

A Science Service Feature

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? WHY THE WEATHER ?

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RIME

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The icy deposits known to weathermen as "rime" occur only in foggy weather. The water droplets of a fog may remain liquid at a temperature well below the freezing point, but when such "sub-cooled" drops drift against an obstacle they change to ice. Large drops may spread more or less before freezing and thus form irregular roundish lumps of ice. Smaller drops are more likely to freeze instantly in the form of icy grains.

From the humid air associated with fog there is usually also deposited on the windward sides of exposed objects more or less ice formed by the direct condensation of water vapor without passing through the liquid stage. Such ice, which is definitely crystalline and often feathery in appearance, may be mixed with that formed by the freezing of water, but in some cases it constitutes the greater of the rime deposit.

Enormous accumulations of rime are seen on mountain tops in winter, encrusting buildings, trees, telegraph poles and other upright objects exposed to drifting fogs and clouds. It forms chiefly on the edges, joints and corners of these objects and hardly at all on horizontal surfaces. The deposit grows against the wind, sometimes at as rapid a rate as two inches an hour.

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