

PUBLISH DATE: DECEMBER 30, 2023

**EASTERN NORTH CAROLINA
MONTHLY CLIMATE REPORT**

NOVEMBER 2023

**WEATHER FORECAST OFFICE
NEWPORT/MOREHEAD CITY, NC**

National Weather Service

NEWPORT/MOREHEAD CITY, NC

MONTHLY SUMMARY

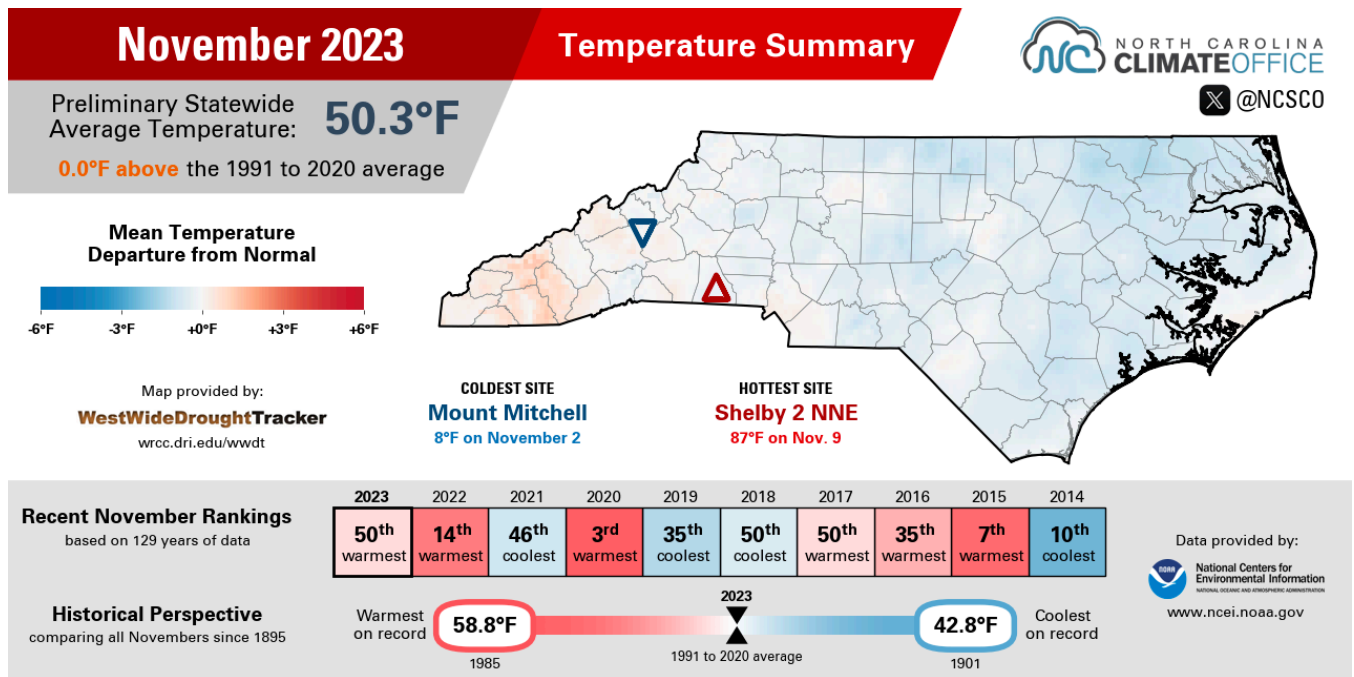
November 2023 continued October's trend of near-average temperatures and below-average precipitation, although eastern North Carolina was a benefactor of a couple of coastal storms that boosted rainfall totals. The most prolific rainfall maker impacted much of NC as well as the East Coast as a strong cold front crossed the area just before Thanksgiving, dropping at least an inch across most of the area (and up to 2+ inches across the Outer Banks). By the end of the month, precipitation totals were 75-100% of normal across the coast but 50-75% of normal inland. Still, this was enough to allow drought conditions to mostly diminish across our area.

Temperatures started on a cool note before giving way to near to slightly above-average readings as anomalously high mid-level heights built over the central United States, resulting in a widespread area of unseasonable warmth across the same area extending across much of the Southeast. Colder air made an abrupt return by month's end, with the season's first freeze occurring just a few days before December.

The December 2023 report will be published around January 30th, 2024.

TEMPERATURES

Temperatures continued to hover near climatological norms across North Carolina in November. The average temperature statewide for the month was 50.3°F, very near the 1991-2020 average. This was the 50th warmest November statewide since records began in 1895, with 129 years of data.



November 2023 Temperature Summary | Source: NC State Climate Office

Across Eastern North Carolina, temperatures were close to or slightly below the statewide average but about a half degree above the 20th-century average. November 2023 was the 39th coolest in New Bern and the 63rd warmest at Cape Hatteras since records began at those respective sites. Additional observations can be found in Appendix A.

MHX Select Site Temperature Statistics: November 2023

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	65.2	47.9	56.6	56.5	0.1
Hatteras (KHSE)	63.3	50.7	57.0	58.7	-1.7

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
New Bern (KEWN)	64.8	43.3	54.1	54.2	-0.2

Normals are based on a period from 1990-2020.

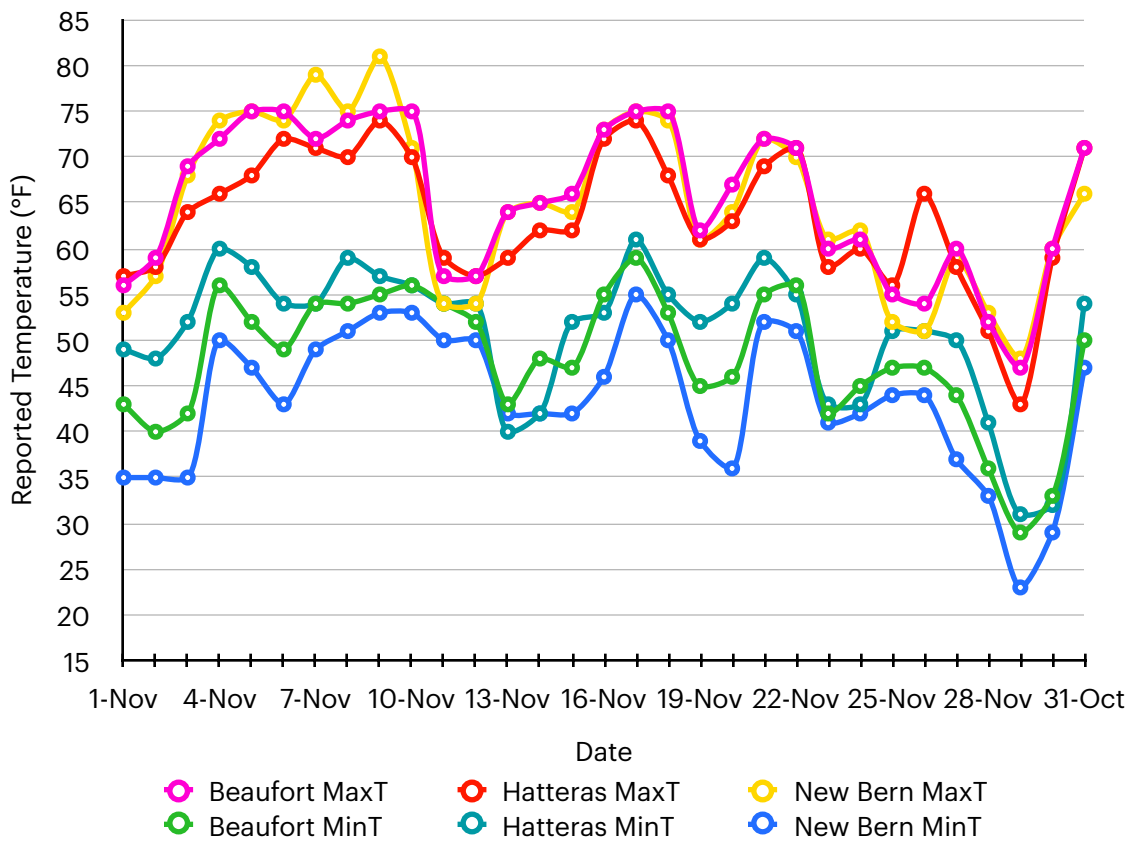
County-averaged statistics are presented in the following table. Note that mean temperature and anomaly calculations are based on a period of 1901-2000, rather than 1990-2020. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Temperature (°F)	Mean (°F)	Departure (°F)	Rank
Beaufort	53.0	52.4	0.6	59 W
Carteret	55.5	54.6	0.9	53 W
Craven	53.5	52.8	0.7	54 W
Dare	55.1	53.7	1.4	44 W
Duplin	52.4	52.2	0.2	58 W
Greene	51.6	51.4	0.2	64 W
Hyde	54.8	53.7	1.1	50 W
Jones	53.2	52.4	0.8	52 W
Lenoir	52.2	51.8	0.4	56 W
Martin	51.4	50.8	0.6	55 W
Onslow	54.0	53.2	0.8	51 W
Pamlico	54.3	53.8	0.5	60 W
Pitt	51.7	51.4	0.3	63 W
Tyrrell	53.6	52.5	1.1	50 W
Washington	52.3	51.5	0.8	54 W
Area Average	53.2	52.5	0.7	

Means are based on a period from 1901-2000. For rankings, "C" designates coldest and "W" designates warmest.

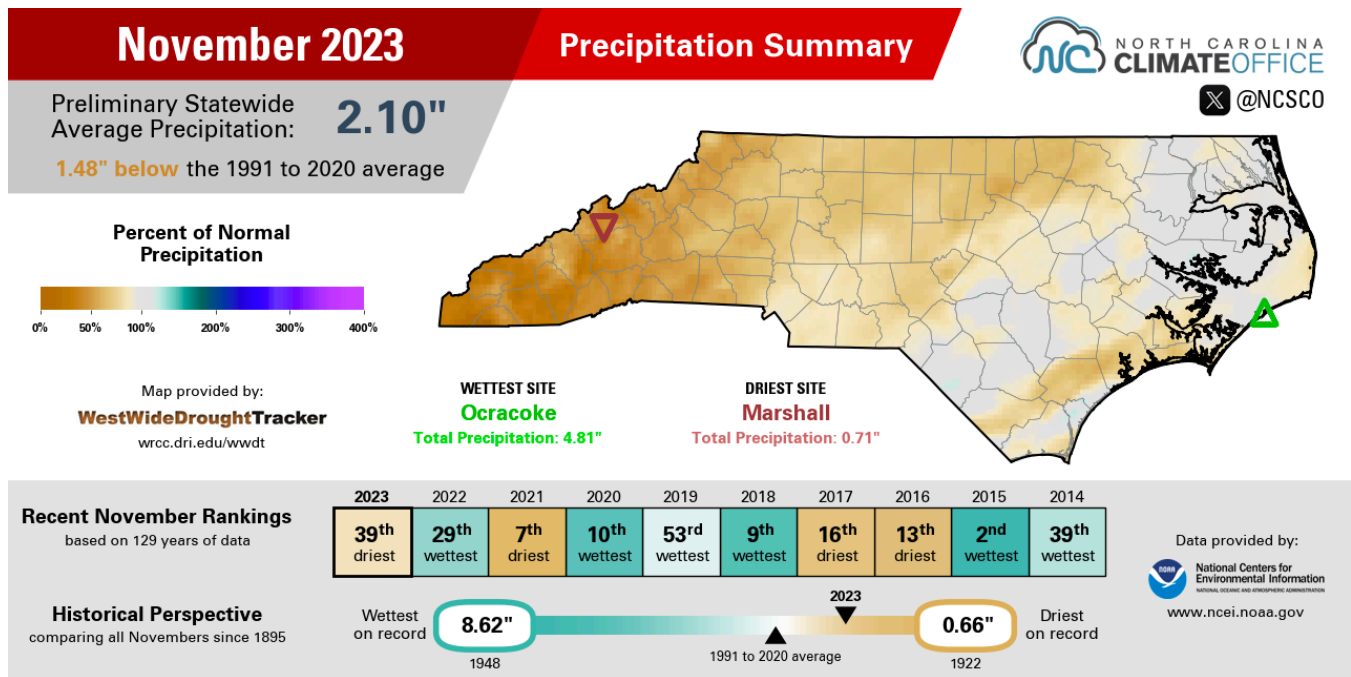
November started off with temperatures running well below average - roughly 6-9 degrees per analysis from the [National Centers for Environmental Information \(NCEI\)](#). Much of the middle of the month saw above-average heights and corresponding high-temperature anomalies across the central U.S. extending eastward, but temperatures across eastern NC averaged near or only slightly above temperatures. November ended on a cooler note than it started, with temperatures plummeting below freezing for the first time this season. **New Bern's** first freeze was late (Nov. 29th, compared to an average first freeze of Nov. 13th), but tied a minimum temperature record of 23 set in 1938.

Daily Maximum and Minimum Temperatures



PRECIPITATION

Analysis conducted by the North Carolina State Climate Office showed much drier than average conditions continued in November. Statewide, precipitation averaged 2.10", or 1.48" below the 30-year average. This was the 39th driest November for the state since records began in 1895.



November 2023 Precipitation Summary | Source: NC State Climate Office

Eastern North Carolina was wetter than the rest of the state owing to a couple of coastal storm systems. Cape Hatteras recorded its 48th wettest November on record, while New Bern recorded its 26th driest. Due to equipment issues, **Beaufort's** rainfall total relied entirely on readings from a COOP site in Morehead City.

MHX Select Site Precipitation Statistics: November 2023

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	2.83	3.99	-1.16
Hatteras (KHSE)	4.56	4.76	-0.2
New Bern (KEWN)	1.89	3.33	-1.44

County-averaged statistics are presented in the following table. Like temperatures, mean and anomaly precipitation calculations are based on a period 1901-2000. Data courtesy of the National Centers for Environmental Information (NCEI).

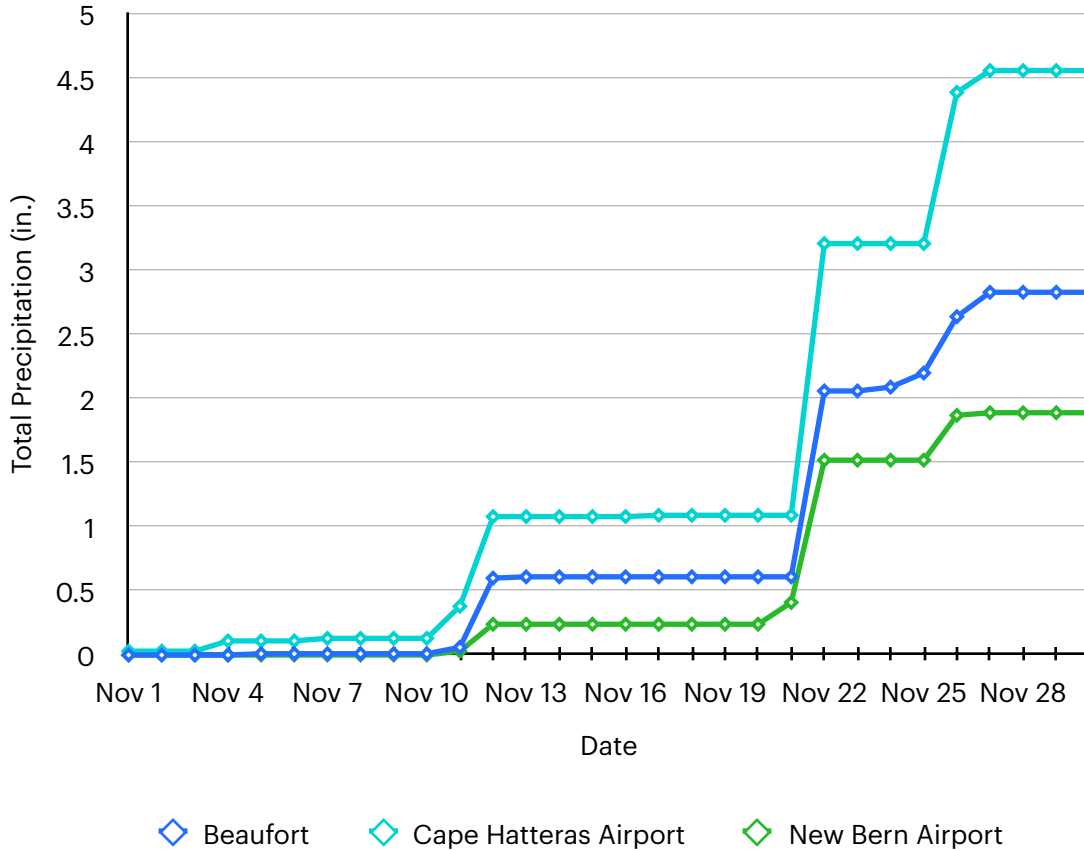
County	Avg. Accum. (in.)	Mean (in.)	Departure (in.)	Rank
Beaufort	2.27	2.98	-0.71	51 D
Carteret	3.29	3.40	-0.11	71 D
Craven	2.24	3.00	-0.76	46 D
Dare	3.42	3.40	0.02	74 D
Duplin	2.37	2.73	-0.36	58 D
Greene	2.30	2.82	-0.52	55 D
Hyde	3.22	3.32	-0.1	65 D
Jones	1.99	2.88	-0.89	41 D
Lenoir	2.14	2.79	-0.65	50 D
Martin	1.76	2.82	-1.06	39 D
Onslow	2.14	2.95	-0.81	45 D
Pamlico	2.73	3.19	-0.46	62 D
Pitt	2.23	2.78	-0.55	53 D
Tyrrell	2.94	3.15	-0.21	64 D
Washington	2.57	3.00	-0.43	59 D
Area Average	2.51	3.01	-0.51	

Means are based on a period from 1901-2000. For rankings, “W” designates wettest and “D” designates driest.

Hardly any precipitation fell during the first third of November, although a weak coastal low managed to spread some light rainfall across much of the area on Veteran’s Day. The heaviest rainfall came on November 22-23 as a strong cold front pushed across the eastern U.S. Several CoCoRaHS gauges along the Crystal Coast recorded around 1.5” of rain; Hatteras Airport recorded 2.12.” A second coastal low late in the month padded

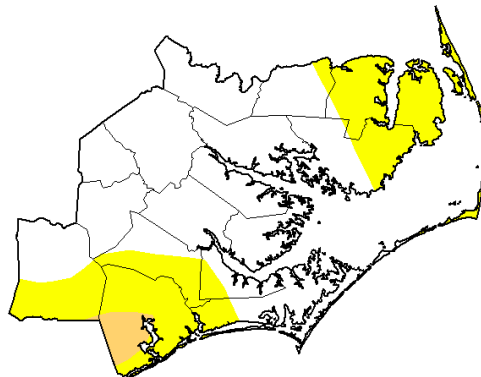
rainfall totals, but precipitation was still between 50-75% normal across the coastal plain and near normal along the Outer Banks.

Monthly Accumulated Precipitation



Despite slightly below average rainfall, drought conditions mostly improved compared to the end of October. The exception was across Onslow County where drought conditions worsened slightly to D1 (Moderate Drought).

U.S. Drought Monitor Newport/Morehead City, NC WFO



November 28, 2023
(Released Thursday, Nov. 30, 2023)
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	66.53	33.47	2.56	0.00	0.00	0.00
Last Week 11-21-2023	26.60	73.40	26.50	0.00	0.00	0.00
3 Months Ago 08-29-2023	12.10	87.90	28.19	0.00	0.00	0.00
Start of Calendar Year 01-03-2023	0.00	100.00	63.79	0.00	0.00	0.00
Start of Water Year 09-26-2023	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 11-29-2022	14.12	85.88	42.73	0.00	0.00	0.00

Intensity
 None (White) D2 Severe Drought (Orange)
 D0 Abnormally Dry (Yellow) D3 Extreme Drought (Red)
 D1 Moderate Drought (Light Orange) D4 Exceptional Drought (Dark Red)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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Western Regional Climate Center



droughtmonitor.unl.edu

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=mxh>

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: November 2023

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	61.8	39.3	50.6	52.7	-2.2
Kinston	63.8	40.7	52.3	55.2	-3.0
Williamston	63.0	40.6	51.8	52.7	-0.9
Plymouth	63.7	41.9	52.8	53.3	-0.5
Bayboro	64.7	42.1	53.4	53.3	0.1
Manteo	64.0	48.8	56.4	54.5	1.9

Normals are based on a period from 1990-2020. Sites in red have missing data.

Maximum and Minimum Monthly Temperatures: November 2023

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	75	Nov 5-6, 9-10, 17-18	29	Nov 29
Hatteras (KHSE)	74	Nov 9, 17	31	Nov 29
New Bern (KEWN)	81	Nov 9	23	Nov 29
Greenville	77	Nov 7, 9	22	Nov 29
Kinston	81	Nov 10	23	Nov 29
Williamston	80	Nov 10	22	Nov 29
Plymouth	85	Nov 17	23	Nov 29
Bayboro	81	Nov 10	26	Nov 30
Manteo	81	Nov 1	40	Nov 20,22

APPENDIX B: ADDITIONAL PRECIPITATION DATA

Cooperative Observation Site Precipitation Statistics: November 2023

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Greenville	2.73	3.42	-0.69
Kinston	2.29	3.46	-1.17
Williamston	2.54	3.39	-0.85
Plymouth	3.31	3.57	-0.26
Bayboro	2.60	3.93	-1.33

Sites in red have missing data in their record.

CoCoRaHS Monthly Accumulated Precipitation: November 2023

Site	County	Amount (in.)
Pantego 0.4 WSW	Beaufort	3.90
Bath 0.7 N	Beaufort	3.14
Cedar Island 0.3 SSE	Carteret	3.21
Beaufort 0.5 W	Carteret	3.20
Beaufort 12.1 N	Carteret	3.18
Atlantic Beach 0.6 W	Carteret	3.07
Beaufort 3.8 N	Carteret	3.03
Newport 1.0 N	Carteret	2.94
Beaufort 5.3 N	Carteret	2.81
Swansboro 2.7 NE	Carteret	2.79
Newport 0.2 SW	Carteret	2.78

Site	County	Amount (in.)
Morehead City 2.9 WNW	Carteret	2.78
Newport 2.5 W	Carteret	2.75
Cape Carteret 1.5 NE	Carteret	2.73
Swansboro 3.7 NNE	Carteret	2.72
Pine Knoll Shores 1.4 E	Carteret	2.72
Cedar Point 0.9 WSW	Carteret	2.66
Pine Knoll Shores 0.3 NE	Carteret	2.65
Newport 1.7 SSE	Carteret	2.62
Emerald Isle 2.3 WSW	Carteret	2.58
Cedar Point 0.7 NNE	Carteret	2.51
Morehead City 0.6 NW	Carteret	2.39
Morehead City 6.0 WNW	Carteret	1.93
River Bend 0.8 ENE	Craven	2.49
New Bern 1.3 NNE	Craven	2.44
New Bern 7.3 ESE	Craven	2.35
Trent Woods 1.2 ENE	Craven	2.33
Trent Woods 0.9 WNW	Craven	2.28
Trent Woods 1.0 NNE	Craven	2.21
Trent Woods 1.3 SSE	Craven	2.17
New Bern 3.8 S	Craven	2.16
New Bern 5.2 SE	Craven	1.74
Manteo 2.8 NW	Dare	3.82
Southern Shores 1.9 NNW	Dare	3.36

Site	County	Amount (in.)
Southern Shores 0.5 NNE	Dare	3.07
Rodanthe 1.0 SSE	Dare	2.76
Rose Hill 0.1 NNW	Duplin	3.19
Albertson 1.2 WNW	Duplin	3.18
Ayden 6.5 WNW	Greene	2.79
Ocracoke 0.2 ESE	Hyde	4.93
Ocracoke 0.6 SW	Hyde	4.84
Engelhard 0.8 W	Hyde	3.56
SQ Tower	Hyde	3.52
Kinston 4.4 WNW	Lenoir	2.83
Kinston 7.0 SW	Lenoir	2.55
Kinston 1.2 NW	Lenoir	2.47
Kinston 4.7 ESE	Lenoir	2.42
Kinston 5.1 WNW	Lenoir	2.32
Pink Hill 2.5 NE	Lenoir	2.25
Jamesville 6.1 SW	Martin	3.22
Williamston 8.9 SSE	Martin	2.74
Holly Ridge 9.0 ENE	Onslow	3.70
Holly Ridge 3.7 E	Onslow	3.61
Sneads Ferry 3.3 SW	Onslow	3.26
Swansboro 2.8 WSW	Onslow	2.74
Jacksonville 1.0 NW	Onslow	1.74
Jacksonville 5.4 WSW	Onslow	1.67

Site	County	Amount (in.)
Jacksonville 2.4 NNE	Onslow	1.64
Lowland 0.2 SE	Pamlico	2.93
Oriental 2.1 WSW	Pamlico	2.74
Merritt 1.5 WSW	Pamlico	2.55
Oriental 4.3 NNW	Pamlico	2.40
Oriental 1.9 WSW	Pamlico	2.35
Greenville 5.7 NW	Pitt	3.37
Fountain 0.1 NE	Pitt	3.19
Greenville 7.1 SSE	Pitt	2.83
Winterville 3.5 W	Pitt	2.77
Winterville 2.8 WNW	Pitt	2.73
Greenville 5.0 SE	Pitt	2.49
Greenville 4.4 SSE	Pitt	2.44
Winterville 1.0 ENE	Pitt	2.42

CoCoRaHS inclusion in this table is based on a complete 30-day liquid precipitation record. Thank you to all observers!