

# Animated guide: Hurricanes

**Hurricanes start when strong clusters of thunderstorms drift over warm ocean waters.**

In the Atlantic and eastern Pacific they are called hurricanes, but in the western Pacific they are called typhoons.

In the Bay of Bengal and Indian Ocean they are known as cyclones.

The very warm air from the storm combines with the moist ocean surface and begin rising. This creates low pressure at the surface.

As trade winds hit those within the storm, the whirling winds cause the storm to start spinning. Rising warm air leaves low pressure above the surface.

Air rises faster and faster to fill this low pressure, in turn drawing more warm air off the sea and sucking cooler, drier air downwards.

As the storm moves over the ocean it picks up more warm, moist air. Wind speeds start to increase as more air is sucked into the low-pressure centre.

It can take hours or several days for a depression to grow into a fully-formed hurricane.

Hurricanes are made up of an eye of calm winds and low pressure surrounded by a spinning vortex of high winds and heavy rainstorms.

When a hurricane hits land it often has devastating effects.

The Saffir-Simpson scale was devised to measure hurricanes around the Americas and is increasingly used to categorise typhoons and cyclones, too, although some regions still use different scales.

The effects:

## **Category 1:**

- Minor flooding
- Little structural damage
- Storm surge 1.2-1.5m above normal

## **Category 2:**

- Roofs damaged
- Some trees damaged
- Storm surge 1.8-2.4m above normal

## **Category 3:**

- Houses damaged

- Severe flooding
- Storm surge 2.7-3.7m above normal

**Category 4:**

- Some roofs destroyed
- Major structural damage to houses
- Storm surge 4-5.5m above normal

**Category 5:**

- Serious damage to buildings
- Severe flooding further inland
- Storm surge more than 5.5m above normal