased over the past 24 hours.** Slide #5 shows 'ensemble' forecast tracks, and the number of potential tracks striking the East Coast has increased considerably compared to 24 hours ago.



Questions?

- For the latest information, visit our website at weather.gov/phi
- If you have any questions, please contact us.
- Gary.Szatkowski@noaa.gov
- Office 609-261-6602 x222
- Cell 609-320-7205

