



ATLANTIC COAST OBSERVER NETWORK, MD / DE / DC CHAPTER WITH DATA FROM NEARBY AREAS

HOT MONTH WITH SCATTERED HEAVY FLOODING THUNDERSTORMS

Except for the week of the 5th, **August 2001** was pleasantly warm without the dreaded "dog days" that so often settle in this time of the year. An extreme heat wave the week of the 5th was broken by heavy thunderstorms with flooding rains on the 11th over central and northern DC, its northern suburbs, northeast of Baltimore, northern New Castle DE, and the inland portion of Sussex County DE southwest through the Eastern Shore of Maryland to the Chesapeake Bay. The northern portion saw areas of 100 degree temperatures while the southern portions saw mid to upper 90's.

TEMPERATURE

Unlike July, which was one of the coolest on record, August was one of the warmest. Frequent cold fronts that brought refreshing cool air last month were absent this month.

The only heat wave of the month occurred from the 5th through the 10th. Temperatures reached extreme levels of 100 degrees or higher at the following ACON stations: **Bear 2 SW, DE, Owings Mills 2 SE, Baltimore 2 SE, Fallston 2 NW, and Smithsburg 2 NE.** 102 degrees, the hottest temperature in the region, was observed by both **Jim Vaughn** of **Smithsburg 2 NE** and **Joe Manfre** of **Baltimore 2 SE.** For many ACON stations, these were the only days that the temperature hit 90 degrees.

Daily maximum temperatures failed to fall below 80 at 14 ACON and 3 NWS stations this month.

PRECIPITATION

The 11th of the month went into the record books as a day of extremely heavy rains from training showers and thunderstorms. According to the Sterling radar estimates for the 10th through the 13th (most of it fell on Saturday, the 11th) 8+ inches of rain with pockets of 12+ inches fell from Richmond VA northeast through

the southwest Eastern Shore of Maryland and into southern Delaware. Another area for heavy rains was in central and northern DC where over 6 inches fell, and northwestern New Castle County Delaware where over 6 inches also fell. All areas of the region east of the mountains received rain. Lighter amounts fell in the drier areas west of Baltimore.

Brian Papa of **duPont Circle, NW DC** reported the heaviest amount. 9.50" fell from the 10th to the 13th which included 6.24" on the 11th. Most of this amount, 6.06", fell between approximately 3:30 PM and 5:30 PM. Widespread flooding and a two day power outages occurred in the duPont Circle area. As result of the flooding rains the President declared it a disaster area. The **University of Delaware Research and Education Center** at **Georgetown DE** received 8.79" during the same period. Other heavy amounts observed were: **Lynn Albright** of **Fallston 2 NW** 4.65" on the 11th, **Tony Scafide** of **Bethesda** 3.22" on the 11th, **Floyd Abell** of **Hollywood** 4.11" on the 10th - 13th. The 4.68" observed by **Kevin Shaw** of **Gaithersburg 2 WNW** on the 11th was a record for the month of August and the second heaviest daily amount in station history (since 12/1/78).

Other heavy thunderstorms were scattered around the region this month. **Rob Rickell** of **Hanover 2 S** reported 3.06" on the 4th. The following observers reported heavy rains on the 23rd: **Brian Papa** of **duPont Circle NW DC** reported 1.58", **Tony Scafide** of **Bethesda** 1.65", **Joe Terry** of **Forest Glen** 1.50", **Bill Hudelson** of **South Bowie** 1.09".

Heavy rains fell on central and northern Anne Arundel county on the

EXTREMES REPORTED BY ACON OBSERVERS

MAXIMUM TEMPERATURE

Smithsburg 2 NE	102
Baltimore 2 SE	102
Fallston 2 NW	101
Bear 2 SW, DE	100

MINIMUM TEMPERATURE

Eagle Rock	50
Hanover 2 S PA	53

WARMEST AVG. TEMP.

duPont Circle NW DC	81.0
Baltimore 2 SE	80.6

COLDEST AVG. TEMP.

Eagle Rock	69.5
Hanover 2 S, PA	73.3

MAXIMUM PRECIPITATION

duPont Circle NW DC	11.52
Gaithersburg 2 WNW	8.34

MINIMUM PRECIPITATION

Eagle Rock	1.64
Smithsburg 2 NE	1.90

30th and 31st. Radar out of Sterling estimated as much as 6 inches fell. **Dan Hanson** of **Millersville 1 SE** reported 3.44" while the NWS at BWI reported 4.24" of which 3.23" fell on the 30th. **Jug Bay Wetlands** reported 2.07" in their rain gauge when observations were taken on the morning of the 31st.

Not all stations received heavy thunderstorms this month. Less than 2 inches (1.90") fell at **Jim Vaughn's Smithsburg 2 NE** station. Amounts of less than 3" fell on portions of New Castle County DE, Baltimore, Carroll, Washington and Garrett Counties. **Jim Vaughn** of **Smithsburg 2 NE** reports that his precipitation deficit is over 20 inches since the drought began on July 1, 1998.

OBSERVER COMMENTS FOR AUGUST 2001

Gary Gallaher of Bear 2 SW, DE

Warmest August since 1980 and overall 3rd warmest. This August set a record with the highest minimum max temp and was only the second in 33 years where all the daily maximum temperatures were above 80 degrees. (1963-1967, 1970-1986,1990-2001)

7th & 9th - 100 degrees each day tied August maximum temperature. It was also the 2nd & 3rd time that the temp has hit 100 during August in station history.

10th - Thunderstorm with frequent and damaging lightning. Lightning struck the house behind me.

Brian Papa of duPont Circle, NW DC

10th - Thunderstorms with heavy rain. 2.68"

11th - 6.06" of rain fell between ~3:30 PM - 5:30 PM. Thunderstorms with torrential rain resulted in a two day power loss in the duPont Circle area. Street flooding reported in other parts of the city.

Al Kreinik of Parkton 5 SW

12th - 5:20 PM very dark, heavy rain and thunder.

15th - Heavy AM fog Visibility 1/4 mile.

Joe Manfre of Baltimore 2SE

7th-10th - Very hot, 100 to 102 degrees each day.

Herb Close of Manchester 1 SW

This was the warmest August in station history (13 years). 98 degrees on the 8th & 9th tied the all-time highest August temperature. Four consecutive 96+days also a record. The 59 degrees minimum tied the warmest minimum temp for the month which was set in 1991.

Ralph Hartsock of Westminster 4 SSE

9th - "Blazing" hot and sunny. 97 degrees.

30th - Humid, PM very heavy storms, 1.11" 40 MPH wind

Bobby Miller of Millers 4 NE

Summer 2001:

Avg. Max 83.0

Avg. Min 62.2

Avg. Temp 72.6

Precip 6.88" Second driest of 20 years

August saw many days of thunder but not much precipitation associated with them. This was the second warmest and sixth driest out of 20 years.

Lynn Albright of Fallston 2 NW

8th-10th - 100 degrees or greater each day.

11th - Heavy rains 4.65"

Rob Cohen of Potomac 4 N

11th - Heavy late afternoon rains. 2.50"

Kevin Shaw of Gaithersburg 2 WNW

A rather warm month, especially during the first 11 days. That 11th day was a real doozy (see below); it started a much wetter and somewhat cooler period that carried through the rest of the month. All but 0.18" of the month's precipitation fell between the 11th and the 31st. And all of the month's $\geq 90^\circ$ max temps occurred during the month's first 11 days. Record setting rainfall on August 11, with 4.68" the highest amount ever recorded in August, and my second biggest daily rainfall amount ever of all time, records going back to 12/21/78. Significant street flooding in many sections

of Gaithersburg, I personally viewed some serious road blockage on Clopper Road under I-270 underpass about 3:30 PM

Joe Terry of Forest Glen

Third month in a row with precipitation 5 inches or greater. Summer total 16.09". August was noticeably hotter and more uncomfortable than July. No minimum temperatures this month below 60 degrees after 11 days in July.

9th - Heat index 109. Still 84 at midnight.

10th - First time I've ever seen a calendar day minimum temperature this high 77 degrees.

11th - Very heavy rain and considerable lightning. 1.3" fell between 1630 & 1730 hours.

23rd - Heavy evening thunderstorm, 1.35" in one hour, 0.35" fell in 5 minutes.

Bill Hudelson of South Bowie

1st - Mostly clear. Light ground fog AM.

23rd - Broken overcast. Rain began 1915 hours, thunderstorm 2015 hours with heavy rain.

30th - Thunderstorm passing N 1200 hours. Thunderstorm 1700-2100 hours with frequent lightning. House struck 1/2 mile away.

Floyd Abell of Hollywood

10th - Heat index on the 10th up to 111-nasty thunderstorm about 6:30 PM with gusty winds & vivid lightning--possible microburst about 12 miles south of station

23rd - Thunderstorm wind damage and possible microburst about 2 miles south of station.

Greg Keefer of Hagerstown 1 E

August 2001 average temperature of 76.3 tied 1983 for the 6th warmest on record.

4th - A few very light showers this morning 5-7 AM .02" Cloudy hazy warm and humid today. Intense thunderstorm this afternoon 4 PM-5 PM with heavy downpours 1.00" fell in 40 minutes .30" fell in 5 minutes. Also intense lightning and gusty winds to 29 mph. That's the first time we had a inch or more of rain in one day since March 29th.

Jim Vaughn of Smithsburg 2 NE

Mean temperature of 77.6 set a record for August. This month was the first time that a record low mean temperature was followed by a record high mean temperature since 1978. This was the 4th driest August and the summer (7.39") was the 3rd driest. Precipitation deficit 20.25" since July 1998.

6th-9th - 100 to 102 degrees each day. (3 days of 102 ties the August record maximum temperature)

10th - 77 degree minimum set a new record for August.

John Zyla of Ridge

10 thunderstorm days along with only 5 90 degree days.

Rob Rickell of Hanover 1 S, PA

4th - New 24 hour greatest precip fell, 3.06", with more than 2 inches of that falling within an hour this evening. This was a highly localized event with almost no rain fell 2 miles to the east.

12th - Another localized precipitation event with 1.67" measured here and only 3 to 4 tenths falling to the immediate north and west.