

A Science Service Feature

Released upon receipt  
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February 20, 1930

? WHY THE WEATHER ?

Mailed February 13, 1930

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FATA BRUMOSA

The fata morgana, a complex form of mirage causing weird distortions of distant objects, is fairly well known, at least by name, both in and out of scientific circles, but very little has ever been said even in scientific books about its first cousin, the "fata brumosa." The latter phenomenon was first described and named by Prof. F. A. Forel, of the University of Lausanne, in his great work on Lake Geneva, published in 1895. It consists of an appearance resembling a bank of fog, which partly blots out the view of a distant shore. Forel describes it as seen by an observer looking along the surface of the lake and situated at a low level. From a point a couple of yards higher the phenomenon is no longer visible, proving that no real fog is present. With a light breeze blowing, the upper edge of the false fog bank is more or less wavy in outline and is seen to be moving with the wind. Sometimes patches of the apparent fog are suspended a little above the horizon, with a fogless area below them. In one case a distant shore seemed to be invaded by a huge tidal wave, which appeared to flow over houses and trees up to a height of fifty feet or more.

Like all kinds of mirage, this phenomenon is an effect of refraction, the conditions of occurrence probably being that the observer is in a cold layer of air over the water, which deflects above him rays of light from distant low-lying objects, and thus renders them invisible. Air currents would then explain the irregular outline and movements of the pseudo-fog.

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21st and B Sts.,  
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