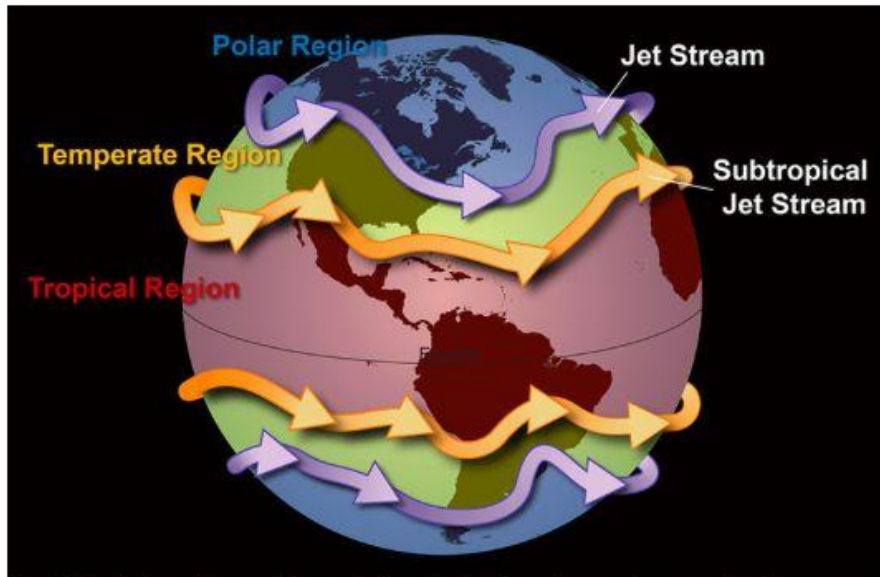
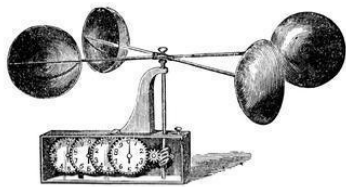


Wind

Wind is created when air flows from high pressure to low pressure. Wind can be global, such as the jet stream about 30,000 feet above the ground, or localized and closer to ground level. Around the world winds generally blow from the west to the east.



The division between these regions varies from day to day and season to season based upon locations of the jet and sub-tropical jetstreams.



Anemometer from 1846

Wind is measured with anemometers. The first known use of an anemometer was in 1450.



1886



Types of Wind Events

- ❖ **Straight-line wind:** any thunderstorm wind that is not associated with rotation, and is used mainly to differentiate tornadic winds.
- ❖ **Downdraft:** a small-scale column of air that rapidly sinks to the ground
- ❖ **Downburst:** a result of a strong downdraft. A downburst is a strong downdraft with horizontal dimensions larger than 4 km (2.5 mi) resulting in an outward burst of damaging winds on or near the ground.
- ❖ **Microburst:** small concentrate downburst that produces an outward burst of damaging winds at the surface. Generally less than 4 km across and lasting 5-10 minutes with maximum wind speeds up to 168 mph.
- ❖ **Gust front:** the leading edge of rain-cooled air that clashes with warmer thunderstorm inflow.
- ❖ **Derecho:** A widespread, long-lived wind storm that is associated with a band of rapidly moving showers or thunderstorms.
- ❖ **Haboob:** a wall of dust that is pushed along the ground from a thunderstorm downdraft at high speeds.