Hurricanes

When the conditions are right, hurricanes form over warm ocean waters. These are severe tropical storms, or cyclones, and normally occur in the Western Atlantic Ocean, around the Caribbean Sea, Gulf of Mexico and in the North Pacific off Mexico. In these areas, hurricane season is officially from 1st June until the end of November.

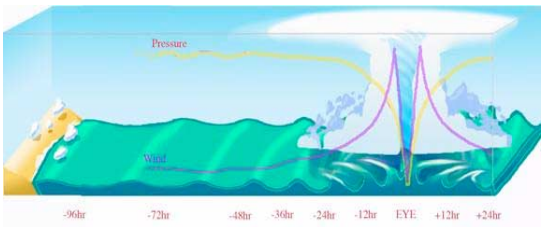

Image courtesy of JNOAA

A example of a hurricane, 92 hours before it hits land.

A hurricane feeds on the heat released from moist air rising from the ocean. This moist air condenses when it hits colder air above it and forms into water drops, which warm the surrounding air. This warm air rises and cooler air replaces it creating wind. There is a force, known as Coriolis Force, which deflects moving objects to one side because of the Earth's rotation. It is this force that starts the wind spinning in one direction around an "eye", creating a hurricane.

When a hurricane occurs in the Northern Hemisphere, it spins in an anti-clockwise direction, but if it forms in the Southern Hemisphere, it spins in a clockwise direction. When a hurricane hits land, heavy rain and strong winds can cause huge damage to buildings, trees and vehicles. Heavy waves, known as a storm surge, are also created and these waves are very dangerous.

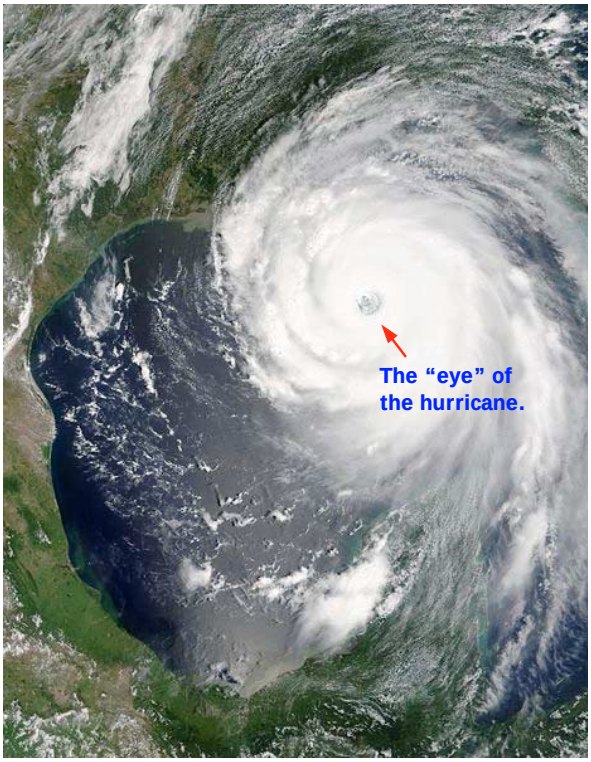

Image courtesy of Jeff Schmaltz, MODIS Rapid Response Team, NASA/GSFC

A satellite image of *Hurricane Katrina*, which caused such destruction when it hit the USA in August, 2008.

Hurricanes, Cyclones & Typhoons

Severe tropical storms do occur in other parts of the world, but they are not usually referred to as hurricanes. If they occur in the Indian Ocean they are usually called cyclones and in the Pacific Ocean they are called typhoons.

Tracking Hurricanes

It is important to track hurricane activity so that people can have some warning before a hurricane hits land, giving them time to evacuate the area. In the US, the National Hurricane Center, which is part of the National Weather Service and the National Oceanic and Atmospheric Administration, tracks tropical storms and hurricanes. They look at satellite images and have brave pilots who actually fly into hurricanes and tropical storms to collect data.

Naming Hurricanes

Parents who are expecting a baby often spend many days and weeks trying to think of the perfect name for their new baby but the scientists who name hurricanes don't have that problem.

To help scientists identify individual hurricanes and tropical storms, a simple name was found to be the easiest way to keep track of them as they moved around the ocean. The World Meteorological Organisation uses six lists of names, using one list each year until all the lists are used, and then they go back to the start again. Each list has a man or woman's name for every letter of the alphabet, except Q, U, X, Y and Z. The only time a name is "retired" is if a hurricane proved to be very deadly or costly. That name will then be replaced with a new name.

The names for the 2008 season are: Arthur, Bertha, Cristobal, Dolly, Edouard, Fay, Gustav, Hanna, Ike, Josephine, Kyle, Laura, Marco, Nana, Omar, Paloma, Rene, Sally, Teddy, Vicky and Wilfred.