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? WHY THE WEATHER ?

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DARK CLOUDS THAT DO NOT RAIN

Dark clouds will not always produce rain. The most frequent type of dark cloud that fails to yield the expected rain comes up on a bright, cool day when there is a warmer wind aloft. The sunlight starts convectional currents readily. Condensation occurs and clouds form not far below the warm upper wind. But this warm layer constitutes what is known as a lid or ceiling in the atmosphere, preventing convection from going higher. The clouds, therefore, flatten out into widespreading sheets instead of growing tall. Such clouds may contain many minute water droplets and appear fairly dense, but have not sufficient vertical thickness to produce drops large enough to fall as rain. On a bright day these clouds appear especially dark by contrast and also because when the lower air is dry and clear the lower surface of the cloud is not illumined by light reflected by haze.

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