



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

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

## RECORD DECEMBER SNOWSTORM

December 2009 went into the books as a very active precipitation month. The following NWS stations reported record precipitation: Wilmington DE 8.58", and Baltimore BWI 8.06"; and snowfall: Baltimore BWI 23.2", and Washington National Airport 16.6". Monthly snowfall totals reported by ACON observers exceeded 20 inches in a vast area west of the Chesapeake Bay with over 30 inches at **Clarksburg 2 ENE** by **Richard Holden** and **Olney 1 S** by Rich Giannola.

There were seven precipitation events this month - 2nd-3rd, 5th, 8th-9th, 13th, 18th-19th, 25th-26th, and 31st. The first snow event of this winter season occurred on the 5th which just happened to be the day of **Herb Close's** of **Manchester 1 S** annual Weather Gathering. Ever since 2002 snow has fallen on either the 5th or 6th on all but 1 or two years. The heaviest snow reported was 7.5" by **Herb Close** of **Manchester 1S** and **Richard Holden** of **Clarksburg 2 ENE**.

The warmest temperatures of the month occurred on the 3rd southeast of Washington D.C. and on the Delmarva Peninsula. Readings were in the mid to upper 60's. **Ralph Hartsock** of **Westminster 4 SSE** reported a wind gust of 56 MPH from the WNW also on the 3rd..

The wettest event of the month occurred on the 8th and 9th. Snow changed to sleet, freezing rain and then all rain in portions of Central and Western Maryland as temperatures rose into the upper 40's in Central Maryland to the 60's in the southeastern areas. Rainfall amounts of over 2 inches occurred over portions of the entire region. **John Zyla** of **Ridge** reported 2.48", **Rebecca Harvey** of **Eagle Rock** 2.33", and **Nate Mullins** of **LaVale** 2.26". Thunder was reported by **Greg Latta** of **Frostburg**.

The next storm occurred on the 13th. Rainfall amounts generally ranged from one half to one inch.

The storm event which re-wrote snowfall records for the month of December began late on the 18th and ended late on the 19th. Official NWS record storm

amounts fell at Washington Reagan (DCA) 16.4" and Baltimore (BWI) 21.1". 20"+ storm totals were reported by many ACON observers south of Baltimore. The greatest storm amounts reported by ACON observers were 24.2" by **Marty Brumback** of **White Plains 5.5 WNW**, 24.0" by **Richard Holden** of **Clarksburg 2 ENE** and 21.0" by **Jeff Stoudt** of **Laurel 2 E**. More details can be found on pages 2 to 4.

Heavy rains on Christmas and the 26th along with 50 degree temperatures caused a rapid snow melt. **Gary Gallaher** of **Bear 2 SW DE** reported the 7" snow depth melted as 1.85" of rain fell. **David Legates** of **Middletown 6N** reported 1.98" of rain. Dense fog was reported in some areas.

The last day of the month began with snow, sleet and ended with rain.

### EXTREMES REPORTED BY ACON OBSERVERS

#### MAXIMUM TEMPERATURE

Jug Bay Wetlands	70
Bear 2 SW DE	68
Middletown 6 N	68
Townsend 4 W	68

#### MINIMUM TEMPERATURE

Davis 3 SE WV	3
Eagle Rock	4
Smithsburg 2 NE	4
Frostburg	7
Emmitsburg	7

#### WARMEST AVG. TEMP.

Ridge	39.4
Baltimore 2 SE	38.5
Harbeson 8 S	38.3

#### COLDEST AVG. TEMP.

Davis 3 SE WV	24.8
Eagle Rock	25.9
Frostburg	26.7

#### MAXIMUM PRECIPITATION

White Plains 5.5 WNW	8.85
Bear 2 SW DE	8.63
Hollywood	8.51

#### MINIMUM PRECIPITATION

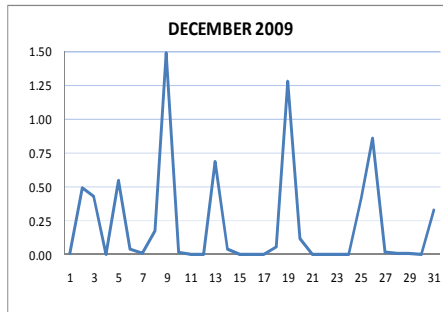
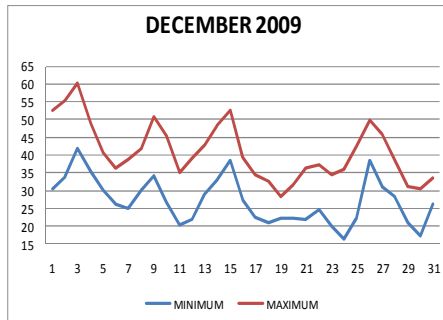
Smithsburg 1.5 SW	4.02
Hagerstown 1 E	5.36
Eagle Rock	5.87

#### MAXIMUM SNOWFALL

Eagle Rock	49.5
Davis 3 SE WV	48.4
Clarksburg 2 ENE	35.1
Olney 1 S	30.3

#### MINIMUM SNOWFALL

Ridge	9.7
Hollywood	14.6
Oxon Hill	17.9



### ACON MD/DE Network

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

# OBSERVER COMMENTS FOR DECEMBER 2009

## **Gary Gallaher of Bear 2 SW, DE**

8.63" the second wettest December in station history. Record is 8.80" set in 1996. Second heaviest December snowfall of 19.7". The record of 24.2" was set in 1966. This was only the second December with 10"+ snow in 43 years of records.

**9th** - Heavy rain, windy. 2.08" fell in 9 hours ending around 8 AM.

**19th** - New monthly December daily snowfall of 17.0" Old December daily record was 14.0" set 12/24/1966.

**25th—26th** - Rapid snow melt of 7" in less than 24 hours as a result of 1.85" of heavy warm rain and a high of 54° on the 26th.

## **Greg Latta of Frostburg**

The following occurred during the 24 hours ending at 7 AM:

**9th** - Freezing rain (glaze)

**10th** - Thunder during the previous 24 hours ending at 7 AM.

**14th** - Freezing rain (glaze)

## **Nate Mullins of LaVale**

Wettest December with 6.31" besting 1969 when 6.30" fell and second snowiest 28.3" behind 1969 when 34.0" fell.

**8th & 9th** - Heavy snow began 8 PM mixing with and changing to sleet late evening. Heavy sleet, freezing rain, and rain during the predawn hours of the 9th. 2.26" fell in only 12 hours. Severe thunderstorms passed north of the area with the cold front.

**13th** - Rain and freezing rain. Light coating of ice / glaze on elevated surfaces.

**18th—19th** - 16.5" of snow the greatest since February 2003.

**25th** - Sleet and freezing rain, 0.3" of sleet / glaze.

## **Jeff Stoudt of Laurel 2 E**

The number one highlight was unquestionably the colossal snowstorm (21.0") of the 18th & 19th, and was just one of several big ticket precipitation events of this December on top of a few more from November that kept grounds abnormally soggy all month, regardless of snow cover.

**5th** - Rain changed to wet snow by noon and ended early evening.

## **Marty Sharrow of Owings Mills**

**1st** - Frosty start, then sunny and mild.

**5th** - Heavy wet snow with falling temperatures.

**16th** - Partly sunny, breezy, and colder.

**31st** - Morning snow, cloudy, late day rain.

## **Joe Manfre of Baltimore 2SE**

**25th** - Cloudy, cold, rain beginning in early afternoon.

**26th** - Cloudy, mild rain ending mid morning. Drizzle and fog until late evening.

**29th** - Partly cloudy, very windy, cold.

## **Herb Close of Manchester 1 S**

New December snowfall record of 29.1". The old record of 15.0" set in 2003. (21 years of records) This was the first December to have two 6" snowstorms occurred in December.

**8th—9th** - 2.5" of heavy wet snow with large flakes quickly accumulated before it changed to sleet, freezing rain, and then rain washed all the snow away.

**31st** - 1.1" snow fell in the morning, then some freezing rain. Rain fell during the evening and overnight.

## **Ralph Hartsock of Westminster 4 SSE**

**2nd—3rd** - Rain develops by noon, heavy overnight.

High winds briefly on the 3rd and clearing.

**19th** - Very heavy and deep snowstorm.

**26th** - Heavy rains and warm.

**29th** - Sun and wind. 52 MPH.

**30th** - Partly cloudy, cold, no wind.

## **Bobby Miller of Millers 4 NE**

**1st** - Near 100% sunshine.

**5th** - Moderate snow till obs time ( 6PM) then light.

**8th** - Heavy snow late (after obs time) 1.5" between 10PM & 11PM and 1.5" between 11PM & 12AM. It became mixed with sleet and changed to freezing rain and then rain early on the 9th. 0.2" of snow fell on the 9th.

**9th** - Minimum barometric reading of 29.17".

**19th** - Moderate to heavy snow, some blowing and drifting.

**26th** - Periods of rain melting snow depth down to Trace (0.4") from 7" on the 25th.

## **Ray Muller of Westminster City**

**19th** - Visibility 1/16th mile at 0800 due to snow and fog.

Temperature remained in the low 20's all day. Snow fell at a rate of 2" per hour in the morning.

## **Marty Brumback of Bryans Road 2 ESE**

**5th** - Rain followed by snow.

**18th—19th** - Snow began at 8:15 PM of the 18th and ended between 10:30 & midnight of the 19th. 24.2" fell.

## **Eric Glass of Emmitsburg 2 SE**

**13th** - Light freezing rain.

**19th** - Heavy snow, light winds and cold.

**28th** - Mostly sunny, very windy, cool.

## **Rebecca Harvey of Eagle Rock**

**9th** - 4" of snow which included 1/2" of sleet. Total liquid 2.33".

**22nd** - Max snow depth for the month of 22".

## **Rob Cohen of Potomac 4 N**

Snowiest and wettest December

**18th—19th** - Snow began on the 18th around 9:30 PM and tapered off 9 to 10 PM on the 19th. Heavy snow fell 10AM - 4PM.

**31st** - Freezing rain, sleet, snow prior to 7 AM.

## **Rich Giannola of APL/JHU**

**29th** - Peak wind gust 44 MPH from the west.

## **Ron Berger of Norbeck 1 SE**

Snowiest December and the third snowiest month, exceeded only by Feb 2003 (35.1") and January 1996 (32.5").

**18th—20th** - 21.3" of snow was the third biggest exceeded only by Jan 6 - 8, 1996 (24.0") and February 15 - 18th, 2003 (22.3").

**CONTINUED ON PAGE 3**

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.

## OBSERVERS COMMENTS CONTINUED FROM PAGE 2

### Rich Giannola of Olney 1 S

Wettest and snowiest December since records began in 1986. It was the snowiest month since February 2003.

**18th—19th** - Snow began ~10 PM on the 18th and ended as flurries late in the evening of the 19th.

Storm totals as of:

12/19	10AM	7.8"	0.61" liquid
12/19	2PM	15.0"	1.09" liquid
12/19	5PM	19.5"	1.33" liquid
12/19	10PM	23.3"	1.53" liquid.

### Richard Holden of Clarksburg 2 ENE

**13th** - Moderate freezing rain and rain.

**19th** - Heavy snow, blowing snow. Fell at a rate of 2" per hour for four hours.

**31st** - Moderate snow, light sleet, moderate freezing rain.

### Stan Rossen of Glenmont 1 NNE

December was the wettest and snowiest on record. Old precipitation record was 7.29" set in 1983 and the old snow record was 11.7" set in 1989.

**18th—19th** - 18.7" in 27 hours set a record for a December storm. It was the 5th greatest snowstorm on record

21.4"	February 10-12 1983
21.1"	February 16-17 2003
21.0"	January 6-8 1996
20.3"	February 18-19 1979
18.7"	December 18-20 2009

### Kevin Shaw of Gaithersburg 2 WNW

December was just slightly above normal in temperature, totally due to the continued pattern of warmer than normal minimum values. December was the wettest on record, 6.90" broke the old record of 6.49 set in 1996, and snowiest, 26.1" broke the old record of 15.8" set in 2003.

**13th** - Cloudy, rainy - mostly AM / afternoon. Dense evening fog.

**19th** - 19.3" of snow easiest surpassed the old December record of 7.4" set on December 5, 2002.

**25th** - Dense AM fog, drizzle, rain afternoon into the evening. Cold early, warming rest of the day.

**26th** - Cloudy, foggy, mild, rainy most of the day.

**28th** - Partly cloudy, blustery, colder.

### Joe Terry of Forest Glen

Wettest December in station history (previous 6.11" in 1996) and the snowiest by far and the snowiest month since February 2003.

**5th** - Precipitation started as rain and changed to a very wet snow (4:1 ratio) around 9 AM. It then continued light to moderate through early evening.

**18th—19th** - Snow began at 2100 on the 18th and continued light to moderate till 1030 on the 19th. Starting around 1030 the snowfall rate increased to 2" per hour for three hours. Visibility was <1/4 mile during this period of heavy snow. Rather pronounced gravity wave indicated on pressure trace around 1000 just prior to onset of heavy snow—see Joe's chart on page 4.

**25th** - Dense fog most of the afternoon as temps rose.

**31st** - A period of early morning sleet covered the ground to 1/2" by sunrise.

### Brian Smith of Oxon Hill

**18th—19th** - 17" of snow. I was at DCA for more than 32 hours during the storm.

**31st** - Light freezing rain and sleet 0400 to 0800.

### Floyd Abell of Hollywood

Wettest December in 30 years of records.

**31st** - AM mix of freezing rain and rain. Afternoon and evening rain.

### John Zyla of Ridge

Station record rainfall of 8.25" broke the old record from 1996 of 5.55".

**18th** - Snow 7 PM to midnight.

**19th** - Snow midnight to 2 AM (1.5"), rain 2 AM to 11 AM, and snow again 11 AM to 10:30 PM (4.0")

### Max Hutto of Smithsburg 1.5 SW

**26th** - Dense AM fog which froze of surfaces.

**27th** - Dense overnight fog which froze on surfaces.

**31st** - Overnight and AM snow and PM sleet.

### Greg Keefer of Hagerstown 1 E

This was the second snowiest December with 22.4". Record snowiest is 23.1" set in 1951.

**1st** - Sunny, breezy high of 55.

**5th** - Wet snow began shortly after 7 AM and continued all day. Temperatures stayed above 32° through the event.

**8th** - Snow began falling around 9 PM and became moderate to heavy at times till around midnight when it changed to some sleet then all rain. Temperatures stayed above 32°

**18th—19th** - Snow began around 10:15 PM on the 18th. Snow fell all night moderate to heavy at times with 7.5" on the ground at 8 AM of the 19th. Snow continued all morning heavy at times with 11.3" by noon. Snow continued during the afternoon and evening - at 1 PM 12.3", 4 PM 14.0", 7 PM 16.0". Storm ended by 9 PM with 16.2". This was a new December snowfall record for most from a storm or event. The old storm record was 12.5" set December 11-12, 1960. The all-time record is 34.9" set January 8, 1996.

**25th** - 7" of snow on the ground. A little sleet fell this morning. Temperatures rose all day. Winds gusted to 38 MPH, temperatures rose to 46° began a rapid snow melt which continued on the 26th.

**27th** - Dense freezing fog overnight froze on trees, roads, etc.

### Jim Vaughn of Smithsburg 2 NE

**9th** - New daily precipitation amount of 1.08" surpassing 1.07" set in 1978. Peak wind gust 53 MPH.

**19th** - New daily minimum maximum temperature of 25° surpassed 26° set in 1989. 16.1" of snow set a new December record. Old record was 11.2" set on December 27, 1990. This was the 5th heaviest daily amount. The top five are:

27.5"	February 11, 1983
24.0"	March 13, 1993
19.0"	January 7, 1996
18.0"	February 16, 2003
16.1"	December 19, 2009

**25th** - Peak wind gust of 52 MPH.

### Lance Shaffer of Sterling 4 N VA

**3rd** - Mild then FROPA.

**5th** - Wet snow on grass.

**19th** - 14" of snow by 12:15 PM, 18" by 4:30 PM, 20" total.

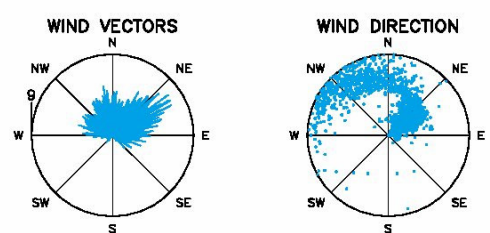
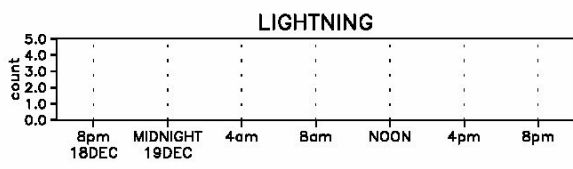
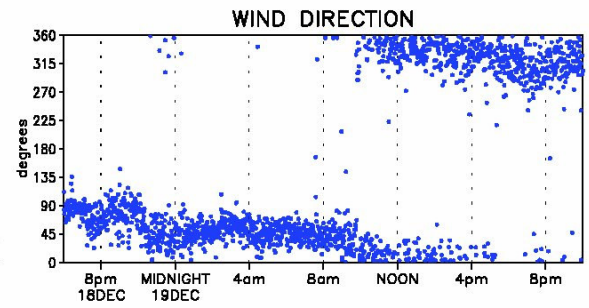
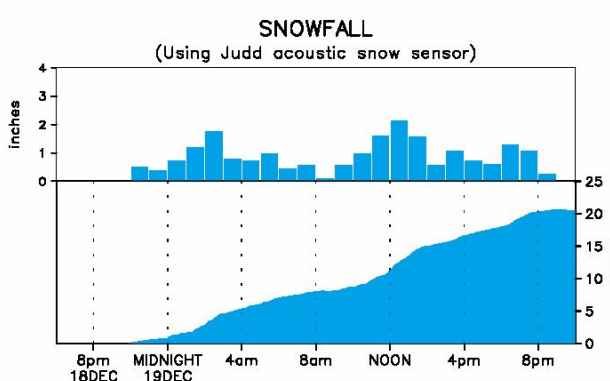
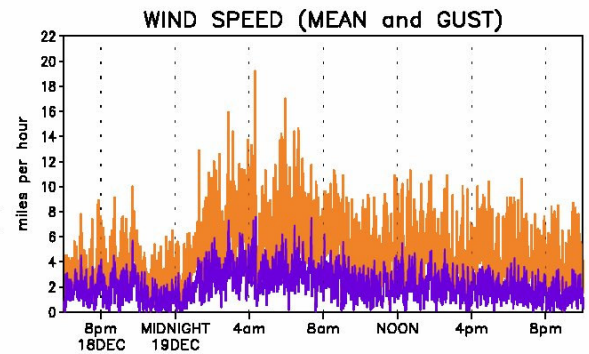
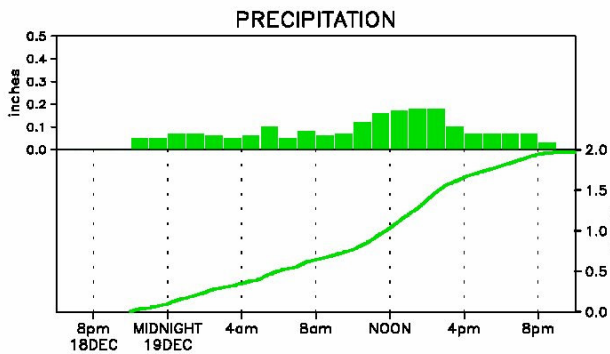
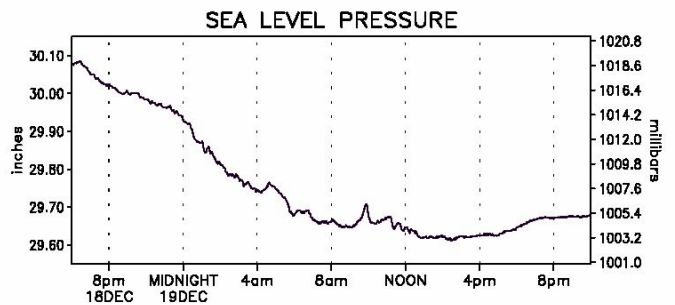
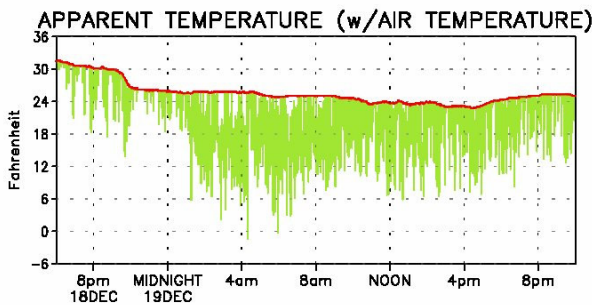
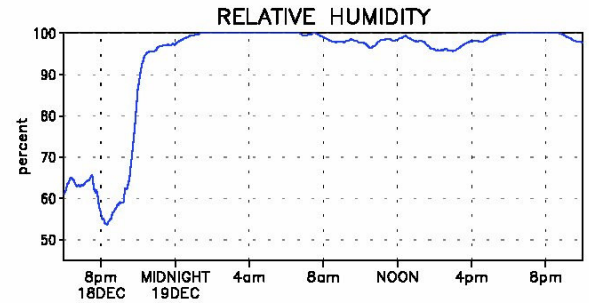
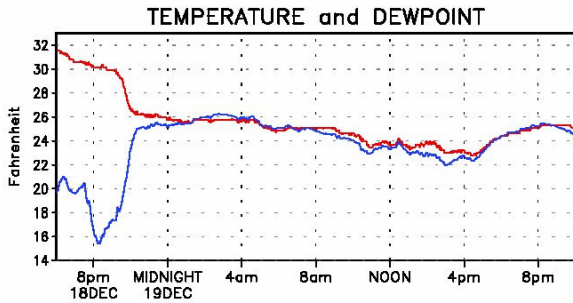
**31st** - Sleet mix to all snow, 2" by 8:15 AM

### Dave Leshner of Davis 3 SE WV

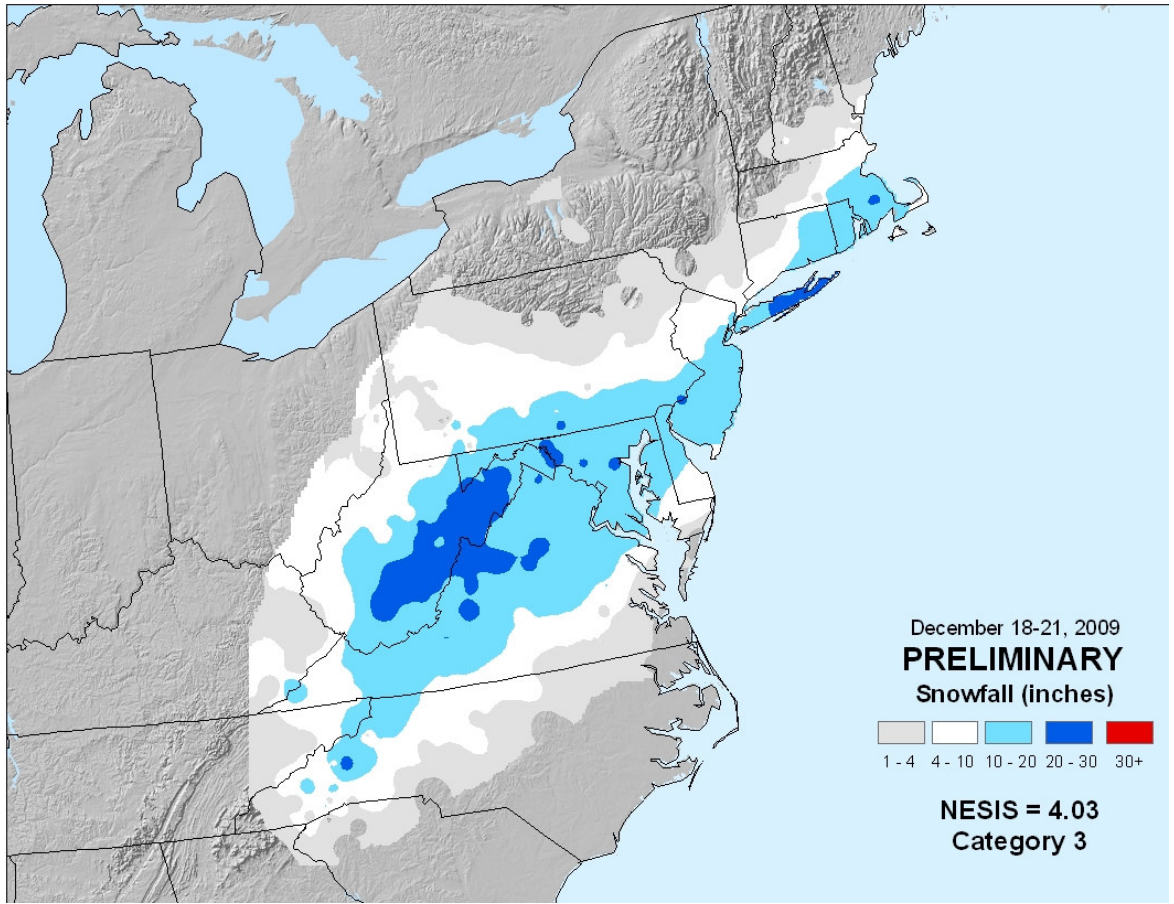
Maximum snow depth of 16" occurred on the 20th.

**Plot of the December 18-19 snowstorm courtesy of Joe Terry of Forest Glen area in Silver Spring Maryland.**

**One-Minute Automated Weather Observations**  
 Fri Dec 18, 2009 (18h) to Sat Dec 19, 2009 (22h)



Snowfall from the December 18-21 storm. NESIS (Northeast Snow Impact Scale) rating of 4.03 placing as a low category 3 (major) storm. For more info about NESIS access the following web site: [www.ncdc.noaa.gov/snow-and-ice/nesis.php](http://www.ncdc.noaa.gov/snow-and-ice/nesis.php)



Newspaper article provided by Marty Brumback on the December 18-19 snowstorm. The snowfall of 21.2" noted in the article is his.

# County digs out after record snowfall

Storm stalls plans for big retail weekend

By ERICA MITRANO  
Staff writer

It was a weekend as bleak as the weather for Southern Maryland retailers on what was supposed to be the biggest shopping time of the year.

"The most wonderful time of the year," as the song goes, is generally the Saturday before Christmas for store owners, according to Tom Saquella, president of the Maryland Retailers Association, as shoppers rush to get last-minute gifts. While the numbers aren't in for Dec. 19, Saquella expects that few did well.

"It definitely was a real setback for merchants," he said, especially because it wasn't this year's only weather-related retail catastrophe. Torrential rain two weeks ago thinned the crowds on another Saturday so sellers need every opportunity to make up for lost time. He expects stores will extend hours in the days remaining until Christmas but believes there are limits to what businesses can do to recover.

Kelechi African Authentics in the St. Charles Towne Center mall in Waldorf was among the stores that could not open at all on Saturday, according to co-owner Olivia Achuko.

See SHOP, Page A-10



Helen Moore shovels snow off of a vehicle in her driveway in Waldorf on Sunday. Her son, William Moore, in the background, helps with shoveling.

Totals vary across region; 21 inches fall in west county

By NANCY BROMLEY MCCONATY  
Staff writer

The heaviest snow storm on record for December slammed the county this weekend and for the most part folks heeded the call to stay indoors and off the roads.

The National Weather Service in Sterling, Va., quickly turned a winter storm watch into a blizzard warning for Charles, Calvert, St. Mary's, Prince George's and Anne Arundel counties early Saturday morning as heavy snow cut visibility in almost nothing and steadily covered the roads with at least one inch of snow an hour.

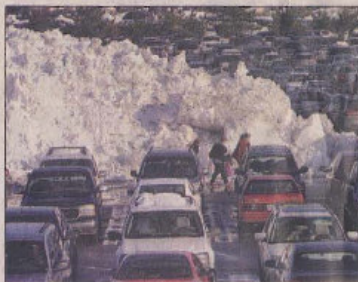
Snow totals widely varied

across the county with Waldorf receiving a little more than 16 inches and Bryans Road recording 21.2 inches, Bryan Jackson, NWS meteorologist, said Monday.

Port Tobacco and Dentville received about 13 inches, he said, adding that freezing rain that mixed in with the snow caused the totals in some areas to be less.

The heavy snowfall coupled with winds predicted to be up to 40 miles per hour forced Charles County commissioners' President E. Wayne Cooper to declare a state of emergency in the county at 9 a.m. Saturday. On Monday the state of emer-

See SNOW, Page A-10



Far left, cars fill the parking lot Monday around St. Charles Towne Center amid piles of plowed snow. Left, David Blasos finishes putting on Christmas decorations at his home in Waldorf following a storm that dumped up to 21 inches of snow in some locations in the county Saturday.

Article continued on page 6.

# Snow

Continued from Page A-1

gency was still in effect.

Cooper said he has been in touch with the county's public facilities crew since early Saturday morning.

"The roads were in pretty bad shape at that time," Cooper said Monday. "The neighborhoods are still in pretty rough shape. We're getting to them as fast as we can."

The treacherous road conditions also prompted the county to stop VanGO bus service Saturday, according to Amy Calvin, county spokeswoman. The service was running on an altered schedule Monday with the fixed route service starting two hours late. There was no morning dialysis subscription service or Nanjemoy subscription service, she said.

Senior centers were scheduled to open at 10 a.m. Monday and subscription service was available at those locations, Calvin said, adding that the county government opened two hours late Monday and Tuesday and liberal leave for employees was in effect.

The Charles County Courthouse was also closed Monday because of the road conditions from the storm and opened two hours late Tuesday.

There were few vehicular accidents reported during the storm, according to the Charles County Sheriff's Office and Maryland State Police La Plata barrack. Most of the calls were for motorists who had spun off of icy, snow-packed roads into



Reggie Butler of Waldorf and his son, Reilly, 2, use a plastic mat to slide down a hill near St. Charles Parkway in Waldorf on Monday.

ditches, said Cpl. Joseph Swann of the MSP.

"The biggest thing that we had to handle was getting motorists off the road when they spun out or pulling them out of a ditch," he said.

Capt. Robert Cleaveland, spokesman for the sheriff's office, said that people heeded the warning to stay off the roads during the storm.

"We had no serious vehicular accidents that resulted in serious injuries," he said Monday. "Everybody took notice of the severe weather and really limited their travel and stayed home. All in all it was not difficult on the roads."

The county's department of public facilities began to mobilize to deal with the storm at 9 p.m. Friday and worked steadily through Sunday evening and into Monday morning spreading salt and



Pin Owens walks her dog Qtip in a street covered with snow near her Waldorf home Sunday.



Rico Dennis shovels the sidewalk in front of his home in Waldorf.



Irvine Bryant uses a snowblower to clear snow in front of his home.

Donna Batten of Waldorf falls back into the snow after sliding down a hill on an innertube sled.

plowing roads, Calvin said, adding that all county roads were "passable" by 10 a.m. Monday.

Cooper said 137 pieces of contracted equipment and 43 pieces of county equipment were deployed to battle the storm. About 2,000 tons of salt were spread on county roads during the weekend.

Calvin reminded residents that the Maryland State Highway Administration is responsible for numbered routes such as U.S. 301

and Route 6. All named roads are the county's responsibility to clear, she said, adding that the owners of private roads must make arrangements to have those streets cleared.

The biggest problem county road crews were still encountering Monday morning was vehicles parked along the curbs in neighborhoods, Calvin said. County road officials ask folks to try to park all vehicles in driveways but if that isn't possible they should park all the vehicles on one

side of the road so plows can clear it and then move all of the cars to the opposite side of the road.

Abandoned vehicles or those parked in the county's snow emergency routes are reported to the sheriff's office for removal, Calvin said, adding so far no vehicles have been towed.

Southern Maryland Electric Cooperative reported 1,600 power outages between early Saturday morning and Sunday night, Tom Dennison, spokesman, said Monday. The outages were scattered throughout the county and were mainly caused by trees falling into electric lines.

No substations or transmission and feeder lines were impacted by the storm, Dennison said.

"All things considered with the record snowfall we have fared very, very well," he said. "We really appreciate our customers' patience during the storm."

Cooper asks residents to remain patient while road crews continue to plow and salt the roads.

"We're working on it full steam ahead," he said. "We're giving it all we've got."

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