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? WHY THE WEATHER ?

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

COLD WEATHER THUNDERSTORMS

The season of heat thunderstorms is past, but windshift line thunderstorms occur in cold weather as well as in warm, and, while not so severe, are fully as dangerous, because their thundercloud hangs low in winter and lightning descends easily. The windshift line occurs when an area of high pressure arrives from the west, and its advancing cold wind strikes a current of warm, moist air from the south or southwest. The cold air locally overrides the warm which then rises, or it enters as a wedge under the warm air and forces it upward, in either case making it cool suddenly by expansion. Very rapid condensation takes place, clouds form quickly, and an electrical storm results.

Most of the cold weather thunderstorms occur in the darkness, for the contrast between the warm and cold air is greatest at night. The windshift line may be several hundred miles in length as it sweeps eastward across the country with the meeting of the two winds, and therefore the thunderstorms may cover a vast expanse of territory. As the line passes out to sea and the cold wind strikes the warm, humid air over the Gulf Stream, waterspouts are often formed.

(Tomorrow: Snowsqualls of the Great Lakes)

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