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**EASTERN NORTH CAROLINA
MONTHLY CLIMATE REPORT**

FEBRUARY 2022

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

National Weather Service

NEWPORT/MOREHEAD CITY, NC

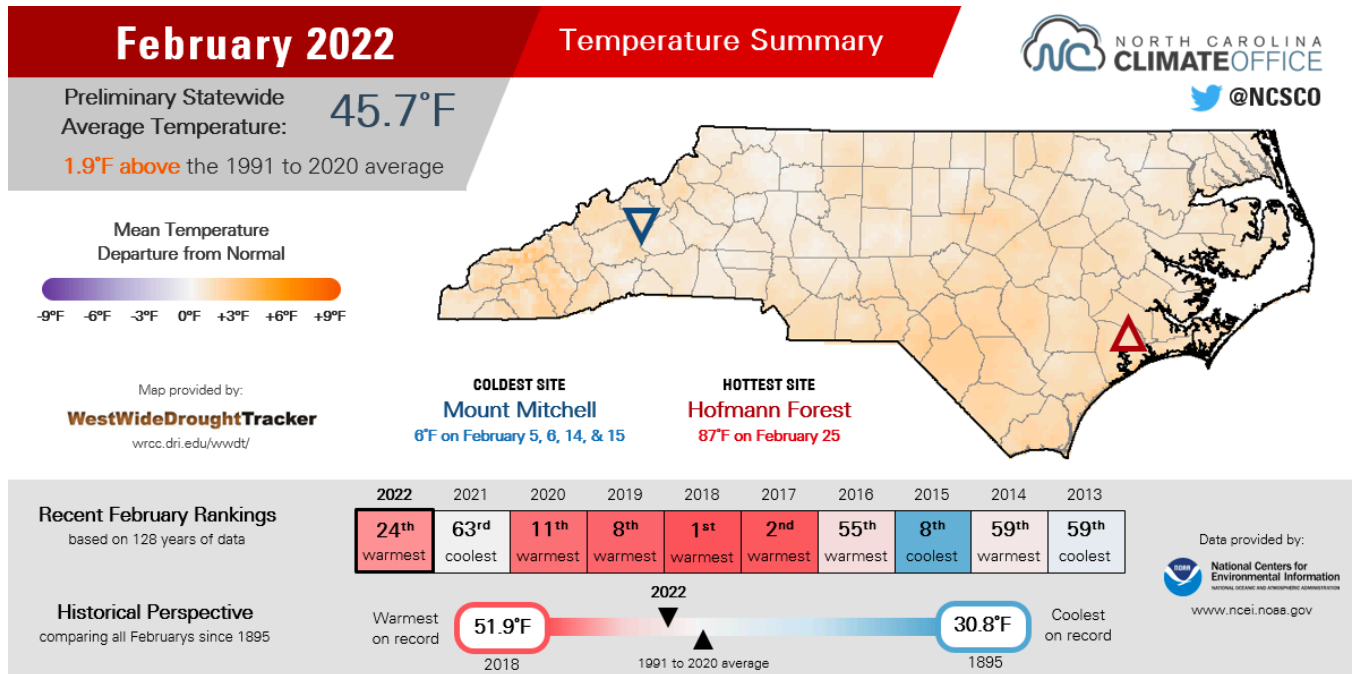
MONTHLY SUMMARY

Warm and very dry is the best way to describe February 2022 across eastern North Carolina. Temperatures climbed as much as 2-3 degrees above normal for the period, slightly above the statewide average. Most noticeable, however, were very dry conditions. Only a handful of locales in the region managed to pick up over 2 inches of rain, in a month that averages over 3 inches statewide. New Bern tied 1943 and 1947 for the driest February in its recorded history with exactly one inch of liquid precipitation.

The abnormal warmth, combined with very little rainfall, resulted in the redevelopment of drought conditions across eastern North Carolina. By the start of meteorological spring, over half of the region was in moderate drought. Similar conditions are forecast to persist through the remainder of March.

TEMPERATURES

Analysis conducted by the North Carolina State Climate Office showed temperatures staging a quick rebound across the state from January. The average temperature statewide was 45.7°F or 1.9°F above the 1991-2020 average. This ended up being the 24th warmest February since records began in 1895.



February temperature summary from the North Carolina State Climate Office.

Eastern North Carolina was warmer than the statewide average. The three primary climate sites in the Morehead City CWA were around 3°F degrees above average for the month. Additional observations can be found in Appendix A.

MHX Select Site Temperature Statistics: February 2022

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	60.3	41.8	51.1	48.2	2.9
Hatteras (KHSE)	59.1	44.7	51.9	49.1	2.8

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
New Bern (KEWN)	62.8	37.6	50.2	47.1	3.1

Normals are based on a period from 1990-2020.

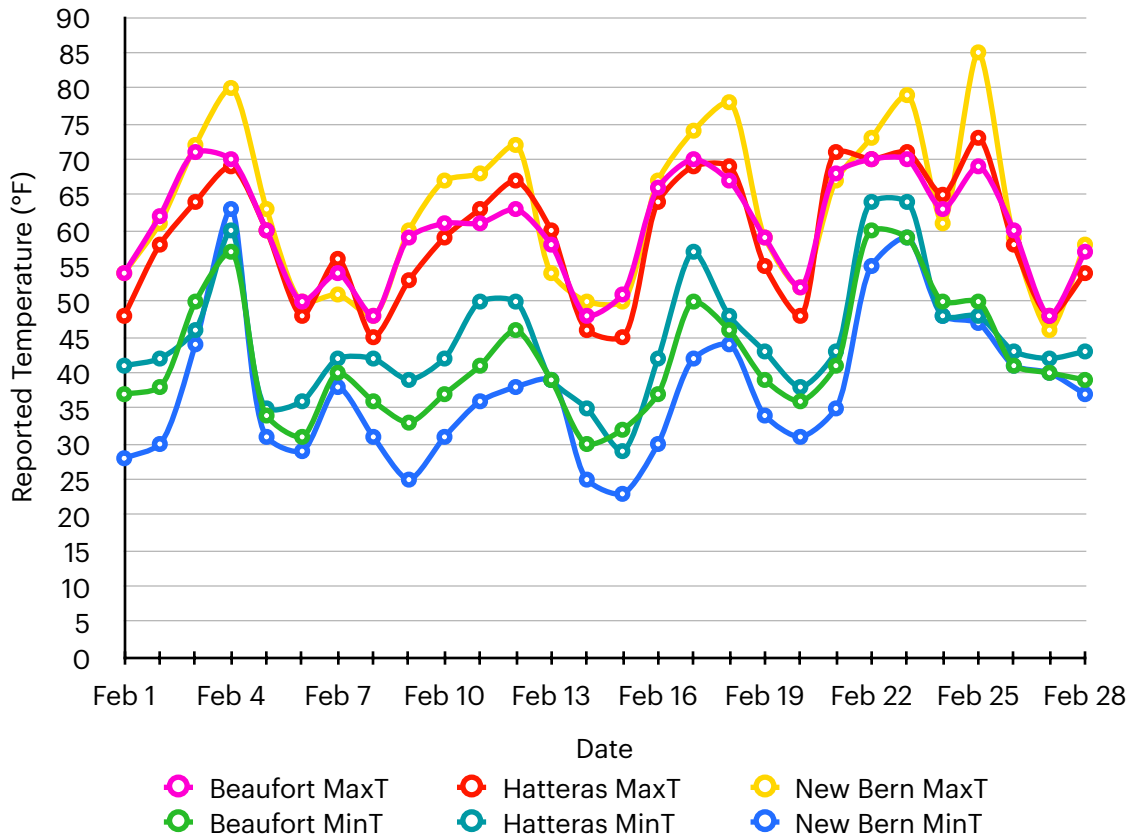
County-averaged statistics are presented in the following table. Note that mean temperature and anomaly calculations are based on a period of 1901-2000, rather than 1990-2020. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Temperature (°F)	Mean (°F)	Departure (°F)	Rank
Beaufort	49.0	44.4	4.6	16 W
Carteret	51.0	45.9	5.1	14 W
Craven	49.5	45.0	4.5	16 W
Dare	48.7	44.1	4.6	14 W
Duplin	48.8	45.0	3.8	23 W
Greene	47.3	43.7	3.6	28 W
Hyde	49.9	44.9	5	14 W
Jones	49.0	44.9	4.1	20 W
Lenoir	47.5	44.3	3.2	34 W
Martin	47.4	42.9	4.5	18 W
Onslow	50.1	45.8	4.3	18 W
Pamlico	50.3	45.4	4.9	15 W
Pitt	47.7	43.7	4	23 W
Tyrrell	48.2	43.8	4.4	16 W
Washington	48.0	43.3	4.7	15 W
Area Average	48.8	44.5	4.4	

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

Area-wide, temperatures were about 4 to 5 degrees above average with February 2022 placing in the top one-third warmest for all counties. Although several cold fronts did their best to knock temperatures down (the coolest period being around the middle of the month), the majority of the time was spent in above-average territory. New Bern saw 8 days with highs above 70°F and 2 days at or above 80°F in a period their normal high was 58.5°F.

Daily Maximum and Minimum Temperatures

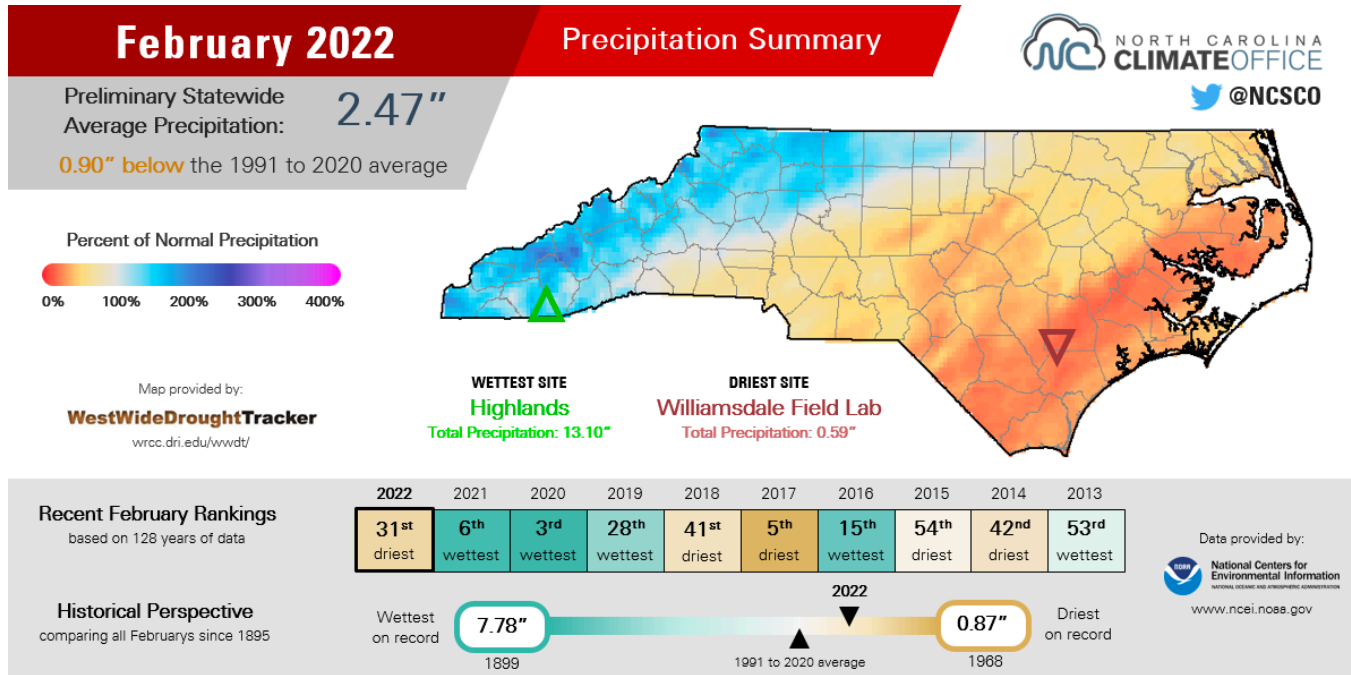


RECORDS OF NOTE

New Bern set a record high of 85°F on Feb 25. The previous record of 84°F was set in 2018.

PRECIPITATION

Analysis conducted by the North Carolina State Climate Office indicated average statewide precipitation of 2.47" for February or about 0.90" inches below average. This was the 31st driest month for the state since records began in 1895.



February precipitation summary from the North Carolina State Climate Office

Eastern North Carolina was by far the driest part of the state with most counties experiencing one of their top ten driest Februaries on record. **New Bern's monthly total of 1 inch tied 1943 and 1947 for the driest February since records began in 1933.** The deficit, combined with periods of windy conditions, contributed to the development of a few wildfires across the region. Additional observations can be found in Appendix B.

MHX Select Site Precipitation Statistics: February 2022

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	1.77	3.33	-1.56
Hatteras (KHSE)	2.00	4.34	-2.34
New Bern (KEWN)	1.00	3.32	-2.32

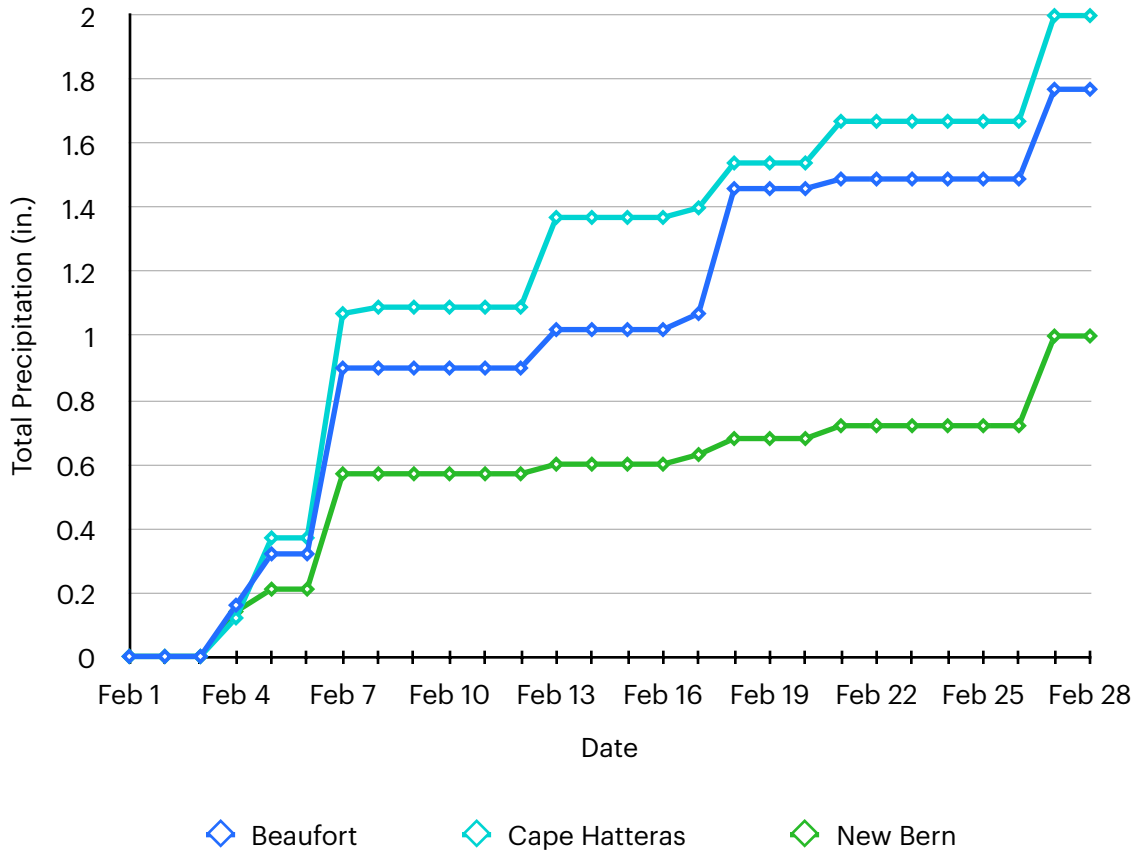
County-averaged statistics are presented in the following table. Like temperatures, mean and anomaly precipitation calculations are based on a period 1901-2000. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Accum. (in.)	Mean (in.)	Departure (in.)	Rank
Beaufort	1.25	3.72	-2.47	4 D
Carteret	1.41	4.00	-2.59	7 D
Craven	1.25	3.83	-2.58	6 D
Dare	1.65	3.85	-2.2	13 D
Duplin	1.01	3.61	-2.6	4 D
Greene	1.68	3.67	-1.99	21 D
Hyde	1.40	3.83	-2.43	8 D
Jones	1.24	3.80	-2.56	7 D
Lenoir	1.30	3.66	-2.36	13 D
Martin	1.61	3.69	-2.08	15 D
Onslow	1.32	3.84	-2.52	8 D
Pamlico	1.18	3.82	-2.64	5 D
Pitt	1.55	3.71	-2.16	15 D
Tyrrell	1.42	3.77	-2.35	9 D
Washington	1.36	3.72	-2.36	9 D
Area Average	1.38	3.77	-2.39	

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

The highest daily precipitation totals were associated with a quick-moving coastal low impacting the area on the morning and afternoon of Feb 7. Cape Hatteras picked up 0.70” of precipitation during this event while New Bern struggled to pick up a third of an inch. Beyond this, no particular event yielded much more than a tenth of an inch of precipitation, save for an end-of-month stratiform event.

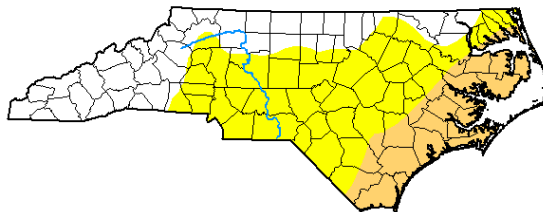
Monthly Accumulated Precipitation



The dry and warm conditions aided in a redevelopment of drought conditions across nearly all of eastern North Carolina. D1, or Moderate Drought conditions, are in place for all areas along and east of U.S. Highway 17.

U.S. Drought Monitor North Carolina

March 8, 2022
(Released Thursday, Mar. 10, 2022)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	33.55	66.45	20.21	0.00	0.00	0.00
Last Week <i>03-01-2022</i>	48.29	51.71	9.10	0.00	0.00	0.00
3 Months Ago <i>12-07-2021</i>	1.27	98.73	79.46	51.24	0.00	0.00
Start of Calendar Year <i>01-04-2022</i>	2.84	97.16	60.20	2.76	0.00	0.00
Start of Water Year <i>09-28-2021</i>	91.27	8.73	0.00	0.00	0.00	0.00
One Year Ago <i>03-09-2021</i>	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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>

Author:

Brian Fuchs
National Drought Mitigation Center



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/>.

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: February 2022

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	60.7	35.3	48.0	45.9	2.1
Kinston	60.5	36.3	48.4	48.4	0.0
Williamston	59.2	35.3	47.3	45.2	2.1
Plymouth	62.3	37.0	49.7	46.3	3.4
Bayboro	61.5	37.4	49.5	46.3	3.2
Manteo	54.7	37.6	46.2	44.9	1.3

Normals are based on a period from 1990-2020.

Maximum and Minimum Monthly Temperatures: February 2022

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	71	Feb 3	30	Feb 14
Hatteras (KHSE)	73	Feb 25	29	Feb 15
New Bern (KEWN)	85	Feb 25	23	Feb 15
Greenville	78	Feb 4	25	Feb 15
Kinston	83	Feb 26	24	Feb 15
Williamston	78	Feb 5	25	Feb 1
Plymouth	77	Feb 4	23	Feb 15
Bayboro	83	Feb 26	28	Feb 1, Feb 15-16
Manteo	73	Feb 26	27	Feb 1

APPENDIX B: ADDITIONAL PRECIPITATION DATA

Cooperative Observation Site Precipitation Statistics: February 2022

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Bayboro	1.32	3.53	-2.21
Greenville	1.74	3.35	-1.61
Kinston	1.15	3.20	-2.05
Manteo	0.94	3.16	-2.22
Plymouth	1.51	3.40	-1.89
Williamston	1.92	3.22	-1.3

Sites in red have missing data in their record.

CoCoRaHS Monthly Accumulated Precipitation: February 2022

Site	County	Amount (in.)
Bath 1.6 SSE	Beaufort	1.02
Bath 6.6 ESE	Beaufort	0.92
Washington 1.0 SSW	Beaufort	0.89
Bath 0.7 N	Beaufort	0.79
Cedar Island 0.3 SSE	Carteret	2.03
Beaufort 5.3 N	Carteret	1.92
Beaufort 12.2 N	Carteret	1.89
Beaufort 15.1 N	Carteret	1.89
Beaufort 3.8 N	Carteret	1.83
Beaufort 0.5 W	Carteret	1.81

Site	County	Amount (in.)
Harkers Island 3.2 NE	Carteret	1.77
Morehead City 5.7 W	Carteret	1.72
Beaufort 3.4 NNW	Carteret	1.67
Newport 0.2 SW	Carteret	1.67
Newport 1.7 SSE	Carteret	1.64
Atlantic Beach 0.6 W	Carteret	1.62
Swansboro 3.7 NNE	Carteret	1.54
Morehead City 2.9 WNW	Carteret	1.53
Morehead City 6.0 WNW	Carteret	1.50
Pine Knoll Shores 0.3 NE	Carteret	1.49
Pine Knoll Shores 1.4 E	Carteret	1.48
Cape Carteret 1.5 NE	Carteret	1.46
Indian Beach 0.0 W	Carteret	1.44
Cape Carteret 0.8 NE	Carteret	1.41
Cape Carteret 1.0 NNW	Carteret	1.37
Cedar Point 0.9 WSW	Carteret	1.35
Emerald Isle 2.3 WSW	Carteret	1.32
Trent Woods 1.0 NNE	Craven	1.26
Trent Woods 1.2 ENE	Craven	1.25
Havelock 1.9 SSE	Craven	1.20
New Bern 2.6 SW	Craven	1.18
New Bern 4.9 SW	Craven	1.16
New Bern 7.3 ESE	Craven	1.14

Site	County	Amount (in.)
Trent Woods 1.3 SSE	Craven	1.14
Trent Woods 0.9 WNW	Craven	1.11
New Bern 1.3 NNE	Craven	1.09
New Bern 5.3 SW	Craven	1.01
New Bern 5.2 SE	Craven	0.90
Buxton 0.3 ENE	Dare	1.96
Rodanthe 1.0 SSE	Dare	1.45
Manteo 2.8 NW	Dare	1.16
Southern Shores 0.5 NNE	Dare	0.84
Mount Olive 2.4 SW	Duplin	1.76
Albertson 1.2 WNW	Duplin	1.16
Rose Hill 0.1 NNW	Duplin	0.70
Ayden 6.5 WNW	Greene	1.76
Ocracoke 0.2 ESE	Hyde	1.90
Engelhard 0.8 NW	Hyde	1.02
SQ Tower	Hyde	0.89
Kinston 5.1 WNW	Lenoir	1.41
Kinston 4.4 WNW	Lenoir	1.35
Kinston 1.2 NW	Lenoir	1.16
Kinston 7.0 SW	Lenoir	1.05
Williamston 8.9 SSE	Martin	1.28
Swansboro 1.4 N	Onslow	1.85
Swansboro 3.3 NW	Onslow	1.64

Site	County	Amount (in.)
Sneads Ferry 3.3 SW	Onslow	1.60
Jacksonville 1.0 NW	Onslow	1.53
Hubert 4.9 SE	Onslow	1.52
Swansboro 2.8 WSW	Onslow	1.52
Jacksonville 5.4 WSW	Onslow	1.51
Camp Lejeune 1.4 NW	Onslow	1.49
Jacksonville 4.5 NW	Onslow	1.02
Oriental 2.1 WSW	Pamlico	1.87
Merritt 1.5 WSW	Pamlico	1.55
Oriental 4.3 NNW	Pamlico	1.50
Oriental 1.9 WSW	Pamlico	1.44
Lowland 0.2 SE	Pamlico	1.43
Greenville 4.6 W	Pitt	2.16
Fountain 0.1 NE	Pitt	1.95
Winterville 2.8 WNW	Pitt	1.85
Winterville 3.5 W	Pitt	1.63
Greenville 4.4 SSE	Pitt	1.61
Greenville 4.3 SSE	Pitt	1.50
Greenville 5.0 SE	Pitt	1.41
Greenville 7.1 SSE	Pitt	1.37
Columbia 0.8 NNE	Tyrrell	1.17

Site	County	Amount (in.)
Roper 2.4 NE	Washington	1.48

CoCoRaHS inclusion in this table is based on a complete 28-day liquid precipitation record. Thank you to all observers!