Weather and Climate Extremes

Heat Waves and Droughts (see Lectures 1/2)

The 1930s Dust Bowl

2011 Texas

The 1995 Chicago Heat Waves

The Heat Index
Cold Storms 

The Polar Vortex

The Wind Chill

Blizzards

Air Masses

Precipitation (will not be on the tests)

WIND CHILL Chart (Air Temperature & Wind Speed)

**Formula**: 

*W* = 35.74 + 0.6215 *T* - 35.74 *T* *10^-3 *V^2 + 0.4275 *T* *10^-5 *V^4

*W* = Wind Chill (°F) 

**Fronts**

Principal Features of a Cold Front

- wind shift
- cold air
- warm air
- cold front
- thunderstorms along front
- stratus and altostratus clouds ahead of front
- wind speed (mph)

Principal Features of a Warm Front

- wind shift
- warm air
- cold air
- warm front
- 500 mile
- rain
- snow

Principal Features of an Occluded Front

- wind shift
- cold air
- warm air
- cold air recording
- 100 mile
- rain
- snow

**Wave Cyclones**

Nor'Easters

Pineapple Express