

August 2025 Monthly Weather Summary

Temperature Overview

While the rest of the summer experienced above-normal average temperatures, August stopped that trend in its tracks. Multiple cold frontal passages brought in a few rounds of cooler air throughout the month. Differing from the fleeting cooler air masses we have seen over the past few months, these modified air masses remained in place for longer periods, which led to prolonged cool spells. Average temperatures were mostly 3-5°F below normal, and 90°F days were limited.

After a few months of above normal average temperatures, three long-term climate sites including Richmond, VA (73.8°F), Elizabeth City, NC (75.4°F), and Salisbury, MD (71.5°F), measured average temperatures that ranked within the 10 coolest Augusts on record, coming in at 7th, 4th, and 3rd (both Elizabeth City and Salisbury), respectively. The only long-term climate not ranked within the top 10 coolest Augusts was Norfolk, VA (75.7°F, 18th), which had the help of periods of northeasterly flow moving over the warmer waters adjacent to the site to stay out of the top 10. CO-OP sites in Ashland, VA (6th), Wakefield, VA (2nd), Williamsburg, VA (3rd), and Edenton, NC (7th) all recorded top 10 coolest August rankings. Despite the cool August temperatures, only Richmond, VA (70°F on the 6th) and Elizabeth City, NC (80°F on the 2nd, 77°F on the 7th) set record low maximum temperatures. There were no record lows set in August of 2025.

August 2025 Monthly Weather Summary

Precipitation Overview

Thanks to the longer residency, drier air masses that filtered in behind the multiple fronts that moved through the area in August, all long-term and CO-OP climate sites experienced below-normal rainfall. Salisbury, MD, just edged into the top 10 driest Augusts on record, coming in at #9 with a monthly rainfall total of 1.71". Norfolk, VA, narrowly missed the top 10 driest Augusts, coming in at the 11th driest with a monthly total of 1.60". For the CO-OP sites, Ashland, VA (4th) and Louisa, VA (5th) both recorded top 5 driest August rankings. Many long-term climate and CO-OP sites recorded their greatest daily rainfall totals on the 13th/14th of August as a weak backdoor cold front moved through the forecast area in a very favorable airmass for heavy rainfall. Daily highest monthly rainfall totals recorded during this event ranged from 0.63" to 2.53". Unsurprisingly, there were no daily precipitation records set this month.

The following table on page 3 shows detailed temperature and precipitation statistics for August 2025 at many locations within the Wakefield CWA. On page 4, daily average temperature departures are shown at Richmond and Norfolk for August, followed by August precipitation maps (page 5), with daily records set during the month at our 4 main long-term sites on the last page.

Tabular Summary of Data for Selected Climate Sites (August):

August 2025 Temperature Summary Data																		* also on other dates			All Normals are 1991-2020		
Site	Avg Max		Avg Min		Avg Temp		Daily Highs						Daily Mins						Remarks				
	(°F)		(°F)		(°F)		Warmest (°F)			Coolest (°F)			Warmest (°F)			Coolest (°F)							
	Actual	Dep	Actual	Dep	Actual	Dep	Actual	Date	Dep	Actual	Date	Dep	Actual	Date	Dep	Actual	Date	Dep					
Richmond	82.6	-4.9	65.1	-2.5	73.8	-3.7	93	17th	-4	70	6th	-5	74	*14th	-1	54	31st	-5	7th coolest				
Norfolk	81.7	-5.2	69.6	-2.0	75.7	-3.5	91	14th	-4	76	30th	0	76	214h	-2	59	28th	-5					
Salisbury	81.4	-4.0	61.5	-4.8	71.5	-4.3	90	17th	-5	71	13th	-4	71	13th	-4	49	31st	-5	3rd coolest				
Wallops Island	80.6	-3.6	65.5	-3.2	73.0	-3.5	90	14th	-3	74	30th	-1	74	*20th	-2	53	31st	-6	**4th coolest**				
Elizabeth City	83.2	-3.6	67.5	-2.5	75.4	-3.0	91	14th	-4	77	*31st	-1	74	*20th	-3	56	29th	-3	3rd coolest				
Ashland, VA	81.3	-3.8	63.9	-2.3	72.6	-3.1	91	17th	-2	71	19th	-3	74	13th	0	51	31st	-5	**6th coolest**				
Louisa, VA	83.6	-1.7	61.4	-2.2	72.5	-1.9	94	17th	-1	77	*19th	1	74	13th	2	46	31st	-6					
Wakefield, VA	82.6	-5.1	63.8	-2.5	73.2	-3.8	92	17th	-4	70	6th	-5	74	13th	0	53	31st	-3	**2nd coolest**				
Williamsburg, VA	82.1	-4.4	65.7	-3.0	73.9	-3.7	92	14th	-3	72	6th	-4	74	*14th	-2	56	31st	-3	**3rd coolest**				
Edenton, NC	82.4	-4.4	68.2	-2.4	75.3	-3.4	88	*25th	-6	77	*31st	-2	75	1st	-2	58	31st	-2	**7th coolest**				

August 2025 Precipitation Summary Data																		* also on other dates			All Normals are 1991-2020		
Site	Total Pre		# Pre Days		# Pre Days		Greatest		Total Snow		# Snow Days		# Snow Days		Greatest		Remarks						
	(in.)		(≥0.01")		(≥0.10")		(in.)		(in.)		(≥0.1")		(≥1.0")		(in.)								
	Actual	Dep	Actual	Dep	Actual	Dep	Act	Date	Act	Dep	Act	Dep	Act	Dep	Daily	Date		Storm	Date				
Richmond	2.53	-2.37	11	2	6	-1	0.84	18th															
Norfolk	1.60	-4.28	8	-2	6	-1	0.63	14th															
Salisbury	1.71	-3.56	7	-2	3	-3	0.74	14th										9th driest					
Wallops Island	3.07	-1.25	6	-3	4	-2	1.28	18th															
Elizabeth City	2.98	-2.34	11	-1	5	-2	1.27	11th															
Ashland, VA	0.93	-2.98	4	-4	2	-4	0.59	6th										**4th driest**					
Louisa, VA	0.76	-2.92	8	-1	3	-3	0.20	13th										**5th driest**					
Wakefield, VA	5.04	-0.46	9	-1	5	-2	2.53	14th															
Williamsburg, VA	3.94	-1.74	7	-4	5	-2	1.16	19th															
Edenton, NC	3.80	-2.36	11	2	3	-5	2.00	14th															

* **“Dep”= Departure** from the 30-year normals (1991-2020). Temperature departures are shaded orange for 1 F or more warmer than average (dark red for 4 F or greater anomalies) and blue for 1 F or more cooler than average (dark blue for 4 F or more below normal). Similarly, precipitation departures are shaded green for 0.50” or more wetter than average (dark green for 2.00” or more) and tan for 0.50” or more drier than average (dark brown for 2.00” or more drier). Snowfall departures are shaded purple for 1” or more above average and tan for 1” or more below average. ****Rankings in Remark section are included for Co-op sites where a complete period of record is of sufficient duration.**
N/A in Remarks section indicates sites with a shorter period of record, leading to rankings being of less significance

Monthly Avg. Dew Point & Departure: August 2025

In strong contrast to the early portion of summer that featured hot and sultry weather with many days exceeding a heat index of 100° , August 2025 turned much cooler, but also much drier, with extended periods where afternoon dew points dropped into the 50s, a rather unusual occurrence in August. The maps below indicate that most of the local area recorded a monthly average dew pt. in the 63° - 67° , or approximately 2 to 4 degrees lower than the long-term mean (locally portions of NE NC along the Albemarle sound were in the 67 - 71° category).

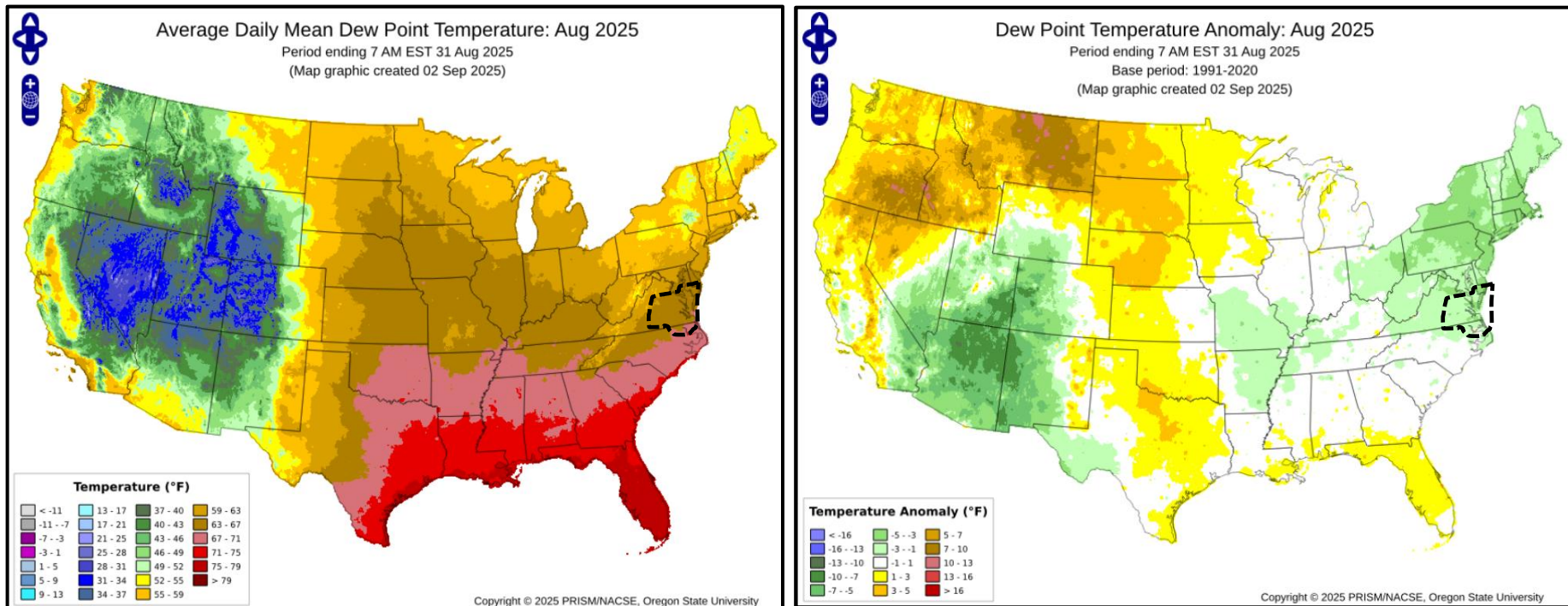


Figure 1: Avg. Dew Pt. Temperature & Departure from Normal Source: NCEI & Oregon St. University

Monthly Avg. Dew Point: August 2025

Long-term detailed dew point data is available from Richmond, VA back through 1948 (a 78-year period of record). August 2025 had an average monthly value of 63.9°, significantly lower than average, indicating less oppressive conditions than what is often observed in August. The combination of well below normal average temperature and limited days with dew point values at or above 70°, made for comfortable conditions across the region, a complete reversal from the 2nd half of June and July.

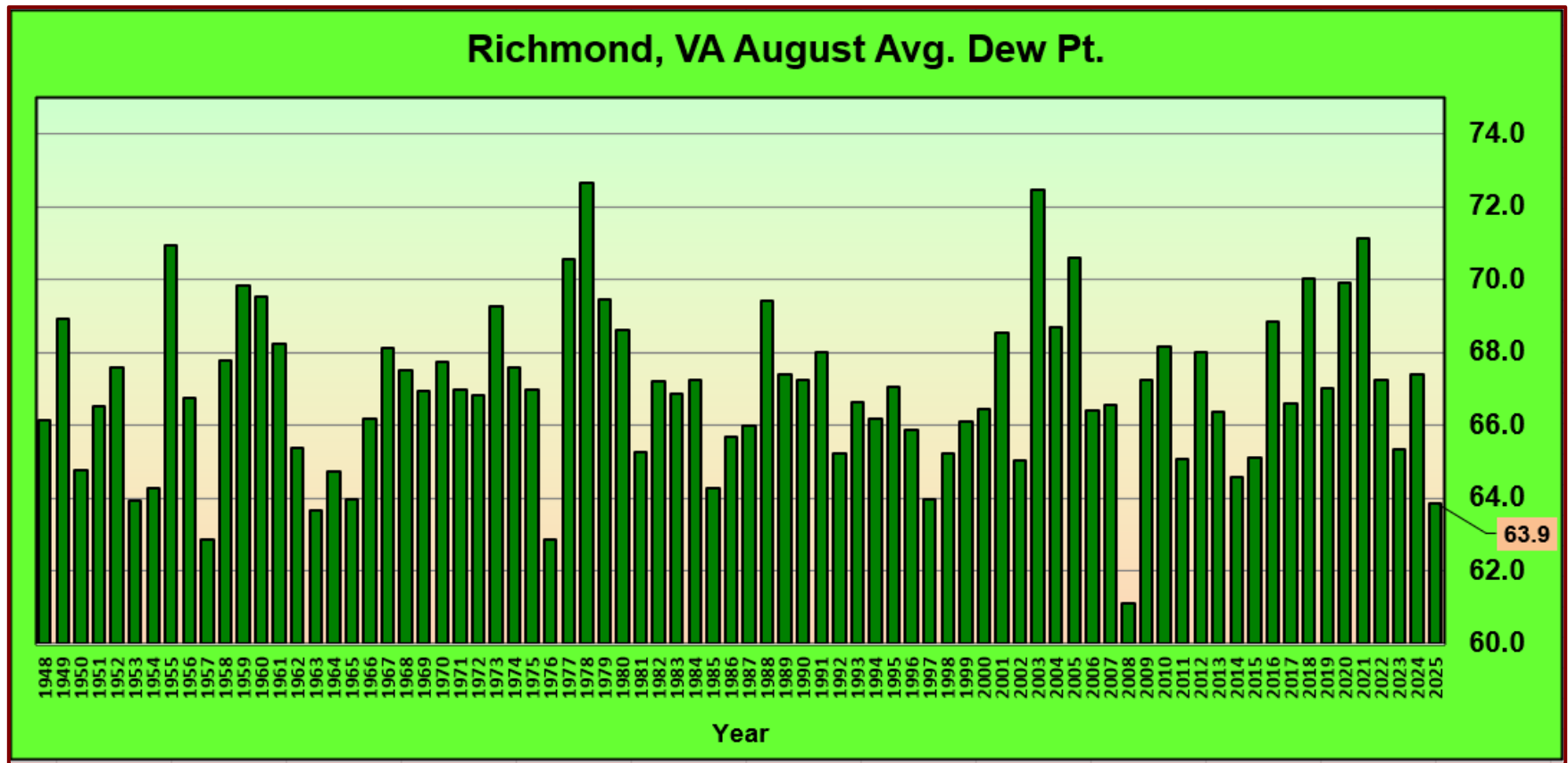


Figure 2: Avg. Dew Pt. Temperature at Richmond Since 1948

Daily Average Temperature Departures at Richmond & Norfolk, VA (August)

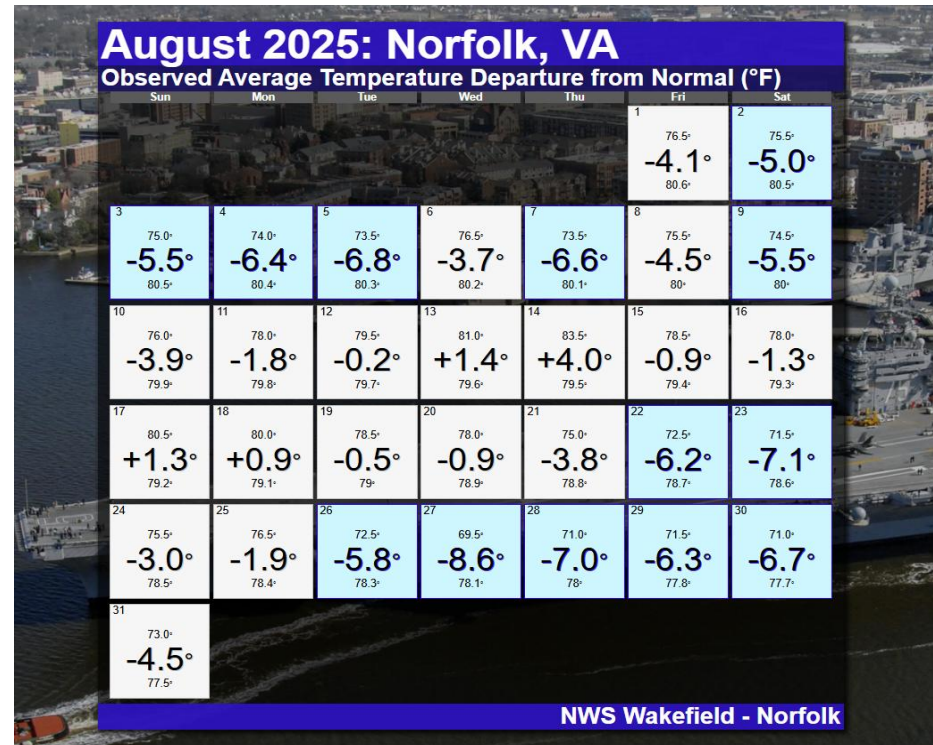
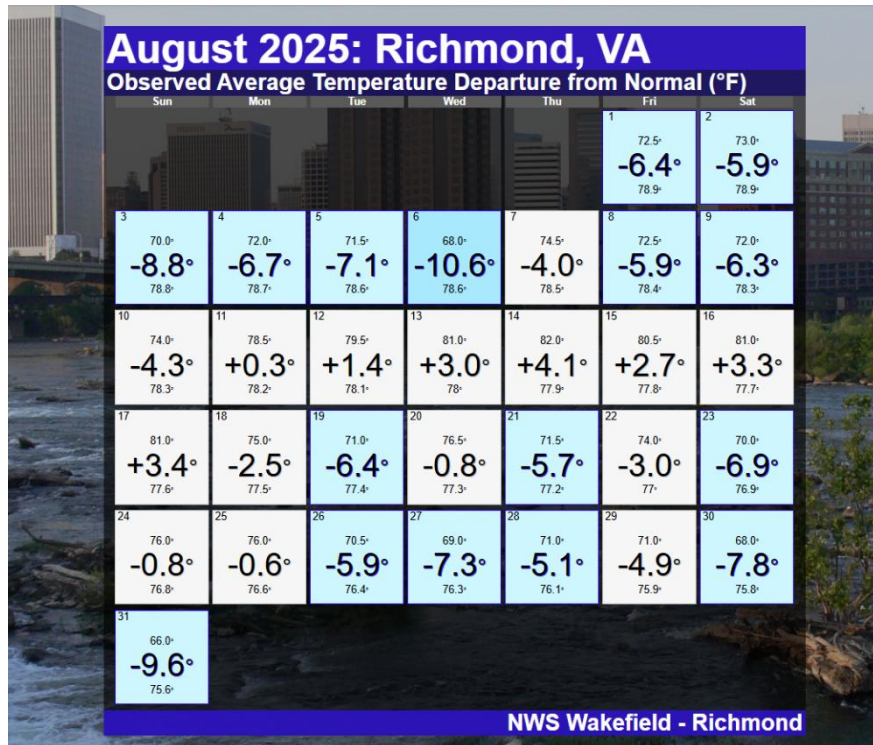


Figure 2: Daily Average Temperature Departures at RIC and ORF

Regional Precipitation Maps: August 2025

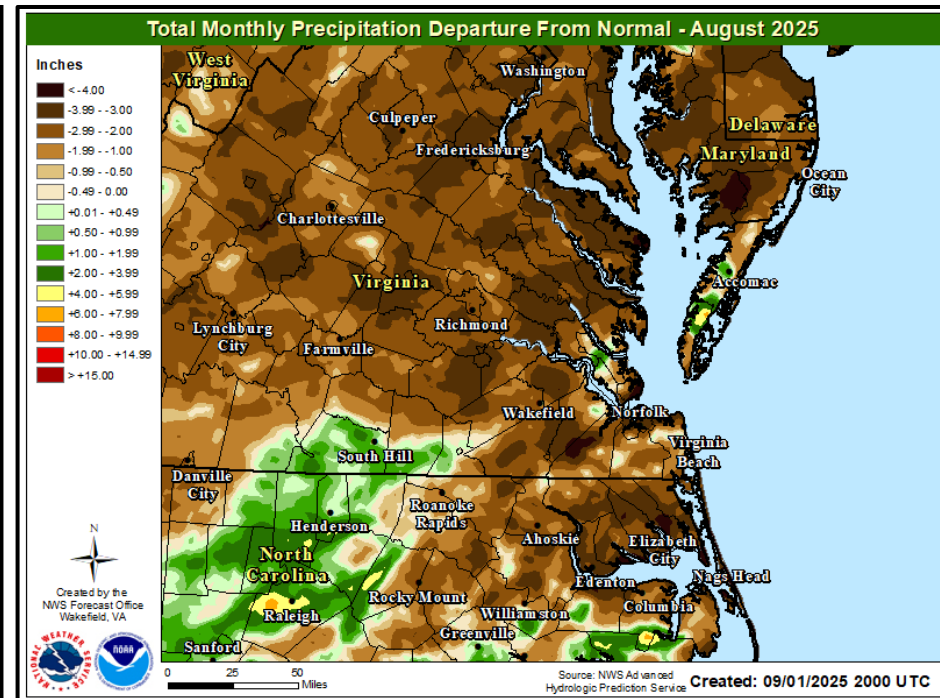
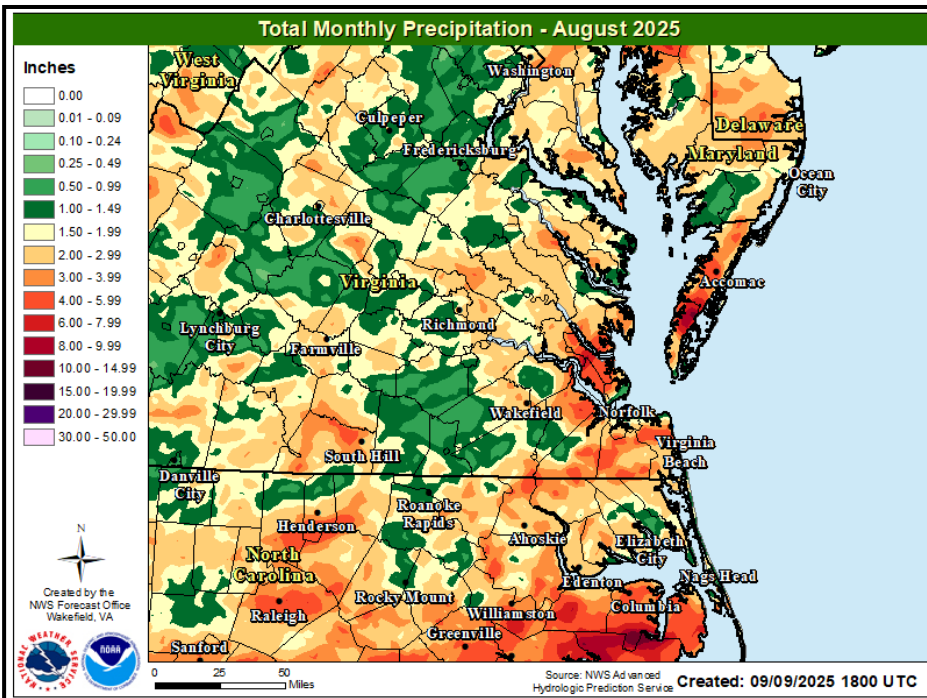


Figure 3: *Total Precipitation* for the month is shown in the map on the left. *Departure* from the 30-year normals (1991-2020) is shown on the map on the right.

Daily Records for Long Term Sites (August):

Norfolk, VA Records (Period of Record 152 yrs./1874-2025) **tie*

Record Highs: none set.
Record Low Maximums: none set.
Record Lows: none set.
Record High Minimums: none set.
Daily Precipitation: none set.

Richmond, VA Records (Period of Record 129 yrs./1897-2025) **tie*

Record Highs: none set.
Record Low Maximums: 70° (6th).
Record Lows: none set.
Record High Minimums: none set.
Daily Precipitation: none set.

Salisbury, MD Records (Period of Record 119 yrs./1907-2025) **tie*

Record Highs: none set.
Record Low Maximums: none set.
Record Lows: none set.
Record High Minimums: none set.
Daily Precipitation: none set.

Elizabeth City, NC Records (Period of Record 92 yrs./1934-2025) **tie*

Record Highs: none set.
Record Low Maximums: 80° (2nd), 77° (7th).
Record Lows: none set.
Record High Minimums: none set.
Daily Precipitation: none set.