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A Science Service Feature

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
of Clark University.
discusses:

DUST STORMS

Dust storms occur most commonly in March when westerly gales are frequent over the Great Plains. The strong temperature contrast between the snow covered northeast and the bare southern plains favors these gales. So strong are the winds that the top soil is blown away in dense clouds, and wheat is even blown out of the ground. The westerly winds, moving faster than the particular low pressure area with which they are associated, carry the dust clouds aloft into the front of the low and there override the cold east and northeast winds of its northeast quadrant.

This elevation of the dust-carrying wind usually causes precipitation of much of its moisture as a mud rain, or colored snow. The dust from Texas and Arkansas, or Oklahoma may thus be deposited finally in Iowa, Illinois, or Wisconsin. As much as two million tons appear to have been transported hundreds of miles by a single storm. Immediately after great dust and sandstorms on the Great Plains discolored snow and sleet fell as far east as Vermont and New Hampshire on March 14, 1918.

Dust storms occur in Europe. The "blood rains" of southern France, Italy and Switzerland, formerly ascribed to the devil, are now known to be due to red dust carried from the Sahara. Sahara dust has even been deposited as far north as England, after making a wide circuit over the Atlantic.

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