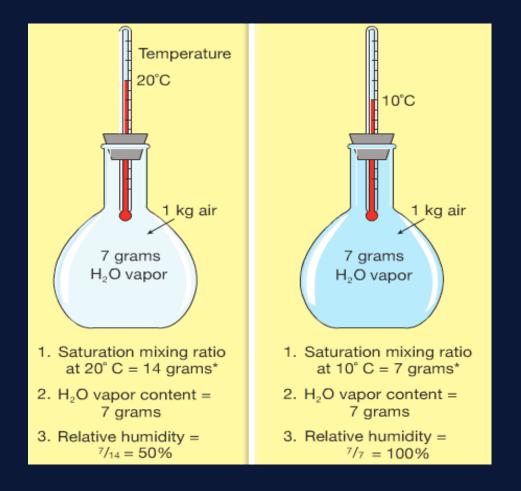
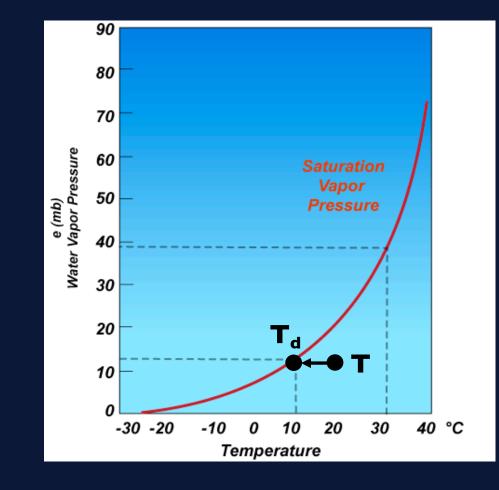
Dew and frost

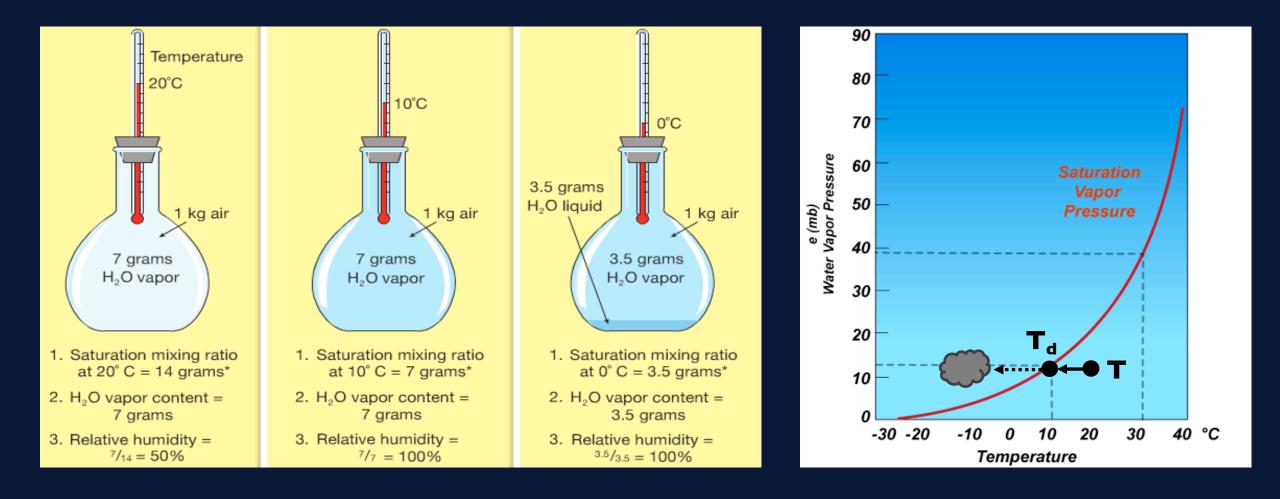
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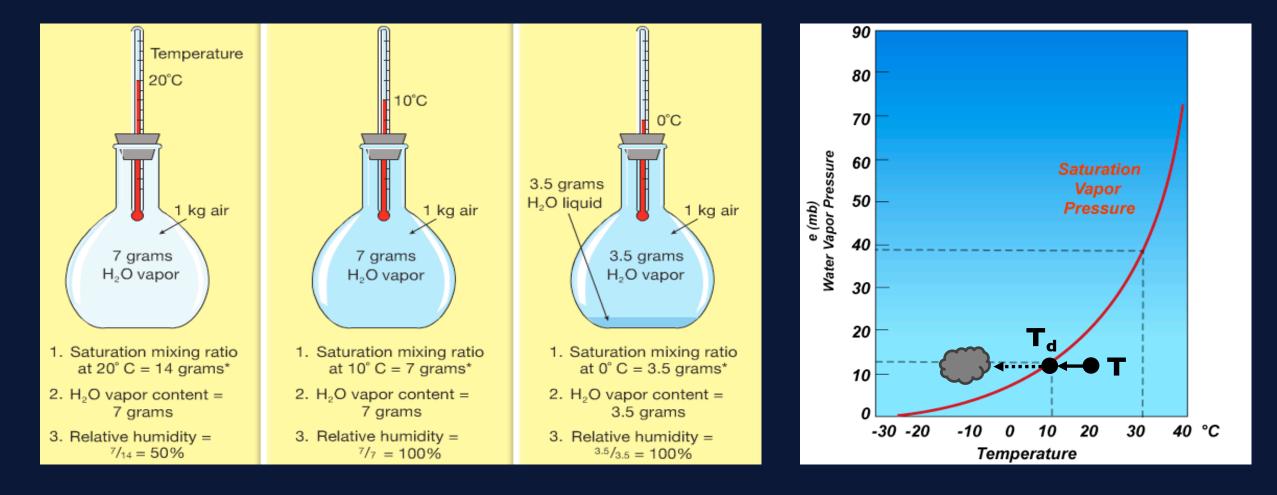




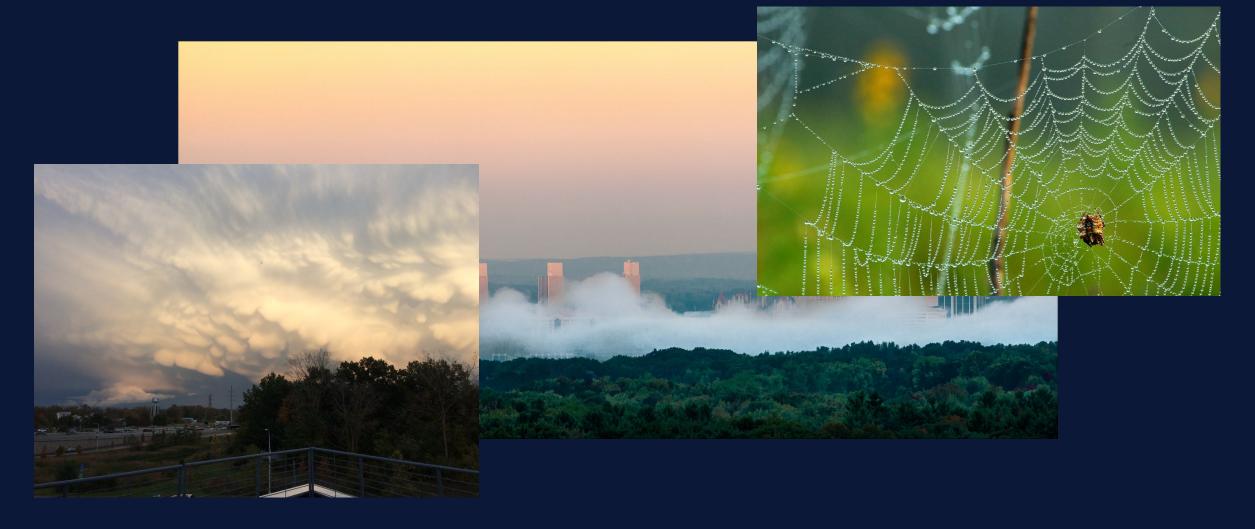
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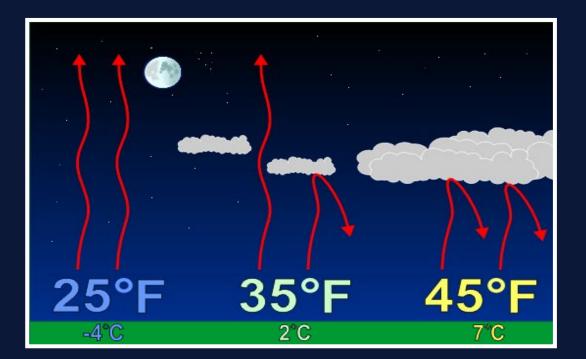


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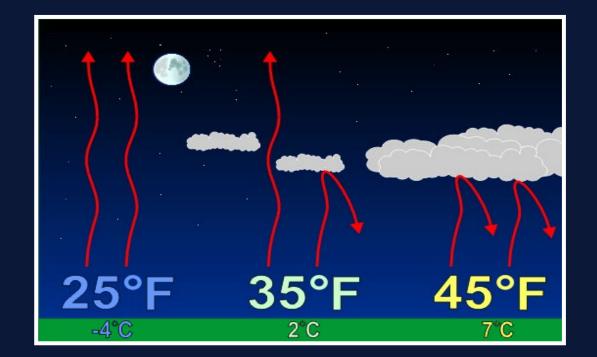


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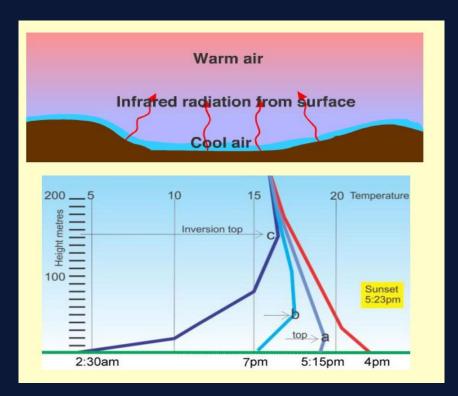


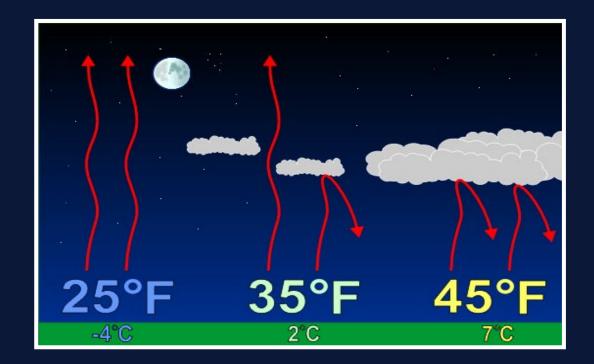
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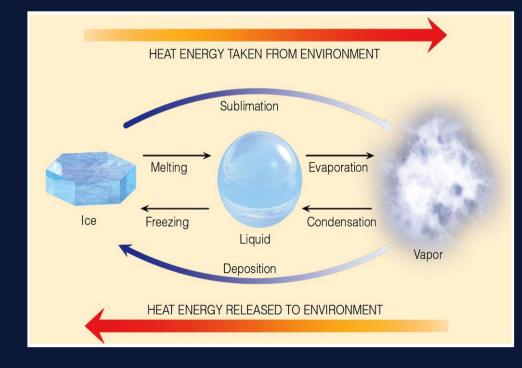




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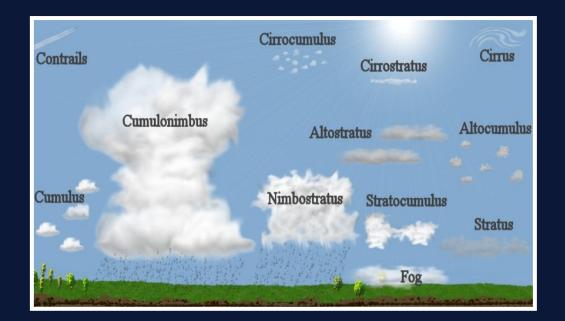




Fog is a cloud with its base at the ground. Both are composed of tiny water droplets, but their locations and <u>formation differ</u>.

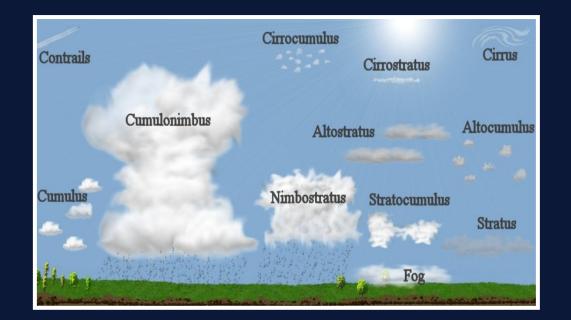


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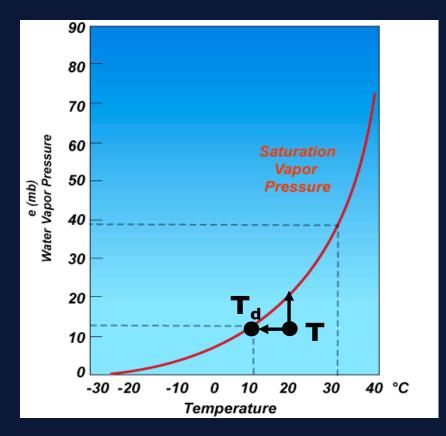
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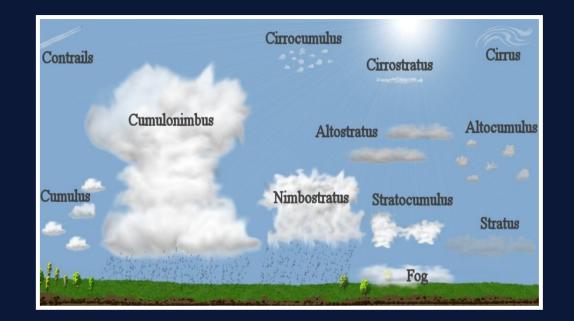


Clouds form when air rises and cools, while fog results from cooling the air or the addition of water vapor to saturation (the two ways to get the relative humidity to 100%!).

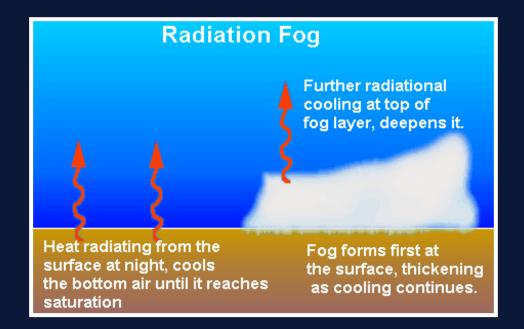


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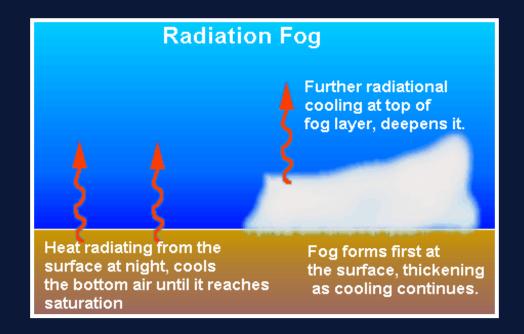




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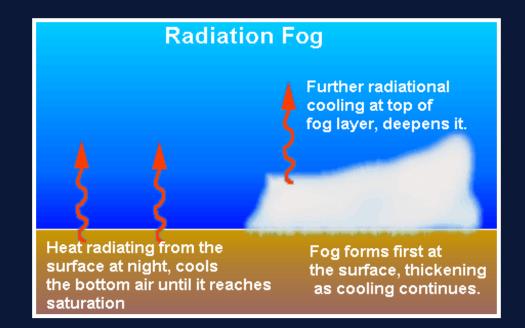


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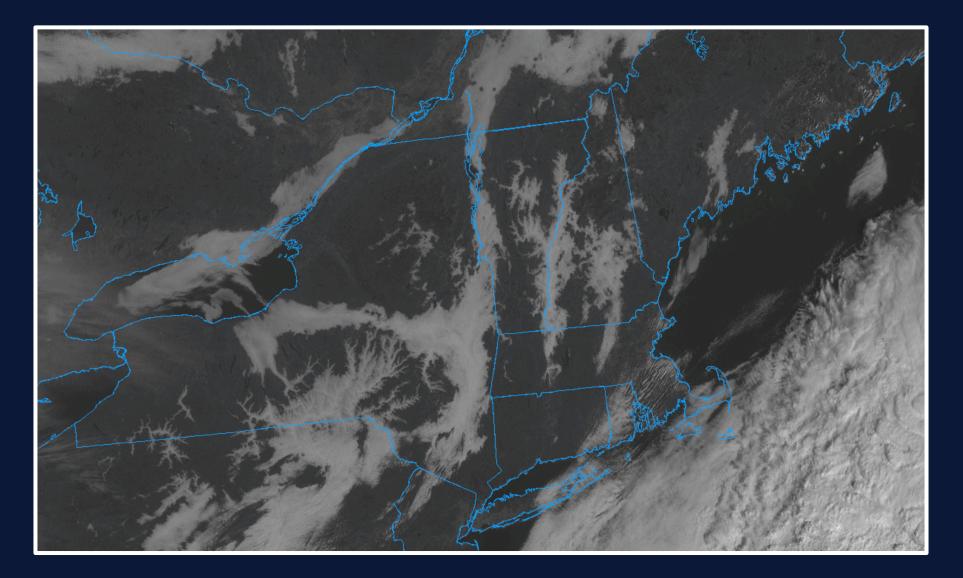


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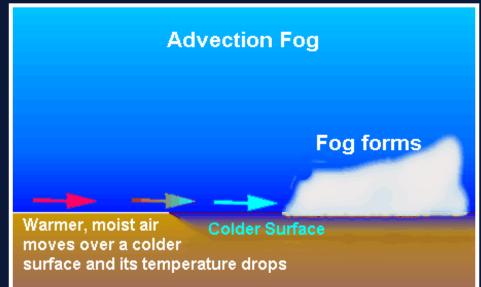


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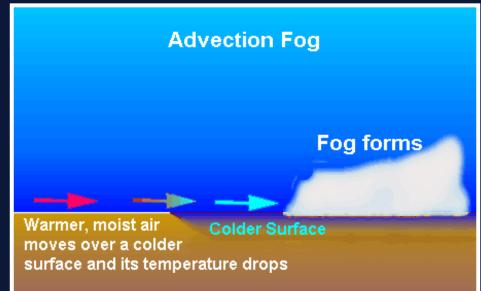
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~ Advection fog forms when warm, moist air flows over a cold surface and is chilled to its dew point by conduction and mixing.



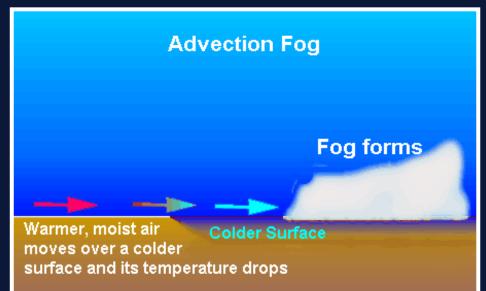
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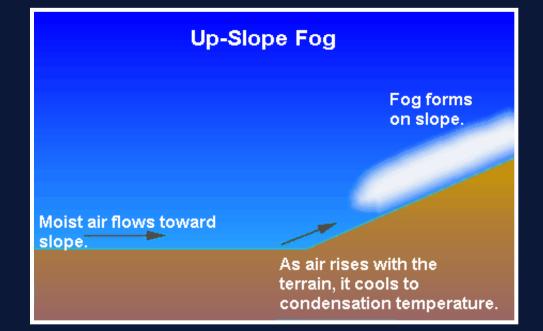
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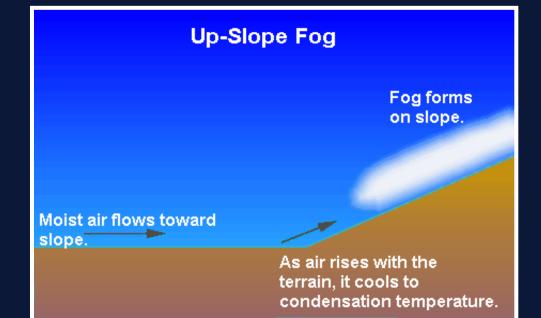




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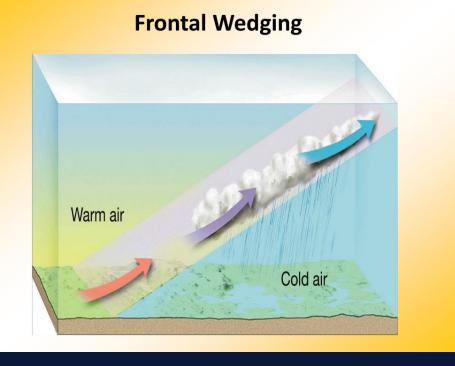
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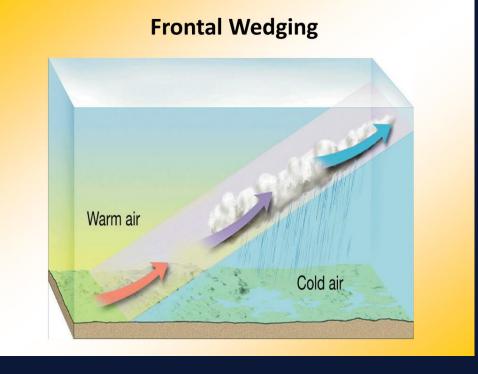
Steam fog forms when cool air moves over warm water and vapor from the surface condenses in the cool air, like steam rising from a hot bowl of soup.



When warm air rises over cold air, clouds form that produce precipitation, which falls into the air below.



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Frontal Wedging

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 Precipitation

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 air.

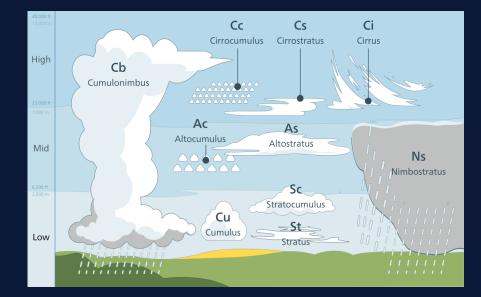
 Evaporative

 cooling leads

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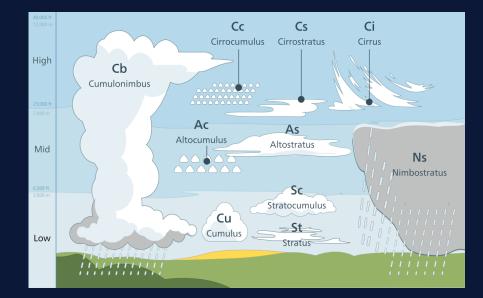
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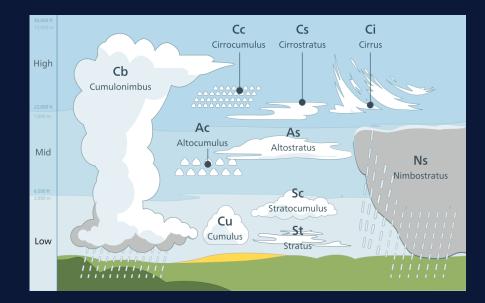


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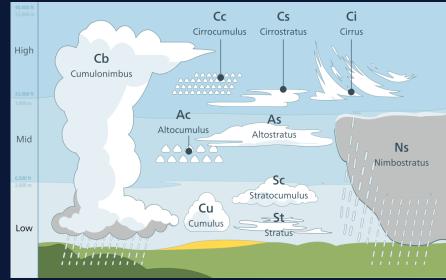


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Cc

Altostrat

imbostratu

Ac

Hiah

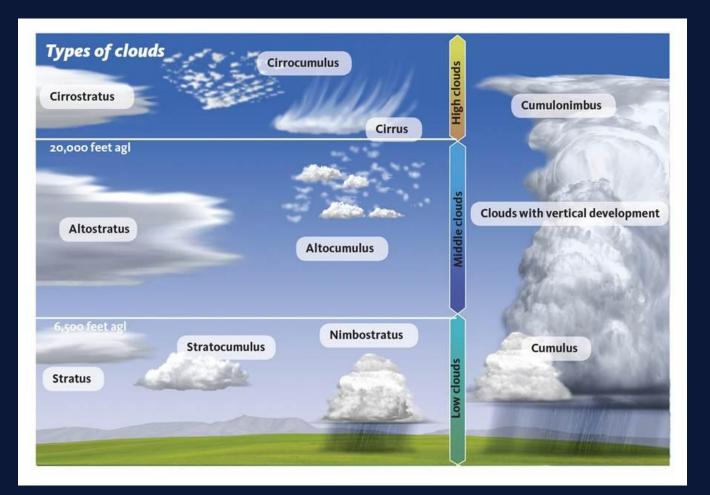
Mid

Cb

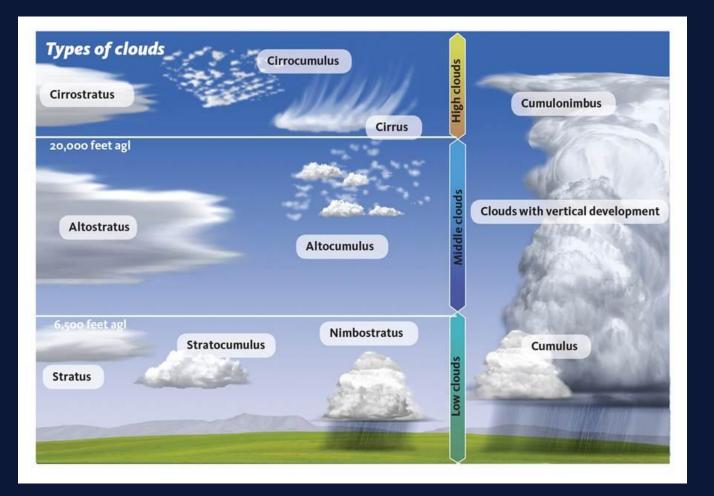
Cumulonimbus



~ Clouds are also named by their height with high clouds having bases greater than 6 km (20,000 ft), middle clouds between 2 and 6 km, and low clouds below 2 km (6,500 ft). ~ Clouds are also named by their height with high clouds having bases greater than 6 km (20,000 ft), middle clouds between 2 and 6 km, and low clouds below 2 km (6,500 ft).



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There are also clouds that grow to extensive heights called clouds of vertical development. ~ High clouds (cirrus, cirrostratus, and cirrocumulus) are made of ice crystals, and are generally thin and white. ~ High clouds (cirrus, cirrostratus, and cirrocumulus) are made of ice crystals, and are generally thin and white.

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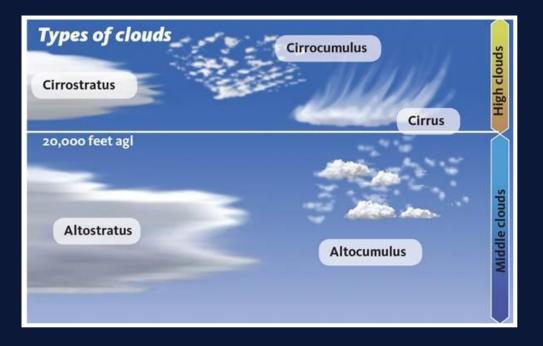


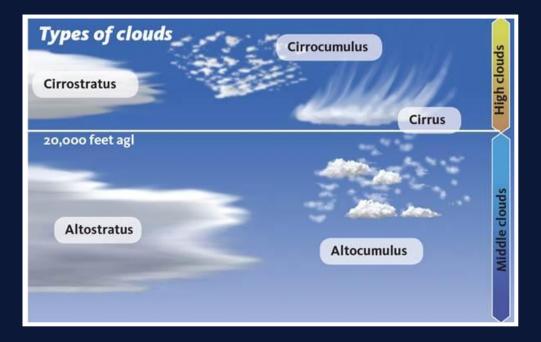




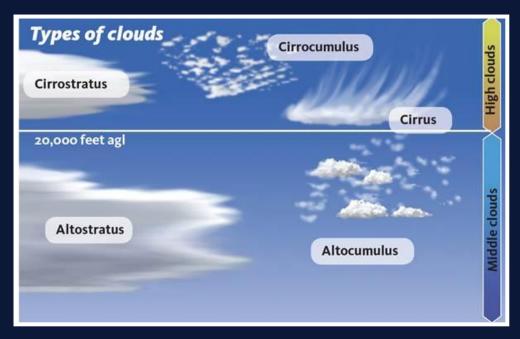






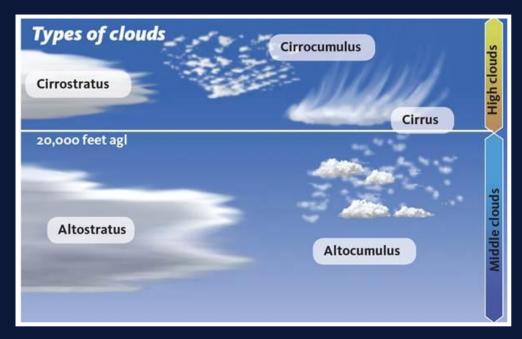


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They are *lower* in the sky and possess *larger* cloud elements *than cirrocumulus*.











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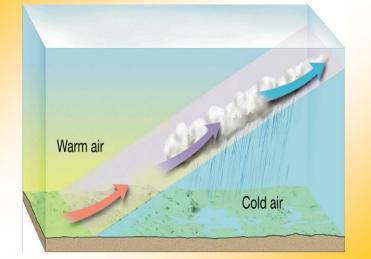


~ When stratus lowers towards the ground, turns gray, and starts precipitating, it's called nimbostratus.

~ Nimbostratus form due to air being forced aloft (like frontal wedging) giving them their large horizontal extent.



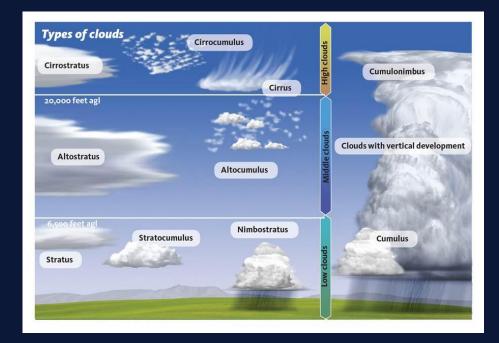
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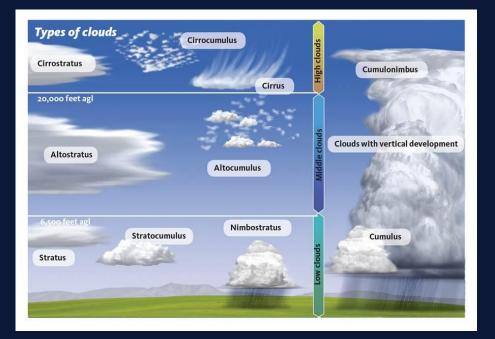
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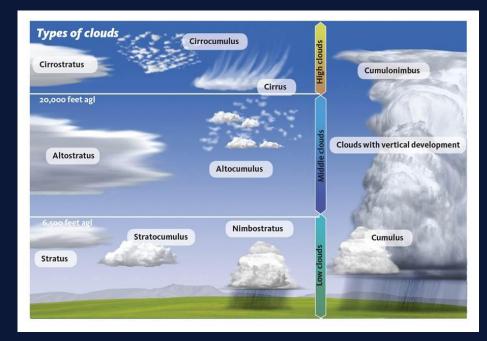


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Cumulus clouds are individual towers of puffy, cauliflower type clouds that form on clear days when warm air is convectively lifted. If cumulus clouds grow vertically, they become cumulus congestus, and then cumulonimbus when their heights reach upper levels and rain begins.



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Cumulonimbus clouds are huge, billowing towers with tops that are ice and may spread out in an anvil shape.



Other clouds include mammatus, which form on the underside of cumulonimbus clouds, and lenticular clouds that form over mountains. Other clouds include mammatus, which form on the underside of cumulonimbus clouds, and lenticular clouds that form over mountains.



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