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**EASTERN NORTH CAROLINA  
MONTHLY CLIMATE REPORT**

# **JANUARY 2022**

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

# National Weather Service

## NEWPORT/MOREHEAD CITY, NC

# MONTHLY SUMMARY

**F**rom multiple coastal storms to historic icing, January 2022 was a very busy winter month. Persistent troughing over the eastern half of the United States not only kept North Carolina in a favorable pattern for continued active weather, but also aided in keeping cold air in place to result in wintry precipitation. The most notable event was an ice storm across the Crystal Coast severe enough to prompt our office's first-ever Ice Storm Warning. Ice accumulations up to a half inch rivaled those of the ice storm of Feb 11, 2014. Not wanting to miss out, areas across the coastal plain picked up between 4-6 inches of snow. This ended up being only 1 of 4 wintry episodes across the region for the month.

Despite starting on a note of record warmth, temperatures across Eastern North Carolina ended up slightly below normal for January, and overall slightly cooler than the statewide average. Most areas across the region saw near-normal to slightly above normal precipitation, although locales around the Albemarle Sound saw a January that placed among the Top 15 wettest.

## NOTABLE EVENTS IN JANUARY 2022

### JANUARY 3-4: MAJOR COASTAL LOW

Intensifying low pressure moved across Eastern North Carolina to start the first work week of 2022, bringing a host of hazards across the region. Although the storm will be remembered nationally for bringing up to a foot of snow across much of the mid-Atlantic and stranding drivers on Interstate 95 for nearly a day, in our neck of the woods it brought severe thunderstorms, heavy rain, high winds, coastal flooding, and some wintry precipitation. For a more detailed analysis, see our event review page: <https://www.weather.gov/mhx/pastStrongCoastalLowJanuary3rd2022>

### JANUARY 16-17: COASTAL STORM/WINTRY MIX

Intensifying low pressure lifted across the southeastern United States, originating at the Florida Panhandle and lifting across central portions of North Carolina. Entrenched cold air at the surface allowed for very light sleet and freezing rain accumulations to start the event, before eventually transitioning to rain as the warm sector swept over the region and temperatures soared into the 60s. By the event's end, 1-3" fell across much of eastern North Carolina. Tropical storm force winds and coastal flooding were also observed. For a more detailed analysis, see our event review page: <https://www.weather.gov/mhx/pastStrongLowJanuary16th2022>

### JANUARY 21-22: HISTORIC ICE STORM

An unprecedented and historic ice storm impacted coastal areas of eastern North Carolina, along with up to 4 inches of snow for portions of the coastal plain and northern Outer Banks. Ice accumulations up to half an inch resulted in scattered power outages and hazardous road conditions. This event prompted the office's first-ever Ice Storm Warning. For a more detailed



Ice coats the grass outside the NWS office in Morehead City on the morning of January 22, 2022.

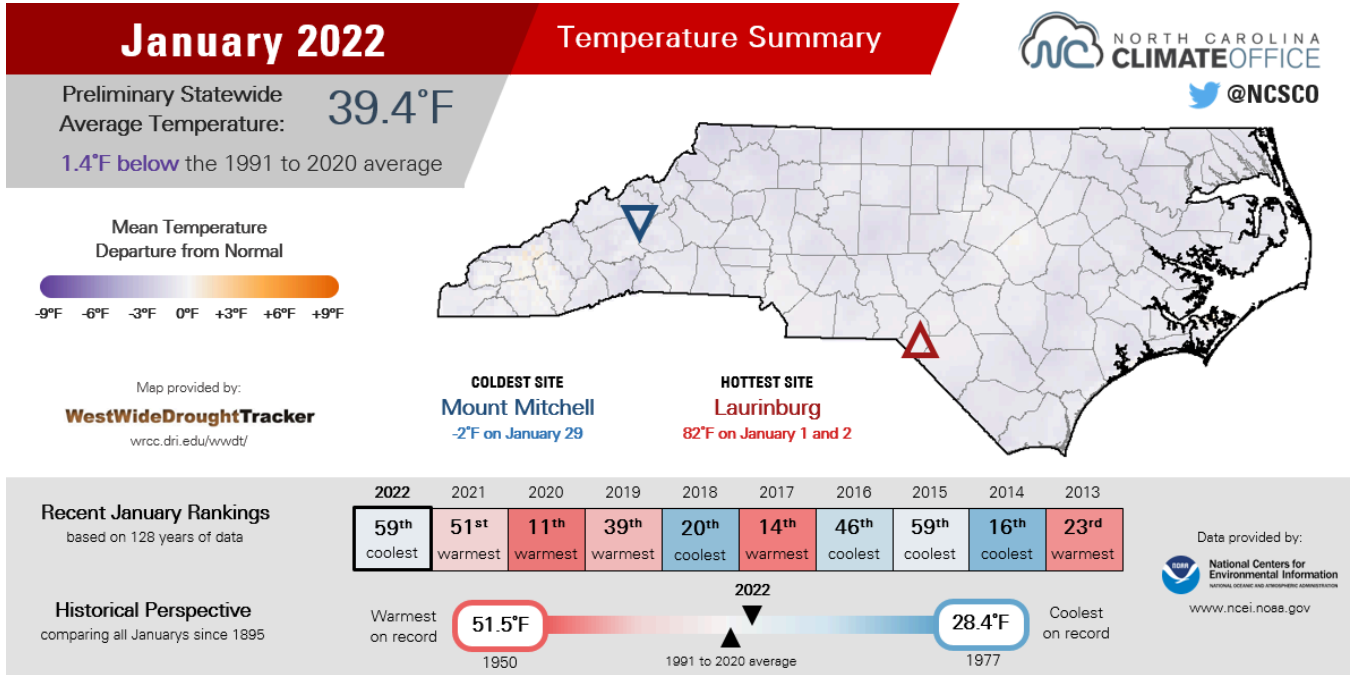
analysis, see our event review page: <https://www.weather.gov/mhx/pastWinterStormJanuary212022>

## **JANUARY 29: LIGHT SNOW AND COLD TEMPERATURES**

While blizzard conditions walloped the Mid-Atlantic and Northeast, eastern North Carolina saw light snowfall accumulations during the overnight hours associated with a weak disturbance aloft. Accumulations of up to an inch quickly melted the following day. Much colder air flooded into the region that evening as temperatures plummeted well into the 10s. For a more detailed analysis, see our event review page: <https://www.weather.gov/mhx/pastLightSnowJanuary292022>

# TEMPERATURES

Analysis conducted by the North Carolina State Climate Office showed a state-wide average temperature of 39.4°F, or 1.4°F below the 1991-2020 average. This ended up being the 59th coolest January since record began in 1895.



January temperature summary from the North Carolina State Climate Office.

Eastern North Carolina was slightly cooler than the statewide average. The three primary climate sites in the Morehead City CWA came in around 1.5-2° degrees below average for the month. Additional observations can be found in Appendix A.

## MHX Select Site Temperature Statistics: January 2022

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	54.3	34.9	44.6	46.2	-1.6
Hatteras (KHSE)	53.6	38.5	46.1	48.0	-2.0

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
New Bern (KEWN)	54.1	31.1	42.6	44.5	-1.9

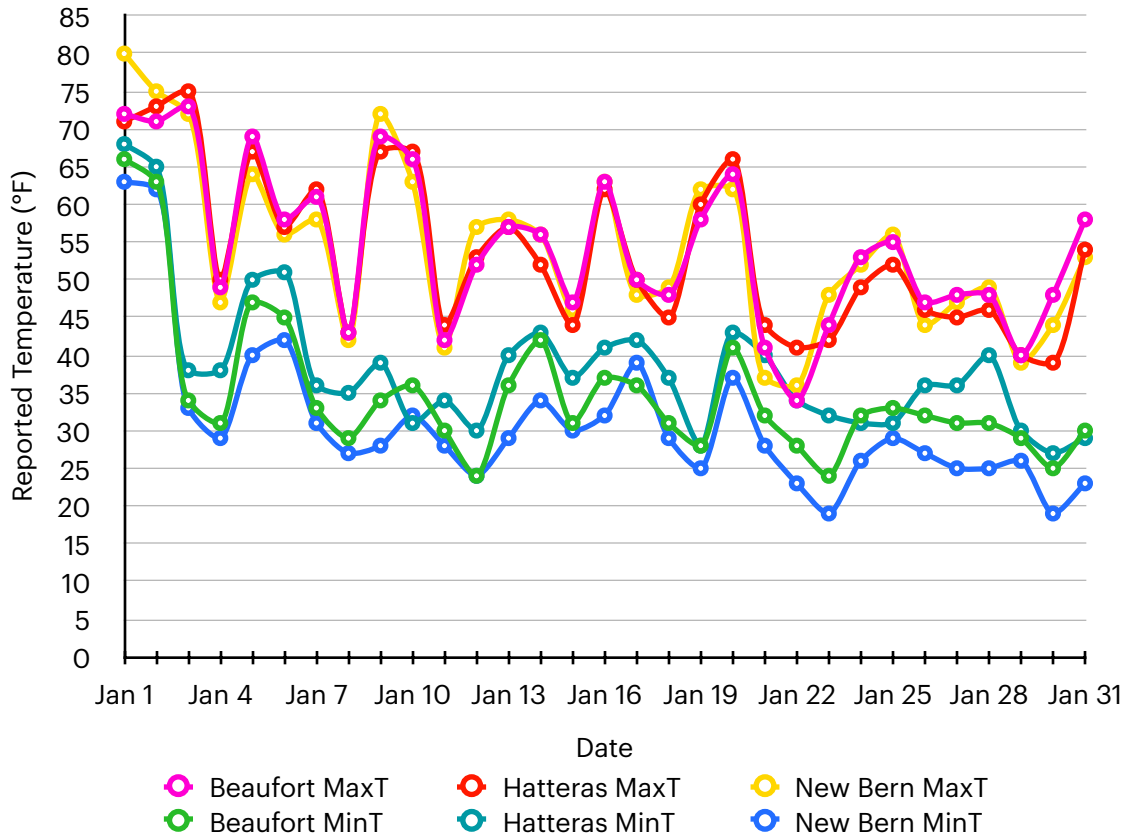
Normals are based on a period from 1990-2020.

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	41.2	43.1	-1.9	40 C
Carteret	43.5	45.3	-1.8	41 C
Craven	41.8	43.7	-1.9	38 C
Dare	42.1	43.5	-1.4	45 C
Duplin	40.3	43.3	-3	32 C
Greene	39.9	42.0	-2.1	37 C
Hyde	42.4	44.1	-1.7	42 C
Jones	41.2	43.4	-2.2	35 C
Lenoir	39.8	42.6	-2.8	34 C
Martin	40.2	41.3	-1.1	52 C
Onslow	42.3	44.4	-2.1	37 C
Pamlico	42.6	44.5	-1.9	39 C
Pitt	40.2	42.0	-1.8	38 C
Tyrrell	41.3	42.7	-1.4	48 C
Washington	40.6	41.9	-1.3	48 C
<b>Area Average</b>	<b>41.3</b>	<b>43.2</b>	<b>-1.9</b>	

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

### Daily Maximum and Minimum Temperatures



January started off on a pronounced warm note with temperatures soaring almost 25 degrees above average (New Bern set a record with a high of 80 to start the new year). However, this quickly gave way to persistent below average temperatures especially in the later half of the month. This was exacerbated by fresh snow pack associated with the Jan 21-22 winter storm, which aided in low temperatures falling into the 10s.

### RECORDS OF NOTE

**New Bern** tied a record high of 80°F on Jan 1. The previous record of 80°F was set in 1985.

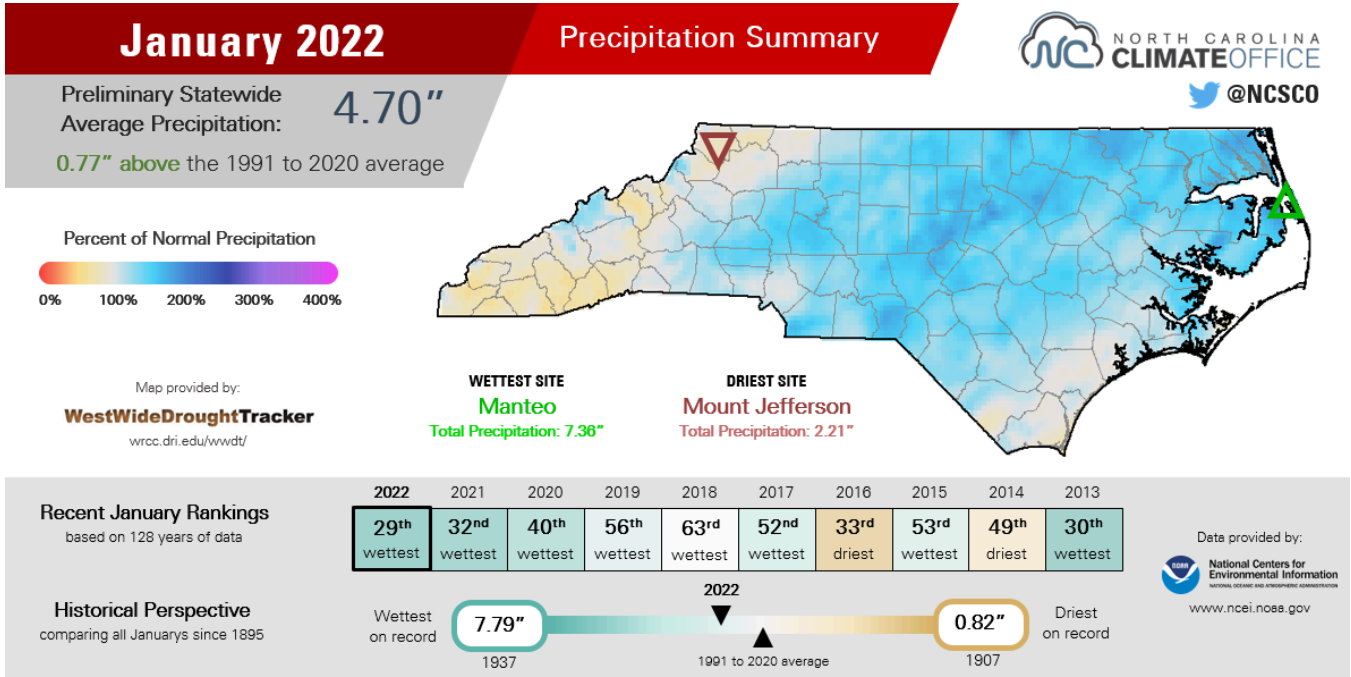
**Cape Hatteras** tied a record high of 73°F on Jan 2. The previous record of 73°F was set in both 1930 and 1985.

Cape Hatteras also set a record high of 75°F on Jan 3. The previous record of 73°F was set in 2020. This observation also tied the January monthly record high temperature of 75°F, which was set in 1985.



# PRECIPITATION

Analysis conducted by the North Carolina State Climate Office indicated average statewide precipitation of 4.70" for January, or about 0.77" inches above average. This was the 29th wettest month for the state since records began in 1895.



January Precipitation Summary from the North Carolina State Climate Office.

Eastern North Carolina experienced a range of precipitation regimes for the month, ranging from near-normal accumulations across the southern coastal plain to well above average amounts across the Pamlico-Albemarle Peninsula owing to multiple coastal systems. Additional observations can be found in Appendix B.

## MHX Select Site Precipitation Statistics: January 2022

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	4.76	4.17	0.59
Hatteras (KHSE)	7.10	4.91	2.19
New Bern (KEWN)	4.13	3.89	0.24

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	5.94	3.89	2.05	14 W
Carteret	5.16	4.13	1.03	34 W
Craven	4.97	3.92	1.05	33 W
Dare	6.59	4.03	2.56	12 W
Duplin	3.49	3.74	-0.25	63 D
Greene	4.83	3.73	1.1	30 W
Hyde	6.48	4.00	2.48	14 W
Jones	4.54	3.89	0.65	37 W
Lenoir	4.69	3.77	0.92	37 W
Martin	5.56	3.76	1.8	15 W
Onslow	4.02	3.92	0.1	49 W
Pamlico	5.37	4.00	1.37	27 W
Pitt	5.39	3.77	1.62	21 W
Tyrrell	6.59	4.01	2.58	10 W
Washington	6.15	3.94	2.21	13 W
<b>Area Average</b>	<b>5.32</b>	<b>3.90</b>	<b>1.42</b>	

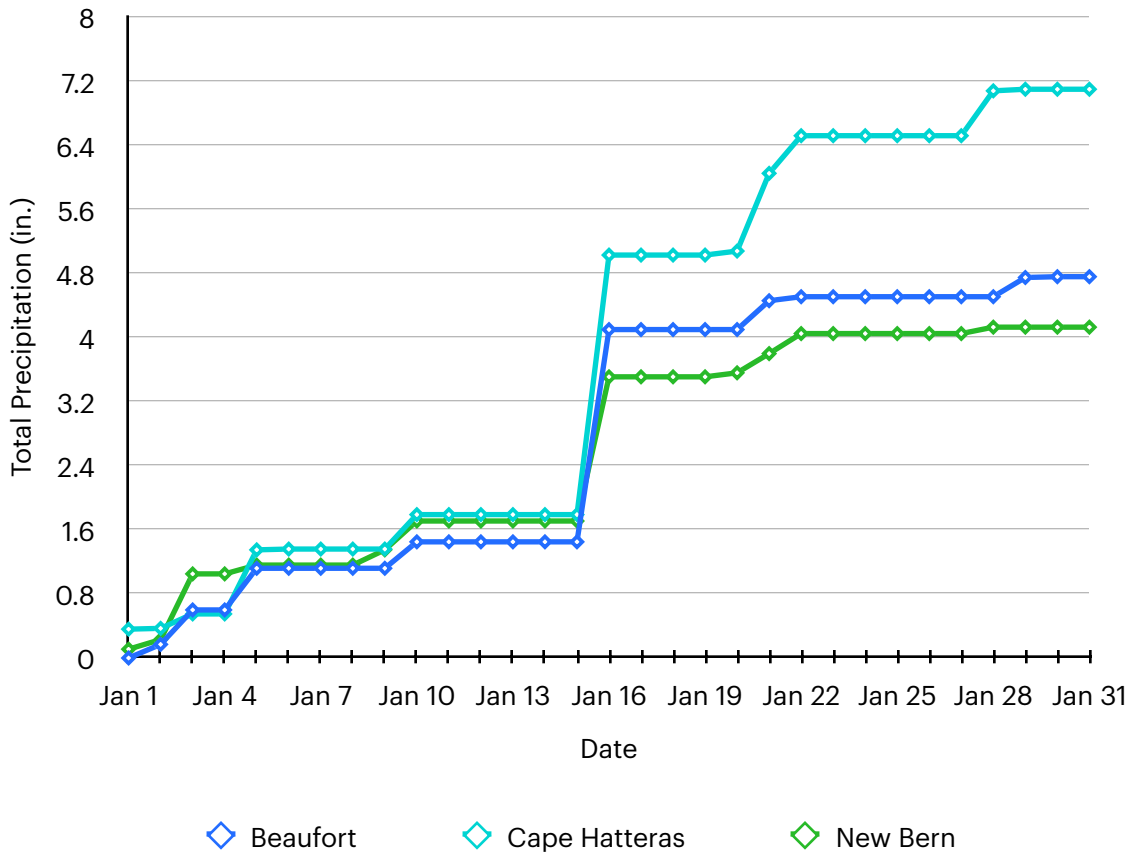
Means are based on a period from 1901-2000. For rankings, “W” designates wettest and “D” designates driest.

For snowfall, please see the event reviews at the beginning of the report for event-based accumulations.

The highest daily precipitation totals were associated with the Jan 16-17th storm. Cape Hatteras picked up over 3” of precipitation on the 16th alone, but New Bern and Beaufort

also picked up 1.80" and 2.65" of precipitation, respectively. New Bern's accumulation set a new daily rainfall record for Jan 16.

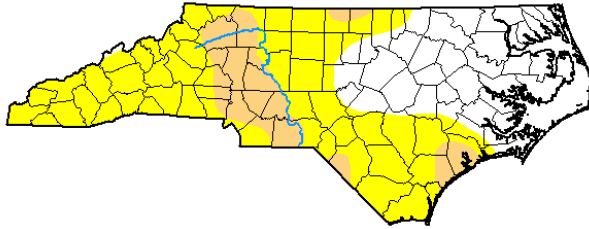
### Monthly Accumulated Precipitation



Thanks to the wet conditions, especially along the coast, drought conditions were wiped out across a large portion of Eastern North Carolina, save areas south and west of U.S. Highway 70.

# U.S. Drought Monitor North Carolina

**February 1, 2022**  
(Released Thursday, Feb. 3, 2022)  
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	33.44	66.56	14.22	0.00	0.00	0.00
<b>Last Week</b> <small>01-25-2022</small>	40.40	59.60	14.22	0.00	0.00	0.00
<b>3 Months Ago</b> <small>11-02-2021</small>	37.76	62.24	22.77	0.00	0.00	0.00
<b>Start of Calendar Year</b> <small>01-04-2022</small>	2.84	97.16	60.20	2.76	0.00	0.00
<b>Start of Water Year</b> <small>09-28-2021</small>	91.27	8.73	0.00	0.00	0.00	0.00
<b>One Year Ago</b> <small>02-03-2021</small>	98.06	1.94	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>

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National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

U.S. Drought Monitor analysis for North Carolina on Feb. 1, 2022.

## 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: January 2022

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	51.5	29.0	40.3	43.1	-2.9
Kinston	51.8	30.3	41.1	45.7	-4.7
Williamston	50.9	30.5	40.7	42.5	-1.8
Plymouth	52.2	30.5	41.4	43.8	-2.5
Bayboro	54.6	34.0	44.3	44.6	-0.3
Manteo	49.5	34.5	42.0	43.1	-1.1

Normals are based on a period from 1990-2020.

### Maximum and Minimum Monthly Temperatures: January 2022

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	73	Jan 3	24	Jan 12, Jan 23
Hatteras (KHSE)	75	Jan 3	27	Jan 30
New Bern (KEWN)	80	Jan 1	19	Jan 23, Jan 30
Greenville	79	Jan 1	17	Jan 23, Jan 30
Kinston	79	Jan 2	15	Jan 23
Williamston	79	Jan 2	16	Jan 23
Plymouth	75	Jan 1-2	13	Jan 23
Bayboro	76	Jan 2	24	Jan 23-24, 30-31
Manteo	72	Jan 2	23	Jan 31

## APPENDIX B: ADDITIONAL PRECIPITATION DATA

### Cooperative Observation Site Precipitation Statistics: January 2022

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Manteo	7.36	3.78	3.58
Williamston	7.10	4.91	2.19
Bayboro	5.11	4.01	1.1
Kinston	5.03	3.74	1.29
Greenville	4.76	4.17	0.59
Plymouth	4.13	3.89	0.24

### CoCoRaHS Monthly Accumulated Precipitation: January 2022

Site	County	Amount (in.)
Manteo 2.8 NW	Dare	7.47
Southern Shores 0.5 NNE	Dare	7.44
Engelhard 0.8 NW	Hyde	6.65
Columbia 0.8 NNE	Tyrrell	6.39
Beaufort 12.2 N	Carteret	6.37
Beaufort 15.1 N	Carteret	6.21
Roper 2.4 NE	Washington	5.96
Oriental 4.3 NNW	Pamlico	5.89
Oriental 2.1 WSW	Pamlico	5.83
Beaufort 5.3 N	Carteret	5.76
Greenville 4.6 W	Pitt	5.68
Beaufort 3.8 N	Carteret	5.66

Site	County	Amount (in.)
Lowland 0.2 SE	Pamlico	5.62
Kinston 4.4 WNW	Lenoir	5.57
Morehead City 5.7 W	Carteret	5.51
Swansboro 1.4 N	Onslow	5.44
Bath 6.6 ESE	Beaufort	5.35
Pantego 0.4 WSW	Beaufort	5.33
Newport 1.0 N	Carteret	5.30
Atlantic Beach 0.6 W	Carteret	5.29
Farmville 3.1 NW	Pitt	5.27
Albertson 1.2 WNW	Duplin	5.24
Bath 0.7 N	Beaufort	5.19
Hubert 4.9 SE	Onslow	5.17
Kinston 5.1 WNW	Lenoir	5.13
Ocean 0.5 S	Carteret	5.11
Swansboro 3.7 NNE	Carteret	5.10
Newport 10.3 SW	Carteret	5.08
Winterville 3.5 W	Pitt	5.07
Newport 1.7 SSE	Carteret	5.03
Beaufort 0.5 W	Carteret	5.02
Pine Knoll Shores 1.4 E	Carteret	5.01
Rodanthe 1.0 SSE	Dare	4.94
Harkers Island 3.2 NE	Carteret	4.94
Newport 0.2 SW	Carteret	4.91



Site	County	Amount (in.)
Kinston 1.2 NW	Lenoir	4.84
Swansboro 3.3 NW	Onslow	4.77
Jamesville 6.1 SW	Martin	4.76
Fountain 0.1 NE	Pitt	4.76
New Bern 7.3 ESE	Craven	4.72
Jacksonville 5.4 WSW	Onslow	4.72
Trent Woods 1.3 SSE	Craven	4.71
Williamston 8.9 SSE	Martin	4.65
Sneads Ferry 3.3 SW	Onslow	4.63
Swansboro 2.8 WSW	Onslow	4.60
Morehead City 0.6 NW	Carteret	4.55
Cape Carteret 1.0 NNW	Carteret	4.54
Cedar Point 0.9 WSW	Carteret	4.51
Holly Ridge 4.9 ENE	Onslow	4.46
Greenville 5.0 SE	Pitt	4.42
Trent Woods 1.2 ENE	Craven	4.39
New Bern 4.6 SW	Craven	4.38
New Bern 5.3 SW	Craven	4.37
Jacksonville 1.0 NW	Onslow	4.35
New Bern 1.3 NNE	Craven	4.34
Chocowinity 0.2 W	Beaufort	4.31
Greenville 4.3 SSE	Pitt	4.31
Greenville 7.1 SSE	Pitt	4.30

Site	County	Amount (in.)
<b>Ayden 6.5 WNW</b>	Greene	4.28
<b>Sneads Ferry 1.2 SSW</b>	Onslow	4.27
<b>Trent Woods 1.0 NNE</b>	Craven	4.26
<b>Belleville 4.8 SE</b>	Duplin	4.19
<b>Camp Lejeune 1.4 NW</b>	Onslow	4.11
<b>Bath 4.1 NNW</b>	Beaufort	3.82
<b>Emerald Isle 2.3 WSW</b>	Carteret	3.76
<b>New Bern 4.4 SW</b>	Jones	3.69
<b>Cedar Island 0.3 SSE</b>	Carteret	3.13

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