Severe Weather.... --Tornadoes & Hurricanes







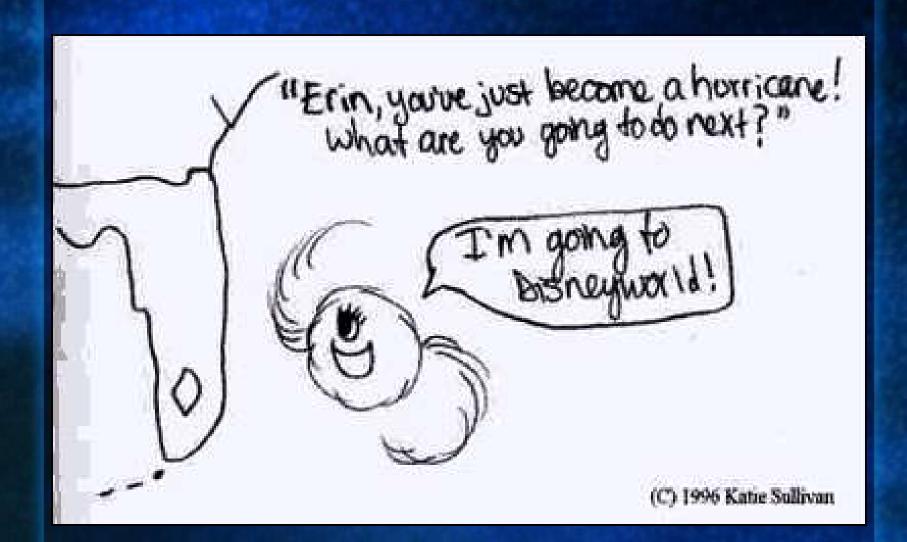
"That's the first time I've ever seen your mother let go of her purse."

SO WHAT?







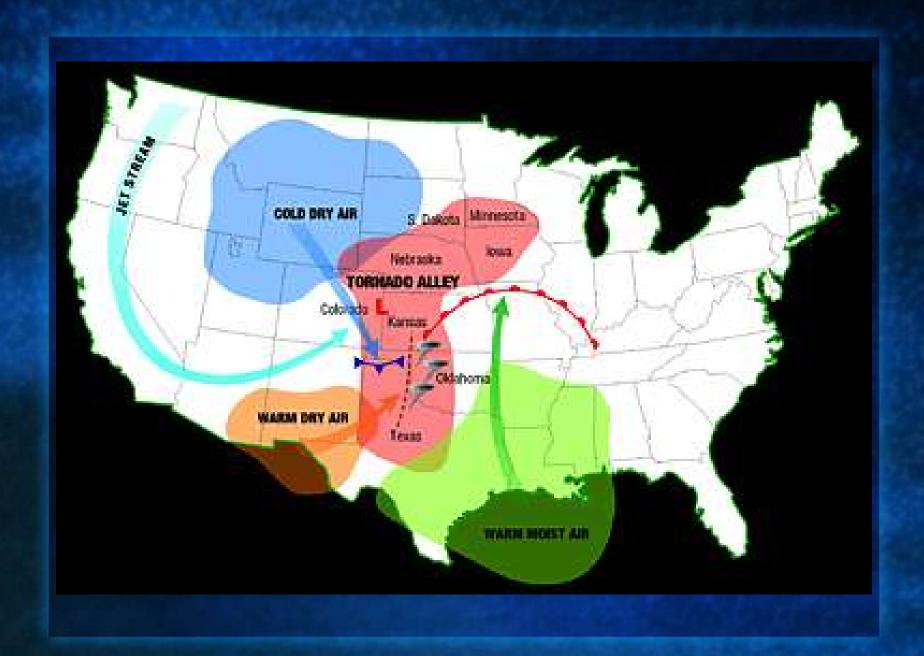


- Tornadoes are the most violent storms on the surface of the Earth.
- 70% of all tornadoes on Earth occur in the Great Plains region of the United States.



- Air masses collide over tornado alley, causing rotation:
- Warm, moist air masses from the Gulf of Mexico
- fast-moving polar air masses from Canadian Rockies.





- Common in the late spring and early summer
- Low pressure systems, as are all storms
- Cause a lot of damage yet the majority average 200 meters in diameter & last less than 10 minutes.







Hurricanes....



Hurricanes....

 Largest storms on Earth & the only storms which are named.

 Different parts of the world have different names:

United States: Hurricanes

Indian Ocean: Cyclones

Western Pacific (Japan): Typhoons

Requirements for a hurricane:

 Water temperature has to be at least 80°F in the upper 200 feet of water

Air Must be both warm & humid

Form in 5° to 20° latitude

Formation of Hurricanes:

- Warm water in the equatorial region needs to transfer energy
- Does so by evaporating water molecules into the atmosphere (water cycle)
- Winds start forming---
 - **Counterclockwise in Northern Hemisphere
 - **Clockwise in the Southern Hemisphere (Due to Coreolis Effect)

Wind Speeds...

Wind Speed

- Winds under 39 mph
- Winds 39-74 mph
- Winds over 74 mph

Storm Type

- **Tropical Depression
- **Tropical Storm
- **Hurricane

Hurricanes....

- Hurricane will strengthen as long as it is over warm water!
- Once hurricane reaches land it weakens because there is no more heat energy from the warm water to fuel it!

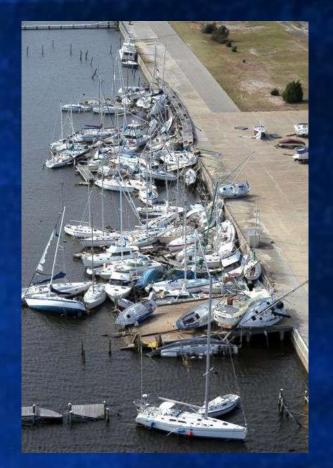


Seawater again? (C) 1996 Katie Sullivan

Hurricane Damage....







90% of all deaths from a hurricane occur in the storm surge!