

Glossary of Commonly Used Weather Terms

Advisory	Eye	Gale Warning	High Wind Warning
Hurricane/Typhoon	Hurricane Season	Hurricane Warning	Hurricane Watch
Landfall	Major Hurricane	Saffir-Simpson Scale	Storm Surge
Storm Warning	Tropical Storm	Tropical Storm Warning	Tropical Storm Watch

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](#).

Eye:

The roughly circular area of comparatively light winds that encompasses the center of a severe [tropical cyclone](#). The eye is either completely or partially surrounded by the [eyewall](#) cloud.

Gale Warning:

A warning of 1-minute sustained surface winds in the range 34 kt (39 mph or 63 km/hr) to 47 kt (54 mph or 87 km/hr) inclusive, either predicted or occurring and not directly associated with [tropical cyclones](#).

High Wind Warning:

A high wind warning is defined as 1-minute average surface winds of 35 kt (40 mph or 64 km/hr) or greater lasting for 1 hour or longer, or winds gusting to 50 kt (58 mph or 93 km/hr) or greater regardless of duration that are either expected or observed over land.

Hurricane / Typhoon:

A [tropical cyclone](#) in which the maximum sustained surface wind (using the U.S. 1-minute average) is 64 kt (74 mph or 119 km/hr) or more. The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline.

Hurricane Season:

The portion of the year having a relatively high incidence of hurricanes. The hurricane season in the Atlantic, Caribbean, and Gulf of Mexico runs from June 1 to November 30. The hurricane season in the [Eastern Pacific basin](#) runs from May 15 to November 30. The hurricane season in the [Central Pacific basin](#) runs from June 1 to November 30.

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.

Landfall:

The intersection of the surface [center](#) of a [tropical cyclone](#) with a coastline. Because the strongest winds in a tropical cyclone are not located precisely at the center, it is possible for a cyclone's strongest winds to be experienced over land even if landfall does not occur. Similarly, it is possible for a tropical cyclone to make landfall and have its strongest winds remain over the water. Compare [direct hit](#), [indirect hit](#), and [strike](#).

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

A detailed description of the Saffir-Simpson Hurricane Wind Scale is available at <http://www.nhc.noaa.gov/aboutsshws.php>.

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.

Storm Warning:

A warning of 1-minute sustained surface winds of 48 kt (55 mph or 88 km/hr) or greater, either predicted or occurring, not directly associated with [tropical cyclones](#).

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).

Tropical Storm Warning:

An announcement that sustained winds of 34 to 63 knots (39 to 73 mph or 63 to 118 km/hr) are *expected* somewhere within the specified area within 36 hours in association with a [tropical](#), [subtropical](#), or [post-tropical](#) cyclone.

Tropical Storm Watch:

An announcement that sustained winds of 34 to 63 knots (39 to 73 mph or 63 to 118 km/hr) are *possible* within the specified area within 48 hours in association with a [tropical](#), [subtropical](#), or [post-tropical](#) cyclone.

Definitions provided by the National Weather Service. To view a complete list of definitions, [click here](#).