

Air Masses and Fronts

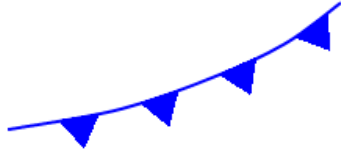
Air masses cover many thousands of square kilometers.



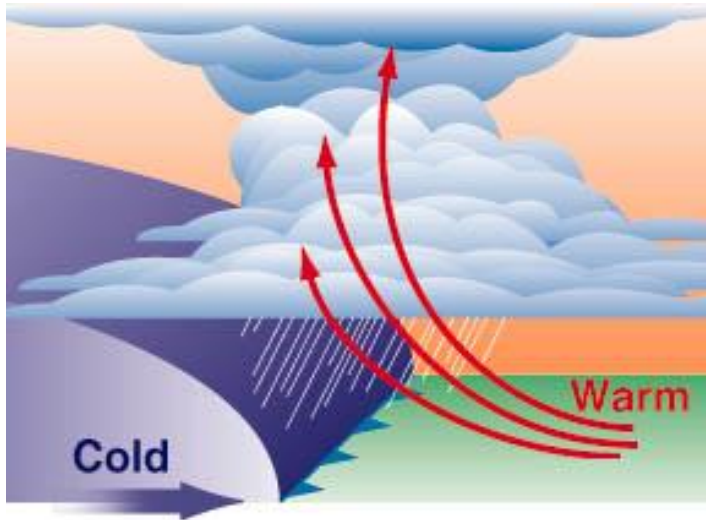
A boundary that separates two different air masses is called a weather (*atmospheric*) front.

Weather Fronts

Cold front:



fast moving cold (dense) air mass runs into a slow moving warm air mass and slides under.

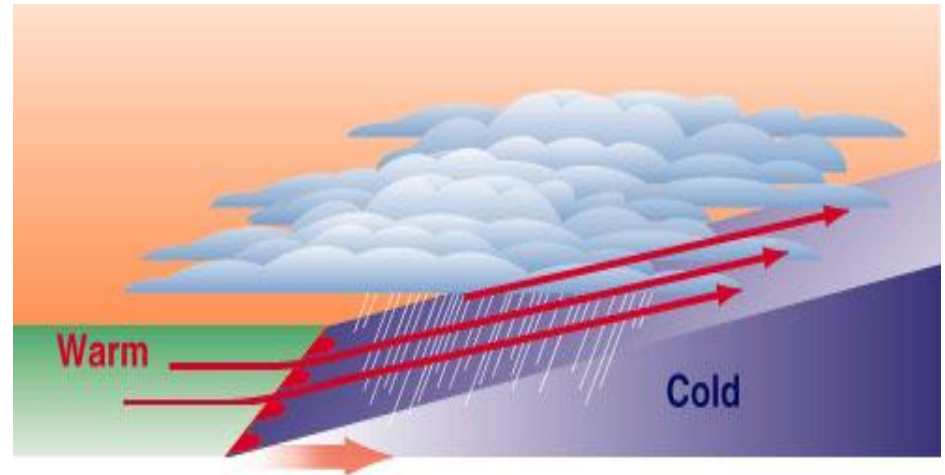


Weather: showers and thunderstorms.

Warm front:



fast moving warm (less dense) air mass collides with a slow moving cold air mass and moves over.



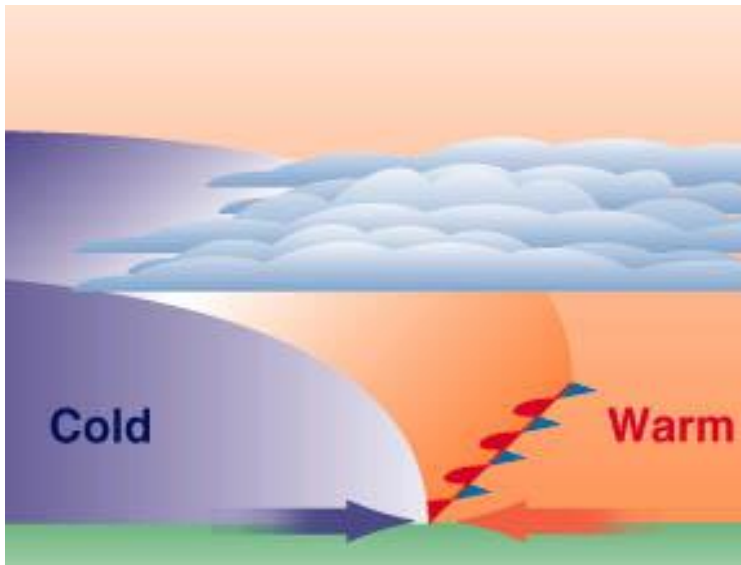
Weather: fog, rain, snow.

Weather Fronts

Stationary front:

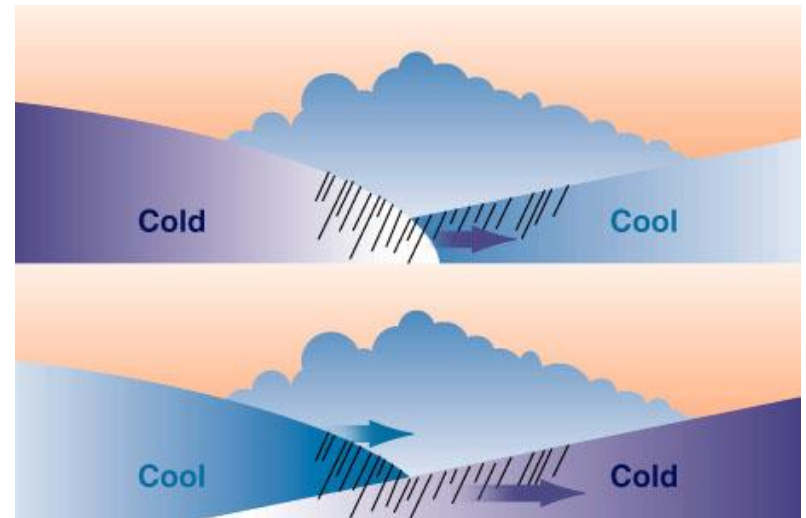


cold air mass and warm air mass meet, but neither has enough force to move the other.



Occluded front:

warm air mass is caught between two cooler air masses and the denser cold air masses move underneath and push it upward.



Weather: rain, thunder.