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A Science Service Feature

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society
says:

RAINDROP FORMS ON DUST

A raindrop consists of a considerable accumulation of water condensed upon a particle of dust in the air. As condensation continues the globules of water first formed become larger and larger, and as they grow they begin to fall at an appreciable velocity. Some drops unite. Soon the larger drops fall fast enough to pass through the rising air which was responsible for the condensation, and, if they escape total evaporation in their descent, fall as rain.

A good-sized raindrop contains as much water as 8,000,000 ordinary cloud droplets. The ordinary drop is one-sixteenth of an inch in diameter, and the largest one-fifth of an inch. The raindrop's size as it reaches the ground depends upon conditions. In gently rising air condensation takes place very slowly, and thus even very small drops can fall, and we have drizzling rain. Where convection is strongest, with powerful ascending air currents, drops may be held aloft until they are very large, the extremes falling with great splashes, as observed just in advance of the downpour of a thunderstorm.

(Tomorrow: Intensity of Rainfall.)

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