Jan 27 2023

From: Sent: To: Subject: Duke Meteorology Monday, December 19, 2022 8:44 AM Weather-CAR-Outlook Carolinas Weather Outlook for Friday - Wind Gusts 40-50 mph possible.

With the strong cold front coming through the region later this week, we are expecting very gusty winds (in excess of 40 mph) on Friday. The main uncertainly is the timing of the cold front, which would determine the timing of the peak wind gusts. This would determine whether the strongest wind gusts occur in the morning or in the afternoon. Widespread to significant power outages are possible due to the threat of wind gusts 40-50 mph.

With the "faster" European model solution with the front arriving Thursday night, the winds increase across the Carolinas 1am-7am on Friday. If this model solution is correct, by daybreak on Friday, we would be looking at wind gusts of 40-50mph across Carolinas-West and 35-40 mph across Carolinas-East. On Friday morning, wind gusts of 35-50 mph in the West; strongest along and east of I-77 and then 40-50 mph in the East. On Friday afternoon, wind gusts 30-35 mph in the West, 35-40 mph in the East.

The "slower" American model solution shows similar winds, just arriving a bit later. The winds don't increase until daybreak on Friday. By mid-morning, wind gusts of 35-40 mph for the western/central Carolinas. By early afternoon, gusts of 40-50 mph across the Carolinas-West and 35-45 mph across Carolinas-East. Then, in the afternoon, widespread wind gusts of 40-50 mph. By early afternoon, the gusts drop off in the West, but the East remains gusty. By mid-evening, wind gusts should be generally less than 40 mph area-wide.

Right now, the faster European model is preferred, which would produce strong, gusty winds across the region, especially Carolinas-West, prior to daybreak on Friday.



From: Duke Meteorology Sent: Monday, December 19, 2022 7:19 AM To: Weather-CAR-Outlook Subject: Carolinas Daily Weather Outlook - 12/19/2022

Weather-related outages are not expected across the Carolinas Service Area through Wednesday. There could be some light ice accumulation (0.10" or less) across the northern NC mountains Wednesday night into Thursday morning.

DUKE

Carolinas Weather Outlook Issued: 12/19/2022 7:02 AM

Carolinas – West	Mon 12/19	Tue 12/20	Wed 12/21	Thu 12/22
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Mountains			Chance of PM rain; rain and/or freezing rain overnight	AM rain and/or freezing rain; up to 0.10" ice across northern NC mtns
Triad			Slight chance of PM rain; rain likely overnight	Rain likely
Central			Slight chance of PM rain; rain likely overnight	AM rain likely
Upstate			Slight chance of PM rain; rain likely overnight	AM rain likely
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Carolinas – East	Mon 12/19	Tue 12/20	Wed 12/21	Thu 12/22
Carolinas – East Triangle North	Mon 12/19	Tue 12/20	Wed 12/21   Rain likely overnight, mainly after midnight	Thu 12/22 Rain
251 3.52	Mon 12/19	Tue 12/20	Rain likely overnight,	
Triangle North	Mon 12/19	Tue 12/20	Rain likely overnight, mainly after midnight Rain likely overnight,	Rain

\*To see a comprehensive map of the Duke Energy Carolinas Distribution Zones, click <u>here</u>. \*\* For customer outage projection terminology, click <u>here</u>.

## **3-Day Carolinas Weather Forecast**

Today: Sunny early, then partly sunny. Highs 45 to 50 degrees. Variable wind around 5 mph.

Tonight: Mostly cloudy. Lows in the upper 20s to middle 30s. Light and variable wind.

*Tuesday:* Considerable cloudiness. Highs in the lower and middle 40s west, middle and upper 40s east. Northeast wind around 5 mph.

*Wednesday:* Considerable cloudiness with a chance of rain in the afternoon. Lows in the lower and middle 30s. Highs in the middle 40s west, upper 40s east. Northeast wind 5 to 10 mph.

## Weather Discussion

Weather-related outages are not expected across the Carolinas Service Area through Wednesday afternoon.

Cold high pressure builds into the Carolinas through Tuesday. An area of mid/high cloudiness will spread across the region west-to-east this morning through this afternoon. Skies will remain rather cloudy tonight and Tuesday.

An area of low pressure will develop near the Southeast US coast late Wed and track up the Carolina coastline on Thursday. Skies will remain rather cloudy across the region on Wednesday with a chance of light rain in the afternoon. Precipitation will increase in coverage and intensity across the western Carolinas overnight. There could be some wintry mix across the higher elevations of the NC mountains on Wednesday night into early Thursday morning. Ice accumulations look to be generally 0.10" or less with highest totals to the northeast of the Asheville area.

## EXTENDED FORECAST

Rain on Thursday as the storm system tracks up the coast, ending by early afternoon across the Carolinas-West region but lingering until late afternoon or early evening across the Carolinas-East region.

A powerful cold front will move quickly across the region on Friday. The models differ on the exact timing of this front and the arrival of the much colder air mass behind it. However, in general, expecting temperatures to be warmer in the morning than the afternoon and turning much colder by evening. Could see mid-upper 20s across the Carolinas-West region by early evening.

Very cold conditions are forecast for Saturday – Monday. Saturday and Sunday will both features morning lows in the middle teens to lower 20s and highs in the 30s. Monday will be slightly warmer with lows in the upper teens and lower 20s followed by highs in the upper 30s and lower 40s. Temperatures will continue to slowly moderate through the of next week, then above normal temperatures are forecast for the 11-15 day period.



