No. 27

June 12

A Science Service Feature

? WHY THE WEATHER ?

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

THE PROCESSION OF THE WEATHER

Areas of high and low pressure pass across the United States in constant procession from west to east, at velocities averaging 20 miles an hour in summer and 30 miles in winter. In summer when the atmospheric circulation is weaker the speed is slower and the contrasts between "highs" and "lows" are less pronounced than in the winter, for which reason weather is less changeable and disturbances, apart from thunderstorms and the infrequent tornado and hurricane, are less violent. Each high or low pressure area covers a great territory, ranging in diameter from a few hundred to a thousand or more miles.

In meteorology these areas are known as "highs" and "lows", and, when well-defined, "cyclones" and "anticyclones", names derived from their wind systems. Generally speaking, the "high" or "anticyclone" is an area of fair weather, the "low" or "cyclone" an area of stormy conditions.

The term "cyclone" was first applied to the storms of spirally inflowing winds about low pressure centers in the Indian Ocean, corresponding to our West Indian hurricanes. Then its usage was broadened to include similar though usually less violent storms in temperate latitudes, and also the small destructive whirlwind meteorologists call the tornado. The term "anticyclone" was invented to designate the spirally outflowing systems of winds from centers of high pressure.

(Tomorrow: The Hot Wave.)

All rights reserved by Science Service,
1115 Connecticut Ave.,
Washington, D.C.