

# Hurricane Definitions

---

*The Tampa Tribune*

*Published: May 10, 2007*

## **UNDERSTANDING THE TERMS**

When tropical weather threatens, agencies from the local to federal levels watch the systems and try to gauge their strength. When a hurricane is approaching land, the National Hurricane Center will begin issuing watches and warnings. Here's how to decipher those:

**HURRICANE:** The storm has winds of more than 73 mph.

**HURRICANE WATCH:** Hurricane-force winds of more than 73 mph are possible within 36 hours.

**HURRICANE WARNING:** Hurricane-force winds are possible within 24 hours.

**EYE:** This is the hurricane's roughly circular center area where the winds are comparatively lighter.

**TROPICAL STORMS:** These generate winds of 39 to 73 mph. Watches and warnings also are issued for these.

**LANDFALL:** The place where the center of a storm intersects with land. Because the storm's strongest winds are not in the center, an area can be greatly affected even if the storm doesn't make landfall there.

**ERROR CONE:** This shows a broad path that a storm could take. Because of uncertainty in forecasting a storm's path and strength, watches and warnings cover large areas of coastline. Those alerts mean anyone in a watch or warning area could be hit by a storm.

**STORM SURGE:** The abnormal rise in sea level accompanies a hurricane or other intense storm. This dome of water (often 50 to 100 miles wide) sweeps the coastline near where the hurricane's eye makes landfall.

**Source: National Weather Service**

## **MEASURING A HURRICANE**

Emergency officials use the Saffir-Simpson scale to decide which areas to evacuate. It ranks hurricanes from Category 1 (minimal) to Category 5 (catastrophic).

### **Category 1**

Wind: 74 to 95 mph

Storm surge: 4 to 5 feet

Damage: Minimal  
Example: Hurricane Gaston in 2004

**Category 2**

Wind: 96 to 110 mph  
Storm surge: 6 to 8 feet  
Damage: Moderate  
Example: Hurricane Frances in 2004

**Category 3**

Wind: 111 to 130 mph  
Storm surge: 9 to 12 feet  
Damage: Extensive  
Example: Hurricanes Jeanne and Ivan in 2004

**Category 4**

Wind: 131 to 155 mph  
Storm surge: 13 to 18 feet  
Damage: Extreme  
Example: Hurricane Charley in 2004

**Category 5**

Wind: 156 mph plus  
Storm surge: Higher than 18 feet  
Damage: Catastrophic  
Example: Hurricane Andrew in 1992