

From: Duke Meteorology
Sent: Monday, December 19, 2022 5:54 AM
To: Weather-CAR-Discussion
Subject: Carolinas Weather Forecast Discussion - 12/19/2022

Monday – Wednesday:

- Cold high pressure will build into the region through Tuesday. An area of low pressure will develop near the Southeast US coast late Wed and track up the Carolina coastline on Thursday. Below normal temperatures through midweek.
- Clear skies overnight allowed temperatures to drop into the middle 20s across the DEC region and upper 20s across the DEP region.
- Skies will start out sunny today, but mid/high clouds will spread across the DEC region this morning and reach the DEP region this afternoon. High temps in the middle and upper 40s this afternoon, but risk slightly cooler due to the increasing cloud cover.
- Partly to mostly cloudy tonight. Lows in the upper 20s north, lower 30s south. Risk slightly cooler for DEP sys avg if Raleigh drops into the upper 20s.
- Considerable mid/high cloudiness on Tuesday. Lows in the lower 30s. Highs in the low-mid 40s west, mid-upper 40s east.
- Considerable cloudiness on Wednesday with a chance of showers in the afternoon. Lows in the lower 30s. Highs in the middle 40s west, upper 40s east.

Extended Range:

- An area of low pressure will lift north across the eastern Carolinas Wed night into Thursday. Not much agreement in the models regarding the timing of precipitation, which will have significant impacts on the temperatures. So confidence is low in Thursday's temps.
- Looks like this will be mainly a rain event. Could see some wintry mix over the higher elevations across the NC mountains on Wed night. May also get a brief period of wintry mix at onset across northeastern NC. The current forecast calls for DEC temps on Thursday starting in the upper 30s and only reaching the middle 40s. For DEP, starting out in the mid 40s and reaching the mid 50s. Again, low confidence.
- Then, a powerful cold front will move quickly across the region on Friday. The faster European model has temps mild in the morning then falling through the day. The slower American model has mild temps through midday then temps crashing in the afternoon. Our forecast more closely aligns with the European model solution.
- AM temps from the mid 40s west to mid 50s east, then late afternoon temps from the low 30s west to mid 40s east. Low confidence.
- Friday afternoon will be breezy along with the falling temperatures.
- The holiday weekend is still forecast to be very cold with morning lows in the teens and highs in the 30s.
- Sunny on Saturday. Lows in the mid-upper teens west, upper teens to lower 20s east. Highs in the lower 30s west, mid-upper 30s east.
- Sunny on Sunday. Lows in the mid-upper teens west, upper teens to lower 20s east. Highs in the low-mid 30s west, upper 30s east.
- Sunny on Monday. Lows in the upper teens to lower 20s west, low-mid 20s east. Highs in the upper 30s and lower 40s west, low-mid 40s east.
- Becoming gradually milder through midweek but still expecting morning lows in the mid-upper 20s on Tues AM and Wed AM.

[REDACTED]