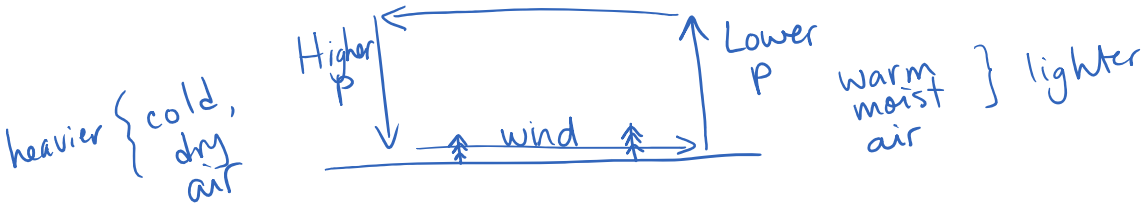
Wind

- blows from H pressure to L pressure



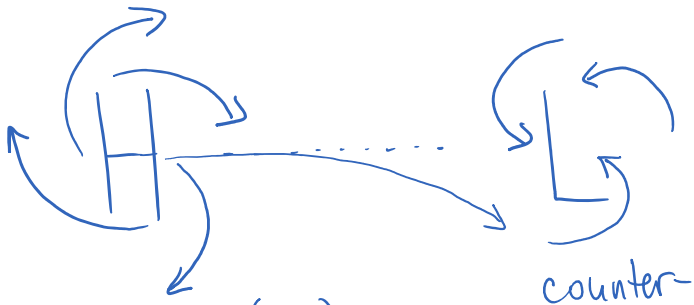
- normally wind blows straight from the centre of a Hig to the centre of a low....

But

the Coriolis Effect causes wind to change direction...

- Coriolis Effect
  - caused by ⊕'s rotation on axis
  - causes winds to veer to the right in the Northern hemisphere

N. Hem

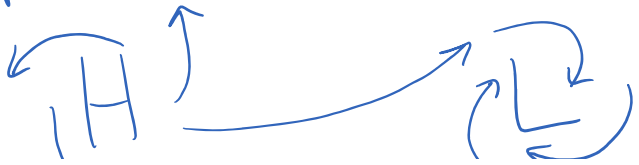


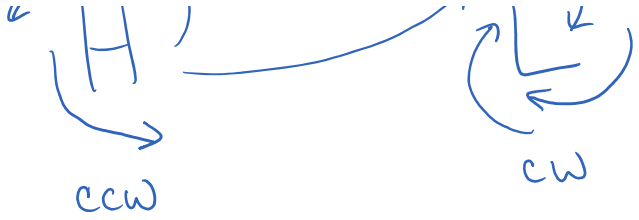
Clockwise (CW) around a high

counter-clockwise (CCW) around a Low (like tornado or hurricane)

both Lows

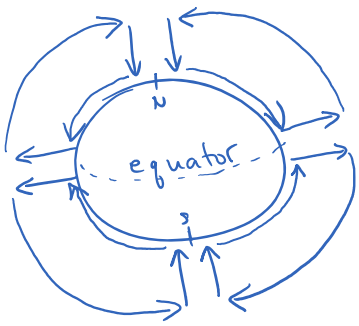
S. Hem - opposite





Simplified World Wind Belts

- if no rotation, and no land to interfere
- really much more complicated



Air Masses

- a large body of air with generally uniform temperature and humidity
- types of air masses – based on where formed –

P – Polar – cold
T – Tropical – warm
c – Continental – dry
m – maritime – humid

mP = cold, humid air
cT = dry, warm air

- Air masses can control the weather for a relatively long time (days to months)
- most weather changes occur along the edges of these air masses at boundaries called "Fronts"

Fronts

- boundaries btwn air masses
- named for the temperature of the air mass they are leading.
- weather map symbols

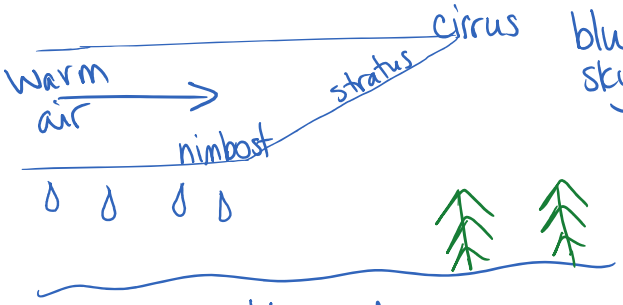
cold front (moving down page)

warm front (" " ")

stationary front (not moving)
(collision of cold and warm fronts)

occluded front (moving up page)
cold front runs over a warm front

Warm Front



- gentle slope
- gradual rising of the air along the front
- layered clouds (stratus)
- precipitation
- slower moving

Cold Front

- steeper slope
- pushes air up as cold air goes under
- abrupt air rise
- showery, thunderstorms
- move faster.