

A Science Service Feature

Released upon receipt
but intended for use
January 31, 1935

? WHY THE WEATHER ? Mailed Jan. 24, 1935

YEARLY "CLIMATES"

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When we describe the climate of a region, we usually tell of its average rainfall, temperature, cloudiness and other atmospheric conditions, together with their usual seasonal variations, and the extremes to which they are subject -- all this based on many years of past experience. The same information is often presented in climatic charts, likewise based on long records. In any particular year, however, a certain area may have a "climate" (if such it should be called) quite different from its normal one. Some writers have lately emphasized the importance of describing and charting temporary "climates," in this sense. Thus we read in the last Report of the Science Advisory Board, submitted to the President of the United States:

"In one sense a climate is a fixed area within which certain average relations obtain between temperature and moisture, expressed in a seasonal régime. Away from the center of such a climate it is found that there are years when the weather characteristics are not like those of the climatic type to which the area, on average conditions, is assigned, but like those of another, neighboring climatic area. In this sense, then, a climatic region is true to type only in its interior parts; about its margins there is a recurrent dislocation of climatic boundary. When a disastrous drought overtakes a Missouri Valley State, it may mean that for that year the weather conditions characteristic of the steppe or even of the desert have pushed eastward far beyond their normal area. This view has been graphically demonstrated by R. J. Russell in studies of what he has termed desert and steppe years, with delineation of the extent and frequency of their occurrence. Thus a climate may be properly thought of as an area whose margins are annually and irregularly shrinking or expanding. Where, in this sense, of two adjacent climates one is within the margin of crop safety and the other without it, the zone of oscillation represents the area in which the farmer is forever shaking dice with the weather. This is the zone of climatic risk."

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