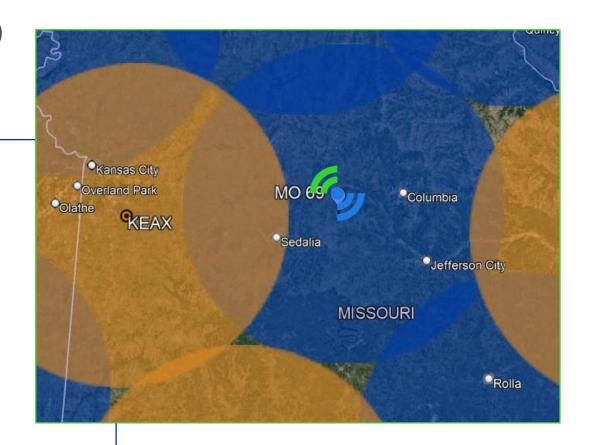


Callaway County, MO Tornado

MO69 is located in Boonville, MO and provides gap-filling coverage for 60 miles in every direction. Orange circles represent NEXRAD systems out to 4,000ft above the ground. Blue circles represent radar "gaps" and planned or live supplemental Climavision radar sites – areas with diminished coverage beyond the low-level visibility of NEXRAD systems. The nearest NEXRAD radar to

Boonville is KEAX around ~84 miles away.





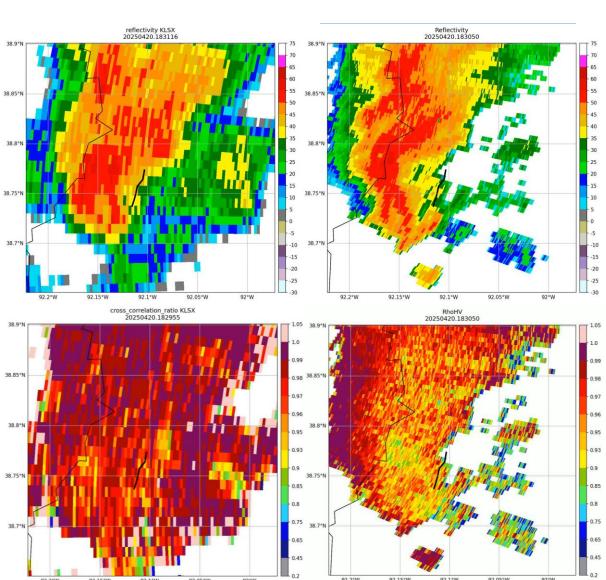




Callaway County, MO

Tornado

On April 20th, 2025, a tornado touched down in Callaway County, Missouri. Climavision and NEXRAD radars both detected rotation and a hook echo. However, only Climavision's MO69 radar scanned at a low enough elevation to detect lofted debris from the tornado touching down. A tornado warning was issued, but not until the Climavision radar detected a tornado debris signature, meaning the tornado was already impacting the ground. Our MO69 radar observed the storm at 715 meters AGL, whereas KLSX was scanning at around 1900 meters AGL.



Climavision

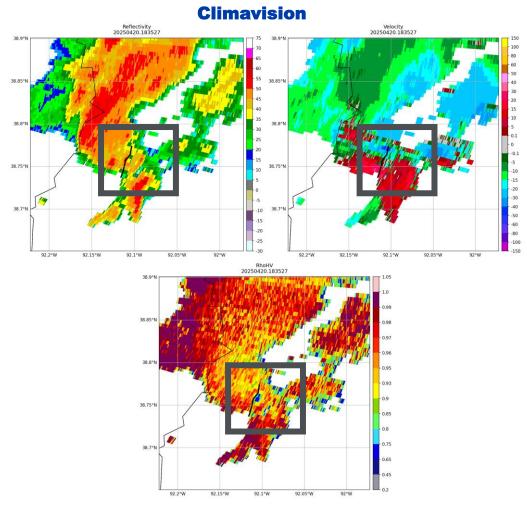


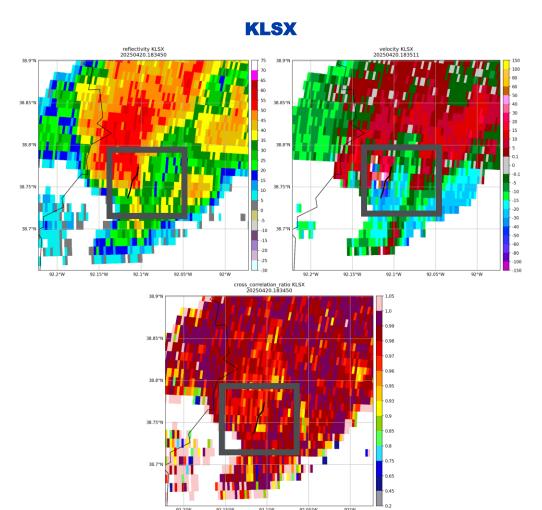
Black lines indicated tornado path from the NWS Damage Survey.

KLSX

Callaway County, MO

Reflectivity, velocity, and correlation coefficient (KLSX)/Rho HV (Climavision) data







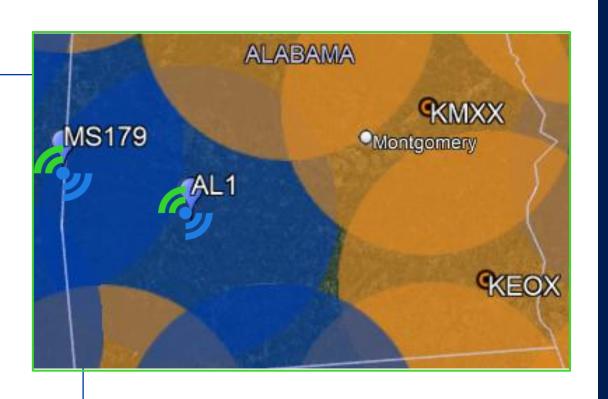


Pine Hill, AL

Tornado

AL1 is located in Pine Hill, AL and provides gap-filling coverage for 60 miles in every direction.

Orange circles represent NEXRAD systems out to 4,000ft above the ground. Blue circles represent radar "gaps" and planned or live supplemental Climavision radar sites – areas with diminished coverage beyond the low-level visibility of NEXRAD systems. The nearest NEXRAD radar to Pine Hill is KMOB around 90 miles away.





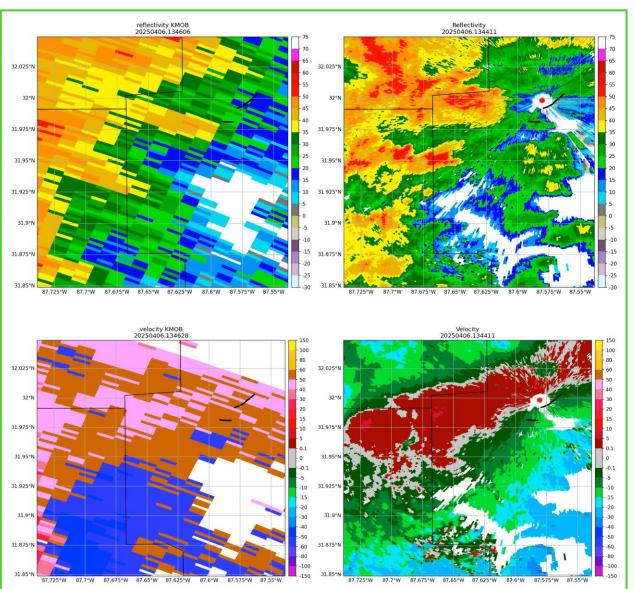




Climavision

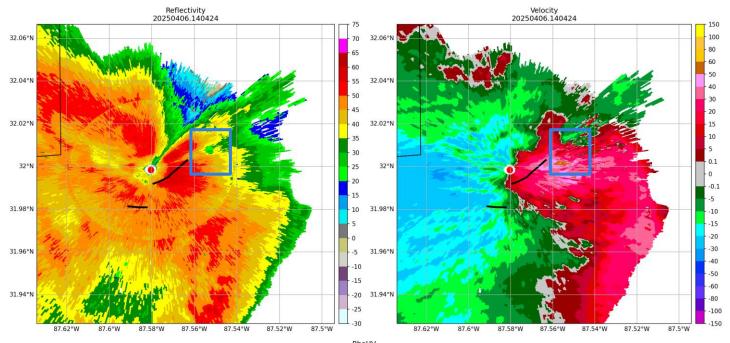
Pine Hill, AL Tornado

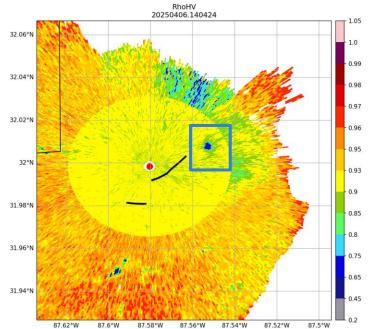
On April 6, 2025, a tornado touched down about one kilometer from Climavision's AL1 radar. As the storm approached, a reflectivity notch could be seen. Once the storm passed the radar, a tornado debris signature was visible on radar, indicating a tornado touch-down and debris lofted into the air. No severe thunderstorm or tornado warnings were issued through the duration of the event. Rotation was not visible on KMOB (left) radar data due to beam heights around 2,000m AGL. Climavision (left) sampled the data at less than 100m AGL.



April 6, 2025

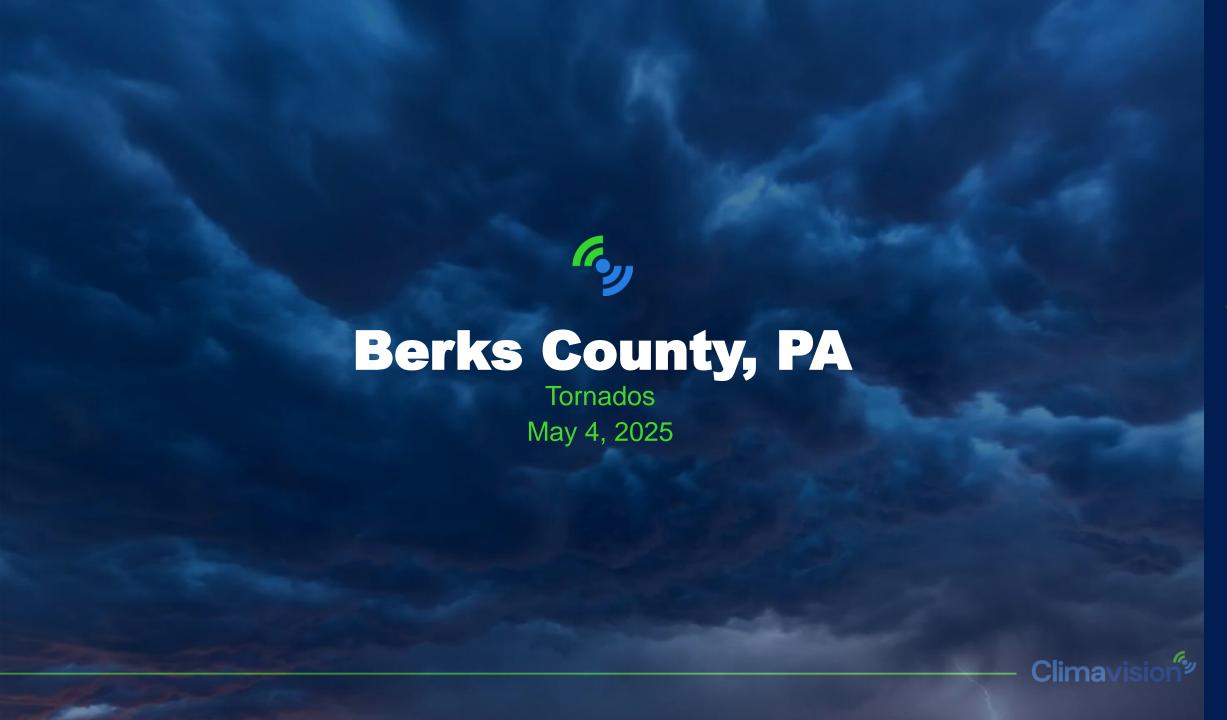
Pine Hill, AL Tornado





Black lines indicate NWS storm damage survey tornado path.

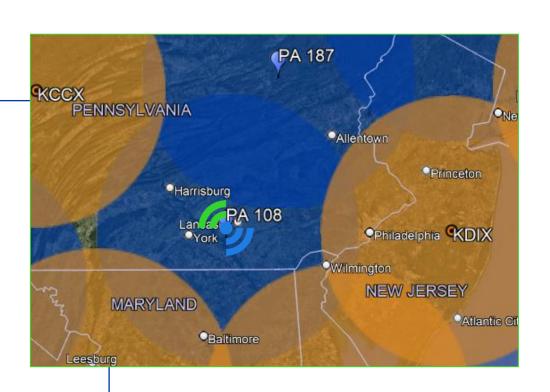




Berks County, PA

Tornados

PA108 is located in Millersville, PA and provides gap-filling coverage for 60 miles in every direction. Orange circles represent NEXRAD systems out to 4,000ft above the ground. Blue circles represent radar "gaps" and planned or live supplemental Climavision radar sites – areas with diminished coverage beyond the low-level visibility of NEXRAD systems. The nearest NEXRAD radar to Millersville is KLWX around ~88 miles away.





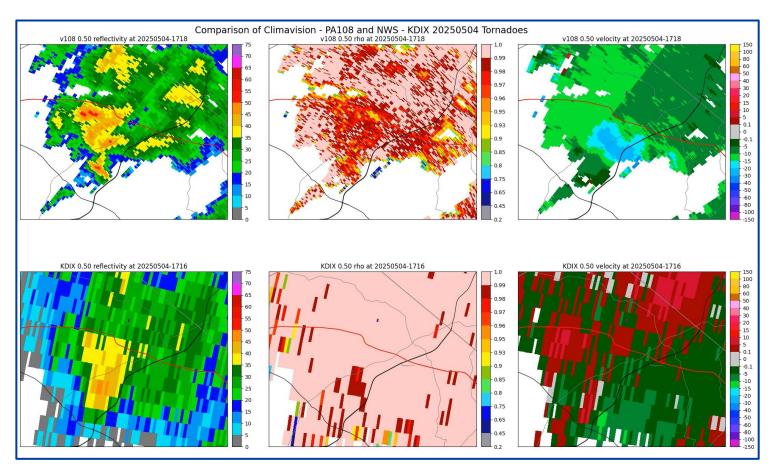




Lancaster County, PA

Tornados

The first of three tornados to touch down on May 4th, 2025 occurred just northeast of our radar site in the East Cocalico Township. No warning was issued for any of the tornados, and they were not visible in the NEXRAD radar coverage. In this case, KDIX was scanning at 7900 ft, whereas our PA108 system scanned the tornado at 1300 ft and captured a tornado debris signature. This tornado destroyed three sheds.



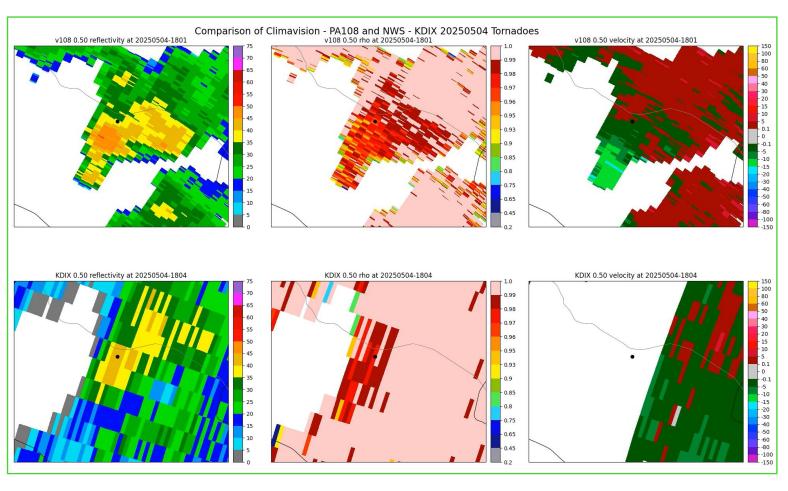
Reflectivity, RhoHV, and velocity data from Climavision's PA108 radar (top) and KDIX (bottom).



Berks County, PA

Tornados

The second of three tornados to touch down on May 4th, 2025 occurred in the Blue Marsh National Recreational Area. No warning was issued for any of the three tornados, and they were not visible in the NEXRAD radar coverage. In this case, KDIX was scanning at 7900 ft, whereas our PA108 system scanned the tornado at 2200 ft and captured a tornado debris signature.



Reflectivity, RhoHV, and velocity data from Climavision's PA108 radar (top) and KDIX (bottom).

Berks County, PA

Tornados

The third tornado to touch down on May 4th, 2025 occurred in the Mohrsville/Shoemakersville area. No warning was issued for any of the three tornados, and they were not visible in the NEXRAD radar coverage. In this case, KDIX was scanning at 7550 ft, whereas our PA108 system scanned the tornado at 2800 ft and captured a tornado debris signature.

