



Fair Weather Cumulus Clouds

puffy cotton balls floating in the sky

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Fair weather cumulus have the appearance of floating cotton and have a lifetime of 5-40 minutes. Known for their flat bases and distinct outlines, fair weather cumulus exhibit only slight vertical growth, with the cloud tops designating the limit of the rising air. Given suitable conditions, however, harmless fair weather cumulus can later develop into towering [cumulonimbus clouds](#) associated with powerful thunderstorms.



-- Photograph by Ronald L. Holle --
-- U. of Illinois Cloud Catalog --

Photograph by: [Holle](#)

Fair weather cumulus are fueled by buoyant bubbles of air, or [thermals](#), that rise upward from the earth's surface. As they rise, the [water vapor within cools and condenses](#) forming cloud droplets. Young fair weather cumulus have sharply defined edges and bases while the edges of older clouds appear more ragged, an artifact of cloud erosion. Evaporation along the cloud edges cools the surrounding air, making it heavier and producing sinking motion (or subsidence) outside the cloud.

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