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A Science Service Feature

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? WHY THE WEATHER ?

By Dr. Charles F. Brooks  
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RAINS IN THE INTERIOR

This is the season when we keep reading about heavy rainstorms in the Middle West. The farmer loves his thunderstorm rains, but he does not appreciate an overdose of six inches at night attended by a squall, a hailstorm and perhaps a tornado. These summer showers are mere individual expressions of a gigantic movement. The heating of the continent results in such an expansion of the air that some is forced out over the cooler sea. The difference in pressure so created causes a moist wind to blow into the continent day after day. And this provides the makings for the summer showers. Even a modest supply of water vapor may make many times its weight in rainfall. The rain falls, most evaporates, and in subsequent convection the vapor so formed is again precipitated as the major part of the new shower. Dr. Raphael Zon has estimated that but two-ninths of the rainfall of the northern plains comes directly from ocean water vapor. The other seven-ninths he thinks comes from water vapor evaporated from land wet by previous rainfalls.

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(Tomorrow: What Is a Cloud?)

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