

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

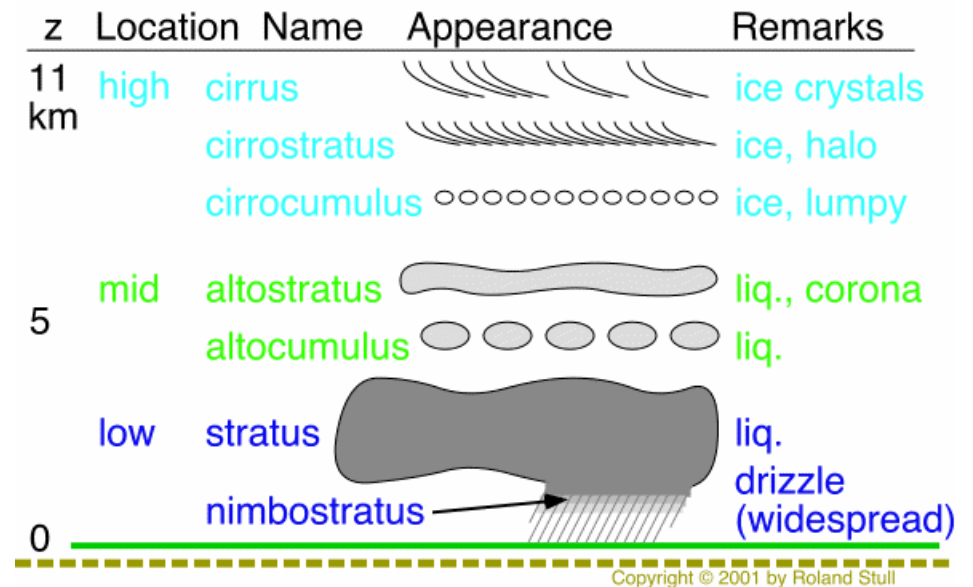
Rain and Snow

- **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

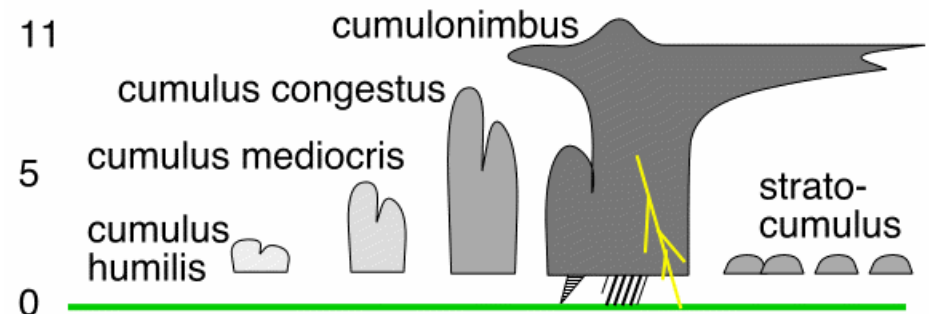
Stratiform

Layered clouds caused by nearly horizontal advection by winds.



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.

