

2008 Year in Review

General Summary

The southern portion of the Mid Atlantic experienced another relatively warm year in 2008. Overall, precipitation for the year was close to average; slightly above normal over western portions of the county warning area and slightly below normal near the coast. The most noteworthy event of the year was the tornado outbreak of April 28th. The tornado that struck Suffolk was rated as an EF3, and is the most significant tornado to affect the Wakefield County warning area since the office was opened in 1994. This was a part of a series of severe weather events that stretched through late April and early May.

Temperatures were not as warm as in 2007 but still ended above normal for the year at most locations. It was the 10th warmest year at Richmond but did not rank in the top 10 at Norfolk. Compared to the long term averages, most of the winter, spring and early summer was warmer than normal, with slightly below average temperatures during the fall. June was very warm, ranking as the 2nd warmest on record at Richmond and 3rd warmest at Norfolk. At Norfolk, June was actually the warmest month of the year, warmer than either July or August. It was the first time for this to happen since 1942. At Richmond, June experienced 19 days with a high of 90 F or above, just shy of the record of 20 days set back in 1943. The early season heat wave from June 7th through the 10th was historic: Richmond had four consecutive days of 98 degrees or higher, the first time for such an event in the month of June. It also set a new record for the earliest in the season for two consecutive days of 100 F or higher (June 7th and 8th). Norfolk had two days with a high of 100 F or above (the most in June since 1952), and the four consecutive days of 96 F and above from June 7th through the 10th was the most for so early in the season.

Precipitation was generally well below normal during the winter months, contributing to an unusually active fire season beginning in February as several wildfires ignited on February 10th. A welcome wet spell briefly arrived in April as the month ranked as the 3rd wettest on record at Richmond and the 10th wettest at Norfolk. Drought conditions returned over far southeast Virginia and northeast North Carolina by late May and June however, due to a combination of above normal temperatures and below normal precipitation.

By late summer and fall, frequent intrusions of tropical air brought abundant rainfall to the mid-Atlantic region, alleviating the ongoing drought. Tropical Storm Fay dissipated over Florida on the 23rd of August but moisture from Fay brought flash flooding to parts of central Virginia on the 28th of August. Six to nine inches of rain was reported in portions of Chesterfield County. Officially, Richmond received over five inches of rain on the 28th and 29th. A week later, Tropical Storm Hanna moved rapidly across the area on the 6th of September, passing through the Chesapeake Bay on its trek up the East Coast. The storm brought three to five inches of rain over far western portions of the area from Mecklenburg to Louisa County, with scattered reports of wind damage farther east. September in Norfolk recorded 9.41 inches (10th wettest on record) including three days with two inches or more (the 11th, 25th and 30th). Here at Wakefield, 9.34 inches of rain fell in September including almost six inches on the 25th and 26th combined.

As mentioned earlier, annual precipitation was near normal overall, slightly below normal along the coast and in far southeast Virginia and northeast North Carolina. There was a large variation across northeast North Carolina; Edenton, NC had 42.20 inches (about 4 inches below average) while Elizabeth City, NC recorded just 29.31 inches (nearly 18 inches below normal). The combination of cooler temperatures and normal to above normal precipitation in Fall allowed all areas, even northeast North Carolina to be removed from drought status on the NWS Drought Monitor. See the following link for updates: <http://www.drought.unl.edu/dm/monitor.html>

Snowfall was scant at best, continuing a trend of several years of well below normal amounts. The 2007-2008 season saw just 0.2 inches at Norfolk (in Feb.), 0.8 inches at Richmond (in Jan.) and 2.8 inches at Salisbury (1.3 in Jan, 1.5 in Feb). Around 2 inches of snow fell to the north and west of Richmond on the morning of Jan 17th. On the evening of Jan 19th, 1 to 3 inches of snow fell over parts of eastern Virginia including 3 inches in Middlesex County and 1 to 2 inches in portions of James City and Prince George Counties. In February, the eastern shore received a couple of light snows. Salisbury received 1.5 inches on the 14th as did Wallops Island on the 20th.

In the late Fall of 2008 (the beginning of the 2008-2009 winter season), the only noteworthy snowfall occurred over eastern portions of the CWA with officially a half inch at Elizabeth City on the morning of November 21st. A few areas of Tidewater Virginia received 1 to 2 inches of snow but only trace was reported at Norfolk. Farther to the north and west, no measureable snow was reported at Richmond, although into the Piedmont north and west of Richmond a few tenths of an inch of snow fell on the evening of December 6th.

Severe Weather:

The tornado outbreak mentioned earlier that occurred on April 28th resulted in 11 tornadoes within the County warning area. The EF3 tornado in Suffolk injured approximately 200 people and caused widespread property damage during its 22 mile long path that reached a maximum width of a quarter mile. Fortunately there were no deaths. Another tornado (EF1) struck a major shopping area in Colonial Heights which resulted in 21 injuries. More details can be found at http://www.erh.noaa.gov/er/akq/wx_events/severe/april28_2008/april28_2008.html

In addition to the April 28th event, a few other notable tornadoes occurred during the year: EF2 tornadoes in Hertford and Bertie counties on May 9th (Mother's Day); another EF2 tornado in Bertie County, NC on May 11th; and an EF1 in Petersburg on July 9th. A small EF0 tornado touched down briefly just 3 miles northwest of the Wakefield forecast office on the 26th of September. It is believed that this is the closest tornado to Wakefield WFO since it opened in 1994.

Daily Temperature & Precipitation Records in 2008

RICHMOND (period of record 112 yrs/ 1897-2008):

- **Record Highs:** Nine record highs were set (or tied) in 2008....most of which occurred during two separate warm/hot streaks: the first in early February on the 5th (76 F), 6th (79 F), and 7th (70 F) with another in early June on the 7th (100 F), 8th (100 F), 9th (98 F), and 10th (101 F). The others were on January 9th and December 15th.
- **Record High Mins:** Ten record high minimums were set (or tied)...most notable being a low temperature of 63 F on February 6th, not only a daily record but also the warmest minimum for any date in February.
- **Record Lows:** One record low was set in 2008....low of 20 F on November 23rd.
- **Record Low Maximums:** One set....high of only 54 F on May 12th.
- **Precipitation:** Eight new daily precipitation records were set....the most notable being 2.62" on December 11th which also qualifies as the highest daily precipitation for *any* day in December.

NORFOLK (period of record 135 yrs/ 1874-2008):

- **Record Highs:** Five record highs were set (or tied) in 2008....most notable being 101 F on June 7th as this is the 2nd earliest 100+ reading of the season on record (earliest is 100 F on May 31st in 1991).
- **Record High Mins:** Seven record high mins were set (or tied)...most notably a low temperature of 78 F on June 9th, the earliest in the season reading of 78 F or higher on record.
- **Record Lows:** Two record lows were set (or tied)...46 F on May 29th and 23 F on Nov 23rd.
- **Record Low Maximums:** One set...high of only 39 F on Nov 22nd.
- **Precipitation:** Five new daily precipitation records were set....the most notable being 2.77" on December 11th which also qualifies as the highest daily precipitation for *any* day in December.

SALISBURY (period of record 103 yrs/ 1906-2008):

- **Record Highs:** Five record highs were set (or tied) in 2008....most notable being 97 F on both June 7th and June 10th during the early season heat wave.
- **Record High Mins:** Three record high mins were set (or tied)...most notably a low temperature of 60 F on December 10th, nearly 30 degrees above normal for the date.
- **Record Lows:** Six record lows were set (or tied)...most notable being two consecutive record lows on April 16th and 17th, the temperature dropping to 25 F and 26 F respectively.
- **Record Low Maximums:** None set.
- **Precipitation:** Three new daily precipitation records were set....the most notable being 2.08" on December 11th

Richmond, VA 2008 Summary Data

	TEMPERATURE				PRECIPITATION				Significance / Remarks	
	ACTUAL			Dep	Total (in)		# Days		Temperature	Precipitation
	Max	Min	Avg		Actual	Dep	.01"+	Dep		
Jan	49.8	30.3	40.1	3.5	0.96	-2.59	8	-3		5th Driest
Feb	54.4	32.6	43.5	4.0	3.41	0.43	7	-2		
Mar	63.0	38.8	50.9	3.2	3.50	-0.59	12	1		
Apr	69.8	49.2	59.5	2.4	8.32	5.14	14	5		3rd Wettest
May	77.2	53.8	65.5	0.1	5.10	1.15	10	-1		
Jun	91.4	66.5	79.0	5.5	3.64	0.10	11	1	2nd Warmest	
Jul	89.7	68.4	79.0	1.1	4.05	-0.62	10	-1		
Aug	88.0	66.4	77.2	0.9	5.73	1.55	6	-3		
Sep	81.1	62.7	71.9	2.1	5.94	1.96	12	3		
Oct	70.3	47.3	58.8	0.6	1.32	-2.28	5	-3		
Nov	58.0	39.7	48.9	-0.3	3.51	0.45	12	4		
Dec	54.3	34.7	44.5	4.1	4.07	0.95	10	(avg)		
ANNUAL	70.6	49.2	59.9	2.3	49.55	5.64	117	2	10th Warmest	

Norfolk, VA 2008 Summary Data

	TEMPERATURE				PRECIPITATION				Significance / Remarks	
	ACTUAL			Dep	Total (in)		# Days		Temperature	Precipitation
	Max	Min	Avg		Actual	Dep	.01"+	Dep		
Jan	50.3	34.1	42.2	2.1	1.36	-2.57	8	-3		5th Driest
Feb	56.6	36.9	46.7	4.7	3.41	0.07	8	-2		
Mar	61.8	43.9	52.9	3.9	2.96	-1.12	9	-2		
Apr	66.7	51.2	59.0	1.6	6.37	2.99	15	6		10th Wettest
May	75.1	55.3	65.2	-1.1	2.88	-0.86	12	2		
Jun	89.3	69.1	79.2	4.7	1.93	-1.84	9	-1	3rd Warmest	
Jul	87.1	70.9	79.0	-0.1	5.19	0.02	12	1		
Aug	84.5	70.9	77.7	0.3	0.67	-4.12	4	-6		2nd Driest
Sep	80.1	67.6	73.9	1.8	9.41	5.35	10	2		10th Wettest
Oct	69.0	51.5	60.2	-0.9	1.47	-2.00	5	-3		
Nov	56.8	42.0	49.4	-2.9	5.32	2.34	13	5		
Dec	57.2	39.3	48.2	4.0	3.83	0.80	10	(avg)		
ANNUAL	69.5	52.7	61.1	1.5	44.80	-0.93	115	-2		

Salisbury, MD 2008 Summary Data

	TEMPERATURE				PRECIPITATION				Significance / Remarks	
	ACTUAL			Dep	Total (in)		# Days		Temperature	Precipitation
	Max	Min	Avg		Actual	Dep	.01"+	Dep		
Jan	46.5	23.9	35.2	-0.5	1.48	-2.61	12	1		
Feb	51.6	27.0	39.3	1.6	3.58	0.02	12	2		
Mar	58.4	33.6	46.0	0.6	2.42	-2.20	11	(avg)		
Apr	66.5	43.2	54.9	0.7	4.82	1.41	15	5		
May	73.0	46.7	59.9	-3.4	6.02	2.15	13	2		
Jun	86.6	60.4	73.5	1.4	4.45	0.88	12	2		
Jul	87.7	63.5	75.6	-1.6	3.97	-0.57	11	1		
Aug	84.5	57.8	71.1	-4.3	1.88	-3.11	6	-3		
Sep	79.5	57.6	68.6	-0.4	4.36	0.63	6	-2		
Oct	67.7	40.7	54.2	-3.3	0.92	-2.72	7	-1		
Nov	55.0	34.6	44.8	-3.8	4.68	1.38	12	3		
Dec	52.4	32.2	42.3	2.3	3.85	0.13	10	-1		
ANNUAL	67.5	43.4	55.4	-0.9	42.43	-4.59	127	11		

Detailed monthly data for 2008 for the three main climate sites, Richmond, Norfolk, and Salisbury are shown in the tables to the left.

Departures from the 1971-2000 means are color coded for temperature: Orange (warm) and blue (cool) and for precipitation: Tan (dry) and green (wet).

For Richmond and Norfolk (both of which have a period of record greater than 100 years), monthly rankings are included if they attain top ten status. Note that both experienced a very warm (hot) June.