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

TROPICAL STORM ERNESTO REMNANTS AND SEVERNA PARK TORNADO

September's weather was a welcome relief from the heat, humidity, and dryness of August. The cool temperatures resulted from the considerable cloud cover which held down maximum temperatures and held up the minimum temperatures. There were no 90 degree temperatures and a below average number of days with 80+ temperatures. **Gary Gallaher** of **Bear 2 SW DE** reported 5 days with temperatures 80 or above, the fewest number of days in 41 years of records.

The month began on a cool, wet note. The remnants of Tropical Storm Ernesto, which made landfall in North Carolina, moved slowly northwards through central Maryland on the 2nd and was absorbed by a frontal system over Pennsylvania / New York during the next couple of days. The rain shield moved northwards ahead of the center of low pressure. The southeastern portions of Maryland / Delaware region received heavy, flooding rains. See page 2 for a picture of the flooding in St Mary's County. Four inch plus amounts reached as far north as Anne Arundel County Maryland and Sussex County Delaware. Gale force winds occurred near the coast as a result of the interaction between the remnants of Ernesto and a large high pressure system to the north. Below are the heavier amounts reported by ACON observers:

Jug Bay Wetlands	7.05"
Floyd Abell of Hollywood	6.96"
John Zyla of Ridge	6.00"
UofD Res Ctr Georgetown DE	4.57"
Dave Bryant of Annapolis 2N	4.33"
Jeff Stoudt of Laurel 2E	3.84"

NWS reported the following amounts:	
Salisbury Airport	6.88"
Georgetown DE Airport	4.51"

Generally two to three inches fell over the balance of the region. A picture of flooding in St Mary's county is on page 2.

One to two inches of rain fell on the 5th as a result of a stalled frontal system.

The longest streak of 80 degree days of the month occurred from the 7th to the 10th.

Rain returned on the 11th to areas west of I-95. The heaviest amounts fell in portions of Montgomery and Washington Counties. **Max Hutto** of **Smithsburg 1.5SW** reported 1.48" while **Greg Keefer** of **Hagerstown 1E** had 1.21" and **David Roth** of **Montgomery Village 1SW** had 1.03". The balance of the region west of I-95 corridor and east of the mountains received less than a half inch.

The last few days of summer brought temperatures as high as the low to mid 80's on the 17th and 18th and minimums as low as the upper 30's to the middle 40's on the 21st and 22nd. Extremes reported were **Joe Terry** of **Forest Glen** with 86 on the 18th and **Max Hutto** of **Smithsburg 1.5SW** with 38 on the 21st.

A strong cold front moved across the region on the 28th. Rainfall amounts ranged from less than a half inch to nearly two inches. Greg Klein of Westminster 5 SSE reported 1.87" while Ralph Hartsock of Westminster 4 SSE reported 1.85". A F1 tornado touched down in Severna Park. The report

EXTREMES REPORTED BY

ACON OBSERVERS

MAXIMUM TEMPERATURE

Jug Bay Wetland	87
Glenmont 1 NNE	87
Six Stations	86

MINIMUM TEMPERATURE

Davis 3 SE WV	35
Eagle Rockl	36
Frostburg	37

WARMEST AVG. TEMP.

Baltimore 2 SE	69.4
Ridge	68.5
Hollywood	68.1

COLDEST AVG. TEMP.

Davis 3 SE WV	54.6
Eagle Rock	57.8
Frostburg	58.6

MAXIMUM PRECIPITATION

Jug Bay Wetlands	11.63
Ridge	11.47
Hollywood	11.08

MINIMUM PRECIPITATION

LaVale	3.36
Eagle Rock	3.80
Davis 3 SE WV	3.96
Frostburg	4.31

issued by NWS Sterling is on page 2 along with a picture of the damage.

The balance of the month was cool. The coldest temperatures of the month occurred on the morning of the 30th. **Dave Leshner** of **Davis 3 SE WV** reported 35. Temperatures fell to 37 at Salisbury NWS

**PUBLIC INFORMATION STATEMENT
NATIONAL WEATHER SERVICE BALTIMORE MD/WASHINGTON DC
415 PM EDT FRI SEP 29 2006**

...A TORNADO TOUCHED DOWN IN CENTRAL MARYLAND THURSDAY EVENING...

THE NATIONAL WEATHER SERVICE CONDUCTED A STORM SURVEY IN SEVERNA PARK AND PASADENA MARYLAND TODAY. FROM THIS SURVEY... INTERVIEWS WITH EYEWITNESSES... NATIONAL WEATHER SERVICE SKYWARN SPOTTERS... AND DOPPLER RADAR IMAGERY... IT WAS DETERMINED THAT A TORNADO TOUCHED DOWN AROUND 6:30 PM IN CENTRAL MARYLAND IN THE AREA OF SEVERNA PARK... AND TRAVELED TWO MILES BEFORE LIFTING IN PASADENA MARYLAND AROUND 6:40 PM. AT ITS MAXIMUM THE STORM WAS 250 YARDS WIDE WITH WINDS OF 90 MPH WITH A RANKING OF F1 ON THE FUJITA SCALE WHICH RUNS FROM F0 TO F5. 33 HOMES WERE SEVERELY DAMAGED BY FALLING TREES WITH 13 OF THOSE HOMES RENDERED UNINHABITABLE.

INITIAL MINOR DAMAGE WAS LOCATED NEAR THE INTERSECTION OF RITCHIE HIGHWAY ROUTE 2 AND MCKINSEY AVENUE. A HARDWARE STORE HAD ITS SIGN BLOWN DOWN AND A SMALL TREE WAS DOWNED NEAR THE SEVERNA PARK MARKET-PLACE SHOPPING CENTER. A FEW TREES WERE ALSO DOWNED IMMEDIATELY BEHIND THE SHOPPING CENTER ALONG LEELYNN ROAD.

THE TORNADO GATHERED STRENGTH AS IT PROGRESSED THROUGH WEST RIDGE AND TOWARDS CATTAIL CREEK OFF OF THE MAGOTHY RIVER. FIVE LARGE HARDWOOD TREES OF ONE TO TWO FEET IN DIAMETER WERE UPROOTED... AND SEVERAL OTHERS WERE SNAPPED OFF ALONG WHITTIER PARKWAY. TWO OF THE LARGE TREES HAD FALLEN THROUGH HOUSES. THESE TREES... AS MOST OF THE TREES WERE IN THE SURVEY... WERE BLOWN DOWN NEARLY PERPENDICULAR TO THE PATH OF THE TORNADO... KNOCKED DOWN TOWARDS THE WEST.

THE TORNADO THEN PASSED OVER A NORTHWEST EXTENSION OF THE MAGOTHY RIVER CALLED CATTAIL CREEK... AND REACHED ITS MOST INTENSE AND WIDEST EXTENT AS IT PASSED THROUGH THE COMMUNITY OF LOWER MAGOTHY BEACH. IN THIS AREA WINDS WERE ESTIMATED TO HAVE REACHED 90 MPH. AT ITS MAXIMUM THE STORM PASSED THROUGH A VACANT LOT BETWEEN NORTH DRIVE AND SOUTH DRIVE. IN THAT AREA NEARLY EVERY TREE WAS UPROOTED OR SNAPPED OFF AND BLOWN DOWN TO THE WEST. MANY OF THESE TREES WERE LARGE TWO FOOT DIAMETER HARDWOOD TREES THAT WERE 60 TO 80 FEET TALL. IT WAS EVEN NOTED THAT A SMALL SHRUB OF THREE FEET TALL WAS UPROOTED... AN INDICATION THAT THE CIRCULATION REACHED ALL THE WAY TO THE SURFACE. LEAF SPATTER WAS NOTED ON THE SIDES OF HOMES AND VEHICLES. SLIGHT SIDING DAMAGE WAS NOTED ON ONE HOME. SEVERAL HOMES HAD DAMAGE FROM TREES OR LARGE TREE BRANCHES FALLING INTO THEM. MANY WIRES AND TELEPHONE POLES WERE KNOCKED DOWN IN THIS AREA. THE WIDTH OF THE TORNADO AT THIS POINT WAS 250 YARDS.

THE TORNADO THEN BEGAN TO WEAKEN AS IT PASSED JUST WEST OF HAMILTON HARBOR MARINA AND CROSSED OVER THE COMMUNITY OF STEWARTS LANDING BEFORE CROSSING OLD MAN CREEK INTO RIVERDALE. DURING THIS TIME MORE TREES WERE BEING SNAPPED OFF THEN UPROOTED AS THE TORNADO WAS BEGINNING TO LIFT OFF THE GROUND.

IN THE RIVERDALE AREA... A FEW TREES AND SEVERAL LARGE BRANCHES WERE DOWN. A SMALL GARAGE WAS DESTROYED BY A TREE. DAMAGE BECAME MUCH MORE LIMITED AS THE TORNADO CONTINUED NORTH ACROSS NORWITCH ROAD AND INVERNESS ROAD IN RIVERDALE. BY THE TIME THE STORM CROSSED THE MAGOTHY FOR THE FINAL TIME AND TRAVELED OVER THE COMMUNITY OF BEACHWOOD PARK... ONLY LEAF LITTER AND SMALL DOWNED BRANCHES WERE NOTED.



Photo as published in the September 2006 Storm Data

F1 Tornado damage at Severna Park, MD Sept 26, 2006. Image courtesy of Anne Arundel County Police, Officer Rich Herard.

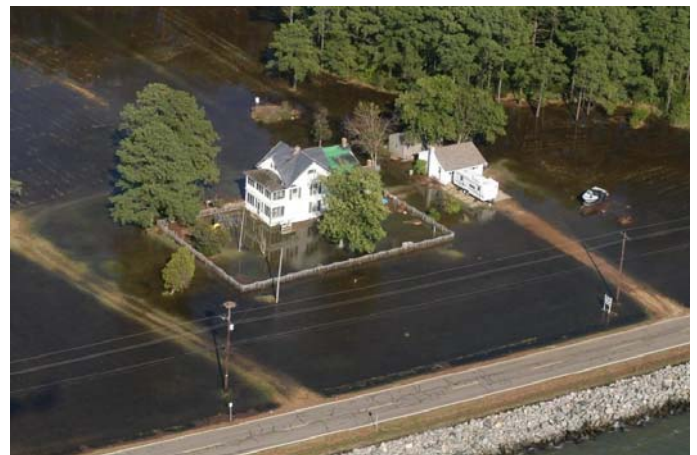


Photo as published in the September 2006 Storm Data

Flooding from the remnants of Tropical Storm Ernesto Image courtesy of St Mary's County Emergency Management

OBSERVER COMMENTS FOR SEPTEMBER 2006

Gary Gallaher of Bear 2 SW, DE

Third coolest September in 41 years of records. 5 days with maximum temperatures of 80 or higher was the fewest ever for September. Tropical Storm Ernesto brought the first beneficial rains since mid July on the 1st and 2nd. Its winds and driving rain stripped many leaves and blossoms from my pole beans which ended any future bean development..

Nate Mullins of LaVale

Due to ample cloud cover, the below normal daily max's were nearly offset by above normal nightly mins.

2nd - Rain, heavy at times continued overnight and tapered to drizzle by 8 AM. Total rain from Ernesto 2.20".

17th & 18th - Dense AM fog.

Dave Bryant of Annapolis 2 N

28th - Brief violent downburst 5-6 PM, estimated 40 - 50 knot gusts for 4 to 5 minutes.

Jeff Stoudt of Laurel 2 E

The hot and dry August turned cool and rainy immediately at the onset of September as moisture from TS Ernesto overran a wedge of cool air. The event brought 3.84" of rain.

28th - Thunderstorm during early evening turned severe nearby to the east and even tornadic at Severna Park.

Karyn Molines of Jug Bay Wetlands

Tropical storm Ernesto dumped 7.14" of rain.

Al Kreinik of Parkton 5 SW

14th - Rain early AM till early afternoon.

Marty Sharrow of Owings Mills

8th - Hazy sun with few clouds and warm.

25th - Sunny and much more comfortable.

Joe Manfre of Baltimore 2SE

5th - Cloudy, cool, occasional rain.

18th - Partly cloudy, warm, moderate humidity.

Ralph Hartsock of Westminster 4 SSE

28th - Severe PM storm pea size hail and marble size hail.

Bobby Miller of Millers 4 NE

9th - AM fog then sunny day.

16th - Periods of drizzle, very little sun.

Marty Brumback of Bryans Road 2 ESE

15th - Unusual system. Rain moved from the east to west due to an upper level low.

Rebecca Harvey of Eagle Rock

6th - Thunder

Rich Giannola of JHU/APL

1st - Peak wind gust from Ernesto was 42 MPH @ 9:13 PM.

Rob Cohen of Potomac 4 N

1st - Tropical Storm Ernesto brought mid afternoon temperatures in the low 60's and windy conditions.

28th - Moderate thunderstorm 6 to 7 PM.

Rich Giannola of Olney 1 S

1st—2nd - Rain began before 6 AM on the 1st from remnants of TS Ernesto. Windy afternoon. Power was out from 10:25—11:10 PM. Rain continued overnight into the second. Precipitation ended late in the afternoon of the 2nd.

Kevin Shaw of Gaithersburg 2 WNW

All in all a very interesting transitional month. A wet, cool month. The cool temperatures were almost entirely due to low maximum temperatures rather than low minimum temperatures.

28th - Daily rainfall record set with 1.79".

Joe Terry of Forest Glen

Very wet after an extremely dry August. Considerably cooler than August.

1st - Very cool and windy with continuous rain, occasionally heavy and slowly falling temperatures.

28th - First thunderstorm since August 7. Early evening thunderstorms with brief very heavy rain. Sky grew almost as dark as night one hour prior to sunset.

Brian Smith of Oxon Hill

28th - +TSRA 1714-1730, 1805-1930 otherwise -SHRA/SHRA 1630-2300

Floyd Abell of Hollywood

Second wettest September, 11.08" of rain fell.

1st & 2nd - Rain and wind from Tropical Storm Ernesto. Peak wind on the 1st 53 mph and 41 mph on the 2nd. 6.96" of rain fell.

28th - Fair then evening thunderstorm.

John Zyla of Ridge

6.00" of rain from Ernesto (August 31 - Sept 2). Second highest monthly precipitation, 11.47". Wettest month was September 1999 when 12.90" fell.

Max Hutto of Smithsburg 1.5 SW

11th - Overnight moderate to heavy rain, much cooler, rainy most of the day.

28th - PM thunderstorm, nearby were intense.

Greg Keefer of Hagerstown 1 E

1st & 2nd - Total rainfall from Ernesto 2.30". Winds gusted to 31 mph on the 1st and 39 mph on the 2nd.

9th & 10th - Each day dense fog overnight and in the morning

11th - Rain overnight moderate to heavy at times. Chilly with light rain and drizzle most of the day. 1.21" fell.

28th - Severe thunderstorms across the area with damaging winds in some places. Intense thunderstorm here between 4:30—5:30 PM. Ominous storm skies with wind gusts to 46 MPH, frequent sharp lightning.

Jim Vaughn of Smithsburg 2 NE

Fifth coldest September.

1st & 2nd - Remnants of Ernesto peak wind of 49 mph on the 1st and 44 mph on the 2nd. 2.71" of rain fell.

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.