

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CHARLES F. MARVIN, Chief

In Cooperation with Maryland State Weather Service

CLIMATOLOGICAL DATA

MARYLAND AND DELAWARE SECTION

JOHN R. WEEKS, Meteorologist and Section Director

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GENERAL SUMMARY

Dry and sunshiny weather, typical of autumn, characterized October. The month was 2° cooler than normal and was the second driest October of record since 1892. The average rainfall of 0.80 inch was twice as great as in the driest October, in 1924, but less than one-sixth of the average in October, 1929. October was the fourth successive month of this year's drought. With the exception of the prolonged light to moderate daytime rain of the 29th, rainfall was of the shower type and occurred mostly at night. The showers were light, except moderate to heavy during night of 14-15th. Monthly sunshine was between 5 and 10 per cent above normal and was the greatest in October since 1924. Relative humidity was low, being between 10 and 15 per cent below normal. Notable periods of clear sky and abundant sunshine were 1st-7th, 10-12th, and 18-20th. The first decade was rainless, except that sprinkles occurred during night of 8-9th. Contrasting temperature waves were well pronounced. Fresh to strong northwest winds predominated, but there was no occurrence of violent or damaging winds. East and southeast winds prevailed during the warm period of 7-17th.

The cool spell that began on September 29 continued until the 6th of this month. The 7-17th was warm. Cold weather prevailed from the 18th to the 27th, the period of lowest temperatures being 19th-23d. The 28-30th was mild. The 31st was cool.

The minimum temperature of 7° at Oakland on the 22d was the lowest temperature recorded in October since 1895, when 4° was recorded at Deer Park on the 30th.

The first general killing frost of the season occurred in the Allegheny Mountain region on the 1st and over the remainder of western Maryland on the 2d; in the central and eastern divisions it occurred on the 19th, except on the 21st along the shores of Chesapeake Bay. Tomatoes, string beans, potato vines, dahlias, etc., were destroyed. Freezing temperatures and killing frosts were general from the 19th to the 23d.

Rainfall averaged 29 per cent of normal. It was unevenly distributed, the Eastern Shore and southern Maryland being more generously favored. The area of least monthly rainfall embraced Allegany and western Washington Counties, with totals of a trace to 0.20 inch. In the Allegheny Mountain region and in central and eastern Washington County the totals were 0.20 to 0.80 inch. The average rainfall for western Maryland was 0.32 inch. Totals were also 0.20 to 0.80 inch in north-central Maryland, with an average of 0.41 inch for the division; were 0.20 to 1.60 inches in southern Maryland, with an average of 0.82 inch for the division; and were 0.90 to 2.30 inches on the Eastern Shore, with an average of 1.54 inches for the division.

Rainfall averaged 11 per cent of normal in western Maryland; 13 per cent in north-central Maryland; 30 per cent in southern Maryland; and 53 per cent on the Eastern Shore.

Light snow fell in the Allegheny Mountain region on the 23d, at night of the 24th, and on the 31st. Flurries occurred in the Allegheny Mountain region on the 18th and 24th and in the

northern counties from Allegany eastward to Cecil and Kent in Maryland during night of 24-25th.

Weather of the month was favorable for outdoor work. Harvesting corn ended during the first decade, tomatoes, tobacco, and pears during the second decade, and apples during the third decade; the yields were light. Preparation of the soil, greatly hindered by its dryness, and sowing of grains were in progress. Sowing of grains ended in western Maryland during the first half of the month and in north-central Maryland during the third decade where the early-sown came up to poor to fair stands. Grains were being sown during the second and third decades in southern Maryland and on the Eastern Shore. Other activities were husking corn, stripping tobacco, cutting wood, feeding stock, hauling water for home and stock in some localities, digging late potatoes in the Allegheny Mountain region, and digging sweet potatoes in the southern and central portions of the Eastern Shore. Pastures were poor in the northern half of the section and dry in the southern half. The prolonged light to moderate rain of the 29th was of benefit to grains already up and aided germination of late-sown grains. Streams, wells, and springs were very low.—J. B., jr.

PRESSURE

The monthly mean sea-level pressure at Washington, D. C., was 30.11; at Baltimore, 30.10; at Aberdeen, 30.09 inches. The highest at Washington, D. C., was 30.51; at Baltimore and Aberdeen, 30.49 inches—all on the 22d. The lowest at Washington, D. C., Baltimore, and Aberdeen, was 29.66 inches—all on the 17th.

TEMPERATURE

The monthly mean for the section, 54.1°, is 2.2° below normal. The highest monthly mean was 58.1° at Crisfield; the lowest, 45.5°, at Oakland. The highest, 89°, occurred at Cumberland on the 11th; the lowest, 7°, at Oakland on the 22d. The greatest monthly range was 70° at Bell, Hancock, and Oakland; the least, 45°, at Wilmington. The greatest daily range was 54° at Clear Spring on the 6th.

PRECIPITATION

The monthly average for the section, 0.82 inch, is 2.04 inches below normal. The greatest monthly amount was 2.29 inches at Public Landing; the least, a trace, at Hancock and Picardy. The greatest 24-hour amount was 1.40 inches at Coleman from night of 14th to morning of 15th. The monthly average snowfall for the section, 0.1 inch, is normal. The greatest monthly snowfall was 2.0 inches at Oakland. The number of days with 0.01 inch or more of precipitation, 5, is 2 below normal.

RELATIVE HUMIDITY

The average percentages were: Washington, D. C., 8 a. m., 74; 12 noon, 42; 8 p. m., 54. Baltimore, Md., 8 a. m., 68; 12 noon, 44; 8 p. m., 53. Aberdeen, Md., 8 a. m., 80; 4 p. m., 54. Philadelphia, Pa., 8 a. m., 69; 12 noon, 48; 8 p. m., 54.

WIND

(By 8-cup anemometer, except 4-cup at Aberdeen, Md.)

The prevailing direction for the section was northwest. The total movement at Washington, D. C., was 3,405; at Baltimore, 6,203; at Aberdeen, 4,257 miles. The maximum velocity at

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Climatological Data for October, 1930

Table with columns: Stations, Counties, Elevation, Length of record, Temperature (Mean, Departure from normal, Highest, Date, Lowest, Date, Greatest daily range), Precipitation (Total, Departure from normal, Greatest in 24 hours, Total snowfall), Number of days (With precip., Clear, Partly cloudy, Cloudy), Prevailing direction of wind, Observers.

The departures from normal temperature and precipitation are computed only for such stations as have 10 or more years of record, but all complete reports are used in determining section or division means. Data in italics determined from surrounding sections. T. Precipitation is less than 0.01 inch rain or melted snow. Reference letters, a, b, c, appearing in the table indicate number of days missing: For example, b represents two days, etc. † Post office addresses of these stations are as follows: Of Bell, Glendale; of Coleman, Worton; of Fallston, Bagley; of Ferry Landing, Owings; of Great Falls, Bethesda; of Pleasant Hill, Owings Mills; of Public Landing, Snow Hill. *Also on other dates. †Custom House, Gay and Water Streets. **Weather Bureau Building, 24th and M Streets.

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Washington, D. C., was 34 miles from the northwest on the 17th; at Baltimore, 33 miles from the southwest on the 17th and from the northwest on the 25th; at Aberdeen, 36 miles from the northwest on the 25th.

SUNSHINE AND CLOUDINESS

At Washington, D. C., 66 per cent of the possible sunshine was recorded; at Baltimore, 74 per cent; at Aberdeen, 66 per cent. For the whole section the average number of clear days was 16; partly cloudy, 9; cloudy, 6.

MISCELLANEOUS PHENOMENA (WITH DATES)

Fogs, dense.—Aberdeen, 10, 11, 13, 16, 17, 23, 29; Bell, Fallston, Millington, and Solomons, 14; Cheltenham, 15, 16; Chewsville and Mechanicsville, 15; Ferry Landing, 7, 10 to 17; Newburg and Princess Anne, 16, 17; Westminster, 8, 10, 11; extreme northern Delaware, 17; District of Columbia, 23; and on the coast, 13, 14, 29. Frost, killing (first of season).—See "General Summary". Hail, light.—Solomons, night 30. Sleet, light.—Sines, 18; Grantsville, 30. Thunderstorms.—Chewsville, Keedysville, and Westminster, 16; Millsboro, night 17-18; southern Maryland, extreme northern Eastern Shore, and Aberdeen, night 30. Winds, high.—Westerly, mostly northwest, 17, 18, 19, 25, 26, 31.

Daily Precipitation for October, 1930

Table with columns for Stations, Watersheds, Day of month (1-31), and Total. Rows list various Maryland and Delaware stations and their corresponding precipitation data for each day of October 1930.

Except as otherwise indicated, observations are generally made late in afternoon, near sunset, and precipitation recorded is for the 24 hours ending at time of observation.
***Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.
|||||Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.
T. Trace, or less than 0.01 inch. Data in italics determined from surrounding stations.

COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR OCTOBER

Table comparing monthly climate data for Maryland and Delaware from 1895 to 1930. Columns include Year, Temperature (Mean, Departure from normal, Highest, Lowest, Average), Precipitation (Departure from normal, Greatest local, Least local, Greatest in 24 hours, Snowfall, Number of days with 0.01 inch or more), and Total precipitation.

Daily Temperatures for October, 1930

Table with columns for Stations, 1-31, and Mean. Rows list various Maryland and Delaware locations with their daily temperature ranges and monthly means.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from record. § Instruments are read in morning; maximum temperature then read is charged to preceding day in which it almost always occurs. Temperatures at Aberdeen, Baltimore, and Washington are from midnight to midnight; other stations, except Cumberland, are for 24-hour period ending late in afternoon, near sunset. Data in italics determined from surrounding stations. (WB-14-26-30-960)