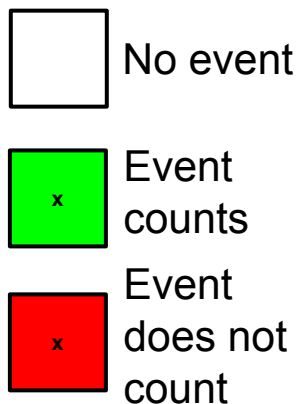
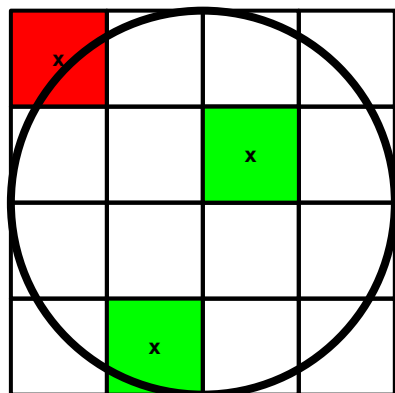


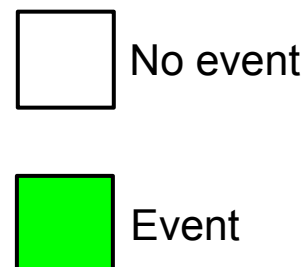
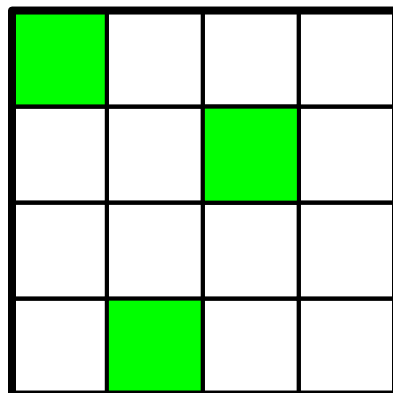
Neighborhood Maximum Ensemble Probability Quick Reference Guide

Neighborhood probability calculations can use a circular or square search area.

Circular search area



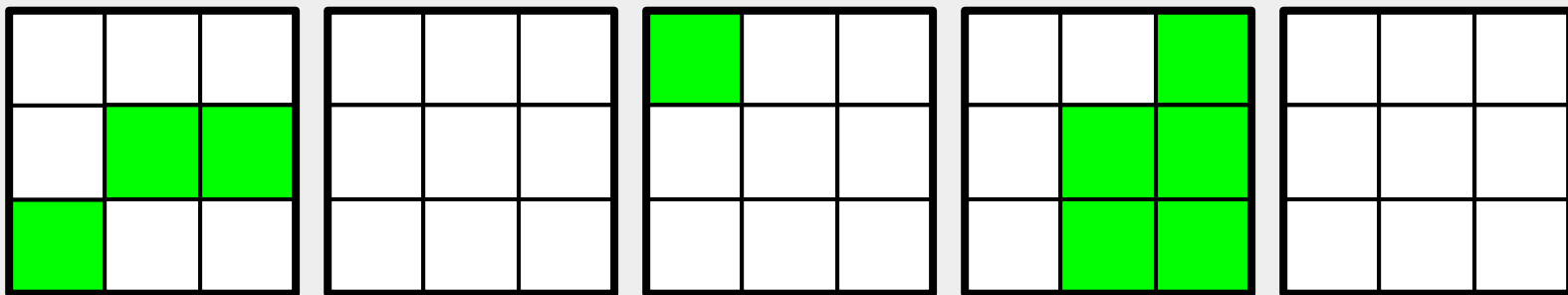
Square search area



Example: An ensemble of 5 members using a 3x3 square search area

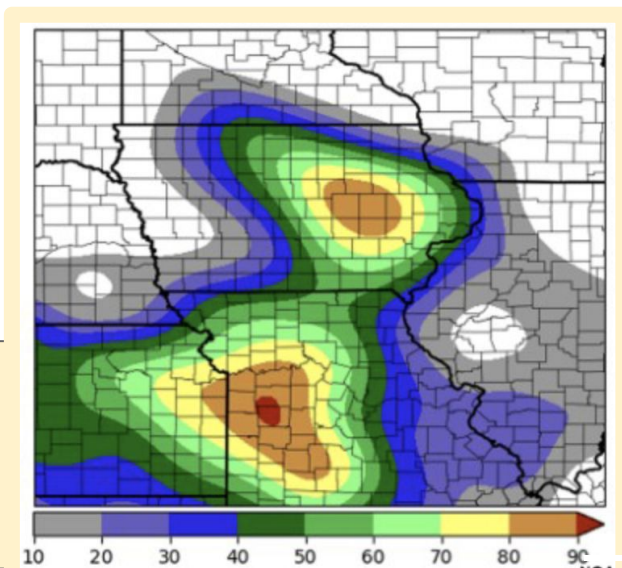
3 of 5 ensemble members have an event in the search area = **60% NMEP**

(Note: This is a **binary search**, so it doesn't matter how many events are in the search area)



The **Neighborhood Maximum Ensemble Probability (NMEP)** can be mapped at all grid points, and then smoothing can be applied.

Smoothed Neighborhood Maximum Ensemble Probability of updraft helicity in the 2-5 km layer greater than 75 m^2s^{-2} during the forecast period



Forecasting Guide: [sites.google.com/noaa.gov/nws-fdtd/guide](https://www.noaa.gov/nws-fdtd/guide)

NOAA/NWS Forecast Decision Training Division, Boulder, CO

