



## Glossary of NHC Terms

**Advisory:** Official information issued by tropical cyclone warning centers describing all [tropical cyclone](#) watches and warnings in effect along with details concerning tropical cyclone locations, intensity and movement, and precautions that should be taken. Advisories are also issued to describe: (a) [tropical cyclones](#) prior to issuance of watches and warnings and (b) [subtropical cyclones](#).

**Cone of Uncertainty:** 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 circles 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 a 5-year sample fall within the circle. Based on forecasts over the previous 5 years, the entire track of the tropical cyclone can be expected to remain within the cone roughly 60-70% of the time.

**Devastating side of hurricane:** The hurricane's forward motion and its rotational winds combine on the right-front side resulting in the strongest winds, highest storm surge, and greatest risk for tornadoes.

**Hurricane Warning:** An announcement that sustained winds of 64 knots (74 mph or 119 km/hr) or higher are *expected* somewhere within the specified area in association with a [tropical](#), [subtropical](#), or [post-tropical](#) cyclone. Because hurricane preparedness activities become difficult once winds reach [tropical storm](#) force, the warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds. The warning can remain in effect when dangerously high water or a combination of dangerously high water and waves continue, even though winds may be less than [hurricane](#) force.

**Hurricane Watch:** An announcement that sustained winds of 64 knots (74 mph or 119 km/hr) or higher are *possible* within the specified area in association with a [tropical](#), [subtropical](#), or [post-tropical](#) cyclone. 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.

**Major Hurricane:** A [hurricane](#) that is classified as Category 3 or higher.

**Saffir-Simpson Hurricane Wind Scale:** The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time. The scale provides examples of the type of damage and impacts in the United States associated with winds of the indicated intensity. The following table shows the scale broken down by winds:

Category	Wind Speed (mph)	Damage
1	74 - 95	Very dangerous winds will produce some damage
2	96 - 110	Extremely dangerous winds will cause extensive damage
3	111 - 129	Devastating damage will occur
4	130 - 156	Catastrophic damage will occur
5	> 156	Catastrophic damage will occur

**Storm Surge:** An abnormal rise in sea level accompanying a [hurricane](#) or other intense storm, and whose height is the difference between the observed level of the sea surface and the level that would have occurred in the absence of the cyclone. Storm surge is usually estimated by subtracting the normal or astronomic high tide from the observed storm tide.

**Tropical Depression:** A [tropical cyclone](#) in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 33 kt (38 mph or 62 km/hr) or less.

**Tropical Disturbance:** A discrete tropical weather system of apparently organized convection -- generally 100 to 300 nmi in diameter -- originating in the tropics or subtropics, having a nonfrontal migratory character, and maintaining its identity for 24 hours or more. It may or may not be associated with a detectable perturbation of the wind field.

**Tropical Storm:** A [tropical cyclone](#) in which the maximum sustained surface wind speed (using the U.S. 1-minute average) ranges from 34 kt (39 mph or 63 km/hr) to 63 kt (73 mph or 118 km/hr).