



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

AUTUMN OFF TO A COOL AND WET BEGINNING

September continued the trend of this past summer, i.e. below normal temperatures and ample precipitation.

The month began on a summer like note with showers, high humidity and maximum temperatures in the mid 80's to 90 degrees. The minimum temperatures were quite high the first four days. On the 1st **Joe Manfre of Baltimore 2 SE**, whose station is located in the city of Baltimore, recorded a minimum temperature of 77. ACON observers **Gary Gallaher of Bear 2 SW, DE, Joe Terry of Forest Glen and Marlene Walchli of California 3 NW** each observed 75 degrees on the 1st.

Showers, some heavy, were numerous during the first four days. Close to half of the stations reported 1" or more on one of these days. **Jug Bay Wetlands** reported the heaviest daily amount of 3.75" on the 3rd while the **U of D Research and Education Center in Georgetown DE** reported 2.47" on the 2nd and an additional 1.19" on the 3rd.

A cold front that moved through late on the 4th pushed out the high humidity and brought in refreshing early season cool dry air. Minimum temperatures fell into the 40's for at least one day from the 5th to the 8th at most stations except those south and east of Washington, D. C.

Thunderstorms brought heavy rain to scattered locations on the 14th & 15th. **Herb Close of Manchester 1 SW** 1.80" on the 14th. The following amounts were reported for the 15th: **Jim Canavan of Wilmington 4 NNE** 2.08", **Jug Bay Wetlands of Lothian** 2.25", and **Floyd Abell of Hollywood** 1.72".

The remnants of Hurricane Gordon brought heavy rains on the 19th. Amounts ranged up to 2.70".

This amount was recorded by **Ray Muller of Westminster 1 N**.

The last and heaviest of the month occurred on the 25th & 26th. Storm totals generally ranged from 1 1/2" to 3 1/2". **Marlene Walchli of California 3 NW** reported the heaviest with 3.65"

SNOW IN SEPT. ?

Jim Vaughn, ACON member from Smithsburg 3 NE, works as an observer at Ronald Reagan National Airport (DCA) reported this in an e-mail on Sept 26th. It sparked lots of conversation. Below is his message:

"Driving home from the weather station at DCA last night coming over South Mountain heading into Washington County, Md. at about 1 AM and what did I behold but the drizzle changing to a mix of light rain and snow. The temp at my weather station (Smithsburg, Md. 3 NE) was 42 degrees so I venture to guess that the temp a few hundred feet further up the mountain was in the upper 30's."

In response to Jim's note Rob Rickell, who lives ~36 miles NE of where Jim reported snow reported the following: "Here in Hanover, Pa, I noticed that my temperature was quite variable last night, at times, especially during the heaviest precip the temp had fallen as low as 43 degrees, and within minutes after the heavier bursts of precip would move through, the temp would rise several degrees to between 45 and 47."

The following e-mail was sent by **Michelle Margraf, Storm Data Focal Point/Forecaster, National Weather Service, Sterling, VA** on Sept 27th: "I thought it might be good for the National Weather Service to chime in on this early season snow sighting. I noticed Jim's report of rain/snow mix from Washington Co. in the spotter e-

mail account and mentioned it to a few of my colleagues. After a very interesting discussion, we all believe that a period of wet snowflakes could have occurred on the mountain top that night. Strong upper level atmospheric dynamics were passing overhead at the time (i.e. the upper trof passing over us had very strong UVV (upward vertical velocity) and a strong vort max (major source of lift)). With that kind of movement of air (what comes up must come down) cooler air could have briefly been brought down by the falling precipitation resulting in a few wet snowflakes."

"Our mountain expert on station who has worked at the Denver office said that 850mb temps of +3 to +5 can be present with momentary bursts of snowfall when strong dynamics/strong vertical velocities are present. Another thing to note is that the 850mb temperature taken at PIT was recorded between 7 and 8PM the night before. As we all know the atmosphere is constantly changing. Between the 00z sounding between 7-8PM the night before and the 12z observation between AM and 8PM the next morning the 850mb temp could have wandered a degree or two. The sounding from PIT is nearly always the closest representative of conditions in the higher elevations vs. the IAD sounding. Another fact to note is that we recorded a low here at our Sterling, VA office that morning of 36 degrees. I'm sure it was a bit cooler on the ridge tops nearby."

"Thanks so much for the report and the interesting meteorological discussion that has resulted. This interesting sighting will be noted in our monthly hydrometeorological report. This is also an opportunity to thank all of you for your wonderful reports throughout the year. Keep up the good work! We really appreciate it."

OBSERVER COMMENTS FOR SEPTEMBER 2000

Gary Gallaher of Bear 2 SW, DE

Continued below normal temperatures. Month began warm and humid and ended cool. Two storms brought heavy rains this month, 19th & 25th-26th. This was the second wettest month of the year and the sunniest month since November 1999.

Jim Canavan of Wilmington 4 NNE, DE

15th - Heavy Thunderstorm 2.08"

Marty Sharrow of Owings Mills

September was a fairly typical month in terms of temperature: Warm to start and cool to end.

6th - Brilliant sunshine, low humidity, and beautiful.

27th - Dense AM ground fog; sunny and cool

Joe Manfre of Baltimore 2SE

A little above normal precipitation with a cooler than normal second half of the month.

Herb Close of Manchester 1 SW

2nd wettest September on Record. Wettest is 1999.

Ralph Hartsock of Westminster 4 SSE

1st - AM heavy rain and storms, Very humid.

19th - Heavy tropical rains from Gordon.

29th - Light scattered frost.

30th - More frost - Sunny and nice.

Bobby Miller of Millers 4 NE

Third wettest of 20 Septembers.

1st - Thunderstorms with heavy rain before sunrise.

30th - Some AM frost with dense fog.

Marty Brumback of Bryans Road 2 ESE

This was the fourth consecutive month with below normal temperatures. The big precipitation event occurred on the 25th and spilled over to the 26th. 2.73" fell.

Rob Cohen of Potomac 4 N

25th - Afternoon maximum temperature of 54.

Rich Giannola of Olney

15th - Becoming windy in late afternoon with advancing cold front. RW at 6:30 PM. Double rainbow at 6:35 PM. Very bright base on primary rainbow (north side).

19th - RW's all day (occasional RW+), from the remnants of Hurricane Gordon and ending in early evening.

Joe Terry of Forest Glen

Tropical heat and humidity 1st few days then cycles of very warm and very cool ending with very chilly conditions. Major 3'+ rain event, greatest extratropical storms since Nov 1997.

1st - Oppressive. Highest minimum temperature of summer

Bill Hudelson of South Bowie

3rd - Thunderstorm 1615 - 1640 with .50" in 10 minutes.

17th - Clear AM. Gradually increasing clouds from S to N from hurricane Gordon.

18th - Bkn-ovc with clouds from tropical storm Gordon.

19th - Rain from remnants of Hurricane Gordon began before 0600 end 1700, heavy late morning and early afternoon.

Greg Keefer of Hagerstown 1 E

1st - Showers and thunderstorms between 5 AM-8 AM .20".

A few more sprinkles later this morning. Warm and very humid today high 87 F. with dew points in the mid 70's and a heat index topping out at 99.

14th - Thunderstorms this evening formed all around this station 7 PM-10 PM and were in every direction with a lot of intense lightning and thunder but only got .01" of rain here.

27th - Cold morning low of 38 F with just a touch of frost reported and a touch observed on rooftops and cars. Bright with 100% sunshine warmer with a high of 72 F.

Robert Rickell of Hanover 2 S, PA

14th - Heavy thunderstorms rolled across the area. Very dangerous lightning, strong winds, and heavy downpours accompanied these storms as they moved through the area.

29th - Moderate frost on ground, however, it was not a freezing nature to the vegetation!

EXTREMES REPORTED BY ACON OBSERVERS

MAXIMUM TEMPERATURE

Hollywood 90

Smithsburg 3 NE 90

MINIMUM TEMPERATURE

Hanover 1 S, PA 34

Parkton 5 SW 35

Millers 4 NE 35

WARMEST AVG. TEMP.

Baltimore 2 SE 69.2

Ridge 68.8

COLDEST AVG. TEMP.

Eagle Rock 59.8

Westminster 4 SSE 62.3

MAXIMUM PRECIPITATION

Jug Bay Wetlands 11.64

Westminster 1 N 8.60

MINIMUM PRECIPITATION

Hagerstown 1 E 3.31

Millersville 1 SE 3.47

Compiled by Gary Gallaher, MD/DE ACON Data Collector and Report Writer, from data received from dedicated observers. Without your observations each month this report will not be possible.