

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

In Cooperation with Maryland State Weather Service

CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

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GENERAL SUMMARY

This was the first cool September since 1928. There was a warm spell from the 19th to the 22d. The first decade was mostly cloudy and wet; the second and third decades were dry, mostly clear, and sunshiny. Monthly sunshine was about 5 per cent below normal, except about 5 per cent above normal in western Maryland.

The month was featured by a tornado on the 4th and on the 5th (see Miscellaneous Phenomena), and by an excessive rainstorm of the 4th-6th (see pages 34 and 35).

Over southern Maryland and the southern and central Eastern Shore, which was the area of excessive rainfall, the 24-hour amounts were the greatest of record, the total amount for the 4-6th was the greatest of record for any rainstorm, and the monthly rainfall was the greatest of record for any month.

The rains of the first decade terminated the prolonged dry spell of August. Growing crops, except those damaged by rain and wind, improved to good to excellent; also grasses and pastures. Under the dry weather that followed, growing crops were but mostly good and grasses and pastures were fair to good during the third decade. In south-central and eastern divisions, due to the super-saturated condition of the soil, much corn was blown down by strong northerly winds of the 6th, and tobacco and tomatoes were damaged heavily by the excessive rain.

In the Allegheny Mountain region threshing oats was completed; the late potato crop was poor to fair, due to blight; buckwheat was cut and threshed; and wheat came up to good stand during the last week.

Haying, plowing, and harvesting tomatoes, sugar corn, sweet potatoes, tobacco, truck, gardens, cowpeas and soy beans for hay, tree fruits, grapes, and watermelons were in progress; also digging late potatoes in western Maryland. Most of the early corn was shocked, a good to excellent crop. Late corn filled out well and was maturing. Late potatoes in central and eastern divisions were in full bloom, were making, and were maturing. Wheat, rye, and barley were being sown between the Allegheny Mountains and Chesapeake Bay during the third decade. — J. B., jr.

TEMPERATURE

The monthly mean for the section, 65.2°, is 2.6° below normal. The highest monthly mean was 70.0° at Crisfield; the lowest, 58.0° at Grantsville. The highest temperature, 92°, occurred at Dundalk on the 21st; the lowest, 28°, at Grantsville and Oakland on the 30th. The greatest local monthly range was 58° at Bell and Hancock; the least, 42°, at Solomons. The greatest daily range was 44° at Friendsville and Sines on the 24th.

PRECIPITATION

The monthly average for the section, 7.96 inches, is 4.73 inches above normal. The greatest monthly amount was 17.57 inches at Easton; the least, 3.08 inches at Friendsville. The greatest 24-hour amount was 10.30 inches at Cambridge on the 5-6th. The average number of days with 0.01 inch or more, 8, is 1 above normal.

MISCELLANEOUS PHENOMENA (WITH DATES)

Tornado.—4th. About 3:30 p.m., from between Brandywine and Naylor in Prince Georges County northeastward across extreme northwestern Calvert County, extreme southeastern Anne Arundel County, the Chesapeake Bay (as a waterspout), and extreme southwestern Queen Annes County, to Willoughby in Queen Annes County, between 5 p.m. and 6 p.m. Tornado passed through Naylor, Dunkirk, Chaney, Wilson, Jewell, Owings, Friendship, and Fair Haven. Path was from southwest to northeast, varied in width from about 20 yards at start to one-half mile at finish, and was about 40 miles in length. Within the path, homes, barns, stables, and sheds were wrecked; trees were uprooted, were twisted off, and stripped of limbs; poles were blown down; corn fields

were leveled; 3 persons were injured; one horse was killed; another horse was injured. Damage to property estimated at \$125,000; to crops, between \$50,000 and \$100,000.
Tornado.—5th. Extreme northwestern Somerset County; 6 p.m. to 6:30 p.m.; south-west to northeast; from Dames Quarter, over Monie Bay, through Mt. Vernon, across Wicomico River, to Whitehaven; path about 300 feet wide and 10 miles long; several homes damaged, number of barns demolished, some trees uprooted; 3 persons injured; damage to property about \$5,000; to crops, about \$100.
Fogs, light.—1 to 6, 8 to 19, 21, 22, 24 to 29. Fogs, dense.—3, 9, 12, 13, 14, 19, 26, 27.
Frosts, light.—Allegheny and Washington Counties and interior of southern Eastern Shore, 24; southern Maryland and Eastern Shore, 30.
Frosts, heavy.—Allegheny Mountain region, 24; north-central Maryland, except light near Chesapeake Bay, 30.
Frosts, killing.—Western Maryland, 30.
Hazes, Lunar.—11, 13, 19. Halos, Solar.—11, 12.
Hazes, Light.—Oakland, 21. Rainbows (double).—Emmitsburg, 28.
Thundergusts, high.—Southwest, 4, 5. Northwest, 9. Thunderstorms.—4, 5, 9, 18, 20, 21.
Winds, high.—Northeast, 6 (eastern portion of section, gale on the coast). North west, 29.

PRESSURE, HUMIDITY, SUNSHINE AND WIND

Stations	Atmospheric pressure reduced to sea level				Wind				Mean relative humidity			Percentage of sunshine	
	Average	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	Local n n		8 p. m.
Aberdeen, Md.	30.06	30.36	24	29.65	29	7.1	36	n.w.	9	86	82	78	..
Annapolis, Md.	30.05	30.35	24	29.65	29	6.9	..	..	9	82	68	82	..
Baltimore, Md.	30.06	30.36	24	29.67	29	8.7	35	n.w.	9	78	59	70	..
Elkins, W. Va.	30.10	30.37	24	29.81	29	4.1	18	w.	9	96	59	85	56
Harrisburg, Pa.	30.05	30.37	24	29.65	29	6.0	24	n.w.	9	83	59	67	56
Norfolk, Va.	30.06	30.35	25	29.43	6	8.0	34	n.w.	9	82	62	80	57
Philadelphia, Pa.	30.07	30.39	25	29.61	29	10.9	36	se.	9	80	61	70	59
Pittsburgh, Pa.	30.06	30.29	23	29.70	29	8.1	29	n.w.	9	85	53	64	73
Washington, D. C.	30.05	30.36	24	29.64	6	5.1	21	n.w.	9	83	63	74	65

COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR SEPTEMBER

Year	Temperature				Precipitation				Number of days				
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest	Least	Average snowfall	With .01 in. or more precipita'n	Clear	Partly c'ly	Cloudy
1895....	70.6	+2.8	101	27	2.04	-1.19	5.90	0.24	T	4	19	9	2
1896....	66.8	+1.2	98	26	4.33	+1.10	8.07	1.13	0.0	6	24	6	3
1897....	66.6	+1.0	100	22	1.88	-1.35	3.37	0.50	0.0	6	21	6	3
1898....	69.5	+1.7	100	28	1.85	-1.88	4.28	0.51	0.0	6	20	6	4
1899....	65.4	-2.4	99	25	4.70	+1.47	9.43	0.77	0.0	7	18	8	4
1900....	72.0	+4.2	103	29	3.40	+0.17	8.23	0.40	0.0	6	16	8	6
1901....	66.5	-1.3	95	29	3.03	-0.20	6.46	1.33	0.0	8	15	8	7
1902....	66.1	-1.7	101	25	6.19	+2.96	12.93	1.38	0.0	10	13	8	6
1903....	66.1	-1.7	98	23	2.10	-1.13	4.15	0.58	0.0	5	18	8	4
1904....	67.1	-0.7	99	27	3.61	+0.38	6.22	1.05	0.0	5	15	9	6
1905....	67.1	-0.7	94	24	2.91	-0.32	6.19	1.37	0.0	6	18	8	4
1906....	70.8	+3.0	98	36	1.28	-1.95	3.74	0.22	0.0	6	14	10	6
1907....	68.4	+0.6	95	30	6.23	+3.00	10.95	2.46	0.0	12	12	11	7
1908....	66.0	-1.8	94	24	2.40	-0.83	5.14	0.48	0.0	3	16	8	6
1909....	65.5	-2.3	92	23	3.30	+0.07	5.71	1.18	0.0	5	14	10	6
1910....	69.5	+1.7	98	32	1.78	-1.45	3.97	0.27	0.0	6	16	9	5
1911....	69.3	+1.5	95	30	2.72	-0.51	6.38	0.92	0.0	7	13	11	6
1912....	69.3	+1.5	102	30	5.77	+2.54	9.85	2.07	0.0	11	13	9	8
1913....	66.8	-1.0	102	22	2.83	-0.40	5.31	1.52	0.0	7	14	9	7
1914....	64.8	-3.0	98	21	0.98	-2.30	3.09	0.40	0.0	4	20	6	4
1915....	69.4	+1.6	99	31	2.06	-1.17	5.19	0.43	0.0	4	18	9	7
1916....	65.3	-2.3	98	26	3.43	+0.20	5.70	1.82	0.0	7	19	7	4
1917....	62.6	-5.2	93	27	2.73	-0.50	4.96	1.31	0.0	7	15	8	7
1918....	63.3	-4.5	88	27	3.76	+0.53	5.66	1.96	0.0	8	16	8	6
1919....	68.1	+0.3	100	31	2.32	-0.91	4.09	0.75	0.0	4	18	7	5
1920....	67.7	-0.1	92	35	3.08	-0.15	5.10	1.14	0.0	6	18	7	5
1921....	72.6	+4.8	99	37	3.33	+0.10	7.63	0.26	0.0	9	15	10	5
1922....	68.6	+0.8	100	27	2.57	-0.66	7.30	0.69	0.0	4	18	8	4
1923....	68.3	+0.5	92	28	3.51	+0.28	7.27	1.22	0.0	9	16	8	6
1924....	63.2	-4.6	101	30	6.02	+2.79	8.07	3.83	0.0	12	11	6	13
1925....	71.6	+3.8	100	35	1.69	-1.54	3.84	0.35	0.0	6	15	10	5
1926....	67.9	+0.1	93	35	5.00	+1.77	7.51	2.11	0.0	11	10	10	10
1927....	67.8	+0.0	99	26	1.43	-1.80	7.79	0.49	0.0	4	18	8	4
1928....	63.3	-4.5	93	28	4.67	+1.44	8.73	2.17	0.0	10	11	9	11
1929....	68.3	+0.5	100	28	3.62	+0.39	7.73	0.68	0.0	8	14	11	5
1930....	73.0	+5.2	102	33	1.47	-1.76	4.34	0.26	0.0	8	15	12	3
1931....	72.2	+4.4	100	30	2.54	-0.69	5.92	0.83	0.0	8	18	8	4
1932....	68.0	+0.2	106	25	2.20	-1.03	4.38	0.20	0.0	6	14	11	5
1933....	70.2	+2.4	94	37	3.21	-0.02	6.65	1.15	0.0	11	11	11	8
1934....	68.7	+0.9	92	36	9.33	+6.10	17.45	3.12	0.0	14	8	11	11
1935....	65.2	-2.6	92	28	7.96	+4.73	17.57	3.08	0.0	8	14	8	8
Period.	67.8	.....	106	21	3.23	.....	17.57	0.20	T.	7	16	8	6

Climatological Data, September, 1935

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 stations. Precipitation is less than 0.01 inch rain or melted snow.

THE EXCESSIVE RAIN OF SEPTEMBER 4-6th, 1935, IN MARYLAND AND DELAWARE.

The Florida hurricane that developed southeast of the Bahamas August 30, 1935, recurved over the Matabumbe Keys, and, after passing the Florida coast east of Apalachicola, moved northeast over the Carolinas and Virginia, crossing the lower Chesapeake Bay north of the Capes the night of September 5th.

humid weather in the Atlantic States, with rains beginning as early as September 1st in the Middle Atlantic States. An unusual feature was a local tornado near Farmville, Va., on the 5th, and one on the 4th and another on the 5th in southern Maryland. Excessive rains attended the northwest quadrant of the disturbance, falling on the 4th to 6th in Virginia and Maryland, the estimated damage to crops in Virginia, principally corn, being \$1,650,000, and to highways, \$450,000.

Daily Temperatures for September, 1935

Table with columns for Stations, 1-31, and Mean. Rows list various Maryland and Delaware locations such as Aberdeen, Annapolis, Baltimore, etc., with their respective daily temperature readings.

§§ Instruments are read in morning; maximum temperature then read is charged to preceding day, on which it almost always occurs. Temperatures at Aberdeen, Annapolis, Baltimore, Dundalk, Sines, and Washington are from midnight to midnight; other stations, except Cumberland, are for 24-hour period ending late in afternoon, near sunset.