

Appendix A: Anatomy of a Zone Forecast

The National Weather Service issues forecasts for sky condition, precipitation probability, temperature, and wind on a routine basis. Because the weather is always changing, the terminology used in these forecasts is also quite variable. Listed below are descriptions of regularly used weather terms that should give you a better understanding of each forecast.

SKY CONDITION

The sky condition describes the predominant/average sky condition based on the percentage of sky covered by opaque (not transparent) clouds. If a high probability of precipitation (60% or greater) is expected over a majority of the forecast period, then the sky condition may be omitted since it is inferred from the precipitation forecast.

Sky Condition	Opaque Cloud Coverage
Cloudy / Overcast	88-100%
Mostly Cloudy / Considerable Cloudiness	70-87%
Partly Sunny / Mostly Cloudy	51-69%
Mostly Sunny / Partly Cloudy	26-50%
Sunny / Mostly Clear	6-25%
Sunny / Clear	0-5%

PRECIPITATION PROBABILITY

The Probability of Precipitation (POP) is defined as *the likelihood of occurrence (expressed as a percent) of a **measurable** amount of liquid precipitation (or the water equivalent of frozen precipitation) during a specified period of time at **any given point** in the forecast area.* Measurable precipitation is equal to or greater than 0.01". Unless specified otherwise, the time period is normally 12 hours. The forecast area, or zone, is generally considered to be a county. NWS forecasters use such categorical terms as *occasional, intermittent, or periods of* to describe a precipitation event that has a high probability of occurrence (80% +) but is expected to be of an "on and off" nature.

POP Percent	Expression of Uncertainty	Equivalent Areal Qualifier (convective only)
10 percent	(None used)	Isolated
20 percent	Slight chance	Isolated
30, 40, & 50 percent	Chance	Scattered
60 & 70 percent	Likely	Numerous
80, 90, & 100 percent	(None used)	(None used)

TEMPERATURE

The temperature in a forecast is used to describe the forecast maximum and minimum temperature, or in some cases, the temperature expected at a specific time.

<i>Temperature Description</i>	<i>Forecast Interpretation</i>
Around 40 / Near 40	A range of temperatures from 38 to 42
Lower 40s	Temperatures of 40, 41, 42, 43, 44
Mid 40s	Temperatures of 43, 44, 45, 46, 47
Upper 40s	Temperatures of 46, 47, 48, 49
40 to 45	Temperatures of 40, 41, 42, 43, 44, 45

WIND

The wind describes the prevailing direction from which the wind is blowing, with speeds in miles per hour. Wind velocity is included in the first five periods of a zone forecast.

<i>Sustained Wind Speed</i>	<i>Descriptive Term</i>
0-5 mph	Calm / Light / Light & variable
5-15 mph / 10-20 mph	(None used)
15-25 mph	Breezy (mild weather) Brisk or Blustery (cold weather)
20-30 mph / 25-35 mph	Windy
30-40 mph	Very windy
40 mph or greater	Strong, dangerous, high, damaging (High Wind Warning criteria)

TIME PERIODS

<i>Forecast Time Period</i>	<i>NWS Definition (LST)</i>
Today	6am-6pm (or Issuance – 6pm)
This Morning	6am-noon
This Afternoon	Noon-6pm
This Evening	6pm-midnight
Overnight	Midnight-6am
Tonight	6pm-6am (or Issuance – 6am)