

A Science Service Feature

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? WHY THE WEATHER ?

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HOARFROST AND RIME

In literary English the words "hoarfrost" and "rime" are used interchangeably, but meteorologists find it convenient to make a distinction between these terms. They apply the former to a deposit of ice crystals formed by the direct condensation of atmospheric moisture, after the manner of dew. Sometimes liquid dew-drops are formed first and are subsequently frozen, but usually the atmospheric moisture changes from a gaseous to a solid state without passing through the liquid stage. Hoarfrost is a familiar sight on roofs, pavements, vegetation, etc., in the early morning, after a cold night, and also forms indoors in the daytime on the pipes of refrigeration plants and the like. Some of the most beautiful deposits of hoarfrost are the so-called "ice flowers", seen on the surface ice of lakes, streams and glaciers.

The word "rime", in the scientific vocabulary, is applied to rough or feathery deposits of ice formed in cold weather by drifting fog. The most remarkable examples are seen on mountains and in the polar regions. Since rime is built up of the fog particles driven by the wind, it forms chiefly on the windward sides of objects, growing out against the wind. It is sometimes observed to grow at the rate of an inch an hour, soon converting telegraph poles, fences and other objects into shapeless masses of ice.

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