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RAIN FOGS AND SMOKE CLOUDS

Falling rain sometimes causes a fog. Two kinds of rain fog occur: in one case cold rain falls into damp, warmer air and chills it sufficiently to produce general condensation, or a fog. In the other case, temperature conditions are reversed, the rain is warmer than the air, and the warm raindrops "steam" in the cold air. Fogs of this sort appear to be less common than the other type, for precipitation is generally colder than the lower air. Nevertheless, in combination with "steaming" from the ground they may be quite dense.

In cities, a small amount of surface heating and convection is enough to produce low clouds in smoky air which has been chilled nearly to the condensation point by cold rain. A combination of smoke and cloud makes such days particularly dark and unpleasant in manufacturing centers.

The smoke has more than a simply darkening effect, its hygroscopic, or vapor attracting, nature favors the production of clouds in smoke, and the oily covering that is likely to surround the cloud droplets in smoke hinders their evaporation. This effect is akin to that in the well known, dank city fog, or "smog", as some mid-westerners have dubbed it.

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