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? WHY THE WEATHER ?

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SOUTHWESTERN CLOUDBURSTS

One would not naturally turn to our driest desert for examples of cloudbursts. Yet, the attention is arrested when one sees in the records that the rainfall for July, 1922, at Campo in southeastern California was 7.10 inches and that the number of days on which it rained was only one! The storm bringing that one down-pour is locally known as a Sonora storm. These storms were named when it was thought they originated in Sonora, Mexico. Now, however, it is known that they develop in California, near where they run their course and end.

A western position of the summer desert low pressure area favorable to a large inflow and superheating of moist air from the Gulf of California, occurs, on the average, but one day a year, usually in July or August. On such a day 2 to 7, even over 11 inches of rain, may fall in one sudden downpour on the valleys and slopes over 2,000 feet above sea-level. Where rain may not reach the ground numerous fires may be set by lightning. The waters roar down the dry gullies and wash away highways, railroads, or any other obstructions in their path. The extraordinarily violent character of these thunderstorm rains is owing to a great abundance of moist air heated to desert temperatures on a generally quiet day. On rare occasions, similar cloudbursts occur on some western slopes of the Appalachians.

(Tomorrow: St. Elmo's Fire)

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