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? WHY THE WEATHER ?

By Dr. Charles F. Brooks  
of Clark University.

HOW FAR THUNDER CAN BE HEARD

At a recent meeting of the American Meteorological Society there was a discussion as to how far thunder could be heard. The common maximum distance is 10 to 15 miles, represented by an interval of 50 to 75 seconds between the lightning flash and the rumble of the thunder. Under certain favorable conditions, however, extremely heavy thunder can be heard twice or three times as far over land, and to a distance of 60 miles or more over the sea. Sometimes, however, the limit at sea is but five miles, owing to a peculiar bending and breaking of the sound waves.

A series of observations made during 20 years by Veenema, in Germany, gives an audibility of 20 to 30 miles on 21 occasions, of 30 to 50 miles on six, and over 50 miles on three occasions, two of these being over 62 miles. Veenema concludes that the loudest thunder comes from the strongest and brightest and downward-directed lightning, and that the evening and night hours, when the air is homogeneous and usually coolest near the ground, appear more favorable for the propagation of sound than the day hours. For the same reason, late summer and autumn are more favorable for hearing thunder at great distance than spring and early summer. Wind direction near the ground, however, appears to have little influence, except that audibility is diminished by irregularities and turbulence in the atmosphere.

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(Tomorrow: "Raining Cats and Dogs")

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