

Hurricanes, Typhoons, and Cyclones: A World of Difference

by RV staff writer JCH

Have you ever been watching when a tv weatherperson points to a large, white spiral of storm clouds spinning over the Earth on their video screen? If so, then you've gotten a small look at what the most powerful storm in the world looks like: a tropical cyclone.

Tropical cyclones start as tropical storms that form in warm ocean waters near the Earth's equator. The Earth's equator is an invisible line that wraps around the center of the Earth. It divides the Earth into two halves: the Northern and Southern hemispheres. The warm air and water at the equator rise into the atmosphere, cool off, and then sink back down. As this cycle repeats itself over and over again, the storm begins to grow and the winds around the storm begin to move faster. Once wind speeds reach 74 miles per hour, the tropical storm becomes a tropical cyclone.

Depending on where a tropical cyclone is in the world, it is called either a hurricane, a typhoon, or a cyclone. If a tropical cyclone moves over the northwestern Pacific Ocean, it is called a typhoon; if that storm was to move over the northeastern Pacific or the Atlantic Ocean, it is called a hurricane; and if that storm moves over the South Pacific or the Indian Ocean, it is called a cyclone.

The center of a tropical cyclone is called the "eye." The rest of the storm moves in a circle around the eye at incredibly high speeds. Most of the strong winds do not reach the eye of the storm, so the eye is the calmest part of the storm.

Tropical cyclones are put into categories based on their strength. A storm that is rated as a Category 1 is the weakest; it is still dangerous, but the winds are not as high. A Category 5 tropical cyclone is the strongest; this type of storm can cause heavy damage to buildings and can cause heavy flooding.

The strongest tropical cyclone in the Western Hemisphere ever recorded was a Category 5 hurricane named Hurricane Patricia in 1979. This hurricane had winds that reached 215 miles per hour. It produced flooding rain in Mexico, Central America, and Texas. The strongest tropical cyclone was Typhoon Tip, also in 1979. Its winds reached 260 miles per hour, and caused damage in the Philippines, Japan, and other areas of the Pacific.

While tropical cyclone winds can be incredibly strong and destructive, the winds are not the only reason that these storms are the strongest on the planet. They can also cause heavy rains, a rise in sea levels, heavy flooding, and tornadoes. All of these factors can be life-threatening to those in the path of the storm.

Once these storms come onto land, they no longer have the warm ocean water they need to grow larger. This means that they begin to grow weaker once they no longer spin over the water. This,

however, doesn't stop them from causing a lot of damage before they go away. They still may produce strong rain and tornadoes.

If you live in an area that experiences tropical cyclones or if you ever encounter a tropical cyclone, it's extremely important to know how to prepare and how to keep yourself safe. First, if you live in an area that has a hurricane warning, pay attention to evacuation notices. If your governor or local authorities ask you to evacuate, you and your family should seek shelter with a loved one or at a designated storm shelter. If there's no evacuation notice before a tropical cyclone, you and your family should make a plan to stay safe while the storm is in your area.

Tropical cyclones are an amazing natural phenomenon. It's important to respect how powerful and destructive they are.

Questions

1. On what part of the planet is a tropical cyclone called a hurricane?
2. Where does a typhoon occur?
3. Which tropical cyclone is the strongest: a Category 1 or a Category 5?
4. What is the eye of a tropical cyclone?