PUBLISH DATE: JUNE 29, 2025

EASTERN NORTH CAROLINA MONTHLY CLIMATE REPORT

MAY 2025

WEATHER FORECAST OFFICE
NEWPORT/MOREHEAD CITY, NC

National Weather Service
NEWPORT/MOREHEAD CITY, NC

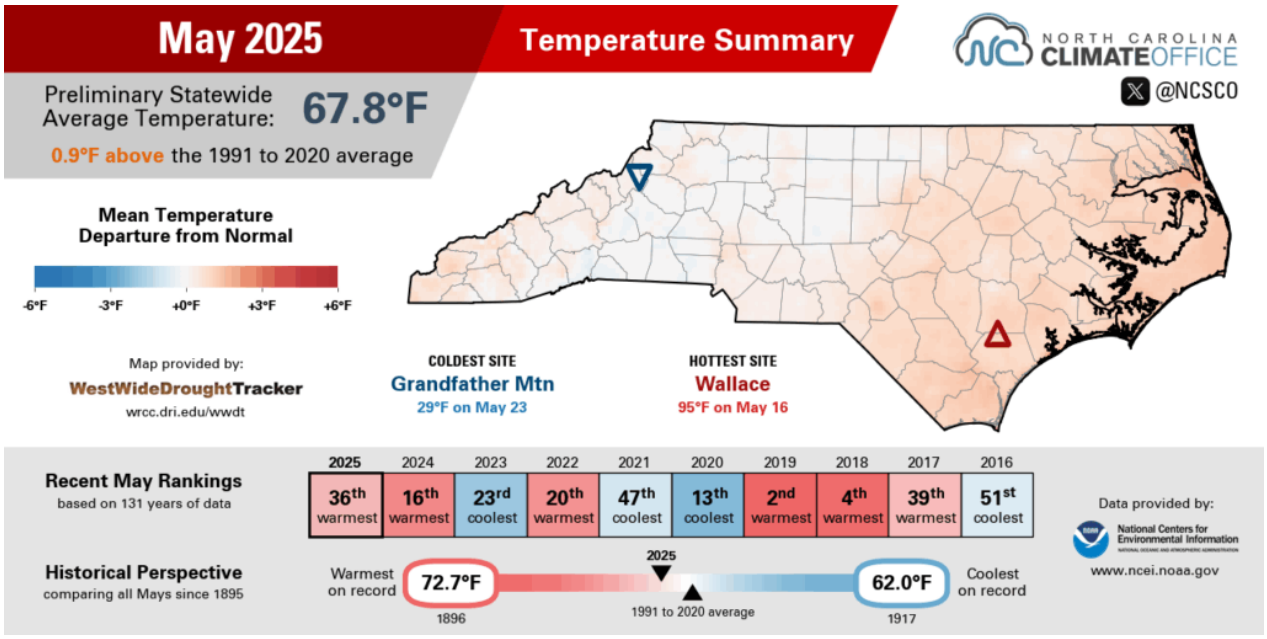
MONTHLY SUMMARY

May saw a continued streak of above average temperatures but a reversal of fortune in regards to precipitation. Although rainfall totals were highly variable owing to convection, two prominent wet periods occurred in mid and late May, totaling around 2-4” of rainfall per event. Coastal Onslow County was among the wettest region in May with several sites reporting in excess of a foot of rainfall. The average precipitation across the region was 6.83”, or roughly 170% of the 1991-2020 normal.

Temperatures were above average across eastern North Carolina in May, although not nearly as much as in April. The average temperature was 71.2°F, or 2.3°F above the 1991-2020 normal. This was still roughly a degree warmer than the rest of the state, and coastal areas were warmer still – Onslow, Carteret, and Pamlico Counties saw average temperatures among their top 10 warmest on record. The heavy rainfall put a considerable dent in regional drought conditions. By the end of the month, a majority of the forecast area was no longer in drought and less than a quarter was in Moderate (D1) drought.

TEMPERATURES

Temperatures remained above average, although anomalies were not nearly as severe as April's according to the North Carolina State Climate Office. The average temperature statewide for May was 67.8°F or 0.9°F above the 1991-2020 average. This was the 36th warmest May statewide since records began in 1895, with 131 years of data.



May 2025 Temperature Summary | Source: NC State Climate Office

Eastern North Carolina temperature anomalies were warmer compared to the rest of the state, with temperatures across our 15 counties 2.3°F above the 1991-2020 average. Since their respective records began, May 2025 was the 13th warmest for Cape Hatteras and 3rd warmest for New Bern.

MHX Select Site Temperature Statistics: May 2025

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	79.8	68.7	74.3	70.1	4.2
Hatteras (KHSE)	77.3	66.9	72.1	69.7	2.4
New Bern (KEWN)	81.8	63.1	72.5	69.5	3.0

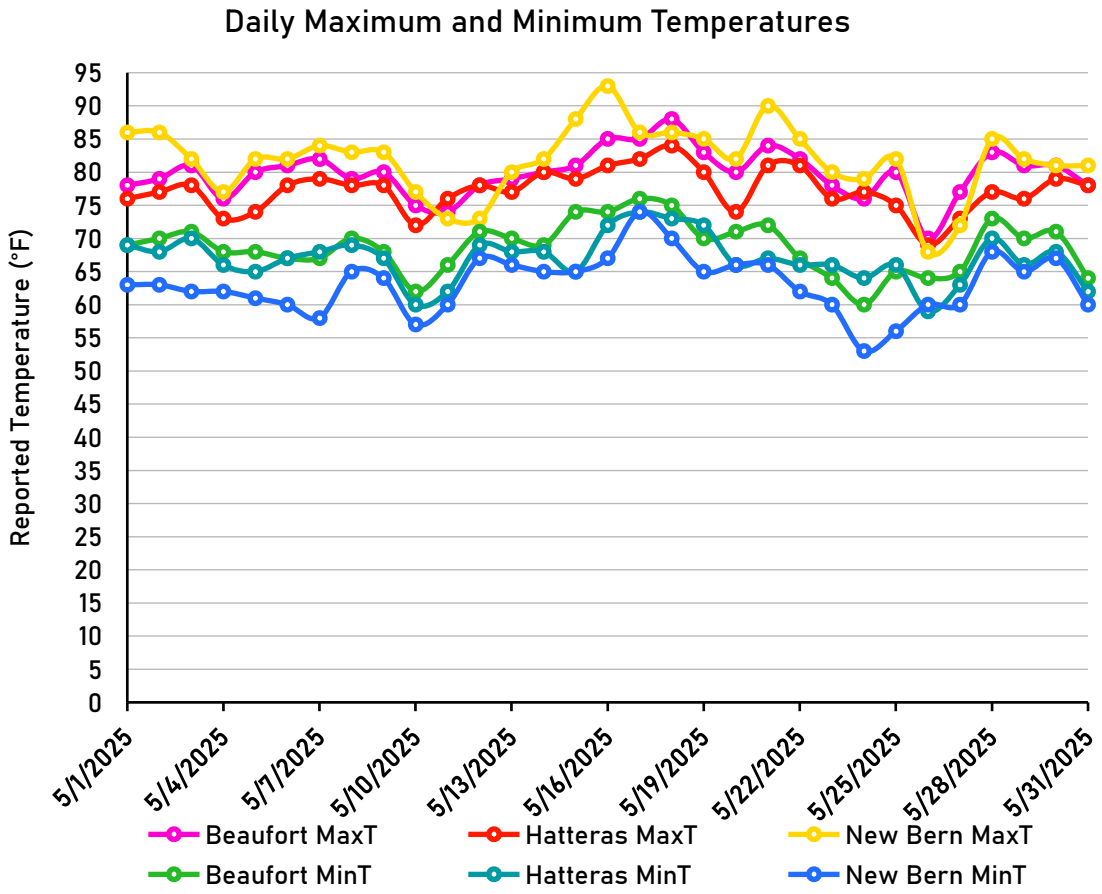
Normals are based on a period from 1990-2020.

County-averaged statistics are presented in the following table. **Mean and departure calculations are based on the 1991-2020 climate normals.** Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Temperature (°F)	Mean (°F)	Departure (°F)	Rank
Beaufort	71.4	69.1	2.3	18 W
Carteret	73.1	69.7	3.4	9 W
Craven	71.9	69.2	2.7	14 W
Dare	70.7	67.8	2.9	13 W
Duplin	71.0	69.0	2.0	20 W
Greene	70.4	68.9	1.5	27 W
Hyde	71.7	69.1	2.6	12 W
Jones	71.4	68.9	2.5	15 W
Lenoir	70.7	69.0	1.7	24 W
Martin	70.0	68.1	1.9	26 W
Onslow	72.1	69.2	2.9	9 W
Pamlico	72.7	69.7	3.0	10 W
Pitt	70.2	68.8	1.4	28 W
Tyrrell	70.8	68.8	2.0	15 W
Washington	70.6	68.4	2.2	18 W
Area Average	71.2	68.9	2.3	

Means are based on a period from 1991-2020. For rankings, “C” designates coldest and “W” designates warmest.

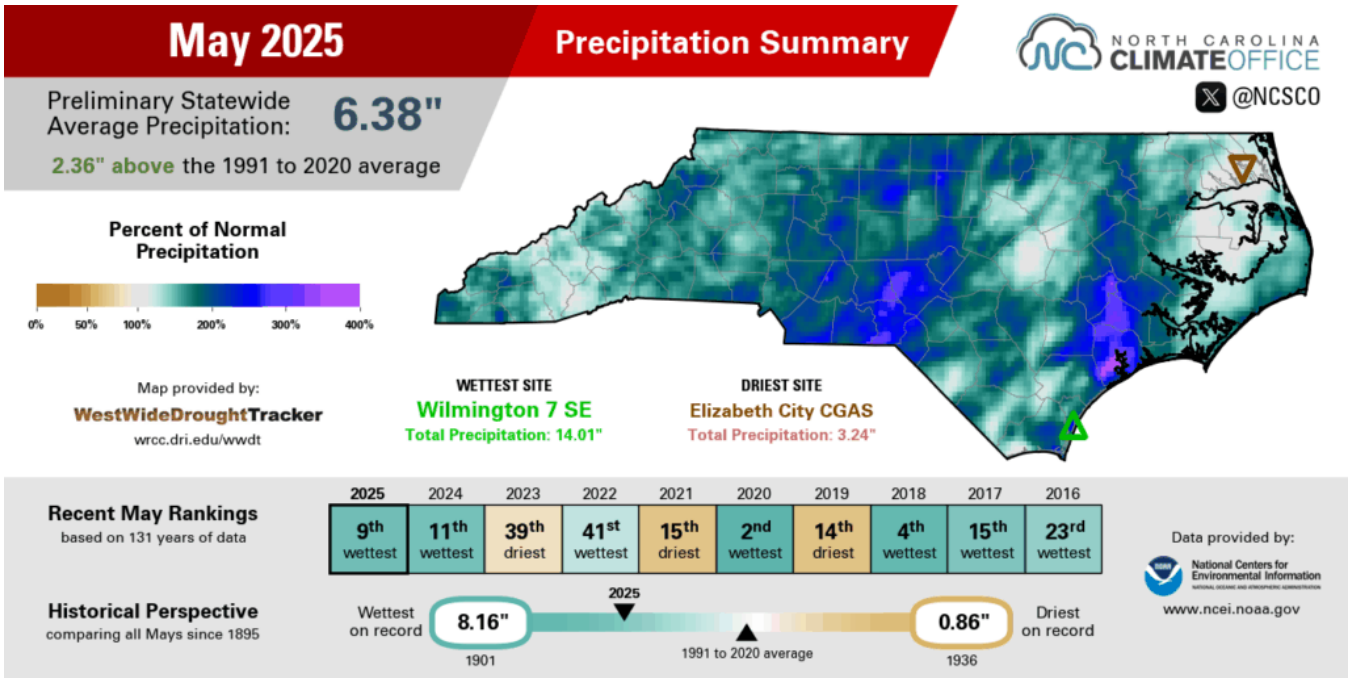
The upper level pattern across the eastern United States in May averaged to a more unsettled pattern of modest troughing, although the day to day pattern was highly variable. Modest ridging for the first half of the month played a role in above-average temperatures across the Carolinas, ranging around 3-6 degrees above average per analysis from the National Centers for Environmental Information (NCEI). The latter half of May saw more pronounced troughing and temperatures slightly below average for the period.



No temperature records were set at New Bern and Cape Hatteras in May. Carteret, Onslow, and Pamlico counties' average temperatures were among their top 10 warmest on record, per NCEI. Wallace was the warmest site in North Carolina in May, reaching 95°F on May 16th.

PRECIPITATION

Analysis conducted by the North Carolina State Climate Office indicated average statewide precipitation was a whopping 6.38” for May, or 2.36” inches above average. This was the 9th wettest May since records began in 1895, and slightly wetter than May last year.



May 2025 Precipitation Summary | Source: NC State Climate Office

Eastern North Carolina was slightly wetter on average than the rest of the state, although precipitation amounts were highly variable owing to convective patterns. Coastal Onslow County saw considerable rainfall with many sites recording over a foot of precipitation. Cape Hatteras recorded its 9th wettest May, while New Bern experienced its 4th wettest. The average accumulation across the MHX forecast area was 6.83”, or 2.78” above the 1991-2020 average.

MHX Select Site Precipitation Statistics: May 2025

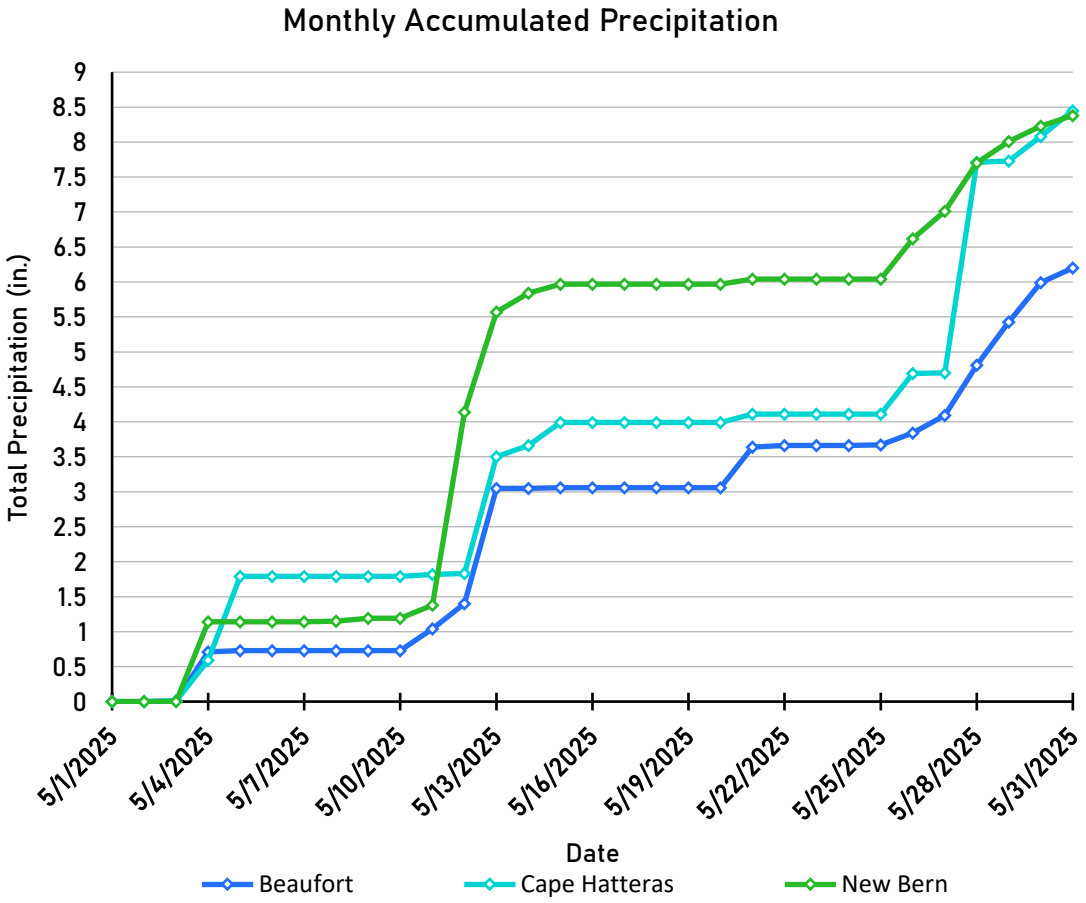
Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	6.20	3.94	2.26
Hatteras (KHSE)	8.45	4.37	4.08
New Bern (KEWN)	8.38	4.25	4.13

County-averaged statistics are presented in the following table. Mean and departure calculations are based on the 1991-2020 climate normals. Data courtesy of the National Centers for Environmental Information (NCEI).

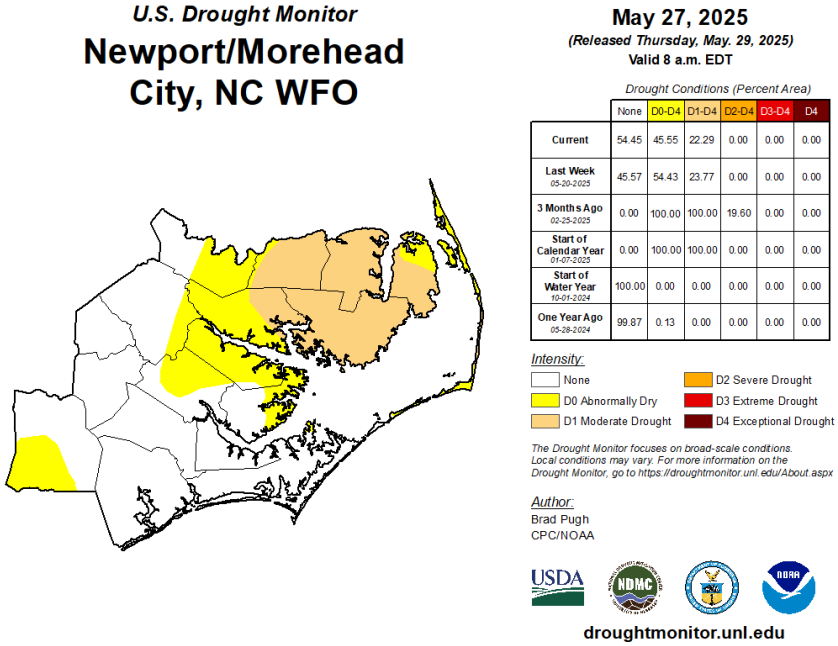
County	Avg. Accum. (in.)	Mean (in.)	Departure (in.)	Rank
Beaufort	6.93	4.04	2.89	10 W
Carteret	7.09	4.22	2.87	16 W
Craven	7.62	4.17	3.45	6 W
Dare	5.75	3.65	2.10	22 W
Duplin	7.00	4.33	2.67	12 W
Greene	7.16	4.01	3.15	7 W
Hyde	6.39	3.95	2.44	18 W
Jones	7.99	4.26	3.73	5 W
Lenoir	7.98	4.19	3.79	5 W
Martin	6.91	3.78	3.13	8 W
Onslow	7.41	4.41	3.00	12 W
Pamlico	6.76	4.14	2.62	14 W
Pitt	7.38	4.01	3.37	8 W
Tyrrell	4.85	3.78	1.07	38 W
Washington	5.21	3.85	1.36	34 W
Area Average	6.83	4.05	2.78	

Means are based on a period from 1991-2020. For rankings, "W" designates wettest and "D" designates driest.

Although there were multiple periods of scattershot convection in the month of May, the most prominent event was May 11-13th as a slow moving front meandered over the Carolinas. New Bern picked up 4" between the 12th and 13th, while Beaufort and Hatteras picked up 2". A second pronounced wet period occurred starting May 25th as 6 straight days of rain fell through the end of the month, adding another 2-4" inches of rain across the region. Overall, precipitation was roughly 170% of 1991-2020 normals for eastern North Carolina. Cape Hatteras set a daily rainfall record on May 28, picking up 3.01" of rain (Prior Record: 2.53"/2018).



The heavy rainfall put a significant dent in drought conditions for the month of May. By the end of the month, over half of the forecast area was no longer in drought. Moderate (D1) drought contracted to 22% of the region, down from 96% at the end of April.



ADDITIONAL CLIMATE RESOURCES

For a look at climate on the national scale, as well as statistics from a CONUS-wide to county and city level, please visit the **National Centers for Environmental Information** at https://www.ncei.noaa.gov/. Additional maps and data, as well as teaching materials and a climate resiliency toolkit, can be found at **NOAA's** https://www.climate.gov.

For additional drought information, including a wealth of maps of data focused on topics such as agriculture, fire, and water supply, please visit **NOAA's National Integrated Drought Information System (NIDIS)** at https://www.drought.gov.

For climate statistics and real time observations across the state of North Carolina, please visit the **North Carolina State Climate Office** at https://climate.ncsu.edu/.

For climate forecasts and outlooks, visit the **Climate Prediction Center** at https://www.cpc.ncep.noaa.gov/.

For community-based precipitation observations from across the United States, visit **CoCoRaHS** at https://www.cocorahs.org/.

For climate statistics relevant to various regions of North Carolina, please visit the following climate pages:

Eastern (WFO Morehead City): https://www.weather.gov/wrh/climate?wfo=mhx

Southeastern (WFO Wilmington): https://www.weather.gov/wrh/climate?wfo=ilm

Northeastern (WFO Wakefield, VA): https://www.weather.gov/wrh/climate?wfo=akq

Central (WFO Raleigh): https://www.weather.gov/wrh/climate?wfo=rah

Northwestern (WFO Blacksburg, VA): https://www.weather.gov/wrh/climate?wfo=rnk

Southwestern (WFO Greer, SC): https://www.weather.gov/wrh/climate?wfo=gsp

Cherokee and Clay Co. (WFO Knoxville, TN): https://www.weather.gov/wrh/climate?wfo=mrx

APPENDIX A: ADDITIONAL TEMPERATURE DATA

Cooperative Observation Site Temperature Statistics: May 2025

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	79.0	61.6	70.3	69.6	0.7
Kinston	80.9	61.7	71.3	70.7	0.6
Williamston	79.7	61.5	70.6	68.5	2.1
Plymouth	80.5	61.3	70.9	69.1	1.8
Bayboro	82.2	62.5	72.4	68.5	3.8
Manteo	77.5	65.8	71.7	67.4	4.3

Normals are based on a period from 1991-2020.

Maximum and Minimum Monthly Temperatures: May 2025

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	88	May 18	60	May 24
Hatteras (KHSE)	84	May 18	59	May 26
New Bern (KEWN)	93	May 16	53	May 24
Greenville	87	May 16	50	May 24
Kinston	92	May 17	52	May 24
Williamston	89	May 17	50	May 24
Plymouth	88	May 16	47	May 24
Bayboro	91	May 17	52	May 24
Manteo	86	May 17-18	58	May 27

APPENDIX B: ADDITIONAL PRECIPITATION DATA

Cooperative Observation Site Precipitation Statistics: May 2025

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Greenville	6.92	4.04	2.88
Kinston	10.89	3.92	6.97
Williamston	7.46	3.69	3.77
Plymouth	5.51	4.14	1.37
Bayboro	5.78	4.36	1.42

Sites in red have missing data in their record.

CoCoRaHS Monthly Accumulated Precipitation: May 2025

Site	County	Amount (in.)
Washington 1.0 SSW	Beaufort	7.81
Pantego 0.4 WSW	Beaufort	5.47
Bath 0.7 N	Beaufort	7.52
Aurora 4.8 NE	Beaufort	6.38
Swansboro 3.7 NNE	Carteret	8.88
Swansboro 2.7 NE	Carteret	8.84
Cedar Point 0.7 NNE	Carteret	9.02
Cedar Point 0.4 WSW	Carteret	11.89
Cedar Point 0.9 WSW	Carteret	8.99
Emerald Isle 2.3 WSW	Carteret	8.88
Cape Carteret 1.5 NE	Carteret	9.42

CoCoRaHS Monthly Accumulated Precipitation: May 2025

Site	County	Amount (in.)
Ocean 0.5 S	Carteret	8.11
Newport 2.5 W	Carteret	9.67
Newport 1.0 N	Carteret	9.84
Newport 0.2 SW	Carteret	10.07
Newport 1.7 SSE	Carteret	8.81
Newport 2.3 SE	Carteret	7.59
Morehead City 6.0 WNW	Carteret	11.98
Morehead City 2.9 WNW	Carteret	6.93
Morehead City 0.6 NW	Carteret	4.72
Pine Knoll Shores 0.3 NE	Carteret	6.90
Pine Knoll Shores 1.4 E	Carteret	7.14
Newport 7.1 ENE	Carteret	7.15
Beaufort 5.3 N	Carteret	7.14
Beaufort 0.5 W	Carteret	5.75
Cedar Island 0.3 SSE	Carteret	5.75
New Bern 5.3 SW	Craven	10.56
New Bern 1.3 NNE	Craven	8.92
Bridgeton 0.3 SSE	Craven	9.29
New Bern 7.3 ESE	Craven	8.13
Trent Woods 1.2 ENE	Craven	8.77
Brice Creek 0.9 WNW	Craven	7.28

CoCoRaHS Monthly Accumulated Precipitation: May 2025

Site	County	Amount (in.)
Trent Woods 1.3 SSE	Craven	8.74
New Bern 3.8 S	Craven	8.46
James City 2.0 S	Craven	8.64
Southern Shores 0.5 NNE	Dare	4.51
Manteo 2.8 NW	Dare	6.77
Rodanthe 1.0 SSE	Dare	6.89
Buxton 0.3 ENE	Dare	7.72
Mount Olive 2.4 SW	Duplin	7.21
Rose Hill 0.1 NNW	Duplin	7.93
Wallace 14.8 E	Duplin	12.07
Ayden 6.5 WNW	Greene	8.24
SQ Tower	Hyde	5.63
Ocracoke 0.6 SW	Hyde	8.94
Ocracoke 0.2 ESE	Hyde	9.24
Kinston 5.1 WNW	Lenoir	9.02
Kinston 3.1 W	Lenoir	8.95
Kinston 1.2 NW	Lenoir	10.69
Kinston 4.6 ESE	Lenoir	10.39
Kinston 7.0 SW	Lenoir	10.42
Williamston 8.9 SSE	Martin	7.76
Jamesville 6.1 SW	Martin	7.23

CoCoRaHS Monthly Accumulated Precipitation: May 2025

Site	County	Amount (in.)
Jacksonville 5.4 WSW	Onslow	13.22
Jacksonville 3.3 W	Onslow	13.45
Jacksonville 4.5 NW	Onslow	14.53
Jacksonville 2.4 NNE	Onslow	13.58
Hubert 4.9 SE	Onslow	11.53
Swansboro 2.8 WSW	Onslow	12.92
Swansboro 1.2 NNW	Onslow	8.77
Lowland 0.2 SE	Pamlico	5.26
Grantsboro 4.6 SSW	Pamlico	6.61
Merritt 1.5 WSW	Pamlico	5.00
Oriental 4.3 NNW	Pamlico	5.28
Oriental 5.2 NE	Pamlico	4.13
Oriental 1.7 WNW	Pamlico	5.14
Fountain 0.1 NE	Pitt	8.21
Farmville 0.8 ESE	Pitt	10.37
Greenville 4.6 W	Pitt	8.62
Winterville 2.5 NNW	Pitt	9.44
Winterville 3.5 W	Pitt	10.13
Greenville 2.8 ESE	Pitt	8.74
Greenville 5.0 SE	Pitt	8.64
Greenville 7.1 SSE	Pitt	8.51

CoCoRaHS Monthly Accumulated Precipitation: May 2025

Site	County	Amount (in.)
Columbia 0.8 NNE	Tyrrell	5.50

CoCoRaHS inclusion in this table is based on a complete 31-day liquid precipitation record. Thank you to all observers!