

Ch 18.3 Cloud Types and Precipitation

Types of Clouds

- Clouds are classified on the basis of their form and heights.

Cirrus Clouds (a curl of hair)

- High, white, and thin clouds. Cirrus clouds are composed of ice crystals. They tend to be wispy and feathery, often transparent.



Cumulus (a pile)

- Consist of rounded individual cloud masses. Appearance of rising domes or towers, often described as having a cauliflower structure.

Stratus (a layer)

- Best describe as sheets or layers that cover much or all of the sky. There are three levels of cloud heights: high, middle, and low.



High Clouds – fluffy masses, made of ice crystals – cirrocumulus, cirrostratus.

Middle Clouds – have the prefix alto. Larger and denser rounded masses – altocumulus.

Low Clouds – uniform fog-like layer of clouds. Produce light precipitation – nimbostratus, stratus. **Nimbus** means “rainy cloud”.

Forms of Precipitation

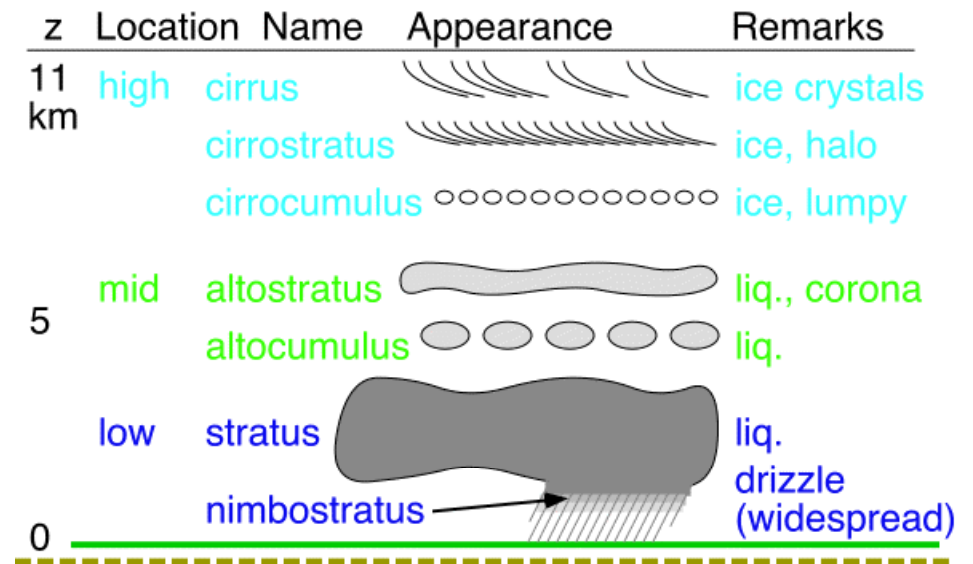
Rain and Snow

- **Rain** means drops of water that fall from a cloud. Small drops are called **drizzle**.
- **Sleet** is the fall of small particles of clear-translucent ice.
- **Glaze** is also known as freezing rain. **Hail** is ice pellets of different size that encounter strong updrafts in the cloud.

Cloud Identification

Stratiform

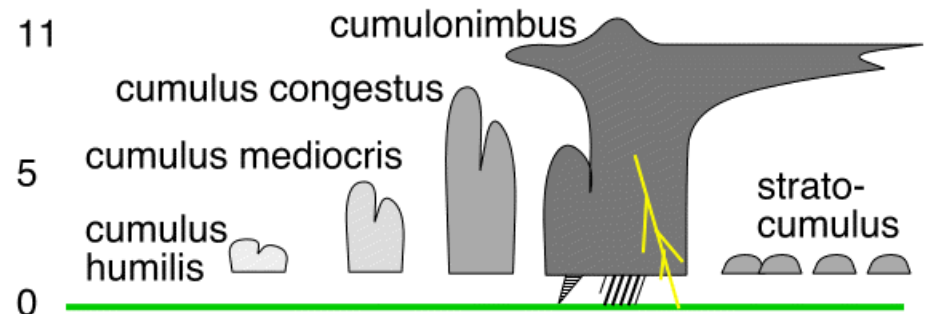
Layered clouds caused by nearly horizontal advection by winds.



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Cumuliform

Lumpy clouds caused by convection (updrafts) from the surface.



Fog

- Fog is defined as a cloud with its base at or very near the ground. Fog can be dense with low visibility and dangerous to drive in.
- Fog can be caused by cooling when warm, moist air moves over cool land.

