

No. 20

A Science Service Feature

June 4

? WHY THE WEATHER ?

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

THE TWO KINDS OF THUNDERSTORMS

Thunderstorms are divided into two general classes, the heat thunderstorm, which is local in its character, and which usually leaves the atmosphere fully as oppressive, if not more so, than before it occurred; the other the "windshift line" type which marks the arrival of drier and cooler clear weather. The local shower is generally confined to the late afternoon and early evening, closing the hours of the day's extreme heat. An unstable condition is brought about by the overheating of the surface air when the atmosphere is comparatively quiet. Such storms are sporadic, and may move in any direction, though usually from a westerly direction.

The other class of thunderstorm, as a rule, is more severe. They may form a nearly continuous line hundreds of miles long across the country, as the cool air from the west or north meets the hot, moist current which has been rendering the atmosphere trying to man and beast. The cool current usually strikes the side of the warm current like a wedge, either lifting the moisture bodily or entrapping it by entry above, then descending and violently forcing it aloft. Condensation takes place rapidly, resulting in disruptive electrical disturbances and a heavy downpouring of rain. This type of storm often shows the forbidding anvil-shaped cloud, and is not infrequently accompanied by hail and windsqualls which sometimes are of such strength as to level trees and frail buildings. Its arrival may be either by day or by night.

(Tomorrow: Distribution of Thunderstorms.)

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