

A Science Service Feature

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? WHY THE WEATHER ? Mailed September 9, 1932

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CLIMATOLOGY IN A NUTSHELL

The meteorological conditions that are characteristic of a particular region constitute its climate. With respect to temperature, climates are distinguished not only as hot, temperate and cold, but also as equable and the reverse. Marine climates -- i.e., the climates of regions exposed to winds from the ocean -- have small daily and yearly ranges of temperature, while continental climates -- those withdrawn from oceanic influences -- are subject to great extremes of temperature.

Rainfall, as an element of climate, includes all forms of aqueous precipitation (the frozen forms being expressed for statistical purposes in their "water equivalent"). Measurements of rainfall refer to the depth of water that would lie on the ground if none of it ran off, soaked in or evaporated. Annual rainfalls may be classified, especially with respect to their agricultural significance, as excessive when over 75 inches; copious, 50-75 inches; moderate, 25-50 inches; light, 10-25 inches, desert, under 10 inches.

Wind direction and force, cloudiness, duration and intensity of sunshine, humidity, evaporation and storm frequency are other important elements of climate.

That "the climate has changed" within a generation or so is a widespread popular notion and one that has prevailed in the past just as it does today. It is mainly a delusion, arising from the fact that exceptional weather impresses itself more lastingly on one's memory than does normal weather, though it may be based in some cases upon a real "bunching" of years that are relatively warm or cold, wet or dry; more or less well defined cycles of this character being revealed in a good many long weather records.

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