

# Top Weather Events of 2014

10. March 3 Snow and Cold

9. July 10 Severe Weather and Virginia Beach Tornado

8. September 2 Heat

7. May 16 Norfolk and Portsmouth Flooding

6. September 8 Heavy Rainfall

5. January Cold

4. January 28 Snow Event

3. April 15 Cold Front

2. July 24 Cherrystone Tornado

1. April 25 North Carolina Tornadoes

# Honorable Mention

## Hurricane Arthur

- Earliest hurricane to make landfall in North Carolina

## May 22 Long Track Supercell

- Supercell tracked over 120 miles before dissipating
- Produced two EF-0 tornadoes
- Rotating wall cloud and large hail over Richmond

## June 19 Severe Weather

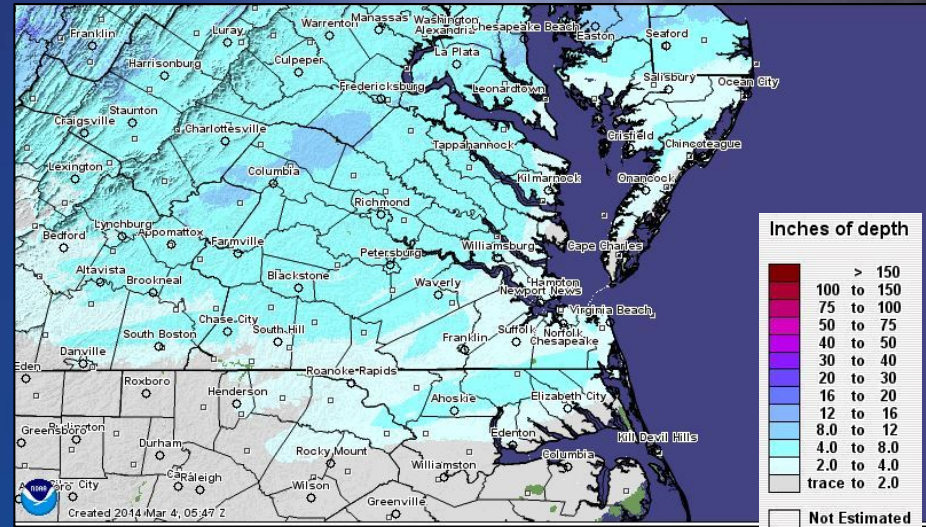
- Significant damage to Bowling Green and Milford
- Several homes damaged around Chesapeake Regional Hospital

## January 11 Tornadoes

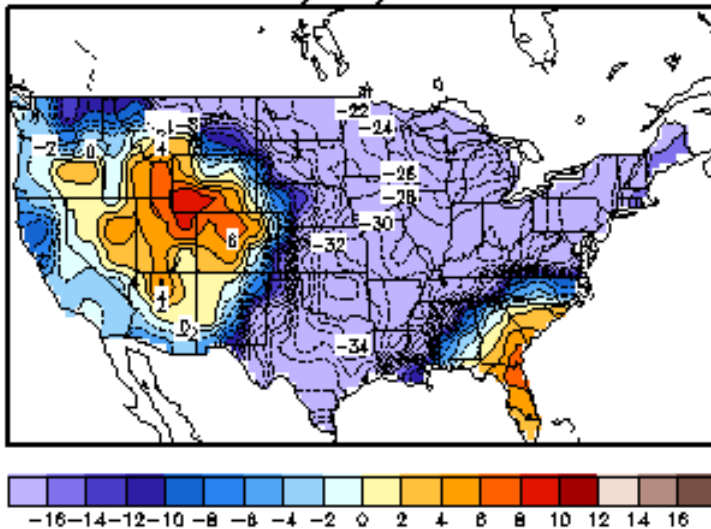
- Two EF-0 Tornadoes in Isle of Wight County
- EF-0 Tornado in Hampton.

# March 3 Snow and Cold

A strong cold front moved across the Mid-Atlantic region during the evening and early morning hours of March 2 and 3. Temperatures were in the mid 60s to low 70s during the afternoon of March 2, and then plummeted 40-45 degrees in a 24 hour period. By the afternoon of March 3 temperatures were in the 20s to low 30s. A low of 11 at Richmond the following morning (March 4) fell one degree short of the all time March record low. Two to five inches of snow fell across the region in addition to the cold.



Max Temperature Anomaly (F)  
03/03/2014





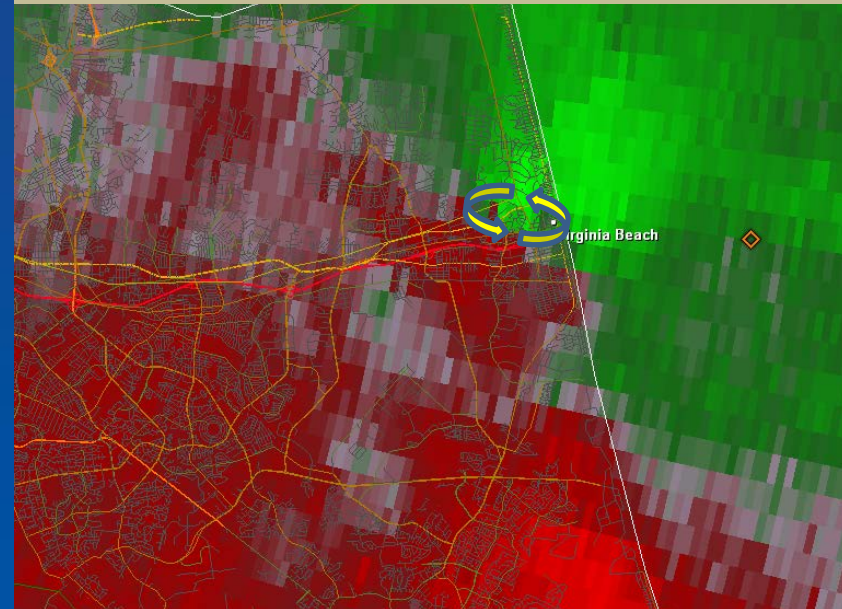
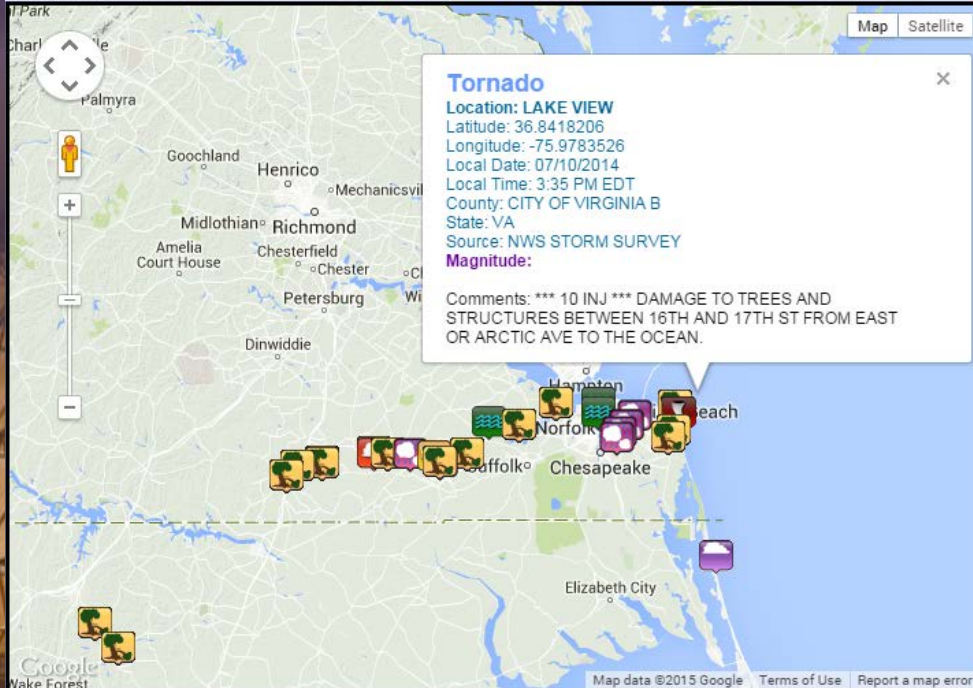
# July 10 Virginia Beach Tornado



Virginia Beach Tornado Damage

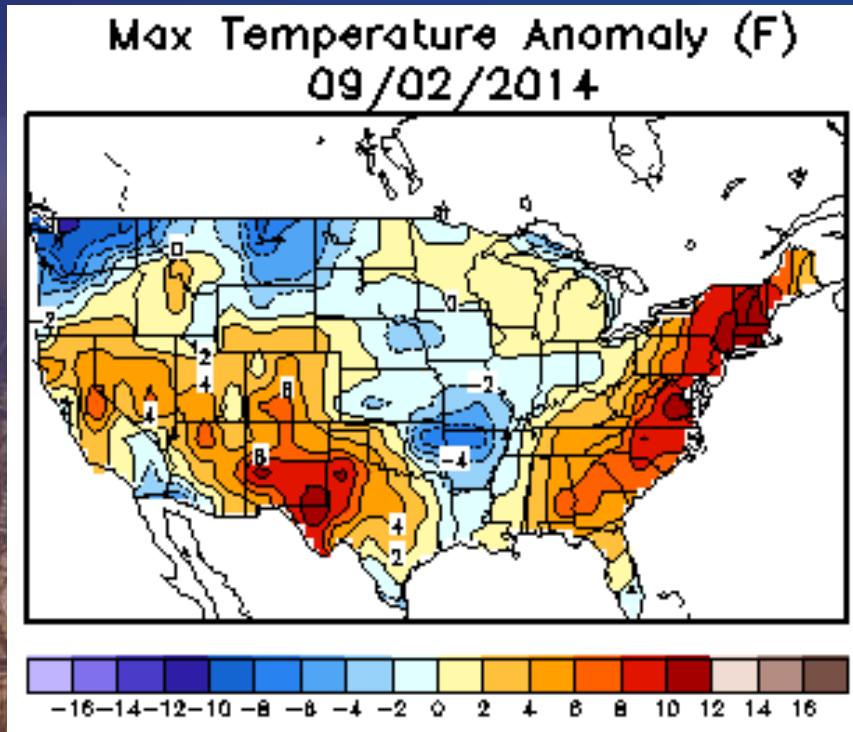
A severe thunderstorm developed during the early afternoon of July 10 near Emporia. The first Severe Thunderstorm Warning was issued at 12:34 PM EDT. By the time the storm moved offshore 3 hours later, it had left a path of damage nearly 90 miles long. Merging storms over Virginia Beach produced a brief EF-0 tornado in Virginia Beach around 3:35 PM EDT, injuring 10 people. Significant straight line wind damage occurred in Capron, VA and tennis ball size hail shattered glass at Lynnhaven Mall as well.

Radar Storm Relative Velocity at 329 pm. Circulation was evident on radar for only 2 to 4 minutes.



# September 2 Heat

The warmest day of the year at Richmond and Norfolk occurred on September 2<sup>nd</sup> with 101 and 99 degrees respectively. At Richmond, this was the warmest September reading since 1954 when the temperature reached its highest September reading of 103. Norfolk tied September 11, 1983 as the warmest since 1895. In September 1895, the temperature reached 100. Other readings included: Newport News 99, Hanover, VA 98, Salisbury 97, Wakefield 96, Wallops Island 94, and Elizabeth City 93. This was the first time since 1939 that Richmond and Norfolk had their highest temperature of the year in September.



REGIONAL MAX/MIN TEMPERATURE AND PCPN TABLE  
NATIONAL WEATHER SERVICE WAKEFIELD VA  
826 PM EDT TUE SEP 2 2014

...FULL TIME STATIONS...

HIGH TEMPERATURE LAST 12 HOURS/ LOW TEMPERATURE AND  
PRECIPITATION THE PAST 24 HOURS THROUGH 7 PM EST/8 PM EDT

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.BR AKQ 0903 DH00/TAIRZY/TN/PPD
:                               24 HR
:ID STATION    HIGH LOW  PCPN
RIC : RICHMOND VA:          101 / 73 / 0.00
OFP : HANOVER VA:           98 / 71 / 0.00
DCA : WASHINGTON DC:        95 / 77 / 0.01
IAD : DULLES APRT:          90 / 71 / 0.12
CHO : CHARLOTTESVILLE VA:  93 / 71 / T
LYH : LYNCHBURG VA:         90 / 66 / 0.00
ROA : ROANOKE VA:           92 / 71 / 0.00
DAN : DANVILLE VA:        94 / 68 / 0.00
PHF : NEWPORT NEWS VA:     99 / 80 / 0.00
ORF : NORFOLK VA:          99 / 79 / 0.00
AKQ : WAKEFIELD VA:         96 / 74 / 0.00
WAL : WALLOPS ISLAND VA:    94 / 76 / 0.00
SBY : SALISBURY MD:         97 / 75 / 0.00
OXB : OCEAN CITY MD:        92 / 77 / 0.00
ECG : ELIZABETH CITY NC:    93 / 75 / 0.00
.END
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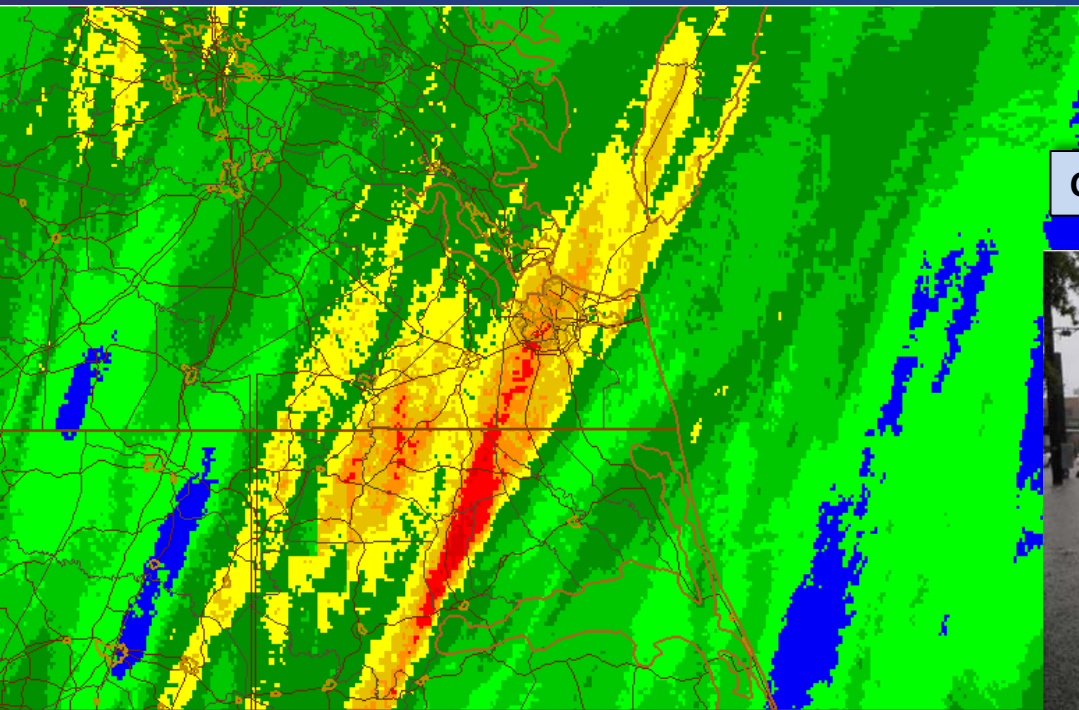


# May 16 Heavy Rainfall

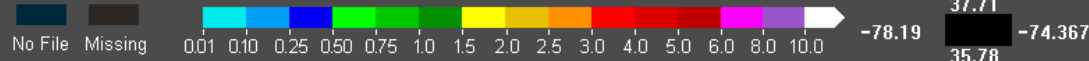
A cold front stalled along the southeast Virginia coast during the early morning hours of May 16. The stalled front in tandem with a deep moist air mass resulted in a band of heavy rainfall extending from northeast North Carolina into Norfolk. Rainfall amounts ranged from 3 to 4 inches. When combined with the morning's high tide cycle, flood waters inundated a large portion of downtown Norfolk and Portsmouth. Flood waters were slow to recede due to the high tide cycle.



Colley Underpass, Norfolk. *Virginian-Pilot, Bill Tiernan*



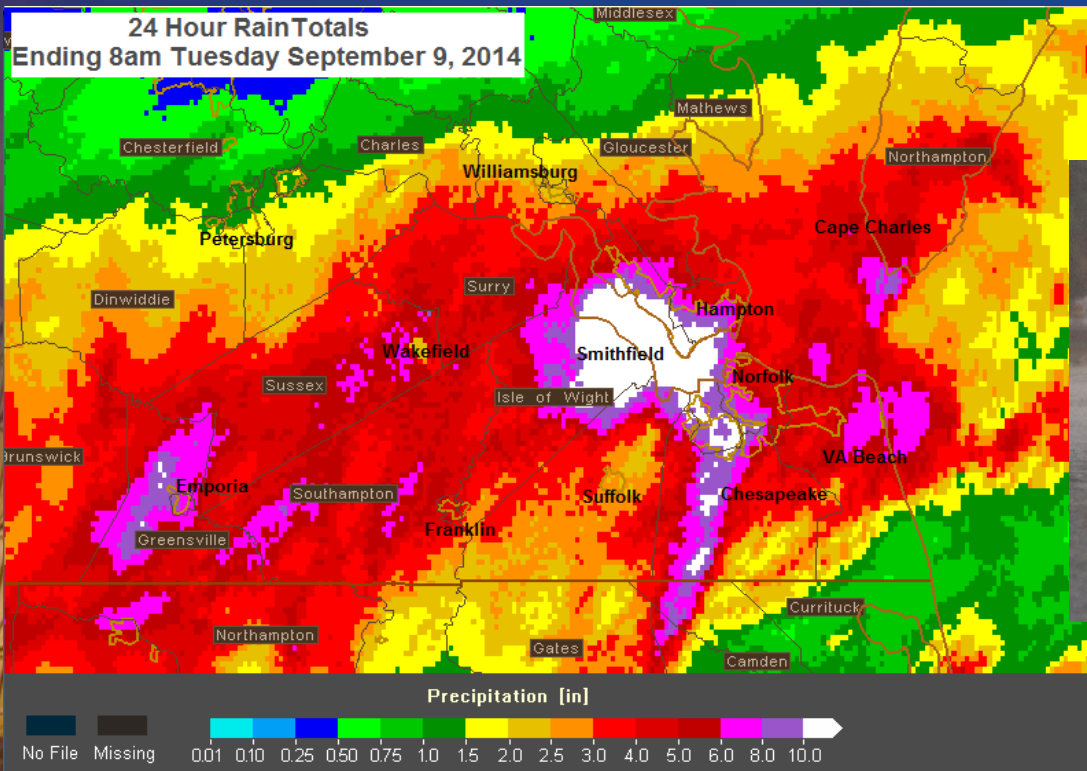
Precipitation [in]



Norfolk. *WAVY/LaVoy Harrell*

# September 8-9 Heavy Rainfall

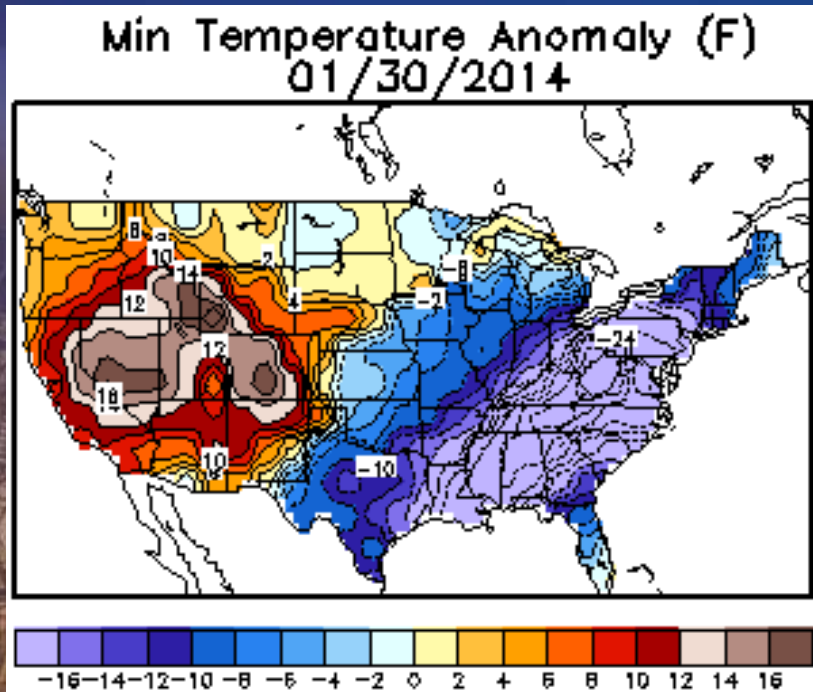
Low pressure slowly lifted into eastern North Carolina September 8-9, resulting in widespread heavy rainfall across the region. Several rounds of rain across the Hampton Roads area from the morning of the 8<sup>th</sup> through the morning of the 9<sup>th</sup> resulted in rainfall amounts of nearly one foot. Smithfield, VA received 12.2 inches of rainfall. Many areas around Hampton, Newport News, North Suffolk, and Portsmouth were inundated with high water. High tide cycles also exacerbated the problem, resulted in a prolonged period of flooding. Residents had to be rescued from an apartment complex in Hampton. Heavy rainfall also collapsed roofs in Emporia.



Norfolk. *Virginian-Pilot, The' N. Pham*

# Cold January Temperatures

After a couple of decades that had a lack of extreme cold, there were three mornings in January with noteworthy low temperatures, the 7<sup>th</sup>, 23<sup>rd</sup> and 30<sup>th</sup>. These mornings had the coldest temperatures in many years, in some cases more than 20 years. The coldest was on the 30<sup>th</sup> when excellent radiational cooling combined with a significant snow cover allowed temperatures to drop below zero in some places. Lows included minus 6 at Salisbury, plus 6 Norfolk, plus 7 at Elizabeth City and plus 4 at Richmond. Other minimums were minus 7 at the Wakefield ASOS, minus 9 at Ocean City (one mile inland), and plus 1 at Newport News.



REGIONAL MAX/MIN TEMPERATURE AND PCPN TABLE  
NATIONAL WEATHER SERVICE WAKEFIELD VA  
716 PM EST THU JAN 30 2014

...FULL TIME STATIONS...

HIGH TEMPERATURE LAST 12 HOURS/ LOW TEMPERATURE AND  
PRECIPITATION THE PAST 24 HOURS THROUGH 7 PM EST/8 PM EDT

.BR AKQ 0131 DH00/TAIRZY/TN/PPD  
: 24 HR

:ID	STATION	HIGH	LOW	PCPN
RIC	: RICHMOND VA:	36	4	0.00
LYH	: LYNCHBURG VA:	33	3	0.00
DCA	: WASHINGTON DC:	34	16	0.00
IAD	: DULLES APRT:	31	4	0.00
CHO	: CHARLOTTESVILLE:	32	5	0.00
ROA	: ROANOKE VA:	32	6	0.00
DAN	: DANVILLE VA:	36	0	0.00
PHF	: NEWPORT NEWS VA:	34	1	0.00
ORF	: NORFOLK VA:	32	6	0.00
WAL	: WALLOPS IS.:	31	3	0.00
SBY	: SALISBURY MD:	33	-6	0.00
AKQ	: WAKEFIELD VA:	35	-7	0.00
.END				

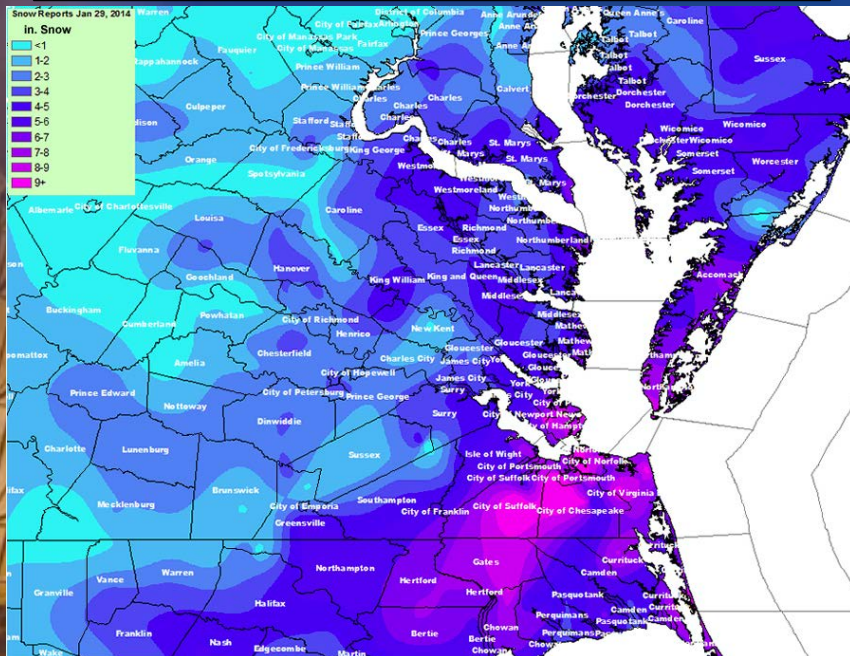


# January 28-29 Snow Event



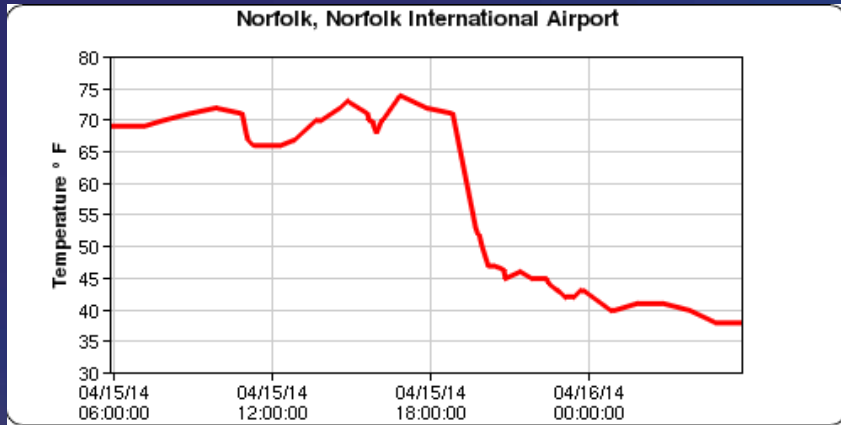
Virginia Beach. *Virginian-Pilot, L. Todd Spencer*

A low pressure system moved northeast off the North Carolina and Virginia coast on January 28. Snowfall ranged from 3 inches or less along and west of Interstate 95 to between 6 and 10 inches toward the coast in southeast Virginia and northeast North Carolina. From 4 to 6 inches of snow fell on the lower Maryland Eastern Shore. This was a dry snow for most locations. Moist air in the boundary layer made this a rather wet snow near the Chesapeake Bay despite temperatures in the middle 20s. At Norfolk, when combined with a 3 inch snowfall earlier in the month, made it the 6<sup>th</sup> snowiest January on record.



City	Snow (Inches)	City	Snow (Inches)
Chesapeake, VA	10.0	Gliden, NC	9.0
Norfolk, VA	10.0	Hampton, VA	8.0
Portsmouth, VA	10.0	Moyock, NC	8.0
Suffolk, VA	10.0	Carrolton, VA	7.2
Virginia Beach, VA	9.8	Accomac, VA	7.0
Newport News, VA	9.5	Richmond, VA	3.1

# April 15 Cold Front



A strong and fast moving cold front crossed the Wakefield forecast area during the afternoon of April 15. Temperatures dropped from the low 70s to upper 40s in less than an hour and strong wind gusts accompanied its passage. When the front reached the lower Chesapeake Bay, winds got even stronger and there were large ships that dragged anchor into shallow water as northerly winds reached 60 to over 70 mph. Similar winds were also reported in portions of Virginia Beach.



Virginia Beach. *Virginian-Pilot*, Steve Earley

## Select Wind Gusts (mph):

7SW Fishermans Island: 73  
Cape Henry: 73  
Kiptopeke: 65  
Ches. Bay Bridge Tunnel: 64  
Norfolk: 63  
Poquoson: 61  
Willoughby Degaussing: 55



# July 24 Cherrystone, VA Tornado

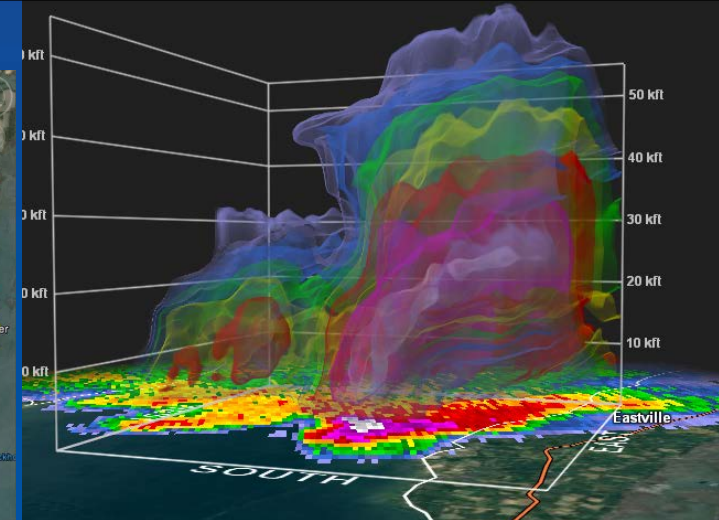
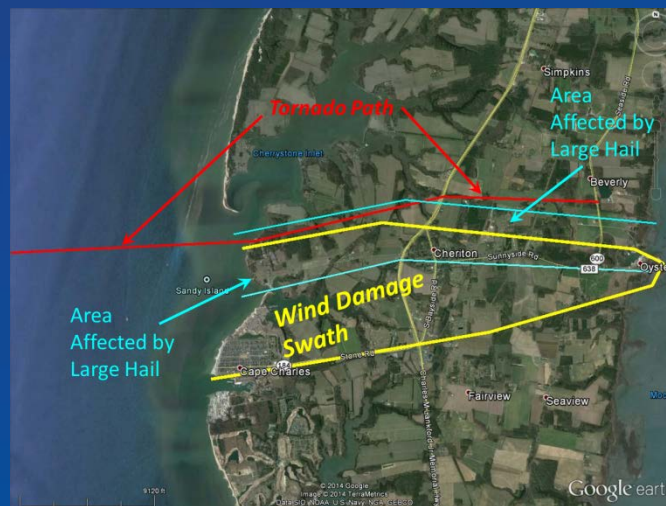


Cherrystone  
Campground Damage

Scattered thunderstorms developed over the region during the early morning hours of July 24. One storm moved over the warm waters of the Chesapeake Bay and intensified rapidly. The storm tracked east across the waters, producing a waterspout before moving onshore at the Cherrystone Campground. The tornado continued across Northampton County, VA before lifting near Seaside Road near the Northampton Landfill. The EF-1 tornado tracked 8 miles, killing 3 people, injuring 35, and flipping several campers. Hail up to the size of baseballs, and downburst winds up to 75 mph also caused considerable crop and property damage.



Storm Relative Velocity  
8:31 AM EDT

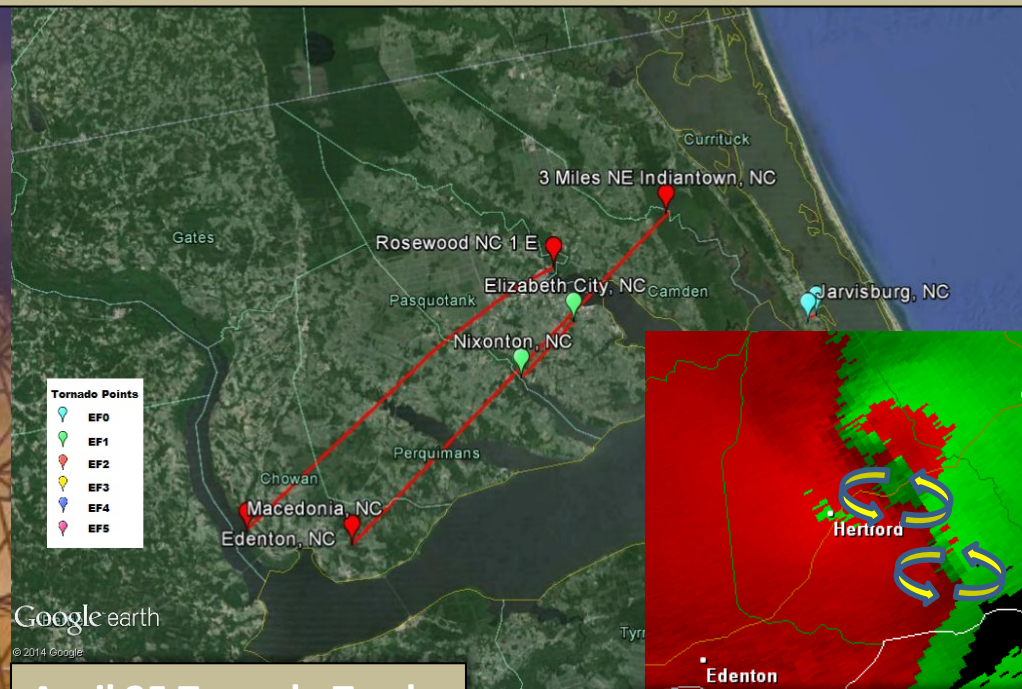


Radar Cross Section 8:21 AM EDT



# April 25 Tornadoes

A line of thunderstorms developed in advance of a cold front over central North Carolina during the afternoon of April 25 and raced toward the coast. Tornadoic thunderstorms lifted from central North Carolina into northeast North Carolina during the early evening. Before the storms merged and moved off the coast, four tornadoes touched down near the Albemarle Sound. Two tornadoes were long tracked EF-2, occurring nearly simultaneously along parallel paths. One was on the ground for 40 miles, the other for 32 miles. Wind speeds were upwards of 125 mph. One fatality and one injury were reported. Numerous homes and outbuildings were destroyed. While tornadoes are not uncommon to northeast North Carolina, the nearly simultaneous, parallel EF-2 tornadoes make this a truly historical event and worthy of a number 1 ranking.



April 25 Tornado Tracks

7:52pm EDT Storm Relative Motion