

No. 238

A Science Service Feature

Feb. 15

? WHY THE WEATHER ?

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

CHARACTERISTICS OF THE "LOW"

A "low", the meteorologists' nickname for an extratropical cyclone, or general storm, may be visualized as a vast area where the atmospheric pressure is low, showing on the daily weather map as an oval with its longer axis in a northerly and southerly direction. It travels across the country from west to east at about 20 miles an hour in summer and 30 miles in winter. Its wind velocity is usually moderate, its accompanying cloud area is immense, and rain or snow usually falls. The area of snow or rain and heavy clouds is commonly from 300 to 1,000 miles in length and half as wide.

The winds of a "low" are generally ascending currents crowding in from regions of higher pressure. But this peculiarity exists: the winds do not blow straight towards the center of the "low", but enter it in more or less spiral paths, and in the northern hemisphere, in a direction opposite to that traveled by the hands of a clock. Thus, winds from an area of high pressure to the northwest enter the low from a northerly direction, and those from a high in the southeast from a southerly direction.

The southerly airs are relatively warm and moisture laden, and therefore the bulk of the precipitation is in the easterly and southerly quadrants of the storm where the air masses are rising over or being elevated by inflowing colder winds of the low.

(Tomorrow: How Icicles Form)

All rights reserved by Science Service

Science Service,
1115 Conn. Ave.,
Washington, D.C.