

PUBLISH DATE: DECEMBER 9, 2022

**EASTERN NORTH CAROLINA
MONTHLY CLIMATE REPORT**

NOVEMBER 2022

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

National Weather Service

NEWPORT/MOREHEAD CITY, NC

MONTHLY SUMMARY

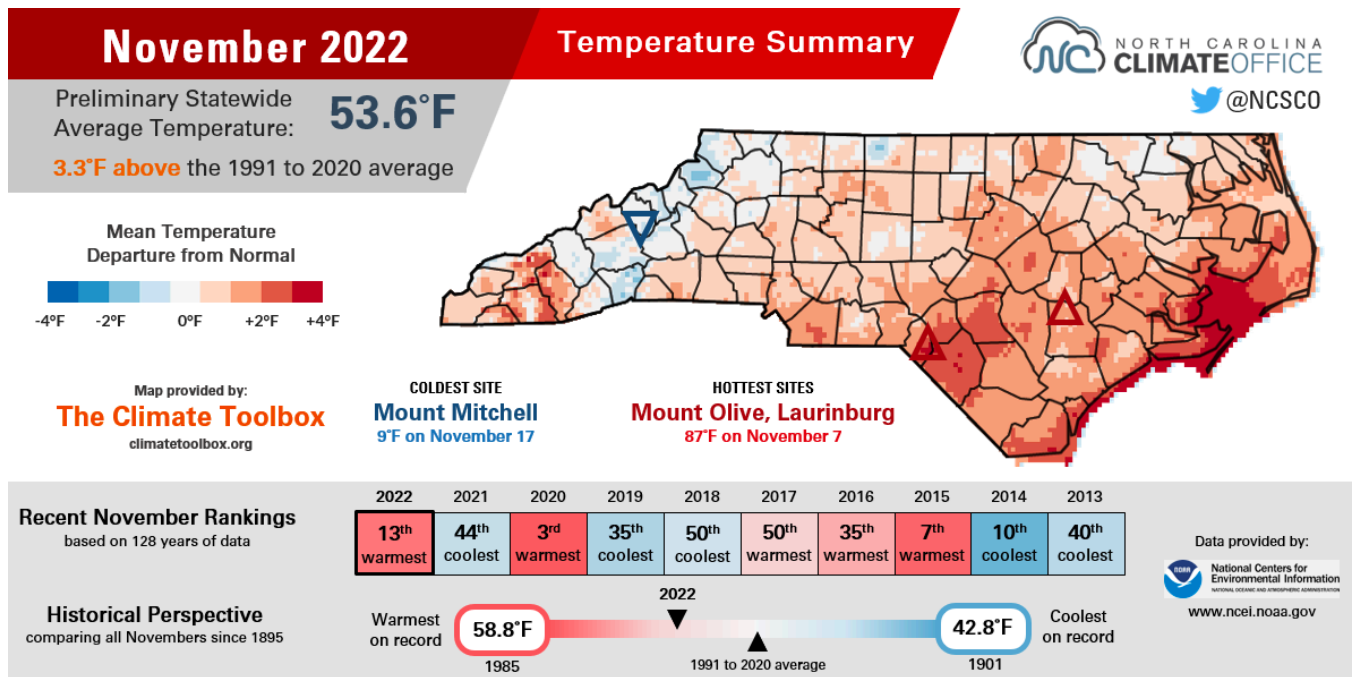
November 2022 refused to follow along with October's cold streak, as temperatures climbed well above average and precipitation remained piddling. Temperatures across eastern North Carolina were generally between 2 to 4 inches above average. Low temperatures were particularly mild, averaging about 6 degrees above average for the month.

Winter is usually the dry season across the region, but even then rainfall was about 1 to 2 inches below average for the month - a typical occurrence in La Niña winters. Drought conditions expanded across eastern NC and abnormal dryness continues across the entire region. Seasonal outlooks call for typical La Niña conditions through February - a slight (40-50%) chance of above-average temperatures and a slight (33-40%) chance of below-average precipitation. Drought conditions are expected to continue expanding and worsening through the winter season.

The December 2022 report will be published around January 20th, 2023.

TEMPERATURES

In typical La Niña fashion, abnormally warmer weather made its return to North Carolina, based on analysis from the NC State Climate Office. The average temperature statewide for November was 53.6°F or 3.3°F above the 1991-2020 average. This was the 13th warmest November statewide since records began in 1895, with 128 years of data.



November 2022 Temperature Summary from the NC State Climate Office

Eastern North Carolina temperatures were above the statewide average. Temperatures at the three primary climate sites in the forecast area were between 2 to nearly 5 degrees above normal. Additional observations can be found in Appendix A.

MHX Select Site Temperature Statistics: November 2022

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	69.2	52.1	60.7	56.4	4.3
Hatteras (KHSE)	67.6	54.0	60.8	58.7	2.1

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
New Bern (KEWN)	68.8	47.8	58.3	54.2	4.1

Normals are based on a period from 1990-2020.

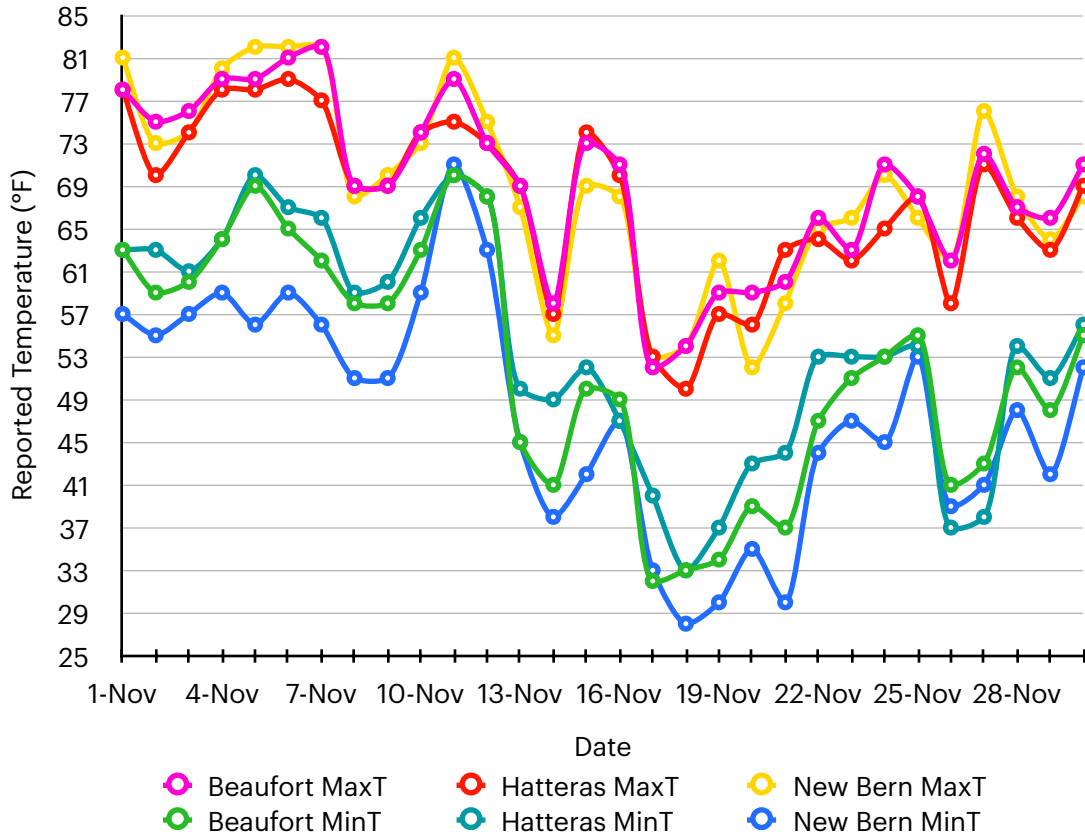
County-averaged statistics are presented in the following table. Note that mean temperature and anomaly calculations are based on a period of 1901-2000, rather than 1990-2020. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Temperature (°F)	Mean (°F)	Departure (°F)	Rank
Beaufort	57.2	52.4	4.8	11 W
Carteret	59.5	54.6	4.9	13 W
Craven	57.9	52.8	5.1	6 W
Dare	58.0	53.7	4.3	14 W
Duplin	57.0	52.2	4.8	9 W
Greene	56.2	51.4	4.8	10 W
Hyde	58.0	53.7	4.3	13 W
Jones	57.5	52.4	5.1	7 W
Lenoir	56.7	51.8	4.9	9 W
Martin	55.5	50.8	4.7	11 W
Onslow	58.4	53.2	5.2	7 W
Pamlico	58.6	53.8	4.8	11 W
Pitt	56.1	51.4	4.7	11 W
Tyrrell	57.1	52.5	4.6	11 W
Washington	56.3	51.5	4.8	11 W
Area Average	57.3	52.5	4.8	

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

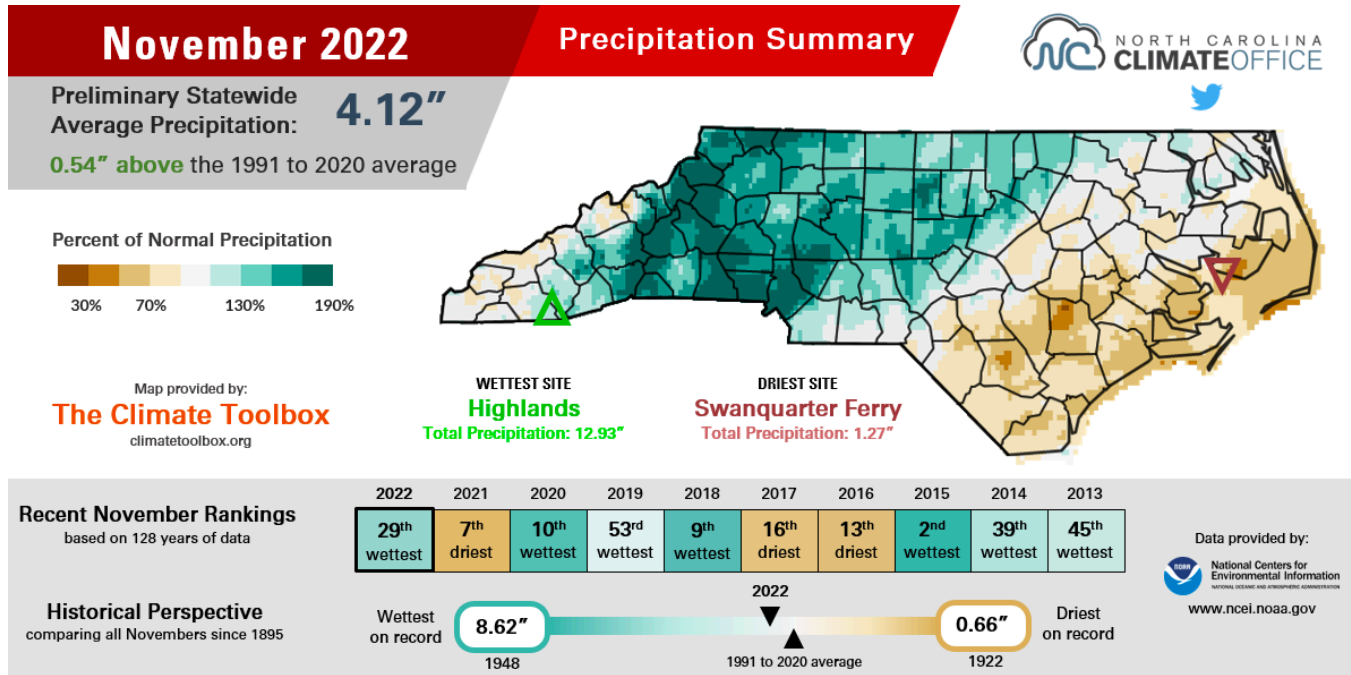
The biggest contributor to the abnormal warmth across eastern NC were overnight lows, which alone ran around 6 degrees above average and ranked among the top 10 warmest across all regional counties. Any cold snaps were short-lived, with the longest period of cool weather being the week before Thanksgiving. New Bern recorded 3 nights with temperatures at or below freezing; the average is 4.

Daily Maximum and Minimum Temperatures



PRECIPITATION

Analysis conducted by the North Carolina State Climate Office indicated above-average precipitation statewide, sitting at 4.12” for November, or about 0.54” inches above average. This was the 29th driest November for the state since records began in 1895.



November 2022 Precipitation Summary from the NC State Climate Office

Eastern North Carolina was considerably drier than the statewide average. Like last month, the driest spots were along the coast. Climatologically, November is usually a dry month across the region but rainfall deficits still sat at around 1 to 2 inches. Swanquarter Ferry terminal was the driest spot in the state, recording a mere 1.27”.

MHX Select Site Precipitation Statistics: November 2022

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	2.67	3.99	-1.32
Hatteras (KHSE)	2.88	4.76	-1.88
New Bern (KEWN)	2.30	3.33	-1.03

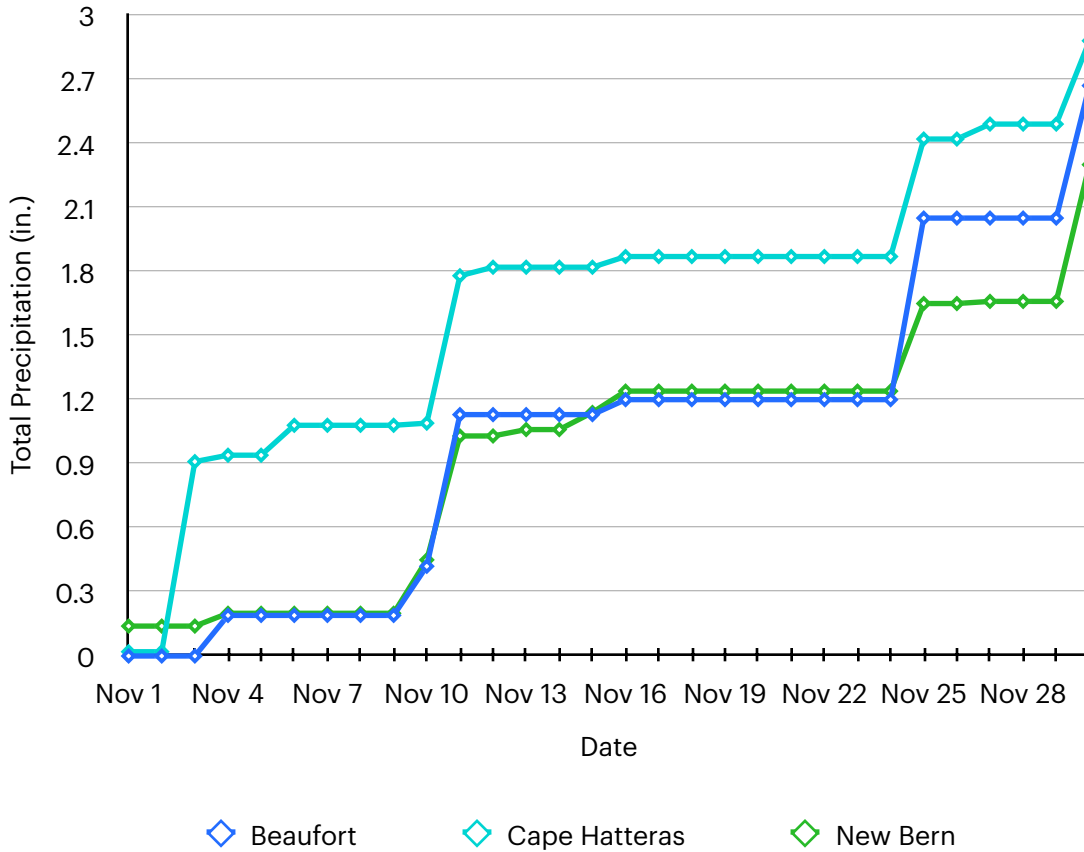
County-averaged statistics are presented in the following table. Like temperatures, mean and anomaly precipitation calculations are based on a period 1901-2000. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Accum. (in.)	Mean (in.)	Departure (in.)	Rank
Beaufort	2.72	2.98	-0.26	57 D
Carteret	2.46	3.40	-0.94	50 D
Craven	2.43	3.00	-0.57	54 D
Dare	2.99	3.40	-0.41	61 D
Duplin	1.90	2.73	-0.83	42 D
Greene	2.97	2.82	0.15	60 W
Hyde	2.29	3.32	-1.03	44 D
Jones	2.10	2.88	-0.78	45 D
Lenoir	2.12	2.79	-0.67	49 D
Martin	3.39	2.82	0.57	46 W
Onslow	2.04	2.95	-0.91	42 D
Pamlico	2.16	3.19	-1.03	41 D
Pitt	3.47	2.78	0.69	42 W
Tyrrell	2.75	3.15	-0.4	60 D
Washington	2.48	3.00	-0.52	58 D
Area Average	2.55	3.01	-0.46	

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

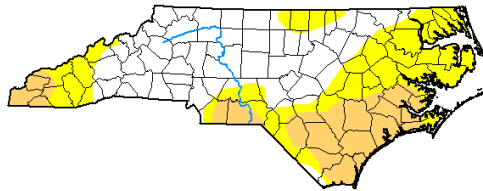
Despite the lower-than-average rainfall, many sites did see more days of measurable precipitation than average. New Bern had 10 days of rainfall greater than or equal to a hundredth of an inch; the average is 8 days. The wettest days were Nov. 11 associated with a passing warm front, Nov. 25 with a coastal trough and offshore low, and Nov. 30 associated with a strong cold front.

Monthly Accumulated Precipitation



Drought conditions continued to slowly expand across eastern North Carolina in November. As of December 6, moderate drought conditions were in place mainly south of Highway 264, but abnormal dryness persists across the entire forecast area. Seasonal outlooks call for further drought development over the next 3 months.

U.S. Drought Monitor North Carolina



December 6, 2022
(Released Thursday, Dec. 8, 2022)
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	46.38	53.62	21.11	0.00	0.00	0.00
Last Week 11-29-2022	42.95	57.05	22.72	2.50	0.00	0.00
3 Months Ago 09-06-2022	61.72	38.28	0.00	0.00	0.00	0.00
Start of Calendar Year 01-04-2022	2.84	97.16	60.20	2.76	0.00	0.00
Start of Water Year 09-27-2022	38.94	61.06	15.04	0.00	0.00	0.00
One Year Ago 12-07-2021	1.27	98.73	79.46	51.24	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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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 2022

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	67.3	45.7	56.5	52.7	3.8
Kinston	67.9	45.4	56.7	55.2	1.5
Williamston	66.9	44.7	55.8	52.7	3.1
Plymouth	67.7	46.5	57.1	53.3	3.8
Bayboro	68.0	47.2	57.6	53.3	4.3
Manteo	66.2	51.9	59.1	54.5	4.6

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

Maximum and Minimum Monthly Temperatures: November 2022

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	82	Nov 7	32	Nov 17
Hatteras (KHSE)	79	Nov 6	33	Nov 18
New Bern (KEWN)	82	Nov 5-7	28	Nov 18
Greenville	83	Nov 6	27	Nov 21
Kinston	84	Nov 7	26	Nov 18
Williamston	82	Nov 7-8	26	Nov 21
Plymouth	81	Nov 6	26	Nov 21
Bayboro	82	Nov 7	32	Nov 18-22
Manteo	79	Nov 5-6, Nov 8	37	Nov 21

APPENDIX B: ADDITIONAL PRECIPITATION DATA

Cooperative Observation Site Precipitation Statistics: November 2022

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Bayboro	1.53	3.93	-2.4
Greenville	4.90	3.42	1.48
Kinston	1.66	3.46	-1.8
Plymouth	3.40	3.57	-0.17
Williamston	3.96	3.39	0.57

Sites in red have missing data in their record.

CoCoRaHS Monthly Accumulated Precipitation: November 2022

Site	County	Amount (in.)
Pantego 0.4 WSW	Beaufort	2.16
Bath 1.6 SSE	Beaufort	1.71
Beaufort 12.1 N	Carteret	3.01
Newport 0.2 SW	Carteret	2.77
Morehead City 6.0 WNW	Carteret	2.57
Beaufort 5.3 N	Carteret	2.43
Morehead City 5.7 W	Carteret	2.43
Swansboro 3.7 NNE	Carteret	2.40
Beaufort 3.8 N	Carteret	2.39
Morehead City 2.9 WNW	Carteret	2.31
Beaufort 3.4 NNW	Carteret	2.29

Site	County	Amount (in.)
Cape Carteret 1.0 NNW	Carteret	2.09
Newport 2.5 W	Carteret	2.05
Stella 2.5 SE	Carteret	2.00
Newport 1.7 SSE	Carteret	1.99
Cedar Point 0.4 WSW	Carteret	1.79
Atlantic Beach 0.6 W	Carteret	1.76
Beaufort 0.5 W	Carteret	1.66
Pine Knoll Shores 1.4 E	Carteret	1.65
Williston 0.9 SW	Carteret	1.58
Cedar Point 0.9 WSW	Carteret	1.44
Trent Woods 1.2 ENE	Craven	1.94
Trent Woods 1.0 NNE	Craven	1.91
New Bern 1.3 NNE	Craven	1.90
New Bern 2.6 SW	Craven	1.71
New Bern 3.8 S	Craven	1.65
New Bern 4.2 S	Craven	1.37
Manteo 2.8 NW	Dare	2.47
Buxton 0.3 ENE	Dare	2.46
Duck 0.7 SSE	Dare	2.37
Rodanthe 1.0 SSE	Dare	2.26
Southern Shores 0.5 NNE	Dare	2.24
Rose Hill 0.1 NNW	Duplin	1.80
Mount Olive 2.4 SW	Duplin	1.64

Site	County	Amount (in.)
Albertson 1.2 WNW	Duplin	1.45
Mount Olive 6.0 SE	Duplin	0.52
Ayden 6.5 WNW	Greene	2.57
Ocracoke 0.2 ESE	Hyde	1.96
SQ Tower	Hyde	1.13
Kinston 4.4 WNW	Lenoir	1.57
Kinston 7.0 SW	Lenoir	1.43
Kinston 1.2 NW	Lenoir	1.41
Kinston 5.1 WNW	Lenoir	1.33
Pink Hill 2.5 NE	Lenoir	1.25
Williamston 8.9 SSE	Martin	2.57
Jamesville 6.1 SW	Martin	2.32
Sneads Ferry 3.3 SW	Onslow	2.25
Sneads Ferry 1.2 SSW	Onslow	2.01
Hubert 4.9 SE	Onslow	1.92
Holly Ridge 9.0 ENE	Onslow	1.91
Swansboro 2.8 WSW	Onslow	1.90
Jacksonville 4.5 NW	Onslow	1.80
Jacksonville 2.4 NNE	Onslow	1.47
Lowland 0.2 SE	Pamlico	1.83
Oriental 1.9 WSW	Pamlico	1.38
Oriental 4.3 NNW	Pamlico	1.26
Merritt 1.5 WSW	Pamlico	1.23

Site	County	Amount (in.)
Oriental 5.2 NE	Pamlico	1.01
Greenville 5.7 NW	Pitt	3.86
Fountain 0.1 NE	Pitt	2.94
Greenville 5.0 SE	Pitt	2.77
Winterville 1.0 ENE	Pitt	2.74
Winterville 3.5 W	Pitt	2.53
Greenville 7.1 SSE	Pitt	2.18
Columbia 0.8 NNE	Tyrrell	3.11

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