

# **Horizon AI HIRES & Radar-as-a-Service Performance**

## **Erie, PA Lake Effect Snow**



# HIRES Performance

Erie, PA Lake Effect Snow

November 11-12, 2025

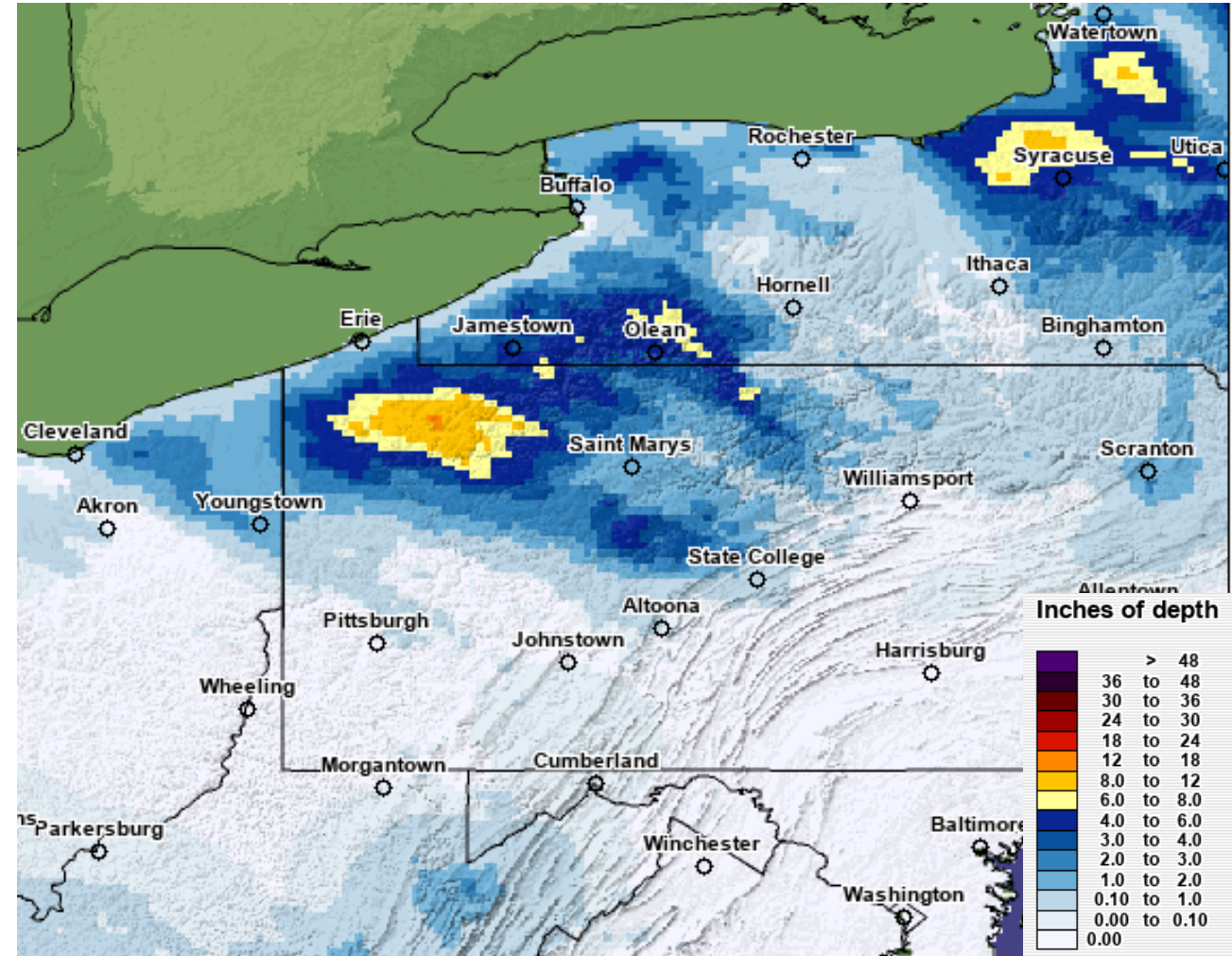
November 2025

## Northeast Lake Effect Snow

An early season lake effect snow event brought 8-12 inches of snow to parts of Pennsylvania and New York on November 11-12, with isolated locations seeing a foot or more of snow. The early season wet snow brought a risk for tree damage and power outages, as well as travel delays and impacts to infrastructure.

Because the nature of lake effect snow brings sharp snowfall gradients over relatively short areas, having accurate high resolution forecast data is critical. This data helps utilities and emergency managers pre-position crews and resources, and enables local media to provide clear, targeted communication to the public.

Estimated Snowfall Total Actuals, November 11-12





November 2025

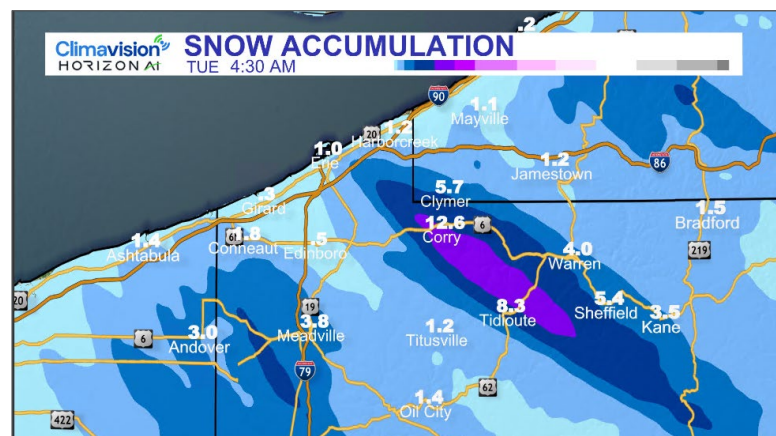
## Northeast Lake Effect Snow

Having high-resolution forecast data makes a significant difference for lake effect snow events. While most high-resolution guidance only goes out 2-3 days, Climavision's Horizon AI HIRES model was signaling the potential for heavy snowbands capable of producing 12+ inches of total snow almost a week in advance. Other publicly available models at that time frame were coarser in resolution, and while they forecasted snow, they did not have an accurate representation of the intensity or orientation of the snowbands. This early insight provided a clearer picture of the event's potential impact long before traditional high-resolution guidance was available.

**Climavision** HIRES

Model Run time: **7AM EDT 4 November 2025**

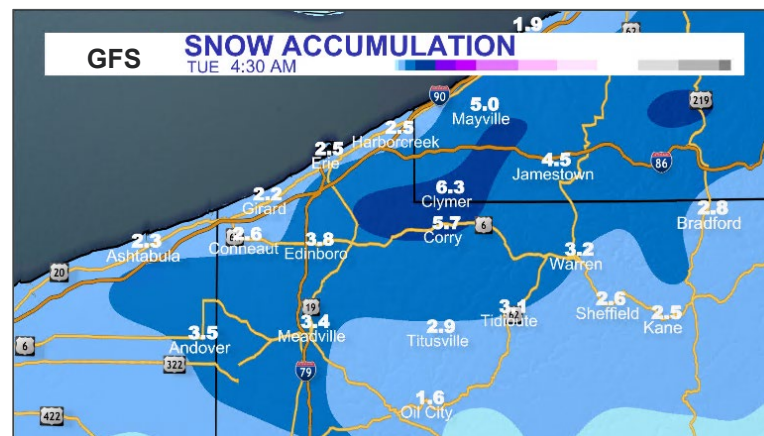
Forecast Valid time: **4:30AM EDT 11 November 2025**



**GFS**

Model Run time: **7AM EDT 4 November 2025**

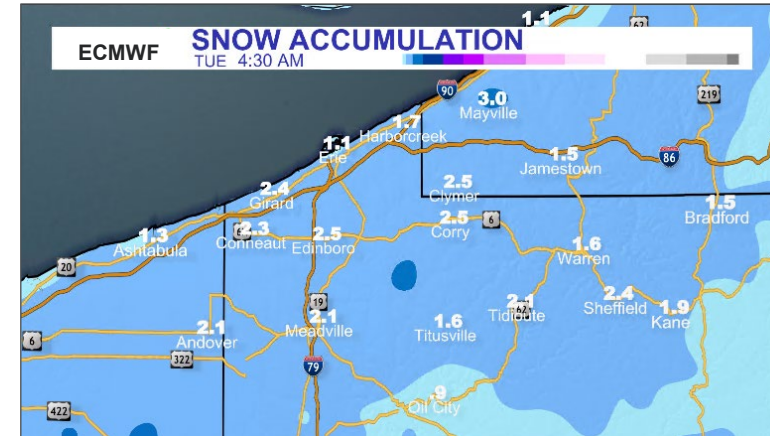
Forecast Valid time: **4:30AM EDT 11 November 2025**



**ECMWF**

Model Run time: **7AM EDT 4 November 2025**

Forecast Valid time: **4:30AM EDT 11 November 2025**



November 2025

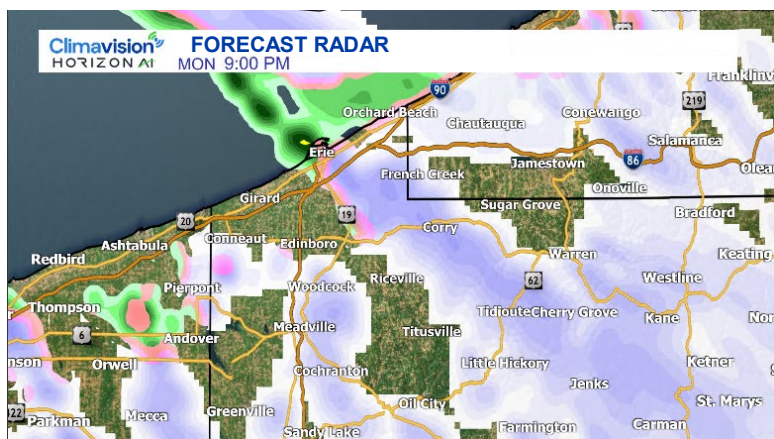
## Northeast Lake Effect Snow

Climavision's Horizon AI HIRES model more accurately captured the placement and orientation of the lake-effect snowbands nearly a week in advance of this early season event. Global models like the GFS and ECMWF lack the resolution needed to pick up on small-scale features such as narrow, intense lake effect bands.

**Climavision** HIRES

Model Run time: **7AM EDT 4 November 2025**

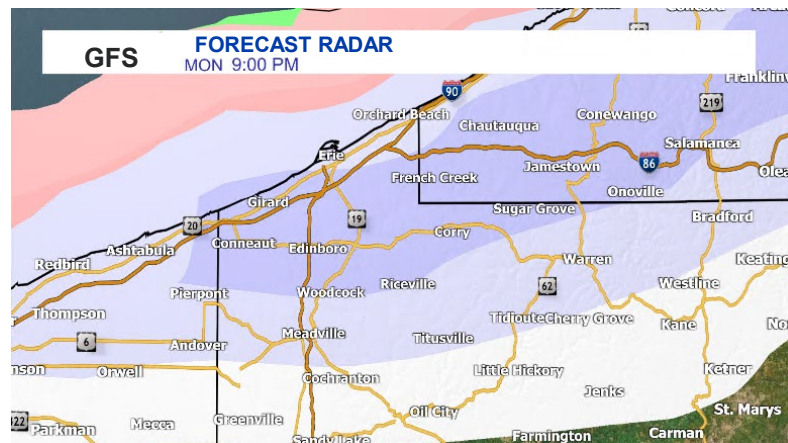
Forecast Valid time: **9:00PM EDT 10 November 2025**



**GFS**

Model Run time: **7AM EDT 4 November 2025**

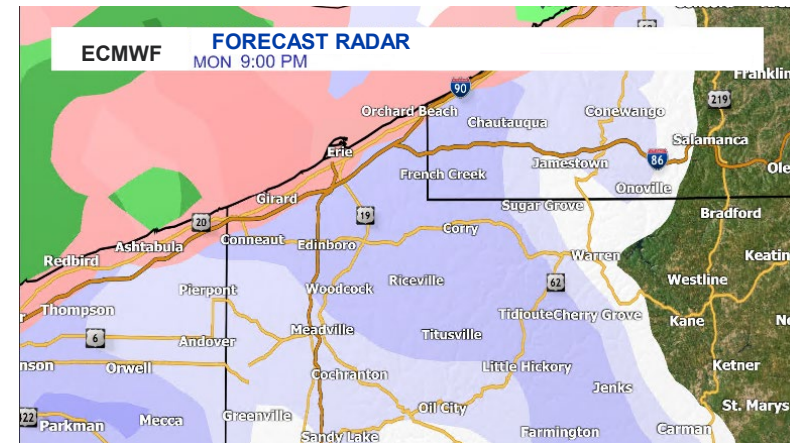
Forecast Valid time: **9:00PM EDT 10 November 2025**



**ECMWF**

Model Run time: **7AM EDT 4 November 2025**

Forecast Valid time: **9:00PM EDT 10 November 2025**







# Radar Performance

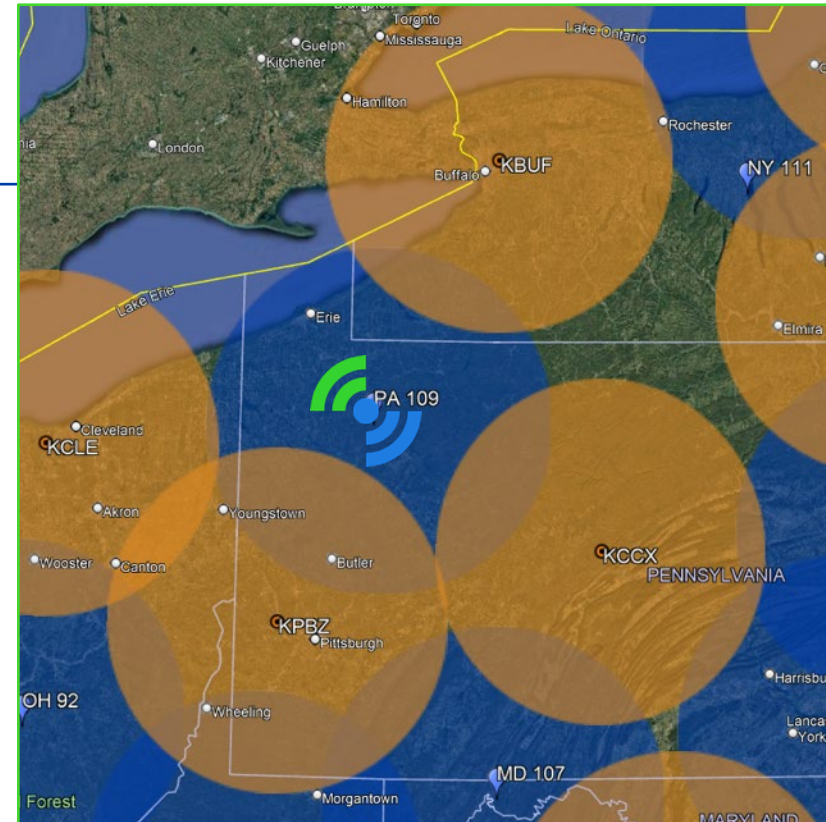
Erie, PA Lake Effect Snow

November 11-12, 2025

November 11-12, 2025

# Erie Region Snow Squalls

PA109 is located in Pleasantville, 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 Erie is KBUF around 90 miles away.

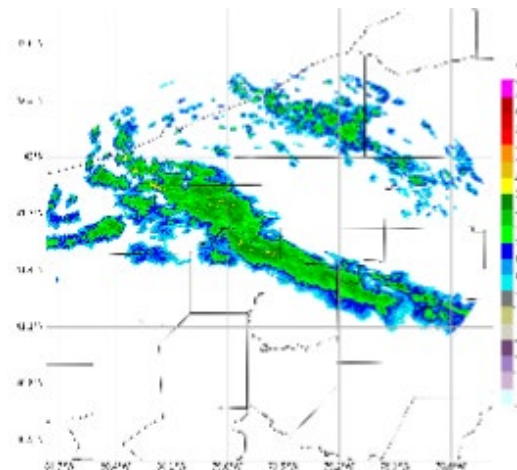


November 11-12,  
2025

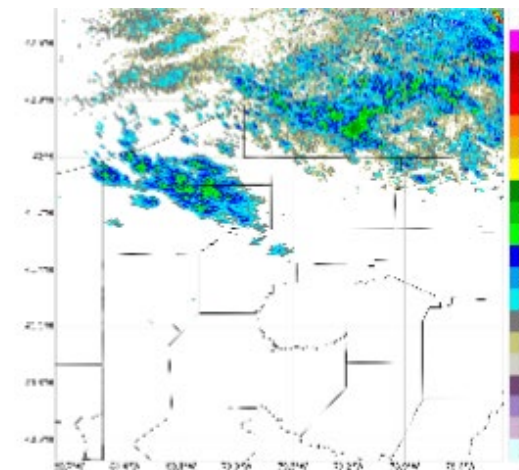
## Erie Region Lake Effect Snow

In early November 2025, a strong cold snap hit much of the United States. Snow bands reached as far south as Georgia and spread from the Midwest to the Northeast. In the Erie, PA region, the cold air mass interacted with Lake Erie to create lake-effect snow bands that dropped over 10" of snow in certain areas. The images to the right show how gap-filling weather radar data is crucial for viewing and responding to lake-effect snow, as this type of snowfall occurs in the lowest levels of the atmosphere and is heavily influenced by terrain. In this event, KBUF overshot the lake-effect snow whereas PA109, centrally located in a former radar gap, created an accurate picture of what was occurring on the ground.

Climavision  
PA109 11/11/2025

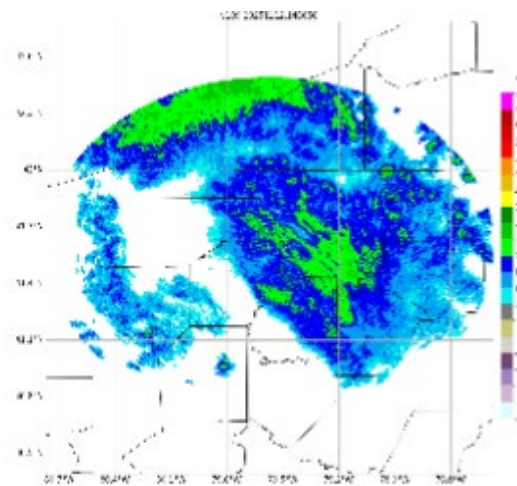


KBUF 11/11/2025

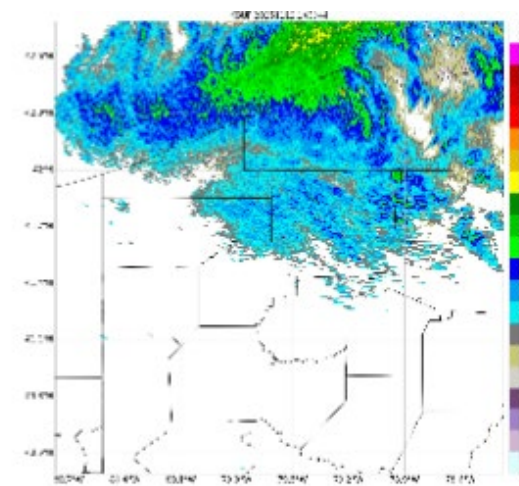


[View Video Here](#)

PA109 11/12/2025



KBUF 11/12/2025



[View Video Here](#)