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A Science Service Feature

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society,
says:

LIGHTNING MEASURES STORM SPEED

The interval between a lightning flash and its thunderpeal may be employed not only to determine the distance at which the bolt struck, but also to give the rate of travel of the storm and the time of its arrival. The measure of distance between flash and thunder crash is 5 seconds per mile. The flash reaches the eye practically instantly, the sound of the thunder travels about 1100 feet per second.

To determine the speed at which a storm is approaching and the probable time of its arrival, take two observations. Measure the time between an intense flash and its following thunder. Five minutes later, by the watch, time another bright flash. If the interval in the second case is shorter than in the first, the storm is getting that much nearer.

Let us suppose that the first observation gives an interval of 40 seconds, which at 5 seconds to the mile means a distance of eight miles to the active front of the storm. The second observation gives an interval of 30 seconds, which means the storm is six miles away. Consequently the storm has travelled two miles nearer the observer in five minutes, or at the rate of 24 miles an hour. It is still six miles away. At this rate of progress the remaining six miles will require 15 minutes. Naturally, this method gives only approximate results. Yet there are occasions when it is worth while to know, even roughly, how much time remains before the torrents will begin to descend.

(Tomorrow: St. Swithin's Day)

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