PUBLISH DATE: MARCH 3, 2025

EASTERN NORTH CAROLINA
MONTHLY CLIMATE REPORT

JANUARY 2025

WEATHER FORECAST OFFICE
NEWPORT/MOREHEAD CITY, NC

National Weather Service
NEWPORT/MOREHEAD CITY, NC

MONTHLY SUMMARY

Drier than average conditions persisted for a second straight month in January, but this time with considerably colder air in place. Eastern NC experienced several quick-hitting systems with generally modest precipitation, but two rounds of winter weather left their mark on the region. The first, around Jan 10-11, brought light freezing rain, snow, and sleet to areas mainly away from the coast. The more prolific was on Jan 21-22 as an average of 2-6" of snow blanketed the region, with some of the highest amounts along the Outer Banks with reports of up to 9". New Bern saw 4.5" of snow, the 9th single snowiest day since Feb 24, 1968 and the 4th snowiest January since 1966. The snow did little to alleviate drought conditions, which steadily expanded in January. Overall precipitation was still 25-75% of normal – around 2" on average.

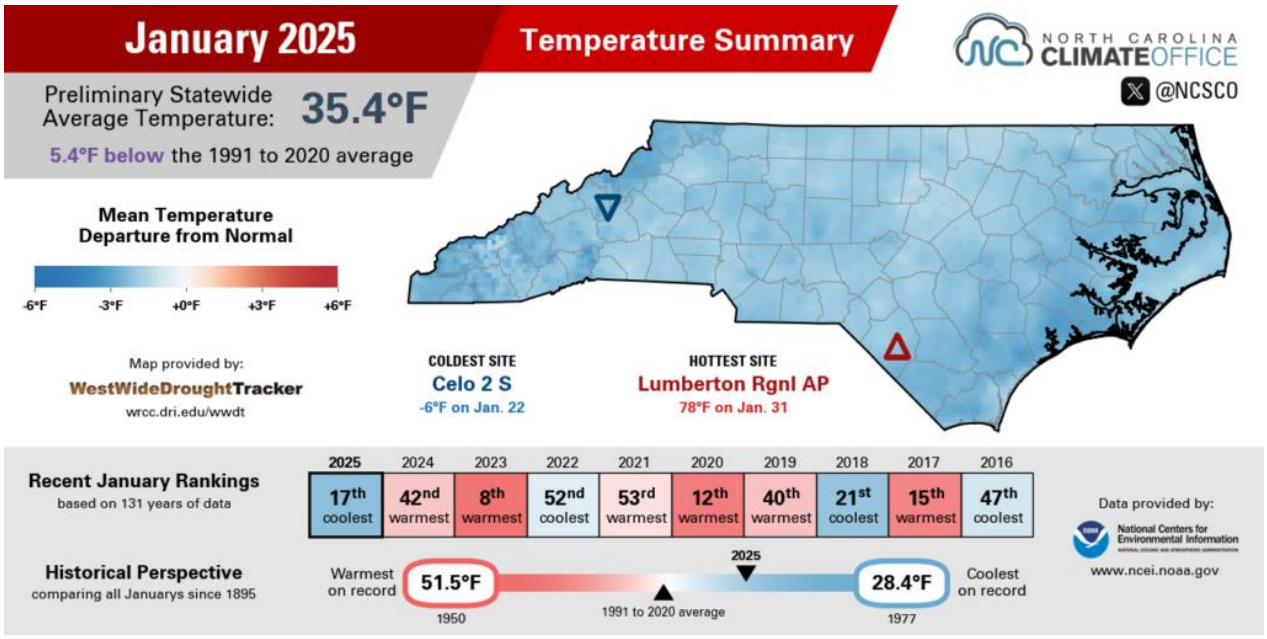
Persistent troughing kept much of the United States under below average temperatures, and eastern North Carolina was no exception. The coldest period, coinciding with the late-month snowstorm, saw temperatures between 9 – 12 degrees below normal. The average temperature across the region was a mere 38.2°, or nearly 6°F below the 1991-2020 climatological normal.

Starting with this report, county average temperature and precipitation anomalies will be based on the 1991-2020 normals instead of the 20th century average.

A summary of the Jan 21-22 snowstorm can be found on our Significant Event Review page.

TEMPERATURES

After a mild December, January turned frigid across North Carolina according to the North Carolina State Climate Office. The average temperature statewide for January was 35.4°F or 5.4°F below the 1991-2020 average. This was the 17th coolest January statewide since records began in 1895, with 131 years of data.



January 2025 Temperature Summary | Source: NC State Climate Office

Eastern North Carolina experienced similar anomalies compared to the rest of the state, with temperatures across our 15 counties 5.7°F below the 30-year average. Since their respective records began, January 2025 was the 13th coolest for Cape Hatteras and 8th coolest for New Bern. Additional observations can be found in Appendix A.

MHX Select Site Temperature Statistics: January 2025

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	50.3	34.0	42.1	46.2	-4.1
Hatteras (KHSE)	47.9	34.9	41.4	48.0	-6.6
New Bern (KEWN)	50.0	28.0	39.0	44.5	-5.5

Normals are based on a period from 1990-2020.

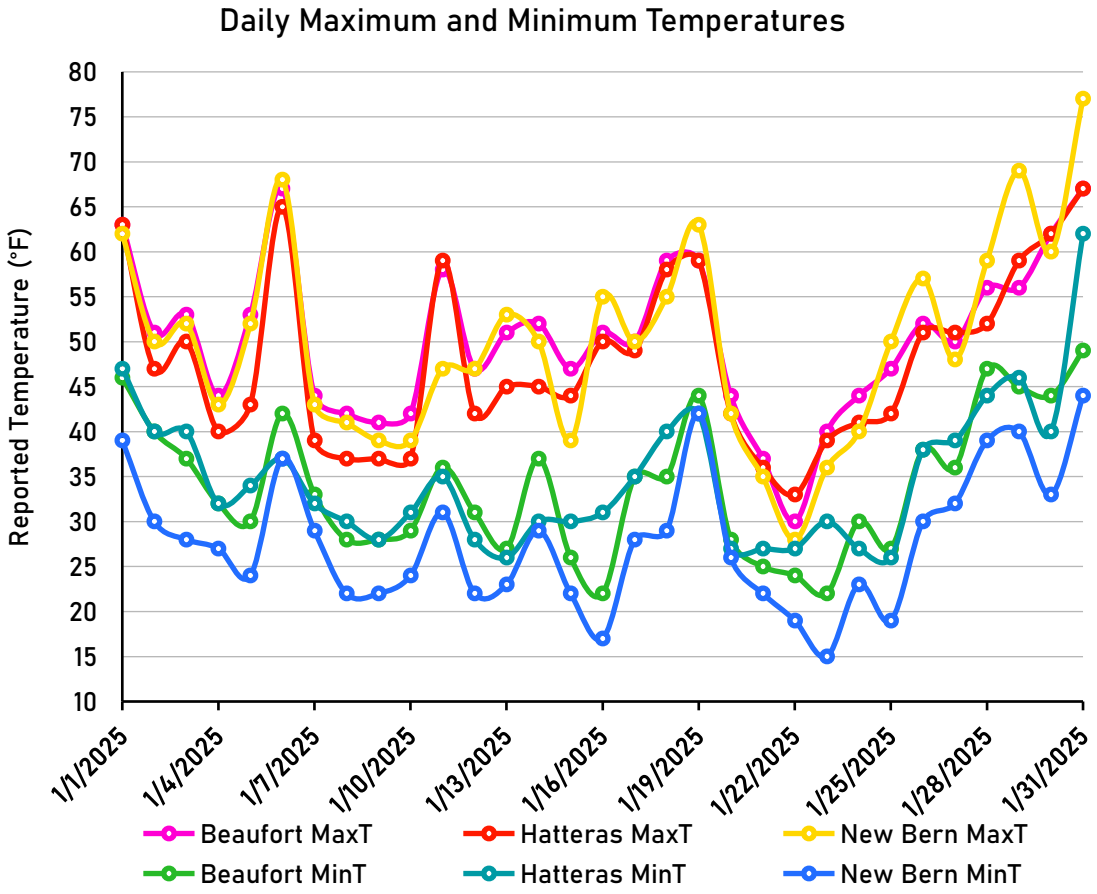
County-averaged statistics are presented in the following table. **Starting with this report, mean and departure calculations are based on the 1991-2020 climate normals.** Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Temperature (°F)	Mean (°F)	Departure (°F)	Rank
Beaufort	38.6	44.0	-5.4	17 C
Carteret	40.5	46.1	-5.6	14 C
Craven	38.7	44.5	-5.8	12 C
Dare	38.8	44.0	-5.2	13 C
Duplin	37.4	43.6	-6.2	8 C
Greene	36.6	42.8	-6.2	11 C
Hyde	39.5	44.8	-5.3	18 C
Jones	38.0	44.1	-6.1	11 C
Lenoir	36.8	43.4	-6.6	10 C
Martin	36.7	42.2	-5.5	14 C
Onslow	38.7	44.8	-6.1	11 C
Pamlico	40.2	45.8	-5.6	18 C
Pitt	37.0	42.8	-5.8	14 C
Tyrrell	38.3	43.5	-5.2	19 C
Washington	37.4	42.9	-5.5	19 C
Area Average	38.2	44.0	-5.7	

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

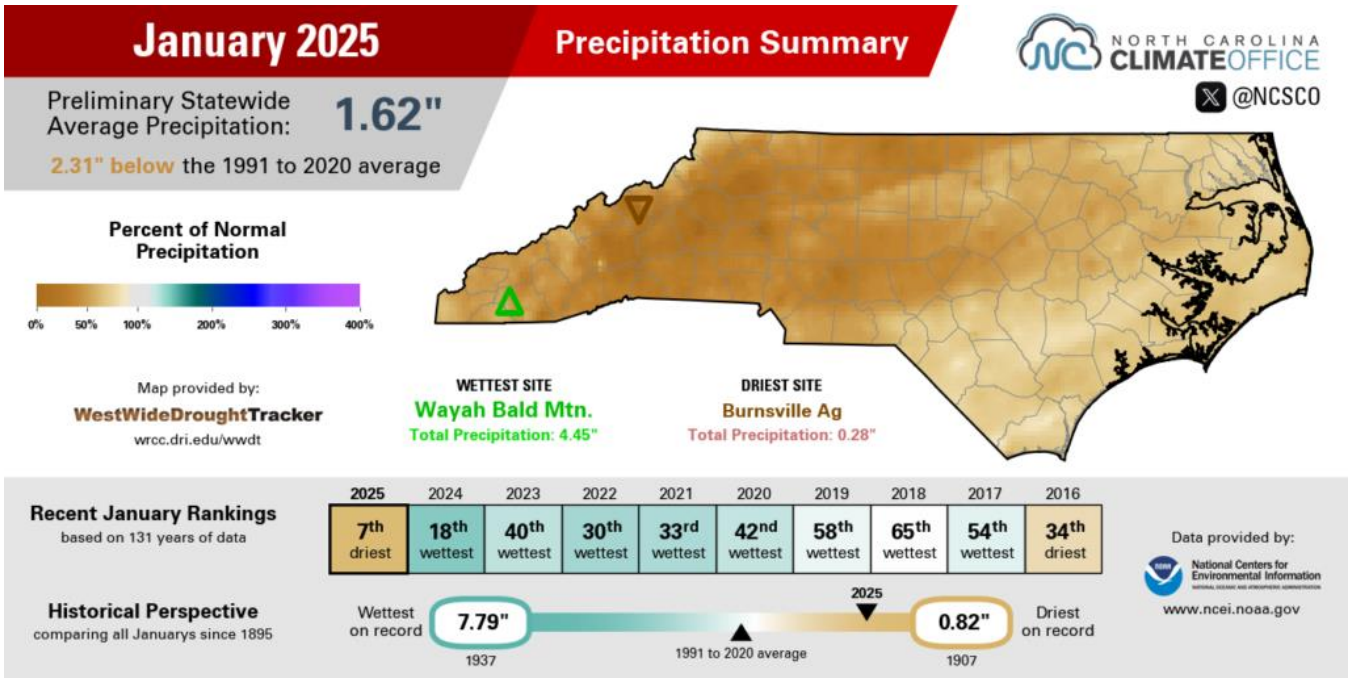
Strong and persistent troughing dominated much of the eastern United States in January, keeping temperatures largely below normal although a few jumps did occur as coastal troughs drifted onshore. For the first two weeks of the month, temperature anomalies across eastern North Carolina ranged from 3-9 degrees below average. The coolest time period, per analysis from NCEI, was Jan 19-26 where temperatures were 9-12 degrees below average and coincided with the region's snowstorm. The coldest

temperatures almost universally occurred on January 23rd thanks to the presence of fresh snowpacks. After the 26th, troughing eased and temperatures were able to steadily rebound – up to 6 degrees above normal.



PRECIPITATION

Analysis conducted by the North Carolina State Climate Office indicated average statewide precipitation was 1.62” for January, or 2.31” inches below average. This ended up being the 7th driest January for the state since records began in 1895.



January 2025 Precipitation Summary | Source: NC State Climate Office

Eastern North Carolina was slightly wetter than the rest of the state but still well below normal for January. Cape Hatteras recorded its 39th driest December, while New Bern experienced its 13th driest. The average accumulation across the MHX forecast area was 1.97”, or 1.96” below the 1991-2020 average. Beaufort and New Bern’s precipitation records were augmented by back-up COOP stations in Morehead City (Jan 21-22) and Perrytown (Jan 10-11, 21-22), respectively, due to equipment failure. Snowfall records were also augmented by Beaufort 5.3 N (Jan 21-23) and Perrytown (Jan 21-22).

MHX Select Site Precipitation Statistics: January 2025

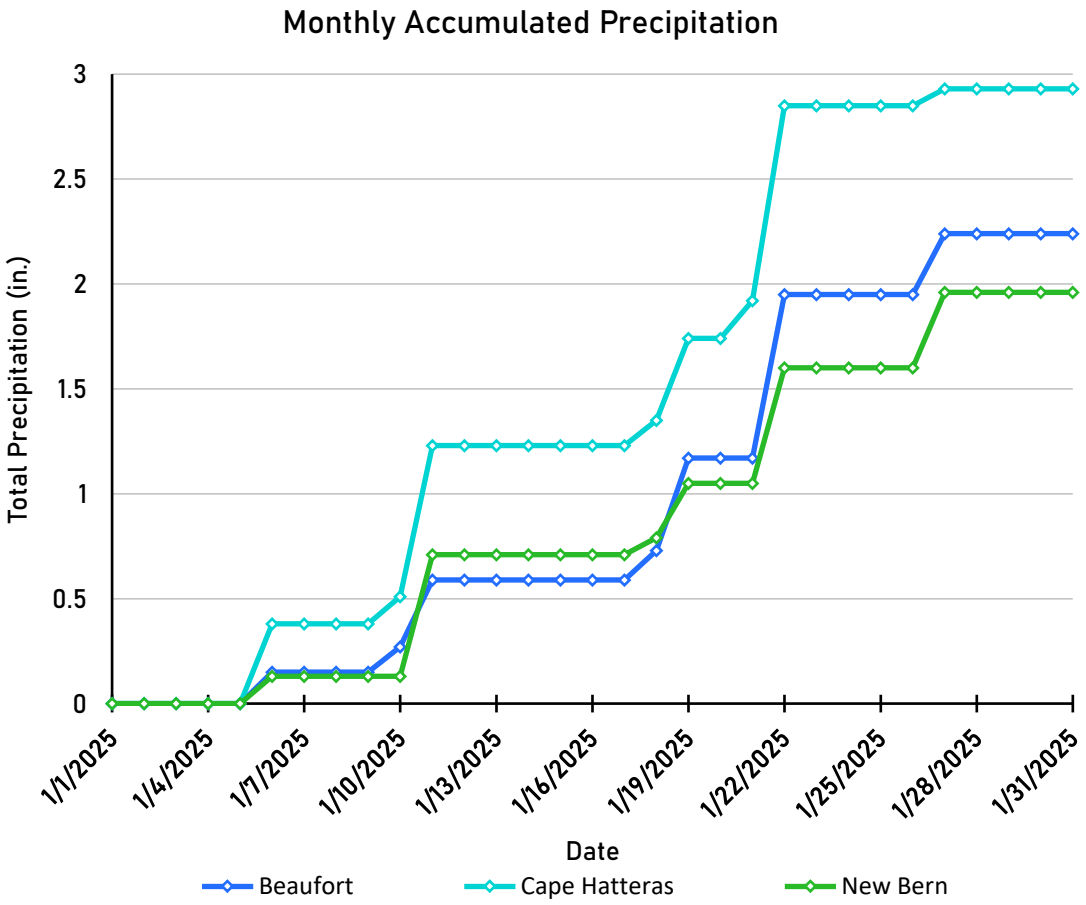
Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	2.24	4.17	-1.93
Hatteras (KHSE)	2.93	4.91	-1.98
New Bern (KEWN)	1.96	3.89	-1.93

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

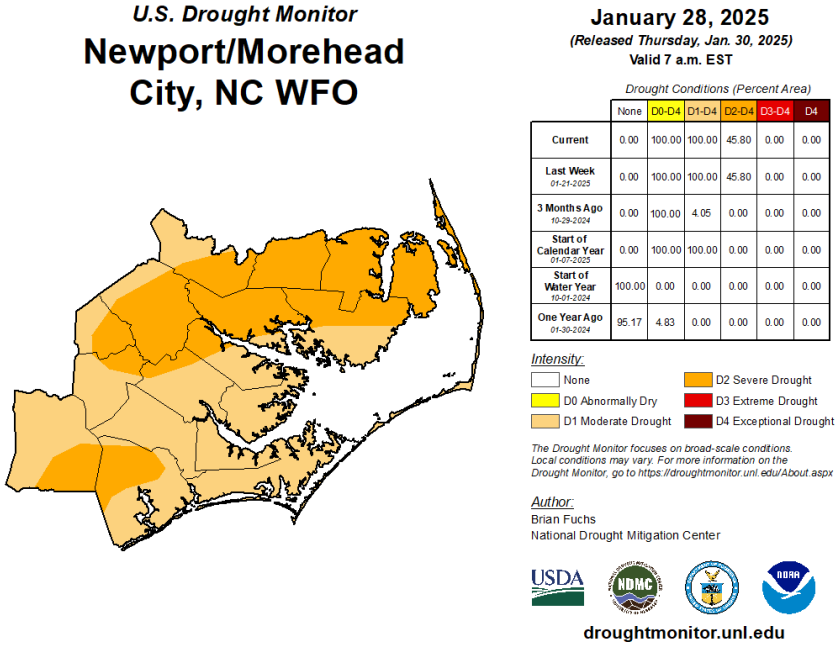
County	Avg. Accum. (in.)	Mean (in.)	Departure (in.)	Rank
Beaufort	1.84	3.88	-2.04	10 D
Carteret	1.68	4.29	-2.61	8 D
Craven	1.55	3.89	-2.34	8 D
Dare	2.52	4.08	-1.56	28 D
Duplin	2.06	3.71	-1.65	22 D
Greene	2.08	3.67	-1.59	21 D
Hyde	2.37	4.29	-1.92	21 D
Jones	1.63	3.86	-2.23	10 D
Lenoir	2.04	3.71	-1.67	20 D
Martin	1.91	3.76	-1.85	17 D
Onslow	1.80	3.96	-2.16	17 D
Pamlico	1.59	4.09	-2.50	9 D
Pitt	2.17	3.73	-1.56	23 D
Tyrrell	2.29	4.08	-1.79	18 D
Washington	1.99	3.94	-1.95	14 D
Area Average	1.97	3.93	-1.96	

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

January across eastern NC brought several quick hitting but generally weak systems every few days, with a few notable exceptions which brought winter weather to the area. The first, on Jan 10-11, brought light ice, snow, and sleet to areas away from the coast. The more notable event, driven by passing low pressure to our south, was the significant snowstorm on Jan 21-22 – see the linked event summary at the beginning of the report. **New Bern** saw its 9th snowiest day on record with **4.5 inches,** tying Feb 24th, 1968. This was also the **4th snowiest January** on record for New Bern, tying Jan. 1966.



Drought conditions, after staying steady in December, further deteriorated in January. By the end of the month, nearly 46% of the forecast area was in Severe (D2) drought while the rest of the region remained in Moderate (D1) drought.



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: January 2025

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	47.5	27.3	37.4	43.1	-5.7
Kinston	47.9	26.9	37.4	45.7	-8.3
Williamston	46.9	26.7	36.8	42.5	-5.7
Plymouth	48.8	26.0	37.4	43.8	-6.4
Bayboro	52.5	30.5	41.5	44.6	-3.1
Manteo	44.3	31.1	37.7	43.1	-5.4

Normals are based on a period from 1990-2020.

Maximum and Minimum Monthly Temperatures: January 2025

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	67	Jan 6, 31	22	Jan 16, 23
Hatteras (KHSE)	67	Jan 31	26	Jan 13, 26
New Bern (KEWN)	77	Jan 31	15	Jan 23
Greenville	75	Jan 31	13	Jan 23
Kinston	71	Jan 1	10	Jan 23
Williamston	71	Jan 1	17	Jan 23
Plymouth	74	Jan 31	14	Jan 23
Bayboro	74	Jan 1	23	Jan 16-17, 25-26
Manteo	66	Jan 1	23	Jan 22

APPENDIX B: ADDITIONAL PRECIPITATION DATA

Cooperative Observation Site Precipitation Statistics: January 2025

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Greenville	2.62	3.91	-1.29
Kinston	2.23	3.74	-1.51
Williamston	1.31	3.69	-2.38
Plymouth	1.77	3.95	-2.18
Bayboro	2.25	4.01	-1.76

Sites in red have missing data in their record.

CoCoRaHS Monthly Accumulated Precipitation: January 2025

Site	County	Amount (in.)
Washington 1.0 SSW	Beaufort	1.84
Beaufort 3.8 N	Carteret	2.90
Beaufort 0.5 W	Carteret	2.75
Newport 1.0 N	Carteret	2.69
Cape Carteret 1.5 NE	Carteret	2.63
Beaufort 5.3 N	Carteret	2.48
Newport 7.1 ENE	Carteret	2.40
Morehead City 6.0 WNW	Carteret	2.39
Newport 2.3 SE	Carteret	2.33
Cedar Point 0.9 WSW	Carteret	2.27
Morehead City 0.6 NW	Carteret	2.24

CoCoRaHS Monthly Accumulated Precipitation: January 2025

Site	County	Amount (in.)
Beaufort 12.1 N	Carteret	2.19
Newport 0.2 SW	Carteret	2.14
Cedar Point 0.7 NNE	Carteret	2.14
Cedar Island 0.3 SSE	Carteret	2.10
Trent Woods 1.2 ENE	Craven	2.57
Trent Woods 1.0 NNE	Craven	2.48
Trent Woods 1.3 SSE	Craven	2.20
Trent Woods 1.3 WNW	Craven	2.16
New Bern 5.3 SW	Craven	2.16
New Bern 1.3 NNE	Craven	2.09
Brice Creek 0.9 WNW	Craven	2.08
New Bern 4.2 S	Craven	2.07
Bridgeton 0.3 SSE	Craven	1.96
New Bern 2.9 SSE	Craven	1.67
Manteo 2.8 NW	Dare	2.83
Duck 0.7 SSE	Dare	2.75
Buxton 0.3 ENE	Dare	2.68
Southern Shores 1.9 NNW	Dare	2.60
Southern Shores 0.5 NNE	Dare	2.50
Rodanthe 1.0 SSE	Dare	2.16
Rose Hill 0.1 NNW	Duplin	2.62

CoCoRaHS Monthly Accumulated Precipitation: January 2025

Site	County	Amount (in.)
Mount Olive 2.4 SW	Duplin	1.84
Ocracoke 0.6 SW	Hyde	2.91
SQ Tower	Hyde	2.09
Kinston 4.6 ESE	Lenior	2.32
Kinston 7.0 SW	Lenior	2.32
Kinston 4.4 WNW	Lenior	2.04
Kinston 5.1 WNW	Lenior	2.01
Pink Hill 2.5 NE	Lenior	1.77
Jamesville 6.1 SW	Martin	1.57
Williamston 8.9 SSE	Martin	1.39
Holly Ridge 5.0 E	Onslow	2.60
Jacksonville 1.0 NW	Onslow	2.50
Jacksonville 5.4 WSW	Onslow	2.50
Holly Ridge 3.7 E	Onslow	2.50
Hubert 4.9 SE	Onslow	2.36
Jacksonville 2.4 NNE	Onslow	2.24
Swansboro 2.8 WSW	Onslow	2.10
Swansboro 1.2 NNW	Onslow	2.04
Lowland 0.2 SE	Pamlico	2.21
Oriental 2.1 WSW	Pamlico	2.20
Merritt 1.5 WSW	Pamlico	2.07

CoCoRaHS Monthly Accumulated Precipitation: January 2025

Site	County	Amount (in.)
Oriental 4.3 NNW	Pamlico	1.98
Greenville 7.1 SSE	Pitt	1.95
Greenville 5.7 NW	Pitt	1.74
Winterville 3.5 W	Pitt	1.74
Greenville 5.0 SE	Pitt	1.55
Fountain 0.1 NE	Pitt	1.50
Columbia 0.8 NNE	Tyrell	2.04

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