



CATASTROPHE AND RISK SOLUTIONS

# Verisk Winter Storm Model

for the United States

# Winter Storm Model for the U.S.

Winter storm events can have severe impacts, triggering substantial economic losses, disrupting critical infrastructure, and causing widespread disruption across communities and society. Recent severe loss events highlight the scale of exposure, with notable events causing widespread power outages, infrastructure damage, and significant insured losses across the United States.

## What does Verisk's Winter Storm Model for the U.S. mean for your portfolio?

The Verisk Winter Storm Model for the United States enhances how insurers understand and manage cold-weather risk by combining advanced hazard and vulnerability science. The model incorporates detailed analysis of long-duration cold air outbreaks, capturing the cascading impacts of prolonged severe conditions.

The model also features updated regional vulnerability frameworks with new regional support for snow, built from claims insights, building codes, and engineering analysis, and validated against real-world losses. The result is more realistic estimates to strengthen underwriting, pricing, and portfolio management.



## What makes Verisk the catastrophe modeling leader that's trusted worldwide?

When catastrophe risk decisions demand clarity, more than 400 insurers and reinsurers—from global leaders to regional carriers—rely on Verisk. Our scalable models deliver granular, by-peril data across every region, built on a single financial framework so portfolio comparisons are always consistent. Our dedicated client teams bring the same depth of expertise as our scientists—ensuring you get responsive, personalized support at every stage, from onboarding through ongoing model use.

## What sets Verisk's Winter Storm Model for the United States apart?

Our updated model delivers an accurate and actionable view of vulnerability, with a particular focus on how losses from cold air outbreaks are captured. The latest update goes beyond traditional approaches by incorporating insights from U.S. power grid performance during extended cold events, offering insurers a clearer understanding of cascading winter storm disruptions and their real-world impacts.

## Model at a glance



### Perils

Snow, wind, and freezing temperatures



### Domain

Contiguous United States



### Delivery

Verisk Synergy Studio (2026)



### Stochastic catalog

A 10,000-sample-year climate catalog that captures near-present climate conditions, enabling robust analysis of both the frequency and severity of winter storms.



Over  
**\$50<sub>B</sub>**  
in aggregate loss data

An additional  
**\$13<sub>B</sub>**  
in detailed claims data

# What is in the model to help drive your business forward?



## Industry-leading data foundation

Our unmatched depth of data sets us apart, powered by over \$50 billion in aggregate loss data and an additional \$13 billion in detailed claims data and strengthened by our leading insurance expertise.



## Enhanced vulnerability frameworks

We provide more accurate winter storm risk insights with newly introduced support for the impact of cold air outbreaks and regional snow vulnerability, informed by building codes and engineering analysis and rigorously validated to increase confidence.



## Deeper insight into cold air outbreak-driven losses

Enhanced loss representation from cold air outbreaks incorporating dedicated analysis of U.S. power grid behavior to better capture the impacts of long-duration, severe cold events.



## We have also updated vulnerability relationships across key perils

**Freeze:** Improved representation of freeze events and their impact on the built environment, with enhanced data to better differentiate across occupancy types.

**Snow:** Fully re-evaluated damage functions, now with clearer regional differentiation.

**Wind:** Refined damage functions and enhanced regional vulnerability relationships.



## Seamless and accessible all-peril modeling

With superior financial consistency across your portfolio and full alignment with every model in our suite as well as the assets we support, you can perform confident, integrated risk assessments. Leverage a comprehensive view of winter storm risk on its own or combine it with our other peril models, including our U.S. severe thunderstorm model, to build a robust, all-hazards modeling solution.

# Step into the future of winter storm risk modeling

Assess storm severity, anticipate disruptions, and drive portfolio resilience with Verisk.

Visit to learn more [verisk.com/products/extratropical-cyclone-models/](https://verisk.com/products/extratropical-cyclone-models/)