

# Hazardous Weather Warning and Advisory Criteria

NWS Louisville KY

2023

<b>WARNING Type and Criteria</b>	
Blizzard	Sustained winds or frequent gusts $\geq 35$ mph and considerable S/BS with vsbys $\leq 1/4$ mi for 3-hr period.
Snow Squall	Intense, but limited duration, periods of heavy snowfall and gusty surface winds resulting in visibility $\leq 1/4$ mile.
Winter Storm	Snow averaging $\geq 4''$ (3-5'', 3-6'', 4-8'', etc.) in an event*, or combo of significant S, IP, or ZR. Think impact.
Ice Storm	Ice (ZR) accum $\geq 1/4''$ that is a hazard to life or property. ZR is the only precip type expected.
Wind Chill	Wind chill $\leq -25$ °F and wind speed near or above 10 mph.
Freeze	Temps $\leq 30$ °F for at least 2 hrs at $\geq 3$ obs sites during growing season.
High Wind	Non-thunderstorm sustained winds $\geq 40$ mph for $\geq 1$ hr or gusts $\geq 58$ mph for any duration.
Excessive Heat	Max heat index $\geq 110$ °F for about $\geq 2$ hrs.
Red Flag	10-hour fuels $\leq 8\%$ , RH $< 25\%$ , 20 foot winds $> 15$ mph for several hours.
Severe T-storm	T-storm with report or radar-indication of $\geq 1$ inch hail, winds $\geq 58$ mph, or storm damage.
Tornado	T-storm with radar-indication of signif low-level rotation in favorable environment, or reported tornado.
Flash Flood	Very high rain rates from slow-moving storms, and/or reported flowing water. Threatens life/property.

\*The event duration will be determined by the issuing office, but it will not exceed 48 hours. If an event will last longer than 48 hours, offices should highlight the period of greatest impacts or separate into multiple events.

<b>ADVISORY Type and Criteria</b>	
Winter Weather	Snow averaging $< 4''$ (0.5-1'', 1-3'', 2-4'', etc.) in an event, or combo of S, IP, or ZR. Think impact.
Wind Chill	Wind chill $-10$ °F to $-24$ °F and wind speed near or above 10 mph.
Frost	Widespread frost expected with temps $\leq 35$ °F for at least 2 hrs at $\geq 3$ obs sites during growing season.
Wind	Non-thunderstorm sustained winds $\geq 30$ mph for $\geq 1$ hr or gusts $\geq 40$ mph for any duration.
Heat	Max heat index $\geq 105$ °F for about $\geq 2$ hrs.
Dense Fog	Widespread visibilities $\leq 1/4$ mi for $\geq 2$ hrs.
Flood	Heavy rain that causes low-impact/low-lying flooding and significant ponding of water on roads.