

## Glossary of Weather Terms

**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.

**Flood** – Any high flow, overflow, or inundation by water which causes or threatens damage and/or threatens human life.

**Hurricane** – A tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) is 74 mph 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 Watch** – Hurricane conditions (sustained winds of 74 mph or higher) are possible within the specified area. Because hurricane preparedness activities become dangerous once winds reach tropical-storm-force (sustained winds of 39 to 73 mph), a hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds. During a hurricane watch, prepare your home and follow instructions from local officials. If you live in an evacuation zone for storm surge, you might be told to prepare your home and evacuate even before or without a hurricane watch.

**Hurricane Warning** – Hurricane conditions (sustained winds of 74 mph or higher) are expected somewhere within the specified area. Because hurricane preparedness activities become dangerous once winds reach tropical-storm-force (sustained winds of 39 to 73 mph), the hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds. During a hurricane warning, rush preparations to completion, follow instructions from local officials, and take shelter where you will stay during the storm. If you live in an evacuation zone for storm surge, you might be told to prepare your home and evacuate even before or without a hurricane warning.

**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	> 157	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.

**Storm Surge Watch** – The possibility of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 48 hours, in association with an ongoing or potential tropical cyclone, a subtropical cyclone or a post-tropical cyclone. The watch may be issued earlier when other conditions, such as the onset of tropical-storm-force winds, are expected to limit the time available to take protective actions for surge (e.g., evacuations). The watch may also be issued for locations not expected to receive life-threatening inundation but which could potentially be isolated by inundation in adjacent areas. Prepare your home and follow instructions from local officials, and evacuate if and when told to do so. In some cases, you may be told to prepare your home and evacuate even before the issuance of a storm surge watch.

**Storm Surge Warning** – The danger of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 36 hours, in association with an ongoing or potential tropical cyclone, a subtropical cyclone or a post-tropical cyclone. The warning may be issued earlier when other conditions, such as the onset of tropical-storm-force winds, are expected to limit the time available to take protective actions for surge (e.g., evacuations). The warning may also be issued for locations not expected to receive life-threatening inundation but which could potentially be isolated by inundation in adjacent areas. Rush preparations to completion, follow instructions from local officials, evacuate if and when told to do so, and take shelter where you will stay during the storm. In some cases, you may be told to prepare your home and evacuate even before the issuance of a storm surge warning or watch.

**Tropical Depression** – A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 38 mph or less.

**Tropical Storm** – A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) ranges from 39 mph to 73 mph.