

Released upon receipt  
but intended for use  
May 27, 1930

A Science Service Feature

? WHY THE WEATHER ?

Mailed May 20, 1930.

By Charles Fitzhugh Talman,  
Authority on Meteorology.

BRUECKNER'S WEATHER CYCLE

The late Professor Brueckner, an Austrian meteorologist, made many years ago an elaborate analysis of long instrumental weather records from various parts of the world, and of still longer non-instrumental records relating to lake levels, harvest dates, cold and mild winters, etc., and reached the conclusion that there is a widespread tendency for the weather to run through cycles averaging about 35 years, but of individual lengths varying from 20 to 50 years. Series of generally warm and dry years are supposed to alternate with series of cool and rainy years.

This cycle, if it exists, is rather vague and indefinite, so that it can not well be used for predicting weather from year to year. However, those who accept its reality believe that it has other practical applications. Thus Sir Richard Gregory says:

"Although the amount of rainfall may vary widely from one year to the next, the quantity of water which is stored up on the land areas, in the soil, in lakes and in glaciers, varies far more slowly. This stored water is not so closely related to the rainfall of the one preceding year as to the average rainfall of the ten preceding years, and if these ten years fall in the wet half of a Brueckner cycle, the quantity of water stored will be great. Again, in the dull rainy countries of northwestern Europe, warm dry years are favorable for crops and vegetation, and on the whole the warm dry half of a Brueckner cycle will yield better crops than the cool wet half, although there may be wide variations from one year to the next. An agricultural community must take the bad years with the good and trust to the surplus from a rich harvest to tide over a year of dearth, but at the end of the warm half of the cycle the community will be prosperous, while at the end of the cold half it will be poor. Hence waves of emigration and the movements of peoples are closely related to climatic cycles such as Brueckner's, which in this way leave their mark on history."

(All rights reserved by Science Service, Inc.)

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