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? WHY THE WEATHER ?

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CLOUDBURSTS

It has been estimated that if all the water vapor in the atmosphere could be turned into rain and distributed evenly, less than two inches would result. Yet in cloudbursts over two inches of rain have been known to fall in three minutes, although ^{-quarter} one inch of rain is enough to make a whole day rainy. Such excessive rains happen when enormous streams of moist air are drawn to a single region. Intense convection causes strong rising currents of air, the air is cooled and its vapor condensed, but the drops may not fall at first because the upward motion of the air is too strong. In this way, occasionally a large amount of rain accumulates aloft instead of falling gradually as it forms, then suddenly the supporting upward air current may give way and down comes all the rain in a torrent.

(Tomorrow: Hot Roads Bad for Tires)

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