



## PRODUCT CHANGES FOR THE 2012 HURRICANE SEASON

The National Hurricane Center will implement the following changes to its text and graphical products for the 2012 hurricane season, effective May 15:

### Changes:

#### 1) Saffir-Simpson Hurricane Wind Scale modification.

A minor modification of the Saffir-Simpson Hurricane Wind Scale (SSHWS) will be made to resolve rounding issues associated with the conversion of units from knots to mph which are used for wind speed. This change follows a public comment period conducted in 2011.

Category 4 on the SSHWS will be broadened by one mph at each end of the range, yielding a new range of 130-156 mph. This will also result in a minor modification of the Category 3 and 5 wind speed thresholds. The SSHWS will change as follows:

From:

Category 3: 111-130 mph (96-113 kt, 178-209 km/h)

Category 4: 131-155 mph (114-135 kt, 210-249 km/h)

Category 5: 156 mph or higher (136 kt or higher, 250 km/h or higher)

To:

Category 3: 111-129 mph (96-112 kt, 178-208 km/h)

Category 4: 130-156 mph (113-136 kt, 209-251 km/h)

Category 5: 157 mph or higher (137 kt or higher, 252 km/h or higher)

There will be no change to the wind speeds currently assigned to Categories 1 and 2.

With this change, a 115-kt Category 4 hurricane will have its intensity properly converted to mph and rounded to the nearest 5 mph (130 mph) and remain within the Category 4 mph range.

Important note: Since intensities are assigned using 5-kt increments, neither storms in the historical record nor any future storms will have their SSHWS category changed as a result of this modification to the scale.

The NWS wishes to remind media, partners, and the public that the Saffir-Simpson Hurricane Wind Scale provides information on wind impacts only. The scale does not provide commentary or information on other impacts (i.e., storm surge, rainfall, and tornadoes) or characteristics of tropical cyclones.

Additional information on this change can be found at:

<http://www.nhc.noaa.gov/aboutsshws.php>

## 2) Tropical Cyclone forecast cone will be reduced in size.

The size of the tropical cyclone forecast cone will be slightly smaller. The cone represents the probable track of the center of a tropical cyclone, and is formed by enclosing the area swept out by a set of imaginary circles placed along the forecast track (at 12, 24, 36 hours, etc.). The size of each circle is set so that two-thirds of historical official forecast errors over the previous five years (2007-2011) fall within the circle. The circle radii defining the cones in 2012 for the Atlantic and eastern North Pacific basins are given in the table below:

Forecast Period (hours)	Circle radius Atlantic Basin (nautical miles)	Circle radius Eastern North Pacific Basin (nautical miles)
12	36	33
24	56	52
36	75	72
48	95	89
72	141	121
96	180	170
120	236	216

### Other items of interest for 2012:

- 1) A reminder that the lead times of tropical cyclone watches and warnings were increased in 2010. The definitions of tropical storm and hurricane watches and warnings are as follows:

*Tropical Storm Watch:* An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are *possible* within the specified coastal area within 48 hours.

*Tropical Storm Warning:* An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are *expected* within the specified coastal area within 36 hours.

*Hurricane Watch:* An announcement that hurricane conditions (sustained winds of 74 mph or higher) are *possible* somewhere within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds.

*Hurricane Warning:* An announcement that hurricane conditions (sustained winds of 74 mph or higher) are *expected* somewhere within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds.

- 2) Storm Surge Exceedance products are operational. The exceedance graphics show the storm surge height, in feet above normal tide level, which has a specific probability of being exceeded in the next 3 days. The available probability thresholds range from 10 to 90 percent, at 10 percent intervals. The products are available on the NHC website when a hurricane watch or warning is in effect for the United States.

Information on NHC Storm Surge products is found at:

[http://www.nhc.noaa.gov/ssurge/ssurge\\_products.shtml](http://www.nhc.noaa.gov/ssurge/ssurge_products.shtml)

- 3) The pronunciation guide for storm names includes phonetic pronunciations of all Atlantic and Eastern North Pacific storm names. The list of names and pronunciation guide is found on the NHC website at:

Atlantic: [http://www.nhc.noaa.gov/pdf/aboutnames\\_pronounce\\_atlc.pdf](http://www.nhc.noaa.gov/pdf/aboutnames_pronounce_atlc.pdf)

Eastern North Pacific: [http://www.nhc.noaa.gov/pdf/aboutnames\\_pronounce\\_epac.pdf](http://www.nhc.noaa.gov/pdf/aboutnames_pronounce_epac.pdf)

- 4) The National Hurricane Center has a Facebook page. The “NOAA NWS National Hurricane Center” page provides updates about the NHC outreach and education campaign and other items that might be of interest to the public throughout the year. During the hurricane season, the site contains a daily tropical weather update for both the Atlantic and eastern North Pacific basins, as well as alerts regarding any tropical cyclone activity as needed. The NHC Facebook page is found at:

<http://www.facebook.com/US.NOAA.NationalHurricaneCenter.gov>

- 5) The National Hurricane Center has joined the conversation on Twitter. A tweet is sent whenever NHC issues:

- A public advisory regarding a tropical cyclone (TCP)
- A tropical cyclone update (TCU)
- A position estimate (TCE)
- A tropical weather outlook (TWO)

Each tweet contains a link to access the corresponding product on the NHC website. NHC can also tweet a special message at any time.

NHC has two Twitter accounts, one for the Atlantic basin (which includes the Gulf of Mexico and the Caribbean Sea):

**U.S. National Hurricane Center (Atlantic) - @NHC\_Atlantic**

and one for the Eastern North Pacific basin:

**U.S. National Hurricane Center (Eastern Pacific) - @NHC\_Pacific**

**Experimental Products:** (Note that the timeliness and accuracy of these products cannot be guaranteed)

- 1) Audio podcast RSS/XML feed for top-of-the-hour briefings when the media pool is activated:  
<http://www.nhc.noaa.gov/audio/>  
(The media pool is typically activated when a hurricane watch is issued for any portion of the U.S. contiguous coastline.)
- 2) Live video/audio feed of top-of-the-hour hurricane briefings when the media pool is activated:  
<http://www.imaphurricane.info/>
- 3) Various GIS products:  
<http://www.nhc.noaa.gov/gis/>
- 4) In 2012, NHC will be working behind the scenes on potential enhancements to products and services. These planned in-house (non-public) experiments include extending tropical cyclone track and intensity forecasts out to seven days from the current five-day period, extending tropical cyclone formation forecasts out to five days from the current 48 hours, creation of track and intensity forecasts for disturbances with a high chance of formation, and the issuances of tropical cyclone warnings prior to the formation of a cyclone.

**On the Web:**

National Hurricane Center  
<http://www.hurricanes.gov>

National Hurricane Center Product Description Document-A User's Guide to Hurricane Product  
[http://www.nhc.noaa.gov/pdf/NHC\\_Product\\_Description.pdf](http://www.nhc.noaa.gov/pdf/NHC_Product_Description.pdf)

Graphical Tropical Weather Outlook:  
<http://www.nhc.noaa.gov/aboutnhcgraphics.shtml#GTWO>

Saffir Simpson Hurricane Wind Scale:  
<http://www.nhc.noaa.gov/aboutsshs.php>

Definition of NHC Track Forecast Cone:  
<http://www.nhc.noaa.gov/aboutcone.shtml>

National Hurricane Center Facebook page:  
<http://www.facebook.com/US.NOAA.NationalHurricaneCenter.gov>

National Hurricane Center Twitter page:  
<http://www.nhc.noaa.gov/twitter.shtml>

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