



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

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

WARM, WET, CLOUDY MONTH TORNADIC THUNDERSTORMS

April was an active weather month. For a good part of the month fronts generally laid in an east-west direction across the region. When the front moved northwards warm southerly winds brought summer-like temperatures in the 80's and when it moved southwards cool damp winds with an easterly component brought cool maximum temperatures in the 40's and 50's. Clouds were abundant.

Temperatures averaged well above normal mainly due to quite warm minimums. **Gary Gallaher** of **Bear 2 SW DE** and **Kevin Shaw** of **Gaithersburg 2 WNW** both reported average minimums 1.5° warmer than their previous records.

Precipitation also averaged above normal across the region except for the Delmarva Peninsula where below normal amounts fell. The heaviest rains fell from Central Maryland westwards. Thunder was reported on around seven days. A few of these storms brought small hail. It was also a windy month. Wind gusts of 40 MPH or higher were reported at over half of the stations which report wind data.

There were numerous reports of severe weather - hail, strong winds, and tornadoes. More than a dozen tornadoes occurred on four days (4th, 16th, 27th, & 28th) in Maryland and none in Delaware. Most of the tornadoes occurred on the 27th and 28th in conjunction with the tornado outbreak which hit the southeast. **Wes Gleason** of **Hollywood 3 ENE** reported that a weak tornado / funnel cloud passed over his home on the 27th. For more details see page 3.

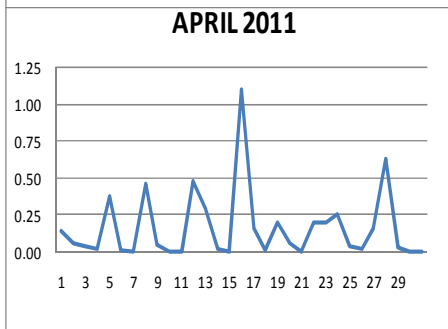
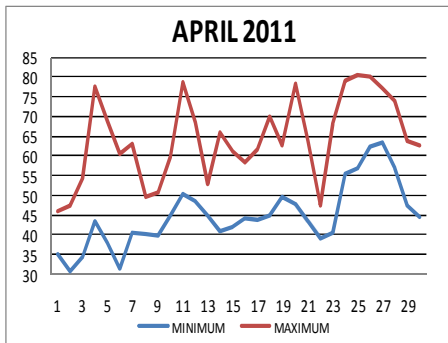
The month began cool with maximum temperatures remaining in the 40's. The coldest temperature occurred on either the 1st, 2nd, or 6th when temperatures fell to around freezing. Snow and sleet fell on the 1st and 2nd. **Herb Close** of **Manchester 1 SW** reported 3.2" of snow and **Bobby Miller** of **Millers 4 NE** 2.0" on the 1st. **Dave Leshner** of **Davis 3 SE WV** reported 19.7" of snow from the 1st to the 3rd.

The first warmth occurred on the 4th when 80's were common.

Heavy rains along with some thunderstorms occurred on the 16th. 1"+ amounts were common with the heaviest amounts falling in Washington County and the lightest amounts on the Delmarva Peninsula. **Jim Vaughn** of **Smithsburg 3 NE** reported 2.64", **Max Hutto** of **Smithsburg 1.5 SW** 1.85" and **Greg Keefer** of **Hagerstown 1 E** 1.83".

80° maximum temperatures occurred from the 24th to the 27th. Minimums on the 26th and 27th only fell to the mid to upper 60's setting records for the warmest minimum temperatures for April. **Stan Rossen** of **Glenmont 1 NNE** re-

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ACON MD/DE Network

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

EXTREMES REPORTED BY ACON OBSERVERS

MAXIMUM TEMPERATURE

Forest Glen	90
Jug Bay Wetlands	89
Baltimore 2 SE	89
Glenmont 1 NNE	89
Oxon Hill	89

MINIMUM TEMPERATURE

Davis 3 SE WV	23
Mont. Village 1 SW	27
Frostburg	28

WARMEST AVG. TEMP.

Baltimore 2 SE	61.3
Oxon Hill	59.9
Ridge	59.9

COLDEST AVG. TEMP.

Davis 3 SE WV	47.1
Frostburg	49.7
Manchester 1 SW	54.2

MAXIMUM PRECIPITATION

Davis 3 SE WV	10.99
Smithsburg 1.5 SW	9.64
Smithsburg 3 NE	9.38

MINIMUM PRECIPITATION

Harbeson DEOS 8 S DE	1.62
Rehoboth Beach DEOS DE	2.06
Georgetown DEOS 5 SW DE	2.67

MAXIMUM SNOWFALL

Davis 3 SE WV	23.3
Manchester 1 SW	3.2
Millers 4 NE	2.0

WEATHER PARTY

SATURDAY, JULY 30, 2011
HOME OF HERB CLOSE
MANCHESTER 1 SW
More information to follow.

OBSERVER COMMENTS FOR APRIL 2011

Gary Gallaher of Bear 2 SW, DE

Cloudy month, only 2 clear days. First April without a freezing temperature in 45 years of records. Average minimum temperature 1.5° warmer than the previous record set in 1994. Seven days with max temps in the 80's broke the old record of 5 days set in 1994, tied 2010.

27th - 68° tied max minimum temp for the month set 1977.

Greg Latta of Frostburg

Seven days with thunder. 2nd wettest April. Record is 9.28" set in 1964.

Nate Mullins of LaVale

Wet and mild. Temps 2.5° above normal almost entirely to well above normal overnight lows, and only a handful of sub-freezing lows, which is very unusual.

22nd - Record low max high only 48°. Some snowflakes fell on some nearby ridges.

26th - A line of severe thunderstorms to the west and north prompted a tornado warning but weakened as it approached.

28th - A fast moving line of severe storms passed through around 1 AM prompted a tornado warning.

Jeff Stoudt of Laurel 2 E

April was highlighted by frequent showers, some with thunder, but no really heavy rain resulting in a near normal rainfall. The warmth came in four brief spikes and reached summery levels on three of them.

5th - Gusty TSRA toward dawn (0.19").

16th - Periods of rain after daybreak.

Marty Sharrow of Owings Mills

April 2011 started off more like late winter with max/min temperatures running well below normal. The cold air did not stick around very long and temperatures warmed to near summertime values on the 4th. Overall, temperatures for the month were about 2° above normal. There was a spell of summer-like heat and humidity during the last week. Precipitation for the month was quite plentiful, namely some 1 ¾" above normal.

Joe Manfre of Baltimore 2SE

Seven days with thunder.

16th - Very windy, heavy rain.

Ralph Hartsock of Westminster 4 SSE

Daily PWG => 40MPH on the 5th (43 mph WNW), 16th (42 mph ESE) & 17th (40 mph WSW).

5th - Rain and thunderstorms early. Flakes mixed in at noon.

16th - Rain, thunderstorms, flooding, tornadoes, lots of damage.

28th - Tornado warnings all night and AM hours, flooding.

Bobby Miller of Millers 4 NE

Second wettest April in 29 years of records. Only 1983 was wetter with 8.18". Winds gusted to over 50 mph on the 4th (58 mph), 16th & 17th (each 52 mph), and 20th (51 mph). A lot of carry over temperatures. Usually April has the biggest difference in 6 PM vs. midnight data.

Bobby Miller of Millers 4 NE (Cont.)

4th & 5th - First time with two consecutive days with a range of 40+ degrees.

28th - AM storms, heavy rain local flooding.

Ray Muller of Reisterstown

Average temperature using the Bruce Watson method (9 PM temperatures averaged) 57.1°. Hourly maximum temperature 84° on the 4th (first occurrence) and, hourly minimum temperature 33° on the 1st & 2nd.

Eric Glass of Emmitsburg 2 SE

1st - Light drizzle, calm and cold at obs time.

19th - Dew on grass, slight breeze at obs time.

Rich Giannola of JHU/APL

Barometric pressure extremes: 30.43" 22nd, 29.25" 5th.

Winds gusted over 40 mph on 4th (42) 5th (40 mph) 16th (46 mph).

Ron Berger of Norbeck 1 SE

2nd - Small hail ⅛" diameter (rice size) 12:21-12:22 PM.

Rob Cohen of Potomac 4 N

4th - Record maximum temperature. Occasional thunder 9:30 - 12 PM.

11th - Record Maximum temperature.

28th - Morning minimum temperature 72°.

Rich Giannola of Olney 1 S

5th - Morning SHRA with TSRA at 4:50 AM. 0.28" fell by 6:20 AM. SHRA in morning and early afternoon with 0.06" more before clearing and turning cooler in the afternoon.

Richard Holden of Clarksburg 2 ENE

Winds gusted to 40+ mph on the 5th (46 mph), 16th (41 mph), 28th (48 mph).

3rd - Hail.

22nd - Moderate rain, light sleet.

Stan Rossen of Glenmont 1 NNE

I busted my April record for highest minimum temperature of 65° (4/30/83, 4/9/91, & 4/18/02) by 3° on 4/26 and then broke that by 1° the next day.

Kevin Shaw of Gaithersburg 2 WNW

Third wettest April surpassed only by 1983 (7.50") and 2008 (6.64"). My average minimum temperature of 47.4° set an all-time warmest average minimum for April breaking the old record of 45.9° set back in 2008.

22nd - Record low maximum temperature of 48°.

25th—27th - Record maximum minimum temp each day.

27th - 69° set all-time record maximum minimum temperature for April.

Joe Terry of Forest Glen

Warmest average minimum temperature and second warmest April in 16 years of station records.

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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.

OBSERVER COMMENTS
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Joe Terry of Forest Glen (Continued)

2nd - Two afternoon showers each with 12 degree temperature drops. The second was accompanied by 0.1" to 0.2" diameter hail from 1433 to 1436.

3rd - 0.2" diameter hail around 2140.

Brian Smith of Oxon Hill

2nd - ¼" hail 1458 to 1500.

5th - Brief strong TSRA around 0430.

16th - TSRA 1602-1800 not severe. Gale force SE winds brought down a ~6" diameter dead branch in neighbor's yard.

27th - +TSRA 1900-2000; tornadic thunderstorms just south, then just north of the area. GR (hail) B1931E1933, ½" diameter.

Wes Gleason of Hollywood 3 ENE

28th - The tornadoes in St Mary's and Calvert county went right over the house. Lucky they were not on the ground. It blew the top of my chimney cap off and downed a neighbors tree. It was amazing watching it happen. I did not see a funnel, but heard the high winds on the roof and looked at the wind gage to see less than 20 MPH but 30 to 50 feet off the ground they were moving pretty good. I looked out at the creek and it didn't seem windy. Then the power went out which was the neighbors tree falling on the power lines. Didn't realize there was a tornado until I saw the National Weather service post the Calvert storm a few days later. I had already sent in a weather report for SKYWARN about the wind and damage.

John Zyla of Ridge

22nd - Cloudy, cool, drizzle all day, most rain 6:30-9:00 PM.

28th - Thunderstorm 12:45-1:05 PM & 7:00-9:00 PM.

Max Hutto of Smithsburg 1.5 SW

16th - Rain throughout the day, heavy at times. Creek flooding, cool, very windy.

24th - Easter Sunday mostly sunny, warm, breezy.

28th - Overnight severe thunderstorms, heavy rain, pea size hail, extremely windy (46 mph)

Greg Keefer of Hagerstown 1 E

Four days with peak wind gusts =>40 mph: 16th (40 mph SE), 17th (51 mph W), 20th (50 mph SW), & 28th (51 mph SW).

Wettest April on record with 8.07" breaking the old record of 7.80" set in 1952.

3rd - Thunderstorms 8 PM to midnight with frequent lightning and thunder with some very close strikes and also some marble size hail which fell around 10:30 PM. Most storms passed N & NE of the city only 0.07" of rain fell here.

4th - Record high of 82°. The old record of 81° was set in 1956.

28th - Series of strong thunderstorms overnight between 2

AM and 7 AM with very heavy downpours, frequent lightning, and strong winds gusting up to 51 mph. 2.42" of rain fell in a very short time. Flash flooding reported on roads and in creeks and rivers. Wind gusts caused down trees and some power outages in the area.

Jim Vaughn of Smithsburg 3 NE

Wettest April with 9.38". Old record was 8.37" in 1952.

Winds gusted over 40 mph on 11 days with four of them over 50 mph: 16th (53 mph), 17th & 27th (each 56 mph), and 28th (61 mph).

Record low daily maximum temperatures set on the 1st, 22nd, & 29th.

25th & 26th - Record high daily minimum temperature.

Lance Shaffer of Sterling 4 N VA

Not many days without precipitation. Nice cool finish to the month.

27th - 70° at obs time.

Dave Leshner of Davis 3 SE WV

5th - 14 inch snow depth on the 3rd melted down to a Trace.

17th - Last day with snow on the ground (1") this month.

MONTHLY REPORT
CONTINUED FROM PAGE 1

ported that he broke the old record of 65° on the 26th and on the 27th that broke the new record set the day earlier.

Severe storms associated with the storm system which brought a deadly tornado outbreak to the Southeast occurred on the 27th and 28th. Nearly a dozen tornadoes were reported in Maryland from southeast of Washington DC to west of Baltimore and in Western Maryland. Most of the storms were classified EF-0 but a couple of EF-1's were reported. Heavy rains fell in Carroll and Washington Counties Maryland resulted in some flooding. Over 2 inches were reported by the following ACON observers:

Mac Hutto of Smithsburg 1.5 SW 3.28"

Jim Vaughn of Smithsburg 3 NE 2.89"

Herb Close of Manchester 1 SW 2.44"

Greg Keefer of Hagerstown 1 E 2.42"

Bobby Miller of Millers 4 NE 2.38"

The month ended on a seasonal note with maximum temperatures generally in the 60's and minimums in the 40's.

April 5th

1 ENE Norwood, Charles County 38.65, -76.89 EF-0

A weak EF-0 tornado with peak winds of 65 MPH briefly causes some damage in North Waldorf before dissipating. Damage included a large pine tree pushed into a house roof.

2 SE Crofton, Prince Georges / Anne Arundel Counties 38.97, -76.72 EF-0

Brief weak tornado produced minor tree damage near the communities of Sherwood Manor and Patuxent Preserve.

April 16th

2 NNE New Market, Frederick County 39.41, -77.26 EF-1

Max winds 90-100 mph, numerous trees uprooted. Barns partially destroyed, Roof Damage to Residence.

3 NE New Market, Frederick County 39.41, -77.24 EF-1

Small barn destroyed. Roofs partially off of warehouses, numerous tree damage.

3 SE Unionville, Frederick County 39.44, -77.15 EF-0

Trees snapped and shingles removed from residence. Tornado ended in Carroll County.

1 SW Deep Run, Carroll County 39.68, -77.00 EF-0

Numerous trees uprooted and snapped. Tree into house. Two barns partially unroofed.

April 27th

1SE Friendly, Prince Georges County EF-0

A brief tornado occurred at Potomac Airfield. Six general aviation aircraft suffered minor to major damage.

Andrews AFB & Camp Springs 38.81, -76.90 EF-0

Numerous trees uprooted and snapped in a wooded area just SW of the intersection of Auth Road and Allentown Road onto Andrews AFB

April 28th

2 N Town Creek, Allegany County 39.55, -78.54 EF-0

Numerous trees uprooted along the hillside. A large tree three feet in diameter partially fell on a residence.

3 NW Green Ridge, Allegany County 39.60, -78.48 EF-0

Numerous trees were uprooted and / or topped in a small area of Mertens Road. Tree canopies showed evidence of convergent flow near the damage track.

N of Poolesville, Montgomery County 39.15, -77.42 EF-0

Spotty tree damage observed along the track on Beallsville Road, Elgin Road, and Jerusalem Road.

Westminster, Carroll County 39.57, -76.99 EF-0

Tracked from near Old Westminster Pike across Ralph and Center Street before lifting as it crossed Route 97. Uprooted and snapped several trees and downed large branches.

2 E Hampstead, Baltimore County 39.61, -76.83 EF-0

Tracked from near the Carroll County line along Mt Carmel Road for 1.1 miles. Snapped and uprooted several trees and downed large branches. The storm tracked across Marshall Mill Road.

2 WNW Hereford, Baltimore County 39.60, -76.71 EF-0

Touched down briefly just north of Evna Road in a heavily wooded area. Damage was limited to trees.

Breton Bay, St Marys County 38.26, -76.67 EF-1

The tornado tracked across Breton Bay. It snapped and uprooted numerous large trees and caused some home roofing and siding damage. The tornado passed over Camp Calvert

Lusby, Calvert County 38.37, -76.47 EF-0

Tracked briefly from near the intersection of Hilltop Road and Coster Road to the intersection of Solomons Island Road and Sweetwater Road. Six instances of damage noted along path including approximately a dozen trees uprooted.

Source of information: Sterling NWS Web Site & NOAA Severe Weather Prediction Web Site
Not all tornadoes may be listed. Detailed information can be found on the Sterling Web site for all except the tornadoes of the 16th.