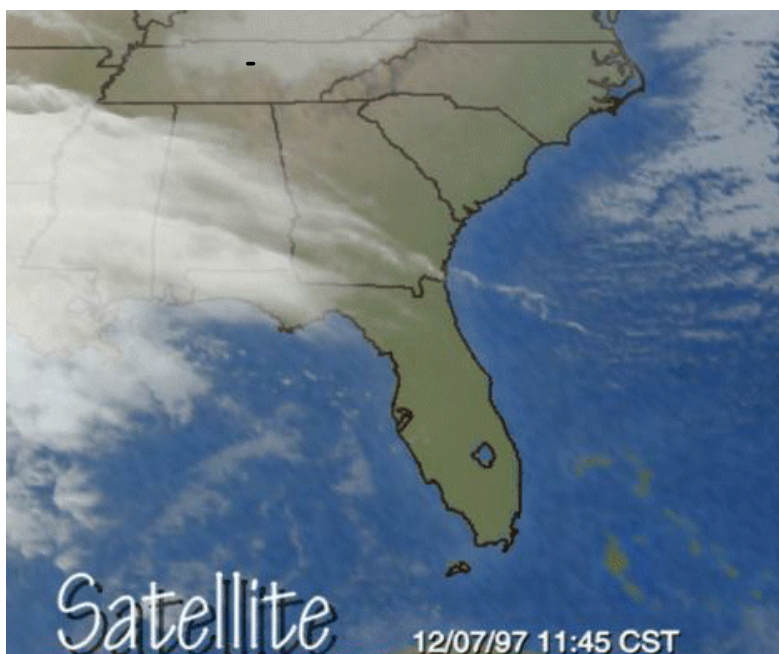
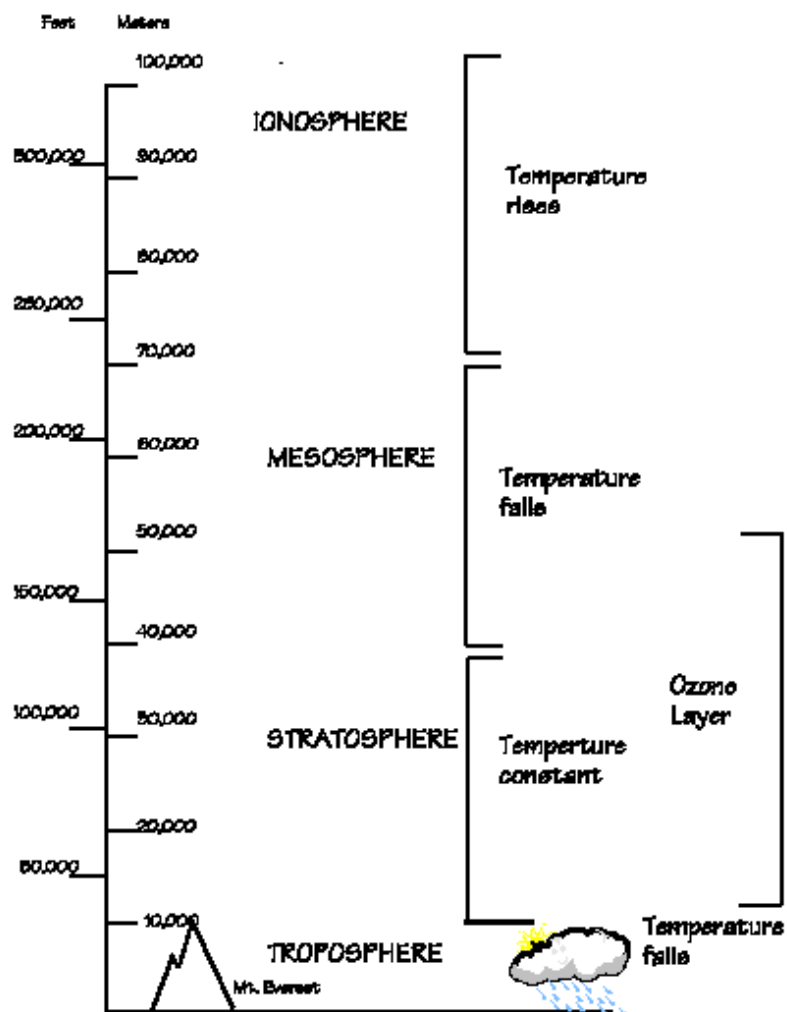


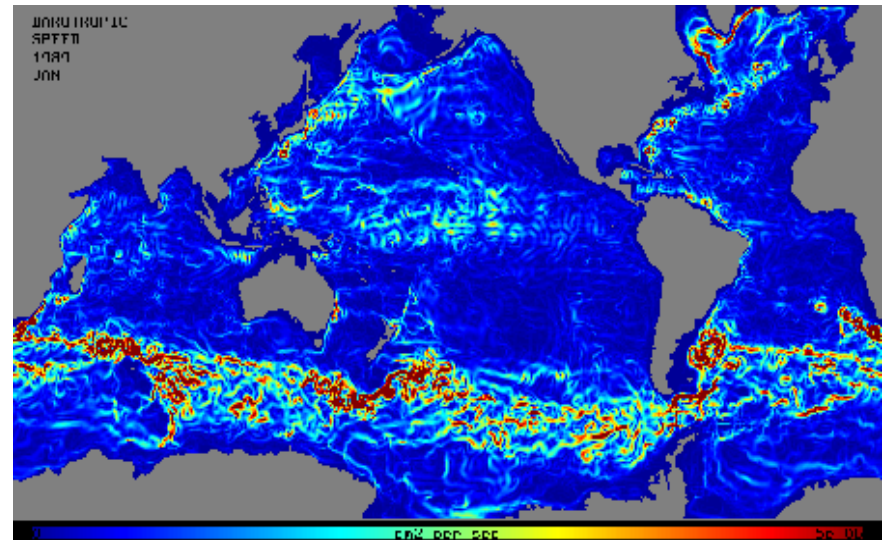
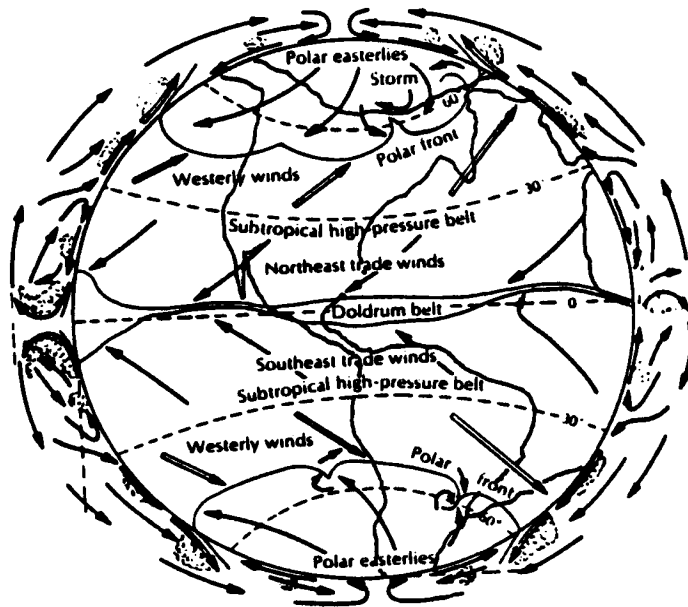
SEVERE WEATHER



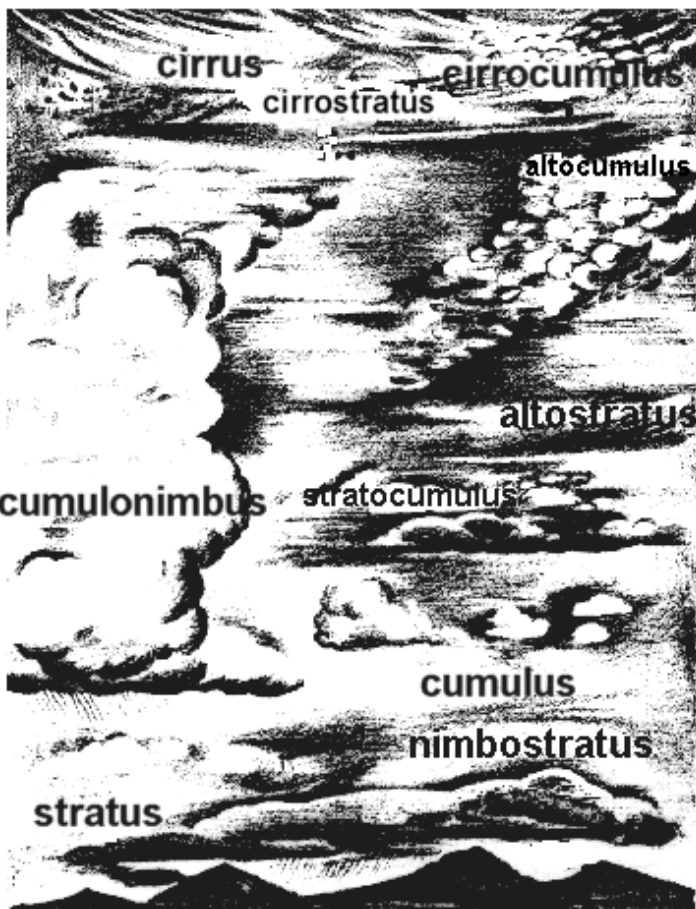
Where does weather occur?



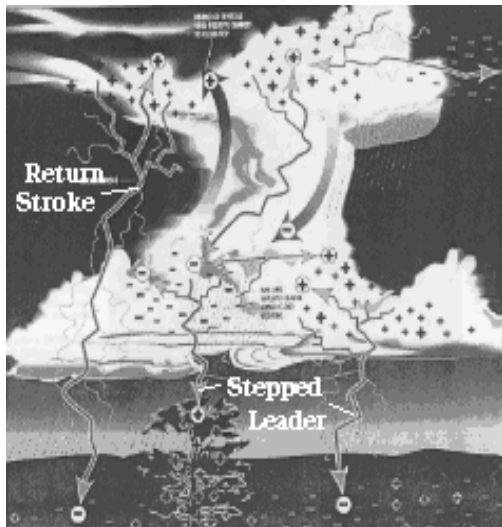
What causes the weather?



Thunderstorms



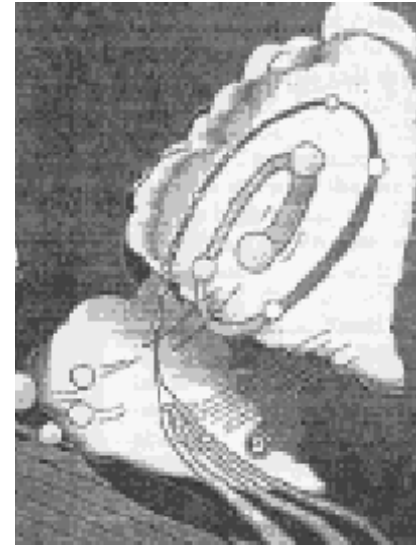
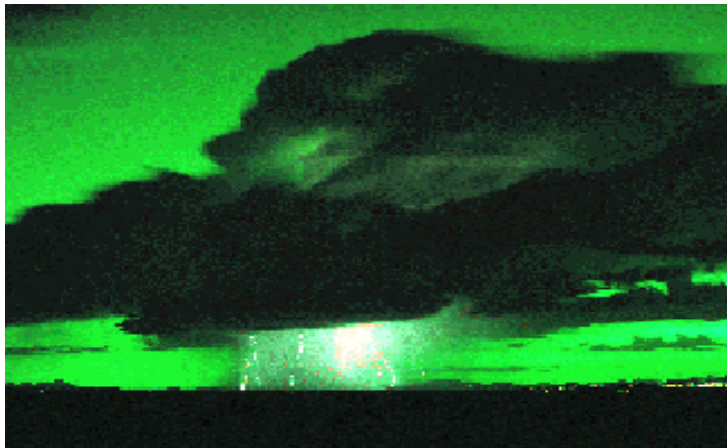
Lightning



**giant spark, rush of electrons from one place to another
motion of dust, hail, rain and other particles, cause a release of
negative charges which build up and then "flash"**

**Lightning strikes the Earth, 100 times per second
About 100 deaths occur each year just in the United States
The energy in one lightning storm equals 10 atom bombs**

Hail and Sleet



Sleet is when rain passes through a cold part of the atmosphere and freezes

Hail starts as rain at the top of a thundercloud, freezes and starts falling, an updraft in the cloud brings it upward and refreezes making it larger, Different cycles will produce different sizes of hail

Tornadoes

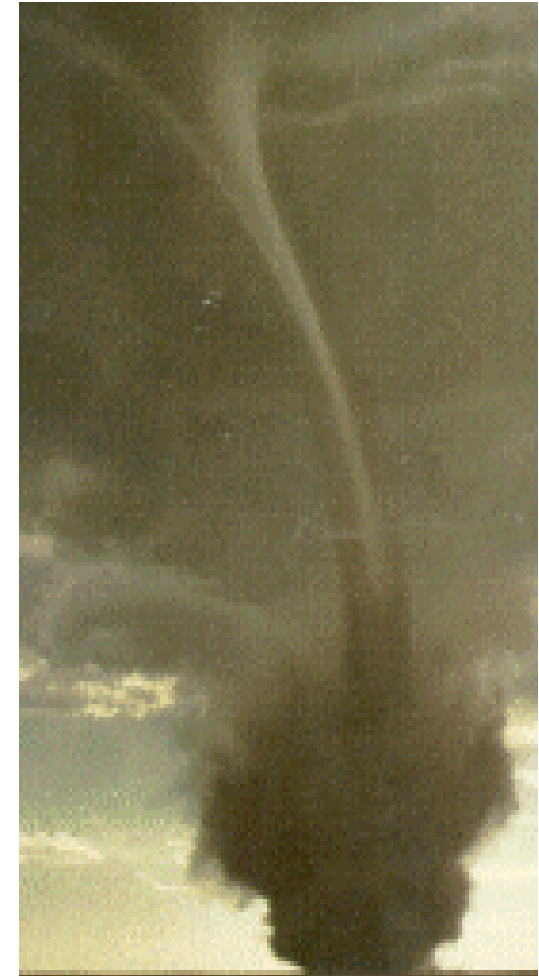
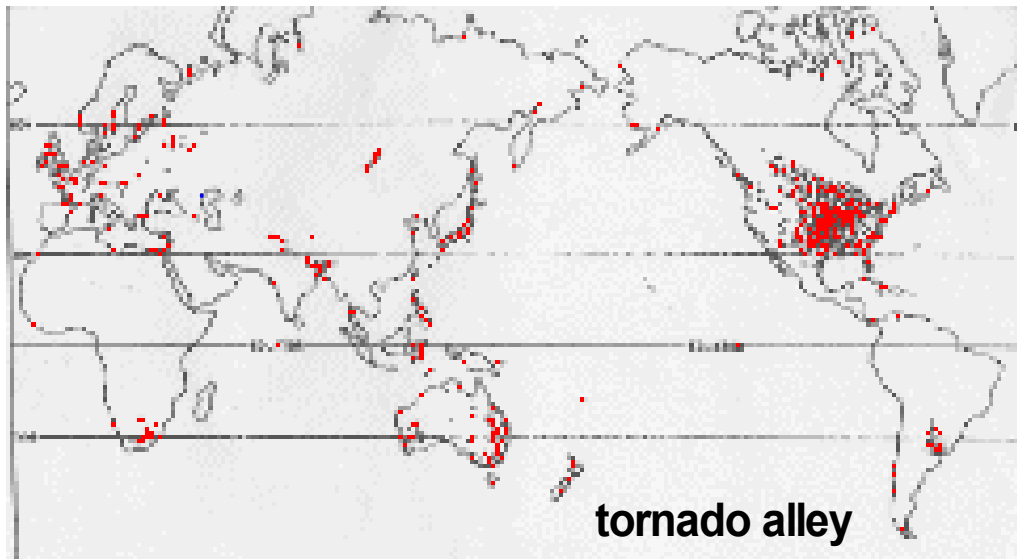
Violent and destructive whirlwind

Moves over narrow path

Speeds up to 300 mph

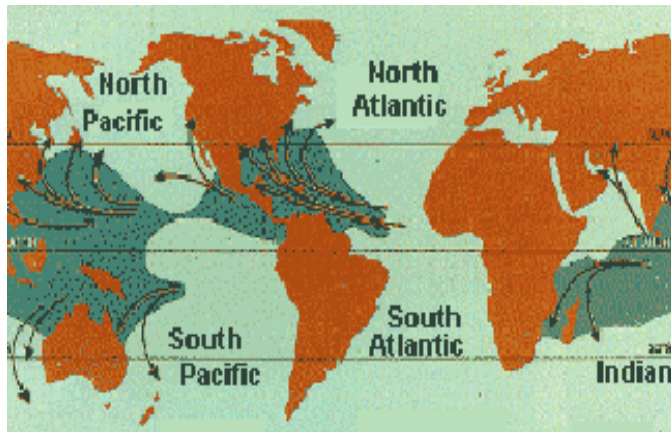
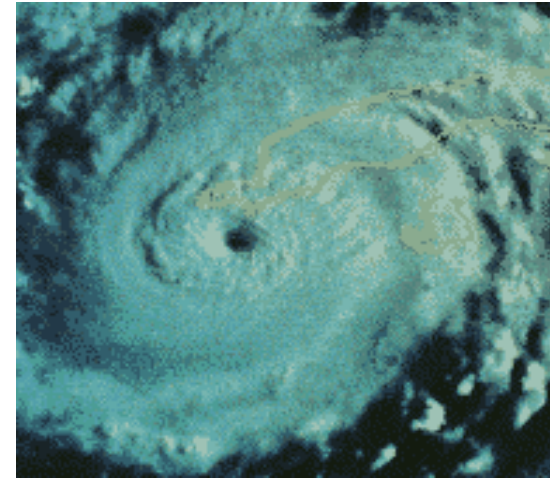
**Counterclockwise in northern hemisphere, clockwise
in southern hemisphere**

Lasts less than 1 hour, moving about 20 miles



Hurricanes

Typhoons, tropical cyclones
Low pressure system over warm water
with thunderstorm and cyclonic wind
greater than 33 m/s = hurricane



1997	1998	1999	2000	2001	2002
Ana	Alex	Arlene	Alberto	Allison	Arthur
Bill	Bonnie	Bret	Beryl	Barry	Bertha
Claudette	Charley	Cindy	Chris	Chantal	Cristobal
Danny	Danielle	Dennis	Debby	Dean	Dolly
Erika	Earl	Emily	Ernesto	Erin	Edouard
Fabian	Frances	Floyd	Florence	Felix	Fay
Grace	Georges	Gert	Gordon	Gabrielle	Gustav
Henri	Hermine	Harvey	Helene	Humberto	Hanna
Isabel	Ivan	Irene	Isaac	Iris	Isidore
Juan	Jeanne	Jose	Joyce	Jerry	Josephine
Kate	Karl	Katrina	Keith	Karen	Kyle
Larry	Lisa	Lenny	Leslie	Lorenzo	Lili
Mindy	Mitch	Maria	Michael	Michelle	Marco
Nicholas	Nicole	Nate	Nadine	Noel	Nana
Odette	Otto	Ophelia	Oscar	Olga	Omar
Peter	Paula	Philippe	Patty	Pablo	Paloma
Rose	Richard	Rita	Rafael	Rebekah	Rene
Sam	Shary	Stan	Sandy	Sebastien	Sally
Teresa	Tomas	Tammy	Tony	Tanya	Teddy
Victor	Virginie	Vince	Valerie	Van	Vicky
Wanda	Walter	Wilma	William	Wendy	Wilfred