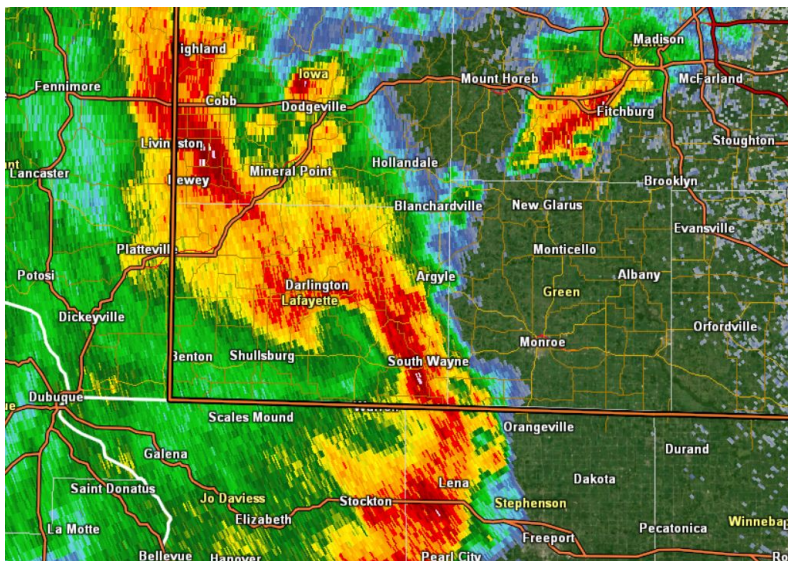




July 11, 2025 Severe Storms/Flooding

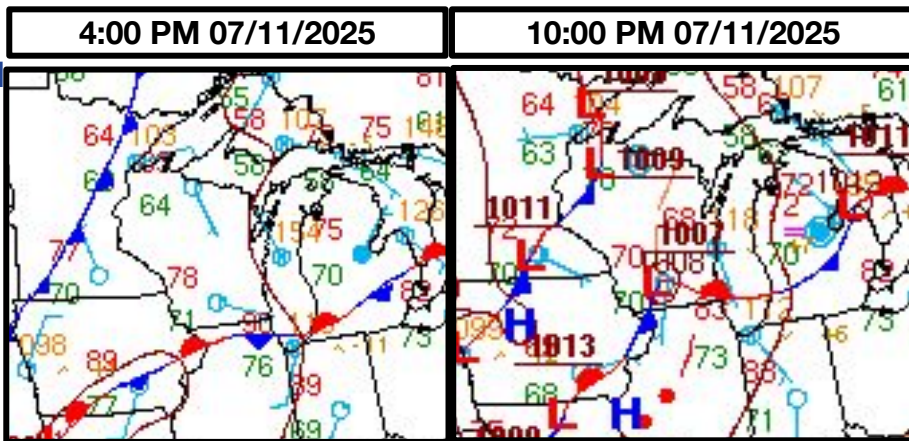
Winds Up To 80 MPH and Heavy, Rapid Rainfall

Event Overview: A strong cluster of thunderstorms originating in central Iowa progressed eastward along the southernmost Wisconsin counties during the afternoon of July 11th, bringing widespread damaging winds across Lafayette and Green Counties into western Rock County, where consistent gusts of 70 to 80 MPH were measured at calibrated weather stations. The highest measured gust of 79 MPH was measured at the Monroe Airport at 6:06 PM CDT. Storms also brought flooding rainfall to the region, with widespread 2.5 to 3 inch totals in southwest Wisconsin.

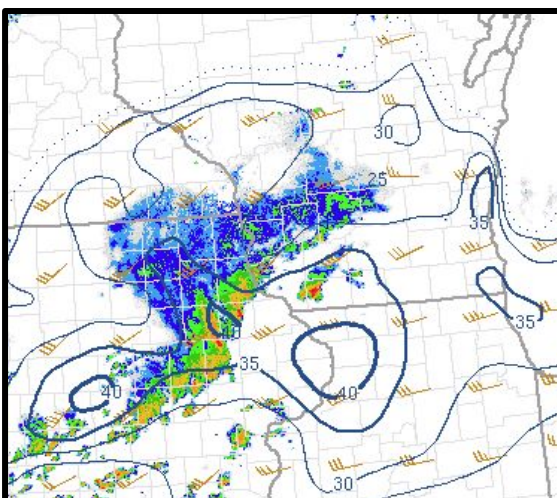


5:46 PM CDT radar image as damaging winds and flooding rain occurred in Lafayette Co.

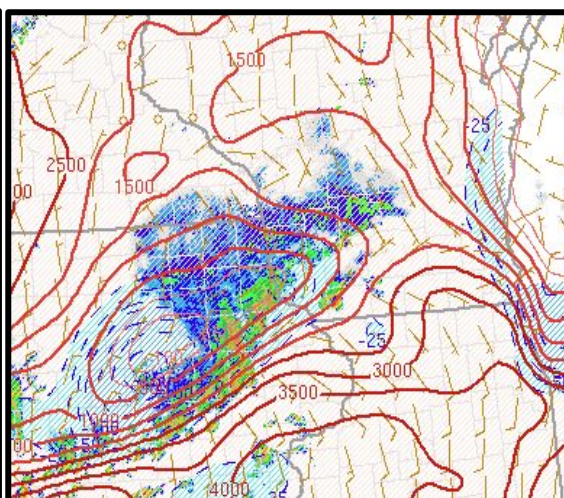
Event Setup: A stationary front draped across northern Illinois mid-afternoon lifted northward into southern Wisconsin by the evening hours, as thunderstorms from Iowa pushed northeastward with steering flow in the middle atmosphere. High surface instability and very moist southwesterly near-surface flow enhanced storm growth into the evening hours as they entered southern Wisconsin, allowing for the development of very strong, damaging winds and high rainfall rates.



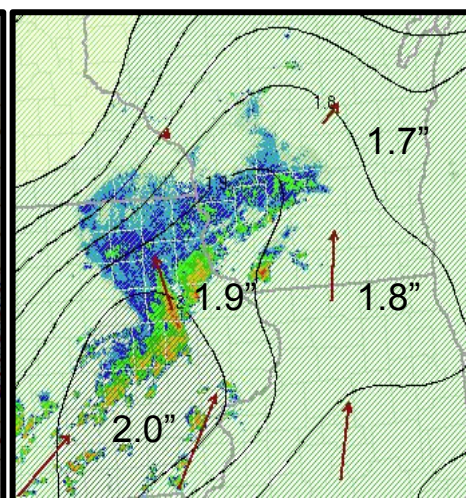
WPC Surface Analyses from the afternoon and evening of the 11th



Bulk Effective Shear at 4 PM (SPC Mesoscale Analysis page), showing a steering vector to the northeast from Iowa



Surface based CAPE at 4 PM (SPC Mesoscale Analysis Page), showing a region of 2500-3000 J/kg pushing northwest into southern Wisconsin



Precipitable water values and transport vectors at 4 PM (SPC Mesoscale Analysis Page), showing heavy rain potential

