

A Science Service Feature

Released on receipt
but intended for use
October 12, 1926

WHY THE WEATHER ?

Mailed October 5, 1926

By Dr. Charles F. Brooks
of Clark University

RAIN WITH HIGH BAROMETER

Watch the barometer and you will soon notice that high pressure does not always insure fair weather. It may be a bit disconcerting to discover that highs are not always dependable, but even furnish vigorous rains at times. In winter when pressure differences are greatest, highs are most reliable. Just what the pressure happens to be is perhaps of less consequence than which way it is going. If the barometer is beginning to fall, it may rain while the pressure is still quite high.

Any conditions favoring the cooling of moist air favor rain whether the pressure is high or low. Recently, with a high pressure area over the northeast, it rained all day when a tropical hurricane approached the north Atlantic coast. But the pressure was as high as at any time during the warm months. This rain was caused by converging winds on the boundary between the cyclone and the high, which crowded together and forced the moist air in this region to rise. Rain is quite common in the southern portion of highs where cold air flowing out from the high, invades warmer, moister regions. The cold wind may overflow the warm air, causing instability and convectional overturning to occur; or it may enter at a lower level like a wedge; in either case, the warm air is forced to rise and is cooled. Such rains fell during the last days of September in a belt from southern New England to the Mid-west.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE,
21st and B Sts.,
Washington, D. C.