A storm system associated with the remnants of Ida is seen along the mid-Atlantic states bringing strong winds, coastal flooding, and heavy rains. Rainfall totals of 11.92, 9.51, and 7.10 inches were recorded at Chesapeake Virginia, Swansboro North Carolina, and Great Mills Maryland respectively through 7 AM EST on November 13 as reported by the National Hurricane Center.
Ventnor City OEM
Coastal Erosion Comparison

October 16, 2009
New Haven Avenue & Beach

November 14, 2009
New Haven Avenue & Beach
Water washes under homes Friday morning in Indian Beach, south of Dewey Beach. High tides caused beach erosion and flooding.

Special to The News Journal/CHUCK SNYDER
Water washes under homes Friday morning in Indian Beach. Rep. Mike Castle, R-Del., toured beach areas Friday and promised to work in Congress for renewed funding for beach replenishment.
Atlantic City Press Newspaper
**Record Highest Wave**
26.7 ft

Waves measured since 1986.

- Bethany Beach De 11.6 ft
- Ocean City Md 11.9 ft
- Long Beach Island NJ 9.6 ft
- Buoy 44054 Lower De Bay 7.9 ft
- Buoy 44054 Central De Bay 5.3 ft

**Waves Impacting Beach/De Bay**
VDS - A Ten Year Storm

Stevens Institute -http://cmn.dl.stevens-tech.edu/
Sandy Hook NJ - elevation relative to MLLW (ft)

- Major flood level: 8.69
- Moderate flood level: 8.1
- Minor flood level: 6.69
- Blowout level: -1.8

Sandy Hook NJ - Water elevation difference (ft)

http://hudson.dl.stevens-tech.edu/SSWS/
NOAA Buoy 44009

Sustained 34 knots or greater
24 hours

Image Credit: NOAA/NWS/NDBC
Consecutive Hours of Sustained wind =>34 knots and Max Wind Gust

Dave Robinson – NJ State Climatologist

- Sea Girt – 31 hours – Max Gust 38 knots
- Seaside Heights – 20 hours – Max Gust 45 knots
- Harvey Cedars – 32 Hours – Max Gust 47 knots
- Atlantic City – 40 Hours – Max Gust 46 knots
- Lower Township – 50 Hours – Max Gust 50 knots
Comparison data for the VDS and January 27-28, 1998 storms and with Hurricane Isabel September 18, 2003
NOAA BUOY 44009

<table>
<thead>
<tr>
<th>Storm</th>
<th>Lowest Pressure (MBS)</th>
<th>Sustained Winds =&gt;34 kts Number of Hours</th>
<th>Gust =&gt;34 kts Number of Hours</th>
<th>Storm Force Sustained/Gusts =&gt;47 kts Number of Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDS</td>
<td>1002.4 MB</td>
<td>24</td>
<td>58</td>
<td>9</td>
</tr>
<tr>
<td>Isabel</td>
<td>1006.6 MB</td>
<td>1</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>01/27-28/98</td>
<td>992.4 mb</td>
<td>14</td>
<td>23</td>
<td>9</td>
</tr>
</tbody>
</table>

The thirty four knots are equivalent to Tropical Storm Force winds and is used in the Hurrevac Program to alert emergency managers that any preparedness action should be curtailed.