

PUBLISH DATE: JUNE 2, 2024

**EASTERN NORTH CAROLINA
MONTHLY CLIMATE REPORT**

**APRIL
2024**

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

National Weather Service

NEWPORT/MOREHEAD CITY, NC

MONTHLY SUMMARY

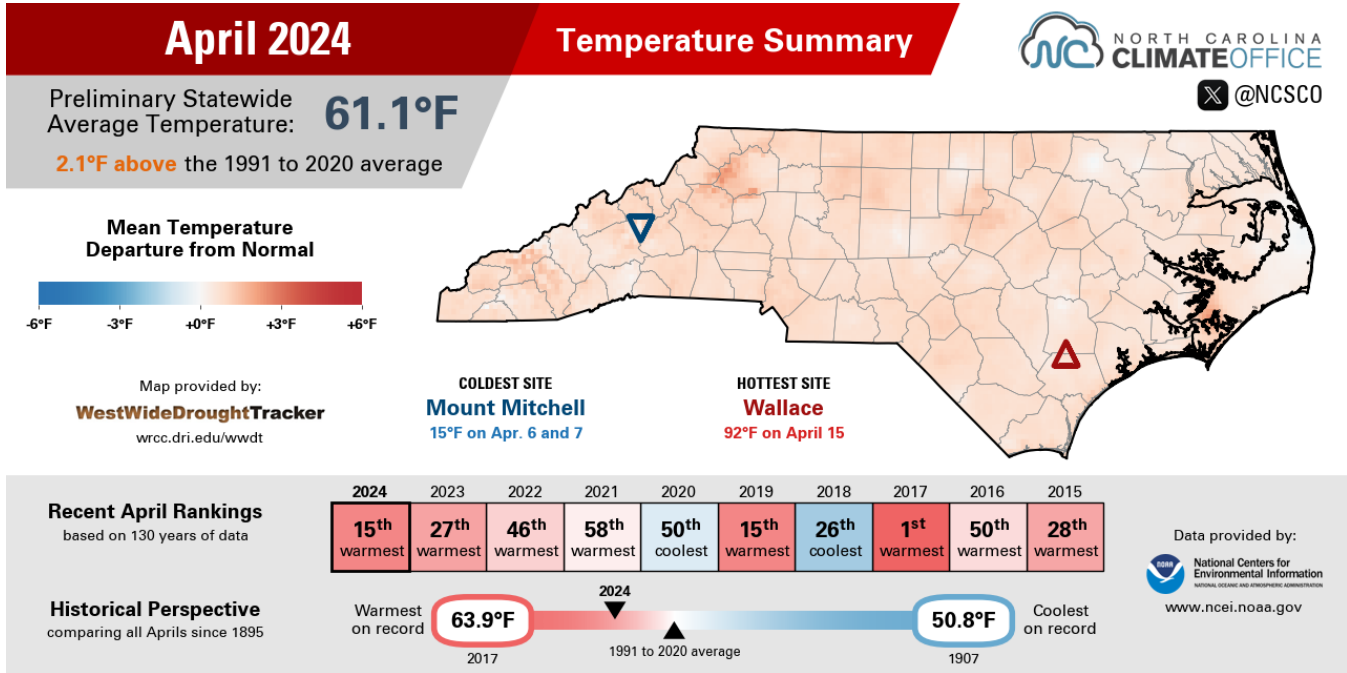
After the deluge of precipitation in March, April returned to a more familiar drier-than-average pattern. Like the prior month, the precipitation gradient was stark, with the highest amounts along the Crystal Coast and lowest amounts focused closer to the Virginia border. In the driest spots, precipitation was a mere 25-50% of normal—for Tyrell, Washington, and Martin counties, this April ranked among the top five driest since records began. Along the Crystal Coast, amounts were 50-75% of normal. Areawide, the average precipitation was 1.56”.

Above-average temperatures were unrelenting in April, although not as high as in March. The warmest temperatures occurred in the middle of April, with more near-average temperatures on either end owing to a progressive pattern of troughing and ridging crossing the region. Overall temperatures were within 3 degrees of average, with an areawide average temperature of 62.4°F. Wallace was the warmest spot in the state, hitting 92°F on April 15th.

The June 2024 report will be published around July 30th, 2024.

TEMPERATURES

Above-average temperatures did not relent across North Carolina in April. The average temperature for the month was 61.1°F, or 2.1°F above the 1991-2020 average. This was the 15th warmest April since records began in 1895, with 130 years of data.



April 2024 Temperature Summary | Source: NC State Climate Office

Across Eastern North Carolina, temperatures were near the statewide average and about 2.6 degrees above the 20th-century average. Since their respective records began, April 2024 was the 24th warmest at New Bern and the 31st warmest at Cape Hatteras. Additional observations can be found in Appendix A.

MHX Select Site Temperature Statistics: April 2024

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	71.8	57.5	64.7	62.1	2.6
Hatteras (KHSE)	67.5	55.2	61.4	61.8	-0.5

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
New Bern (KEWN)	75.3	52.2	63.8	61.8	2.0

Normals are based on a period from 1990-2020.

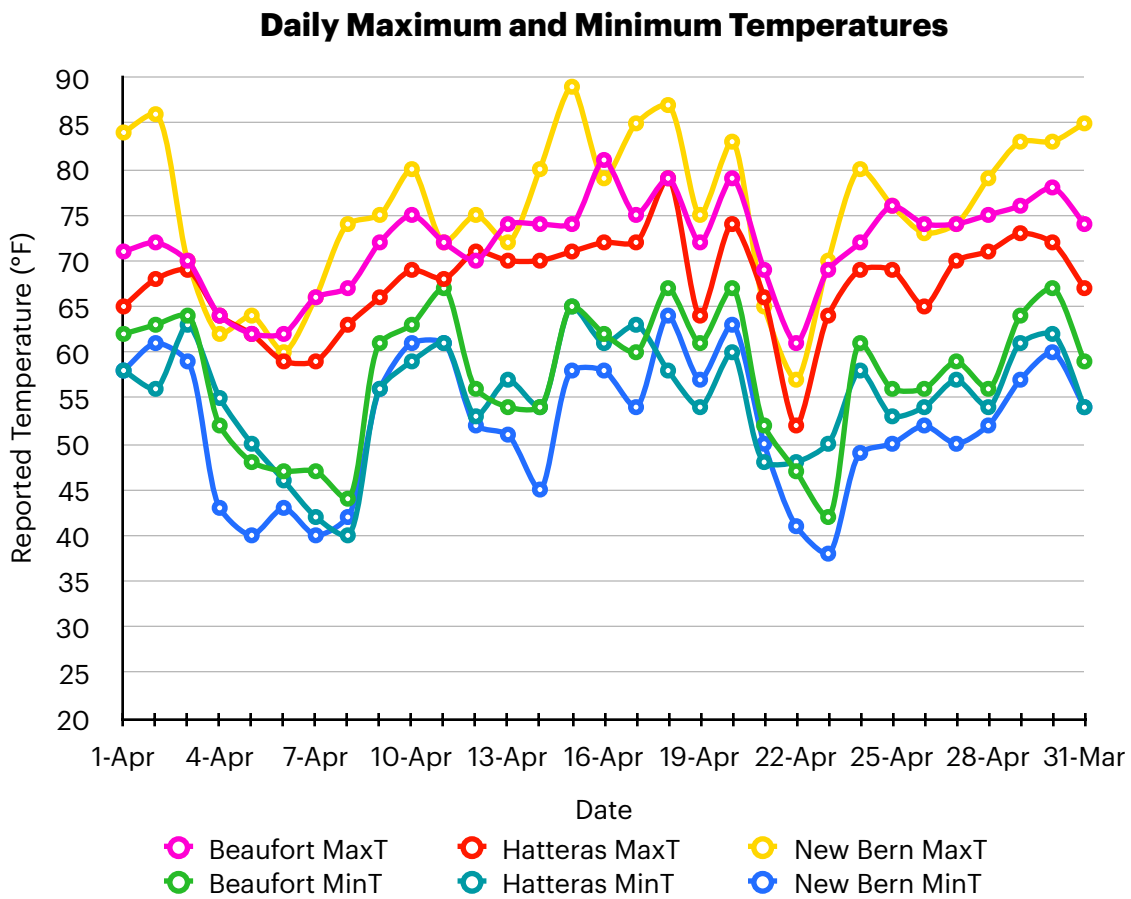
County-averaged statistics are presented in the following table. Note that mean temperature and anomaly calculations are based on a period of 1901-2000, rather than 1990-2020. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Temperature (°F)	Mean (°F)	Departure (°F)	Rank
Beaufort	62.8	59.9	2.9	20 W
Carteret	62.8	60.5	2.3	25 W
Craven	62.7	60.1	2.6	23 W
Dare	61.5	58.7	2.8	22 W
Duplin	62.5	60.3	2.2	27 W
Greene	62.3	59.8	2.5	22 W
Hyde	62.4	59.9	2.5	22 W
Jones	62.4	60.0	2.4	27 W
Lenoir	61.9	60.0	1.9	33 W
Martin	62.4	58.9	3.5	15 W
Onslow	62.9	60.6	2.3	25 W
Pamlico	62.8	60.5	2.3	28 W
Pitt	62.6	59.7	2.9	20 W
Tyrrell	62.1	59.0	3.1	19 W
Washington	62.3	58.9	3.4	17 W
Area Average	62.4	59.8	2.6	

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

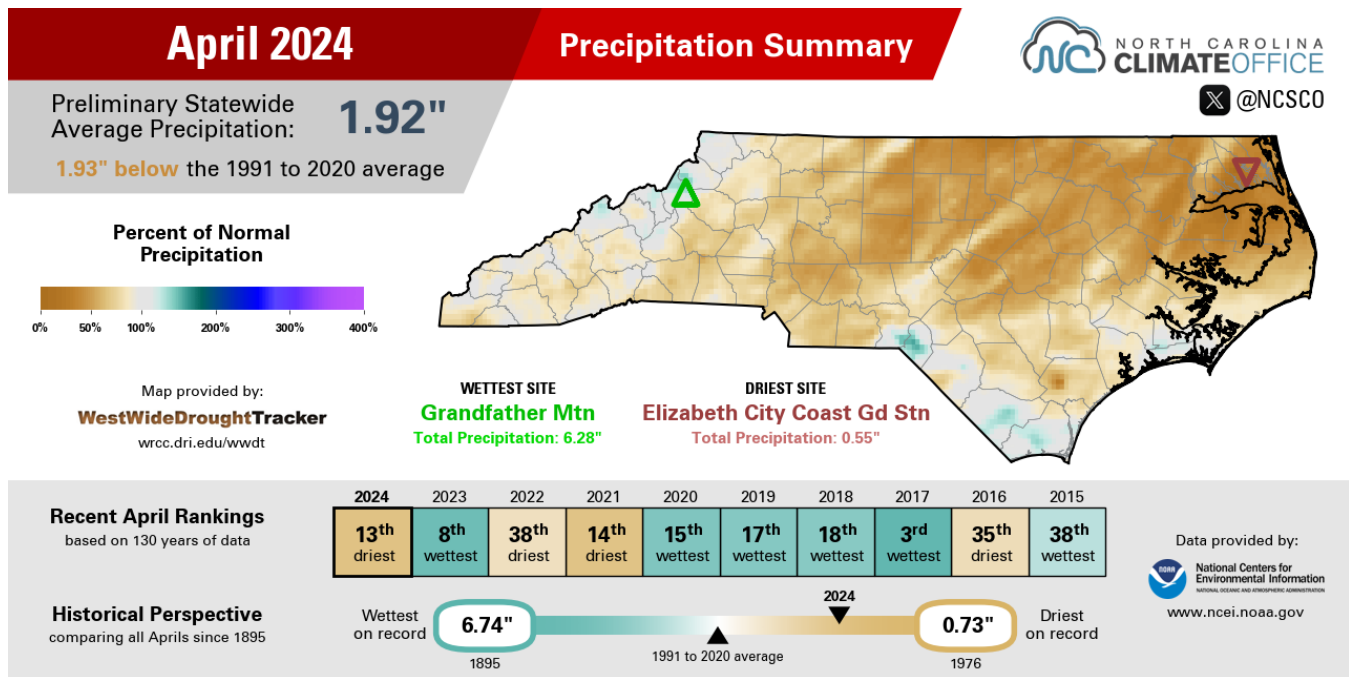
Temperatures were warmest in mid-April as sub-tropical ridging expanded over the Gulf of Mexico and the southeastern United States. The bookends of the month were marked by a progressive pattern of troughing and ridging, preventing more dominant warm or cold streaks from taking hold. Analysis from the National Centers for Environmental Information (NCEI) showed an average temperature departure of within 3 degrees above average area-wide, considered above average for the period. Mid-April saw average temperature departures of 3-6 degrees above average. No temperature records were set at New Bern or Cape Hatteras.

Wallace in Duplin County was the warmest location in the state, recording a high of 92°F on April 15th.



PRECIPITATION

Analysis conducted by the North Carolina State Climate Office showed primarily below-average precipitation across North Carolina in April. Statewide, precipitation averaged 1.92", or 1.93" below the 30-year average. This was the 13th driest April for the state since records began in 1895.



April 2024 Precipitation Summary | Source: NC State Climate Office

Eastern North Carolina was generally drier than the rest of the state, with the driest spots across the north but near-average amounts along the southern coast. New Bern recorded its 27th driest April, while Cape Hatteras recorded its 24th. Seven CWA counties saw a top ten driest April since tracking began in 1895.

MHX Select Site Precipitation Statistics: April 2024

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	2.66	3.39	-0.73
Hatteras (KHSE)	1.77	3.92	-2.15
New Bern (KEWN)	2.18	3.18	-1

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).

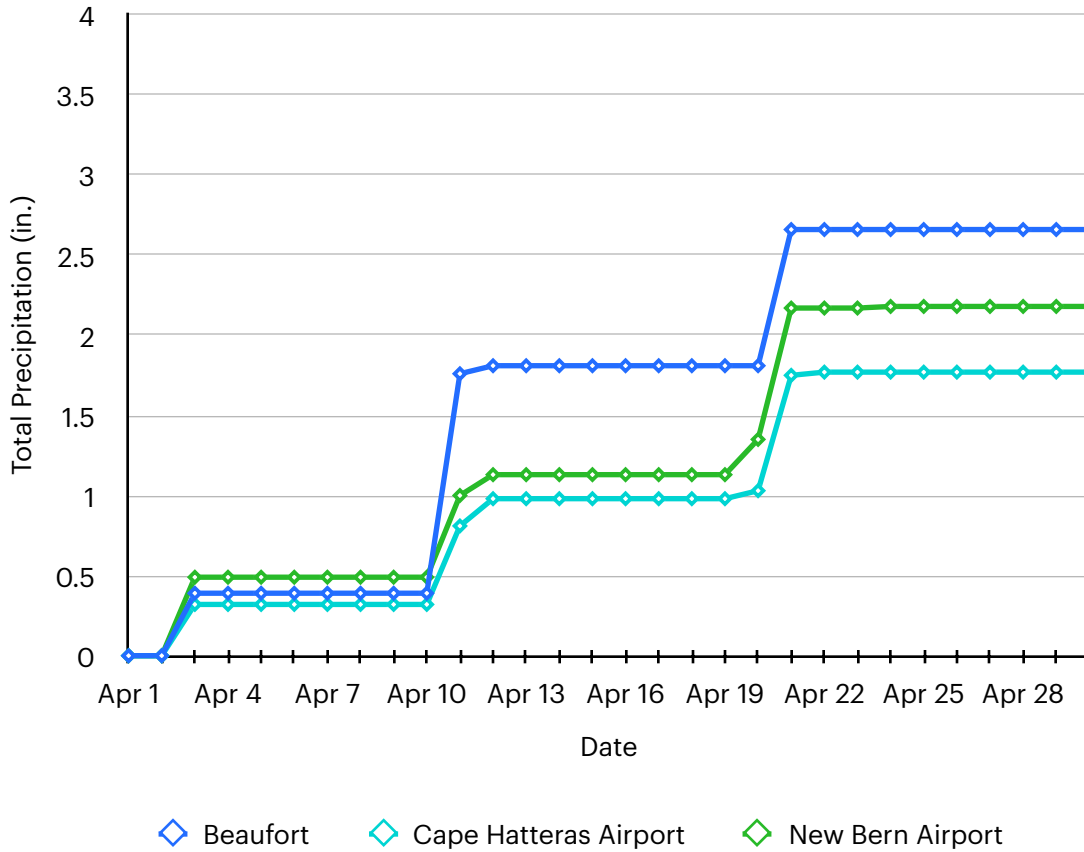
County	Avg. Accum. (in.)	Mean (in.)	Departure (in.)	Rank
Beaufort	1.32	3.34	-2.02	10 D
Carteret	2.35	3.19	-0.84	39 D
Craven	1.92	3.21	-1.29	24 D
Dare	1.15	3.26	-2.11	8 D
Duplin	2.01	3.08	-1.07	30 D
Greene	1.15	3.38	-2.23	8 D
Hyde	1.46	3.37	-1.91	11 D
Jones	2.08	3.16	-1.08	28 D
Lenoir	1.46	3.31	-1.85	15 D
Martin	0.97	3.40	-2.43	5 D
Onslow	2.63	3.01	-0.38	56 D
Pamlico	1.98	3.28	-1.3	26 D
Pitt	1.15	3.38	-2.23	7 D
Tyrrell	0.94	3.34	-2.4	3 D
Washington	0.89	3.38	-2.49	4 D
Area Average	1.56	3.27	-1.71	

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

Precipitation fell in three waves. The first was associated with a weak area of low pressure lifting across the Carolinas on April 3rd, followed by a much stronger front and associated complex low pressure on April 10-11th, and then finally a stalled frontal boundary and waves of low pressure migrating along it on April 20-21st. Areas along the Crystal Coast saw the highest rainfall totals, and ended the month at 50-75% of average amounts. North of Highway 70, totals were 25-50% of average - considered much below average.

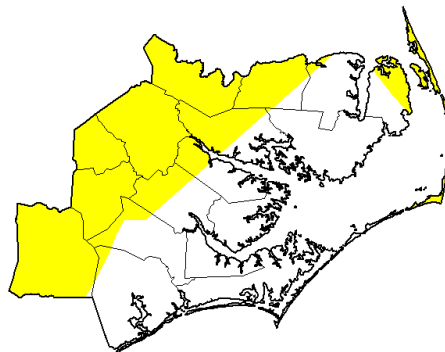
No precipitation records were set in New Bern or Cape Hatteras in April.

Monthly Accumulated Precipitation



Drought conditions expanded slightly from the end of March, although moderate drought conditions over the coastal plain were eliminated. Overall, nearly half of eastern North Carolina was in D1 conditions by the end of April - classified as Abnormally Dry.

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



May 7, 2024
(Released Thursday, May 9, 2024)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D1	D1-D2	D2-D3	D3-D4	D4
Current	51.17	48.83	0.00	0.00	0.00	0.00
Last Week 04-30-2024	53.74	46.26	0.00	0.00	0.00	0.00
3 Months Ago 02-06-2024	95.17	4.83	0.00	0.00	0.00	0.00
Start of Calendar Year 01-01-2024	96.09	3.91	0.00	0.00	0.00	0.00
Start of Water Year 09-30-2023	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 05-09-2023	100.00	0.00	0.00	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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National Drought Mitigation 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=mrj>

APPENDIX A: ADDITIONAL TEMPERATURE DATA

Cooperative Observation Site Temperature Statistics: April 2024

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	75.0	52.4	63.7	61.8	1.9
Kinston	75.0	51.6	63.3	63.4	-0.1
Williamston	73.9	51.4	62.7	60.8	1.9
Plymouth	74.5	51.1	62.8	61.6	1.2
Bayboro	73.9	50.7	62.3	60.2	2.1
Manteo	68.3	51.6	60.0	59.6	0.4

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

Maximum and Minimum Monthly Temperatures: April 2024

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	81	Apr 16	42	Apr 23
Hatteras (KHSE)	79	Apr 18	40	Apr 8
New Bern (KEWN)	89	Apr 15	38	Apr 23
Greenville	88	Apr 15	38	Apr 23
Kinston	88	Apr 16	37	Apr 23
Williamston	88	Apr 16	37	Apr 23
Plymouth	87	Apr 15-16	36	Apr 23
Bayboro	87	Apr 16	38	Apr 23-24
Manteo	81	Apr 30	41	Apr 24, 29

APPENDIX B: ADDITIONAL PRECIPITATION DATA

Cooperative Observation Site Precipitation Statistics: April 2024

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Greenville	1.16	3.81	-2.65
Kinston	1.30	3.53	-2.23
Williamston	0.83	3.72	-2.89
Plymouth	0.84	3.74	-2.9
Bayboro	2.09	3.76	-1.67

Sites in red have missing data in their record.

CoCoRaHS Monthly Accumulated Precipitation: April 2024

Site	County	Amount (in.)
Bath 1.6 SSE	Beaufort	3.23
Pantego 0.4 WSW	Beaufort	1.01
Beaufort 5.3 N	Carteret	3.46
Newport 1.0 N	Carteret	3.36
Cape Carteret 1.5 NE	Carteret	3.23
Newport 2.5 W	Carteret	3.09
Pine Knoll Shores 1.4 E	Carteret	3.03
Emerald Isle 2.3 WSW	Carteret	2.93
Swansboro 3.7 NNE	Carteret	2.88
Beaufort 3.8 N	Carteret	2.83
Newport 0.2 SW	Carteret	2.79

Site	County	Amount (in.)
Pine Knoll Shores 0.3 NE	Carteret	2.72
Cedar Point 0.7 NNE	Carteret	2.69
Cedar Point 0.4 WSW	Carteret	2.68
Beaufort 0.5 W	Carteret	2.65
Cedar Island 0.3 SSE	Carteret	2.64
Newport 2.3 SE	Carteret	2.44
Cedar Point 0.9 WSW	Carteret	2.38
Morehead City 6.0 WNW	Carteret	2.34
Morehead City 2.9 WNW	Carteret	2.31
Newport 1.7 SSE	Carteret	2.31
Indian Beach 0.0 W	Carteret	2.06
New Bern 3.8 S	Craven	2.43
Trent Woods 1.3 SSE	Craven	2.41
New Bern 1.3 NNE	Craven	2.30
New Bern 7.3 ESE	Craven	2.25
New Bern 2.6 SW	Craven	2.17
Bridgeton 0.3 SSE	Craven	2.02
New Bern 5.3 SW	Craven	1.82
Rodanthe 1.0 SSE	Dare	1.48
Manteo 2.8 NW	Dare	1.03
Southern Shores 0.5 NNE	Dare	0.92
Rose Hill 0.1 NNW	Duplin	1.75
Wallace 14.8 E	Duplin	1.68

Site	County	Amount (in.)
Snow Hill 3.1 NNE	Greene	2.76
Ayden 6.5 WNW	Greene	1.62
Ocracoke 0.6 SW	Hyde	2.46
Eglehard 0.8 NW	Hyde	1.27
Pink Hill 2.5 NE	Lenoir	2.31
Kinston 7.0 SW	Lenoir	1.76
Kinston 4.6 ESE	Lenoir	1.41
Kinston 5.1 WNW	Lenoir	1.35
Kinston 4.4 WNW	Lenoir	1.34
Kinston 1.2 NW	Lenoir	1.18
Williamston 8.9 SSE	Martin	0.85
Swansboro 2.8 WSW	Onslow	2.95
Hubert 4.9 SE	Onslow	2.90
Jacksonville 5.4 WSW	Onslow	2.66
Sneads Ferry 3.3 SW	Onslow	2.25
Jacksonville 2.4 NNE	Onslow	2.21
Jacksonville 3.3 W	Onslow	2.16
Holly Ridge 9.0 ENE	Onslow	1.98
Jacksonville 1.0 NW	Onslow	1.92
Oriental 4.3 NNW	Pamlico	2.39
Oriental 2.1 WSW	Pamlico	2.31
Lowland 0.2 SE	Pamlico	2.00
Oriental 5.2 NE	Pamlico	1.87

Site	County	Amount (in.)
Winterville 3.5 W	Pitt	1.96
Fountain 0.1 NE	Pitt	1.45
Greenville 7.1 SSE	Pitt	1.11
Greenville 5.0 SE	Pitt	1.05
Columbia 0.8 NNE	Tyrell	0.71
Roper 2.4 NE	Washington	0.76

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