

A Science Service Feature

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? WHY THE WEATHER ?

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PHOTOGRAPHING THE "GREEN FLASH"

In clear weather when the sun is setting behind a sharply defined horizon the last tiny speck of the disappearing disk is sometimes seen to turn vivid green for an instant, or, in exceptionally clear weather, blue. The first speck of the disk seen at sunrise often shows the same coloration. The phenomenon is called the "green flash," and is an effect of "dispersion;" i.e., the separation of the colors of which sunlight is composed owing to different degrees of bending by the atmosphere.

In France a very skillful photographer of atmospheric phenomena, M. Lucien Rudaux, has taken many telescopic photographs of the green flash. His first picture was obtained in September, 1925, on the shore of the English Channel, as the sun sank into the ocean to the westward.

A more remarkable enterprise has lately been carried out at Forcalquier, in a mountainous district of southeastern France, where, on account of the extreme purity of the atmosphere, the French government is planning to establish a big astronomical observatory. Here M. de Kerolyr set up apparatus for taking pictures of the green flash in natural colors at the moment of the sun's rising over a mountain ridge. The air is generally clearer and purer at sunrise than at sunset, and for this reason, as well as because the observer's eye is not dazzled by sunlight before the flash appears, conditions are more favorable for exposing the camera at the right instant. As a further aid in doing so, the photographer posted an assistant on a balcony above where he stood beside the camera, to give him a signal when the flash appeared at this higher elevation. He has secured several fine pictures, which not only show the green flash distinctly, but also show, as optical theory requires, that the flash shades above into violet and below into orange.

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