

U. S. CLIMATE IN 'DRY PHASE,' SAYS WEATHER BUREAU CHIEF; WEST HARD HIT BY DROUGHT

No Fundamental Change in Conditions, Federal Expert Declares.

By J. B. KINER
Chief of the Division of Climate and Crop
Weather, U. S. Weather Bureau.
(Copyright, 1936, by Science Service)

It has been said that the usual weather is unusual; and the only trouble with our recent weather is that it has been more unusual than it usually is unusual.

The unusual happenings in recent years include these:

1. Extremely high summer temperatures.
2. Many warm winters, to be followed by an extremely severe one in 1935-1936.
3. Recent, unprecedented floods in the East.
4. Disastrous tornadoes in the South.
5. Two drought years, 1930 and 1934, establishing new records for dryness over large areas, both of which were of tremendous national significance.

Because of these things, many people have grown alarmed and express fear for the future.

Going Through Dry Phase

We have weather records for more than 5000 different localities in the United States, but unfortunately a very few are for periods as long as 100 years. Our longest records indicate that there has been no permanent change in climate. Rather, we are going through a dry phase of our normal climate.

Climate is the general run, or sum total, of weather, and that sum total does not seem to be undergoing any fundamental changes. Weather is the phase of climate that we experience from day to day, from week to week, or even year to year. Therefore, as every one knows from reading the Weather Bureau forecasts, as published in every daily newspaper in the country, weather varies, often markedly, from day to day, due to vast changes in air mass movements.

When the run of weather conforms to the general climate of a region, that is, when it is about normal, it receives very little attention or discussion. But when it varies greatly from the normal in heat, cold, destructiveness, drought, and the like, it at once becomes of popular interest, and in some cases of national concern.

Termed Weather Trends

Now, we readily observe that different weather phases—warm, then cool; cloudy and rainy; then sunny and dry—follow one another at intervals usually counted in days or weeks; that is, at short intervals. This we call weather trends.

There are climatic trends of a similar nature, the yardstick being years instead of days. In recent years, we have been going through a dry, warm phase of climate, an unusually frequent drought is the result.

These up and down trends in rainfall make, when the record is smoothed, a wave-like pattern, but the length of the periods appears to be too irregular to justify a definite long-range forecast as to what will happen in the future. If records were available for a thousand years instead of from 50 to 100, we possibly could discover a definite law of succession.

Bible Has Reference

The Bible, in the story of Joseph and the dreams of Pharaoh, gives the first historical reference to this important characteristic of rainfall—the tendency of a number of successive years having comparatively heavy rainfall to be followed by a series of harmful dry years, especially in regions with normally scanty moisture.

In the United States, local droughts may be expected periodically every year, but they are seldom of nationwide importance. Prior to 1934, three wide-spread droughts are worthy of mention as seriously affecting production of staple farm crops in the United States. These droughts of national importance occurred in 1894, 1901, and 1930. The fourth and latest, in 1934, broke all records.

Chemical Firm Moves

The Clark Chemical Co. today was doing business at 1240 Roosevelt-av in quarters twice as large as it formerly occupied at 31 E. Georgia-st. Increased business and bright prospects prompted the move, Vernon L. Clark, president and general manager, said.

OFFICIAL WEATHER

United States Weather Bureau

Sunrise 4:22 Sunset 7:17

TEMPERATURE

July 6, 1936

7 a. m. 76 1 p. m. 81

BAROMETER

7 a. m. 30.15 1 p. m. 30.10

Precipitation 24 hrs. ending 7 a. m. .00

Total precipitation since Jan. 1. 14.90

Deficiency since Jan. 1. 6.51

MIDWEST WEATHER

Indiana: Generally fair tonight and tomorrow; warmer tomorrow.

Illinois: Generally fair tonight and tomorrow; warmer eastern portion.

Lower Michigan: Fair tonight and tomorrow; warmer tomorrow.

Ohio: Generally fair tonight and tomorrow; slightly warmer tomorrow in north and central portions.

Kentucky: Generally fair tonight and tomorrow; little change in temperature.

WEATHER IN OTHER CITIES AT 7 A. M.

Station Weather Bar. Temp.

Alamogordo, N. M. Clear 70.0 62

Bismarck, N. D. Clear 70.0 62

Boston Clear 70.0 64

Chicago Clear 70.0 64

Cleveland Clear 70.0 64

Cincinnati Clear 70.0 64

Columbus Clear 70.0 64

Denver Clear 70.0 64

Dodge City Clear 70.0 64

Helena, Mont. Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64

Los Angeles Clear 70.0 64