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Based on the National Centers for Environmental Information (NCEI), the statewide total September precipitation was 8.84 inches, which was 3.95 inches more than last month, 6.83 inches more than in September 2017, and 4.85 inch more than the 1981-2010 average, making it the $4^{\text {th }}$ wettest September in the 124-year period of record. It was the wettest September since 1999 (Table 1). Above-average precipitation was observed in all parts of the state (Figure 1). The greatest monthly precipitation accumulation was 10.04 inches, recorded at Millers 4 NE. The greatest 24-hour precipitation was 4.94 inches, recorded at Kingsville 1.2 E in Calvert County on September 12. Based on historical records, statewide September precipitation showed a slight decrease in precipitation since 1895 of 0.11 inches per decade. The highest and lowest September precipitation for the state ranged from 10.35 inches in 1999 to 0.54 inchs in 1941 (Figure 2).

Percent of Normal Precipitation September 2018


Figure 1: September 2018 precipitation percent of normal for Maryland. (NRCC)


Maryland, Precipitation, September


Figure 2: Historical September precipitation time series for Maryland.

September Precipitation Statistics (124 Years)

Record High: 10.35" in 1999
Record Low: 0.54" in 1941
Trend: 0.11 " per decade
$121^{\text {st }}$ driest
Rank: $4^{\text {th }}$ wettest

September 2018 value: 8.84 "

1981-2010 average: 3.99"
Anomaly: 4.85"
Driest since: 2017
Wettest Since: 1999

Table 1: Maryland September Precipitation Statistics


TEMPERATURE

## Avg Temperature Departure ( ${ }^{\circ} \mathrm{F}$ ) September 2018



Figure 3: September 2018 average temperature departure from normal for Maryland. (NRCC)
The official state average September temperature was $73.0^{\circ} \mathrm{F}, 4.2^{\circ} \mathrm{F}$ cooler than last month and $4.8^{\circ} \mathrm{F}$ warmer than in September 2017, and $5.7^{\circ} \mathrm{F}$ warmer than the 1981-2010 average, making it the 124th coolest September in the 124-year period of record. It was the warmest September to date (Table 2). Above average temperatures were observed in all regions the state. The state's highest and lowest daily temperatures ranged from $98^{\circ} \mathrm{F}$ on September $4^{\text {th }}$ at the Emmitsburg 2 SE in Frederick County, to $47^{\circ} \mathrm{F}$ on September $30^{\text {th }}$ at Oakland 1 SE in Garrett County. Based on the historical records, the state average September temperature showed a positive long-term trend of $0.1^{\circ} \mathrm{F}$ per decade since 1895 . The highest and lowest monthly state September average temperatures ranged from $73.0^{\circ} \mathrm{F}$ in 2018 to $62.0^{\circ} \mathrm{F}$ in 1917 (Figure 4).


Maryland, Average Temperature, September


Figure 4: Historical September temperature time series for Maryland.

September Temperature Statistics (124 Years)
Record High: $73.0^{\circ} \mathrm{F}$ in 2018
Record Low: $62.0^{\circ} \mathrm{F}$ in 1917
Trend: $0.1^{\circ} \mathrm{F}$ per decade
September 2018
value: $73.0^{\circ} \mathrm{F}$
1981-2010 average: $67.3^{\circ} \mathrm{F}$
Anomaly: $5.7^{\circ} \mathrm{F}$
Rank:
$1^{\text {st }}$ warmest
Warmest since: 2017
$124^{\text {th }}$ coolest
Coolest Since: 1927
Table 2: Maryland September Temperature Statistics


Figure 5: Drought Monitor map comparison for Maryland at the beginning (left) and end (right) of September 2018
Drought Monitor (DM): Maryland experienced no drought in the month of September. Figure 5 shows a comparison of the drought conditions across the state from the beginning to the end of the month.


Storm Reports: The NOAA Storm Prediction Center's Storm Report reported a total of 17 significant storm events in September. Table 3 summarizes the number of tornado (0), hail (0) and damaging wind (17) reports in September, while Figure 6 geographically displays the locations of these storm reports.


Figure 6: Map of September 2018 Maryland storm events (red: tornado, blue:wind, green:hail).

| Category | Number of Reports |
| ---: | :--- |
| Tornado reports | 0 |
| Hail reports | 0 |
| Wind reports | 17 |
| Total | 17 |

Table 3: Summary of September severe storm reports in Maryland. (SPC, NOAA)

