



<http://www.jhuapl.edu/weather/education/ACONdata.html>

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

EXTREMELY HEAVY RAINS IN EASTERN AREAS HURRICANE IRENE PASSED JUST OFFSHORE

August temperatures averaged above normal but were much closer to normal than they were in July. The months highlight was its precipitation. The further east the wetter it was. Well over a foot fell in St. Marys County Maryland and New Castle County Delaware. Just northeast of the region NWS Philadelphia Pa reported 19.31" of rain which exceeded the previous August record set in 1911 by 7.21" and the all-time monthly record by 6.24" set in September 1999 with Floyd.

One tropical event occurred. Hurricane Irene, an extremely large storm, was barely a category 1 storm as it travelled NNE just off the Atlantic Coast of Maryland and Delaware during the 27th and the early morning hours of the 28th. 60 MPH wind gusts occurred at some locations from Carroll County eastward.

July's heat continued into the first two days of August. From the third till the end of the month maximums in the 80's were common long with a few 70's and 90's but the humid conditions remained as a result of frequent showers. The only ≥100° temperature reported at an ACON station occurred on the 1st at **Baltimore 2 SE**. The last 90 degree readings occurred on the 21st. Minimum temperatures fell into the comfortable 50's on the 12th, 13th, 23rd, 29th, and 30th at many locations.

There were only six days without measureable precipitation: 11th, 12th, 23rd, 24th, 30th, & 31st. Showers and thunderstorms occurred throughout the month. Scattered heavy storms occurred on the 6th and 7th. **Richard Holden** of **Clarksburg 2 ENE** measured 1.72", **Ray Muller** of **Reisterstown 1.70"**, **Brian Smith** of **Oxon Hill 1.50"**, and **Jeff Stoudt** of **Laurel 2 E 1.44"**.

Heavy showers and thunderstorms occurred from the 13th to 15th. Over a months worth of rain fell in New Castle County Delaware. **DEOS Townsend 4 W DE** observed 7.34", **Gary Gallaher** of **Bear 2 SW DE 6.65"**, and **David**

Legates of Middletown 6 N 5.10".

More scattered heavy showers occurred on the 18th, 19th, and 21st. **Dan Hanson** of **Pasadena 2 N** reported 4.63". Hail was reported on the 18th by **Stan Rossen** of **Glenmont 1 NNE** - pea size to 3/4", and **Greg Keefer** of **Hagerstown 1 E** - pea size with reports to nickel size across the Hagerstown area.

A non weather related event occurred on the 18th. At 1:51 PM a 5.8 earthquake occurred in Northern Virginia. **Rich Giannola** reported that it caused the tipping bucket rain gauge at **Laurel JHU/APL** to record 0.01". It left a vibration mark on **Gary Gallaher's Bear 2 SW DE** recording rain gauge. Picture on page 3.

Hurricane Irene made landfall near Cape Lookout, North Carolina the

EXTREMES REPORTED BY

ACON OBSERVERS MAXIMUM TEMPERATURE

Baltimore 2 SE	101
Bryans Road 2 ESE	99
Oxon Hill	99

MINIMUM TEMPERATURE

Davis 3 SE WV	45
Frostburg	49
Smithsburg 1.5 SW	49
Millers 4 NE	50
Hagerstown 1 E	50

WARMEST AVG. TEMP.

Baltimore 2 SE	80.7
Ridge	78.5
Hollywood 3 ENE	77.4

COLDEST AVG. TEMP.

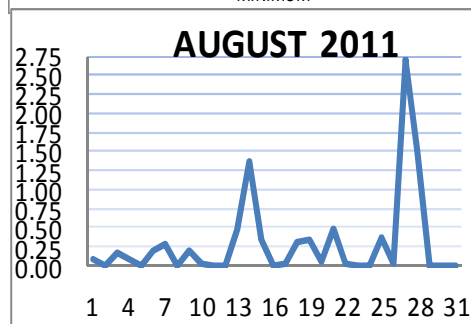
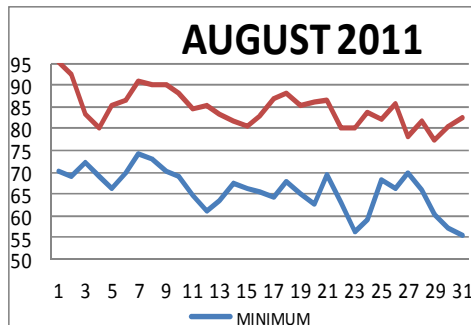
Davis 3 SE WV	64.6
Frostburg	68.8
Manchester 1 SW	72.5

MAXIMUM PRECIPITATION

DEOS Townsend 4 W DE	20.00
Ridge	15.42
Bear 2 SW DE	15.02

MINIMUM PRECIPITATION

LaVale	3.77
Frostburg	4.10
Olney 1 S	5.03



ACON MD/DE Network

Daily average temperatures and precipitation based on observation times, not calendar days.

morning of the 27th. It then moved NNE returning to the Atlantic east of Norfolk, then paralleled the coast till it made landfall again in Central New Jersey. Comments concerning the storm from ACON observers can be found in the Observer Comments Section.

Sunny, dry, pleasant temperatures followed in the wake of Hurricane Irene.

OBSERVER COMMENTS FOR AUGUST 2011

Gary Gallaher of Bear 2 SW, DE

15.02" of rain, an all-time record wettest month. Old record was 13.53" set in August 1967.

14th - Heavy showers and thunderstorms. 5.12" of rain tied 8/27/1971 for the wettest August day. 6.32" of rain fell during the heavy rain event of the 13th & 14th.

19th - Lightning struck the house next door at 6:19 PM.

27th & 28th - Hurricane Irene: Precipitation 6.23". Minimum barometric pressure 28.81" an August record and lowest since 28.41" on 3/13/1993. PWG 43 W @ 12:14 PM on 28th.

Summer 2011: Precipitation 24.45" Wettest on record. Old record was 23.24" set in 2004. Average temperature 75.5°, 9th warmest of 45 years. $\geq 90^\circ$ 21 days, exactly average.

David Legates of Middletown 6N

27th & 28th - Hurricane Irene: Precipitation 6.44", PWG 31 on the both days.

U of D Newark AG Farm DEOS, DE

27th & 28th - Hurricane Irene: Precipitation 7.13", PWG 26 on the 27th.

U of D Townsend 4 W DEOS, DE

27th & 28th - Hurricane Irene: Precipitation 8.36", PWG 32 on the 28th.

U of D Georgetown 5 SW DEOS, DE

27th & 28th - Hurricane Irene: Precipitation 7.05", PWG 43 on the 27th.

U of D Harbeson 8 N DEOS, DE

27th & 28th - Hurricane Irene: Precipitation 6.67", PWG 38 on the 27th.

U of D Rehoboth Beach Bwk DEOS, DE

27th & 28th - Hurricane Irene: Precipitation 6.10", PWG 45 on the 27th.

Greg Latta of Frostburg

27th & 28th - Hurricane Irene: Precipitation 0.38".

Nate Mullins of LaVale

Maximum temperatures generally around normal, with a remarkable 24 days in the 80's.

3rd to 8th - Six consecutive minimum temperatures in the 70's. The first five were record high minimums.

14th - Over half of the months rain fell when a slow moving, intense storm dumped over 2" of rain.

27th & 28th - Hurricane Irene: Precipitation 0.06".

Summer 2011: Second hottest with a mean temperature 74.4°. Record hottest 75.6° set in 2010.

Dan Hanson of Pasadena 2 N

27th & 28th - Hurricane Irene: Precipitation 5.05", PWG 49 NE on the 27th.

Jeff Stoudt of Laurel 2 E

August was the wettest of 17 years of non-continuous weather observations at this location surpassing the August 1999 mark of 7.80".

27th & 28th - Hurricane Irene: Precipitation 4.64". Irene brought considerable tree damage and moderate flooding to this area.

Ray Muller of Reisterstown

27th & 28th - Hurricane Irene: Precipitation 3.27". Minimum barometric pressure 29.06" @ 3:30 AM. PWG 33 NE at 2005 hours on the 27th.

Marty Sharrow of Owings Mills

1st - Partly cloudy, hot & humid. Evening thunderstorm. Wind gust 33 MPH from the NE at 2005 hrs.

23rd - Brilliant sunshine and pleasant.

27th & 28th - Hurricane Irene: Precipitation 4.60" PWG 46 NNE.

Joe Manfre of Baltimore 2SE

1st - Very hot, moderate humidity, evening thunderstorms.

27th & 28th - Hurricane Irene: Precipitation 3.90".

30th - Partly cloudy, warm, low humidity.

Herb Close of Manchester 1 SW

27th & 28th - Hurricane Irene: Precipitation 3.86".

Ralph Hartsock of Westminster 4 SSE

4th - Overnight light rain showers, clearing and warm.

6th - Heavy overnight showers after obs time.

19th - Brief shower, bad lightning around.

27th & 28th - Hurricane Irene: Precipitation 2.70", PWG 47 WSW on the 27th.

28th - Power outages from Hurricane Irene.

Bobby Miller of Millers 4 NE

17th - AM heavy dew, some afternoon scattered CU few Cl.

18th - Storm before midnight, vivid lightning.

27th & 28th - Hurricane Irene: Precipitation 4.42". Peak of Hurricane Irene was from about 11:30 PM on the 27th to about 4 AM on the 28th. PWG 60 MPH NNE @ 2:36 AM 28th. Minimum barometric pressure 29.10" @ 4:09 AM 28th. There were a few whole trees uprooted due to heavy precipitation and some large branches down in the area but nothing like Isabel. Isabel had a stronger wind for a longer period of time. The power was out for 4 days, 19 hours, 37 minutes from 12:04 AM on the 28th till 9/1.

Marty Brumback of Bryans Road 2 ESE

3rd - Overcast. Sprinkles began at about 6:30 AM and continued intermittently throughout the day.

27th & 28th - Hurricane Irene: Precipitation 5.26", PWG 42 MPH on the 27th. No damage or flooding.

Eric Glass of Emmitsburg 2 SE

4th - Breezy, overcast, humid and cooler.

20th, 21st, & 26th - Morning Fog.

27th & 28th - Hurricane Irene: Precipitation 1.63".

Rich Giannola of JHU/APL Laurel

27th & 28th - Hurricane Irene: Precipitation 3.44", PWG 54 MPH N @ 11:53 PM the 27th. Minimum barometric pressure 29.11" on the 28th.

Ron Berger of Norbeck 1 SE

27th & 28th - Hurricane Irene: Precipitation 3.07".

Rob Cohen of Potomac 4 N

27th & 28th - Hurricane Irene: Precipitation 2.14" Minimal tree damage.

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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.

August 2011 MD / DC / DE Report

Observer Comments Continued From Page 2

Rich Giannola of Olney 1 S

27th & 28th - Hurricane Irene: Precipitation 2.51".

Richard Holden of Clarksburg 2 ENE

14th - Heavy rain. AM minimum temperature 69°.

27th & 28th - Hurricane Irene: Precipitation 2.05", PWG 52 MPH NNW on the 28th. Minimum barometric pressure 29.17" on the 28th.

Stan Rossen of Glenmont 1 NNE

4th - It was 35 years ago today that I bought my 8" rain gauge from Belfort Instruments in Baltimore, brought it home, and set it up on the back corner of the patio in my back yard for use. It is still the rain gauge of record, although it is now in front of the house where it has been for the past dozen years as trees grew around the back yard.

18th - Mostly pea size hail 5:23 PM to 5:27 PM EST. The largest hail stones were 1/2" to 3/4".

27th & 28th - Hurricane Irene: Precipitation 3.15", PWG 19 on the 28th.

Tony Scafide of Bethesda

27th & 28th - Hurricane Irene: Precipitation 2.19", PWG 19 on the 28.

Kevin Shaw of Gaithersburg 2 WNW

Mean temperatures averaged 0.6° above normal, maximum temperatures averaged 0.9° below normal while minimums averaged 2.2° above normal.

27th & 28th - Hurricane Irene: Precipitation 2.05", PWG 37 N on the 28th. Minimum barometric pressure 29.17" on the 28th.

29th - Partly cloudy, cooler, a bit less humid.

Joe Terry of Forest Glen

2nd - Last day of 17 consecutive days with temps $\geq 90^\circ$.

21st - Strong thunderstorm around 1500 with 10 minutes of very heavy rain. 0.45" fell in 5 minutes. PWG 34 MPH.

27th & 28th - Hurricane Irene: Precipitation 3.39", PWG 36 NNW on the 28th. Minimum barometric pressure 29.10" on the 28th.

Brian Smith of Oxon Hill

27th & 28th - Hurricane Irene: Precipitation 5.21".

Wes Gleason of Hollywood 3 ENE

No wind data. Osprey have been using wind instruments to perch.

27th & 28th - Hurricane Irene: Precipitation 10.20". Minimum barometric pressure 28.85" on the 28th.

John Zyla of Ridge

Station record highest monthly precipitation 15.42"

Station record lowest barometric pressure 28.87"

13th - Smoke and Haze from Great Dismal Swamp Fire 150 miles away.

27th & 28th - Hurricane Irene: Precipitation 10.46", PWG 41 NE on the 27th. Minimum barometric pressure 28.87" on the 28th. Length of storm 25 hours.

Max Hutto of Smithsburg 1.5 SW

12th - Sunny, warm, breezy, very nice day.

18th - PM thunderstorm with nickel size hail.

27th & 28th - Hurricane Irene: Precipitation 1.68", PWG 29 on the 28th.

Greg Keefer of Hagerstown 1 E

8th wettest August. Wettest is 8.85" set in 1955.

18th - Intense slow moving thunderstorms developed overhead this evening just before 9 PM and continued till around 11:30 PM. They dropped heavy amounts of rain (1.82") and contained very frequent wicked lightning. Some 1/4" hail fell here briefly. Nickel size hail was reported in the area.

23rd - Chilly low of 50 this morning. Sunny today.

27th & 28th - Hurricane Irene: Precipitation 1.29". PWG 37 N on both days, Minimum barometer 29.25" on the 28th.

Summer 2011: Average mean temperature 75.9° tied 1991 for the 3rd warmest on record. Second hottest 76.0° in 1995. Record hottest is 77.7° set in 2010.

Jim Vaughn of Smithsburg 2 NE

4th wettest August. Wettest is 8.45" set in 1955.

3rd - Daily low maximum temperature of 79° surpassing 80° set in 1964.

27th & 28th - Hurricane Irene: Precipitation 1.10". PWG 44 on the 28th, Minimum barometer 29.24" on the 28th.

Summer 2011: Average mean temperature 75.6°, Precipitation 9.56".

David Leshner of Davis 3 SE WV

27th & 28th - Hurricane Irene: Precipitation 0.22".



Vibration mark left of the recording rain gauge chart of Gary Gallaher, Bear 2 SW DE, on 8/23